# CITY OF GREEN COVE SPRINGS
# PLANNING & ZONING BOARD MEETING

**321 WALNUT STREET, GREEN COVE SPRINGS, FLORIDA**
**TUESDAY, JUNE 25, 2024 – 5:00 PM**

## AGENDA

### GENERAL INFORMATION

Anyone wishing to address the Planning and Zoning Board regarding any topic on this evening's agenda is requested to complete a card available at the Clerk's desk. Speakers are respectfully requested to limit their comments to three (3) minutes.

The Planning and Zoning Board prohibits the use of cell phones and pagers which emit an audible sound during all meetings with the exception of Law Enforcement, Fire and Rescue, or Health Care Professionals on call. Persons in violation will be requested to leave the meeting.

**ROLL CALL**

**APPROVAL OF MINUTES**

1. Approval of the Minutes of the May 28, 2024 Meeting

**PUBLIC HEARINGS**

2. Review of Special Exception application for use of the south portion of the property for Springs Chapel as off-street parking

3. Review of Special Exception application to allow for a street wall along US 17 as a design option at the Clay County Economic Development Building site

4. Review of Zoning Amendment Request for Parcel 016579-000-00 from Mixed Use Highway, MUH to General Commercial, C2

5. Review of Modification of Rookery (formerly Ayrshire) Planned Unit Development

**ACTION ITEMS**

6. Review of a Site Development Plan for the Clay County Economic Development Building at 633 N Orange Avenue

**BOARD BUSINESS**

Board Discussion / Comments

Staff Comments

**ADJOURNMENT**

**NEXT MEETING:** TUESDAY, JULY 23, 2024 AT 5:00PM

Minutes of the Planning & Zoning Board Meeting can be obtained from the City Clerk's office. The Minutes are recorded, but are not transcribed verbatim.

Persons requiring a verbatim transcript may make arrangements with the City Clerk to duplicate the recordings, or arrange to have a court reporter present at the meeting. The cost of duplication and/or court reporter will be at the expense of the requesting party.

## ADA NOTICE

In accordance with Section 286.26, Florida Statutes, persons with disabilities needing special accommodations to participate in this meeting should contact the City Clerk's office no later than 5:00 p.m. on the day prior to the meeting.

## EXPARTE COMMUNICATIONS

Oral or written exchanges (sometimes referred to as lobbying or information gathering) between a Planning and Zoning Board member and others, including staff, where there is a substantive discussion regarding a quasi-judicial decision by the Planning and Zoning Board. The exchanges must be disclosed by the Planning and Zoning Board.

# CITY OF GREEN COVE SPRINGS
# PLANNING & ZONING BOARD MEETING

**321 WALNUT STREET, GREEN COVE SPRINGS, FLORIDA**
**TUESDAY, MAY 28, 2024 – 5:00 PM**

## MINUTES

**Chairman Hall called the meeting to order at 5:00pm.**

**ROLL CALL**

Board Members Present: Board Member Henrietta Francis, Board Member Joshua Hobbs, Board Member Phil Vetter, Vice Chairman Josh Danley, Chairman Justin Hall

Staff Members Present: Steve Kennedy, City Manager, Michael Daniels, Development Services Director, Gabriel Barro, Staff Planner, Lyndie Knowles, Development Services Representative

**APPROVAL OF MINUTES**

1. Approval of the Minutes of the April 23, 2024 Meeting

   **Motion was made to approve the Minutes of the April 23, 2024 Meeting.**

   Motion made by Board Member Francis, Seconded by Board Member Hobbs.
   Voting Yea: Board Member Francis, Board Member Hobbs, Board Member Vetter, Vice Chairman Danley, Chairman Hall

   *Motion passed.*

2. Approval of the Minutes of the April 30, 2024 Meeting

   **Motion was made to approve the Minutes of the April 30, 2024 Meeting.**

   Motion made by Board Member Hobb, Seconded by Vice Chairman Danley.
   Voting Yea: Board Member Francis, Board Member Hobbs, Board Member Vetter, Vice Chairman Danley, Chairman Hall

   *Motion passed.*

**ACTION ITEMS**

3. Introduction of New Board Member - Seat 1

   New Board Member Phil Vetter was introduced and was given a few minutes to speak. Mr. Vetter was appointed by City Councilman Ed Gaw.

   At this time, all Planning and Zoning Board Members were given their oath of office and sworn in by Development Services Representative, Lyndie Knowles.

4. Election of Chair and Vice Chair

**Motion to elect Joshua Danley as Chair.**
Motion made by Board Member Francis, Seconded by Board Member Hobbs
Voting Yea: Board Member Francis, Board Member Hobbs, Board Member Vetter, Vice Chairman Danley, Chairman Hall

*Motion passed.*

M**otion to elect Joshua Hobbs as Vice Chair.**

Motion made by Board Member Francis, Seconded by Vice Chairman Danley
Voting Yea: Board Member Francis, Board Member Hobbs, Board Member Vetter, Vice Chairman Danley, Chairman Hall

*Motion passed.*

## PUBLIC HEARINGS

5. PUD Rezoning request for property located at the Southeast corner of US 17 and SR 16 for approximately 112 acres of parcel #016451-003-00 and 016451-000-00.

Zoning Amendment: from: C-2, General Commercial

to: PUD, Planned Unit Development

Development Services Director, Michael Daniels presented Ordinance O-10-2024the rezoning request.

Chairman Hall opened the public hearing.

Applicant, Kelly Hartwig, was present and answered questions from the board members.

Chairman Hall closed the public hearing.

Board discussion followed.

**Motion made by Vice Chairman Hobbs, Seconded by Board Member Francis.**
Voting Yea: Board Member Francis, Board Member Hall, Vice Chairman Hobbs, Chairman Danley
Voting Nay: Board Member Vetter

*Motion passed: 4-1*

## BOARD BUSINESS

Mr. Daniels gave an update on the Rivers House bid process and the Community Redevelopment Agency's public art initiative.

Board Member Hobbs inquired about the mobility fees that were implemented last year. Mr. Daniels gave an update and stated that we are slowly starting to see those come in and there will be a discussion on what projects those funds can be used for once the fund grows to a more substantial amount.

**ADJOURNMENT**

Chairman Hall adjourned the meeting at 6:03pm.

**NEXT MEETING:** TUESDAY, JUNE 25, 2024 AT 5:00PM

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CITY OF GREEN COVE SPRINGS, FLORIDA

J. Justin Hall, Chairman

Attest:

Lyndie Knowles, Development Services Rep.

# STAFF REPORT

## CITY OF GREEN COVE SPRINGS, FLORIDA

**TO:** Planning and Zoning Commission **MEETING DATE:** June 25, 2024

**FROM:** Gabriel Barro, Planning and Zoning

**SUBJECT:** Review of Special Exception application for use of the south portion of the property for Springs Chapel as off-street parking

## PROPERTY DESCRIPTION

**APPLICANT:** James G Whitehouse, Esq., St. Johns Law Group **OWNER:** Springs Chapel Corp.

**PROPERTY LOCATION:** 1106 N Orange Avenue

**PARCEL NUMBER:** 017553-000-00

**FILE NUMBER:** SE 24-002

**CURRENT ZONING:** Gateway Corridor Commercial, Gateway Corridor Residential, Low Density Residential R-1

**FUTURE LAND USE DESIGNATION:** Mixed-Use / Neighborhood

## SURROUNDING LAND USE

**NORTH:** **FLU**: Neighborhood
**Z**: GCC / R-1
**Use**: Commercial / Residential

**SOUTH:** **FLU**: MU
**Z**: GCC
**Use**: Vacant

**EAST:** **FLU**: Neighborhood
**Z**: R-1
**Use**: Residential (Single Family)

**WEST:** **FLU**: MU / Public
**Z**: GCC / Institutional
**Use**: Food / Vacant Non-Residential

## BACKGROUND

The property was approved for a Site Development Plan for the Orange Avenue Baptist Church by the City Council on May 7, 1997. Subsequent to the approval of the site development plan, it was determined that due to traffic concerns along US 17 was required to secure a special exception to allow church uses within the R-1 Zoning District. The Special Exception was approved on July 1, 1997 with the following conditions:

- Orange Avenue Baptist Church shall bring all remaining properties into compliance with the current zoning requirements by acquiring a Special Exception and that the properties be made one single property through the filing of a Site Development Plan, that depicts the existing

development, proposed development, landscaping, access, buffering and parking, and that this Site Development Plan be submitted and approved within 6 months of this meeting, and subject to the property being limited to one driveway, constructed to City standards, off St. Johns Avenue and depicted on the Site Development Plan.

In 2013, an amendment to the approved Site Development was submitted for approval which provided a driveway connection from the Church property to St Johns Avenue to the east.

According to Section 117-62(3) of the City Code, churches with their attendant education and recreational buildings and off-street parking areas are allowed by special exception in the Residential Low Density zoning district. In 2016, an amendment by Crossroads School was approved amending the original special exception to allow a school to be located at the site subject to the following conditions:

1. Ingress and egress for the school shall be limited to North Orange Avenue. No ingress and egress for the school shall be permitted off of St Johns Avenue.
2. The school shall with all comments from the City of Green Cove Springs Building Official and Clay County Fire Marshal.
3. An agent authorization for the Special Exception shall be executed by a director of the Springs Baptist Church Corporation, listed with the State of Florida.
4. Any parking created shall comply with the required landscaping requirements.
5. All signs on the property shall comply with Chapter 110 of the City Code.

Code Enforcement

The church has a history of non-compliance with regulations defined in past special exceptions.

In 2017, two code enforcement violations were issued to the property owner. One for accumulation of garbage and improper use of a carport. The other for failure to comply with the approved site plans and staff recommendations from 2013 and 2016: ingress and egress shall be limited to Orange Ave.

The Special Exception issued in 2016 allowed for a school at 1106 N Orange Ave for a maximum of 100 students. The school currently hosts 156 students, per the National Center for Education Statistics Private School Survey Data.

The same Special Exception from 2016 references a site plan from 2014 which required a hedge or fence with 85% opacity be placed along St. Johns Ave as part of a landscape buffer. No hedge or fence is currently in place.

In 2023, a code enforcement violation was issued to the property owner for failure to comply with the approved Special Exception approved in 2016: ingress and egress shall be limited to Orange Ave. This violation is still active.

The church is requesting an amendment to their 2016 Special Exception regarding approval to allow a school at 1106 N Orange Avenue with compliance with seeking to provide a buffered off street parking area to address the issue of vehicle stacking on streets surrounding the property, as addressed by the surrounding residents. The property is used as a K-12 educational facility and sees higher than normal traffic volume during drop off and pick up hours.

Due to a history of non-compliance with past Special Exceptions and the current code enforcement violation, staff is recommending that failure to obtain and comply with the current special exception results in a fine of $25 per day retroactive to the 29th of April, 2024.

**Special Exception Review Criteria**

When deciding on special exception requests, the Site Development Review Team (SDRT) will ensure the following criteria are satisfied:

(1) Compliance with all elements of the comprehensive plan.
*The proposed request is consistent with the Comprehensive Future Land Use Policy 1.1.1(c), which allows the Gateway Corridor Commercial Zoning District within the Mixed Use Future Land Use Designation*

(2) The establishment, maintenance or operation of the special exception will not be detrimental to or endanger the public health, safety, or general welfare, and is not contrary to established standards, regulations or ordinances of other governmental agencies.
*The proposed development will meet this criteria with the addition of certain requirements.*

(3) Each structure or improvement is so designed and constructed that it is not unsightly, undesirable or obnoxious in appearance to the extent that it will hinder the orderly and harmonious development of the city and the zoning district in which it is proposed.
*The construction plan will meet this criteria with the addition of a landscape buffer, decorative wall along St. Johns Ave, and 1 tree per every 25 ft along St Johns Ave.*

(4) The special exception will not adversely impact the permitted uses in the zoning district nor unduly restrict the enjoyment of other property in the immediate vicinity nor substantially diminish or impair property values within the area.
*The proposed use will be consistent with the existing uses in the gateway corridor and will not negatively impact the area with the addition of certain requirements.*

(5) The establishment of the special exception will not impede the orderly development and improvement of the surrounding property for uses permitted in the zoning district.
*The proposed use will not impact the improvement of surrounding properties.*

(6) Adequate water supply and sewage disposal facilities will be provided in accordance with state and county health departments.
*Water and sewer are available.*

(7) Adequate access roads, onsite parking, onsite loading and unloading berths, and drainage have been or will be provided where required.
*Vehicles will enter the parking lot off of Grove St and be directed through a pickup line. Vehicles will then exit onto N Orange Ave.*

(8) Adequate measures have been taken to provide ingress and egress to the property, which is designed in a manner to minimize traffic congestion on local roads.
*Access is provided off N Orange Ave and Grove St.*

(9) Adequate screening and buffering of the special exception will be provided, if needed.
*Landscape buffers will be provided along areas abutting neighborhoods.*

(10) The special exception will not require signs or exterior lighting which will cause glare, adversely impact area traffic safety or have a negative economic effect on the area. Any signs or exterior lighting required by the special exception shall be compatible with development in the zoning district.
*The special exception will not require signs specific to it.*

(11) The special exception will conform to all applicable regulations of the zoning district in which it is proposed.

## STAFF RECOMMENDATION

Staff recommends approval of the modifications to the Special Exception, subject to the following conditions:

- Define the maximum number of students to no more than 156 students.
- Addition of or modification to any existing structure/facility on the site as of the approval of this modification, will require a modification to the Special Exception.
- Provide parking calculations along with site plans.
- Provide a tree survey showing the location of existing trees, comply with the tree preservation requirements set forth in Sec. 113-274~279.
- Secure permits from FDOT for state road access/driveway.
- Ingress and egress are prohibited on St. Johns Avenue. Provide a gate on the St. Johns Avenue driveway, to be closed during school hours.
- A 6’ high wall and trees (1 per 25 feet) to be provided along St. Johns Avenue as part of the required landscape buffer per Sec. 113-243.
- Gate at access to St. Johns Avenue must be closed and secured during drop-off hours, school hours and pick-up hours.
- Provide vehicle stacking to scale, each vehicle should be 10’ in width and 20’ in length. A minimum of 200’ of stacking shall be provided.
- Block Grove Street at St Johns Avenue with a permanent barrier. Grove Street must be closed prior to the start of the school year, which is August 13, 2024, subject to City Council approval.
- Provide a temporary stacking plan for school drop off and pickup with no access from St. Johns Avenue.
- Special Exception shall be limited to Springs Chapel Corp. Any change in ownership shall require modification to the Special Exception.
- Upon approval, failure to comply will result in pulling of the current and past Special Exceptions.

Submittal timeframes

1. Secure a Site Development Plan approval subject to the special exception requirements within 120 days; and
2. Completion of construction of the improvements set forth in the approved Site Development Plan and conditions within the Special Exception within 6 months subsequent to Site Plan approval; and
3. Not meeting these timeframes shall be considered a violation of the approved Special Exception and shall be grounds for the special exception to be returned to the Planning and Zoning Commission for revocation of the Special Exception; and
4. Any other violations of the Special Exception and Site Development Plan shall follow the Code Enforcement procedure set forth in Chapter 22 of the Green Cove Springs City Code.

# City of Green Cove Springs
# Special Exception Application

**FOR OFFICE USE ONLY**

P Z File #_____ *Item # 2.*

Application Fee:_____

Filing Date: _____ Acceptance Date:_____

Review Type: SDRT ☐ P & Z ☐

**A. PROJECT**

1. Project Name: Springs Chapel & Academy - Church / Education Off Street Parking
2. Address of Subject Property: 1106 N. Orange Avenue
3. Parcel ID Number(s) 38-06-26-017553-000-00
4. Existing Use of Property: Church and Educational Uses
5. Future Land Use Map Designation : Mixed Use FLUM - front / Neighborhood FLUM - back
6. Zoning Designation: Gateway Corridor Commercial (GCC) - front / Gateway Corridor Residential (GCR) - back
7. Acreage: 2.8 acres

**B. APPLICANT**

1. Applicant's Status ☐ Owner (title holder) ☒ Agent
2. Name of Applicant(s) or Contact Person(s): James G. Whitehouse, Esq. Title:_____

   Company (if applicable): St. Johns Law Group

   Mailing address: 104 Sea Grove Main Street

   City: St. Augustine State: FL ZIP: 32080

   Telephone: (___ )904-495-0400 FAX: (___ )904-495-0506 e-mail: jameswhitehouse@sjlawgroup.com
3. If the applicant is agent for the property owner*:

   Name of Owner (title holder): Pastor Christian Pope

   Company (if applicable): Springs Chapel Corp.

   Mailing address: 1106 N. Orange Avenue

   City: Green Cove Springs State: FL ZIP: 32043

   Telephone: (___ )_____ FAX: (___ )_____ e-mail:_____

   * Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

**C. ADDITIONAL INFORMATION**

1. Is there any additional contact for sale of, or options to purchase, the subject property? ☐ Yes ☒ No

   If yes, list names of all parties involved:_____

   If yes, is the contract/option contingent or absolute? ☐ Contingent ☐ Absolute

## D. STATEMENT OF SPECIAL EXCEPTION SOUGHT

1. Requested Special Exception:
   Special Exception as allowed by the Code and Comprehensive Plan for use of the south portion of the property for Churches with their attendant education and recreational buildings and off-street parking areas, (Buffers to be included as requested by the neighbors on St. Johns, including a compatible, architecturally pleasing fence and landscaping and prohibition from the use of St. Johns for ingress and egress, as requested.)

2. Section of Land Development Regulations under which the Special Exception is sought:
   DIVISION 3. - GATEWAY CORRIDOR RESIDENTIAL (GCR) ZONING CATEGORY,
   Sec. 117-515(a) - The gateway corridor residential zoning category is intended for all property located in the gateway corridor and designated as RLD (residential low density) on the future land use map. The permitted uses, special exceptions, and density controls are R-1.

   DIVISION 2. - RESIDENTIAL LOW DENSITY LAND USE, R-1 ZONING CATEGORY
   Sec. 117-62. - Special exceptions: The following are special exceptions in the residential low density land use, R-1 zoning category:
   (3) Churches with their attendant education and recreational buildings and off-street parking areas.

3. Reason Special Exception is requested:
   The Church, with their attendant education buildings and off-street parking areas, requests, in coordination with the St. Johns neighborhood, to provide a well buffered and landscaped area on the southeastern side of their property, to address the parking and stacking needs of the church and education uses. Part of this area has been used for dirt parking and traffic direction for years, and they wish to provide a better engineered and architecturally and aesthetically pleasing plan to contain this church and attendant educational traffic and parking. The Church and attendant K-12 school onsite, seeks to provide the safest experience for ingress/egress and parking and the least amount of disruption to the state highway and a clear separation from the St. Johns neighborhood areas as requested by the residents. Thus, they seek this special exception as allowed by our comprehensive plan and under our code to allow this Church and attendant education off-street parking area, as depicted, with substantial buffering to be included as requested by the neighbors on St. Johns, continuing their compatible, beautifully designed iron fence the length of the property behind this section while adding additional landscaping and buffering to substantially buffer this excepted attendant parking. Further, as a good neighbor, they will direct all traffic toward Orange Avenue and away from St. Johns Ave. as they ingress/egress the church and school. Finally, this will allow them to contain all their church and attendant school traffic to the property, with no adverse off-site impacts or effect.

4. Statement of Facts for Requested Special Exception (Use additional pages if necessary)

(PLEASE ANSWER THE FOLLOWING QUESTIONS TO THE BEST OF YOUR ABILITY. THESE FACTS WILL BE USED BY THE STAFF TO MAKE A RECOMMENDATION AND THE PLANNING AND ZONING BOARD IN MAKING THEIR DECISION)

**a.** Is this exception in compliance with all elements of the Comprehensive Plan?

Yes, this plan is allowable as a special exception for this very use pursuant to our code and is in compliance with our comprehensive plan. This property's land use designation is split, with the entire front half in the Mixed-Use FLU and zoned Gateway Corridor Commercial (GCC), while the back section is in the Neighborhood FLU with Gateway Corridor Residential zoning. Div. 3 – Gateway Corridor Residential, Sec. 117-515, specifically states: The permitted special exceptions for GCR are the same as R-1. Div. 2 – R1, Section 117-62 (R1 Special exceptions) states that the following are special exceptions in the R1 zoning category: "(3) – Churches with their attendant education and recreational buildings and off-street parking areas."

**b.** Is the establishment, maintenance or operation of the special exception detrimental to or endanger the public health, safety or general welfare, or contrary to established standards, regulations or ordinances of other governmental agen

No, in fact, the plan being designed by this long-standing church and attendant educational uses merely seeks to utilize the vacant part of their land on the southeastern end, which has been used for dirt parking and traffic direction for years, under a better engineered and architecturally and aesthetically pleasing plan to contain its church and attendant educational traffic and parking. Specifically, they will continue their beautifully designed iron fence the length of the property behind this section while adding additional landscaping and buffering to substantially buffer this excepted attendant parking. Further, as a good neighbor, they will direct all traffic toward Orange Avenue and away from St. Johns Ave. as they ingress/egress the church and school. Finally, this will allow them to contain all their church and attendant school traffic to the property, with no adverse off-site impacts or effect to continue to address any issues that have arisen from the long-standing allowed use.

**c.** Is the structure or improvement so designed and constructed that it is not unsightly, undesirable or obnoxious in appearance to the extent that it will hinder the orderly and harmonious development of Green Cove Springs and zoning district in which it is proposed?

The church and school have been in place for years and will remain orderly and in compliance with all our codes and regulations. As stated, to reduce/eliminate visibility of the new allowable parking area from St. Johns Avenue, the church will (1) extend its beautifully designed iron fence the length of the property behind this section while adding additional landscaping and buffering fence, (2) ensure a minimum 90% opacity screening in this buffered area, and (3) will also add trees and shrubbery alongside the fence extension (as requested/instructed). These three features will create somewhat of a park like experience/appearance from all roads, especially from St. Johns Avenue. They have specifically worked on this design with their engineers and will implement it to continue their beautifully designed fence the length of the property behind this section while adding landscaping and buffering to substantially buffer this attendant parking. Further, as a good neighbor, they will direct all traffic toward Orange Avenue and away from St. Johns Ave. as they ingress/egress the church and school. Finally, this will allow them to contain all their church and attendant school traffic to the property, with no adverse off-site impacts or effect and to continue to address any issues from the long-standing allowed use.

**d.** Will the special exception adversely impact the permitted use in the zoning district or unduly restrict the enjoyment of the other property in the immediate vicinity nor substantially diminish or impair property values within the area?

Not at all, in fact, the plan being designed by this long-standing church and attendant educational uses merely seeks to utilize this open, vacant part of their land on the southeastern end, part of which has been used for dirt parking and traffic direction for years, under a better engineered and architecturally and aesthetically pleasing plan to contain its church and attendant educational traffic and parking. Specifically, they will continue their beautifully designed iron fence the length of the property behind this section while adding additional landscaping and buffering to substantially buffer this excepted attendant parking. Further, as a good neighbor, they will direct all traffic toward Orange Avenue and away from St. Johns Ave. as they ingress/egress the church and school. Finally, this will allow them to contain all their church and attendant school traffic to the property, with no adverse off-site impacts or effect and to continue to address any issues from the long-standing allowed use. This will provide a positive impact on the area and the immediately adjacent properties to this Gateway Commercial Area:

(1) Neighbors will be extensively buffered from church parking and school pickup/drop-off traffic;
(2) This buffering will help reduce/eliminate lights and sounds from the growing US17 traffic; and
(3) It will provide a beautification of the St. Johns Ave. corridor with extensive landscaping, trees and bushes & the full extension of their beautifully designed fence for the full length of the property, clearly delineating the Gateway uses from the residential areas on St. Johns Avenue, a long-established planning technique in transitional areas to protect residents.

e. Will the establishment of the special exception impede the orderly development and improvement of the surrounding property for uses permitted in the zoning district?

No, this plan is allowable as a special exception for this very use pursuant to our code. This property's land use designation is split, with the entire front half in the Mixed-Use FLU and zoned Gateway Corridor Commercial (GCC), while the back section is in the Neighborhood FLU with Gateway Corridor Residential zoning. Div. 3 – Gateway Corridor Residential, Sec. 117-515, specifically states: The permitted special exceptions for GCR are the same as R-1. Div. 2 – R1, Section 117-62 (R1 Special exceptions) states that the following are special exceptions in the R1 zoning category: "(3) – Churches with their attendant education and recreational buildings and off-street parking areas."

Moreover, the plan as described and depicted will in fact compliment the long-allowed use and add aesthetic and architecturally pleasing additional buffering to assist in the differentiation between the Gateway zoned areas and the residential neighborhood on St. Johns Avenue, particularly with their direction of any traffic away from the public roads up and down St. Johns Avenue.

f. Are adequate water and sewage disposal facilities provided?

Yes.

g. Are access roads adequate, on-site parking, on-site loading and loading berths, and drainage have been or will be provided where required?

Yes. Grove St. is a public road that is lightly trafficked with an existing southbound turn lane and the new church/school parking area plan being designed for this long-standing church and attendant educational uses merely seeks to utilize the additional vacant part of their land on the southeastern end, which has been used for dirt parking and traffic direction for years, under a better engineered and architecturally and aesthetically pleasing plan to contain its church and attendant educational traffic and parking lot, including pickup/drop-off lanes onsite and adding approximately 70 parking spaces, which will fulfill our current needs & allow room for additional church and school parking.

h. Have adequate measures been taken to provide ingress and egress to the property and design in a manner to minimize traffic congestion on local roads?

Yes, hence the plan and the church's large expenditure to contain all their traffic and parking to be good neighbors for this long-allowed use. This use of an access removed from the state highway on Grove St. allows for removal of all congestion from US17. The double pickup/drop-off lane & extended parking area will further eliminate any traffic congestion on Grove St. and all traffic will continue to be directed away from St. Johns Avenue and the residentially zoned areas behind the Gateway. The angled and clearly identified entrance from Grove St. will also help to further eliminate any St. Johns Avenue usage.

i. Is adequate screening and buffering signs of the special exception provided, if needed??

Yes, as discussed above, an extensive landscaping/screening buffer will be added to the new extended fence alongside St. Johns Avenue. The plan designed by this long-standing church and attendant educational use merely seeks to utilize this open/vacant part of their land on the southeastern end, part of which has been used for dirt parking and traffic direction for years, under a better engineered and architecturally and aesthetically pleasing plan to contain its church and attendant educational traffic and parking. Specifically, they will continue their beautifully designed iron fence the length of the property behind this section while adding additional landscaping and buffering to substantially buffer this attendant parking. Further, as a good neighbor, they will continue to direct all traffic toward Orange Avenue and away from St. Johns Ave. as they ingress/egress the church and school. Finally, this will allow them to contain all their church and attendant school traffic to the property, with no adverse off-site impacts or effect and to continue to address any issues from the long-standing allowed use.

j. Will the special exception require signs or exterior lighting, which will cause glare, adversely impact area traffic safety or have a negative economic effect on the area? Any signs or exterior lighting required by t exception shall be compatible with development in the zoning district?

No glare or adverse impact. In fact, all directional signage will be advantageous to direct the traffic away from St. Johns Avenue and the neighborhoods behind this Gateway zoned area and any lighting will be directional to provide safety as required but to eliminate any adverse effect on the area. All will be compatible with the area.

k. Will the special exception conform to all applicable regulations of the zoning district in which it is proposed?

Yes, we will meet all the applicable regulations and requirements of our code.

**E. ATTACHMENTS (One hard copy or one copy in PDF format)**

1. Copy of Warranty Deed or other proof of ownership

See Attached.

2. Legal description

See Attached.

**F. FEE.**

Home Occupation - $150
Residential property - $250
Non- residential - $500

a. The Cost of postage, signs, advertisements, and outside consultants are in addition to the application fee.

b. The applicant is responsible to pay the cost of the advertisement and signs.

c. All applications are subject 10% administrative fee and must pay the cost of any outside consultants' fees.

No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any fees for advertising, signs, necessary technical review or additional reviews of the application by a consultant will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any action of any kind on the development application.

**Both attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.**

**I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge:**

Signature of Applicant

James G. Whitehouse, Esq.
Typed or printed name and title of applicant

5/3/24
Date

Signature of Co-applicant

Typed or printed name of co-applicant

Date

State of Florida County of St. Johns

The foregoing application is acknowledged before me this 3 day of May, 2024, by James Whitehouse, who is/are personally known to me, or who has/have produced _____ as identification.

NOTARY SEAL

Signature of Notary Public, State of _____

Notary Public State of Florida
Thomas Sharpe
My Commission HH 077152
Expires 01/04/2025

## LEGEND

- AREAS WHERE NEW CONCRETE CONSTRUCTION IS TO OCCUR
- AREAS WHERE NEW ASPHALT CONSTRUCTION IS TO OCCUR
- PROPERTY BOUNDARY
- SOLID ARROWS ARE FOR DIRECTIONAL PURPOSES ONLY NOT FOR PAVEMENT MARKINGS
- (10) NUMBER OF STANDARD PARKING SPACES
- NOTE: FOR ADA PARKING AND SIDEWALK DETAILS SEE MISC. DETAILS

## SITE DATA

| | |
|---|---|
| TOTAL AREA | = 2.79 AC |
| IMPERVIOUS AREA (EXISTING) | = 1.00 AC |
| IMPERVIOUS AREA (PROPOSED) | = 0.78 AC |
| PERVIOUS AREA | = 1.20 AC |
| WETLANDS AREA (PONDS) | = 0.12 AC |
| PROJECT AREA | = 1.10 AC |
| IMPERVIOUS AREA (EXISTING) | = 0.20 AC |
| IMPERVIOUS AREA (PROPOSED) | = 0.78 AC |
| PERVIOUS AREA | = 0.33 AC |
| WETLANDS AREA (PONDS) | = 0.12 AC |

| SITE INFORMATION | DESIGNED | EXISTING | PROPOSED | REQUIRED |
|---|---|---|---|---|
| STANDARD PARKING SPACES | 102 | 29 PAVED 11 UNPVD | 62 | 100* |
| ADA PARKING SPACES | 3 ADA + 1 VAN | 2 ADA | 1 ADA + 1 VAN | 3 ADA + 1 VAN** |
| TOTAL PARKING SPACES | 102 + 4 ADA | 40 + 2 ADA | 62 + 2 ADA | 100 + 4 ADA |

* 300 SEAT SANCTUARY / 3 SEATS PER SPACE (300 / 3) = 100 SP

** TOTAL ADA = 4 PER 76-100 STANDARD SP
VAN = 1 PER 1-200 ADA SP

MAX. STUDENT COUNT
1 SPACE / 10 STUDENTS = 1,060 STUDENTS

HOURS OF OPERATION
SCHOOL: MON-FRI 8AM-5PM
CHURCH: SAT-SUN 8AM - 9PM

SEWAGE MANHOLE
RIM EL.=17.84'
BOTTOM EL.=8.60'
12" R.C.P. (W) INV.=9.54'
12" R.C.P. (E) INV.=9.54'

ST. JOHNS AVENUE — APPARENT 60.0' RIGHT OF WAY

11.00'(P)
10.64'(M)
FOUND 4"X4" CONCRETE MONUMENT
60.00'
FOUND 5/8" IROD PIPE (WITNESS CORNER)
(12.8')
0.3'E
0.3'N
90°08'11"
ACCESS GATE
4.0'N
3.9'N
UNABLE TO FIND OR SET DUE TO OAK TREE & FENCE @ PROPERTY CORNER
N60°18'23"W 498.70'(C)
1.6'N
MATCH EXISTING FENCE TO END OF PROPERTY LINE
MATCH CURB/GUTTER
AREA TO BE REMOVED
HYDRANT
30.00'
FOUND 1/2" IROD PIPE ILLEGIBLE
N:10037.813
E:5467.293
89°51'43"(C)
12"
SITE BOUNDARY
10' LANDSCAPE BUFFER
14'x14' DUMPSTER PAD
METAL BUILDING ON CONCRETE
40.6'
19.0'
19.2'
20.2'
LOT 15 BLOCK 3
LOT 13 BLOCK 3
LOT 11 BLOCK 3
LOT 9 BLOCK 3
LOT 7 BLOCK 3
LOT 5 BLOCK 3
LOT 4 BLOCK 3
LOT 3 BLOCK 3
LOT 2 BLOCK 3
LOT 1 BLOCK 3
123.0'
PROJECT BOUNDARY
S29°49'54"W 244.03'(C)
1.6'W
(11.7')
FOUND 1/2" IROD PIPE (WITNESS CORNER)
144.3'
CONCRETE
A/C
80.6'
COVERED
16.9'
5.9'
7.0'
60.0'
ASPHALT
46.8'
BUILDING # 1106
LOT 16 BLOCK 3
LOT 14 BLOCK 3
LOT 12 BLOCK 3
LOT 10 BLOCK 3
LOT 8 BLOCK 3
LOT 6 BLOCK 3
144.4'
11.9'
16.5'
42.9'
61.1'
83.3'
DROP OFF ZONE
65.7'
BROKEN CONCRETE
89°51'38"(C)
50.00'(P)
F.F.=19.28'
13.9'
3.9'
30.8'
14.0'
41.6'
7.6'
11.3'
FOUND 1/2" IROD PIPE ILLEGIBLE
N:10050.903
E:4911.834
N60°18'28"W 498.70'(M)
SITE BENCHMARK
EL. = 18.63'
NORTH ORANGE AVENUE MAGNOLIA AVENUE(P) RIGHT OF WAY UNDETERMINED
4.6'
4.6'
R49'
R25'
R15'
R5'
R60'
R30'
R3.5'
18'
19.28'
25.34'
10.28'
110.37'
110.02'
113.24'
75'
50'
40'
15'
12'
10' (TYP)
SIGN
UNKNOWN RIGHT OF WAY
GROVE STREET
FOUND 1/2" IROD PIPE ILLEGIBLE
N:9821.760
E:5354.793
CURB INLET DRAIN
STORM MANHOLE
RIM EL.=17.19'
15"R.C.P.(SW) INV.=13.24'
6" R.C.P.(E) INV.=13.85'
6" R.C.P. (W) INV.=15.85'
4" C.P.P. (NW)INV.=14.04'

0 20 40
SCALE: 1" = 20'
SCALE: 1" = 40'

FOR: 11"x17" SHEET

TOCOI Engineering, LLC
714 NORTH ORANGE AVENUE, GREEN COVE SPRINGS, FL 32043
PH: 904-215-1388
E.B. NUMBER: 26383

ENGINEER OF RECORD
CHARLES SOHM
FLORIDA
REGISTRATION NUMBER:
79289

SPRINGS ACADEMY PARKING LOT
FOR
SPRINGS CHAPEL CORP.
CONCEPT PLAN

REVISIONS

PLOT DATE:
DRAWN BY:
DESIGNED BY:
CHECKED BY:
SCALE:
JOB NO.:

SHEET NO.



Date: 6/20/24 Time: 1:38 PM DWG Name: \\TE-GCS\01-Projects\24-671 Springs Academy Parking Lot GCS Pope\03-CADD\24-671 MASTER PLAN.dwg Layout: CONCEPT

All documents and materials supplementing the signed and sealed documents are resources provided for clarification purposes only and do not supersede the signed and sealed documents. Engineer is not responsible for any deviations from the signed and sealed documents.

## Retention Pond Treatment Analysis

**Springs Chapel**
**Proposed Drainage Area**
**Detention/Retention Basin**

| | | |
|---|---|---|
| Site Area (acres) | 0.95 | |
| Drainage Area 1 (acres) | 0.95 | |
| % Impervious (excluding ponds) | 93% | |
| Impervious Area | 0.88 | |
| Run off Coefficient | 0.7 | |
| **On-line treatment** | | |
| f Prorosity= | 0.25 | |
| Kvs= see soils test results | 25.9 | ft/day |
| *Kh= | 24.4 | ft/day |
| F.S.= | 2 | |
| Basin Bottom | 15.00 | ft |
| Estimated Seasonal High GWT | 9.90 | ft |
| Impervious Layer Elevation | -3.00 | ft |
| **Rectangular retention basin** | | |
| Area at bottom (acres) | 0.017 | ac |
| Height of Basin above GWT, hb | 5.10 | ft |

| Stage | Depth of Water | Area (sq.ft) | Area (acre) | Vol. (ac.ft.) | Vol. (cu.ft.) | Storage(ac.ft.) |
|---|---|---|---|---|---|---|
| 15.00 | 0.00 | 744.0 | 0.02 | 0.00 | 0.00 | 0.00 |
| 15.50 | 0.50 | 1872.0 | 0.04 | 0.02 | 654.00 | 0.02 |
| 16.00 | 1.00 | 3064.0 | 0.07 | 0.03 | 1234.00 | 0.04 |
| 16.50 | 1.50 | 4320.0 | 0.10 | 0.04 | 1846.00 | 0.09 |
| 17.00 | 2.00 | 5640.0 | 0.13 | 0.06 | 2490.00 | 0.14 |

**Calculate time to recover Treatment Volume**

**Treatment volume required**

| | | | | |
|---|---|---|---|---|
| 0.5" of run off | 1724.25 | cu.ft. | 0.04 | ac. ft. |
| 1.25" x impervious area excluding pond area | 4007.29 | cu.ft. | 0.09 | ac. ft. |
| Greatest + additional 0.5" | 5731.54 | cu.ft. | 0.13 | ac. ft. |
| Treatment volume / drainage area | 1.66 | in. | | |

**Calculate height of treatment volume**

| | | |
|---|---|---|
| Treatment Volume Elevation | 16.84 | ft. |

**Determine if saturated lateral (Stage Two) flow will occur**

| | | |
|---|---|---|
| Treatment Volume Depth (hv) | 1.84 | ft |
| Height of water to saturate the soil (hu) hu=f(hb) | 1.275 | ft |

## Retention Pond Treatment Analysis

**Since hv > hu Saturated Lateral Flow will occur**

**Calculate the volume of water infiltrated in unsaturated vertical (Stage One) flow and the time to infiltrate this volume.**

| | | | |
|---|---|---|---|
| Area of basin bottom(sq.ft) | 744.00 | sq. ft. | |
| Volume Infiltrated during Stage One (Vu)<br>Vu=Ab*hb*f | 948.60 | cu. ft. | |
| Unsaturated Vertical Hydraulic Conductivity (Kvu)<br>Kvu= 2/3*Kvs | 17.27 | ft/day | |
| Design Infiltration Rate Id<br>Id=Kvu/FS | 8.63 | ft/day | |
| Time to saturate soil beneath the basin $t_{sat}$<br>tsat=f*hb/Id | 0.15 | days | |

**Saturated Lateral Flow Analysis**

Calculated the remaining treatment volume to be recovered under saturated lateral flow (Stage 2) conditions.

| | | | |
|---|---|---|---|
| Remaining volume to be infiltrated | 4782.94 | cu. ft. | 0.11 ac.ft |
| Elevation of treatment volume at start of saturated lateral flow. | 16.71<br>16.71 | ft | Interpolate |

**Calculate Fx and Fy**

| | | |
|---|---|---|
| hc=hb (at t=t Total) | | |
| Height of water in basin at saturated lateral flow | | |
| h2= HT-hb | 1.71 | ft |
| HT=hb+h2 | 6.81 | ft |
| Fy = hb/HT | 0.75 | |

**When water level is at the basin bottom**

| | | |
|---|---|---|
| the basin length L | 268 | ft |
| the basin width W | 2 | ft |
| Basin Width to Length ratio (L/W) | 134.00 | ft/ft |

| | |
|---|---|
| Determine Fx | |
| Fx (f=0.2) | 1.00 |
| Fx (f=0.3) | 1.50 |
| Fx=((W^2)/4KH*D*t)^.5 | 1.25 |

**Calculate time to recover treatment volume under saturated lateral flow.**

| | | |
|---|---|---|
| H=seasonal high GWT-impervious layer | 12.9 | ft |
| Average Saturated Thickness (D)<br>D=H+(hc/2) | 15.45 | ft |
| Time to recover remaining treatment volume under lateral saturated flow conditions<br>t=W^2/ 4*Kh*D*Fx^2 | 0.00 | days |
| Total Recovery Time<br>T=Tsat+T lateral sat. | 0.149<br>3.59 | days<br>hours |

**Design meets 72 hour recovery time criteria**

Kh value is based on Double Ring Infiltromiter

Node Max Conditions [Scenario1]

| Node Name | Sim Name | Warning Stage [ft] | Max Stage [ft] | Min/Max Delta Stage [ft] | Max Total Inflow [cfs] | Max Total Outflow [cfs] | Max Surface Area [ft2] |
|---|---|---|---|---|---|---|---|
| FDOT INLET | 100Y-24H | 17.75 | 14.75 | 0.0010 | 0.92 | 0.00 | 0 |
| GWR | 100Y-24H | 10.00 | 9.90 | 0.0000 | 1.39 | 0.00 | 0 |
| P1 | 100Y-24H | 17.00 | 16.91 | -0.0010 | 2.80 | 1.47 | 2304 |
| P2 | 100Y-24H | 17.00 | 16.95 | -0.0010 | 2.58 | 0.88 | 3128 |
| P3 | 100Y-24H | 17.00 | 16.96 | 0.0010 | 2.38 | 0.69 | 3144 |
| P4 | 100Y-24H | 17.00 | 16.97 | -0.0010 | 2.11 | 0.51 | 3158 |
| P5 | 100Y-24H | 17.00 | 16.97 | 0.0010 | 1.92 | 0.34 | 3162 |
| FDOT INLET | 10Y-24H | 17.75 | 14.75 | 0.0010 | 0.00 | 0.00 | 0 |
| GWR | 10Y-24H | 10.00 | 9.90 | 0.0000 | 1.14 | 0.00 | 0 |
| P1 | 10Y-24H | 17.00 | 16.48 | -0.0010 | 1.87 | 1.13 | 1834 |
| P2 | 10Y-24H | 17.00 | 16.48 | 0.0010 | 1.83 | 0.74 | 2403 |
| P3 | 10Y-24H | 17.00 | 16.48 | 0.0010 | 1.73 | 0.58 | 2407 |
| P4 | 10Y-24H | 17.00 | 16.49 | -0.0010 | 1.52 | 0.34 | 2410 |
| P5 | 10Y-24H | 17.00 | 16.49 | -0.0010 | 1.33 | 0.21 | 2411 |
| FDOT INLET | 25Y-24H | 17.75 | 14.75 | 0.0010 | 0.00 | 0.00 | 0 |
| GWR | 25Y-24H | 10.00 | 9.90 | 0.0000 | 1.21 | 0.00 | 0 |
| P1 | 25Y-24H | 17.00 | 16.63 | -0.0010 | 2.12 | 1.23 | 2001 |
| P2 | 25Y-24H | 17.00 | 16.64 | -0.0010 | 2.04 | 0.78 | 2643 |
| P3 | 25Y-24H | 17.00 | 16.64 | 0.0010 | 1.92 | 0.61 | 2647 |
| P4 | 25Y-24H | 17.00 | 16.64 | -0.0010 | 1.69 | 0.35 | 2650 |
| P5 | 25Y-24H | 17.00 | 16.64 | -0.0010 | 1.50 | 0.22 | 2652 |
| FDOT INLET | MA-24H | 17.75 | 14.75 | 0.0010 | 0.00 | 0.00 | 0 |
| GWR | MA-24H | 10.00 | 9.90 | 0.0000 | 0.93 | 0.00 | 0 |
| P1 | MA-24H | 17.00 | 16.00 | -0.0010 | 1.18 | 0.85 | 1366 |
| P2 | MA-24H | 17.00 | 16.01 | -0.0010 | 1.17 | 0.54 | 1764 |
| P3 | MA-24H | 17.00 | 16.01 | 0.0010 | 1.02 | 0.42 | 1755 |
| P4 | MA-24H | 17.00 | 16.01 | -0.0010 | 0.83 | 0.26 | 1769 |
| P5 | MA-24H | 17.00 | 16.01 | -0.0010 | 0.74 | 0.20 | 1744 |

## Manual Basin: B1

Scenario: Scenario1
Node: P1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.3490 ac

| Area [ac] | Land Cover Zone | Soil Zone | Rainfall Name |
|---|---|---|---|
| 0.3490 | B1 | B1 | |

Comment:

## Manual Basin: B2

Scenario: Scenario1
Node: P2
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.2157 ac

| Area [ac] | Land Cover Zone | Soil Zone | Rainfall Name |
|---|---|---|---|
| 0.2157 | B2 | B2 | |

Comment:

## Manual Basin: B3

Scenario: Scenario1
Node: P3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.2148 ac

| Area [ac] | Land Cover Zone | Soil Zone | Rainfall Name |
|---|---|---|---|
| 0.2148 | B3 | B3 | |

Comment:

## Manual Basin: B4

Scenario: Scenario1
Node: P4
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.2062 ac

| Area [ac] | Land Cover Zone | Soil Zone | Rainfall Name |
|---|---|---|---|
| 0.2062 | B4 | B4 | |

Comment:

## Manual Basin: B5

Scenario: Scenario1
Node: P5
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.2166 ac

| Area [ac] | Land Cover Zone | Soil Zone | Rainfall Name |
|---|---|---|---|
| 0.2166 | B5 | B5 | |

Comment:

## Node: FDOT INLET

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 13.24 ft
Warning Stage: 17.75 ft
Boundary Stage:

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 13.24 |
| 0 | 0 | 0 | 12.0000 | 14.75 |
| 0 | 0 | 0 | 24.0000 | 14.75 |

Comment:

## Node: GWR

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 9.90 ft
Warning Stage: 10.00 ft
Boundary Stage:

Comment:

## Node: P1

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 15.00 ft
Warning Stage: 17.00 ft

| Stage [ft] | Area [ac] | Area [ft2] |
|---|---|---|
| 15.00 | 0.0096 | 416 |
| 15.50 | 0.0198 | 864 |
| 16.00 | 0.0309 | 1344 |
| 16.50 | 0.0426 | 1856 |
| 17.00 | 0.0551 | 2400 |

Comment:

## Node: P2

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 15.00 ft
Warning Stage: 17.00 ft

| Stage [ft] | Area [ac] | Area [ft2] |
|---|---|---|
| 15.00 | 0.0109 | 474 |
| 15.50 | 0.0244 | 1062 |
| 16.00 | 0.0393 | 1714 |
| 16.50 | 0.0558 | 2430 |
| 17.00 | 0.0737 | 3210 |

Comment:

## Node: P3

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 15.00 ft
Warning Stage: 17.00 ft

| Stage [ft] | Area [ac] | Area [ft2] |
|---|---|---|
| 15.00 | 0.0109 | 474 |
| 15.50 | 0.0244 | 1062 |
| 16.00 | 0.0393 | 1714 |
| 16.50 | 0.0558 | 2430 |
| 17.00 | 0.0737 | 3210 |

Comment:

## Node: P4

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 15.00 ft
Warning Stage: 17.00 ft

| Stage [ft] | Area [ac] | Area [ft2] |
|---|---|---|
| 15.00 | 0.0109 | 474 |
| 15.50 | 0.0244 | 1062 |
| 16.00 | 0.0393 | 1714 |
| 16.50 | 0.0558 | 2430 |
| 17.00 | 0.0737 | 3210 |

Comment:

## Node: P5

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 15.00 ft
Warning Stage: 17.00 ft

| Stage [ft] | Area [ac] | Area [ft2] |
|---|---|---|
| 15.00 | 0.0109 | 474 |
| 15.50 | 0.0244 | 1062 |
| 16.00 | 0.0393 | 1714 |
| 16.50 | 0.0558 | 2430 |
| 17.00 | 0.0737 | 3210 |

Comment:

| Pipe Link: L-0020P | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Scenario1 | Invert: | 15.50 ft | Invert: | 15.00 ft |
| From Node: | P2 | Manning's N: | 0.0120 | Manning's N: | 0.0120 |
| To Node: | P1 | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.00 ft | Max Depth: | 1.00 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 75.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 1 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 1.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

| Pipe Link: L-0030P | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Scenario1 | Invert: | 15.50 ft | Invert: | 15.00 ft |
| From Node: | P3 | Manning's N: | 0.0120 | Manning's N: | 0.0120 |
| To Node: | P2 | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.00 ft | Max Depth: | 1.00 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 20.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 1 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 1.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |

| | | | | | |
|---|---|---|---|---|---|
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

| Pipe Link: L-0040P | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Scenario1 | Invert: | 15.50 ft | Invert: | 15.00 ft |
| From Node: | P4 | Manning's N: | 0.0120 | Manning's N: | 0.0120 |
| To Node: | P3 | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.00 ft | Max Depth: | 1.00 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 70.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 1 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 1.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

| Pipe Link: L-0050P | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Scenario1 | Invert: | 15.50 ft | Invert: | 15.00 ft |
| From Node: | P5 | Manning's N: | 0.0120 | Manning's N: | 0.0120 |
| To Node: | P4 | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.00 ft | Max Depth: | 1.00 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 20.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 1 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 1.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

| Percolation Link: L-0060PERC | | | |
|---|---|---|---|
| Scenario: | Scenario1 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | P1 | | |
| To Node: | GWR | Vertical Flow Termination: | Horizontal Flow Algorithm |

| | | | |
|---|---|---|---|
| Link Count: | 1 | | |
| Flow Direction: | Both | Perimeter 1: | 216.00 ft |
| Aquifer Base Elevation: | -3.00 ft | Perimeter 2: | 404.00 ft |
| Water Table Elevation: | 9.90 ft | Perimeter 3: | 530.00 ft |
| Annual Recharge Rate: | 50 ipy | Distance P1 to P2: | 30.00 ft |
| Horizontal Conductivity: | 24.400 fpd | Distance P2 to P3: | 50.00 ft |
| Vertical Conductivity: | 25.900 fpd | # of Cells P1 to P2: | 10 |
| Fillable Porosity: | 0.250 | # of Cells P2 to P3: | 20 |
| Layer Thickness: | 0.00 ft | | |

Comment:

**Percolation Link: L-0070PERC**

| | | | |
|---|---|---|---|
| Scenario: | Scenario1 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | P2 | | |
| To Node: | GWR | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 62.00 ft |
| Flow Direction: | Both | Perimeter 2: | 250.00 ft |
| Aquifer Base Elevation: | -3.00 ft | Perimeter 3: | 376.00 ft |
| Water Table Elevation: | 9.90 ft | Distance P1 to P2: | 30.00 ft |
| Annual Recharge Rate: | 50 ipy | Distance P2 to P3: | 50.00 ft |
| Horizontal Conductivity: | 24.400 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 25.900 fpd | # of Cells P2 to P3: | 20 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 0.00 ft | | |

Comment:

**Percolation Link: L-0080PERC**

| | | | |
|---|---|---|---|
| Scenario: | Scenario1 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | P3 | | |
| To Node: | GWR | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 62.00 ft |
| Flow Direction: | Both | Perimeter 2: | 250.00 ft |
| Aquifer Base Elevation: | -3.00 ft | Perimeter 3: | 376.00 ft |
| Water Table Elevation: | 9.90 ft | Distance P1 to P2: | 30.00 ft |
| Annual Recharge Rate: | 50 ipy | Distance P2 to P3: | 50.00 ft |
| Horizontal Conductivity: | 24.400 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 25.900 fpd | # of Cells P2 to P3: | 20 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 0.00 ft | | |

Comment:

**Percolation Link: L-0090PERC**

| | | | |
|---|---|---|---|
| Scenario: | Scenario1 | | |
| From Node: | P4 | Surface Area Option: | Vary Based on Stage/Area Table |
| To Node: | GWR | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 62.00 ft |
| Flow Direction: | Both | Perimeter 2: | 250.00 ft |
| Aquifer Base Elevation: | -3.00 ft | Perimeter 3: | 376.00 ft |
| Water Table Elevation: | 9.90 ft | Distance P1 to P2: | 30.00 ft |
| Annual Recharge Rate: | 50 ipy | Distance P2 to P3: | 50.00 ft |
| Horizontal Conductivity: | 24.400 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 25.900 fpd | # of Cells P2 to P3: | 20 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 0.00 ft | | |

Comment:

**Percolation Link: L-0100PERC**

| | | | |
|---|---|---|---|
| Scenario: | Scenario1 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | P5 | | |
| To Node: | GWR | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 62.00 ft |
| Flow Direction: | Both | Perimeter 2: | 250.00 ft |
| Aquifer Base Elevation: | -3.00 ft | Perimeter 3: | 376.00 ft |
| Water Table Elevation: | 9.90 ft | Distance P1 to P2: | 30.00 ft |
| Annual Recharge Rate: | 50 ipy | Distance P2 to P3: | 50.00 ft |
| Horizontal Conductivity: | 24.400 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 25.900 fpd | # of Cells P2 to P3: | 20 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 0.00 ft | | |

Comment:

**Drop Structure Link: OUTFALL**

| | | Upstream Pipe | | Downstream Pipe | |
|---|---|---|---|---|---|
| Scenario: | Scenario1 | Invert: | 14.50 ft | Invert: | 14.00 ft |
| From Node: | P1 | Manning's N: | 0.0150 | Manning's N: | 0.0150 |
| To Node: | FDOT INLET | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.50 ft | Max Depth: | 1.50 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Solution: | Combine | Default: | 0.00 ft | Default: | 0.00 ft |
| Increments: | 0 | Op Table: | | Op Table: | |
| Pipe Count: | 1 | Ref Node: | | Ref Node: | |
| Damping: | 0.0000 ft | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Length: | 75.00 ft | Top Clip | | | |
| FHWA Code: | 1 | Default: | 0.00 ft | Default: | 0.00 ft |
| Entr Loss Coef: | 0.00 | Op Table: | | Op Table: | |
| Exit Loss Coef: | 0.00 | Ref Node: | | Ref Node: | |
| Bend Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Bend Location: | 0.00 dec | | | | |

Energy Switch: Energy

Pipe Comment:

| Weir Component | | Bottom Clip | |
|---|---|---|---|
| Weir: | 1 | Default: | 0.00 ft |
| Weir Count: | 1 | Op Table: | |
| Weir Flow Direction: | Both | Ref Node: | |
| Damping: | 0.0000 ft | **Top Clip** | |
| Weir Type: | Horizontal | Default: | 0.00 ft |
| Geometry Type: | Rectangular | Op Table: | |
| Invert: | 16.84 ft | Ref Node: | |
| Control Elevation: | 16.84 ft | **Discharge Coefficients** | |
| Max Depth: | 3.00 ft | Weir Default: | 3.200 |
| Max Width: | 4.50 ft | Weir Table: | |
| Fillet: | 0.00 ft | Orifice Default: | 0.600 |
| | | Orifice Table: | |

Weir Comment:

Drop Structure Comment:

## Simulation: 100Y-24H

Scenario: Scenario1
Run Date/Time: 6/19/2024 4:43:12 PM
Program Version: ICPR4 4.07.08

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 30.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

**Restart File**

Save Restart: False

**Resources & Lookup Tables**

**Resources**

Rainfall Folder:

Unit Hydrograph Folder:

**Lookup Tables**

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1

**Tolerances & Options**

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 11.04 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

**Simulation: 25Y-24H**

Scenario: Scenario1
Run Date/Time: 6/19/2024 4:43:17 PM
Program Version: ICPR4 4.07.08

**General**

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |

| | | | | |
|---|---|---|---|---|
| End Time: | 0 | 0 | 0 | 30.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder:

Unit Hydrograph Folder:

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 8.40 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: MA-24H

Scenario: Scenario1
Run Date/Time: 6/19/2024 4:43:27 PM
Program Version: ICPR4 4.07.08

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 30.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder:

Unit Hydrograph Folder:

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1

Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1

## Tolerances & Options

| | | | |
|---|---|---|---|
| Time Marching: | SAOR | IA Recovery Time: | 24.0000 hr |
| Max Iterations: | 6 | | |
| Over-Relax Weight Fact: | 0.5 dec | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FLMOD |
| | | Rainfall Amount: | 4.80 in |
| Edge Length Option: | Automatic | Storm Duration: | 24.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

Curve Number: 1 [Set]

| Land Cover Zone | Soil Zone | Curve Number [dec] |
|---|---|---|
| B1 | B1 | 94.0 |
| B2 | B2 | 94.0 |
| B3 | B3 | 94.0 |
| B4 | B4 | 94.0 |
| B5 | B5 | 94.0 |

**JACKSON GEOTECHNICAL ENGINEERING, LLC**
*Consulting Geotechnical Engineers*

# REPORT OF GEOTECHNICAL EXPLORATION
# 1106 NORTH ORANGE AVENUE
# GREEN COVE SPRINGS, FLORIDA
# JGE PROJECT NO. 24-516.1

**Prepared for:**

Tocoi Engineering
714 N. Orange Avenue
Green Cove Springs, FL 32043

**Prepared by:**

Jackson Geotechnical Engineering
164 Plaza Del Rio Drive
St. Augustine, Florida 32084
Phone: 904-252-2292

May 13, 2024

# JACKSON GEOTECHNICAL ENGINEERING, LLC

*Consulting Geotechnical Engineers*

May 13, 2024

Mr. Charley Sohm, P.E.
Tocoi Engineering
714 N. Orange Avenue
Green Cove Springs, FL 32043

Report of Geotechnical Exploration and Engineering Services
1106 North Orange Avenue
Green Cove Springs, Florida
JGE Project No. 24-516.1

Dear Mr. Sohm:

As requested, Jackson Geotechnical Engineering has completed a geotechnical exploration for the subject project. The exploration was performed to evaluate the general subsurface conditions within the area of the proposed construction, and to provide guidelines to facilitate pavement support, earthwork preparation, and drainage design.

We appreciate this opportunity to be of service as your geotechnical consultant on this phase of the project. Please contact us if you have any questions, or if we may be of any further service.

Sincerely:
Jackson Geotechnical Engineering, LLC.

Jeff S. Jackson, P.E.
Licensed, Florida 51979

**Jackson Geotechnical Engineering**
*Consulting Geotechnical Engineers*
*1106 North Orange Avenue*

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**Jackson Geotechnical Engineering**
*Consulting Geotechnical Engineers*
*1106 North Orange Avenue*

## 1.0 PROJECT INFORMATION

### 1.1 Site Location and Description

The site of the proposed project is located in the northwest quadrant of the intersection of Orange Avenue and Grove Street in Green Cove Springs, Florida. The site is cleared with a few scattered oak trees. Asphaltic pavement is present within the southern portion of the site. An existing church facility is located directly to the west, and St. Johns Avenue bounds the site to the north.

### 1.2 Project Description

Project information was provided to us during correspondence with you. We were provided with a Boundary Survey of the subject site prepared by Compass Surveying, last dated January 21, 2022. The provided survey shows the property boundaries, limits of existing asphalt, and adjacent roadways.

We understand a parking lot will be constructed at the site to expand the Church's parking capacity. The proposed pavement section will consist of flexible asphaltic concrete underlain by base course and stabilized subgrade. A dry retention pond will be excavated to treat and attenuate stormwater runoff.

## 2.0 FIELD EXPLORATION

### 2.1 Soil Borings

To explore the subsurface conditions within the area of the proposed pond, 1 Standard Penetration Test (SPT) boring (PB-1) was conducted to a depth of 20 feet below existing grade. To explore the subsurface conditions within the proposed pavement areas, 3 auger borings (A-1 through A-3) were conducted to a depth of 6 feet each below existing grade. The borings were performed at pre-selected areas within the site. The SPT and auger borings were conducted in accordance with ASTM D1586 and ASTM D1452, respectively. The locations of the borings, and the subsurface conditions encountered at each boring location, are presented in Appendix A on the Boring Location Plan and Subsurface Profiles, respectively.

### 2.2 Relatively Undisturbed Soil Samples

Two relatively undisturbed soil samples (one horizontal and one vertical) were obtained at the location of Boring PB-1 for the purposes of permeability (hydraulic conductivity) testing. The soil samples were obtained using thin-walled tube sampling techniques (Shelby tube). The Shelby tubes were transported to our laboratory for permeability testing.

## 3.0 LABORATORY TESTING

### 3.1 Index Testing

Soil samples recovered during the field exploration were visually classified in accordance with ASTM D2488. The results of the classification testing are presented on the Subsurface Profiles in Appendix A.

### 3.2 Permeability Testing

Permeability (hydraulic conductivity) tests were conducted on the undisturbed soil samples to estimate the coefficients of permeability of the appropriate soil layers. The coefficient of permeability is a measure of a soil's ability to transmit water under hydraulic loading conditions. It typically is a required input parameter for groundwater modeling, such as dry pond recoveries, background seepage, etc. The laboratory permeability test is typically conducted by placing the undisturbed soil sample in a permeameter, and while in the permeameter, the soil sample is subjected to differential hydraulic loading over a period of time. The volume of water that is transmitted through the soil sample is recorded, and along with the known hydraulic loading conditions, Darcy's law is utilized to calculate the coefficient of permeability. The coefficients of permeability are shown on the Subsurface Profiles at the depths of which the soil samples were obtained.

## 4.0 GENERAL SUBSURFACE CONDITIONS

### 4.1 General Soil Profile

The boring locations and general subsurface conditions that were encountered are presented on the Boring Location Plan and Subsurface Profiles. When reviewing these records, it should be understood the soil conditions may change significantly between the boring locations. The following discussion summarizes the soil conditions encountered.

The SPT boring (PB-1), performed within the area of the proposed pond, encountered loose to medium dense fine sand (SP) throughout its 20-foot exploration depth. As an exception, the sandy soils encountered below a depth of approximately 15 feet exhibited a dense compactness.

The auger borings (A-1 through A-3) were performed within the proposed pavement areas. Borings A-1 through A-3 encountered fine sand (SP) throughout their 6-foot exploration depths.

### 4.2 Groundwater Level

The groundwater level was only encountered at the location of Boring PB-1. At this location, the groundwater level was encountered at a depth of approximately 10.6 feet below existing grade. The depth of the groundwater level encountered at the boring location is presented on the Subsurface Profiles.

The groundwater table will fluctuate depending on seasonal variations, adjacent construction, surface water runoff, etc. Our estimate of the normal seasonal high groundwater level at each applicable boring location is also presented on the Subsurface Profiles in Appendix A. Our estimates are based on the results of the soil borings, review of available published literature, and information provided for this study. Should rainfall intensity exceed normal quantities, or should other variables that affect the seasonal high groundwater level be altered, the groundwater profile at the site could change significantly.

## 5.0 PAVEMENT RECOMMENDATIONS

### 5.1 General

We understand the subject project will utilize flexible asphaltic concrete pavement. In the following sections, we have presented our recommendations to guide pavement design and site preparation.

### 5.2 Pavement Section Recommendations

Our recommendations for pavement sections are presented below. Detailed traffic loading conditions were not available; therefore, we have provided pavement sections which can accommodate loading conditions typical of the subject construction over a design life of 20 years. The light duty pavement sections are based on 500,000 Equivalent Single Axle Loads (ESALs) of 18 kips. The heavy-duty pavement sections are based on 1,500,000 ESALs. Pavement sections supporting significant truck loads would require different component thicknesses than presented below. If provided with detailed traffic loading, Jackson Geotechnical Engineering can perform a detailed pavement design.

| Pavement Section | Asphalt[(1)] Thickness (in) | Base Course[(2)] Thickness (in) | Stabilized[(3)] Subgrade (in) |
|---|---|---|---|
| Light Duty Asphalt | 1.5 | 6.0 | 12 |
| Heavy Duty Asphalt | 2.0 | 8.0 | 12 |

1) Flexible pavement should consist of SP 9.5 and/or SP 12.5. Heavy-duty pavement sections should include the use of SP 12.5.
2) Base course should consist of limerock exhibiting an LBR of at least 100, or crushed concrete exhibiting an LBR of at least 130. Limerock and crushed concrete base course materials and gradations should conform to FDOT Standard Specifications for Road and Bridge Construction Sections 911 and 204, respectively.
3) Subgrade should exhibit an LBR of at least 40.

### 5.3 Site Preparation for Pavements

We recommend the following site preparation guidelines for pavement construction:

1. Strip the proposed construction limits of all grass, roots, topsoil, existing asphalt, and other potentially deleterious materials from within, and extending at least 3 feet beyond, the proposed pavement limits. Expect initial clearing and grubbing to average depths of approximately 6 to 12 inches. During stripping operations, roots with a diameter greater than 0.5 inches, stumps, and roots in a concentrated state, should be completely removed.

2. Compact the exposed surface with a vibratory drum roller until densities of at least 95 percent of the modified Proctor maximum dry density (ASTM D 1557) are achieved within the upper one foot below the exposed surface with the exception that densities of at least 98 percent should be obtained in the upper 12 inches below base course. We recommend the compacted soils exhibit moisture contents within 2 percent of the optimum moisture content as determined by the Modified Proctor Test (ASTM D 1557).

   Should the soils experience pumping and soil strength loss during the compaction operations, compaction work should be immediately terminated and (1) the disturbed soils removed and backfilled with dry structural fill soils which are then compacted, or (2) the excess moisture content within the disturbed soils allowed to dissipate before recompacting.

3. Test the compacted surface for density at a frequency of not less than one test per 10,000 square feet of pavement area (minimum four locations).

4. Place structural fill in loose lifts not exceeding 12 inches and compact until finished subgrade is achieved. Structural fill and backfill is typically defined as non-plastic, inorganic, granular soil having less than 12 percent material passing the No. 200 mesh sieve and containing less than 4 percent organic material. Typically, the material should

exhibit moisture contents within 2 percent of the Modified Proctor optimum moisture content (ASTM D 1557) during the compaction operations. Compaction should continue until densities of at least 95 percent of the Modified Proctor maximum dry density (ASTM D 1557) have been achieved within each foot of the compacted structural fill, with the exception that densities of at least 98 percent should be obtained in the upper 12 inches below base course.

Care should be exercised to avoid damaging any nearby structures while the compaction operation is underway. Prior to commencing compaction, occupants of adjacent structures should be notified and the existing conditions of the structures be documented with photographs and survey (if deemed necessary). Compaction should cease if deemed detrimental to adjacent structures and Jackson Geotechnical Engineering should be contacted immediately. It is recommended the vibratory roller remain a minimum of 75 feet from existing structures. Within this zone, use of a vibratory roller operating in the static mode (vibration turned off) is recommended.

5. Perform density tests within each lift of fill at a frequency of not less than one test per 10,000 square feet of pavement area (minimum of four locations).

6. Place and compact base course until densities of at least 100 percent of the modified Proctor maximum dry density are achieved.

7. Perform density tests within the base course at a frequency of not less than one test per 10,000 square feet of pavement area (minimum of four locations).

## 5.4 Additional Pavement Considerations

### 5.4.1 Asphaltic Concrete Pavement

Asphaltic concrete mixes should be a current FDOT approved design of the materials actually used. Samples of the materials delivered to the project should be tested to verify that the aggregate gradation and asphalt content satisfies the mix design requirements.

After placement and field compaction, core the wearing surface to evaluate material thickness and to perform laboratory densities. Obtain cores at frequencies of at least one core per 3,000 square feet of placed pavement, or a minimum of two cores per day of production.

### 5.4.2 Groundwater Separation

Groundwater, if not maintained below the base course an adequate distance, can result in weakened subgrade and base course soils, and therefore a greatly reduced pavement life. The groundwater level at the location of the pond boring (PB-1) was encountered at a depth of approximately 10.5 feet. The groundwater level was not encountered within the

6-foot vertical reaches of the auger borings. At these depths, it is anticipated that groundwater will not adversely affect the pavement base course.

## 6.0 DRY RETENTION RECOVERY PARAMETERS

The drainage system will include a dry retention pond. Retention systems retain the necessary minimum amount of stormwater runoff (treatment volume) during the storm event. The volume retained is treated by infiltration into the ground. Infiltration into the ground is primarily affected by permeability of the soil, vertical height of stormwater stored in the pond (hydraulic loading), depth of the aquifer, soil porosity, and vertical distance between the pond bottom and the water table.

Based on State regulations, the retention system must recover the Pollution Abatement Volume (PAV) within a specified period of time, typically 72 hours after the storm event. Additionally, it is required the total volume located below the weir be recovered in a specified period of time. The table below summarizes the tested and estimated parameters for stormwater recovery modeling. A factor of safety of 2.0 should be utilized in the recovery analysis.

| Location | Horizontal Permeability (ft/day) | Vertical Permeability (ft/day) | Effective Porosity | Bottom of Aquifer[(1,2)] (feet) | Estimated Seasonal High Groundwater Level[(2)] (feet) |
|---|---|---|---|---|---|
| PB-1 | 24.4 | 25.9 | 25% | 20 | 7.6 |

(1) Aquifer depth limited to depth of boring, in accordance with SJRWMD guidelines.
(2) Depth references existing ground surface.

Note: Presented permeability values represent in-situ permeability rates of soil layer tested. It is recommended the drainage engineer specify on his plans the permeability of the backfill required, based on his calculations. The contractor should verify the permeability of the backfill soils prior to placement, and prior to import to the site.

## 7.0 LIMITATIONS

We have conducted the geotechnical engineering in accordance with principles and practices normally accepted in the geotechnical engineering profession. Our analysis and recommendations are dependent on the information provided to us. Jackson Geotechnical Engineering is not responsible for independent conclusions or interpretations based on the information presented in this report.

The recommendations provided in this report are specific to the proposed construction, and construction locations, as shown on the provided plans. Significant changes to the site design and construction, as described in this report, would nullify the provided recommendations.

# APPENDIX A

*BORING LOCATION PLAN*

*SUBSURFACE PROFILES*

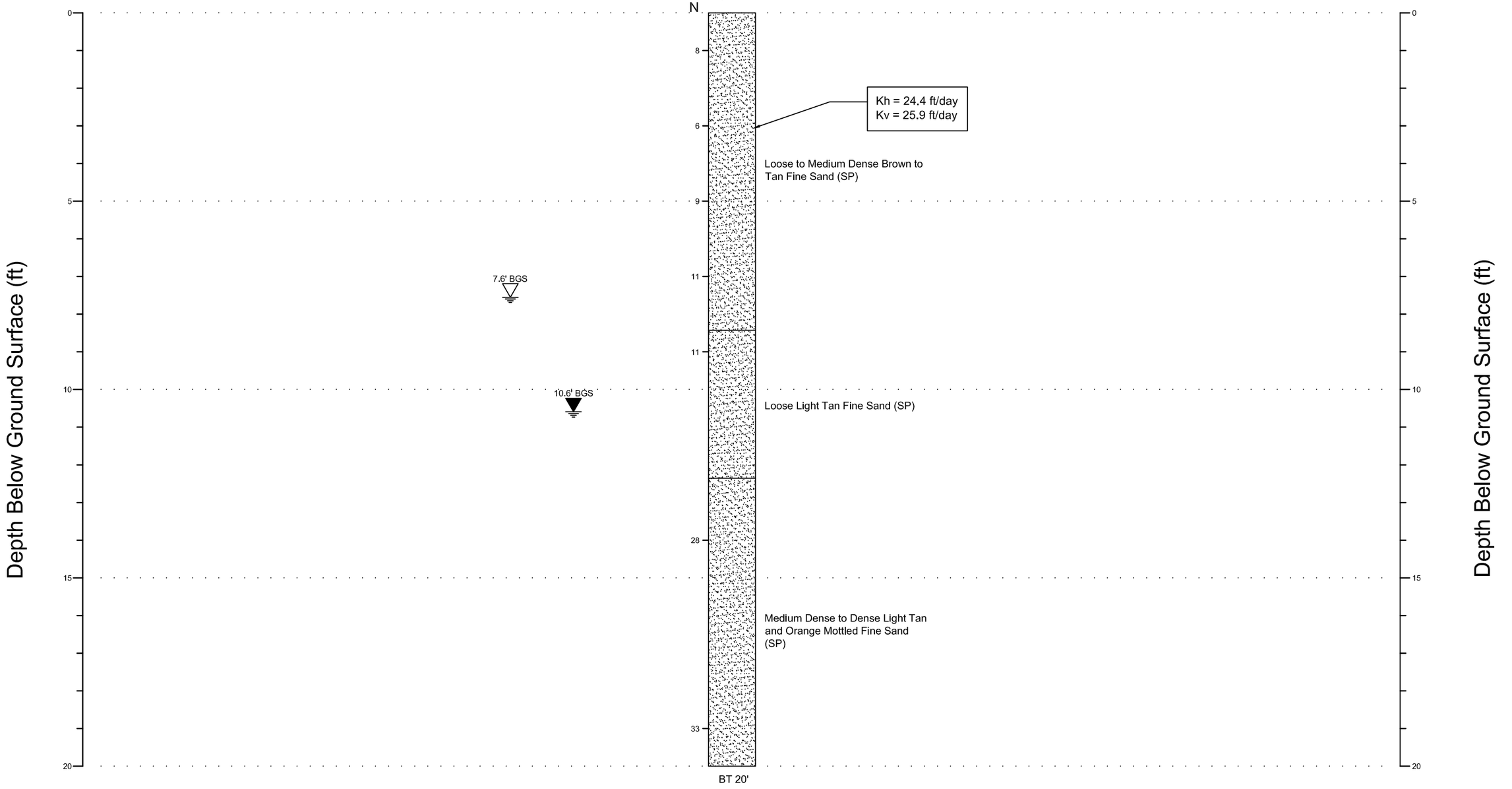
N

SPT Boring Location

Auger Boring Location

| | |
|---|---|
| Jackson Geotechnical Engineering | |
| Subsurface Profiles | |
| 1106 North Orange Avenue | |
| May 9, 2024 | Drawn by: MJ |
| Project No. 24-516 | Figure 1 |

# PB-1




Fine Sand (SP)

Seasonal High Groundwater Table Estimated Below Existing Surface

Groundwater Table Measured Below Surface

BT Boring Terminated

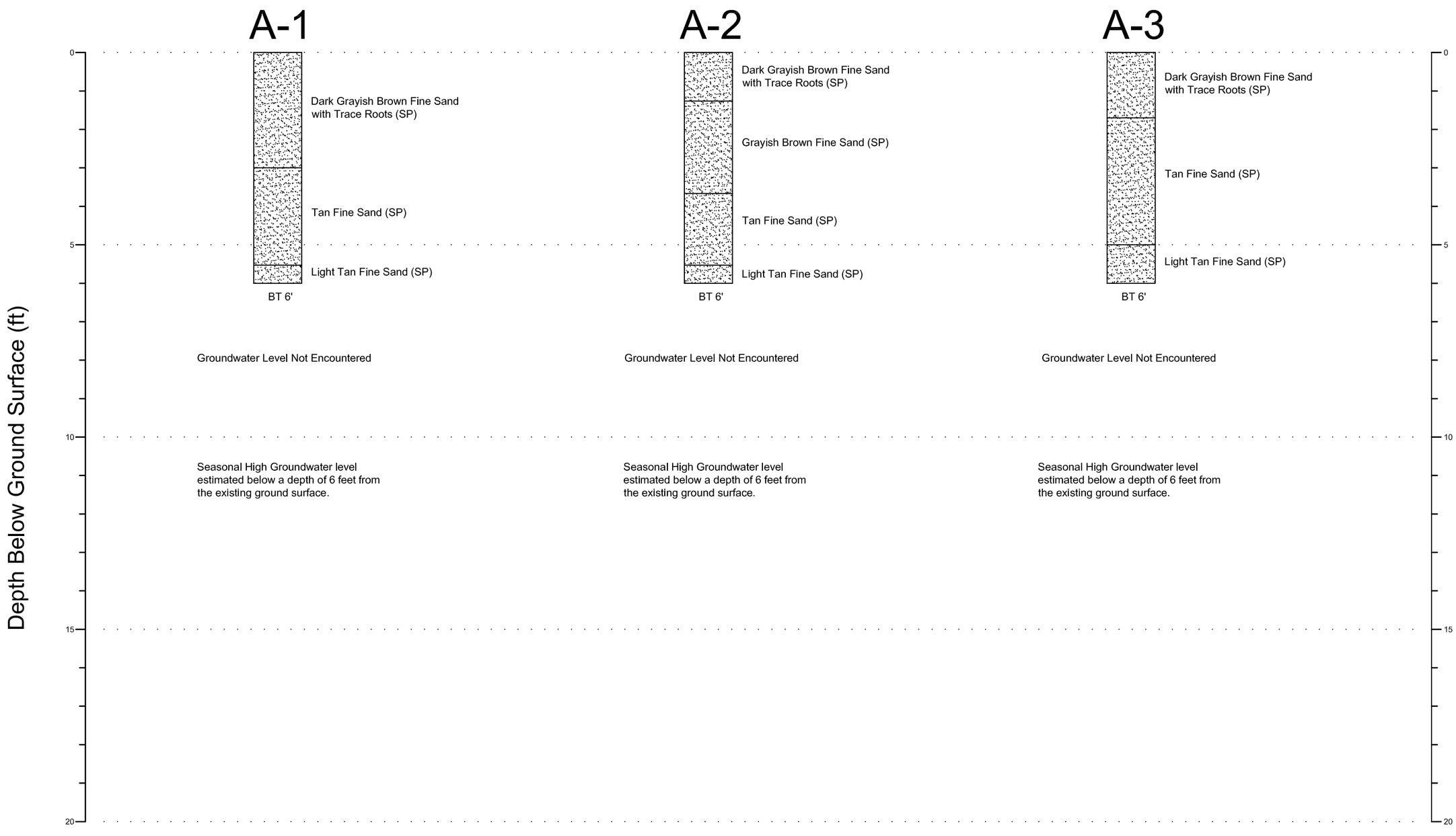
Kh Coefficient of Horizontal Permeability

Kv Coefficient of Vertical Permeability

BGS Below Ground Surface

N SPT - N Blow Count

| Jackson Geotechnical Engineering | |
|---|---|
| Subsurface Profiles | |
| 1106 North Orange Avenue | |
| May 9, 2024 | Drawn by: MJ |
| Project No. 24-516 | Figure 2 |




Fine Sand (SP)

BT Boring Terminated

BGS Below Ground Surface

| Jackson Geotechnical Engineering | |
|---|---|
| Subsurface Profiles | |
| 1106 North Orange Avenue | |
| May 9, 2024 | Drawn by: MJ |
| Project No. 24-516 | Figure 3 |

# APPENDIX B

*KEY TO SOIL CLASSIFICATION*

*FIELD AND LABORATORY TEST PROCEDURES*

# JACKSON GEOTECHNICAL ENGINEERING

*Consulting Geotechnical Engineers*

## KEY TO SOIL CLASSIFICATION

### CORRELATION OF PENETRATION WITH RELATIVE DENSITY & CONSISTENCY

| *SANDS AND GRAVEL* | |
|---|---|
| BLOW COUNT | RELATIVE DENSITY |
| 0-3 | VERY LOOSE |
| 4-10 | LOOSE |
| 11-30 | MEDIUM DENSE |
| 31-50 | DENSE |
| OVER 50 | VERY DENSE |

| *SILTS AND CLAYS* | |
|---|---|
| BLOW COUNT | CONSISTENCY |
| 0-2 | VERY SOFT |
| 3-4 | SOFT |
| 5-8 | FIRM |
| 16-30 | VERY STIFF |
| 31-50 | HARD |
| OVER 50 | VERY HARD |

### PARTICLE SIZE IDENTIFICATION (UNIFIED CLASSIFICATION SYSTEM)

| *CATEGORY* | *DIMENSIONS* |
|---|---|
| Boulders | Diameter exceeds 12 inches |
| Cobbles | 3 to 12 inches |
| Gravel | Coarse – 0.75 to 3 inches in diameter<br>Fine – 4.76 mm to 0.75 inch diameter |
| Sand | Coarse – 2.0 mm to 4.76 mm diameter<br>Medium – 0.42 mm to 2.0 mm diameter<br>Fine – 0.074 mm to 0.42 mm diameter |
| Silt and Clay | Less than 0.074 mm (invisible to the naked eye) |

### MODIFIERS

These modifiers provide our estimate of the amount of minor constituent (sand, silt, or clay size particles) in the soil sample

| *PERCENTAGE OF MINOR CONSTITUENT* | *MODIFIERS* |
|---|---|
| 0% to 5% | No Modifier |
| 5 % to 12 % | With Silt, With Clay |
| 12% to 30% | Silty, Clayey, Sandy |
| 30% to 50% | Very Silty, Very Clayey, Very Sandy |

| *APPROXIMATE CONTENT OF OTHER COMPONENTS (SHELL, GRAVEL, ETC.)* | *MODIFIERS* | *APPROXIMATE CONTENT OF ORGANIC COMPONENTS* |
|---|---|---|
| 0% to 5% | TRACE | 1 to 2% |
| 5% to 12% | FEW | 2% to 4% |
| 12% to 30% | SOME | 4% to 8% |
| 30% to 50% | MANY | >8% |

# FIELD AND LABORATORY TEST PROCEDURES

## Penetration Borings

The penetration borings were made in general accordance with ASTM D 1586-67, "Penetration Test and Split-Barrel Sampling of Soils". Each boring was advanced to the water table by augering and, after encountering the groundwater table, further advanced with a rotary drilling technique that uses a circulating bentonite fluid for borehole flushing and stability. At two-foot intervals within the upper 10 feet and at five-foot intervals thereafter, the drilling tools were removed from the borehole and a split-barrel sampler inserted to the borehole bottom. The sampler was then driven 18 inches into the material using a 140-pound SPT hammer falling, on the average, 30 inches per hammer blow. The number of hammer blows for the final 12 inches of penetration is termed the "penetration resistance, blow count, or N-value". This value is an index to several in-place geotechnical properties of the material tested, such as relative density and Young's Modulus.

After driving the sampler 18 inches (or less, if in hard rock or rock-like material) at each test interval, the sampler was retrieved from the borehole and a representative sample of the material within the split-barrel was placed in a watertight container and sealed. After completing the drilling operations, the samples for each boring were transported to our laboratory where our Geotechnical Engineer examined them in order to verify the driller's field classifications. The samples will be kept in our laboratory for a period of two months after submittal of formal written report, unless otherwise directed by the Client.

## Auger Borings

The auger borings were performed using a continuous flight auger attached to a rotary drill rig or manually using a post-hole auger; and thus in general accordance with ASTM D 1452-80, "Soil Investigation and Sampling by Auger Borings". Representative samples of the soils brought to the ground surface by the augering process were placed in watertight containers and sealed. After completing the drilling operations, the samples for each boring were transported to the laboratory where the Geotechnical Engineer examined them in order to verify the driller's field classifications. The samples will be kept in our laboratory for a period of two months after submittal of formal written report, unless otherwise directed by the Client.

## Soil Classification

Soil samples obtained from the performance of the borings were transported to our laboratory for observation and review. An engineer, registered in the State of Florida and familiar with local geological conditions, conducted the review and classified the soils in accordance with ASTM 2488. The results of the soil classification are presented on the boring records.

## Constant Head Permeability Test

The coefficient of permeability for the laminar flow of water through granular soils was determined in general accordance with the latest revision of ASTM D 2434. The constant head permeability test is a measure of the quantity of water that flows through a sample contained in a cylinder of known height and diameter in a measured time while maintaining a constant head of water on the sample. The coefficient of permeability is determined by application of the Darcy's Law shown below:

$$k = \frac{Q\,L}{hAt}$$

k = Coefficient of permeability

Q = Quantity of water discharge

L = Length of specimen

h = Constant head of water

A = Cross-sectional area of specimen

t = Total time of discharge

**Undisturbed Sampling**

Relatively undisturbed samples were obtained in general accordance with the latest revision of ASTM A 1587, "Thin-Walled Tube Sampling of Soils". Manual methods were used to advance the 3-inch O.D. – 16 gauge stainless steel sampler tubes into the soils at the selected depths. After retrieving the samples, the ends were capped and then transported to our laboratory.

# STAFF REPORT

## CITY OF GREEN COVE SPRINGS, FLORIDA

**TO:** Planning and Zoning Commission **MEETING DATE:** June 25, 2024

**FROM:** Gabriel Barro, Planning and Zoning

**SUBJECT:** Review of Special Exception application to allow for a street wall along US 17 as a design option at the Clay County Economic Development Building site

## PROPERTY DESCRIPTION

**APPLICANT:** Travis Hastay, PE, CHW **OWNER:** Clay County

**PROPERTY LOCATION:** 633 N Orange Avenue

**PARCEL NUMBER:** 017628-000-00

**FILE NUMBER:** SE-24-003

**CURRENT ZONING***:* Gateway Corridor Commercial (GCC)

**FUTURE LAND USE DESIGNATION***:* Mixed-Use (MU)

## SURROUNDING LAND USE

**NORTH:** **FLU**: Public
**Z**: Institutional (INS)
**Use**: Government

**SOUTH:** **FLU**: Mixed Use
**Z**: Gateway Corridor Commercial (GCC)
**Use**: Financial

**EAST:** **FLU**: Mixed Use
**Z**: Gateway Corridor Commercial (GCC)
**Use**: Restaurant

**WEST:** **FLU**: Public
**Z**: Gateway Corridor Neighborhood (GCN)
**Use**: Church

## BACKGROUND

Travis Hastay, PE with CHW as an agent for Clay County is requesting a special exception for the use of a street wall as a design option to allow for the placement of a parking area to be located between the street front and building location at 633 N Orange Avenue. A provision exists within the Gateway Corridor Commercial to allow parking to be placed between the street front and building as set forth in Sec 117-656 of the city code. A street wall is required to be constructed along the street front to mask the parking area from public view.

The property at 633 N Orange Avenue is currently being used as a parking lot for the Clay County government seat. The Clay County Economic Development building is due to be constructed at this location.

**Special Exception Review Criteria**

When deciding on special exception requests, the Planning and Zoning Board will ensure the following criteria are satisfied:

(1) Compliance with all elements of the comprehensive plan.
*The proposed request is consistent with the Comprehensive Plan.*

(2) The establishment, maintenance or operation of the special exception will not be detrimental to or endanger the public health, safety, or general welfare, and is not contrary to established standards, regulations or ordinances of other governmental agencies.
*The proposed development will not negatively impact the area.*

(3) Each structure or improvement is so designed and constructed that it is not unsightly, undesirable or obnoxious in appearance to the extent that it will hinder the orderly and harmonious development of the city and the zoning district in which it is proposed.
*Construction is being proposed as part of this special exception. Any building or site permits that are requested for the development of the site will be reviewed under a separate permit.*

(4) The special exception will not adversely impact the permitted uses in the zoning district nor unduly restrict the enjoyment of other property in the immediate vicinity nor substantially diminish or impair property values within the area.
*The proposed use will be consistent with the existing uses in the gateway corridor and will not negatively impact the area.*

(5) The establishment of the special exception will not impede the orderly development and improvement of the surrounding property for uses permitted in the zoning district.
*The proposed use will not impact the improvement of surrounding properties.*

(6) Adequate water supply and sewage disposal facilities will be provided in accordance with state and county health departments.
*Water and sewer are available.*

(7) Adequate access roads, onsite parking, onsite loading and unloading berths, and drainage have been or will be provided where required.
*Vehicular access will be available from N Orange Ave and Palmetto Ave. 98 parking spaces will be provided.*

(8) Adequate measures have been taken to provide ingress and egress to the property, which is designed in a manner to minimize traffic congestion on local roads.
*Access is provided off N Orange Ave and Palmetto Ave.*

(9) Adequate screening and buffering of the special exception will be provided, if needed.
*Screening is required. A decorative brick street wall measuring between 3'4" and 5'4" will be constructed along N Orange Ave as part of the special exception.*

(10) The special exception will not require signs or exterior lighting which will cause glare, adversely impact area traffic safety or have a negative economic effect on the area. Any signs or exterior lighting required by the special exception shall be compatible with development in the zoning district.
*A sign will be placed on the brick street wall identifying the main building as "Clay County Administration".*

(11) The special exception will conform to all applicable regulations of the zoning district in which it is proposed.

## STAFF RECOMMENDATION

Staff recommends approval of the Special Exception for the use of a street wall along North Orange Avenue at the planned Clay County Economic Development Building.

**Recommended Motion:**

Motion to approve Special Exception application for a decorative street wall along North Orange Ave at the planned Clay County Economic Development Building site.

**FOR OFFICE USE ONLY**

P Z File #_____

Application Fee:_____

Filing Date: _____ Acceptance Date:_____

Review Type: SDRT ☐ P & Z ☐

*Item # 3.*

# City of Green Cove Springs
# Special Exception Application

**A. PROJECT**

1. Project Name: Clay County Economic Development
2. Address of Subject Property: 633 N Orange Ave, Green Cove Springs, FL 32043
3. Parcel ID Number(s) 38-06026-017628-000-00
4. Existing Use of Property: Vehicle Sales
5. Future Land Use Map Designation : Mixed use
6. Zoning Designation: Gateway Corridor Commercial (GCC)
7. Acreage: +/- 1.46

**B. APPLICANT**

1. Applicant's Status ☐ Owner (title holder) ☒ Agent
2. Name of Applicant(s) or Contact Person(s): Travis Hastay, PE Title: Senior Project Manager

   Company (if applicable): CHW, an NV5 Company

   Mailing address: 11801 Research Dr

   City: Alachua State: FL ZIP: 32615

   Telephone: (___ ) 352-331-1976 FAX: (___ )_____ e-mail: travis.hastay@nv5.com
3. If the applicant is agent for the property owner*:

   Name of Owner (title holder): Clay County

   Company (if applicable): Clay County

   Mailing address: PO Box 1366

   City: Green Cove Springs State: FL ZIP: 32043

   Telephone: (___ ) 352-331-1976 FAX: (___ )_____ e-mail: permiteng@chw-inc.com

   * Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

**C. ADDITIONAL INFORMATION**

1. Is there any additional contact for sale of, or options to purchase, the subject property? ☐ Yes ☒ No

   If yes, list names of all parties involved:_____

   If yes, is the contract/option contingent or absolute? ☐ Contingent ☐ Absolute

**D. STATEMENT OF SPECIAL EXCEPTION SOUGHT**

1. Requested Special Exception: Street wall
2. Section of Land Development Regulations under which the Special Exception is sought Sec. 117-656(1)g.
3. Reason Special Exception is requested: Site circumstances prevent building from being able to reasonably meet frontage requiements
4. Statement of Facts for Requested Special Exception (Use additional pages if necessary)

(PLEASE ANSWER THE FOLLOWING QUESTIONS TO THE BEST OF YOUR ABILITY. THESE FACTS WILL BE USED BY THE STAFF TO MAKE A RECOMMENDATION AND THE PLANNING AND ZONING BOARD IN MAKING THEIR DECISION)

**a.** Is this exception in compliance with all elements of the Comprehensive Plan?

Yes. Please see attached comprehensive plan consistency report

**b.** Is the establishment, maintenance or operation of the special exception detrimental to or endanger the public health, safety or general welfare, or contrary to established standards, regulations or ordinances of other governmental agencies?

In accordance with LDR Sec. 117-656, the proposed Street Wall will not be located in the Right-of-Way so as not to impede pedestrian or vehicular travel and will meet the clear sight line requirements as required by LDR Sec. 113-76.

**c.** Is the structure or improvement so designed and constructed that it is not unsightly, undesirable or obnoxious in appearance to the extent that it will hinder the orderly and harmonious development of Green Cove Springs and zoning district in which it is proposed?

As required by LDR Sec. 117-656, the proposed Street Wall will be between 3 ft. - 6 ft. in height. The portion of the wall up to 3 ft. will be solid material, i.e. brick, masonry, etc. the portion of the wall over 3 ft. in height will be transparent, i.e. wrought iron. The Street Wall will also have columns / posts spaced every 24 ft. Chain link, wood, and PVC materials are prohibited. Please refer to the architectural rendering included with this application.

**d.** Will the special exception adversely impact the permitted use in the zoning district or unduly restrict the enjoyment of the other property in the immediate vicinity nor substantially diminish or impair property values within the area?

The proposed special exception will allow for the highest and best use of the property and encourage infill redevelopment within the core of the City. The redevelopment of an underutilized site will also prevent the site from becoming blighted.

**e**. Will the establishment of the special exception impede the orderly development and improvement of the surrounding property for uses permitted in the zoning district?

No.

**f**. Are adequate water and sewage disposal facilities provided?

Yes. As shown on the site plans

**g.** Are access roads adequate, on-site parking, on-site loading and loading berths, and drainage have been or will be provided where required?

Yes. The proposed Street Wall will allow for a more efficient design for stormwater drainage and parking

**h**. Have adequate measures been taken to provide ingress and egress to the property and design in a manner to minimize traffic congestion on local roads?

Yes. As shown on the site plan

**i**. Is adequate screening and buffering signs of the special exception provided, if needed??

As required by LDR Sec. 117-656, the areas in front and behind the Street Wall will be landscaped in accordance with LDR Sec. 117-626 and Sec. 113-244(d)(3).

**j.** Will the special exception require signs or exterior lighting, which will cause glare, adversely impact area traffic safety or have a negative economic effect on the area? Any signs or exterior lighting required by the special exception shall be compatible with development in the zoning district?

No

**k**. Will the special exception conform to all applicable regulations of the zoning district in which it is proposed?

Yes

**E. ATTACHMENTS (One hard copy or one copy in PDF format)**

**1. Copy of Warranty Deed or other proof of ownership**

**2. Legal description**

**F. FEE.**

Home Occupation - $150
Residential property - $250
Non- residential - $500

a. The Cost of postage, signs, advertisements, and outside consultants are in addition to the application fee.

b. The applicant is responsible to pay the cost of the advertisement and signs.

**c.** All applications are subject 10% administrative fee and must pay the cost of any outside consultants' fees.

No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any fees for advertising, signs, necessary technical review or additional reviews of the application by a consultant will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any action of any kind on the development application.

**Both attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.**

**I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge:**

Travis J Hastay Digitally signed by Travis J Hastay DN: E=travish@chw-inc.com, CN=Travis J Hastay, C=Travis J. Hastay, L=Gainesville, S=Florida, C=US Date: 2024.05.30 08:52:36-04'00'

Signature of Applicant

Signature of Co-applicant

Travis Hastay

Typed or printed name and title of applicant

Typed or printed name of co-applicant

Project Manager

Date

Date

State of _____ County of _____

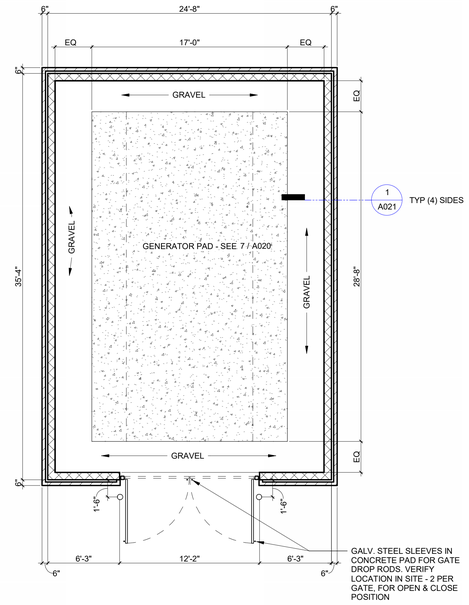
The foregoing application is acknowledged before me this _____ day of _____, 20__, by _____

_____, who is/are personally known to me, or who has/have produced _____

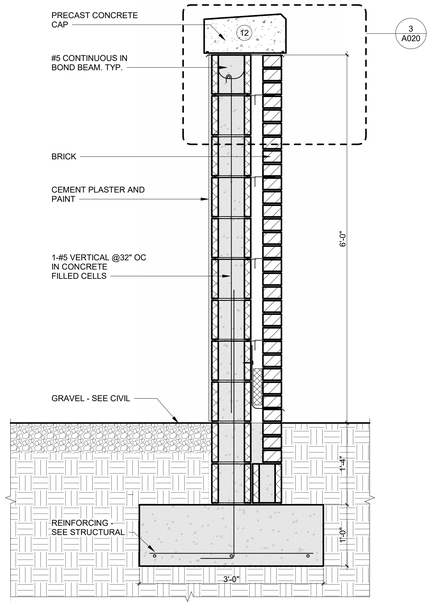
as identification.

NOTARY SEAL

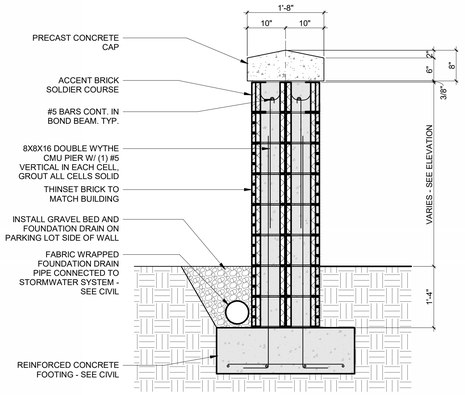
Signature of Notary Public, State of _____



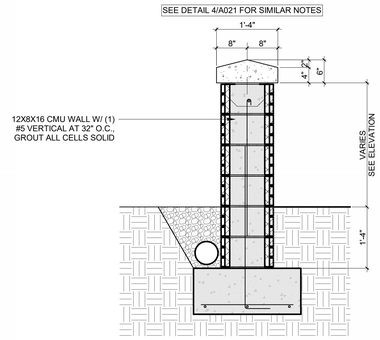

2 MECHANICAL YARD PLAN
3/16" = 1'-0"



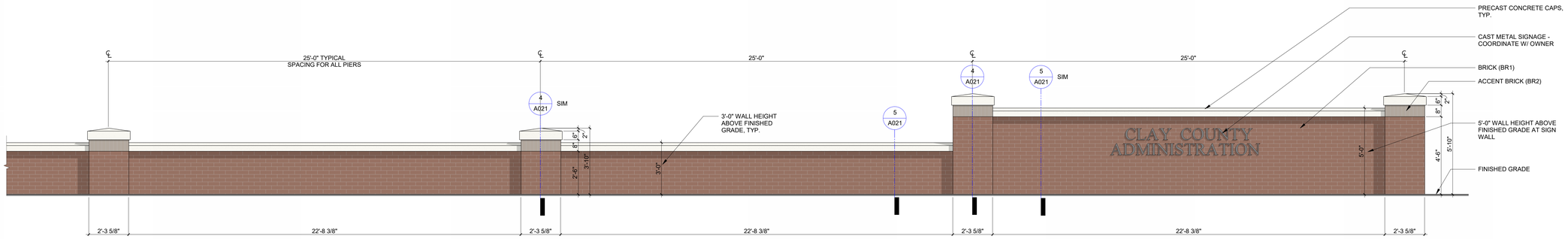

1 MECHANICAL YARD TYPICAL WALL SECTION
1" = 1'-0"




4 SITE WALL PIER DETAIL
3/4" = 1'-0"




5 SITE WALL SECTION DETAIL
3/4" = 1'-0"




3 SITE WALL ELEVATION
3/8" = 1'-0"

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6/19/2024 11:57:21 AM

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9133 R.G. SKINNER PARKWAY
JACKSONVILLE, FL 32256

| SUBMITTAL: | | ISSUE DATE: |
|---|---|---|
| CONSTRUCTION DOCUMENTS | | 04/11/2024 |
| REVISION | DESCRIPTION | DATE |
| 1 | Addendum 01 | 05/31/2024 |

# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

ENLARGED SITE PLANS AND DETAILS

| PROJECT NO.: 22068 | DRAWN BY: | AS |
|---|---|---|
| | CHECKED BY: | MB |

# A021

# STAFF REPORT

## CITY OF GREEN COVE SPRINGS, FLORIDA

**TO:** Planning and Zoning Commission **MEETING DATE:** June 25, 2024

**FROM:** Gabriel Barro, Planning and Zoning

**SUBJECT:** Review of a Site Development Plan for the Clay County Economic Development Building at 633 N Orange Avenue

### PROPERTY DESCRIPTION

**APPLICANT:** Travis Hastay, PE, CHW **OWNER:** Clay County

**PROPERTY LOCATION:** 633 Orange Avenue

**PARCEL NUMBER:** 017628-000-00

**FILE NUMBER:** SPL-23-007

**CURRENT ZONING**: Gateway Corridor Commercial (GCC)

**FUTURE LAND USE DESIGNATION**: Mixed-Use (MU)

### SURROUNDING LAND USE

**NORTH:** **FLU**: Public
**Z**: Institutional (INS)
**Use**: Government

**SOUTH:** **FLU**: Mixed Use
**Z**: Gateway Corridor Commercial (GCC)
**Use**: Financial

**EAST:** **FLU**: Mixed Use
**Z**: Gateway Corridor Commercial (GCC)
**Use**: Restaurant

**WEST:** **FLU**: Public
**Z**: Gateway Corridor Neighborhood (GCN)
**Use**: Church

### BACKGROUND

Travis Hastay, PE with CHW as an agent for Clay County has applied for Site Development approval for the subject property for the development of a two story, 18,731 square-foot administrative building.

## PROPERTY DESCRIPTION

The property, consisting of 1.55 acres, is currently being used as a parking lot for Clay County government vehicles. There is currently a one-story concrete block building on the site.

## DEVELOPMENT DESCRIPTION

The applicant has submitted a site development plan for an administrative building for the Clay County government. The proposed building consists of 18,731 square feet. They are proposing to demolish the existing building and redevelop the site. The applicant is proposing to provide a decorative wall and landscape buffer along N Orange Ave. as part of a special exception to allow for a parking lot to be placed in front of the building.

### PARKING, LOADING, & STACKING

The plan shows 100 onsite parking spaces and 5 handicapped spaces. The applicant will need to demonstrate how they are in compliance with the city code parking requirements as set forth in Section 113-157.

### DRAINAGE RETENTION

A drainage retention pond already exists on the site. In addition, stormwater chambers will be placed underground on site. The site will be graded to direct stormwater towards storm drains located across the project site.

### TRAFFIC AND ACCESS

The plan shows two vehicular access point on Walburg St. A crosswalk and on street parking will be constructed on Walburg St. The current access to N Orange Ave. will be removed and blocked off by the decorative wall and landscape buffer.

### UTILITY CONNECTIONS & SOLID WASTE

The new buildings will connect to City utilities. The utility plan (sheet 14) points show location water and sewer connections. Electrical connections and transformer locations have been provided.

Solid Waste will be serviced by a commercial franchise. Dumpster location is provided on the Utility and Site Plans and is shown to be on the southwestern corner of the current Clay County Administration building. The dumpster enclosure shall comply with screening requirements set forth in City Code Sec. 113-246(8).

### LANDSCAPE PLAN

The landscape plan is showing 20 new trees and shrubs being planted onsite. One tree must be planted every 50 feet. Planted trees must be 2.5” in DBH. The plan shall be required to comply with the landscape requirements as set forth in section 113-244 of the City Code.

Attachments:

1. Site Plan Application
2. Civil Plans
3. Landscape Plan

## STAFF RECOMMENDATION

Staff recommends approval of the Clay County Economic Development Building Site Development Plan subject to meeting staff comments prior to City Council approval:

1. Comply with City landscaping requirements regarding perimeter landscaping and provide calculations on the landscape plan 113-244 (b)
    - Provide a continuous shrub, 24" minimum in height at time of planting between street wall and US 17
    - Provide 5 small trees (i.e. crape myrtle, little gem magnolia etc. minimum 6'-8' in height) between street wall and US 17
2. Provide building rendering and materials to match street wall
3. Wall must be a minimum of 3'
4. Continue hedge and small trees south on Palmetto Ave to buffer maintenance yard
5. If planning to vacate Walburg between Orange and Palmetto, need to apply to have the street vacated. Otherwise, the dumpster will need to be moved from right-of-way.

**Recommended Motion:**

Motion to recommend to City Council the approval of the Clay County Economic Development Building Site Development Plan subject to meeting staff comments prior to City Council approval:

1. Comply with City landscaping requirements regarding perimeter landscaping and provide calculations on the landscape plan 113-244 (b)
    - Provide a continuous shrub, 24" minimum in height at time of planting between street wall and US 17
    - Provide 5 small trees (i.e. crape myrtle, little gem magnolia etc. minimum 6'-8' in height) between street wall and US 17
2. Provide building rendering and materials to match street wall
3. Wall must be a minimum of 3'
4. Continue hedge and small trees south on Palmetto Ave to buffer maintenance yard
5. If planning to vacate Walburg between Orange and Palmetto, need to apply to have the street vacated. Otherwise, the dumpster will need to be moved from right-of-way.

# City of Green Cove Springs Site Plan Application

**FOR OFFICE USE ONLY**

P Z File #_____

Application Fee:_____

Filing Date: _____ Acceptance Date:_____

Review Type: SRDT ☐ P & Z ☐ CC ☐

**A. PROJECT**

1. Project Name: Clay County Economic Development
2. Address of Subject Property: 633 N Orange Ave, Green Cove Springs, FL 32043
3. Parcel ID Number(s): 38-06026-017628-000-00
4. Existing Use of Property: Vehicle Sales
5. Future Land Use Map Designation : Mixed use
6. Zoning Designation: Gateway Corridor Commercial (GCC)
7. Acreage: +/- 1.46

**B. APPLICANT**

1. Applicant's Status ☐ Owner (title holder) ☒ Agent
2. Name of Applicant(s) or Contact Person(s): Travis Hastay, PE Title: Senior Project Manager

   Company (if applicable): CHW

   Mailing address: 11801 Research Dr

   City: Alachua State: FL ZIP: 32615

   Telephone: (___ ) (352) 331-1976 FAX: (___ )_____ e-mail: travish@chw-inc.com
3. If the applicant is agent for the property owner*:

   Name of Owner (title holder): Clay County

   Company (if applicable): Clay County

   Mailing address: PO Box 1366

   City: Green Cove Springs State: FL ZIP: 32043

   Telephone: (___ ) (352) 331-1976 FAX: (___ )_____ e-mail: permiteng@chw-inc.com

   * Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

**C. ADDITIONAL INFORMATION**

1. Is there any contract for sale of, or options to purchase the subject property? ☐ Yes ☒ No

   If yes, list names of all parties involved: _____

   If yes, is the contract/option contingent or absolute? ☐ Contingent ☐ Absolute

**D. ATTACHMENTS** (One copy reduced to no greater than 11 x 17, plus one copy in PDF format)

1. Site Plan and Survey including but not limited to:
   a. Name, location, owner, and designer of the proposed development.
   b. Vicinity map - indicating general location of the site and all abutting streets and properties.
   d. Complete legal description.
   e. Statement of Proposed Uses.
   f. Location of the site in relation to adjacent properties, including the means of ingress and egress to such properties and any screening or buffers along adjacent properties.
   g. Location of nearest fire hydrant, adjacent pedestrian sidewalks and bicycle paths.
   h. Date, north arrow, and graphic scale (not to exceed one (1) inch equal to fifty (50) feet).
   i. Area and dimensions of site.
   j. Location of all property lines, existing right-of-way approaches, sidewalks, curbs, and gutters.
   k. Access and points of connection to utilities (electric, potable water, sanitary sewer, gas, etc.).
   m. Location and dimensions of all existing and proposed parking areas, loading areas, curb cuts.
   n. Location and size of any lakes, ponds, canals, or other waters and waterways.
   o. Structures and major features – fully dimensioned – including setbacks, distances between structures, floor area, width of driveways, parking spaces, proposed surface materials of driveways and parking areas, property or lot lines, and floor area ratio.
   p. Required buffers.
   q. Location of existing trees, identifying any trees to be removed.
   r. Landscaping plan depicting type, size, and design of landscaped areas, buffers, and tree mitigation calculations.
   s. Percent of pervious surface.
   t. Lighting plan.
   u. Location, design, height, and orientation of signs.
   v. Location of dumpsters and detail of dumpster enclosure.
   w. For development consisting of Multi-family residential;
      i. Tabulation of gross acreage.
      ii. Tabulation of density.
      iii. Number of dwelling units proposed.
      iv. Location and percent of total open space and recreation areas.
      v. Floor area of dwelling units.
      vi. Number of proposed parking spaces.
      vii. Street layout.
2. Stormwater management plan - including the following:
   a. Existing contours at one (1) foot intervals.
   b. Proposed finished floor elevation of each building site.
   c. Existing and proposed stormwater management facilities with size and grades.
   d. Proposed orderly disposal of surface water runoff.
   e. Centerline elevations along adjacent streets.
3. Legal description with tax parcel number.
4. Warranty Deed or other proof of ownership.
5. Permit or Letter of Exemption from the St. Johns River Water Management District.

6. Fee**.**

   a. Based on size of site:

      i. For sites <10,000 s.f. - $500

      ii. For sites >10,000 s.f.- $1,000 + $20 per acre

   b. All applications are subject 10% administrative fee and must pay the cost of any outside consultants' fees.

No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any fees necessary for technical review or additional reviews of the application by a consultant will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any action of any kind on the development application.

**<u>All 6 attachments are required for a complete application.</u> A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.**

**I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge:**

_____ _____

Signature of Applicant Signature of Co-applicant

_____ _____

Typed or printed name and title of applicant Typed or printed name of co-applicant

_____ _____

Date Date

State of _____ County of _____

The foregoing application is acknowledged before me this _____ day of _____, 20__, by _____

_____, who is/are personally known to me, or who has/have produced _____

as identification.

NOTARY SEAL _____

Signature of Notary Public, State of _____

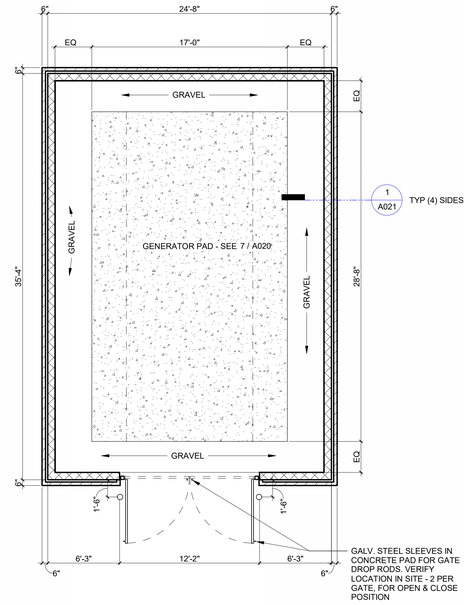
Travis J. Hastay
State of Florida
Professional Engineer, License No. 84295

This item has been digitally signed and sealed by Travis J. Hastay, PE, on the date indicated here.

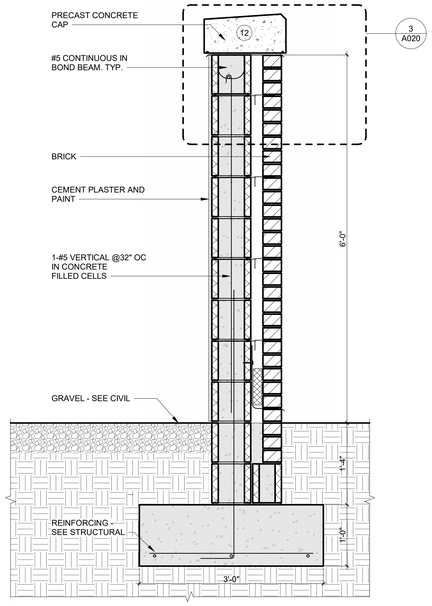
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Travis J Hastay

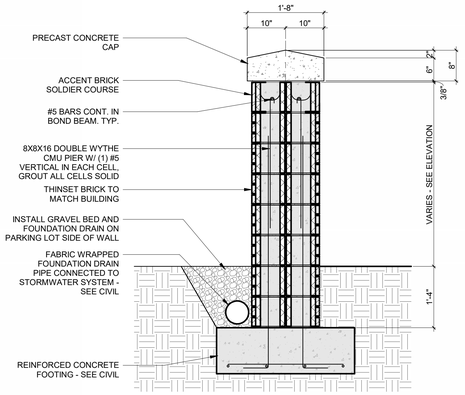
Digitally signed by Travis J Hastay
DN: E=travish@chw-inc.com, CN=Travis J Hastay, O=Travis J. Hastay, L=Gainesville, S=Florida, C=US
Date: 2023.10.12 13:28:50-04'00'



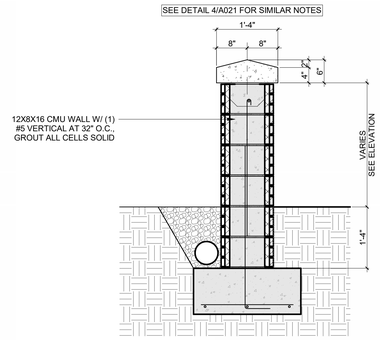

2 MECHANICAL YARD PLAN
3/16" = 1'-0"



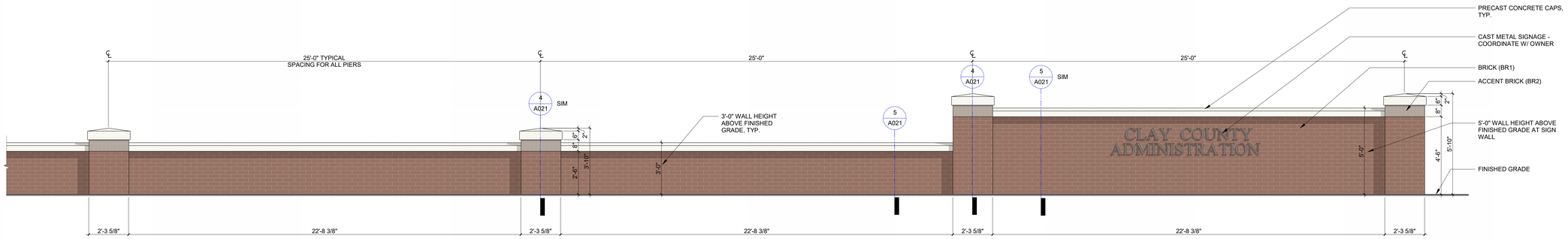

1 MECHANICAL YARD TYPICAL WALL SECTION
1" = 1'-0"




4 SITE WALL PIER DETAIL
3/4" = 1'-0"




5 SITE WALL SECTION DETAIL
3/4" = 1'-0"




3 SITE WALL ELEVATION
3/8" = 1'-0"

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IMEG The FUTURE. Built Smarter.
9133 R.G. SKINNER PARKWAY
JACKSONVILLE, FL 32256

| SUBMITTAL: | | ISSUE DATE: |
|---|---|---|
| CONSTRUCTION DOCUMENTS | | 04/11/2024 |
| REVISION | DESCRIPTION | DATE |
| 1 | Addendum 01 | 05/31/2024 |

# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

ENLARGED SITE PLANS AND DETAILS

| PROJECT NO.: 22068 | DRAWN BY: | AS |
|---|---|---|
| | CHECKED BY: | MB |

# A021

# DEVELOPMENT PLANS
FOR
# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITIES
## SECTION 38, TOWNSHIP 6 SOUTH, RANGE 26 EAST
SUBMITTED TO
## ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
## CLAY COUNTY
## FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION


**DEVELOPER**
GAURAV LOHIYA
WALKER ARCHITECTS
2035 NW 13TH STREET
GAINESVILLE, FLORIDA 32609

**OWNERS**
CLAY COUNTY
PO BOX 1366
GREEN COVE SPRINGS, FL 32043

**ENGINEER OF RECORD**
TRAVIS J. HASTAY, P.E.
CHW
11801 RESEARCH DRIVE
ALACHUA, FL 32615
(352) 331-1976

**SURVEYOR OF RECORD**
CLINTON N. RICKNER, P.S.M.
CHW
2100 SE 17TH STREET, UNIT 802
OCALA, FL 34471
(352) 414-4621

**LANDSCAPE**
CAELI TOLAR, P.L.A.
CHW
11801 RESEARCH DRIVE
ALACHUA, FL 32615
(352) 331-1976

**VICINITY MAP**

## DEVELOPMENT DATA:

| | ON-SITE | |
|---|---|---|
| DEVELOPMENT AREA: | 82,135 S.F. | 1.78 AC |
| BUILDING AREA | 18,731 S.F. | 22.80% |
| ROADS/CURB/CONCRETE: | 45,384 S.F. | 55.26% |
| IMPERVIOUS AREA: | 64,775 S.F. | 78.86% |
| OPEN SPACE: | 17,360 S.F. | 21.14% |
| | | |
| PARKING SPACES: | 102 | |
| FAR | 0.397 | |
| MAX BUILDING HEIGHT: | LESS THAN 21 FEET | |
| | | |
| LEGAL DESCRIPTION: REFER TO SURVEY | | |

## SHEET INDEX


| SHEET NUMBER | DESCRIPTION |
|---|---|
| C0.00 | COVER SHEET AND INDEX |
| 1 OF 1 | ALTA/NSPS LAND TITLE SURVEY |
| C0.10 | GENERAL NOTES |
| C0.11 | LEGEND |
| C0.20 | STORMWATER POLLUTION PREVENTION NOTES |
| C0.21 | STORMWATER POLLUTION PREVENTION PLAN |
| C0.30 | DEMOLITION AND TREE PROTECTION PLAN |
| C1.10 | DETAILED HORIZONTAL CONTROL AND SITE PLAN |
| C1.20 | ACCESSIBILITY SITE PLAN |
| C2.10 | DETAILED GRADING AND DRAINAGE PLAN |
| C2.20 - C2.22 | UNDERGROUND STORMWATER MANAGEMENT FACILITY DETAILS |
| C2.30 | CONSTRUCTION DETAILS |
| C3.10 | DETAILED UTILITY SITE PLAN |
| | |
| | |
| LS-01 | LANDSCAPE PLAN |
| LS-02 | IRRIGATION PLAN |
| | |
| E-1 | PHOTOMETRIC SITE PLAN |
| A2 | ARCHITECTURAL ELEVATIONS |
| | |
| | |
| | |


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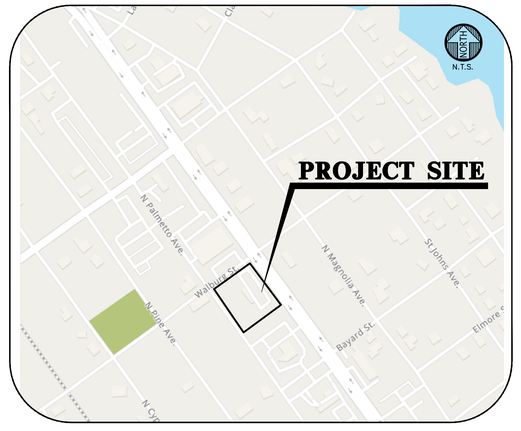
AT LEAST TWO FULL BUSINESS DAYS BEFORE
DIGGING OR DISTURBING EARTH
811
Know what's below. Call before you dig.
1-800-432-4770

TRAFFIC STATEMENT:

| PROPOSED LAND USE | ITE LU | AREA | AADT | AM PEAK | PM PEAK |
|---|---|---|---|---|---|
| GOVERNMENT OFFICE BUILDING | (730) | 30,772 S.F. | 695 | 114 | 98 |
| NET TRIP GENERATION | | | 695 | 114 | 98 |

1.) BASED ON ITE TRIP GENERATION MANUAL 11TH EDITION

PARKING REQUIREMENT:
PARKING REQUIRED: 30,772 SF AT 1 SPACE PER 333 SF = 30,772 / 333 = 92 SPACES
PARKING PROVIDED: 104 SPACES
ACCESSIBLE PARKING REQUIRED: 5 SPACES
ACCESSIBLE PARKING PROVIDED: 5 SPACES
ADDITIONAL SPACES PROVIDED BY NEIGHBORING COUNTY BUILDINGS.




**LOCATION MAP**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Travis J. Hastay
State of Florida, Professional Engineer, License No. 84295
This item has been electronically signed and sealed by Travis J. Hastay, PE on 06/19/2024 using a Digital Signature.
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JACKSONVILLE, FL


| SUBMITTAL: | ISSUE DATE: |
|---|---|
| 100% CONSTRUCTION DOCUMENTS | 4/11/2024 |

| REVISION | DESCRIPTION | DATE |
|---|---|---|

**CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY**
633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:
COVER SHEET AND INDEX

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

**C0.00**

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7/27/2023 8:57:42 AM
Tech: nicolas Plot Date: Jun 19,2024 8:59am Filename: N:\2023\23-0204\Department\04_Engineering\01_DWG\Production Files\23-0204 CV.dwg

# CLAY COUNTY GENERAL NOTES (COMMERCIAL)

1. CLAY COUNTY ENGINEERING DIVISION REQUIRES TWENTY-FOUR HOURS (24-HR) NOTICE ON ALL MEETINGS AND OR TESTING PROCEDURES.

2. CONSTRUCTION WARNING SIGNS ARE TO BE POST MOUNTED AND ERECTED BEFORE CONSTRUCTION CAN COMMENCE. THESE AND ALL TRAFFIC CONTROL DEVICES SHALL FOLLOW THE STANDARDS SET FORTH BY THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND DETAILS.

3. ALL CONSTRUCTION PROJECTS 1 ACRE OR MORE IN SIZE SHALL BE REQUIRED TO ABIDE BY THE PROVISIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION (NPDES) PERMIT. THE OWNER OR CONTRACTOR IS RESPONSIBLE FOR PREPARING THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMITTING THE NPDES "NOTICE OF INTENT" (NOI) AND "NOTICE OF TERMINATION" (NOT) TO THE EPA OR LOCAL STATE AGENCY HAVING JURISDICTION OVER THE NPDES PROGRAM. THE CONTACTOR SHALL KEEP ONSITE COPIES OF THE SWPPP, NOI, AND WATER MANAGEMENT DISTRICT PERMITS.

4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RECOGNIZE AND ABIDE BY ALL OSHA SAFETY STANDARDS.

5. ALL DISTURBED CLAY COUNTY RIGHTS-OF-WAY SHALL BE SODDED TO THE DISCRETION AND APPROVAL OF THE CLAY COUNTY ENGINEERING DIVISION.

6. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO EXCAVATION AND TAKE ALL MEASURES NECESSARY TO PROTECT UTILITIES DURING CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPONSIBLE UTILITY COMPANY, THE ENGINEER, AND THE COUNTY.

CALL BEFORE YOU DIG
1-800-432-4770
&
904-269-6359

- CALL 800-432-4770 TWO FULL BUSINESS DAYS BEFORE DIGGING. CALL 10 DAYS BEFORE DIGGING WHEN DIGGING UNDER WATER.
- CALL 904-269-6359 (CLAY COUNTY SIGNAL & MAINTENANCE DIVISION) TWO FULL BUSINESS DAYS BEFORE DIGGING
- WAIT THE REQUIRED TIME FOR BURIED UTILITIES TO BE LOCATED AND MARKED.
- PROTECT THE MARKS DURING YOUR PROJECT. IF MARKS ARE DESTROYED, CALL AGAIN.
- DIG SAFELY, USING EXTREME CAUTION WHEN DIGGING WITHIN 24 INCHES ON EITHER SIDE OF THE MARKS TO AVOID HITTING THE BURIED UTILITY LINES.

7. BEFORE WORKING IN EXISTING COUNTY RIGHTS-OF-WAY, THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN A RIGHT-OF-WAY PERMIT. THE PERMIT CAN BE OBTAINED AT THE CLAY COUNTY ENGINEERING DIVISION, 477 HOUSTON STREET, 3RD FLOOR, GREEN COVE SPRINGS, FLORIDA.

8. ALL SWALE SECTIONS AND PONDS ARE TO BE SODDED WITHIN 15 DAYS OF THEIR FINAL GRADING.

9. ANY OFFSITE SWALES OR DITCHES IMPACTED BY THE DEVELOPMENT, THE CONTACTOR SHALL RE-GRADE AND RESTORE, TO OBTAIN POSITIVE DRAINAGE.

10. A COPY OF THE CONTRACTORS' GENERAL LICENSE AND THE UNDER GROUND UTILITY LICENSE SHALL BE PROVIDED AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE.

11. ANY APPLICABLE SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD), FDEP (GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES, ARMY CORP OF ENGINEERS, AND A FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) PERMITS SHALL BE PROVIDED TO THE COUNTY BY THE PRE-CONSTRUCTION CONFERENCE. NO WORK SHALL BEGIN WITHOUT ALL APPLICABLE PERMITS ON FILE.

12. THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) BEFORE THE COUNTY WILL ACCEPT THE PROJECT.

13. ALL STORM PIPES SHALL BE VIDEOED PRIOR TO A FINAL INSPECTION AND ALL DATA SHALL BE RECORDED IN HIGH QUALITY DVD FORMAT WITH SOUND OR ANY EQUIPMENT APPROVED BY THE ENGINEERING DIVISION (REF. FDOT SSRBC LATEST EDITION).

14. THERE SHALL BE A MINIMUM FIVE (5) DAYS NOTICE GIVEN FOR SCHEDULING THE FINAL INSPECTION.

15. AT THE FINAL INSPECTION A LETTER OF COMPLIANCE WILL NEED TO BE FILLED OUT AND SIGNED BY THE STATE OF FLORIDA REGISTERED PROFESSIONAL ENGINEER OF RECORD FOR THE PROJECT. THE LETTER SHALL STATE THAT THE PROJECT HAS BEEN BUILT IN ACCORDANCE OF THE APPROVED DESIGN PLANS AND OTHER AGENCY PERMITS.

16. ALL SOIL AND DEBRIS TRACKED OUT OF THE PROJECT SHALL BE CLEANED IN ACCORDANCE WITH THE APPROVED SWPPP OR AT THE DISCRETION OF THE CLAY COUNTY ENGINEERING DIVISION.

17. PRIOR TO ANY INSPECTION OR TESTING, ALL PIPE LINE, STRUCTURES, ROADWAY, ETC. SHALL BE CLEANED.

# EROSION CONTROL

1. PURSUANT TO COMPREHENSIVE PLAN POLICY 9:1 OF THE CONSERVATION ELEMENT, THE USE OF ONE OR MORE EROSION CONTROL MEASURES, AS REQUESTED BY THE CLAY COUNTY ENGINEERING DIVISION, SHALL BE USED DURING CONSTRUCTION. THESE WILL BE, BUT NOT LIMITED TO, ITEMS SUCH AS TEMPORARY GRASS COVER, SEDIMENT BASINS OR PONDS, MULCHING, TEMPORARY FENCES, DIVERSION CHANNELS, AND HAY BALES.

2. PURSUANT TO COMPREHENSIVE PLAN POLICY 9:1 OF THE CONSERVATION ELEMENT, SCHEDULING OF CONSTRUCTION SHALL BE GIVEN SPECIAL CONSIDERATION TO MINIMIZE EXPOSURE OF BARE SOIL. THE CONTRACTOR WILL FORMULATE A CONSTRUCTION SCHEDULE TO BE GIVEN TO THE COUNTY REPRESENTATIVE.

3. THE GOVERNING PUBLICATIONS FOR EROSION CONTROL ARE CURRENT FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX 100-105, CURRENT FDOT STD. SPEC. FOR ROADWAY & BRIDGE CONST., SECTION 104, AND THE NPDES STORMWATER AND EROSION CONTROL MANUAL LATEST EDITION.

4. THE CONTRACTOR SHALL CHECK EACH DAY TO INSURE THAT ALL EROSION CONTROL DEVICES ARE IN PLACE AND WORKING PROPERLY.

5. ALL EROSION CONTROL MEASURES SHALL BE IN COMPLIANCE WITH THE RULES, REGULATIONS AND STANDARDS OF THE SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT, THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND THE UNITED STATES ARMY CORP OF ENGINEERS AND CLAY COUNTY REGULATIONS AND ORDINANCES.

6. THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PREVENT THE EROSION OF SOIL AND DEPOSITION OF SEDIMENT ON ADJACENT AND DOWNSTREAM PROPERTIES.

7. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. SEDIMENT CONTROL CONSISTS OF SILT FENCING, HAY BALES, AND FLOATING TURBIDITY BARRIERS PER FDOT INDEX NO. 102 &103. EROSION CONTROL CONSISTS OF SEEDING AND MULCHING, SODDING, WETTING SURFACES, PLACEMENT OF COARSE AGGREGATE, TEMPORARY PAVING.

8. THE CONTACTOR SHALL RESPOND TO EROSION AND SEDIMENT CONTROL MAINTENANCE WITH 24-HOURS OF BEING INFORMED BY CLAY COUNTY, UNLESS THE SITUATION REQUIRES AN IMMEDIATE RESPONSE. THE CONTRACTOR WILL THEN RESPOND IMMEDIATELY AFTER NOTIFICATION BY THE COUNTY. THE CONTACTORS EROSION CONTROL INSPECTOR SHALL BE A QUALIFIED STORMWATER MANAGEMENT INSPECTOR BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

9. THE CONTRACTOR SHALL BE REQUIRED TO INCORPORATE PERMANENT EROSION CONTROL MEASURES AT THE EARLIEST PRACTICAL TIME SO AS TO MINIMIZE THE NEED FOR TEMPORARY CONTROLS.

10. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE MINIMUM REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL EROSION CONTROL MEASURES AS DETERMINED BY THE COUNTY OR THE CONTACTOR TO INSURE QUALITY CONTROL.

11. ALL DISTURBED AREAS SHALL BE GRASSED WITHIN 7 DAYS OF THE INITIAL DISTURBANCE. TYPES OF GRASSING SHALL BE AS FOLLOWS: SODDING IS REQUIRED FOR AROUND ALL DRAINAGE STRUCTURES, RETENTION/DETENTION AREAS, SWALES, DITCHES, AND WHERE 4:1 SLOPES ARE EXCEEDED. SEED AND MULCH MAY BE USED AT ALL OTHER LOCATIONS UNLESS SPECIFICALLY CALLED OUT FOR ON THESE DRAWINGS. THERE SHALL BE A STANDING ROW OF GRASS AT THE TIME OF FINAL ACCEPTANCE. IF SEED AND MULCH HAS BEEN USED AND HAS NOT TAKEN TO, SOD WILL BE REQUIRED FOR ESTABLISHED GRASS.

12. THE CONTRACTOR SHALL INSPECT AND REPORT EROSION AND SEDIMENT CONTROL METHODS EVERY WEEK AND AFTER ½ INCH OF RAIN DURING CONSTRUCTION. THE CONTRACTOR SHALL REMOVE ANY SEDIMENT BUILD UP, REPAIR OR REINSTALL ANY CONTROL MEASURES.

13. THE COUNTY REQUIRES BACKGROUND TESTING OF LOCAL WATERWAYS AND ADDITIONAL PERIODIC TESTING DURING CONSTRUCTION FOR WATER QUALITY AND CONFORMITY WITH CLAY COUNTY STANDARDS.

# DRAINAGE STRUCTURES & PIPE INSTALLATION

1. THE GOVERNING PUBLICATIONS FOR PIPE ARE THE CURRENT FDOT STANDARD PLANS FOR ROAD CONSTRUCTION INDEX 430 AND THE CURRENT FDOT STD. SPEC. FOR ROADWAY & BRIDGE CONST. SECTION 430.

2. THE GOVERNING PUBLICATIONS FOR INLETS, JUNCTION BOXES AND MANHOLES ARE THE CURRENT FDOT STANDARD PLANS FOR ROAD CONSTRUCTION, INDEX 425 AND THE CURRENT FDOT STD. SPEC. FOR ROADWAY & BRIDGE CONST. SECTION 425.

3. ALL JOINTS OF PIPE REGARDLESS OF MATERIAL TYPE SHALL BE WRAPPED WITH FABRIC FILTER CLOTH PER FDOT STD. SPEC FOR ROADWAY AND BRIDGE CONSTRUCTION INDEX 985 TYPE D-3, A.O.S. 70-100. THE FABRIC SHALL BE INSTALLED IN ACCORDANCE WITH FDOT INDEX NUMBER 430. THE CONTRACTOR WILL PROVIDE A MINIMUM 12" OVERLAP IN THE FABRIC.

4. ALL STORM SEWER PIPES ARE TO BE STEEL REINFORCED CONCRETE PIPE (SRCP) UNLESS OTHERWISE NOTED ON THESE DRAWINGS. ROUND CONCRETE PIPE SHALL COMPLY WITH ASTM C76. ELLIPTICAL PIPE SHALL COMPLY WITH ASTM C507. PIPE JOINTS AND O RING GASKETS SHALL COMPLY WITH ASTM C443.

5. ALL STORM SEWER PIPES SHALL BE SUBJECTED TO LEAKAGE TESTING AND SHALL BE VIDEOED/ TV PRIOR TO THE FINAL INSPECTION.

6. ALL STORM SEWER PIPES SHALL BE CUT FLUSH WITH THE INTERIOR WALL OF ANY TYPE MANHOLE OR CURB AND DITCH BOTTOM INLETS.

7. IF THE APPROVED DESIGN REQUIRES THE INLET OR STORM RUN BE SURCHARGED, ALL INLETS SHALL BE INSPECTED BEFORE BEING EXPOSED TO THE SYSTEM.

8. MITERED END SECTIONS SHALL MEET THE REQUIREMENTS UNDER THE CURRENT FDOT STANDARD PLANS FOR ROAD CONSTRUCTION, INDEX 430.

9. NO MANHOLE SHALL BE PLACED WITHIN 2.5' OF THE CURB.

10. NO BRICK ADJUSTMENT SHALL BE ALLOWED FOR MANHOLES UNDERNEATH THE PAVEMENT.

11. THE MAXIMUM THRESHOLD FOR MANHOLE ADJUSTMENT UNDERNEATH THE ROADWAY SHALL BE BETWEEN 0 TO 4".

12. FINAL PIPE INSPECTION IN THE RIGHT-OF-WAY OR COUNTY'S EASEMENT: AFTER THE FINAL PAVEMENT OPERATION, THE CONTRACTOR SHALL DEWATER AND VIDEO THE PIPE/CULVERT; THE COUNTY WILL ONLY REVIEW THE VIDEO DATA POST ASPHALT CONSTRUCTION SUPPLIED BY THE CONTRACTOR/DEVELOPER, AND THE TESTS AND DVD MUST MEET SECTION 430 OF THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

# SIGNAGE & PAVEMENT MARKINGS

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE LATEST IMPLEMENTED ADDITION OF THE FDOT STANDARD PLANS FOR ROAD CONSTRUCTION INDEX NUMBERS 700, 706 & 711.

2. ALL FINAL PAVEMENT MARKINGS WITHIN THE RIGHTS-OF-WAY SHALL BE THERMOPLASTIC.

3. ALL SIGNS SHALL BE ON A TEN-FOOT (10') POLE A MINIMUM SEVEN FEET (7') FROM THE GROUND.

4. STREET SIGNS SHALL BE MOUNTED WITH TEE CAPS.

5. STREET SIGNS SHALL BE A SIX INCHES (6") WIDE WITH GREEN BACKINGS AND WHITE LETTERS AND BORDERING.

6. STOP SIGNS SHALL MEET THE MINIMUM SIZE REQUIREMENTS OF THE MUTCD.

7. STOP SIGNS ARE TO BE PLACED FOUR FEET (4') FROM BACK OF CURB, FOUR FEET (4') BEHIND CROSS WALKS AND ON THE RIGHT HAND SIDE OF THE ROAD.

8. ALL REGULATORY SIGNS SHALL BE BLACK AND WHITE. ALL CONSTRUCTION WARNING SIGNS SHALL BE ORANGE AND BLACK. ALL WARNING SIGNS SHALL BE YELLOW AND BLACK. ALL NO PARKING AND STOP SIGNS SHALL BE RED AND WHITE.

9. STOP BARS SHALL BE TWENTY-FOUR INCHES (24") WIDE AND LANE WIDTH. ALL STOP BARS SHALL BE THERMOPLASTIC.

10. ALL SIGNS MUST MEET FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS FOR ENGINEERING GRADE SIGN FACES IN REFLECTIVITY.

11. FOR COUNTY MAINTAINED ROADS, STREET SIGNS SHALL BE COLORED WITH A GREEN BACKGROUND AND WHITE LETTERING. FOR PRIVATE ROADS, THE SIGN SHALL BE A WHITE BACKGROUND WITH GREEN LETTERING.

12. ALL PAVEMENT MARKINGS REQUIRE LAYOUT APPROVAL BY CLAY COUNTY.

# SIDEWALKS

1. THE GOVERNING PUBLICATIONS FOR SIDEWALK ARE THE CURRENT FDOT STANDARD PLANS FOR ROAD CONSTRUCTION, INDEX 522-001 AND THE CURRENT FDOT STD. SPEC. FOR ROADWAY & BRIDGE CONST. SECTION 522.

2. SIDEWALKS ARE A MINIMUM OF 5' IN WIDTH FOR A LOCAL ROAD AND 6' IN WIDTH FOR A RESIDENTIAL COLLECTOR. ALL OTHER ROADWAY CLASSIFICATIONS SHALL REFER TO THE DETAILS HEREIN. IN NO CASE SHALL THE SIDEWALK BE LESS THAN 5' WITHOUT WRITTEN APPROVAL FROM THE ENGINEERING DIVISION.

3. ALL SIDEWALKS THAT ARE NOT IN FRONT OF A BUILD ABLE LOT, SHALL BE INSTALLED PRIOR TO THE FINAL INSPECTION

4. PEDESTRIAN CROSSING/HANDICAP RAMPS SHALL BE INSTALLED WHEREVER THE SIDEWALK MEETS THE CURB. THE RAMPS SHALL BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS FOR ROAD CONSTRUCTION INDEX 522-002. ALL ADA RAMPS SHALL BE INSTALLED PRIOR TO FINAL ACCEPTANCE UNLESS OTHERWISE APPROVED BY THE ENGINEERING DIVISION.

5. WHETHER DEPICTED ON THE PLANS OR NOT, A SIDEWALK IS TO BE INSTALLED AT THE SUBDIVISION ENTRANCE RUNNING PARALLEL TO THE RIGHT OF WAY FOR THE EXTENT OF THE PROPERTY.

6. SIDEWALKS ARE TO BE PLACED, AT A MINIMUM, 3' FROM THE PROPERTY LINE OR AS OTHERWISE APPROVED BY THE ENGINEERING DIVISION.

# MAINTENANCE OF TRAFFIC (MOT) NOTES

1. THE GOVERNING PUBLICATIONS FOR MAINTENANCE OF TRAFFIC ARE THE CURRENT FDOT STANDARD PLANS FOR ROAD CONSTRUCTION INDEX 102 AND THE CURRENT FDOT STD. SPEC. FOR ROADWAY & BRIDGE CONST., SECTION 102, AND THE LATEST EDITION OF THE MUTCD.

# AS-BUILT REQUIREMENTS

GENERAL

1. SUBMIT TWO (2) SIGNED AND SEALED SETS OF PRINTS AND ONE DIGITAL COPY (AUTOCAD FORMAT; PLEASE DO NOT USE REFERENCE FILES) WITH THE DESIGN INFORMATION (ELEVATIONS, PIPE LENGTHS, STATIONING, ETC.) LINED THROUGH ( 28.48 ) AND THE AS-BUILT INFORMATION PLACED ADJACENT TO IT.

NOTE: THE FIRM OR LICENSED SURVEYOR SHALL USE THE ORIGINAL PAVING AND DRAINAGE SHEET(S)) SPECIFICALLY FOR AS-BUILT INFORMATION. THE DRAWING(S) ARE TO BE ON 24" X 36" SHEET(S) AND CONTAIN THE FOLLOWING IN ADDITION TO THE AS-BUILT INFORMATION:

- PROJECT NAME AS IT APPEARS ON THE PLAT
- PROJECT/DEVELOPMENT NUMBER
- STREET NAMES
- ALL COMMERCIAL SITES SHALL SHOW THE SITE PHYSICAL ADDRESS IN THE TITLE BLOCK
- DESIGN INFORMATION FOR ALL AS-BUILT INFORMATION PROVIDED LINED THROUGH
- NORTH ARROW
- SCALE
- SHOW AND LABEL ALL SURVEY-LINES USED FOR LOCATIONS

2. THE WORDS "AS-BUILT" IN AT LEAST ONE-INCH HIGH LETTERS

3. MATERIALS CERTIFICATION STATEMENT SIGNED BY THE CONTRACTOR

4. SIGNED ENGINEER'S CERTIFICATION STATEMENT

5. INFORMATION PERTAINING TO BENCHMARK(S) (LOCATION, ELEVATION, AND REFERENCE TYPE)

6. SHOW STATE PLANE COORDINATE (NAD. 83)

REFERENCES ON AT LEAST FOUR (4) BOUNDARY CORNERS AND ON ALL PRM(S) (ONE POSITION, TO BE KNOWN AS THE "NORTHING," SHALL GIVE THE POSITION IN A NORTH AND SOUTH DIRECTION; THE OTHER, TO BE KNOWN AS THE "EASTING," SHALL GIVE THE POSITION IN AN EAST AND WEST DIRECTION, REF. F.S CH. 177.151) FOR PLATS AND AS-BUILTS.

BENCHMARKS

PERMANENT BENCHMARKS ARE TO BE SITUATED AS TO FACILITATE LOT GRADING (I.E. TOP OF METAL CURB HOODS, MANHOLE RIMS, ETC.). AT LEAST TWO (2) PERMANENT BENCHMARKS SHALL BE ESTABLISHED WITHIN A SUBDIVISION OR IN EACH PHASE OF A SUBDIVISION AND LOCATED SO THAT NO LOT IS MORE THAN ONE THOUSAND FEET (1,000') FROM A BENCHMARK. PLEASE REFERENCE EACH BENCHMARK BY STATION.

PAVING

STATIONS, OFFSETS, AND ELEVATIONS ON

- CENTER-LINE OR PROFILE GRADE LINE
- TOP OF CURB
- GUTTER OR EDGE OF PAVEMENT (SPECIFY WHICH)
- BACK OF SIDEWALKS

A MINIMUM OF EVERY 100 FEET AND AT THE FOLLOWING CHANGES IN VERTICAL AND HORIZONTAL ALIGNMENT:

- PVC, PC AND PVT
- LOW AND HIGH POINTS
- CURB RETURNS
- CENTERLINE INTERSECTIONS
- BEGIN AND END VALLEY GUTTER
- BEGIN AND END SUPERELEVATION TRANSITION
- BEGIN AND END FULL SUPERELEVATION
- BEGIN AND END ROADWAY TRANSITION
- GUTTER LINE (CUL-DE-SAC EVERY 25')

DRAINAGE

7. LOCATION OF ALL DRAINAGE STRUCTURES. LOCATION SHOULD BE BY STATION AND OFFSET WHENEVER POSSIBLE, OTHERWISE STRUCTURES MUST BE TIED DOWN FROM AT LEAST TWO DIRECTIONS.

8. SIZES, LENGTHS, AND TYPES OF DRAINAGE PIPES INCLUDING UNDERDRAIN.

9. INFORMATION FOR ALL STRUCTURES TO INCLUDE:

- PIPE INVERT ELEVATIONS INCLUDING UNDERDRAIN
- TOP OR GRATE ELEVATIONS (SPECIFY WHICH)
- WEIR OR SLOT ELEVATIONS AND SIZES

10. CROSS SECTIONS THROUGH ALL SWALE AND DITCH CONSTRUCTION A MINIMUM OF EVERY 25 FEET TO INCLUDE ELEVATIONS AND LOCATIONS OF THE CENTERLINE OR TOES OF SLOPE (SPECIFY WHICH) AND THE TOPS OF BANK.

11. INFORMATION FOR RETENTION / DETENTION BASINS TO INCLUDE:

- ELEVATIONS AND LOCATIONS ALONG THE TOP OF BANK A MINIMUM OF EVERY 100 FEET
- DATED ELEVATION OF THE WATER STAGE AT THE TIME OF AS-BUILT
- TIES FROM THE TOP OF BANK TO THE WATERS EDGE A MINIMUM OF EVERY 100 FEET
- ELEVATIONS ALONG THE BOTTOM OF BASIN (2 SHOTS PER AVERAGE POND ACREAGE)

12. INFORMATION FOR CONTROL STRUCTURE TO INCLUDE:

- LOCATION
- TOP ELEVATION
- WEIR OR SLOT ELEVATION AND SIZE
- ELEVATION AND SIZE OF DRAWDOWN ORIFICE
- LENGTH, SIZE, AND INVERTS (AT HIGH AND LOW POINTS) OF FILTER DRAIN
- INVERT OF OUTFALL PIPE

13. SHOW ALL DRAINAGE EASEMENTS, ENCROACHMENTS WITHIN THE EASEMENTS, AND ANY ENCROACHMENTS OF DRAINAGE OUTSIDE OF EASEMENTS.

SIGNAGE

14. THE LOCATION OF ALL STREET SIGNS SHALL BE SHOWN BY STATION AND OFFSET WHENEVER POSSIBLE, OTHERWISE, THE SIGNS MUST BE TIED DOWN FROM AT LEAST TWO DIRECTIONS.

ADDITIONAL NOTES

15. ALL PROPOSED ELEVATIONS SHALL BE CHECKED FOR APPROVAL; ADDITIONAL ELEVATIONS MAY BE REQUIRED TO CHECK FOR POSITIVE DRAINAGE.

16. ALL CUL-DE-SAC CURBING SHALL BE SURVEYED EVERY 25'.

17. SUBMIT THE BLUE-LINE OR BLACK-LINE (THE FINAL SET MUST BE SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR, LICENSED BY THE STATE OF FLORIDA) WITH THE CAD DISK FIVE (5) DAYS PRIOR TO SCHEDULING THE FINAL INSPECTION.

18. WATER MANAGEMENT APPROVALS ARE REQUIRED PRIOR TO FINAL ACCEPTANCE.

19. AS-BUILTS SHALL BE SIGNED IN, IF REVISIONS ARE REQUIRED, THE COMPANY WILL BE NOTIFIED TO PICK THEM UP AND SIGN THEM OUT. ONCE REVISIONS HAVE BEEN MADE, THE DOCUMENTS SHALL BE SIGNED BACK IN.

20. THE FILES ON THE CAD DISK SHOULD REFLECT THE SITE WITHOUT ADDITIONAL EDITING.

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| REVISION | DESCRIPTION | DATE |
|---|---|---|

CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:
GENERAL NOTES

| PROJECT NO.: | 23-204 | DRAWN BY: | TFC |
|---|---|---|---|
| | | CHECKED BY: | TJH |

C0.10

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# ABBREVIATIONS

| | |
|---|---|
| | *SYMBOLS* |
| ' | *FEET (WHEN USED WITH LENGTHS)* |
| ° | *DEGREES* |
| ' | *MINUTES (WHEN USED WITH ANGLES)* |
| " | *SECONDS* |
| % | *PERCENT* |
| @ | *AT* |
| | *A* |
| AASHTO | *ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS* |
| AC | *ACRES* |
| ADA | *AMERICAN WITH DISABILITIES ACT* |
| ANSI | *AMERICAN NATIONAL STANDARDS INSTITUTE* |
| ARCH | *ARCHITECT* |
| ARV | *AIR RELEASE VALVE* |
| ASTM | *AMERICAN SOCIETY FOR TESTING AND MATERIALS* |
| AWWA | *AMERICAN WATER WORKS ASSOCIATION* |
| | *B* |
| BC | *BACK OF CURB* |
| BFP | *BACKFLOW PREVENTER* |
| BLDG | *BUILDING* |
| BM | *BENCHMARK* |
| BMP | *BEST MANAGEMENT PRACTICE* |
| BOC | *BACK OF CURB* |
| BVCS | *BEGIN VERTICAL CURVE STATION* |
| BVCE | *BEGIN VERTICAL CURVE ELEVATION* |
| BW | *BOTTOM OF WALL* |
| BSL | *BUILDING SETBACK LINE* |
| | *C* |
| CATV | *CABLE TELEVISION* |
| CI | *CURB INLET* |
| CIP | *CAST IRON PIPE* |
| CMP | *CORRUGATED METAL PIPE* |
| CO | *CLEANOUT* |
| CONC | *CONCRETE* |
| COORD | *COORDINATE* |
| CR | *COUNTY ROAD* |
| C/O | *CLEANOUT* |
| | *D* |
| DBH | *DIAMETER AT BREAST HEIGHT* |
| DE | *DRAINAGE EASEMENT* |
| DEG | *DEGREE* |
| DIA | *DIAMETER* |
| DIP | *DUCTILE IRON PIPE* |
| DWG | *DRAWING* |
| | *E* |
| e | *RATE OF ELEVATION* |
| E | *EAST* |
| EA | *EACH* |
| EL | *ELEVATION* |
| ELEV | *ELEVATION* |
| EOP | *EDGE OF PAVEMENT* |
| EOR | *ENGINEER OF RECORD* |
| ERCP | *ELLIPTICAL REINFORCED CONCRETE PIPE* |
| ESMT | *EASEMENT* |
| EVCS | *END VERTICAL CURVE STATION* |
| EVCE | *END VERTICAL CURVE ELEVATION* |
| EX | *EXISTING* |
| | *F* |
| FAC | *FLORIDA ADMINISTRATIVE CODE* |
| FBR | *FLORIDA BEARING RATIO* |
| FC | *FRICTION COURSE* |
| FDEP | *FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION* |
| FDOT | *FLORIDA DEPARTMENT OF TRANSPORTATION* |
| FFE | *FINISHED FLOOR ELEVATION* |
| FH | *FIRE HYDRANT* |
| FHWA | *FLORIDA HIGHWAY ADMINISTRATION* |
| FIG | *FIGURE* |
| FM | *FORCE MAIN* |
| FOC | *FACE OF CURB* |
| FS | *FLORIDA STATUTES* |
| FT | *FEET* |
| | *G* |
| GALV | *GALVANIZED* |
| GM | *GAS MAIN* |
| GV | *GATE VALVE* |
| | *H* |
| HDPE | *HIGH DENSITY POLYETHYLENE* |
| HP | *HIGH POINT* |
| | *I* |
| ID | *IDENTIFICATION* |
| INV | *INVERT* |
| INV EL | *INVERT ELEVATION* |
| IP | *IRON PIPE* |
| | *K* |
| K | *VERTICAL CURVE RATE OF CHANGE* |
| | *L* |
| L | *LENGTH* |
| LA | *LANDSCAPE ARCHITECT* |
| LBR | *LIMEROCK BEARING RATIO* |
| LDR | *LAND DEVELOPMENT REGULATION* |
| LF | *LINEAR FEET* |
| LP | *LOW POINT* |
| LT | *LEFT* |
| | *M* |
| MAX | *MAXIMUM* |
| ME | *MATCH EXISTING* |
| MH | *MANHOLE* |
| MIN | *MINIMUM* |
| MISC | *MISCELLANEOUS* |
| MUTCD | *MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES* |
| | *N* |
| N | *NORTH* |
| N-E | *NORTHING - EASTING* |
| N/A | *NOT APPLICABLE* |
| NAVD | *NORTH AMERICAN VERTICAL DATUM OF 1988* |
| NGVD | *NATIONAL GEODETIC VERTICAL DATUM OF 1929* |
| NO | *NUMBER* |
| NPDES | *NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM* |
| NTS | *NOT TO SCALE* |
| | *O* |
| OC | *ON CENTER* |
| OHW | *OVERHEAD WIRE* |
| ORB | *OFFICIAL RECORDS BOOK* |
| OSHA | *OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION* |
| | *P* |
| PAVT | *PAVEMENT* |
| PC | *POINT OF CURVATURE* |
| PCC | *POINT OF COMPOUND CURVE* |
| PERF | *PERFORATED* |
| PROP | *PROPOSED* |
| PT | *POINT OF TANGENCY* |
| PVC | *POLYVINYL CHLORIDE* |
| PVI | *POINT OF VERTICAL INTERSECTION* |
| | *R* |
| R | *RADIUS* |
| RCP | *REINFORCED CONCRETE PIPE* |
| RPM | *RAISED REFLECTIVE PAVEMENT MARKER* |
| RPZ | *REDUCED PRESSURE ZONE* |
| RT | *RIGHT* |
| RWM | *RECLAIMED WATER MAIN* |
| R/W | *RIGHT-OF-WAY* |
| | *S* |
| S | *SOUTH* |
| SAN | *SANITARY* |
| SHWE | *SEASONAL HIGH WATER ELEVATION* |
| SL | *SLOPE* |
| SP | *SUPERPAVE* |
| SR | *STATE ROAD* |
| SS | *SANITARY SEWER* |
| ST | *STORM* |
| STA | *STATION* |
| STD | *STANDARD* |
| | *T* |
| TCE | *TEMPORARY CONSTRUCTION EASEMENT* |
| TEMP | *TEMPORARY* |
| TOB | *TOP OF BANK* |
| TV | *TELEVISION* |
| TW | *TOP OF WALL* |
| TYP | *TYPICAL* |
| | *U* |
| USF | *UNITED STATES FOUNDRY* |
| USGS | *UNITED STATES GEOLOGICAL SURVEY* |
| UTIL | *UTILITY* |
| | *V* |
| V | *VERTICAL* |
| VC | *VERTICAL CURVE* |
| VCP | *VITRIFIED CLAY PIPE* |
| | *W* |
| W | *WEST* |
| W | *WATER* |
| W/ | *WITH* |
| WM | *WATER MAIN* |
| WW | *WASTEWATER* |
| WWF | *WELDED WIRE FABRIC* |

# SIGNAGE

*SIGNS ARE PER FDOT SPECIFICATIONS OR PER MUTCD. SIGN POSTS AND INSTALLATION SHALL BE PER FDOT INDEX NO. 700-010. SIGN PLACEMENT SHALL BE PER FDOT INDEX NO. 700-101.*

*FTP-20-06 (12" X 18") PER FDOT INDEX NO. 700-102*

*R1-1 "STOP" - SEE PLANS FOR SIZE*

# SITE INFORMATION

*EX. PROPERTY LINE*

*LANDSCAPE BUFFER LINE*

*BUILDING SETBACK LINE*

*WETLAND LIMITS LINE*

*WETLAND SETBACK LINE*

*CENTER LINE*

*EASEMENT LINE*

*RIGHT-OF-WAY LINE*

*SILT FENCE LINE*

*TREE BARRICADE LINE*

*EX. STRUCTURE OR BUILDING*

*PROPOSED BUILDING*

*PROPOSED ASPHALTIC PAVEMENT*

*PROPOSED CONCRETE PAVEMENT*

*PROPOSED DETECTABLE WARNING SURFACE*

*DIRECTIONAL TRAFFIC ARROW PER FDOT INDEX NO. 17346*

*WATERSHED DIVIDE*

*EX. ELEVATION CONTOUR*

*PROPOSED CONTOUR*

*EX. SPOT ELEVATION*

*PROPOSED SPOT ELEVATION*

*DIRECTION OF SURFACE DRAINAGE FLOW*

*PROPOSED SWALE LINE*

*EX. FENCE*

*PROPOSED FENCE*

*EX. TREE (SIZE & TYPE)*

*EX. TREE (TREE ID)*

*EX. TREE TO BE REMOVED (SIZE & TYPE)*

*EX. TREE TO BE REMOVED (TREE ID)*

*PROJECT BENCHMARK*

# STORMWATER

*THE PROPOSED STORMWATER STRUCTURES DEPICTED BELOW ARE DRAWN PER FDOT SPECIFICATIONS AND TO SCALE WHEN SHOWN ON THE PLAN SHEETS.*

*EX. GRAVITY STORMWATER MAIN*

*PROPOSED GRAVITY STORMWATER MAIN (PIPE LENGTHS ARE FROM N-E LOCATION OF A STRUCTURE TO N-E LOCATION OF A STRUCTURE)*

*EX. STORMWATER MANHOLE*

*PROPOSED 48" DIA. STORMWATER MANHOLE PER FDOT INDEX. NO. 425-001 AND 425-010*

*PROPOSED CIRCULAR AREA DRAIN*

*PROPOSED SQUARE AREA DRAIN*

*PROPOSED TYPE 1 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)*

*PROPOSED TYPE 2 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)*

*PROPOSED TYPE 3 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)*

*PROPOSED TYPE 4 CURB INLET TOP PER FDOT INDEX NO. 425-020 (SEE PLANS FOR BOTTOM SPECIFICATION)*

*PROPOSED TYPE 5 CURB INLET TOP PER FDOT INDEX NO. 425-021 (SEE PLANS FOR BOTTOM SPECIFICATION)*

*PROPOSED TYPE 6 CURB INLET TOP PER FDOT INDEX NO. 425-021 (SEE PLANS FOR BOTTOM SPECIFICATION)*

*PROPOSED TYPE 9 CURB INLET TOP PER FDOT INDEX NO. 425-024 (SEE PLANS FOR BOTTOM SPECIFICATION)*

*PROPOSED TYPE 'C' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)*

*PROPOSED TYPE 'D' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)*

*PROPOSED TYPE 'E' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)*

*PROPOSED TYPE 'F' DITCH BOTTOM INLET TOP WITH STEEL GRATE PER FDOT INDEX NO. 425-053 (SEE PLANS FOR BOTTOM SPECIFICATION)*

*PROPOSED TYPE 'G' DITCH BOTTOM INLET TOP WITH STEEL GRATE PER FDOT INDEX NO. 425-053 (SEE PLANS FOR BOTTOM SPECIFICATION)*

*PROPOSED TYPE 'H' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)*

*PROPOSED TYPE 'H' DITCH BOTTOM INLET TOP PER FDOT INDEX NO. 425-052 (SEE PLANS FOR GRATE MATERIAL AND BOTTOM SPECIFICATION)*

*PROPOSED TYPE 'J' DITCH BOTTOM INLET TOP WITH STEEL GRATE PER FDOT INDEX NO. 425-054 (SEE PLANS FOR BOTTOM SPECIFICATION)*

*PROPOSED U-TYPE CONCRETE ENDWALLS WITH GRATES PER FDOT INDEX NO. 430-010 (SEE PLANS FOR SIZE)*

*PROPOSED FLARED END SECTION PER FDOT INDEX NO. 430-020 (SEE PLANS FOR SIZE)*

*PROPOSED CROSS DRAIN MITERED END SECTION PER FDOT INDEX NO. 430-021 (SEE PLANS FOR SIZE)*

*PROPOSED SIDE DRAIN MITERED END SECTION PER FDOT INDEX NO. 430-022 (SEE PLANS FOR SIZE)*

S-10 *PROPOSED STORMWATER STRUCTURE ID TAG*

# POTABLE AND RECLAIMED WATER

*EX. POTABLE WATER MAIN*

*PROPOSED POTABLE WATER MAIN*

*EX. RECLAIMED WATER MAIN*

*PROPOSED RECLAIMED WATER MAIN*

*11.25° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)*

*22.5° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)*

*45° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)*

*90° BEND W/ MECHANICALLY RESTRAINED JOINTS (POTABLE AND RCW)*

*TEE (POTABLE AND RCW)*

*CROSS (POTABLE AND RCW)*

*BLOWOFF ASSEMBLY (POTABLE AND RCW)*

*REDUCER (POTABLE AND RCW)*

*EX. GATE VALVE AND BOX (POTABLE AND RCW)*

*PROPOSED GATE VALVE AND BOX (POTABLE AND RCW)*

*EX. AIR RELEASE VALVE (POTABLE AND RCW)*

*PROPOSED AIR RELEASE VALVE (POTABLE AND RCW)*

*EX. FIRE HYDRANT ASSEMBLY*

*PROPOSED FIRE HYDRANT ASSEMBLY*

*PROPOSED SAMPLE POINT*

*EX. WATER METER (POTABLE AND RCW)*

*PROPOSED POTABLE WATER METER*

*PROPOSED POTABLE WATER BACK FLOW PREVENTER*

*PROPOSED RECLAIMED WATER METER*

*EX. WATER WELL*

*EX. HOSE BIB (POTABLE AND RECLAIMED)*

*PROPOSED HOSE BIB (POTABLE AND RECLAIMED)*

*PROPOSED FITTING ID TAG (POTABLE AND RECLAIMED)*

# WASTEWATER

*EX. GRAVITY WASTEWATER MAIN*

*PROPOSED GRAVITY WASTEWATER MAIN (PIPE LENGTHS ARE FROM N-E LOCATION OF A STRUCTURE TO N-E LOCATION OF A STRUCTURE)*

*EX. WASTEWATER FORCE MAIN*

*PROPOSED WASTEWATER FORCE MAIN*

*EX. WASTEWATER MANHOLE*

*PROPOSED WASTEWATER MANHOLE*

*EX. WASTEWATER CLEANOUT*

*PROPOSED WASTEWATER CLEANOUT*

*PROPOSED WASTEWATER GREASE TRAP*

MH# *PROPOSED WASTEWATER MANHOLE ID*

*11.25° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)*

*22.5° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)*

*45° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)*

*90° BEND W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)*

*WYE W/ MECHANICALLY RESTRAINED JOINTS (WW FORCE MAIN)*

*EX. PLUG VALVE AND BOX (WW FORCE MAIN)*

*PROPOSED PLUG VALVE AND BOX (WW FORCE MAIN)*

*EX. AIR RELEASE VALVE (WW FORCE MAIN)*

*PROPOSED AIR RELEASE VALVE (WW FORCE MAIN)*

# MISCELLANEOUS UTILITIES

*THE PROPOSED UTILITIES BELOW ARE DESIGN BY OTHERS AND ARE DEPICTED FOR COORDINATION PURPOSES ONLY. REFER TO PLANS BY OTHERS FOR EXACT LOCATIONS, DIMENSION, AND DETAILS.*

*PROPOSED AT&T LINE*

*EX. BURIED CABLE LINE*

*PROPOSED BURIED CABLE LINE*

*EX. BURIED TELEPHONE LINE*

*PROPOSED TELEPHONE LINE*

*EX. CABLE TELEVISION LINE*

*PROPOSED CABLE/TELEVISION LINE*

*EX. FIBER OPTIC LINE*

*EX. UNDERGROUND TELEPHONE LINE*

*EX. TELEPHONE PEDESTAL*

*EX. TELEVISION/CABLE PEDESTAL*

*EX. CHILLED WATER MAIN*

*PROPOSED CHILLED WATER MAIN*

*EX. FIRE MAIN*

*PROPOSED FIRE MAIN*

*EX. IRRIGATION LINE*

*PROPOSED IRRIGATION LINE*

*EX. STEAM LINE*

*PROPOSED STEAM LINE*

*PROPOSED CLAY ELECTRIC LINE*

*EX. ELECTRIC LINE*

*PROPOSED ELECTRIC LINE*

*EX. ENERGY LINE*

*PROPOSED PRIVATE LIGHTING LINE*

*EX. OVERHEAD WIRE LINE*

*EX. UNDERGROUND ELECTRIC LINE*

*EX. LIGHT*

*EX. UTILITY POLE*

*EX. UTILITY POLE*

*EX. WOOD POWER POLE*

*EX. GUY ANCHOR*

*PROPOSED TRANSFORMER*

*EX. GAS LINE*

*PROPOSED GAS LINE*

*EX. GAS MARKER*

*EX. GAS MARKER*

*NOTES:*
*1. THIS LEGEND IS ALL INCLUSIVE AND MAY INCLUDE ITEMS NOT A PART OF THIS PLAN SET.*

*2. SYMBOLS SHOWN ON THIS SHEET ARE FOR ILLUSTRATIVE PURPOSES ONLY. UNLESS NOTED OTHERWISE, SYMBOLS IN THESE PLANS MAY NOT BE REPRESENTATIVE OF SIZE.*

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# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

LEGEND

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

# C0.11

# I. INTRODUCTION

THIS DOCUMENT WAS PREPARED IN ORDER TO ILLUSTRATE COMPLIANCE WITH CHAPTER 62-621.300 (4) OF THE FLORIDA ADMINISTRATIVE CODE, WHICH PERTAINS TO THE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. THE ADMINISTRATIVE CODE GRANTS THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) THE AUTHORITY TO REGULATE POINT SOURCE DISCHARGE OF STORMWATER FROM CONSTRUCTION SITES. THIS DOCUMENT ESTABLISHES A STORMWATER POLLUTION PREVENTION PLAN FOR THE SITE USING STANDARD PRACTICE AND BEST MANAGEMENT PRACTICES (BMPs) AND IS ORGANIZED TO CORRESPOND TO 62-621.300(4)(a) GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES FDEP FORM 62-621.300(4)(b) IS TO BE SUBMITTED IN CONJUNCTION WITH THIS DOCUMENT. CONTRACTOR(S) MUST FILL IN THE ACTIVITIES SEQUENCE (SECTION ii. B. BELOW) AND SIGN THIS SHEET (REFER TO SIGNATURE TABLE THIS SHEET) AND RETAIN THIS SHEET AND ALL FOLLOWING SWPPP SHEETS ON SITE. ALTERNATIVELY, CONTRACTOR(S) MAY PREPARE AND SIGN THEIR OWN SWPP PLAN MEETING THE REQUIREMENTS. IF THE SITE OR CONTRACTOR ACTIVITIES REQUIRE ANY BMPs THAT ARE NOT DESCRIBED ON THIS SHEET, THE CONTRACTOR MUST PREPARE AN ALTERNATIVE OR ADDITIONAL SWPPP DOCUMENT CONTAINING THE NECESSARY BMPs.

# II. SITE DESCRIPTION

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|---|---|
| COUNTY: | CLAY COUNTY, FLORIDA |
| SECTION, TOWNSHIP, RANGE: | SECTION 38, TOWNSHIP 06 SOUTH, RANGE 26 EAST |
| COUNTY PARCEL NO.: | 36-06-26-017628-000-00 |
| STREET ADDRESS: | 633 N ORANGE AVE, GREEN COVE SPRINGS, FL 32043 |
| PROJECT AREA: | 1.65 ACRES |
| SITE LOCATION MAP: | SEE COVER SHEET OF CONSTRUCTION DRAWINGS |

## A. NATURE OF CONSTRUCTION ACTIVITY

THE PROPOSED DEVELOPMENT IS THE CONSTRUCTION OF A ±36,000 ECONOMIC DEVELOPMENT BUILDING FOR CLAY COUNTY AND ASSOCIATED PAVEMENT FOR DRIVEWAYS AND PARKING, SIDEWALKS, UTILITIES, AND SEVEN UNDERGROUND STORMWATER MANAGEMENT FACILITIES. THE PROJECT SITE IS LOCATED AT 633 NO ORANGE AVE, GREEN COVE SPRINGS, FLORIDA. THE PROJECT SITE TOTAL AREA IS APPROXIMATELY 1.65 ACRES.

## B. SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES - CONTRACTOR MUST FILL IN DAYS

DAYS

FROM_______TO_______ PRIOR TO CONSTRUCTION, SILT FENCING AND TREE PROTECTION FENCING SHALL BE INSTALLED AND ALL EXISTING STORM DRAINAGE SWALE AND INLETS SHALL BE PROTECTED IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, DATED JULY 2013, AND THESE PLANS.

FROM_______TO_______ THE CONSTRUCTION SERVICE ENTRANCE SHALL BE STABILIZED TO MINIMIZE THE CREATION OF DUST AND OFF-SITE TRACKING OF SEDIMENTS.

FROM_______TO_______ ONLY THE AREA COMPRISING THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE CLEARED AND GRUBBED OF UNWANTED VEGETATION.

FROM_______TO_______ THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE CONSTRUCTED.

FROM_______TO_______ IF SUITABLE, THE EXCAVATED SOIL FROM THE FACILITY(S) MAY BE USED AS FILL FOR ON-SITE GRADING THAT IS DEPICTED IN THESE CONSTRUCTION PLANS. THE CONTRACTOR SHALL DISPOSE OF ALL UNSUITABLE MATERIAL ON-SITE OR OFF-SITE TO A PERMITTED LOCATION.

FROM_______TO_______ THE REMAINING PORTION OF THE SITE THAT IS TREATED BY THE CONSTRUCTED STORMWATER MANAGEMENT FACILITY(S) SHALL BE CLEARED AND GRUBBED.

FROM_______TO_______ THE PERMANENT ROADWAYS/DRIVEWAYS SHALL BE ROUGHLY GRADED.

FROM_______TO_______ THE UNDERGROUND UTILITIES INFRASTRUCTURE AND STORMWATER PIPING SYSTEM SHALL BE INSTALLED. ANY DE-WATERING (PUMPED) SHALL BE DIVERTED TO THE ASSOCIATED STORMWATER MANAGEMENT FACILITY(S).

FROM_______TO_______ THE PERMANENT ROADWAY/DRIVEWAY SUBGRADE SHALL BE COMPACTED, A LIMEROCK BASE SHALL BE ESTABLISHED, AND THEN FOLLOWED BY AN OVERLAY OF ASPHALT.

FROM_______TO_______ UPON SIGNIFICANT COMPLETION OF CONSTRUCTION, THE STORMWATER PIPING SYSTEM SHALL BE FLUSHED OUT TO REMOVE ACCUMULATED DEBRIS AND SEDIMENT.

FROM_______TO_______ UPON COMPLETION OF THE DEBRIS AND SEDIMENT REMOVAL FROM THE STORMWATER PIPING SYSTEM, THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE FINE GRADED AND SHALL BE EXCAVATED A MINIMUM OF SIX INCHES BELOW THE DESIGN BOTTOM ELEVATION AND REPLACED WITH FILL HAVING A MINIMUM PERMEABILITY RATE OF 20 FEET/DAY WITH A MAXIMUM OF 5% SOIL FINES PASSING THE NO. 200 SIEVE. THE BOTTOM SHALL BE SCARIFIED AND STABILIZED ACCORDING TO THESE PLANS. ONCE COMPLETED, NO HEAVY MACHINERY SHALL BE ALLOWED WITHIN THE STORMWATER MANAGEMENT FACILITY(S).

FROM_______TO_______ ALL REMAINING DISTURBED AREAS WITHIN THE CONSTRUCTION AREA SHALL BE COMPLETELY GRASSED AND/OR LANDSCAPED ACCORDING TO THESE PLANS. TURF ESTABLISHMENT SHALL BE PER FDOT STANDARD SPECIFICATIONS SECTION 570. EVIDENCE OF GROWTH MUST BE PRESENT PRIOR TO REMOVAL OF SILT FENCING AND OTHER EROSION CONTROL APPLICATIONS.

## C. SITE DEVELOPMENT DATA:

| | |
|---|---|
| TOTAL PROJECT SITE AREA: | 1.23 ACRES |
| TOTAL SITE AREA TO BE DISTURBED: | 1.78 ACRES |
| TOTAL IMPERVIOUS AREA (AS SHOWN IN CONSTRUCTION DRAWINGS): | 1.20 ACRES |
| TOTAL DETENTION VOLUME: | 0.35 ACRE-FEET |
| TOTAL OPEN AREA: | 0.03 ACRES |

## D. SOIL CONDITIONS AND STORMWATER QUALITY

THE NRCS DATA FOR THE SITE REVEALS THAT THE SITE SOILS ARE COMPRISED OF LEON FINE SAND. GSE ENGINEERING & CONSULTING, INC. CONDUCTED A GEOTECHNICAL EXPLORATION OF THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) LOCATION IN JULY OF 2023. THE INVESTIGATION REVEALED THAT THE PROJECT SITE'S SURFACE SOILS HAVE THE FOLLOWING CHARACTERISTICS:

| | |
|---|---|
| DEPTH TO EFFECTIVE OR MOBILIZED AQUIFER: | 25 FEET BLS |
| DEPTH OF SEASONAL HIGH WATER TABLE: | 2.0 FEET BLS |
| HORIZONTAL HYDRAULIC CONDUCTIVITY: | 6 FEET/DAY |
| UNSATURATED VERTICAL INFILTRATION: | 20 FEET/DAY |

DESIGN PERCOLATION RATES FOR THE STORMWATER MANAGEMENT FACILITY(S) WERE DETERMINED BASED ON LABORATORY PERMEABILITY TEST RESULTS FROM BORING SAMPLES TAKEN WITHIN THE LIMITS OF THE STORMWATER MANAGEMENT FACILITY(S).

THE STORMWATER MANAGEMENT FACILITY(S) WAS DESIGNED TO PROVIDE RATE CONTROL AND WATER QUALITY TREATMENT OF THE STORMWATER RUNOFF RESULTING FROM THE POST-DEVELOPMENT SITE UNDER 25-YEAR & MEAN ANNUAL 24-HOUR STORM EVENT RAINFALL CONDITIONS. THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) DEPICTS THE POST-DEVELOPMENT WATERSHED(S) LIMITS AND THE TABLE BELOW SUMMARIZES EACH WATERSHED.

| WATERSHED ID | POST DEVELOPMENT AREA (ACRES) | POST DEVELOPMENT RUNOFF FACTOR (CN) | POST DEVELOPMENT IMPERVIOUS AREA (ACRES) | STORMWATER MANAGEMENT FACILITY TYPE | FACILITY DETENTION CAPACITY (ACRE-FEET) | 25-YEAR FLOOD ELEVATION (FT) |
|---|---|---|---|---|---|---|
| 1 | 0.25 | 97 | 0.24 | DRY RETENTION | 0.092 | 14.82 |
| 2 | 0.56 | 97 | 0.55 | DRY RETENTION | 0.193 | 13.57 |
| 3 | 0.42 | 97 | 0.41 | DRY RETENTION | 0.063 | 13.95 |

## E. SITE MAP

PLEASE SEE THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) FOR DETAILS.

## F. STORMWATER OUTFALL LOCATION AND RECEIVING WATER BODY

THE STORMWATER MANAGEMENT FACILITY OUTFALL STRUCTURE IS LOCATED AT THE EAST PORTION OF THE PROJECT (39°00'00.76" N, 81°41'01.32" W) AND THE ASSOCIATED RECEIVING WATER BODY IS ST JOHNS RIVER.

# III. CONTROLS TO REDUCE POLLUTION

AS OUTLINED IN THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) PERMIT, ALL CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED IN A MANNER AS TO NOT VIOLATE STATE WATER QUALITY STANDARDS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON-SITE. IF SITE CONDITIONS ARE SUCH THAT ADDITIONAL CONTROL MEASURES ARE REQUIRED OTHER THAN WHAT IS SPECIFIED IN THE EROSION AND SEDIMENTATION CONTROL PLAN, THEN THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES. THESE MEASURES MUST BE INSPECTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PHASE AND UNTIL AS DIRECTED BY THESE PLANS. THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) AND SECTION IV BELOW PROVIDE DETAILS ON THE SPECIFIC CONTROL MEASURES TO REDUCE STORMWATER POLLUTION.

# IV. EROSION AND SEDIMENT CONTROLS

## A. STABILIZATION PRACTICES

EXISTING TREES AND NATURAL VEGETATION TO REMAIN ON-SITE SHALL BE PROTECTED BY TREE BARRICADE FENCING AS DEPICTED ON THE STORMWATER POLLUTION PREVENTION PLAN (C0.21). TYPE III SILT FENCING SHALL PROTECT ALL DRAINAGE STRUCTURES AND SHALL BUFFER AREAS WITH POTENTIAL TO CONTRIBUTE OFF-SITE RUNOFF AND AS SPECIFICALLY DEPICTED ON THE STORMWATER POLLUTION PREVENTION PLAN (C0.21). STABILIZATION MEASURES SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS, IN PORTIONS OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED. AS SPECIFIED IN SECTION II.B. ABOVE, UPON COMPLETION OF CONSTRUCTION, ALL STORMWATER MANAGEMENT FACILITIES SHALL BE SCRAPED CLEAN OF ACCUMULATED SEDIMENT AFTER THE COMPLETION OF CONSTRUCTION. ALL TURF ESTABLISHMENT SHALL BE PERFORMED MEETING THE REQUIREMENTS OF SECTION 570 OF THE STANDARD SPECIFICATIONS. EVIDENCE OF GROWTH MUST BE PRESENT PRIOR TO FINAL RELEASE.

## B. STRUCTURE PRACTICES

AS DEPICTED IN THE STORMWATER POLLUTION PREVENTION PLAN (C0.21), A STORMWATER MANAGEMENT SYSTEM WILL BE CONSTRUCTED AND WILL BE COMPRISED OF A WET RETENTION FACILITY AND A STORM PIPE CONVEYANCE SYSTEM. TO PREVENT EROSION DURING CONSTRUCTION, TYPE III SILT FENCING WILL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS. ALL EXISTING AND PROPOSED STORM DRAINS AND DRAINAGE SWALES SHALL BE PROTECTED ACCORDING TO THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, DATED JULY 2013 OR PER DETAILS PROVIDED ON SHEET C0.21 UNTIL CONSTRUCTION IS COMPLETE. THE STORM PIPE CONVEYANCE SYSTEM SHALL BE FLUSHED OUT TO REMOVE ALL ACCUMULATED DEBRIS AND SEDIMENT UPON COMPLETION OF CONSTRUCTION.

## C. DRAINAGE LOCATIONS THAT SERVE AREAS WITH LESS THAN 10 DISTURBED ACRES

AS SPECIFIED IN THE "SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES," THE SMF(S) WILL BE CONSTRUCTED PRIOR TO CLEARING AND GRUBBING OUTSIDE OF THE SMF(S) AREAS AND CONSTRUCTION OF THE PERMANENT PAVED AREAS. THE TOTAL CONTRIBUTING DRAINAGE AREA TO THE STORMWATER MANAGEMENT SYSTEM IS APPROXIMATELY 1.23 ACRES AND WILL CONSIST OF APPROXIMATELY 1.65 ACRES OF DISTURBED CONSTRUCTION AREA. THEREFORE, NO ADDITIONAL SEDIMENT TRAP BASINS ARE NECESSARY TO PROVIDE SEDIMENT STORAGE ON-SITE DURING CONSTRUCTION. AS SHOWN ON THE STORMWATER POLLUTION PREVENTION PLAN (C0.21), THE PROPOSED STORMWATER MANAGEMENT SYSTEM WILL PREVENT OFF-SITE EROSION DURING CONSTRUCTION. SILT FENCES OR EQUIVALENT SEDIMENT CONTROLS SHALL BE INSTALLED AT SIDE SLOPE AND DOWN SLOPE BOUNDARIES, INLET LOCATION, OUTLET LOCATIONS, AND OTHER LOCATIONS AS SHOWN ON THE STORMWATER POLLUTION PREVENTION PLAN, AS REQUIRED. BY COMPLETION OF CONSTRUCTION, THE SIDE SLOPES, SWALES, AND ALL DISTURBED AREAS SHALL BE STABILIZED WITH GRASS AND LANDSCAPING AS SPECIFIED ON THE CONSTRUCTION DRAWINGS.

## D. DRAINAGE LOCATIONS THAT SERVE AREAS WITH MORE THAN 10 DISTURBED ACRES

NOT APPLICABLE, SEE SECTION C, ABOVE.

# V. STORMWATER MANAGEMENT

## A. BEST MANAGEMENT PRACTICES

AFTER CONSTRUCTION, THE STORMWATER MANAGEMENT SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH THE SPECIFIED STORMWATER MAINTENANCE NOTES IN THE INCLUDED CONSTRUCTION DRAWINGS AND/OR RESPECTIVE MAINTENANCE REPORTS. SPECIFICALLY, THE PROPOSED SMF(S) SHALL BE MOWED REGULARLY IN THE SPECIFIED AREAS, STORM PIPES AND STRUCTURES WILL BE INSPECTED SEMI-ANNUALLY AND CLEANED ANNUALLY, SMF(S) SIDE SLOPES SHALL BE MAINTAINED TO PREVENT EROSION, AND LANDSCAPING AND GRASS THAT PREVENTS EROSION SHALL BE MAINTAINED. ADDITIONALLY, REMEDIAL ACTIONS SHALL BE TAKEN SHOULD THE SMF(S) NOT PERFORM AS DESIGNED.

## B. VEGETATED SWALES

WHEN VEGETATED SWALES ARE UTILIZED, SILT FENCING OR EQUIVALENT SEDIMENT CONTROLS SHALL BE INSTALLED AT ADEQUATE INTERVALS TO COLLECT SEDIMENT ALONG THE SWALE. THE SEDIMENT SHALL BE REMOVED WHEN SEDIMENT REACHES ONE-THIRD OF THE HEIGHT OF THE SILT FENCING. SEE THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) FOR DETAILS AND LOCATIONS, AS REQUIRED.

## C. VELOCITY DISSIPATION DEVICES AT DISCHARGE POINTS

WHEN DISCHARGE POINTS ARE NOT LOCATED UNDER WATER, RIP RAP PADS HAVE BEEN PROVIDED AT LOCATIONS WHERE NECESSARY DUE TO ANTICIPATED DISCHARGE VELOCITIES. PLEASE SEE THE CONSTRUCTION PLANS FOR DETAILS AND LOCATIONS, AS NEEDED.

# VI. CONTROLS FOR OTHER POTENTIAL POLLUTANTS

## A. WASTE DISPOSAL

THE CONTRACTOR SHALL PROVIDE LITTER COLLECTION CONTAINERS WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION. CONTRACTOR SHALL DISPOSE OF ALL UNSUITABLE MATERIALS AND CONSTRUCTION DEBRIS IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.

## B. DUST CONTROL

TO PREVENT OFF-SITE VEHICULAR TRACKING OF SEDIMENTS AND DUST GENERATION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE ESTABLISHED BY THE SITE CONTRACTOR. PLEASE SEE THE STORMWATER POLLUTION PREVENTION PLAN (C0.21) FOR DETAILS AND LOCATION(S).

## C. EXISTING VERSUS PROPOSED POTABLE AND SANITARY SEWER SYSTEMS

THERE ARE EXISTING SANITARY SEWER AND POTABLE WATER SYSTEMS LOCATED ON THE PROJECT SITE. EXTENSION AND UPGRADES ARE PROPOSED. IF TEMPORARY SANITARY SYSTEMS ARE UTILIZED DURING CONSTRUCTION, THE CONTRACTOR SHALL PROPERLY CONTROL AND DISCHARGE ANY SANITARY WASTE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

## D. FERTILIZER & PESTICIDES

THE USE OF FERTILIZERS, HERBICIDES, AND PESTICIDES ON THE PROJECT SITE, WILL BE DIRECTED BY THE LANDSCAPE PLAN AND THE FDOT STANDARD SPECIFICATIONS SECTION 570, TO SUPPORT THE GROWTH OF THE PROPOSED VEGETATION. ESTABLISHING THIS VEGETATION WILL AID IN THE STABILIZATION OF THE PROJECT SITE AND REDUCE EROSION. APPLICATION RATES FOR THE FERTILIZERS, HERBICIDES, AND PESTICIDES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS TO GUARD AGAINST OVER-USE, WHICH CAN LEAD TO VIOLATIONS OF STATE WATER QUALITY STANDARDS.

## E. TOXIC MATERIAL

THE CONSTRUCTION SITE WILL BE IN FULL COMPLIANCE WITH STATE AND FEDERAL REQUIREMENTS. A PLASTIC MAT, TAR PAPER, OR OTHER IMPERVIOUS MATERIAL SHALL BE PLACED UNDER AREAS WHERE TOXIC LIQUIDS ARE TO BE OPENED AND STORED.

## F. HAZARDOUS MATERIALS

ALL HAZARDOUS MATERIALS SHALL BE STORED IN A SECURE LOCATION, UNDER COVER, AND IN APPROPRIATE TIGHTLY, SEALED CONTAINERS WHEN NOT IN USE. ALL PRODUCTS SHALL BE STORED IN AND USED FROM THE ORIGINAL CONTAINER WITH THE ORIGINAL PRODUCT LABEL. CONTAINERS MUST BE STORED IN A MANNER TO PROTECT THEM FROM THE ELEMENTS AND INCIDENTAL DAMAGE. THE MINIMUM PRACTICAL QUANTITY OF ALL SUCH MATERIALS SHALL BE KEPT ON THE JOB SITE AND SCHEDULED FOR DELIVERY AS CLOSE TO TIME OF USE AS PRACTICAL.

ALL PRODUCTS SHALL BE USED IN STRICT COMPLIANCE WITH THE INSTRUCTIONS ON THE PRODUCT LABEL.

SUFFICIENT EQUIPMENT AND/OR MATERIALS SHALL BE KEPT ONSITE TO CONTAIN AND CLEAN UP SPILLS OF HAZARDOUS MATERIALS IN THE AREAS WHERE THESE MATERIALS ARE STORED OR USED. SPILL CONTROL AND CONTAINMENT KIT SUPPLIES SHALL BE OF SUFFICIENT QUANTITIES AND APPROPRIATE CONTENT TO CONTAIN A SPILL FROM THE LARGEST ANTICIPATED PIECE OF EQUIPMENT AND FROM THE LARGEST ANTICIPATED QUANTITIES OF PRODUCTS STORED ON THE SITE AT ANY GIVEN TIME.

CONTRACTOR TO CONTAIN AND CLEAN UP ANY SPILLS IMMEDIATELY AFTER THEY OCCUR. ANY SPILLS OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF REPORTABLE QUANTITIES AS DEFINED BY EPA, STATE, OR LOCAL AGENCY REGULATIONS SHALL BE REPORTED TO THE APPROPRIATE AGENCIES IN THE REQUIRED TIME FRAMES. THE CONTRACTOR SHALL PROVIDE A WRITTEN NOTICE TO THE OWNER IMMEDIATELY UPON IDENTIFICATION OF ANY SPILL.

ALL EXCESS, USED, OR SPILLED PRODUCTS, INCLUDING CONTAMINATED SOIL, SHALL BE DISPOSED OF BY THE CONTRACTOR IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE PRODUCT LABEL AND ALL APPLICABLE REGULATIONS.

# VII. APPROVED STATE AND LOCAL PLANS

THE CONSTRUCTION DRAWINGS FOR THE PROJECT WERE APPROVED AND PERMITTED BY THE FOLLOWING AGENCIES:

* CITY OF GREEN COVE SPRINGS
* FLORIDA DEPARTMENT OF TRANSPORTATION
* ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
* FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

# VIII. CONSTRUCTION ACTIVITY DISCHARGES

IN ACCORDANCE WITH THIS PLAN, THERE ARE NO ANTICIPATED DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.

# IX. CHANGES TO THE POLLUTION PREVENTION PLAN

THIS STORMWATER POLLUTION PREVENTION PLAN SHALL BE AMENDED TO REFLECT ANY APPLICABLE CHANGE IN A STATE, REGIONAL, OR LOCAL PERMIT FOR WHICH THE PERMITTEE RECEIVES WRITTEN NOTICE. WHEN WRITTEN NOTICE IS RECEIVED, THE PERMITTEE SHALL PROVIDE A RE-CERTIFICATION OF THIS POLLUTION PREVENTION PLAN, WHICH HAS BEEN REVISED TO ADDRESS SUCH CHANGES. AMENDMENTS TO THE PLAN SHALL BE PREPARED, SIGNED, DATE, AND KEPT AS ATTACHMENTS TO THE ORIGINAL PLAN.

# X. ALTERNATIVE PERMIT REQUIREMENTS

NO ALTERNATIVE PERMIT REQUIREMENTS ARE REQUESTED.

# XI. MAINTENANCE

THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE, INSPECTION SCHEDULE, AND REPAIRS OUTLINED IN THIS PLAN. MAINTENANCE SHALL CONTINUE THROUGHOUT THE PROJECT UNTIL WORK IS COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER CONSTRUCTION IS COMPLETE. IN ADDITION TO THE TIMES MENTIONED IN THE PREVIOUS SECTIONS, THE CONTRACTOR SHALL INITIATE ANY REPAIRS WITHIN 24 HOURS OF BEING REPORTED. IN THE EVENT THAT THE SMF(S) DO NOT PERFORM PROPERLY OR IF A SINKHOLE DEVELOPS, THE PROJECT ENGINEER SHALL BE NOTIFIED TO ASSIST IN COORDINATING REMEDIAL ACTION. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM SILT FENCING WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE SILT FENCE. UPON FINAL COMPLETION OF CONSTRUCTION AND ACCEPTANCE BY BOTH THE CITY AND OWNER, THE OPERATION AND MAINTENANCE ENTITY WILL BE "????????????????????????????????".

# XII. INSPECTIONS

THE CONTRACTOR SHALL INSPECT ALL POINTS OF POTENTIAL DISCHARGE FROM THE PROJECT SITE FOR ALL DISTURBED AREAS ON THE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.50 INCHES OR GREATER. FOR POINTS OF DISCHARGE INTO SURFACE WATERS OF THE STATE OR AN MS4, A QUALIFIED INSPECTOR (PROVIDED BY THE OPERATOR) SHALL PERFORM THE REQUIRED INSPECTIONS. THE CONTRACTOR SHALL INSTALL A RAIN GAUGE AT THE SITE TO MONITOR AND DOCUMENT RAINFALL EVENTS 0.50 INCHES OR GREATER. LOCATIONS WHERE THE SITE IS COMPLETELY CONSTRUCTED AND STABILIZED, SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE A MONTH. ALL INSPECTIONS SHALL BE RECORDED ON THE CONSTRUCTION INSPECTION FORM. THE CONTRACTOR MAY USE THEIR OWN FORM (MEETING FDEP SWPPP REQUIREMENTS) OR A SAMPLE FORM FROM FDEP. A SAMPLE CONSTRUCTION FORM IS AVAILABLE AT: "HTTPS://FLORIDADEP.GOV/WATER/STORMWATER/DOCUMENTS/CONSTRUCTION-SWPPP". MORE SPECIFICALLY, THE INSPECTION SHALL ENSURE THE FOLLOWING CATEGORIES.

## A. DISTURBED AREAS

ALL DISTURBED AREAS AND AREAS USED FOR MATERIAL STORAGE SHALL BE INSPECTED FOR POLLUTANTS ENTERING THE STORMWATER SYSTEM. THE STORMWATER MANAGEMENT SYSTEM AND EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE INSPECTED TO ENSURE THEY ARE OPERATING CORRECTLY. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.

## B. MAINTENANCE PERFORMANCE

BASED ON THE RESULTS OF THE INSPECTION, ALL MAINTENANCE OPERATIONS NEEDED TO ASSURE PROPER COMPLIANCE WITH THIS PLAN SHALL BE DONE IN A TIMELY MANNER, BUT IN NO CASE LATER THAN 7 DAYS FOLLOWING THE INSPECTION.

## C. REPORTING REQUIREMENTS

ALL INSPECTIONS SHALL BE RECORDED ON THE CONSTRUCTION INSPECTION FORM. THIS FORM IS CREATED TO SUMMARIZE THE SCOPE OF THE INSPECTION, THE NAME(S) AND QUALIFICATION OF THE INSPECTOR(S), THE DATE OF INSPECTION, RAINFALL DATA, OBSERVATIONS, THE ACTIONS TAKEN TO CORRECT INCIDENTS OF NON-COMPLIANCE WITH THE PROVISIONS OF THIS PLAN. IF NO INCIDENTS OF NON-COMPLIANTS ARE OBSERVED, THE REPORT SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND THE ASSOCIATED PERMIT.

# XIII. NON-STORMWATER DISCHARGES

IN ADDITION TO STORMWATER RUNOFF, THIS PLAN APPLIES TO RUNOFF FROM IRRIGATION OPERATIONS AND CONSTRUCTION PRACTICES. THIS PLAN DOES NOT PERTAIN TO DISCHARGES FROM FIRE FIGHTING ACTIVITIES.

# XIV. CONTRACTORS CERTIFICATION

THE CONTRACTORS OR SUB-CONTRACTORS SHALL PHOTOCOPY AND COMPLETE THE FORM ON THIS PAGE. IT SHALL BE PROVIDED TO THE OWNER AND KEPT ON FILE PURSUANT TO SECTION XV REGARDING PROJECT RECORDS.

# XV. RETENTION OF RECORDS

THE PERMITTEE SHALL RETAIN COPIES OF STORMWATER POLLUTION PREVENTION PLANS AND ALL REPORTS REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED.

THE PERMITTEE SHALL RETAIN A COPY OF THE STORMWATER POLLUTION PREVENTION PLAN AND ALL REPORTS, RECORDS, AND DOCUMENTATION REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE, OR AN APPROPRIATE ALTERNATIVE LOCATION AS SPECIFIED IN THE NOTICE OF INTENT, FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

# XVI. NOTICE OF TERMINATION

NOTICE OF TERMINATION:

1. WHERE A SITE HAS BEEN FINALLY STABILIZED AND ALL STORMWATER DISCHARGES AUTHORIZED BY THIS PERMIT ARE ELIMINATED, THE PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION (DEP FORM 62-621.300(6)), SIGNED IN ACCORDANCE WITH PART VII.C OF DEP DOCUMENT NO. 62-621.300(4)(a), WITHIN 14 DAYS OF FINAL STABILIZATION OF THE SITE TO TERMINATE COVERAGE UNDER THIS PERMIT.
2. ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY MEANS THAT ALL DISTURBED SOILS AT THE SITE HAVE BEEN FINALLY STABILIZED AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED OR WILL BE REMOVED AT AN APPROPRIATE TIME, OR THAT ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE SITE THAT ARE AUTHORIZED BY THIS GENERIC PERMIT HAVE OTHERWISE BEEN ELIMINATED.
3. FOR CONSTRUCTION ACTIVITIES WHERE THE OPERATOR CHANGES, THE EXISTING OPERATOR SHALL FILE AN N.O.T. IN ACCORDANCE WITH THIS PART WITHIN 14 DAYS OF RELINQUISHING CONTROL OF THE PROJECT TO A NEW OPERATOR.

THE PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE FOLLOWING ADDRESS:

NPDES STORMWATER NOTICES CENTER, MS# 2510
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

PROJECTS THAT DISCHARGED STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY TO A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) SHALL SUBMIT A COPY OF THE N.O.T. TO THE OPERATOR OF THE MS4.

## Contractor/Subcontractor Certification Statement
## Stormwater Pollution Prevention Plan

Site Name: Clay County Economic Development Building
Site Location: 633 N Orange Ave
Clay County, Florida

THE CONTRACTOR(S) OR SUB-CONTRACTOR(S) RESPONSIBLE FOR COMPLYING WITH THIS STORMWATER POLLUTION PREVENTION PLAN SHALL SIGN THE CERTIFICATION STATEMENT BELOW. MULTIPLE COPIES OF THIS CERTIFICATION STATEMENT MAY BE NECESSARY DEPENDING ON THE NUMBER OF SUB-CONTRACTORS ASSOCIATED WITH THE PROJECT

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER.

| DATE | RESPONSIBLE INDIVIDUAL'S NAME | RESPONSIBLE INDIVIDUAL'S SIGNATURE | TITLE | COMPANY NAME, ADDRESS, AND PHONE NUMBER |
|---|---|---|---|---|
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| REVISION | DESCRIPTION | DATE |
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CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

STORMWATER POLLUTION PREVENTION NOTES

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

C0.20

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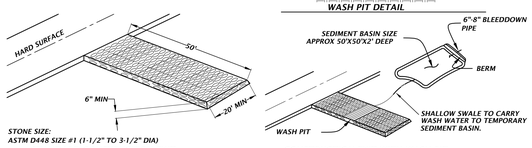
Tech: nicolac Plot Date: Jun 19,2024 8:59am Filename: N:\2023\23-0204\Departments\04_Engineering\02_DWGs\Production Files\23-0204 SWPP.dwg

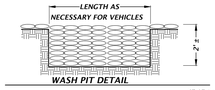
NOTE:
1. CONSTRUCTION EXIT INSTALLATION SHALL REMOVE MUD/SOILS FROM TIRES TO PREVENT TRACKING ONTO PUBLIC ROADS.
2. TOP DRESSING WITH 2" STONE MAY BE REQ'D AS DETERMINED BY THE USE AND FUNCTION OF THE SYSTEM.
3. THE WASH PIT SHOULD BE INSTALLED IF THE STANDARD CONSTRUCTION EXIT DOES NOT SUFFICIENTLY REMOVE SOILS AND WASHING IS REQ'D.



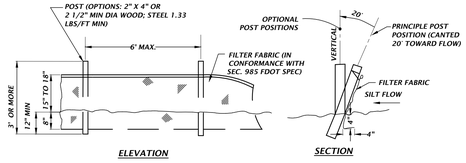

STONE SIZE:
ASTM D448 SIZE #1 (1-1/2" TO 3-1/2" DIA)

STANDARD CONSTRUCTION EXIT | CONSTRUCTION EXIT WITH WASH PIT

## TEMPORARY CONSTRUCTION EXIT DETAIL
NTS




WASH PIT DETAIL




ELEVATION | SECTION

## TYPE III SILT FENCE DETAIL
NTS

TYPICAL INSTALLATION SEQUENCE FOR SILT-SAVER FRAME AND FILTER

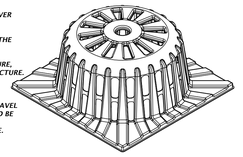
1. EXCAVATE APPROXIMATELY 4" TO 6" BELOW THE TOP OF THE INLET STRUCTURE.

2. PLACE THE FRAME ONTO THE INLET STRUCTURE, ENSURING PROPER SEATING OF FRAME TO STRUCTURE.

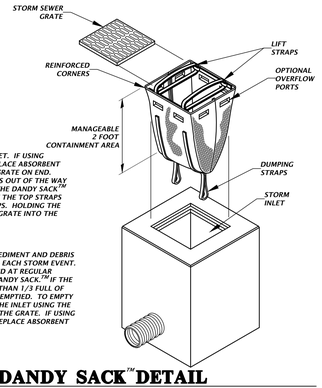
3. SLIDE THE FILTER OVER THE FRAME.

4. FILL THE FILTER POCKETS WITH SOIL, #57 GRAVEL OR EQUIVALENT. THE FILTER POCKETS SHOULD BE COMPLETELY FILLED TO ENSURE A GOOD SEAL BETWEEN THE GROUND AND INLET STRUCTURE.

5. BACK FILL AROUND THE FRAME AND FILTER ASSEMBLY IS NOT REQUIRED TO COMPLETE INSTALLATION; HOWEVER, BACK FILLING MAY BE NECESSARY TO COMPLETE EXCAVATION REQUIREMENTS FOR THE SITE.




## SILT-SAVER® DETAIL
NTS




INSTALLATION:

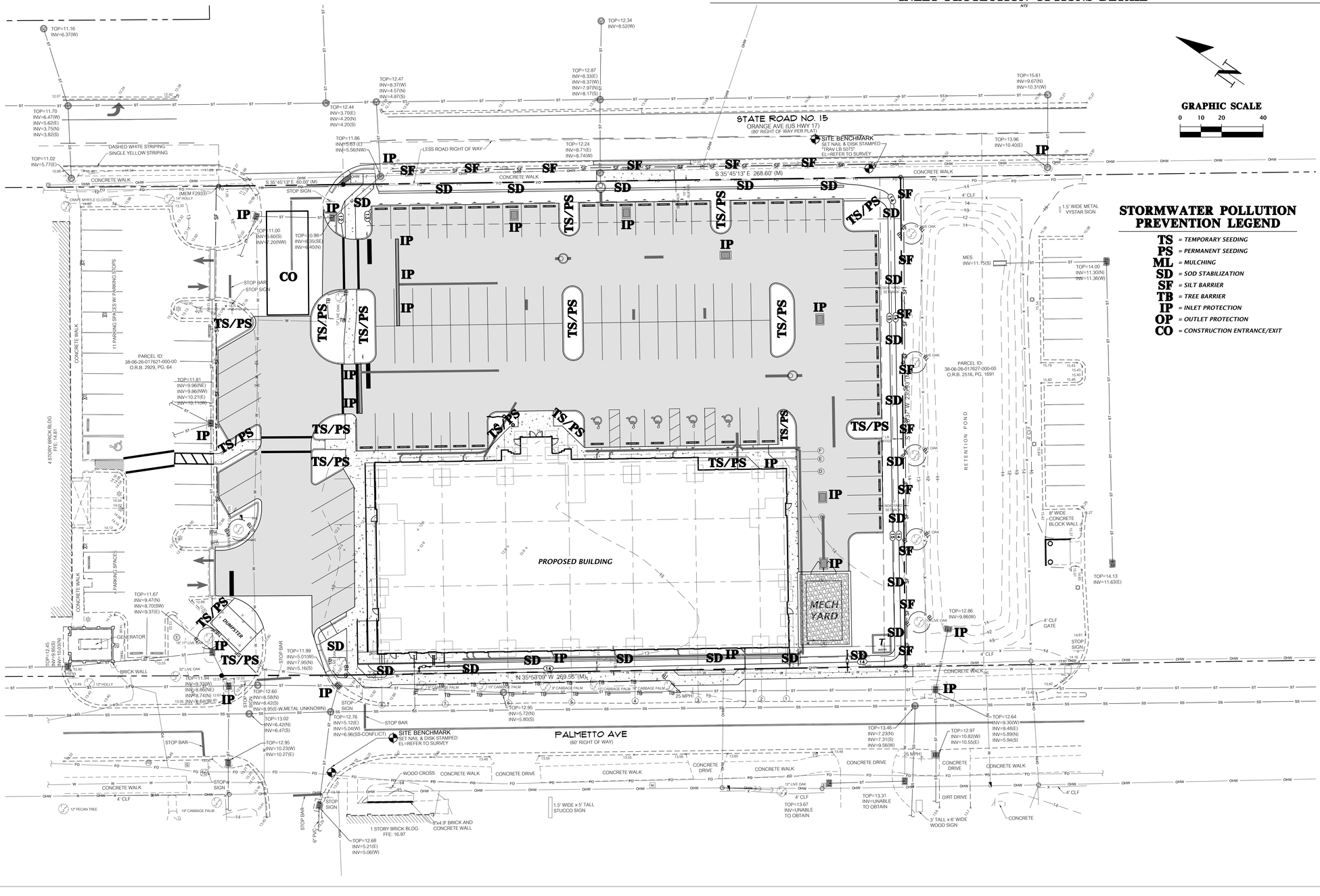
REMOVE THE GRATE FROM INLET. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND THE GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE DANDY SACK™ SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

MAINTENANCE:

REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE DANDY SACK™ IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

## DANDY SACK™ DETAIL
NTS

## INLET PROTECTION OPTIONS DETAIL
NTS




GRAPHIC SCALE
0 10 20 40

## STORMWATER POLLUTION PREVENTION LEGEND

| | |
|---|---|
| TS | = TEMPORARY SEEDING |
| PS | = PERMANENT SEEDING |
| ML | = MULCHING |
| SD | = SOD STABILIZATION |
| SF | = SILT BARRIER |
| TB | = TREE BARRIER |
| IP | = INLET PROTECTION |
| OP | = OUTLET PROTECTION |
| CO | = CONSTRUCTION ENTRANCE/EXIT |

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| REVISION | DESCRIPTION | DATE |
|---|---|---|

# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

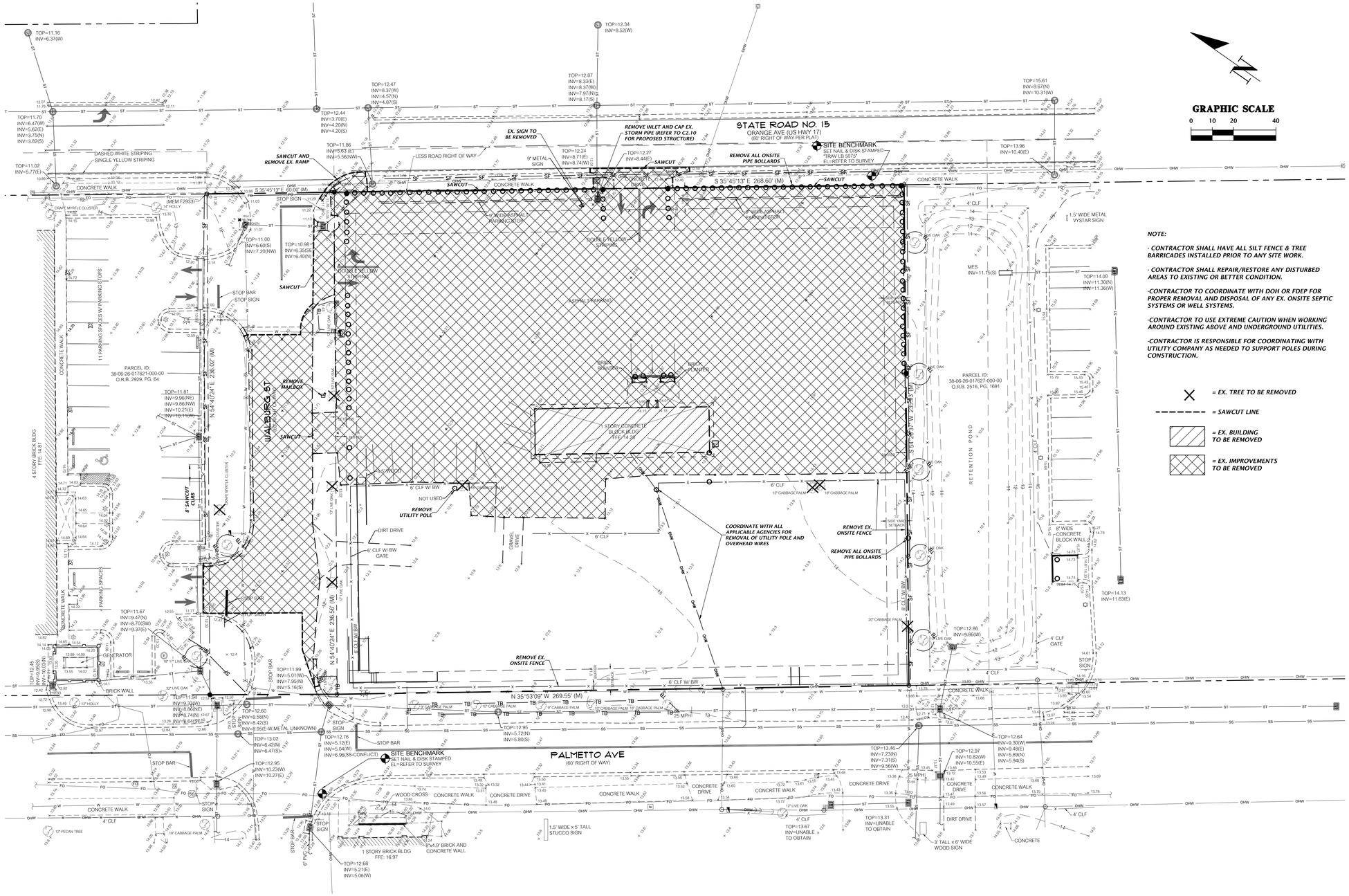
633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:
STORMWATER POLLUTION PREVENTION PLAN

| PROJECT NO.: 23-204 | DRAWN BY: TFC |
|---|---|
| | CHECKED BY: TJH |

# C0.21




**NOTE:**

- *CONTRACTOR SHALL HAVE ALL SILT FENCE & TREE BARRICADES INSTALLED PRIOR TO ANY SITE WORK.*
- *CONTRACTOR SHALL REPAIR/RESTORE ANY DISTURBED AREAS TO EXISTING OR BETTER CONDITION.*
- *CONTRACTOR TO COORDINATE WITH DOH OR FDEP FOR PROPER REMOVAL AND DISPOSAL OF ANY EX. ONSITE SEPTIC SYSTEMS OR WELL SYSTEMS.*
- *CONTRACTOR TO USE EXTREME CAUTION WHEN WORKING AROUND EXISTING ABOVE AND UNDERGROUND UTILITIES.*
- *CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH UTILITY COMPANY AS NEEDED TO SUPPORT POLES DURING CONSTRUCTION.*

× = *EX. TREE TO BE REMOVED*

= *SAWCUT LINE*

= *EX. BUILDING TO BE REMOVED*

= *EX. IMPROVEMENTS TO BE REMOVED*

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# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

## DEMOLITION AND TREE PROTECTION PLAN

| PROJECT NO.: | 23-204 | DRAWN BY: | TFC |
|---|---|---|---|
| | | CHECKED BY: | TJH |

# C0.30

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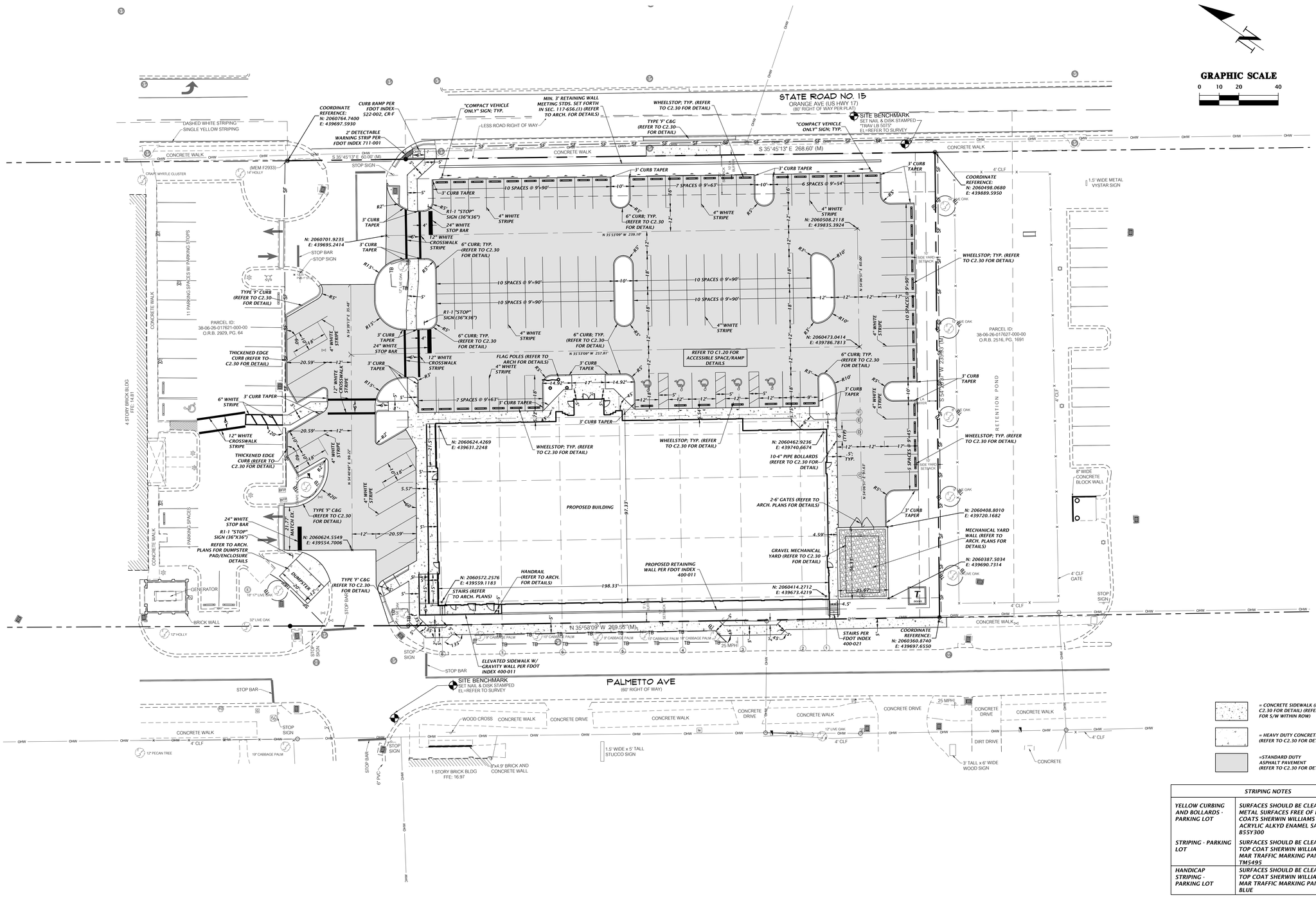


| STRIPING NOTES | |
|---|---|
| YELLOW CURBING AND BOLLARDS - PARKING LOT | SURFACES SHOULD BE CLEAN, DRY AND METAL SURFACES FREE OF HEAVY RUST 2 COATS SHERWIN WILLIAMS - KEM 4000 ACRYLIC ALKYD ENAMEL SAFETY YELLOW B55Y300 |
| STRIPING - PARKING LOT | SURFACES SHOULD BE CLEAN, DRY. TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT WHITE TM5495 |
| HANDICAP STRIPING - PARKING LOT | SURFACES SHOULD BE CLEAN, DRY. TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT "H.C." BLUE |

STRIPING SHALL BE THE RESPONSIBILITY OF CURRENT AND ALL SUBSEQUENT PROPERTY OWNERS.

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# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

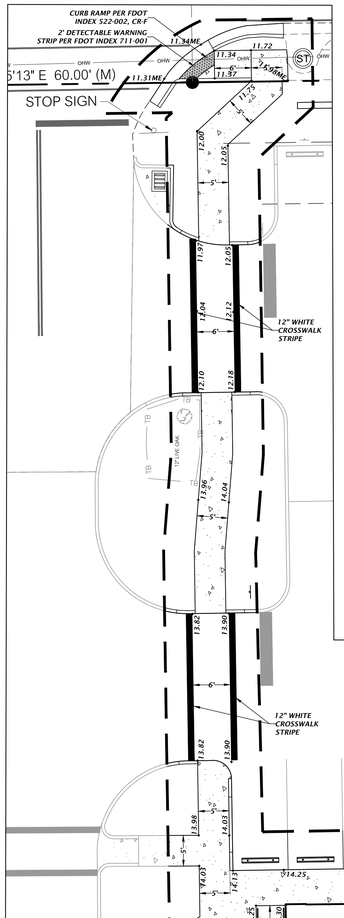
633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

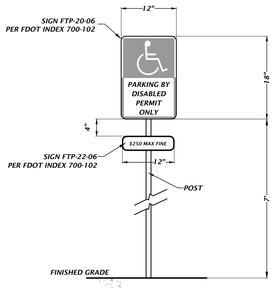
KEY PLAN

DRAWING TITLE:
DETAILED HORIZONTAL CONTROL AND SITE PLAN

| PROJECT NO.: 23-204 | DRAWN BY: TFC |
|---|---|
| | CHECKED BY: TJH |

# C1.10



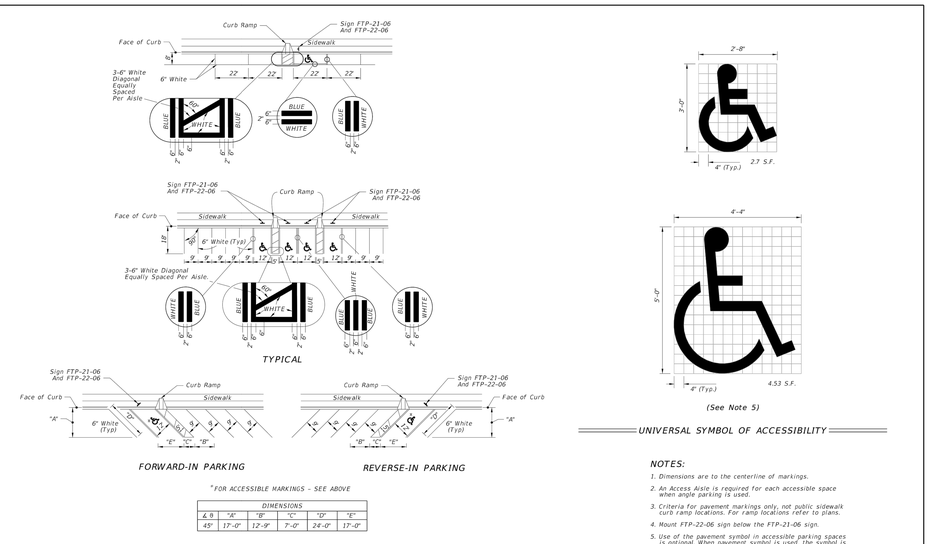




**SIGN NOTES:**

1. SIGN CONSTRUCTION, DESIGN AND PLACEMENT SHALL COMPLY WITH STATE AND LOCAL STATUTES.

## ACCESSIBLE PARKING SIGN DETAIL

NTS




*FOR ACCESSIBLE MARKINGS - SEE ABOVE

| DIMENSIONS | | | | | |
|---|---|---|---|---|---|
| ∠ θ | "A" | "B" | "C" | "D" | "E" |
| 45° | 17'-0" | 12'-9" | 7'-0" | 24'-0" | 17'-0" |

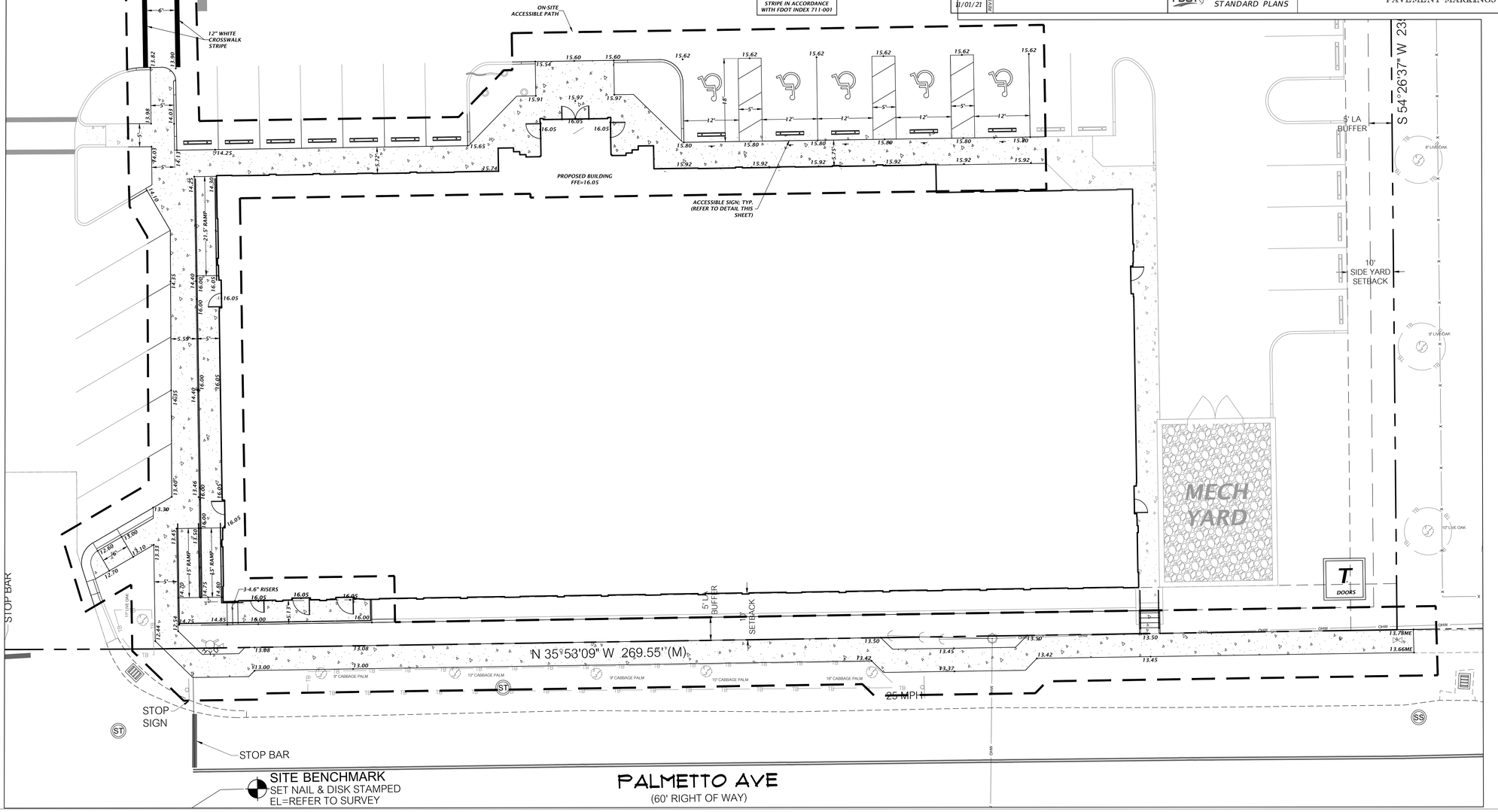
PAVEMENT MARKING FOR PARKING

NOTES:

1. Dimensions are to the centerline of markings.
2. An Access Aisle is required for each accessible space when angle parking is used.
3. Criteria for pavement markings only, not public sidewalk curb ramp locations. For ramp locations refer to plans.
4. Mount FTP-22-06 sign below the FTP-21-06 sign.
5. Use of the pavement symbol in accessible parking spaces is optional. When pavement symbol is used, the symbol is either 3'-0" or 5'-0" high and white in color.

| LAST REVISION | DESCRIPTION: | FDOT FY 2022-23 STANDARD PLANS | PAVEMENT MARKINGS | INDEX | SHEET |
|---|---|---|---|---|---|
| 11/01/21 | | | | 711-001 | 11 of 13 |

STRIPE IN ACCORDANCE WITH FDOT INDEX 711-001

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# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

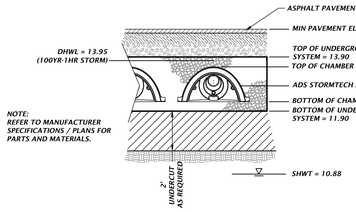
633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:
ON-SITE ACCESSIBILITY PLAN

| PROJECT NO.: 23-204 | DRAWN BY: TFC |
|---|---|
| | CHECKED BY: TJH |

# C1.20




## SMF-3A TYPICAL CROSS SECTION

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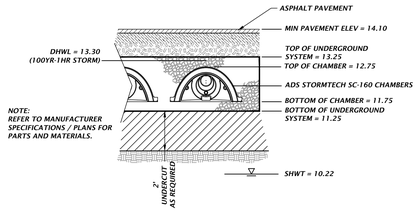


## SMF-3B TYPICAL CROSS SECTION

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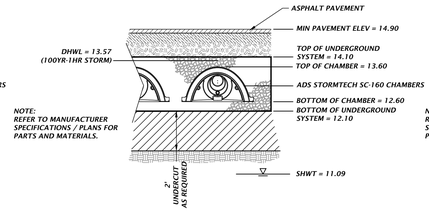


## SMF-2A TYPICAL CROSS SECTION

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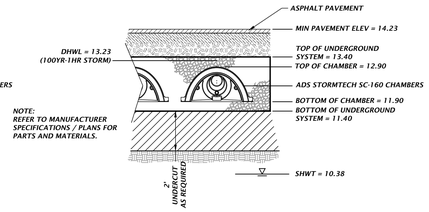


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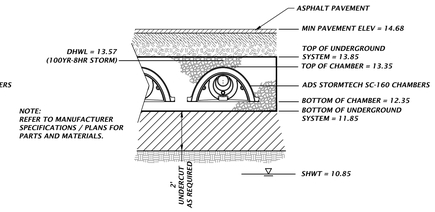


## SMF-2C TYPICAL CROSS SECTION

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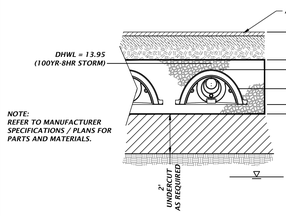


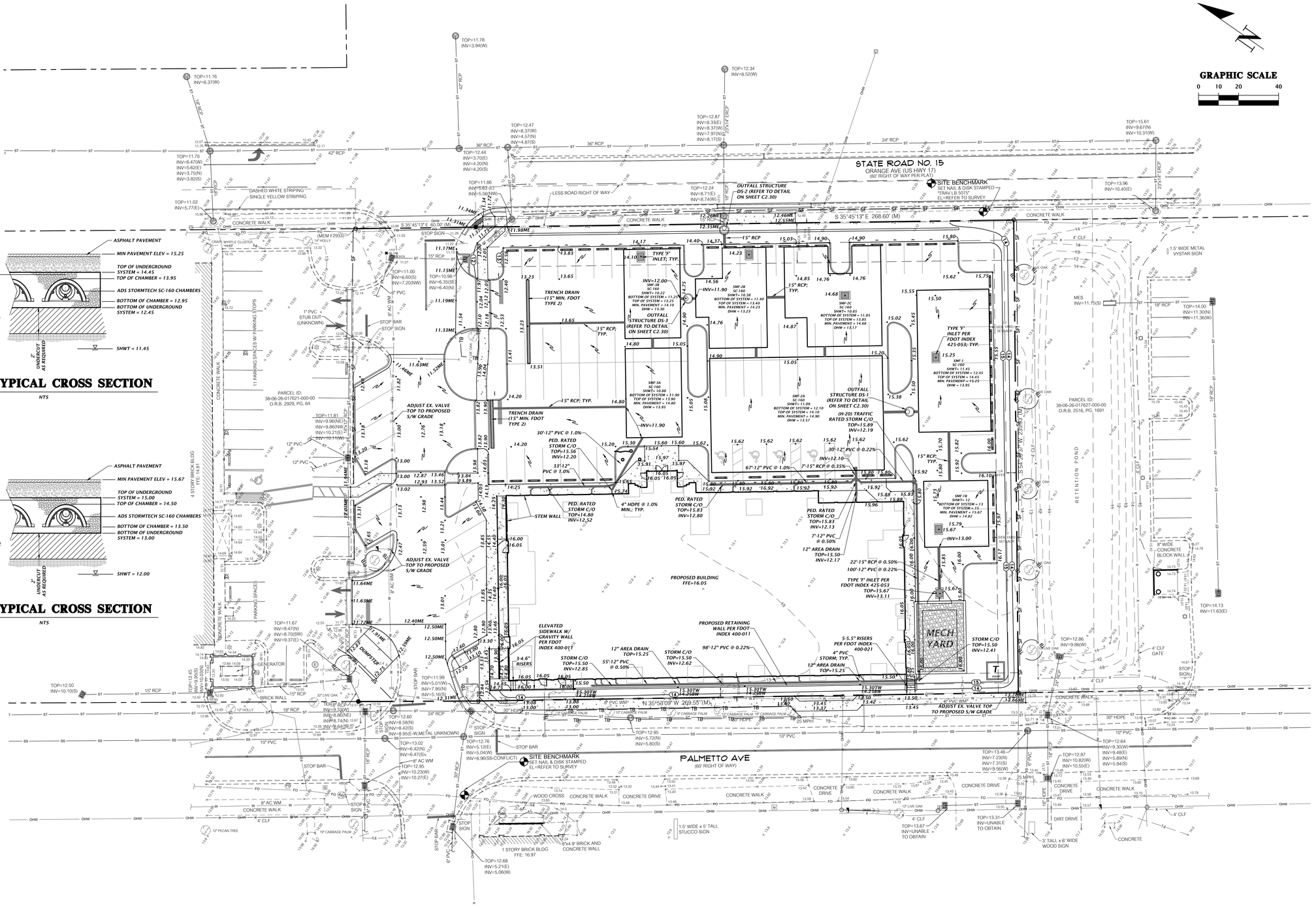

## SMF-1A TYPICAL CROSS SECTION

NTS




## SMF-1B TYPICAL CROSS SECTION

NTS

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# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

DETAILED GRADING AND DRAINGE PLAN

| PROJECT NO.: 23-204 | DRAWN BY: TFC |
|---|---|
| | CHECKED BY: TJH |

C2.10

Item # 6.

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| PROJECT INFORMATION | |
|---|---|
| ENGINEERED PRODUCT MANAGER: | RYAN RAFFERTY<br>904-673-6572<br>RYAN.RAFFERTY@ADS-PIPE.COM |
| ADS SALES REP: | DREW LANE<br>407-697-9796<br>DREW.LANE@ADSPIPE.COM |
| PROJECT NO: | S371901 |

ADS™ Advanced Drainage Systems, Inc.

ADS SiteAssist™ FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR APP

# CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING

GREEN COVE SPRINGS, FL

## SC-160LP STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-160LP.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 1.5".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN/IN. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

## IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-160LP SYSTEM

1. STORMTECH SC-160LP CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-160LP CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-160LP CONSTRUCTION GUIDE".
3. FOUNDATION STONE AND EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE; AASHTO M43 #3,357, 4, 467, 5, 56, OR 57.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. THE DEPTH OF FOUNDATION STONE SHALL BE DETERMINED BASED ON THE SUBGRADE BEARING CAPACITY PROVIDED BY THE SITE DESIGN ENGINEER.
6. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES CONCERNING CHAMBER FOUNDATION DESIGN AND SUBGRADE BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
7. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
8. CHAMBERS SHALL BE INSTALLED "TOE TO TOE". NO ADDITIONAL SPACING BETWEEN ROWS IS REQUIRED.
9. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
10. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

## NOTES FOR CONSTRUCTION EQUIPMENT

1. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-160LP CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-160LP CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-106LP CONSTRUCTION GUIDE".
2. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

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## PROPOSED LAYOUT SMF-1A

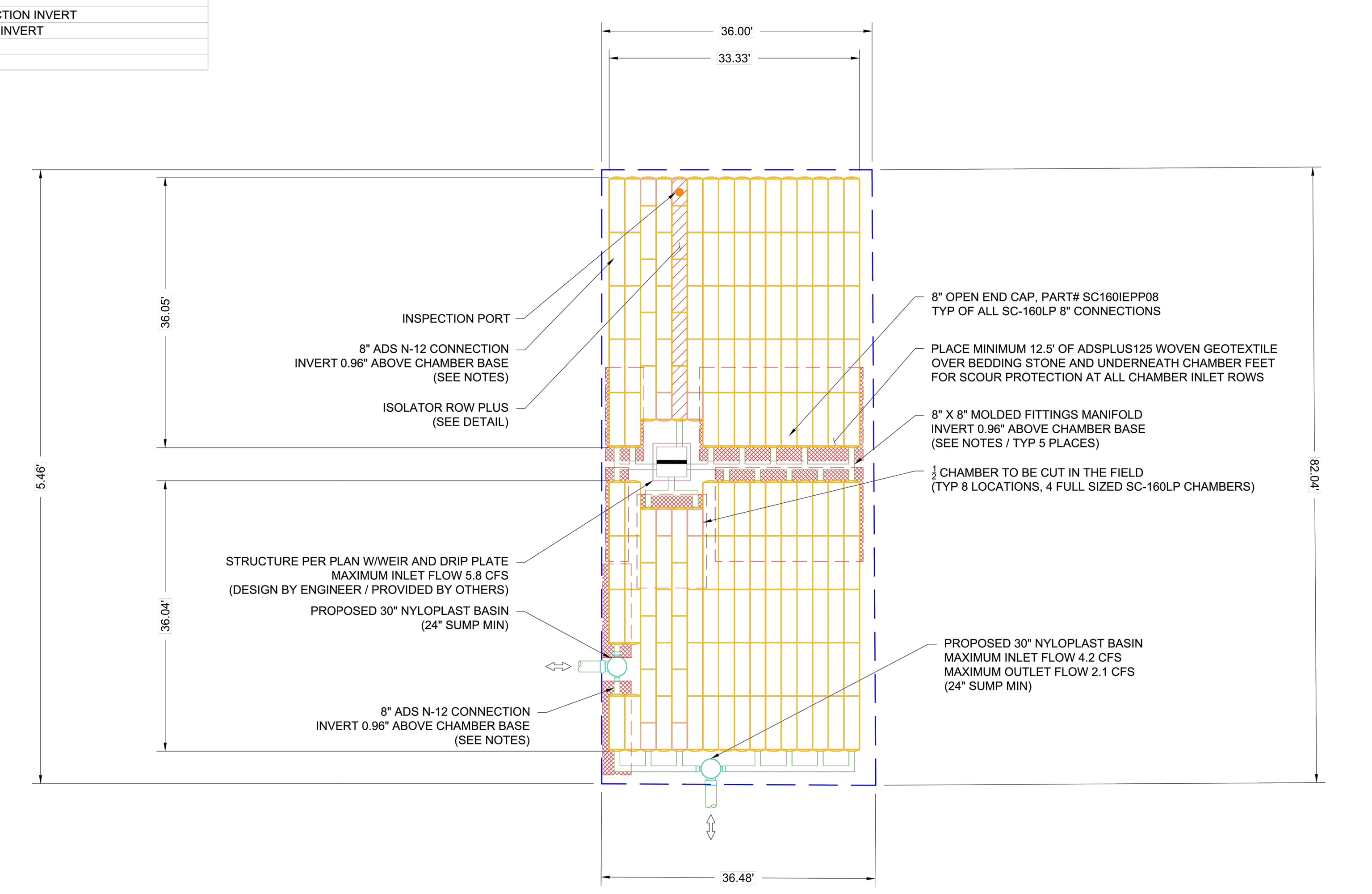
| | |
|---|---|
| 154 | STORMTECH SC-160LP CHAMBERS |
| 68 | STORMTECH SC-160LP END CAPS |
| 6 | STONE ABOVE (in) |
| 6 | STONE BELOW (in) |
| 40 | % STONE VOID |
| 2970 | SYSTEM AREA (ft²) |
| 236 | SYSTEM PERIMETER (ft) |

## PROPOSED ELEVATIONS SMF-1A

| | |
|---|---|
| 23.95 | MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED) |
| 15.62 | MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC) |
| 15.12 | MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC) |
| 15.12 | MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT) |
| 15.12 | MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT) |
| 14.45 | TOP OF STONE |
| 13.95 | TOP OF SC-160LP CHAMBER |
| 13.03 | 8" ISOLATOR ROW PLUS CONNECTION INVERT |
| 13.03 | 8" X 8" MANIFOLD / CONNECTION INVERT |
| 12.95 | BOTTOM OF SC-160LP CHAMBER |
| 12.45 | BOTTOM OF STONE |

## NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.




CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING GREEN COVE SPRINGS, FL

| | | | |
|---|---|---|---|
| DATE: | 08-20-23 | DRAWN: | AVM |
| PROJECT #: | S371901 | CHECKED: | JEK |

| DATE | DRWN | CHKD | DESCRIPTION |
|---|---|---|---|
| 06/18/24 | EEH | RWD | ADD INSPECTION PORTS FOR ALL BEDS |
| 09/25/23 | TSG | CJD | REVISED PER UPDATED PLANS |

StormTech® Chamber System
888-892-2694 | WWW.STORMTECH.COM

ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026

0 15' 30'

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

SHEET 2 OF 11

## PROPOSED LAYOUT SMF-1B

| | |
|---|---|
| 42 | STORMTECH SC-160LP CHAMBERS |
| 50 | STORMTECH SC-160LP END CAPS |
| 6 | STONE ABOVE (in) |
| 6 | STONE BELOW (in) |
| 40 | % STONE VOID |
| 1140 | SYSTEM AREA (ft²) |
| 135 | SYSTEM PERIMETER (ft) |

## PROPOSED ELEVATIONS SMF-1B

| | |
|---|---|
| 24.50 | MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED) |
| 16.17 | MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC) |
| 15.67 | MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC) |
| 15.67 | MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT) |
| 15.67 | MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT) |
| 15.00 | TOP OF STONE |
| 14.50 | TOP OF SC-160LP CHAMBER |
| 13.58 | 8" ISOLATOR ROW PLUS CONNECTION INVERT |
| 13.58 | 8" X 8" MANIFOLD / CONNECTION INVERT |
| 13.50 | BOTTOM OF SC-160LP CHAMBER |
| 13.00 | BOTTOM OF STONE |

## NOTES

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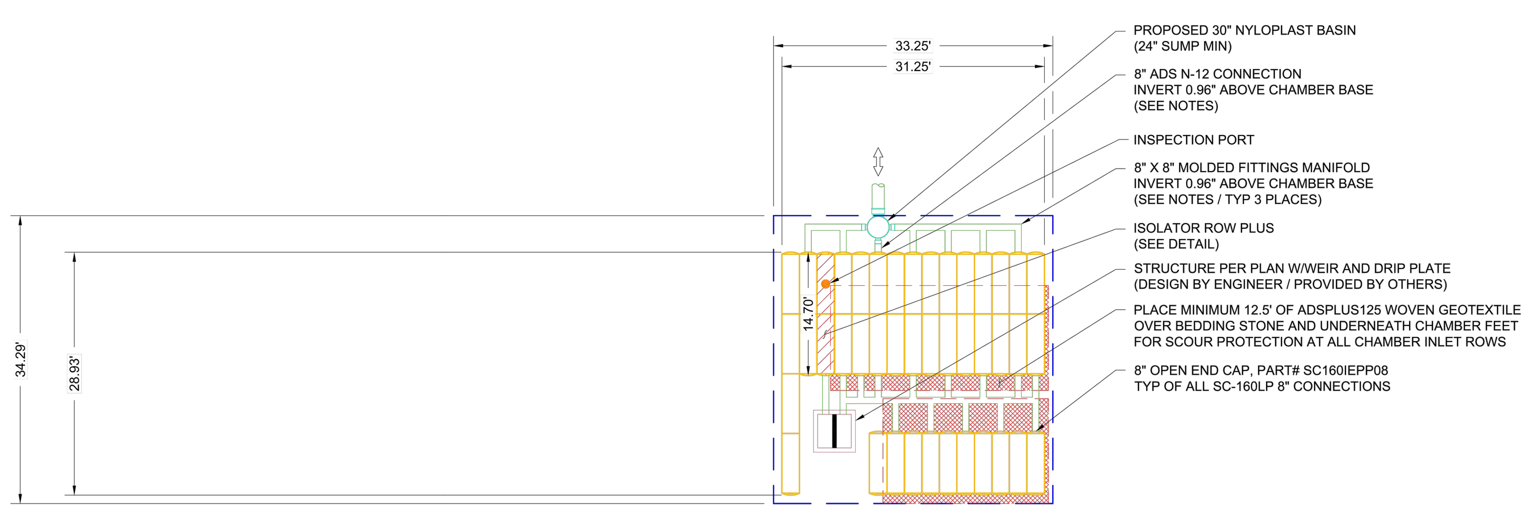
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.




CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING GREEN COVE SPRINGS, FL
DATE: 08-20-23 DRAWN: AVM
PROJECT #: S371901 CHECKED: JEK
06/18/24 EEH RWD ADD INSPECTION PORTS FOR ALL BEDS
09/25/23 TSG CJD REVISED PER UPDATED PLANS
DATE DRWN CHKD DESCRIPTION
StormTech® Chamber System
888-892-2694 | WWW.STORMTECH.COM
ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026
0 15' 30'
THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

SHEET 3 OF 11

## PROPOSED LAYOUT SMF-2A

| | |
|---|---|
| 267 | STORMTECH SC-160LP CHAMBERS |
| 60 | STORMTECH SC-160LP END CAPS |
| 6 | STONE ABOVE (in) |
| 6 | STONE BELOW (in) |
| 40 | % STONE VOID |
| 4760 | SYSTEM AREA (ft²) |
| 282 | SYSTEM PERIMETER (ft) |

## PROPOSED ELEVATIONS SMF-2A

| | |
|---|---|
| 23.60 | MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED) |
| 15.27 | MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC) |
| 14.77 | MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC) |
| 14.77 | MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT) |
| 14.77 | MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT) |
| 14.10 | TOP OF STONE |
| 13.60 | TOP OF SC-160LP CHAMBER |
| 12.68 | 8" X 8" MANIFOLD / CONNECTION INVERT |
| 12.60 | BOTTOM OF SC-160LP CHAMBER |
| 12.10 | BOTTOM OF STONE |

## NOTES

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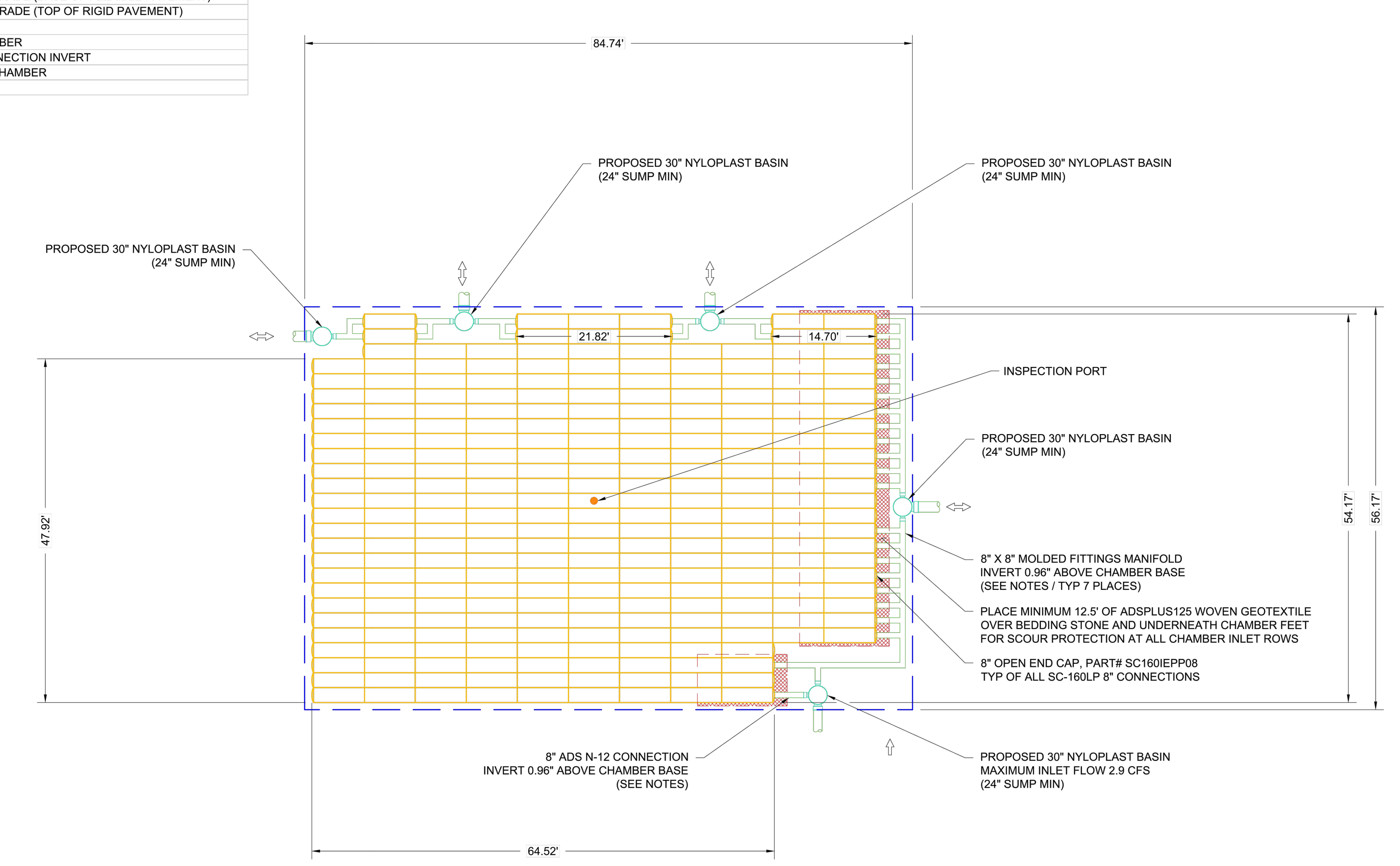


CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING GREEN COVE SPRINGS, FL
DATE: 08-20-23 DRAWN: AVM
PROJECT #: S371901 CHECKED: JEK
06/18/24 EEH RWD ADD INSPECTION PORTS FOR ALL BEDS
09/25/23 TSG CJD REVISED PER UPDATED PLANS
DATE DRWN CHKD DESCRIPTION
StormTech® Chamber System
888-892-2694 | WWW.STORMTECH.COM
ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026
0 15' 30'
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SHEET 4 OF 11

**TRAVIS J. HASTAY**

Travis J. Hastay
State of Florida, Professional Engineer, License No. 84295

This item has been electronically signed and sealed by Travis J. Hastay, PE on 06/19/2024 using a Digital Signature.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

**FL PE No. 84295**

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**11801 RESEARCH DRIVE**
**ALACHUA, FL 32615**
**T: 352.331.1976 F: 352.331.2476**
**CA Lic. No: 5075**

**MG engineering**
**MITCHELL GULLEDGE ENGINEERING, INC.**
**204 SW 4TH AVENUE**
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| SUBMITTAL: | ISSUE DATE: |
|---|---|
| 100% CONSTRUCTION DOCUMENTS | 4/11/2024 |

| REVISION | DESCRIPTION | DATE |
|---|---|---|

# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

UNDERGROUND STORMWATER MANAGEMENT FACILITY DETAILS

| PROJECT NO.: | 23-204 | DRAWN BY: | TFC |
|---|---|---|---|
| | | CHECKED BY: | TJH |

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Tech: nicolac Plot Date: Jun 19,2024 9:00am Filename: N:\2023\23-0204\Departments\04_Engineering\02_DWGs\Production Files\23-0204 PG.dwg

Walker Architects
2035 NW 13TH STREET GAINESVILLE, FL 32609
T: 352.672.6448 www.walker-arch.com AA26002009

## PROPOSED LAYOUT SMF-2B

| | |
|---|---|
| 71 | STORMTECH SC-160LP CHAMBERS |
| 38 | STORMTECH SC-160LP END CAPS |
| 6 | STONE ABOVE (in) |
| 6 | STONE BELOW (in) |
| 40 | % STONE VOID |
| 1486 | SYSTEM AREA (ft²) |
| 171 | SYSTEM PERIMETER (ft) |

## PROPOSED ELEVATIONS SMF-2B

| | |
|---|---|
| 22.90 | MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED) |
| 14.57 | MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC) |
| 14.07 | MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC) |
| 14.07 | MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT) |
| 14.07 | MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT) |
| 13.40 | TOP OF STONE |
| 12.90 | TOP OF SC-160LP CHAMBER |
| 11.98 | 8" ISOLATOR ROW PLUS CONNECTION INVERT |
| 11.98 | 8" X 8" MANIFOLD INVERT |
| 11.90 | BOTTOM OF SC-160LP CHAMBER |
| 11.40 | BOTTOM OF STONE |

## NOTES

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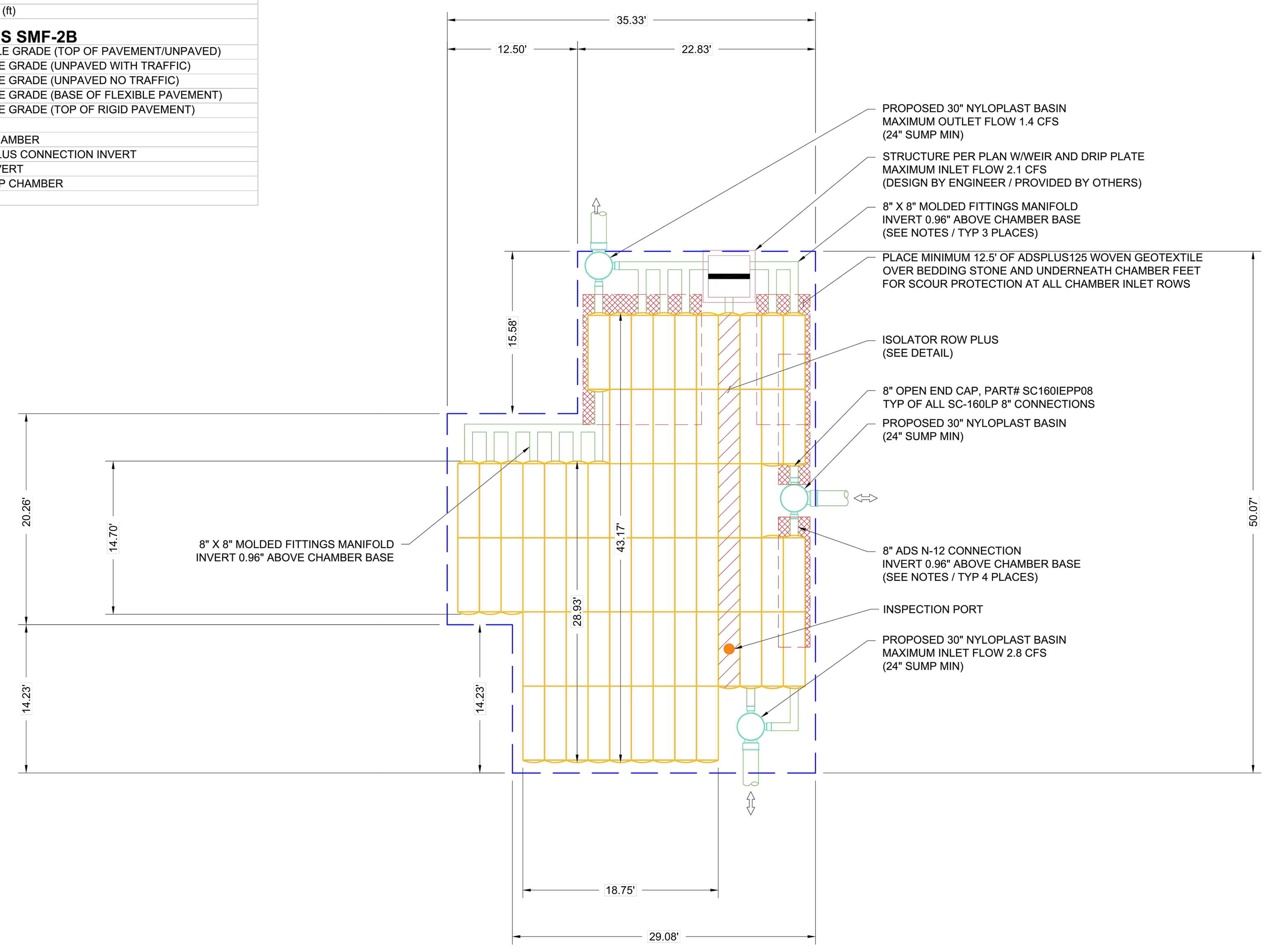


CLAY COUNTY
ECONOMIC DEVELOPMENT BUILDING
GREEN COVE SPRINGS, FL

| | | | |
|---|---|---|---|
| DATE: | 08-20-23 | DRAWN: | AVM |
| PROJECT #: | S371901 | CHECKED: | JEK |

| DATE | DRWN | CHKD | DESCRIPTION |
|---|---|---|---|
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ADS
4640 TRUEMAN BLVD
HILLIARD, OH 43026

0 10' 20'

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SHEET 5 OF 11

## PROPOSED LAYOUT SMF-2C

| | |
|---|---|
| 105 | STORMTECH SC-160LP CHAMBERS |
| 76 | STORMTECH SC-160LP END CAPS |
| 6 | STONE ABOVE (in) |
| 6 | STONE BELOW (in) |
| 40 | % STONE VOID |
| 2252 | SYSTEM AREA (ft²) |
| 224 | SYSTEM PERIMETER (ft) |

## PROPOSED ELEVATIONS SMF-2C

| | |
|---|---|
| 23.35 | MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED) |
| 15.02 | MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC) |
| 14.52 | MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC) |
| 14.52 | MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT) |
| 14.52 | MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT) |
| 13.85 | TOP OF STONE |
| 13.35 | TOP OF SC-160LP CHAMBER |
| 12.43 | 8" ISOLATOR ROW PLUS CONNECTION INVERT |
| 12.43 | 8" X 8" MANIFOLD INVERT |
| 12.35 | BOTTOM OF SC-160LP CHAMBER |
| 11.85 | BOTTOM OF STONE |

## NOTES

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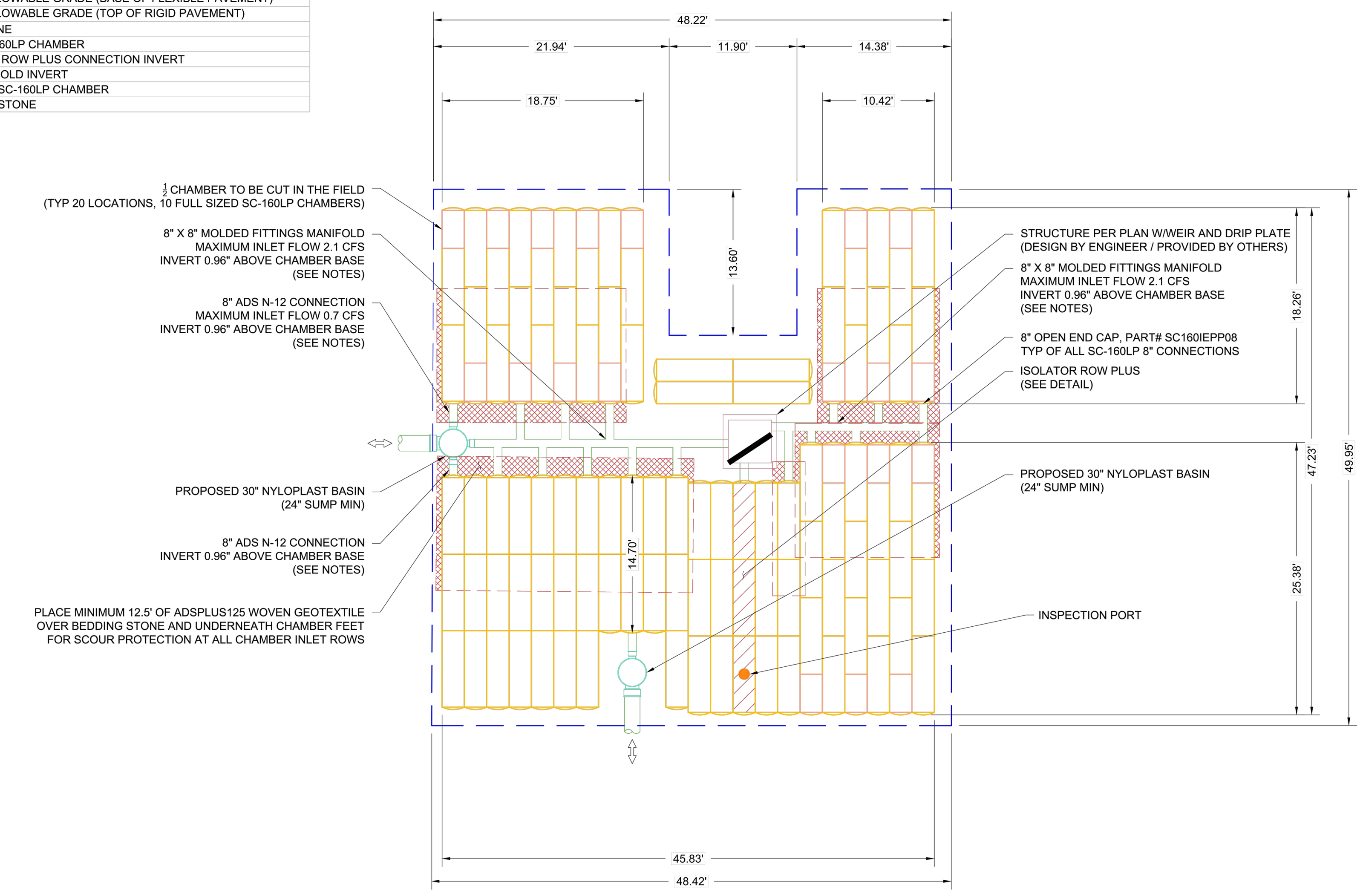


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StormTech® Chamber System 888-892-2694 | WWW.STORMTECH.COM
ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026

SHEET 6 OF 11

## PROPOSED LAYOUT SMF-3A

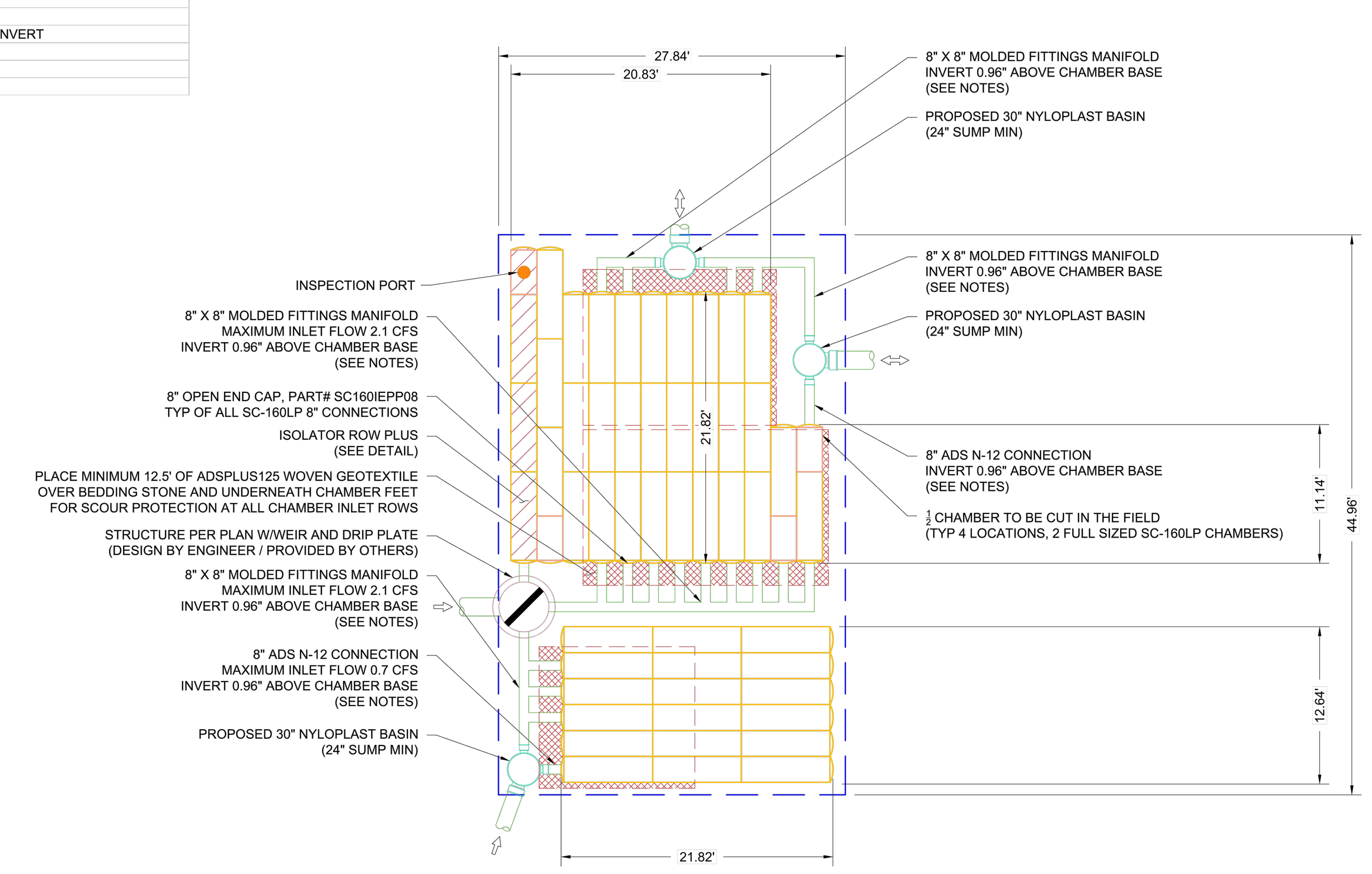
| | |
|---|---|
| 52 | STORMTECH SC-160LP CHAMBERS |
| 36 | STORMTECH SC-160LP END CAPS |
| 6 | STONE ABOVE (in) |
| 6 | STONE BELOW (in) |
| 40 | % STONE VOID |
| 1252 | SYSTEM AREA (ft²) |
| 146 | SYSTEM PERIMETER (ft) |

## PROPOSED ELEVATIONS SMF-3A

| | |
|---|---|
| 23.40 | MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED) |
| 15.07 | MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC) |
| 14.57 | MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC) |
| 14.57 | MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT) |
| 14.57 | MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT) |
| 13.90 | TOP OF STONE |
| 13.40 | TOP OF SC-160LP CHAMBER |
| 12.48 | 8" ISOLATOR ROW PLUS CONNECTION INVERT |
| 12.48 | 8" X 8" MANIFOLD INVERT |
| 12.40 | BOTTOM OF SC-160LP CHAMBER |
| 11.90 | BOTTOM OF STONE |

## NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.




CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING GREEN COVE SPRINGS, FL
DATE: 08-20-23 DRAWN: AVM PROJECT #: S371901 CHECKED: JEK
06/18/24 EEH RWD ADD INSPECTION PORTS FOR ALL BEDS
09/25/23 TSG CJD REVISED PER UPDATED PLANS
StormTech® Chamber System 888-892-2694 | WWW.STORMTECH.COM
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SHEET 7 OF 11

## PROPOSED LAYOUT SMF-3B

| | |
|---|---|
| 53 | STORMTECH SC-160LP CHAMBERS |
| 24 | STORMTECH SC-160LP END CAPS |
| 6 | STONE ABOVE (in) |
| 6 | STONE BELOW (in) |
| 40 | % STONE VOID |
| 1197 | SYSTEM AREA (ft²) |
| 143 | SYSTEM PERIMETER (ft) |

## PROPOSED ELEVATIONS SMF-3B

| | |
|---|---|
| 22.75 | MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED) |
| 14.42 | MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC) |
| 13.92 | MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC) |
| 13.92 | MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT) |
| 13.92 | MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT) |
| 13.25 | TOP OF STONE |
| 12.75 | TOP OF SC-160LP CHAMBER |
| 11.83 | 8" ISOLATOR ROW PLUS CONNECTION INVERT |
| 11.83 | 8" X 8" MANIFOLD INVERT |
| 11.75 | BOTTOM OF SC-160LP CHAMBER |
| 11.25 | BOTTOM OF STONE |

## NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
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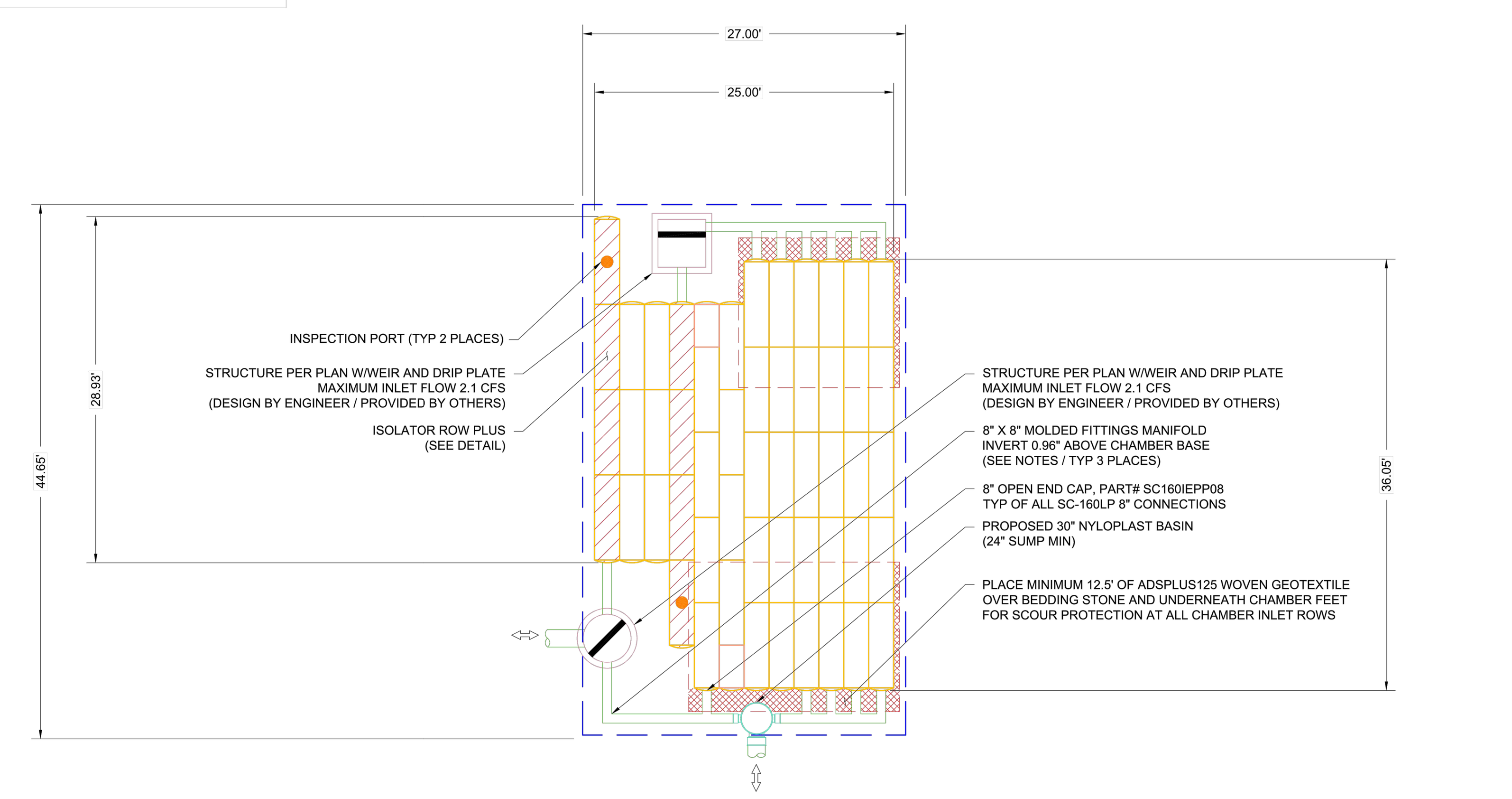


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SHEET 8 OF 11

TRAVIS J. HASTAY

Travis J. Hastay
State of Florida, Professional Engineer, License No. 84295

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| 100% CONSTRUCTION DOCUMENTS | 4/11/2024 |

| REVISION | DESCRIPTION | DATE |
|---|---|---|

# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

UNDERGROUND STORMWATER MANAGEMENT FACILITY DETAILS

| PROJECT NO.: | 23-204 | DRAWN BY: | TFC |
|---|---|---|---|
| | | CHECKED BY: | TJH |

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2035 NW 13TH STREET GAINESVILLE, FL 32609
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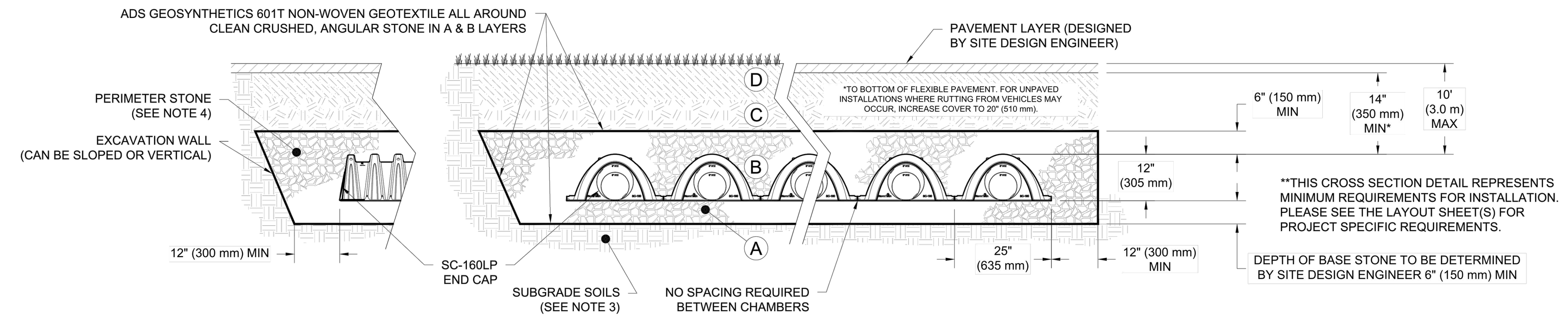
## ACCEPTABLE FILL MATERIALS: STORMTECH SC-160LP CHAMBER SYSTEMS

| MATERIAL LOCATION | | DESCRIPTION | AASHTO MATERIAL CLASSIFICATIONS | COMPACTION / DENSITY REQUIREMENT |
|---|---|---|---|---|
| D | **FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER | ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS. | N/A | PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS. |
| C | **INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 14" (355 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER. | GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER. | AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10 | BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN). |
| B | **EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE. | CLEAN, CRUSHED, ANGULAR STONE | AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57 | NO COMPACTION REQUIRED. |
| A | **FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER. | CLEAN, CRUSHED, ANGULAR STONE | AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57 | PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3] |

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.




## NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 1.5"
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING GREEN COVE SPRINGS, FL
DATE: 08-20-23 DRAWN: AVM
PROJECT #: S371901 CHECKED: JEK

| DATE | DRWN | CHKD | DESCRIPTION |
|---|---|---|---|
| 06/18/24 | EEH | RWD | ADD INSPECTION PORTS FOR ALL BEDS |
| 09/25/23 | TSG | CJD | REVISED PER UPDATED PLANS |

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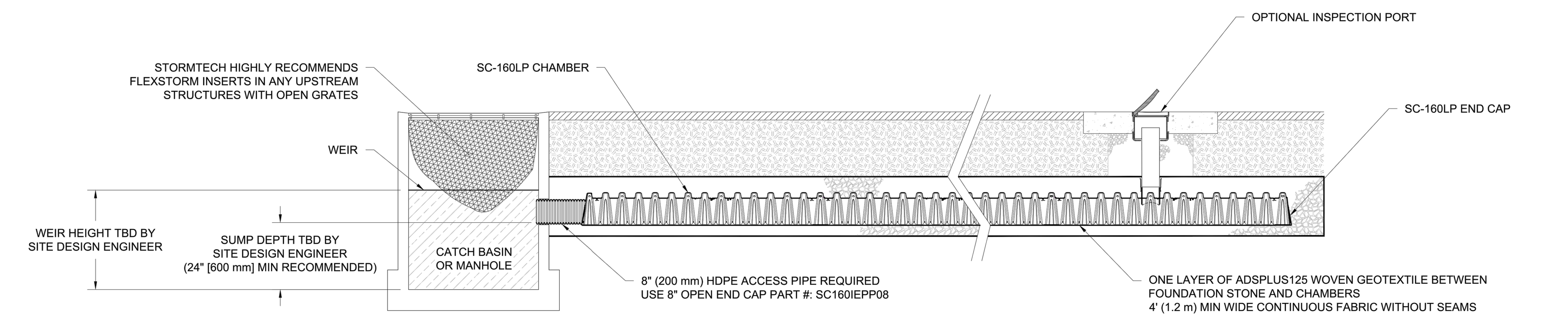
THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

SHEET 9 OF 11




### SC-160LP ISOLATOR ROW PLUS DETAIL
NTS

### INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

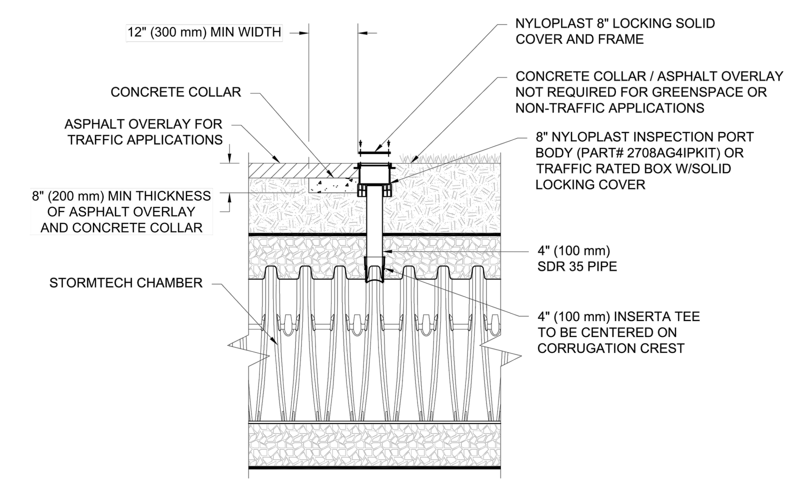
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

### NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



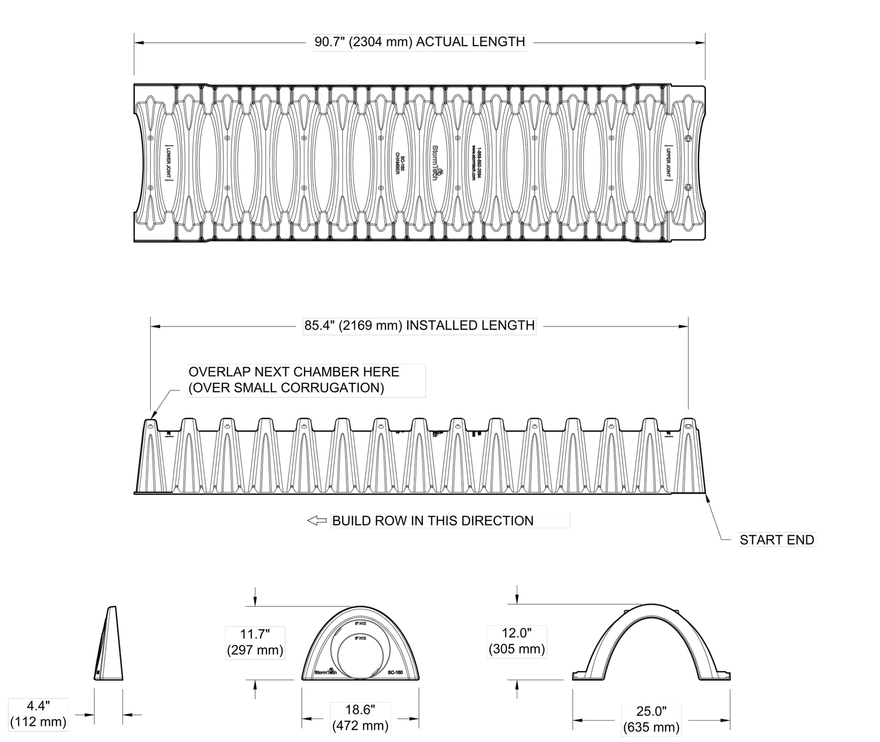

NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

### 4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)
NTS

CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING GREEN COVE SPRINGS, FL
DATE: 08-20-23 DRAWN: AVM
PROJECT #: S371901 CHECKED: JEK

SHEET 10 OF 11

### SC-160LP TECHNICAL SPECIFICATION
NTS

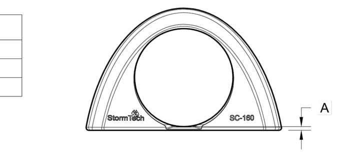



**NOMINAL CHAMBER SPECIFICATIONS**

| | | |
|---|---|---|
| SIZE (W X H X INSTALLED LENGTH) | 25.0" X 12.0" X 85.4" | (635 mm X 305 mm X 2169 mm) |
| CHAMBER STORAGE | 6.85 CUBIC FEET | (0.19 m³) |
| MINIMUM INSTALLED STORAGE* | 16.0 CUBIC FEET | (0.45 m³) |
| WEIGHT | 24.0 lbs. | (10.9 kg) |

*ASSUMES 6" (152 mm) ABOVE, 6" (152 mm) BELOW, AND STONE BETWEEN CHAMBERS WITH 40% STONE POROSITY.

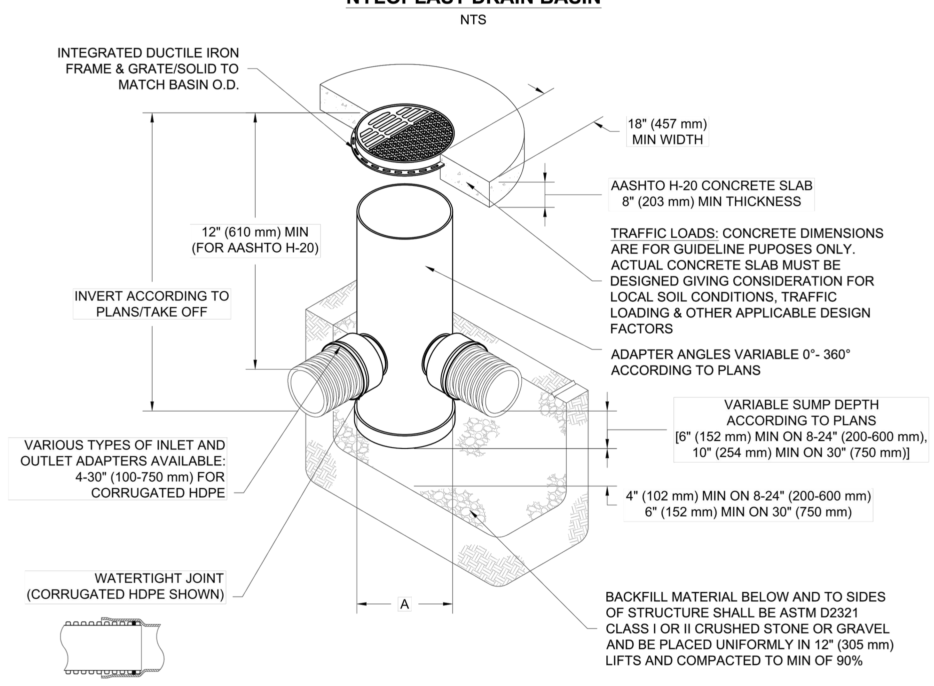
| PART # | STUB | A |
|---|---|---|
| SC160EPP | 6" (150 mm) | 0.66" (16 mm) |
| | 8" (200 mm) | 0.80" (20 mm) |
| SC160EPP08 | 8" (200 mm) | 0.96" (24 mm) |




ALL STUBS ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

NOTE: ALL DIMENSIONS ARE NOMINAL

### NYLOPLAST DRAIN BASIN
NTS




### NOTES

1. 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
2. 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
5. FOR COMPLETE DESIGN AND PRODUCT INFORMATION: **WWW.NYLOPLAST-US.COM**
6. TO ORDER CALL: **800-821-6710**

| A | PART # | GRATE/SOLID COVER OPTIONS | | |
|---|---|---|---|---|
| 8" (200 mm) | 2808AG | PEDESTRIAN LIGHT DUTY | STANDARD LIGHT DUTY | SOLID LIGHT DUTY |
| 10" (250 mm) | 2810AG | PEDESTRIAN LIGHT DUTY | STANDARD LIGHT DUTY | SOLID LIGHT DUTY |
| 12" (300 mm) | 2812AG | PEDESTRIAN AASHTO H-10 | STANDARD AASHTO H-20 | SOLID AASHTO H-20 |
| 15" (375 mm) | 2815AG | PEDESTRIAN AASHTO H-10 | STANDARD AASHTO H-20 | SOLID AASHTO H-20 |
| 18" (450 mm) | 2818AG | PEDESTRIAN AASHTO H-10 | STANDARD AASHTO H-20 | SOLID AASHTO H-20 |
| 24" (600 mm) | 2824AG | PEDESTRIAN AASHTO H-10 | STANDARD AASHTO H-20 | SOLID AASHTO H-20 |
| 30" (750 mm) | 2830AG | PEDESTRIAN AASHTO H-20 | STANDARD AASHTO H-20 | SOLID AASHTO H-20 |

CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING GREEN COVE SPRINGS, FL
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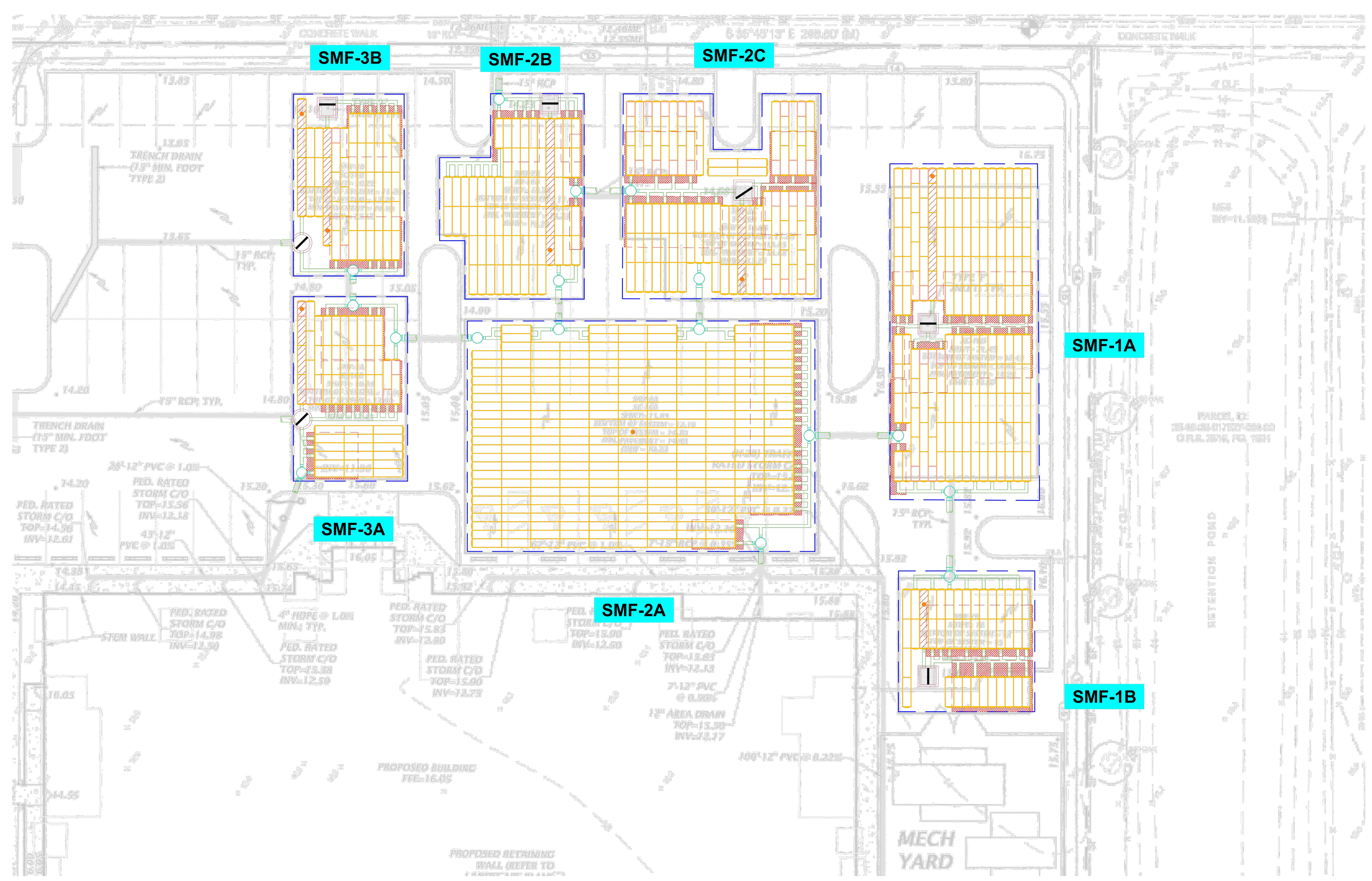
SHEET 11 OF 11




TRAVIS J. HASTAY

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REVISION | DESCRIPTION | DATE

# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:
## UNDERGROUND STORMWATER MANAGEMENT FACILITY DETAILS

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

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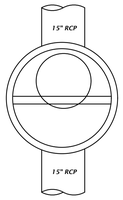
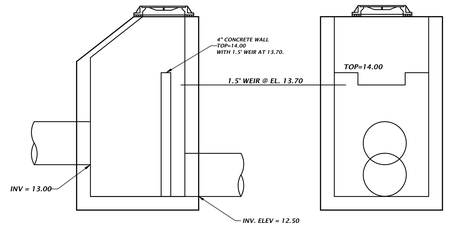
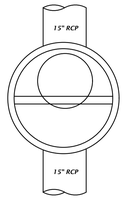



TOP VIEW

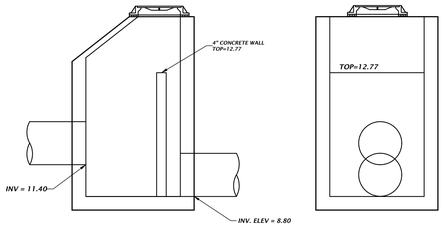



FRONT VIEW SIDE VIEW

## OUTFALL STRUCTURE DS-1
NTS

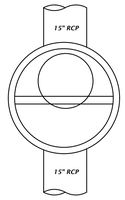



TOP VIEW

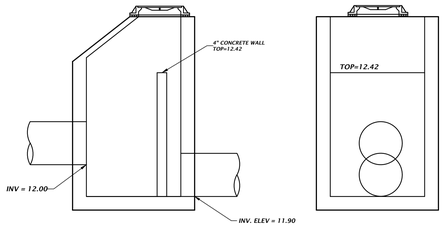



FRONT VIEW SIDE VIEW

## OUTFALL STRUCTURE DS-2
NTS

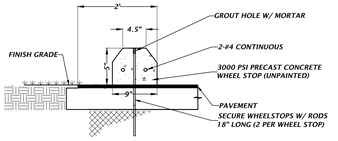


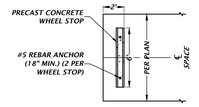

TOP VIEW




FRONT VIEW SIDE VIEW

## OUTFALL STRUCTURE DS-3
NTS




## WHEEL STOP DETAIL
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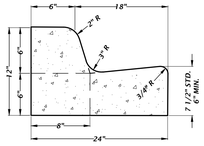
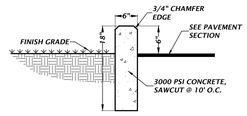



NOTE:

WHEN USED ON THE HIGH SIDE OF ROADWAY, THE CROSS-SLOPE OF THE GUTTER SHALL MATCH THE CROSS-SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6".

## TYPE F CONCRETE CURB AND GUTTER DETAIL
NTS




## 6" BOX CURB DETAIL
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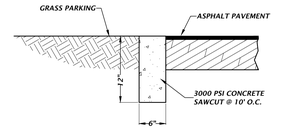


## FLUSH CURB DETAIL
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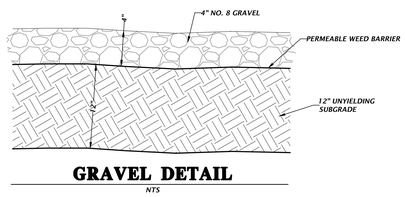


## GRAVEL DETAIL
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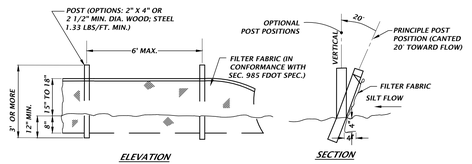


ELEVATION SECTION

## TYPE III SILT FENCE DETAIL
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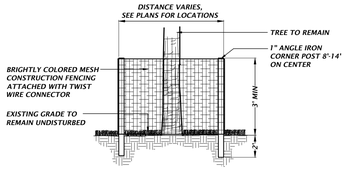


## TREE PROTECTION DETAIL
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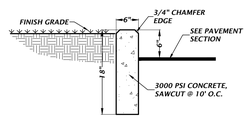


## TYPICAL 6" CURB DETAIL
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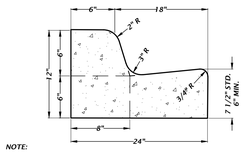
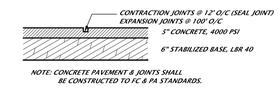



NOTE:

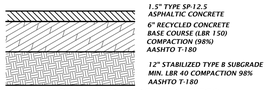
WHEN USED ON THE HIGH SIDE OF ROADWAY, THE CROSS-SLOPE OF THE GUTTER SHALL MATCH THE CROSS-SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6".

## TYPE F CONCRETE CURB AND GUTTER DETAIL
NTS




NOTE: CONCRETE PAVEMENT & JOINTS SHALL BE CONSTRUCTED TO FC & FA STANDARDS.

## HEAVY DUTY CONCRETE DETAIL
NTS




## STANDARD DUTY ASPHALT DETAIL
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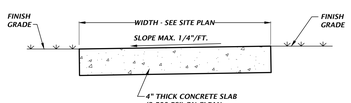
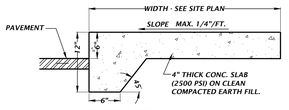



NOTES:

1. SAWCUT CONTROL JOINTS SHALL BE CONSTRUCTED 5 FEET ON CENTER
2. EXPANSION JOINTS WITH PREFORMED JOINT FILLER SHALL BE CONSTRUCTED BETWEEN ALL FIXED OBJECTS AND WALK AND AT CONSTRUCTION JOINTS.

## NOT ADJACENT TO PAVEMENT
NTS

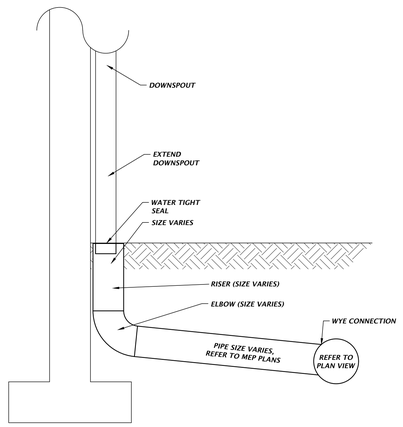



NOTES:

1. SAWCUT CONTROL JOINTS SHALL BE CONSTRUCTED 5 FEET ON CENTER
2. EXPANSION JOINTS WITH PREFORMED JOINT FILLER SHALL BE CONSTRUCTED BETWEEN ALL FIXED OBJECTS AND WALK AND AT CONSTRUCTION JOINTS.

## ADJACENT TO PAVEMENT
NTS

## CONCRETE SIDEWALK DETAILS
NTS




## DOWNSPOUT CONNECTION DETAIL
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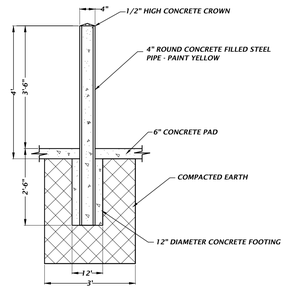


## PIPE BOLLARD DETAIL
NTS

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TRAVIS J. HASTAY

Travis J. Hastay
State of Florida, Professional Engineer, License No. 84295

This item has been electronically signed and sealed by Travis J. Hastay, PE on 06/19/2024 using a Digital Signature.

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| SUBMITTAL: | ISSUE DATE: |
|---|---|
| 100% CONSTRUCTION DOCUMENTS | 4/11/2024 |

| REVISION | DESCRIPTION | DATE |
|---|---|---|

# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

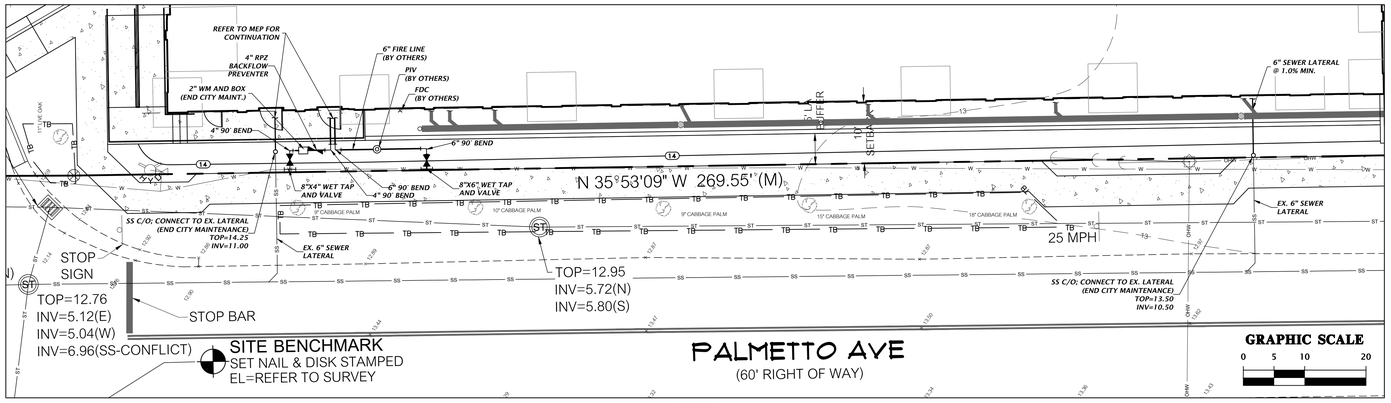
KEY PLAN

DRAWING TITLE:
CONSTRUCTION DETAILS

PROJECT NO.: 23-204 DRAWN BY: TFC
CHECKED BY: TJH

# C2.30

Item # 6.

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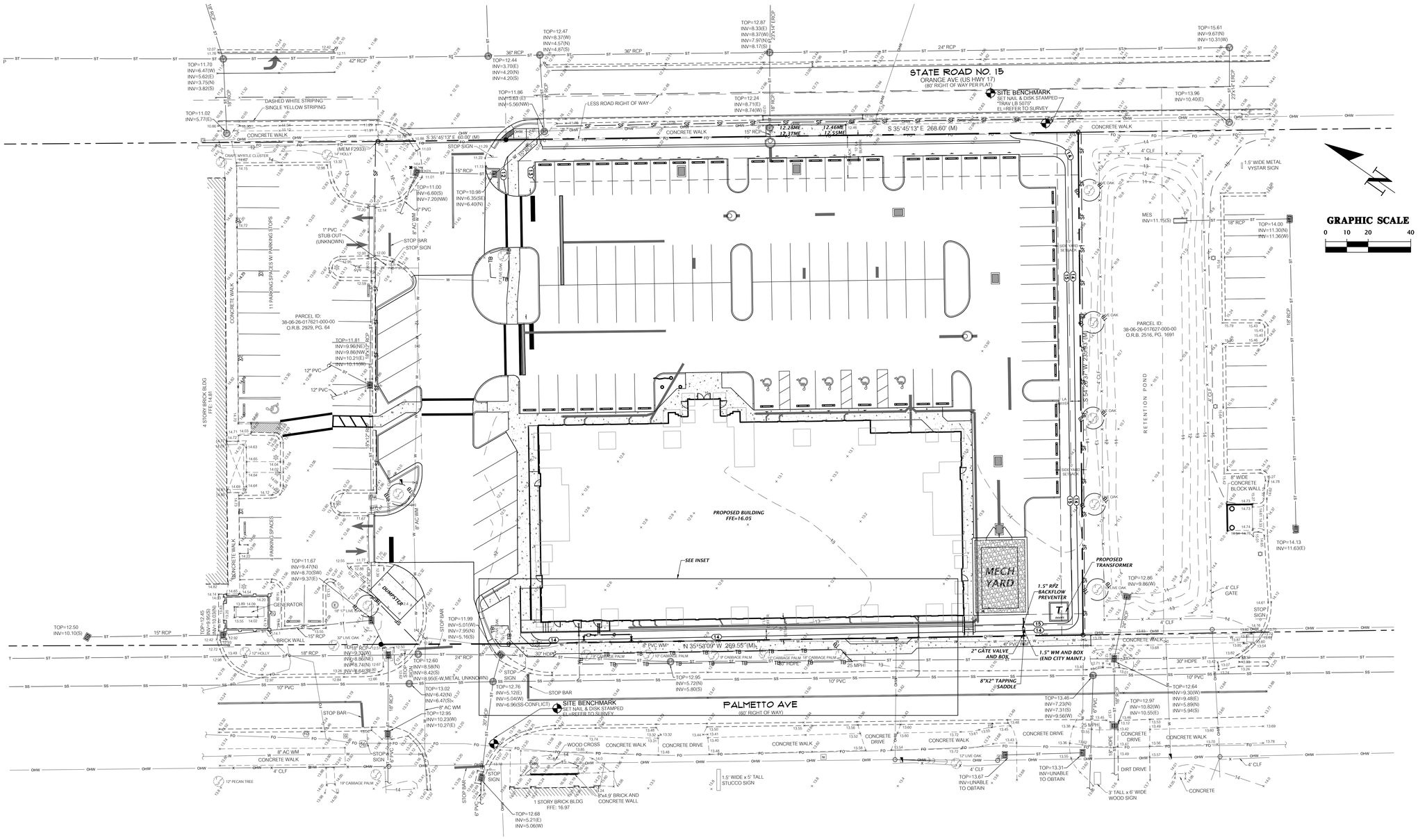



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TRAVIS J. HASTAY

Travis J. Hastay
State of Florida, Professional Engineer, License No. 84295

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| REVISION | DESCRIPTION | DATE |

# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

DETAILED UTILITY SITE PLAN

| PROJECT NO.: 23-204 | DRAWN BY: TFC |
|---|---|
| | CHECKED BY: TJH |

# C3.10


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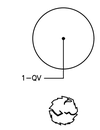
LEGEND




NEW TREES TO BE ADDED

EXISTING TREES TO REMAIN

GENERAL NOTES

ALL ASPHALT, LIMEROCK, AND CONSTRUCTION DEBRIS SHALL BE REMOVED FROM PLANTING BEDS AND SOD AREAS PRIOR TO LANDSCAPE INSTALLATION. IF ENCOUNTERED DURING CONSTRUCTION OR INSTALLATION, THESE SHALL BE EXCAVATED AND REMOVED FROM THE SITE. PLANTING DEPTH OF SOIL IN SUCH AREAS SHOULD BE AT LEAST 3'. IF FILL MUST BE ADDED, IT MUST BE FLORIDA CLEAN DEEP FILL (FREE OF WEED SEEDS) WITH pH 6.0 – 7.5.

ALL LANDSCAPED AREAS SHALL BE MULCHED WITH 3" THICKNESS OF MULCH. PINE BARK MULCH SHALL BE USED IN ALL AREAS.

NEW TREES OUTSIDE OF MULCHED LANDSCAPED BEDS WILL BE PROTECTED FROM MOWER AND STRING TRIMMER DAMAGE WITH 10" OF PLASTIC DRAIN TUBING.

LEADER SHOOTS AND MAIN STRUCTURAL LIMBS OF TREES SHALL NOT BE TOPPED OR PRUNED. TREES WILL BE STAKED AS NEEDED. GUYLINES WILL BE OF NON-SYNTHETIC BIODEGRADABLE MATERIAL.

REFER TO CIVIL PLANS FOR TREE BARRICADE DETAILS AND INFORMATION.

INVASIVE EXOTIC PLANT MATERIAL

ALL INVASIVE PLANT SPECIES TO BE REMOVED FROM SITE PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.

GRASSING

ALL DISTURBED AND UNPAVED AREAS TO BE GRASSED WITH SOD THAT IS FREE OF NOXIOUS WEEDS INCLUDING TROPICAL SODA APPLE OR SHALL BE SEEDED AND MULCHED. SEE CIVIL SITE PLANS FOR ADDITIONAL RELATED INFORMATION.

PLANT MATERIAL

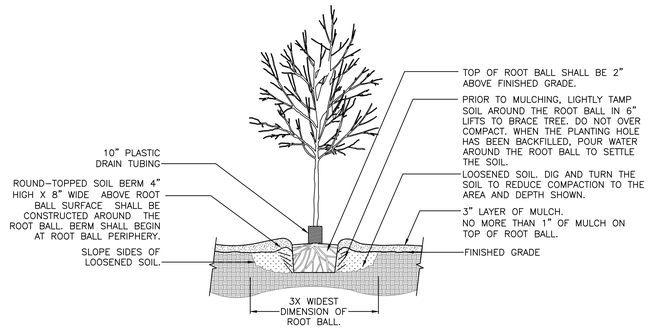
ALL PLANT MATERIAL TO BE FLORIDA NO.1 OR BETTER, GRADED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF AGRICULTURE, DIVISION OF PLANT INDUSTRY'S 'GRADES AND STANDARDS FOR NURSERY PLANTS', CURRENT EDITION AT THE TIME PLANS ARE ISSUED. CALL LANDSCAPE ARCHITECT PRIOR TO PURCHASING ANY PLANT MATERIAL FOR AN ON SITE INSPECTION AND REVIEW OF LANDSCAPE PLAN.

PLANT QUANTITIES SHOWN ARE FOR PERMITTING PURPOSES ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM ALL QUANTITIES SHOWN ON THE PLAN.

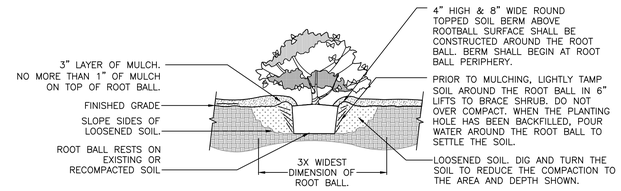
IRRIGATION

LANDSCAPE IRRIGATION TO BE PROVIDED BY AUTOMATIC IRRIGATION SYSTEM. BUBBLERS SHALL BE INSTALLED BY EACH TREE AS PART OF THE IRRIGATION SYSTEM.

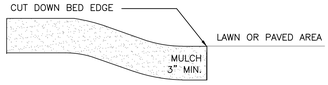
811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast, it's free, it's the law.
Call 811 two business days before digging



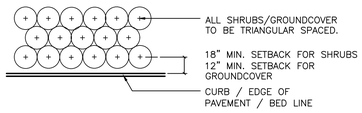

1 TREE PLANTING DETAIL
SCALE: N.T.S.




2 SHRUB PLANTING DETAIL
SCALE: N.T.S.




3 MULCH DETAIL
SCALE: N.T.S.




NOTE: THE PERIMETER OF ALL CURVED PLANTING BEDS SHALL BE PLANTED WITH A ROW OF SHRUBS AS SHOWN IN THE PLANS AND AT THE SPACING SHOWN IN THE PLANT LIST. INTERIOR PORTIONS OF EACH BED SHALL BE PLANTED AT APPROPRIATE SPACING ACCORDING TO THIS PLANT SPACING DETAIL.

4 SHRUB PLANTING DETAIL
SCALE: N.T.S.

| TREE CREDITS Sec. 113-279(b) | |
|---|---|
| TREES PRESERVED ABOVE 12" | |
| DBH/SPECIES | TREE CREDITS |
| 32" LO | 48" |
| 18"17" LO | 35" |
| 11" LO | 11" |
| 12" LO | 12" |
| 14" HOLLY | 7" |
| | = 113" TOTAL TREE CREDITS AGAINST LANDSCAPE REQUIREMENTS |

PERIMETER LANDSCAPING CALCULATIONS Sec. 113-244(b)(1)

| LOCATION | BUFFER LENGTH | REQUIRED LANDSCAPE | PROVIDED LANDSCAPE |
|---|---|---|---|
| NORTHERN PERIMETER ALONG ORANGE AVE | 250 L.F. | 1 SHADE TREE PROVIDED EVERY 50 LINEAR FEET & CONTINUOUS SHRUB = 5 SHADE TREES & CONTINOUS HEDGE | 5 SHADE TREES CONTINOUS HEDGE |
| SOUTHERN PERIMETER ALONG PALMETTO AVE | 215 L.F. | 1 SHADE TREE PROVIDED EVERY 50 LINEAR FEET & CONTINUOUS SHRUB = 4 SHADE TREES & CONTINOUS HEDGE | 4 TREE CREDITS CONTINOUS HEDGE |

INTERIOR LANDSCAPING CALCULATIONS Sec. 113-244(b)(2)

PROJECT SITE AREA.....63,600 S.F.

TOTAL REQUIRED TREES PER 1,500 S.F. (FOR THE FIRST 10,500 S.F. OF THE PROJECT SITE AREA).....7 TREES

TOTAL REQUIRED TREES PER 4,000 S.F. (FOR THE REMAINDER OF THE PROJECT SITE AREA).....13 TREES

TOTAL REQUIRED TREES.....20 TREES

TOTAL REQUIRED INCHES (AT 2"/TREE).....40"

TOTAL PROVIDED INCHES (FROM APPLIED TREE CREDITS).....40"

TOTAL REMAINDER TREE CREDITS.....76"

TREE MITIGATION CALCULATIONS Sec. 113-279(a)

| CATEGORY | MITIGATION CALCULATIONS |
|---|---|
| INCH-FOR-INCH REPLACEMENT | REMOVED LIVES OAKS<br>DBH/SPECIES<br>10" LO<br>12" LO<br>13" LO<br>TOTAL REMOVED LIVE OAK INCHES.....35"<br>TOTAL REQUIRED REPLACEMENT LIVE OAKS INCHES.....35"<br>TOTAL PROVIDED LIVE OAK INCHES.....26"<br>TOTAL DEFICIT LIVE OAK INCHES.....9" |
| ½ REPLACEMENT | REMOVED TREES ABOVE 12"<br>DBH/SPECIES<br>18" PALM<br>18" PALM<br>15" PALM<br>20" PALM<br>TOTAL REMOVED TREE INCHES.....71"<br>TOTAL REQUIRED REPLACEMENT TREE INCHES (AT ½ REPLACEMENT).....24" |
| TOTAL TREE MITIGATION | TOTAL MITIGATION INCHES REQUIRED.....33"<br>TOTAL MITIGATION PROVIDED.....33"<br>2 AR @ 2.0" = 4"<br>10 CV @ 1.5" = 15"<br>2 LIM @ 2.0" = 4"<br>5 QO @ 2.0" = 10"<br>TOTAL MITIGATION INCHES DEFICIT.....0"<br>TOTAL MITIGATION PAYMENT:<br>DEFICIT PAYMENT ($148/INCH).....$0.00<br>TOTAL PAYMENT REQUIRED.....$0.00 |

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REGISTERED LANDSCAPE ARCHITECT CASEY HOWARD ROSE LA 0667280 STATE OF FLORIDA

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| 100% CONSTRUCTION DOCUMENTS | 6/19/2024 |

| REVISION | DESCRIPTION | DATE |
|---|---|---|

**CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY**

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

**LANDSCAPE DETAILS, NOTES, AND CALCULATIONS**

| PROJECT NO.: 23-0204 | DRAWN BY: | LR |
|---|---|---|
| | CHECKED BY: | JMS |

**LS-1**

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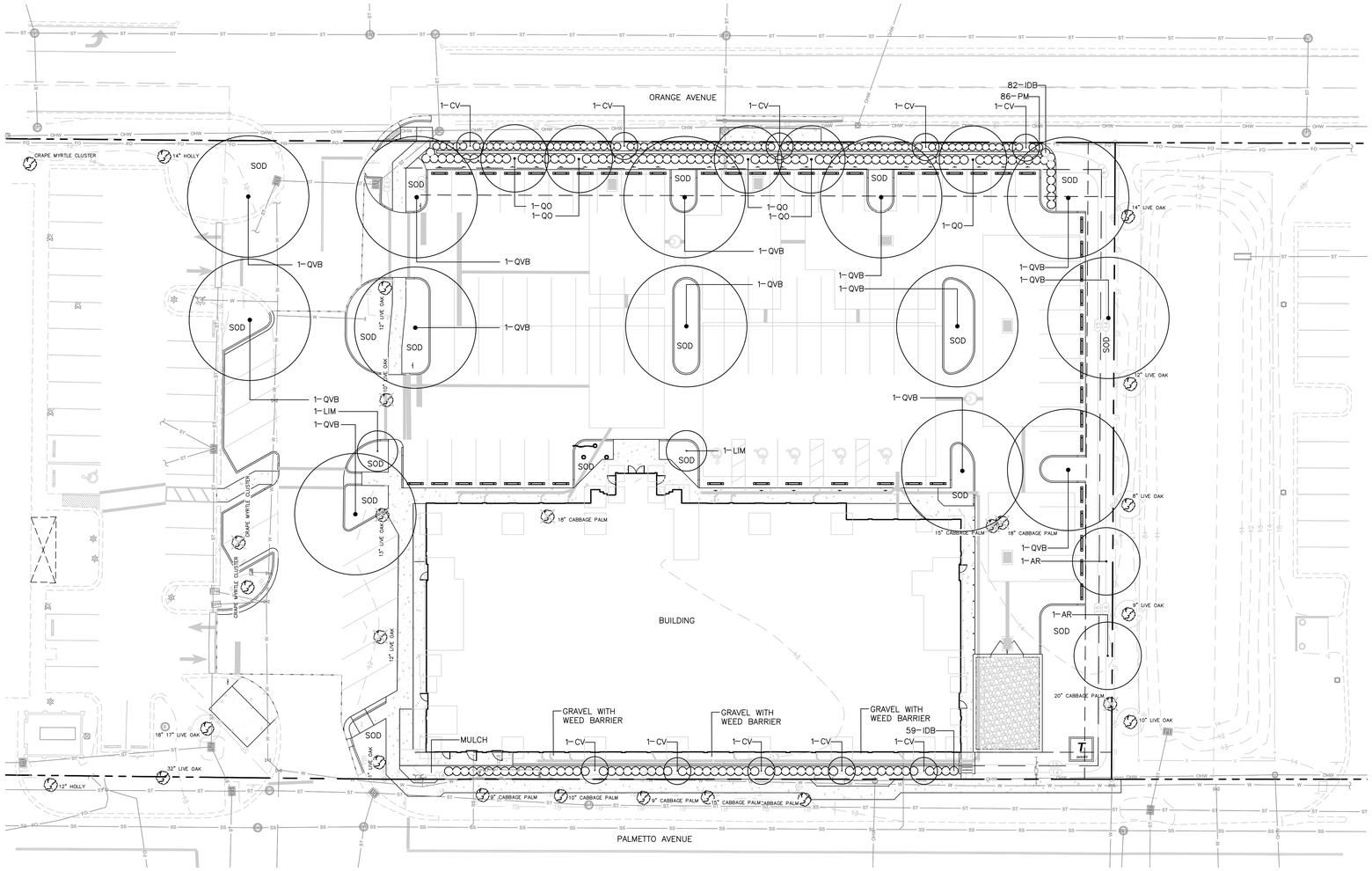


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It's fast, it's free, it's the law.
Call 811 two business days before digging

## PLANT SCHEDULE

| CODE | QTY | BOTANICAL NAME | COMMON NAME | SIZE |
|---|---|---|---|---|
| TREES | | | | |
| AR | 2 | ACER RUBRUM 'FLORIDA FLAME' | FLORIDA FLAME RED MAPLE | 30 GAL., 11' HT, 3' SPR, 2" CAL |
| CV | 10 | CHIONANTHUS VIRGINICUS | WHITE FRINGETREE | 15 GAL., 9' HT., 30" SPR., 1-1/2" CAL |
| LIM | 2 | LAGERSTROEMIA INDICA 'MUSKOGEE' | MUSKOGEE CRAPE MYRTLE | 30 GAL., 10' HT, 4' SPR, 2" CAL |
| QO | 5 | QUERCUS MICHAUXII | BASKET OAK | 30 GAL., 12' HT, 42" SPR, 2" CAL |
| QVB | 13 | QUERCUS VIRGINIANA 'BOARDWALK' | BOARDWALK LIVE OAK | 30 GAL., 12' HT, 54" SPR, 2" CAL |
| SHRUBS | | | | |
| IDB | 141 | ILEX CORNUTA 'DWARF BURFORDII' | DWARF BURFORD HOLLY | 3 GAL., 24" HT, 16" SPR |
| PM | 86 | PODOCARPUS MACROPHYLLUS 'DWARF PRINGLES' | DWARF PRINGLES PODOCARPUS | 3 GAL., 24" HT., 18"SPR. |

| CODE | BOTANICAL NAME | COMMON NAME | SIZE |
|---|---|---|---|
| SOD/SEED | | | |
| SOD | PASPALUM NOTATUM 'ARGENTINE' | BAHIA GRASS | WEED FREE AND SAND GROWN SOD |

GRAPHIC SCALE
0 10 20 40


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|---|---|---|
| 100% CONSTRUCTION DOCUMENTS | | 6/19/2024 |
| REVISION | DESCRIPTION | DATE |

# CLAY COUNTY ECONOMIC DEVELOPMENT SERVICES FACILITY

633 N. ORANGE AVE.
GREEN COVE SPRINGS, FL 32043

KEY PLAN

DRAWING TITLE:

## LANDSCAPE PLAN

PROJECT NO.: 23-0204 DRAWN BY: LR
CHECKED BY: JMS

LS-2


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Tech: lsenor Plot Date: Jun 18,2024 1:26pm Filename: N:\2023\23-0204\Departments\03_Design\02_DWGs\01_Permitting\23-0204_clay county eco design base.dwg

# Stormwater Management System Report

## Clay County Economic Development Building

Prepared For: Clay County

Submitted To: City of Green Cove Springs, Florida Department of Environmental Protection, and Florida Department of Transportation

Date: 10/2/2023
PN# 23-0204
PM: Travis Hastay

Clay County
P.O. Box 1366
Green Cove Springs, FL 32043

www.chw-inc.com

CHW Professional Consultants

Engineer's Certification Statement

I hereby certify that the design of the stormwater management systems for the project known as Clay County Eco Development has been designed substantially in accordance with the City of Green Cove Springs, Florida Department of Transportation, and St. Johns River Water Management District applicable rules and regulations.

Nicola R Cowap

Digitally signed by Nicola R Cowap
DN: CN=Nicola R Cowap, O=Nicola R Cowap, L=Alachua, S=Florida, C=US
Date: 2024.06.19 09:54:53-04'00'

Nicola R. Cowap,
State of Florida, Professional Engineer, License No. 91233

This item has been electronically signed and sealed by Nicola R. Cowap, P.E. on 06/19/2024 using a Digital Signature.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Nicola R. Cowap, FL PE No. 91233

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**Appendices**

A. Drainage Calculations and Computer Model Output

B. Operation and Maintenance Requirements and Erosion and Sedimentation Control Requirements

# Introduction

The Clay County Eco Development project proposes the construction of a 2 story building with associated parking, underground stormwater, and utility infrastructure that will be completed over several phases. The total proposed site area is ±1.78 acres with a drainage area of ±1.23 acres, located along the southwest corner of Hwy 17 (Orange Avenue) and Walburg St. in Green Cove Springs, Florida.

The project site is located on tax parcel #38-06-26-017628-000-00 according to the Clay County Property Appraiser's website. Figure 1 provides a Location Map and Figure 2 depicts the site on a portion of the Green Cove Springs USGS Quadrangle Map. The site is located in Section 38, Township 6, Range 26 in Clay County, Florida.

Refer to the accompanying engineering plans for details about the proposed construction and demolition regarding this project.

# Design Criteria

The design criteria for the proposed stormwater management facility (SMF) are based upon the criteria set forth by the City of Green Cove Springs (GCS), Florida Department of Transportation (FDOT) and the St. Johns River Water Management District (SJRWMD) for dry underground retention systems designed in an open watershed. The criteria are as follows:

1. Provide Peak Discharge Rate Attenuation: Attenuate the post-development peak discharge rates to be less than the pre-development peak discharge rates for:
    a. the 25-year 24-hour and the Mean Annual 24-hour storm events (SJRWMD).
    b. the 1-hour, 2-hour, 4-hour, 8-hour, and 72-hour storms for the 3-year, 5-year, 10-year, 25-year, 50-year, and 100-year return periods (FDOT).
    c. the 100-year, 24-hour storm (GCS).

2. Provide Water Quality Treatment Volume (WQTV): The minimum stormwater treatment volume shall be the runoff from the first 0.5 inch of runoff over the entire drainage area or 1.25 inches times the impervious area, whichever is greater, plus an additional 0.5 inch of runoff over the drainage area that must recover within 72 hours (SJRWMD).

3. Provide Volume Recovery: The retention system must provide capacity for:
    a. the appropriate treatment volume of the WQTV stormwater to infiltrate completely within 72 hours. The total volume must be available in the pond within 14 days after the end of the design storm event (SJRWMD).
    b. half of the volume to be infiltrated in 7 days and the total volume in 30 days (FDOT).

City of Green Cove Springs, FDOT, and SJRWMD also require that best management practices be employed to control erosion, sedimentation, and that an operation and maintenance entity be established.

# Site Characteristics

Physical characteristics of the site are described in the following sections. Additional details are provided in the accompanying Engineering plans.

*Site Topography*

The existing site is mostly an impervious area consisting of landscaping, buildings, drive aisles, and parking that drains to Walburg Street right-of-way to the northeast and Orange Ave (US-HWY 17) to the east. The project site is bordered by Orange Ave to the east, Bayard St. to the south, Palmetto Ave to the west, and Walburg St to the north. The site is moderately sloping from the southwest corner of the site to the north and northeast corner of the site. Elevations (NAVD 88) range from EL. ± 14.0' at the southwest corner to EL. ± 12.0' to the northeast. The site is located in an open basin and drains to the ROW on Orange Ave through Walburg St and by direct connection.

The entire site consists of Type 'A/D' soils per NRCS, which were modeled as Type 'D' soils. Refer to Figure 5 for a NRCS Soils Map.

*Pre-Development Drainage*

Pre-development drainage on the site consists of one watershed, Pre-development watershed #1 (Pre DA-1).

Pre-Development Watershed #1 (Pre DA-1) comprises the entirety of the site and is half developed. The watershed is ±1.21 acres in size and includes ±0.71 acres of existing impervious. Stormwater runoff occurs via sheet flow offsite into a storm pipe in the Walburg St. ROW as well as a direct connection located on the northwest property line.

Refer to Figure 6 for more information on the pre-development watershed.

*Post-Development Drainage*

Post-Development drainage on the site consists of three watersheds: Post-Development Watershed #1 (WS-1), Post-Development Watershed #2 (WS-2), and Post-Development Watershed #3 (WS-3).

WS-1 consists of ±0.25 acres and includes ±0.23 acres of proposed impervious area including parking areas and drive aisles. Stormwater runoff from WS-1 will be routed via a stormwater pipe conveyance system and into SMF-1A and SMF-1B.

SMF-1A and SMF-1B are designed as interconnected dry retention underground stormwater management facilities. SMF-1A is designed with a bottom at el. 12.45' and a top at el. 14.45' and SMF-1B is designed with a bottom at el. 13 and a top at el. 15. Both systems will be constructed using ADS Stormtech SC-160LP and connected via an equalizer pipe. SMF-1A will discharge to SMF-2C via a 1.5' weir at el. 13.70'.

WS-2 consists of ±0.56 acres and includes ±0.28 acres of proposed building and ±0.27 acres of proposed parking areas, sidewalks, and drive aisles. Stormwater runoff from WS-2 will be routed via a stormwater pipe conveyance system and into SMF-2A, SMF-2B, and SMF-2C.

SMF-2A, SMF-2B and SMF-2C are designed as interconnected dry retention underground stormwater management facilities. SMF-2A is designed with a bottom at el. 12.10' and a top at el. 14.10', SMF-2B is designed with a bottom at el. 11.40' and a top at el. 13.40', and SMF-2C is designed with a bottom at el. 11.85' and a top at el. 13.85'. All three systems will be constructed using ADS Stormtech SC-160LP and connected via equalizer pipes. SMF-2B will discharge via a 3.50' weir at el. 12.77 to the adjacent Orange Ave ROW. This is the overall discharge point for the project where the peak discharge rates were determined.

WS-3 consists of ±0.42 acres and includes ±0.15 acres of proposed building and ±0.26 acres of proposed parking areas, sidewalks, and drive aisles. Stormwater runoff from WS-3 will be routed via a stormwater pipe conveyance system and into SMF-3A and SMF-3B.

SMF-3A and SMF-3B are designed as interconnected dry retention underground stormwater management facilities. SMF-3A is designed with a bottom at el. 11.90' and a top at el. 13.90' and SMF-3B is designed with a bottom at el. 11.25' and a top at el. 13.25'. Both systems will be constructed using ADS Stormtech SC-160LP and connected via equalizer pipes. SMF-3A will discharge via a 3.50' weir at el. 12.90 to SMF-2A.

Refer to Figure 7 for more information on the post-development watershed.

*Soils Information*

The National Resource Conservation Service (NRCS) Soil Survey for Clay County describes the near surface soil profile for the project area as *Leon fine sand (0-2%)* with a hydrologic soil group rating of 'A/D'. Refer to Figure 4 for the NRCS Soils Map.

## Drainage Analysis

The proposed stormwater management systems have been designed to provide attenuation of the discharge rates for the FDOT open basin design storms and the Mean Annual, 24-hour storm. In addition, the stormwater management system provides the required water quality treatment volume.

Pre-development calculations were completed to determine the runoff rates for the existing conditions. Calculations for Pre-1, WS-1, WS-2, and WS-3 were completed to demonstrate that the required water quality treatment volume and discharge rate attenuation were met.

Appendix A contains details and calculations as well as a section for routing results, recovery analysis, hydraulic calculations, and general drainage calculations.

*Analysis Methodology*

The drainage analysis was conducted using the computer program ICPR (v4.07.02) to generate runoff hydrographs and route the runoff hydrographs through the proposed stormwater system. The required storm events were analyzed using SJRWMD and FDOT rainfall amounts for the pre-development and post-development watersheds.

*Unit Hydrograph Parameters*

Unit hydrograph parameters required for the drainage analysis include run-off curve number (CN), time of concentration (Tc), and drainage area. Values used in the analysis are summarized as follows:

Pre-Development Watershed #1 (Pre-1):

| | Area (sf) | Area (ac) | Percent |
|---|---|---|---|
| Total Area: | 52,615 | 1.21 | 100% |
| Existing Pavement | 31,024 | 0.71 | 59% |
| Existing Building | 1,795 | 0.04 | 3% |
| Open Space (Fair Condition, Type D Soil) | 19,796 | 0.45 | 38% |
| **CN =** | **93** | | |
| Tc = | 10 | min* | |

Post-Development Watershed #1 (WS-1):

| | Area (sf) | Area (ac) | Percent |
|---|---|---|---|
| Total Area: | 10,810 | 0.25 | 100% |
| Proposed Building | 0 | 0.00 | 0.0% |
| Proposed Pavement | 10,030 | 0.23 | 92.8% |
| Proposed Sidewalk | 652 | 0.01 | 6.0% |
| Open Space (Fair Condition, Type D Soil) | 128 | 0.00 | 1.2% |
| | | 0.00 | 0.0% |
| CN = | 97 | | |
| Tc = | 10 | min* | |

Post-Development Watershed #2 (WS-2):

| | Area (sf) | Area (ac) | Percent |
|---|---|---|---|
| Total Area: | 10,810 | 0.25 | 100% |
| Proposed Building | 0 | 0.00 | 0.0% |
| Proposed Pavement | 10,030 | 0.23 | 92.8% |
| Proposed Sidewalk | 652 | 0.01 | 6.0% |
| Open Space (Fair Condition, Type D Soil) | 128 | 0.00 | 1.2% |
| | | 0.00 | 0.0% |
| CN = | 97 | | |
| Tc = | 10 | min* | |

Post-Development Watershed #3 (WS-3):

| | Area (sf) | Area (ac) | Percent |
|---|---|---|---|
| Total Area: | 24,344 | 0.56 | 100% |
| Proposed Building | 12,007 | 0.28 | 49.3% |
| Proposed Pavement | 11,103 | 0.25 | 45.6% |
| Proposed Sidewalk | 924 | 0.02 | 3.8% |
| Open Space (Fair Condition, Type A Soil) | 309 | 0.01 | 1.3% |
| | | 0.00 | 0.0% |

| | | |
|---|---|---|
| CN = | 97 | |
| Tc = | 10 | min* |

*Time of Concentration is assumed to be 10 minutes based on the FDOT minimum time of concentration.

*Pond Storage*

Stage-storage values for the proposed stormwater management facilities are provided in Appendix A.

*Water Quality Treatment Volume (WQTV)*

Per SJRWMD, the required water quality treatment volume (WQTV) required for a dry retention system is 0.5 inch of runoff over the drainage area or 1.25 inches over the impervious area plus another 0.5 inch of runoff over the drainage area for online systems. The SJRWMD also requires that the WQTV is drawn down in 72 hours. The WQTV per watershed is shown in Table 1, with recovery times for each SMF shown in Table 2. WQTV calculations are shown in Appendix A.

Table 1: Post Development Watershed Water Quality Treatment

| Watershed | Required WQTV (cf) | Provided WQTV (cf) | Remaining WQTV (cf)* |
|---|---|---|---|
| WS-1 | 1,563 | 2,646 | -1,083 |
| WS-2 | 3,518 | 3,518 | 0 |
| WS-3 | 2,601 | 1,713 | 950.57 |

*As the SMFs in WS-3 cannot provide the necessary WQTV for WS-3, overcompensation was provided in WS-1.

Table 2: Post Development Watershed Water Quality Treatment Recovery

| Stormwater Management Facility | Peak Elevation at WQTV (ft) | Time to Recovery (hours) |
|---|---|---|
| SMF-1A | 13.70 | 65 |
| SMF-1B | 14.00 | 11 |
| SMF-2A | 12.77 | 12 |
| SMF-2B | 12.77 | 48 |
| SMF-2C | 12.77 | 18 |
| SMF-3A | 13.00 | 19 |
| SMF-3B | 12.60 | 58 |

*Run-off and Facility Routing Results*

The routing results are summarized in the tables below which includes peak stage elevations and discharge rates for the analyzed storm events. In all cases, total post-development discharge rates did not exceed the pre-development conditions, and the peak stage elevations never exceeded the top of the facility. Detailed results can be found in Appendix A.

Table 3: Pre-1 vs. DS-2 Peak Discharge

| Storm Event | Discharge Rates (cfs) | | |
|---|---|---|---|
| | Pre | Post | Change |
| 3 year, 1 hour | 5.28 | 0 | -5.28 |
| 3 year, 2 hour | 3.96 | 0 | -3.96 |
| 3 year, 4 hour | 2.07 | 0.35 | -1.72 |
| 3 year, 8 hour | 2.10 | 0.4 | -1.7 |
| 3 year, 24 hour | 0.68 | 0.24 | -0.44 |
| 3 year, 72 hour | 0.45 | 0.26 | -0.19 |
| 5 year, 1 hour | 5.79 | 0 | -5.79 |
| 5 year, 2 hour | 4.41 | 0.3 | -4.11 |
| 5 year, 4 hour | 2.40 | 0.78 | -1.62 |
| 5 year, 8 hour | 2.36 | 0.53 | -1.83 |
| 5 year, 24 hour | 0.77 | 0.27 | -0.5 |
| 5 year, 72 hour | 0.48 | 0.33 | -0.15 |
| 10 year, 1 hour | 6.56 | 0.39 | -6.17 |
| 10 year, 2 hour | 5.02 | 0.56 | -4.46 |
| 10 year, 4 hour | 2.73 | 1.28 | -1.45 |
| 10 year, 8 hour | 2.78 | 1.41 | -1.37 |
| 10 year, 24 hour | 0.90 | 0.47 | -0.43 |
| 10 year, 72 hour | 0.53 | 0.39 | -0.14 |
| 25 year, 1 hour | 7.83 | 1.48 | -6.35 |
| 25 year, 2 hour | 5.77 | 1.23 | -4.54 |
| 25 year, 4 hour | 3.13 | 1.85 | -1.28 |
| 25 year, 8 hour | 3.10 | 2.17 | -0.93 |
| 25 year, 24 hour | 1.02 | 0.7 | -0.32 |
| 25 year, 72 hour | 0.66 | 0.63 | -0.03 |
| 50 year, 1 hour | 8.85 | 2.37 | -6.48 |
| 50 year, 2 hour | 6.67 | 2.11 | -4.56 |
| 50 year, 4 hour | 3.52 | 2.14 | -1.38 |
| 50 year, 8 hour | 3.52 | 2.57 | -0.95 |
| 50 year, 24 hour | 1.15 | 0.78 | -0.37 |
| 50 year, 72 hour | 0.72 | 0.69 | -0.03 |
| 100 year, 1 hour | 9.86 | 3.54 | -6.32 |
| 100 year, 2 hour | 7.41 | 3.08 | -4.33 |
| 100 year, 4 hour | 3.98 | 2.39 | -1.59 |
| 100 year, 8 hour | 3.78 | 3.22 | -0.56 |
| 100 year, 24 hour | 1.34 | 0.97 | -0.37 |
| 100 year, 72 hour | 0.83 | 0.8 | -0.03 |
| SJRWMD Mean Annual, 24 hour | 3.92 | 0.31 | -3.61 |

Table 5: SMF-1A Max Stage and Recovery Analysis

| Storm Event | Max Stage (ft) | Freeboard (ft) | Time to Recovery (days after storm) |
|---|---|---|---|
| 3 year, 1 hour | 13.41 | 1.04 | <1 |
| 3 year, 2 hour | 13.40 | 1.05 | <1 |
| 3 year, 4 hour | 13.57 | 0.88 | <3 |
| 3 year, 8 hour | 13.65 | 0.80 | <4 |
| 3 year, 24 hour | 13.74 | 0.71 | <9 |
| 3 year, 72 hour | 13.75 | 0.70 | <8 |
| 5 year, 1 hour | 13.46 | 0.99 | <1 |
| 5 year, 2 hour | 13.49 | 0.96 | <2 |
| 5 year, 4 hour | 13.72 | 0.73 | <3 |
| 5 year, 8 hour | 13.73 | 0.72 | <5 |
| 5 year, 24 hour | 13.75 | 0.70 | <11 |
| 5 year, 72 hour | 13.76 | 0.69 | <14 |
| 10 year, 1 hour | 13.56 | 0.89 | <2 |
| 10 year, 2 hour | 13.60 | 0.85 | <3 |
| 10 year, 4 hour | 13.79 | 0.66 | <5 |
| 10 year, 8 hour | 13.80 | 0.65 | <7 |
| 10 year, 24 hour | 13.77 | 0.68 | <12 |
| 10 year, 72 hour | 13.77 | 0.68 | <17 |
| 25 year, 1 hour | 13.73 | 0.72 | <3 |
| 25 year, 2 hour | 13.75 | 0.70 | <5 |
| 25 year, 4 hour | 13.84 | 0.61 | <7 |
| 25 year, 8 hour | 13.84 | 0.61 | <9 |
| 25 year, 24 hour | 13.78 | 0.67 | <13 |
| 25 year, 72 hour | 13.79 | 0.66 | <21 |
| 50 year, 1 hour | 13.83 | 0.62 | <4 |
| 50 year, 2 hour | 13.82 | 0.63 | <7 |
| 50 year, 4 hour | 13.88 | 0.57 | <8 |
| 50 year, 8 hour | 13.91 | 0.54 | <9 |
| 50 year, 24 hour | 13.81 | 0.64 | <13 |
| 50 year, 72 hour | 13.79 | 0.66 | <21 |
| 100 year, 1 hour | 13.91 | 0.54 | <6 |
| 100 year, 2 hour | 13.88 | 0.57 | <7 |
| 100 year, 4 hour | 13.92 | 0.53 | <8 |
| 100 year, 8 hour | 13.94 | 0.51 | <10 |
| 100 year, 24 hour | 13.84 | 0.61 | <13 |
| 100 year, 72 hour | 13.80 | 0.65 | <23 |
| SJRWMD Mean Annual, 24 hour | 13.57 | 0.88 | <3 |

Table 6: SMF-1B Max Stage and Recovery Analysis

| Storm Event | Max Stage (ft) | Freeboard (ft) | Time to Recovery (days after storm) |
|---|---|---|---|
| 3 year, 1 hour | 13.38 | 1.62 | <3 |
| 3 year, 2 hour | 13.39 | 1.61 | <3 |
| 3 year, 4 hour | 13.56 | 1.44 | <4 |
| 3 year, 8 hour | 13.65 | 1.35 | <5 |
| 3 year, 24 hour | 13.73 | 1.27 | <7 |
| 3 year, 72 hour | 13.75 | 1.25 | <14 |
| 5 year, 1 hour | 13.45 | 1.55 | <3 |
| 5 year, 2 hour | 13.49 | 1.51 | <3 |
| 5 year, 4 hour | 13.72 | 1.28 | <4 |
| 5 year, 8 hour | 13.73 | 1.27 | <5 |
| 5 year, 24 hour | 13.75 | 1.25 | <8 |
| 5 year, 72 hour | 13.76 | 1.24 | <14 |
| 10 year, 1 hour | 13.56 | 1.44 | <3 |
| 10 year, 2 hour | 13.60 | 1.40 | <3 |
| 10 year, 4 hour | 13.79 | 1.21 | <4 |
| 10 year, 8 hour | 13.80 | 1.20 | <5 |
| 10 year, 24 hour | 13.77 | 1.23 | <8 |
| 10 year, 72 hour | 13.77 | 1.23 | <15 |
| 25 year, 1 hour | 13.73 | 1.27 | <3 |
| 25 year, 2 hour | 13.75 | 1.25 | <3 |
| 25 year, 4 hour | 13.84 | 1.16 | <4 |
| 25 year, 8 hour | 13.84 | 1.16 | <5 |
| 25 year, 24 hour | 13.78 | 1.22 | <8 |
| 25 year, 72 hour | 13.79 | 1.21 | <15 |
| 50 year, 1 hour | 13.83 | 1.17 | <3 |
| 50 year, 2 hour | 13.81 | 1.19 | <3 |
| 50 year, 4 hour | 13.88 | 1.12 | <4 |
| 50 year, 8 hour | 13.91 | 1.09 | <5 |
| 50 year, 24 hour | 13.81 | 1.19 | <8 |
| 50 year, 72 hour | 13.79 | 1.21 | <15 |
| 100 year, 1 hour | 13.91 | 1.09 | <3 |
| 100 year, 2 hour | 13.88 | 1.12 | <3 |
| 100 year, 4 hour | 13.92 | 1.08 | <4 |
| 100 year, 8 hour | 13.94 | 1.06 | <5 |
| 100 year, 24 hour | 13.83 | 1.17 | <8 |
| 100 year, 72 hour | 13.80 | 1.20 | <15 |
| SJRWMD Mean Annual, 24 hour | 13.57 | 1.43 | <7 |

Table 7: SMF-2A Max Stage and Recovery Analysis

| Storm Event | Max Stage (ft) | Freeboard (ft) | Time to Recovery (days after storm) |
|---|---|---|---|
| 3 year, 1 hour | 13.22 | 0.88 | <4 |
| 3 year, 2 hour | 13.17 | 0.93 | <5 |
| 3 year, 4 hour | 13.19 | 0.91 | <6 |
| 3 year, 8 hour | 13.22 | 0.88 | <7 |
| 3 year, 24 hour | 13.15 | 0.95 | <10 |
| 3 year, 72 hour | 13.15 | 0.95 | <16 |
| 5 year, 1 hour | 13.28 | 0.82 | <4 |
| 5 year, 2 hour | 13.26 | 0.84 | <6 |
| 5 year, 4 hour | 13.26 | 0.84 | <7 |
| 5 year, 8 hour | 13.25 | 0.85 | <8 |
| 5 year, 24 hour | 13.16 | 0.94 | <10 |
| 5 year, 72 hour | 13.17 | 0.93 | <17 |
| 10 year, 1 hour | 13.36 | 0.74 | <5 |
| 10 year, 2 hour | 13.32 | 0.78 | <6 |
| 10 year, 4 hour | 13.33 | 0.77 | <7 |
| 10 year, 8 hour | 13.33 | 0.77 | <8 |
| 10 year, 24 hour | 13.20 | 0.90 | <11 |
| 10 year, 72 hour | 13.19 | 0.91 | <17 |
| 25 year, 1 hour | 13.45 | 0.65 | <6 |
| 25 year, 2 hour | 13.40 | 0.70 | <6 |
| 25 year, 4 hour | 13.41 | 0.69 | <7 |
| 25 year, 8 hour | 13.44 | 0.66 | <8 |
| 25 year, 24 hour | 13.25 | 0.85 | <11 |
| 25 year, 72 hour | 13.25 | 0.85 | <18 |
| 50 year, 1 hour | 13.50 | 0.60 | <6 |
| 50 year, 2 hour | 13.47 | 0.63 | <6 |
| 50 year, 4 hour | 13.44 | 0.66 | <7 |
| 50 year, 8 hour | 13.49 | 0.61 | <8 |
| 50 year, 24 hour | 13.26 | 0.84 | <11 |
| 50 year, 72 hour | 13.26 | 0.84 | <18 |
| 100 year, 1 hour | 13.57 | 0.53 | <6 |
| 100 year, 2 hour | 13.52 | 0.58 | <6 |
| 100 year, 4 hour | 13.47 | 0.63 | <7 |
| 100 year, 8 hour | 13.57 | 0.53 | <8 |
| 100 year, 24 hour | 13.31 | 0.79 | <11 |
| 100 year, 72 hour | 13.29 | 0.81 | <18 |
| SJRWMD Mean Annual, 24 hour | 13.30 | 0.80 | <9 |

Table 8: SMF-2B Max Stage and Recovery Analysis

| Storm Event | Max Stage (ft) | Freeboard (ft) | Time to Recovery (days after storm) |
|---|---|---|---|
| 3 year, 1 hour | 12.43 | 0.97 | <2 |
| 3 year, 2 hour | 12.63 | 0.77 | <3 |
| 3 year, 4 hour | 12.87 | 0.53 | <4 |
| 3 year, 8 hour | 12.88 | 0.52 | <6 |
| 3 year, 24 hour | 12.85 | 0.55 | <8 |
| 3 year, 72 hour | 12.85 | 0.55 | <11 |
| 5 year, 1 hour | 12.65 | 0.75 | <3 |
| 5 year, 2 hour | 12.86 | 0.54 | <4 |
| 5 year, 4 hour | 12.94 | 0.46 | <5 |
| 5 year, 8 hour | 12.90 | 0.50 | <6 |
| 5 year, 24 hour | 12.85 | 0.55 | <8 |
| 5 year, 72 hour | 12.87 | 0.53 | <12 |
| 10 year, 1 hour | 12.88 | 0.52 | <4 |
| 10 year, 2 hour | 12.91 | 0.49 | <4 |
| 10 year, 4 hour | 13.01 | 0.39 | <5 |
| 10 year, 8 hour | 13.02 | 0.38 | <6 |
| 10 year, 24 hour | 12.89 | 0.51 | <9 |
| 10 year, 72 hour | 12.88 | 0.52 | <14 |
| 25 year, 1 hour | 13.03 | 0.37 | <4 |
| 25 year, 2 hour | 13.00 | 0.40 | <5 |
| 25 year, 4 hour | 13.07 | 0.33 | <5 |
| 25 year, 8 hour | 13.10 | 0.30 | <5 |
| 25 year, 24 hour | 12.93 | 0.47 | <9 |
| 25 year, 72 hour | 12.92 | 0.48 | <15 |
| 50 year, 1 hour | 13.13 | 0.27 | <4 |
| 50 year, 2 hour | 13.10 | 0.30 | <5 |
| 50 year, 4 hour | 13.10 | 0.30 | <5 |
| 50 year, 8 hour | 13.15 | 0.25 | <6 |
| 50 year, 24 hour | 12.94 | 0.46 | <9 |
| 50 year, 72 hour | 12.93 | 0.47 | <16 |
| 100 year, 1 hour | 13.23 | 0.17 | <4 |
| 100 year, 2 hour | 13.19 | 0.21 | <5 |
| 100 year, 4 hour | 13.13 | 0.27 | <5 |
| 100 year, 8 hour | 13.21 | 0.19 | <6 |
| 100 year, 24 hour | 12.97 | 0.43 | <9 |
| 100 year, 72 hour | 12.94 | 0.46 | <17 |
| SJRWMD Mean Annual, 24 hour | 12.86 | 0.54 | <8 |

Table 9: SMF-2C Max Stage and Recovery Analysis

| Storm Event | Max Stage (ft) | Freeboard (ft) | Time to Recovery (days after storm) |
|---|---|---|---|
| 3 year, 1 hour | 12.68 | 1.17 | <2 |
| 3 year, 2 hour | 13.01 | 0.84 | <4 |
| 3 year, 4 hour | 13.17 | 0.68 | <6 |
| 3 year, 8 hour | 13.18 | 0.67 | <7 |
| 3 year, 24 hour | 13.14 | 0.71 | <10 |
| 3 year, 72 hour | 13.15 | 0.70 | <14 |
| 5 year, 1 hour | 12.98 | 0.87 | <4 |
| 5 year, 2 hour | 13.15 | 0.70 | <5 |
| 5 year, 4 hour | 13.26 | 0.59 | <6 |
| 5 year, 8 hour | 13.21 | 0.64 | <7 |
| 5 year, 24 hour | 13.15 | 0.70 | <10 |
| 5 year, 72 hour | 13.17 | 0.68 | <15 |
| 10 year, 1 hour | 13.18 | 0.67 | <5 |
| 10 year, 2 hour | 13.21 | 0.64 | <6 |
| 10 year, 4 hour | 13.32 | 0.53 | <6 |
| 10 year, 8 hour | 13.33 | 0.52 | <7 |
| 10 year, 24 hour | 13.20 | 0.65 | <10 |
| 10 year, 72 hour | 13.18 | 0.67 | <17 |
| 25 year, 1 hour | 13.35 | 0.50 | <5 |
| 25 year, 2 hour | 13.32 | 0.53 | <6 |
| 25 year, 4 hour | 13.40 | 0.45 | <6 |
| 25 year, 8 hour | 13.43 | 0.42 | <8 |
| 25 year, 24 hour | 13.25 | 0.60 | <11 |
| 25 year, 72 hour | 13.25 | 0.60 | <18 |
| 50 year, 1 hour | 13.44 | 0.41 | <5 |
| 50 year, 2 hour | 13.41 | 0.44 | <6 |
| 50 year, 4 hour | 13.43 | 0.42 | <7 |
| 50 year, 8 hour | 13.48 | 0.37 | <8 |
| 50 year, 24 hour | 13.26 | 0.59 | <11 |
| 50 year, 72 hour | 13.26 | 0.59 | <19 |
| 100 year, 1 hour | 13.54 | 0.31 | <5 |
| 100 year, 2 hour | 13.51 | 0.34 | <6 |
| 100 year, 4 hour | 13.46 | 0.39 | <7 |
| 100 year, 8 hour | 13.57 | 0.28 | <8 |
| 100 year, 24 hour | 13.30 | 0.55 | <11 |
| 100 year, 72 hour | 13.28 | 0.57 | <20 |
| SJRWMD Mean Annual, 24 hour | 13.17 | 0.68 | <9 |

Table 10: SMF-3A Max Stage and Recovery Analysis

| Storm Event | Max Stage (ft) | Freeboard (ft) | Time to Recovery (days after storm) |
|---|---|---|---|
| 3 year, 1 hour | 13.76 | 0.14 | <4 |
| 3 year, 2 hour | 13.68 | 0.22 | <5 |
| 3 year, 4 hour | 13.54 | 0.36 | <6 |
| 3 year, 8 hour | 13.54 | 0.36 | <7 |
| 3 year, 24 hour | 13.39 | 0.51 | <10 |
| 3 year, 72 hour | 13.34 | 0.56 | <19 |
| 5 year, 1 hour | 13.79 | 0.11 | <4 |
| 5 year, 2 hour | 13.71 | 0.19 | <5 |
| 5 year, 4 hour | 13.56 | 0.34 | <6 |
| 5 year, 8 hour | 13.55 | 0.35 | <7 |
| 5 year, 24 hour | 13.39 | 0.51 | <10 |
| 5 year, 72 hour | 13.35 | 0.55 | <18 |
| 10 year, 1 hour | 13.83 | 0.07 | <4 |
| 10 year, 2 hour | 13.74 | 0.16 | <5 |
| 10 year, 4 hour | 13.59 | 0.31 | <6 |
| 10 year, 8 hour | 13.58 | 0.32 | <7 |
| 10 year, 24 hour | 13.41 | 0.49 | <10 |
| 10 year, 72 hour | 13.37 | 0.53 | <18 |
| 25 year, 1 hour | 13.88 | 0.02 | <4 |
| 25 year, 2 hour | 13.78 | 0.12 | <5 |
| 25 year, 4 hour | 13.63 | 0.27 | <6 |
| 25 year, 8 hour | 13.62 | 0.28 | <7 |
| 25 year, 24 hour | 13.43 | 0.47 | <11 |
| 25 year, 72 hour | 13.39 | 0.51 | <20 |
| 50 year, 1 hour | 13.91 | -0.01 | <4 |
| 50 year, 2 hour | 13.81 | 0.09 | <5 |
| 50 year, 4 hour | 13.65 | 0.25 | <6 |
| 50 year, 8 hour | 13.64 | 0.26 | <7 |
| 50 year, 24 hour | 13.44 | 0.46 | <11 |
| 50 year, 72 hour | 13.39 | 0.51 | <20 |
| 100 year, 1 hour | 13.95 | -0.05 | <4 |
| 100 year, 2 hour | 13.85 | 0.05 | <5 |
| 100 year, 4 hour | 13.67 | 0.23 | <6 |
| 100 year, 8 hour | 13.67 | 0.23 | <7 |
| 100 year, 24 hour | 13.46 | 0.44 | <11 |
| 100 year, 72 hour | 13.41 | 0.49 | <20 |
| SJRWMD Mean Annual, 24 hour | 13.67 | 0.23 | <9 |

Table 10: SMF-3B Max Stage and Recovery Analysis

| Storm Event | Max Stage (ft) | Freeboard (ft) | Time to Recovery (days after storm) |
|---|---|---|---|
| 3 year, 1 hour | 12.70 | 0.55 | <3 |
| 3 year, 2 hour | 12.64 | 0.61 | <5 |
| 3 year, 4 hour | 12.88 | 0.37 | <6 |
| 3 year, 8 hour | 12.89 | 0.36 | <8 |
| 3 year, 24 hour | 12.85 | 0.40 | <11 |
| 3 year, 72 hour | 12.86 | 0.39 | <17 |
| 5 year, 1 hour | 12.77 | 0.48 | <3 |
| 5 year, 2 hour | 12.87 | 0.38 | <5 |
| 5 year, 4 hour | 12.95 | 0.30 | <6 |
| 5 year, 8 hour | 12.91 | 0.34 | <8 |
| 5 year, 24 hour | 12.86 | 0.39 | <11 |
| 5 year, 72 hour | 12.87 | 0.38 | <19 |
| 10 year, 1 hour | 12.89 | 0.36 | <5 |
| 10 year, 2 hour | 12.92 | 0.33 | <6 |
| 10 year, 4 hour | 13.03 | 0.22 | <7 |
| 10 year, 8 hour | 13.04 | 0.21 | <8 |
| 10 year, 24 hour | 12.90 | 0.35 | <12 |
| 10 year, 72 hour | 12.88 | 0.37 | <21 |
| 25 year, 1 hour | 13.05 | 0.20 | <5 |
| 25 year, 2 hour | 13.02 | 0.23 | <6 |
| 25 year, 4 hour | 13.10 | 0.15 | <7 |
| 25 year, 8 hour | 13.14 | 0.11 | <8 |
| 25 year, 24 hour | 12.94 | 0.31 | <12 |
| 25 year, 72 hour | 12.92 | 0.33 | <23 |
| 50 year, 1 hour | 13.17 | 0.08 | <6 |
| 50 year, 2 hour | 13.14 | 0.11 | <6 |
| 50 year, 4 hour | 13.13 | 0.12 | <7 |
| 50 year, 8 hour | 13.19 | 0.06 | <8 |
| 50 year, 24 hour | 12.95 | 0.30 | <13 |
| 50 year, 72 hour | 12.93 | 0.32 | <24 |
| 100 year, 1 hour | 13.30 | -0.05 | <6 |
| 100 year, 2 hour | 13.26 | -0.01 | <7 |
| 100 year, 4 hour | 13.16 | 0.09 | <7 |
| 100 year, 8 hour | 13.25 | 0.00 | <9 |
| 100 year, 24 hour | 12.98 | 0.27 | <13 |
| 100 year, 72 hour | 12.95 | 0.30 | <24 |
| SJRWMD Mean Annual, 24 hour | 12.87 | 0.38 | <10 |

## Summary and Conclusions

The proposed drainage system meets GCS, FDOT, and SJRWMD criteria for a dry retention system design in an open watershed. The criteria are as follows:

1. Provide Peak Discharge Rate Attenuation: The SMF attenuates the post-development discharge rates to be less than the pre-development rates for the Mean Annual 24-hour storm events (SJRWMD) as well as the 36 critical storms for an open basin (FDOT).

2. Provide Water Quality Treatment Volume (WQTV): The SMFs have been sized to capture and treat the 1.25 inches of runoff from the impervious site area plus 0.5 inches of runoff from the total site. The water quality treatment volume recovers in less than 72 hours for all SMFs. (SJRWMD).

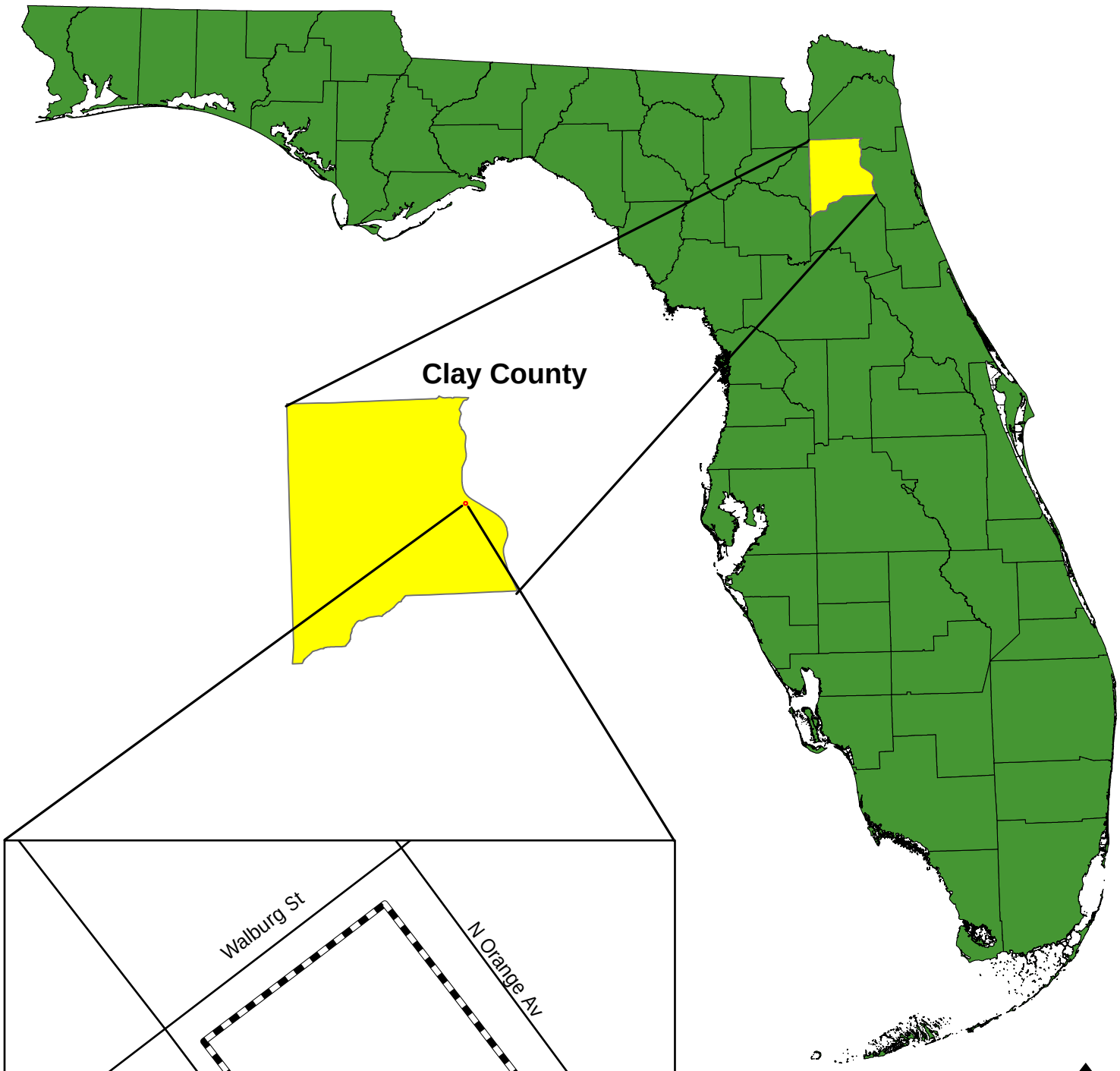
3. Provide Volume Recovery: The SMFs recover the FDOT storms within 30 days and the SJRWMD storms within 14 days.

Based on the information provided, the project is eligible for approval by the City of Green Cove Springs, FDOT, and SJRWMD.

# Figure 1

Project Location Map

# Project Location Map
# Clay County Eco




NORTH

CHW Professional Consultants
11801 Research Drive,
Alachua, Florida 32615
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www.chw-inc.com
est. 198

# Figure 2

USGS Quadrangle Map

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# Clay County Eco Quad Map

0 500 1,000
Feet

# Figure 3

Aerial Map

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# Clay County Eco Aerial Map

0 40 80
Feet



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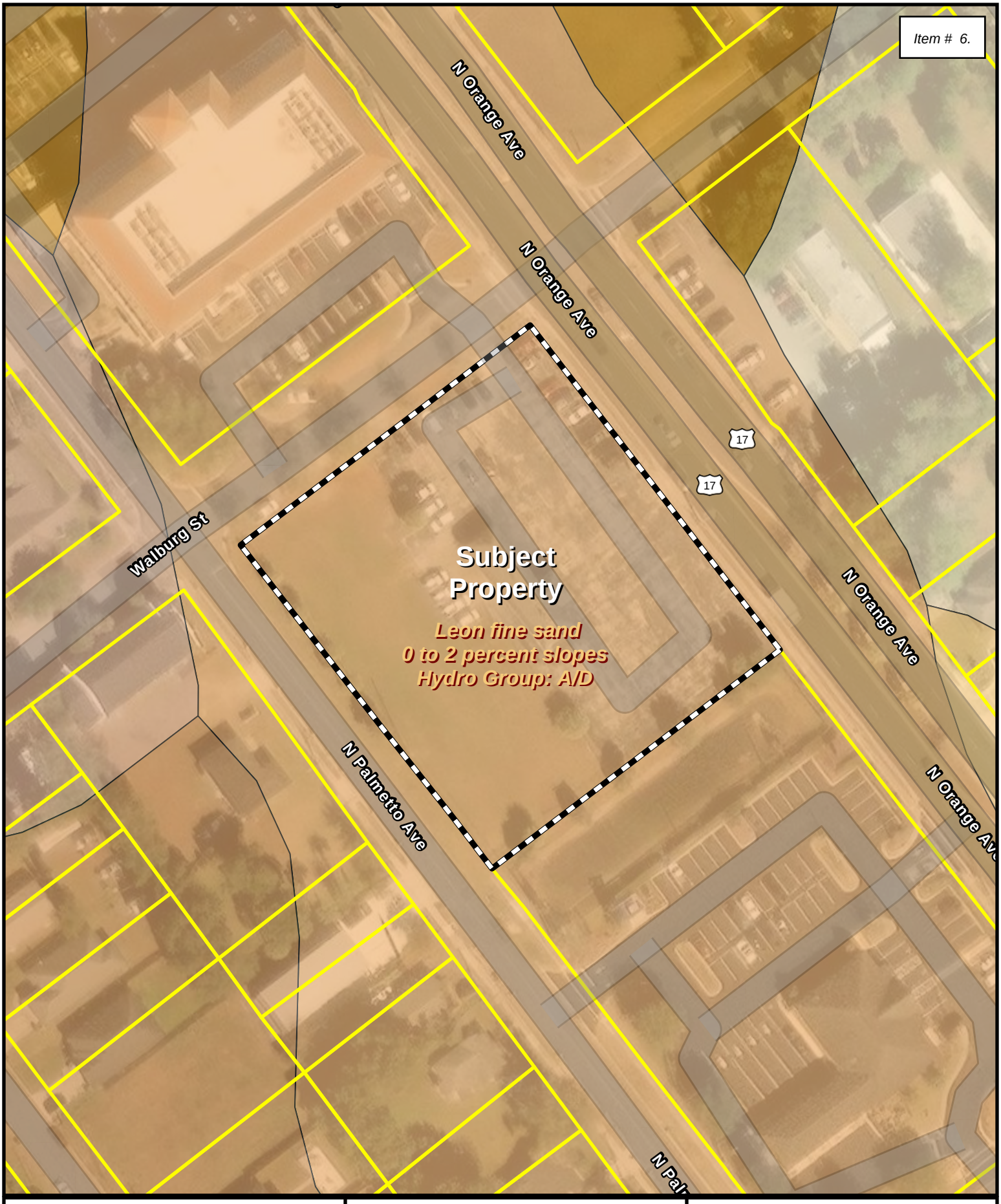
# Figure 4

NRCS Soils Map

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# Clay County Eco Soils Map

0 40 80
Feet



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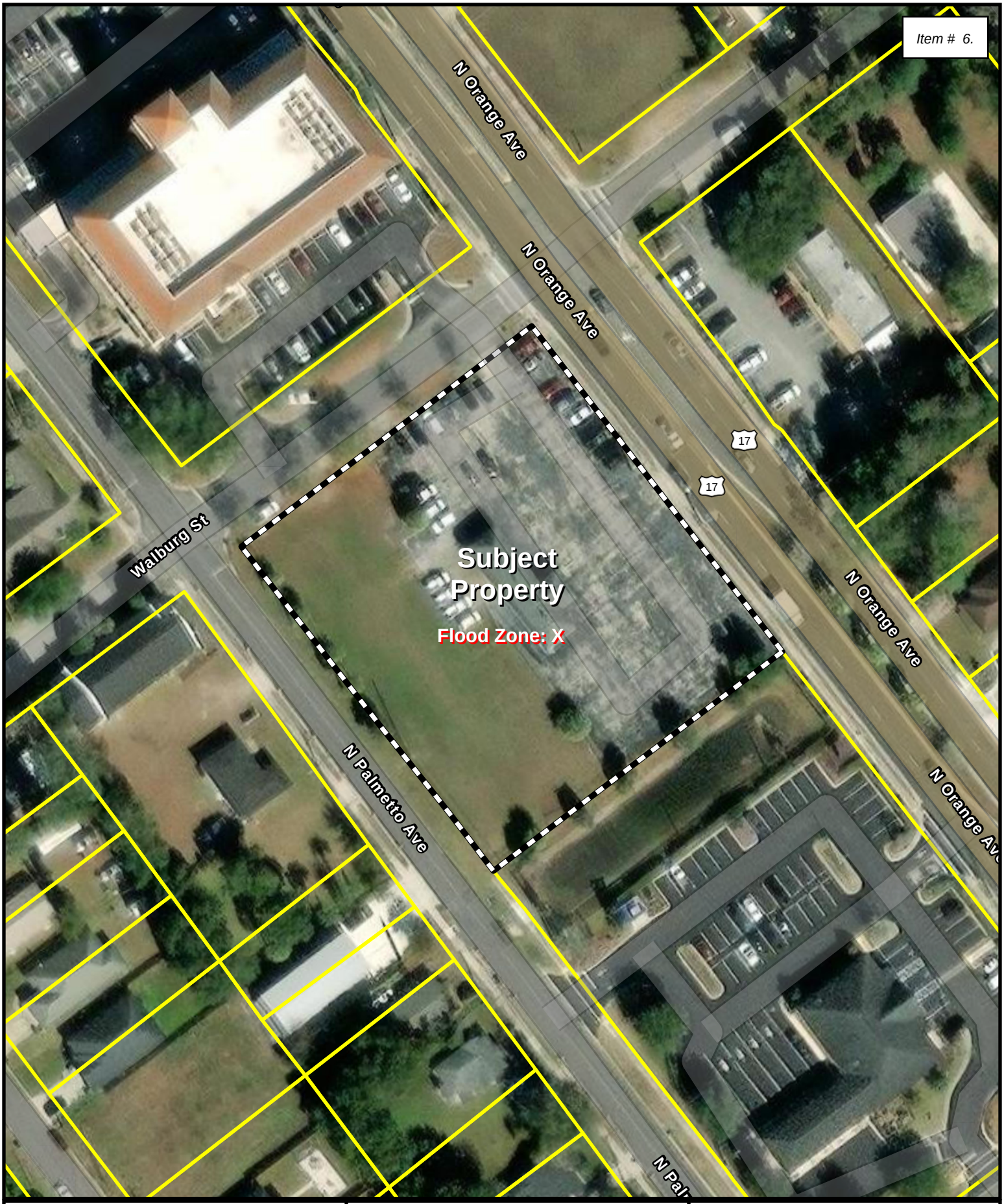
# Figure 5

FEMA Flood Map

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# Clay County Eco FEMA Map

0 40 80
Feet



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# Figure 6

Pre-Development Drainage Map

Item # 6.

# LEGEND

*PRE-DEVELOPMENT ONSITE WATERSHED:*

*EXISTING IMPERVIOUS AREA: 0.88 ac.*

*PRE-DEVELOPMENT DRAINAGE FLOW PATTERNS:*

*PRE-DEVELOPMENT DISCHARGE POINT:*

*NOTE: ALL SOILS ARE TYPE 'D' UNLESS OTHERWISE NOTED*

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SCALE: 1"=60'

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: CAUSSEAUX, HEWETT, & WALPOLE, INC. ENGINEERING - SURVEYING - PLANNING

PROJECT: CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING

SHEET TITLE: PRE-DEVELOPMENT DRAINAGE MAP

TECHNICIAN:

DESIGNER:

QUALITY CONTROL:

PROJECT NUMBER: 23-0204

# Figure 7

Post-Development Drainage Map

Item # 6.

# LEGEND

*POST-DEVELOPMENT WATERSHED #1:*

*POST-DEVELOPMENT WATERSHED #2:*

*POST-DEVELOPMENT WATERSHED #3:*

*PROPOSED ONSITE IMPERVIOUS AREA:*

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SCALE: 1"=40'

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

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SUBMITTALS:

CLIENT: CAUSSEAUX, HEWETT, & WALPOLE, INC. ENGINEERING - SURVEYING - PLANNING

PROJECT: CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING

SHEET TITLE: POST-DEVELOPMENT DRAINAGE MAP

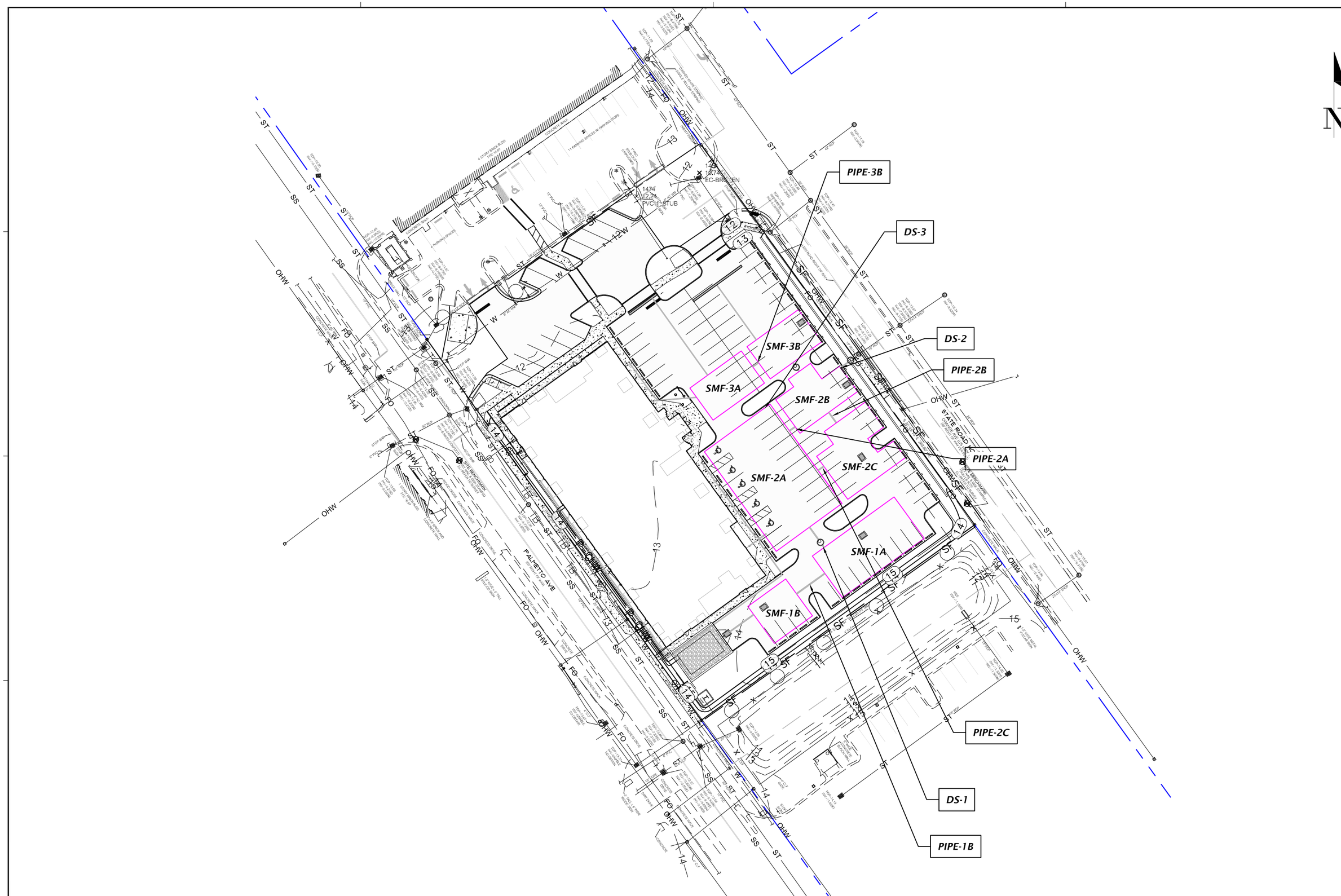
TECHNICIAN:

DESIGNER:

QUALITY CONTROL:

PROJECT NUMBER: 23-0204

Item # 6.

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SCALE: 1"=40'

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: CAUSSEAUX, HEWETT, & WALPOLE, INC. ENGINEERING - SURVEYING - PLANNING

PROJECT: CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING

SHEET TITLE: POST-DEVELOPMENT NODAL DIAGRAM

TECHNICIAN:

DESIGNER:

QUALITY CONTROL:

PROJECT NUMBER: 23-0204

# Appendix A

Drainage Calculations and
Computer Model Output

***Proposed:***

***Pre-1***

| Pre-Development Watershed | Area (sf) | Area (ac) | Percent | CN | Area*CN |
|---|---|---|---|---|---|
| **Total Area:** | 52,615 | 1.21 | 100% | | |
| **Existing Pavement** | 31,024 | 0.71 | 59% | 98 | 69.79637 |
| **Existing Building** | 1,795 | 0.04 | 3% | 98 | 4.038364 |
| **Open Space (Fair Condition, Type D Soil)** | 19,796 | 0.45 | 38% | 84 | 38.17467 |

**CN = 93**

***WS-1***

| Post-Development Watershed | Area (sf) | Area (ac) | Percent | CN | Area*CN |
|---|---|---|---|---|---|
| **Total Area:** | 10,810 | 0.25 | 100% | | |
| Proposed Building | 0 | 0.00 | 0.0% | 98 | 0.0 |
| Proposed Pavement | 10,030 | 0.23 | 92.8% | 98 | 22.6 |
| Proposed Sidewalk | 652 | 0.01 | 6.0% | 98 | 1.5 |
| Open Space (Fair Condition, Type A Soil) | 128 | 0.00 | 1.2% | 39 | 0.1 |
| | | 0.00 | 0.0% | | 0.0 |

**CN = 97**

Tc = 10 min*

***FDOT minimum TOC, used to be conservative**

## WQTV Calculations - Post-1

| | | |
|---|---|---|
| TOTAL DRAINAGE AREA | 10,810 | sf |
| TOTAL IMPERVIOUS AREA | 10,682 | sf |

**SJRWMD Requirement**

| | | |
|---|---|---|
| 0.5" x Drainage Area = | 450 | cf |
| OR | | |
| Runoff from first 1.25" of impervious rainfall | 1,113 | CF |
| PLUS | | |
| 0.5" x Drainage Area = | 450 | cf |

**Required WQTV = 1,563 cf**

***WS-2***

| Post-Development Watershed | Area (sf) | Area (ac) | Percent | CN | Area*CN |
|---|---|---|---|---|---|
| **Total Area:** | 24,344 | 0.56 | 100% | | |
| Proposed Building | 12,007 | 0.28 | 49.3% | 98 | 27.0 |
| Proposed Pavement | 11,103 | 0.25 | 45.6% | 98 | 25.0 |
| Proposed Sidewalk | 924 | 0.02 | 3.8% | 98 | 2.1 |
| Open Space (Fair Condition, Type A Soil) | 309 | 0.01 | 1.3% | 39 | 0.3 |
| | | 0.00 | 0.0% | | 0.0 |

**CN = 97**

Tc = 10 min*

***FDOT minimum TOC, used to be conservative**

## WQTV Calculations - Post-2

| | | |
|---|---|---|
| TOTAL DRAINAGE AREA | 24,344 | sf |
| TOTAL IMPERVIOUS AREA | 24,034 | sf |

**SJRWMD Requirement**

| | | |
|---|---|---|
| 0.5" x Drainage Area = | 1,014 | cf |
| OR | | |
| Runoff from first 1.25" of impervious rainfall | 2,504 | CF |
| PLUS | | |
| 0.5" x Drainage Area = | 1,014 | cf |

| | | |
|---|---|---|
| **Required WQTV =** | **3,518** | **cf** |

***WS-3***

| Post-Development Watershed | Area (sf) | Area (ac) | Percent | CN | Area*CN |
|---|---|---|---|---|---|
| **Total Area:** | 18,125 | 0.42 | 168% | | |
| Proposed Building | 6,338 | 0.15 | 58.6% | 98 | 14.3 |
| Proposed Pavement | 10,456 | 0.24 | 96.7% | 98 | 23.5 |
| Proposed Sidewalk | 922 | 0.02 | 8.5% | 98 | 2.1 |
| Open Space (Fair Condition, Type A Soil) | 409 | 0.01 | 3.8% | 39 | 0.4 |
| | | 0.00 | 0.0% | | 0.0 |

**CN = 97**

Tc = 10 min*

***FDOT minimum TOC, used to be conservative**

## WQTV Calculations - Post-3

| | | |
|---|---|---|
| TOTAL DRAINAGE AREA | 18,125 | sf |
| TOTAL IMPERVIOUS AREA | 17,716 | sf |

**SJRWMD Requirement**

| | | |
|---|---|---|
| 0.5" x Drainage Area = | 755 | cf |
| OR | | |
| Runoff from first 1.25" of impervious rainfall | 1,845 | CF |
| PLUS | | |
| 0.5" x Drainage Area = | 755 | cf |

| | | |
|---|---|---|
| **Required WQTV =** | **2,601** | **cf** |

## *STAGE-STORAGE CALCULATIONS:*

**Post-Development SMF-1A: Stage-Storage Relationship**

| ELEV. (FT.) | AREA (SF) | AREA (AC) | VOLUME (CF) | VOLUME (AC-FT) |
|---|---|---|---|---|
| 12.45 | 1141.27 | 0.0262 | 0 | 0.00000 |
| 12.53 | 1141.27 | 0.0262 | 95.11 | 0.00218 |
| 12.62 | 1141.27 | 0.0262 | 190.21 | 0.00437 |
| 12.70 | 1141.27 | 0.0262 | 285.32 | 0.00655 |
| 12.78 | 1141.27 | 0.0262 | 380.42 | 0.00873 |
| 12.87 | 1141.27 | 0.0262 | 475.53 | 0.01092 |
| 12.95 | 1141.27 | 0.0262 | 570.63 | 0.01310 |
| 13.03 | 2274.97 | 0.0522 | 760.22 | 0.01745 |
| 13.12 | 2231.51 | 0.0512 | 946.17 | 0.02172 |
| 13.20 | 2186.59 | 0.0502 | 1128.39 | 0.02590 |
| 13.28 | 2133.99 | 0.0490 | 1306.22 | 0.02999 |
| 13.37 | 2073.77 | 0.0476 | 1479.04 | 0.03395 |
| 13.45 | 2003.91 | 0.0460 | 1646.03 | 0.03779 |
| 13.53 | 1922.29 | 0.0441 | 1806.22 | 0.04147 |
| 13.62 | 1824.49 | 0.0419 | 1958.26 | 0.04496 |
| 13.70 | 1701.28 | 0.0391 | 2100.03 | 0.04821 |
| 13.78 | 1509.50 | 0.0347 | 2225.83 | 0.05110 |
| 13.87 | 1311.61 | 0.0301 | 2335.13 | 0.05361 |
| 13.95 | 1206.17 | 0.0277 | 2435.64 | 0.05591 |
| 14.03 | 1141.27 | 0.0262 | 2530.75 | 0.05810 |
| 14.12 | 1141.27 | 0.0262 | 2625.85 | 0.06028 |
| 14.20 | 1141.27 | 0.0262 | 2720.96 | 0.06246 |
| 14.28 | 1141.27 | 0.0262 | 2816.06 | 0.06465 |
| 14.37 | 1141.27 | 0.0262 | 2911.17 | 0.06683 |
| 14.45 | 1141.27 | 0.0262 | 3006.28 | 0.06901 |

| | | |
|---|---|---|
| **Required WQTV =** | **1563.14** | **cf** |
| | **0.04** | **ac-ft** |
| SMF-1A WQTV = | 2,100 | cf |
| SMF-1A WQTV El. = | 13.70 | ft |
| SMF-1B WQTV = | 546 | cf |
| SMF-1B WQTV El = | 14.00 | ft |
| Excess WQTV from Post-3 = | 950.57 | cf |
| Remaining WQTV = | -132.56 | cf |
| Depth= | 2.00 | ft |

## *STAGE-STORAGE CALCULATIONS:*

**Post-Development SMF-1B: Stage-Storage Relationship**

| ELEV. (FT.) | AREA (SF) | AREA (AC) | VOLUME (CF) | VOLUME (AC-FT) |
|---|---|---|---|---|
| 13.00 | 385.64 | 0.0089 | 0 | 0.00000 |
| 13.08 | 385.64 | 0.0089 | 32.14 | 0.00074 |
| 13.17 | 385.64 | 0.0089 | 64.27 | 0.00148 |
| 13.25 | 385.64 | 0.0089 | 96.41 | 0.00221 |
| 13.33 | 385.64 | 0.0089 | 128.55 | 0.00295 |
| 13.42 | 385.64 | 0.0089 | 160.68 | 0.00369 |
| 13.50 | 385.64 | 0.0089 | 192.82 | 0.00443 |
| 13.58 | 746.36 | 0.0171 | 255.01 | 0.00585 |
| 13.67 | 732.53 | 0.0168 | 316.06 | 0.00726 |
| 13.75 | 718.24 | 0.0165 | 375.91 | 0.00863 |
| 13.83 | 701.50 | 0.0161 | 434.37 | 0.00997 |
| 13.92 | 682.34 | 0.0157 | 491.23 | 0.01128 |
| 14.00 | 660.11 | 0.0152 | 546.24 | 0.01254 |
| 14.08 | 634.14 | 0.0146 | 599.09 | 0.01375 |
| 14.17 | 603.03 | 0.0138 | 649.34 | 0.01491 |
| 14.25 | 563.82 | 0.0129 | 696.32 | 0.01599 |
| 14.33 | 502.80 | 0.0115 | 738.22 | 0.01695 |
| 14.42 | 439.84 | 0.0101 | 774.88 | 0.01779 |
| 14.50 | 406.29 | 0.0093 | 808.73 | 0.01857 |
| 14.58 | 385.64 | 0.0089 | 840.87 | 0.01930 |
| 14.67 | 385.64 | 0.0089 | 873.01 | 0.02004 |
| 14.75 | 385.64 | 0.0089 | 905.14 | 0.02078 |
| 14.83 | 385.64 | 0.0089 | 937.28 | 0.02152 |
| 14.92 | 385.64 | 0.0089 | 969.42 | 0.02225 |
| 15.00 | 385.64 | 0.0089 | 1001.55 | 0.02299 |

| | | |
|---|---|---|
| **Required WQTV =** | **1563.14** | **cf** |
| | **0.04** | **ac-ft** |
| SMF-1A WQTV = | 2,100 | cf |
| SMF-1A WQTV El. = | 13.70 | ft |
| SMF-1B WQTV = | 546 | cf |
| SMF-1B WQTV El = | 14.00 | ft |
| Excess WQTV from Post-3 = | 950.57 | cf |
| Remaining WQTV = | -132.56 | cf |
| Depth= | 2.00 | ft |

## *STAGE-STORAGE CALCULATIONS:*

**Post-Development SMF-2A: Stage-Storage Relationship**

| ELEV. (FT.) | AREA (SF) | AREA (AC) | VOLUME (CF) | VOLUME (AC-FT) |
|---|---|---|---|---|
| 12.10 | 1784.60 | 0.0089 | 0 | 0.00000 |
| 12.18 | 1784.60 | 0.0089 | 148.72 | 0.00341 |
| 12.27 | 1784.60 | 0.0089 | 297.43 | 0.00683 |
| 12.35 | 1784.60 | 0.0089 | 446.15 | 0.01024 |
| 12.43 | 1784.60 | 0.0089 | 594.87 | 0.01366 |
| 12.52 | 1784.60 | 0.0089 | 743.59 | 0.01707 |
| 12.60 | 1784.60 | 0.0089 | 892.30 | 0.02048 |
| 12.68 | 3588.23 | 0.0171 | 1191.32 | 0.02735 |
| 12.77 | 3519.07 | 0.0168 | 1484.58 | 0.03408 |
| 12.85 | 3447.62 | 0.0165 | 1771.88 | 0.04068 |
| 12.93 | 3363.94 | 0.0161 | 2052.21 | 0.04711 |
| 13.02 | 3268.14 | 0.0157 | 2324.55 | 0.05336 |
| 13.10 | 3156.99 | 0.0152 | 2587.63 | 0.05940 |
| 13.18 | 3027.14 | 0.0146 | 2839.90 | 0.06520 |
| 13.27 | 2871.55 | 0.0138 | 3079.19 | 0.07069 |
| 13.35 | 2675.53 | 0.0129 | 3302.15 | 0.07581 |
| 13.43 | 2370.42 | 0.0115 | 3499.69 | 0.08034 |
| 13.52 | 2055.60 | 0.0101 | 3670.99 | 0.08427 |
| 13.60 | 1887.86 | 0.0093 | 3828.31 | 0.08789 |
| 13.68 | 1784.60 | 0.0089 | 3977.03 | 0.09130 |
| 13.77 | 1784.60 | 0.0089 | 4125.74 | 0.09471 |
| 13.85 | 1784.60 | 0.0089 | 4274.46 | 0.09813 |
| 13.93 | 1784.60 | 0.0089 | 4423.18 | 0.10154 |
| 14.02 | 1784.60 | 0.0089 | 4571.89 | 0.10496 |
| 14.10 | 1784.60 | 0.0089 | 4720.61 | 0.10837 |

| | | |
|---|---|---|
| **Required WQTV =** | **3517.90** | **cf** |
| **Additional WQTV =** | **-** | **cf** |
| **Total WQTV =** | **3,518** | **cf** |
| | 0.081 | ac-ft |
| **WQTV Elevation =** | **12.77** | **ft** |
| Depth= | 2.00 | ft |

## *STAGE-STORAGE CALCULATIONS:*

**Post-Development SMF-2B: Stage-Storage Relationship**

| ELEV. (FT.) | AREA (SF) | AREA (AC) | VOLUME (CF) | VOLUME (AC-FT) |
|---|---|---|---|---|
| 11.40 | 582.80 | 0.0386 | 0 | 0.00000 |
| 11.48 | 582.80 | 0.0386 | 48.57 | 0.00111 |
| 11.57 | 582.80 | 0.0386 | 97.13 | 0.00223 |
| 11.65 | 582.80 | 0.0386 | 145.70 | 0.00334 |
| 11.73 | 582.80 | 0.0386 | 194.27 | 0.00446 |
| 11.82 | 582.80 | 0.0386 | 242.84 | 0.00557 |
| 11.90 | 582.80 | 0.0386 | 291.40 | 0.00669 |
| 11.98 | 1085.24 | 0.0746 | 381.84 | 0.00877 |
| 12.07 | 1065.98 | 0.0739 | 470.67 | 0.01081 |
| 12.15 | 1046.07 | 0.0729 | 557.84 | 0.01281 |
| 12.23 | 1022.76 | 0.0719 | 643.07 | 0.01476 |
| 12.32 | 996.07 | 0.0706 | 726.08 | 0.01667 |
| 12.40 | 965.11 | 0.0691 | 806.51 | 0.01851 |
| 12.48 | 928.94 | 0.0676 | 883.92 | 0.02029 |
| 12.57 | 885.60 | 0.0661 | 957.72 | 0.02199 |
| 12.65 | 830.99 | 0.0641 | 1026.97 | 0.02358 |
| 12.73 | 746.00 | 0.0618 | 1089.13 | 0.02500 |
| 12.82 | 658.30 | 0.0593 | 1143.99 | 0.02626 |
| 12.90 | 611.57 | 0.0563 | 1194.95 | 0.02743 |
| 12.98 | 582.80 | 0.0523 | 1243.52 | 0.02855 |
| 13.07 | 582.80 | 0.0453 | 1292.09 | 0.02966 |
| 13.15 | 582.80 | 0.0425 | 1340.66 | 0.03078 |
| 13.23 | 582.80 | 0.0401 | 1389.22 | 0.03189 |
| 13.32 | 582.80 | 0.0386 | 1437.79 | 0.03301 |
| 13.40 | 582.80 | 0.0386 | 1486.36 | 0.03412 |

| | | |
|---|---|---|
| **Required WQTV =** | **3517.90** | **cf** |
| **Additional WQTV =** | **-** | **cf** |
| **Total WQTV =** | **3,518** | **cf** |
| | 0.081 | ac-ft |
| **WQTV Elevation =** | **12.77** | **ft** |
| Depth= | 2.00 | ft |

## *STAGE-STORAGE CALCULATIONS:*

**Post-Development SMF-2C: Stage-Storage Relationship**

| ELEV. (FT.) | AREA (SF) | AREA (AC) | VOLUME (CF) | VOLUME (AC-FT) |
|---|---|---|---|---|
| 11.85 | 902.36 | 0.0386 | 0 | 0.00000 |
| 11.93 | 902.36 | 0.0386 | 75.20 | 0.00173 |
| 12.02 | 902.36 | 0.0386 | 150.39 | 0.00345 |
| 12.10 | 902.36 | 0.0386 | 225.59 | 0.00518 |
| 12.18 | 902.36 | 0.0386 | 300.79 | 0.00691 |
| 12.27 | 902.36 | 0.0386 | 375.98 | 0.00863 |
| 12.35 | 902.36 | 0.0386 | 451.18 | 0.01036 |
| 12.43 | 1688.22 | 0.0746 | 591.87 | 0.01359 |
| 12.52 | 1658.09 | 0.0739 | 730.04 | 0.01676 |
| 12.60 | 1626.96 | 0.0729 | 865.62 | 0.01987 |
| 12.68 | 1590.50 | 0.0719 | 998.16 | 0.02291 |
| 12.77 | 1548.76 | 0.0706 | 1127.22 | 0.02588 |
| 12.85 | 1500.33 | 0.0691 | 1252.25 | 0.02875 |
| 12.93 | 1443.75 | 0.0676 | 1372.56 | 0.03151 |
| 13.02 | 1375.96 | 0.0661 | 1487.23 | 0.03414 |
| 13.10 | 1290.55 | 0.0641 | 1594.77 | 0.03661 |
| 13.18 | 1157.61 | 0.0618 | 1691.24 | 0.03883 |
| 13.27 | 1020.44 | 0.0593 | 1776.28 | 0.04078 |
| 13.35 | 947.35 | 0.0563 | 1855.22 | 0.04259 |
| 13.43 | 902.36 | 0.0523 | 1930.42 | 0.04432 |
| 13.52 | 902.36 | 0.0453 | 2005.62 | 0.04604 |
| 13.60 | 902.36 | 0.0425 | 2080.81 | 0.04777 |
| 13.68 | 902.36 | 0.0401 | 2156.01 | 0.04950 |
| 13.77 | 902.36 | 0.0386 | 2231.21 | 0.05122 |
| 13.85 | 902.36 | 0.0386 | 2306.40 | 0.05295 |

| | | |
|---|---|---|
| **Required WQTV =** | **3517.90** | **cf** |
| **Additional WQTV* =** | **-** | **cf** |
| **Total WQTV =** | **3,518** | **cf** |
| | 0.081 | ac-ft |
| **WQTV Elevation =** | **12.77** | **ft** |
| Depth= | 2.00 | ft |

## *STAGE-STORAGE CALCULATIONS:*

**Post-Development SMF-3A: Stage-Storage Relationship**

| ELEV. (FT.) | AREA (SF) | AREA (AC) | VOLUME (CF) | VOLUME (AC-FT) |
|---|---|---|---|---|
| 11.90 | 525.44 | 0.0386 | 0 | 0.00000 |
| 11.98 | 525.44 | 0.0386 | 43.79 | 0.00101 |
| 12.07 | 525.44 | 0.0386 | 87.57 | 0.00201 |
| 12.15 | 525.44 | 0.0386 | 131.36 | 0.00302 |
| 12.23 | 525.44 | 0.0386 | 175.15 | 0.00402 |
| 12.32 | 525.44 | 0.0386 | 218.93 | 0.00503 |
| 12.40 | 525.44 | 0.0386 | 262.72 | 0.00603 |
| 12.48 | 1027.88 | 0.0746 | 348.38 | 0.00800 |
| 12.57 | 1008.61 | 0.0739 | 432.43 | 0.00993 |
| 12.65 | 988.71 | 0.0729 | 514.82 | 0.01182 |
| 12.73 | 965.40 | 0.0719 | 595.27 | 0.01367 |
| 12.82 | 938.71 | 0.0706 | 673.50 | 0.01546 |
| 12.90 | 907.75 | 0.0691 | 749.14 | 0.01720 |
| 12.98 | 871.58 | 0.0676 | 821.77 | 0.01887 |
| 13.07 | 828.23 | 0.0661 | 890.79 | 0.02045 |
| 13.15 | 773.63 | 0.0641 | 955.26 | 0.02193 |
| 13.23 | 688.63 | 0.0618 | 1012.65 | 0.02325 |
| 13.32 | 600.93 | 0.0593 | 1062.72 | 0.02440 |
| 13.40 | 554.20 | 0.0563 | 1108.91 | 0.02546 |
| 13.48 | 525.44 | 0.0523 | 1152.69 | 0.02646 |
| 13.57 | 525.44 | 0.0453 | 1196.48 | 0.02747 |
| 13.65 | 525.44 | 0.0425 | 1240.27 | 0.02847 |
| 13.73 | 525.44 | 0.0401 | 1284.05 | 0.02948 |
| 13.82 | 525.44 | 0.0386 | 1327.84 | 0.03048 |
| 13.90 | 525.44 | 0.0386 | 1371.63 | 0.03149 |

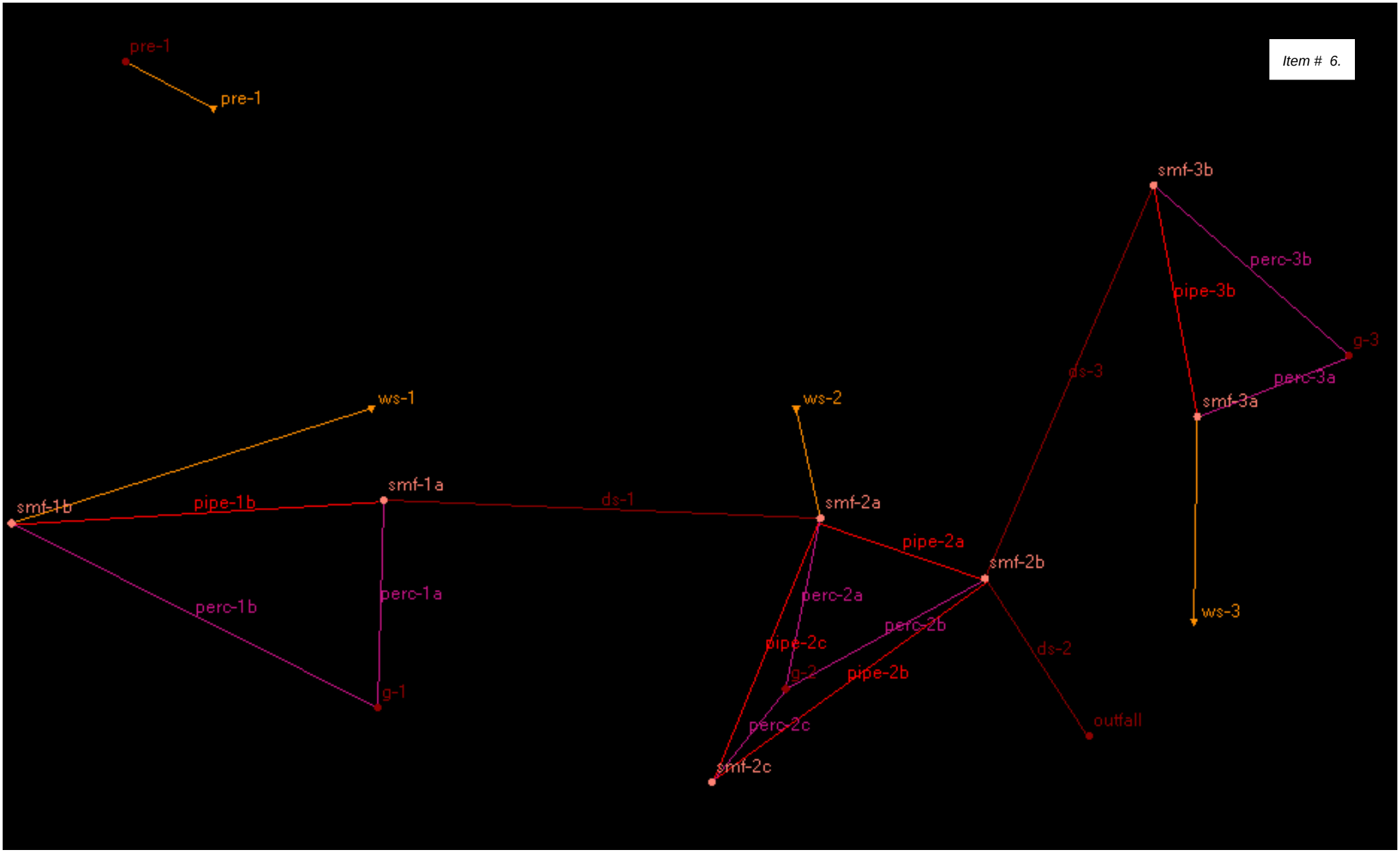
| | | |
|---|---|---|
| **Required WQTV =** | **2600.57** | **cf** |
| | **0.06** | **ac-ft** |
| WQTV Elevation = | 13.42 | ft |
| SMF-3A WQTV = | 822 | cf |
| SMF-3A WQTV El. = | 13.00 | ft |
| SMF-3B WQTV = | 828 | cf |
| SMF-3B WQTV El = | 12.42 | ft |
| Remaining WQTV = | 950.57 | cf |
| Depth= | 2.00 | ft |

## *STAGE-STORAGE CALCULATIONS:*

**Post-Development SMF-3B: Stage-Storage Relationship**

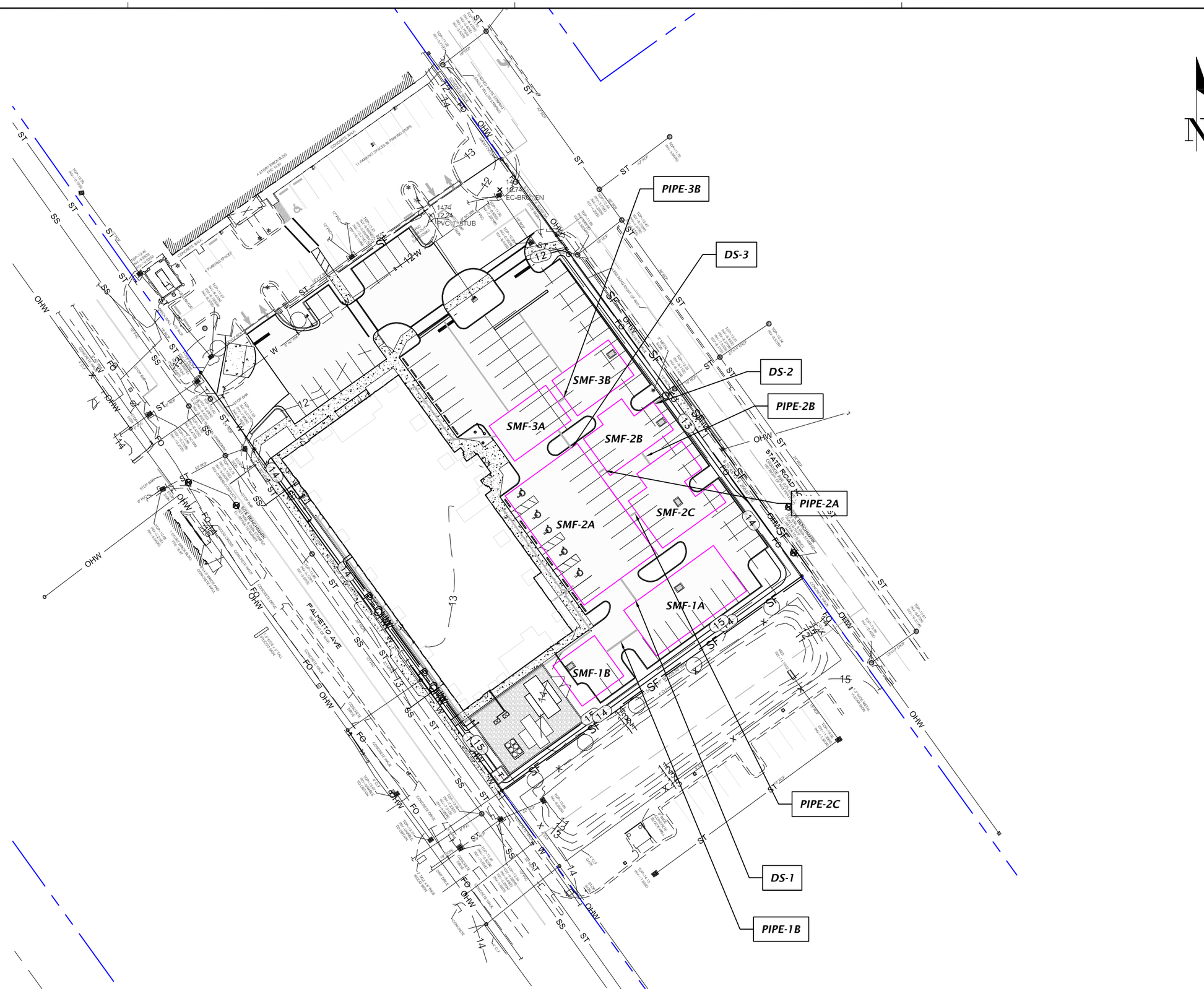
| ELEV. (FT.) | AREA (SF) | AREA (AC) | VOLUME (CF) | VOLUME (AC-FT) |
|---|---|---|---|---|
| 11.25 | 525.44 | 0.0386 | 0 | 0.00000 |
| 11.33 | 525.44 | 0.0386 | 43.79 | 0.00101 |
| 11.42 | 525.44 | 0.0386 | 87.57 | 0.00201 |
| 11.50 | 525.44 | 0.0386 | 131.36 | 0.00302 |
| 11.58 | 525.44 | 0.0386 | 175.15 | 0.00402 |
| 11.67 | 525.44 | 0.0386 | 218.93 | 0.00503 |
| 11.75 | 525.44 | 0.0386 | 262.72 | 0.00603 |
| 11.83 | 1027.88 | 0.0746 | 348.38 | 0.00800 |
| 11.92 | 1008.61 | 0.0739 | 432.43 | 0.00993 |
| 12.00 | 988.71 | 0.0729 | 514.82 | 0.01182 |
| 12.08 | 965.40 | 0.0719 | 595.27 | 0.01367 |
| 12.17 | 938.71 | 0.0706 | 673.50 | 0.01546 |
| 12.25 | 907.75 | 0.0691 | 749.14 | 0.01720 |
| 12.33 | 871.58 | 0.0676 | 821.77 | 0.01887 |
| 12.42 | 828.23 | 0.0661 | 890.79 | 0.02045 |
| 12.50 | 773.63 | 0.0641 | 955.26 | 0.02193 |
| 12.58 | 688.63 | 0.0618 | 1012.65 | 0.02325 |
| 12.67 | 600.93 | 0.0593 | 1062.72 | 0.02440 |
| 12.75 | 554.20 | 0.0563 | 1108.91 | 0.02546 |
| 12.83 | 525.44 | 0.0523 | 1152.69 | 0.02646 |
| 12.92 | 525.44 | 0.0453 | 1196.48 | 0.02747 |
| 13.00 | 525.44 | 0.0425 | 1240.27 | 0.02847 |
| 13.08 | 525.44 | 0.0401 | 1284.05 | 0.02948 |
| 13.17 | 525.44 | 0.0386 | 1327.84 | 0.03048 |
| 13.25 | 525.44 | 0.0386 | 1371.63 | 0.03149 |

| | | |
|---|---|---|
| **Required WQTV =** | **2600.57** | **cf** |
| | **0.06** | **ac-ft** |
| WQTV Elevation = | 13.42 | ft |
| SMF-3A WQTV = | 822 | cf |
| SMF-3A WQTV El. = | 13.00 | ft |
| SMF-3B WQTV = | 828 | cf |
| SMF-3B WQTV El = | 12.42 | ft |
| Remaining WQTV = | 950.57 | cf |
| Depth= | 2.00 | ft |




# Clay County Economic Development Building Nodal Diagram

Item # 6.




CHW Professional Consultants

1801 Reseau
Alachua, Flor
(352)
www.chw
est. 1988 FLO

SCALE: 1"=40'

VERIFY SCALE
BAR IS ONE INCH ON
ORIGINAL DRAWING

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY.

CONSTRUCTION/BID REVISIONS:

SUBMITTALS:

CLIENT: CAUSSEAUX, HEWETT, & WALPOLE, INC.
ENGINEERING - SURVEYING - PLANNING

PROJECT: CLAY COUNTY ECONOMIC DEVELOPMENT BUILDING

SHEET TITLE: POST-DEVELOPMENT NODAL DIAGRAM

TECHNICIAN:

DESIGNER:

QUALITY CONTROL:

PROJECT NUMBER: 23-0204

Inputs

## Simple Basin: pre-1

| | |
|---|---|
| Scenario: | Icpr3 |
| Node: | pre-1 |
| Hydrograph Method: | NRCS Unit Hydrograph |
| Infiltration Method: | Curve Number |
| Time of Concentration: | 10.0000 min |
| Max Allowable Q: | 0.00 cfs |
| Time Shift: | 0.0000 hr |
| Unit Hydrograph: | UH484 |
| Peaking Factor: | 484.0 |
| Area: | 1.2100 ac |
| Curve Number: | 93.0 |
| % Impervious: | 0.00 |
| % DCIA: | 0.00 |
| % Direct: | 0.00 |
| Rainfall Name: | |

Comment:

## Simple Basin: ws-1

| | |
|---|---|
| Scenario: | Icpr3 |
| Node: | smf-1b |
| Hydrograph Method: | NRCS Unit Hydrograph |
| Infiltration Method: | Curve Number |
| Time of Concentration: | 10.0000 min |
| Max Allowable Q: | 999999.00 cfs |
| Time Shift: | 0.0000 hr |
| Unit Hydrograph: | UH484 |
| Peaking Factor: | 484.0 |
| Area: | 0.2500 ac |
| Curve Number: | 97.0 |
| % Impervious: | 0.00 |
| % DCIA: | 0.00 |
| % Direct: | 0.00 |
| Rainfall Name: | |

Comment:

## Simple Basin: ws-2

| | |
|---|---|
| Scenario: | Icpr3 |
| Node: | smf-2a |
| Hydrograph Method: | NRCS Unit Hydrograph |
| Infiltration Method: | Curve Number |
| Time of Concentration: | 10.0000 min |
| Max Allowable Q: | 999999.00 cfs |

Inputs

| | |
|---|---|
| Time Shift: | 0.0000 hr |
| Unit Hydrograph: | UH484 |
| Peaking Factor: | 484.0 |
| Area: | 0.5600 ac |
| Curve Number: | 97.0 |
| % Impervious: | 0.00 |
| % DCIA: | 0.00 |
| % Direct: | 0.00 |
| Rainfall Name: | |

Comment:

## Simple Basin: ws-3

| | |
|---|---|
| Scenario: | Icpr3 |
| Node: | smf-3a |
| Hydrograph Method: | NRCS Unit Hydrograph |
| Infiltration Method: | Curve Number |
| Time of Concentration: | 10.0000 min |
| Max Allowable Q: | 999999.00 cfs |
| Time Shift: | 0.0000 hr |
| Unit Hydrograph: | Uh484 |
| Peaking Factor: | 484.0 |
| Area: | 0.4300 ac |
| Curve Number: | 97.0 |
| % Impervious: | 0.00 |
| % DCIA: | 0.00 |
| % Direct: | 0.00 |
| Rainfall Name: | |

Comment:

## Node: g-1

| | |
|---|---|
| Scenario: | Icpr3 |
| Type: | Time/Stage |
| Base Flow: | 0.00 cfs |
| Initial Stage: | 0.00 ft |
| Warning Stage: | 0.00 ft |
| Boundary Stage: | |

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 0.00 |
| 0 | 0 | 0 | 99999.0000 | 0.00 |

Comment:

Node: g-2

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 0.00 |
| 0 | 0 | 0 | 99999.0000 | 0.00 |

Comment:

Node: g-3

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 0.00 |
| 0 | 0 | 0 | 99999.0000 | 0.00 |

Comment:

Node: outfall

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 7.65 ft
Warning Stage: 0.00 ft
Boundary Stage:

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 7.65 |
| 0 | 0 | 0 | 99999.0000 | 7.65 |

Comment:

## Node: pre-1

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 14.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 14.00 |
| 0 | 0 | 0 | 99999.0000 | 14.00 |

Comment:

## Node: smf-1a

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 12.45 ft
Warning Stage: 14.40 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 12.45 | 0.00 | 0 |
| 12.53 | 0.00 | 95 |
| 12.62 | 0.00 | 190 |
| 12.70 | 0.01 | 285 |
| 12.78 | 0.01 | 380 |
| 12.87 | 0.01 | 476 |
| 12.95 | 0.01 | 571 |
| 13.03 | 0.02 | 760 |
| 13.12 | 0.02 | 946 |
| 13.20 | 0.03 | 1128 |
| 13.28 | 0.03 | 1306 |
| 13.37 | 0.03 | 1479 |
| 13.45 | 0.04 | 1646 |
| 13.53 | 0.04 | 1806 |
| 13.62 | 0.04 | 1958 |
| 13.70 | 0.05 | 2100 |
| 13.78 | 0.05 | 2226 |
| 13.87 | 0.05 | 2335 |
| 13.95 | 0.06 | 2435 |
| 14.03 | 0.06 | 2531 |
| 14.12 | 0.06 | 2626 |
| 14.20 | 0.06 | 2721 |
| 14.28 | 0.06 | 2816 |
| 14.37 | 0.07 | 2911 |
| 14.45 | 0.07 | 3006 |

Comment:

Node: smf-1b

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 13.00 ft
Warning Stage: 14.75 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 13.00 | 0.00 | 0 |
| 13.08 | 0.00 | 32 |
| 13.17 | 0.00 | 64 |
| 13.25 | 0.00 | 96 |
| 13.33 | 0.00 | 129 |
| 13.42 | 0.00 | 161 |
| 13.50 | 0.00 | 193 |
| 13.58 | 0.01 | 255 |
| 13.67 | 0.01 | 316 |
| 13.75 | 0.01 | 376 |
| 13.83 | 0.01 | 434 |
| 13.92 | 0.01 | 491 |
| 14.00 | 0.01 | 546 |
| 14.08 | 0.01 | 599 |
| 14.17 | 0.01 | 649 |
| 14.25 | 0.02 | 697 |
| 14.33 | 0.02 | 738 |
| 14.42 | 0.02 | 775 |
| 14.50 | 0.02 | 809 |
| 14.58 | 0.02 | 841 |
| 14.67 | 0.02 | 873 |
| 14.75 | 0.02 | 905 |
| 14.83 | 0.02 | 937 |
| 14.92 | 0.02 | 969 |
| 15.00 | 0.02 | 1001 |

Comment:

Node: smf-2a

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 12.10 ft
Warning Stage: 14.00 ft

Inputs

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 12.10 | 0.00 | 0 |
| 12.18 | 0.00 | 149 |
| 12.27 | 0.01 | 298 |
| 12.35 | 0.01 | 446 |
| 12.43 | 0.01 | 595 |
| 12.52 | 0.02 | 744 |
| 12.60 | 0.02 | 892 |
| 12.68 | 0.03 | 1191 |
| 12.77 | 0.03 | 1485 |
| 12.85 | 0.04 | 1772 |
| 12.93 | 0.05 | 2052 |
| 13.02 | 0.05 | 2324 |
| 13.10 | 0.06 | 2587 |
| 13.18 | 0.07 | 2840 |
| 13.27 | 0.07 | 3079 |
| 13.35 | 0.08 | 3302 |
| 13.43 | 0.08 | 3500 |
| 13.52 | 0.08 | 3671 |
| 13.60 | 0.09 | 3828 |
| 13.68 | 0.09 | 3977 |
| 13.77 | 0.09 | 4126 |
| 13.85 | 0.10 | 4275 |
| 13.93 | 0.10 | 4423 |
| 14.02 | 0.10 | 4572 |
| 14.10 | 0.11 | 4721 |

Comment:

## Node: smf-2b

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.40 ft
Warning Stage: 13.30 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 11.40 | 0.00 | 0 |
| 11.48 | 0.00 | 48 |
| 11.57 | 0.00 | 97 |
| 11.65 | 0.00 | 145 |
| 11.73 | 0.00 | 194 |
| 11.82 | 0.01 | 243 |
| 11.90 | 0.01 | 291 |
| 11.98 | 0.01 | 382 |
| 12.07 | 0.01 | 471 |

Inputs

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 12.15 | 0.01 | 558 |
| 12.23 | 0.01 | 643 |
| 12.32 | 0.02 | 726 |
| 12.40 | 0.02 | 806 |
| 12.48 | 0.02 | 884 |
| 12.57 | 0.02 | 958 |
| 12.65 | 0.02 | 1027 |
| 12.73 | 0.03 | 1089 |
| 12.82 | 0.03 | 1144 |
| 12.90 | 0.03 | 1195 |
| 12.98 | 0.03 | 1244 |
| 13.07 | 0.03 | 1292 |
| 13.15 | 0.03 | 1341 |
| 13.23 | 0.03 | 1389 |
| 13.32 | 0.03 | 1438 |
| 13.40 | 0.03 | 1486 |

Comment:

Node: smf-2c

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.85 ft
Warning Stage: 14.30 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 11.85 | 0.00 | 0 |
| 11.93 | 0.00 | 75 |
| 12.02 | 0.00 | 150 |
| 12.10 | 0.01 | 226 |
| 12.18 | 0.01 | 301 |
| 12.27 | 0.01 | 376 |
| 12.35 | 0.01 | 451 |
| 12.43 | 0.01 | 592 |
| 12.52 | 0.02 | 730 |
| 12.60 | 0.02 | 866 |
| 12.68 | 0.02 | 998 |
| 12.77 | 0.03 | 1127 |
| 12.85 | 0.03 | 1252 |
| 12.93 | 0.03 | 1373 |
| 13.02 | 0.03 | 1487 |
| 13.10 | 0.04 | 1595 |
| 13.18 | 0.04 | 1691 |
| 13.27 | 0.04 | 1776 |
| 13.35 | 0.04 | 1855 |

Inputs

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 13.43 | 0.04 | 1931 |
| 13.52 | 0.05 | 2006 |
| 13.60 | 0.05 | 2081 |
| 13.68 | 0.05 | 2156 |
| 13.77 | 0.05 | 2231 |
| 13.85 | 0.05 | 2307 |

Comment:

Node: smf-3a

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.90 ft
Warning Stage: 13.80 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 11.90 | 0.00 | 0 |
| 11.98 | 0.00 | 44 |
| 12.07 | 0.00 | 88 |
| 12.15 | 0.00 | 132 |
| 12.23 | 0.00 | 175 |
| 12.32 | 0.01 | 219 |
| 12.40 | 0.01 | 263 |
| 12.48 | 0.01 | 348 |
| 12.57 | 0.01 | 433 |
| 12.65 | 0.01 | 515 |
| 12.73 | 0.01 | 595 |
| 12.82 | 0.02 | 673 |
| 12.90 | 0.02 | 749 |
| 12.98 | 0.02 | 822 |
| 13.07 | 0.02 | 891 |
| 13.15 | 0.02 | 955 |
| 13.23 | 0.02 | 1013 |
| 13.32 | 0.02 | 1063 |
| 13.40 | 0.03 | 1109 |
| 13.48 | 0.03 | 1153 |
| 13.57 | 0.03 | 1197 |
| 13.65 | 0.03 | 1240 |
| 13.73 | 0.03 | 1284 |
| 13.82 | 0.03 | 1328 |
| 13.90 | 0.03 | 1372 |

Comment:

Inputs

**Node: smf-3b**

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.25 ft
Warning Stage: 13.10 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 11.25 | 0.00 | 0 |
| 11.33 | 0.00 | 44 |
| 11.42 | 0.00 | 88 |
| 11.50 | 0.00 | 132 |
| 11.58 | 0.00 | 175 |
| 11.67 | 0.01 | 219 |
| 11.75 | 0.01 | 263 |
| 11.83 | 0.01 | 348 |
| 11.92 | 0.01 | 433 |
| 12.00 | 0.01 | 515 |
| 12.08 | 0.01 | 595 |
| 12.17 | 0.02 | 673 |
| 12.25 | 0.02 | 749 |
| 12.33 | 0.02 | 822 |
| 12.42 | 0.02 | 891 |
| 12.50 | 0.02 | 955 |
| 12.58 | 0.02 | 1013 |
| 12.67 | 0.02 | 1063 |
| 12.75 | 0.03 | 1109 |
| 12.83 | 0.03 | 1153 |
| 12.92 | 0.03 | 1197 |
| 13.00 | 0.03 | 1240 |
| 13.08 | 0.03 | 1284 |
| 13.17 | 0.03 | 1328 |
| 13.25 | 0.03 | 1372 |

Comment:

**Drop Structure Link: ds-1**

Scenario: Icpr3
From Node: smf-1a
To Node: smf-2a
Link Count: 1
Flow Direction: Both
Solution: Combine
Increments: 10
Pipe Count: 1
Damping: 0.0000 ft
Length: 15.00 ft

**Upstream Pipe**

Invert: 13.00 ft
Manning's N: 0.0110

**Geometry: Circular**

Max Depth: 1.25 ft

**Bottom Clip**

Default: 0.00 ft
Op Table:
Ref Node:
Manning's N: 0.0000

**Top Clip**

**Downstream Pipe**

Invert: 12.25 ft
Manning's N: 0.0110

**Geometry: Circular**

Max Depth: 1.25 ft

**Bottom Clip**

Default: 0.00 ft
Op Table:
Ref Node:
Manning's N: 0.0000

**Top Clip**

Inputs

| | | | | | |
|---|---|---|---|---|---|
| FHWA Code: | 1 | Default: | 0.00 ft | Default: | 0.00 ft |
| Entr Loss Coef: | 0.00 | Op Table: | | Op Table: | |
| Exit Loss Coef: | 1.00 | Ref Node: | | Ref Node: | |
| Bend Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Bend Location: | 0.00 dec | | | | |
| Energy Switch: | Energy | | | | |

Pipe Comment:

| Weir Component | | Bottom Clip | |
|---|---|---|---|
| Weir: | 1 | Default: | 0.00 ft |
| Weir Count: | 1 | Op Table: | |
| Weir Flow Direction: | Both | Ref Node: | |
| Damping: | 0.0000 ft | **Top Clip** | |
| Weir Type: | Sharp Crested Vertical | Default: | 0.00 ft |
| Geometry Type: | Rectangular | Op Table: | |
| Invert: | 13.70 ft | Ref Node: | |
| Control Elevation: | 13.70 ft | **Discharge Coefficients** | |
| Max Depth: | 1.50 ft | Weir Default: | 3.200 |
| Max Width: | 1.50 ft | Weir Table: | |
| Fillet: | 0.00 ft | Orifice Default: | 0.600 |
| | | Orifice Table: | |

Weir Comment:

Drop Structure Comment:

| Drop Structure Link: ds-2 | | Upstream Pipe | | Downstream Pipe | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 11.40 ft | Invert: | 6.40 ft |
| From Node: | smf-2b | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | outfall | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.50 ft | Max Depth: | 1.50 ft |
| Flow Direction: | Both | **Bottom Clip** | | | |
| Solution: | Combine | Default: | 0.00 ft | Default: | 0.00 ft |
| Increments: | 10 | Op Table: | | Op Table: | |
| Pipe Count: | 1 | Ref Node: | | Ref Node: | |
| Damping: | 0.0000 ft | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Length: | 20.00 ft | **Top Clip** | | | |
| FHWA Code: | 1 | Default: | 0.00 ft | Default: | 0.00 ft |
| Entr Loss Coef: | 0.00 | Op Table: | | Op Table: | |
| Exit Loss Coef: | 1.00 | Ref Node: | | Ref Node: | |
| Bend Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Bend Location: | 0.00 dec | | | | |
| Energy Switch: | Energy | | | | |

Pipe Comment:

| Weir Component | | Bottom Clip |
|---|---|---|
| Weir: | 1 | |

Inputs

| | | | |
|---|---|---|---|
| Weir Count: | 1 | | |
| Weir Flow Direction: | Both | Default: | 0.00 ft |
| Damping: | 0.0000 ft | Op Table: | |
| Weir Type: | Sharp Crested Vertical | Ref Node: | |
| Geometry Type: | Rectangular | **Top Clip** | |
| Invert: | 12.77 ft | Default: | 0.00 ft |
| Control Elevation: | 12.77 ft | Op Table: | |
| Max Depth: | 0.90 ft | Ref Node: | |
| Max Width: | 3.50 ft | **Discharge Coefficients** | |
| Fillet: | 0.00 ft | Weir Default: | 3.200 |
| | | Weir Table: | |
| | | Orifice Default: | 0.600 |
| | | Orifice Table: | |

Weir Comment:

Drop Structure Comment:

| Drop Structure Link: ds-3 | | Upstream Pipe | | Downstream Pipe | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 12.00 ft | Invert: | 11.90 ft |
| From Node: | smf-3b | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-2b | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.25 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Solution: | Combine | Default: | 0.00 ft | Default: | 0.00 ft |
| Increments: | 10 | Op Table: | | Op Table: | |
| Pipe Count: | 1 | Ref Node: | | Ref Node: | |
| Damping: | 0.0000 ft | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Length: | 29.00 ft | Top Clip | | | |
| FHWA Code: | 1 | Default: | 0.00 ft | Default: | 0.00 ft |
| Entr Loss Coef: | 0.00 | Op Table: | | Op Table: | |
| Exit Loss Coef: | 1.00 | Ref Node: | | Ref Node: | |
| Bend Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Bend Location: | 0.00 dec | | | | |
| Energy Switch: | Energy | | | | |

Pipe Comment:

| Weir Component | | | |
|---|---|---|---|
| Weir: | 1 | **Bottom Clip** | |
| Weir Count: | 1 | Default: | 0.00 ft |
| Weir Flow Direction: | Both | Op Table: | |
| Damping: | 0.0000 ft | Ref Node: | |
| Weir Type: | Sharp Crested Vertical | **Top Clip** | |
| Geometry Type: | Rectangular | Default: | 0.00 ft |
| Invert: | 12.42 ft | Op Table: | |
| Control Elevation: | 12.42 ft | Ref Node: | |
| Max Depth: | 0.83 ft | **Discharge Coefficients** | |
| Max Width: | 3.50 ft | Weir Default: | 3.200 |

Inputs

| | | | |
|---|---|---|---|
| Fillet: | 0.00 ft | Weir Table: | |
| | | Orifice Default: | 0.600 |
| | | Orifice Table: | |

Weir Comment:

Drop Structure Comment:

## Percolation Link: perc-1a

| | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-1a | | |
| To Node: | g-1 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 225.00 ft |
| Flow Direction: | Both | Perimeter 2: | 226.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 227.00 ft |
| Water Table Elevation: | 11.45 ft | Distance P1 to P2: | 50.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 450.00 ft |
| Horizontal Conductivity: | 3.000 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 10.000 fpd | # of Cells P2 to P3: | 45 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 1.00 ft | | |

Comment:

## Percolation Link: perc-1b

| | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-1b | | |
| To Node: | g-1 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 130.00 ft |
| Flow Direction: | Both | Perimeter 2: | 131.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 132.00 ft |
| Water Table Elevation: | 12.00 ft | Distance P1 to P2: | 50.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 450.00 ft |
| Horizontal Conductivity: | 3.000 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 10.000 fpd | # of Cells P2 to P3: | 45 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 1.00 ft | | |

Comment:

## Percolation Link: perc-2a

| | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-2a | | |
| To Node: | g-2 | Vertical Flow Termination: | Horizontal Flow Algorithm |

Inputs

| | | | |
|---|---|---|---|
| Link Count: | 1 | | |
| Flow Direction: | Both | Perimeter 1: | 286.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 2: | 287.00 ft |
| Water Table Elevation: | 11.09 ft | Perimeter 3: | 288.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P1 to P2: | 50.00 ft |
| Horizontal Conductivity: | 3.000 fpd | Distance P2 to P3: | 450.00 ft |
| Vertical Conductivity: | 10.000 fpd | # of Cells P1 to P2: | 10 |
| Fillable Porosity: | 0.250 | # of Cells P2 to P3: | 45 |
| Layer Thickness: | 1.00 ft | | |

Comment:

Percolation Link: perc-2b

| | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-2b | | |
| To Node: | g-2 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 171.00 ft |
| Flow Direction: | Both | Perimeter 2: | 172.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 173.00 ft |
| Water Table Elevation: | 10.38 ft | Distance P1 to P2: | 50.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 450.00 ft |
| Horizontal Conductivity: | 3.000 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 10.000 fpd | # of Cells P2 to P3: | 45 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 1.00 ft | | |

Comment:

Percolation Link: perc-2c

| | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-2c | | |
| To Node: | g-2 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 224.00 ft |
| Flow Direction: | Both | Perimeter 2: | 225.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 226.00 ft |
| Water Table Elevation: | 10.85 ft | Distance P1 to P2: | 50.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 450.00 ft |
| Horizontal Conductivity: | 3.000 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 10.000 fpd | # of Cells P2 to P3: | 45 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 1.00 ft | | |

Comment:

Percolation Link: perc-3a

Inputs

| | | | |
|---|---|---|---|
| Scenario: | Icpr3 | | |
| From Node: | smf-3a | Surface Area Option: | User Specified |
| To Node: | g-3 | Bottom Elevation: | 11.90 ft |
| Link Count: | 1 | Surface Area: | 0.0234 ac |
| Flow Direction: | Both | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 1: | 145.00 ft |
| Water Table Elevation: | 10.88 ft | Perimeter 2: | 146.00 ft |
| Annual Recharge Rate: | 0 ipy | Perimeter 3: | 147.00 ft |
| Horizontal Conductivity: | 3.000 fpd | Distance P1 to P2: | 50.00 ft |
| Vertical Conductivity: | 10.000 fpd | Distance P2 to P3: | 450.00 ft |
| Fillable Porosity: | 0.250 | # of Cells P1 to P2: | 10 |
| Layer Thickness: | 1.00 ft | # of Cells P2 to P3: | 45 |

Comment:

**Percolation Link: perc-3b**

| | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-3b | | |
| To Node: | g-3 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 144.00 ft |
| Flow Direction: | Both | Perimeter 2: | 145.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 146.00 ft |
| Water Table Elevation: | 10.22 ft | Distance P1 to P2: | 50.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 450.00 ft |
| Horizontal Conductivity: | 3.000 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 10.000 fpd | # of Cells P2 to P3: | 45 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 1.00 ft | | |

Comment:

**Pipe Link: pipe-1b**

| | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 14.25 ft | Invert: | 12.95 ft |
| From Node: | smf-1b | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-1a | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.25 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 23.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 0 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

Inputs

| Pipe Link: pipe-2a | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 13.25 ft | Invert: | 12.60 ft |
| From Node: | smf-2a | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-2c | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.25 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 5.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 0 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

| Pipe Link: pipe-2b | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 13.00 ft | Invert: | 12.60 ft |
| From Node: | smf-2c | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-2b | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.25 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 20.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 0 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

| Pipe Link: pipe-2c | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 12.80 ft | Invert: | 12.80 ft |
| From Node: | smf-2c | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-2a | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.25 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 5.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 0 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |

Inputs

| | | | | | |
|---|---|---|---|---|---|
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

| Pipe Link: pipe-3b | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 13.20 ft | Invert: | 11.75 ft |
| From Node: | smf-3a | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-3b | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.25 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 5.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 0 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

Simulation: 003YR001HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 6:06:07 PM
Program Version: ICPR4 4.07.02

General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 721.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

Output Time Increments

Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|

Inputs

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999.0000 | 15.0000 |

Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 99999.0000 | 15.0000 |

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 2.60 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 003YR002HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 6:15:45 PM

Inputs

Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 722.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

## Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

IA Recovery Time: 2.0000 hr

Smp/Man Basin Rain Opt: Global

Inputs

| | | | |
|---|---|---|---|
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-2 |
| | | Rainfall Amount: | 3.10 in |
| Edge Length Option: | Automatic | Storm Duration: | 2.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 003YR004HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 6:25:17 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 724.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

### Resources & Lookup Tables

| Resources | | Lookup Tables | |
|---|---|---|---|
| Rainfall Folder: | Icpr3 | Boundary Stage Set: | |
| | | Extern Hydrograph Set: | |
| Unit Hydrograph Folder: | Icpr3 | Curve Number Set: | |
| | | Green-Ampt Set: | |
| | | Vertical Layers Set: | |
| | | Impervious Set: | |

| Tolerances & Options | | | |
|---|---|---|---|
| Time Marching: | SAOR | IA Recovery Time: | 4.0000 hr |
| Max Iterations: | 6 | | |
| Over-Relax Weight Fact: | 0.5 dec | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-4 |
| | | Rainfall Amount: | 3.60 in |
| Edge Length Option: | Automatic | Storm Duration: | 4.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 003YR008HR

| | |
|---|---|
| Scenario: | Icpr3 |
| Run Date/Time: | 9/19/2023 6:36:29 PM |
| Program Version: | ICPR4 4.07.02 |

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 728.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

Inputs

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 4.30 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 003YR024HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 6:45:44 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-24 |
| | | Rainfall Amount: | 5.80 in |
| Edge Length Option: | Automatic | Storm Duration: | 24.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 003YR072HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 6:55:14 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 792.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

| | | | |
|---|---|---|---|
| Time Marching: | SAOR | IA Recovery Time: | 72.0000 hr |
| Max Iterations: | 6 | | |
| Over-Relax Weight Fact: | 0.5 dec | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-72 |
| | | Rainfall Amount: | 6.50 in |
| Edge Length Option: | Automatic | Storm Duration: | 72.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 005YR001HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 7:05:55 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 721.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 2.80 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 005YR002HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 7:17:31 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 722.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 2.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-2 |
| | | Rainfall Amount: | 3.50 in |
| Edge Length Option: | Automatic | Storm Duration: | 2.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 005YR004HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 7:26:52 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 724.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Inputs

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 4.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-4
Rainfall Amount: 4.10 in
Storm Duration: 4.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 005YR008HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 7:38:07 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 728.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 4.70 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 005YR024HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 7:47:31 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-24 |
| | | Rainfall Amount: | 6.20 in |
| Edge Length Option: | Automatic | Storm Duration: | 24.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 005YR072HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 7:57:13 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 792.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Inputs

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 72.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-72
Rainfall Amount: 7.60 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 010YR001HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 8:07:50 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 721.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 99999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 3.10 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 010YR002HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 8:17:25 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 722.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 2.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-2 |
| | | Rainfall Amount: | 3.80 in |
| Edge Length Option: | Automatic | Storm Duration: | 2.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 010YR004HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 8:27:23 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 724.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Inputs

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 4.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-4
Rainfall Amount: 4.70 in
Storm Duration: 4.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 010YR008HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 8:36:49 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 728.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 5.40 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 010YR024HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 8:46:07 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-24 |
| | | Rainfall Amount: | 7.30 in |
| Edge Length Option: | Automatic | Storm Duration: | 24.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 010YR072HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 8:55:48 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 792.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 72.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-72
Rainfall Amount: 8.80 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 025YR001HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 9:06:52 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 721.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 99999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

### Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

## Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FDOT-1

Rainfall Amount: 3.50 in

Storm Duration: 1.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 025YR002HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 9:16:36 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 722.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec

IA Recovery Time: 2.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-2 |
| | | Rainfall Amount: | 4.30 in |
| Edge Length Option: | Automatic | Storm Duration: | 2.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 025YR004HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 9:27:23 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 724.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 4.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-4
Rainfall Amount: 5.50 in
Storm Duration: 4.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 025YR008HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 9:36:51 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 728.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 6.40 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 025YR024HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 9:46:24 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 60.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 5.0000 |
| 0 | 0 | 0 | 999999.0000 | 5.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: ICPR3

Unit Hydrograph Folder: ICPR3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec

IA Recovery Time: 24.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-24 |
| | | Rainfall Amount: | 8.60 in |
| Edge Length Option: | Automatic | Storm Duration: | 24.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 113 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 025YR072HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 10:01:30 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 792.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

| | | | |
|---|---|---|---|
| Time Marching: | SAOR | IA Recovery Time: | 72.0000 hr |
| Max Iterations: | 6 | | |
| Over-Relax Weight Fact: | 0.5 dec | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-72 |
| | | Rainfall Amount: | 11.00 in |
| Edge Length Option: | Automatic | Storm Duration: | 72.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 050YR001HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 10:16:34 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 721.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 99999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 3.80 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 050YR002HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 10:30:10 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 722.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 2.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-2 |
| | | Rainfall Amount: | 4.80 in |
| Edge Length Option: | Automatic | Storm Duration: | 2.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 050YR004YR

Scenario: Icpr3
Run Date/Time: 9/19/2023 10:43:15 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 724.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 4.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-4
Rainfall Amount: 6.00 in
Storm Duration: 4.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 050YR008HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 10:56:46 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 728.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 7.10 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 050YR024HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 11:10:05 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-24 |
| | | Rainfall Amount: | 9.30 in |
| Edge Length Option: | Automatic | Storm Duration: | 24.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 050YR072HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 11:21:20 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 792.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 72.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-72
Rainfall Amount: 12.00 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 100YR001HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 11:33:14 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 721.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 99999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 4.20 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 100YR002HR

Scenario: Icpr3
Run Date/Time: 9/19/2023 11:43:07 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 722.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 2.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-2 |
| | | Rainfall Amount: | 5.30 in |
| Edge Length Option: | Automatic | Storm Duration: | 2.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 100YR004YR

Scenario: Icpr3
Run Date/Time: 9/19/2023 11:53:05 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 724.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Inputs

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 4.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-4
Rainfall Amount: 6.50 in
Storm Duration: 4.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 100YR008HR

Scenario: Icpr3
Run Date/Time: 9/20/2023 12:02:26 AM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 728.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 7.90 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 100YR024HR

Scenario: Icpr3
Run Date/Time: 9/20/2023 12:12:07 AM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-24 |
| | | Rainfall Amount: | 10.60 in |
| Edge Length Option: | Automatic | Storm Duration: | 24.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 100YR072HR

Scenario: Icpr3
Run Date/Time: 9/20/2023 12:21:52 AM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 792.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 72.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-72
Rainfall Amount: 13.75 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: MN024HR

Scenario: Icpr3
Run Date/Time: 9/20/2023 12:32:33 AM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 4.70 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Max Stages

| Sim | Node Name | Maximum Stage [ft] |
|---|---|---|
| 003YR001HR | smf-1a | 13.04 |
| 003YR001HR | smf-1b | 14.67 |
| 003YR001HR | smf-2a | 13.22 |
| 003YR001HR | smf-2b | 12.43 |
| 003YR001HR | smf-2c | 12.68 |
| 003YR001HR | smf-3a | 13.76 |
| 003YR001HR | smf-3b | 12.70 |
| 003YR002HR | smf-1a | 13.02 |
| 003YR002HR | smf-1b | 14.61 |
| 003YR002HR | smf-2a | 13.17 |
| 003YR002HR | smf-2b | 12.63 |
| 003YR002HR | smf-2c | 13.01 |
| 003YR002HR | smf-3a | 13.68 |
| 003YR002HR | smf-3b | 12.64 |
| 003YR004HR | smf-1a | 13.23 |
| 003YR004HR | smf-1b | 14.50 |
| 003YR004HR | smf-2a | 13.19 |
| 003YR004HR | smf-2b | 12.87 |
| 003YR004HR | smf-2c | 13.17 |
| 003YR004HR | smf-3a | 13.54 |
| 003YR004HR | smf-3b | 12.88 |
| 003YR008HR | smf-1a | 13.19 |
| 003YR008HR | smf-1b | 14.50 |
| 003YR008HR | smf-2a | 13.22 |
| 003YR008HR | smf-2b | 12.88 |
| 003YR008HR | smf-2c | 13.18 |
| 003YR008HR | smf-3a | 13.54 |
| 003YR008HR | smf-3b | 12.89 |
| 003YR024HR | smf-1a | 13.51 |
| 003YR024HR | smf-1b | 14.39 |
| 003YR024HR | smf-2a | 13.15 |
| 003YR024HR | smf-2b | 12.85 |
| 003YR024HR | smf-2c | 13.14 |
| 003YR024HR | smf-3a | 13.39 |
| 003YR024HR | smf-3b | 12.85 |
| 003YR072HR | smf-1a | 13.33 |
| 003YR072HR | smf-1b | 14.36 |
| 003YR072HR | smf-2a | 13.15 |
| 003YR072HR | smf-2b | 12.85 |
| 003YR072HR | smf-2c | 13.15 |
| 003YR072HR | smf-3a | 13.34 |
| 003YR072HR | smf-3b | 12.86 |

Max Stages

| Sim | Node Name | Maximum Stage [ft] |
|---|---|---|
| 005YR001HR | smf-1a | 13.10 |
| 005YR001HR | smf-1b | 14.69 |
| 005YR001HR | smf-2a | 13.28 |
| 005YR001HR | smf-2b | 12.64 |
| 005YR001HR | smf-2c | 12.98 |
| 005YR001HR | smf-3a | 13.79 |
| 005YR001HR | smf-3b | 12.77 |
| 005YR002HR | smf-1a | 13.12 |
| 005YR002HR | smf-1b | 14.64 |
| 005YR002HR | smf-2a | 13.26 |
| 005YR002HR | smf-2b | 12.86 |
| 005YR002HR | smf-2c | 13.15 |
| 005YR002HR | smf-3a | 13.71 |
| 005YR002HR | smf-3b | 12.87 |
| 005YR004HR | smf-1a | 13.26 |
| 005YR004HR | smf-1b | 14.52 |
| 005YR004HR | smf-2a | 13.26 |
| 005YR004HR | smf-2b | 12.94 |
| 005YR004HR | smf-2c | 13.26 |
| 005YR004HR | smf-3a | 13.56 |
| 005YR004HR | smf-3b | 12.95 |
| 005YR008HR | smf-1a | 13.31 |
| 005YR008HR | smf-1b | 14.51 |
| 005YR008HR | smf-2a | 13.25 |
| 005YR008HR | smf-2b | 12.90 |
| 005YR008HR | smf-2c | 13.21 |
| 005YR008HR | smf-3a | 13.55 |
| 005YR008HR | smf-3b | 12.91 |
| 005YR024HR | smf-1a | 13.66 |
| 005YR024HR | smf-1b | 14.39 |
| 005YR024HR | smf-2a | 13.16 |
| 005YR024HR | smf-2b | 12.85 |
| 005YR024HR | smf-2c | 13.15 |
| 005YR024HR | smf-3a | 13.39 |
| 005YR024HR | smf-3b | 12.86 |
| 005YR072HR | smf-1a | 13.66 |
| 005YR072HR | smf-1b | 14.37 |
| 005YR072HR | smf-2a | 13.17 |
| 005YR072HR | smf-2b | 12.87 |
| 005YR072HR | smf-2c | 13.17 |
| 005YR072HR | smf-3a | 13.35 |
| 005YR072HR | smf-3b | 12.87 |

Max Stages

| Sim | Node Name | Maximum Stage [ft] |
|---|---|---|
| 010YR001HR | smf-1a | 13.20 |
| 010YR001HR | smf-1b | 14.72 |
| 010YR001HR | smf-2a | 13.36 |
| 010YR001HR | smf-2b | 12.88 |
| 010YR001HR | smf-2c | 13.18 |
| 010YR001HR | smf-3a | 13.83 |
| 010YR001HR | smf-3b | 12.89 |
| 010YR002HR | smf-1a | 13.23 |
| 010YR002HR | smf-1b | 14.65 |
| 010YR002HR | smf-2a | 13.32 |
| 010YR002HR | smf-2b | 12.91 |
| 010YR002HR | smf-2c | 13.21 |
| 010YR002HR | smf-3a | 13.74 |
| 010YR002HR | smf-3b | 12.92 |
| 010YR004HR | smf-1a | 13.50 |
| 010YR004HR | smf-1b | 14.54 |
| 010YR004HR | smf-2a | 13.33 |
| 010YR004HR | smf-2b | 13.01 |
| 010YR004HR | smf-2c | 13.32 |
| 010YR004HR | smf-3a | 13.59 |
| 010YR004HR | smf-3b | 13.03 |
| 010YR008HR | smf-1a | 13.57 |
| 010YR008HR | smf-1b | 14.54 |
| 010YR008HR | smf-2a | 13.33 |
| 010YR008HR | smf-2b | 13.02 |
| 010YR008HR | smf-2c | 13.33 |
| 010YR008HR | smf-3a | 13.58 |
| 010YR008HR | smf-3b | 13.04 |
| 010YR024HR | smf-1a | 13.74 |
| 010YR024HR | smf-1b | 14.41 |
| 010YR024HR | smf-2a | 13.20 |
| 010YR024HR | smf-2b | 12.89 |
| 010YR024HR | smf-2c | 13.20 |
| 010YR024HR | smf-3a | 13.41 |
| 010YR024HR | smf-3b | 12.90 |
| 010YR072HR | smf-1a | 13.74 |
| 010YR072HR | smf-1b | 14.37 |
| 010YR072HR | smf-2a | 13.19 |
| 010YR072HR | smf-2b | 12.88 |
| 010YR072HR | smf-2c | 13.18 |
| 010YR072HR | smf-3a | 13.37 |
| 010YR072HR | smf-3b | 12.88 |

Max Stages

| Sim | Node Name | Maximum Stage [ft] |
|---|---|---|
| 025YR001HR | smf-1a | 13.36 |
| 025YR001HR | smf-1b | 14.76 |
| 025YR001HR | smf-2a | 13.45 |
| 025YR001HR | smf-2b | 13.03 |
| 025YR001HR | smf-2c | 13.35 |
| 025YR001HR | smf-3a | 13.88 |
| 025YR001HR | smf-3b | 13.05 |
| 025YR002HR | smf-1a | 13.47 |
| 025YR002HR | smf-1b | 14.68 |
| 025YR002HR | smf-2a | 13.40 |
| 025YR002HR | smf-2b | 13.00 |
| 025YR002HR | smf-2c | 13.32 |
| 025YR002HR | smf-3a | 13.78 |
| 025YR002HR | smf-3b | 13.02 |
| 025YR004HR | smf-1a | 13.76 |
| 025YR004HR | smf-1b | 14.57 |
| 025YR004HR | smf-2a | 13.41 |
| 025YR004HR | smf-2b | 13.07 |
| 025YR004HR | smf-2c | 13.40 |
| 025YR004HR | smf-3a | 13.63 |
| 025YR004HR | smf-3b | 13.10 |
| 025YR008HR | smf-1a | 13.81 |
| 025YR008HR | smf-1b | 14.56 |
| 025YR008HR | smf-2a | 13.44 |
| 025YR008HR | smf-2b | 13.10 |
| 025YR008HR | smf-2c | 13.43 |
| 025YR008HR | smf-3a | 13.62 |
| 025YR008HR | smf-3b | 13.14 |
| 025YR024HR | smf-1a | 13.77 |
| 025YR024HR | smf-1b | 14.42 |
| 025YR024HR | smf-2a | 13.25 |
| 025YR024HR | smf-2b | 12.93 |
| 025YR024HR | smf-2c | 13.25 |
| 025YR024HR | smf-3a | 13.43 |
| 025YR024HR | smf-3b | 12.94 |
| 025YR072HR | smf-1a | 13.79 |
| 025YR072HR | smf-1b | 14.39 |
| 025YR072HR | smf-2a | 13.25 |
| 025YR072HR | smf-2b | 12.92 |
| 025YR072HR | smf-2c | 13.25 |
| 025YR072HR | smf-3a | 13.39 |
| 025YR072HR | smf-3b | 12.92 |

Max Stages

| Sim | Node Name | Maximum Stage [ft] |
|---|---|---|
| 050YR001HR | smf-1a | 13.49 |
| 050YR001HR | smf-1b | 14.79 |
| 050YR001HR | smf-2a | 13.50 |
| 050YR001HR | smf-2b | 13.13 |
| 050YR001HR | smf-2c | 13.44 |
| 050YR001HR | smf-3a | 13.91 |
| 050YR001HR | smf-3b | 13.17 |
| 050YR002HR | smf-1a | 13.72 |
| 050YR002HR | smf-1b | 14.71 |
| 050YR002HR | smf-2a | 13.47 |
| 050YR002HR | smf-2b | 13.10 |
| 050YR002HR | smf-2c | 13.41 |
| 050YR002HR | smf-3a | 13.81 |
| 050YR002HR | smf-3b | 13.14 |
| 050YR004YR | smf-1a | 13.85 |
| 050YR004YR | smf-1b | 14.59 |
| 050YR004YR | smf-2a | 13.44 |
| 050YR004YR | smf-2b | 13.10 |
| 050YR004YR | smf-2c | 13.43 |
| 050YR004YR | smf-3a | 13.65 |
| 050YR004YR | smf-3b | 13.13 |
| 050YR008HR | smf-1a | 13.87 |
| 050YR008HR | smf-1b | 14.58 |
| 050YR008HR | smf-2a | 13.49 |
| 050YR008HR | smf-2b | 13.15 |
| 050YR008HR | smf-2c | 13.48 |
| 050YR008HR | smf-3a | 13.64 |
| 050YR008HR | smf-3b | 13.19 |
| 050YR024HR | smf-1a | 13.78 |
| 050YR024HR | smf-1b | 14.43 |
| 050YR024HR | smf-2a | 13.26 |
| 050YR024HR | smf-2b | 12.94 |
| 050YR024HR | smf-2c | 13.26 |
| 050YR024HR | smf-3a | 13.44 |
| 050YR024HR | smf-3b | 12.95 |
| 050YR072HR | smf-1a | 13.79 |
| 050YR072HR | smf-1b | 14.40 |
| 050YR072HR | smf-2a | 13.26 |
| 050YR072HR | smf-2b | 12.93 |
| 050YR072HR | smf-2c | 13.26 |
| 050YR072HR | smf-3a | 13.39 |
| 050YR072HR | smf-3b | 12.93 |

Max Stages

| Sim | Node Name | Maximum Stage [ft] |
|---|---|---|
| 100YR001HR | smf-1a | 13.70 |
| 100YR001HR | smf-1b | 14.82 |
| 100YR001HR | smf-2a | 13.57 |
| 100YR001HR | smf-2b | 13.23 |
| 100YR001HR | smf-2c | 13.54 |
| 100YR001HR | smf-3a | 13.95 |
| 100YR001HR | smf-3b | 13.30 |
| 100YR002HR | smf-1a | 13.81 |
| 100YR002HR | smf-1b | 14.74 |
| 100YR002HR | smf-2a | 13.52 |
| 100YR002HR | smf-2b | 13.19 |
| 100YR002HR | smf-2c | 13.51 |
| 100YR002HR | smf-3a | 13.85 |
| 100YR002HR | smf-3b | 13.26 |
| 100YR004YR | smf-1a | 13.88 |
| 100YR004YR | smf-1b | 14.60 |
| 100YR004YR | smf-2a | 13.47 |
| 100YR004YR | smf-2b | 13.13 |
| 100YR004YR | smf-2c | 13.46 |
| 100YR004YR | smf-3a | 13.67 |
| 100YR004YR | smf-3b | 13.16 |
| 100YR008HR | smf-1a | 13.95 |
| 100YR008HR | smf-1b | 14.60 |
| 100YR008HR | smf-2a | 13.57 |
| 100YR008HR | smf-2b | 13.21 |
| 100YR008HR | smf-2c | 13.57 |
| 100YR008HR | smf-3a | 13.67 |
| 100YR008HR | smf-3b | 13.25 |
| 100YR024HR | smf-1a | 13.81 |
| 100YR024HR | smf-1b | 14.45 |
| 100YR024HR | smf-2a | 13.31 |
| 100YR024HR | smf-2b | 12.97 |
| 100YR024HR | smf-2c | 13.30 |
| 100YR024HR | smf-3a | 13.46 |
| 100YR024HR | smf-3b | 12.98 |
| 100YR072HR | smf-1a | 13.80 |
| 100YR072HR | smf-1b | 14.41 |
| 100YR072HR | smf-2a | 13.29 |
| 100YR072HR | smf-2b | 12.94 |
| 100YR072HR | smf-2c | 13.28 |
| 100YR072HR | smf-3a | 13.41 |
| 100YR072HR | smf-3b | 12.95 |

Max Stages

| Sim | Node Name | Maximum Stage [ft] |
|---|---|---|
| MN024HR | smf-1a | 13.06 |
| MN024HR | smf-1b | 14.60 |
| MN024HR | smf-2a | 13.30 |
| MN024HR | smf-2b | 12.86 |
| MN024HR | smf-2c | 13.17 |
| MN024HR | smf-3a | 13.67 |
| MN024HR | smf-3b | 12.87 |

Node Max Conditions [Icpr3]

| Node Name | Sim Name | Warning Stage [ft] | Max Stage [ft] | Min/Max Delta Stage [ft] | Max Total Inflow [cfs] | Max Total Outflow [cfs] | Max Surface Area [ft2] |
|---|---|---|---|---|---|---|---|
| pre-1 | 003YR001HR | 0.00 | 14.00 | 0.0000 | 5.28 | 0.00 | 0 |
| pre-1 | 003YR002HR | 0.00 | 14.00 | 0.0000 | 3.96 | 0.00 | 0 |
| pre-1 | 003YR004HR | 0.00 | 14.00 | 0.0000 | 2.07 | 0.00 | 0 |
| pre-1 | 003YR008HR | 0.00 | 14.00 | 0.0000 | 2.10 | 0.00 | 0 |
| pre-1 | 003YR024HR | 0.00 | 14.00 | 0.0000 | 0.68 | 0.00 | 0 |
| pre-1 | 003YR072HR | 0.00 | 14.00 | 0.0000 | 0.45 | 0.00 | 0 |
| pre-1 | 005YR001HR | 0.00 | 14.00 | 0.0000 | 5.79 | 0.00 | 0 |
| pre-1 | 005YR002HR | 0.00 | 14.00 | 0.0000 | 4.41 | 0.00 | 0 |
| pre-1 | 005YR004HR | 0.00 | 14.00 | 0.0000 | 2.40 | 0.00 | 0 |
| pre-1 | 005YR008HR | 0.00 | 14.00 | 0.0000 | 2.36 | 0.00 | 0 |
| pre-1 | 005YR024HR | 0.00 | 14.00 | 0.0000 | 0.77 | 0.00 | 0 |
| pre-1 | 005YR072HR | 0.00 | 14.00 | 0.0000 | 0.48 | 0.00 | 0 |
| pre-1 | 010YR001HR | 0.00 | 14.00 | 0.0000 | 6.56 | 0.00 | 0 |
| pre-1 | 010YR002HR | 0.00 | 14.00 | 0.0000 | 5.02 | 0.00 | 0 |
| pre-1 | 010YR004HR | 0.00 | 14.00 | 0.0000 | 2.73 | 0.00 | 0 |
| pre-1 | 010YR008HR | 0.00 | 14.00 | 0.0000 | 2.78 | 0.00 | 0 |
| pre-1 | 010YR024HR | 0.00 | 14.00 | 0.0000 | 0.90 | 0.00 | 0 |
| pre-1 | 010YR072HR | 0.00 | 14.00 | 0.0000 | 0.53 | 0.00 | 0 |
| pre-1 | 025YR001HR | 0.00 | 14.00 | 0.0000 | 7.83 | 0.00 | 0 |
| pre-1 | 025YR002HR | 0.00 | 14.00 | 0.0000 | 5.77 | 0.00 | 0 |
| pre-1 | 025YR004HR | 0.00 | 14.00 | 0.0000 | 3.13 | 0.00 | 0 |
| pre-1 | 025YR008HR | 0.00 | 14.00 | 0.0000 | 3.10 | 0.00 | 0 |
| pre-1 | 025YR024HR | 0.00 | 14.00 | 0.0000 | 1.02 | 0.00 | 0 |
| pre-1 | 025YR072HR | 0.00 | 14.00 | 0.0000 | 0.66 | 0.00 | 0 |
| pre-1 | 050YR001HR | 0.00 | 14.00 | 0.0000 | 8.85 | 0.00 | 0 |
| pre-1 | 050YR002HR | 0.00 | 14.00 | 0.0000 | 6.67 | 0.00 | 0 |
| pre-1 | 050YR004YR | 0.00 | 14.00 | 0.0000 | 3.52 | 0.00 | 0 |
| pre-1 | 050YR008HR | 0.00 | 14.00 | 0.0000 | 3.52 | 0.00 | 0 |
| pre-1 | 050YR024HR | 0.00 | 14.00 | 0.0000 | 1.15 | 0.00 | 0 |
| pre-1 | 050YR072HR | 0.00 | 14.00 | 0.0000 | 0.72 | 0.00 | 0 |
| pre-1 | 100YR001HR | 0.00 | 14.00 | 0.0000 | 9.86 | 0.00 | 0 |
| pre-1 | 100YR002HR | 0.00 | 14.00 | 0.0000 | 7.41 | 0.00 | 0 |
| pre-1 | 100YR004YR | 0.00 | 14.00 | 0.0000 | 3.98 | 0.00 | 0 |
| pre-1 | 100YR008HR | 0.00 | 14.00 | 0.0000 | 3.78 | 0.00 | 0 |
| pre-1 | 100YR024HR | 0.00 | 14.00 | 0.0000 | 1.34 | 0.00 | 0 |
| pre-1 | 100YR072HR | 0.00 | 14.00 | 0.0000 | 0.83 | 0.00 | 0 |
| pre-1 | MN024HR | 0.00 | 14.00 | 0.0000 | 3.92 | 0.00 | 0 |

Node Max Conditions w/ Times [Icpr3]

| Node Name | Sim Name | Warning Stage [ft] | Max Stage [ft] | Min/Max Delta Stage [ft] | Max Total Inflow [cfs] | Max Total Outflow [cfs] | Max Surface Area [ft2] | Time to Max Stage [hr] | Time to Min/Max Delta Stage | Time to Max Total Inflow | Time to Max Total Outflow |
|---|---|---|---|---|---|---|---|---|---|---|---|

| Node Name | Sim Name | Warning Stage [ft] | Max Stage [ft] | Min/Max Delta Stage [ft] | Max Total Inflow [cfs] | Max Total Outflow [cfs] | Max Surface Area [ft2] | Time to Max Stage [hr] | Time to Min/Max Delta Stage [hr] | Time to Max Total Inflow [hr] | Time to Max Total Outflow [hr] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| pre-1 | 003YR001HR | 0.00 | 14.00 | 0.0000 | 5.28 | 0.00 | 0 | 0.0000 | 0.0000 | 0.6000 | 0.0000 |
| pre-1 | 003YR002HR | 0.00 | 14.00 | 0.0000 | 3.96 | 0.00 | 0 | 0.0000 | 0.0000 | 0.8000 | 0.0000 |
| pre-1 | 003YR004HR | 0.00 | 14.00 | 0.0000 | 2.07 | 0.00 | 0 | 0.0000 | 0.0000 | 2.0167 | 0.0000 |
| pre-1 | 003YR008HR | 0.00 | 14.00 | 0.0000 | 2.10 | 0.00 | 0 | 0.0000 | 0.0000 | 4.0002 | 0.0000 |
| pre-1 | 003YR024HR | 0.00 | 14.00 | 0.0000 | 0.68 | 0.00 | 0 | 0.0000 | 0.0000 | 11.9983 | 0.0000 |
| pre-1 | 003YR072HR | 0.00 | 14.00 | 0.0000 | 0.45 | 0.00 | 0 | 0.0000 | 0.0000 | 59.9154 | 0.0000 |
| pre-1 | 005YR001HR | 0.00 | 14.00 | 0.0000 | 5.79 | 0.00 | 0 | 0.0000 | 0.0000 | 0.5834 | 0.0000 |
| pre-1 | 005YR002HR | 0.00 | 14.00 | 0.0000 | 4.41 | 0.00 | 0 | 0.0000 | 0.0000 | 0.8000 | 0.0000 |
| pre-1 | 005YR004HR | 0.00 | 14.00 | 0.0000 | 2.40 | 0.00 | 0 | 0.0000 | 0.0000 | 2.0168 | 0.0000 |
| pre-1 | 005YR008HR | 0.00 | 14.00 | 0.0000 | 2.36 | 0.00 | 0 | 0.0000 | 0.0000 | 3.9998 | 0.0000 |
| pre-1 | 005YR024HR | 0.00 | 14.00 | 0.0000 | 0.77 | 0.00 | 0 | 0.0000 | 0.0000 | 11.9987 | 0.0000 |
| pre-1 | 005YR072HR | 0.00 | 14.00 | 0.0000 | 0.48 | 0.00 | 0 | 0.0000 | 0.0000 | 59.9149 | 0.0000 |
| pre-1 | 010YR001HR | 0.00 | 14.00 | 0.0000 | 6.56 | 0.00 | 0 | 0.0000 | 0.0000 | 0.5833 | 0.0000 |
| pre-1 | 010YR002HR | 0.00 | 14.00 | 0.0000 | 5.02 | 0.00 | 0 | 0.0000 | 0.0000 | 0.8001 | 0.0000 |
| pre-1 | 010YR004HR | 0.00 | 14.00 | 0.0000 | 2.73 | 0.00 | 0 | 0.0000 | 0.0000 | 2.0167 | 0.0000 |
| pre-1 | 010YR008HR | 0.00 | 14.00 | 0.0000 | 2.78 | 0.00 | 0 | 0.0000 | 0.0000 | 3.9992 | 0.0000 |
| pre-1 | 010YR024HR | 0.00 | 14.00 | 0.0000 | 0.90 | 0.00 | 0 | 0.0000 | 0.0000 | 11.9998 | 0.0000 |
| pre-1 | 010YR072HR | 0.00 | 14.00 | 0.0000 | 0.53 | 0.00 | 0 | 0.0000 | 0.0000 | 59.9162 | 0.0000 |
| pre-1 | 025YR001HR | 0.00 | 14.00 | 0.0000 | 7.83 | 0.00 | 0 | 0.0000 | 0.0000 | 0.5833 | 0.0000 |
| pre-1 | 025YR002HR | 0.00 | 14.00 | 0.0000 | 5.77 | 0.00 | 0 | 0.0000 | 0.0000 | 0.8000 | 0.0000 |
| pre-1 | 025YR004HR | 0.00 | 14.00 | 0.0000 | 3.13 | 0.00 | 0 | 0.0000 | 0.0000 | 2.0164 | 0.0000 |
| pre-1 | 025YR008HR | 0.00 | 14.00 | 0.0000 | 3.10 | 0.00 | 0 | 0.0000 | 0.0000 | 4.0000 | 0.0000 |
| pre-1 | 025YR0 | 0.00 | 14.00 | 0.0000 | 1.02 | 0.00 | 0 | 0.0000 | 0.0000 | 11.9988 | 0.0000 |

| Node Name | Sim Name | Warning Stage [ft] | Max Stage [ft] | Min/Max Delta Stage [ft] | Max Total Inflow [cfs] | Max Total Outflow [cfs] | Max Surface Area [ft2] | Time to Max Stage [hr] | Time to Min/Max Delta Stage [hr] | Time to Max Total Inflow [hr] | Time to Max Total Outflow [hr] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 24HR | | | | | | | | | | |
| pre-1 | 025YR072HR | 0.00 | 14.00 | 0.0000 | 0.66 | 0.00 | 0 | 0.0000 | 0.0000 | 59.9153 | 0.0000 |
| pre-1 | 050YR001HR | 0.00 | 14.00 | 0.0000 | 8.85 | 0.00 | 0 | 0.0000 | 0.0000 | 0.5833 | 0.0000 |
| pre-1 | 050YR002HR | 0.00 | 14.00 | 0.0000 | 6.67 | 0.00 | 0 | 0.0000 | 0.0000 | 0.7999 | 0.0000 |
| pre-1 | 050YR004YR | 0.00 | 14.00 | 0.0000 | 3.52 | 0.00 | 0 | 0.0000 | 0.0000 | 2.0166 | 0.0000 |
| pre-1 | 050YR008HR | 0.00 | 14.00 | 0.0000 | 3.52 | 0.00 | 0 | 0.0000 | 0.0000 | 3.9985 | 0.0000 |
| pre-1 | 050YR024HR | 0.00 | 14.00 | 0.0000 | 1.15 | 0.00 | 0 | 0.0000 | 0.0000 | 11.9961 | 0.0000 |
| pre-1 | 050YR072HR | 0.00 | 14.00 | 0.0000 | 0.72 | 0.00 | 0 | 0.0000 | 0.0000 | 59.9166 | 0.0000 |
| pre-1 | 100YR001HR | 0.00 | 14.00 | 0.0000 | 9.86 | 0.00 | 0 | 0.0000 | 0.0000 | 0.5833 | 0.0000 |
| pre-1 | 100YR002HR | 0.00 | 14.00 | 0.0000 | 7.41 | 0.00 | 0 | 0.0000 | 0.0000 | 0.8000 | 0.0000 |
| pre-1 | 100YR004YR | 0.00 | 14.00 | 0.0000 | 3.98 | 0.00 | 0 | 0.0000 | 0.0000 | 2.0000 | 0.0000 |
| pre-1 | 100YR008HR | 0.00 | 14.00 | 0.0000 | 3.78 | 0.00 | 0 | 0.0000 | 0.0000 | 3.9993 | 0.0000 |
| pre-1 | 100YR024HR | 0.00 | 14.00 | 0.0000 | 1.34 | 0.00 | 0 | 0.0000 | 0.0000 | 11.9977 | 0.0000 |
| pre-1 | 100YR072HR | 0.00 | 14.00 | 0.0000 | 0.83 | 0.00 | 0 | 0.0000 | 0.0000 | 59.9124 | 0.0000 |
| pre-1 | MN024HR | 0.00 | 14.00 | 0.0000 | 3.92 | 0.00 | 0 | 0.0000 | 0.0000 | 12.0166 | 0.0000 |

Peak Discharge

| Sim | Link Name | Maximum Flow Rate [cfs] | Time to Maximum Flow Rate [hrs |
|---|---|---|---|
| 003YR001HR | ds-2 | 0.00 | 0.0000 |
| 003YR002HR | ds-2 | 0.00 | 0.0000 |
| 003YR004HR | ds-2 | 0.35 | 3.1818 |
| 003YR008HR | ds-2 | 0.40 | 5.0824 |
| 003YR024HR | ds-2 | 0.24 | 15.0904 |
| 003YR072HR | ds-2 | 0.26 | 60.0798 |
| 005YR001HR | ds-2 | 0.00 | 0.0000 |
| 005YR002HR | ds-2 | 0.30 | 1.7114 |
| 005YR004HR | ds-2 | 0.78 | 3.0684 |
| 005YR008HR | ds-2 | 0.53 | 4.2860 |
| 005YR024HR | ds-2 | 0.27 | 15.0735 |
| 005YR072HR | ds-2 | 0.33 | 59.5825 |
| 010YR001HR | ds-2 | 0.39 | 0.9749 |
| 010YR002HR | ds-2 | 0.56 | 1.4584 |
| 010YR004HR | ds-2 | 1.28 | 2.6319 |
| 010YR008HR | ds-2 | 1.41 | 4.1035 |
| 010YR024HR | ds-2 | 0.47 | 12.1225 |
| 010YR072HR | ds-2 | 0.39 | 59.8328 |
| 025YR001HR | ds-2 | 1.48 | 0.9353 |
| 025YR002HR | ds-2 | 1.23 | 1.1696 |
| 025YR004HR | ds-2 | 1.85 | 2.5887 |
| 025YR008HR | ds-2 | 2.17 | 4.0700 |
| 025YR024HR | ds-2 | 0.70 | 12.0597 |
| 025YR072HR | ds-2 | 0.63 | 59.7396 |
| 050YR001HR | ds-2 | 2.37 | 0.8887 |
| 050YR002HR | ds-2 | 2.11 | 1.0668 |
| 050YR004YR | ds-2 | 2.14 | 2.5735 |
| 050YR008HR | ds-2 | 2.57 | 4.0714 |
| 050YR024HR | ds-2 | 0.78 | 12.0748 |
| 050YR072HR | ds-2 | 0.69 | 59.9842 |
| 100YR001HR | ds-2 | 3.54 | 0.8365 |
| 100YR002HR | ds-2 | 3.08 | 0.9958 |
| 100YR004YR | ds-2 | 2.39 | 2.5475 |
| 100YR008HR | ds-2 | 3.22 | 4.0790 |
| 100YR024HR | ds-2 | 0.97 | 12.1087 |
| 100YR072HR | ds-2 | 0.80 | 59.2680 |
| MN024HR | ds-2 | 0.31 | 12.6464 |

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR001HR | smf-1a | 10.5030 | 12.51 |
| 003YR001HR | smf-1a | 10.7530 | 12.50 |
| 003YR001HR | smf-1a | 11.0030 | 12.50 |
| 003YR001HR | smf-1a | 11.2530 | 12.49 |
| 003YR001HR | smf-1a | 11.5030 | 12.49 |
| 003YR001HR | smf-1a | 11.7530 | 12.48 |
| 003YR001HR | smf-1a | 12.0030 | 12.48 |
| 003YR001HR | smf-1a | 12.2530 | 12.48 |
| 003YR001HR | smf-1a | 12.5030 | 12.47 |
| 003YR001HR | smf-1a | 12.7530 | 12.47 |
| 003YR001HR | smf-1a | 13.0030 | 12.46 |
| 003YR001HR | smf-1a | 13.2530 | 12.46 |
| 003YR001HR | smf-1a | 13.5030 | 12.46 |
| 003YR001HR | smf-1a | 13.7530 | 12.45 |
| 003YR001HR | smf-1a | 14.0030 | 12.45 |
| 003YR001HR | smf-1a | 14.2530 | 12.45 |
| 003YR001HR | smf-1a | 14.5030 | 12.45 |
| 003YR001HR | smf-1a | 14.7530 | 12.45 |
| 003YR001HR | smf-1a | 15.0030 | 12.45 |
| 003YR001HR | smf-1a | 15.2530 | 12.45 |
| 003YR001HR | smf-1a | 15.5030 | 12.45 |
| 003YR001HR | smf-1a | 15.7530 | 12.45 |
| 003YR001HR | smf-1a | 16.0030 | 12.45 |
| 003YR001HR | smf-1a | 16.2530 | 12.45 |
| 003YR001HR | smf-1a | 16.5030 | 12.45 |
| 003YR001HR | smf-1a | 16.7530 | 12.45 |
| 003YR001HR | smf-1a | 17.0030 | 12.45 |
| 003YR001HR | smf-1a | 17.2530 | 12.45 |
| 003YR001HR | smf-1a | 17.5030 | 12.45 |
| 003YR001HR | smf-1a | 17.7530 | 12.45 |
| 003YR001HR | smf-1a | 18.0030 | 12.45 |
| 003YR001HR | smf-1a | 18.2530 | 12.45 |
| 003YR001HR | smf-1a | 18.5030 | 12.45 |
| 003YR001HR | smf-1a | 18.7530 | 12.45 |
| 003YR001HR | smf-1a | 19.0030 | 12.45 |
| 003YR001HR | smf-1a | 19.2530 | 12.45 |
| 003YR001HR | smf-1a | 19.5030 | 12.45 |
| 003YR001HR | smf-1a | 19.7530 | 12.45 |
| 003YR001HR | smf-1a | 20.0030 | 12.45 |
| 003YR001HR | smf-1a | 20.2530 | 12.45 |
| 003YR001HR | smf-1a | 20.5030 | 12.45 |
| 003YR001HR | smf-1a | 20.7530 | 12.45 |

**3yr-1hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR001HR | smf-1b | 45.2530 | 13.06 |
| 003YR001HR | smf-1b | 45.5030 | 13.05 |
| 003YR001HR | smf-1b | 45.7530 | 13.05 |
| 003YR001HR | smf-1b | 46.0030 | 13.05 |
| 003YR001HR | smf-1b | 46.2530 | 13.05 |
| 003YR001HR | smf-1b | 46.5030 | 13.05 |
| 003YR001HR | smf-1b | 46.7530 | 13.04 |
| 003YR001HR | smf-1b | 47.0030 | 13.04 |
| 003YR001HR | smf-1b | 47.2530 | 13.04 |
| 003YR001HR | smf-1b | 47.5030 | 13.04 |
| 003YR001HR | smf-1b | 47.7530 | 13.03 |
| 003YR001HR | smf-1b | 48.0030 | 13.03 |
| 003YR001HR | smf-1b | 48.2530 | 13.03 |
| 003YR001HR | smf-1b | 48.5030 | 13.03 |
| 003YR001HR | smf-1b | 48.7530 | 13.03 |
| 003YR001HR | smf-1b | 49.0030 | 13.03 |
| 003YR001HR | smf-1b | 49.2530 | 13.02 |
| 003YR001HR | smf-1b | 49.5030 | 13.02 |
| 003YR001HR | smf-1b | 49.7530 | 13.02 |
| 003YR001HR | smf-1b | 50.0030 | 13.02 |
| 003YR001HR | smf-1b | 50.2530 | 13.02 |
| 003YR001HR | smf-1b | 50.5030 | 13.01 |
| 003YR001HR | smf-1b | 50.7530 | 13.01 |
| 003YR001HR | smf-1b | 51.0030 | 13.01 |
| 003YR001HR | smf-1b | 51.2530 | 13.01 |
| 003YR001HR | smf-1b | 51.5030 | 13.01 |
| 003YR001HR | smf-1b | 51.7530 | 13.00 |
| 003YR001HR | smf-1b | 52.0030 | 13.00 |
| 003YR001HR | smf-1b | 52.2530 | 13.00 |
| 003YR001HR | smf-1b | 52.5030 | 13.00 |
| 003YR001HR | smf-1b | 52.7530 | 13.00 |
| 003YR001HR | smf-1b | 53.0030 | 13.00 |
| 003YR001HR | smf-1b | 53.2530 | 13.00 |
| 003YR001HR | smf-1b | 53.5030 | 13.00 |
| 003YR001HR | smf-1b | 53.7530 | 13.00 |
| 003YR001HR | smf-1b | 54.0030 | 13.00 |
| 003YR001HR | smf-1b | 54.2530 | 13.00 |
| 003YR001HR | smf-1b | 54.5030 | 13.00 |
| 003YR001HR | smf-1b | 54.7530 | 13.00 |
| 003YR001HR | smf-1b | 55.0030 | 13.00 |
| 003YR001HR | smf-1b | 55.2530 | 13.00 |
| 003YR001HR | smf-1b | 55.5030 | 13.00 |

**3yr-1hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR001HR | smf-2a | 80.0030 | 12.13 |
| 003YR001HR | smf-2a | 80.2530 | 12.13 |
| 003YR001HR | smf-2a | 80.5030 | 12.13 |
| 003YR001HR | smf-2a | 80.7530 | 12.13 |
| 003YR001HR | smf-2a | 81.0030 | 12.13 |
| 003YR001HR | smf-2a | 81.2530 | 12.13 |
| 003YR001HR | smf-2a | 81.5030 | 12.13 |
| 003YR001HR | smf-2a | 81.7530 | 12.13 |
| 003YR001HR | smf-2a | 82.0030 | 12.12 |
| 003YR001HR | smf-2a | 82.2530 | 12.12 |
| 003YR001HR | smf-2a | 82.5030 | 12.12 |
| 003YR001HR | smf-2a | 82.7530 | 12.12 |
| 003YR001HR | smf-2a | 83.0030 | 12.12 |
| 003YR001HR | smf-2a | 83.2530 | 12.12 |
| 003YR001HR | smf-2a | 83.5030 | 12.12 |
| 003YR001HR | smf-2a | 83.7530 | 12.12 |
| 003YR001HR | smf-2a | 84.0030 | 12.12 |
| 003YR001HR | smf-2a | 84.2530 | 12.12 |
| 003YR001HR | smf-2a | 84.5030 | 12.12 |
| 003YR001HR | smf-2a | 84.7530 | 12.12 |
| 003YR001HR | smf-2a | 85.0030 | 12.11 |
| 003YR001HR | smf-2a | 85.2530 | 12.11 |
| 003YR001HR | smf-2a | 85.5030 | 12.11 |
| 003YR001HR | smf-2a | 85.7530 | 12.11 |
| 003YR001HR | smf-2a | 86.0030 | 12.11 |
| 003YR001HR | smf-2a | 86.2530 | 12.11 |
| 003YR001HR | smf-2a | 86.5030 | 12.11 |
| 003YR001HR | smf-2a | 86.7530 | 12.11 |
| 003YR001HR | smf-2a | 87.0030 | 12.11 |
| 003YR001HR | smf-2a | 87.2530 | 12.11 |
| 003YR001HR | smf-2a | 87.5030 | 12.11 |
| 003YR001HR | smf-2a | 87.7530 | 12.11 |
| 003YR001HR | smf-2a | 88.0030 | 12.10 |
| 003YR001HR | smf-2a | 88.2530 | 12.10 |
| 003YR001HR | smf-2a | 88.5030 | 12.10 |
| 003YR001HR | smf-2a | 88.7530 | 12.10 |
| 003YR001HR | smf-2a | 89.0030 | 12.10 |
| 003YR001HR | smf-2a | 89.2530 | 12.10 |
| 003YR001HR | smf-2a | 89.5030 | 12.10 |
| 003YR001HR | smf-2a | 89.7530 | 12.10 |
| 003YR001HR | smf-2a | 90.0030 | 12.10 |
| 003YR001HR | smf-2a | 90.2530 | 12.10 |

**3yr-1hr SMF-2a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR001HR | smf-2b | 30.7530 | 11.40 |
| 003YR001HR | smf-2b | 31.0030 | 11.40 |
| 003YR001HR | smf-2b | 31.2530 | 11.40 |
| 003YR001HR | smf-2b | 31.5030 | 11.40 |
| 003YR001HR | smf-2b | 31.7530 | 11.40 |
| 003YR001HR | smf-2b | 32.0030 | 11.40 |
| 003YR001HR | smf-2b | 32.2530 | 11.40 |
| 003YR001HR | smf-2b | 32.5030 | 11.40 |
| 003YR001HR | smf-2b | 32.7530 | 11.40 |
| 003YR001HR | smf-2b | 33.0030 | 11.40 |
| 003YR001HR | smf-2b | 33.2530 | 11.40 |
| 003YR001HR | smf-2b | 33.5030 | 11.40 |
| 003YR001HR | smf-2b | 33.7530 | 11.40 |
| 003YR001HR | smf-2b | 34.0030 | 11.40 |
| 003YR001HR | smf-2b | 34.2530 | 11.40 |
| 003YR001HR | smf-2b | 34.5030 | 11.40 |
| 003YR001HR | smf-2b | 34.7530 | 11.40 |
| 003YR001HR | smf-2b | 35.0030 | 11.40 |
| 003YR001HR | smf-2b | 35.2530 | 11.40 |
| 003YR001HR | smf-2b | 35.5030 | 11.40 |
| 003YR001HR | smf-2b | 35.7530 | 11.40 |
| 003YR001HR | smf-2b | 36.0030 | 11.40 |
| 003YR001HR | smf-2b | 36.2530 | 11.40 |
| 003YR001HR | smf-2b | 36.5030 | 11.40 |
| 003YR001HR | smf-2b | 36.7530 | 11.40 |
| 003YR001HR | smf-2b | 37.0030 | 11.40 |
| 003YR001HR | smf-2b | 37.2530 | 11.40 |
| 003YR001HR | smf-2b | 37.5030 | 11.40 |
| 003YR001HR | smf-2b | 37.7530 | 11.40 |
| 003YR001HR | smf-2b | 38.0030 | 11.40 |
| 003YR001HR | smf-2b | 38.2530 | 11.40 |
| 003YR001HR | smf-2b | 38.5030 | 11.40 |
| 003YR001HR | smf-2b | 38.7530 | 11.40 |
| 003YR001HR | smf-2b | 39.0030 | 11.40 |
| 003YR001HR | smf-2b | 39.2530 | 11.40 |
| 003YR001HR | smf-2b | 39.5030 | 11.40 |
| 003YR001HR | smf-2b | 39.7530 | 11.40 |
| 003YR001HR | smf-2b | 40.0030 | 11.40 |
| 003YR001HR | smf-2b | 40.2530 | 11.40 |
| 003YR001HR | smf-2b | 40.5030 | 11.40 |
| 003YR001HR | smf-2b | 40.7530 | 11.40 |
| 003YR001HR | smf-2b | 41.0030 | 11.40 |

**3yr-1hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR001HR | smf-2c | 34.0030 | 11.93 |
| 003YR001HR | smf-2c | 34.2530 | 11.93 |
| 003YR001HR | smf-2c | 34.5030 | 11.93 |
| 003YR001HR | smf-2c | 34.7530 | 11.93 |
| 003YR001HR | smf-2c | 35.0030 | 11.92 |
| 003YR001HR | smf-2c | 35.2530 | 11.92 |
| 003YR001HR | smf-2c | 35.5030 | 11.92 |
| 003YR001HR | smf-2c | 35.7530 | 11.92 |
| 003YR001HR | smf-2c | 36.0030 | 11.91 |
| 003YR001HR | smf-2c | 36.2530 | 11.91 |
| 003YR001HR | smf-2c | 36.5030 | 11.91 |
| 003YR001HR | smf-2c | 36.7530 | 11.91 |
| 003YR001HR | smf-2c | 37.0030 | 11.91 |
| 003YR001HR | smf-2c | 37.2530 | 11.90 |
| 003YR001HR | smf-2c | 37.5030 | 11.90 |
| 003YR001HR | smf-2c | 37.7530 | 11.90 |
| 003YR001HR | smf-2c | 38.0030 | 11.90 |
| 003YR001HR | smf-2c | 38.2530 | 11.89 |
| 003YR001HR | smf-2c | 38.5030 | 11.89 |
| 003YR001HR | smf-2c | 38.7530 | 11.89 |
| 003YR001HR | smf-2c | 39.0030 | 11.89 |
| 003YR001HR | smf-2c | 39.2530 | 11.89 |
| 003YR001HR | smf-2c | 39.5030 | 11.88 |
| 003YR001HR | smf-2c | 39.7530 | 11.88 |
| 003YR001HR | smf-2c | 40.0030 | 11.88 |
| 003YR001HR | smf-2c | 40.2530 | 11.88 |
| 003YR001HR | smf-2c | 40.5030 | 11.88 |
| 003YR001HR | smf-2c | 40.7530 | 11.87 |
| 003YR001HR | smf-2c | 41.0030 | 11.87 |
| 003YR001HR | smf-2c | 41.2530 | 11.87 |
| 003YR001HR | smf-2c | 41.5030 | 11.87 |
| 003YR001HR | smf-2c | 41.7530 | 11.87 |
| 003YR001HR | smf-2c | 42.0030 | 11.87 |
| 003YR001HR | smf-2c | 42.2530 | 11.86 |
| 003YR001HR | smf-2c | 42.5030 | 11.86 |
| 003YR001HR | smf-2c | 42.7530 | 11.86 |
| 003YR001HR | smf-2c | 43.0030 | 11.86 |
| 003YR001HR | smf-2c | 43.2530 | 11.86 |
| 003YR001HR | smf-2c | 43.5030 | 11.85 |
| 003YR001HR | smf-2c | 43.7530 | 11.85 |
| 003YR001HR | smf-2c | 44.0030 | 11.85 |
| 003YR001HR | smf-2c | 44.2530 | 11.85 |

**3yr-1hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR001HR | smf-3a | 79.2530 | 11.94 |
| 003YR001HR | smf-3a | 79.5030 | 11.94 |
| 003YR001HR | smf-3a | 79.7530 | 11.94 |
| 003YR001HR | smf-3a | 80.0030 | 11.94 |
| 003YR001HR | smf-3a | 80.2530 | 11.94 |
| 003YR001HR | smf-3a | 80.5030 | 11.94 |
| 003YR001HR | smf-3a | 80.7530 | 11.94 |
| 003YR001HR | smf-3a | 81.0030 | 11.94 |
| 003YR001HR | smf-3a | 81.2530 | 11.93 |
| 003YR001HR | smf-3a | 81.5030 | 11.93 |
| 003YR001HR | smf-3a | 81.7530 | 11.93 |
| 003YR001HR | smf-3a | 82.0030 | 11.93 |
| 003YR001HR | smf-3a | 82.2530 | 11.93 |
| 003YR001HR | smf-3a | 82.5030 | 11.93 |
| 003YR001HR | smf-3a | 82.7530 | 11.93 |
| 003YR001HR | smf-3a | 83.0030 | 11.93 |
| 003YR001HR | smf-3a | 83.2530 | 11.93 |
| 003YR001HR | smf-3a | 83.5030 | 11.92 |
| 003YR001HR | smf-3a | 83.7530 | 11.92 |
| 003YR001HR | smf-3a | 84.0030 | 11.92 |
| 003YR001HR | smf-3a | 84.2530 | 11.92 |
| 003YR001HR | smf-3a | 84.5030 | 11.92 |
| 003YR001HR | smf-3a | 84.7530 | 11.92 |
| 003YR001HR | smf-3a | 85.0030 | 11.92 |
| 003YR001HR | smf-3a | 85.2530 | 11.92 |
| 003YR001HR | smf-3a | 85.5030 | 11.92 |
| 003YR001HR | smf-3a | 85.7530 | 11.91 |
| 003YR001HR | smf-3a | 86.0030 | 11.91 |
| 003YR001HR | smf-3a | 86.2530 | 11.91 |
| 003YR001HR | smf-3a | 86.5030 | 11.91 |
| 003YR001HR | smf-3a | 86.7530 | 11.91 |
| 003YR001HR | smf-3a | 87.0030 | 11.91 |
| 003YR001HR | smf-3a | 87.2530 | 11.91 |
| 003YR001HR | smf-3a | 87.5030 | 11.91 |
| 003YR001HR | smf-3a | 87.7530 | 11.91 |
| 003YR001HR | smf-3a | 88.0030 | 11.90 |
| 003YR001HR | smf-3a | 88.2530 | 11.90 |
| 003YR001HR | smf-3a | 88.5030 | 11.90 |
| 003YR001HR | smf-3a | 88.7530 | 11.90 |
| 003YR001HR | smf-3a | 89.0030 | 11.90 |
| 003YR001HR | smf-3a | 89.2530 | 11.90 |
| 003YR001HR | smf-3a | 89.5030 | 11.90 |

**3yr-1hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR001HR | smf-3b | 61.5030 | 11.30 |
| 003YR001HR | smf-3b | 61.7530 | 11.30 |
| 003YR001HR | smf-3b | 62.0030 | 11.29 |
| 003YR001HR | smf-3b | 62.2530 | 11.29 |
| 003YR001HR | smf-3b | 62.5030 | 11.29 |
| 003YR001HR | smf-3b | 62.7530 | 11.29 |
| 003YR001HR | smf-3b | 63.0030 | 11.29 |
| 003YR001HR | smf-3b | 63.2530 | 11.29 |
| 003YR001HR | smf-3b | 63.5030 | 11.29 |
| 003YR001HR | smf-3b | 63.7530 | 11.28 |
| 003YR001HR | smf-3b | 64.0030 | 11.28 |
| 003YR001HR | smf-3b | 64.2530 | 11.28 |
| 003YR001HR | smf-3b | 64.5030 | 11.28 |
| 003YR001HR | smf-3b | 64.7530 | 11.28 |
| 003YR001HR | smf-3b | 65.0030 | 11.28 |
| 003YR001HR | smf-3b | 65.2530 | 11.28 |
| 003YR001HR | smf-3b | 65.5030 | 11.27 |
| 003YR001HR | smf-3b | 65.7530 | 11.27 |
| 003YR001HR | smf-3b | 66.0030 | 11.27 |
| 003YR001HR | smf-3b | 66.2530 | 11.27 |
| 003YR001HR | smf-3b | 66.5030 | 11.27 |
| 003YR001HR | smf-3b | 66.7530 | 11.27 |
| 003YR001HR | smf-3b | 67.0030 | 11.27 |
| 003YR001HR | smf-3b | 67.2530 | 11.27 |
| 003YR001HR | smf-3b | 67.5030 | 11.26 |
| 003YR001HR | smf-3b | 67.7530 | 11.26 |
| 003YR001HR | smf-3b | 68.0030 | 11.26 |
| 003YR001HR | smf-3b | 68.2530 | 11.26 |
| 003YR001HR | smf-3b | 68.5030 | 11.26 |
| 003YR001HR | smf-3b | 68.7530 | 11.26 |
| 003YR001HR | smf-3b | 69.0030 | 11.26 |
| 003YR001HR | smf-3b | 69.2530 | 11.25 |
| 003YR001HR | smf-3b | 69.5030 | 11.25 |
| 003YR001HR | smf-3b | 69.7530 | 11.25 |
| 003YR001HR | smf-3b | 70.0030 | 11.25 |
| 003YR001HR | smf-3b | 70.2530 | 11.25 |
| 003YR001HR | smf-3b | 70.5030 | 11.25 |
| 003YR001HR | smf-3b | 70.7530 | 11.25 |
| 003YR001HR | smf-3b | 71.0030 | 11.25 |
| 003YR001HR | smf-3b | 71.2530 | 11.25 |
| 003YR001HR | smf-3b | 71.5030 | 11.25 |
| 003YR001HR | smf-3b | 71.7530 | 11.25 |

**3yr-1hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR002HR | smf-1a | 22.7562 | 12.48 |
| 003YR002HR | smf-1a | 23.0062 | 12.48 |
| 003YR002HR | smf-1a | 23.2562 | 12.47 |
| 003YR002HR | smf-1a | 23.5062 | 12.47 |
| 003YR002HR | smf-1a | 23.7562 | 12.47 |
| 003YR002HR | smf-1a | 24.0062 | 12.47 |
| 003YR002HR | smf-1a | 24.2562 | 12.46 |
| 003YR002HR | smf-1a | 24.5062 | 12.46 |
| 003YR002HR | smf-1a | 24.7562 | 12.46 |
| 003YR002HR | smf-1a | 25.0062 | 12.46 |
| 003YR002HR | smf-1a | 25.2562 | 12.46 |
| 003YR002HR | smf-1a | 25.5062 | 12.45 |
| 003YR002HR | smf-1a | 25.7562 | 12.45 |
| 003YR002HR | smf-1a | 26.0062 | 12.45 |
| 003YR002HR | smf-1a | 26.2562 | 12.45 |
| 003YR002HR | smf-1a | 26.5062 | 12.45 |
| 003YR002HR | smf-1a | 26.7562 | 12.45 |
| 003YR002HR | smf-1a | 27.0062 | 12.45 |
| 003YR002HR | smf-1a | 27.2562 | 12.45 |
| 003YR002HR | smf-1a | 27.5062 | 12.45 |
| 003YR002HR | smf-1a | 27.7562 | 12.45 |
| 003YR002HR | smf-1a | 28.0062 | 12.45 |
| 003YR002HR | smf-1a | 28.2562 | 12.45 |
| 003YR002HR | smf-1a | 28.5062 | 12.45 |
| 003YR002HR | smf-1a | 28.7562 | 12.45 |
| 003YR002HR | smf-1a | 29.0062 | 12.45 |
| 003YR002HR | smf-1a | 29.2562 | 12.45 |
| 003YR002HR | smf-1a | 29.5062 | 12.45 |
| 003YR002HR | smf-1a | 29.7562 | 12.45 |
| 003YR002HR | smf-1a | 30.0062 | 12.45 |
| 003YR002HR | smf-1a | 30.2562 | 12.45 |
| 003YR002HR | smf-1a | 30.5062 | 12.45 |
| 003YR002HR | smf-1a | 30.7562 | 12.45 |
| 003YR002HR | smf-1a | 31.0062 | 12.45 |
| 003YR002HR | smf-1a | 31.2562 | 12.45 |
| 003YR002HR | smf-1a | 31.5062 | 12.45 |
| 003YR002HR | smf-1a | 31.7562 | 12.45 |
| 003YR002HR | smf-1a | 32.0062 | 12.45 |
| 003YR002HR | smf-1a | 32.2562 | 12.45 |
| 003YR002HR | smf-1a | 32.5062 | 12.45 |
| 003YR002HR | smf-1a | 32.7562 | 12.45 |
| 003YR002HR | smf-1a | 33.0062 | 12.45 |

**3yr-2hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR002HR | smf-1b | 56.5062 | 13.07 |
| 003YR002HR | smf-1b | 56.7562 | 13.07 |
| 003YR002HR | smf-1b | 57.0062 | 13.06 |
| 003YR002HR | smf-1b | 57.2562 | 13.06 |
| 003YR002HR | smf-1b | 57.5062 | 13.06 |
| 003YR002HR | smf-1b | 57.7562 | 13.06 |
| 003YR002HR | smf-1b | 58.0062 | 13.06 |
| 003YR002HR | smf-1b | 58.2562 | 13.06 |
| 003YR002HR | smf-1b | 58.5062 | 13.05 |
| 003YR002HR | smf-1b | 58.7562 | 13.05 |
| 003YR002HR | smf-1b | 59.0062 | 13.05 |
| 003YR002HR | smf-1b | 59.2562 | 13.05 |
| 003YR002HR | smf-1b | 59.5062 | 13.05 |
| 003YR002HR | smf-1b | 59.7562 | 13.04 |
| 003YR002HR | smf-1b | 60.0062 | 13.04 |
| 003YR002HR | smf-1b | 60.2562 | 13.04 |
| 003YR002HR | smf-1b | 60.5062 | 13.04 |
| 003YR002HR | smf-1b | 60.7562 | 13.04 |
| 003YR002HR | smf-1b | 61.0062 | 13.04 |
| 003YR002HR | smf-1b | 61.2562 | 13.03 |
| 003YR002HR | smf-1b | 61.5062 | 13.03 |
| 003YR002HR | smf-1b | 61.7562 | 13.03 |
| 003YR002HR | smf-1b | 62.0062 | 13.03 |
| 003YR002HR | smf-1b | 62.2562 | 13.03 |
| 003YR002HR | smf-1b | 62.5062 | 13.03 |
| 003YR002HR | smf-1b | 62.7562 | 13.02 |
| 003YR002HR | smf-1b | 63.0062 | 13.02 |
| 003YR002HR | smf-1b | 63.2562 | 13.02 |
| 003YR002HR | smf-1b | 63.5062 | 13.02 |
| 003YR002HR | smf-1b | 63.7562 | 13.02 |
| 003YR002HR | smf-1b | 64.0062 | 13.02 |
| 003YR002HR | smf-1b | 64.2562 | 13.02 |
| 003YR002HR | smf-1b | 64.5062 | 13.01 |
| 003YR002HR | smf-1b | 64.7562 | 13.01 |
| 003YR002HR | smf-1b | 65.0062 | 13.01 |
| 003YR002HR | smf-1b | 65.2562 | 13.01 |
| 003YR002HR | smf-1b | 65.5062 | 13.01 |
| 003YR002HR | smf-1b | 65.7562 | 13.01 |
| 003YR002HR | smf-1b | 66.0062 | 13.01 |
| 003YR002HR | smf-1b | 66.2562 | 13.00 |
| 003YR002HR | smf-1b | 66.5062 | 13.00 |
| 003YR002HR | smf-1b | 66.7562 | 13.00 |

**3yr-2hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR002HR | smf-2a | 100.7562 | 12.13 |
| 003YR002HR | smf-2a | 101.0062 | 12.13 |
| 003YR002HR | smf-2a | 101.2562 | 12.13 |
| 003YR002HR | smf-2a | 101.5062 | 12.13 |
| 003YR002HR | smf-2a | 101.7562 | 12.13 |
| 003YR002HR | smf-2a | 102.0062 | 12.12 |
| 003YR002HR | smf-2a | 102.2562 | 12.12 |
| 003YR002HR | smf-2a | 102.5062 | 12.12 |
| 003YR002HR | smf-2a | 102.7562 | 12.12 |
| 003YR002HR | smf-2a | 103.0062 | 12.12 |
| 003YR002HR | smf-2a | 103.2562 | 12.12 |
| 003YR002HR | smf-2a | 103.5062 | 12.12 |
| 003YR002HR | smf-2a | 103.7562 | 12.12 |
| 003YR002HR | smf-2a | 104.0062 | 12.12 |
| 003YR002HR | smf-2a | 104.2562 | 12.12 |
| 003YR002HR | smf-2a | 104.5062 | 12.12 |
| 003YR002HR | smf-2a | 104.7562 | 12.12 |
| 003YR002HR | smf-2a | 105.0062 | 12.12 |
| 003YR002HR | smf-2a | 105.2562 | 12.12 |
| 003YR002HR | smf-2a | 105.5062 | 12.11 |
| 003YR002HR | smf-2a | 105.7562 | 12.11 |
| 003YR002HR | smf-2a | 106.0062 | 12.11 |
| 003YR002HR | smf-2a | 106.2562 | 12.11 |
| 003YR002HR | smf-2a | 106.5062 | 12.11 |
| 003YR002HR | smf-2a | 106.7562 | 12.11 |
| 003YR002HR | smf-2a | 107.0062 | 12.11 |
| 003YR002HR | smf-2a | 107.2562 | 12.11 |
| 003YR002HR | smf-2a | 107.5062 | 12.11 |
| 003YR002HR | smf-2a | 107.7562 | 12.11 |
| 003YR002HR | smf-2a | 108.0062 | 12.11 |
| 003YR002HR | smf-2a | 108.2562 | 12.11 |
| 003YR002HR | smf-2a | 108.5062 | 12.11 |
| 003YR002HR | smf-2a | 108.7562 | 12.11 |
| 003YR002HR | smf-2a | 109.0062 | 12.10 |
| 003YR002HR | smf-2a | 109.2562 | 12.10 |
| 003YR002HR | smf-2a | 109.5062 | 12.10 |
| 003YR002HR | smf-2a | 109.7562 | 12.10 |
| 003YR002HR | smf-2a | 110.0062 | 12.10 |
| 003YR002HR | smf-2a | 110.2562 | 12.10 |
| 003YR002HR | smf-2a | 110.5062 | 12.10 |
| 003YR002HR | smf-2a | 110.7562 | 12.10 |
| 003YR002HR | smf-2a | 111.0062 | 12.10 |

**3yr-2hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR002HR | smf-2b | 61.0062 | 11.44 |
| 003YR002HR | smf-2b | 61.2562 | 11.43 |
| 003YR002HR | smf-2b | 61.5062 | 11.43 |
| 003YR002HR | smf-2b | 61.7562 | 11.43 |
| 003YR002HR | smf-2b | 62.0062 | 11.43 |
| 003YR002HR | smf-2b | 62.2562 | 11.43 |
| 003YR002HR | smf-2b | 62.5062 | 11.43 |
| 003YR002HR | smf-2b | 62.7562 | 11.42 |
| 003YR002HR | smf-2b | 63.0062 | 11.42 |
| 003YR002HR | smf-2b | 63.2562 | 11.42 |
| 003YR002HR | smf-2b | 63.5062 | 11.42 |
| 003YR002HR | smf-2b | 63.7562 | 11.42 |
| 003YR002HR | smf-2b | 64.0062 | 11.42 |
| 003YR002HR | smf-2b | 64.2562 | 11.42 |
| 003YR002HR | smf-2b | 64.5062 | 11.41 |
| 003YR002HR | smf-2b | 64.7562 | 11.41 |
| 003YR002HR | smf-2b | 65.0062 | 11.41 |
| 003YR002HR | smf-2b | 65.2562 | 11.41 |
| 003YR002HR | smf-2b | 65.5062 | 11.41 |
| 003YR002HR | smf-2b | 65.7562 | 11.41 |
| 003YR002HR | smf-2b | 66.0062 | 11.41 |
| 003YR002HR | smf-2b | 66.2562 | 11.40 |
| 003YR002HR | smf-2b | 66.5062 | 11.40 |
| 003YR002HR | smf-2b | 66.7562 | 11.40 |
| 003YR002HR | smf-2b | 67.0062 | 11.40 |
| 003YR002HR | smf-2b | 67.2562 | 11.40 |
| 003YR002HR | smf-2b | 67.5062 | 11.40 |
| 003YR002HR | smf-2b | 67.7562 | 11.40 |
| 003YR002HR | smf-2b | 68.0062 | 11.40 |
| 003YR002HR | smf-2b | 68.2562 | 11.40 |
| 003YR002HR | smf-2b | 68.5062 | 11.40 |
| 003YR002HR | smf-2b | 68.7562 | 11.40 |
| 003YR002HR | smf-2b | 69.0062 | 11.40 |
| 003YR002HR | smf-2b | 69.2562 | 11.40 |
| 003YR002HR | smf-2b | 69.5062 | 11.40 |
| 003YR002HR | smf-2b | 69.7562 | 11.40 |
| 003YR002HR | smf-2b | 70.0062 | 11.40 |
| 003YR002HR | smf-2b | 70.2562 | 11.40 |
| 003YR002HR | smf-2b | 70.5062 | 11.40 |
| 003YR002HR | smf-2b | 70.7562 | 11.40 |
| 003YR002HR | smf-2b | 71.0062 | 11.40 |
| 003YR002HR | smf-2b | 71.2562 | 11.40 |

**3yr-2hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR002HR | smf-2c | 84.2562 | 11.89 |
| 003YR002HR | smf-2c | 84.5062 | 11.89 |
| 003YR002HR | smf-2c | 84.7562 | 11.89 |
| 003YR002HR | smf-2c | 85.0062 | 11.89 |
| 003YR002HR | smf-2c | 85.2562 | 11.89 |
| 003YR002HR | smf-2c | 85.5062 | 11.89 |
| 003YR002HR | smf-2c | 85.7562 | 11.88 |
| 003YR002HR | smf-2c | 86.0062 | 11.88 |
| 003YR002HR | smf-2c | 86.2562 | 11.88 |
| 003YR002HR | smf-2c | 86.5062 | 11.88 |
| 003YR002HR | smf-2c | 86.7562 | 11.88 |
| 003YR002HR | smf-2c | 87.0062 | 11.88 |
| 003YR002HR | smf-2c | 87.2562 | 11.88 |
| 003YR002HR | smf-2c | 87.5062 | 11.88 |
| 003YR002HR | smf-2c | 87.7562 | 11.88 |
| 003YR002HR | smf-2c | 88.0062 | 11.87 |
| 003YR002HR | smf-2c | 88.2562 | 11.87 |
| 003YR002HR | smf-2c | 88.5062 | 11.87 |
| 003YR002HR | smf-2c | 88.7562 | 11.87 |
| 003YR002HR | smf-2c | 89.0062 | 11.87 |
| 003YR002HR | smf-2c | 89.2562 | 11.87 |
| 003YR002HR | smf-2c | 89.5062 | 11.87 |
| 003YR002HR | smf-2c | 89.7562 | 11.87 |
| 003YR002HR | smf-2c | 90.0062 | 11.87 |
| 003YR002HR | smf-2c | 90.2562 | 11.87 |
| 003YR002HR | smf-2c | 90.5062 | 11.86 |
| 003YR002HR | smf-2c | 90.7562 | 11.86 |
| 003YR002HR | smf-2c | 91.0062 | 11.86 |
| 003YR002HR | smf-2c | 91.2562 | 11.86 |
| 003YR002HR | smf-2c | 91.5062 | 11.86 |
| 003YR002HR | smf-2c | 91.7562 | 11.86 |
| 003YR002HR | smf-2c | 92.0062 | 11.86 |
| 003YR002HR | smf-2c | 92.2562 | 11.86 |
| 003YR002HR | smf-2c | 92.5062 | 11.86 |
| 003YR002HR | smf-2c | 92.7562 | 11.86 |
| 003YR002HR | smf-2c | 93.0062 | 11.85 |
| 003YR002HR | smf-2c | 93.2562 | 11.85 |
| 003YR002HR | smf-2c | 93.5062 | 11.85 |
| 003YR002HR | smf-2c | 93.7562 | 11.85 |
| 003YR002HR | smf-2c | 94.0062 | 11.85 |
| 003YR002HR | smf-2c | 94.2562 | 11.85 |
| 003YR002HR | smf-2c | 94.5062 | 11.85 |

**3yr-2hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR002HR | smf-3a | 97.0062 | 11.94 |
| 003YR002HR | smf-3a | 97.2562 | 11.94 |
| 003YR002HR | smf-3a | 97.5062 | 11.94 |
| 003YR002HR | smf-3a | 97.7562 | 11.94 |
| 003YR002HR | smf-3a | 98.0062 | 11.94 |
| 003YR002HR | smf-3a | 98.2562 | 11.94 |
| 003YR002HR | smf-3a | 98.5062 | 11.94 |
| 003YR002HR | smf-3a | 98.7562 | 11.94 |
| 003YR002HR | smf-3a | 99.0062 | 11.93 |
| 003YR002HR | smf-3a | 99.2562 | 11.93 |
| 003YR002HR | smf-3a | 99.5062 | 11.93 |
| 003YR002HR | smf-3a | 99.7562 | 11.93 |
| 003YR002HR | smf-3a | 100.0062 | 11.93 |
| 003YR002HR | smf-3a | 100.2562 | 11.93 |
| 003YR002HR | smf-3a | 100.5062 | 11.93 |
| 003YR002HR | smf-3a | 100.7562 | 11.93 |
| 003YR002HR | smf-3a | 101.0062 | 11.93 |
| 003YR002HR | smf-3a | 101.2562 | 11.93 |
| 003YR002HR | smf-3a | 101.5062 | 11.92 |
| 003YR002HR | smf-3a | 101.7562 | 11.92 |
| 003YR002HR | smf-3a | 102.0062 | 11.92 |
| 003YR002HR | smf-3a | 102.2562 | 11.92 |
| 003YR002HR | smf-3a | 102.5062 | 11.92 |
| 003YR002HR | smf-3a | 102.7562 | 11.92 |
| 003YR002HR | smf-3a | 103.0062 | 11.92 |
| 003YR002HR | smf-3a | 103.2562 | 11.92 |
| 003YR002HR | smf-3a | 103.5062 | 11.92 |
| 003YR002HR | smf-3a | 103.7562 | 11.92 |
| 003YR002HR | smf-3a | 104.0062 | 11.92 |
| 003YR002HR | smf-3a | 104.2562 | 11.91 |
| 003YR002HR | smf-3a | 104.5062 | 11.91 |
| 003YR002HR | smf-3a | 104.7562 | 11.91 |
| 003YR002HR | smf-3a | 105.0062 | 11.91 |
| 003YR002HR | smf-3a | 105.2562 | 11.91 |
| 003YR002HR | smf-3a | 105.5062 | 11.91 |
| 003YR002HR | smf-3a | 105.7562 | 11.91 |
| 003YR002HR | smf-3a | 106.0062 | 11.91 |
| 003YR002HR | smf-3a | 106.2562 | 11.91 |
| 003YR002HR | smf-3a | 106.5062 | 11.91 |
| 003YR002HR | smf-3a | 106.7562 | 11.91 |
| 003YR002HR | smf-3a | 107.0062 | 11.90 |
| 003YR002HR | smf-3a | 107.2562 | 11.90 |

**3yr-2hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR002HR | smf-3b | 99.2562 | 11.27 |
| 003YR002HR | smf-3b | 99.5062 | 11.27 |
| 003YR002HR | smf-3b | 99.7562 | 11.27 |
| 003YR002HR | smf-3b | 100.0062 | 11.26 |
| 003YR002HR | smf-3b | 100.2562 | 11.26 |
| 003YR002HR | smf-3b | 100.5062 | 11.26 |
| 003YR002HR | smf-3b | 100.7562 | 11.26 |
| 003YR002HR | smf-3b | 101.0062 | 11.26 |
| 003YR002HR | smf-3b | 101.2562 | 11.26 |
| 003YR002HR | smf-3b | 101.5062 | 11.26 |
| 003YR002HR | smf-3b | 101.7562 | 11.26 |
| 003YR002HR | smf-3b | 102.0062 | 11.26 |
| 003YR002HR | smf-3b | 102.2562 | 11.26 |
| 003YR002HR | smf-3b | 102.5062 | 11.25 |
| 003YR002HR | smf-3b | 102.7562 | 11.25 |
| 003YR002HR | smf-3b | 103.0062 | 11.25 |
| 003YR002HR | smf-3b | 103.2562 | 11.25 |
| 003YR002HR | smf-3b | 103.5062 | 11.25 |
| 003YR002HR | smf-3b | 103.7562 | 11.25 |
| 003YR002HR | smf-3b | 104.0062 | 11.25 |
| 003YR002HR | smf-3b | 104.2562 | 11.25 |
| 003YR002HR | smf-3b | 104.5062 | 11.25 |
| 003YR002HR | smf-3b | 104.7562 | 11.25 |
| 003YR002HR | smf-3b | 105.0062 | 11.25 |
| 003YR002HR | smf-3b | 105.2562 | 11.25 |
| 003YR002HR | smf-3b | 105.5062 | 11.25 |
| 003YR002HR | smf-3b | 105.7562 | 11.25 |
| 003YR002HR | smf-3b | 106.0062 | 11.25 |
| 003YR002HR | smf-3b | 106.2562 | 11.25 |
| 003YR002HR | smf-3b | 106.5062 | 11.25 |
| 003YR002HR | smf-3b | 106.7562 | 11.25 |
| 003YR002HR | smf-3b | 107.0062 | 11.25 |
| 003YR002HR | smf-3b | 107.2562 | 11.25 |
| 003YR002HR | smf-3b | 107.5062 | 11.25 |
| 003YR002HR | smf-3b | 107.7562 | 11.25 |
| 003YR002HR | smf-3b | 108.0062 | 11.25 |
| 003YR002HR | smf-3b | 108.2562 | 11.25 |
| 003YR002HR | smf-3b | 108.5062 | 11.25 |
| 003YR002HR | smf-3b | 108.7562 | 11.25 |
| 003YR002HR | smf-3b | 109.0062 | 11.25 |
| 003YR002HR | smf-3b | 109.2562 | 11.25 |
| 003YR002HR | smf-3b | 109.5062 | 11.25 |

**3yr-2hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR004HR | smf-1a | 59.5074 | 12.49 |
| 003YR004HR | smf-1a | 59.7574 | 12.49 |
| 003YR004HR | smf-1a | 60.0074 | 12.49 |
| 003YR004HR | smf-1a | 60.2574 | 12.49 |
| 003YR004HR | smf-1a | 60.5074 | 12.49 |
| 003YR004HR | smf-1a | 60.7574 | 12.49 |
| 003YR004HR | smf-1a | 61.0074 | 12.48 |
| 003YR004HR | smf-1a | 61.2574 | 12.48 |
| 003YR004HR | smf-1a | 61.5074 | 12.48 |
| 003YR004HR | smf-1a | 61.7574 | 12.48 |
| 003YR004HR | smf-1a | 62.0074 | 12.48 |
| 003YR004HR | smf-1a | 62.2574 | 12.48 |
| 003YR004HR | smf-1a | 62.5074 | 12.48 |
| 003YR004HR | smf-1a | 62.7574 | 12.47 |
| 003YR004HR | smf-1a | 63.0074 | 12.47 |
| 003YR004HR | smf-1a | 63.2574 | 12.47 |
| 003YR004HR | smf-1a | 63.5074 | 12.47 |
| 003YR004HR | smf-1a | 63.7574 | 12.47 |
| 003YR004HR | smf-1a | 64.0074 | 12.47 |
| 003YR004HR | smf-1a | 64.2574 | 12.47 |
| 003YR004HR | smf-1a | 64.5074 | 12.47 |
| 003YR004HR | smf-1a | 64.7574 | 12.47 |
| 003YR004HR | smf-1a | 65.0074 | 12.46 |
| 003YR004HR | smf-1a | 65.2574 | 12.46 |
| 003YR004HR | smf-1a | 65.5074 | 12.46 |
| 003YR004HR | smf-1a | 65.7574 | 12.46 |
| 003YR004HR | smf-1a | 66.0074 | 12.46 |
| 003YR004HR | smf-1a | 66.2574 | 12.46 |
| 003YR004HR | smf-1a | 66.5074 | 12.46 |
| 003YR004HR | smf-1a | 66.7574 | 12.46 |
| 003YR004HR | smf-1a | 67.0074 | 12.45 |
| 003YR004HR | smf-1a | 67.2574 | 12.45 |
| 003YR004HR | smf-1a | 67.5074 | 12.45 |
| 003YR004HR | smf-1a | 67.7574 | 12.45 |
| 003YR004HR | smf-1a | 68.0074 | 12.45 |
| 003YR004HR | smf-1a | 68.2574 | 12.45 |
| 003YR004HR | smf-1a | 68.5074 | 12.45 |
| 003YR004HR | smf-1a | 68.7574 | 12.45 |
| 003YR004HR | smf-1a | 69.0074 | 12.45 |
| 003YR004HR | smf-1a | 69.2574 | 12.45 |
| 003YR004HR | smf-1a | 69.5074 | 12.45 |
| 003YR004HR | smf-1a | 69.7574 | 12.45 |

**3yr-4hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR004HR | smf-1b | 80.7574 | 13.02 |
| 003YR004HR | smf-1b | 81.0074 | 13.02 |
| 003YR004HR | smf-1b | 81.2574 | 13.02 |
| 003YR004HR | smf-1b | 81.5074 | 13.01 |
| 003YR004HR | smf-1b | 81.7574 | 13.01 |
| 003YR004HR | smf-1b | 82.0074 | 13.01 |
| 003YR004HR | smf-1b | 82.2574 | 13.01 |
| 003YR004HR | smf-1b | 82.5074 | 13.01 |
| 003YR004HR | smf-1b | 82.7574 | 13.01 |
| 003YR004HR | smf-1b | 83.0074 | 13.01 |
| 003YR004HR | smf-1b | 83.2574 | 13.01 |
| 003YR004HR | smf-1b | 83.5074 | 13.00 |
| 003YR004HR | smf-1b | 83.7574 | 13.00 |
| 003YR004HR | smf-1b | 84.0074 | 13.00 |
| 003YR004HR | smf-1b | 84.2574 | 13.00 |
| 003YR004HR | smf-1b | 84.5074 | 13.00 |
| 003YR004HR | smf-1b | 84.7574 | 13.00 |
| 003YR004HR | smf-1b | 85.0074 | 13.00 |
| 003YR004HR | smf-1b | 85.2574 | 13.00 |
| 003YR004HR | smf-1b | 85.5074 | 13.00 |
| 003YR004HR | smf-1b | 85.7574 | 13.00 |
| 003YR004HR | smf-1b | 86.0074 | 13.00 |
| 003YR004HR | smf-1b | 86.2574 | 13.00 |
| 003YR004HR | smf-1b | 86.5074 | 13.00 |
| 003YR004HR | smf-1b | 86.7574 | 13.00 |
| 003YR004HR | smf-1b | 87.0074 | 13.00 |
| 003YR004HR | smf-1b | 87.2574 | 13.00 |
| 003YR004HR | smf-1b | 87.5074 | 13.00 |
| 003YR004HR | smf-1b | 87.7574 | 13.00 |
| 003YR004HR | smf-1b | 88.0074 | 13.00 |
| 003YR004HR | smf-1b | 88.2574 | 13.00 |
| 003YR004HR | smf-1b | 88.5074 | 13.00 |
| 003YR004HR | smf-1b | 88.7574 | 13.00 |
| 003YR004HR | smf-1b | 89.0074 | 13.00 |
| 003YR004HR | smf-1b | 89.2574 | 13.00 |
| 003YR004HR | smf-1b | 89.5074 | 13.00 |
| 003YR004HR | smf-1b | 89.7574 | 13.00 |
| 003YR004HR | smf-1b | 90.0074 | 13.00 |
| 003YR004HR | smf-1b | 90.2574 | 13.00 |
| 003YR004HR | smf-1b | 90.5074 | 13.00 |
| 003YR004HR | smf-1b | 90.7574 | 13.00 |
| 003YR004HR | smf-1b | 91.0074 | 13.00 |

**3yr-4hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR004HR | smf-2a | 144.0074 | 12.11 |
| 003YR004HR | smf-2a | 144.2574 | 12.11 |
| 003YR004HR | smf-2a | 144.5074 | 12.11 |
| 003YR004HR | smf-2a | 144.7574 | 12.11 |
| 003YR004HR | smf-2a | 145.0074 | 12.11 |
| 003YR004HR | smf-2a | 145.2574 | 12.11 |
| 003YR004HR | smf-2a | 145.5074 | 12.11 |
| 003YR004HR | smf-2a | 145.7574 | 12.10 |
| 003YR004HR | smf-2a | 146.0074 | 12.10 |
| 003YR004HR | smf-2a | 146.2574 | 12.10 |
| 003YR004HR | smf-2a | 146.5074 | 12.10 |
| 003YR004HR | smf-2a | 146.7574 | 12.10 |
| 003YR004HR | smf-2a | 147.0074 | 12.10 |
| 003YR004HR | smf-2a | 147.2574 | 12.10 |
| 003YR004HR | smf-2a | 147.5074 | 12.10 |
| 003YR004HR | smf-2a | 147.7574 | 12.10 |
| 003YR004HR | smf-2a | 148.0074 | 12.10 |
| 003YR004HR | smf-2a | 148.2574 | 12.10 |
| 003YR004HR | smf-2a | 148.5074 | 12.10 |
| 003YR004HR | smf-2a | 148.7574 | 12.10 |
| 003YR004HR | smf-2a | 149.0074 | 12.10 |
| 003YR004HR | smf-2a | 149.2574 | 12.10 |
| 003YR004HR | smf-2a | 149.5074 | 12.10 |
| 003YR004HR | smf-2a | 149.7574 | 12.10 |
| 003YR004HR | smf-2a | 150.0074 | 12.10 |
| 003YR004HR | smf-2a | 150.2574 | 12.10 |
| 003YR004HR | smf-2a | 150.5074 | 12.10 |
| 003YR004HR | smf-2a | 150.7574 | 12.10 |
| 003YR004HR | smf-2a | 151.0074 | 12.10 |
| 003YR004HR | smf-2a | 151.2574 | 12.10 |
| 003YR004HR | smf-2a | 151.5074 | 12.10 |
| 003YR004HR | smf-2a | 151.7574 | 12.10 |
| 003YR004HR | smf-2a | 152.0074 | 12.10 |
| 003YR004HR | smf-2a | 152.2574 | 12.10 |
| 003YR004HR | smf-2a | 152.5074 | 12.10 |
| 003YR004HR | smf-2a | 152.7574 | 12.10 |
| 003YR004HR | smf-2a | 153.0074 | 12.10 |
| 003YR004HR | smf-2a | 153.2574 | 12.10 |
| 003YR004HR | smf-2a | 153.5074 | 12.10 |
| 003YR004HR | smf-2a | 153.7574 | 12.10 |
| 003YR004HR | smf-2a | 154.0074 | 12.10 |
| 003YR004HR | smf-2a | 154.2574 | 12.10 |

**3yr-4hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR004HR | smf-2b | 91.7574 | 11.44 |
| 003YR004HR | smf-2b | 92.0074 | 11.44 |
| 003YR004HR | smf-2b | 92.2574 | 11.43 |
| 003YR004HR | smf-2b | 92.5074 | 11.43 |
| 003YR004HR | smf-2b | 92.7574 | 11.43 |
| 003YR004HR | smf-2b | 93.0074 | 11.43 |
| 003YR004HR | smf-2b | 93.2574 | 11.43 |
| 003YR004HR | smf-2b | 93.5074 | 11.43 |
| 003YR004HR | smf-2b | 93.7574 | 11.43 |
| 003YR004HR | smf-2b | 94.0074 | 11.43 |
| 003YR004HR | smf-2b | 94.2574 | 11.43 |
| 003YR004HR | smf-2b | 94.5074 | 11.42 |
| 003YR004HR | smf-2b | 94.7574 | 11.42 |
| 003YR004HR | smf-2b | 95.0074 | 11.42 |
| 003YR004HR | smf-2b | 95.2574 | 11.42 |
| 003YR004HR | smf-2b | 95.5074 | 11.42 |
| 003YR004HR | smf-2b | 95.7574 | 11.42 |
| 003YR004HR | smf-2b | 96.0074 | 11.42 |
| 003YR004HR | smf-2b | 96.2574 | 11.42 |
| 003YR004HR | smf-2b | 96.5074 | 11.42 |
| 003YR004HR | smf-2b | 96.7574 | 11.42 |
| 003YR004HR | smf-2b | 97.0074 | 11.41 |
| 003YR004HR | smf-2b | 97.2574 | 11.41 |
| 003YR004HR | smf-2b | 97.5074 | 11.41 |
| 003YR004HR | smf-2b | 97.7574 | 11.41 |
| 003YR004HR | smf-2b | 98.0074 | 11.41 |
| 003YR004HR | smf-2b | 98.2574 | 11.41 |
| 003YR004HR | smf-2b | 98.5074 | 11.41 |
| 003YR004HR | smf-2b | 98.7574 | 11.41 |
| 003YR004HR | smf-2b | 99.0074 | 11.41 |
| 003YR004HR | smf-2b | 99.2574 | 11.41 |
| 003YR004HR | smf-2b | 99.5074 | 11.40 |
| 003YR004HR | smf-2b | 99.7574 | 11.40 |
| 003YR004HR | smf-2b | 100.0074 | 11.40 |
| 003YR004HR | smf-2b | 100.2574 | 11.40 |
| 003YR004HR | smf-2b | 100.5074 | 11.40 |
| 003YR004HR | smf-2b | 100.7574 | 11.40 |
| 003YR004HR | smf-2b | 101.0074 | 11.40 |
| 003YR004HR | smf-2b | 101.2574 | 11.40 |
| 003YR004HR | smf-2b | 101.5074 | 11.40 |
| 003YR004HR | smf-2b | 101.7574 | 11.40 |
| 003YR004HR | smf-2b | 102.0074 | 11.40 |

**3yr-4hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR004HR | smf-2c | 123.5074 | 11.88 |
| 003YR004HR | smf-2c | 123.7574 | 11.88 |
| 003YR004HR | smf-2c | 124.0074 | 11.88 |
| 003YR004HR | smf-2c | 124.2574 | 11.88 |
| 003YR004HR | smf-2c | 124.5074 | 11.88 |
| 003YR004HR | smf-2c | 124.7574 | 11.88 |
| 003YR004HR | smf-2c | 125.0074 | 11.87 |
| 003YR004HR | smf-2c | 125.2574 | 11.87 |
| 003YR004HR | smf-2c | 125.5074 | 11.87 |
| 003YR004HR | smf-2c | 125.7574 | 11.87 |
| 003YR004HR | smf-2c | 126.0074 | 11.87 |
| 003YR004HR | smf-2c | 126.2574 | 11.87 |
| 003YR004HR | smf-2c | 126.5074 | 11.87 |
| 003YR004HR | smf-2c | 126.7574 | 11.87 |
| 003YR004HR | smf-2c | 127.0074 | 11.87 |
| 003YR004HR | smf-2c | 127.2574 | 11.87 |
| 003YR004HR | smf-2c | 127.5074 | 11.87 |
| 003YR004HR | smf-2c | 127.7574 | 11.87 |
| 003YR004HR | smf-2c | 128.0074 | 11.87 |
| 003YR004HR | smf-2c | 128.2574 | 11.86 |
| 003YR004HR | smf-2c | 128.5074 | 11.86 |
| 003YR004HR | smf-2c | 128.7574 | 11.86 |
| 003YR004HR | smf-2c | 129.0074 | 11.86 |
| 003YR004HR | smf-2c | 129.2574 | 11.86 |
| 003YR004HR | smf-2c | 129.5074 | 11.86 |
| 003YR004HR | smf-2c | 129.7574 | 11.86 |
| 003YR004HR | smf-2c | 130.0074 | 11.86 |
| 003YR004HR | smf-2c | 130.2574 | 11.86 |
| 003YR004HR | smf-2c | 130.5074 | 11.86 |
| 003YR004HR | smf-2c | 130.7574 | 11.86 |
| 003YR004HR | smf-2c | 131.0074 | 11.86 |
| 003YR004HR | smf-2c | 131.2574 | 11.86 |
| 003YR004HR | smf-2c | 131.5074 | 11.85 |
| 003YR004HR | smf-2c | 131.7574 | 11.85 |
| 003YR004HR | smf-2c | 132.0074 | 11.85 |
| 003YR004HR | smf-2c | 132.2574 | 11.85 |
| 003YR004HR | smf-2c | 132.5074 | 11.85 |
| 003YR004HR | smf-2c | 132.7574 | 11.85 |
| 003YR004HR | smf-2c | 133.0074 | 11.85 |
| 003YR004HR | smf-2c | 133.2574 | 11.85 |
| 003YR004HR | smf-2c | 133.5074 | 11.85 |
| 003YR004HR | smf-2c | 133.7574 | 11.85 |

**3yr-4hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR004HR | smf-3a | 123.7574 | 11.91 |
| 003YR004HR | smf-3a | 124.0074 | 11.91 |
| 003YR004HR | smf-3a | 124.2574 | 11.91 |
| 003YR004HR | smf-3a | 124.5074 | 11.91 |
| 003YR004HR | smf-3a | 124.7574 | 11.91 |
| 003YR004HR | smf-3a | 125.0074 | 11.90 |
| 003YR004HR | smf-3a | 125.2574 | 11.90 |
| 003YR004HR | smf-3a | 125.5074 | 11.90 |
| 003YR004HR | smf-3a | 125.7574 | 11.90 |
| 003YR004HR | smf-3a | 126.0074 | 11.90 |
| 003YR004HR | smf-3a | 126.2574 | 11.90 |
| 003YR004HR | smf-3a | 126.5074 | 11.90 |
| 003YR004HR | smf-3a | 126.7574 | 11.90 |
| 003YR004HR | smf-3a | 127.0074 | 11.90 |
| 003YR004HR | smf-3a | 127.2574 | 11.90 |
| 003YR004HR | smf-3a | 127.5074 | 11.90 |
| 003YR004HR | smf-3a | 127.7574 | 11.90 |
| 003YR004HR | smf-3a | 128.0074 | 11.90 |
| 003YR004HR | smf-3a | 128.2574 | 11.90 |
| 003YR004HR | smf-3a | 128.5074 | 11.90 |
| 003YR004HR | smf-3a | 128.7574 | 11.90 |
| 003YR004HR | smf-3a | 129.0074 | 11.90 |
| 003YR004HR | smf-3a | 129.2574 | 11.90 |
| 003YR004HR | smf-3a | 129.5074 | 11.90 |
| 003YR004HR | smf-3a | 129.7574 | 11.90 |
| 003YR004HR | smf-3a | 130.0074 | 11.90 |
| 003YR004HR | smf-3a | 130.2574 | 11.90 |
| 003YR004HR | smf-3a | 130.5074 | 11.90 |
| 003YR004HR | smf-3a | 130.7574 | 11.90 |
| 003YR004HR | smf-3a | 131.0074 | 11.90 |
| 003YR004HR | smf-3a | 131.2574 | 11.90 |
| 003YR004HR | smf-3a | 131.5074 | 11.90 |
| 003YR004HR | smf-3a | 131.7574 | 11.90 |
| 003YR004HR | smf-3a | 132.0074 | 11.90 |
| 003YR004HR | smf-3a | 132.2574 | 11.90 |
| 003YR004HR | smf-3a | 132.5074 | 11.90 |
| 003YR004HR | smf-3a | 132.7574 | 11.90 |
| 003YR004HR | smf-3a | 133.0074 | 11.90 |
| 003YR004HR | smf-3a | 133.2574 | 11.90 |
| 003YR004HR | smf-3a | 133.5074 | 11.90 |
| 003YR004HR | smf-3a | 133.7574 | 11.90 |
| 003YR004HR | smf-3a | 134.0074 | 11.90 |

**3yr-4hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR004HR | smf-3b | 134.5074 | 11.28 |
| 003YR004HR | smf-3b | 134.7574 | 11.27 |
| 003YR004HR | smf-3b | 135.0074 | 11.27 |
| 003YR004HR | smf-3b | 135.2574 | 11.27 |
| 003YR004HR | smf-3b | 135.5074 | 11.27 |
| 003YR004HR | smf-3b | 135.7574 | 11.27 |
| 003YR004HR | smf-3b | 136.0074 | 11.27 |
| 003YR004HR | smf-3b | 136.2574 | 11.27 |
| 003YR004HR | smf-3b | 136.5074 | 11.27 |
| 003YR004HR | smf-3b | 136.7574 | 11.27 |
| 003YR004HR | smf-3b | 137.0074 | 11.27 |
| 003YR004HR | smf-3b | 137.2574 | 11.27 |
| 003YR004HR | smf-3b | 137.5074 | 11.27 |
| 003YR004HR | smf-3b | 137.7574 | 11.27 |
| 003YR004HR | smf-3b | 138.0074 | 11.26 |
| 003YR004HR | smf-3b | 138.2574 | 11.26 |
| 003YR004HR | smf-3b | 138.5074 | 11.26 |
| 003YR004HR | smf-3b | 138.7574 | 11.26 |
| 003YR004HR | smf-3b | 139.0074 | 11.26 |
| 003YR004HR | smf-3b | 139.2574 | 11.26 |
| 003YR004HR | smf-3b | 139.5074 | 11.26 |
| 003YR004HR | smf-3b | 139.7574 | 11.26 |
| 003YR004HR | smf-3b | 140.0074 | 11.26 |
| 003YR004HR | smf-3b | 140.2574 | 11.26 |
| 003YR004HR | smf-3b | 140.5074 | 11.26 |
| 003YR004HR | smf-3b | 140.7574 | 11.26 |
| 003YR004HR | smf-3b | 141.0074 | 11.26 |
| 003YR004HR | smf-3b | 141.2574 | 11.26 |
| 003YR004HR | smf-3b | 141.5074 | 11.25 |
| 003YR004HR | smf-3b | 141.7574 | 11.25 |
| 003YR004HR | smf-3b | 142.0074 | 11.25 |
| 003YR004HR | smf-3b | 142.2574 | 11.25 |
| 003YR004HR | smf-3b | 142.5074 | 11.25 |
| 003YR004HR | smf-3b | 142.7574 | 11.25 |
| 003YR004HR | smf-3b | 143.0074 | 11.25 |
| 003YR004HR | smf-3b | 143.2574 | 11.25 |
| 003YR004HR | smf-3b | 143.5074 | 11.25 |
| 003YR004HR | smf-3b | 143.7574 | 11.25 |
| 003YR004HR | smf-3b | 144.0074 | 11.25 |
| 003YR004HR | smf-3b | 144.2574 | 11.25 |
| 003YR004HR | smf-3b | 144.5074 | 11.25 |
| 003YR004HR | smf-3b | 144.7574 | 11.25 |

**3yr-4hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR008HR | smf-1a | 71.7575 | 12.48 |
| 003YR008HR | smf-1a | 72.0075 | 12.48 |
| 003YR008HR | smf-1a | 72.2575 | 12.48 |
| 003YR008HR | smf-1a | 72.5075 | 12.48 |
| 003YR008HR | smf-1a | 72.7575 | 12.48 |
| 003YR008HR | smf-1a | 73.0075 | 12.47 |
| 003YR008HR | smf-1a | 73.2575 | 12.47 |
| 003YR008HR | smf-1a | 73.5075 | 12.47 |
| 003YR008HR | smf-1a | 73.7575 | 12.47 |
| 003YR008HR | smf-1a | 74.0075 | 12.47 |
| 003YR008HR | smf-1a | 74.2575 | 12.47 |
| 003YR008HR | smf-1a | 74.5075 | 12.47 |
| 003YR008HR | smf-1a | 74.7575 | 12.47 |
| 003YR008HR | smf-1a | 75.0075 | 12.47 |
| 003YR008HR | smf-1a | 75.2575 | 12.46 |
| 003YR008HR | smf-1a | 75.5075 | 12.46 |
| 003YR008HR | smf-1a | 75.7575 | 12.46 |
| 003YR008HR | smf-1a | 76.0075 | 12.46 |
| 003YR008HR | smf-1a | 76.2575 | 12.46 |
| 003YR008HR | smf-1a | 76.5075 | 12.46 |
| 003YR008HR | smf-1a | 76.7575 | 12.46 |
| 003YR008HR | smf-1a | 77.0075 | 12.46 |
| 003YR008HR | smf-1a | 77.2575 | 12.46 |
| 003YR008HR | smf-1a | 77.5075 | 12.45 |
| 003YR008HR | smf-1a | 77.7575 | 12.45 |
| 003YR008HR | smf-1a | 78.0075 | 12.45 |
| 003YR008HR | smf-1a | 78.2575 | 12.45 |
| 003YR008HR | smf-1a | 78.5075 | 12.45 |
| 003YR008HR | smf-1a | 78.7575 | 12.45 |
| 003YR008HR | smf-1a | 79.0075 | 12.45 |
| 003YR008HR | smf-1a | 79.2575 | 12.45 |
| 003YR008HR | smf-1a | 79.5075 | 12.45 |
| 003YR008HR | smf-1a | 79.7575 | 12.45 |
| 003YR008HR | smf-1a | 80.0075 | 12.45 |
| 003YR008HR | smf-1a | 80.2575 | 12.45 |
| 003YR008HR | smf-1a | 80.5075 | 12.45 |
| 003YR008HR | smf-1a | 80.7575 | 12.45 |
| 003YR008HR | smf-1a | 81.0075 | 12.45 |
| 003YR008HR | smf-1a | 81.2575 | 12.45 |
| 003YR008HR | smf-1a | 81.5075 | 12.45 |
| 003YR008HR | smf-1a | 81.7575 | 12.45 |
| 003YR008HR | smf-1a | 82.0075 | 12.45 |

**3yr-8hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR008HR | smf-1b | 99.5075 | 13.05 |
| 003YR008HR | smf-1b | 99.7575 | 13.05 |
| 003YR008HR | smf-1b | 100.0075 | 13.04 |
| 003YR008HR | smf-1b | 100.2575 | 13.04 |
| 003YR008HR | smf-1b | 100.5075 | 13.04 |
| 003YR008HR | smf-1b | 100.7575 | 13.04 |
| 003YR008HR | smf-1b | 101.0075 | 13.04 |
| 003YR008HR | smf-1b | 101.2575 | 13.04 |
| 003YR008HR | smf-1b | 101.5075 | 13.04 |
| 003YR008HR | smf-1b | 101.7575 | 13.04 |
| 003YR008HR | smf-1b | 102.0075 | 13.04 |
| 003YR008HR | smf-1b | 102.2575 | 13.03 |
| 003YR008HR | smf-1b | 102.5075 | 13.03 |
| 003YR008HR | smf-1b | 102.7575 | 13.03 |
| 003YR008HR | smf-1b | 103.0075 | 13.03 |
| 003YR008HR | smf-1b | 103.2575 | 13.03 |
| 003YR008HR | smf-1b | 103.5075 | 13.03 |
| 003YR008HR | smf-1b | 103.7575 | 13.03 |
| 003YR008HR | smf-1b | 104.0075 | 13.03 |
| 003YR008HR | smf-1b | 104.2575 | 13.03 |
| 003YR008HR | smf-1b | 104.5075 | 13.02 |
| 003YR008HR | smf-1b | 104.7575 | 13.02 |
| 003YR008HR | smf-1b | 105.0075 | 13.02 |
| 003YR008HR | smf-1b | 105.2575 | 13.02 |
| 003YR008HR | smf-1b | 105.5075 | 13.02 |
| 003YR008HR | smf-1b | 105.7575 | 13.02 |
| 003YR008HR | smf-1b | 106.0075 | 13.02 |
| 003YR008HR | smf-1b | 106.2575 | 13.02 |
| 003YR008HR | smf-1b | 106.5075 | 13.02 |
| 003YR008HR | smf-1b | 106.7575 | 13.02 |
| 003YR008HR | smf-1b | 107.0075 | 13.01 |
| 003YR008HR | smf-1b | 107.2575 | 13.01 |
| 003YR008HR | smf-1b | 107.5075 | 13.01 |
| 003YR008HR | smf-1b | 107.7575 | 13.01 |
| 003YR008HR | smf-1b | 108.0075 | 13.01 |
| 003YR008HR | smf-1b | 108.2575 | 13.01 |
| 003YR008HR | smf-1b | 108.5075 | 13.01 |
| 003YR008HR | smf-1b | 108.7575 | 13.01 |
| 003YR008HR | smf-1b | 109.0075 | 13.01 |
| 003YR008HR | smf-1b | 109.2575 | 13.01 |
| 003YR008HR | smf-1b | 109.5075 | 13.00 |
| 003YR008HR | smf-1b | 109.7575 | 13.00 |

**3yr-8hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR008HR | smf-2a | 169.2575 | 12.12 |
| 003YR008HR | smf-2a | 169.5075 | 12.12 |
| 003YR008HR | smf-2a | 169.7575 | 12.12 |
| 003YR008HR | smf-2a | 170.0075 | 12.11 |
| 003YR008HR | smf-2a | 170.2575 | 12.11 |
| 003YR008HR | smf-2a | 170.5075 | 12.11 |
| 003YR008HR | smf-2a | 170.7575 | 12.11 |
| 003YR008HR | smf-2a | 171.0075 | 12.11 |
| 003YR008HR | smf-2a | 171.2575 | 12.11 |
| 003YR008HR | smf-2a | 171.5075 | 12.11 |
| 003YR008HR | smf-2a | 171.7575 | 12.11 |
| 003YR008HR | smf-2a | 172.0075 | 12.11 |
| 003YR008HR | smf-2a | 172.2575 | 12.11 |
| 003YR008HR | smf-2a | 172.5075 | 12.11 |
| 003YR008HR | smf-2a | 172.7575 | 12.11 |
| 003YR008HR | smf-2a | 173.0075 | 12.11 |
| 003YR008HR | smf-2a | 173.2575 | 12.11 |
| 003YR008HR | smf-2a | 173.5075 | 12.11 |
| 003YR008HR | smf-2a | 173.7575 | 12.11 |
| 003YR008HR | smf-2a | 174.0075 | 12.11 |
| 003YR008HR | smf-2a | 174.2575 | 12.11 |
| 003YR008HR | smf-2a | 174.5075 | 12.11 |
| 003YR008HR | smf-2a | 174.7575 | 12.11 |
| 003YR008HR | smf-2a | 175.0075 | 12.10 |
| 003YR008HR | smf-2a | 175.2575 | 12.10 |
| 003YR008HR | smf-2a | 175.5075 | 12.10 |
| 003YR008HR | smf-2a | 175.7575 | 12.10 |
| 003YR008HR | smf-2a | 176.0075 | 12.10 |
| 003YR008HR | smf-2a | 176.2575 | 12.10 |
| 003YR008HR | smf-2a | 176.5075 | 12.10 |
| 003YR008HR | smf-2a | 176.7575 | 12.10 |
| 003YR008HR | smf-2a | 177.0075 | 12.10 |
| 003YR008HR | smf-2a | 177.2575 | 12.10 |
| 003YR008HR | smf-2a | 177.5075 | 12.10 |
| 003YR008HR | smf-2a | 177.7575 | 12.10 |
| 003YR008HR | smf-2a | 178.0075 | 12.10 |
| 003YR008HR | smf-2a | 178.2575 | 12.10 |
| 003YR008HR | smf-2a | 178.5075 | 12.10 |
| 003YR008HR | smf-2a | 178.7575 | 12.10 |
| 003YR008HR | smf-2a | 179.0075 | 12.10 |
| 003YR008HR | smf-2a | 179.2575 | 12.10 |
| 003YR008HR | smf-2a | 179.5075 | 12.10 |

**3yr-8hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR008HR | smf-2b | 123.5075 | 11.43 |
| 003YR008HR | smf-2b | 123.7575 | 11.43 |
| 003YR008HR | smf-2b | 124.0075 | 11.43 |
| 003YR008HR | smf-2b | 124.2575 | 11.43 |
| 003YR008HR | smf-2b | 124.5075 | 11.43 |
| 003YR008HR | smf-2b | 124.7575 | 11.43 |
| 003YR008HR | smf-2b | 125.0075 | 11.43 |
| 003YR008HR | smf-2b | 125.2575 | 11.43 |
| 003YR008HR | smf-2b | 125.5075 | 11.43 |
| 003YR008HR | smf-2b | 125.7575 | 11.43 |
| 003YR008HR | smf-2b | 126.0075 | 11.43 |
| 003YR008HR | smf-2b | 126.2575 | 11.43 |
| 003YR008HR | smf-2b | 126.5075 | 11.42 |
| 003YR008HR | smf-2b | 126.7575 | 11.42 |
| 003YR008HR | smf-2b | 127.0075 | 11.42 |
| 003YR008HR | smf-2b | 127.2575 | 11.42 |
| 003YR008HR | smf-2b | 127.5075 | 11.42 |
| 003YR008HR | smf-2b | 127.7575 | 11.42 |
| 003YR008HR | smf-2b | 128.0075 | 11.42 |
| 003YR008HR | smf-2b | 128.2575 | 11.42 |
| 003YR008HR | smf-2b | 128.5075 | 11.42 |
| 003YR008HR | smf-2b | 128.7575 | 11.42 |
| 003YR008HR | smf-2b | 129.0075 | 11.42 |
| 003YR008HR | smf-2b | 129.2575 | 11.42 |
| 003YR008HR | smf-2b | 129.5075 | 11.41 |
| 003YR008HR | smf-2b | 129.7575 | 11.41 |
| 003YR008HR | smf-2b | 130.0075 | 11.41 |
| 003YR008HR | smf-2b | 130.2575 | 11.41 |
| 003YR008HR | smf-2b | 130.5075 | 11.41 |
| 003YR008HR | smf-2b | 130.7575 | 11.41 |
| 003YR008HR | smf-2b | 131.0075 | 11.41 |
| 003YR008HR | smf-2b | 131.2575 | 11.41 |
| 003YR008HR | smf-2b | 131.5075 | 11.41 |
| 003YR008HR | smf-2b | 131.7575 | 11.41 |
| 003YR008HR | smf-2b | 132.0075 | 11.41 |
| 003YR008HR | smf-2b | 132.2575 | 11.41 |
| 003YR008HR | smf-2b | 132.5075 | 11.40 |
| 003YR008HR | smf-2b | 132.7575 | 11.40 |
| 003YR008HR | smf-2b | 133.0075 | 11.40 |
| 003YR008HR | smf-2b | 133.2575 | 11.40 |
| 003YR008HR | smf-2b | 133.5075 | 11.40 |
| 003YR008HR | smf-2b | 133.7575 | 11.40 |

**3yr-8hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR008HR | smf-2c | 161.7575 | 11.86 |
| 003YR008HR | smf-2c | 162.0075 | 11.86 |
| 003YR008HR | smf-2c | 162.2575 | 11.86 |
| 003YR008HR | smf-2c | 162.5075 | 11.86 |
| 003YR008HR | smf-2c | 162.7575 | 11.86 |
| 003YR008HR | smf-2c | 163.0075 | 11.85 |
| 003YR008HR | smf-2c | 163.2575 | 11.85 |
| 003YR008HR | smf-2c | 163.5075 | 11.85 |
| 003YR008HR | smf-2c | 163.7575 | 11.85 |
| 003YR008HR | smf-2c | 164.0075 | 11.85 |
| 003YR008HR | smf-2c | 164.2575 | 11.85 |
| 003YR008HR | smf-2c | 164.5075 | 11.85 |
| 003YR008HR | smf-2c | 164.7575 | 11.85 |
| 003YR008HR | smf-2c | 165.0075 | 11.85 |
| 003YR008HR | smf-2c | 165.2575 | 11.85 |
| 003YR008HR | smf-2c | 165.5075 | 11.85 |
| 003YR008HR | smf-2c | 165.7575 | 11.85 |
| 003YR008HR | smf-2c | 166.0075 | 11.85 |
| 003YR008HR | smf-2c | 166.2575 | 11.85 |
| 003YR008HR | smf-2c | 166.5075 | 11.85 |
| 003YR008HR | smf-2c | 166.7575 | 11.85 |
| 003YR008HR | smf-2c | 167.0075 | 11.85 |
| 003YR008HR | smf-2c | 167.2575 | 11.85 |
| 003YR008HR | smf-2c | 167.5075 | 11.85 |
| 003YR008HR | smf-2c | 167.7575 | 11.85 |
| 003YR008HR | smf-2c | 168.0075 | 11.85 |
| 003YR008HR | smf-2c | 168.2575 | 11.85 |
| 003YR008HR | smf-2c | 168.5075 | 11.85 |
| 003YR008HR | smf-2c | 168.7575 | 11.85 |
| 003YR008HR | smf-2c | 169.0075 | 11.85 |
| 003YR008HR | smf-2c | 169.2575 | 11.85 |
| 003YR008HR | smf-2c | 169.5075 | 11.85 |
| 003YR008HR | smf-2c | 169.7575 | 11.85 |
| 003YR008HR | smf-2c | 170.0075 | 11.85 |
| 003YR008HR | smf-2c | 170.2575 | 11.85 |
| 003YR008HR | smf-2c | 170.5075 | 11.85 |
| 003YR008HR | smf-2c | 170.7575 | 11.85 |
| 003YR008HR | smf-2c | 171.0075 | 11.85 |
| 003YR008HR | smf-2c | 171.2575 | 11.85 |
| 003YR008HR | smf-2c | 171.5075 | 11.85 |
| 003YR008HR | smf-2c | 171.7575 | 11.85 |
| 003YR008HR | smf-2c | 172.0075 | 11.85 |

**3yr-8hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR008HR | smf-3a | 147.5075 | 11.93 |
| 003YR008HR | smf-3a | 147.7575 | 11.93 |
| 003YR008HR | smf-3a | 148.0075 | 11.93 |
| 003YR008HR | smf-3a | 148.2575 | 11.93 |
| 003YR008HR | smf-3a | 148.5075 | 11.93 |
| 003YR008HR | smf-3a | 148.7575 | 11.93 |
| 003YR008HR | smf-3a | 149.0075 | 11.93 |
| 003YR008HR | smf-3a | 149.2575 | 11.93 |
| 003YR008HR | smf-3a | 149.5075 | 11.92 |
| 003YR008HR | smf-3a | 149.7575 | 11.92 |
| 003YR008HR | smf-3a | 150.0075 | 11.92 |
| 003YR008HR | smf-3a | 150.2575 | 11.92 |
| 003YR008HR | smf-3a | 150.5075 | 11.92 |
| 003YR008HR | smf-3a | 150.7575 | 11.92 |
| 003YR008HR | smf-3a | 151.0075 | 11.92 |
| 003YR008HR | smf-3a | 151.2575 | 11.92 |
| 003YR008HR | smf-3a | 151.5075 | 11.92 |
| 003YR008HR | smf-3a | 151.7575 | 11.92 |
| 003YR008HR | smf-3a | 152.0075 | 11.92 |
| 003YR008HR | smf-3a | 152.2575 | 11.92 |
| 003YR008HR | smf-3a | 152.5075 | 11.92 |
| 003YR008HR | smf-3a | 152.7575 | 11.92 |
| 003YR008HR | smf-3a | 153.0075 | 11.92 |
| 003YR008HR | smf-3a | 153.2575 | 11.91 |
| 003YR008HR | smf-3a | 153.5075 | 11.91 |
| 003YR008HR | smf-3a | 153.7575 | 11.91 |
| 003YR008HR | smf-3a | 154.0075 | 11.91 |
| 003YR008HR | smf-3a | 154.2575 | 11.91 |
| 003YR008HR | smf-3a | 154.5075 | 11.91 |
| 003YR008HR | smf-3a | 154.7575 | 11.91 |
| 003YR008HR | smf-3a | 155.0075 | 11.91 |
| 003YR008HR | smf-3a | 155.2575 | 11.91 |
| 003YR008HR | smf-3a | 155.5075 | 11.91 |
| 003YR008HR | smf-3a | 155.7575 | 11.91 |
| 003YR008HR | smf-3a | 156.0075 | 11.91 |
| 003YR008HR | smf-3a | 156.2575 | 11.91 |
| 003YR008HR | smf-3a | 156.5075 | 11.91 |
| 003YR008HR | smf-3a | 156.7575 | 11.91 |
| 003YR008HR | smf-3a | 157.0075 | 11.90 |
| 003YR008HR | smf-3a | 157.2575 | 11.90 |
| 003YR008HR | smf-3a | 157.5075 | 11.90 |
| 003YR008HR | smf-3a | 157.7575 | 11.90 |

**3yr-8hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR008HR | smf-3b | 175.2575 | 11.27 |
| 003YR008HR | smf-3b | 175.5075 | 11.27 |
| 003YR008HR | smf-3b | 175.7575 | 11.27 |
| 003YR008HR | smf-3b | 176.0075 | 11.27 |
| 003YR008HR | smf-3b | 176.2575 | 11.27 |
| 003YR008HR | smf-3b | 176.5075 | 11.27 |
| 003YR008HR | smf-3b | 176.7575 | 11.27 |
| 003YR008HR | smf-3b | 177.0075 | 11.27 |
| 003YR008HR | smf-3b | 177.2575 | 11.26 |
| 003YR008HR | smf-3b | 177.5075 | 11.26 |
| 003YR008HR | smf-3b | 177.7575 | 11.26 |
| 003YR008HR | smf-3b | 178.0075 | 11.26 |
| 003YR008HR | smf-3b | 178.2575 | 11.26 |
| 003YR008HR | smf-3b | 178.5075 | 11.26 |
| 003YR008HR | smf-3b | 178.7575 | 11.26 |
| 003YR008HR | smf-3b | 179.0075 | 11.26 |
| 003YR008HR | smf-3b | 179.2575 | 11.26 |
| 003YR008HR | smf-3b | 179.5075 | 11.26 |
| 003YR008HR | smf-3b | 179.7575 | 11.26 |
| 003YR008HR | smf-3b | 180.0075 | 11.26 |
| 003YR008HR | smf-3b | 180.2575 | 11.26 |
| 003YR008HR | smf-3b | 180.5075 | 11.26 |
| 003YR008HR | smf-3b | 180.7575 | 11.26 |
| 003YR008HR | smf-3b | 181.0075 | 11.26 |
| 003YR008HR | smf-3b | 181.2575 | 11.26 |
| 003YR008HR | smf-3b | 181.5075 | 11.25 |
| 003YR008HR | smf-3b | 181.7575 | 11.25 |
| 003YR008HR | smf-3b | 182.0075 | 11.25 |
| 003YR008HR | smf-3b | 182.2575 | 11.25 |
| 003YR008HR | smf-3b | 182.5075 | 11.25 |
| 003YR008HR | smf-3b | 182.7575 | 11.25 |
| 003YR008HR | smf-3b | 183.0075 | 11.25 |
| 003YR008HR | smf-3b | 183.2575 | 11.25 |
| 003YR008HR | smf-3b | 183.5075 | 11.25 |
| 003YR008HR | smf-3b | 183.7575 | 11.25 |
| 003YR008HR | smf-3b | 184.0075 | 11.25 |
| 003YR008HR | smf-3b | 184.2575 | 11.25 |
| 003YR008HR | smf-3b | 184.5075 | 11.25 |
| 003YR008HR | smf-3b | 184.7575 | 11.25 |
| 003YR008HR | smf-3b | 185.0075 | 11.25 |
| 003YR008HR | smf-3b | 185.2575 | 11.25 |
| 003YR008HR | smf-3b | 185.5075 | 11.25 |

**3yr-8hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR024HR | smf-1a | 213.5013 | 12.47 |
| 003YR024HR | smf-1a | 213.7513 | 12.47 |
| 003YR024HR | smf-1a | 214.0013 | 12.47 |
| 003YR024HR | smf-1a | 214.2513 | 12.47 |
| 003YR024HR | smf-1a | 214.5013 | 12.47 |
| 003YR024HR | smf-1a | 214.7513 | 12.47 |
| 003YR024HR | smf-1a | 215.0013 | 12.47 |
| 003YR024HR | smf-1a | 215.2513 | 12.47 |
| 003YR024HR | smf-1a | 215.5013 | 12.47 |
| 003YR024HR | smf-1a | 215.7513 | 12.47 |
| 003YR024HR | smf-1a | 216.0013 | 12.47 |
| 003YR024HR | smf-1a | 216.2513 | 12.46 |
| 003YR024HR | smf-1a | 216.5013 | 12.46 |
| 003YR024HR | smf-1a | 216.7513 | 12.46 |
| 003YR024HR | smf-1a | 217.0013 | 12.46 |
| 003YR024HR | smf-1a | 217.2513 | 12.46 |
| 003YR024HR | smf-1a | 217.5013 | 12.46 |
| 003YR024HR | smf-1a | 217.7513 | 12.46 |
| 003YR024HR | smf-1a | 218.0013 | 12.46 |
| 003YR024HR | smf-1a | 218.2513 | 12.46 |
| 003YR024HR | smf-1a | 218.5013 | 12.46 |
| 003YR024HR | smf-1a | 218.7513 | 12.46 |
| 003YR024HR | smf-1a | 219.0013 | 12.46 |
| 003YR024HR | smf-1a | 219.2513 | 12.46 |
| 003YR024HR | smf-1a | 219.5013 | 12.46 |
| 003YR024HR | smf-1a | 219.7513 | 12.46 |
| 003YR024HR | smf-1a | 220.0013 | 12.46 |
| 003YR024HR | smf-1a | 220.2513 | 12.46 |
| 003YR024HR | smf-1a | 220.5013 | 12.46 |
| 003YR024HR | smf-1a | 220.7513 | 12.46 |
| 003YR024HR | smf-1a | 221.0013 | 12.46 |
| 003YR024HR | smf-1a | 221.2513 | 12.46 |
| 003YR024HR | smf-1a | 221.5013 | 12.46 |
| 003YR024HR | smf-1a | 221.7513 | 12.45 |
| 003YR024HR | smf-1a | 222.0013 | 12.45 |
| 003YR024HR | smf-1a | 222.2513 | 12.45 |
| 003YR024HR | smf-1a | 222.5013 | 12.45 |
| 003YR024HR | smf-1a | 222.7513 | 12.45 |
| 003YR024HR | smf-1a | 223.0013 | 12.45 |
| 003YR024HR | smf-1a | 223.2513 | 12.45 |
| 003YR024HR | smf-1a | 223.5013 | 12.45 |
| 003YR024HR | smf-1a | 223.7513 | 12.45 |

**3yr-24hr SMF-1a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR024HR | smf-1b | 183.2513 | 13.02 |
| 003YR024HR | smf-1b | 183.5013 | 13.02 |
| 003YR024HR | smf-1b | 183.7513 | 13.02 |
| 003YR024HR | smf-1b | 184.0013 | 13.02 |
| 003YR024HR | smf-1b | 184.2513 | 13.02 |
| 003YR024HR | smf-1b | 184.5013 | 13.02 |
| 003YR024HR | smf-1b | 184.7513 | 13.02 |
| 003YR024HR | smf-1b | 185.0013 | 13.02 |
| 003YR024HR | smf-1b | 185.2513 | 13.02 |
| 003YR024HR | smf-1b | 185.5013 | 13.02 |
| 003YR024HR | smf-1b | 185.7513 | 13.02 |
| 003YR024HR | smf-1b | 186.0013 | 13.02 |
| 003YR024HR | smf-1b | 186.2513 | 13.02 |
| 003YR024HR | smf-1b | 186.5013 | 13.02 |
| 003YR024HR | smf-1b | 186.7513 | 13.01 |
| 003YR024HR | smf-1b | 187.0013 | 13.01 |
| 003YR024HR | smf-1b | 187.2513 | 13.01 |
| 003YR024HR | smf-1b | 187.5013 | 13.01 |
| 003YR024HR | smf-1b | 187.7513 | 13.01 |
| 003YR024HR | smf-1b | 188.0013 | 13.01 |
| 003YR024HR | smf-1b | 188.2513 | 13.01 |
| 003YR024HR | smf-1b | 188.5013 | 13.01 |
| 003YR024HR | smf-1b | 188.7513 | 13.01 |
| 003YR024HR | smf-1b | 189.0013 | 13.01 |
| 003YR024HR | smf-1b | 189.2513 | 13.01 |
| 003YR024HR | smf-1b | 189.5013 | 13.01 |
| 003YR024HR | smf-1b | 189.7513 | 13.01 |
| 003YR024HR | smf-1b | 190.0013 | 13.01 |
| 003YR024HR | smf-1b | 190.2513 | 13.01 |
| 003YR024HR | smf-1b | 190.5013 | 13.01 |
| 003YR024HR | smf-1b | 190.7513 | 13.01 |
| 003YR024HR | smf-1b | 191.0013 | 13.00 |
| 003YR024HR | smf-1b | 191.2513 | 13.00 |
| 003YR024HR | smf-1b | 191.5013 | 13.00 |
| 003YR024HR | smf-1b | 191.7513 | 13.00 |
| 003YR024HR | smf-1b | 192.0013 | 13.00 |
| 003YR024HR | smf-1b | 192.2513 | 13.00 |
| 003YR024HR | smf-1b | 192.5013 | 13.00 |
| 003YR024HR | smf-1b | 192.7513 | 13.00 |
| 003YR024HR | smf-1b | 193.0013 | 13.00 |
| 003YR024HR | smf-1b | 193.2513 | 13.00 |
| 003YR024HR | smf-1b | 193.5013 | 13.00 |

**3yr-24hr SMF-1b**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR024HR | smf-2a | 258.0013 | 12.11 |
| 003YR024HR | smf-2a | 258.2513 | 12.11 |
| 003YR024HR | smf-2a | 258.5013 | 12.11 |
| 003YR024HR | smf-2a | 258.7513 | 12.11 |
| 003YR024HR | smf-2a | 259.0013 | 12.11 |
| 003YR024HR | smf-2a | 259.2513 | 12.11 |
| 003YR024HR | smf-2a | 259.5013 | 12.10 |
| 003YR024HR | smf-2a | 259.7513 | 12.10 |
| 003YR024HR | smf-2a | 260.0013 | 12.10 |
| 003YR024HR | smf-2a | 260.2513 | 12.10 |
| 003YR024HR | smf-2a | 260.5013 | 12.10 |
| 003YR024HR | smf-2a | 260.7513 | 12.10 |
| 003YR024HR | smf-2a | 261.0013 | 12.10 |
| 003YR024HR | smf-2a | 261.2513 | 12.10 |
| 003YR024HR | smf-2a | 261.5013 | 12.10 |
| 003YR024HR | smf-2a | 261.7513 | 12.10 |
| 003YR024HR | smf-2a | 262.0013 | 12.10 |
| 003YR024HR | smf-2a | 262.2513 | 12.10 |
| 003YR024HR | smf-2a | 262.5013 | 12.10 |
| 003YR024HR | smf-2a | 262.7513 | 12.10 |
| 003YR024HR | smf-2a | 263.0013 | 12.10 |
| 003YR024HR | smf-2a | 263.2513 | 12.10 |
| 003YR024HR | smf-2a | 263.5013 | 12.10 |
| 003YR024HR | smf-2a | 263.7513 | 12.10 |
| 003YR024HR | smf-2a | 264.0013 | 12.10 |
| 003YR024HR | smf-2a | 264.2513 | 12.10 |
| 003YR024HR | smf-2a | 264.5013 | 12.10 |
| 003YR024HR | smf-2a | 264.7513 | 12.10 |
| 003YR024HR | smf-2a | 265.0013 | 12.10 |
| 003YR024HR | smf-2a | 265.2513 | 12.10 |
| 003YR024HR | smf-2a | 265.5013 | 12.10 |
| 003YR024HR | smf-2a | 265.7513 | 12.10 |
| 003YR024HR | smf-2a | 266.0013 | 12.10 |
| 003YR024HR | smf-2a | 266.2513 | 12.10 |
| 003YR024HR | smf-2a | 266.5013 | 12.10 |
| 003YR024HR | smf-2a | 266.7513 | 12.10 |
| 003YR024HR | smf-2a | 267.0013 | 12.10 |
| 003YR024HR | smf-2a | 267.2513 | 12.10 |
| 003YR024HR | smf-2a | 267.5013 | 12.10 |
| 003YR024HR | smf-2a | 267.7513 | 12.10 |
| 003YR024HR | smf-2a | 268.0013 | 12.10 |
| 003YR024HR | smf-2a | 268.2513 | 12.10 |

**3yr-24hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR024HR | smf-2b | 206.7513 | 11.41 |
| 003YR024HR | smf-2b | 207.0013 | 11.41 |
| 003YR024HR | smf-2b | 207.2513 | 11.41 |
| 003YR024HR | smf-2b | 207.5013 | 11.41 |
| 003YR024HR | smf-2b | 207.7513 | 11.41 |
| 003YR024HR | smf-2b | 208.0013 | 11.41 |
| 003YR024HR | smf-2b | 208.2513 | 11.41 |
| 003YR024HR | smf-2b | 208.5013 | 11.41 |
| 003YR024HR | smf-2b | 208.7513 | 11.41 |
| 003YR024HR | smf-2b | 209.0013 | 11.41 |
| 003YR024HR | smf-2b | 209.2513 | 11.41 |
| 003YR024HR | smf-2b | 209.5013 | 11.40 |
| 003YR024HR | smf-2b | 209.7513 | 11.40 |
| 003YR024HR | smf-2b | 210.0013 | 11.40 |
| 003YR024HR | smf-2b | 210.2513 | 11.40 |
| 003YR024HR | smf-2b | 210.5013 | 11.40 |
| 003YR024HR | smf-2b | 210.7513 | 11.40 |
| 003YR024HR | smf-2b | 211.0013 | 11.40 |
| 003YR024HR | smf-2b | 211.2513 | 11.40 |
| 003YR024HR | smf-2b | 211.5013 | 11.40 |
| 003YR024HR | smf-2b | 211.7513 | 11.40 |
| 003YR024HR | smf-2b | 212.0013 | 11.40 |
| 003YR024HR | smf-2b | 212.2513 | 11.40 |
| 003YR024HR | smf-2b | 212.5013 | 11.40 |
| 003YR024HR | smf-2b | 212.7513 | 11.40 |
| 003YR024HR | smf-2b | 213.0013 | 11.40 |
| 003YR024HR | smf-2b | 213.2513 | 11.40 |
| 003YR024HR | smf-2b | 213.5013 | 11.40 |
| 003YR024HR | smf-2b | 213.7513 | 11.40 |
| 003YR024HR | smf-2b | 214.0013 | 11.40 |
| 003YR024HR | smf-2b | 214.2513 | 11.40 |
| 003YR024HR | smf-2b | 214.5013 | 11.40 |
| 003YR024HR | smf-2b | 214.7513 | 11.40 |
| 003YR024HR | smf-2b | 215.0013 | 11.40 |
| 003YR024HR | smf-2b | 215.2513 | 11.40 |
| 003YR024HR | smf-2b | 215.5013 | 11.40 |
| 003YR024HR | smf-2b | 215.7513 | 11.40 |
| 003YR024HR | smf-2b | 216.0013 | 11.40 |
| 003YR024HR | smf-2b | 216.2513 | 11.40 |
| 003YR024HR | smf-2b | 216.5013 | 11.40 |
| 003YR024HR | smf-2b | 216.7513 | 11.40 |
| 003YR024HR | smf-2b | 217.0013 | 11.40 |

**3yr-24hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR024HR | smf-2c | 239.5013 | 11.87 |
| 003YR024HR | smf-2c | 239.7513 | 11.87 |
| 003YR024HR | smf-2c | 240.0013 | 11.87 |
| 003YR024HR | smf-2c | 240.2513 | 11.86 |
| 003YR024HR | smf-2c | 240.5013 | 11.86 |
| 003YR024HR | smf-2c | 240.7513 | 11.86 |
| 003YR024HR | smf-2c | 241.0013 | 11.86 |
| 003YR024HR | smf-2c | 241.2513 | 11.86 |
| 003YR024HR | smf-2c | 241.5013 | 11.86 |
| 003YR024HR | smf-2c | 241.7513 | 11.86 |
| 003YR024HR | smf-2c | 242.0013 | 11.86 |
| 003YR024HR | smf-2c | 242.2513 | 11.86 |
| 003YR024HR | smf-2c | 242.5013 | 11.86 |
| 003YR024HR | smf-2c | 242.7513 | 11.86 |
| 003YR024HR | smf-2c | 243.0013 | 11.86 |
| 003YR024HR | smf-2c | 243.2513 | 11.86 |
| 003YR024HR | smf-2c | 243.5013 | 11.86 |
| 003YR024HR | smf-2c | 243.7513 | 11.86 |
| 003YR024HR | smf-2c | 244.0013 | 11.86 |
| 003YR024HR | smf-2c | 244.2513 | 11.86 |
| 003YR024HR | smf-2c | 244.5013 | 11.86 |
| 003YR024HR | smf-2c | 244.7513 | 11.86 |
| 003YR024HR | smf-2c | 245.0013 | 11.86 |
| 003YR024HR | smf-2c | 245.2513 | 11.86 |
| 003YR024HR | smf-2c | 245.5013 | 11.86 |
| 003YR024HR | smf-2c | 245.7513 | 11.86 |
| 003YR024HR | smf-2c | 246.0013 | 11.86 |
| 003YR024HR | smf-2c | 246.2513 | 11.85 |
| 003YR024HR | smf-2c | 246.5013 | 11.85 |
| 003YR024HR | smf-2c | 246.7513 | 11.85 |
| 003YR024HR | smf-2c | 247.0013 | 11.85 |
| 003YR024HR | smf-2c | 247.2513 | 11.85 |
| 003YR024HR | smf-2c | 247.5013 | 11.85 |
| 003YR024HR | smf-2c | 247.7513 | 11.85 |
| 003YR024HR | smf-2c | 248.0013 | 11.85 |
| 003YR024HR | smf-2c | 248.2513 | 11.85 |
| 003YR024HR | smf-2c | 248.5013 | 11.85 |
| 003YR024HR | smf-2c | 248.7513 | 11.85 |
| 003YR024HR | smf-2c | 249.0013 | 11.85 |
| 003YR024HR | smf-2c | 249.2513 | 11.85 |
| 003YR024HR | smf-2c | 249.5013 | 11.85 |
| 003YR024HR | smf-2c | 249.7513 | 11.85 |

**3yr-24hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR024HR | smf-3a | 251.2513 | 11.92 |
| 003YR024HR | smf-3a | 251.5013 | 11.91 |
| 003YR024HR | smf-3a | 251.7513 | 11.91 |
| 003YR024HR | smf-3a | 252.0013 | 11.91 |
| 003YR024HR | smf-3a | 252.2513 | 11.91 |
| 003YR024HR | smf-3a | 252.5013 | 11.91 |
| 003YR024HR | smf-3a | 252.7513 | 11.91 |
| 003YR024HR | smf-3a | 253.0013 | 11.91 |
| 003YR024HR | smf-3a | 253.2513 | 11.91 |
| 003YR024HR | smf-3a | 253.5013 | 11.91 |
| 003YR024HR | smf-3a | 253.7513 | 11.91 |
| 003YR024HR | smf-3a | 254.0013 | 11.91 |
| 003YR024HR | smf-3a | 254.2513 | 11.91 |
| 003YR024HR | smf-3a | 254.5013 | 11.91 |
| 003YR024HR | smf-3a | 254.7513 | 11.91 |
| 003YR024HR | smf-3a | 255.0013 | 11.91 |
| 003YR024HR | smf-3a | 255.2513 | 11.91 |
| 003YR024HR | smf-3a | 255.5013 | 11.91 |
| 003YR024HR | smf-3a | 255.7513 | 11.91 |
| 003YR024HR | smf-3a | 256.0013 | 11.91 |
| 003YR024HR | smf-3a | 256.2513 | 11.91 |
| 003YR024HR | smf-3a | 256.5013 | 11.91 |
| 003YR024HR | smf-3a | 256.7513 | 11.91 |
| 003YR024HR | smf-3a | 257.0013 | 11.91 |
| 003YR024HR | smf-3a | 257.2513 | 11.91 |
| 003YR024HR | smf-3a | 257.5013 | 11.91 |
| 003YR024HR | smf-3a | 257.7513 | 11.90 |
| 003YR024HR | smf-3a | 258.0013 | 11.90 |
| 003YR024HR | smf-3a | 258.2513 | 11.90 |
| 003YR024HR | smf-3a | 258.5013 | 11.90 |
| 003YR024HR | smf-3a | 258.7513 | 11.90 |
| 003YR024HR | smf-3a | 259.0013 | 11.90 |
| 003YR024HR | smf-3a | 259.2513 | 11.90 |
| 003YR024HR | smf-3a | 259.5013 | 11.90 |
| 003YR024HR | smf-3a | 259.7513 | 11.90 |
| 003YR024HR | smf-3a | 260.0013 | 11.90 |
| 003YR024HR | smf-3a | 260.2513 | 11.90 |
| 003YR024HR | smf-3a | 260.5013 | 11.90 |
| 003YR024HR | smf-3a | 260.7513 | 11.90 |
| 003YR024HR | smf-3a | 261.0013 | 11.90 |
| 003YR024HR | smf-3a | 261.2513 | 11.90 |
| 003YR024HR | smf-3a | 261.5013 | 11.90 |

**3yr-24hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR024HR | smf-3b | 273.5013 | 11.27 |
| 003YR024HR | smf-3b | 273.7513 | 11.27 |
| 003YR024HR | smf-3b | 274.0013 | 11.27 |
| 003YR024HR | smf-3b | 274.2513 | 11.27 |
| 003YR024HR | smf-3b | 274.5013 | 11.27 |
| 003YR024HR | smf-3b | 274.7513 | 11.27 |
| 003YR024HR | smf-3b | 275.0013 | 11.27 |
| 003YR024HR | smf-3b | 275.2513 | 11.27 |
| 003YR024HR | smf-3b | 275.5013 | 11.27 |
| 003YR024HR | smf-3b | 275.7513 | 11.27 |
| 003YR024HR | smf-3b | 276.0013 | 11.27 |
| 003YR024HR | smf-3b | 276.2513 | 11.27 |
| 003YR024HR | smf-3b | 276.5013 | 11.27 |
| 003YR024HR | smf-3b | 276.7513 | 11.27 |
| 003YR024HR | smf-3b | 277.0013 | 11.26 |
| 003YR024HR | smf-3b | 277.2513 | 11.26 |
| 003YR024HR | smf-3b | 277.5013 | 11.26 |
| 003YR024HR | smf-3b | 277.7513 | 11.26 |
| 003YR024HR | smf-3b | 278.0013 | 11.26 |
| 003YR024HR | smf-3b | 278.2513 | 11.26 |
| 003YR024HR | smf-3b | 278.5013 | 11.26 |
| 003YR024HR | smf-3b | 278.7513 | 11.26 |
| 003YR024HR | smf-3b | 279.0013 | 11.26 |
| 003YR024HR | smf-3b | 279.2513 | 11.26 |
| 003YR024HR | smf-3b | 279.5013 | 11.26 |
| 003YR024HR | smf-3b | 279.7513 | 11.26 |
| 003YR024HR | smf-3b | 280.0013 | 11.26 |
| 003YR024HR | smf-3b | 280.2513 | 11.26 |
| 003YR024HR | smf-3b | 280.5013 | 11.26 |
| 003YR024HR | smf-3b | 280.7513 | 11.26 |
| 003YR024HR | smf-3b | 281.0013 | 11.26 |
| 003YR024HR | smf-3b | 281.2513 | 11.26 |
| 003YR024HR | smf-3b | 281.5013 | 11.26 |
| 003YR024HR | smf-3b | 281.7513 | 11.26 |
| 003YR024HR | smf-3b | 282.0013 | 11.26 |
| 003YR024HR | smf-3b | 282.2513 | 11.26 |
| 003YR024HR | smf-3b | 282.5013 | 11.26 |
| 003YR024HR | smf-3b | 282.7513 | 11.26 |
| 003YR024HR | smf-3b | 283.0013 | 11.26 |
| 003YR024HR | smf-3b | 283.2513 | 11.26 |
| 003YR024HR | smf-3b | 283.5013 | 11.25 |
| 003YR024HR | smf-3b | 283.7513 | 11.25 |

**3yr-24hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR072HR | smf-1a | 243.2575 | 12.47 |
| 003YR072HR | smf-1a | 243.5075 | 12.47 |
| 003YR072HR | smf-1a | 243.7575 | 12.47 |
| 003YR072HR | smf-1a | 244.0075 | 12.47 |
| 003YR072HR | smf-1a | 244.2575 | 12.47 |
| 003YR072HR | smf-1a | 244.5075 | 12.47 |
| 003YR072HR | smf-1a | 244.7575 | 12.47 |
| 003YR072HR | smf-1a | 245.0075 | 12.47 |
| 003YR072HR | smf-1a | 245.2575 | 12.47 |
| 003YR072HR | smf-1a | 245.5075 | 12.47 |
| 003YR072HR | smf-1a | 245.7575 | 12.47 |
| 003YR072HR | smf-1a | 246.0075 | 12.47 |
| 003YR072HR | smf-1a | 246.2575 | 12.47 |
| 003YR072HR | smf-1a | 246.5075 | 12.47 |
| 003YR072HR | smf-1a | 246.7575 | 12.47 |
| 003YR072HR | smf-1a | 247.0075 | 12.46 |
| 003YR072HR | smf-1a | 247.2575 | 12.46 |
| 003YR072HR | smf-1a | 247.5075 | 12.46 |
| 003YR072HR | smf-1a | 247.7575 | 12.46 |
| 003YR072HR | smf-1a | 248.0075 | 12.46 |
| 003YR072HR | smf-1a | 248.2575 | 12.46 |
| 003YR072HR | smf-1a | 248.5075 | 12.46 |
| 003YR072HR | smf-1a | 248.7575 | 12.46 |
| 003YR072HR | smf-1a | 249.0075 | 12.46 |
| 003YR072HR | smf-1a | 249.2575 | 12.46 |
| 003YR072HR | smf-1a | 249.5075 | 12.46 |
| 003YR072HR | smf-1a | 249.7575 | 12.46 |
| 003YR072HR | smf-1a | 250.0075 | 12.46 |
| 003YR072HR | smf-1a | 250.2575 | 12.46 |
| 003YR072HR | smf-1a | 250.5075 | 12.46 |
| 003YR072HR | smf-1a | 250.7575 | 12.46 |
| 003YR072HR | smf-1a | 251.0075 | 12.46 |
| 003YR072HR | smf-1a | 251.2575 | 12.46 |
| 003YR072HR | smf-1a | 251.5075 | 12.46 |
| 003YR072HR | smf-1a | 251.7575 | 12.46 |
| 003YR072HR | smf-1a | 252.0075 | 12.46 |
| 003YR072HR | smf-1a | 252.2575 | 12.46 |
| 003YR072HR | smf-1a | 252.5075 | 12.45 |
| 003YR072HR | smf-1a | 252.7575 | 12.45 |
| 003YR072HR | smf-1a | 253.0075 | 12.45 |
| 003YR072HR | smf-1a | 253.2575 | 12.45 |
| 003YR072HR | smf-1a | 253.5075 | 12.45 |

**3yr-72hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR072HR | smf-1b | 385.5075 | 13.01 |
| 003YR072HR | smf-1b | 385.7575 | 13.01 |
| 003YR072HR | smf-1b | 386.0075 | 13.01 |
| 003YR072HR | smf-1b | 386.2575 | 13.01 |
| 003YR072HR | smf-1b | 386.5075 | 13.01 |
| 003YR072HR | smf-1b | 386.7575 | 13.01 |
| 003YR072HR | smf-1b | 387.0075 | 13.01 |
| 003YR072HR | smf-1b | 387.2575 | 13.01 |
| 003YR072HR | smf-1b | 387.5075 | 13.01 |
| 003YR072HR | smf-1b | 387.7575 | 13.01 |
| 003YR072HR | smf-1b | 388.0075 | 13.01 |
| 003YR072HR | smf-1b | 388.2575 | 13.01 |
| 003YR072HR | smf-1b | 388.5075 | 13.01 |
| 003YR072HR | smf-1b | 388.7575 | 13.01 |
| 003YR072HR | smf-1b | 389.0075 | 13.01 |
| 003YR072HR | smf-1b | 389.2575 | 13.01 |
| 003YR072HR | smf-1b | 389.5075 | 13.01 |
| 003YR072HR | smf-1b | 389.7575 | 13.01 |
| 003YR072HR | smf-1b | 390.0075 | 13.01 |
| 003YR072HR | smf-1b | 390.2575 | 13.01 |
| 003YR072HR | smf-1b | 390.5075 | 13.01 |
| 003YR072HR | smf-1b | 390.7575 | 13.01 |
| 003YR072HR | smf-1b | 391.0075 | 13.01 |
| 003YR072HR | smf-1b | 391.2575 | 13.01 |
| 003YR072HR | smf-1b | 391.5075 | 13.01 |
| 003YR072HR | smf-1b | 391.7575 | 13.01 |
| 003YR072HR | smf-1b | 392.0075 | 13.01 |
| 003YR072HR | smf-1b | 392.2575 | 13.01 |
| 003YR072HR | smf-1b | 392.5075 | 13.01 |
| 003YR072HR | smf-1b | 392.7575 | 13.00 |
| 003YR072HR | smf-1b | 393.0075 | 13.00 |
| 003YR072HR | smf-1b | 393.2575 | 13.00 |
| 003YR072HR | smf-1b | 393.5075 | 13.00 |
| 003YR072HR | smf-1b | 393.7575 | 13.00 |
| 003YR072HR | smf-1b | 394.0075 | 13.00 |
| 003YR072HR | smf-1b | 394.2575 | 13.00 |
| 003YR072HR | smf-1b | 394.5075 | 13.00 |
| 003YR072HR | smf-1b | 394.7575 | 13.00 |
| 003YR072HR | smf-1b | 395.0075 | 13.00 |
| 003YR072HR | smf-1b | 395.2575 | 13.00 |
| 003YR072HR | smf-1b | 395.5075 | 13.00 |
| 003YR072HR | smf-1b | 395.7575 | 13.00 |

**3yr-72hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR072HR | smf-2a | 433.2575 | 12.11 |
| 003YR072HR | smf-2a | 433.5075 | 12.11 |
| 003YR072HR | smf-2a | 433.7575 | 12.11 |
| 003YR072HR | smf-2a | 434.0075 | 12.11 |
| 003YR072HR | smf-2a | 434.2575 | 12.11 |
| 003YR072HR | smf-2a | 434.5075 | 12.11 |
| 003YR072HR | smf-2a | 434.7575 | 12.11 |
| 003YR072HR | smf-2a | 435.0075 | 12.11 |
| 003YR072HR | smf-2a | 435.2575 | 12.11 |
| 003YR072HR | smf-2a | 435.5075 | 12.11 |
| 003YR072HR | smf-2a | 435.7575 | 12.11 |
| 003YR072HR | smf-2a | 436.0075 | 12.11 |
| 003YR072HR | smf-2a | 436.2575 | 12.11 |
| 003YR072HR | smf-2a | 436.5075 | 12.11 |
| 003YR072HR | smf-2a | 436.7575 | 12.11 |
| 003YR072HR | smf-2a | 437.0075 | 12.11 |
| 003YR072HR | smf-2a | 437.2575 | 12.11 |
| 003YR072HR | smf-2a | 437.5075 | 12.11 |
| 003YR072HR | smf-2a | 437.7575 | 12.11 |
| 003YR072HR | smf-2a | 438.0075 | 12.11 |
| 003YR072HR | smf-2a | 438.2575 | 12.11 |
| 003YR072HR | smf-2a | 438.5075 | 12.11 |
| 003YR072HR | smf-2a | 438.7575 | 12.10 |
| 003YR072HR | smf-2a | 439.0075 | 12.10 |
| 003YR072HR | smf-2a | 439.2575 | 12.10 |
| 003YR072HR | smf-2a | 439.5075 | 12.10 |
| 003YR072HR | smf-2a | 439.7575 | 12.10 |
| 003YR072HR | smf-2a | 440.0075 | 12.10 |
| 003YR072HR | smf-2a | 440.2575 | 12.10 |
| 003YR072HR | smf-2a | 440.5075 | 12.10 |
| 003YR072HR | smf-2a | 440.7575 | 12.10 |
| 003YR072HR | smf-2a | 441.0075 | 12.10 |
| 003YR072HR | smf-2a | 441.2575 | 12.10 |
| 003YR072HR | smf-2a | 441.5075 | 12.10 |
| 003YR072HR | smf-2a | 441.7575 | 12.10 |
| 003YR072HR | smf-2a | 442.0075 | 12.10 |
| 003YR072HR | smf-2a | 442.2575 | 12.10 |
| 003YR072HR | smf-2a | 442.5075 | 12.10 |
| 003YR072HR | smf-2a | 442.7575 | 12.10 |
| 003YR072HR | smf-2a | 443.0075 | 12.10 |
| 003YR072HR | smf-2a | 443.2575 | 12.10 |
| 003YR072HR | smf-2a | 443.5075 | 12.10 |

**3yr-72hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR072HR | smf-2b | 313.0075 | 11.40 |
| 003YR072HR | smf-2b | 313.2575 | 11.40 |
| 003YR072HR | smf-2b | 313.5075 | 11.40 |
| 003YR072HR | smf-2b | 313.7575 | 11.40 |
| 003YR072HR | smf-2b | 314.0075 | 11.40 |
| 003YR072HR | smf-2b | 314.2575 | 11.40 |
| 003YR072HR | smf-2b | 314.5075 | 11.40 |
| 003YR072HR | smf-2b | 314.7575 | 11.40 |
| 003YR072HR | smf-2b | 315.0075 | 11.40 |
| 003YR072HR | smf-2b | 315.2575 | 11.40 |
| 003YR072HR | smf-2b | 315.5075 | 11.40 |
| 003YR072HR | smf-2b | 315.7575 | 11.40 |
| 003YR072HR | smf-2b | 316.0075 | 11.40 |
| 003YR072HR | smf-2b | 316.2575 | 11.40 |
| 003YR072HR | smf-2b | 316.5075 | 11.40 |
| 003YR072HR | smf-2b | 316.7575 | 11.40 |
| 003YR072HR | smf-2b | 317.0075 | 11.40 |
| 003YR072HR | smf-2b | 317.2575 | 11.40 |
| 003YR072HR | smf-2b | 317.5075 | 11.40 |
| 003YR072HR | smf-2b | 317.7575 | 11.40 |
| 003YR072HR | smf-2b | 318.0075 | 11.40 |
| 003YR072HR | smf-2b | 318.2575 | 11.40 |
| 003YR072HR | smf-2b | 318.5075 | 11.40 |
| 003YR072HR | smf-2b | 318.7575 | 11.40 |
| 003YR072HR | smf-2b | 319.0075 | 11.40 |
| 003YR072HR | smf-2b | 319.2575 | 11.40 |
| 003YR072HR | smf-2b | 319.5075 | 11.40 |
| 003YR072HR | smf-2b | 319.7575 | 11.40 |
| 003YR072HR | smf-2b | 320.0075 | 11.40 |
| 003YR072HR | smf-2b | 320.2575 | 11.40 |
| 003YR072HR | smf-2b | 320.5075 | 11.40 |
| 003YR072HR | smf-2b | 320.7575 | 11.40 |
| 003YR072HR | smf-2b | 321.0075 | 11.40 |
| 003YR072HR | smf-2b | 321.2575 | 11.40 |
| 003YR072HR | smf-2b | 321.5075 | 11.40 |
| 003YR072HR | smf-2b | 321.7575 | 11.40 |
| 003YR072HR | smf-2b | 322.0075 | 11.40 |
| 003YR072HR | smf-2b | 322.2575 | 11.40 |
| 003YR072HR | smf-2b | 322.5075 | 11.40 |
| 003YR072HR | smf-2b | 322.7575 | 11.40 |
| 003YR072HR | smf-2b | 323.0075 | 11.40 |
| 003YR072HR | smf-2b | 323.2575 | 11.40 |

**3yr-72hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR072HR | smf-2c | 392.2575 | 11.86 |
| 003YR072HR | smf-2c | 392.5075 | 11.86 |
| 003YR072HR | smf-2c | 392.7575 | 11.86 |
| 003YR072HR | smf-2c | 393.0075 | 11.86 |
| 003YR072HR | smf-2c | 393.2575 | 11.86 |
| 003YR072HR | smf-2c | 393.5075 | 11.86 |
| 003YR072HR | smf-2c | 393.7575 | 11.86 |
| 003YR072HR | smf-2c | 394.0075 | 11.86 |
| 003YR072HR | smf-2c | 394.2575 | 11.86 |
| 003YR072HR | smf-2c | 394.5075 | 11.86 |
| 003YR072HR | smf-2c | 394.7575 | 11.86 |
| 003YR072HR | smf-2c | 395.0075 | 11.86 |
| 003YR072HR | smf-2c | 395.2575 | 11.86 |
| 003YR072HR | smf-2c | 395.5075 | 11.86 |
| 003YR072HR | smf-2c | 395.7575 | 11.85 |
| 003YR072HR | smf-2c | 396.0075 | 11.85 |
| 003YR072HR | smf-2c | 396.2575 | 11.85 |
| 003YR072HR | smf-2c | 396.5075 | 11.85 |
| 003YR072HR | smf-2c | 396.7575 | 11.85 |
| 003YR072HR | smf-2c | 397.0075 | 11.85 |
| 003YR072HR | smf-2c | 397.2575 | 11.85 |
| 003YR072HR | smf-2c | 397.5075 | 11.85 |
| 003YR072HR | smf-2c | 397.7575 | 11.85 |
| 003YR072HR | smf-2c | 398.0075 | 11.85 |
| 003YR072HR | smf-2c | 398.2575 | 11.85 |
| 003YR072HR | smf-2c | 398.5075 | 11.85 |
| 003YR072HR | smf-2c | 398.7575 | 11.85 |
| 003YR072HR | smf-2c | 399.0075 | 11.85 |
| 003YR072HR | smf-2c | 399.2575 | 11.85 |
| 003YR072HR | smf-2c | 399.5075 | 11.85 |
| 003YR072HR | smf-2c | 399.7575 | 11.85 |
| 003YR072HR | smf-2c | 400.0075 | 11.85 |
| 003YR072HR | smf-2c | 400.2575 | 11.85 |
| 003YR072HR | smf-2c | 400.5075 | 11.85 |
| 003YR072HR | smf-2c | 400.7575 | 11.85 |
| 003YR072HR | smf-2c | 401.0075 | 11.85 |
| 003YR072HR | smf-2c | 401.2575 | 11.85 |
| 003YR072HR | smf-2c | 401.5075 | 11.85 |
| 003YR072HR | smf-2c | 401.7575 | 11.85 |
| 003YR072HR | smf-2c | 402.0075 | 11.85 |
| 003YR072HR | smf-2c | 402.2575 | 11.85 |
| 003YR072HR | smf-2c | 402.5075 | 11.85 |

**3yr-72hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR072HR | smf-3a | 513.5075 | 11.91 |
| 003YR072HR | smf-3a | 513.7575 | 11.91 |
| 003YR072HR | smf-3a | 514.0075 | 11.91 |
| 003YR072HR | smf-3a | 514.2575 | 11.91 |
| 003YR072HR | smf-3a | 514.5075 | 11.91 |
| 003YR072HR | smf-3a | 514.7575 | 11.91 |
| 003YR072HR | smf-3a | 515.0075 | 11.91 |
| 003YR072HR | smf-3a | 515.2575 | 11.91 |
| 003YR072HR | smf-3a | 515.5075 | 11.90 |
| 003YR072HR | smf-3a | 515.7575 | 11.90 |
| 003YR072HR | smf-3a | 516.0075 | 11.90 |
| 003YR072HR | smf-3a | 516.2575 | 11.90 |
| 003YR072HR | smf-3a | 516.5075 | 11.90 |
| 003YR072HR | smf-3a | 516.7575 | 11.90 |
| 003YR072HR | smf-3a | 517.0075 | 11.90 |
| 003YR072HR | smf-3a | 517.2575 | 11.90 |
| 003YR072HR | smf-3a | 517.5075 | 11.90 |
| 003YR072HR | smf-3a | 517.7575 | 11.90 |
| 003YR072HR | smf-3a | 518.0075 | 11.90 |
| 003YR072HR | smf-3a | 518.2575 | 11.90 |
| 003YR072HR | smf-3a | 518.5075 | 11.90 |
| 003YR072HR | smf-3a | 518.7575 | 11.90 |
| 003YR072HR | smf-3a | 519.0075 | 11.90 |
| 003YR072HR | smf-3a | 519.2575 | 11.90 |
| 003YR072HR | smf-3a | 519.5075 | 11.90 |
| 003YR072HR | smf-3a | 519.7575 | 11.90 |
| 003YR072HR | smf-3a | 520.0075 | 11.90 |
| 003YR072HR | smf-3a | 520.2575 | 11.90 |
| 003YR072HR | smf-3a | 520.5075 | 11.90 |
| 003YR072HR | smf-3a | 520.7575 | 11.90 |
| 003YR072HR | smf-3a | 521.0075 | 11.90 |
| 003YR072HR | smf-3a | 521.2575 | 11.90 |
| 003YR072HR | smf-3a | 521.5075 | 11.90 |
| 003YR072HR | smf-3a | 521.7575 | 11.90 |
| 003YR072HR | smf-3a | 522.0075 | 11.90 |
| 003YR072HR | smf-3a | 522.2575 | 11.90 |
| 003YR072HR | smf-3a | 522.5075 | 11.90 |
| 003YR072HR | smf-3a | 522.7575 | 11.90 |
| 003YR072HR | smf-3a | 523.0075 | 11.90 |
| 003YR072HR | smf-3a | 523.2575 | 11.90 |
| 003YR072HR | smf-3a | 523.5075 | 11.90 |
| 003YR072HR | smf-3a | 523.7575 | 11.90 |

**3yr-72hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 003YR072HR | smf-3b | 456.2575 | 11.26 |
| 003YR072HR | smf-3b | 456.5075 | 11.25 |
| 003YR072HR | smf-3b | 456.7575 | 11.25 |
| 003YR072HR | smf-3b | 457.0075 | 11.25 |
| 003YR072HR | smf-3b | 457.2575 | 11.25 |
| 003YR072HR | smf-3b | 457.5075 | 11.25 |
| 003YR072HR | smf-3b | 457.7575 | 11.25 |
| 003YR072HR | smf-3b | 458.0075 | 11.25 |
| 003YR072HR | smf-3b | 458.2575 | 11.25 |
| 003YR072HR | smf-3b | 458.5075 | 11.25 |
| 003YR072HR | smf-3b | 458.7575 | 11.25 |
| 003YR072HR | smf-3b | 459.0075 | 11.25 |
| 003YR072HR | smf-3b | 459.2575 | 11.25 |
| 003YR072HR | smf-3b | 459.5075 | 11.25 |
| 003YR072HR | smf-3b | 459.7575 | 11.25 |
| 003YR072HR | smf-3b | 460.0075 | 11.25 |
| 003YR072HR | smf-3b | 460.2575 | 11.25 |
| 003YR072HR | smf-3b | 460.5075 | 11.25 |
| 003YR072HR | smf-3b | 460.7575 | 11.25 |
| 003YR072HR | smf-3b | 461.0075 | 11.25 |
| 003YR072HR | smf-3b | 461.2575 | 11.25 |
| 003YR072HR | smf-3b | 461.5075 | 11.25 |
| 003YR072HR | smf-3b | 461.7575 | 11.25 |
| 003YR072HR | smf-3b | 462.0075 | 11.25 |
| 003YR072HR | smf-3b | 462.2575 | 11.25 |
| 003YR072HR | smf-3b | 462.5075 | 11.25 |
| 003YR072HR | smf-3b | 462.7575 | 11.25 |
| 003YR072HR | smf-3b | 463.0075 | 11.25 |
| 003YR072HR | smf-3b | 463.2575 | 11.25 |
| 003YR072HR | smf-3b | 463.5075 | 11.25 |
| 003YR072HR | smf-3b | 463.7575 | 11.25 |
| 003YR072HR | smf-3b | 464.0075 | 11.25 |
| 003YR072HR | smf-3b | 464.2575 | 11.25 |
| 003YR072HR | smf-3b | 464.5075 | 11.25 |
| 003YR072HR | smf-3b | 464.7575 | 11.25 |
| 003YR072HR | smf-3b | 465.0075 | 11.25 |
| 003YR072HR | smf-3b | 465.2575 | 11.25 |
| 003YR072HR | smf-3b | 465.5075 | 11.25 |
| 003YR072HR | smf-3b | 465.7575 | 11.25 |
| 003YR072HR | smf-3b | 466.0075 | 11.25 |
| 003YR072HR | smf-3b | 466.2575 | 11.25 |
| 003YR072HR | smf-3b | 466.5075 | 11.25 |

**3yr-72hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR001HR | smf-1a | 10.5014 | 12.56 |
| 005YR001HR | smf-1a | 10.7514 | 12.55 |
| 005YR001HR | smf-1a | 11.0014 | 12.55 |
| 005YR001HR | smf-1a | 11.2514 | 12.54 |
| 005YR001HR | smf-1a | 11.5014 | 12.54 |
| 005YR001HR | smf-1a | 11.7514 | 12.53 |
| 005YR001HR | smf-1a | 12.0014 | 12.53 |
| 005YR001HR | smf-1a | 12.2514 | 12.53 |
| 005YR001HR | smf-1a | 12.5014 | 12.52 |
| 005YR001HR | smf-1a | 12.7514 | 12.52 |
| 005YR001HR | smf-1a | 13.0014 | 12.51 |
| 005YR001HR | smf-1a | 13.2514 | 12.51 |
| 005YR001HR | smf-1a | 13.5014 | 12.50 |
| 005YR001HR | smf-1a | 13.7514 | 12.50 |
| 005YR001HR | smf-1a | 14.0014 | 12.50 |
| 005YR001HR | smf-1a | 14.2514 | 12.49 |
| 005YR001HR | smf-1a | 14.5014 | 12.49 |
| 005YR001HR | smf-1a | 14.7514 | 12.49 |
| 005YR001HR | smf-1a | 15.0014 | 12.48 |
| 005YR001HR | smf-1a | 15.2514 | 12.48 |
| 005YR001HR | smf-1a | 15.5014 | 12.48 |
| 005YR001HR | smf-1a | 15.7514 | 12.47 |
| 005YR001HR | smf-1a | 16.0014 | 12.47 |
| 005YR001HR | smf-1a | 16.2514 | 12.47 |
| 005YR001HR | smf-1a | 16.5014 | 12.46 |
| 005YR001HR | smf-1a | 16.7514 | 12.46 |
| 005YR001HR | smf-1a | 17.0014 | 12.46 |
| 005YR001HR | smf-1a | 17.2514 | 12.45 |
| 005YR001HR | smf-1a | 17.5014 | 12.45 |
| 005YR001HR | smf-1a | 17.7514 | 12.45 |
| 005YR001HR | smf-1a | 18.0014 | 12.45 |
| 005YR001HR | smf-1a | 18.2514 | 12.45 |
| 005YR001HR | smf-1a | 18.5014 | 12.45 |
| 005YR001HR | smf-1a | 18.7514 | 12.45 |
| 005YR001HR | smf-1a | 19.0014 | 12.45 |
| 005YR001HR | smf-1a | 19.2514 | 12.45 |
| 005YR001HR | smf-1a | 19.5014 | 12.45 |
| 005YR001HR | smf-1a | 19.7514 | 12.45 |
| 005YR001HR | smf-1a | 20.0014 | 12.45 |
| 005YR001HR | smf-1a | 20.2514 | 12.45 |
| 005YR001HR | smf-1a | 20.5014 | 12.45 |
| 005YR001HR | smf-1a | 20.7514 | 12.45 |

**5yr-1hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR001HR | smf-1b | 45.2514 | 13.06 |
| 005YR001HR | smf-1b | 45.5014 | 13.06 |
| 005YR001HR | smf-1b | 45.7514 | 13.05 |
| 005YR001HR | smf-1b | 46.0014 | 13.05 |
| 005YR001HR | smf-1b | 46.2514 | 13.05 |
| 005YR001HR | smf-1b | 46.5014 | 13.05 |
| 005YR001HR | smf-1b | 46.7514 | 13.05 |
| 005YR001HR | smf-1b | 47.0014 | 13.04 |
| 005YR001HR | smf-1b | 47.2514 | 13.04 |
| 005YR001HR | smf-1b | 47.5014 | 13.04 |
| 005YR001HR | smf-1b | 47.7514 | 13.04 |
| 005YR001HR | smf-1b | 48.0014 | 13.04 |
| 005YR001HR | smf-1b | 48.2514 | 13.03 |
| 005YR001HR | smf-1b | 48.5014 | 13.03 |
| 005YR001HR | smf-1b | 48.7514 | 13.03 |
| 005YR001HR | smf-1b | 49.0014 | 13.03 |
| 005YR001HR | smf-1b | 49.2514 | 13.03 |
| 005YR001HR | smf-1b | 49.5014 | 13.02 |
| 005YR001HR | smf-1b | 49.7514 | 13.02 |
| 005YR001HR | smf-1b | 50.0014 | 13.02 |
| 005YR001HR | smf-1b | 50.2514 | 13.02 |
| 005YR001HR | smf-1b | 50.5014 | 13.02 |
| 005YR001HR | smf-1b | 50.7514 | 13.01 |
| 005YR001HR | smf-1b | 51.0014 | 13.01 |
| 005YR001HR | smf-1b | 51.2514 | 13.01 |
| 005YR001HR | smf-1b | 51.5014 | 13.01 |
| 005YR001HR | smf-1b | 51.7514 | 13.01 |
| 005YR001HR | smf-1b | 52.0014 | 13.01 |
| 005YR001HR | smf-1b | 52.2514 | 13.00 |
| 005YR001HR | smf-1b | 52.5014 | 13.00 |
| 005YR001HR | smf-1b | 52.7514 | 13.00 |
| 005YR001HR | smf-1b | 53.0014 | 13.00 |
| 005YR001HR | smf-1b | 53.2514 | 13.00 |
| 005YR001HR | smf-1b | 53.5014 | 13.00 |
| 005YR001HR | smf-1b | 53.7514 | 13.00 |
| 005YR001HR | smf-1b | 54.0014 | 13.00 |
| 005YR001HR | smf-1b | 54.2514 | 13.00 |
| 005YR001HR | smf-1b | 54.5014 | 13.00 |
| 005YR001HR | smf-1b | 54.7514 | 13.00 |
| 005YR001HR | smf-1b | 55.0014 | 13.00 |
| 005YR001HR | smf-1b | 55.2514 | 13.00 |
| 005YR001HR | smf-1b | 55.5014 | 13.00 |

**5yr-1hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR001HR | smf-2a | 90.5014 | 12.12 |
| 005YR001HR | smf-2a | 90.7514 | 12.12 |
| 005YR001HR | smf-2a | 91.0014 | 12.12 |
| 005YR001HR | smf-2a | 91.2514 | 12.12 |
| 005YR001HR | smf-2a | 91.5014 | 12.12 |
| 005YR001HR | smf-2a | 91.7514 | 12.11 |
| 005YR001HR | smf-2a | 92.0014 | 12.11 |
| 005YR001HR | smf-2a | 92.2514 | 12.11 |
| 005YR001HR | smf-2a | 92.5014 | 12.11 |
| 005YR001HR | smf-2a | 92.7514 | 12.11 |
| 005YR001HR | smf-2a | 93.0014 | 12.11 |
| 005YR001HR | smf-2a | 93.2514 | 12.11 |
| 005YR001HR | smf-2a | 93.5014 | 12.11 |
| 005YR001HR | smf-2a | 93.7514 | 12.11 |
| 005YR001HR | smf-2a | 94.0014 | 12.11 |
| 005YR001HR | smf-2a | 94.2514 | 12.11 |
| 005YR001HR | smf-2a | 94.5014 | 12.11 |
| 005YR001HR | smf-2a | 94.7514 | 12.11 |
| 005YR001HR | smf-2a | 95.0014 | 12.10 |
| 005YR001HR | smf-2a | 95.2514 | 12.10 |
| 005YR001HR | smf-2a | 95.5014 | 12.10 |
| 005YR001HR | smf-2a | 95.7514 | 12.10 |
| 005YR001HR | smf-2a | 96.0014 | 12.10 |
| 005YR001HR | smf-2a | 96.2514 | 12.10 |
| 005YR001HR | smf-2a | 96.5014 | 12.10 |
| 005YR001HR | smf-2a | 96.7514 | 12.10 |
| 005YR001HR | smf-2a | 97.0014 | 12.10 |
| 005YR001HR | smf-2a | 97.2514 | 12.10 |
| 005YR001HR | smf-2a | 97.5014 | 12.10 |
| 005YR001HR | smf-2a | 97.7514 | 12.10 |
| 005YR001HR | smf-2a | 98.0014 | 12.10 |
| 005YR001HR | smf-2a | 98.2514 | 12.10 |
| 005YR001HR | smf-2a | 98.5014 | 12.10 |
| 005YR001HR | smf-2a | 98.7514 | 12.10 |
| 005YR001HR | smf-2a | 99.0014 | 12.10 |
| 005YR001HR | smf-2a | 99.2514 | 12.10 |
| 005YR001HR | smf-2a | 99.5014 | 12.10 |
| 005YR001HR | smf-2a | 99.7514 | 12.10 |
| 005YR001HR | smf-2a | 100.0014 | 12.10 |
| 005YR001HR | smf-2a | 100.2514 | 12.10 |
| 005YR001HR | smf-2a | 100.5014 | 12.10 |
| 005YR001HR | smf-2a | 100.7514 | 12.10 |

**5yr-1hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR001HR | smf-2b | 41.2514 | 11.48 |
| 005YR001HR | smf-2b | 41.5014 | 11.48 |
| 005YR001HR | smf-2b | 41.7514 | 11.48 |
| 005YR001HR | smf-2b | 42.0014 | 11.48 |
| 005YR001HR | smf-2b | 42.2514 | 11.47 |
| 005YR001HR | smf-2b | 42.5014 | 11.47 |
| 005YR001HR | smf-2b | 42.7514 | 11.47 |
| 005YR001HR | smf-2b | 43.0014 | 11.47 |
| 005YR001HR | smf-2b | 43.2514 | 11.46 |
| 005YR001HR | smf-2b | 43.5014 | 11.46 |
| 005YR001HR | smf-2b | 43.7514 | 11.46 |
| 005YR001HR | smf-2b | 44.0014 | 11.46 |
| 005YR001HR | smf-2b | 44.2514 | 11.46 |
| 005YR001HR | smf-2b | 44.5014 | 11.45 |
| 005YR001HR | smf-2b | 44.7514 | 11.45 |
| 005YR001HR | smf-2b | 45.0014 | 11.45 |
| 005YR001HR | smf-2b | 45.2514 | 11.45 |
| 005YR001HR | smf-2b | 45.5014 | 11.45 |
| 005YR001HR | smf-2b | 45.7514 | 11.44 |
| 005YR001HR | smf-2b | 46.0014 | 11.44 |
| 005YR001HR | smf-2b | 46.2514 | 11.44 |
| 005YR001HR | smf-2b | 46.5014 | 11.44 |
| 005YR001HR | smf-2b | 46.7514 | 11.44 |
| 005YR001HR | smf-2b | 47.0014 | 11.43 |
| 005YR001HR | smf-2b | 47.2514 | 11.43 |
| 005YR001HR | smf-2b | 47.5014 | 11.43 |
| 005YR001HR | smf-2b | 47.7514 | 11.43 |
| 005YR001HR | smf-2b | 48.0014 | 11.43 |
| 005YR001HR | smf-2b | 48.2514 | 11.42 |
| 005YR001HR | smf-2b | 48.5014 | 11.42 |
| 005YR001HR | smf-2b | 48.7514 | 11.42 |
| 005YR001HR | smf-2b | 49.0014 | 11.42 |
| 005YR001HR | smf-2b | 49.2514 | 11.42 |
| 005YR001HR | smf-2b | 49.5014 | 11.42 |
| 005YR001HR | smf-2b | 49.7514 | 11.41 |
| 005YR001HR | smf-2b | 50.0014 | 11.41 |
| 005YR001HR | smf-2b | 50.2514 | 11.41 |
| 005YR001HR | smf-2b | 50.5014 | 11.41 |
| 005YR001HR | smf-2b | 50.7514 | 11.41 |
| 005YR001HR | smf-2b | 51.0014 | 11.41 |
| 005YR001HR | smf-2b | 51.2514 | 11.40 |
| 005YR001HR | smf-2b | 51.5014 | 11.40 |

**5yr-1hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR001HR | smf-2c | 76.0014 | 11.86 |
| 005YR001HR | smf-2c | 76.2514 | 11.86 |
| 005YR001HR | smf-2c | 76.5014 | 11.86 |
| 005YR001HR | smf-2c | 76.7514 | 11.86 |
| 005YR001HR | smf-2c | 77.0014 | 11.86 |
| 005YR001HR | smf-2c | 77.2514 | 11.86 |
| 005YR001HR | smf-2c | 77.5014 | 11.86 |
| 005YR001HR | smf-2c | 77.7514 | 11.86 |
| 005YR001HR | smf-2c | 78.0014 | 11.85 |
| 005YR001HR | smf-2c | 78.2514 | 11.85 |
| 005YR001HR | smf-2c | 78.5014 | 11.85 |
| 005YR001HR | smf-2c | 78.7514 | 11.85 |
| 005YR001HR | smf-2c | 79.0014 | 11.85 |
| 005YR001HR | smf-2c | 79.2514 | 11.85 |
| 005YR001HR | smf-2c | 79.5014 | 11.85 |
| 005YR001HR | smf-2c | 79.7514 | 11.85 |
| 005YR001HR | smf-2c | 80.0014 | 11.85 |
| 005YR001HR | smf-2c | 80.2514 | 11.85 |
| 005YR001HR | smf-2c | 80.5014 | 11.85 |
| 005YR001HR | smf-2c | 80.7514 | 11.85 |
| 005YR001HR | smf-2c | 81.0014 | 11.85 |
| 005YR001HR | smf-2c | 81.2514 | 11.85 |
| 005YR001HR | smf-2c | 81.5014 | 11.85 |
| 005YR001HR | smf-2c | 81.7514 | 11.85 |
| 005YR001HR | smf-2c | 82.0014 | 11.85 |
| 005YR001HR | smf-2c | 82.2514 | 11.85 |
| 005YR001HR | smf-2c | 82.5014 | 11.85 |
| 005YR001HR | smf-2c | 82.7514 | 11.85 |
| 005YR001HR | smf-2c | 83.0014 | 11.85 |
| 005YR001HR | smf-2c | 83.2514 | 11.85 |
| 005YR001HR | smf-2c | 83.5014 | 11.85 |
| 005YR001HR | smf-2c | 83.7514 | 11.85 |
| 005YR001HR | smf-2c | 84.0014 | 11.85 |
| 005YR001HR | smf-2c | 84.2514 | 11.85 |
| 005YR001HR | smf-2c | 84.5014 | 11.85 |
| 005YR001HR | smf-2c | 84.7514 | 11.85 |
| 005YR001HR | smf-2c | 85.0014 | 11.85 |
| 005YR001HR | smf-2c | 85.2514 | 11.85 |
| 005YR001HR | smf-2c | 85.5014 | 11.85 |
| 005YR001HR | smf-2c | 85.7514 | 11.85 |
| 005YR001HR | smf-2c | 86.0014 | 11.85 |
| 005YR001HR | smf-2c | 86.2514 | 11.85 |

**5yr-1hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR001HR | smf-3a | 79.2514 | 11.95 |
| 005YR001HR | smf-3a | 79.5014 | 11.95 |
| 005YR001HR | smf-3a | 79.7514 | 11.94 |
| 005YR001HR | smf-3a | 80.0014 | 11.94 |
| 005YR001HR | smf-3a | 80.2514 | 11.94 |
| 005YR001HR | smf-3a | 80.5014 | 11.94 |
| 005YR001HR | smf-3a | 80.7514 | 11.94 |
| 005YR001HR | smf-3a | 81.0014 | 11.94 |
| 005YR001HR | smf-3a | 81.2514 | 11.94 |
| 005YR001HR | smf-3a | 81.5014 | 11.94 |
| 005YR001HR | smf-3a | 81.7514 | 11.93 |
| 005YR001HR | smf-3a | 82.0014 | 11.93 |
| 005YR001HR | smf-3a | 82.2514 | 11.93 |
| 005YR001HR | smf-3a | 82.5014 | 11.93 |
| 005YR001HR | smf-3a | 82.7514 | 11.93 |
| 005YR001HR | smf-3a | 83.0014 | 11.93 |
| 005YR001HR | smf-3a | 83.2514 | 11.93 |
| 005YR001HR | smf-3a | 83.5014 | 11.93 |
| 005YR001HR | smf-3a | 83.7514 | 11.93 |
| 005YR001HR | smf-3a | 84.0014 | 11.92 |
| 005YR001HR | smf-3a | 84.2514 | 11.92 |
| 005YR001HR | smf-3a | 84.5014 | 11.92 |
| 005YR001HR | smf-3a | 84.7514 | 11.92 |
| 005YR001HR | smf-3a | 85.0014 | 11.92 |
| 005YR001HR | smf-3a | 85.2514 | 11.92 |
| 005YR001HR | smf-3a | 85.5014 | 11.92 |
| 005YR001HR | smf-3a | 85.7514 | 11.92 |
| 005YR001HR | smf-3a | 86.0014 | 11.92 |
| 005YR001HR | smf-3a | 86.2514 | 11.91 |
| 005YR001HR | smf-3a | 86.5014 | 11.91 |
| 005YR001HR | smf-3a | 86.7514 | 11.91 |
| 005YR001HR | smf-3a | 87.0014 | 11.91 |
| 005YR001HR | smf-3a | 87.2514 | 11.91 |
| 005YR001HR | smf-3a | 87.5014 | 11.91 |
| 005YR001HR | smf-3a | 87.7514 | 11.91 |
| 005YR001HR | smf-3a | 88.0014 | 11.91 |
| 005YR001HR | smf-3a | 88.2514 | 11.91 |
| 005YR001HR | smf-3a | 88.5014 | 11.90 |
| 005YR001HR | smf-3a | 88.7514 | 11.90 |
| 005YR001HR | smf-3a | 89.0014 | 11.90 |
| 005YR001HR | smf-3a | 89.2514 | 11.90 |
| 005YR001HR | smf-3a | 89.5014 | 11.90 |

**5yr-1hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR001HR | smf-3b | 82.5014 | 11.27 |
| 005YR001HR | smf-3b | 82.7514 | 11.27 |
| 005YR001HR | smf-3b | 83.0014 | 11.27 |
| 005YR001HR | smf-3b | 83.2514 | 11.26 |
| 005YR001HR | smf-3b | 83.5014 | 11.26 |
| 005YR001HR | smf-3b | 83.7514 | 11.26 |
| 005YR001HR | smf-3b | 84.0014 | 11.26 |
| 005YR001HR | smf-3b | 84.2514 | 11.26 |
| 005YR001HR | smf-3b | 84.5014 | 11.26 |
| 005YR001HR | smf-3b | 84.7514 | 11.26 |
| 005YR001HR | smf-3b | 85.0014 | 11.26 |
| 005YR001HR | smf-3b | 85.2514 | 11.26 |
| 005YR001HR | smf-3b | 85.5014 | 11.25 |
| 005YR001HR | smf-3b | 85.7514 | 11.25 |
| 005YR001HR | smf-3b | 86.0014 | 11.25 |
| 005YR001HR | smf-3b | 86.2514 | 11.25 |
| 005YR001HR | smf-3b | 86.5014 | 11.25 |
| 005YR001HR | smf-3b | 86.7514 | 11.25 |
| 005YR001HR | smf-3b | 87.0014 | 11.25 |
| 005YR001HR | smf-3b | 87.2514 | 11.25 |
| 005YR001HR | smf-3b | 87.5014 | 11.25 |
| 005YR001HR | smf-3b | 87.7514 | 11.25 |
| 005YR001HR | smf-3b | 88.0014 | 11.25 |
| 005YR001HR | smf-3b | 88.2514 | 11.25 |
| 005YR001HR | smf-3b | 88.5014 | 11.25 |
| 005YR001HR | smf-3b | 88.7514 | 11.25 |
| 005YR001HR | smf-3b | 89.0014 | 11.25 |
| 005YR001HR | smf-3b | 89.2514 | 11.25 |
| 005YR001HR | smf-3b | 89.5014 | 11.25 |
| 005YR001HR | smf-3b | 89.7514 | 11.25 |
| 005YR001HR | smf-3b | 90.0014 | 11.25 |
| 005YR001HR | smf-3b | 90.2514 | 11.25 |
| 005YR001HR | smf-3b | 90.5014 | 11.25 |
| 005YR001HR | smf-3b | 90.7514 | 11.25 |
| 005YR001HR | smf-3b | 91.0014 | 11.25 |
| 005YR001HR | smf-3b | 91.2514 | 11.25 |
| 005YR001HR | smf-3b | 91.5014 | 11.25 |
| 005YR001HR | smf-3b | 91.7514 | 11.25 |
| 005YR001HR | smf-3b | 92.0014 | 11.25 |
| 005YR001HR | smf-3b | 92.2514 | 11.25 |
| 005YR001HR | smf-3b | 92.5014 | 11.25 |
| 005YR001HR | smf-3b | 92.7514 | 11.25 |

**5yr-1hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR002HR | smf-1a | 33.2528 | 12.50 |
| 005YR002HR | smf-1a | 33.5028 | 12.49 |
| 005YR002HR | smf-1a | 33.7528 | 12.49 |
| 005YR002HR | smf-1a | 34.0028 | 12.49 |
| 005YR002HR | smf-1a | 34.2528 | 12.49 |
| 005YR002HR | smf-1a | 34.5028 | 12.49 |
| 005YR002HR | smf-1a | 34.7528 | 12.48 |
| 005YR002HR | smf-1a | 35.0028 | 12.48 |
| 005YR002HR | smf-1a | 35.2528 | 12.48 |
| 005YR002HR | smf-1a | 35.5028 | 12.48 |
| 005YR002HR | smf-1a | 35.7528 | 12.48 |
| 005YR002HR | smf-1a | 36.0028 | 12.47 |
| 005YR002HR | smf-1a | 36.2528 | 12.47 |
| 005YR002HR | smf-1a | 36.5028 | 12.47 |
| 005YR002HR | smf-1a | 36.7528 | 12.47 |
| 005YR002HR | smf-1a | 37.0028 | 12.47 |
| 005YR002HR | smf-1a | 37.2528 | 12.47 |
| 005YR002HR | smf-1a | 37.5028 | 12.46 |
| 005YR002HR | smf-1a | 37.7528 | 12.46 |
| 005YR002HR | smf-1a | 38.0028 | 12.46 |
| 005YR002HR | smf-1a | 38.2528 | 12.46 |
| 005YR002HR | smf-1a | 38.5028 | 12.46 |
| 005YR002HR | smf-1a | 38.7528 | 12.46 |
| 005YR002HR | smf-1a | 39.0028 | 12.45 |
| 005YR002HR | smf-1a | 39.2528 | 12.45 |
| 005YR002HR | smf-1a | 39.5028 | 12.45 |
| 005YR002HR | smf-1a | 39.7528 | 12.45 |
| 005YR002HR | smf-1a | 40.0028 | 12.45 |
| 005YR002HR | smf-1a | 40.2528 | 12.45 |
| 005YR002HR | smf-1a | 40.5028 | 12.45 |
| 005YR002HR | smf-1a | 40.7528 | 12.45 |
| 005YR002HR | smf-1a | 41.0028 | 12.45 |
| 005YR002HR | smf-1a | 41.2528 | 12.45 |
| 005YR002HR | smf-1a | 41.5028 | 12.45 |
| 005YR002HR | smf-1a | 41.7528 | 12.45 |
| 005YR002HR | smf-1a | 42.0028 | 12.45 |
| 005YR002HR | smf-1a | 42.2528 | 12.45 |
| 005YR002HR | smf-1a | 42.5028 | 12.45 |
| 005YR002HR | smf-1a | 42.7528 | 12.45 |
| 005YR002HR | smf-1a | 43.0028 | 12.45 |
| 005YR002HR | smf-1a | 43.2528 | 12.45 |
| 005YR002HR | smf-1a | 43.5028 | 12.45 |

**5yr-2hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR002HR | smf-1b | 67.0028 | 13.00 |
| 005YR002HR | smf-1b | 67.2528 | 13.00 |
| 005YR002HR | smf-1b | 67.5028 | 13.00 |
| 005YR002HR | smf-1b | 67.7528 | 13.00 |
| 005YR002HR | smf-1b | 68.0028 | 13.00 |
| 005YR002HR | smf-1b | 68.2528 | 13.00 |
| 005YR002HR | smf-1b | 68.5028 | 13.00 |
| 005YR002HR | smf-1b | 68.7528 | 13.00 |
| 005YR002HR | smf-1b | 69.0028 | 13.00 |
| 005YR002HR | smf-1b | 69.2528 | 13.00 |
| 005YR002HR | smf-1b | 69.5028 | 13.00 |
| 005YR002HR | smf-1b | 69.7528 | 13.00 |
| 005YR002HR | smf-1b | 70.0028 | 13.00 |
| 005YR002HR | smf-1b | 70.2528 | 13.00 |
| 005YR002HR | smf-1b | 70.5028 | 13.00 |
| 005YR002HR | smf-1b | 70.7528 | 13.00 |
| 005YR002HR | smf-1b | 71.0028 | 13.00 |
| 005YR002HR | smf-1b | 71.2528 | 13.00 |
| 005YR002HR | smf-1b | 71.5028 | 13.00 |
| 005YR002HR | smf-1b | 71.7528 | 13.00 |
| 005YR002HR | smf-1b | 72.0028 | 13.00 |
| 005YR002HR | smf-1b | 72.2528 | 13.00 |
| 005YR002HR | smf-1b | 72.5028 | 13.00 |
| 005YR002HR | smf-1b | 72.7528 | 13.00 |
| 005YR002HR | smf-1b | 73.0028 | 13.00 |
| 005YR002HR | smf-1b | 73.2528 | 13.00 |
| 005YR002HR | smf-1b | 73.5028 | 13.00 |
| 005YR002HR | smf-1b | 73.7528 | 13.00 |
| 005YR002HR | smf-1b | 74.0028 | 13.00 |
| 005YR002HR | smf-1b | 74.2528 | 13.00 |
| 005YR002HR | smf-1b | 74.5028 | 13.00 |
| 005YR002HR | smf-1b | 74.7528 | 13.00 |
| 005YR002HR | smf-1b | 75.0028 | 13.00 |
| 005YR002HR | smf-1b | 75.2528 | 13.00 |
| 005YR002HR | smf-1b | 75.5028 | 13.00 |
| 005YR002HR | smf-1b | 75.7528 | 13.00 |
| 005YR002HR | smf-1b | 76.0028 | 13.00 |
| 005YR002HR | smf-1b | 76.2528 | 13.00 |
| 005YR002HR | smf-1b | 76.5028 | 13.00 |
| 005YR002HR | smf-1b | 76.7528 | 13.00 |
| 005YR002HR | smf-1b | 77.0028 | 13.00 |
| 005YR002HR | smf-1b | 77.2528 | 13.00 |

**5yr-2hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR002HR | smf-2a | 121.7528 | 12.13 |
| 005YR002HR | smf-2a | 122.0028 | 12.13 |
| 005YR002HR | smf-2a | 122.2528 | 12.12 |
| 005YR002HR | smf-2a | 122.5028 | 12.12 |
| 005YR002HR | smf-2a | 122.7528 | 12.12 |
| 005YR002HR | smf-2a | 123.0028 | 12.12 |
| 005YR002HR | smf-2a | 123.2528 | 12.12 |
| 005YR002HR | smf-2a | 123.5028 | 12.12 |
| 005YR002HR | smf-2a | 123.7528 | 12.12 |
| 005YR002HR | smf-2a | 124.0028 | 12.12 |
| 005YR002HR | smf-2a | 124.2528 | 12.12 |
| 005YR002HR | smf-2a | 124.5028 | 12.12 |
| 005YR002HR | smf-2a | 124.7528 | 12.12 |
| 005YR002HR | smf-2a | 125.0028 | 12.12 |
| 005YR002HR | smf-2a | 125.2528 | 12.12 |
| 005YR002HR | smf-2a | 125.5028 | 12.12 |
| 005YR002HR | smf-2a | 125.7528 | 12.12 |
| 005YR002HR | smf-2a | 126.0028 | 12.12 |
| 005YR002HR | smf-2a | 126.2528 | 12.11 |
| 005YR002HR | smf-2a | 126.5028 | 12.11 |
| 005YR002HR | smf-2a | 126.7528 | 12.11 |
| 005YR002HR | smf-2a | 127.0028 | 12.11 |
| 005YR002HR | smf-2a | 127.2528 | 12.11 |
| 005YR002HR | smf-2a | 127.5028 | 12.11 |
| 005YR002HR | smf-2a | 127.7528 | 12.11 |
| 005YR002HR | smf-2a | 128.0028 | 12.11 |
| 005YR002HR | smf-2a | 128.2528 | 12.11 |
| 005YR002HR | smf-2a | 128.5028 | 12.11 |
| 005YR002HR | smf-2a | 128.7528 | 12.11 |
| 005YR002HR | smf-2a | 129.0028 | 12.11 |
| 005YR002HR | smf-2a | 129.2528 | 12.11 |
| 005YR002HR | smf-2a | 129.5028 | 12.11 |
| 005YR002HR | smf-2a | 129.7528 | 12.11 |
| 005YR002HR | smf-2a | 130.0028 | 12.11 |
| 005YR002HR | smf-2a | 130.2528 | 12.10 |
| 005YR002HR | smf-2a | 130.5028 | 12.10 |
| 005YR002HR | smf-2a | 130.7528 | 12.10 |
| 005YR002HR | smf-2a | 131.0028 | 12.10 |
| 005YR002HR | smf-2a | 131.2528 | 12.10 |
| 005YR002HR | smf-2a | 131.5028 | 12.10 |
| 005YR002HR | smf-2a | 131.7528 | 12.10 |
| 005YR002HR | smf-2a | 132.0028 | 12.10 |

**5yr-2hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR002HR | smf-2b | 82.0028 | 11.45 |
| 005YR002HR | smf-2b | 82.2528 | 11.45 |
| 005YR002HR | smf-2b | 82.5028 | 11.45 |
| 005YR002HR | smf-2b | 82.7528 | 11.45 |
| 005YR002HR | smf-2b | 83.0028 | 11.44 |
| 005YR002HR | smf-2b | 83.2528 | 11.44 |
| 005YR002HR | smf-2b | 83.5028 | 11.44 |
| 005YR002HR | smf-2b | 83.7528 | 11.44 |
| 005YR002HR | smf-2b | 84.0028 | 11.44 |
| 005YR002HR | smf-2b | 84.2528 | 11.44 |
| 005YR002HR | smf-2b | 84.5028 | 11.44 |
| 005YR002HR | smf-2b | 84.7528 | 11.44 |
| 005YR002HR | smf-2b | 85.0028 | 11.43 |
| 005YR002HR | smf-2b | 85.2528 | 11.43 |
| 005YR002HR | smf-2b | 85.5028 | 11.43 |
| 005YR002HR | smf-2b | 85.7528 | 11.43 |
| 005YR002HR | smf-2b | 86.0028 | 11.43 |
| 005YR002HR | smf-2b | 86.2528 | 11.43 |
| 005YR002HR | smf-2b | 86.5028 | 11.43 |
| 005YR002HR | smf-2b | 86.7528 | 11.43 |
| 005YR002HR | smf-2b | 87.0028 | 11.42 |
| 005YR002HR | smf-2b | 87.2528 | 11.42 |
| 005YR002HR | smf-2b | 87.5028 | 11.42 |
| 005YR002HR | smf-2b | 87.7528 | 11.42 |
| 005YR002HR | smf-2b | 88.0028 | 11.42 |
| 005YR002HR | smf-2b | 88.2528 | 11.42 |
| 005YR002HR | smf-2b | 88.5028 | 11.42 |
| 005YR002HR | smf-2b | 88.7528 | 11.42 |
| 005YR002HR | smf-2b | 89.0028 | 11.42 |
| 005YR002HR | smf-2b | 89.2528 | 11.41 |
| 005YR002HR | smf-2b | 89.5028 | 11.41 |
| 005YR002HR | smf-2b | 89.7528 | 11.41 |
| 005YR002HR | smf-2b | 90.0028 | 11.41 |
| 005YR002HR | smf-2b | 90.2528 | 11.41 |
| 005YR002HR | smf-2b | 90.5028 | 11.41 |
| 005YR002HR | smf-2b | 90.7528 | 11.41 |
| 005YR002HR | smf-2b | 91.0028 | 11.41 |
| 005YR002HR | smf-2b | 91.2528 | 11.41 |
| 005YR002HR | smf-2b | 91.5028 | 11.41 |
| 005YR002HR | smf-2b | 91.7528 | 11.40 |
| 005YR002HR | smf-2b | 92.0028 | 11.40 |
| 005YR002HR | smf-2b | 92.2528 | 11.40 |

**5yr-2hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR002HR | smf-2c | 115.7528 | 11.86 |
| 005YR002HR | smf-2c | 116.0028 | 11.86 |
| 005YR002HR | smf-2c | 116.2528 | 11.86 |
| 005YR002HR | smf-2c | 116.5028 | 11.86 |
| 005YR002HR | smf-2c | 116.7528 | 11.86 |
| 005YR002HR | smf-2c | 117.0028 | 11.86 |
| 005YR002HR | smf-2c | 117.2528 | 11.86 |
| 005YR002HR | smf-2c | 117.5028 | 11.86 |
| 005YR002HR | smf-2c | 117.7528 | 11.86 |
| 005YR002HR | smf-2c | 118.0028 | 11.86 |
| 005YR002HR | smf-2c | 118.2528 | 11.86 |
| 005YR002HR | smf-2c | 118.5028 | 11.86 |
| 005YR002HR | smf-2c | 118.7528 | 11.86 |
| 005YR002HR | smf-2c | 119.0028 | 11.85 |
| 005YR002HR | smf-2c | 119.2528 | 11.85 |
| 005YR002HR | smf-2c | 119.5028 | 11.85 |
| 005YR002HR | smf-2c | 119.7528 | 11.85 |
| 005YR002HR | smf-2c | 120.0028 | 11.85 |
| 005YR002HR | smf-2c | 120.2528 | 11.85 |
| 005YR002HR | smf-2c | 120.5028 | 11.85 |
| 005YR002HR | smf-2c | 120.7528 | 11.85 |
| 005YR002HR | smf-2c | 121.0028 | 11.85 |
| 005YR002HR | smf-2c | 121.2528 | 11.85 |
| 005YR002HR | smf-2c | 121.5028 | 11.85 |
| 005YR002HR | smf-2c | 121.7528 | 11.85 |
| 005YR002HR | smf-2c | 122.0028 | 11.85 |
| 005YR002HR | smf-2c | 122.2528 | 11.85 |
| 005YR002HR | smf-2c | 122.5028 | 11.85 |
| 005YR002HR | smf-2c | 122.7528 | 11.85 |
| 005YR002HR | smf-2c | 123.0028 | 11.85 |
| 005YR002HR | smf-2c | 123.2528 | 11.85 |
| 005YR002HR | smf-2c | 123.5028 | 11.85 |
| 005YR002HR | smf-2c | 123.7528 | 11.85 |
| 005YR002HR | smf-2c | 124.0028 | 11.85 |
| 005YR002HR | smf-2c | 124.2528 | 11.85 |
| 005YR002HR | smf-2c | 124.5028 | 11.85 |
| 005YR002HR | smf-2c | 124.7528 | 11.85 |
| 005YR002HR | smf-2c | 125.0028 | 11.85 |
| 005YR002HR | smf-2c | 125.2528 | 11.85 |
| 005YR002HR | smf-2c | 125.5028 | 11.85 |
| 005YR002HR | smf-2c | 125.7528 | 11.85 |
| 005YR002HR | smf-2c | 126.0028 | 11.85 |

**5yr-2hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR002HR | smf-3a | 107.5028 | 11.91 |
| 005YR002HR | smf-3a | 107.7528 | 11.91 |
| 005YR002HR | smf-3a | 108.0028 | 11.90 |
| 005YR002HR | smf-3a | 108.2528 | 11.90 |
| 005YR002HR | smf-3a | 108.5028 | 11.90 |
| 005YR002HR | smf-3a | 108.7528 | 11.90 |
| 005YR002HR | smf-3a | 109.0028 | 11.90 |
| 005YR002HR | smf-3a | 109.2528 | 11.90 |
| 005YR002HR | smf-3a | 109.5028 | 11.90 |
| 005YR002HR | smf-3a | 109.7528 | 11.90 |
| 005YR002HR | smf-3a | 110.0028 | 11.90 |
| 005YR002HR | smf-3a | 110.2528 | 11.90 |
| 005YR002HR | smf-3a | 110.5028 | 11.90 |
| 005YR002HR | smf-3a | 110.7528 | 11.90 |
| 005YR002HR | smf-3a | 111.0028 | 11.90 |
| 005YR002HR | smf-3a | 111.2528 | 11.90 |
| 005YR002HR | smf-3a | 111.5028 | 11.90 |
| 005YR002HR | smf-3a | 111.7528 | 11.90 |
| 005YR002HR | smf-3a | 112.0028 | 11.90 |
| 005YR002HR | smf-3a | 112.2528 | 11.90 |
| 005YR002HR | smf-3a | 112.5028 | 11.90 |
| 005YR002HR | smf-3a | 112.7528 | 11.90 |
| 005YR002HR | smf-3a | 113.0028 | 11.90 |
| 005YR002HR | smf-3a | 113.2528 | 11.90 |
| 005YR002HR | smf-3a | 113.5028 | 11.90 |
| 005YR002HR | smf-3a | 113.7528 | 11.90 |
| 005YR002HR | smf-3a | 114.0028 | 11.90 |
| 005YR002HR | smf-3a | 114.2528 | 11.90 |
| 005YR002HR | smf-3a | 114.5028 | 11.90 |
| 005YR002HR | smf-3a | 114.7528 | 11.90 |
| 005YR002HR | smf-3a | 115.0028 | 11.90 |
| 005YR002HR | smf-3a | 115.2528 | 11.90 |
| 005YR002HR | smf-3a | 115.5028 | 11.90 |
| 005YR002HR | smf-3a | 115.7528 | 11.90 |
| 005YR002HR | smf-3a | 116.0028 | 11.90 |
| 005YR002HR | smf-3a | 116.2528 | 11.90 |
| 005YR002HR | smf-3a | 116.5028 | 11.90 |
| 005YR002HR | smf-3a | 116.7528 | 11.90 |
| 005YR002HR | smf-3a | 117.0028 | 11.90 |
| 005YR002HR | smf-3a | 117.2528 | 11.90 |
| 005YR002HR | smf-3a | 117.5028 | 11.90 |
| 005YR002HR | smf-3a | 117.7528 | 11.90 |

**5yr-2hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR002HR | smf-3b | 130.7528 | 11.26 |
| 005YR002HR | smf-3b | 131.0028 | 11.25 |
| 005YR002HR | smf-3b | 131.2528 | 11.25 |
| 005YR002HR | smf-3b | 131.5028 | 11.25 |
| 005YR002HR | smf-3b | 131.7528 | 11.25 |
| 005YR002HR | smf-3b | 132.0028 | 11.25 |
| 005YR002HR | smf-3b | 132.2528 | 11.25 |
| 005YR002HR | smf-3b | 132.5028 | 11.25 |
| 005YR002HR | smf-3b | 132.7528 | 11.25 |
| 005YR002HR | smf-3b | 133.0028 | 11.25 |
| 005YR002HR | smf-3b | 133.2528 | 11.25 |
| 005YR002HR | smf-3b | 133.5028 | 11.25 |
| 005YR002HR | smf-3b | 133.7528 | 11.25 |
| 005YR002HR | smf-3b | 134.0028 | 11.25 |
| 005YR002HR | smf-3b | 134.2528 | 11.25 |
| 005YR002HR | smf-3b | 134.5028 | 11.25 |
| 005YR002HR | smf-3b | 134.7528 | 11.25 |
| 005YR002HR | smf-3b | 135.0028 | 11.25 |
| 005YR002HR | smf-3b | 135.2528 | 11.25 |
| 005YR002HR | smf-3b | 135.5028 | 11.25 |
| 005YR002HR | smf-3b | 135.7528 | 11.25 |
| 005YR002HR | smf-3b | 136.0028 | 11.25 |
| 005YR002HR | smf-3b | 136.2528 | 11.25 |
| 005YR002HR | smf-3b | 136.5028 | 11.25 |
| 005YR002HR | smf-3b | 136.7528 | 11.25 |
| 005YR002HR | smf-3b | 137.0028 | 11.25 |
| 005YR002HR | smf-3b | 137.2528 | 11.25 |
| 005YR002HR | smf-3b | 137.5028 | 11.25 |
| 005YR002HR | smf-3b | 137.7528 | 11.25 |
| 005YR002HR | smf-3b | 138.0028 | 11.25 |
| 005YR002HR | smf-3b | 138.2528 | 11.25 |
| 005YR002HR | smf-3b | 138.5028 | 11.25 |
| 005YR002HR | smf-3b | 138.7528 | 11.25 |
| 005YR002HR | smf-3b | 139.0028 | 11.25 |
| 005YR002HR | smf-3b | 139.2528 | 11.25 |
| 005YR002HR | smf-3b | 139.5028 | 11.25 |
| 005YR002HR | smf-3b | 139.7528 | 11.25 |
| 005YR002HR | smf-3b | 140.0028 | 11.25 |
| 005YR002HR | smf-3b | 140.2528 | 11.25 |
| 005YR002HR | smf-3b | 140.5028 | 11.25 |
| 005YR002HR | smf-3b | 140.7528 | 11.25 |
| 005YR002HR | smf-3b | 141.0028 | 11.25 |

**5yr-2hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR004HR | smf-1a | 70.0040 | 12.46 |
| 005YR004HR | smf-1a | 70.2540 | 12.46 |
| 005YR004HR | smf-1a | 70.5040 | 12.46 |
| 005YR004HR | smf-1a | 70.7540 | 12.45 |
| 005YR004HR | smf-1a | 71.0040 | 12.45 |
| 005YR004HR | smf-1a | 71.2540 | 12.45 |
| 005YR004HR | smf-1a | 71.5040 | 12.45 |
| 005YR004HR | smf-1a | 71.7540 | 12.45 |
| 005YR004HR | smf-1a | 72.0040 | 12.45 |
| 005YR004HR | smf-1a | 72.2540 | 12.45 |
| 005YR004HR | smf-1a | 72.5040 | 12.45 |
| 005YR004HR | smf-1a | 72.7540 | 12.45 |
| 005YR004HR | smf-1a | 73.0040 | 12.45 |
| 005YR004HR | smf-1a | 73.2540 | 12.45 |
| 005YR004HR | smf-1a | 73.5040 | 12.45 |
| 005YR004HR | smf-1a | 73.7540 | 12.45 |
| 005YR004HR | smf-1a | 74.0040 | 12.45 |
| 005YR004HR | smf-1a | 74.2540 | 12.45 |
| 005YR004HR | smf-1a | 74.5040 | 12.45 |
| 005YR004HR | smf-1a | 74.7540 | 12.45 |
| 005YR004HR | smf-1a | 75.0040 | 12.45 |
| 005YR004HR | smf-1a | 75.2540 | 12.45 |
| 005YR004HR | smf-1a | 75.5040 | 12.45 |
| 005YR004HR | smf-1a | 75.7540 | 12.45 |
| 005YR004HR | smf-1a | 76.0040 | 12.45 |
| 005YR004HR | smf-1a | 76.2540 | 12.45 |
| 005YR004HR | smf-1a | 76.5040 | 12.45 |
| 005YR004HR | smf-1a | 76.7540 | 12.45 |
| 005YR004HR | smf-1a | 77.0040 | 12.45 |
| 005YR004HR | smf-1a | 77.2540 | 12.45 |
| 005YR004HR | smf-1a | 77.5040 | 12.45 |
| 005YR004HR | smf-1a | 77.7540 | 12.45 |
| 005YR004HR | smf-1a | 78.0040 | 12.45 |
| 005YR004HR | smf-1a | 78.2540 | 12.45 |
| 005YR004HR | smf-1a | 78.5040 | 12.45 |
| 005YR004HR | smf-1a | 78.7540 | 12.45 |
| 005YR004HR | smf-1a | 79.0040 | 12.45 |
| 005YR004HR | smf-1a | 79.2540 | 12.45 |
| 005YR004HR | smf-1a | 79.5040 | 12.45 |
| 005YR004HR | smf-1a | 79.7540 | 12.45 |
| 005YR004HR | smf-1a | 80.0040 | 12.45 |
| 005YR004HR | smf-1a | 80.2540 | 12.45 |

**5yr-4hr SMF-1a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR004HR | smf-1b | 80.7540 | 13.02 |
| 005YR004HR | smf-1b | 81.0040 | 13.02 |
| 005YR004HR | smf-1b | 81.2540 | 13.02 |
| 005YR004HR | smf-1b | 81.5040 | 13.02 |
| 005YR004HR | smf-1b | 81.7540 | 13.02 |
| 005YR004HR | smf-1b | 82.0040 | 13.02 |
| 005YR004HR | smf-1b | 82.2540 | 13.02 |
| 005YR004HR | smf-1b | 82.5040 | 13.01 |
| 005YR004HR | smf-1b | 82.7540 | 13.01 |
| 005YR004HR | smf-1b | 83.0040 | 13.01 |
| 005YR004HR | smf-1b | 83.2540 | 13.01 |
| 005YR004HR | smf-1b | 83.5040 | 13.01 |
| 005YR004HR | smf-1b | 83.7540 | 13.01 |
| 005YR004HR | smf-1b | 84.0040 | 13.01 |
| 005YR004HR | smf-1b | 84.2540 | 13.01 |
| 005YR004HR | smf-1b | 84.5040 | 13.00 |
| 005YR004HR | smf-1b | 84.7540 | 13.00 |
| 005YR004HR | smf-1b | 85.0040 | 13.00 |
| 005YR004HR | smf-1b | 85.2540 | 13.00 |
| 005YR004HR | smf-1b | 85.5040 | 13.00 |
| 005YR004HR | smf-1b | 85.7540 | 13.00 |
| 005YR004HR | smf-1b | 86.0040 | 13.00 |
| 005YR004HR | smf-1b | 86.2540 | 13.00 |
| 005YR004HR | smf-1b | 86.5040 | 13.00 |
| 005YR004HR | smf-1b | 86.7540 | 13.00 |
| 005YR004HR | smf-1b | 87.0040 | 13.00 |
| 005YR004HR | smf-1b | 87.2540 | 13.00 |
| 005YR004HR | smf-1b | 87.5040 | 13.00 |
| 005YR004HR | smf-1b | 87.7540 | 13.00 |
| 005YR004HR | smf-1b | 88.0040 | 13.00 |
| 005YR004HR | smf-1b | 88.2540 | 13.00 |
| 005YR004HR | smf-1b | 88.5040 | 13.00 |
| 005YR004HR | smf-1b | 88.7540 | 13.00 |
| 005YR004HR | smf-1b | 89.0040 | 13.00 |
| 005YR004HR | smf-1b | 89.2540 | 13.00 |
| 005YR004HR | smf-1b | 89.5040 | 13.00 |
| 005YR004HR | smf-1b | 89.7540 | 13.00 |
| 005YR004HR | smf-1b | 90.0040 | 13.00 |
| 005YR004HR | smf-1b | 90.2540 | 13.00 |
| 005YR004HR | smf-1b | 90.5040 | 13.00 |
| 005YR004HR | smf-1b | 90.7540 | 13.00 |
| 005YR004HR | smf-1b | 91.0040 | 13.00 |

**5yr-4hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR004HR | smf-2a | 144.0040 | 12.12 |
| 005YR004HR | smf-2a | 144.2540 | 12.12 |
| 005YR004HR | smf-2a | 144.5040 | 12.12 |
| 005YR004HR | smf-2a | 144.7540 | 12.12 |
| 005YR004HR | smf-2a | 145.0040 | 12.12 |
| 005YR004HR | smf-2a | 145.2540 | 12.12 |
| 005YR004HR | smf-2a | 145.5040 | 12.12 |
| 005YR004HR | smf-2a | 145.7540 | 12.12 |
| 005YR004HR | smf-2a | 146.0040 | 12.11 |
| 005YR004HR | smf-2a | 146.2540 | 12.11 |
| 005YR004HR | smf-2a | 146.5040 | 12.11 |
| 005YR004HR | smf-2a | 146.7540 | 12.11 |
| 005YR004HR | smf-2a | 147.0040 | 12.11 |
| 005YR004HR | smf-2a | 147.2540 | 12.11 |
| 005YR004HR | smf-2a | 147.5040 | 12.11 |
| 005YR004HR | smf-2a | 147.7540 | 12.11 |
| 005YR004HR | smf-2a | 148.0040 | 12.11 |
| 005YR004HR | smf-2a | 148.2540 | 12.11 |
| 005YR004HR | smf-2a | 148.5040 | 12.11 |
| 005YR004HR | smf-2a | 148.7540 | 12.11 |
| 005YR004HR | smf-2a | 149.0040 | 12.11 |
| 005YR004HR | smf-2a | 149.2540 | 12.11 |
| 005YR004HR | smf-2a | 149.5040 | 12.11 |
| 005YR004HR | smf-2a | 149.7540 | 12.11 |
| 005YR004HR | smf-2a | 150.0040 | 12.11 |
| 005YR004HR | smf-2a | 150.2540 | 12.11 |
| 005YR004HR | smf-2a | 150.5040 | 12.10 |
| 005YR004HR | smf-2a | 150.7540 | 12.10 |
| 005YR004HR | smf-2a | 151.0040 | 12.10 |
| 005YR004HR | smf-2a | 151.2540 | 12.10 |
| 005YR004HR | smf-2a | 151.5040 | 12.10 |
| 005YR004HR | smf-2a | 151.7540 | 12.10 |
| 005YR004HR | smf-2a | 152.0040 | 12.10 |
| 005YR004HR | smf-2a | 152.2540 | 12.10 |
| 005YR004HR | smf-2a | 152.5040 | 12.10 |
| 005YR004HR | smf-2a | 152.7540 | 12.10 |
| 005YR004HR | smf-2a | 153.0040 | 12.10 |
| 005YR004HR | smf-2a | 153.2540 | 12.10 |
| 005YR004HR | smf-2a | 153.5040 | 12.10 |
| 005YR004HR | smf-2a | 153.7540 | 12.10 |
| 005YR004HR | smf-2a | 154.0040 | 12.10 |
| 005YR004HR | smf-2a | 154.2540 | 12.10 |

**5yr-4hr SMF-2a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR004HR | smf-2b | 102.2540 | 11.42 |
| 005YR004HR | smf-2b | 102.5040 | 11.42 |
| 005YR004HR | smf-2b | 102.7540 | 11.42 |
| 005YR004HR | smf-2b | 103.0040 | 11.42 |
| 005YR004HR | smf-2b | 103.2540 | 11.42 |
| 005YR004HR | smf-2b | 103.5040 | 11.41 |
| 005YR004HR | smf-2b | 103.7540 | 11.41 |
| 005YR004HR | smf-2b | 104.0040 | 11.41 |
| 005YR004HR | smf-2b | 104.2540 | 11.41 |
| 005YR004HR | smf-2b | 104.5040 | 11.41 |
| 005YR004HR | smf-2b | 104.7540 | 11.41 |
| 005YR004HR | smf-2b | 105.0040 | 11.41 |
| 005YR004HR | smf-2b | 105.2540 | 11.41 |
| 005YR004HR | smf-2b | 105.5040 | 11.41 |
| 005YR004HR | smf-2b | 105.7540 | 11.41 |
| 005YR004HR | smf-2b | 106.0040 | 11.40 |
| 005YR004HR | smf-2b | 106.2540 | 11.40 |
| 005YR004HR | smf-2b | 106.5040 | 11.40 |
| 005YR004HR | smf-2b | 106.7540 | 11.40 |
| 005YR004HR | smf-2b | 107.0040 | 11.40 |
| 005YR004HR | smf-2b | 107.2540 | 11.40 |
| 005YR004HR | smf-2b | 107.5040 | 11.40 |
| 005YR004HR | smf-2b | 107.7540 | 11.40 |
| 005YR004HR | smf-2b | 108.0040 | 11.40 |
| 005YR004HR | smf-2b | 108.2540 | 11.40 |
| 005YR004HR | smf-2b | 108.5040 | 11.40 |
| 005YR004HR | smf-2b | 108.7540 | 11.40 |
| 005YR004HR | smf-2b | 109.0040 | 11.40 |
| 005YR004HR | smf-2b | 109.2540 | 11.40 |
| 005YR004HR | smf-2b | 109.5040 | 11.40 |
| 005YR004HR | smf-2b | 109.7540 | 11.40 |
| 005YR004HR | smf-2b | 110.0040 | 11.40 |
| 005YR004HR | smf-2b | 110.2540 | 11.40 |
| 005YR004HR | smf-2b | 110.5040 | 11.40 |
| 005YR004HR | smf-2b | 110.7540 | 11.40 |
| 005YR004HR | smf-2b | 111.0040 | 11.40 |
| 005YR004HR | smf-2b | 111.2540 | 11.40 |
| 005YR004HR | smf-2b | 111.5040 | 11.40 |
| 005YR004HR | smf-2b | 111.7540 | 11.40 |
| 005YR004HR | smf-2b | 112.0040 | 11.40 |
| 005YR004HR | smf-2b | 112.2540 | 11.40 |
| 005YR004HR | smf-2b | 112.5040 | 11.40 |

**5yr-4hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR004HR | smf-2c | 134.0040 | 11.87 |
| 005YR004HR | smf-2c | 134.2540 | 11.86 |
| 005YR004HR | smf-2c | 134.5040 | 11.86 |
| 005YR004HR | smf-2c | 134.7540 | 11.86 |
| 005YR004HR | smf-2c | 135.0040 | 11.86 |
| 005YR004HR | smf-2c | 135.2540 | 11.86 |
| 005YR004HR | smf-2c | 135.5040 | 11.86 |
| 005YR004HR | smf-2c | 135.7540 | 11.86 |
| 005YR004HR | smf-2c | 136.0040 | 11.86 |
| 005YR004HR | smf-2c | 136.2540 | 11.86 |
| 005YR004HR | smf-2c | 136.5040 | 11.86 |
| 005YR004HR | smf-2c | 136.7540 | 11.86 |
| 005YR004HR | smf-2c | 137.0040 | 11.86 |
| 005YR004HR | smf-2c | 137.2540 | 11.86 |
| 005YR004HR | smf-2c | 137.5040 | 11.86 |
| 005YR004HR | smf-2c | 137.7540 | 11.85 |
| 005YR004HR | smf-2c | 138.0040 | 11.85 |
| 005YR004HR | smf-2c | 138.2540 | 11.85 |
| 005YR004HR | smf-2c | 138.5040 | 11.85 |
| 005YR004HR | smf-2c | 138.7540 | 11.85 |
| 005YR004HR | smf-2c | 139.0040 | 11.85 |
| 005YR004HR | smf-2c | 139.2540 | 11.85 |
| 005YR004HR | smf-2c | 139.5040 | 11.85 |
| 005YR004HR | smf-2c | 139.7540 | 11.85 |
| 005YR004HR | smf-2c | 140.0040 | 11.85 |
| 005YR004HR | smf-2c | 140.2540 | 11.85 |
| 005YR004HR | smf-2c | 140.5040 | 11.85 |
| 005YR004HR | smf-2c | 140.7540 | 11.85 |
| 005YR004HR | smf-2c | 141.0040 | 11.85 |
| 005YR004HR | smf-2c | 141.2540 | 11.85 |
| 005YR004HR | smf-2c | 141.5040 | 11.85 |
| 005YR004HR | smf-2c | 141.7540 | 11.85 |
| 005YR004HR | smf-2c | 142.0040 | 11.85 |
| 005YR004HR | smf-2c | 142.2540 | 11.85 |
| 005YR004HR | smf-2c | 142.5040 | 11.85 |
| 005YR004HR | smf-2c | 142.7540 | 11.85 |
| 005YR004HR | smf-2c | 143.0040 | 11.85 |
| 005YR004HR | smf-2c | 143.2540 | 11.85 |
| 005YR004HR | smf-2c | 143.5040 | 11.85 |
| 005YR004HR | smf-2c | 143.7540 | 11.85 |
| 005YR004HR | smf-2c | 144.0040 | 11.85 |
| 005YR004HR | smf-2c | 144.2540 | 11.85 |

**5yr-4hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR004HR | smf-3a | 123.7540 | 11.91 |
| 005YR004HR | smf-3a | 124.0040 | 11.91 |
| 005YR004HR | smf-3a | 124.2540 | 11.91 |
| 005YR004HR | smf-3a | 124.5040 | 11.91 |
| 005YR004HR | smf-3a | 124.7540 | 11.91 |
| 005YR004HR | smf-3a | 125.0040 | 11.91 |
| 005YR004HR | smf-3a | 125.2540 | 11.91 |
| 005YR004HR | smf-3a | 125.5040 | 11.91 |
| 005YR004HR | smf-3a | 125.7540 | 11.91 |
| 005YR004HR | smf-3a | 126.0040 | 11.91 |
| 005YR004HR | smf-3a | 126.2540 | 11.91 |
| 005YR004HR | smf-3a | 126.5040 | 11.90 |
| 005YR004HR | smf-3a | 126.7540 | 11.90 |
| 005YR004HR | smf-3a | 127.0040 | 11.90 |
| 005YR004HR | smf-3a | 127.2540 | 11.90 |
| 005YR004HR | smf-3a | 127.5040 | 11.90 |
| 005YR004HR | smf-3a | 127.7540 | 11.90 |
| 005YR004HR | smf-3a | 128.0040 | 11.90 |
| 005YR004HR | smf-3a | 128.2540 | 11.90 |
| 005YR004HR | smf-3a | 128.5040 | 11.90 |
| 005YR004HR | smf-3a | 128.7540 | 11.90 |
| 005YR004HR | smf-3a | 129.0040 | 11.90 |
| 005YR004HR | smf-3a | 129.2540 | 11.90 |
| 005YR004HR | smf-3a | 129.5040 | 11.90 |
| 005YR004HR | smf-3a | 129.7540 | 11.90 |
| 005YR004HR | smf-3a | 130.0040 | 11.90 |
| 005YR004HR | smf-3a | 130.2540 | 11.90 |
| 005YR004HR | smf-3a | 130.5040 | 11.90 |
| 005YR004HR | smf-3a | 130.7540 | 11.90 |
| 005YR004HR | smf-3a | 131.0040 | 11.90 |
| 005YR004HR | smf-3a | 131.2540 | 11.90 |
| 005YR004HR | smf-3a | 131.5040 | 11.90 |
| 005YR004HR | smf-3a | 131.7540 | 11.90 |
| 005YR004HR | smf-3a | 132.0040 | 11.90 |
| 005YR004HR | smf-3a | 132.2540 | 11.90 |
| 005YR004HR | smf-3a | 132.5040 | 11.90 |
| 005YR004HR | smf-3a | 132.7540 | 11.90 |
| 005YR004HR | smf-3a | 133.0040 | 11.90 |
| 005YR004HR | smf-3a | 133.2540 | 11.90 |
| 005YR004HR | smf-3a | 133.5040 | 11.90 |
| 005YR004HR | smf-3a | 133.7540 | 11.90 |
| 005YR004HR | smf-3a | 134.0040 | 11.90 |

**5yr-4hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR004HR | smf-3b | 145.0040 | 11.27 |
| 005YR004HR | smf-3b | 145.2540 | 11.27 |
| 005YR004HR | smf-3b | 145.5040 | 11.26 |
| 005YR004HR | smf-3b | 145.7540 | 11.26 |
| 005YR004HR | smf-3b | 146.0040 | 11.26 |
| 005YR004HR | smf-3b | 146.2540 | 11.26 |
| 005YR004HR | smf-3b | 146.5040 | 11.26 |
| 005YR004HR | smf-3b | 146.7540 | 11.26 |
| 005YR004HR | smf-3b | 147.0040 | 11.26 |
| 005YR004HR | smf-3b | 147.2540 | 11.26 |
| 005YR004HR | smf-3b | 147.5040 | 11.26 |
| 005YR004HR | smf-3b | 147.7540 | 11.26 |
| 005YR004HR | smf-3b | 148.0040 | 11.26 |
| 005YR004HR | smf-3b | 148.2540 | 11.26 |
| 005YR004HR | smf-3b | 148.5040 | 11.26 |
| 005YR004HR | smf-3b | 148.7540 | 11.26 |
| 005YR004HR | smf-3b | 149.0040 | 11.25 |
| 005YR004HR | smf-3b | 149.2540 | 11.25 |
| 005YR004HR | smf-3b | 149.5040 | 11.25 |
| 005YR004HR | smf-3b | 149.7540 | 11.25 |
| 005YR004HR | smf-3b | 150.0040 | 11.25 |
| 005YR004HR | smf-3b | 150.2540 | 11.25 |
| 005YR004HR | smf-3b | 150.5040 | 11.25 |
| 005YR004HR | smf-3b | 150.7540 | 11.25 |
| 005YR004HR | smf-3b | 151.0040 | 11.25 |
| 005YR004HR | smf-3b | 151.2540 | 11.25 |
| 005YR004HR | smf-3b | 151.5040 | 11.25 |
| 005YR004HR | smf-3b | 151.7540 | 11.25 |
| 005YR004HR | smf-3b | 152.0040 | 11.25 |
| 005YR004HR | smf-3b | 152.2540 | 11.25 |
| 005YR004HR | smf-3b | 152.5040 | 11.25 |
| 005YR004HR | smf-3b | 152.7540 | 11.25 |
| 005YR004HR | smf-3b | 153.0040 | 11.25 |
| 005YR004HR | smf-3b | 153.2540 | 11.25 |
| 005YR004HR | smf-3b | 153.5040 | 11.25 |
| 005YR004HR | smf-3b | 153.7540 | 11.25 |
| 005YR004HR | smf-3b | 154.0040 | 11.25 |
| 005YR004HR | smf-3b | 154.2540 | 11.25 |
| 005YR004HR | smf-3b | 154.5040 | 11.25 |
| 005YR004HR | smf-3b | 154.7540 | 11.25 |
| 005YR004HR | smf-3b | 155.0040 | 11.25 |
| 005YR004HR | smf-3b | 155.2540 | 11.25 |

**5yr-4hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR008HR | smf-1a | 103.2530 | 12.46 |
| 005YR008HR | smf-1a | 103.5030 | 12.46 |
| 005YR008HR | smf-1a | 103.7530 | 12.46 |
| 005YR008HR | smf-1a | 104.0030 | 12.46 |
| 005YR008HR | smf-1a | 104.2530 | 12.46 |
| 005YR008HR | smf-1a | 104.5030 | 12.46 |
| 005YR008HR | smf-1a | 104.7530 | 12.46 |
| 005YR008HR | smf-1a | 105.0030 | 12.46 |
| 005YR008HR | smf-1a | 105.2530 | 12.46 |
| 005YR008HR | smf-1a | 105.5030 | 12.46 |
| 005YR008HR | smf-1a | 105.7530 | 12.45 |
| 005YR008HR | smf-1a | 106.0030 | 12.45 |
| 005YR008HR | smf-1a | 106.2530 | 12.45 |
| 005YR008HR | smf-1a | 106.5030 | 12.45 |
| 005YR008HR | smf-1a | 106.7530 | 12.45 |
| 005YR008HR | smf-1a | 107.0030 | 12.45 |
| 005YR008HR | smf-1a | 107.2530 | 12.45 |
| 005YR008HR | smf-1a | 107.5030 | 12.45 |
| 005YR008HR | smf-1a | 107.7530 | 12.45 |
| 005YR008HR | smf-1a | 108.0030 | 12.45 |
| 005YR008HR | smf-1a | 108.2530 | 12.45 |
| 005YR008HR | smf-1a | 108.5030 | 12.45 |
| 005YR008HR | smf-1a | 108.7530 | 12.45 |
| 005YR008HR | smf-1a | 109.0030 | 12.45 |
| 005YR008HR | smf-1a | 109.2530 | 12.45 |
| 005YR008HR | smf-1a | 109.5030 | 12.45 |
| 005YR008HR | smf-1a | 109.7530 | 12.45 |
| 005YR008HR | smf-1a | 110.0030 | 12.45 |
| 005YR008HR | smf-1a | 110.2530 | 12.45 |
| 005YR008HR | smf-1a | 110.5030 | 12.45 |
| 005YR008HR | smf-1a | 110.7530 | 12.45 |
| 005YR008HR | smf-1a | 111.0030 | 12.45 |
| 005YR008HR | smf-1a | 111.2530 | 12.45 |
| 005YR008HR | smf-1a | 111.5030 | 12.45 |
| 005YR008HR | smf-1a | 111.7530 | 12.45 |
| 005YR008HR | smf-1a | 112.0030 | 12.45 |
| 005YR008HR | smf-1a | 112.2530 | 12.45 |
| 005YR008HR | smf-1a | 112.5030 | 12.45 |
| 005YR008HR | smf-1a | 112.7530 | 12.45 |
| 005YR008HR | smf-1a | 113.0030 | 12.45 |
| 005YR008HR | smf-1a | 113.2530 | 12.45 |
| 005YR008HR | smf-1a | 113.5030 | 12.45 |

**5yr-8hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR008HR | smf-1b | 110.0030 | 13.01 |
| 005YR008HR | smf-1b | 110.2530 | 13.01 |
| 005YR008HR | smf-1b | 110.5030 | 13.00 |
| 005YR008HR | smf-1b | 110.7530 | 13.00 |
| 005YR008HR | smf-1b | 111.0030 | 13.00 |
| 005YR008HR | smf-1b | 111.2530 | 13.00 |
| 005YR008HR | smf-1b | 111.5030 | 13.00 |
| 005YR008HR | smf-1b | 111.7530 | 13.00 |
| 005YR008HR | smf-1b | 112.0030 | 13.00 |
| 005YR008HR | smf-1b | 112.2530 | 13.00 |
| 005YR008HR | smf-1b | 112.5030 | 13.00 |
| 005YR008HR | smf-1b | 112.7530 | 13.00 |
| 005YR008HR | smf-1b | 113.0030 | 13.00 |
| 005YR008HR | smf-1b | 113.2530 | 13.00 |
| 005YR008HR | smf-1b | 113.5030 | 13.00 |
| 005YR008HR | smf-1b | 113.7530 | 13.00 |
| 005YR008HR | smf-1b | 114.0030 | 13.00 |
| 005YR008HR | smf-1b | 114.2530 | 13.00 |
| 005YR008HR | smf-1b | 114.5030 | 13.00 |
| 005YR008HR | smf-1b | 114.7530 | 13.00 |
| 005YR008HR | smf-1b | 115.0030 | 13.00 |
| 005YR008HR | smf-1b | 115.2530 | 13.00 |
| 005YR008HR | smf-1b | 115.5030 | 13.00 |
| 005YR008HR | smf-1b | 115.7530 | 13.00 |
| 005YR008HR | smf-1b | 116.0030 | 13.00 |
| 005YR008HR | smf-1b | 116.2530 | 13.00 |
| 005YR008HR | smf-1b | 116.5030 | 13.00 |
| 005YR008HR | smf-1b | 116.7530 | 13.00 |
| 005YR008HR | smf-1b | 117.0030 | 13.00 |
| 005YR008HR | smf-1b | 117.2530 | 13.00 |
| 005YR008HR | smf-1b | 117.5030 | 13.00 |
| 005YR008HR | smf-1b | 117.7530 | 13.00 |
| 005YR008HR | smf-1b | 118.0030 | 13.00 |
| 005YR008HR | smf-1b | 118.2530 | 13.00 |
| 005YR008HR | smf-1b | 118.5030 | 13.00 |
| 005YR008HR | smf-1b | 118.7530 | 13.00 |
| 005YR008HR | smf-1b | 119.0030 | 13.00 |
| 005YR008HR | smf-1b | 119.2530 | 13.00 |
| 005YR008HR | smf-1b | 119.5030 | 13.00 |
| 005YR008HR | smf-1b | 119.7530 | 13.00 |
| 005YR008HR | smf-1b | 120.0030 | 13.00 |
| 005YR008HR | smf-1b | 120.2530 | 13.00 |

**5yr-8hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR008HR | smf-2a | 169.2530 | 12.12 |
| 005YR008HR | smf-2a | 169.5030 | 12.12 |
| 005YR008HR | smf-2a | 169.7530 | 12.12 |
| 005YR008HR | smf-2a | 170.0030 | 12.12 |
| 005YR008HR | smf-2a | 170.2530 | 12.12 |
| 005YR008HR | smf-2a | 170.5030 | 12.12 |
| 005YR008HR | smf-2a | 170.7530 | 12.12 |
| 005YR008HR | smf-2a | 171.0030 | 12.12 |
| 005YR008HR | smf-2a | 171.2530 | 12.12 |
| 005YR008HR | smf-2a | 171.5030 | 12.12 |
| 005YR008HR | smf-2a | 171.7530 | 12.12 |
| 005YR008HR | smf-2a | 172.0030 | 12.12 |
| 005YR008HR | smf-2a | 172.2530 | 12.12 |
| 005YR008HR | smf-2a | 172.5030 | 12.11 |
| 005YR008HR | smf-2a | 172.7530 | 12.11 |
| 005YR008HR | smf-2a | 173.0030 | 12.11 |
| 005YR008HR | smf-2a | 173.2530 | 12.11 |
| 005YR008HR | smf-2a | 173.5030 | 12.11 |
| 005YR008HR | smf-2a | 173.7530 | 12.11 |
| 005YR008HR | smf-2a | 174.0030 | 12.11 |
| 005YR008HR | smf-2a | 174.2530 | 12.11 |
| 005YR008HR | smf-2a | 174.5030 | 12.11 |
| 005YR008HR | smf-2a | 174.7530 | 12.11 |
| 005YR008HR | smf-2a | 175.0030 | 12.11 |
| 005YR008HR | smf-2a | 175.2530 | 12.11 |
| 005YR008HR | smf-2a | 175.5030 | 12.11 |
| 005YR008HR | smf-2a | 175.7530 | 12.11 |
| 005YR008HR | smf-2a | 176.0030 | 12.11 |
| 005YR008HR | smf-2a | 176.2530 | 12.11 |
| 005YR008HR | smf-2a | 176.5030 | 12.11 |
| 005YR008HR | smf-2a | 176.7530 | 12.11 |
| 005YR008HR | smf-2a | 177.0030 | 12.11 |
| 005YR008HR | smf-2a | 177.2530 | 12.11 |
| 005YR008HR | smf-2a | 177.5030 | 12.10 |
| 005YR008HR | smf-2a | 177.7530 | 12.10 |
| 005YR008HR | smf-2a | 178.0030 | 12.10 |
| 005YR008HR | smf-2a | 178.2530 | 12.10 |
| 005YR008HR | smf-2a | 178.5030 | 12.10 |
| 005YR008HR | smf-2a | 178.7530 | 12.10 |
| 005YR008HR | smf-2a | 179.0030 | 12.10 |
| 005YR008HR | smf-2a | 179.2530 | 12.10 |
| 005YR008HR | smf-2a | 179.5030 | 12.10 |

**5yr-8hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR008HR | smf-2b | 134.0030 | 11.41 |
| 005YR008HR | smf-2b | 134.2530 | 11.41 |
| 005YR008HR | smf-2b | 134.5030 | 11.41 |
| 005YR008HR | smf-2b | 134.7530 | 11.41 |
| 005YR008HR | smf-2b | 135.0030 | 11.41 |
| 005YR008HR | smf-2b | 135.2530 | 11.41 |
| 005YR008HR | smf-2b | 135.5030 | 11.40 |
| 005YR008HR | smf-2b | 135.7530 | 11.40 |
| 005YR008HR | smf-2b | 136.0030 | 11.40 |
| 005YR008HR | smf-2b | 136.2530 | 11.40 |
| 005YR008HR | smf-2b | 136.5030 | 11.40 |
| 005YR008HR | smf-2b | 136.7530 | 11.40 |
| 005YR008HR | smf-2b | 137.0030 | 11.40 |
| 005YR008HR | smf-2b | 137.2530 | 11.40 |
| 005YR008HR | smf-2b | 137.5030 | 11.40 |
| 005YR008HR | smf-2b | 137.7530 | 11.40 |
| 005YR008HR | smf-2b | 138.0030 | 11.40 |
| 005YR008HR | smf-2b | 138.2530 | 11.40 |
| 005YR008HR | smf-2b | 138.5030 | 11.40 |
| 005YR008HR | smf-2b | 138.7530 | 11.40 |
| 005YR008HR | smf-2b | 139.0030 | 11.40 |
| 005YR008HR | smf-2b | 139.2530 | 11.40 |
| 005YR008HR | smf-2b | 139.5030 | 11.40 |
| 005YR008HR | smf-2b | 139.7530 | 11.40 |
| 005YR008HR | smf-2b | 140.0030 | 11.40 |
| 005YR008HR | smf-2b | 140.2530 | 11.40 |
| 005YR008HR | smf-2b | 140.5030 | 11.40 |
| 005YR008HR | smf-2b | 140.7530 | 11.40 |
| 005YR008HR | smf-2b | 141.0030 | 11.40 |
| 005YR008HR | smf-2b | 141.2530 | 11.40 |
| 005YR008HR | smf-2b | 141.5030 | 11.40 |
| 005YR008HR | smf-2b | 141.7530 | 11.40 |
| 005YR008HR | smf-2b | 142.0030 | 11.40 |
| 005YR008HR | smf-2b | 142.2530 | 11.40 |
| 005YR008HR | smf-2b | 142.5030 | 11.40 |
| 005YR008HR | smf-2b | 142.7530 | 11.40 |
| 005YR008HR | smf-2b | 143.0030 | 11.40 |
| 005YR008HR | smf-2b | 143.2530 | 11.40 |
| 005YR008HR | smf-2b | 143.5030 | 11.40 |
| 005YR008HR | smf-2b | 143.7530 | 11.40 |
| 005YR008HR | smf-2b | 144.0030 | 11.40 |
| 005YR008HR | smf-2b | 144.2530 | 11.40 |

**5yr-8hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR008HR | smf-2c | 161.7530 | 11.87 |
| 005YR008HR | smf-2c | 162.0030 | 11.86 |
| 005YR008HR | smf-2c | 162.2530 | 11.86 |
| 005YR008HR | smf-2c | 162.5030 | 11.86 |
| 005YR008HR | smf-2c | 162.7530 | 11.86 |
| 005YR008HR | smf-2c | 163.0030 | 11.86 |
| 005YR008HR | smf-2c | 163.2530 | 11.86 |
| 005YR008HR | smf-2c | 163.5030 | 11.86 |
| 005YR008HR | smf-2c | 163.7530 | 11.86 |
| 005YR008HR | smf-2c | 164.0030 | 11.86 |
| 005YR008HR | smf-2c | 164.2530 | 11.86 |
| 005YR008HR | smf-2c | 164.5030 | 11.86 |
| 005YR008HR | smf-2c | 164.7530 | 11.86 |
| 005YR008HR | smf-2c | 165.0030 | 11.86 |
| 005YR008HR | smf-2c | 165.2530 | 11.86 |
| 005YR008HR | smf-2c | 165.5030 | 11.86 |
| 005YR008HR | smf-2c | 165.7530 | 11.86 |
| 005YR008HR | smf-2c | 166.0030 | 11.86 |
| 005YR008HR | smf-2c | 166.2530 | 11.85 |
| 005YR008HR | smf-2c | 166.5030 | 11.85 |
| 005YR008HR | smf-2c | 166.7530 | 11.85 |
| 005YR008HR | smf-2c | 167.0030 | 11.85 |
| 005YR008HR | smf-2c | 167.2530 | 11.85 |
| 005YR008HR | smf-2c | 167.5030 | 11.85 |
| 005YR008HR | smf-2c | 167.7530 | 11.85 |
| 005YR008HR | smf-2c | 168.0030 | 11.85 |
| 005YR008HR | smf-2c | 168.2530 | 11.85 |
| 005YR008HR | smf-2c | 168.5030 | 11.85 |
| 005YR008HR | smf-2c | 168.7530 | 11.85 |
| 005YR008HR | smf-2c | 169.0030 | 11.85 |
| 005YR008HR | smf-2c | 169.2530 | 11.85 |
| 005YR008HR | smf-2c | 169.5030 | 11.85 |
| 005YR008HR | smf-2c | 169.7530 | 11.85 |
| 005YR008HR | smf-2c | 170.0030 | 11.85 |
| 005YR008HR | smf-2c | 170.2530 | 11.85 |
| 005YR008HR | smf-2c | 170.5030 | 11.85 |
| 005YR008HR | smf-2c | 170.7530 | 11.85 |
| 005YR008HR | smf-2c | 171.0030 | 11.85 |
| 005YR008HR | smf-2c | 171.2530 | 11.85 |
| 005YR008HR | smf-2c | 171.5030 | 11.85 |
| 005YR008HR | smf-2c | 171.7530 | 11.85 |
| 005YR008HR | smf-2c | 172.0030 | 11.85 |

**5yr-8hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR008HR | smf-3a | 158.0030 | 11.91 |
| 005YR008HR | smf-3a | 158.2530 | 11.90 |
| 005YR008HR | smf-3a | 158.5030 | 11.90 |
| 005YR008HR | smf-3a | 158.7530 | 11.90 |
| 005YR008HR | smf-3a | 159.0030 | 11.90 |
| 005YR008HR | smf-3a | 159.2530 | 11.90 |
| 005YR008HR | smf-3a | 159.5030 | 11.90 |
| 005YR008HR | smf-3a | 159.7530 | 11.90 |
| 005YR008HR | smf-3a | 160.0030 | 11.90 |
| 005YR008HR | smf-3a | 160.2530 | 11.90 |
| 005YR008HR | smf-3a | 160.5030 | 11.90 |
| 005YR008HR | smf-3a | 160.7530 | 11.90 |
| 005YR008HR | smf-3a | 161.0030 | 11.90 |
| 005YR008HR | smf-3a | 161.2530 | 11.90 |
| 005YR008HR | smf-3a | 161.5030 | 11.90 |
| 005YR008HR | smf-3a | 161.7530 | 11.90 |
| 005YR008HR | smf-3a | 162.0030 | 11.90 |
| 005YR008HR | smf-3a | 162.2530 | 11.90 |
| 005YR008HR | smf-3a | 162.5030 | 11.90 |
| 005YR008HR | smf-3a | 162.7530 | 11.90 |
| 005YR008HR | smf-3a | 163.0030 | 11.90 |
| 005YR008HR | smf-3a | 163.2530 | 11.90 |
| 005YR008HR | smf-3a | 163.5030 | 11.90 |
| 005YR008HR | smf-3a | 163.7530 | 11.90 |
| 005YR008HR | smf-3a | 164.0030 | 11.90 |
| 005YR008HR | smf-3a | 164.2530 | 11.90 |
| 005YR008HR | smf-3a | 164.5030 | 11.90 |
| 005YR008HR | smf-3a | 164.7530 | 11.90 |
| 005YR008HR | smf-3a | 165.0030 | 11.90 |
| 005YR008HR | smf-3a | 165.2530 | 11.90 |
| 005YR008HR | smf-3a | 165.5030 | 11.90 |
| 005YR008HR | smf-3a | 165.7530 | 11.90 |
| 005YR008HR | smf-3a | 166.0030 | 11.90 |
| 005YR008HR | smf-3a | 166.2530 | 11.90 |
| 005YR008HR | smf-3a | 166.5030 | 11.90 |
| 005YR008HR | smf-3a | 166.7530 | 11.90 |
| 005YR008HR | smf-3a | 167.0030 | 11.90 |
| 005YR008HR | smf-3a | 167.2530 | 11.90 |
| 005YR008HR | smf-3a | 167.5030 | 11.90 |
| 005YR008HR | smf-3a | 167.7530 | 11.90 |
| 005YR008HR | smf-3a | 168.0030 | 11.90 |
| 005YR008HR | smf-3a | 168.2530 | 11.90 |

**5yr-8hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR008HR | smf-3b | 175.2530 | 11.28 |
| 005YR008HR | smf-3b | 175.5030 | 11.28 |
| 005YR008HR | smf-3b | 175.7530 | 11.28 |
| 005YR008HR | smf-3b | 176.0030 | 11.28 |
| 005YR008HR | smf-3b | 176.2530 | 11.27 |
| 005YR008HR | smf-3b | 176.5030 | 11.27 |
| 005YR008HR | smf-3b | 176.7530 | 11.27 |
| 005YR008HR | smf-3b | 177.0030 | 11.27 |
| 005YR008HR | smf-3b | 177.2530 | 11.27 |
| 005YR008HR | smf-3b | 177.5030 | 11.27 |
| 005YR008HR | smf-3b | 177.7530 | 11.27 |
| 005YR008HR | smf-3b | 178.0030 | 11.27 |
| 005YR008HR | smf-3b | 178.2530 | 11.27 |
| 005YR008HR | smf-3b | 178.5030 | 11.27 |
| 005YR008HR | smf-3b | 178.7530 | 11.27 |
| 005YR008HR | smf-3b | 179.0030 | 11.27 |
| 005YR008HR | smf-3b | 179.2530 | 11.27 |
| 005YR008HR | smf-3b | 179.5030 | 11.27 |
| 005YR008HR | smf-3b | 179.7530 | 11.27 |
| 005YR008HR | smf-3b | 180.0030 | 11.27 |
| 005YR008HR | smf-3b | 180.2530 | 11.27 |
| 005YR008HR | smf-3b | 180.5030 | 11.26 |
| 005YR008HR | smf-3b | 180.7530 | 11.26 |
| 005YR008HR | smf-3b | 181.0030 | 11.26 |
| 005YR008HR | smf-3b | 181.2530 | 11.26 |
| 005YR008HR | smf-3b | 181.5030 | 11.26 |
| 005YR008HR | smf-3b | 181.7530 | 11.26 |
| 005YR008HR | smf-3b | 182.0030 | 11.26 |
| 005YR008HR | smf-3b | 182.2530 | 11.26 |
| 005YR008HR | smf-3b | 182.5030 | 11.26 |
| 005YR008HR | smf-3b | 182.7530 | 11.26 |
| 005YR008HR | smf-3b | 183.0030 | 11.26 |
| 005YR008HR | smf-3b | 183.2530 | 11.26 |
| 005YR008HR | smf-3b | 183.5030 | 11.26 |
| 005YR008HR | smf-3b | 183.7530 | 11.26 |
| 005YR008HR | smf-3b | 184.0030 | 11.26 |
| 005YR008HR | smf-3b | 184.2530 | 11.26 |
| 005YR008HR | smf-3b | 184.5030 | 11.26 |
| 005YR008HR | smf-3b | 184.7530 | 11.25 |
| 005YR008HR | smf-3b | 185.0030 | 11.25 |
| 005YR008HR | smf-3b | 185.2530 | 11.25 |
| 005YR008HR | smf-3b | 185.5030 | 11.25 |

**5yr-8hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR024HR | smf-1a | 266.0066 | 12.47 |
| 005YR024HR | smf-1a | 266.2566 | 12.47 |
| 005YR024HR | smf-1a | 266.5066 | 12.47 |
| 005YR024HR | smf-1a | 266.7566 | 12.47 |
| 005YR024HR | smf-1a | 267.0066 | 12.46 |
| 005YR024HR | smf-1a | 267.2566 | 12.46 |
| 005YR024HR | smf-1a | 267.5066 | 12.46 |
| 005YR024HR | smf-1a | 267.7566 | 12.46 |
| 005YR024HR | smf-1a | 268.0066 | 12.46 |
| 005YR024HR | smf-1a | 268.2566 | 12.46 |
| 005YR024HR | smf-1a | 268.5066 | 12.46 |
| 005YR024HR | smf-1a | 268.7566 | 12.46 |
| 005YR024HR | smf-1a | 269.0066 | 12.46 |
| 005YR024HR | smf-1a | 269.2566 | 12.46 |
| 005YR024HR | smf-1a | 269.5066 | 12.46 |
| 005YR024HR | smf-1a | 269.7566 | 12.46 |
| 005YR024HR | smf-1a | 270.0066 | 12.46 |
| 005YR024HR | smf-1a | 270.2566 | 12.46 |
| 005YR024HR | smf-1a | 270.5066 | 12.46 |
| 005YR024HR | smf-1a | 270.7566 | 12.46 |
| 005YR024HR | smf-1a | 271.0066 | 12.46 |
| 005YR024HR | smf-1a | 271.2566 | 12.46 |
| 005YR024HR | smf-1a | 271.5066 | 12.46 |
| 005YR024HR | smf-1a | 271.7566 | 12.46 |
| 005YR024HR | smf-1a | 272.0066 | 12.46 |
| 005YR024HR | smf-1a | 272.2566 | 12.46 |
| 005YR024HR | smf-1a | 272.5066 | 12.46 |
| 005YR024HR | smf-1a | 272.7566 | 12.46 |
| 005YR024HR | smf-1a | 273.0066 | 12.46 |
| 005YR024HR | smf-1a | 273.2566 | 12.46 |
| 005YR024HR | smf-1a | 273.5066 | 12.46 |
| 005YR024HR | smf-1a | 273.7566 | 12.45 |
| 005YR024HR | smf-1a | 274.0066 | 12.45 |
| 005YR024HR | smf-1a | 274.2566 | 12.45 |
| 005YR024HR | smf-1a | 274.5066 | 12.45 |
| 005YR024HR | smf-1a | 274.7566 | 12.45 |
| 005YR024HR | smf-1a | 275.0066 | 12.45 |
| 005YR024HR | smf-1a | 275.2566 | 12.45 |
| 005YR024HR | smf-1a | 275.5066 | 12.45 |
| 005YR024HR | smf-1a | 275.7566 | 12.45 |
| 005YR024HR | smf-1a | 276.0066 | 12.45 |
| 005YR024HR | smf-1a | 276.2566 | 12.45 |

**5yr-24hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR024HR | smf-1b | 183.2566 | 13.03 |
| 005YR024HR | smf-1b | 183.5066 | 13.03 |
| 005YR024HR | smf-1b | 183.7566 | 13.03 |
| 005YR024HR | smf-1b | 184.0066 | 13.02 |
| 005YR024HR | smf-1b | 184.2566 | 13.02 |
| 005YR024HR | smf-1b | 184.5066 | 13.02 |
| 005YR024HR | smf-1b | 184.7566 | 13.02 |
| 005YR024HR | smf-1b | 185.0066 | 13.02 |
| 005YR024HR | smf-1b | 185.2566 | 13.02 |
| 005YR024HR | smf-1b | 185.5066 | 13.02 |
| 005YR024HR | smf-1b | 185.7566 | 13.02 |
| 005YR024HR | smf-1b | 186.0066 | 13.02 |
| 005YR024HR | smf-1b | 186.2566 | 13.02 |
| 005YR024HR | smf-1b | 186.5066 | 13.02 |
| 005YR024HR | smf-1b | 186.7566 | 13.02 |
| 005YR024HR | smf-1b | 187.0066 | 13.02 |
| 005YR024HR | smf-1b | 187.2566 | 13.02 |
| 005YR024HR | smf-1b | 187.5066 | 13.02 |
| 005YR024HR | smf-1b | 187.7566 | 13.02 |
| 005YR024HR | smf-1b | 188.0066 | 13.01 |
| 005YR024HR | smf-1b | 188.2566 | 13.01 |
| 005YR024HR | smf-1b | 188.5066 | 13.01 |
| 005YR024HR | smf-1b | 188.7566 | 13.01 |
| 005YR024HR | smf-1b | 189.0066 | 13.01 |
| 005YR024HR | smf-1b | 189.2566 | 13.01 |
| 005YR024HR | smf-1b | 189.5066 | 13.01 |
| 005YR024HR | smf-1b | 189.7566 | 13.01 |
| 005YR024HR | smf-1b | 190.0066 | 13.01 |
| 005YR024HR | smf-1b | 190.2566 | 13.01 |
| 005YR024HR | smf-1b | 190.5066 | 13.01 |
| 005YR024HR | smf-1b | 190.7566 | 13.01 |
| 005YR024HR | smf-1b | 191.0066 | 13.01 |
| 005YR024HR | smf-1b | 191.2566 | 13.01 |
| 005YR024HR | smf-1b | 191.5066 | 13.01 |
| 005YR024HR | smf-1b | 191.7566 | 13.01 |
| 005YR024HR | smf-1b | 192.0066 | 13.01 |
| 005YR024HR | smf-1b | 192.2566 | 13.01 |
| 005YR024HR | smf-1b | 192.5066 | 13.00 |
| 005YR024HR | smf-1b | 192.7566 | 13.00 |
| 005YR024HR | smf-1b | 193.0066 | 13.00 |
| 005YR024HR | smf-1b | 193.2566 | 13.00 |
| 005YR024HR | smf-1b | 193.5066 | 13.00 |

**5yr-24hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR024HR | smf-2a | 258.0066 | 12.11 |
| 005YR024HR | smf-2a | 258.2566 | 12.11 |
| 005YR024HR | smf-2a | 258.5066 | 12.11 |
| 005YR024HR | smf-2a | 258.7566 | 12.11 |
| 005YR024HR | smf-2a | 259.0066 | 12.11 |
| 005YR024HR | smf-2a | 259.2566 | 12.11 |
| 005YR024HR | smf-2a | 259.5066 | 12.11 |
| 005YR024HR | smf-2a | 259.7566 | 12.11 |
| 005YR024HR | smf-2a | 260.0066 | 12.11 |
| 005YR024HR | smf-2a | 260.2566 | 12.11 |
| 005YR024HR | smf-2a | 260.5066 | 12.11 |
| 005YR024HR | smf-2a | 260.7566 | 12.11 |
| 005YR024HR | smf-2a | 261.0066 | 12.11 |
| 005YR024HR | smf-2a | 261.2566 | 12.11 |
| 005YR024HR | smf-2a | 261.5066 | 12.11 |
| 005YR024HR | smf-2a | 261.7566 | 12.11 |
| 005YR024HR | smf-2a | 262.0066 | 12.10 |
| 005YR024HR | smf-2a | 262.2566 | 12.10 |
| 005YR024HR | smf-2a | 262.5066 | 12.10 |
| 005YR024HR | smf-2a | 262.7566 | 12.10 |
| 005YR024HR | smf-2a | 263.0066 | 12.10 |
| 005YR024HR | smf-2a | 263.2566 | 12.10 |
| 005YR024HR | smf-2a | 263.5066 | 12.10 |
| 005YR024HR | smf-2a | 263.7566 | 12.10 |
| 005YR024HR | smf-2a | 264.0066 | 12.10 |
| 005YR024HR | smf-2a | 264.2566 | 12.10 |
| 005YR024HR | smf-2a | 264.5066 | 12.10 |
| 005YR024HR | smf-2a | 264.7566 | 12.10 |
| 005YR024HR | smf-2a | 265.0066 | 12.10 |
| 005YR024HR | smf-2a | 265.2566 | 12.10 |
| 005YR024HR | smf-2a | 265.5066 | 12.10 |
| 005YR024HR | smf-2a | 265.7566 | 12.10 |
| 005YR024HR | smf-2a | 266.0066 | 12.10 |
| 005YR024HR | smf-2a | 266.2566 | 12.10 |
| 005YR024HR | smf-2a | 266.5066 | 12.10 |
| 005YR024HR | smf-2a | 266.7566 | 12.10 |
| 005YR024HR | smf-2a | 267.0066 | 12.10 |
| 005YR024HR | smf-2a | 267.2566 | 12.10 |
| 005YR024HR | smf-2a | 267.5066 | 12.10 |
| 005YR024HR | smf-2a | 267.7566 | 12.10 |
| 005YR024HR | smf-2a | 268.0066 | 12.10 |
| 005YR024HR | smf-2a | 268.2566 | 12.10 |

**5yr-24hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR024HR | smf-2b | 206.7566 | 11.42 |
| 005YR024HR | smf-2b | 207.0066 | 11.42 |
| 005YR024HR | smf-2b | 207.2566 | 11.42 |
| 005YR024HR | smf-2b | 207.5066 | 11.42 |
| 005YR024HR | smf-2b | 207.7566 | 11.42 |
| 005YR024HR | smf-2b | 208.0066 | 11.41 |
| 005YR024HR | smf-2b | 208.2566 | 11.41 |
| 005YR024HR | smf-2b | 208.5066 | 11.41 |
| 005YR024HR | smf-2b | 208.7566 | 11.41 |
| 005YR024HR | smf-2b | 209.0066 | 11.41 |
| 005YR024HR | smf-2b | 209.2566 | 11.41 |
| 005YR024HR | smf-2b | 209.5066 | 11.41 |
| 005YR024HR | smf-2b | 209.7566 | 11.41 |
| 005YR024HR | smf-2b | 210.0066 | 11.41 |
| 005YR024HR | smf-2b | 210.2566 | 11.41 |
| 005YR024HR | smf-2b | 210.5066 | 11.41 |
| 005YR024HR | smf-2b | 210.7566 | 11.41 |
| 005YR024HR | smf-2b | 211.0066 | 11.41 |
| 005YR024HR | smf-2b | 211.2566 | 11.41 |
| 005YR024HR | smf-2b | 211.5066 | 11.41 |
| 005YR024HR | smf-2b | 211.7566 | 11.41 |
| 005YR024HR | smf-2b | 212.0066 | 11.41 |
| 005YR024HR | smf-2b | 212.2566 | 11.41 |
| 005YR024HR | smf-2b | 212.5066 | 11.41 |
| 005YR024HR | smf-2b | 212.7566 | 11.40 |
| 005YR024HR | smf-2b | 213.0066 | 11.40 |
| 005YR024HR | smf-2b | 213.2566 | 11.40 |
| 005YR024HR | smf-2b | 213.5066 | 11.40 |
| 005YR024HR | smf-2b | 213.7566 | 11.40 |
| 005YR024HR | smf-2b | 214.0066 | 11.40 |
| 005YR024HR | smf-2b | 214.2566 | 11.40 |
| 005YR024HR | smf-2b | 214.5066 | 11.40 |
| 005YR024HR | smf-2b | 214.7566 | 11.40 |
| 005YR024HR | smf-2b | 215.0066 | 11.40 |
| 005YR024HR | smf-2b | 215.2566 | 11.40 |
| 005YR024HR | smf-2b | 215.5066 | 11.40 |
| 005YR024HR | smf-2b | 215.7566 | 11.40 |
| 005YR024HR | smf-2b | 216.0066 | 11.40 |
| 005YR024HR | smf-2b | 216.2566 | 11.40 |
| 005YR024HR | smf-2b | 216.5066 | 11.40 |
| 005YR024HR | smf-2b | 216.7566 | 11.40 |
| 005YR024HR | smf-2b | 217.0066 | 11.40 |

**5yr-24hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR024HR | smf-2c | 239.5066 | 11.87 |
| 005YR024HR | smf-2c | 239.7566 | 11.87 |
| 005YR024HR | smf-2c | 240.0066 | 11.87 |
| 005YR024HR | smf-2c | 240.2566 | 11.87 |
| 005YR024HR | smf-2c | 240.5066 | 11.87 |
| 005YR024HR | smf-2c | 240.7566 | 11.87 |
| 005YR024HR | smf-2c | 241.0066 | 11.87 |
| 005YR024HR | smf-2c | 241.2566 | 11.87 |
| 005YR024HR | smf-2c | 241.5066 | 11.87 |
| 005YR024HR | smf-2c | 241.7566 | 11.87 |
| 005YR024HR | smf-2c | 242.0066 | 11.87 |
| 005YR024HR | smf-2c | 242.2566 | 11.87 |
| 005YR024HR | smf-2c | 242.5066 | 11.87 |
| 005YR024HR | smf-2c | 242.7566 | 11.87 |
| 005YR024HR | smf-2c | 243.0066 | 11.87 |
| 005YR024HR | smf-2c | 243.2566 | 11.87 |
| 005YR024HR | smf-2c | 243.5066 | 11.86 |
| 005YR024HR | smf-2c | 243.7566 | 11.86 |
| 005YR024HR | smf-2c | 244.0066 | 11.86 |
| 005YR024HR | smf-2c | 244.2566 | 11.86 |
| 005YR024HR | smf-2c | 244.5066 | 11.86 |
| 005YR024HR | smf-2c | 244.7566 | 11.86 |
| 005YR024HR | smf-2c | 245.0066 | 11.86 |
| 005YR024HR | smf-2c | 245.2566 | 11.86 |
| 005YR024HR | smf-2c | 245.5066 | 11.86 |
| 005YR024HR | smf-2c | 245.7566 | 11.86 |
| 005YR024HR | smf-2c | 246.0066 | 11.86 |
| 005YR024HR | smf-2c | 246.2566 | 11.86 |
| 005YR024HR | smf-2c | 246.5066 | 11.86 |
| 005YR024HR | smf-2c | 246.7566 | 11.86 |
| 005YR024HR | smf-2c | 247.0066 | 11.86 |
| 005YR024HR | smf-2c | 247.2566 | 11.86 |
| 005YR024HR | smf-2c | 247.5066 | 11.86 |
| 005YR024HR | smf-2c | 247.7566 | 11.86 |
| 005YR024HR | smf-2c | 248.0066 | 11.86 |
| 005YR024HR | smf-2c | 248.2566 | 11.86 |
| 005YR024HR | smf-2c | 248.5066 | 11.86 |
| 005YR024HR | smf-2c | 248.7566 | 11.86 |
| 005YR024HR | smf-2c | 249.0066 | 11.86 |
| 005YR024HR | smf-2c | 249.2566 | 11.86 |
| 005YR024HR | smf-2c | 249.5066 | 11.85 |
| 005YR024HR | smf-2c | 249.7566 | 11.85 |

**5yr-24hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR024HR | smf-3a | 251.2566 | 11.92 |
| 005YR024HR | smf-3a | 251.5066 | 11.92 |
| 005YR024HR | smf-3a | 251.7566 | 11.92 |
| 005YR024HR | smf-3a | 252.0066 | 11.92 |
| 005YR024HR | smf-3a | 252.2566 | 11.92 |
| 005YR024HR | smf-3a | 252.5066 | 11.92 |
| 005YR024HR | smf-3a | 252.7566 | 11.92 |
| 005YR024HR | smf-3a | 253.0066 | 11.92 |
| 005YR024HR | smf-3a | 253.2566 | 11.92 |
| 005YR024HR | smf-3a | 253.5066 | 11.91 |
| 005YR024HR | smf-3a | 253.7566 | 11.91 |
| 005YR024HR | smf-3a | 254.0066 | 11.91 |
| 005YR024HR | smf-3a | 254.2566 | 11.91 |
| 005YR024HR | smf-3a | 254.5066 | 11.91 |
| 005YR024HR | smf-3a | 254.7566 | 11.91 |
| 005YR024HR | smf-3a | 255.0066 | 11.91 |
| 005YR024HR | smf-3a | 255.2566 | 11.91 |
| 005YR024HR | smf-3a | 255.5066 | 11.91 |
| 005YR024HR | smf-3a | 255.7566 | 11.91 |
| 005YR024HR | smf-3a | 256.0066 | 11.91 |
| 005YR024HR | smf-3a | 256.2566 | 11.91 |
| 005YR024HR | smf-3a | 256.5066 | 11.91 |
| 005YR024HR | smf-3a | 256.7566 | 11.91 |
| 005YR024HR | smf-3a | 257.0066 | 11.91 |
| 005YR024HR | smf-3a | 257.2566 | 11.91 |
| 005YR024HR | smf-3a | 257.5066 | 11.91 |
| 005YR024HR | smf-3a | 257.7566 | 11.91 |
| 005YR024HR | smf-3a | 258.0066 | 11.91 |
| 005YR024HR | smf-3a | 258.2566 | 11.91 |
| 005YR024HR | smf-3a | 258.5066 | 11.91 |
| 005YR024HR | smf-3a | 258.7566 | 11.91 |
| 005YR024HR | smf-3a | 259.0066 | 11.91 |
| 005YR024HR | smf-3a | 259.2566 | 11.91 |
| 005YR024HR | smf-3a | 259.5066 | 11.90 |
| 005YR024HR | smf-3a | 259.7566 | 11.90 |
| 005YR024HR | smf-3a | 260.0066 | 11.90 |
| 005YR024HR | smf-3a | 260.2566 | 11.90 |
| 005YR024HR | smf-3a | 260.5066 | 11.90 |
| 005YR024HR | smf-3a | 260.7566 | 11.90 |
| 005YR024HR | smf-3a | 261.0066 | 11.90 |
| 005YR024HR | smf-3a | 261.2566 | 11.90 |
| 005YR024HR | smf-3a | 261.5066 | 11.90 |

**5yr-24hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR024HR | smf-3b | 284.0066 | 11.26 |
| 005YR024HR | smf-3b | 284.2566 | 11.26 |
| 005YR024HR | smf-3b | 284.5066 | 11.26 |
| 005YR024HR | smf-3b | 284.7566 | 11.26 |
| 005YR024HR | smf-3b | 285.0066 | 11.26 |
| 005YR024HR | smf-3b | 285.2566 | 11.26 |
| 005YR024HR | smf-3b | 285.5066 | 11.26 |
| 005YR024HR | smf-3b | 285.7566 | 11.26 |
| 005YR024HR | smf-3b | 286.0066 | 11.26 |
| 005YR024HR | smf-3b | 286.2566 | 11.26 |
| 005YR024HR | smf-3b | 286.5066 | 11.26 |
| 005YR024HR | smf-3b | 286.7566 | 11.26 |
| 005YR024HR | smf-3b | 287.0066 | 11.26 |
| 005YR024HR | smf-3b | 287.2566 | 11.26 |
| 005YR024HR | smf-3b | 287.5066 | 11.26 |
| 005YR024HR | smf-3b | 287.7566 | 11.26 |
| 005YR024HR | smf-3b | 288.0066 | 11.25 |
| 005YR024HR | smf-3b | 288.2566 | 11.25 |
| 005YR024HR | smf-3b | 288.5066 | 11.25 |
| 005YR024HR | smf-3b | 288.7566 | 11.25 |
| 005YR024HR | smf-3b | 289.0066 | 11.25 |
| 005YR024HR | smf-3b | 289.2566 | 11.25 |
| 005YR024HR | smf-3b | 289.5066 | 11.25 |
| 005YR024HR | smf-3b | 289.7566 | 11.25 |
| 005YR024HR | smf-3b | 290.0066 | 11.25 |
| 005YR024HR | smf-3b | 290.2566 | 11.25 |
| 005YR024HR | smf-3b | 290.5066 | 11.25 |
| 005YR024HR | smf-3b | 290.7566 | 11.25 |
| 005YR024HR | smf-3b | 291.0066 | 11.25 |
| 005YR024HR | smf-3b | 291.2566 | 11.25 |
| 005YR024HR | smf-3b | 291.5066 | 11.25 |
| 005YR024HR | smf-3b | 291.7566 | 11.25 |
| 005YR024HR | smf-3b | 292.0066 | 11.25 |
| 005YR024HR | smf-3b | 292.2566 | 11.25 |
| 005YR024HR | smf-3b | 292.5066 | 11.25 |
| 005YR024HR | smf-3b | 292.7566 | 11.25 |
| 005YR024HR | smf-3b | 293.0066 | 11.25 |
| 005YR024HR | smf-3b | 293.2566 | 11.25 |
| 005YR024HR | smf-3b | 293.5066 | 11.25 |
| 005YR024HR | smf-3b | 293.7566 | 11.25 |
| 005YR024HR | smf-3b | 294.0066 | 11.25 |
| 005YR024HR | smf-3b | 294.2566 | 11.25 |

**5yr-24hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR072HR | smf-1a | 400.7567 | 12.46 |
| 005YR072HR | smf-1a | 401.0067 | 12.46 |
| 005YR072HR | smf-1a | 401.2567 | 12.46 |
| 005YR072HR | smf-1a | 401.5067 | 12.46 |
| 005YR072HR | smf-1a | 401.7567 | 12.46 |
| 005YR072HR | smf-1a | 402.0067 | 12.46 |
| 005YR072HR | smf-1a | 402.2567 | 12.46 |
| 005YR072HR | smf-1a | 402.5067 | 12.46 |
| 005YR072HR | smf-1a | 402.7567 | 12.46 |
| 005YR072HR | smf-1a | 403.0067 | 12.46 |
| 005YR072HR | smf-1a | 403.2567 | 12.46 |
| 005YR072HR | smf-1a | 403.5067 | 12.46 |
| 005YR072HR | smf-1a | 403.7567 | 12.46 |
| 005YR072HR | smf-1a | 404.0067 | 12.46 |
| 005YR072HR | smf-1a | 404.2567 | 12.45 |
| 005YR072HR | smf-1a | 404.5067 | 12.45 |
| 005YR072HR | smf-1a | 404.7567 | 12.45 |
| 005YR072HR | smf-1a | 405.0067 | 12.45 |
| 005YR072HR | smf-1a | 405.2567 | 12.45 |
| 005YR072HR | smf-1a | 405.5067 | 12.45 |
| 005YR072HR | smf-1a | 405.7567 | 12.45 |
| 005YR072HR | smf-1a | 406.0067 | 12.45 |
| 005YR072HR | smf-1a | 406.2567 | 12.45 |
| 005YR072HR | smf-1a | 406.5067 | 12.45 |
| 005YR072HR | smf-1a | 406.7567 | 12.45 |
| 005YR072HR | smf-1a | 407.0067 | 12.45 |
| 005YR072HR | smf-1a | 407.2567 | 12.45 |
| 005YR072HR | smf-1a | 407.5067 | 12.45 |
| 005YR072HR | smf-1a | 407.7567 | 12.45 |
| 005YR072HR | smf-1a | 408.0067 | 12.45 |
| 005YR072HR | smf-1a | 408.2567 | 12.45 |
| 005YR072HR | smf-1a | 408.5067 | 12.45 |
| 005YR072HR | smf-1a | 408.7567 | 12.45 |
| 005YR072HR | smf-1a | 409.0067 | 12.45 |
| 005YR072HR | smf-1a | 409.2567 | 12.45 |
| 005YR072HR | smf-1a | 409.5067 | 12.45 |
| 005YR072HR | smf-1a | 409.7567 | 12.45 |
| 005YR072HR | smf-1a | 410.0067 | 12.45 |
| 005YR072HR | smf-1a | 410.2567 | 12.45 |
| 005YR072HR | smf-1a | 410.5067 | 12.45 |
| 005YR072HR | smf-1a | 410.7567 | 12.45 |
| 005YR072HR | smf-1a | 411.0067 | 12.45 |

**5yr-72hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR072HR | smf-1b | 406.5067 | 13.01 |
| 005YR072HR | smf-1b | 406.7567 | 13.01 |
| 005YR072HR | smf-1b | 407.0067 | 13.00 |
| 005YR072HR | smf-1b | 407.2567 | 13.00 |
| 005YR072HR | smf-1b | 407.5067 | 13.00 |
| 005YR072HR | smf-1b | 407.7567 | 13.00 |
| 005YR072HR | smf-1b | 408.0067 | 13.00 |
| 005YR072HR | smf-1b | 408.2567 | 13.00 |
| 005YR072HR | smf-1b | 408.5067 | 13.00 |
| 005YR072HR | smf-1b | 408.7567 | 13.00 |
| 005YR072HR | smf-1b | 409.0067 | 13.00 |
| 005YR072HR | smf-1b | 409.2567 | 13.00 |
| 005YR072HR | smf-1b | 409.5067 | 13.00 |
| 005YR072HR | smf-1b | 409.7567 | 13.00 |
| 005YR072HR | smf-1b | 410.0067 | 13.00 |
| 005YR072HR | smf-1b | 410.2567 | 13.00 |
| 005YR072HR | smf-1b | 410.5067 | 13.00 |
| 005YR072HR | smf-1b | 410.7567 | 13.00 |
| 005YR072HR | smf-1b | 411.0067 | 13.00 |
| 005YR072HR | smf-1b | 411.2567 | 13.00 |
| 005YR072HR | smf-1b | 411.5067 | 13.00 |
| 005YR072HR | smf-1b | 411.7567 | 13.00 |
| 005YR072HR | smf-1b | 412.0067 | 13.00 |
| 005YR072HR | smf-1b | 412.2567 | 13.00 |
| 005YR072HR | smf-1b | 412.5067 | 13.00 |
| 005YR072HR | smf-1b | 412.7567 | 13.00 |
| 005YR072HR | smf-1b | 413.0067 | 13.00 |
| 005YR072HR | smf-1b | 413.2567 | 13.00 |
| 005YR072HR | smf-1b | 413.5067 | 13.00 |
| 005YR072HR | smf-1b | 413.7567 | 13.00 |
| 005YR072HR | smf-1b | 414.0067 | 13.00 |
| 005YR072HR | smf-1b | 414.2567 | 13.00 |
| 005YR072HR | smf-1b | 414.5067 | 13.00 |
| 005YR072HR | smf-1b | 414.7567 | 13.00 |
| 005YR072HR | smf-1b | 415.0067 | 13.00 |
| 005YR072HR | smf-1b | 415.2567 | 13.00 |
| 005YR072HR | smf-1b | 415.5067 | 13.00 |
| 005YR072HR | smf-1b | 415.7567 | 13.00 |
| 005YR072HR | smf-1b | 416.0067 | 13.00 |
| 005YR072HR | smf-1b | 416.2567 | 13.00 |
| 005YR072HR | smf-1b | 416.5067 | 13.00 |
| 005YR072HR | smf-1b | 416.7567 | 13.00 |

**5yr-72hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR072HR | smf-2a | 454.2567 | 12.11 |
| 005YR072HR | smf-2a | 454.5067 | 12.11 |
| 005YR072HR | smf-2a | 454.7567 | 12.11 |
| 005YR072HR | smf-2a | 455.0067 | 12.11 |
| 005YR072HR | smf-2a | 455.2567 | 12.11 |
| 005YR072HR | smf-2a | 455.5067 | 12.11 |
| 005YR072HR | smf-2a | 455.7567 | 12.11 |
| 005YR072HR | smf-2a | 456.0067 | 12.11 |
| 005YR072HR | smf-2a | 456.2567 | 12.11 |
| 005YR072HR | smf-2a | 456.5067 | 12.11 |
| 005YR072HR | smf-2a | 456.7567 | 12.11 |
| 005YR072HR | smf-2a | 457.0067 | 12.11 |
| 005YR072HR | smf-2a | 457.2567 | 12.11 |
| 005YR072HR | smf-2a | 457.5067 | 12.11 |
| 005YR072HR | smf-2a | 457.7567 | 12.11 |
| 005YR072HR | smf-2a | 458.0067 | 12.11 |
| 005YR072HR | smf-2a | 458.2567 | 12.11 |
| 005YR072HR | smf-2a | 458.5067 | 12.11 |
| 005YR072HR | smf-2a | 458.7567 | 12.11 |
| 005YR072HR | smf-2a | 459.0067 | 12.11 |
| 005YR072HR | smf-2a | 459.2567 | 12.10 |
| 005YR072HR | smf-2a | 459.5067 | 12.10 |
| 005YR072HR | smf-2a | 459.7567 | 12.10 |
| 005YR072HR | smf-2a | 460.0067 | 12.10 |
| 005YR072HR | smf-2a | 460.2567 | 12.10 |
| 005YR072HR | smf-2a | 460.5067 | 12.10 |
| 005YR072HR | smf-2a | 460.7567 | 12.10 |
| 005YR072HR | smf-2a | 461.0067 | 12.10 |
| 005YR072HR | smf-2a | 461.2567 | 12.10 |
| 005YR072HR | smf-2a | 461.5067 | 12.10 |
| 005YR072HR | smf-2a | 461.7567 | 12.10 |
| 005YR072HR | smf-2a | 462.0067 | 12.10 |
| 005YR072HR | smf-2a | 462.2567 | 12.10 |
| 005YR072HR | smf-2a | 462.5067 | 12.10 |
| 005YR072HR | smf-2a | 462.7567 | 12.10 |
| 005YR072HR | smf-2a | 463.0067 | 12.10 |
| 005YR072HR | smf-2a | 463.2567 | 12.10 |
| 005YR072HR | smf-2a | 463.5067 | 12.10 |
| 005YR072HR | smf-2a | 463.7567 | 12.10 |
| 005YR072HR | smf-2a | 464.0067 | 12.10 |
| 005YR072HR | smf-2a | 464.2567 | 12.10 |
| 005YR072HR | smf-2a | 464.5067 | 12.10 |

**5yr-72hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR072HR | smf-2b | 344.5067 | 11.42 |
| 005YR072HR | smf-2b | 344.7567 | 11.41 |
| 005YR072HR | smf-2b | 345.0067 | 11.41 |
| 005YR072HR | smf-2b | 345.2567 | 11.41 |
| 005YR072HR | smf-2b | 345.5067 | 11.41 |
| 005YR072HR | smf-2b | 345.7567 | 11.41 |
| 005YR072HR | smf-2b | 346.0067 | 11.41 |
| 005YR072HR | smf-2b | 346.2567 | 11.41 |
| 005YR072HR | smf-2b | 346.5067 | 11.41 |
| 005YR072HR | smf-2b | 346.7567 | 11.41 |
| 005YR072HR | smf-2b | 347.0067 | 11.41 |
| 005YR072HR | smf-2b | 347.2567 | 11.41 |
| 005YR072HR | smf-2b | 347.5067 | 11.41 |
| 005YR072HR | smf-2b | 347.7567 | 11.41 |
| 005YR072HR | smf-2b | 348.0067 | 11.41 |
| 005YR072HR | smf-2b | 348.2567 | 11.41 |
| 005YR072HR | smf-2b | 348.5067 | 11.41 |
| 005YR072HR | smf-2b | 348.7567 | 11.41 |
| 005YR072HR | smf-2b | 349.0067 | 11.41 |
| 005YR072HR | smf-2b | 349.2567 | 11.41 |
| 005YR072HR | smf-2b | 349.5067 | 11.41 |
| 005YR072HR | smf-2b | 349.7567 | 11.41 |
| 005YR072HR | smf-2b | 350.0067 | 11.41 |
| 005YR072HR | smf-2b | 350.2567 | 11.41 |
| 005YR072HR | smf-2b | 350.5067 | 11.41 |
| 005YR072HR | smf-2b | 350.7567 | 11.41 |
| 005YR072HR | smf-2b | 351.0067 | 11.41 |
| 005YR072HR | smf-2b | 351.2567 | 11.41 |
| 005YR072HR | smf-2b | 351.5067 | 11.41 |
| 005YR072HR | smf-2b | 351.7567 | 11.41 |
| 005YR072HR | smf-2b | 352.0067 | 11.41 |
| 005YR072HR | smf-2b | 352.2567 | 11.40 |
| 005YR072HR | smf-2b | 352.5067 | 11.40 |
| 005YR072HR | smf-2b | 352.7567 | 11.40 |
| 005YR072HR | smf-2b | 353.0067 | 11.40 |
| 005YR072HR | smf-2b | 353.2567 | 11.40 |
| 005YR072HR | smf-2b | 353.5067 | 11.40 |
| 005YR072HR | smf-2b | 353.7567 | 11.40 |
| 005YR072HR | smf-2b | 354.0067 | 11.40 |
| 005YR072HR | smf-2b | 354.2567 | 11.40 |
| 005YR072HR | smf-2b | 354.5067 | 11.40 |
| 005YR072HR | smf-2b | 354.7567 | 11.40 |

**5yr-72hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR072HR | smf-2c | 423.7567 | 11.86 |
| 005YR072HR | smf-2c | 424.0067 | 11.86 |
| 005YR072HR | smf-2c | 424.2567 | 11.86 |
| 005YR072HR | smf-2c | 424.5067 | 11.85 |
| 005YR072HR | smf-2c | 424.7567 | 11.85 |
| 005YR072HR | smf-2c | 425.0067 | 11.85 |
| 005YR072HR | smf-2c | 425.2567 | 11.85 |
| 005YR072HR | smf-2c | 425.5067 | 11.85 |
| 005YR072HR | smf-2c | 425.7567 | 11.85 |
| 005YR072HR | smf-2c | 426.0067 | 11.85 |
| 005YR072HR | smf-2c | 426.2567 | 11.85 |
| 005YR072HR | smf-2c | 426.5067 | 11.85 |
| 005YR072HR | smf-2c | 426.7567 | 11.85 |
| 005YR072HR | smf-2c | 427.0067 | 11.85 |
| 005YR072HR | smf-2c | 427.2567 | 11.85 |
| 005YR072HR | smf-2c | 427.5067 | 11.85 |
| 005YR072HR | smf-2c | 427.7567 | 11.85 |
| 005YR072HR | smf-2c | 428.0067 | 11.85 |
| 005YR072HR | smf-2c | 428.2567 | 11.85 |
| 005YR072HR | smf-2c | 428.5067 | 11.85 |
| 005YR072HR | smf-2c | 428.7567 | 11.85 |
| 005YR072HR | smf-2c | 429.0067 | 11.85 |
| 005YR072HR | smf-2c | 429.2567 | 11.85 |
| 005YR072HR | smf-2c | 429.5067 | 11.85 |
| 005YR072HR | smf-2c | 429.7567 | 11.85 |
| 005YR072HR | smf-2c | 430.0067 | 11.85 |
| 005YR072HR | smf-2c | 430.2567 | 11.85 |
| 005YR072HR | smf-2c | 430.5067 | 11.85 |
| 005YR072HR | smf-2c | 430.7567 | 11.85 |
| 005YR072HR | smf-2c | 431.0067 | 11.85 |
| 005YR072HR | smf-2c | 431.2567 | 11.85 |
| 005YR072HR | smf-2c | 431.5067 | 11.85 |
| 005YR072HR | smf-2c | 431.7567 | 11.85 |
| 005YR072HR | smf-2c | 432.0067 | 11.85 |
| 005YR072HR | smf-2c | 432.2567 | 11.85 |
| 005YR072HR | smf-2c | 432.5067 | 11.85 |
| 005YR072HR | smf-2c | 432.7567 | 11.85 |
| 005YR072HR | smf-2c | 433.0067 | 11.85 |
| 005YR072HR | smf-2c | 433.2567 | 11.85 |
| 005YR072HR | smf-2c | 433.5067 | 11.85 |
| 005YR072HR | smf-2c | 433.7567 | 11.85 |
| 005YR072HR | smf-2c | 434.0067 | 11.85 |

**5yr-72hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR072HR | smf-3a | 524.0067 | 11.90 |
| 005YR072HR | smf-3a | 524.2567 | 11.90 |
| 005YR072HR | smf-3a | 524.5067 | 11.90 |
| 005YR072HR | smf-3a | 524.7567 | 11.90 |
| 005YR072HR | smf-3a | 525.0067 | 11.90 |
| 005YR072HR | smf-3a | 525.2567 | 11.90 |
| 005YR072HR | smf-3a | 525.5067 | 11.90 |
| 005YR072HR | smf-3a | 525.7567 | 11.90 |
| 005YR072HR | smf-3a | 526.0067 | 11.90 |
| 005YR072HR | smf-3a | 526.2567 | 11.90 |
| 005YR072HR | smf-3a | 526.5067 | 11.90 |
| 005YR072HR | smf-3a | 526.7567 | 11.90 |
| 005YR072HR | smf-3a | 527.0067 | 11.90 |
| 005YR072HR | smf-3a | 527.2567 | 11.90 |
| 005YR072HR | smf-3a | 527.5067 | 11.90 |
| 005YR072HR | smf-3a | 527.7567 | 11.90 |
| 005YR072HR | smf-3a | 528.0067 | 11.90 |
| 005YR072HR | smf-3a | 528.2567 | 11.90 |
| 005YR072HR | smf-3a | 528.5067 | 11.90 |
| 005YR072HR | smf-3a | 528.7567 | 11.90 |
| 005YR072HR | smf-3a | 529.0067 | 11.90 |
| 005YR072HR | smf-3a | 529.2567 | 11.90 |
| 005YR072HR | smf-3a | 529.5067 | 11.90 |
| 005YR072HR | smf-3a | 529.7567 | 11.90 |
| 005YR072HR | smf-3a | 530.0067 | 11.90 |
| 005YR072HR | smf-3a | 530.2567 | 11.90 |
| 005YR072HR | smf-3a | 530.5067 | 11.90 |
| 005YR072HR | smf-3a | 530.7567 | 11.90 |
| 005YR072HR | smf-3a | 531.0067 | 11.90 |
| 005YR072HR | smf-3a | 531.2567 | 11.90 |
| 005YR072HR | smf-3a | 531.5067 | 11.90 |
| 005YR072HR | smf-3a | 531.7567 | 11.90 |
| 005YR072HR | smf-3a | 532.0067 | 11.90 |
| 005YR072HR | smf-3a | 532.2567 | 11.90 |
| 005YR072HR | smf-3a | 532.5067 | 11.90 |
| 005YR072HR | smf-3a | 532.7567 | 11.90 |
| 005YR072HR | smf-3a | 533.0067 | 11.90 |
| 005YR072HR | smf-3a | 533.2567 | 11.90 |
| 005YR072HR | smf-3a | 533.5067 | 11.90 |
| 005YR072HR | smf-3a | 533.7567 | 11.90 |
| 005YR072HR | smf-3a | 534.0067 | 11.90 |
| 005YR072HR | smf-3a | 534.2567 | 11.90 |

**5yr-72hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 005YR072HR | smf-3b | 498.2567 | 11.26 |
| 005YR072HR | smf-3b | 498.5067 | 11.26 |
| 005YR072HR | smf-3b | 498.7567 | 11.26 |
| 005YR072HR | smf-3b | 499.0067 | 11.26 |
| 005YR072HR | smf-3b | 499.2567 | 11.26 |
| 005YR072HR | smf-3b | 499.5067 | 11.26 |
| 005YR072HR | smf-3b | 499.7567 | 11.26 |
| 005YR072HR | smf-3b | 500.0067 | 11.26 |
| 005YR072HR | smf-3b | 500.2567 | 11.26 |
| 005YR072HR | smf-3b | 500.5067 | 11.26 |
| 005YR072HR | smf-3b | 500.7567 | 11.26 |
| 005YR072HR | smf-3b | 501.0067 | 11.26 |
| 005YR072HR | smf-3b | 501.2567 | 11.26 |
| 005YR072HR | smf-3b | 501.5067 | 11.26 |
| 005YR072HR | smf-3b | 501.7567 | 11.26 |
| 005YR072HR | smf-3b | 502.0067 | 11.26 |
| 005YR072HR | smf-3b | 502.2567 | 11.26 |
| 005YR072HR | smf-3b | 502.5067 | 11.26 |
| 005YR072HR | smf-3b | 502.7567 | 11.26 |
| 005YR072HR | smf-3b | 503.0067 | 11.26 |
| 005YR072HR | smf-3b | 503.2567 | 11.26 |
| 005YR072HR | smf-3b | 503.5067 | 11.26 |
| 005YR072HR | smf-3b | 503.7567 | 11.26 |
| 005YR072HR | smf-3b | 504.0067 | 11.26 |
| 005YR072HR | smf-3b | 504.2567 | 11.26 |
| 005YR072HR | smf-3b | 504.5067 | 11.26 |
| 005YR072HR | smf-3b | 504.7567 | 11.26 |
| 005YR072HR | smf-3b | 505.0067 | 11.26 |
| 005YR072HR | smf-3b | 505.2567 | 11.26 |
| 005YR072HR | smf-3b | 505.5067 | 11.26 |
| 005YR072HR | smf-3b | 505.7567 | 11.26 |
| 005YR072HR | smf-3b | 506.0067 | 11.25 |
| 005YR072HR | smf-3b | 506.2567 | 11.25 |
| 005YR072HR | smf-3b | 506.5067 | 11.25 |
| 005YR072HR | smf-3b | 506.7567 | 11.25 |
| 005YR072HR | smf-3b | 507.0067 | 11.25 |
| 005YR072HR | smf-3b | 507.2567 | 11.25 |
| 005YR072HR | smf-3b | 507.5067 | 11.25 |
| 005YR072HR | smf-3b | 507.7567 | 11.25 |
| 005YR072HR | smf-3b | 508.0067 | 11.25 |
| 005YR072HR | smf-3b | 508.2567 | 11.25 |
| 005YR072HR | smf-3b | 508.5067 | 11.25 |

**5yr-72hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR001HR | smf-1a | 21.0066 | 12.52 |
| 010YR001HR | smf-1a | 21.2566 | 12.52 |
| 010YR001HR | smf-1a | 21.5066 | 12.51 |
| 010YR001HR | smf-1a | 21.7566 | 12.51 |
| 010YR001HR | smf-1a | 22.0066 | 12.51 |
| 010YR001HR | smf-1a | 22.2566 | 12.51 |
| 010YR001HR | smf-1a | 22.5066 | 12.50 |
| 010YR001HR | smf-1a | 22.7566 | 12.50 |
| 010YR001HR | smf-1a | 23.0066 | 12.50 |
| 010YR001HR | smf-1a | 23.2566 | 12.50 |
| 010YR001HR | smf-1a | 23.5066 | 12.49 |
| 010YR001HR | smf-1a | 23.7566 | 12.49 |
| 010YR001HR | smf-1a | 24.0066 | 12.49 |
| 010YR001HR | smf-1a | 24.2566 | 12.48 |
| 010YR001HR | smf-1a | 24.5066 | 12.48 |
| 010YR001HR | smf-1a | 24.7566 | 12.48 |
| 010YR001HR | smf-1a | 25.0066 | 12.48 |
| 010YR001HR | smf-1a | 25.2566 | 12.48 |
| 010YR001HR | smf-1a | 25.5066 | 12.47 |
| 010YR001HR | smf-1a | 25.7566 | 12.47 |
| 010YR001HR | smf-1a | 26.0066 | 12.47 |
| 010YR001HR | smf-1a | 26.2566 | 12.47 |
| 010YR001HR | smf-1a | 26.5066 | 12.46 |
| 010YR001HR | smf-1a | 26.7566 | 12.46 |
| 010YR001HR | smf-1a | 27.0066 | 12.46 |
| 010YR001HR | smf-1a | 27.2566 | 12.46 |
| 010YR001HR | smf-1a | 27.5066 | 12.45 |
| 010YR001HR | smf-1a | 27.7566 | 12.45 |
| 010YR001HR | smf-1a | 28.0066 | 12.45 |
| 010YR001HR | smf-1a | 28.2566 | 12.45 |
| 010YR001HR | smf-1a | 28.5066 | 12.45 |
| 010YR001HR | smf-1a | 28.7566 | 12.45 |
| 010YR001HR | smf-1a | 29.0066 | 12.45 |
| 010YR001HR | smf-1a | 29.2566 | 12.45 |
| 010YR001HR | smf-1a | 29.5066 | 12.45 |
| 010YR001HR | smf-1a | 29.7566 | 12.45 |
| 010YR001HR | smf-1a | 30.0066 | 12.45 |
| 010YR001HR | smf-1a | 30.2566 | 12.45 |
| 010YR001HR | smf-1a | 30.5066 | 12.45 |
| 010YR001HR | smf-1a | 30.7566 | 12.45 |
| 010YR001HR | smf-1a | 31.0066 | 12.45 |
| 010YR001HR | smf-1a | 31.2566 | 12.45 |

**10yr-1hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR001HR | smf-1b | 45.2566 | 13.06 |
| 010YR001HR | smf-1b | 45.5066 | 13.06 |
| 010YR001HR | smf-1b | 45.7566 | 13.06 |
| 010YR001HR | smf-1b | 46.0066 | 13.06 |
| 010YR001HR | smf-1b | 46.2566 | 13.05 |
| 010YR001HR | smf-1b | 46.5066 | 13.05 |
| 010YR001HR | smf-1b | 46.7566 | 13.05 |
| 010YR001HR | smf-1b | 47.0066 | 13.05 |
| 010YR001HR | smf-1b | 47.2566 | 13.05 |
| 010YR001HR | smf-1b | 47.5066 | 13.04 |
| 010YR001HR | smf-1b | 47.7566 | 13.04 |
| 010YR001HR | smf-1b | 48.0066 | 13.04 |
| 010YR001HR | smf-1b | 48.2566 | 13.04 |
| 010YR001HR | smf-1b | 48.5066 | 13.04 |
| 010YR001HR | smf-1b | 48.7566 | 13.03 |
| 010YR001HR | smf-1b | 49.0066 | 13.03 |
| 010YR001HR | smf-1b | 49.2566 | 13.03 |
| 010YR001HR | smf-1b | 49.5066 | 13.03 |
| 010YR001HR | smf-1b | 49.7566 | 13.03 |
| 010YR001HR | smf-1b | 50.0066 | 13.02 |
| 010YR001HR | smf-1b | 50.2566 | 13.02 |
| 010YR001HR | smf-1b | 50.5066 | 13.02 |
| 010YR001HR | smf-1b | 50.7566 | 13.02 |
| 010YR001HR | smf-1b | 51.0066 | 13.02 |
| 010YR001HR | smf-1b | 51.2566 | 13.01 |
| 010YR001HR | smf-1b | 51.5066 | 13.01 |
| 010YR001HR | smf-1b | 51.7566 | 13.01 |
| 010YR001HR | smf-1b | 52.0066 | 13.01 |
| 010YR001HR | smf-1b | 52.2566 | 13.01 |
| 010YR001HR | smf-1b | 52.5066 | 13.01 |
| 010YR001HR | smf-1b | 52.7566 | 13.00 |
| 010YR001HR | smf-1b | 53.0066 | 13.00 |
| 010YR001HR | smf-1b | 53.2566 | 13.00 |
| 010YR001HR | smf-1b | 53.5066 | 13.00 |
| 010YR001HR | smf-1b | 53.7566 | 13.00 |
| 010YR001HR | smf-1b | 54.0066 | 13.00 |
| 010YR001HR | smf-1b | 54.2566 | 13.00 |
| 010YR001HR | smf-1b | 54.5066 | 13.00 |
| 010YR001HR | smf-1b | 54.7566 | 13.00 |
| 010YR001HR | smf-1b | 55.0066 | 13.00 |
| 010YR001HR | smf-1b | 55.2566 | 13.00 |
| 010YR001HR | smf-1b | 55.5066 | 13.00 |

**10yr-1hr SMF-1b**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR001HR | smf-2a | 111.5066 | 12.11 |
| 010YR001HR | smf-2a | 111.7566 | 12.11 |
| 010YR001HR | smf-2a | 112.0066 | 12.11 |
| 010YR001HR | smf-2a | 112.2566 | 12.11 |
| 010YR001HR | smf-2a | 112.5066 | 12.11 |
| 010YR001HR | smf-2a | 112.7566 | 12.11 |
| 010YR001HR | smf-2a | 113.0066 | 12.11 |
| 010YR001HR | smf-2a | 113.2566 | 12.11 |
| 010YR001HR | smf-2a | 113.5066 | 12.11 |
| 010YR001HR | smf-2a | 113.7566 | 12.11 |
| 010YR001HR | smf-2a | 114.0066 | 12.11 |
| 010YR001HR | smf-2a | 114.2566 | 12.11 |
| 010YR001HR | smf-2a | 114.5066 | 12.11 |
| 010YR001HR | smf-2a | 114.7566 | 12.11 |
| 010YR001HR | smf-2a | 115.0066 | 12.11 |
| 010YR001HR | smf-2a | 115.2566 | 12.10 |
| 010YR001HR | smf-2a | 115.5066 | 12.10 |
| 010YR001HR | smf-2a | 115.7566 | 12.10 |
| 010YR001HR | smf-2a | 116.0066 | 12.10 |
| 010YR001HR | smf-2a | 116.2566 | 12.10 |
| 010YR001HR | smf-2a | 116.5066 | 12.10 |
| 010YR001HR | smf-2a | 116.7566 | 12.10 |
| 010YR001HR | smf-2a | 117.0066 | 12.10 |
| 010YR001HR | smf-2a | 117.2566 | 12.10 |
| 010YR001HR | smf-2a | 117.5066 | 12.10 |
| 010YR001HR | smf-2a | 117.7566 | 12.10 |
| 010YR001HR | smf-2a | 118.0066 | 12.10 |
| 010YR001HR | smf-2a | 118.2566 | 12.10 |
| 010YR001HR | smf-2a | 118.5066 | 12.10 |
| 010YR001HR | smf-2a | 118.7566 | 12.10 |
| 010YR001HR | smf-2a | 119.0066 | 12.10 |
| 010YR001HR | smf-2a | 119.2566 | 12.10 |
| 010YR001HR | smf-2a | 119.5066 | 12.10 |
| 010YR001HR | smf-2a | 119.7566 | 12.10 |
| 010YR001HR | smf-2a | 120.0066 | 12.10 |
| 010YR001HR | smf-2a | 120.2566 | 12.10 |
| 010YR001HR | smf-2a | 120.5066 | 12.10 |
| 010YR001HR | smf-2a | 120.7566 | 12.10 |
| 010YR001HR | smf-2a | 121.0066 | 12.10 |
| 010YR001HR | smf-2a | 121.2566 | 12.10 |
| 010YR001HR | smf-2a | 121.5066 | 12.10 |
| 010YR001HR | smf-2a | 121.7566 | 12.10 |

**10yr-1hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR001HR | smf-2b | 72.7566 | 11.43 |
| 010YR001HR | smf-2b | 73.0066 | 11.43 |
| 010YR001HR | smf-2b | 73.2566 | 11.43 |
| 010YR001HR | smf-2b | 73.5066 | 11.42 |
| 010YR001HR | smf-2b | 73.7566 | 11.42 |
| 010YR001HR | smf-2b | 74.0066 | 11.42 |
| 010YR001HR | smf-2b | 74.2566 | 11.42 |
| 010YR001HR | smf-2b | 74.5066 | 11.42 |
| 010YR001HR | smf-2b | 74.7566 | 11.42 |
| 010YR001HR | smf-2b | 75.0066 | 11.42 |
| 010YR001HR | smf-2b | 75.2566 | 11.41 |
| 010YR001HR | smf-2b | 75.5066 | 11.41 |
| 010YR001HR | smf-2b | 75.7566 | 11.41 |
| 010YR001HR | smf-2b | 76.0066 | 11.41 |
| 010YR001HR | smf-2b | 76.2566 | 11.41 |
| 010YR001HR | smf-2b | 76.5066 | 11.41 |
| 010YR001HR | smf-2b | 76.7566 | 11.41 |
| 010YR001HR | smf-2b | 77.0066 | 11.41 |
| 010YR001HR | smf-2b | 77.2566 | 11.40 |
| 010YR001HR | smf-2b | 77.5066 | 11.40 |
| 010YR001HR | smf-2b | 77.7566 | 11.40 |
| 010YR001HR | smf-2b | 78.0066 | 11.40 |
| 010YR001HR | smf-2b | 78.2566 | 11.40 |
| 010YR001HR | smf-2b | 78.5066 | 11.40 |
| 010YR001HR | smf-2b | 78.7566 | 11.40 |
| 010YR001HR | smf-2b | 79.0066 | 11.40 |
| 010YR001HR | smf-2b | 79.2566 | 11.40 |
| 010YR001HR | smf-2b | 79.5066 | 11.40 |
| 010YR001HR | smf-2b | 79.7566 | 11.40 |
| 010YR001HR | smf-2b | 80.0066 | 11.40 |
| 010YR001HR | smf-2b | 80.2566 | 11.40 |
| 010YR001HR | smf-2b | 80.5066 | 11.40 |
| 010YR001HR | smf-2b | 80.7566 | 11.40 |
| 010YR001HR | smf-2b | 81.0066 | 11.40 |
| 010YR001HR | smf-2b | 81.2566 | 11.40 |
| 010YR001HR | smf-2b | 81.5066 | 11.40 |
| 010YR001HR | smf-2b | 81.7566 | 11.40 |
| 010YR001HR | smf-2b | 82.0066 | 11.40 |
| 010YR001HR | smf-2b | 82.2566 | 11.40 |
| 010YR001HR | smf-2b | 82.5066 | 11.40 |
| 010YR001HR | smf-2b | 82.7566 | 11.40 |
| 010YR001HR | smf-2b | 83.0066 | 11.40 |

**10yr-1hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR001HR | smf-2c | 97.0066 | 11.88 |
| 010YR001HR | smf-2c | 97.2566 | 11.88 |
| 010YR001HR | smf-2c | 97.5066 | 11.88 |
| 010YR001HR | smf-2c | 97.7566 | 11.88 |
| 010YR001HR | smf-2c | 98.0066 | 11.88 |
| 010YR001HR | smf-2c | 98.2566 | 11.88 |
| 010YR001HR | smf-2c | 98.5066 | 11.87 |
| 010YR001HR | smf-2c | 98.7566 | 11.87 |
| 010YR001HR | smf-2c | 99.0066 | 11.87 |
| 010YR001HR | smf-2c | 99.2566 | 11.87 |
| 010YR001HR | smf-2c | 99.5066 | 11.87 |
| 010YR001HR | smf-2c | 99.7566 | 11.87 |
| 010YR001HR | smf-2c | 100.0066 | 11.87 |
| 010YR001HR | smf-2c | 100.2566 | 11.87 |
| 010YR001HR | smf-2c | 100.5066 | 11.87 |
| 010YR001HR | smf-2c | 100.7566 | 11.87 |
| 010YR001HR | smf-2c | 101.0066 | 11.86 |
| 010YR001HR | smf-2c | 101.2566 | 11.86 |
| 010YR001HR | smf-2c | 101.5066 | 11.86 |
| 010YR001HR | smf-2c | 101.7566 | 11.86 |
| 010YR001HR | smf-2c | 102.0066 | 11.86 |
| 010YR001HR | smf-2c | 102.2566 | 11.86 |
| 010YR001HR | smf-2c | 102.5066 | 11.86 |
| 010YR001HR | smf-2c | 102.7566 | 11.86 |
| 010YR001HR | smf-2c | 103.0066 | 11.86 |
| 010YR001HR | smf-2c | 103.2566 | 11.86 |
| 010YR001HR | smf-2c | 103.5066 | 11.86 |
| 010YR001HR | smf-2c | 103.7566 | 11.86 |
| 010YR001HR | smf-2c | 104.0066 | 11.85 |
| 010YR001HR | smf-2c | 104.2566 | 11.85 |
| 010YR001HR | smf-2c | 104.5066 | 11.85 |
| 010YR001HR | smf-2c | 104.7566 | 11.85 |
| 010YR001HR | smf-2c | 105.0066 | 11.85 |
| 010YR001HR | smf-2c | 105.2566 | 11.85 |
| 010YR001HR | smf-2c | 105.5066 | 11.85 |
| 010YR001HR | smf-2c | 105.7566 | 11.85 |
| 010YR001HR | smf-2c | 106.0066 | 11.85 |
| 010YR001HR | smf-2c | 106.2566 | 11.85 |
| 010YR001HR | smf-2c | 106.5066 | 11.85 |
| 010YR001HR | smf-2c | 106.7566 | 11.85 |
| 010YR001HR | smf-2c | 107.0066 | 11.85 |
| 010YR001HR | smf-2c | 107.2566 | 11.85 |

**10yr-1hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR001HR | smf-3a | 79.2566 | 11.95 |
| 010YR001HR | smf-3a | 79.5066 | 11.95 |
| 010YR001HR | smf-3a | 79.7566 | 11.95 |
| 010YR001HR | smf-3a | 80.0066 | 11.95 |
| 010YR001HR | smf-3a | 80.2566 | 11.95 |
| 010YR001HR | smf-3a | 80.5066 | 11.94 |
| 010YR001HR | smf-3a | 80.7566 | 11.94 |
| 010YR001HR | smf-3a | 81.0066 | 11.94 |
| 010YR001HR | smf-3a | 81.2566 | 11.94 |
| 010YR001HR | smf-3a | 81.5066 | 11.94 |
| 010YR001HR | smf-3a | 81.7566 | 11.94 |
| 010YR001HR | smf-3a | 82.0066 | 11.94 |
| 010YR001HR | smf-3a | 82.2566 | 11.94 |
| 010YR001HR | smf-3a | 82.5066 | 11.93 |
| 010YR001HR | smf-3a | 82.7566 | 11.93 |
| 010YR001HR | smf-3a | 83.0066 | 11.93 |
| 010YR001HR | smf-3a | 83.2566 | 11.93 |
| 010YR001HR | smf-3a | 83.5066 | 11.93 |
| 010YR001HR | smf-3a | 83.7566 | 11.93 |
| 010YR001HR | smf-3a | 84.0066 | 11.93 |
| 010YR001HR | smf-3a | 84.2566 | 11.93 |
| 010YR001HR | smf-3a | 84.5066 | 11.92 |
| 010YR001HR | smf-3a | 84.7566 | 11.92 |
| 010YR001HR | smf-3a | 85.0066 | 11.92 |
| 010YR001HR | smf-3a | 85.2566 | 11.92 |
| 010YR001HR | smf-3a | 85.5066 | 11.92 |
| 010YR001HR | smf-3a | 85.7566 | 11.92 |
| 010YR001HR | smf-3a | 86.0066 | 11.92 |
| 010YR001HR | smf-3a | 86.2566 | 11.92 |
| 010YR001HR | smf-3a | 86.5066 | 11.92 |
| 010YR001HR | smf-3a | 86.7566 | 11.91 |
| 010YR001HR | smf-3a | 87.0066 | 11.91 |
| 010YR001HR | smf-3a | 87.2566 | 11.91 |
| 010YR001HR | smf-3a | 87.5066 | 11.91 |
| 010YR001HR | smf-3a | 87.7566 | 11.91 |
| 010YR001HR | smf-3a | 88.0066 | 11.91 |
| 010YR001HR | smf-3a | 88.2566 | 11.91 |
| 010YR001HR | smf-3a | 88.5066 | 11.91 |
| 010YR001HR | smf-3a | 88.7566 | 11.91 |
| 010YR001HR | smf-3a | 89.0066 | 11.91 |
| 010YR001HR | smf-3a | 89.2566 | 11.90 |
| 010YR001HR | smf-3a | 89.5066 | 11.90 |

**10yr-1hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR001HR | smf-3b | 103.5066 | 11.29 |
| 010YR001HR | smf-3b | 103.7566 | 11.29 |
| 010YR001HR | smf-3b | 104.0066 | 11.28 |
| 010YR001HR | smf-3b | 104.2566 | 11.28 |
| 010YR001HR | smf-3b | 104.5066 | 11.28 |
| 010YR001HR | smf-3b | 104.7566 | 11.28 |
| 010YR001HR | smf-3b | 105.0066 | 11.28 |
| 010YR001HR | smf-3b | 105.2566 | 11.28 |
| 010YR001HR | smf-3b | 105.5066 | 11.28 |
| 010YR001HR | smf-3b | 105.7566 | 11.28 |
| 010YR001HR | smf-3b | 106.0066 | 11.28 |
| 010YR001HR | smf-3b | 106.2566 | 11.28 |
| 010YR001HR | smf-3b | 106.5066 | 11.27 |
| 010YR001HR | smf-3b | 106.7566 | 11.27 |
| 010YR001HR | smf-3b | 107.0066 | 11.27 |
| 010YR001HR | smf-3b | 107.2566 | 11.27 |
| 010YR001HR | smf-3b | 107.5066 | 11.27 |
| 010YR001HR | smf-3b | 107.7566 | 11.27 |
| 010YR001HR | smf-3b | 108.0066 | 11.27 |
| 010YR001HR | smf-3b | 108.2566 | 11.27 |
| 010YR001HR | smf-3b | 108.5066 | 11.27 |
| 010YR001HR | smf-3b | 108.7566 | 11.27 |
| 010YR001HR | smf-3b | 109.0066 | 11.27 |
| 010YR001HR | smf-3b | 109.2566 | 11.26 |
| 010YR001HR | smf-3b | 109.5066 | 11.26 |
| 010YR001HR | smf-3b | 109.7566 | 11.26 |
| 010YR001HR | smf-3b | 110.0066 | 11.26 |
| 010YR001HR | smf-3b | 110.2566 | 11.26 |
| 010YR001HR | smf-3b | 110.5066 | 11.26 |
| 010YR001HR | smf-3b | 110.7566 | 11.26 |
| 010YR001HR | smf-3b | 111.0066 | 11.26 |
| 010YR001HR | smf-3b | 111.2566 | 11.26 |
| 010YR001HR | smf-3b | 111.5066 | 11.26 |
| 010YR001HR | smf-3b | 111.7566 | 11.26 |
| 010YR001HR | smf-3b | 112.0066 | 11.26 |
| 010YR001HR | smf-3b | 112.2566 | 11.25 |
| 010YR001HR | smf-3b | 112.5066 | 11.25 |
| 010YR001HR | smf-3b | 112.7566 | 11.25 |
| 010YR001HR | smf-3b | 113.0066 | 11.25 |
| 010YR001HR | smf-3b | 113.2566 | 11.25 |
| 010YR001HR | smf-3b | 113.5066 | 11.25 |
| 010YR001HR | smf-3b | 113.7566 | 11.25 |

**10yr-1hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR002HR | smf-1a | 54.2525 | 12.47 |
| 010YR002HR | smf-1a | 54.5025 | 12.46 |
| 010YR002HR | smf-1a | 54.7525 | 12.46 |
| 010YR002HR | smf-1a | 55.0025 | 12.46 |
| 010YR002HR | smf-1a | 55.2525 | 12.46 |
| 010YR002HR | smf-1a | 55.5025 | 12.46 |
| 010YR002HR | smf-1a | 55.7525 | 12.46 |
| 010YR002HR | smf-1a | 56.0025 | 12.46 |
| 010YR002HR | smf-1a | 56.2525 | 12.46 |
| 010YR002HR | smf-1a | 56.5025 | 12.46 |
| 010YR002HR | smf-1a | 56.7525 | 12.45 |
| 010YR002HR | smf-1a | 57.0025 | 12.45 |
| 010YR002HR | smf-1a | 57.2525 | 12.45 |
| 010YR002HR | smf-1a | 57.5025 | 12.45 |
| 010YR002HR | smf-1a | 57.7525 | 12.45 |
| 010YR002HR | smf-1a | 58.0025 | 12.45 |
| 010YR002HR | smf-1a | 58.2525 | 12.45 |
| 010YR002HR | smf-1a | 58.5025 | 12.45 |
| 010YR002HR | smf-1a | 58.7525 | 12.45 |
| 010YR002HR | smf-1a | 59.0025 | 12.45 |
| 010YR002HR | smf-1a | 59.2525 | 12.45 |
| 010YR002HR | smf-1a | 59.5025 | 12.45 |
| 010YR002HR | smf-1a | 59.7525 | 12.45 |
| 010YR002HR | smf-1a | 60.0025 | 12.45 |
| 010YR002HR | smf-1a | 60.2525 | 12.45 |
| 010YR002HR | smf-1a | 60.5025 | 12.45 |
| 010YR002HR | smf-1a | 60.7525 | 12.45 |
| 010YR002HR | smf-1a | 61.0025 | 12.45 |
| 010YR002HR | smf-1a | 61.2525 | 12.45 |
| 010YR002HR | smf-1a | 61.5025 | 12.45 |
| 010YR002HR | smf-1a | 61.7525 | 12.45 |
| 010YR002HR | smf-1a | 62.0025 | 12.45 |
| 010YR002HR | smf-1a | 62.2525 | 12.45 |
| 010YR002HR | smf-1a | 62.5025 | 12.45 |
| 010YR002HR | smf-1a | 62.7525 | 12.45 |
| 010YR002HR | smf-1a | 63.0025 | 12.45 |
| 010YR002HR | smf-1a | 63.2525 | 12.45 |
| 010YR002HR | smf-1a | 63.5025 | 12.45 |
| 010YR002HR | smf-1a | 63.7525 | 12.45 |
| 010YR002HR | smf-1a | 64.0025 | 12.45 |
| 010YR002HR | smf-1a | 64.2525 | 12.45 |
| 010YR002HR | smf-1a | 64.5025 | 12.45 |

**10yr-2hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR002HR | smf-1b | 67.0025 | 13.01 |
| 010YR002HR | smf-1b | 67.2525 | 13.01 |
| 010YR002HR | smf-1b | 67.5025 | 13.00 |
| 010YR002HR | smf-1b | 67.7525 | 13.00 |
| 010YR002HR | smf-1b | 68.0025 | 13.00 |
| 010YR002HR | smf-1b | 68.2525 | 13.00 |
| 010YR002HR | smf-1b | 68.5025 | 13.00 |
| 010YR002HR | smf-1b | 68.7525 | 13.00 |
| 010YR002HR | smf-1b | 69.0025 | 13.00 |
| 010YR002HR | smf-1b | 69.2525 | 13.00 |
| 010YR002HR | smf-1b | 69.5025 | 13.00 |
| 010YR002HR | smf-1b | 69.7525 | 13.00 |
| 010YR002HR | smf-1b | 70.0025 | 13.00 |
| 010YR002HR | smf-1b | 70.2525 | 13.00 |
| 010YR002HR | smf-1b | 70.5025 | 13.00 |
| 010YR002HR | smf-1b | 70.7525 | 13.00 |
| 010YR002HR | smf-1b | 71.0025 | 13.00 |
| 010YR002HR | smf-1b | 71.2525 | 13.00 |
| 010YR002HR | smf-1b | 71.5025 | 13.00 |
| 010YR002HR | smf-1b | 71.7525 | 13.00 |
| 010YR002HR | smf-1b | 72.0025 | 13.00 |
| 010YR002HR | smf-1b | 72.2525 | 13.00 |
| 010YR002HR | smf-1b | 72.5025 | 13.00 |
| 010YR002HR | smf-1b | 72.7525 | 13.00 |
| 010YR002HR | smf-1b | 73.0025 | 13.00 |
| 010YR002HR | smf-1b | 73.2525 | 13.00 |
| 010YR002HR | smf-1b | 73.5025 | 13.00 |
| 010YR002HR | smf-1b | 73.7525 | 13.00 |
| 010YR002HR | smf-1b | 74.0025 | 13.00 |
| 010YR002HR | smf-1b | 74.2525 | 13.00 |
| 010YR002HR | smf-1b | 74.5025 | 13.00 |
| 010YR002HR | smf-1b | 74.7525 | 13.00 |
| 010YR002HR | smf-1b | 75.0025 | 13.00 |
| 010YR002HR | smf-1b | 75.2525 | 13.00 |
| 010YR002HR | smf-1b | 75.5025 | 13.00 |
| 010YR002HR | smf-1b | 75.7525 | 13.00 |
| 010YR002HR | smf-1b | 76.0025 | 13.00 |
| 010YR002HR | smf-1b | 76.2525 | 13.00 |
| 010YR002HR | smf-1b | 76.5025 | 13.00 |
| 010YR002HR | smf-1b | 76.7525 | 13.00 |
| 010YR002HR | smf-1b | 77.0025 | 13.00 |
| 010YR002HR | smf-1b | 77.2525 | 13.00 |

**10yr-2hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR002HR | smf-2a | 132.2525 | 12.11 |
| 010YR002HR | smf-2a | 132.5025 | 12.11 |
| 010YR002HR | smf-2a | 132.7525 | 12.11 |
| 010YR002HR | smf-2a | 133.0025 | 12.11 |
| 010YR002HR | smf-2a | 133.2525 | 12.11 |
| 010YR002HR | smf-2a | 133.5025 | 12.11 |
| 010YR002HR | smf-2a | 133.7525 | 12.11 |
| 010YR002HR | smf-2a | 134.0025 | 12.11 |
| 010YR002HR | smf-2a | 134.2525 | 12.11 |
| 010YR002HR | smf-2a | 134.5025 | 12.10 |
| 010YR002HR | smf-2a | 134.7525 | 12.10 |
| 010YR002HR | smf-2a | 135.0025 | 12.10 |
| 010YR002HR | smf-2a | 135.2525 | 12.10 |
| 010YR002HR | smf-2a | 135.5025 | 12.10 |
| 010YR002HR | smf-2a | 135.7525 | 12.10 |
| 010YR002HR | smf-2a | 136.0025 | 12.10 |
| 010YR002HR | smf-2a | 136.2525 | 12.10 |
| 010YR002HR | smf-2a | 136.5025 | 12.10 |
| 010YR002HR | smf-2a | 136.7525 | 12.10 |
| 010YR002HR | smf-2a | 137.0025 | 12.10 |
| 010YR002HR | smf-2a | 137.2525 | 12.10 |
| 010YR002HR | smf-2a | 137.5025 | 12.10 |
| 010YR002HR | smf-2a | 137.7525 | 12.10 |
| 010YR002HR | smf-2a | 138.0025 | 12.10 |
| 010YR002HR | smf-2a | 138.2525 | 12.10 |
| 010YR002HR | smf-2a | 138.5025 | 12.10 |
| 010YR002HR | smf-2a | 138.7525 | 12.10 |
| 010YR002HR | smf-2a | 139.0025 | 12.10 |
| 010YR002HR | smf-2a | 139.2525 | 12.10 |
| 010YR002HR | smf-2a | 139.5025 | 12.10 |
| 010YR002HR | smf-2a | 139.7525 | 12.10 |
| 010YR002HR | smf-2a | 140.0025 | 12.10 |
| 010YR002HR | smf-2a | 140.2525 | 12.10 |
| 010YR002HR | smf-2a | 140.5025 | 12.10 |
| 010YR002HR | smf-2a | 140.7525 | 12.10 |
| 010YR002HR | smf-2a | 141.0025 | 12.10 |
| 010YR002HR | smf-2a | 141.2525 | 12.10 |
| 010YR002HR | smf-2a | 141.5025 | 12.10 |
| 010YR002HR | smf-2a | 141.7525 | 12.10 |
| 010YR002HR | smf-2a | 142.0025 | 12.10 |
| 010YR002HR | smf-2a | 142.2525 | 12.10 |
| 010YR002HR | smf-2a | 142.5025 | 12.10 |

**10yr-2hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR002HR | smf-2b | 92.5025 | 11.42 |
| 010YR002HR | smf-2b | 92.7525 | 11.42 |
| 010YR002HR | smf-2b | 93.0025 | 11.42 |
| 010YR002HR | smf-2b | 93.2525 | 11.42 |
| 010YR002HR | smf-2b | 93.5025 | 11.42 |
| 010YR002HR | smf-2b | 93.7525 | 11.42 |
| 010YR002HR | smf-2b | 94.0025 | 11.42 |
| 010YR002HR | smf-2b | 94.2525 | 11.42 |
| 010YR002HR | smf-2b | 94.5025 | 11.41 |
| 010YR002HR | smf-2b | 94.7525 | 11.41 |
| 010YR002HR | smf-2b | 95.0025 | 11.41 |
| 010YR002HR | smf-2b | 95.2525 | 11.41 |
| 010YR002HR | smf-2b | 95.5025 | 11.41 |
| 010YR002HR | smf-2b | 95.7525 | 11.41 |
| 010YR002HR | smf-2b | 96.0025 | 11.41 |
| 010YR002HR | smf-2b | 96.2525 | 11.41 |
| 010YR002HR | smf-2b | 96.5025 | 11.41 |
| 010YR002HR | smf-2b | 96.7525 | 11.41 |
| 010YR002HR | smf-2b | 97.0025 | 11.40 |
| 010YR002HR | smf-2b | 97.2525 | 11.40 |
| 010YR002HR | smf-2b | 97.5025 | 11.40 |
| 010YR002HR | smf-2b | 97.7525 | 11.40 |
| 010YR002HR | smf-2b | 98.0025 | 11.40 |
| 010YR002HR | smf-2b | 98.2525 | 11.40 |
| 010YR002HR | smf-2b | 98.5025 | 11.40 |
| 010YR002HR | smf-2b | 98.7525 | 11.40 |
| 010YR002HR | smf-2b | 99.0025 | 11.40 |
| 010YR002HR | smf-2b | 99.2525 | 11.40 |
| 010YR002HR | smf-2b | 99.5025 | 11.40 |
| 010YR002HR | smf-2b | 99.7525 | 11.40 |
| 010YR002HR | smf-2b | 100.0025 | 11.40 |
| 010YR002HR | smf-2b | 100.2525 | 11.40 |
| 010YR002HR | smf-2b | 100.5025 | 11.40 |
| 010YR002HR | smf-2b | 100.7525 | 11.40 |
| 010YR002HR | smf-2b | 101.0025 | 11.40 |
| 010YR002HR | smf-2b | 101.2525 | 11.40 |
| 010YR002HR | smf-2b | 101.5025 | 11.40 |
| 010YR002HR | smf-2b | 101.7525 | 11.40 |
| 010YR002HR | smf-2b | 102.0025 | 11.40 |
| 010YR002HR | smf-2b | 102.2525 | 11.40 |
| 010YR002HR | smf-2b | 102.5025 | 11.40 |
| 010YR002HR | smf-2b | 102.7525 | 11.40 |

**10yr-2hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR002HR | smf-2c | 115.7525 | 11.88 |
| 010YR002HR | smf-2c | 116.0025 | 11.88 |
| 010YR002HR | smf-2c | 116.2525 | 11.88 |
| 010YR002HR | smf-2c | 116.5025 | 11.88 |
| 010YR002HR | smf-2c | 116.7525 | 11.88 |
| 010YR002HR | smf-2c | 117.0025 | 11.88 |
| 010YR002HR | smf-2c | 117.2525 | 11.88 |
| 010YR002HR | smf-2c | 117.5025 | 11.88 |
| 010YR002HR | smf-2c | 117.7525 | 11.88 |
| 010YR002HR | smf-2c | 118.0025 | 11.87 |
| 010YR002HR | smf-2c | 118.2525 | 11.87 |
| 010YR002HR | smf-2c | 118.5025 | 11.87 |
| 010YR002HR | smf-2c | 118.7525 | 11.87 |
| 010YR002HR | smf-2c | 119.0025 | 11.87 |
| 010YR002HR | smf-2c | 119.2525 | 11.87 |
| 010YR002HR | smf-2c | 119.5025 | 11.87 |
| 010YR002HR | smf-2c | 119.7525 | 11.87 |
| 010YR002HR | smf-2c | 120.0025 | 11.87 |
| 010YR002HR | smf-2c | 120.2525 | 11.87 |
| 010YR002HR | smf-2c | 120.5025 | 11.87 |
| 010YR002HR | smf-2c | 120.7525 | 11.87 |
| 010YR002HR | smf-2c | 121.0025 | 11.86 |
| 010YR002HR | smf-2c | 121.2525 | 11.86 |
| 010YR002HR | smf-2c | 121.5025 | 11.86 |
| 010YR002HR | smf-2c | 121.7525 | 11.86 |
| 010YR002HR | smf-2c | 122.0025 | 11.86 |
| 010YR002HR | smf-2c | 122.2525 | 11.86 |
| 010YR002HR | smf-2c | 122.5025 | 11.86 |
| 010YR002HR | smf-2c | 122.7525 | 11.86 |
| 010YR002HR | smf-2c | 123.0025 | 11.86 |
| 010YR002HR | smf-2c | 123.2525 | 11.86 |
| 010YR002HR | smf-2c | 123.5025 | 11.86 |
| 010YR002HR | smf-2c | 123.7525 | 11.86 |
| 010YR002HR | smf-2c | 124.0025 | 11.86 |
| 010YR002HR | smf-2c | 124.2525 | 11.85 |
| 010YR002HR | smf-2c | 124.5025 | 11.85 |
| 010YR002HR | smf-2c | 124.7525 | 11.85 |
| 010YR002HR | smf-2c | 125.0025 | 11.85 |
| 010YR002HR | smf-2c | 125.2525 | 11.85 |
| 010YR002HR | smf-2c | 125.5025 | 11.85 |
| 010YR002HR | smf-2c | 125.7525 | 11.85 |
| 010YR002HR | smf-2c | 126.0025 | 11.85 |

**10yr-2hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR002HR | smf-3a | 107.5025 | 11.91 |
| 010YR002HR | smf-3a | 107.7525 | 11.91 |
| 010YR002HR | smf-3a | 108.0025 | 11.91 |
| 010YR002HR | smf-3a | 108.2525 | 11.91 |
| 010YR002HR | smf-3a | 108.5025 | 11.90 |
| 010YR002HR | smf-3a | 108.7525 | 11.90 |
| 010YR002HR | smf-3a | 109.0025 | 11.90 |
| 010YR002HR | smf-3a | 109.2525 | 11.90 |
| 010YR002HR | smf-3a | 109.5025 | 11.90 |
| 010YR002HR | smf-3a | 109.7525 | 11.90 |
| 010YR002HR | smf-3a | 110.0025 | 11.90 |
| 010YR002HR | smf-3a | 110.2525 | 11.90 |
| 010YR002HR | smf-3a | 110.5025 | 11.90 |
| 010YR002HR | smf-3a | 110.7525 | 11.90 |
| 010YR002HR | smf-3a | 111.0025 | 11.90 |
| 010YR002HR | smf-3a | 111.2525 | 11.90 |
| 010YR002HR | smf-3a | 111.5025 | 11.90 |
| 010YR002HR | smf-3a | 111.7525 | 11.90 |
| 010YR002HR | smf-3a | 112.0025 | 11.90 |
| 010YR002HR | smf-3a | 112.2525 | 11.90 |
| 010YR002HR | smf-3a | 112.5025 | 11.90 |
| 010YR002HR | smf-3a | 112.7525 | 11.90 |
| 010YR002HR | smf-3a | 113.0025 | 11.90 |
| 010YR002HR | smf-3a | 113.2525 | 11.90 |
| 010YR002HR | smf-3a | 113.5025 | 11.90 |
| 010YR002HR | smf-3a | 113.7525 | 11.90 |
| 010YR002HR | smf-3a | 114.0025 | 11.90 |
| 010YR002HR | smf-3a | 114.2525 | 11.90 |
| 010YR002HR | smf-3a | 114.5025 | 11.90 |
| 010YR002HR | smf-3a | 114.7525 | 11.90 |
| 010YR002HR | smf-3a | 115.0025 | 11.90 |
| 010YR002HR | smf-3a | 115.2525 | 11.90 |
| 010YR002HR | smf-3a | 115.5025 | 11.90 |
| 010YR002HR | smf-3a | 115.7525 | 11.90 |
| 010YR002HR | smf-3a | 116.0025 | 11.90 |
| 010YR002HR | smf-3a | 116.2525 | 11.90 |
| 010YR002HR | smf-3a | 116.5025 | 11.90 |
| 010YR002HR | smf-3a | 116.7525 | 11.90 |
| 010YR002HR | smf-3a | 117.0025 | 11.90 |
| 010YR002HR | smf-3a | 117.2525 | 11.90 |
| 010YR002HR | smf-3a | 117.5025 | 11.90 |
| 010YR002HR | smf-3a | 117.7525 | 11.90 |

**10yr-2hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR002HR | smf-3b | 130.7525 | 11.27 |
| 010YR002HR | smf-3b | 131.0025 | 11.27 |
| 010YR002HR | smf-3b | 131.2525 | 11.27 |
| 010YR002HR | smf-3b | 131.5025 | 11.27 |
| 010YR002HR | smf-3b | 131.7525 | 11.27 |
| 010YR002HR | smf-3b | 132.0025 | 11.27 |
| 010YR002HR | smf-3b | 132.2525 | 11.27 |
| 010YR002HR | smf-3b | 132.5025 | 11.27 |
| 010YR002HR | smf-3b | 132.7525 | 11.27 |
| 010YR002HR | smf-3b | 133.0025 | 11.27 |
| 010YR002HR | smf-3b | 133.2525 | 11.26 |
| 010YR002HR | smf-3b | 133.5025 | 11.26 |
| 010YR002HR | smf-3b | 133.7525 | 11.26 |
| 010YR002HR | smf-3b | 134.0025 | 11.26 |
| 010YR002HR | smf-3b | 134.2525 | 11.26 |
| 010YR002HR | smf-3b | 134.5025 | 11.26 |
| 010YR002HR | smf-3b | 134.7525 | 11.26 |
| 010YR002HR | smf-3b | 135.0025 | 11.26 |
| 010YR002HR | smf-3b | 135.2525 | 11.26 |
| 010YR002HR | smf-3b | 135.5025 | 11.26 |
| 010YR002HR | smf-3b | 135.7525 | 11.26 |
| 010YR002HR | smf-3b | 136.0025 | 11.26 |
| 010YR002HR | smf-3b | 136.2525 | 11.26 |
| 010YR002HR | smf-3b | 136.5025 | 11.26 |
| 010YR002HR | smf-3b | 136.7525 | 11.25 |
| 010YR002HR | smf-3b | 137.0025 | 11.25 |
| 010YR002HR | smf-3b | 137.2525 | 11.25 |
| 010YR002HR | smf-3b | 137.5025 | 11.25 |
| 010YR002HR | smf-3b | 137.7525 | 11.25 |
| 010YR002HR | smf-3b | 138.0025 | 11.25 |
| 010YR002HR | smf-3b | 138.2525 | 11.25 |
| 010YR002HR | smf-3b | 138.5025 | 11.25 |
| 010YR002HR | smf-3b | 138.7525 | 11.25 |
| 010YR002HR | smf-3b | 139.0025 | 11.25 |
| 010YR002HR | smf-3b | 139.2525 | 11.25 |
| 010YR002HR | smf-3b | 139.5025 | 11.25 |
| 010YR002HR | smf-3b | 139.7525 | 11.25 |
| 010YR002HR | smf-3b | 140.0025 | 11.25 |
| 010YR002HR | smf-3b | 140.2525 | 11.25 |
| 010YR002HR | smf-3b | 140.5025 | 11.25 |
| 010YR002HR | smf-3b | 140.7525 | 11.25 |
| 010YR002HR | smf-3b | 141.0025 | 11.25 |

**10yr-2hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR004HR | smf-1a | 112.0049 | 12.48 |
| 010YR004HR | smf-1a | 112.2549 | 12.48 |
| 010YR004HR | smf-1a | 112.5049 | 12.47 |
| 010YR004HR | smf-1a | 112.7549 | 12.47 |
| 010YR004HR | smf-1a | 113.0049 | 12.47 |
| 010YR004HR | smf-1a | 113.2549 | 12.47 |
| 010YR004HR | smf-1a | 113.5049 | 12.47 |
| 010YR004HR | smf-1a | 113.7549 | 12.47 |
| 010YR004HR | smf-1a | 114.0049 | 12.47 |
| 010YR004HR | smf-1a | 114.2549 | 12.47 |
| 010YR004HR | smf-1a | 114.5049 | 12.47 |
| 010YR004HR | smf-1a | 114.7549 | 12.47 |
| 010YR004HR | smf-1a | 115.0049 | 12.47 |
| 010YR004HR | smf-1a | 115.2549 | 12.47 |
| 010YR004HR | smf-1a | 115.5049 | 12.47 |
| 010YR004HR | smf-1a | 115.7549 | 12.46 |
| 010YR004HR | smf-1a | 116.0049 | 12.46 |
| 010YR004HR | smf-1a | 116.2549 | 12.46 |
| 010YR004HR | smf-1a | 116.5049 | 12.46 |
| 010YR004HR | smf-1a | 116.7549 | 12.46 |
| 010YR004HR | smf-1a | 117.0049 | 12.46 |
| 010YR004HR | smf-1a | 117.2549 | 12.46 |
| 010YR004HR | smf-1a | 117.5049 | 12.46 |
| 010YR004HR | smf-1a | 117.7549 | 12.46 |
| 010YR004HR | smf-1a | 118.0049 | 12.46 |
| 010YR004HR | smf-1a | 118.2549 | 12.46 |
| 010YR004HR | smf-1a | 118.5049 | 12.46 |
| 010YR004HR | smf-1a | 118.7549 | 12.46 |
| 010YR004HR | smf-1a | 119.0049 | 12.46 |
| 010YR004HR | smf-1a | 119.2549 | 12.45 |
| 010YR004HR | smf-1a | 119.5049 | 12.45 |
| 010YR004HR | smf-1a | 119.7549 | 12.45 |
| 010YR004HR | smf-1a | 120.0049 | 12.45 |
| 010YR004HR | smf-1a | 120.2549 | 12.45 |
| 010YR004HR | smf-1a | 120.5049 | 12.45 |
| 010YR004HR | smf-1a | 120.7549 | 12.45 |
| 010YR004HR | smf-1a | 121.0049 | 12.45 |
| 010YR004HR | smf-1a | 121.2549 | 12.45 |
| 010YR004HR | smf-1a | 121.5049 | 12.45 |
| 010YR004HR | smf-1a | 121.7549 | 12.45 |
| 010YR004HR | smf-1a | 122.0049 | 12.45 |
| 010YR004HR | smf-1a | 122.2549 | 12.45 |

**10yr-4hr SMF-1a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR004HR | smf-1b | 80.7549 | 13.03 |
| 010YR004HR | smf-1b | 81.0049 | 13.03 |
| 010YR004HR | smf-1b | 81.2549 | 13.03 |
| 010YR004HR | smf-1b | 81.5049 | 13.02 |
| 010YR004HR | smf-1b | 81.7549 | 13.02 |
| 010YR004HR | smf-1b | 82.0049 | 13.02 |
| 010YR004HR | smf-1b | 82.2549 | 13.02 |
| 010YR004HR | smf-1b | 82.5049 | 13.02 |
| 010YR004HR | smf-1b | 82.7549 | 13.02 |
| 010YR004HR | smf-1b | 83.0049 | 13.02 |
| 010YR004HR | smf-1b | 83.2549 | 13.02 |
| 010YR004HR | smf-1b | 83.5049 | 13.01 |
| 010YR004HR | smf-1b | 83.7549 | 13.01 |
| 010YR004HR | smf-1b | 84.0049 | 13.01 |
| 010YR004HR | smf-1b | 84.2549 | 13.01 |
| 010YR004HR | smf-1b | 84.5049 | 13.01 |
| 010YR004HR | smf-1b | 84.7549 | 13.01 |
| 010YR004HR | smf-1b | 85.0049 | 13.01 |
| 010YR004HR | smf-1b | 85.2549 | 13.01 |
| 010YR004HR | smf-1b | 85.5049 | 13.01 |
| 010YR004HR | smf-1b | 85.7549 | 13.00 |
| 010YR004HR | smf-1b | 86.0049 | 13.00 |
| 010YR004HR | smf-1b | 86.2549 | 13.00 |
| 010YR004HR | smf-1b | 86.5049 | 13.00 |
| 010YR004HR | smf-1b | 86.7549 | 13.00 |
| 010YR004HR | smf-1b | 87.0049 | 13.00 |
| 010YR004HR | smf-1b | 87.2549 | 13.00 |
| 010YR004HR | smf-1b | 87.5049 | 13.00 |
| 010YR004HR | smf-1b | 87.7549 | 13.00 |
| 010YR004HR | smf-1b | 88.0049 | 13.00 |
| 010YR004HR | smf-1b | 88.2549 | 13.00 |
| 010YR004HR | smf-1b | 88.5049 | 13.00 |
| 010YR004HR | smf-1b | 88.7549 | 13.00 |
| 010YR004HR | smf-1b | 89.0049 | 13.00 |
| 010YR004HR | smf-1b | 89.2549 | 13.00 |
| 010YR004HR | smf-1b | 89.5049 | 13.00 |
| 010YR004HR | smf-1b | 89.7549 | 13.00 |
| 010YR004HR | smf-1b | 90.0049 | 13.00 |
| 010YR004HR | smf-1b | 90.2549 | 13.00 |
| 010YR004HR | smf-1b | 90.5049 | 13.00 |
| 010YR004HR | smf-1b | 90.7549 | 13.00 |
| 010YR004HR | smf-1b | 91.0049 | 13.00 |

**10yr-4hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR004HR | smf-2a | 144.0049 | 12.13 |
| 010YR004HR | smf-2a | 144.2549 | 12.13 |
| 010YR004HR | smf-2a | 144.5049 | 12.13 |
| 010YR004HR | smf-2a | 144.7549 | 12.12 |
| 010YR004HR | smf-2a | 145.0049 | 12.12 |
| 010YR004HR | smf-2a | 145.2549 | 12.12 |
| 010YR004HR | smf-2a | 145.5049 | 12.12 |
| 010YR004HR | smf-2a | 145.7549 | 12.12 |
| 010YR004HR | smf-2a | 146.0049 | 12.12 |
| 010YR004HR | smf-2a | 146.2549 | 12.12 |
| 010YR004HR | smf-2a | 146.5049 | 12.12 |
| 010YR004HR | smf-2a | 146.7549 | 12.12 |
| 010YR004HR | smf-2a | 147.0049 | 12.12 |
| 010YR004HR | smf-2a | 147.2549 | 12.12 |
| 010YR004HR | smf-2a | 147.5049 | 12.12 |
| 010YR004HR | smf-2a | 147.7549 | 12.12 |
| 010YR004HR | smf-2a | 148.0049 | 12.12 |
| 010YR004HR | smf-2a | 148.2549 | 12.12 |
| 010YR004HR | smf-2a | 148.5049 | 12.12 |
| 010YR004HR | smf-2a | 148.7549 | 12.12 |
| 010YR004HR | smf-2a | 149.0049 | 12.12 |
| 010YR004HR | smf-2a | 149.2549 | 12.11 |
| 010YR004HR | smf-2a | 149.5049 | 12.11 |
| 010YR004HR | smf-2a | 149.7549 | 12.11 |
| 010YR004HR | smf-2a | 150.0049 | 12.11 |
| 010YR004HR | smf-2a | 150.2549 | 12.11 |
| 010YR004HR | smf-2a | 150.5049 | 12.11 |
| 010YR004HR | smf-2a | 150.7549 | 12.11 |
| 010YR004HR | smf-2a | 151.0049 | 12.11 |
| 010YR004HR | smf-2a | 151.2549 | 12.11 |
| 010YR004HR | smf-2a | 151.5049 | 12.11 |
| 010YR004HR | smf-2a | 151.7549 | 12.11 |
| 010YR004HR | smf-2a | 152.0049 | 12.11 |
| 010YR004HR | smf-2a | 152.2549 | 12.11 |
| 010YR004HR | smf-2a | 152.5049 | 12.11 |
| 010YR004HR | smf-2a | 152.7549 | 12.11 |
| 010YR004HR | smf-2a | 153.0049 | 12.11 |
| 010YR004HR | smf-2a | 153.2549 | 12.11 |
| 010YR004HR | smf-2a | 153.5049 | 12.11 |
| 010YR004HR | smf-2a | 153.7549 | 12.10 |
| 010YR004HR | smf-2a | 154.0049 | 12.10 |
| 010YR004HR | smf-2a | 154.2549 | 12.10 |

**10yr-4hr SMF-2a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR004HR | smf-2b | 102.2549 | 11.44 |
| 010YR004HR | smf-2b | 102.5049 | 11.44 |
| 010YR004HR | smf-2b | 102.7549 | 11.44 |
| 010YR004HR | smf-2b | 103.0049 | 11.43 |
| 010YR004HR | smf-2b | 103.2549 | 11.43 |
| 010YR004HR | smf-2b | 103.5049 | 11.43 |
| 010YR004HR | smf-2b | 103.7549 | 11.43 |
| 010YR004HR | smf-2b | 104.0049 | 11.43 |
| 010YR004HR | smf-2b | 104.2549 | 11.43 |
| 010YR004HR | smf-2b | 104.5049 | 11.43 |
| 010YR004HR | smf-2b | 104.7549 | 11.43 |
| 010YR004HR | smf-2b | 105.0049 | 11.43 |
| 010YR004HR | smf-2b | 105.2549 | 11.43 |
| 010YR004HR | smf-2b | 105.5049 | 11.42 |
| 010YR004HR | smf-2b | 105.7549 | 11.42 |
| 010YR004HR | smf-2b | 106.0049 | 11.42 |
| 010YR004HR | smf-2b | 106.2549 | 11.42 |
| 010YR004HR | smf-2b | 106.5049 | 11.42 |
| 010YR004HR | smf-2b | 106.7549 | 11.42 |
| 010YR004HR | smf-2b | 107.0049 | 11.42 |
| 010YR004HR | smf-2b | 107.2549 | 11.42 |
| 010YR004HR | smf-2b | 107.5049 | 11.42 |
| 010YR004HR | smf-2b | 107.7549 | 11.42 |
| 010YR004HR | smf-2b | 108.0049 | 11.42 |
| 010YR004HR | smf-2b | 108.2549 | 11.41 |
| 010YR004HR | smf-2b | 108.5049 | 11.41 |
| 010YR004HR | smf-2b | 108.7549 | 11.41 |
| 010YR004HR | smf-2b | 109.0049 | 11.41 |
| 010YR004HR | smf-2b | 109.2549 | 11.41 |
| 010YR004HR | smf-2b | 109.5049 | 11.41 |
| 010YR004HR | smf-2b | 109.7549 | 11.41 |
| 010YR004HR | smf-2b | 110.0049 | 11.41 |
| 010YR004HR | smf-2b | 110.2549 | 11.41 |
| 010YR004HR | smf-2b | 110.5049 | 11.41 |
| 010YR004HR | smf-2b | 110.7549 | 11.41 |
| 010YR004HR | smf-2b | 111.0049 | 11.40 |
| 010YR004HR | smf-2b | 111.2549 | 11.40 |
| 010YR004HR | smf-2b | 111.5049 | 11.40 |
| 010YR004HR | smf-2b | 111.7549 | 11.40 |
| 010YR004HR | smf-2b | 112.0049 | 11.40 |
| 010YR004HR | smf-2b | 112.2549 | 11.40 |
| 010YR004HR | smf-2b | 112.5049 | 11.40 |

**10yr-4hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR004HR | smf-2c | 134.0049 | 11.88 |
| 010YR004HR | smf-2c | 134.2549 | 11.88 |
| 010YR004HR | smf-2c | 134.5049 | 11.88 |
| 010YR004HR | smf-2c | 134.7549 | 11.88 |
| 010YR004HR | smf-2c | 135.0049 | 11.87 |
| 010YR004HR | smf-2c | 135.2549 | 11.87 |
| 010YR004HR | smf-2c | 135.5049 | 11.87 |
| 010YR004HR | smf-2c | 135.7549 | 11.87 |
| 010YR004HR | smf-2c | 136.0049 | 11.87 |
| 010YR004HR | smf-2c | 136.2549 | 11.87 |
| 010YR004HR | smf-2c | 136.5049 | 11.87 |
| 010YR004HR | smf-2c | 136.7549 | 11.87 |
| 010YR004HR | smf-2c | 137.0049 | 11.87 |
| 010YR004HR | smf-2c | 137.2549 | 11.87 |
| 010YR004HR | smf-2c | 137.5049 | 11.87 |
| 010YR004HR | smf-2c | 137.7549 | 11.87 |
| 010YR004HR | smf-2c | 138.0049 | 11.87 |
| 010YR004HR | smf-2c | 138.2549 | 11.87 |
| 010YR004HR | smf-2c | 138.5049 | 11.86 |
| 010YR004HR | smf-2c | 138.7549 | 11.86 |
| 010YR004HR | smf-2c | 139.0049 | 11.86 |
| 010YR004HR | smf-2c | 139.2549 | 11.86 |
| 010YR004HR | smf-2c | 139.5049 | 11.86 |
| 010YR004HR | smf-2c | 139.7549 | 11.86 |
| 010YR004HR | smf-2c | 140.0049 | 11.86 |
| 010YR004HR | smf-2c | 140.2549 | 11.86 |
| 010YR004HR | smf-2c | 140.5049 | 11.86 |
| 010YR004HR | smf-2c | 140.7549 | 11.86 |
| 010YR004HR | smf-2c | 141.0049 | 11.86 |
| 010YR004HR | smf-2c | 141.2549 | 11.86 |
| 010YR004HR | smf-2c | 141.5049 | 11.86 |
| 010YR004HR | smf-2c | 141.7549 | 11.86 |
| 010YR004HR | smf-2c | 142.0049 | 11.86 |
| 010YR004HR | smf-2c | 142.2549 | 11.85 |
| 010YR004HR | smf-2c | 142.5049 | 11.85 |
| 010YR004HR | smf-2c | 142.7549 | 11.85 |
| 010YR004HR | smf-2c | 143.0049 | 11.85 |
| 010YR004HR | smf-2c | 143.2549 | 11.85 |
| 010YR004HR | smf-2c | 143.5049 | 11.85 |
| 010YR004HR | smf-2c | 143.7549 | 11.85 |
| 010YR004HR | smf-2c | 144.0049 | 11.85 |
| 010YR004HR | smf-2c | 144.2549 | 11.85 |

**10yr-4hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR004HR | smf-3a | 123.7549 | 11.92 |
| 010YR004HR | smf-3a | 124.0049 | 11.92 |
| 010YR004HR | smf-3a | 124.2549 | 11.92 |
| 010YR004HR | smf-3a | 124.5049 | 11.92 |
| 010YR004HR | smf-3a | 124.7549 | 11.91 |
| 010YR004HR | smf-3a | 125.0049 | 11.91 |
| 010YR004HR | smf-3a | 125.2549 | 11.91 |
| 010YR004HR | smf-3a | 125.5049 | 11.91 |
| 010YR004HR | smf-3a | 125.7549 | 11.91 |
| 010YR004HR | smf-3a | 126.0049 | 11.91 |
| 010YR004HR | smf-3a | 126.2549 | 11.91 |
| 010YR004HR | smf-3a | 126.5049 | 11.91 |
| 010YR004HR | smf-3a | 126.7549 | 11.91 |
| 010YR004HR | smf-3a | 127.0049 | 11.91 |
| 010YR004HR | smf-3a | 127.2549 | 11.91 |
| 010YR004HR | smf-3a | 127.5049 | 11.91 |
| 010YR004HR | smf-3a | 127.7549 | 11.91 |
| 010YR004HR | smf-3a | 128.0049 | 11.90 |
| 010YR004HR | smf-3a | 128.2549 | 11.90 |
| 010YR004HR | smf-3a | 128.5049 | 11.90 |
| 010YR004HR | smf-3a | 128.7549 | 11.90 |
| 010YR004HR | smf-3a | 129.0049 | 11.90 |
| 010YR004HR | smf-3a | 129.2549 | 11.90 |
| 010YR004HR | smf-3a | 129.5049 | 11.90 |
| 010YR004HR | smf-3a | 129.7549 | 11.90 |
| 010YR004HR | smf-3a | 130.0049 | 11.90 |
| 010YR004HR | smf-3a | 130.2549 | 11.90 |
| 010YR004HR | smf-3a | 130.5049 | 11.90 |
| 010YR004HR | smf-3a | 130.7549 | 11.90 |
| 010YR004HR | smf-3a | 131.0049 | 11.90 |
| 010YR004HR | smf-3a | 131.2549 | 11.90 |
| 010YR004HR | smf-3a | 131.5049 | 11.90 |
| 010YR004HR | smf-3a | 131.7549 | 11.90 |
| 010YR004HR | smf-3a | 132.0049 | 11.90 |
| 010YR004HR | smf-3a | 132.2549 | 11.90 |
| 010YR004HR | smf-3a | 132.5049 | 11.90 |
| 010YR004HR | smf-3a | 132.7549 | 11.90 |
| 010YR004HR | smf-3a | 133.0049 | 11.90 |
| 010YR004HR | smf-3a | 133.2549 | 11.90 |
| 010YR004HR | smf-3a | 133.5049 | 11.90 |
| 010YR004HR | smf-3a | 133.7549 | 11.90 |
| 010YR004HR | smf-3a | 134.0049 | 11.90 |

**10yr-4hr SMF-3a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR004HR | smf-3b | 145.0049 | 11.28 |
| 010YR004HR | smf-3b | 145.2549 | 11.28 |
| 010YR004HR | smf-3b | 145.5049 | 11.28 |
| 010YR004HR | smf-3b | 145.7549 | 11.28 |
| 010YR004HR | smf-3b | 146.0049 | 11.28 |
| 010YR004HR | smf-3b | 146.2549 | 11.28 |
| 010YR004HR | smf-3b | 146.5049 | 11.28 |
| 010YR004HR | smf-3b | 146.7549 | 11.28 |
| 010YR004HR | smf-3b | 147.0049 | 11.28 |
| 010YR004HR | smf-3b | 147.2549 | 11.27 |
| 010YR004HR | smf-3b | 147.5049 | 11.27 |
| 010YR004HR | smf-3b | 147.7549 | 11.27 |
| 010YR004HR | smf-3b | 148.0049 | 11.27 |
| 010YR004HR | smf-3b | 148.2549 | 11.27 |
| 010YR004HR | smf-3b | 148.5049 | 11.27 |
| 010YR004HR | smf-3b | 148.7549 | 11.27 |
| 010YR004HR | smf-3b | 149.0049 | 11.27 |
| 010YR004HR | smf-3b | 149.2549 | 11.27 |
| 010YR004HR | smf-3b | 149.5049 | 11.27 |
| 010YR004HR | smf-3b | 149.7549 | 11.27 |
| 010YR004HR | smf-3b | 150.0049 | 11.27 |
| 010YR004HR | smf-3b | 150.2549 | 11.27 |
| 010YR004HR | smf-3b | 150.5049 | 11.27 |
| 010YR004HR | smf-3b | 150.7549 | 11.26 |
| 010YR004HR | smf-3b | 151.0049 | 11.26 |
| 010YR004HR | smf-3b | 151.2549 | 11.26 |
| 010YR004HR | smf-3b | 151.5049 | 11.26 |
| 010YR004HR | smf-3b | 151.7549 | 11.26 |
| 010YR004HR | smf-3b | 152.0049 | 11.26 |
| 010YR004HR | smf-3b | 152.2549 | 11.26 |
| 010YR004HR | smf-3b | 152.5049 | 11.26 |
| 010YR004HR | smf-3b | 152.7549 | 11.26 |
| 010YR004HR | smf-3b | 153.0049 | 11.26 |
| 010YR004HR | smf-3b | 153.2549 | 11.26 |
| 010YR004HR | smf-3b | 153.5049 | 11.26 |
| 010YR004HR | smf-3b | 153.7549 | 11.26 |
| 010YR004HR | smf-3b | 154.0049 | 11.26 |
| 010YR004HR | smf-3b | 154.2549 | 11.26 |
| 010YR004HR | smf-3b | 154.5049 | 11.25 |
| 010YR004HR | smf-3b | 154.7549 | 11.25 |
| 010YR004HR | smf-3b | 155.0049 | 11.25 |
| 010YR004HR | smf-3b | 155.2549 | 11.25 |

**10yr-4hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR008HR | smf-1a | 166.2534 | 12.47 |
| 010YR008HR | smf-1a | 166.5034 | 12.47 |
| 010YR008HR | smf-1a | 166.7534 | 12.47 |
| 010YR008HR | smf-1a | 167.0034 | 12.47 |
| 010YR008HR | smf-1a | 167.2534 | 12.47 |
| 010YR008HR | smf-1a | 167.5034 | 12.46 |
| 010YR008HR | smf-1a | 167.7534 | 12.46 |
| 010YR008HR | smf-1a | 168.0034 | 12.46 |
| 010YR008HR | smf-1a | 168.2534 | 12.46 |
| 010YR008HR | smf-1a | 168.5034 | 12.46 |
| 010YR008HR | smf-1a | 168.7534 | 12.46 |
| 010YR008HR | smf-1a | 169.0034 | 12.46 |
| 010YR008HR | smf-1a | 169.2534 | 12.46 |
| 010YR008HR | smf-1a | 169.5034 | 12.46 |
| 010YR008HR | smf-1a | 169.7534 | 12.46 |
| 010YR008HR | smf-1a | 170.0034 | 12.46 |
| 010YR008HR | smf-1a | 170.2534 | 12.46 |
| 010YR008HR | smf-1a | 170.5034 | 12.46 |
| 010YR008HR | smf-1a | 170.7534 | 12.46 |
| 010YR008HR | smf-1a | 171.0034 | 12.46 |
| 010YR008HR | smf-1a | 171.2534 | 12.46 |
| 010YR008HR | smf-1a | 171.5034 | 12.46 |
| 010YR008HR | smf-1a | 171.7534 | 12.46 |
| 010YR008HR | smf-1a | 172.0034 | 12.45 |
| 010YR008HR | smf-1a | 172.2534 | 12.45 |
| 010YR008HR | smf-1a | 172.5034 | 12.45 |
| 010YR008HR | smf-1a | 172.7534 | 12.45 |
| 010YR008HR | smf-1a | 173.0034 | 12.45 |
| 010YR008HR | smf-1a | 173.2534 | 12.45 |
| 010YR008HR | smf-1a | 173.5034 | 12.45 |
| 010YR008HR | smf-1a | 173.7534 | 12.45 |
| 010YR008HR | smf-1a | 174.0034 | 12.45 |
| 010YR008HR | smf-1a | 174.2534 | 12.45 |
| 010YR008HR | smf-1a | 174.5034 | 12.45 |
| 010YR008HR | smf-1a | 174.7534 | 12.45 |
| 010YR008HR | smf-1a | 175.0034 | 12.45 |
| 010YR008HR | smf-1a | 175.2534 | 12.45 |
| 010YR008HR | smf-1a | 175.5034 | 12.45 |
| 010YR008HR | smf-1a | 175.7534 | 12.45 |
| 010YR008HR | smf-1a | 176.0034 | 12.45 |
| 010YR008HR | smf-1a | 176.2534 | 12.45 |
| 010YR008HR | smf-1a | 176.5034 | 12.45 |

**10yr-8hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR008HR | smf-1b | 110.0034 | 13.01 |
| 010YR008HR | smf-1b | 110.2534 | 13.01 |
| 010YR008HR | smf-1b | 110.5034 | 13.01 |
| 010YR008HR | smf-1b | 110.7534 | 13.01 |
| 010YR008HR | smf-1b | 111.0034 | 13.01 |
| 010YR008HR | smf-1b | 111.2534 | 13.01 |
| 010YR008HR | smf-1b | 111.5034 | 13.01 |
| 010YR008HR | smf-1b | 111.7534 | 13.00 |
| 010YR008HR | smf-1b | 112.0034 | 13.00 |
| 010YR008HR | smf-1b | 112.2534 | 13.00 |
| 010YR008HR | smf-1b | 112.5034 | 13.00 |
| 010YR008HR | smf-1b | 112.7534 | 13.00 |
| 010YR008HR | smf-1b | 113.0034 | 13.00 |
| 010YR008HR | smf-1b | 113.2534 | 13.00 |
| 010YR008HR | smf-1b | 113.5034 | 13.00 |
| 010YR008HR | smf-1b | 113.7534 | 13.00 |
| 010YR008HR | smf-1b | 114.0034 | 13.00 |
| 010YR008HR | smf-1b | 114.2534 | 13.00 |
| 010YR008HR | smf-1b | 114.5034 | 13.00 |
| 010YR008HR | smf-1b | 114.7534 | 13.00 |
| 010YR008HR | smf-1b | 115.0034 | 13.00 |
| 010YR008HR | smf-1b | 115.2534 | 13.00 |
| 010YR008HR | smf-1b | 115.5034 | 13.00 |
| 010YR008HR | smf-1b | 115.7534 | 13.00 |
| 010YR008HR | smf-1b | 116.0034 | 13.00 |
| 010YR008HR | smf-1b | 116.2534 | 13.00 |
| 010YR008HR | smf-1b | 116.5034 | 13.00 |
| 010YR008HR | smf-1b | 116.7534 | 13.00 |
| 010YR008HR | smf-1b | 117.0034 | 13.00 |
| 010YR008HR | smf-1b | 117.2534 | 13.00 |
| 010YR008HR | smf-1b | 117.5034 | 13.00 |
| 010YR008HR | smf-1b | 117.7534 | 13.00 |
| 010YR008HR | smf-1b | 118.0034 | 13.00 |
| 010YR008HR | smf-1b | 118.2534 | 13.00 |
| 010YR008HR | smf-1b | 118.5034 | 13.00 |
| 010YR008HR | smf-1b | 118.7534 | 13.00 |
| 010YR008HR | smf-1b | 119.0034 | 13.00 |
| 010YR008HR | smf-1b | 119.2534 | 13.00 |
| 010YR008HR | smf-1b | 119.5034 | 13.00 |
| 010YR008HR | smf-1b | 119.7534 | 13.00 |
| 010YR008HR | smf-1b | 120.0034 | 13.00 |
| 010YR008HR | smf-1b | 120.2534 | 13.00 |

**10yr-8hr SMF-1b**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR008HR | smf-2a | 179.7534 | 12.11 |
| 010YR008HR | smf-2a | 180.0034 | 12.11 |
| 010YR008HR | smf-2a | 180.2534 | 12.11 |
| 010YR008HR | smf-2a | 180.5034 | 12.11 |
| 010YR008HR | smf-2a | 180.7534 | 12.10 |
| 010YR008HR | smf-2a | 181.0034 | 12.10 |
| 010YR008HR | smf-2a | 181.2534 | 12.10 |
| 010YR008HR | smf-2a | 181.5034 | 12.10 |
| 010YR008HR | smf-2a | 181.7534 | 12.10 |
| 010YR008HR | smf-2a | 182.0034 | 12.10 |
| 010YR008HR | smf-2a | 182.2534 | 12.10 |
| 010YR008HR | smf-2a | 182.5034 | 12.10 |
| 010YR008HR | smf-2a | 182.7534 | 12.10 |
| 010YR008HR | smf-2a | 183.0034 | 12.10 |
| 010YR008HR | smf-2a | 183.2534 | 12.10 |
| 010YR008HR | smf-2a | 183.5034 | 12.10 |
| 010YR008HR | smf-2a | 183.7534 | 12.10 |
| 010YR008HR | smf-2a | 184.0034 | 12.10 |
| 010YR008HR | smf-2a | 184.2534 | 12.10 |
| 010YR008HR | smf-2a | 184.5034 | 12.10 |
| 010YR008HR | smf-2a | 184.7534 | 12.10 |
| 010YR008HR | smf-2a | 185.0034 | 12.10 |
| 010YR008HR | smf-2a | 185.2534 | 12.10 |
| 010YR008HR | smf-2a | 185.5034 | 12.10 |
| 010YR008HR | smf-2a | 185.7534 | 12.10 |
| 010YR008HR | smf-2a | 186.0034 | 12.10 |
| 010YR008HR | smf-2a | 186.2534 | 12.10 |
| 010YR008HR | smf-2a | 186.5034 | 12.10 |
| 010YR008HR | smf-2a | 186.7534 | 12.10 |
| 010YR008HR | smf-2a | 187.0034 | 12.10 |
| 010YR008HR | smf-2a | 187.2534 | 12.10 |
| 010YR008HR | smf-2a | 187.5034 | 12.10 |
| 010YR008HR | smf-2a | 187.7534 | 12.10 |
| 010YR008HR | smf-2a | 188.0034 | 12.10 |
| 010YR008HR | smf-2a | 188.2534 | 12.10 |
| 010YR008HR | smf-2a | 188.5034 | 12.10 |
| 010YR008HR | smf-2a | 188.7534 | 12.10 |
| 010YR008HR | smf-2a | 189.0034 | 12.10 |
| 010YR008HR | smf-2a | 189.2534 | 12.10 |
| 010YR008HR | smf-2a | 189.5034 | 12.10 |
| 010YR008HR | smf-2a | 189.7534 | 12.10 |
| 010YR008HR | smf-2a | 190.0034 | 12.10 |

**10yr-8hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR008HR | smf-2b | 134.0034 | 11.42 |
| 010YR008HR | smf-2b | 134.2534 | 11.42 |
| 010YR008HR | smf-2b | 134.5034 | 11.42 |
| 010YR008HR | smf-2b | 134.7534 | 11.42 |
| 010YR008HR | smf-2b | 135.0034 | 11.42 |
| 010YR008HR | smf-2b | 135.2534 | 11.42 |
| 010YR008HR | smf-2b | 135.5034 | 11.42 |
| 010YR008HR | smf-2b | 135.7534 | 11.41 |
| 010YR008HR | smf-2b | 136.0034 | 11.41 |
| 010YR008HR | smf-2b | 136.2534 | 11.41 |
| 010YR008HR | smf-2b | 136.5034 | 11.41 |
| 010YR008HR | smf-2b | 136.7534 | 11.41 |
| 010YR008HR | smf-2b | 137.0034 | 11.41 |
| 010YR008HR | smf-2b | 137.2534 | 11.41 |
| 010YR008HR | smf-2b | 137.5034 | 11.41 |
| 010YR008HR | smf-2b | 137.7534 | 11.41 |
| 010YR008HR | smf-2b | 138.0034 | 11.41 |
| 010YR008HR | smf-2b | 138.2534 | 11.41 |
| 010YR008HR | smf-2b | 138.5034 | 11.41 |
| 010YR008HR | smf-2b | 138.7534 | 11.41 |
| 010YR008HR | smf-2b | 139.0034 | 11.40 |
| 010YR008HR | smf-2b | 139.2534 | 11.40 |
| 010YR008HR | smf-2b | 139.5034 | 11.40 |
| 010YR008HR | smf-2b | 139.7534 | 11.40 |
| 010YR008HR | smf-2b | 140.0034 | 11.40 |
| 010YR008HR | smf-2b | 140.2534 | 11.40 |
| 010YR008HR | smf-2b | 140.5034 | 11.40 |
| 010YR008HR | smf-2b | 140.7534 | 11.40 |
| 010YR008HR | smf-2b | 141.0034 | 11.40 |
| 010YR008HR | smf-2b | 141.2534 | 11.40 |
| 010YR008HR | smf-2b | 141.5034 | 11.40 |
| 010YR008HR | smf-2b | 141.7534 | 11.40 |
| 010YR008HR | smf-2b | 142.0034 | 11.40 |
| 010YR008HR | smf-2b | 142.2534 | 11.40 |
| 010YR008HR | smf-2b | 142.5034 | 11.40 |
| 010YR008HR | smf-2b | 142.7534 | 11.40 |
| 010YR008HR | smf-2b | 143.0034 | 11.40 |
| 010YR008HR | smf-2b | 143.2534 | 11.40 |
| 010YR008HR | smf-2b | 143.5034 | 11.40 |
| 010YR008HR | smf-2b | 143.7534 | 11.40 |
| 010YR008HR | smf-2b | 144.0034 | 11.40 |
| 010YR008HR | smf-2b | 144.2534 | 11.40 |

**10yr-8hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR008HR | smf-2c | 161.7534 | 11.87 |
| 010YR008HR | smf-2c | 162.0034 | 11.87 |
| 010YR008HR | smf-2c | 162.2534 | 11.87 |
| 010YR008HR | smf-2c | 162.5034 | 11.87 |
| 010YR008HR | smf-2c | 162.7534 | 11.87 |
| 010YR008HR | smf-2c | 163.0034 | 11.87 |
| 010YR008HR | smf-2c | 163.2534 | 11.87 |
| 010YR008HR | smf-2c | 163.5034 | 11.87 |
| 010YR008HR | smf-2c | 163.7534 | 11.87 |
| 010YR008HR | smf-2c | 164.0034 | 11.87 |
| 010YR008HR | smf-2c | 164.2534 | 11.87 |
| 010YR008HR | smf-2c | 164.5034 | 11.87 |
| 010YR008HR | smf-2c | 164.7534 | 11.87 |
| 010YR008HR | smf-2c | 165.0034 | 11.87 |
| 010YR008HR | smf-2c | 165.2534 | 11.87 |
| 010YR008HR | smf-2c | 165.5034 | 11.87 |
| 010YR008HR | smf-2c | 165.7534 | 11.87 |
| 010YR008HR | smf-2c | 166.0034 | 11.86 |
| 010YR008HR | smf-2c | 166.2534 | 11.86 |
| 010YR008HR | smf-2c | 166.5034 | 11.86 |
| 010YR008HR | smf-2c | 166.7534 | 11.86 |
| 010YR008HR | smf-2c | 167.0034 | 11.86 |
| 010YR008HR | smf-2c | 167.2534 | 11.86 |
| 010YR008HR | smf-2c | 167.5034 | 11.86 |
| 010YR008HR | smf-2c | 167.7534 | 11.86 |
| 010YR008HR | smf-2c | 168.0034 | 11.86 |
| 010YR008HR | smf-2c | 168.2534 | 11.86 |
| 010YR008HR | smf-2c | 168.5034 | 11.86 |
| 010YR008HR | smf-2c | 168.7534 | 11.86 |
| 010YR008HR | smf-2c | 169.0034 | 11.86 |
| 010YR008HR | smf-2c | 169.2534 | 11.86 |
| 010YR008HR | smf-2c | 169.5034 | 11.86 |
| 010YR008HR | smf-2c | 169.7534 | 11.86 |
| 010YR008HR | smf-2c | 170.0034 | 11.85 |
| 010YR008HR | smf-2c | 170.2534 | 11.85 |
| 010YR008HR | smf-2c | 170.5034 | 11.85 |
| 010YR008HR | smf-2c | 170.7534 | 11.85 |
| 010YR008HR | smf-2c | 171.0034 | 11.85 |
| 010YR008HR | smf-2c | 171.2534 | 11.85 |
| 010YR008HR | smf-2c | 171.5034 | 11.85 |
| 010YR008HR | smf-2c | 171.7534 | 11.85 |
| 010YR008HR | smf-2c | 172.0034 | 11.85 |

**10yr-8hr SMF-2c**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR008HR | smf-3a | 158.0034 | 11.91 |
| 010YR008HR | smf-3a | 158.2534 | 11.91 |
| 010YR008HR | smf-3a | 158.5034 | 11.91 |
| 010YR008HR | smf-3a | 158.7534 | 11.91 |
| 010YR008HR | smf-3a | 159.0034 | 11.91 |
| 010YR008HR | smf-3a | 159.2534 | 11.91 |
| 010YR008HR | smf-3a | 159.5034 | 11.91 |
| 010YR008HR | smf-3a | 159.7534 | 11.91 |
| 010YR008HR | smf-3a | 160.0034 | 11.90 |
| 010YR008HR | smf-3a | 160.2534 | 11.90 |
| 010YR008HR | smf-3a | 160.5034 | 11.90 |
| 010YR008HR | smf-3a | 160.7534 | 11.90 |
| 010YR008HR | smf-3a | 161.0034 | 11.90 |
| 010YR008HR | smf-3a | 161.2534 | 11.90 |
| 010YR008HR | smf-3a | 161.5034 | 11.90 |
| 010YR008HR | smf-3a | 161.7534 | 11.90 |
| 010YR008HR | smf-3a | 162.0034 | 11.90 |
| 010YR008HR | smf-3a | 162.2534 | 11.90 |
| 010YR008HR | smf-3a | 162.5034 | 11.90 |
| 010YR008HR | smf-3a | 162.7534 | 11.90 |
| 010YR008HR | smf-3a | 163.0034 | 11.90 |
| 010YR008HR | smf-3a | 163.2534 | 11.90 |
| 010YR008HR | smf-3a | 163.5034 | 11.90 |
| 010YR008HR | smf-3a | 163.7534 | 11.90 |
| 010YR008HR | smf-3a | 164.0034 | 11.90 |
| 010YR008HR | smf-3a | 164.2534 | 11.90 |
| 010YR008HR | smf-3a | 164.5034 | 11.90 |
| 010YR008HR | smf-3a | 164.7534 | 11.90 |
| 010YR008HR | smf-3a | 165.0034 | 11.90 |
| 010YR008HR | smf-3a | 165.2534 | 11.90 |
| 010YR008HR | smf-3a | 165.5034 | 11.90 |
| 010YR008HR | smf-3a | 165.7534 | 11.90 |
| 010YR008HR | smf-3a | 166.0034 | 11.90 |
| 010YR008HR | smf-3a | 166.2534 | 11.90 |
| 010YR008HR | smf-3a | 166.5034 | 11.90 |
| 010YR008HR | smf-3a | 166.7534 | 11.90 |
| 010YR008HR | smf-3a | 167.0034 | 11.90 |
| 010YR008HR | smf-3a | 167.2534 | 11.90 |
| 010YR008HR | smf-3a | 167.5034 | 11.90 |
| 010YR008HR | smf-3a | 167.7534 | 11.90 |
| 010YR008HR | smf-3a | 168.0034 | 11.90 |
| 010YR008HR | smf-3a | 168.2534 | 11.90 |

**10yr-8hr SMF-3a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR008HR | smf-3b | 185.7534 | 11.26 |
| 010YR008HR | smf-3b | 186.0034 | 11.26 |
| 010YR008HR | smf-3b | 186.2534 | 11.26 |
| 010YR008HR | smf-3b | 186.5034 | 11.26 |
| 010YR008HR | smf-3b | 186.7534 | 11.26 |
| 010YR008HR | smf-3b | 187.0034 | 11.26 |
| 010YR008HR | smf-3b | 187.2534 | 11.26 |
| 010YR008HR | smf-3b | 187.5034 | 11.26 |
| 010YR008HR | smf-3b | 187.7534 | 11.26 |
| 010YR008HR | smf-3b | 188.0034 | 11.26 |
| 010YR008HR | smf-3b | 188.2534 | 11.26 |
| 010YR008HR | smf-3b | 188.5034 | 11.26 |
| 010YR008HR | smf-3b | 188.7534 | 11.26 |
| 010YR008HR | smf-3b | 189.0034 | 11.25 |
| 010YR008HR | smf-3b | 189.2534 | 11.25 |
| 010YR008HR | smf-3b | 189.5034 | 11.25 |
| 010YR008HR | smf-3b | 189.7534 | 11.25 |
| 010YR008HR | smf-3b | 190.0034 | 11.25 |
| 010YR008HR | smf-3b | 190.2534 | 11.25 |
| 010YR008HR | smf-3b | 190.5034 | 11.25 |
| 010YR008HR | smf-3b | 190.7534 | 11.25 |
| 010YR008HR | smf-3b | 191.0034 | 11.25 |
| 010YR008HR | smf-3b | 191.2534 | 11.25 |
| 010YR008HR | smf-3b | 191.5034 | 11.25 |
| 010YR008HR | smf-3b | 191.7534 | 11.25 |
| 010YR008HR | smf-3b | 192.0034 | 11.25 |
| 010YR008HR | smf-3b | 192.2534 | 11.25 |
| 010YR008HR | smf-3b | 192.5034 | 11.25 |
| 010YR008HR | smf-3b | 192.7534 | 11.25 |
| 010YR008HR | smf-3b | 193.0034 | 11.25 |
| 010YR008HR | smf-3b | 193.2534 | 11.25 |
| 010YR008HR | smf-3b | 193.5034 | 11.25 |
| 010YR008HR | smf-3b | 193.7534 | 11.25 |
| 010YR008HR | smf-3b | 194.0034 | 11.25 |
| 010YR008HR | smf-3b | 194.2534 | 11.25 |
| 010YR008HR | smf-3b | 194.5034 | 11.25 |
| 010YR008HR | smf-3b | 194.7534 | 11.25 |
| 010YR008HR | smf-3b | 195.0034 | 11.25 |
| 010YR008HR | smf-3b | 195.2534 | 11.25 |
| 010YR008HR | smf-3b | 195.5034 | 11.25 |
| 010YR008HR | smf-3b | 195.7534 | 11.25 |
| 010YR008HR | smf-3b | 196.0034 | 11.25 |

**10yr-8hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR024HR | smf-1a | 308.0082 | 12.46 |
| 010YR024HR | smf-1a | 308.2582 | 12.46 |
| 010YR024HR | smf-1a | 308.5082 | 12.46 |
| 010YR024HR | smf-1a | 308.7582 | 12.46 |
| 010YR024HR | smf-1a | 309.0082 | 12.46 |
| 010YR024HR | smf-1a | 309.2582 | 12.46 |
| 010YR024HR | smf-1a | 309.5082 | 12.46 |
| 010YR024HR | smf-1a | 309.7582 | 12.46 |
| 010YR024HR | smf-1a | 310.0082 | 12.46 |
| 010YR024HR | smf-1a | 310.2582 | 12.46 |
| 010YR024HR | smf-1a | 310.5082 | 12.46 |
| 010YR024HR | smf-1a | 310.7582 | 12.45 |
| 010YR024HR | smf-1a | 311.0082 | 12.45 |
| 010YR024HR | smf-1a | 311.2582 | 12.45 |
| 010YR024HR | smf-1a | 311.5082 | 12.45 |
| 010YR024HR | smf-1a | 311.7582 | 12.45 |
| 010YR024HR | smf-1a | 312.0082 | 12.45 |
| 010YR024HR | smf-1a | 312.2582 | 12.45 |
| 010YR024HR | smf-1a | 312.5082 | 12.45 |
| 010YR024HR | smf-1a | 312.7582 | 12.45 |
| 010YR024HR | smf-1a | 313.0082 | 12.45 |
| 010YR024HR | smf-1a | 313.2582 | 12.45 |
| 010YR024HR | smf-1a | 313.5082 | 12.45 |
| 010YR024HR | smf-1a | 313.7582 | 12.45 |
| 010YR024HR | smf-1a | 314.0082 | 12.45 |
| 010YR024HR | smf-1a | 314.2582 | 12.45 |
| 010YR024HR | smf-1a | 314.5082 | 12.45 |
| 010YR024HR | smf-1a | 314.7582 | 12.45 |
| 010YR024HR | smf-1a | 315.0082 | 12.45 |
| 010YR024HR | smf-1a | 315.2582 | 12.45 |
| 010YR024HR | smf-1a | 315.5082 | 12.45 |
| 010YR024HR | smf-1a | 315.7582 | 12.45 |
| 010YR024HR | smf-1a | 316.0082 | 12.45 |
| 010YR024HR | smf-1a | 316.2582 | 12.45 |
| 010YR024HR | smf-1a | 316.5082 | 12.45 |
| 010YR024HR | smf-1a | 316.7582 | 12.45 |
| 010YR024HR | smf-1a | 317.0082 | 12.45 |
| 010YR024HR | smf-1a | 317.2582 | 12.45 |
| 010YR024HR | smf-1a | 317.5082 | 12.45 |
| 010YR024HR | smf-1a | 317.7582 | 12.45 |
| 010YR024HR | smf-1a | 318.0082 | 12.45 |
| 010YR024HR | smf-1a | 318.2582 | 12.45 |

**10yr-24hr SMF-1a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR024HR | smf-1b | 193.7582 | 13.01 |
| 010YR024HR | smf-1b | 194.0082 | 13.01 |
| 010YR024HR | smf-1b | 194.2582 | 13.01 |
| 010YR024HR | smf-1b | 194.5082 | 13.01 |
| 010YR024HR | smf-1b | 194.7582 | 13.01 |
| 010YR024HR | smf-1b | 195.0082 | 13.01 |
| 010YR024HR | smf-1b | 195.2582 | 13.01 |
| 010YR024HR | smf-1b | 195.5082 | 13.01 |
| 010YR024HR | smf-1b | 195.7582 | 13.01 |
| 010YR024HR | smf-1b | 196.0082 | 13.00 |
| 010YR024HR | smf-1b | 196.2582 | 13.00 |
| 010YR024HR | smf-1b | 196.5082 | 13.00 |
| 010YR024HR | smf-1b | 196.7582 | 13.00 |
| 010YR024HR | smf-1b | 197.0082 | 13.00 |
| 010YR024HR | smf-1b | 197.2582 | 13.00 |
| 010YR024HR | smf-1b | 197.5082 | 13.00 |
| 010YR024HR | smf-1b | 197.7582 | 13.00 |
| 010YR024HR | smf-1b | 198.0082 | 13.00 |
| 010YR024HR | smf-1b | 198.2582 | 13.00 |
| 010YR024HR | smf-1b | 198.5082 | 13.00 |
| 010YR024HR | smf-1b | 198.7582 | 13.00 |
| 010YR024HR | smf-1b | 199.0082 | 13.00 |
| 010YR024HR | smf-1b | 199.2582 | 13.00 |
| 010YR024HR | smf-1b | 199.5082 | 13.00 |
| 010YR024HR | smf-1b | 199.7582 | 13.00 |
| 010YR024HR | smf-1b | 200.0082 | 13.00 |
| 010YR024HR | smf-1b | 200.2582 | 13.00 |
| 010YR024HR | smf-1b | 200.5082 | 13.00 |
| 010YR024HR | smf-1b | 200.7582 | 13.00 |
| 010YR024HR | smf-1b | 201.0082 | 13.00 |
| 010YR024HR | smf-1b | 201.2582 | 13.00 |
| 010YR024HR | smf-1b | 201.5082 | 13.00 |
| 010YR024HR | smf-1b | 201.7582 | 13.00 |
| 010YR024HR | smf-1b | 202.0082 | 13.00 |
| 010YR024HR | smf-1b | 202.2582 | 13.00 |
| 010YR024HR | smf-1b | 202.5082 | 13.00 |
| 010YR024HR | smf-1b | 202.7582 | 13.00 |
| 010YR024HR | smf-1b | 203.0082 | 13.00 |
| 010YR024HR | smf-1b | 203.2582 | 13.00 |
| 010YR024HR | smf-1b | 203.5082 | 13.00 |
| 010YR024HR | smf-1b | 203.7582 | 13.00 |
| 010YR024HR | smf-1b | 204.0082 | 13.00 |

**10yr-24hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR024HR | smf-2a | 268.5082 | 12.11 |
| 010YR024HR | smf-2a | 268.7582 | 12.11 |
| 010YR024HR | smf-2a | 269.0082 | 12.11 |
| 010YR024HR | smf-2a | 269.2582 | 12.10 |
| 010YR024HR | smf-2a | 269.5082 | 12.10 |
| 010YR024HR | smf-2a | 269.7582 | 12.10 |
| 010YR024HR | smf-2a | 270.0082 | 12.10 |
| 010YR024HR | smf-2a | 270.2582 | 12.10 |
| 010YR024HR | smf-2a | 270.5082 | 12.10 |
| 010YR024HR | smf-2a | 270.7582 | 12.10 |
| 010YR024HR | smf-2a | 271.0082 | 12.10 |
| 010YR024HR | smf-2a | 271.2582 | 12.10 |
| 010YR024HR | smf-2a | 271.5082 | 12.10 |
| 010YR024HR | smf-2a | 271.7582 | 12.10 |
| 010YR024HR | smf-2a | 272.0082 | 12.10 |
| 010YR024HR | smf-2a | 272.2582 | 12.10 |
| 010YR024HR | smf-2a | 272.5082 | 12.10 |
| 010YR024HR | smf-2a | 272.7582 | 12.10 |
| 010YR024HR | smf-2a | 273.0082 | 12.10 |
| 010YR024HR | smf-2a | 273.2582 | 12.10 |
| 010YR024HR | smf-2a | 273.5082 | 12.10 |
| 010YR024HR | smf-2a | 273.7582 | 12.10 |
| 010YR024HR | smf-2a | 274.0082 | 12.10 |
| 010YR024HR | smf-2a | 274.2582 | 12.10 |
| 010YR024HR | smf-2a | 274.5082 | 12.10 |
| 010YR024HR | smf-2a | 274.7582 | 12.10 |
| 010YR024HR | smf-2a | 275.0082 | 12.10 |
| 010YR024HR | smf-2a | 275.2582 | 12.10 |
| 010YR024HR | smf-2a | 275.5082 | 12.10 |
| 010YR024HR | smf-2a | 275.7582 | 12.10 |
| 010YR024HR | smf-2a | 276.0082 | 12.10 |
| 010YR024HR | smf-2a | 276.2582 | 12.10 |
| 010YR024HR | smf-2a | 276.5082 | 12.10 |
| 010YR024HR | smf-2a | 276.7582 | 12.10 |
| 010YR024HR | smf-2a | 277.0082 | 12.10 |
| 010YR024HR | smf-2a | 277.2582 | 12.10 |
| 010YR024HR | smf-2a | 277.5082 | 12.10 |
| 010YR024HR | smf-2a | 277.7582 | 12.10 |
| 010YR024HR | smf-2a | 278.0082 | 12.10 |
| 010YR024HR | smf-2a | 278.2582 | 12.10 |
| 010YR024HR | smf-2a | 278.5082 | 12.10 |
| 010YR024HR | smf-2a | 278.7582 | 12.10 |

**10yr-24hr SMF-2a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR024HR | smf-2b | 217.2582 | 11.41 |
| 010YR024HR | smf-2b | 217.5082 | 11.41 |
| 010YR024HR | smf-2b | 217.7582 | 11.41 |
| 010YR024HR | smf-2b | 218.0082 | 11.41 |
| 010YR024HR | smf-2b | 218.2582 | 11.41 |
| 010YR024HR | smf-2b | 218.5082 | 11.41 |
| 010YR024HR | smf-2b | 218.7582 | 11.41 |
| 010YR024HR | smf-2b | 219.0082 | 11.41 |
| 010YR024HR | smf-2b | 219.2582 | 11.41 |
| 010YR024HR | smf-2b | 219.5082 | 11.41 |
| 010YR024HR | smf-2b | 219.7582 | 11.41 |
| 010YR024HR | smf-2b | 220.0082 | 11.41 |
| 010YR024HR | smf-2b | 220.2582 | 11.41 |
| 010YR024HR | smf-2b | 220.5082 | 11.41 |
| 010YR024HR | smf-2b | 220.7582 | 11.41 |
| 010YR024HR | smf-2b | 221.0082 | 11.41 |
| 010YR024HR | smf-2b | 221.2582 | 11.40 |
| 010YR024HR | smf-2b | 221.5082 | 11.40 |
| 010YR024HR | smf-2b | 221.7582 | 11.40 |
| 010YR024HR | smf-2b | 222.0082 | 11.40 |
| 010YR024HR | smf-2b | 222.2582 | 11.40 |
| 010YR024HR | smf-2b | 222.5082 | 11.40 |
| 010YR024HR | smf-2b | 222.7582 | 11.40 |
| 010YR024HR | smf-2b | 223.0082 | 11.40 |
| 010YR024HR | smf-2b | 223.2582 | 11.40 |
| 010YR024HR | smf-2b | 223.5082 | 11.40 |
| 010YR024HR | smf-2b | 223.7582 | 11.40 |
| 010YR024HR | smf-2b | 224.0082 | 11.40 |
| 010YR024HR | smf-2b | 224.2582 | 11.40 |
| 010YR024HR | smf-2b | 224.5082 | 11.40 |
| 010YR024HR | smf-2b | 224.7582 | 11.40 |
| 010YR024HR | smf-2b | 225.0082 | 11.40 |
| 010YR024HR | smf-2b | 225.2582 | 11.40 |
| 010YR024HR | smf-2b | 225.5082 | 11.40 |
| 010YR024HR | smf-2b | 225.7582 | 11.40 |
| 010YR024HR | smf-2b | 226.0082 | 11.40 |
| 010YR024HR | smf-2b | 226.2582 | 11.40 |
| 010YR024HR | smf-2b | 226.5082 | 11.40 |
| 010YR024HR | smf-2b | 226.7582 | 11.40 |
| 010YR024HR | smf-2b | 227.0082 | 11.40 |
| 010YR024HR | smf-2b | 227.2582 | 11.40 |
| 010YR024HR | smf-2b | 227.5082 | 11.40 |

**10yr-24hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR024HR | smf-2c | 250.0082 | 11.87 |
| 010YR024HR | smf-2c | 250.2582 | 11.87 |
| 010YR024HR | smf-2c | 250.5082 | 11.87 |
| 010YR024HR | smf-2c | 250.7582 | 11.87 |
| 010YR024HR | smf-2c | 251.0082 | 11.87 |
| 010YR024HR | smf-2c | 251.2582 | 11.87 |
| 010YR024HR | smf-2c | 251.5082 | 11.87 |
| 010YR024HR | smf-2c | 251.7582 | 11.87 |
| 010YR024HR | smf-2c | 252.0082 | 11.87 |
| 010YR024HR | smf-2c | 252.2582 | 11.87 |
| 010YR024HR | smf-2c | 252.5082 | 11.87 |
| 010YR024HR | smf-2c | 252.7582 | 11.86 |
| 010YR024HR | smf-2c | 253.0082 | 11.86 |
| 010YR024HR | smf-2c | 253.2582 | 11.86 |
| 010YR024HR | smf-2c | 253.5082 | 11.86 |
| 010YR024HR | smf-2c | 253.7582 | 11.86 |
| 010YR024HR | smf-2c | 254.0082 | 11.86 |
| 010YR024HR | smf-2c | 254.2582 | 11.86 |
| 010YR024HR | smf-2c | 254.5082 | 11.86 |
| 010YR024HR | smf-2c | 254.7582 | 11.86 |
| 010YR024HR | smf-2c | 255.0082 | 11.86 |
| 010YR024HR | smf-2c | 255.2582 | 11.86 |
| 010YR024HR | smf-2c | 255.5082 | 11.86 |
| 010YR024HR | smf-2c | 255.7582 | 11.86 |
| 010YR024HR | smf-2c | 256.0082 | 11.86 |
| 010YR024HR | smf-2c | 256.2582 | 11.86 |
| 010YR024HR | smf-2c | 256.5082 | 11.86 |
| 010YR024HR | smf-2c | 256.7582 | 11.86 |
| 010YR024HR | smf-2c | 257.0082 | 11.86 |
| 010YR024HR | smf-2c | 257.2582 | 11.86 |
| 010YR024HR | smf-2c | 257.5082 | 11.86 |
| 010YR024HR | smf-2c | 257.7582 | 11.86 |
| 010YR024HR | smf-2c | 258.0082 | 11.86 |
| 010YR024HR | smf-2c | 258.2582 | 11.86 |
| 010YR024HR | smf-2c | 258.5082 | 11.86 |
| 010YR024HR | smf-2c | 258.7582 | 11.86 |
| 010YR024HR | smf-2c | 259.0082 | 11.85 |
| 010YR024HR | smf-2c | 259.2582 | 11.85 |
| 010YR024HR | smf-2c | 259.5082 | 11.85 |
| 010YR024HR | smf-2c | 259.7582 | 11.85 |
| 010YR024HR | smf-2c | 260.0082 | 11.85 |
| 010YR024HR | smf-2c | 260.2582 | 11.85 |

**10yr-24hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR024HR | smf-3a | 261.7582 | 11.91 |
| 010YR024HR | smf-3a | 262.0082 | 11.91 |
| 010YR024HR | smf-3a | 262.2582 | 11.91 |
| 010YR024HR | smf-3a | 262.5082 | 11.91 |
| 010YR024HR | smf-3a | 262.7582 | 11.91 |
| 010YR024HR | smf-3a | 263.0082 | 11.91 |
| 010YR024HR | smf-3a | 263.2582 | 11.91 |
| 010YR024HR | smf-3a | 263.5082 | 11.91 |
| 010YR024HR | smf-3a | 263.7582 | 11.90 |
| 010YR024HR | smf-3a | 264.0082 | 11.90 |
| 010YR024HR | smf-3a | 264.2582 | 11.90 |
| 010YR024HR | smf-3a | 264.5082 | 11.90 |
| 010YR024HR | smf-3a | 264.7582 | 11.90 |
| 010YR024HR | smf-3a | 265.0082 | 11.90 |
| 010YR024HR | smf-3a | 265.2582 | 11.90 |
| 010YR024HR | smf-3a | 265.5082 | 11.90 |
| 010YR024HR | smf-3a | 265.7582 | 11.90 |
| 010YR024HR | smf-3a | 266.0082 | 11.90 |
| 010YR024HR | smf-3a | 266.2582 | 11.90 |
| 010YR024HR | smf-3a | 266.5082 | 11.90 |
| 010YR024HR | smf-3a | 266.7582 | 11.90 |
| 010YR024HR | smf-3a | 267.0082 | 11.90 |
| 010YR024HR | smf-3a | 267.2582 | 11.90 |
| 010YR024HR | smf-3a | 267.5082 | 11.90 |
| 010YR024HR | smf-3a | 267.7582 | 11.90 |
| 010YR024HR | smf-3a | 268.0082 | 11.90 |
| 010YR024HR | smf-3a | 268.2582 | 11.90 |
| 010YR024HR | smf-3a | 268.5082 | 11.90 |
| 010YR024HR | smf-3a | 268.7582 | 11.90 |
| 010YR024HR | smf-3a | 269.0082 | 11.90 |
| 010YR024HR | smf-3a | 269.2582 | 11.90 |
| 010YR024HR | smf-3a | 269.5082 | 11.90 |
| 010YR024HR | smf-3a | 269.7582 | 11.90 |
| 010YR024HR | smf-3a | 270.0082 | 11.90 |
| 010YR024HR | smf-3a | 270.2582 | 11.90 |
| 010YR024HR | smf-3a | 270.5082 | 11.90 |
| 010YR024HR | smf-3a | 270.7582 | 11.90 |
| 010YR024HR | smf-3a | 271.0082 | 11.90 |
| 010YR024HR | smf-3a | 271.2582 | 11.90 |
| 010YR024HR | smf-3a | 271.5082 | 11.90 |
| 010YR024HR | smf-3a | 271.7582 | 11.90 |
| 010YR024HR | smf-3a | 272.0082 | 11.90 |

**10yr-24hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR024HR | smf-3b | 294.5082 | 11.26 |
| 010YR024HR | smf-3b | 294.7582 | 11.26 |
| 010YR024HR | smf-3b | 295.0082 | 11.26 |
| 010YR024HR | smf-3b | 295.2582 | 11.26 |
| 010YR024HR | smf-3b | 295.5082 | 11.26 |
| 010YR024HR | smf-3b | 295.7582 | 11.26 |
| 010YR024HR | smf-3b | 296.0082 | 11.26 |
| 010YR024HR | smf-3b | 296.2582 | 11.26 |
| 010YR024HR | smf-3b | 296.5082 | 11.26 |
| 010YR024HR | smf-3b | 296.7582 | 11.26 |
| 010YR024HR | smf-3b | 297.0082 | 11.26 |
| 010YR024HR | smf-3b | 297.2582 | 11.26 |
| 010YR024HR | smf-3b | 297.5082 | 11.26 |
| 010YR024HR | smf-3b | 297.7582 | 11.26 |
| 010YR024HR | smf-3b | 298.0082 | 11.26 |
| 010YR024HR | smf-3b | 298.2582 | 11.26 |
| 010YR024HR | smf-3b | 298.5082 | 11.26 |
| 010YR024HR | smf-3b | 298.7582 | 11.26 |
| 010YR024HR | smf-3b | 299.0082 | 11.25 |
| 010YR024HR | smf-3b | 299.2582 | 11.25 |
| 010YR024HR | smf-3b | 299.5082 | 11.25 |
| 010YR024HR | smf-3b | 299.7582 | 11.25 |
| 010YR024HR | smf-3b | 300.0082 | 11.25 |
| 010YR024HR | smf-3b | 300.2582 | 11.25 |
| 010YR024HR | smf-3b | 300.5082 | 11.25 |
| 010YR024HR | smf-3b | 300.7582 | 11.25 |
| 010YR024HR | smf-3b | 301.0082 | 11.25 |
| 010YR024HR | smf-3b | 301.2582 | 11.25 |
| 010YR024HR | smf-3b | 301.5082 | 11.25 |
| 010YR024HR | smf-3b | 301.7582 | 11.25 |
| 010YR024HR | smf-3b | 302.0082 | 11.25 |
| 010YR024HR | smf-3b | 302.2582 | 11.25 |
| 010YR024HR | smf-3b | 302.5082 | 11.25 |
| 010YR024HR | smf-3b | 302.7582 | 11.25 |
| 010YR024HR | smf-3b | 303.0082 | 11.25 |
| 010YR024HR | smf-3b | 303.2582 | 11.25 |
| 010YR024HR | smf-3b | 303.5082 | 11.25 |
| 010YR024HR | smf-3b | 303.7582 | 11.25 |
| 010YR024HR | smf-3b | 304.0082 | 11.25 |
| 010YR024HR | smf-3b | 304.2582 | 11.25 |
| 010YR024HR | smf-3b | 304.5082 | 11.25 |
| 010YR024HR | smf-3b | 304.7582 | 11.25 |

**10yr-24hr SMF-3b**

Recovery Analysis

10yr-72hr SMF-1a

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR072HR | smf-1a | 463.7552 | 12.45 |
| 010YR072HR | smf-1a | 464.0052 | 12.45 |
| 010YR072HR | smf-1a | 464.2552 | 12.45 |
| 010YR072HR | smf-1a | 464.5052 | 12.45 |
| 010YR072HR | smf-1a | 464.7552 | 12.45 |
| 010YR072HR | smf-1a | 465.0052 | 12.45 |
| 010YR072HR | smf-1a | 465.2552 | 12.45 |
| 010YR072HR | smf-1a | 465.5052 | 12.45 |
| 010YR072HR | smf-1a | 465.7552 | 12.45 |
| 010YR072HR | smf-1a | 466.0052 | 12.45 |
| 010YR072HR | smf-1a | 466.2552 | 12.45 |
| 010YR072HR | smf-1a | 466.5052 | 12.45 |
| 010YR072HR | smf-1a | 466.7552 | 12.45 |
| 010YR072HR | smf-1a | 467.0052 | 12.45 |
| 010YR072HR | smf-1a | 467.2552 | 12.45 |
| 010YR072HR | smf-1a | 467.5052 | 12.45 |
| 010YR072HR | smf-1a | 467.7552 | 12.45 |
| 010YR072HR | smf-1a | 468.0052 | 12.45 |
| 010YR072HR | smf-1a | 468.2552 | 12.45 |
| 010YR072HR | smf-1a | 468.5052 | 12.45 |
| 010YR072HR | smf-1a | 468.7552 | 12.45 |
| 010YR072HR | smf-1a | 469.0052 | 12.45 |
| 010YR072HR | smf-1a | 469.2552 | 12.45 |
| 010YR072HR | smf-1a | 469.5052 | 12.45 |
| 010YR072HR | smf-1a | 469.7552 | 12.45 |
| 010YR072HR | smf-1a | 470.0052 | 12.45 |
| 010YR072HR | smf-1a | 470.2552 | 12.45 |
| 010YR072HR | smf-1a | 470.5052 | 12.45 |
| 010YR072HR | smf-1a | 470.7552 | 12.45 |
| 010YR072HR | smf-1a | 471.0052 | 12.45 |
| 010YR072HR | smf-1a | 471.2552 | 12.45 |
| 010YR072HR | smf-1a | 471.5052 | 12.45 |
| 010YR072HR | smf-1a | 471.7552 | 12.45 |
| 010YR072HR | smf-1a | 472.0052 | 12.45 |
| 010YR072HR | smf-1a | 472.2552 | 12.45 |
| 010YR072HR | smf-1a | 472.5052 | 12.45 |
| 010YR072HR | smf-1a | 472.7552 | 12.45 |
| 010YR072HR | smf-1a | 473.0052 | 12.45 |
| 010YR072HR | smf-1a | 473.2552 | 12.45 |
| 010YR072HR | smf-1a | 473.5052 | 12.45 |
| 010YR072HR | smf-1a | 473.7552 | 12.45 |
| 010YR072HR | smf-1a | 474.0052 | 12.45 |

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR072HR | smf-1b | 417.0052 | 13.00 |
| 010YR072HR | smf-1b | 417.2552 | 13.00 |
| 010YR072HR | smf-1b | 417.5052 | 13.00 |
| 010YR072HR | smf-1b | 417.7552 | 13.00 |
| 010YR072HR | smf-1b | 418.0052 | 13.00 |
| 010YR072HR | smf-1b | 418.2552 | 13.00 |
| 010YR072HR | smf-1b | 418.5052 | 13.00 |
| 010YR072HR | smf-1b | 418.7552 | 13.00 |
| 010YR072HR | smf-1b | 419.0052 | 13.00 |
| 010YR072HR | smf-1b | 419.2552 | 13.00 |
| 010YR072HR | smf-1b | 419.5052 | 13.00 |
| 010YR072HR | smf-1b | 419.7552 | 13.00 |
| 010YR072HR | smf-1b | 420.0052 | 13.00 |
| 010YR072HR | smf-1b | 420.2552 | 13.00 |
| 010YR072HR | smf-1b | 420.5052 | 13.00 |
| 010YR072HR | smf-1b | 420.7552 | 13.00 |
| 010YR072HR | smf-1b | 421.0052 | 13.00 |
| 010YR072HR | smf-1b | 421.2552 | 13.00 |
| 010YR072HR | smf-1b | 421.5052 | 13.00 |
| 010YR072HR | smf-1b | 421.7552 | 13.00 |
| 010YR072HR | smf-1b | 422.0052 | 13.00 |
| 010YR072HR | smf-1b | 422.2552 | 13.00 |
| 010YR072HR | smf-1b | 422.5052 | 13.00 |
| 010YR072HR | smf-1b | 422.7552 | 13.00 |
| 010YR072HR | smf-1b | 423.0052 | 13.00 |
| 010YR072HR | smf-1b | 423.2552 | 13.00 |
| 010YR072HR | smf-1b | 423.5052 | 13.00 |
| 010YR072HR | smf-1b | 423.7552 | 13.00 |
| 010YR072HR | smf-1b | 424.0052 | 13.00 |
| 010YR072HR | smf-1b | 424.2552 | 13.00 |
| 010YR072HR | smf-1b | 424.5052 | 13.00 |
| 010YR072HR | smf-1b | 424.7552 | 13.00 |
| 010YR072HR | smf-1b | 425.0052 | 13.00 |
| 010YR072HR | smf-1b | 425.2552 | 13.00 |
| 010YR072HR | smf-1b | 425.5052 | 13.00 |
| 010YR072HR | smf-1b | 425.7552 | 13.00 |
| 010YR072HR | smf-1b | 426.0052 | 13.00 |
| 010YR072HR | smf-1b | 426.2552 | 13.00 |
| 010YR072HR | smf-1b | 426.5052 | 13.00 |
| 010YR072HR | smf-1b | 426.7552 | 13.00 |
| 010YR072HR | smf-1b | 427.0052 | 13.00 |
| 010YR072HR | smf-1b | 427.2552 | 13.00 |

**10yr-72hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR072HR | smf-2a | 464.7552 | 12.11 |
| 010YR072HR | smf-2a | 465.0052 | 12.11 |
| 010YR072HR | smf-2a | 465.2552 | 12.11 |
| 010YR072HR | smf-2a | 465.5052 | 12.11 |
| 010YR072HR | smf-2a | 465.7552 | 12.11 |
| 010YR072HR | smf-2a | 466.0052 | 12.11 |
| 010YR072HR | smf-2a | 466.2552 | 12.11 |
| 010YR072HR | smf-2a | 466.5052 | 12.11 |
| 010YR072HR | smf-2a | 466.7552 | 12.11 |
| 010YR072HR | smf-2a | 467.0052 | 12.11 |
| 010YR072HR | smf-2a | 467.2552 | 12.11 |
| 010YR072HR | smf-2a | 467.5052 | 12.11 |
| 010YR072HR | smf-2a | 467.7552 | 12.11 |
| 010YR072HR | smf-2a | 468.0052 | 12.11 |
| 010YR072HR | smf-2a | 468.2552 | 12.11 |
| 010YR072HR | smf-2a | 468.5052 | 12.11 |
| 010YR072HR | smf-2a | 468.7552 | 12.11 |
| 010YR072HR | smf-2a | 469.0052 | 12.11 |
| 010YR072HR | smf-2a | 469.2552 | 12.11 |
| 010YR072HR | smf-2a | 469.5052 | 12.11 |
| 010YR072HR | smf-2a | 469.7552 | 12.11 |
| 010YR072HR | smf-2a | 470.0052 | 12.11 |
| 010YR072HR | smf-2a | 470.2552 | 12.11 |
| 010YR072HR | smf-2a | 470.5052 | 12.11 |
| 010YR072HR | smf-2a | 470.7552 | 12.11 |
| 010YR072HR | smf-2a | 471.0052 | 12.11 |
| 010YR072HR | smf-2a | 471.2552 | 12.11 |
| 010YR072HR | smf-2a | 471.5052 | 12.11 |
| 010YR072HR | smf-2a | 471.7552 | 12.11 |
| 010YR072HR | smf-2a | 472.0052 | 12.11 |
| 010YR072HR | smf-2a | 472.2552 | 12.11 |
| 010YR072HR | smf-2a | 472.5052 | 12.11 |
| 010YR072HR | smf-2a | 472.7552 | 12.11 |
| 010YR072HR | smf-2a | 473.0052 | 12.11 |
| 010YR072HR | smf-2a | 473.2552 | 12.11 |
| 010YR072HR | smf-2a | 473.5052 | 12.11 |
| 010YR072HR | smf-2a | 473.7552 | 12.11 |
| 010YR072HR | smf-2a | 474.0052 | 12.11 |
| 010YR072HR | smf-2a | 474.2552 | 12.11 |
| 010YR072HR | smf-2a | 474.5052 | 12.10 |
| 010YR072HR | smf-2a | 474.7552 | 12.10 |
| 010YR072HR | smf-2a | 475.0052 | 12.10 |

**10yr-72hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR072HR | smf-2b | 386.5052 | 11.41 |
| 010YR072HR | smf-2b | 386.7552 | 11.41 |
| 010YR072HR | smf-2b | 387.0052 | 11.41 |
| 010YR072HR | smf-2b | 387.2552 | 11.41 |
| 010YR072HR | smf-2b | 387.5052 | 11.41 |
| 010YR072HR | smf-2b | 387.7552 | 11.41 |
| 010YR072HR | smf-2b | 388.0052 | 11.41 |
| 010YR072HR | smf-2b | 388.2552 | 11.41 |
| 010YR072HR | smf-2b | 388.5052 | 11.41 |
| 010YR072HR | smf-2b | 388.7552 | 11.41 |
| 010YR072HR | smf-2b | 389.0052 | 11.41 |
| 010YR072HR | smf-2b | 389.2552 | 11.41 |
| 010YR072HR | smf-2b | 389.5052 | 11.41 |
| 010YR072HR | smf-2b | 389.7552 | 11.41 |
| 010YR072HR | smf-2b | 390.0052 | 11.41 |
| 010YR072HR | smf-2b | 390.2552 | 11.41 |
| 010YR072HR | smf-2b | 390.5052 | 11.41 |
| 010YR072HR | smf-2b | 390.7552 | 11.41 |
| 010YR072HR | smf-2b | 391.0052 | 11.41 |
| 010YR072HR | smf-2b | 391.2552 | 11.41 |
| 010YR072HR | smf-2b | 391.5052 | 11.41 |
| 010YR072HR | smf-2b | 391.7552 | 11.40 |
| 010YR072HR | smf-2b | 392.0052 | 11.40 |
| 010YR072HR | smf-2b | 392.2552 | 11.40 |
| 010YR072HR | smf-2b | 392.5052 | 11.40 |
| 010YR072HR | smf-2b | 392.7552 | 11.40 |
| 010YR072HR | smf-2b | 393.0052 | 11.40 |
| 010YR072HR | smf-2b | 393.2552 | 11.40 |
| 010YR072HR | smf-2b | 393.5052 | 11.40 |
| 010YR072HR | smf-2b | 393.7552 | 11.40 |
| 010YR072HR | smf-2b | 394.0052 | 11.40 |
| 010YR072HR | smf-2b | 394.2552 | 11.40 |
| 010YR072HR | smf-2b | 394.5052 | 11.40 |
| 010YR072HR | smf-2b | 394.7552 | 11.40 |
| 010YR072HR | smf-2b | 395.0052 | 11.40 |
| 010YR072HR | smf-2b | 395.2552 | 11.40 |
| 010YR072HR | smf-2b | 395.5052 | 11.40 |
| 010YR072HR | smf-2b | 395.7552 | 11.40 |
| 010YR072HR | smf-2b | 396.0052 | 11.40 |
| 010YR072HR | smf-2b | 396.2552 | 11.40 |
| 010YR072HR | smf-2b | 396.5052 | 11.40 |
| 010YR072HR | smf-2b | 396.7552 | 11.40 |

**10yr-72hr SMF-2b**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR072HR | smf-2c | 455.2552 | 11.86 |
| 010YR072HR | smf-2c | 455.5052 | 11.86 |
| 010YR072HR | smf-2c | 455.7552 | 11.86 |
| 010YR072HR | smf-2c | 456.0052 | 11.86 |
| 010YR072HR | smf-2c | 456.2552 | 11.86 |
| 010YR072HR | smf-2c | 456.5052 | 11.86 |
| 010YR072HR | smf-2c | 456.7552 | 11.86 |
| 010YR072HR | smf-2c | 457.0052 | 11.86 |
| 010YR072HR | smf-2c | 457.2552 | 11.86 |
| 010YR072HR | smf-2c | 457.5052 | 11.86 |
| 010YR072HR | smf-2c | 457.7552 | 11.86 |
| 010YR072HR | smf-2c | 458.0052 | 11.86 |
| 010YR072HR | smf-2c | 458.2552 | 11.86 |
| 010YR072HR | smf-2c | 458.5052 | 11.86 |
| 010YR072HR | smf-2c | 458.7552 | 11.86 |
| 010YR072HR | smf-2c | 459.0052 | 11.85 |
| 010YR072HR | smf-2c | 459.2552 | 11.85 |
| 010YR072HR | smf-2c | 459.5052 | 11.85 |
| 010YR072HR | smf-2c | 459.7552 | 11.85 |
| 010YR072HR | smf-2c | 460.0052 | 11.85 |
| 010YR072HR | smf-2c | 460.2552 | 11.85 |
| 010YR072HR | smf-2c | 460.5052 | 11.85 |
| 010YR072HR | smf-2c | 460.7552 | 11.85 |
| 010YR072HR | smf-2c | 461.0052 | 11.85 |
| 010YR072HR | smf-2c | 461.2552 | 11.85 |
| 010YR072HR | smf-2c | 461.5052 | 11.85 |
| 010YR072HR | smf-2c | 461.7552 | 11.85 |
| 010YR072HR | smf-2c | 462.0052 | 11.85 |
| 010YR072HR | smf-2c | 462.2552 | 11.85 |
| 010YR072HR | smf-2c | 462.5052 | 11.85 |
| 010YR072HR | smf-2c | 462.7552 | 11.85 |
| 010YR072HR | smf-2c | 463.0052 | 11.85 |
| 010YR072HR | smf-2c | 463.2552 | 11.85 |
| 010YR072HR | smf-2c | 463.5052 | 11.85 |
| 010YR072HR | smf-2c | 463.7552 | 11.85 |
| 010YR072HR | smf-2c | 464.0052 | 11.85 |
| 010YR072HR | smf-2c | 464.2552 | 11.85 |
| 010YR072HR | smf-2c | 464.5052 | 11.85 |
| 010YR072HR | smf-2c | 464.7552 | 11.85 |
| 010YR072HR | smf-2c | 465.0052 | 11.85 |
| 010YR072HR | smf-2c | 465.2552 | 11.85 |
| 010YR072HR | smf-2c | 465.5052 | 11.85 |

**10yr-72hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR072HR | smf-3a | 524.0052 | 11.91 |
| 010YR072HR | smf-3a | 524.2552 | 11.91 |
| 010YR072HR | smf-3a | 524.5052 | 11.91 |
| 010YR072HR | smf-3a | 524.7552 | 11.91 |
| 010YR072HR | smf-3a | 525.0052 | 11.91 |
| 010YR072HR | smf-3a | 525.2552 | 11.91 |
| 010YR072HR | smf-3a | 525.5052 | 11.91 |
| 010YR072HR | smf-3a | 525.7552 | 11.91 |
| 010YR072HR | smf-3a | 526.0052 | 11.91 |
| 010YR072HR | smf-3a | 526.2552 | 11.91 |
| 010YR072HR | smf-3a | 526.5052 | 11.91 |
| 010YR072HR | smf-3a | 526.7552 | 11.91 |
| 010YR072HR | smf-3a | 527.0052 | 11.91 |
| 010YR072HR | smf-3a | 527.2552 | 11.91 |
| 010YR072HR | smf-3a | 527.5052 | 11.91 |
| 010YR072HR | smf-3a | 527.7552 | 11.91 |
| 010YR072HR | smf-3a | 528.0052 | 11.91 |
| 010YR072HR | smf-3a | 528.2552 | 11.91 |
| 010YR072HR | smf-3a | 528.5052 | 11.91 |
| 010YR072HR | smf-3a | 528.7552 | 11.91 |
| 010YR072HR | smf-3a | 529.0052 | 11.91 |
| 010YR072HR | smf-3a | 529.2552 | 11.91 |
| 010YR072HR | smf-3a | 529.5052 | 11.90 |
| 010YR072HR | smf-3a | 529.7552 | 11.90 |
| 010YR072HR | smf-3a | 530.0052 | 11.90 |
| 010YR072HR | smf-3a | 530.2552 | 11.90 |
| 010YR072HR | smf-3a | 530.5052 | 11.90 |
| 010YR072HR | smf-3a | 530.7552 | 11.90 |
| 010YR072HR | smf-3a | 531.0052 | 11.90 |
| 010YR072HR | smf-3a | 531.2552 | 11.90 |
| 010YR072HR | smf-3a | 531.5052 | 11.90 |
| 010YR072HR | smf-3a | 531.7552 | 11.90 |
| 010YR072HR | smf-3a | 532.0052 | 11.90 |
| 010YR072HR | smf-3a | 532.2552 | 11.90 |
| 010YR072HR | smf-3a | 532.5052 | 11.90 |
| 010YR072HR | smf-3a | 532.7552 | 11.90 |
| 010YR072HR | smf-3a | 533.0052 | 11.90 |
| 010YR072HR | smf-3a | 533.2552 | 11.90 |
| 010YR072HR | smf-3a | 533.5052 | 11.90 |
| 010YR072HR | smf-3a | 533.7552 | 11.90 |
| 010YR072HR | smf-3a | 534.0052 | 11.90 |
| 010YR072HR | smf-3a | 534.2552 | 11.90 |

**10yr-72hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 010YR072HR | smf-3b | 550.7552 | 11.26 |
| 010YR072HR | smf-3b | 551.0052 | 11.26 |
| 010YR072HR | smf-3b | 551.2552 | 11.26 |
| 010YR072HR | smf-3b | 551.5052 | 11.26 |
| 010YR072HR | smf-3b | 551.7552 | 11.26 |
| 010YR072HR | smf-3b | 552.0052 | 11.26 |
| 010YR072HR | smf-3b | 552.2552 | 11.26 |
| 010YR072HR | smf-3b | 552.5052 | 11.26 |
| 010YR072HR | smf-3b | 552.7552 | 11.26 |
| 010YR072HR | smf-3b | 553.0052 | 11.26 |
| 010YR072HR | smf-3b | 553.2552 | 11.26 |
| 010YR072HR | smf-3b | 553.5052 | 11.26 |
| 010YR072HR | smf-3b | 553.7552 | 11.26 |
| 010YR072HR | smf-3b | 554.0052 | 11.26 |
| 010YR072HR | smf-3b | 554.2552 | 11.26 |
| 010YR072HR | smf-3b | 554.5052 | 11.26 |
| 010YR072HR | smf-3b | 554.7552 | 11.26 |
| 010YR072HR | smf-3b | 555.0052 | 11.26 |
| 010YR072HR | smf-3b | 555.2552 | 11.26 |
| 010YR072HR | smf-3b | 555.5052 | 11.26 |
| 010YR072HR | smf-3b | 555.7552 | 11.26 |
| 010YR072HR | smf-3b | 556.0052 | 11.26 |
| 010YR072HR | smf-3b | 556.2552 | 11.26 |
| 010YR072HR | smf-3b | 556.5052 | 11.26 |
| 010YR072HR | smf-3b | 556.7552 | 11.26 |
| 010YR072HR | smf-3b | 557.0052 | 11.26 |
| 010YR072HR | smf-3b | 557.2552 | 11.26 |
| 010YR072HR | smf-3b | 557.5052 | 11.26 |
| 010YR072HR | smf-3b | 557.7552 | 11.26 |
| 010YR072HR | smf-3b | 558.0052 | 11.26 |
| 010YR072HR | smf-3b | 558.2552 | 11.26 |
| 010YR072HR | smf-3b | 558.5052 | 11.26 |
| 010YR072HR | smf-3b | 558.7552 | 11.25 |
| 010YR072HR | smf-3b | 559.0052 | 11.25 |
| 010YR072HR | smf-3b | 559.2552 | 11.25 |
| 010YR072HR | smf-3b | 559.5052 | 11.25 |
| 010YR072HR | smf-3b | 559.7552 | 11.25 |
| 010YR072HR | smf-3b | 560.0052 | 11.25 |
| 010YR072HR | smf-3b | 560.2552 | 11.25 |
| 010YR072HR | smf-3b | 560.5052 | 11.25 |
| 010YR072HR | smf-3b | 560.7552 | 11.25 |
| 010YR072HR | smf-3b | 561.0052 | 11.25 |

**10yr-72hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR001HR | smf-1a | 52.5050 | 12.46 |
| 025YR001HR | smf-1a | 52.7550 | 12.45 |
| 025YR001HR | smf-1a | 53.0050 | 12.45 |
| 025YR001HR | smf-1a | 53.2550 | 12.45 |
| 025YR001HR | smf-1a | 53.5050 | 12.45 |
| 025YR001HR | smf-1a | 53.7550 | 12.45 |
| 025YR001HR | smf-1a | 54.0050 | 12.45 |
| 025YR001HR | smf-1a | 54.2550 | 12.45 |
| 025YR001HR | smf-1a | 54.5050 | 12.45 |
| 025YR001HR | smf-1a | 54.7550 | 12.45 |
| 025YR001HR | smf-1a | 55.0050 | 12.45 |
| 025YR001HR | smf-1a | 55.2550 | 12.45 |
| 025YR001HR | smf-1a | 55.5050 | 12.45 |
| 025YR001HR | smf-1a | 55.7550 | 12.45 |
| 025YR001HR | smf-1a | 56.0050 | 12.45 |
| 025YR001HR | smf-1a | 56.2550 | 12.45 |
| 025YR001HR | smf-1a | 56.5050 | 12.45 |
| 025YR001HR | smf-1a | 56.7550 | 12.45 |
| 025YR001HR | smf-1a | 57.0050 | 12.45 |
| 025YR001HR | smf-1a | 57.2550 | 12.45 |
| 025YR001HR | smf-1a | 57.5050 | 12.45 |
| 025YR001HR | smf-1a | 57.7550 | 12.45 |
| 025YR001HR | smf-1a | 58.0050 | 12.45 |
| 025YR001HR | smf-1a | 58.2550 | 12.45 |
| 025YR001HR | smf-1a | 58.5050 | 12.45 |
| 025YR001HR | smf-1a | 58.7550 | 12.45 |
| 025YR001HR | smf-1a | 59.0050 | 12.45 |
| 025YR001HR | smf-1a | 59.2550 | 12.45 |
| 025YR001HR | smf-1a | 59.5050 | 12.45 |
| 025YR001HR | smf-1a | 59.7550 | 12.45 |
| 025YR001HR | smf-1a | 60.0050 | 12.45 |
| 025YR001HR | smf-1a | 60.2550 | 12.45 |
| 025YR001HR | smf-1a | 60.5050 | 12.45 |
| 025YR001HR | smf-1a | 60.7550 | 12.45 |
| 025YR001HR | smf-1a | 61.0050 | 12.45 |
| 025YR001HR | smf-1a | 61.2550 | 12.45 |
| 025YR001HR | smf-1a | 61.5050 | 12.45 |
| 025YR001HR | smf-1a | 61.7550 | 12.45 |
| 025YR001HR | smf-1a | 62.0050 | 12.45 |
| 025YR001HR | smf-1a | 62.2550 | 12.45 |
| 025YR001HR | smf-1a | 62.5050 | 12.45 |
| 025YR001HR | smf-1a | 62.7550 | 12.45 |

**25yr-1hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR001HR | smf-1b | 45.2550 | 13.07 |
| 025YR001HR | smf-1b | 45.5050 | 13.07 |
| 025YR001HR | smf-1b | 45.7550 | 13.06 |
| 025YR001HR | smf-1b | 46.0050 | 13.06 |
| 025YR001HR | smf-1b | 46.2550 | 13.06 |
| 025YR001HR | smf-1b | 46.5050 | 13.06 |
| 025YR001HR | smf-1b | 46.7550 | 13.05 |
| 025YR001HR | smf-1b | 47.0050 | 13.05 |
| 025YR001HR | smf-1b | 47.2550 | 13.05 |
| 025YR001HR | smf-1b | 47.5050 | 13.05 |
| 025YR001HR | smf-1b | 47.7550 | 13.05 |
| 025YR001HR | smf-1b | 48.0050 | 13.04 |
| 025YR001HR | smf-1b | 48.2550 | 13.04 |
| 025YR001HR | smf-1b | 48.5050 | 13.04 |
| 025YR001HR | smf-1b | 48.7550 | 13.04 |
| 025YR001HR | smf-1b | 49.0050 | 13.04 |
| 025YR001HR | smf-1b | 49.2550 | 13.03 |
| 025YR001HR | smf-1b | 49.5050 | 13.03 |
| 025YR001HR | smf-1b | 49.7550 | 13.03 |
| 025YR001HR | smf-1b | 50.0050 | 13.03 |
| 025YR001HR | smf-1b | 50.2550 | 13.03 |
| 025YR001HR | smf-1b | 50.5050 | 13.02 |
| 025YR001HR | smf-1b | 50.7550 | 13.02 |
| 025YR001HR | smf-1b | 51.0050 | 13.02 |
| 025YR001HR | smf-1b | 51.2550 | 13.02 |
| 025YR001HR | smf-1b | 51.5050 | 13.02 |
| 025YR001HR | smf-1b | 51.7550 | 13.02 |
| 025YR001HR | smf-1b | 52.0050 | 13.01 |
| 025YR001HR | smf-1b | 52.2550 | 13.01 |
| 025YR001HR | smf-1b | 52.5050 | 13.01 |
| 025YR001HR | smf-1b | 52.7550 | 13.01 |
| 025YR001HR | smf-1b | 53.0050 | 13.01 |
| 025YR001HR | smf-1b | 53.2550 | 13.00 |
| 025YR001HR | smf-1b | 53.5050 | 13.00 |
| 025YR001HR | smf-1b | 53.7550 | 13.00 |
| 025YR001HR | smf-1b | 54.0050 | 13.00 |
| 025YR001HR | smf-1b | 54.2550 | 13.00 |
| 025YR001HR | smf-1b | 54.5050 | 13.00 |
| 025YR001HR | smf-1b | 54.7550 | 13.00 |
| 025YR001HR | smf-1b | 55.0050 | 13.00 |
| 025YR001HR | smf-1b | 55.2550 | 13.00 |
| 025YR001HR | smf-1b | 55.5050 | 13.00 |

**25yr-1hr SMF-1b**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR001HR | smf-2a | 122.0050 | 12.11 |
| 025YR001HR | smf-2a | 122.2550 | 12.11 |
| 025YR001HR | smf-2a | 122.5050 | 12.11 |
| 025YR001HR | smf-2a | 122.7550 | 12.11 |
| 025YR001HR | smf-2a | 123.0050 | 12.11 |
| 025YR001HR | smf-2a | 123.2550 | 12.11 |
| 025YR001HR | smf-2a | 123.5050 | 12.11 |
| 025YR001HR | smf-2a | 123.7550 | 12.10 |
| 025YR001HR | smf-2a | 124.0050 | 12.10 |
| 025YR001HR | smf-2a | 124.2550 | 12.10 |
| 025YR001HR | smf-2a | 124.5050 | 12.10 |
| 025YR001HR | smf-2a | 124.7550 | 12.10 |
| 025YR001HR | smf-2a | 125.0050 | 12.10 |
| 025YR001HR | smf-2a | 125.2550 | 12.10 |
| 025YR001HR | smf-2a | 125.5050 | 12.10 |
| 025YR001HR | smf-2a | 125.7550 | 12.10 |
| 025YR001HR | smf-2a | 126.0050 | 12.10 |
| 025YR001HR | smf-2a | 126.2550 | 12.10 |
| 025YR001HR | smf-2a | 126.5050 | 12.10 |
| 025YR001HR | smf-2a | 126.7550 | 12.10 |
| 025YR001HR | smf-2a | 127.0050 | 12.10 |
| 025YR001HR | smf-2a | 127.2550 | 12.10 |
| 025YR001HR | smf-2a | 127.5050 | 12.10 |
| 025YR001HR | smf-2a | 127.7550 | 12.10 |
| 025YR001HR | smf-2a | 128.0050 | 12.10 |
| 025YR001HR | smf-2a | 128.2550 | 12.10 |
| 025YR001HR | smf-2a | 128.5050 | 12.10 |
| 025YR001HR | smf-2a | 128.7550 | 12.10 |
| 025YR001HR | smf-2a | 129.0050 | 12.10 |
| 025YR001HR | smf-2a | 129.2550 | 12.10 |
| 025YR001HR | smf-2a | 129.5050 | 12.10 |
| 025YR001HR | smf-2a | 129.7550 | 12.10 |
| 025YR001HR | smf-2a | 130.0050 | 12.10 |
| 025YR001HR | smf-2a | 130.2550 | 12.10 |
| 025YR001HR | smf-2a | 130.5050 | 12.10 |
| 025YR001HR | smf-2a | 130.7550 | 12.10 |
| 025YR001HR | smf-2a | 131.0050 | 12.10 |
| 025YR001HR | smf-2a | 131.2550 | 12.10 |
| 025YR001HR | smf-2a | 131.5050 | 12.10 |
| 025YR001HR | smf-2a | 131.7550 | 12.10 |
| 025YR001HR | smf-2a | 132.0050 | 12.10 |
| 025YR001HR | smf-2a | 132.2550 | 12.10 |

**25yr-1hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR001HR | smf-2b | 83.2550 | 11.41 |
| 025YR001HR | smf-2b | 83.5050 | 11.41 |
| 025YR001HR | smf-2b | 83.7550 | 11.41 |
| 025YR001HR | smf-2b | 84.0050 | 11.41 |
| 025YR001HR | smf-2b | 84.2550 | 11.41 |
| 025YR001HR | smf-2b | 84.5050 | 11.40 |
| 025YR001HR | smf-2b | 84.7550 | 11.40 |
| 025YR001HR | smf-2b | 85.0050 | 11.40 |
| 025YR001HR | smf-2b | 85.2550 | 11.40 |
| 025YR001HR | smf-2b | 85.5050 | 11.40 |
| 025YR001HR | smf-2b | 85.7550 | 11.40 |
| 025YR001HR | smf-2b | 86.0050 | 11.40 |
| 025YR001HR | smf-2b | 86.2550 | 11.40 |
| 025YR001HR | smf-2b | 86.5050 | 11.40 |
| 025YR001HR | smf-2b | 86.7550 | 11.40 |
| 025YR001HR | smf-2b | 87.0050 | 11.40 |
| 025YR001HR | smf-2b | 87.2550 | 11.40 |
| 025YR001HR | smf-2b | 87.5050 | 11.40 |
| 025YR001HR | smf-2b | 87.7550 | 11.40 |
| 025YR001HR | smf-2b | 88.0050 | 11.40 |
| 025YR001HR | smf-2b | 88.2550 | 11.40 |
| 025YR001HR | smf-2b | 88.5050 | 11.40 |
| 025YR001HR | smf-2b | 88.7550 | 11.40 |
| 025YR001HR | smf-2b | 89.0050 | 11.40 |
| 025YR001HR | smf-2b | 89.2550 | 11.40 |
| 025YR001HR | smf-2b | 89.5050 | 11.40 |
| 025YR001HR | smf-2b | 89.7550 | 11.40 |
| 025YR001HR | smf-2b | 90.0050 | 11.40 |
| 025YR001HR | smf-2b | 90.2550 | 11.40 |
| 025YR001HR | smf-2b | 90.5050 | 11.40 |
| 025YR001HR | smf-2b | 90.7550 | 11.40 |
| 025YR001HR | smf-2b | 91.0050 | 11.40 |
| 025YR001HR | smf-2b | 91.2550 | 11.40 |
| 025YR001HR | smf-2b | 91.5050 | 11.40 |
| 025YR001HR | smf-2b | 91.7550 | 11.40 |
| 025YR001HR | smf-2b | 92.0050 | 11.40 |
| 025YR001HR | smf-2b | 92.2550 | 11.40 |
| 025YR001HR | smf-2b | 92.5050 | 11.40 |
| 025YR001HR | smf-2b | 92.7550 | 11.40 |
| 025YR001HR | smf-2b | 93.0050 | 11.40 |
| 025YR001HR | smf-2b | 93.2550 | 11.40 |
| 025YR001HR | smf-2b | 93.5050 | 11.40 |

**25yr-1hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR001HR | smf-2c | 107.5050 | 11.88 |
| 025YR001HR | smf-2c | 107.7550 | 11.88 |
| 025YR001HR | smf-2c | 108.0050 | 11.87 |
| 025YR001HR | smf-2c | 108.2550 | 11.87 |
| 025YR001HR | smf-2c | 108.5050 | 11.87 |
| 025YR001HR | smf-2c | 108.7550 | 11.87 |
| 025YR001HR | smf-2c | 109.0050 | 11.87 |
| 025YR001HR | smf-2c | 109.2550 | 11.87 |
| 025YR001HR | smf-2c | 109.5050 | 11.87 |
| 025YR001HR | smf-2c | 109.7550 | 11.87 |
| 025YR001HR | smf-2c | 110.0050 | 11.87 |
| 025YR001HR | smf-2c | 110.2550 | 11.87 |
| 025YR001HR | smf-2c | 110.5050 | 11.87 |
| 025YR001HR | smf-2c | 110.7550 | 11.86 |
| 025YR001HR | smf-2c | 111.0050 | 11.86 |
| 025YR001HR | smf-2c | 111.2550 | 11.86 |
| 025YR001HR | smf-2c | 111.5050 | 11.86 |
| 025YR001HR | smf-2c | 111.7550 | 11.86 |
| 025YR001HR | smf-2c | 112.0050 | 11.86 |
| 025YR001HR | smf-2c | 112.2550 | 11.86 |
| 025YR001HR | smf-2c | 112.5050 | 11.86 |
| 025YR001HR | smf-2c | 112.7550 | 11.86 |
| 025YR001HR | smf-2c | 113.0050 | 11.86 |
| 025YR001HR | smf-2c | 113.2550 | 11.86 |
| 025YR001HR | smf-2c | 113.5050 | 11.86 |
| 025YR001HR | smf-2c | 113.7550 | 11.85 |
| 025YR001HR | smf-2c | 114.0050 | 11.85 |
| 025YR001HR | smf-2c | 114.2550 | 11.85 |
| 025YR001HR | smf-2c | 114.5050 | 11.85 |
| 025YR001HR | smf-2c | 114.7550 | 11.85 |
| 025YR001HR | smf-2c | 115.0050 | 11.85 |
| 025YR001HR | smf-2c | 115.2550 | 11.85 |
| 025YR001HR | smf-2c | 115.5050 | 11.85 |
| 025YR001HR | smf-2c | 115.7550 | 11.85 |
| 025YR001HR | smf-2c | 116.0050 | 11.85 |
| 025YR001HR | smf-2c | 116.2550 | 11.85 |
| 025YR001HR | smf-2c | 116.5050 | 11.85 |
| 025YR001HR | smf-2c | 116.7550 | 11.85 |
| 025YR001HR | smf-2c | 117.0050 | 11.85 |
| 025YR001HR | smf-2c | 117.2550 | 11.85 |
| 025YR001HR | smf-2c | 117.5050 | 11.85 |
| 025YR001HR | smf-2c | 117.7550 | 11.85 |

**25yr-1hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR001HR | smf-3a | 89.7550 | 11.91 |
| 025YR001HR | smf-3a | 90.0050 | 11.90 |
| 025YR001HR | smf-3a | 90.2550 | 11.90 |
| 025YR001HR | smf-3a | 90.5050 | 11.90 |
| 025YR001HR | smf-3a | 90.7550 | 11.90 |
| 025YR001HR | smf-3a | 91.0050 | 11.90 |
| 025YR001HR | smf-3a | 91.2550 | 11.90 |
| 025YR001HR | smf-3a | 91.5050 | 11.90 |
| 025YR001HR | smf-3a | 91.7550 | 11.90 |
| 025YR001HR | smf-3a | 92.0050 | 11.90 |
| 025YR001HR | smf-3a | 92.2550 | 11.90 |
| 025YR001HR | smf-3a | 92.5050 | 11.90 |
| 025YR001HR | smf-3a | 92.7550 | 11.90 |
| 025YR001HR | smf-3a | 93.0050 | 11.90 |
| 025YR001HR | smf-3a | 93.2550 | 11.90 |
| 025YR001HR | smf-3a | 93.5050 | 11.90 |
| 025YR001HR | smf-3a | 93.7550 | 11.90 |
| 025YR001HR | smf-3a | 94.0050 | 11.90 |
| 025YR001HR | smf-3a | 94.2550 | 11.90 |
| 025YR001HR | smf-3a | 94.5050 | 11.90 |
| 025YR001HR | smf-3a | 94.7550 | 11.90 |
| 025YR001HR | smf-3a | 95.0050 | 11.90 |
| 025YR001HR | smf-3a | 95.2550 | 11.90 |
| 025YR001HR | smf-3a | 95.5050 | 11.90 |
| 025YR001HR | smf-3a | 95.7550 | 11.90 |
| 025YR001HR | smf-3a | 96.0050 | 11.90 |
| 025YR001HR | smf-3a | 96.2550 | 11.90 |
| 025YR001HR | smf-3a | 96.5050 | 11.90 |
| 025YR001HR | smf-3a | 96.7550 | 11.90 |
| 025YR001HR | smf-3a | 97.0050 | 11.90 |
| 025YR001HR | smf-3a | 97.2550 | 11.90 |
| 025YR001HR | smf-3a | 97.5050 | 11.90 |
| 025YR001HR | smf-3a | 97.7550 | 11.90 |
| 025YR001HR | smf-3a | 98.0050 | 11.90 |
| 025YR001HR | smf-3a | 98.2550 | 11.90 |
| 025YR001HR | smf-3a | 98.5050 | 11.90 |
| 025YR001HR | smf-3a | 98.7550 | 11.90 |
| 025YR001HR | smf-3a | 99.0050 | 11.90 |
| 025YR001HR | smf-3a | 99.2550 | 11.90 |
| 025YR001HR | smf-3a | 99.5050 | 11.90 |
| 025YR001HR | smf-3a | 99.7550 | 11.90 |
| 025YR001HR | smf-3a | 100.0050 | 11.90 |

**25yr-1hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR001HR | smf-3b | 114.0050 | 11.28 |
| 025YR001HR | smf-3b | 114.2550 | 11.28 |
| 025YR001HR | smf-3b | 114.5050 | 11.28 |
| 025YR001HR | smf-3b | 114.7550 | 11.28 |
| 025YR001HR | smf-3b | 115.0050 | 11.27 |
| 025YR001HR | smf-3b | 115.2550 | 11.27 |
| 025YR001HR | smf-3b | 115.5050 | 11.27 |
| 025YR001HR | smf-3b | 115.7550 | 11.27 |
| 025YR001HR | smf-3b | 116.0050 | 11.27 |
| 025YR001HR | smf-3b | 116.2550 | 11.27 |
| 025YR001HR | smf-3b | 116.5050 | 11.27 |
| 025YR001HR | smf-3b | 116.7550 | 11.27 |
| 025YR001HR | smf-3b | 117.0050 | 11.27 |
| 025YR001HR | smf-3b | 117.2550 | 11.27 |
| 025YR001HR | smf-3b | 117.5050 | 11.27 |
| 025YR001HR | smf-3b | 117.7550 | 11.26 |
| 025YR001HR | smf-3b | 118.0050 | 11.26 |
| 025YR001HR | smf-3b | 118.2550 | 11.26 |
| 025YR001HR | smf-3b | 118.5050 | 11.26 |
| 025YR001HR | smf-3b | 118.7550 | 11.26 |
| 025YR001HR | smf-3b | 119.0050 | 11.26 |
| 025YR001HR | smf-3b | 119.2550 | 11.26 |
| 025YR001HR | smf-3b | 119.5050 | 11.26 |
| 025YR001HR | smf-3b | 119.7550 | 11.26 |
| 025YR001HR | smf-3b | 120.0050 | 11.26 |
| 025YR001HR | smf-3b | 120.2550 | 11.26 |
| 025YR001HR | smf-3b | 120.5050 | 11.26 |
| 025YR001HR | smf-3b | 120.7550 | 11.25 |
| 025YR001HR | smf-3b | 121.0050 | 11.25 |
| 025YR001HR | smf-3b | 121.2550 | 11.25 |
| 025YR001HR | smf-3b | 121.5050 | 11.25 |
| 025YR001HR | smf-3b | 121.7550 | 11.25 |
| 025YR001HR | smf-3b | 122.0050 | 11.25 |
| 025YR001HR | smf-3b | 122.2550 | 11.25 |
| 025YR001HR | smf-3b | 122.5050 | 11.25 |
| 025YR001HR | smf-3b | 122.7550 | 11.25 |
| 025YR001HR | smf-3b | 123.0050 | 11.25 |
| 025YR001HR | smf-3b | 123.2550 | 11.25 |
| 025YR001HR | smf-3b | 123.5050 | 11.25 |
| 025YR001HR | smf-3b | 123.7550 | 11.25 |
| 025YR001HR | smf-3b | 124.0050 | 11.25 |
| 025YR001HR | smf-3b | 124.2550 | 11.25 |

**25yr-1hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR002HR | smf-1a | 96.2515 | 12.47 |
| 025YR002HR | smf-1a | 96.5015 | 12.47 |
| 025YR002HR | smf-1a | 96.7515 | 12.47 |
| 025YR002HR | smf-1a | 97.0015 | 12.47 |
| 025YR002HR | smf-1a | 97.2515 | 12.47 |
| 025YR002HR | smf-1a | 97.5015 | 12.47 |
| 025YR002HR | smf-1a | 97.7515 | 12.47 |
| 025YR002HR | smf-1a | 98.0015 | 12.47 |
| 025YR002HR | smf-1a | 98.2515 | 12.46 |
| 025YR002HR | smf-1a | 98.5015 | 12.46 |
| 025YR002HR | smf-1a | 98.7515 | 12.46 |
| 025YR002HR | smf-1a | 99.0015 | 12.46 |
| 025YR002HR | smf-1a | 99.2515 | 12.46 |
| 025YR002HR | smf-1a | 99.5015 | 12.46 |
| 025YR002HR | smf-1a | 99.7515 | 12.46 |
| 025YR002HR | smf-1a | 100.0015 | 12.46 |
| 025YR002HR | smf-1a | 100.2515 | 12.46 |
| 025YR002HR | smf-1a | 100.5015 | 12.46 |
| 025YR002HR | smf-1a | 100.7515 | 12.46 |
| 025YR002HR | smf-1a | 101.0015 | 12.46 |
| 025YR002HR | smf-1a | 101.2515 | 12.45 |
| 025YR002HR | smf-1a | 101.5015 | 12.45 |
| 025YR002HR | smf-1a | 101.7515 | 12.45 |
| 025YR002HR | smf-1a | 102.0015 | 12.45 |
| 025YR002HR | smf-1a | 102.2515 | 12.45 |
| 025YR002HR | smf-1a | 102.5015 | 12.45 |
| 025YR002HR | smf-1a | 102.7515 | 12.45 |
| 025YR002HR | smf-1a | 103.0015 | 12.45 |
| 025YR002HR | smf-1a | 103.2515 | 12.45 |
| 025YR002HR | smf-1a | 103.5015 | 12.45 |
| 025YR002HR | smf-1a | 103.7515 | 12.45 |
| 025YR002HR | smf-1a | 104.0015 | 12.45 |
| 025YR002HR | smf-1a | 104.2515 | 12.45 |
| 025YR002HR | smf-1a | 104.5015 | 12.45 |
| 025YR002HR | smf-1a | 104.7515 | 12.45 |
| 025YR002HR | smf-1a | 105.0015 | 12.45 |
| 025YR002HR | smf-1a | 105.2515 | 12.45 |
| 025YR002HR | smf-1a | 105.5015 | 12.45 |
| 025YR002HR | smf-1a | 105.7515 | 12.45 |
| 025YR002HR | smf-1a | 106.0015 | 12.45 |
| 025YR002HR | smf-1a | 106.2515 | 12.45 |
| 025YR002HR | smf-1a | 106.5015 | 12.45 |

**25yr-2hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR002HR | smf-1b | 67.0015 | 13.01 |
| 025YR002HR | smf-1b | 67.2515 | 13.01 |
| 025YR002HR | smf-1b | 67.5015 | 13.01 |
| 025YR002HR | smf-1b | 67.7515 | 13.01 |
| 025YR002HR | smf-1b | 68.0015 | 13.01 |
| 025YR002HR | smf-1b | 68.2515 | 13.00 |
| 025YR002HR | smf-1b | 68.5015 | 13.00 |
| 025YR002HR | smf-1b | 68.7515 | 13.00 |
| 025YR002HR | smf-1b | 69.0015 | 13.00 |
| 025YR002HR | smf-1b | 69.2515 | 13.00 |
| 025YR002HR | smf-1b | 69.5015 | 13.00 |
| 025YR002HR | smf-1b | 69.7515 | 13.00 |
| 025YR002HR | smf-1b | 70.0015 | 13.00 |
| 025YR002HR | smf-1b | 70.2515 | 13.00 |
| 025YR002HR | smf-1b | 70.5015 | 13.00 |
| 025YR002HR | smf-1b | 70.7515 | 13.00 |
| 025YR002HR | smf-1b | 71.0015 | 13.00 |
| 025YR002HR | smf-1b | 71.2515 | 13.00 |
| 025YR002HR | smf-1b | 71.5015 | 13.00 |
| 025YR002HR | smf-1b | 71.7515 | 13.00 |
| 025YR002HR | smf-1b | 72.0015 | 13.00 |
| 025YR002HR | smf-1b | 72.2515 | 13.00 |
| 025YR002HR | smf-1b | 72.5015 | 13.00 |
| 025YR002HR | smf-1b | 72.7515 | 13.00 |
| 025YR002HR | smf-1b | 73.0015 | 13.00 |
| 025YR002HR | smf-1b | 73.2515 | 13.00 |
| 025YR002HR | smf-1b | 73.5015 | 13.00 |
| 025YR002HR | smf-1b | 73.7515 | 13.00 |
| 025YR002HR | smf-1b | 74.0015 | 13.00 |
| 025YR002HR | smf-1b | 74.2515 | 13.00 |
| 025YR002HR | smf-1b | 74.5015 | 13.00 |
| 025YR002HR | smf-1b | 74.7515 | 13.00 |
| 025YR002HR | smf-1b | 75.0015 | 13.00 |
| 025YR002HR | smf-1b | 75.2515 | 13.00 |
| 025YR002HR | smf-1b | 75.5015 | 13.00 |
| 025YR002HR | smf-1b | 75.7515 | 13.00 |
| 025YR002HR | smf-1b | 76.0015 | 13.00 |
| 025YR002HR | smf-1b | 76.2515 | 13.00 |
| 025YR002HR | smf-1b | 76.5015 | 13.00 |
| 025YR002HR | smf-1b | 76.7515 | 13.00 |
| 025YR002HR | smf-1b | 77.0015 | 13.00 |
| 025YR002HR | smf-1b | 77.2515 | 13.00 |

**25yr-2hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR002HR | smf-2a | 132.2515 | 12.12 |
| 025YR002HR | smf-2a | 132.5015 | 12.12 |
| 025YR002HR | smf-2a | 132.7515 | 12.12 |
| 025YR002HR | smf-2a | 133.0015 | 12.12 |
| 025YR002HR | smf-2a | 133.2515 | 12.12 |
| 025YR002HR | smf-2a | 133.5015 | 12.12 |
| 025YR002HR | smf-2a | 133.7515 | 12.12 |
| 025YR002HR | smf-2a | 134.0015 | 12.11 |
| 025YR002HR | smf-2a | 134.2515 | 12.11 |
| 025YR002HR | smf-2a | 134.5015 | 12.11 |
| 025YR002HR | smf-2a | 134.7515 | 12.11 |
| 025YR002HR | smf-2a | 135.0015 | 12.11 |
| 025YR002HR | smf-2a | 135.2515 | 12.11 |
| 025YR002HR | smf-2a | 135.5015 | 12.11 |
| 025YR002HR | smf-2a | 135.7515 | 12.11 |
| 025YR002HR | smf-2a | 136.0015 | 12.11 |
| 025YR002HR | smf-2a | 136.2515 | 12.11 |
| 025YR002HR | smf-2a | 136.5015 | 12.11 |
| 025YR002HR | smf-2a | 136.7515 | 12.11 |
| 025YR002HR | smf-2a | 137.0015 | 12.11 |
| 025YR002HR | smf-2a | 137.2515 | 12.11 |
| 025YR002HR | smf-2a | 137.5015 | 12.11 |
| 025YR002HR | smf-2a | 137.7515 | 12.11 |
| 025YR002HR | smf-2a | 138.0015 | 12.11 |
| 025YR002HR | smf-2a | 138.2515 | 12.10 |
| 025YR002HR | smf-2a | 138.5015 | 12.10 |
| 025YR002HR | smf-2a | 138.7515 | 12.10 |
| 025YR002HR | smf-2a | 139.0015 | 12.10 |
| 025YR002HR | smf-2a | 139.2515 | 12.10 |
| 025YR002HR | smf-2a | 139.5015 | 12.10 |
| 025YR002HR | smf-2a | 139.7515 | 12.10 |
| 025YR002HR | smf-2a | 140.0015 | 12.10 |
| 025YR002HR | smf-2a | 140.2515 | 12.10 |
| 025YR002HR | smf-2a | 140.5015 | 12.10 |
| 025YR002HR | smf-2a | 140.7515 | 12.10 |
| 025YR002HR | smf-2a | 141.0015 | 12.10 |
| 025YR002HR | smf-2a | 141.2515 | 12.10 |
| 025YR002HR | smf-2a | 141.5015 | 12.10 |
| 025YR002HR | smf-2a | 141.7515 | 12.10 |
| 025YR002HR | smf-2a | 142.0015 | 12.10 |
| 025YR002HR | smf-2a | 142.2515 | 12.10 |
| 025YR002HR | smf-2a | 142.5015 | 12.10 |

**25yr-2hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR002HR | smf-2b | 92.5015 | 11.44 |
| 025YR002HR | smf-2b | 92.7515 | 11.44 |
| 025YR002HR | smf-2b | 93.0015 | 11.44 |
| 025YR002HR | smf-2b | 93.2515 | 11.43 |
| 025YR002HR | smf-2b | 93.5015 | 11.43 |
| 025YR002HR | smf-2b | 93.7515 | 11.43 |
| 025YR002HR | smf-2b | 94.0015 | 11.43 |
| 025YR002HR | smf-2b | 94.2515 | 11.43 |
| 025YR002HR | smf-2b | 94.5015 | 11.43 |
| 025YR002HR | smf-2b | 94.7515 | 11.43 |
| 025YR002HR | smf-2b | 95.0015 | 11.43 |
| 025YR002HR | smf-2b | 95.2515 | 11.43 |
| 025YR002HR | smf-2b | 95.5015 | 11.42 |
| 025YR002HR | smf-2b | 95.7515 | 11.42 |
| 025YR002HR | smf-2b | 96.0015 | 11.42 |
| 025YR002HR | smf-2b | 96.2515 | 11.42 |
| 025YR002HR | smf-2b | 96.5015 | 11.42 |
| 025YR002HR | smf-2b | 96.7515 | 11.42 |
| 025YR002HR | smf-2b | 97.0015 | 11.42 |
| 025YR002HR | smf-2b | 97.2515 | 11.42 |
| 025YR002HR | smf-2b | 97.5015 | 11.42 |
| 025YR002HR | smf-2b | 97.7515 | 11.42 |
| 025YR002HR | smf-2b | 98.0015 | 11.41 |
| 025YR002HR | smf-2b | 98.2515 | 11.41 |
| 025YR002HR | smf-2b | 98.5015 | 11.41 |
| 025YR002HR | smf-2b | 98.7515 | 11.41 |
| 025YR002HR | smf-2b | 99.0015 | 11.41 |
| 025YR002HR | smf-2b | 99.2515 | 11.41 |
| 025YR002HR | smf-2b | 99.5015 | 11.41 |
| 025YR002HR | smf-2b | 99.7515 | 11.41 |
| 025YR002HR | smf-2b | 100.0015 | 11.41 |
| 025YR002HR | smf-2b | 100.2515 | 11.41 |
| 025YR002HR | smf-2b | 100.5015 | 11.40 |
| 025YR002HR | smf-2b | 100.7515 | 11.40 |
| 025YR002HR | smf-2b | 101.0015 | 11.40 |
| 025YR002HR | smf-2b | 101.2515 | 11.40 |
| 025YR002HR | smf-2b | 101.5015 | 11.40 |
| 025YR002HR | smf-2b | 101.7515 | 11.40 |
| 025YR002HR | smf-2b | 102.0015 | 11.40 |
| 025YR002HR | smf-2b | 102.2515 | 11.40 |
| 025YR002HR | smf-2b | 102.5015 | 11.40 |
| 025YR002HR | smf-2b | 102.7515 | 11.40 |

**25yr-2hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR002HR | smf-2c | 126.2515 | 11.86 |
| 025YR002HR | smf-2c | 126.5015 | 11.86 |
| 025YR002HR | smf-2c | 126.7515 | 11.86 |
| 025YR002HR | smf-2c | 127.0015 | 11.86 |
| 025YR002HR | smf-2c | 127.2515 | 11.86 |
| 025YR002HR | smf-2c | 127.5015 | 11.86 |
| 025YR002HR | smf-2c | 127.7515 | 11.86 |
| 025YR002HR | smf-2c | 128.0015 | 11.86 |
| 025YR002HR | smf-2c | 128.2515 | 11.86 |
| 025YR002HR | smf-2c | 128.5015 | 11.86 |
| 025YR002HR | smf-2c | 128.7515 | 11.86 |
| 025YR002HR | smf-2c | 129.0015 | 11.86 |
| 025YR002HR | smf-2c | 129.2515 | 11.85 |
| 025YR002HR | smf-2c | 129.5015 | 11.85 |
| 025YR002HR | smf-2c | 129.7515 | 11.85 |
| 025YR002HR | smf-2c | 130.0015 | 11.85 |
| 025YR002HR | smf-2c | 130.2515 | 11.85 |
| 025YR002HR | smf-2c | 130.5015 | 11.85 |
| 025YR002HR | smf-2c | 130.7515 | 11.85 |
| 025YR002HR | smf-2c | 131.0015 | 11.85 |
| 025YR002HR | smf-2c | 131.2515 | 11.85 |
| 025YR002HR | smf-2c | 131.5015 | 11.85 |
| 025YR002HR | smf-2c | 131.7515 | 11.85 |
| 025YR002HR | smf-2c | 132.0015 | 11.85 |
| 025YR002HR | smf-2c | 132.2515 | 11.85 |
| 025YR002HR | smf-2c | 132.5015 | 11.85 |
| 025YR002HR | smf-2c | 132.7515 | 11.85 |
| 025YR002HR | smf-2c | 133.0015 | 11.85 |
| 025YR002HR | smf-2c | 133.2515 | 11.85 |
| 025YR002HR | smf-2c | 133.5015 | 11.85 |
| 025YR002HR | smf-2c | 133.7515 | 11.85 |
| 025YR002HR | smf-2c | 134.0015 | 11.85 |
| 025YR002HR | smf-2c | 134.2515 | 11.85 |
| 025YR002HR | smf-2c | 134.5015 | 11.85 |
| 025YR002HR | smf-2c | 134.7515 | 11.85 |
| 025YR002HR | smf-2c | 135.0015 | 11.85 |
| 025YR002HR | smf-2c | 135.2515 | 11.85 |
| 025YR002HR | smf-2c | 135.5015 | 11.85 |
| 025YR002HR | smf-2c | 135.7515 | 11.85 |
| 025YR002HR | smf-2c | 136.0015 | 11.85 |
| 025YR002HR | smf-2c | 136.2515 | 11.85 |
| 025YR002HR | smf-2c | 136.5015 | 11.85 |

**25yr-2hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR002HR | smf-3a | 107.5015 | 11.91 |
| 025YR002HR | smf-3a | 107.7515 | 11.91 |
| 025YR002HR | smf-3a | 108.0015 | 11.91 |
| 025YR002HR | smf-3a | 108.2515 | 11.91 |
| 025YR002HR | smf-3a | 108.5015 | 11.91 |
| 025YR002HR | smf-3a | 108.7515 | 11.91 |
| 025YR002HR | smf-3a | 109.0015 | 11.91 |
| 025YR002HR | smf-3a | 109.2515 | 11.91 |
| 025YR002HR | smf-3a | 109.5015 | 11.90 |
| 025YR002HR | smf-3a | 109.7515 | 11.90 |
| 025YR002HR | smf-3a | 110.0015 | 11.90 |
| 025YR002HR | smf-3a | 110.2515 | 11.90 |
| 025YR002HR | smf-3a | 110.5015 | 11.90 |
| 025YR002HR | smf-3a | 110.7515 | 11.90 |
| 025YR002HR | smf-3a | 111.0015 | 11.90 |
| 025YR002HR | smf-3a | 111.2515 | 11.90 |
| 025YR002HR | smf-3a | 111.5015 | 11.90 |
| 025YR002HR | smf-3a | 111.7515 | 11.90 |
| 025YR002HR | smf-3a | 112.0015 | 11.90 |
| 025YR002HR | smf-3a | 112.2515 | 11.90 |
| 025YR002HR | smf-3a | 112.5015 | 11.90 |
| 025YR002HR | smf-3a | 112.7515 | 11.90 |
| 025YR002HR | smf-3a | 113.0015 | 11.90 |
| 025YR002HR | smf-3a | 113.2515 | 11.90 |
| 025YR002HR | smf-3a | 113.5015 | 11.90 |
| 025YR002HR | smf-3a | 113.7515 | 11.90 |
| 025YR002HR | smf-3a | 114.0015 | 11.90 |
| 025YR002HR | smf-3a | 114.2515 | 11.90 |
| 025YR002HR | smf-3a | 114.5015 | 11.90 |
| 025YR002HR | smf-3a | 114.7515 | 11.90 |
| 025YR002HR | smf-3a | 115.0015 | 11.90 |
| 025YR002HR | smf-3a | 115.2515 | 11.90 |
| 025YR002HR | smf-3a | 115.5015 | 11.90 |
| 025YR002HR | smf-3a | 115.7515 | 11.90 |
| 025YR002HR | smf-3a | 116.0015 | 11.90 |
| 025YR002HR | smf-3a | 116.2515 | 11.90 |
| 025YR002HR | smf-3a | 116.5015 | 11.90 |
| 025YR002HR | smf-3a | 116.7515 | 11.90 |
| 025YR002HR | smf-3a | 117.0015 | 11.90 |
| 025YR002HR | smf-3a | 117.2515 | 11.90 |
| 025YR002HR | smf-3a | 117.5015 | 11.90 |
| 025YR002HR | smf-3a | 117.7515 | 11.90 |

**25yr-2hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR002HR | smf-3b | 130.7515 | 11.29 |
| 025YR002HR | smf-3b | 131.0015 | 11.28 |
| 025YR002HR | smf-3b | 131.2515 | 11.28 |
| 025YR002HR | smf-3b | 131.5015 | 11.28 |
| 025YR002HR | smf-3b | 131.7515 | 11.28 |
| 025YR002HR | smf-3b | 132.0015 | 11.28 |
| 025YR002HR | smf-3b | 132.2515 | 11.28 |
| 025YR002HR | smf-3b | 132.5015 | 11.28 |
| 025YR002HR | smf-3b | 132.7515 | 11.28 |
| 025YR002HR | smf-3b | 133.0015 | 11.28 |
| 025YR002HR | smf-3b | 133.2515 | 11.28 |
| 025YR002HR | smf-3b | 133.5015 | 11.28 |
| 025YR002HR | smf-3b | 133.7515 | 11.28 |
| 025YR002HR | smf-3b | 134.0015 | 11.27 |
| 025YR002HR | smf-3b | 134.2515 | 11.27 |
| 025YR002HR | smf-3b | 134.5015 | 11.27 |
| 025YR002HR | smf-3b | 134.7515 | 11.27 |
| 025YR002HR | smf-3b | 135.0015 | 11.27 |
| 025YR002HR | smf-3b | 135.2515 | 11.27 |
| 025YR002HR | smf-3b | 135.5015 | 11.27 |
| 025YR002HR | smf-3b | 135.7515 | 11.27 |
| 025YR002HR | smf-3b | 136.0015 | 11.27 |
| 025YR002HR | smf-3b | 136.2515 | 11.27 |
| 025YR002HR | smf-3b | 136.5015 | 11.27 |
| 025YR002HR | smf-3b | 136.7515 | 11.27 |
| 025YR002HR | smf-3b | 137.0015 | 11.27 |
| 025YR002HR | smf-3b | 137.2515 | 11.26 |
| 025YR002HR | smf-3b | 137.5015 | 11.26 |
| 025YR002HR | smf-3b | 137.7515 | 11.26 |
| 025YR002HR | smf-3b | 138.0015 | 11.26 |
| 025YR002HR | smf-3b | 138.2515 | 11.26 |
| 025YR002HR | smf-3b | 138.5015 | 11.26 |
| 025YR002HR | smf-3b | 138.7515 | 11.26 |
| 025YR002HR | smf-3b | 139.0015 | 11.26 |
| 025YR002HR | smf-3b | 139.2515 | 11.26 |
| 025YR002HR | smf-3b | 139.5015 | 11.26 |
| 025YR002HR | smf-3b | 139.7515 | 11.26 |
| 025YR002HR | smf-3b | 140.0015 | 11.26 |
| 025YR002HR | smf-3b | 140.2515 | 11.26 |
| 025YR002HR | smf-3b | 140.5015 | 11.26 |
| 025YR002HR | smf-3b | 140.7515 | 11.25 |
| 025YR002HR | smf-3b | 141.0015 | 11.25 |

**25yr-2hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR004HR | smf-1a | 164.5036 | 12.47 |
| 025YR004HR | smf-1a | 164.7536 | 12.47 |
| 025YR004HR | smf-1a | 165.0036 | 12.47 |
| 025YR004HR | smf-1a | 165.2536 | 12.47 |
| 025YR004HR | smf-1a | 165.5036 | 12.47 |
| 025YR004HR | smf-1a | 165.7536 | 12.47 |
| 025YR004HR | smf-1a | 166.0036 | 12.47 |
| 025YR004HR | smf-1a | 166.2536 | 12.47 |
| 025YR004HR | smf-1a | 166.5036 | 12.47 |
| 025YR004HR | smf-1a | 166.7536 | 12.47 |
| 025YR004HR | smf-1a | 167.0036 | 12.46 |
| 025YR004HR | smf-1a | 167.2536 | 12.46 |
| 025YR004HR | smf-1a | 167.5036 | 12.46 |
| 025YR004HR | smf-1a | 167.7536 | 12.46 |
| 025YR004HR | smf-1a | 168.0036 | 12.46 |
| 025YR004HR | smf-1a | 168.2536 | 12.46 |
| 025YR004HR | smf-1a | 168.5036 | 12.46 |
| 025YR004HR | smf-1a | 168.7536 | 12.46 |
| 025YR004HR | smf-1a | 169.0036 | 12.46 |
| 025YR004HR | smf-1a | 169.2536 | 12.46 |
| 025YR004HR | smf-1a | 169.5036 | 12.46 |
| 025YR004HR | smf-1a | 169.7536 | 12.46 |
| 025YR004HR | smf-1a | 170.0036 | 12.46 |
| 025YR004HR | smf-1a | 170.2536 | 12.46 |
| 025YR004HR | smf-1a | 170.5036 | 12.46 |
| 025YR004HR | smf-1a | 170.7536 | 12.46 |
| 025YR004HR | smf-1a | 171.0036 | 12.46 |
| 025YR004HR | smf-1a | 171.2536 | 12.46 |
| 025YR004HR | smf-1a | 171.5036 | 12.46 |
| 025YR004HR | smf-1a | 171.7536 | 12.45 |
| 025YR004HR | smf-1a | 172.0036 | 12.45 |
| 025YR004HR | smf-1a | 172.2536 | 12.45 |
| 025YR004HR | smf-1a | 172.5036 | 12.45 |
| 025YR004HR | smf-1a | 172.7536 | 12.45 |
| 025YR004HR | smf-1a | 173.0036 | 12.45 |
| 025YR004HR | smf-1a | 173.2536 | 12.45 |
| 025YR004HR | smf-1a | 173.5036 | 12.45 |
| 025YR004HR | smf-1a | 173.7536 | 12.45 |
| 025YR004HR | smf-1a | 174.0036 | 12.45 |
| 025YR004HR | smf-1a | 174.2536 | 12.45 |
| 025YR004HR | smf-1a | 174.5036 | 12.45 |
| 025YR004HR | smf-1a | 174.7536 | 12.45 |

**25yr-4hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR004HR | smf-1b | 80.7536 | 13.02 |
| 025YR004HR | smf-1b | 81.0036 | 13.02 |
| 025YR004HR | smf-1b | 81.2536 | 13.02 |
| 025YR004HR | smf-1b | 81.5036 | 13.02 |
| 025YR004HR | smf-1b | 81.7536 | 13.01 |
| 025YR004HR | smf-1b | 82.0036 | 13.01 |
| 025YR004HR | smf-1b | 82.2536 | 13.01 |
| 025YR004HR | smf-1b | 82.5036 | 13.01 |
| 025YR004HR | smf-1b | 82.7536 | 13.01 |
| 025YR004HR | smf-1b | 83.0036 | 13.01 |
| 025YR004HR | smf-1b | 83.2536 | 13.01 |
| 025YR004HR | smf-1b | 83.5036 | 13.01 |
| 025YR004HR | smf-1b | 83.7536 | 13.01 |
| 025YR004HR | smf-1b | 84.0036 | 13.00 |
| 025YR004HR | smf-1b | 84.2536 | 13.00 |
| 025YR004HR | smf-1b | 84.5036 | 13.00 |
| 025YR004HR | smf-1b | 84.7536 | 13.00 |
| 025YR004HR | smf-1b | 85.0036 | 13.00 |
| 025YR004HR | smf-1b | 85.2536 | 13.00 |
| 025YR004HR | smf-1b | 85.5036 | 13.00 |
| 025YR004HR | smf-1b | 85.7536 | 13.00 |
| 025YR004HR | smf-1b | 86.0036 | 13.00 |
| 025YR004HR | smf-1b | 86.2536 | 13.00 |
| 025YR004HR | smf-1b | 86.5036 | 13.00 |
| 025YR004HR | smf-1b | 86.7536 | 13.00 |
| 025YR004HR | smf-1b | 87.0036 | 13.00 |
| 025YR004HR | smf-1b | 87.2536 | 13.00 |
| 025YR004HR | smf-1b | 87.5036 | 13.00 |
| 025YR004HR | smf-1b | 87.7536 | 13.00 |
| 025YR004HR | smf-1b | 88.0036 | 13.00 |
| 025YR004HR | smf-1b | 88.2536 | 13.00 |
| 025YR004HR | smf-1b | 88.5036 | 13.00 |
| 025YR004HR | smf-1b | 88.7536 | 13.00 |
| 025YR004HR | smf-1b | 89.0036 | 13.00 |
| 025YR004HR | smf-1b | 89.2536 | 13.00 |
| 025YR004HR | smf-1b | 89.5036 | 13.00 |
| 025YR004HR | smf-1b | 89.7536 | 13.00 |
| 025YR004HR | smf-1b | 90.0036 | 13.00 |
| 025YR004HR | smf-1b | 90.2536 | 13.00 |
| 025YR004HR | smf-1b | 90.5036 | 13.00 |
| 025YR004HR | smf-1b | 90.7536 | 13.00 |
| 025YR004HR | smf-1b | 91.0036 | 13.00 |

**25yr-4hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR004HR | smf-2a | 154.5036 | 12.11 |
| 025YR004HR | smf-2a | 154.7536 | 12.11 |
| 025YR004HR | smf-2a | 155.0036 | 12.11 |
| 025YR004HR | smf-2a | 155.2536 | 12.11 |
| 025YR004HR | smf-2a | 155.5036 | 12.11 |
| 025YR004HR | smf-2a | 155.7536 | 12.11 |
| 025YR004HR | smf-2a | 156.0036 | 12.11 |
| 025YR004HR | smf-2a | 156.2536 | 12.11 |
| 025YR004HR | smf-2a | 156.5036 | 12.11 |
| 025YR004HR | smf-2a | 156.7536 | 12.11 |
| 025YR004HR | smf-2a | 157.0036 | 12.11 |
| 025YR004HR | smf-2a | 157.2536 | 12.11 |
| 025YR004HR | smf-2a | 157.5036 | 12.11 |
| 025YR004HR | smf-2a | 157.7536 | 12.10 |
| 025YR004HR | smf-2a | 158.0036 | 12.10 |
| 025YR004HR | smf-2a | 158.2536 | 12.10 |
| 025YR004HR | smf-2a | 158.5036 | 12.10 |
| 025YR004HR | smf-2a | 158.7536 | 12.10 |
| 025YR004HR | smf-2a | 159.0036 | 12.10 |
| 025YR004HR | smf-2a | 159.2536 | 12.10 |
| 025YR004HR | smf-2a | 159.5036 | 12.10 |
| 025YR004HR | smf-2a | 159.7536 | 12.10 |
| 025YR004HR | smf-2a | 160.0036 | 12.10 |
| 025YR004HR | smf-2a | 160.2536 | 12.10 |
| 025YR004HR | smf-2a | 160.5036 | 12.10 |
| 025YR004HR | smf-2a | 160.7536 | 12.10 |
| 025YR004HR | smf-2a | 161.0036 | 12.10 |
| 025YR004HR | smf-2a | 161.2536 | 12.10 |
| 025YR004HR | smf-2a | 161.5036 | 12.10 |
| 025YR004HR | smf-2a | 161.7536 | 12.10 |
| 025YR004HR | smf-2a | 162.0036 | 12.10 |
| 025YR004HR | smf-2a | 162.2536 | 12.10 |
| 025YR004HR | smf-2a | 162.5036 | 12.10 |
| 025YR004HR | smf-2a | 162.7536 | 12.10 |
| 025YR004HR | smf-2a | 163.0036 | 12.10 |
| 025YR004HR | smf-2a | 163.2536 | 12.10 |
| 025YR004HR | smf-2a | 163.5036 | 12.10 |
| 025YR004HR | smf-2a | 163.7536 | 12.10 |
| 025YR004HR | smf-2a | 164.0036 | 12.10 |
| 025YR004HR | smf-2a | 164.2536 | 12.10 |
| 025YR004HR | smf-2a | 164.5036 | 12.10 |
| 025YR004HR | smf-2a | 164.7536 | 12.10 |

**25yr-4hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR004HR | smf-2b | 112.7536 | 11.42 |
| 025YR004HR | smf-2b | 113.0036 | 11.42 |
| 025YR004HR | smf-2b | 113.2536 | 11.41 |
| 025YR004HR | smf-2b | 113.5036 | 11.41 |
| 025YR004HR | smf-2b | 113.7536 | 11.41 |
| 025YR004HR | smf-2b | 114.0036 | 11.41 |
| 025YR004HR | smf-2b | 114.2536 | 11.41 |
| 025YR004HR | smf-2b | 114.5036 | 11.41 |
| 025YR004HR | smf-2b | 114.7536 | 11.41 |
| 025YR004HR | smf-2b | 115.0036 | 11.41 |
| 025YR004HR | smf-2b | 115.2536 | 11.41 |
| 025YR004HR | smf-2b | 115.5036 | 11.41 |
| 025YR004HR | smf-2b | 115.7536 | 11.41 |
| 025YR004HR | smf-2b | 116.0036 | 11.41 |
| 025YR004HR | smf-2b | 116.2536 | 11.40 |
| 025YR004HR | smf-2b | 116.5036 | 11.40 |
| 025YR004HR | smf-2b | 116.7536 | 11.40 |
| 025YR004HR | smf-2b | 117.0036 | 11.40 |
| 025YR004HR | smf-2b | 117.2536 | 11.40 |
| 025YR004HR | smf-2b | 117.5036 | 11.40 |
| 025YR004HR | smf-2b | 117.7536 | 11.40 |
| 025YR004HR | smf-2b | 118.0036 | 11.40 |
| 025YR004HR | smf-2b | 118.2536 | 11.40 |
| 025YR004HR | smf-2b | 118.5036 | 11.40 |
| 025YR004HR | smf-2b | 118.7536 | 11.40 |
| 025YR004HR | smf-2b | 119.0036 | 11.40 |
| 025YR004HR | smf-2b | 119.2536 | 11.40 |
| 025YR004HR | smf-2b | 119.5036 | 11.40 |
| 025YR004HR | smf-2b | 119.7536 | 11.40 |
| 025YR004HR | smf-2b | 120.0036 | 11.40 |
| 025YR004HR | smf-2b | 120.2536 | 11.40 |
| 025YR004HR | smf-2b | 120.5036 | 11.40 |
| 025YR004HR | smf-2b | 120.7536 | 11.40 |
| 025YR004HR | smf-2b | 121.0036 | 11.40 |
| 025YR004HR | smf-2b | 121.2536 | 11.40 |
| 025YR004HR | smf-2b | 121.5036 | 11.40 |
| 025YR004HR | smf-2b | 121.7536 | 11.40 |
| 025YR004HR | smf-2b | 122.0036 | 11.40 |
| 025YR004HR | smf-2b | 122.2536 | 11.40 |
| 025YR004HR | smf-2b | 122.5036 | 11.40 |
| 025YR004HR | smf-2b | 122.7536 | 11.40 |
| 025YR004HR | smf-2b | 123.0036 | 11.40 |

**25yr-4hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR004HR | smf-2c | 144.5036 | 11.86 |
| 025YR004HR | smf-2c | 144.7536 | 11.86 |
| 025YR004HR | smf-2c | 145.0036 | 11.86 |
| 025YR004HR | smf-2c | 145.2536 | 11.86 |
| 025YR004HR | smf-2c | 145.5036 | 11.86 |
| 025YR004HR | smf-2c | 145.7536 | 11.86 |
| 025YR004HR | smf-2c | 146.0036 | 11.86 |
| 025YR004HR | smf-2c | 146.2536 | 11.86 |
| 025YR004HR | smf-2c | 146.5036 | 11.86 |
| 025YR004HR | smf-2c | 146.7536 | 11.86 |
| 025YR004HR | smf-2c | 147.0036 | 11.86 |
| 025YR004HR | smf-2c | 147.2536 | 11.85 |
| 025YR004HR | smf-2c | 147.5036 | 11.85 |
| 025YR004HR | smf-2c | 147.7536 | 11.85 |
| 025YR004HR | smf-2c | 148.0036 | 11.85 |
| 025YR004HR | smf-2c | 148.2536 | 11.85 |
| 025YR004HR | smf-2c | 148.5036 | 11.85 |
| 025YR004HR | smf-2c | 148.7536 | 11.85 |
| 025YR004HR | smf-2c | 149.0036 | 11.85 |
| 025YR004HR | smf-2c | 149.2536 | 11.85 |
| 025YR004HR | smf-2c | 149.5036 | 11.85 |
| 025YR004HR | smf-2c | 149.7536 | 11.85 |
| 025YR004HR | smf-2c | 150.0036 | 11.85 |
| 025YR004HR | smf-2c | 150.2536 | 11.85 |
| 025YR004HR | smf-2c | 150.5036 | 11.85 |
| 025YR004HR | smf-2c | 150.7536 | 11.85 |
| 025YR004HR | smf-2c | 151.0036 | 11.85 |
| 025YR004HR | smf-2c | 151.2536 | 11.85 |
| 025YR004HR | smf-2c | 151.5036 | 11.85 |
| 025YR004HR | smf-2c | 151.7536 | 11.85 |
| 025YR004HR | smf-2c | 152.0036 | 11.85 |
| 025YR004HR | smf-2c | 152.2536 | 11.85 |
| 025YR004HR | smf-2c | 152.5036 | 11.85 |
| 025YR004HR | smf-2c | 152.7536 | 11.85 |
| 025YR004HR | smf-2c | 153.0036 | 11.85 |
| 025YR004HR | smf-2c | 153.2536 | 11.85 |
| 025YR004HR | smf-2c | 153.5036 | 11.85 |
| 025YR004HR | smf-2c | 153.7536 | 11.85 |
| 025YR004HR | smf-2c | 154.0036 | 11.85 |
| 025YR004HR | smf-2c | 154.2536 | 11.85 |
| 025YR004HR | smf-2c | 154.5036 | 11.85 |
| 025YR004HR | smf-2c | 154.7536 | 11.85 |

**25yr-4hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR004HR | smf-3a | 123.7536 | 11.92 |
| 025YR004HR | smf-3a | 124.0036 | 11.92 |
| 025YR004HR | smf-3a | 124.2536 | 11.92 |
| 025YR004HR | smf-3a | 124.5036 | 11.92 |
| 025YR004HR | smf-3a | 124.7536 | 11.92 |
| 025YR004HR | smf-3a | 125.0036 | 11.92 |
| 025YR004HR | smf-3a | 125.2536 | 11.92 |
| 025YR004HR | smf-3a | 125.5036 | 11.92 |
| 025YR004HR | smf-3a | 125.7536 | 11.92 |
| 025YR004HR | smf-3a | 126.0036 | 11.92 |
| 025YR004HR | smf-3a | 126.2536 | 11.92 |
| 025YR004HR | smf-3a | 126.5036 | 11.91 |
| 025YR004HR | smf-3a | 126.7536 | 11.91 |
| 025YR004HR | smf-3a | 127.0036 | 11.91 |
| 025YR004HR | smf-3a | 127.2536 | 11.91 |
| 025YR004HR | smf-3a | 127.5036 | 11.91 |
| 025YR004HR | smf-3a | 127.7536 | 11.91 |
| 025YR004HR | smf-3a | 128.0036 | 11.91 |
| 025YR004HR | smf-3a | 128.2536 | 11.91 |
| 025YR004HR | smf-3a | 128.5036 | 11.91 |
| 025YR004HR | smf-3a | 128.7536 | 11.91 |
| 025YR004HR | smf-3a | 129.0036 | 11.91 |
| 025YR004HR | smf-3a | 129.2536 | 11.91 |
| 025YR004HR | smf-3a | 129.5036 | 11.91 |
| 025YR004HR | smf-3a | 129.7536 | 11.90 |
| 025YR004HR | smf-3a | 130.0036 | 11.90 |
| 025YR004HR | smf-3a | 130.2536 | 11.90 |
| 025YR004HR | smf-3a | 130.5036 | 11.90 |
| 025YR004HR | smf-3a | 130.7536 | 11.90 |
| 025YR004HR | smf-3a | 131.0036 | 11.90 |
| 025YR004HR | smf-3a | 131.2536 | 11.90 |
| 025YR004HR | smf-3a | 131.5036 | 11.90 |
| 025YR004HR | smf-3a | 131.7536 | 11.90 |
| 025YR004HR | smf-3a | 132.0036 | 11.90 |
| 025YR004HR | smf-3a | 132.2536 | 11.90 |
| 025YR004HR | smf-3a | 132.5036 | 11.90 |
| 025YR004HR | smf-3a | 132.7536 | 11.90 |
| 025YR004HR | smf-3a | 133.0036 | 11.90 |
| 025YR004HR | smf-3a | 133.2536 | 11.90 |
| 025YR004HR | smf-3a | 133.5036 | 11.90 |
| 025YR004HR | smf-3a | 133.7536 | 11.90 |
| 025YR004HR | smf-3a | 134.0036 | 11.90 |

**25yr-4hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR004HR | smf-3b | 155.5036 | 11.27 |
| 025YR004HR | smf-3b | 155.7536 | 11.27 |
| 025YR004HR | smf-3b | 156.0036 | 11.27 |
| 025YR004HR | smf-3b | 156.2536 | 11.27 |
| 025YR004HR | smf-3b | 156.5036 | 11.27 |
| 025YR004HR | smf-3b | 156.7536 | 11.27 |
| 025YR004HR | smf-3b | 157.0036 | 11.26 |
| 025YR004HR | smf-3b | 157.2536 | 11.26 |
| 025YR004HR | smf-3b | 157.5036 | 11.26 |
| 025YR004HR | smf-3b | 157.7536 | 11.26 |
| 025YR004HR | smf-3b | 158.0036 | 11.26 |
| 025YR004HR | smf-3b | 158.2536 | 11.26 |
| 025YR004HR | smf-3b | 158.5036 | 11.26 |
| 025YR004HR | smf-3b | 158.7536 | 11.26 |
| 025YR004HR | smf-3b | 159.0036 | 11.26 |
| 025YR004HR | smf-3b | 159.2536 | 11.26 |
| 025YR004HR | smf-3b | 159.5036 | 11.26 |
| 025YR004HR | smf-3b | 159.7536 | 11.26 |
| 025YR004HR | smf-3b | 160.0036 | 11.26 |
| 025YR004HR | smf-3b | 160.2536 | 11.26 |
| 025YR004HR | smf-3b | 160.5036 | 11.26 |
| 025YR004HR | smf-3b | 160.7536 | 11.25 |
| 025YR004HR | smf-3b | 161.0036 | 11.25 |
| 025YR004HR | smf-3b | 161.2536 | 11.25 |
| 025YR004HR | smf-3b | 161.5036 | 11.25 |
| 025YR004HR | smf-3b | 161.7536 | 11.25 |
| 025YR004HR | smf-3b | 162.0036 | 11.25 |
| 025YR004HR | smf-3b | 162.2536 | 11.25 |
| 025YR004HR | smf-3b | 162.5036 | 11.25 |
| 025YR004HR | smf-3b | 162.7536 | 11.25 |
| 025YR004HR | smf-3b | 163.0036 | 11.25 |
| 025YR004HR | smf-3b | 163.2536 | 11.25 |
| 025YR004HR | smf-3b | 163.5036 | 11.25 |
| 025YR004HR | smf-3b | 163.7536 | 11.25 |
| 025YR004HR | smf-3b | 164.0036 | 11.25 |
| 025YR004HR | smf-3b | 164.2536 | 11.25 |
| 025YR004HR | smf-3b | 164.5036 | 11.25 |
| 025YR004HR | smf-3b | 164.7536 | 11.25 |
| 025YR004HR | smf-3b | 165.0036 | 11.25 |
| 025YR004HR | smf-3b | 165.2536 | 11.25 |
| 025YR004HR | smf-3b | 165.5036 | 11.25 |
| 025YR004HR | smf-3b | 165.7536 | 11.25 |

**25yr-4hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR008HR | smf-1a | 218.7536 | 12.46 |
| 025YR008HR | smf-1a | 219.0036 | 12.46 |
| 025YR008HR | smf-1a | 219.2536 | 12.46 |
| 025YR008HR | smf-1a | 219.5036 | 12.46 |
| 025YR008HR | smf-1a | 219.7536 | 12.46 |
| 025YR008HR | smf-1a | 220.0036 | 12.46 |
| 025YR008HR | smf-1a | 220.2536 | 12.45 |
| 025YR008HR | smf-1a | 220.5036 | 12.45 |
| 025YR008HR | smf-1a | 220.7536 | 12.45 |
| 025YR008HR | smf-1a | 221.0036 | 12.45 |
| 025YR008HR | smf-1a | 221.2536 | 12.45 |
| 025YR008HR | smf-1a | 221.5036 | 12.45 |
| 025YR008HR | smf-1a | 221.7536 | 12.45 |
| 025YR008HR | smf-1a | 222.0036 | 12.45 |
| 025YR008HR | smf-1a | 222.2536 | 12.45 |
| 025YR008HR | smf-1a | 222.5036 | 12.45 |
| 025YR008HR | smf-1a | 222.7536 | 12.45 |
| 025YR008HR | smf-1a | 223.0036 | 12.45 |
| 025YR008HR | smf-1a | 223.2536 | 12.45 |
| 025YR008HR | smf-1a | 223.5036 | 12.45 |
| 025YR008HR | smf-1a | 223.7536 | 12.45 |
| 025YR008HR | smf-1a | 224.0036 | 12.45 |
| 025YR008HR | smf-1a | 224.2536 | 12.45 |
| 025YR008HR | smf-1a | 224.5036 | 12.45 |
| 025YR008HR | smf-1a | 224.7536 | 12.45 |
| 025YR008HR | smf-1a | 225.0036 | 12.45 |
| 025YR008HR | smf-1a | 225.2536 | 12.45 |
| 025YR008HR | smf-1a | 225.5036 | 12.45 |
| 025YR008HR | smf-1a | 225.7536 | 12.45 |
| 025YR008HR | smf-1a | 226.0036 | 12.45 |
| 025YR008HR | smf-1a | 226.2536 | 12.45 |
| 025YR008HR | smf-1a | 226.5036 | 12.45 |
| 025YR008HR | smf-1a | 226.7536 | 12.45 |
| 025YR008HR | smf-1a | 227.0036 | 12.45 |
| 025YR008HR | smf-1a | 227.2536 | 12.45 |
| 025YR008HR | smf-1a | 227.5036 | 12.45 |
| 025YR008HR | smf-1a | 227.7536 | 12.45 |
| 025YR008HR | smf-1a | 228.0036 | 12.45 |
| 025YR008HR | smf-1a | 228.2536 | 12.45 |
| 025YR008HR | smf-1a | 228.5036 | 12.45 |
| 025YR008HR | smf-1a | 228.7536 | 12.45 |
| 025YR008HR | smf-1a | 229.0036 | 12.45 |

**25yr-8hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR008HR | smf-1b | 110.0036 | 13.02 |
| 025YR008HR | smf-1b | 110.2536 | 13.02 |
| 025YR008HR | smf-1b | 110.5036 | 13.02 |
| 025YR008HR | smf-1b | 110.7536 | 13.01 |
| 025YR008HR | smf-1b | 111.0036 | 13.01 |
| 025YR008HR | smf-1b | 111.2536 | 13.01 |
| 025YR008HR | smf-1b | 111.5036 | 13.01 |
| 025YR008HR | smf-1b | 111.7536 | 13.01 |
| 025YR008HR | smf-1b | 112.0036 | 13.01 |
| 025YR008HR | smf-1b | 112.2536 | 13.01 |
| 025YR008HR | smf-1b | 112.5036 | 13.01 |
| 025YR008HR | smf-1b | 112.7536 | 13.01 |
| 025YR008HR | smf-1b | 113.0036 | 13.01 |
| 025YR008HR | smf-1b | 113.2536 | 13.00 |
| 025YR008HR | smf-1b | 113.5036 | 13.00 |
| 025YR008HR | smf-1b | 113.7536 | 13.00 |
| 025YR008HR | smf-1b | 114.0036 | 13.00 |
| 025YR008HR | smf-1b | 114.2536 | 13.00 |
| 025YR008HR | smf-1b | 114.5036 | 13.00 |
| 025YR008HR | smf-1b | 114.7536 | 13.00 |
| 025YR008HR | smf-1b | 115.0036 | 13.00 |
| 025YR008HR | smf-1b | 115.2536 | 13.00 |
| 025YR008HR | smf-1b | 115.5036 | 13.00 |
| 025YR008HR | smf-1b | 115.7536 | 13.00 |
| 025YR008HR | smf-1b | 116.0036 | 13.00 |
| 025YR008HR | smf-1b | 116.2536 | 13.00 |
| 025YR008HR | smf-1b | 116.5036 | 13.00 |
| 025YR008HR | smf-1b | 116.7536 | 13.00 |
| 025YR008HR | smf-1b | 117.0036 | 13.00 |
| 025YR008HR | smf-1b | 117.2536 | 13.00 |
| 025YR008HR | smf-1b | 117.5036 | 13.00 |
| 025YR008HR | smf-1b | 117.7536 | 13.00 |
| 025YR008HR | smf-1b | 118.0036 | 13.00 |
| 025YR008HR | smf-1b | 118.2536 | 13.00 |
| 025YR008HR | smf-1b | 118.5036 | 13.00 |
| 025YR008HR | smf-1b | 118.7536 | 13.00 |
| 025YR008HR | smf-1b | 119.0036 | 13.00 |
| 025YR008HR | smf-1b | 119.2536 | 13.00 |
| 025YR008HR | smf-1b | 119.5036 | 13.00 |
| 025YR008HR | smf-1b | 119.7536 | 13.00 |
| 025YR008HR | smf-1b | 120.0036 | 13.00 |
| 025YR008HR | smf-1b | 120.2536 | 13.00 |

**25yr-8hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR008HR | smf-2a | 179.7536 | 12.12 |
| 025YR008HR | smf-2a | 180.0036 | 12.12 |
| 025YR008HR | smf-2a | 180.2536 | 12.12 |
| 025YR008HR | smf-2a | 180.5036 | 12.12 |
| 025YR008HR | smf-2a | 180.7536 | 12.12 |
| 025YR008HR | smf-2a | 181.0036 | 12.11 |
| 025YR008HR | smf-2a | 181.2536 | 12.11 |
| 025YR008HR | smf-2a | 181.5036 | 12.11 |
| 025YR008HR | smf-2a | 181.7536 | 12.11 |
| 025YR008HR | smf-2a | 182.0036 | 12.11 |
| 025YR008HR | smf-2a | 182.2536 | 12.11 |
| 025YR008HR | smf-2a | 182.5036 | 12.11 |
| 025YR008HR | smf-2a | 182.7536 | 12.11 |
| 025YR008HR | smf-2a | 183.0036 | 12.11 |
| 025YR008HR | smf-2a | 183.2536 | 12.11 |
| 025YR008HR | smf-2a | 183.5036 | 12.11 |
| 025YR008HR | smf-2a | 183.7536 | 12.11 |
| 025YR008HR | smf-2a | 184.0036 | 12.11 |
| 025YR008HR | smf-2a | 184.2536 | 12.11 |
| 025YR008HR | smf-2a | 184.5036 | 12.11 |
| 025YR008HR | smf-2a | 184.7536 | 12.11 |
| 025YR008HR | smf-2a | 185.0036 | 12.11 |
| 025YR008HR | smf-2a | 185.2536 | 12.11 |
| 025YR008HR | smf-2a | 185.5036 | 12.11 |
| 025YR008HR | smf-2a | 185.7536 | 12.11 |
| 025YR008HR | smf-2a | 186.0036 | 12.11 |
| 025YR008HR | smf-2a | 186.2536 | 12.10 |
| 025YR008HR | smf-2a | 186.5036 | 12.10 |
| 025YR008HR | smf-2a | 186.7536 | 12.10 |
| 025YR008HR | smf-2a | 187.0036 | 12.10 |
| 025YR008HR | smf-2a | 187.2536 | 12.10 |
| 025YR008HR | smf-2a | 187.5036 | 12.10 |
| 025YR008HR | smf-2a | 187.7536 | 12.10 |
| 025YR008HR | smf-2a | 188.0036 | 12.10 |
| 025YR008HR | smf-2a | 188.2536 | 12.10 |
| 025YR008HR | smf-2a | 188.5036 | 12.10 |
| 025YR008HR | smf-2a | 188.7536 | 12.10 |
| 025YR008HR | smf-2a | 189.0036 | 12.10 |
| 025YR008HR | smf-2a | 189.2536 | 12.10 |
| 025YR008HR | smf-2a | 189.5036 | 12.10 |
| 025YR008HR | smf-2a | 189.7536 | 12.10 |
| 025YR008HR | smf-2a | 190.0036 | 12.10 |

**25yr-8hr SMF-2a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR008HR | smf-2b | 144.5036 | 11.40 |
| 025YR008HR | smf-2b | 144.7536 | 11.40 |
| 025YR008HR | smf-2b | 145.0036 | 11.40 |
| 025YR008HR | smf-2b | 145.2536 | 11.40 |
| 025YR008HR | smf-2b | 145.5036 | 11.40 |
| 025YR008HR | smf-2b | 145.7536 | 11.40 |
| 025YR008HR | smf-2b | 146.0036 | 11.40 |
| 025YR008HR | smf-2b | 146.2536 | 11.40 |
| 025YR008HR | smf-2b | 146.5036 | 11.40 |
| 025YR008HR | smf-2b | 146.7536 | 11.40 |
| 025YR008HR | smf-2b | 147.0036 | 11.40 |
| 025YR008HR | smf-2b | 147.2536 | 11.40 |
| 025YR008HR | smf-2b | 147.5036 | 11.40 |
| 025YR008HR | smf-2b | 147.7536 | 11.40 |
| 025YR008HR | smf-2b | 148.0036 | 11.40 |
| 025YR008HR | smf-2b | 148.2536 | 11.40 |
| 025YR008HR | smf-2b | 148.5036 | 11.40 |
| 025YR008HR | smf-2b | 148.7536 | 11.40 |
| 025YR008HR | smf-2b | 149.0036 | 11.40 |
| 025YR008HR | smf-2b | 149.2536 | 11.40 |
| 025YR008HR | smf-2b | 149.5036 | 11.40 |
| 025YR008HR | smf-2b | 149.7536 | 11.40 |
| 025YR008HR | smf-2b | 150.0036 | 11.40 |
| 025YR008HR | smf-2b | 150.2536 | 11.40 |
| 025YR008HR | smf-2b | 150.5036 | 11.40 |
| 025YR008HR | smf-2b | 150.7536 | 11.40 |
| 025YR008HR | smf-2b | 151.0036 | 11.40 |
| 025YR008HR | smf-2b | 151.2536 | 11.40 |
| 025YR008HR | smf-2b | 151.5036 | 11.40 |
| 025YR008HR | smf-2b | 151.7536 | 11.40 |
| 025YR008HR | smf-2b | 152.0036 | 11.40 |
| 025YR008HR | smf-2b | 152.2536 | 11.40 |
| 025YR008HR | smf-2b | 152.5036 | 11.40 |
| 025YR008HR | smf-2b | 152.7536 | 11.40 |
| 025YR008HR | smf-2b | 153.0036 | 11.40 |
| 025YR008HR | smf-2b | 153.2536 | 11.40 |
| 025YR008HR | smf-2b | 153.5036 | 11.40 |
| 025YR008HR | smf-2b | 153.7536 | 11.40 |
| 025YR008HR | smf-2b | 154.0036 | 11.40 |
| 025YR008HR | smf-2b | 154.2536 | 11.40 |
| 025YR008HR | smf-2b | 154.5036 | 11.40 |
| 025YR008HR | smf-2b | 154.7536 | 11.40 |

**25yr-8hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR008HR | smf-2c | 172.2536 | 11.86 |
| 025YR008HR | smf-2c | 172.5036 | 11.86 |
| 025YR008HR | smf-2c | 172.7536 | 11.86 |
| 025YR008HR | smf-2c | 173.0036 | 11.86 |
| 025YR008HR | smf-2c | 173.2536 | 11.86 |
| 025YR008HR | smf-2c | 173.5036 | 11.86 |
| 025YR008HR | smf-2c | 173.7536 | 11.86 |
| 025YR008HR | smf-2c | 174.0036 | 11.86 |
| 025YR008HR | smf-2c | 174.2536 | 11.86 |
| 025YR008HR | smf-2c | 174.5036 | 11.86 |
| 025YR008HR | smf-2c | 174.7536 | 11.86 |
| 025YR008HR | smf-2c | 175.0036 | 11.86 |
| 025YR008HR | smf-2c | 175.2536 | 11.86 |
| 025YR008HR | smf-2c | 175.5036 | 11.86 |
| 025YR008HR | smf-2c | 175.7536 | 11.86 |
| 025YR008HR | smf-2c | 176.0036 | 11.86 |
| 025YR008HR | smf-2c | 176.2536 | 11.86 |
| 025YR008HR | smf-2c | 176.5036 | 11.85 |
| 025YR008HR | smf-2c | 176.7536 | 11.85 |
| 025YR008HR | smf-2c | 177.0036 | 11.85 |
| 025YR008HR | smf-2c | 177.2536 | 11.85 |
| 025YR008HR | smf-2c | 177.5036 | 11.85 |
| 025YR008HR | smf-2c | 177.7536 | 11.85 |
| 025YR008HR | smf-2c | 178.0036 | 11.85 |
| 025YR008HR | smf-2c | 178.2536 | 11.85 |
| 025YR008HR | smf-2c | 178.5036 | 11.85 |
| 025YR008HR | smf-2c | 178.7536 | 11.85 |
| 025YR008HR | smf-2c | 179.0036 | 11.85 |
| 025YR008HR | smf-2c | 179.2536 | 11.85 |
| 025YR008HR | smf-2c | 179.5036 | 11.85 |
| 025YR008HR | smf-2c | 179.7536 | 11.85 |
| 025YR008HR | smf-2c | 180.0036 | 11.85 |
| 025YR008HR | smf-2c | 180.2536 | 11.85 |
| 025YR008HR | smf-2c | 180.5036 | 11.85 |
| 025YR008HR | smf-2c | 180.7536 | 11.85 |
| 025YR008HR | smf-2c | 181.0036 | 11.85 |
| 025YR008HR | smf-2c | 181.2536 | 11.85 |
| 025YR008HR | smf-2c | 181.5036 | 11.85 |
| 025YR008HR | smf-2c | 181.7536 | 11.85 |
| 025YR008HR | smf-2c | 182.0036 | 11.85 |
| 025YR008HR | smf-2c | 182.2536 | 11.85 |
| 025YR008HR | smf-2c | 182.5036 | 11.85 |

**25yr-8hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR008HR | smf-3a | 158.0036 | 11.92 |
| 025YR008HR | smf-3a | 158.2536 | 11.91 |
| 025YR008HR | smf-3a | 158.5036 | 11.91 |
| 025YR008HR | smf-3a | 158.7536 | 11.91 |
| 025YR008HR | smf-3a | 159.0036 | 11.91 |
| 025YR008HR | smf-3a | 159.2536 | 11.91 |
| 025YR008HR | smf-3a | 159.5036 | 11.91 |
| 025YR008HR | smf-3a | 159.7536 | 11.91 |
| 025YR008HR | smf-3a | 160.0036 | 11.91 |
| 025YR008HR | smf-3a | 160.2536 | 11.91 |
| 025YR008HR | smf-3a | 160.5036 | 11.91 |
| 025YR008HR | smf-3a | 160.7536 | 11.91 |
| 025YR008HR | smf-3a | 161.0036 | 11.91 |
| 025YR008HR | smf-3a | 161.2536 | 11.91 |
| 025YR008HR | smf-3a | 161.5036 | 11.91 |
| 025YR008HR | smf-3a | 161.7536 | 11.91 |
| 025YR008HR | smf-3a | 162.0036 | 11.91 |
| 025YR008HR | smf-3a | 162.2536 | 11.90 |
| 025YR008HR | smf-3a | 162.5036 | 11.90 |
| 025YR008HR | smf-3a | 162.7536 | 11.90 |
| 025YR008HR | smf-3a | 163.0036 | 11.90 |
| 025YR008HR | smf-3a | 163.2536 | 11.90 |
| 025YR008HR | smf-3a | 163.5036 | 11.90 |
| 025YR008HR | smf-3a | 163.7536 | 11.90 |
| 025YR008HR | smf-3a | 164.0036 | 11.90 |
| 025YR008HR | smf-3a | 164.2536 | 11.90 |
| 025YR008HR | smf-3a | 164.5036 | 11.90 |
| 025YR008HR | smf-3a | 164.7536 | 11.90 |
| 025YR008HR | smf-3a | 165.0036 | 11.90 |
| 025YR008HR | smf-3a | 165.2536 | 11.90 |
| 025YR008HR | smf-3a | 165.5036 | 11.90 |
| 025YR008HR | smf-3a | 165.7536 | 11.90 |
| 025YR008HR | smf-3a | 166.0036 | 11.90 |
| 025YR008HR | smf-3a | 166.2536 | 11.90 |
| 025YR008HR | smf-3a | 166.5036 | 11.90 |
| 025YR008HR | smf-3a | 166.7536 | 11.90 |
| 025YR008HR | smf-3a | 167.0036 | 11.90 |
| 025YR008HR | smf-3a | 167.2536 | 11.90 |
| 025YR008HR | smf-3a | 167.5036 | 11.90 |
| 025YR008HR | smf-3a | 167.7536 | 11.90 |
| 025YR008HR | smf-3a | 168.0036 | 11.90 |
| 025YR008HR | smf-3a | 168.2536 | 11.90 |

**25yr-8hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR008HR | smf-3b | 185.7536 | 11.28 |
| 025YR008HR | smf-3b | 186.0036 | 11.28 |
| 025YR008HR | smf-3b | 186.2536 | 11.28 |
| 025YR008HR | smf-3b | 186.5036 | 11.28 |
| 025YR008HR | smf-3b | 186.7536 | 11.27 |
| 025YR008HR | smf-3b | 187.0036 | 11.27 |
| 025YR008HR | smf-3b | 187.2536 | 11.27 |
| 025YR008HR | smf-3b | 187.5036 | 11.27 |
| 025YR008HR | smf-3b | 187.7536 | 11.27 |
| 025YR008HR | smf-3b | 188.0036 | 11.27 |
| 025YR008HR | smf-3b | 188.2536 | 11.27 |
| 025YR008HR | smf-3b | 188.5036 | 11.27 |
| 025YR008HR | smf-3b | 188.7536 | 11.27 |
| 025YR008HR | smf-3b | 189.0036 | 11.27 |
| 025YR008HR | smf-3b | 189.2536 | 11.27 |
| 025YR008HR | smf-3b | 189.5036 | 11.27 |
| 025YR008HR | smf-3b | 189.7536 | 11.27 |
| 025YR008HR | smf-3b | 190.0036 | 11.27 |
| 025YR008HR | smf-3b | 190.2536 | 11.27 |
| 025YR008HR | smf-3b | 190.5036 | 11.27 |
| 025YR008HR | smf-3b | 190.7536 | 11.27 |
| 025YR008HR | smf-3b | 191.0036 | 11.27 |
| 025YR008HR | smf-3b | 191.2536 | 11.26 |
| 025YR008HR | smf-3b | 191.5036 | 11.26 |
| 025YR008HR | smf-3b | 191.7536 | 11.26 |
| 025YR008HR | smf-3b | 192.0036 | 11.26 |
| 025YR008HR | smf-3b | 192.2536 | 11.26 |
| 025YR008HR | smf-3b | 192.5036 | 11.26 |
| 025YR008HR | smf-3b | 192.7536 | 11.26 |
| 025YR008HR | smf-3b | 193.0036 | 11.26 |
| 025YR008HR | smf-3b | 193.2536 | 11.26 |
| 025YR008HR | smf-3b | 193.5036 | 11.26 |
| 025YR008HR | smf-3b | 193.7536 | 11.26 |
| 025YR008HR | smf-3b | 194.0036 | 11.26 |
| 025YR008HR | smf-3b | 194.2536 | 11.26 |
| 025YR008HR | smf-3b | 194.5036 | 11.26 |
| 025YR008HR | smf-3b | 194.7536 | 11.26 |
| 025YR008HR | smf-3b | 195.0036 | 11.26 |
| 025YR008HR | smf-3b | 195.2536 | 11.26 |
| 025YR008HR | smf-3b | 195.5036 | 11.26 |
| 025YR008HR | smf-3b | 195.7536 | 11.25 |
| 025YR008HR | smf-3b | 196.0036 | 11.25 |

**25yr-8hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR024HR | smf-1a | 318.5070 | 12.46 |
| 025YR024HR | smf-1a | 318.7570 | 12.46 |
| 025YR024HR | smf-1a | 319.0070 | 12.46 |
| 025YR024HR | smf-1a | 319.2570 | 12.46 |
| 025YR024HR | smf-1a | 319.5070 | 12.46 |
| 025YR024HR | smf-1a | 319.7570 | 12.46 |
| 025YR024HR | smf-1a | 320.0070 | 12.46 |
| 025YR024HR | smf-1a | 320.2570 | 12.46 |
| 025YR024HR | smf-1a | 320.5070 | 12.46 |
| 025YR024HR | smf-1a | 320.7570 | 12.46 |
| 025YR024HR | smf-1a | 321.0070 | 12.46 |
| 025YR024HR | smf-1a | 321.2570 | 12.46 |
| 025YR024HR | smf-1a | 321.5070 | 12.46 |
| 025YR024HR | smf-1a | 321.7570 | 12.46 |
| 025YR024HR | smf-1a | 322.0070 | 12.46 |
| 025YR024HR | smf-1a | 322.2570 | 12.45 |
| 025YR024HR | smf-1a | 322.5070 | 12.45 |
| 025YR024HR | smf-1a | 322.7570 | 12.45 |
| 025YR024HR | smf-1a | 323.0070 | 12.45 |
| 025YR024HR | smf-1a | 323.2570 | 12.45 |
| 025YR024HR | smf-1a | 323.5070 | 12.45 |
| 025YR024HR | smf-1a | 323.7570 | 12.45 |
| 025YR024HR | smf-1a | 324.0070 | 12.45 |
| 025YR024HR | smf-1a | 324.2570 | 12.45 |
| 025YR024HR | smf-1a | 324.5070 | 12.45 |
| 025YR024HR | smf-1a | 324.7570 | 12.45 |
| 025YR024HR | smf-1a | 325.0070 | 12.45 |
| 025YR024HR | smf-1a | 325.2570 | 12.45 |
| 025YR024HR | smf-1a | 325.5070 | 12.45 |
| 025YR024HR | smf-1a | 325.7570 | 12.45 |
| 025YR024HR | smf-1a | 326.0070 | 12.45 |
| 025YR024HR | smf-1a | 326.2570 | 12.45 |
| 025YR024HR | smf-1a | 326.5070 | 12.45 |
| 025YR024HR | smf-1a | 326.7570 | 12.45 |
| 025YR024HR | smf-1a | 327.0070 | 12.45 |
| 025YR024HR | smf-1a | 327.2570 | 12.45 |
| 025YR024HR | smf-1a | 327.5070 | 12.45 |
| 025YR024HR | smf-1a | 327.7570 | 12.45 |
| 025YR024HR | smf-1a | 328.0070 | 12.45 |
| 025YR024HR | smf-1a | 328.2570 | 12.45 |
| 025YR024HR | smf-1a | 328.5070 | 12.45 |
| 025YR024HR | smf-1a | 328.7570 | 12.45 |

**25yr-24hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR024HR | smf-1b | 193.7570 | 13.02 |
| 025YR024HR | smf-1b | 194.0070 | 13.02 |
| 025YR024HR | smf-1b | 194.2570 | 13.01 |
| 025YR024HR | smf-1b | 194.5070 | 13.01 |
| 025YR024HR | smf-1b | 194.7570 | 13.01 |
| 025YR024HR | smf-1b | 195.0070 | 13.01 |
| 025YR024HR | smf-1b | 195.2570 | 13.01 |
| 025YR024HR | smf-1b | 195.5070 | 13.01 |
| 025YR024HR | smf-1b | 195.7570 | 13.01 |
| 025YR024HR | smf-1b | 196.0070 | 13.01 |
| 025YR024HR | smf-1b | 196.2570 | 13.01 |
| 025YR024HR | smf-1b | 196.5070 | 13.01 |
| 025YR024HR | smf-1b | 196.7570 | 13.01 |
| 025YR024HR | smf-1b | 197.0070 | 13.01 |
| 025YR024HR | smf-1b | 197.2570 | 13.01 |
| 025YR024HR | smf-1b | 197.5070 | 13.01 |
| 025YR024HR | smf-1b | 197.7570 | 13.01 |
| 025YR024HR | smf-1b | 198.0070 | 13.01 |
| 025YR024HR | smf-1b | 198.2570 | 13.01 |
| 025YR024HR | smf-1b | 198.5070 | 13.01 |
| 025YR024HR | smf-1b | 198.7570 | 13.00 |
| 025YR024HR | smf-1b | 199.0070 | 13.00 |
| 025YR024HR | smf-1b | 199.2570 | 13.00 |
| 025YR024HR | smf-1b | 199.5070 | 13.00 |
| 025YR024HR | smf-1b | 199.7570 | 13.00 |
| 025YR024HR | smf-1b | 200.0070 | 13.00 |
| 025YR024HR | smf-1b | 200.2570 | 13.00 |
| 025YR024HR | smf-1b | 200.5070 | 13.00 |
| 025YR024HR | smf-1b | 200.7570 | 13.00 |
| 025YR024HR | smf-1b | 201.0070 | 13.00 |
| 025YR024HR | smf-1b | 201.2570 | 13.00 |
| 025YR024HR | smf-1b | 201.5070 | 13.00 |
| 025YR024HR | smf-1b | 201.7570 | 13.00 |
| 025YR024HR | smf-1b | 202.0070 | 13.00 |
| 025YR024HR | smf-1b | 202.2570 | 13.00 |
| 025YR024HR | smf-1b | 202.5070 | 13.00 |
| 025YR024HR | smf-1b | 202.7570 | 13.00 |
| 025YR024HR | smf-1b | 203.0070 | 13.00 |
| 025YR024HR | smf-1b | 203.2570 | 13.00 |
| 025YR024HR | smf-1b | 203.5070 | 13.00 |
| 025YR024HR | smf-1b | 203.7570 | 13.00 |
| 025YR024HR | smf-1b | 204.0070 | 13.00 |

**25yr-24hr SMF-1b**

1D Nodes - Time Series | Clay County Economic Development Building | 10964

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR024HR | smf-2a | 268.5070 | 12.11 |
| 025YR024HR | smf-2a | 268.7570 | 12.11 |
| 025YR024HR | smf-2a | 269.0070 | 12.11 |
| 025YR024HR | smf-2a | 269.2570 | 12.11 |
| 025YR024HR | smf-2a | 269.5070 | 12.11 |
| 025YR024HR | smf-2a | 269.7570 | 12.11 |
| 025YR024HR | smf-2a | 270.0070 | 12.11 |
| 025YR024HR | smf-2a | 270.2570 | 12.11 |
| 025YR024HR | smf-2a | 270.5070 | 12.11 |
| 025YR024HR | smf-2a | 270.7570 | 12.11 |
| 025YR024HR | smf-2a | 271.0070 | 12.11 |
| 025YR024HR | smf-2a | 271.2570 | 12.11 |
| 025YR024HR | smf-2a | 271.5070 | 12.11 |
| 025YR024HR | smf-2a | 271.7570 | 12.11 |
| 025YR024HR | smf-2a | 272.0070 | 12.11 |
| 025YR024HR | smf-2a | 272.2570 | 12.11 |
| 025YR024HR | smf-2a | 272.5070 | 12.11 |
| 025YR024HR | smf-2a | 272.7570 | 12.11 |
| 025YR024HR | smf-2a | 273.0070 | 12.11 |
| 025YR024HR | smf-2a | 273.2570 | 12.11 |
| 025YR024HR | smf-2a | 273.5070 | 12.11 |
| 025YR024HR | smf-2a | 273.7570 | 12.11 |
| 025YR024HR | smf-2a | 274.0070 | 12.11 |
| 025YR024HR | smf-2a | 274.2570 | 12.11 |
| 025YR024HR | smf-2a | 274.5070 | 12.11 |
| 025YR024HR | smf-2a | 274.7570 | 12.11 |
| 025YR024HR | smf-2a | 275.0070 | 12.11 |
| 025YR024HR | smf-2a | 275.2570 | 12.10 |
| 025YR024HR | smf-2a | 275.5070 | 12.10 |
| 025YR024HR | smf-2a | 275.7570 | 12.10 |
| 025YR024HR | smf-2a | 276.0070 | 12.10 |
| 025YR024HR | smf-2a | 276.2570 | 12.10 |
| 025YR024HR | smf-2a | 276.5070 | 12.10 |
| 025YR024HR | smf-2a | 276.7570 | 12.10 |
| 025YR024HR | smf-2a | 277.0070 | 12.10 |
| 025YR024HR | smf-2a | 277.2570 | 12.10 |
| 025YR024HR | smf-2a | 277.5070 | 12.10 |
| 025YR024HR | smf-2a | 277.7570 | 12.10 |
| 025YR024HR | smf-2a | 278.0070 | 12.10 |
| 025YR024HR | smf-2a | 278.2570 | 12.10 |
| 025YR024HR | smf-2a | 278.5070 | 12.10 |
| 025YR024HR | smf-2a | 278.7570 | 12.10 |

**25yr-24hr SMF-2a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR024HR | smf-2b | 227.7570 | 11.41 |
| 025YR024HR | smf-2b | 228.0070 | 11.41 |
| 025YR024HR | smf-2b | 228.2570 | 11.41 |
| 025YR024HR | smf-2b | 228.5070 | 11.41 |
| 025YR024HR | smf-2b | 228.7570 | 11.41 |
| 025YR024HR | smf-2b | 229.0070 | 11.40 |
| 025YR024HR | smf-2b | 229.2570 | 11.40 |
| 025YR024HR | smf-2b | 229.5070 | 11.40 |
| 025YR024HR | smf-2b | 229.7570 | 11.40 |
| 025YR024HR | smf-2b | 230.0070 | 11.40 |
| 025YR024HR | smf-2b | 230.2570 | 11.40 |
| 025YR024HR | smf-2b | 230.5070 | 11.40 |
| 025YR024HR | smf-2b | 230.7570 | 11.40 |
| 025YR024HR | smf-2b | 231.0070 | 11.40 |
| 025YR024HR | smf-2b | 231.2570 | 11.40 |
| 025YR024HR | smf-2b | 231.5070 | 11.40 |
| 025YR024HR | smf-2b | 231.7570 | 11.40 |
| 025YR024HR | smf-2b | 232.0070 | 11.40 |
| 025YR024HR | smf-2b | 232.2570 | 11.40 |
| 025YR024HR | smf-2b | 232.5070 | 11.40 |
| 025YR024HR | smf-2b | 232.7570 | 11.40 |
| 025YR024HR | smf-2b | 233.0070 | 11.40 |
| 025YR024HR | smf-2b | 233.2570 | 11.40 |
| 025YR024HR | smf-2b | 233.5070 | 11.40 |
| 025YR024HR | smf-2b | 233.7570 | 11.40 |
| 025YR024HR | smf-2b | 234.0070 | 11.40 |
| 025YR024HR | smf-2b | 234.2570 | 11.40 |
| 025YR024HR | smf-2b | 234.5070 | 11.40 |
| 025YR024HR | smf-2b | 234.7570 | 11.40 |
| 025YR024HR | smf-2b | 235.0070 | 11.40 |
| 025YR024HR | smf-2b | 235.2570 | 11.40 |
| 025YR024HR | smf-2b | 235.5070 | 11.40 |
| 025YR024HR | smf-2b | 235.7570 | 11.40 |
| 025YR024HR | smf-2b | 236.0070 | 11.40 |
| 025YR024HR | smf-2b | 236.2570 | 11.40 |
| 025YR024HR | smf-2b | 236.5070 | 11.40 |
| 025YR024HR | smf-2b | 236.7570 | 11.40 |
| 025YR024HR | smf-2b | 237.0070 | 11.40 |
| 025YR024HR | smf-2b | 237.2570 | 11.40 |
| 025YR024HR | smf-2b | 237.5070 | 11.40 |
| 025YR024HR | smf-2b | 237.7570 | 11.40 |
| 025YR024HR | smf-2b | 238.0070 | 11.40 |

**25yr-24hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR024HR | smf-2c | 260.5070 | 11.87 |
| 025YR024HR | smf-2c | 260.7570 | 11.86 |
| 025YR024HR | smf-2c | 261.0070 | 11.86 |
| 025YR024HR | smf-2c | 261.2570 | 11.86 |
| 025YR024HR | smf-2c | 261.5070 | 11.86 |
| 025YR024HR | smf-2c | 261.7570 | 11.86 |
| 025YR024HR | smf-2c | 262.0070 | 11.86 |
| 025YR024HR | smf-2c | 262.2570 | 11.86 |
| 025YR024HR | smf-2c | 262.5070 | 11.86 |
| 025YR024HR | smf-2c | 262.7570 | 11.86 |
| 025YR024HR | smf-2c | 263.0070 | 11.86 |
| 025YR024HR | smf-2c | 263.2570 | 11.86 |
| 025YR024HR | smf-2c | 263.5070 | 11.86 |
| 025YR024HR | smf-2c | 263.7570 | 11.86 |
| 025YR024HR | smf-2c | 264.0070 | 11.86 |
| 025YR024HR | smf-2c | 264.2570 | 11.86 |
| 025YR024HR | smf-2c | 264.5070 | 11.86 |
| 025YR024HR | smf-2c | 264.7570 | 11.86 |
| 025YR024HR | smf-2c | 265.0070 | 11.86 |
| 025YR024HR | smf-2c | 265.2570 | 11.86 |
| 025YR024HR | smf-2c | 265.5070 | 11.86 |
| 025YR024HR | smf-2c | 265.7570 | 11.86 |
| 025YR024HR | smf-2c | 266.0070 | 11.86 |
| 025YR024HR | smf-2c | 266.2570 | 11.86 |
| 025YR024HR | smf-2c | 266.5070 | 11.86 |
| 025YR024HR | smf-2c | 266.7570 | 11.86 |
| 025YR024HR | smf-2c | 267.0070 | 11.86 |
| 025YR024HR | smf-2c | 267.2570 | 11.85 |
| 025YR024HR | smf-2c | 267.5070 | 11.85 |
| 025YR024HR | smf-2c | 267.7570 | 11.85 |
| 025YR024HR | smf-2c | 268.0070 | 11.85 |
| 025YR024HR | smf-2c | 268.2570 | 11.85 |
| 025YR024HR | smf-2c | 268.5070 | 11.85 |
| 025YR024HR | smf-2c | 268.7570 | 11.85 |
| 025YR024HR | smf-2c | 269.0070 | 11.85 |
| 025YR024HR | smf-2c | 269.2570 | 11.85 |
| 025YR024HR | smf-2c | 269.5070 | 11.85 |
| 025YR024HR | smf-2c | 269.7570 | 11.85 |
| 025YR024HR | smf-2c | 270.0070 | 11.85 |
| 025YR024HR | smf-2c | 270.2570 | 11.85 |
| 025YR024HR | smf-2c | 270.5070 | 11.85 |
| 025YR024HR | smf-2c | 270.7570 | 11.85 |

**25yr-24hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR024HR | smf-3a | 261.7570 | 11.91 |
| 025YR024HR | smf-3a | 262.0070 | 11.91 |
| 025YR024HR | smf-3a | 262.2570 | 11.91 |
| 025YR024HR | smf-3a | 262.5070 | 11.91 |
| 025YR024HR | smf-3a | 262.7570 | 11.91 |
| 025YR024HR | smf-3a | 263.0070 | 11.91 |
| 025YR024HR | smf-3a | 263.2570 | 11.91 |
| 025YR024HR | smf-3a | 263.5070 | 11.91 |
| 025YR024HR | smf-3a | 263.7570 | 11.91 |
| 025YR024HR | smf-3a | 264.0070 | 11.91 |
| 025YR024HR | smf-3a | 264.2570 | 11.91 |
| 025YR024HR | smf-3a | 264.5070 | 11.91 |
| 025YR024HR | smf-3a | 264.7570 | 11.91 |
| 025YR024HR | smf-3a | 265.0070 | 11.91 |
| 025YR024HR | smf-3a | 265.2570 | 11.91 |
| 025YR024HR | smf-3a | 265.5070 | 11.91 |
| 025YR024HR | smf-3a | 265.7570 | 11.91 |
| 025YR024HR | smf-3a | 266.0070 | 11.91 |
| 025YR024HR | smf-3a | 266.2570 | 11.91 |
| 025YR024HR | smf-3a | 266.5070 | 11.91 |
| 025YR024HR | smf-3a | 266.7570 | 11.91 |
| 025YR024HR | smf-3a | 267.0070 | 11.91 |
| 025YR024HR | smf-3a | 267.2570 | 11.91 |
| 025YR024HR | smf-3a | 267.5070 | 11.90 |
| 025YR024HR | smf-3a | 267.7570 | 11.90 |
| 025YR024HR | smf-3a | 268.0070 | 11.90 |
| 025YR024HR | smf-3a | 268.2570 | 11.90 |
| 025YR024HR | smf-3a | 268.5070 | 11.90 |
| 025YR024HR | smf-3a | 268.7570 | 11.90 |
| 025YR024HR | smf-3a | 269.0070 | 11.90 |
| 025YR024HR | smf-3a | 269.2570 | 11.90 |
| 025YR024HR | smf-3a | 269.5070 | 11.90 |
| 025YR024HR | smf-3a | 269.7570 | 11.90 |
| 025YR024HR | smf-3a | 270.0070 | 11.90 |
| 025YR024HR | smf-3a | 270.2570 | 11.90 |
| 025YR024HR | smf-3a | 270.5070 | 11.90 |
| 025YR024HR | smf-3a | 270.7570 | 11.90 |
| 025YR024HR | smf-3a | 271.0070 | 11.90 |
| 025YR024HR | smf-3a | 271.2570 | 11.90 |
| 025YR024HR | smf-3a | 271.5070 | 11.90 |
| 025YR024HR | smf-3a | 271.7570 | 11.90 |
| 025YR024HR | smf-3a | 272.0070 | 11.90 |

**25yr-24hr SMF-3a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR024HR | smf-3b | 305.0070 | 11.26 |
| 025YR024HR | smf-3b | 305.2570 | 11.26 |
| 025YR024HR | smf-3b | 305.5070 | 11.26 |
| 025YR024HR | smf-3b | 305.7570 | 11.26 |
| 025YR024HR | smf-3b | 306.0070 | 11.26 |
| 025YR024HR | smf-3b | 306.2570 | 11.26 |
| 025YR024HR | smf-3b | 306.5070 | 11.26 |
| 025YR024HR | smf-3b | 306.7570 | 11.26 |
| 025YR024HR | smf-3b | 307.0070 | 11.26 |
| 025YR024HR | smf-3b | 307.2570 | 11.26 |
| 025YR024HR | smf-3b | 307.5070 | 11.26 |
| 025YR024HR | smf-3b | 307.7570 | 11.26 |
| 025YR024HR | smf-3b | 308.0070 | 11.26 |
| 025YR024HR | smf-3b | 308.2570 | 11.26 |
| 025YR024HR | smf-3b | 308.5070 | 11.25 |
| 025YR024HR | smf-3b | 308.7570 | 11.25 |
| 025YR024HR | smf-3b | 309.0070 | 11.25 |
| 025YR024HR | smf-3b | 309.2570 | 11.25 |
| 025YR024HR | smf-3b | 309.5070 | 11.25 |
| 025YR024HR | smf-3b | 309.7570 | 11.25 |
| 025YR024HR | smf-3b | 310.0070 | 11.25 |
| 025YR024HR | smf-3b | 310.2570 | 11.25 |
| 025YR024HR | smf-3b | 310.5070 | 11.25 |
| 025YR024HR | smf-3b | 310.7570 | 11.25 |
| 025YR024HR | smf-3b | 311.0070 | 11.25 |
| 025YR024HR | smf-3b | 311.2570 | 11.25 |
| 025YR024HR | smf-3b | 311.5070 | 11.25 |
| 025YR024HR | smf-3b | 311.7570 | 11.25 |
| 025YR024HR | smf-3b | 312.0070 | 11.25 |
| 025YR024HR | smf-3b | 312.2570 | 11.25 |
| 025YR024HR | smf-3b | 312.5070 | 11.25 |
| 025YR024HR | smf-3b | 312.7570 | 11.25 |
| 025YR024HR | smf-3b | 313.0070 | 11.25 |
| 025YR024HR | smf-3b | 313.2570 | 11.25 |
| 025YR024HR | smf-3b | 313.5070 | 11.25 |
| 025YR024HR | smf-3b | 313.7570 | 11.25 |
| 025YR024HR | smf-3b | 314.0070 | 11.25 |
| 025YR024HR | smf-3b | 314.2570 | 11.25 |
| 025YR024HR | smf-3b | 314.5070 | 11.25 |
| 025YR024HR | smf-3b | 314.7570 | 11.25 |
| 025YR024HR | smf-3b | 315.0070 | 11.25 |
| 025YR024HR | smf-3b | 315.2570 | 11.25 |

**25yr-24hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR072HR | smf-1a | 547.7515 | 12.46 |
| 025YR072HR | smf-1a | 548.0015 | 12.46 |
| 025YR072HR | smf-1a | 548.2515 | 12.46 |
| 025YR072HR | smf-1a | 548.5015 | 12.46 |
| 025YR072HR | smf-1a | 548.7515 | 12.46 |
| 025YR072HR | smf-1a | 549.0015 | 12.46 |
| 025YR072HR | smf-1a | 549.2515 | 12.46 |
| 025YR072HR | smf-1a | 549.5015 | 12.46 |
| 025YR072HR | smf-1a | 549.7515 | 12.46 |
| 025YR072HR | smf-1a | 550.0015 | 12.46 |
| 025YR072HR | smf-1a | 550.2515 | 12.46 |
| 025YR072HR | smf-1a | 550.5015 | 12.46 |
| 025YR072HR | smf-1a | 550.7515 | 12.46 |
| 025YR072HR | smf-1a | 551.0015 | 12.46 |
| 025YR072HR | smf-1a | 551.2515 | 12.46 |
| 025YR072HR | smf-1a | 551.5015 | 12.46 |
| 025YR072HR | smf-1a | 551.7515 | 12.46 |
| 025YR072HR | smf-1a | 552.0015 | 12.46 |
| 025YR072HR | smf-1a | 552.2515 | 12.46 |
| 025YR072HR | smf-1a | 552.5015 | 12.46 |
| 025YR072HR | smf-1a | 552.7515 | 12.45 |
| 025YR072HR | smf-1a | 553.0015 | 12.45 |
| 025YR072HR | smf-1a | 553.2515 | 12.45 |
| 025YR072HR | smf-1a | 553.5015 | 12.45 |
| 025YR072HR | smf-1a | 553.7515 | 12.45 |
| 025YR072HR | smf-1a | 554.0015 | 12.45 |
| 025YR072HR | smf-1a | 554.2515 | 12.45 |
| 025YR072HR | smf-1a | 554.5015 | 12.45 |
| 025YR072HR | smf-1a | 554.7515 | 12.45 |
| 025YR072HR | smf-1a | 555.0015 | 12.45 |
| 025YR072HR | smf-1a | 555.2515 | 12.45 |
| 025YR072HR | smf-1a | 555.5015 | 12.45 |
| 025YR072HR | smf-1a | 555.7515 | 12.45 |
| 025YR072HR | smf-1a | 556.0015 | 12.45 |
| 025YR072HR | smf-1a | 556.2515 | 12.45 |
| 025YR072HR | smf-1a | 556.5015 | 12.45 |
| 025YR072HR | smf-1a | 556.7515 | 12.45 |
| 025YR072HR | smf-1a | 557.0015 | 12.45 |
| 025YR072HR | smf-1a | 557.2515 | 12.45 |
| 025YR072HR | smf-1a | 557.5015 | 12.45 |
| 025YR072HR | smf-1a | 557.7515 | 12.45 |
| 025YR072HR | smf-1a | 558.0015 | 12.45 |

**25yr-72hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR072HR | smf-1b | 417.0015 | 13.01 |
| 025YR072HR | smf-1b | 417.2515 | 13.01 |
| 025YR072HR | smf-1b | 417.5015 | 13.01 |
| 025YR072HR | smf-1b | 417.7515 | 13.01 |
| 025YR072HR | smf-1b | 418.0015 | 13.01 |
| 025YR072HR | smf-1b | 418.2515 | 13.01 |
| 025YR072HR | smf-1b | 418.5015 | 13.01 |
| 025YR072HR | smf-1b | 418.7515 | 13.01 |
| 025YR072HR | smf-1b | 419.0015 | 13.01 |
| 025YR072HR | smf-1b | 419.2515 | 13.01 |
| 025YR072HR | smf-1b | 419.5015 | 13.01 |
| 025YR072HR | smf-1b | 419.7515 | 13.01 |
| 025YR072HR | smf-1b | 420.0015 | 13.01 |
| 025YR072HR | smf-1b | 420.2515 | 13.01 |
| 025YR072HR | smf-1b | 420.5015 | 13.01 |
| 025YR072HR | smf-1b | 420.7515 | 13.01 |
| 025YR072HR | smf-1b | 421.0015 | 13.01 |
| 025YR072HR | smf-1b | 421.2515 | 13.01 |
| 025YR072HR | smf-1b | 421.5015 | 13.01 |
| 025YR072HR | smf-1b | 421.7515 | 13.01 |
| 025YR072HR | smf-1b | 422.0015 | 13.01 |
| 025YR072HR | smf-1b | 422.2515 | 13.01 |
| 025YR072HR | smf-1b | 422.5015 | 13.01 |
| 025YR072HR | smf-1b | 422.7515 | 13.01 |
| 025YR072HR | smf-1b | 423.0015 | 13.01 |
| 025YR072HR | smf-1b | 423.2515 | 13.01 |
| 025YR072HR | smf-1b | 423.5015 | 13.01 |
| 025YR072HR | smf-1b | 423.7515 | 13.01 |
| 025YR072HR | smf-1b | 424.0015 | 13.01 |
| 025YR072HR | smf-1b | 424.2515 | 13.00 |
| 025YR072HR | smf-1b | 424.5015 | 13.00 |
| 025YR072HR | smf-1b | 424.7515 | 13.00 |
| 025YR072HR | smf-1b | 425.0015 | 13.00 |
| 025YR072HR | smf-1b | 425.2515 | 13.00 |
| 025YR072HR | smf-1b | 425.5015 | 13.00 |
| 025YR072HR | smf-1b | 425.7515 | 13.00 |
| 025YR072HR | smf-1b | 426.0015 | 13.00 |
| 025YR072HR | smf-1b | 426.2515 | 13.00 |
| 025YR072HR | smf-1b | 426.5015 | 13.00 |
| 025YR072HR | smf-1b | 426.7515 | 13.00 |
| 025YR072HR | smf-1b | 427.0015 | 13.00 |
| 025YR072HR | smf-1b | 427.2515 | 13.00 |

**25yr-72hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR072HR | smf-2a | 485.7515 | 12.11 |
| 025YR072HR | smf-2a | 486.0015 | 12.11 |
| 025YR072HR | smf-2a | 486.2515 | 12.11 |
| 025YR072HR | smf-2a | 486.5015 | 12.11 |
| 025YR072HR | smf-2a | 486.7515 | 12.11 |
| 025YR072HR | smf-2a | 487.0015 | 12.11 |
| 025YR072HR | smf-2a | 487.2515 | 12.11 |
| 025YR072HR | smf-2a | 487.5015 | 12.11 |
| 025YR072HR | smf-2a | 487.7515 | 12.11 |
| 025YR072HR | smf-2a | 488.0015 | 12.11 |
| 025YR072HR | smf-2a | 488.2515 | 12.11 |
| 025YR072HR | smf-2a | 488.5015 | 12.11 |
| 025YR072HR | smf-2a | 488.7515 | 12.10 |
| 025YR072HR | smf-2a | 489.0015 | 12.10 |
| 025YR072HR | smf-2a | 489.2515 | 12.10 |
| 025YR072HR | smf-2a | 489.5015 | 12.10 |
| 025YR072HR | smf-2a | 489.7515 | 12.10 |
| 025YR072HR | smf-2a | 490.0015 | 12.10 |
| 025YR072HR | smf-2a | 490.2515 | 12.10 |
| 025YR072HR | smf-2a | 490.5015 | 12.10 |
| 025YR072HR | smf-2a | 490.7515 | 12.10 |
| 025YR072HR | smf-2a | 491.0015 | 12.10 |
| 025YR072HR | smf-2a | 491.2515 | 12.10 |
| 025YR072HR | smf-2a | 491.5015 | 12.10 |
| 025YR072HR | smf-2a | 491.7515 | 12.10 |
| 025YR072HR | smf-2a | 492.0015 | 12.10 |
| 025YR072HR | smf-2a | 492.2515 | 12.10 |
| 025YR072HR | smf-2a | 492.5015 | 12.10 |
| 025YR072HR | smf-2a | 492.7515 | 12.10 |
| 025YR072HR | smf-2a | 493.0015 | 12.10 |
| 025YR072HR | smf-2a | 493.2515 | 12.10 |
| 025YR072HR | smf-2a | 493.5015 | 12.10 |
| 025YR072HR | smf-2a | 493.7515 | 12.10 |
| 025YR072HR | smf-2a | 494.0015 | 12.10 |
| 025YR072HR | smf-2a | 494.2515 | 12.10 |
| 025YR072HR | smf-2a | 494.5015 | 12.10 |
| 025YR072HR | smf-2a | 494.7515 | 12.10 |
| 025YR072HR | smf-2a | 495.0015 | 12.10 |
| 025YR072HR | smf-2a | 495.2515 | 12.10 |
| 025YR072HR | smf-2a | 495.5015 | 12.10 |
| 025YR072HR | smf-2a | 495.7515 | 12.10 |
| 025YR072HR | smf-2a | 496.0015 | 12.10 |

**25yr-72hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR072HR | smf-2b | 407.5015 | 11.41 |
| 025YR072HR | smf-2b | 407.7515 | 11.41 |
| 025YR072HR | smf-2b | 408.0015 | 11.41 |
| 025YR072HR | smf-2b | 408.2515 | 11.41 |
| 025YR072HR | smf-2b | 408.5015 | 11.41 |
| 025YR072HR | smf-2b | 408.7515 | 11.41 |
| 025YR072HR | smf-2b | 409.0015 | 11.41 |
| 025YR072HR | smf-2b | 409.2515 | 11.41 |
| 025YR072HR | smf-2b | 409.5015 | 11.41 |
| 025YR072HR | smf-2b | 409.7515 | 11.41 |
| 025YR072HR | smf-2b | 410.0015 | 11.41 |
| 025YR072HR | smf-2b | 410.2515 | 11.41 |
| 025YR072HR | smf-2b | 410.5015 | 11.41 |
| 025YR072HR | smf-2b | 410.7515 | 11.41 |
| 025YR072HR | smf-2b | 411.0015 | 11.41 |
| 025YR072HR | smf-2b | 411.2515 | 11.41 |
| 025YR072HR | smf-2b | 411.5015 | 11.41 |
| 025YR072HR | smf-2b | 411.7515 | 11.41 |
| 025YR072HR | smf-2b | 412.0015 | 11.41 |
| 025YR072HR | smf-2b | 412.2515 | 11.41 |
| 025YR072HR | smf-2b | 412.5015 | 11.41 |
| 025YR072HR | smf-2b | 412.7515 | 11.41 |
| 025YR072HR | smf-2b | 413.0015 | 11.41 |
| 025YR072HR | smf-2b | 413.2515 | 11.41 |
| 025YR072HR | smf-2b | 413.5015 | 11.40 |
| 025YR072HR | smf-2b | 413.7515 | 11.40 |
| 025YR072HR | smf-2b | 414.0015 | 11.40 |
| 025YR072HR | smf-2b | 414.2515 | 11.40 |
| 025YR072HR | smf-2b | 414.5015 | 11.40 |
| 025YR072HR | smf-2b | 414.7515 | 11.40 |
| 025YR072HR | smf-2b | 415.0015 | 11.40 |
| 025YR072HR | smf-2b | 415.2515 | 11.40 |
| 025YR072HR | smf-2b | 415.5015 | 11.40 |
| 025YR072HR | smf-2b | 415.7515 | 11.40 |
| 025YR072HR | smf-2b | 416.0015 | 11.40 |
| 025YR072HR | smf-2b | 416.2515 | 11.40 |
| 025YR072HR | smf-2b | 416.5015 | 11.40 |
| 025YR072HR | smf-2b | 416.7515 | 11.40 |
| 025YR072HR | smf-2b | 417.0015 | 11.40 |
| 025YR072HR | smf-2b | 417.2515 | 11.40 |
| 025YR072HR | smf-2b | 417.5015 | 11.40 |
| 025YR072HR | smf-2b | 417.7515 | 11.40 |

**25yr-72hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR072HR | smf-2c | 486.7515 | 11.86 |
| 025YR072HR | smf-2c | 487.0015 | 11.86 |
| 025YR072HR | smf-2c | 487.2515 | 11.86 |
| 025YR072HR | smf-2c | 487.5015 | 11.86 |
| 025YR072HR | smf-2c | 487.7515 | 11.86 |
| 025YR072HR | smf-2c | 488.0015 | 11.86 |
| 025YR072HR | smf-2c | 488.2515 | 11.86 |
| 025YR072HR | smf-2c | 488.5015 | 11.86 |
| 025YR072HR | smf-2c | 488.7515 | 11.86 |
| 025YR072HR | smf-2c | 489.0015 | 11.86 |
| 025YR072HR | smf-2c | 489.2515 | 11.86 |
| 025YR072HR | smf-2c | 489.5015 | 11.86 |
| 025YR072HR | smf-2c | 489.7515 | 11.86 |
| 025YR072HR | smf-2c | 490.0015 | 11.86 |
| 025YR072HR | smf-2c | 490.2515 | 11.86 |
| 025YR072HR | smf-2c | 490.5015 | 11.86 |
| 025YR072HR | smf-2c | 490.7515 | 11.86 |
| 025YR072HR | smf-2c | 491.0015 | 11.86 |
| 025YR072HR | smf-2c | 491.2515 | 11.86 |
| 025YR072HR | smf-2c | 491.5015 | 11.86 |
| 025YR072HR | smf-2c | 491.7515 | 11.86 |
| 025YR072HR | smf-2c | 492.0015 | 11.86 |
| 025YR072HR | smf-2c | 492.2515 | 11.86 |
| 025YR072HR | smf-2c | 492.5015 | 11.86 |
| 025YR072HR | smf-2c | 492.7515 | 11.86 |
| 025YR072HR | smf-2c | 493.0015 | 11.86 |
| 025YR072HR | smf-2c | 493.2515 | 11.86 |
| 025YR072HR | smf-2c | 493.5015 | 11.86 |
| 025YR072HR | smf-2c | 493.7515 | 11.86 |
| 025YR072HR | smf-2c | 494.0015 | 11.86 |
| 025YR072HR | smf-2c | 494.2515 | 11.86 |
| 025YR072HR | smf-2c | 494.5015 | 11.86 |
| 025YR072HR | smf-2c | 494.7515 | 11.86 |
| 025YR072HR | smf-2c | 495.0015 | 11.86 |
| 025YR072HR | smf-2c | 495.2515 | 11.86 |
| 025YR072HR | smf-2c | 495.5015 | 11.86 |
| 025YR072HR | smf-2c | 495.7515 | 11.86 |
| 025YR072HR | smf-2c | 496.0015 | 11.86 |
| 025YR072HR | smf-2c | 496.2515 | 11.86 |
| 025YR072HR | smf-2c | 496.5015 | 11.86 |
| 025YR072HR | smf-2c | 496.7515 | 11.86 |
| 025YR072HR | smf-2c | 497.0015 | 11.85 |

**25yr-72hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR072HR | smf-3a | 534.5015 | 11.91 |
| 025YR072HR | smf-3a | 534.7515 | 11.91 |
| 025YR072HR | smf-3a | 535.0015 | 11.91 |
| 025YR072HR | smf-3a | 535.2515 | 11.91 |
| 025YR072HR | smf-3a | 535.5015 | 11.91 |
| 025YR072HR | smf-3a | 535.7515 | 11.91 |
| 025YR072HR | smf-3a | 536.0015 | 11.91 |
| 025YR072HR | smf-3a | 536.2515 | 11.91 |
| 025YR072HR | smf-3a | 536.5015 | 11.91 |
| 025YR072HR | smf-3a | 536.7515 | 11.91 |
| 025YR072HR | smf-3a | 537.0015 | 11.91 |
| 025YR072HR | smf-3a | 537.2515 | 11.91 |
| 025YR072HR | smf-3a | 537.5015 | 11.90 |
| 025YR072HR | smf-3a | 537.7515 | 11.90 |
| 025YR072HR | smf-3a | 538.0015 | 11.90 |
| 025YR072HR | smf-3a | 538.2515 | 11.90 |
| 025YR072HR | smf-3a | 538.5015 | 11.90 |
| 025YR072HR | smf-3a | 538.7515 | 11.90 |
| 025YR072HR | smf-3a | 539.0015 | 11.90 |
| 025YR072HR | smf-3a | 539.2515 | 11.90 |
| 025YR072HR | smf-3a | 539.5015 | 11.90 |
| 025YR072HR | smf-3a | 539.7515 | 11.90 |
| 025YR072HR | smf-3a | 540.0015 | 11.90 |
| 025YR072HR | smf-3a | 540.2515 | 11.90 |
| 025YR072HR | smf-3a | 540.5015 | 11.90 |
| 025YR072HR | smf-3a | 540.7515 | 11.90 |
| 025YR072HR | smf-3a | 541.0015 | 11.90 |
| 025YR072HR | smf-3a | 541.2515 | 11.90 |
| 025YR072HR | smf-3a | 541.5015 | 11.90 |
| 025YR072HR | smf-3a | 541.7515 | 11.90 |
| 025YR072HR | smf-3a | 542.0015 | 11.90 |
| 025YR072HR | smf-3a | 542.2515 | 11.90 |
| 025YR072HR | smf-3a | 542.5015 | 11.90 |
| 025YR072HR | smf-3a | 542.7515 | 11.90 |
| 025YR072HR | smf-3a | 543.0015 | 11.90 |
| 025YR072HR | smf-3a | 543.2515 | 11.90 |
| 025YR072HR | smf-3a | 543.5015 | 11.90 |
| 025YR072HR | smf-3a | 543.7515 | 11.90 |
| 025YR072HR | smf-3a | 544.0015 | 11.90 |
| 025YR072HR | smf-3a | 544.2515 | 11.90 |
| 025YR072HR | smf-3a | 544.5015 | 11.90 |
| 025YR072HR | smf-3a | 544.7515 | 11.90 |

**25yr-72hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 025YR072HR | smf-3b | 603.2515 | 11.26 |
| 025YR072HR | smf-3b | 603.5015 | 11.26 |
| 025YR072HR | smf-3b | 603.7515 | 11.26 |
| 025YR072HR | smf-3b | 604.0015 | 11.26 |
| 025YR072HR | smf-3b | 604.2515 | 11.26 |
| 025YR072HR | smf-3b | 604.5015 | 11.26 |
| 025YR072HR | smf-3b | 604.7515 | 11.26 |
| 025YR072HR | smf-3b | 605.0015 | 11.26 |
| 025YR072HR | smf-3b | 605.2515 | 11.26 |
| 025YR072HR | smf-3b | 605.5015 | 11.26 |
| 025YR072HR | smf-3b | 605.7515 | 11.26 |
| 025YR072HR | smf-3b | 606.0015 | 11.26 |
| 025YR072HR | smf-3b | 606.2515 | 11.26 |
| 025YR072HR | smf-3b | 606.5015 | 11.26 |
| 025YR072HR | smf-3b | 606.7515 | 11.26 |
| 025YR072HR | smf-3b | 607.0015 | 11.26 |
| 025YR072HR | smf-3b | 607.2515 | 11.26 |
| 025YR072HR | smf-3b | 607.5015 | 11.26 |
| 025YR072HR | smf-3b | 607.7515 | 11.26 |
| 025YR072HR | smf-3b | 608.0015 | 11.26 |
| 025YR072HR | smf-3b | 608.2515 | 11.26 |
| 025YR072HR | smf-3b | 608.5015 | 11.26 |
| 025YR072HR | smf-3b | 608.7515 | 11.26 |
| 025YR072HR | smf-3b | 609.0015 | 11.25 |
| 025YR072HR | smf-3b | 609.2515 | 11.25 |
| 025YR072HR | smf-3b | 609.5015 | 11.25 |
| 025YR072HR | smf-3b | 609.7515 | 11.25 |
| 025YR072HR | smf-3b | 610.0015 | 11.25 |
| 025YR072HR | smf-3b | 610.2515 | 11.25 |
| 025YR072HR | smf-3b | 610.5015 | 11.25 |
| 025YR072HR | smf-3b | 610.7515 | 11.25 |
| 025YR072HR | smf-3b | 611.0015 | 11.25 |
| 025YR072HR | smf-3b | 611.2515 | 11.25 |
| 025YR072HR | smf-3b | 611.5015 | 11.25 |
| 025YR072HR | smf-3b | 611.7515 | 11.25 |
| 025YR072HR | smf-3b | 612.0015 | 11.25 |
| 025YR072HR | smf-3b | 612.2515 | 11.25 |
| 025YR072HR | smf-3b | 612.5015 | 11.25 |
| 025YR072HR | smf-3b | 612.7515 | 11.25 |
| 025YR072HR | smf-3b | 613.0015 | 11.25 |
| 025YR072HR | smf-3b | 613.2515 | 11.25 |
| 025YR072HR | smf-3b | 613.5015 | 11.25 |

**25yr-72hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR001HR | smf-1a | 73.5011 | 12.46 |
| 050YR001HR | smf-1a | 73.7511 | 12.46 |
| 050YR001HR | smf-1a | 74.0011 | 12.46 |
| 050YR001HR | smf-1a | 74.2511 | 12.46 |
| 050YR001HR | smf-1a | 74.5011 | 12.45 |
| 050YR001HR | smf-1a | 74.7511 | 12.45 |
| 050YR001HR | smf-1a | 75.0011 | 12.45 |
| 050YR001HR | smf-1a | 75.2511 | 12.45 |
| 050YR001HR | smf-1a | 75.5011 | 12.45 |
| 050YR001HR | smf-1a | 75.7511 | 12.45 |
| 050YR001HR | smf-1a | 76.0011 | 12.45 |
| 050YR001HR | smf-1a | 76.2511 | 12.45 |
| 050YR001HR | smf-1a | 76.5011 | 12.45 |
| 050YR001HR | smf-1a | 76.7511 | 12.45 |
| 050YR001HR | smf-1a | 77.0011 | 12.45 |
| 050YR001HR | smf-1a | 77.2511 | 12.45 |
| 050YR001HR | smf-1a | 77.5011 | 12.45 |
| 050YR001HR | smf-1a | 77.7511 | 12.45 |
| 050YR001HR | smf-1a | 78.0011 | 12.45 |
| 050YR001HR | smf-1a | 78.2511 | 12.45 |
| 050YR001HR | smf-1a | 78.5011 | 12.45 |
| 050YR001HR | smf-1a | 78.7511 | 12.45 |
| 050YR001HR | smf-1a | 79.0011 | 12.45 |
| 050YR001HR | smf-1a | 79.2511 | 12.45 |
| 050YR001HR | smf-1a | 79.5011 | 12.45 |
| 050YR001HR | smf-1a | 79.7511 | 12.45 |
| 050YR001HR | smf-1a | 80.0011 | 12.45 |
| 050YR001HR | smf-1a | 80.2511 | 12.45 |
| 050YR001HR | smf-1a | 80.5011 | 12.45 |
| 050YR001HR | smf-1a | 80.7511 | 12.45 |
| 050YR001HR | smf-1a | 81.0011 | 12.45 |
| 050YR001HR | smf-1a | 81.2511 | 12.45 |
| 050YR001HR | smf-1a | 81.5011 | 12.45 |
| 050YR001HR | smf-1a | 81.7511 | 12.45 |
| 050YR001HR | smf-1a | 82.0011 | 12.45 |
| 050YR001HR | smf-1a | 82.2511 | 12.45 |
| 050YR001HR | smf-1a | 82.5011 | 12.45 |
| 050YR001HR | smf-1a | 82.7511 | 12.45 |
| 050YR001HR | smf-1a | 83.0011 | 12.45 |
| 050YR001HR | smf-1a | 83.2511 | 12.45 |
| 050YR001HR | smf-1a | 83.5011 | 12.45 |
| 050YR001HR | smf-1a | 83.7511 | 12.45 |

**50yr-1hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR001HR | smf-1b | 45.2511 | 13.07 |
| 050YR001HR | smf-1b | 45.5011 | 13.07 |
| 050YR001HR | smf-1b | 45.7511 | 13.07 |
| 050YR001HR | smf-1b | 46.0011 | 13.06 |
| 050YR001HR | smf-1b | 46.2511 | 13.06 |
| 050YR001HR | smf-1b | 46.5011 | 13.06 |
| 050YR001HR | smf-1b | 46.7511 | 13.06 |
| 050YR001HR | smf-1b | 47.0011 | 13.05 |
| 050YR001HR | smf-1b | 47.2511 | 13.05 |
| 050YR001HR | smf-1b | 47.5011 | 13.05 |
| 050YR001HR | smf-1b | 47.7511 | 13.05 |
| 050YR001HR | smf-1b | 48.0011 | 13.05 |
| 050YR001HR | smf-1b | 48.2511 | 13.04 |
| 050YR001HR | smf-1b | 48.5011 | 13.04 |
| 050YR001HR | smf-1b | 48.7511 | 13.04 |
| 050YR001HR | smf-1b | 49.0011 | 13.04 |
| 050YR001HR | smf-1b | 49.2511 | 13.04 |
| 050YR001HR | smf-1b | 49.5011 | 13.03 |
| 050YR001HR | smf-1b | 49.7511 | 13.03 |
| 050YR001HR | smf-1b | 50.0011 | 13.03 |
| 050YR001HR | smf-1b | 50.2511 | 13.03 |
| 050YR001HR | smf-1b | 50.5011 | 13.03 |
| 050YR001HR | smf-1b | 50.7511 | 13.02 |
| 050YR001HR | smf-1b | 51.0011 | 13.02 |
| 050YR001HR | smf-1b | 51.2511 | 13.02 |
| 050YR001HR | smf-1b | 51.5011 | 13.02 |
| 050YR001HR | smf-1b | 51.7511 | 13.02 |
| 050YR001HR | smf-1b | 52.0011 | 13.02 |
| 050YR001HR | smf-1b | 52.2511 | 13.01 |
| 050YR001HR | smf-1b | 52.5011 | 13.01 |
| 050YR001HR | smf-1b | 52.7511 | 13.01 |
| 050YR001HR | smf-1b | 53.0011 | 13.01 |
| 050YR001HR | smf-1b | 53.2511 | 13.01 |
| 050YR001HR | smf-1b | 53.5011 | 13.01 |
| 050YR001HR | smf-1b | 53.7511 | 13.00 |
| 050YR001HR | smf-1b | 54.0011 | 13.00 |
| 050YR001HR | smf-1b | 54.2511 | 13.00 |
| 050YR001HR | smf-1b | 54.5011 | 13.00 |
| 050YR001HR | smf-1b | 54.7511 | 13.00 |
| 050YR001HR | smf-1b | 55.0011 | 13.00 |
| 050YR001HR | smf-1b | 55.2511 | 13.00 |
| 050YR001HR | smf-1b | 55.5011 | 13.00 |

**50yr-1hr SMF-1b**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR001HR | smf-2a | 122.0011 | 12.12 |
| 050YR001HR | smf-2a | 122.2511 | 12.11 |
| 050YR001HR | smf-2a | 122.5011 | 12.11 |
| 050YR001HR | smf-2a | 122.7511 | 12.11 |
| 050YR001HR | smf-2a | 123.0011 | 12.11 |
| 050YR001HR | smf-2a | 123.2511 | 12.11 |
| 050YR001HR | smf-2a | 123.5011 | 12.11 |
| 050YR001HR | smf-2a | 123.7511 | 12.11 |
| 050YR001HR | smf-2a | 124.0011 | 12.11 |
| 050YR001HR | smf-2a | 124.2511 | 12.11 |
| 050YR001HR | smf-2a | 124.5011 | 12.11 |
| 050YR001HR | smf-2a | 124.7511 | 12.11 |
| 050YR001HR | smf-2a | 125.0011 | 12.11 |
| 050YR001HR | smf-2a | 125.2511 | 12.11 |
| 050YR001HR | smf-2a | 125.5011 | 12.11 |
| 050YR001HR | smf-2a | 125.7511 | 12.11 |
| 050YR001HR | smf-2a | 126.0011 | 12.11 |
| 050YR001HR | smf-2a | 126.2511 | 12.10 |
| 050YR001HR | smf-2a | 126.5011 | 12.10 |
| 050YR001HR | smf-2a | 126.7511 | 12.10 |
| 050YR001HR | smf-2a | 127.0011 | 12.10 |
| 050YR001HR | smf-2a | 127.2511 | 12.10 |
| 050YR001HR | smf-2a | 127.5011 | 12.10 |
| 050YR001HR | smf-2a | 127.7511 | 12.10 |
| 050YR001HR | smf-2a | 128.0011 | 12.10 |
| 050YR001HR | smf-2a | 128.2511 | 12.10 |
| 050YR001HR | smf-2a | 128.5011 | 12.10 |
| 050YR001HR | smf-2a | 128.7511 | 12.10 |
| 050YR001HR | smf-2a | 129.0011 | 12.10 |
| 050YR001HR | smf-2a | 129.2511 | 12.10 |
| 050YR001HR | smf-2a | 129.5011 | 12.10 |
| 050YR001HR | smf-2a | 129.7511 | 12.10 |
| 050YR001HR | smf-2a | 130.0011 | 12.10 |
| 050YR001HR | smf-2a | 130.2511 | 12.10 |
| 050YR001HR | smf-2a | 130.5011 | 12.10 |
| 050YR001HR | smf-2a | 130.7511 | 12.10 |
| 050YR001HR | smf-2a | 131.0011 | 12.10 |
| 050YR001HR | smf-2a | 131.2511 | 12.10 |
| 050YR001HR | smf-2a | 131.5011 | 12.10 |
| 050YR001HR | smf-2a | 131.7511 | 12.10 |
| 050YR001HR | smf-2a | 132.0011 | 12.10 |
| 050YR001HR | smf-2a | 132.2511 | 12.10 |

**50yr-1hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR001HR | smf-2b | 83.2511 | 11.42 |
| 050YR001HR | smf-2b | 83.5011 | 11.42 |
| 050YR001HR | smf-2b | 83.7511 | 11.42 |
| 050YR001HR | smf-2b | 84.0011 | 11.42 |
| 050YR001HR | smf-2b | 84.2511 | 11.42 |
| 050YR001HR | smf-2b | 84.5011 | 11.42 |
| 050YR001HR | smf-2b | 84.7511 | 11.41 |
| 050YR001HR | smf-2b | 85.0011 | 11.41 |
| 050YR001HR | smf-2b | 85.2511 | 11.41 |
| 050YR001HR | smf-2b | 85.5011 | 11.41 |
| 050YR001HR | smf-2b | 85.7511 | 11.41 |
| 050YR001HR | smf-2b | 86.0011 | 11.41 |
| 050YR001HR | smf-2b | 86.2511 | 11.41 |
| 050YR001HR | smf-2b | 86.5011 | 11.41 |
| 050YR001HR | smf-2b | 86.7511 | 11.41 |
| 050YR001HR | smf-2b | 87.0011 | 11.40 |
| 050YR001HR | smf-2b | 87.2511 | 11.40 |
| 050YR001HR | smf-2b | 87.5011 | 11.40 |
| 050YR001HR | smf-2b | 87.7511 | 11.40 |
| 050YR001HR | smf-2b | 88.0011 | 11.40 |
| 050YR001HR | smf-2b | 88.2511 | 11.40 |
| 050YR001HR | smf-2b | 88.5011 | 11.40 |
| 050YR001HR | smf-2b | 88.7511 | 11.40 |
| 050YR001HR | smf-2b | 89.0011 | 11.40 |
| 050YR001HR | smf-2b | 89.2511 | 11.40 |
| 050YR001HR | smf-2b | 89.5011 | 11.40 |
| 050YR001HR | smf-2b | 89.7511 | 11.40 |
| 050YR001HR | smf-2b | 90.0011 | 11.40 |
| 050YR001HR | smf-2b | 90.2511 | 11.40 |
| 050YR001HR | smf-2b | 90.5011 | 11.40 |
| 050YR001HR | smf-2b | 90.7511 | 11.40 |
| 050YR001HR | smf-2b | 91.0011 | 11.40 |
| 050YR001HR | smf-2b | 91.2511 | 11.40 |
| 050YR001HR | smf-2b | 91.5011 | 11.40 |
| 050YR001HR | smf-2b | 91.7511 | 11.40 |
| 050YR001HR | smf-2b | 92.0011 | 11.40 |
| 050YR001HR | smf-2b | 92.2511 | 11.40 |
| 050YR001HR | smf-2b | 92.5011 | 11.40 |
| 050YR001HR | smf-2b | 92.7511 | 11.40 |
| 050YR001HR | smf-2b | 93.0011 | 11.40 |
| 050YR001HR | smf-2b | 93.2511 | 11.40 |
| 050YR001HR | smf-2b | 93.5011 | 11.40 |

**50yr-1hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR001HR | smf-2c | 107.5011 | 11.89 |
| 050YR001HR | smf-2c | 107.7511 | 11.89 |
| 050YR001HR | smf-2c | 108.0011 | 11.88 |
| 050YR001HR | smf-2c | 108.2511 | 11.88 |
| 050YR001HR | smf-2c | 108.5011 | 11.88 |
| 050YR001HR | smf-2c | 108.7511 | 11.88 |
| 050YR001HR | smf-2c | 109.0011 | 11.88 |
| 050YR001HR | smf-2c | 109.2511 | 11.88 |
| 050YR001HR | smf-2c | 109.5011 | 11.88 |
| 050YR001HR | smf-2c | 109.7511 | 11.88 |
| 050YR001HR | smf-2c | 110.0011 | 11.88 |
| 050YR001HR | smf-2c | 110.2511 | 11.88 |
| 050YR001HR | smf-2c | 110.5011 | 11.88 |
| 050YR001HR | smf-2c | 110.7511 | 11.87 |
| 050YR001HR | smf-2c | 111.0011 | 11.87 |
| 050YR001HR | smf-2c | 111.2511 | 11.87 |
| 050YR001HR | smf-2c | 111.5011 | 11.87 |
| 050YR001HR | smf-2c | 111.7511 | 11.87 |
| 050YR001HR | smf-2c | 112.0011 | 11.87 |
| 050YR001HR | smf-2c | 112.2511 | 11.87 |
| 050YR001HR | smf-2c | 112.5011 | 11.87 |
| 050YR001HR | smf-2c | 112.7511 | 11.87 |
| 050YR001HR | smf-2c | 113.0011 | 11.87 |
| 050YR001HR | smf-2c | 113.2511 | 11.87 |
| 050YR001HR | smf-2c | 113.5011 | 11.87 |
| 050YR001HR | smf-2c | 113.7511 | 11.86 |
| 050YR001HR | smf-2c | 114.0011 | 11.86 |
| 050YR001HR | smf-2c | 114.2511 | 11.86 |
| 050YR001HR | smf-2c | 114.5011 | 11.86 |
| 050YR001HR | smf-2c | 114.7511 | 11.86 |
| 050YR001HR | smf-2c | 115.0011 | 11.86 |
| 050YR001HR | smf-2c | 115.2511 | 11.86 |
| 050YR001HR | smf-2c | 115.5011 | 11.86 |
| 050YR001HR | smf-2c | 115.7511 | 11.86 |
| 050YR001HR | smf-2c | 116.0011 | 11.86 |
| 050YR001HR | smf-2c | 116.2511 | 11.86 |
| 050YR001HR | smf-2c | 116.5011 | 11.86 |
| 050YR001HR | smf-2c | 116.7511 | 11.85 |
| 050YR001HR | smf-2c | 117.0011 | 11.85 |
| 050YR001HR | smf-2c | 117.2511 | 11.85 |
| 050YR001HR | smf-2c | 117.5011 | 11.85 |
| 050YR001HR | smf-2c | 117.7511 | 11.85 |

**50yr-1hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR001HR | smf-3a | 89.7511 | 11.91 |
| 050YR001HR | smf-3a | 90.0011 | 11.91 |
| 050YR001HR | smf-3a | 90.2511 | 11.91 |
| 050YR001HR | smf-3a | 90.5011 | 11.91 |
| 050YR001HR | smf-3a | 90.7511 | 11.90 |
| 050YR001HR | smf-3a | 91.0011 | 11.90 |
| 050YR001HR | smf-3a | 91.2511 | 11.90 |
| 050YR001HR | smf-3a | 91.5011 | 11.90 |
| 050YR001HR | smf-3a | 91.7511 | 11.90 |
| 050YR001HR | smf-3a | 92.0011 | 11.90 |
| 050YR001HR | smf-3a | 92.2511 | 11.90 |
| 050YR001HR | smf-3a | 92.5011 | 11.90 |
| 050YR001HR | smf-3a | 92.7511 | 11.90 |
| 050YR001HR | smf-3a | 93.0011 | 11.90 |
| 050YR001HR | smf-3a | 93.2511 | 11.90 |
| 050YR001HR | smf-3a | 93.5011 | 11.90 |
| 050YR001HR | smf-3a | 93.7511 | 11.90 |
| 050YR001HR | smf-3a | 94.0011 | 11.90 |
| 050YR001HR | smf-3a | 94.2511 | 11.90 |
| 050YR001HR | smf-3a | 94.5011 | 11.90 |
| 050YR001HR | smf-3a | 94.7511 | 11.90 |
| 050YR001HR | smf-3a | 95.0011 | 11.90 |
| 050YR001HR | smf-3a | 95.2511 | 11.90 |
| 050YR001HR | smf-3a | 95.5011 | 11.90 |
| 050YR001HR | smf-3a | 95.7511 | 11.90 |
| 050YR001HR | smf-3a | 96.0011 | 11.90 |
| 050YR001HR | smf-3a | 96.2511 | 11.90 |
| 050YR001HR | smf-3a | 96.5011 | 11.90 |
| 050YR001HR | smf-3a | 96.7511 | 11.90 |
| 050YR001HR | smf-3a | 97.0011 | 11.90 |
| 050YR001HR | smf-3a | 97.2511 | 11.90 |
| 050YR001HR | smf-3a | 97.5011 | 11.90 |
| 050YR001HR | smf-3a | 97.7511 | 11.90 |
| 050YR001HR | smf-3a | 98.0011 | 11.90 |
| 050YR001HR | smf-3a | 98.2511 | 11.90 |
| 050YR001HR | smf-3a | 98.5011 | 11.90 |
| 050YR001HR | smf-3a | 98.7511 | 11.90 |
| 050YR001HR | smf-3a | 99.0011 | 11.90 |
| 050YR001HR | smf-3a | 99.2511 | 11.90 |
| 050YR001HR | smf-3a | 99.5011 | 11.90 |
| 050YR001HR | smf-3a | 99.7511 | 11.90 |
| 050YR001HR | smf-3a | 100.0011 | 11.90 |

**50yr-1hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR001HR | smf-3b | 114.0011 | 11.29 |
| 050YR001HR | smf-3b | 114.2511 | 11.29 |
| 050YR001HR | smf-3b | 114.5011 | 11.29 |
| 050YR001HR | smf-3b | 114.7511 | 11.28 |
| 050YR001HR | smf-3b | 115.0011 | 11.28 |
| 050YR001HR | smf-3b | 115.2511 | 11.28 |
| 050YR001HR | smf-3b | 115.5011 | 11.28 |
| 050YR001HR | smf-3b | 115.7511 | 11.28 |
| 050YR001HR | smf-3b | 116.0011 | 11.28 |
| 050YR001HR | smf-3b | 116.2511 | 11.28 |
| 050YR001HR | smf-3b | 116.5011 | 11.28 |
| 050YR001HR | smf-3b | 116.7511 | 11.28 |
| 050YR001HR | smf-3b | 117.0011 | 11.28 |
| 050YR001HR | smf-3b | 117.2511 | 11.28 |
| 050YR001HR | smf-3b | 117.5011 | 11.27 |
| 050YR001HR | smf-3b | 117.7511 | 11.27 |
| 050YR001HR | smf-3b | 118.0011 | 11.27 |
| 050YR001HR | smf-3b | 118.2511 | 11.27 |
| 050YR001HR | smf-3b | 118.5011 | 11.27 |
| 050YR001HR | smf-3b | 118.7511 | 11.27 |
| 050YR001HR | smf-3b | 119.0011 | 11.27 |
| 050YR001HR | smf-3b | 119.2511 | 11.27 |
| 050YR001HR | smf-3b | 119.5011 | 11.27 |
| 050YR001HR | smf-3b | 119.7511 | 11.27 |
| 050YR001HR | smf-3b | 120.0011 | 11.27 |
| 050YR001HR | smf-3b | 120.2511 | 11.27 |
| 050YR001HR | smf-3b | 120.5011 | 11.26 |
| 050YR001HR | smf-3b | 120.7511 | 11.26 |
| 050YR001HR | smf-3b | 121.0011 | 11.26 |
| 050YR001HR | smf-3b | 121.2511 | 11.26 |
| 050YR001HR | smf-3b | 121.5011 | 11.26 |
| 050YR001HR | smf-3b | 121.7511 | 11.26 |
| 050YR001HR | smf-3b | 122.0011 | 11.26 |
| 050YR001HR | smf-3b | 122.2511 | 11.26 |
| 050YR001HR | smf-3b | 122.5011 | 11.26 |
| 050YR001HR | smf-3b | 122.7511 | 11.26 |
| 050YR001HR | smf-3b | 123.0011 | 11.26 |
| 050YR001HR | smf-3b | 123.2511 | 11.26 |
| 050YR001HR | smf-3b | 123.5011 | 11.25 |
| 050YR001HR | smf-3b | 123.7511 | 11.25 |
| 050YR001HR | smf-3b | 124.0011 | 11.25 |
| 050YR001HR | smf-3b | 124.2511 | 11.25 |

**50yr-1hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR002HR | smf-1a | 148.7541 | 12.46 |
| 050YR002HR | smf-1a | 149.0041 | 12.46 |
| 050YR002HR | smf-1a | 149.2541 | 12.46 |
| 050YR002HR | smf-1a | 149.5041 | 12.46 |
| 050YR002HR | smf-1a | 149.7541 | 12.46 |
| 050YR002HR | smf-1a | 150.0041 | 12.46 |
| 050YR002HR | smf-1a | 150.2541 | 12.46 |
| 050YR002HR | smf-1a | 150.5041 | 12.46 |
| 050YR002HR | smf-1a | 150.7541 | 12.46 |
| 050YR002HR | smf-1a | 151.0041 | 12.46 |
| 050YR002HR | smf-1a | 151.2541 | 12.46 |
| 050YR002HR | smf-1a | 151.5041 | 12.46 |
| 050YR002HR | smf-1a | 151.7541 | 12.46 |
| 050YR002HR | smf-1a | 152.0041 | 12.46 |
| 050YR002HR | smf-1a | 152.2541 | 12.46 |
| 050YR002HR | smf-1a | 152.5041 | 12.46 |
| 050YR002HR | smf-1a | 152.7541 | 12.45 |
| 050YR002HR | smf-1a | 153.0041 | 12.45 |
| 050YR002HR | smf-1a | 153.2541 | 12.45 |
| 050YR002HR | smf-1a | 153.5041 | 12.45 |
| 050YR002HR | smf-1a | 153.7541 | 12.45 |
| 050YR002HR | smf-1a | 154.0041 | 12.45 |
| 050YR002HR | smf-1a | 154.2541 | 12.45 |
| 050YR002HR | smf-1a | 154.5041 | 12.45 |
| 050YR002HR | smf-1a | 154.7541 | 12.45 |
| 050YR002HR | smf-1a | 155.0041 | 12.45 |
| 050YR002HR | smf-1a | 155.2541 | 12.45 |
| 050YR002HR | smf-1a | 155.5041 | 12.45 |
| 050YR002HR | smf-1a | 155.7541 | 12.45 |
| 050YR002HR | smf-1a | 156.0041 | 12.45 |
| 050YR002HR | smf-1a | 156.2541 | 12.45 |
| 050YR002HR | smf-1a | 156.5041 | 12.45 |
| 050YR002HR | smf-1a | 156.7541 | 12.45 |
| 050YR002HR | smf-1a | 157.0041 | 12.45 |
| 050YR002HR | smf-1a | 157.2541 | 12.45 |
| 050YR002HR | smf-1a | 157.5041 | 12.45 |
| 050YR002HR | smf-1a | 157.7541 | 12.45 |
| 050YR002HR | smf-1a | 158.0041 | 12.45 |
| 050YR002HR | smf-1a | 158.2541 | 12.45 |
| 050YR002HR | smf-1a | 158.5041 | 12.45 |
| 050YR002HR | smf-1a | 158.7541 | 12.45 |
| 050YR002HR | smf-1a | 159.0041 | 12.45 |

**50yr-2hr SMF-1a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR002HR | smf-1b | 67.0041 | 13.01 |
| 050YR002HR | smf-1b | 67.2541 | 13.01 |
| 050YR002HR | smf-1b | 67.5041 | 13.01 |
| 050YR002HR | smf-1b | 67.7541 | 13.01 |
| 050YR002HR | smf-1b | 68.0041 | 13.01 |
| 050YR002HR | smf-1b | 68.2541 | 13.01 |
| 050YR002HR | smf-1b | 68.5041 | 13.01 |
| 050YR002HR | smf-1b | 68.7541 | 13.00 |
| 050YR002HR | smf-1b | 69.0041 | 13.00 |
| 050YR002HR | smf-1b | 69.2541 | 13.00 |
| 050YR002HR | smf-1b | 69.5041 | 13.00 |
| 050YR002HR | smf-1b | 69.7541 | 13.00 |
| 050YR002HR | smf-1b | 70.0041 | 13.00 |
| 050YR002HR | smf-1b | 70.2541 | 13.00 |
| 050YR002HR | smf-1b | 70.5041 | 13.00 |
| 050YR002HR | smf-1b | 70.7541 | 13.00 |
| 050YR002HR | smf-1b | 71.0041 | 13.00 |
| 050YR002HR | smf-1b | 71.2541 | 13.00 |
| 050YR002HR | smf-1b | 71.5041 | 13.00 |
| 050YR002HR | smf-1b | 71.7541 | 13.00 |
| 050YR002HR | smf-1b | 72.0041 | 13.00 |
| 050YR002HR | smf-1b | 72.2541 | 13.00 |
| 050YR002HR | smf-1b | 72.5041 | 13.00 |
| 050YR002HR | smf-1b | 72.7541 | 13.00 |
| 050YR002HR | smf-1b | 73.0041 | 13.00 |
| 050YR002HR | smf-1b | 73.2541 | 13.00 |
| 050YR002HR | smf-1b | 73.5041 | 13.00 |
| 050YR002HR | smf-1b | 73.7541 | 13.00 |
| 050YR002HR | smf-1b | 74.0041 | 13.00 |
| 050YR002HR | smf-1b | 74.2541 | 13.00 |
| 050YR002HR | smf-1b | 74.5041 | 13.00 |
| 050YR002HR | smf-1b | 74.7541 | 13.00 |
| 050YR002HR | smf-1b | 75.0041 | 13.00 |
| 050YR002HR | smf-1b | 75.2541 | 13.00 |
| 050YR002HR | smf-1b | 75.5041 | 13.00 |
| 050YR002HR | smf-1b | 75.7541 | 13.00 |
| 050YR002HR | smf-1b | 76.0041 | 13.00 |
| 050YR002HR | smf-1b | 76.2541 | 13.00 |
| 050YR002HR | smf-1b | 76.5041 | 13.00 |
| 050YR002HR | smf-1b | 76.7541 | 13.00 |
| 050YR002HR | smf-1b | 77.0041 | 13.00 |
| 050YR002HR | smf-1b | 77.2541 | 13.00 |

**50yr-2hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR002HR | smf-2a | 132.2541 | 12.12 |
| 050YR002HR | smf-2a | 132.5041 | 12.12 |
| 050YR002HR | smf-2a | 132.7541 | 12.12 |
| 050YR002HR | smf-2a | 133.0041 | 12.12 |
| 050YR002HR | smf-2a | 133.2541 | 12.12 |
| 050YR002HR | smf-2a | 133.5041 | 12.12 |
| 050YR002HR | smf-2a | 133.7541 | 12.12 |
| 050YR002HR | smf-2a | 134.0041 | 12.12 |
| 050YR002HR | smf-2a | 134.2541 | 12.12 |
| 050YR002HR | smf-2a | 134.5041 | 12.12 |
| 050YR002HR | smf-2a | 134.7541 | 12.12 |
| 050YR002HR | smf-2a | 135.0041 | 12.12 |
| 050YR002HR | smf-2a | 135.2541 | 12.12 |
| 050YR002HR | smf-2a | 135.5041 | 12.12 |
| 050YR002HR | smf-2a | 135.7541 | 12.12 |
| 050YR002HR | smf-2a | 136.0041 | 12.12 |
| 050YR002HR | smf-2a | 136.2541 | 12.12 |
| 050YR002HR | smf-2a | 136.5041 | 12.11 |
| 050YR002HR | smf-2a | 136.7541 | 12.11 |
| 050YR002HR | smf-2a | 137.0041 | 12.11 |
| 050YR002HR | smf-2a | 137.2541 | 12.11 |
| 050YR002HR | smf-2a | 137.5041 | 12.11 |
| 050YR002HR | smf-2a | 137.7541 | 12.11 |
| 050YR002HR | smf-2a | 138.0041 | 12.11 |
| 050YR002HR | smf-2a | 138.2541 | 12.11 |
| 050YR002HR | smf-2a | 138.5041 | 12.11 |
| 050YR002HR | smf-2a | 138.7541 | 12.11 |
| 050YR002HR | smf-2a | 139.0041 | 12.11 |
| 050YR002HR | smf-2a | 139.2541 | 12.11 |
| 050YR002HR | smf-2a | 139.5041 | 12.11 |
| 050YR002HR | smf-2a | 139.7541 | 12.11 |
| 050YR002HR | smf-2a | 140.0041 | 12.11 |
| 050YR002HR | smf-2a | 140.2541 | 12.11 |
| 050YR002HR | smf-2a | 140.5041 | 12.11 |
| 050YR002HR | smf-2a | 140.7541 | 12.10 |
| 050YR002HR | smf-2a | 141.0041 | 12.10 |
| 050YR002HR | smf-2a | 141.2541 | 12.10 |
| 050YR002HR | smf-2a | 141.5041 | 12.10 |
| 050YR002HR | smf-2a | 141.7541 | 12.10 |
| 050YR002HR | smf-2a | 142.0041 | 12.10 |
| 050YR002HR | smf-2a | 142.2541 | 12.10 |
| 050YR002HR | smf-2a | 142.5041 | 12.10 |

**50yr-2hr SMF-2a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR002HR | smf-2b | 103.0041 | 11.40 |
| 050YR002HR | smf-2b | 103.2541 | 11.40 |
| 050YR002HR | smf-2b | 103.5041 | 11.40 |
| 050YR002HR | smf-2b | 103.7541 | 11.40 |
| 050YR002HR | smf-2b | 104.0041 | 11.40 |
| 050YR002HR | smf-2b | 104.2541 | 11.40 |
| 050YR002HR | smf-2b | 104.5041 | 11.40 |
| 050YR002HR | smf-2b | 104.7541 | 11.40 |
| 050YR002HR | smf-2b | 105.0041 | 11.40 |
| 050YR002HR | smf-2b | 105.2541 | 11.40 |
| 050YR002HR | smf-2b | 105.5041 | 11.40 |
| 050YR002HR | smf-2b | 105.7541 | 11.40 |
| 050YR002HR | smf-2b | 106.0041 | 11.40 |
| 050YR002HR | smf-2b | 106.2541 | 11.40 |
| 050YR002HR | smf-2b | 106.5041 | 11.40 |
| 050YR002HR | smf-2b | 106.7541 | 11.40 |
| 050YR002HR | smf-2b | 107.0041 | 11.40 |
| 050YR002HR | smf-2b | 107.2541 | 11.40 |
| 050YR002HR | smf-2b | 107.5041 | 11.40 |
| 050YR002HR | smf-2b | 107.7541 | 11.40 |
| 050YR002HR | smf-2b | 108.0041 | 11.40 |
| 050YR002HR | smf-2b | 108.2541 | 11.40 |
| 050YR002HR | smf-2b | 108.5041 | 11.40 |
| 050YR002HR | smf-2b | 108.7541 | 11.40 |
| 050YR002HR | smf-2b | 109.0041 | 11.40 |
| 050YR002HR | smf-2b | 109.2541 | 11.40 |
| 050YR002HR | smf-2b | 109.5041 | 11.40 |
| 050YR002HR | smf-2b | 109.7541 | 11.40 |
| 050YR002HR | smf-2b | 110.0041 | 11.40 |
| 050YR002HR | smf-2b | 110.2541 | 11.40 |
| 050YR002HR | smf-2b | 110.5041 | 11.40 |
| 050YR002HR | smf-2b | 110.7541 | 11.40 |
| 050YR002HR | smf-2b | 111.0041 | 11.40 |
| 050YR002HR | smf-2b | 111.2541 | 11.40 |
| 050YR002HR | smf-2b | 111.5041 | 11.40 |
| 050YR002HR | smf-2b | 111.7541 | 11.40 |
| 050YR002HR | smf-2b | 112.0041 | 11.40 |
| 050YR002HR | smf-2b | 112.2541 | 11.40 |
| 050YR002HR | smf-2b | 112.5041 | 11.40 |
| 050YR002HR | smf-2b | 112.7541 | 11.40 |
| 050YR002HR | smf-2b | 113.0041 | 11.40 |
| 050YR002HR | smf-2b | 113.2541 | 11.40 |

**50yr-2hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR002HR | smf-2c | 126.2541 | 11.87 |
| 050YR002HR | smf-2c | 126.5041 | 11.87 |
| 050YR002HR | smf-2c | 126.7541 | 11.87 |
| 050YR002HR | smf-2c | 127.0041 | 11.87 |
| 050YR002HR | smf-2c | 127.2541 | 11.87 |
| 050YR002HR | smf-2c | 127.5041 | 11.87 |
| 050YR002HR | smf-2c | 127.7541 | 11.87 |
| 050YR002HR | smf-2c | 128.0041 | 11.87 |
| 050YR002HR | smf-2c | 128.2541 | 11.87 |
| 050YR002HR | smf-2c | 128.5041 | 11.87 |
| 050YR002HR | smf-2c | 128.7541 | 11.87 |
| 050YR002HR | smf-2c | 129.0041 | 11.86 |
| 050YR002HR | smf-2c | 129.2541 | 11.86 |
| 050YR002HR | smf-2c | 129.5041 | 11.86 |
| 050YR002HR | smf-2c | 129.7541 | 11.86 |
| 050YR002HR | smf-2c | 130.0041 | 11.86 |
| 050YR002HR | smf-2c | 130.2541 | 11.86 |
| 050YR002HR | smf-2c | 130.5041 | 11.86 |
| 050YR002HR | smf-2c | 130.7541 | 11.86 |
| 050YR002HR | smf-2c | 131.0041 | 11.86 |
| 050YR002HR | smf-2c | 131.2541 | 11.86 |
| 050YR002HR | smf-2c | 131.5041 | 11.86 |
| 050YR002HR | smf-2c | 131.7541 | 11.86 |
| 050YR002HR | smf-2c | 132.0041 | 11.86 |
| 050YR002HR | smf-2c | 132.2541 | 11.86 |
| 050YR002HR | smf-2c | 132.5041 | 11.85 |
| 050YR002HR | smf-2c | 132.7541 | 11.85 |
| 050YR002HR | smf-2c | 133.0041 | 11.85 |
| 050YR002HR | smf-2c | 133.2541 | 11.85 |
| 050YR002HR | smf-2c | 133.5041 | 11.85 |
| 050YR002HR | smf-2c | 133.7541 | 11.85 |
| 050YR002HR | smf-2c | 134.0041 | 11.85 |
| 050YR002HR | smf-2c | 134.2541 | 11.85 |
| 050YR002HR | smf-2c | 134.5041 | 11.85 |
| 050YR002HR | smf-2c | 134.7541 | 11.85 |
| 050YR002HR | smf-2c | 135.0041 | 11.85 |
| 050YR002HR | smf-2c | 135.2541 | 11.85 |
| 050YR002HR | smf-2c | 135.5041 | 11.85 |
| 050YR002HR | smf-2c | 135.7541 | 11.85 |
| 050YR002HR | smf-2c | 136.0041 | 11.85 |
| 050YR002HR | smf-2c | 136.2541 | 11.85 |
| 050YR002HR | smf-2c | 136.5041 | 11.85 |

**50yr-2hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR002HR | smf-3a | 107.5041 | 11.92 |
| 050YR002HR | smf-3a | 107.7541 | 11.91 |
| 050YR002HR | smf-3a | 108.0041 | 11.91 |
| 050YR002HR | smf-3a | 108.2541 | 11.91 |
| 050YR002HR | smf-3a | 108.5041 | 11.91 |
| 050YR002HR | smf-3a | 108.7541 | 11.91 |
| 050YR002HR | smf-3a | 109.0041 | 11.91 |
| 050YR002HR | smf-3a | 109.2541 | 11.91 |
| 050YR002HR | smf-3a | 109.5041 | 11.91 |
| 050YR002HR | smf-3a | 109.7541 | 11.91 |
| 050YR002HR | smf-3a | 110.0041 | 11.91 |
| 050YR002HR | smf-3a | 110.2541 | 11.91 |
| 050YR002HR | smf-3a | 110.5041 | 11.90 |
| 050YR002HR | smf-3a | 110.7541 | 11.90 |
| 050YR002HR | smf-3a | 111.0041 | 11.90 |
| 050YR002HR | smf-3a | 111.2541 | 11.90 |
| 050YR002HR | smf-3a | 111.5041 | 11.90 |
| 050YR002HR | smf-3a | 111.7541 | 11.90 |
| 050YR002HR | smf-3a | 112.0041 | 11.90 |
| 050YR002HR | smf-3a | 112.2541 | 11.90 |
| 050YR002HR | smf-3a | 112.5041 | 11.90 |
| 050YR002HR | smf-3a | 112.7541 | 11.90 |
| 050YR002HR | smf-3a | 113.0041 | 11.90 |
| 050YR002HR | smf-3a | 113.2541 | 11.90 |
| 050YR002HR | smf-3a | 113.5041 | 11.90 |
| 050YR002HR | smf-3a | 113.7541 | 11.90 |
| 050YR002HR | smf-3a | 114.0041 | 11.90 |
| 050YR002HR | smf-3a | 114.2541 | 11.90 |
| 050YR002HR | smf-3a | 114.5041 | 11.90 |
| 050YR002HR | smf-3a | 114.7541 | 11.90 |
| 050YR002HR | smf-3a | 115.0041 | 11.90 |
| 050YR002HR | smf-3a | 115.2541 | 11.90 |
| 050YR002HR | smf-3a | 115.5041 | 11.90 |
| 050YR002HR | smf-3a | 115.7541 | 11.90 |
| 050YR002HR | smf-3a | 116.0041 | 11.90 |
| 050YR002HR | smf-3a | 116.2541 | 11.90 |
| 050YR002HR | smf-3a | 116.5041 | 11.90 |
| 050YR002HR | smf-3a | 116.7541 | 11.90 |
| 050YR002HR | smf-3a | 117.0041 | 11.90 |
| 050YR002HR | smf-3a | 117.2541 | 11.90 |
| 050YR002HR | smf-3a | 117.5041 | 11.90 |
| 050YR002HR | smf-3a | 117.7541 | 11.90 |

**50yr-2hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR002HR | smf-3b | 141.2541 | 11.26 |
| 050YR002HR | smf-3b | 141.5041 | 11.26 |
| 050YR002HR | smf-3b | 141.7541 | 11.26 |
| 050YR002HR | smf-3b | 142.0041 | 11.26 |
| 050YR002HR | smf-3b | 142.2541 | 11.26 |
| 050YR002HR | smf-3b | 142.5041 | 11.26 |
| 050YR002HR | smf-3b | 142.7541 | 11.26 |
| 050YR002HR | smf-3b | 143.0041 | 11.26 |
| 050YR002HR | smf-3b | 143.2541 | 11.26 |
| 050YR002HR | smf-3b | 143.5041 | 11.25 |
| 050YR002HR | smf-3b | 143.7541 | 11.25 |
| 050YR002HR | smf-3b | 144.0041 | 11.25 |
| 050YR002HR | smf-3b | 144.2541 | 11.25 |
| 050YR002HR | smf-3b | 144.5041 | 11.25 |
| 050YR002HR | smf-3b | 144.7541 | 11.25 |
| 050YR002HR | smf-3b | 145.0041 | 11.25 |
| 050YR002HR | smf-3b | 145.2541 | 11.25 |
| 050YR002HR | smf-3b | 145.5041 | 11.25 |
| 050YR002HR | smf-3b | 145.7541 | 11.25 |
| 050YR002HR | smf-3b | 146.0041 | 11.25 |
| 050YR002HR | smf-3b | 146.2541 | 11.25 |
| 050YR002HR | smf-3b | 146.5041 | 11.25 |
| 050YR002HR | smf-3b | 146.7541 | 11.25 |
| 050YR002HR | smf-3b | 147.0041 | 11.25 |
| 050YR002HR | smf-3b | 147.2541 | 11.25 |
| 050YR002HR | smf-3b | 147.5041 | 11.25 |
| 050YR002HR | smf-3b | 147.7541 | 11.25 |
| 050YR002HR | smf-3b | 148.0041 | 11.25 |
| 050YR002HR | smf-3b | 148.2541 | 11.25 |
| 050YR002HR | smf-3b | 148.5041 | 11.25 |
| 050YR002HR | smf-3b | 148.7541 | 11.25 |
| 050YR002HR | smf-3b | 149.0041 | 11.25 |
| 050YR002HR | smf-3b | 149.2541 | 11.25 |
| 050YR002HR | smf-3b | 149.5041 | 11.25 |
| 050YR002HR | smf-3b | 149.7541 | 11.25 |
| 050YR002HR | smf-3b | 150.0041 | 11.25 |
| 050YR002HR | smf-3b | 150.2541 | 11.25 |
| 050YR002HR | smf-3b | 150.5041 | 11.25 |
| 050YR002HR | smf-3b | 150.7541 | 11.25 |
| 050YR002HR | smf-3b | 151.0041 | 11.25 |
| 050YR002HR | smf-3b | 151.2541 | 11.25 |
| 050YR002HR | smf-3b | 151.5041 | 11.25 |

**50yr-2hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR004YR | smf-1a | 175.0081 | 12.46 |
| 050YR004YR | smf-1a | 175.2581 | 12.46 |
| 050YR004YR | smf-1a | 175.5081 | 12.46 |
| 050YR004YR | smf-1a | 175.7581 | 12.46 |
| 050YR004YR | smf-1a | 176.0081 | 12.46 |
| 050YR004YR | smf-1a | 176.2581 | 12.46 |
| 050YR004YR | smf-1a | 176.5081 | 12.45 |
| 050YR004YR | smf-1a | 176.7581 | 12.45 |
| 050YR004YR | smf-1a | 177.0081 | 12.45 |
| 050YR004YR | smf-1a | 177.2581 | 12.45 |
| 050YR004YR | smf-1a | 177.5081 | 12.45 |
| 050YR004YR | smf-1a | 177.7581 | 12.45 |
| 050YR004YR | smf-1a | 178.0081 | 12.45 |
| 050YR004YR | smf-1a | 178.2581 | 12.45 |
| 050YR004YR | smf-1a | 178.5081 | 12.45 |
| 050YR004YR | smf-1a | 178.7581 | 12.45 |
| 050YR004YR | smf-1a | 179.0081 | 12.45 |
| 050YR004YR | smf-1a | 179.2581 | 12.45 |
| 050YR004YR | smf-1a | 179.5081 | 12.45 |
| 050YR004YR | smf-1a | 179.7581 | 12.45 |
| 050YR004YR | smf-1a | 180.0081 | 12.45 |
| 050YR004YR | smf-1a | 180.2581 | 12.45 |
| 050YR004YR | smf-1a | 180.5081 | 12.45 |
| 050YR004YR | smf-1a | 180.7581 | 12.45 |
| 050YR004YR | smf-1a | 181.0081 | 12.45 |
| 050YR004YR | smf-1a | 181.2581 | 12.45 |
| 050YR004YR | smf-1a | 181.5081 | 12.45 |
| 050YR004YR | smf-1a | 181.7581 | 12.45 |
| 050YR004YR | smf-1a | 182.0081 | 12.45 |
| 050YR004YR | smf-1a | 182.2581 | 12.45 |
| 050YR004YR | smf-1a | 182.5081 | 12.45 |
| 050YR004YR | smf-1a | 182.7581 | 12.45 |
| 050YR004YR | smf-1a | 183.0081 | 12.45 |
| 050YR004YR | smf-1a | 183.2581 | 12.45 |
| 050YR004YR | smf-1a | 183.5081 | 12.45 |
| 050YR004YR | smf-1a | 183.7581 | 12.45 |
| 050YR004YR | smf-1a | 184.0081 | 12.45 |
| 050YR004YR | smf-1a | 184.2581 | 12.45 |
| 050YR004YR | smf-1a | 184.5081 | 12.45 |
| 050YR004YR | smf-1a | 184.7581 | 12.45 |
| 050YR004YR | smf-1a | 185.0081 | 12.45 |
| 050YR004YR | smf-1a | 185.2581 | 12.45 |

**50yr-4hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR004YR | smf-1b | 80.7581 | 13.02 |
| 050YR004YR | smf-1b | 81.0081 | 13.02 |
| 050YR004YR | smf-1b | 81.2581 | 13.02 |
| 050YR004YR | smf-1b | 81.5081 | 13.02 |
| 050YR004YR | smf-1b | 81.7581 | 13.02 |
| 050YR004YR | smf-1b | 82.0081 | 13.02 |
| 050YR004YR | smf-1b | 82.2581 | 13.01 |
| 050YR004YR | smf-1b | 82.5081 | 13.01 |
| 050YR004YR | smf-1b | 82.7581 | 13.01 |
| 050YR004YR | smf-1b | 83.0081 | 13.01 |
| 050YR004YR | smf-1b | 83.2581 | 13.01 |
| 050YR004YR | smf-1b | 83.5081 | 13.01 |
| 050YR004YR | smf-1b | 83.7581 | 13.01 |
| 050YR004YR | smf-1b | 84.0081 | 13.01 |
| 050YR004YR | smf-1b | 84.2581 | 13.00 |
| 050YR004YR | smf-1b | 84.5081 | 13.00 |
| 050YR004YR | smf-1b | 84.7581 | 13.00 |
| 050YR004YR | smf-1b | 85.0081 | 13.00 |
| 050YR004YR | smf-1b | 85.2581 | 13.00 |
| 050YR004YR | smf-1b | 85.5081 | 13.00 |
| 050YR004YR | smf-1b | 85.7581 | 13.00 |
| 050YR004YR | smf-1b | 86.0081 | 13.00 |
| 050YR004YR | smf-1b | 86.2581 | 13.00 |
| 050YR004YR | smf-1b | 86.5081 | 13.00 |
| 050YR004YR | smf-1b | 86.7581 | 13.00 |
| 050YR004YR | smf-1b | 87.0081 | 13.00 |
| 050YR004YR | smf-1b | 87.2581 | 13.00 |
| 050YR004YR | smf-1b | 87.5081 | 13.00 |
| 050YR004YR | smf-1b | 87.7581 | 13.00 |
| 050YR004YR | smf-1b | 88.0081 | 13.00 |
| 050YR004YR | smf-1b | 88.2581 | 13.00 |
| 050YR004YR | smf-1b | 88.5081 | 13.00 |
| 050YR004YR | smf-1b | 88.7581 | 13.00 |
| 050YR004YR | smf-1b | 89.0081 | 13.00 |
| 050YR004YR | smf-1b | 89.2581 | 13.00 |
| 050YR004YR | smf-1b | 89.5081 | 13.00 |
| 050YR004YR | smf-1b | 89.7581 | 13.00 |
| 050YR004YR | smf-1b | 90.0081 | 13.00 |
| 050YR004YR | smf-1b | 90.2581 | 13.00 |
| 050YR004YR | smf-1b | 90.5081 | 13.00 |
| 050YR004YR | smf-1b | 90.7581 | 13.00 |
| 050YR004YR | smf-1b | 91.0081 | 13.00 |

**50yr-4hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR004YR | smf-2a | 154.5081 | 12.12 |
| 050YR004YR | smf-2a | 154.7581 | 12.12 |
| 050YR004YR | smf-2a | 155.0081 | 12.12 |
| 050YR004YR | smf-2a | 155.2581 | 12.11 |
| 050YR004YR | smf-2a | 155.5081 | 12.11 |
| 050YR004YR | smf-2a | 155.7581 | 12.11 |
| 050YR004YR | smf-2a | 156.0081 | 12.11 |
| 050YR004YR | smf-2a | 156.2581 | 12.11 |
| 050YR004YR | smf-2a | 156.5081 | 12.11 |
| 050YR004YR | smf-2a | 156.7581 | 12.11 |
| 050YR004YR | smf-2a | 157.0081 | 12.11 |
| 050YR004YR | smf-2a | 157.2581 | 12.11 |
| 050YR004YR | smf-2a | 157.5081 | 12.11 |
| 050YR004YR | smf-2a | 157.7581 | 12.11 |
| 050YR004YR | smf-2a | 158.0081 | 12.11 |
| 050YR004YR | smf-2a | 158.2581 | 12.11 |
| 050YR004YR | smf-2a | 158.5081 | 12.11 |
| 050YR004YR | smf-2a | 158.7581 | 12.11 |
| 050YR004YR | smf-2a | 159.0081 | 12.11 |
| 050YR004YR | smf-2a | 159.2581 | 12.11 |
| 050YR004YR | smf-2a | 159.5081 | 12.11 |
| 050YR004YR | smf-2a | 159.7581 | 12.11 |
| 050YR004YR | smf-2a | 160.0081 | 12.10 |
| 050YR004YR | smf-2a | 160.2581 | 12.10 |
| 050YR004YR | smf-2a | 160.5081 | 12.10 |
| 050YR004YR | smf-2a | 160.7581 | 12.10 |
| 050YR004YR | smf-2a | 161.0081 | 12.10 |
| 050YR004YR | smf-2a | 161.2581 | 12.10 |
| 050YR004YR | smf-2a | 161.5081 | 12.10 |
| 050YR004YR | smf-2a | 161.7581 | 12.10 |
| 050YR004YR | smf-2a | 162.0081 | 12.10 |
| 050YR004YR | smf-2a | 162.2581 | 12.10 |
| 050YR004YR | smf-2a | 162.5081 | 12.10 |
| 050YR004YR | smf-2a | 162.7581 | 12.10 |
| 050YR004YR | smf-2a | 163.0081 | 12.10 |
| 050YR004YR | smf-2a | 163.2581 | 12.10 |
| 050YR004YR | smf-2a | 163.5081 | 12.10 |
| 050YR004YR | smf-2a | 163.7581 | 12.10 |
| 050YR004YR | smf-2a | 164.0081 | 12.10 |
| 050YR004YR | smf-2a | 164.2581 | 12.10 |
| 050YR004YR | smf-2a | 164.5081 | 12.10 |
| 050YR004YR | smf-2a | 164.7581 | 12.10 |

**50yr-4hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR004YR | smf-2b | 112.7581 | 11.43 |
| 050YR004YR | smf-2b | 113.0081 | 11.43 |
| 050YR004YR | smf-2b | 113.2581 | 11.42 |
| 050YR004YR | smf-2b | 113.5081 | 11.42 |
| 050YR004YR | smf-2b | 113.7581 | 11.42 |
| 050YR004YR | smf-2b | 114.0081 | 11.42 |
| 050YR004YR | smf-2b | 114.2581 | 11.42 |
| 050YR004YR | smf-2b | 114.5081 | 11.42 |
| 050YR004YR | smf-2b | 114.7581 | 11.42 |
| 050YR004YR | smf-2b | 115.0081 | 11.42 |
| 050YR004YR | smf-2b | 115.2581 | 11.42 |
| 050YR004YR | smf-2b | 115.5081 | 11.42 |
| 050YR004YR | smf-2b | 115.7581 | 11.42 |
| 050YR004YR | smf-2b | 116.0081 | 11.41 |
| 050YR004YR | smf-2b | 116.2581 | 11.41 |
| 050YR004YR | smf-2b | 116.5081 | 11.41 |
| 050YR004YR | smf-2b | 116.7581 | 11.41 |
| 050YR004YR | smf-2b | 117.0081 | 11.41 |
| 050YR004YR | smf-2b | 117.2581 | 11.41 |
| 050YR004YR | smf-2b | 117.5081 | 11.41 |
| 050YR004YR | smf-2b | 117.7581 | 11.41 |
| 050YR004YR | smf-2b | 118.0081 | 11.41 |
| 050YR004YR | smf-2b | 118.2581 | 11.41 |
| 050YR004YR | smf-2b | 118.5081 | 11.41 |
| 050YR004YR | smf-2b | 118.7581 | 11.40 |
| 050YR004YR | smf-2b | 119.0081 | 11.40 |
| 050YR004YR | smf-2b | 119.2581 | 11.40 |
| 050YR004YR | smf-2b | 119.5081 | 11.40 |
| 050YR004YR | smf-2b | 119.7581 | 11.40 |
| 050YR004YR | smf-2b | 120.0081 | 11.40 |
| 050YR004YR | smf-2b | 120.2581 | 11.40 |
| 050YR004YR | smf-2b | 120.5081 | 11.40 |
| 050YR004YR | smf-2b | 120.7581 | 11.40 |
| 050YR004YR | smf-2b | 121.0081 | 11.40 |
| 050YR004YR | smf-2b | 121.2581 | 11.40 |
| 050YR004YR | smf-2b | 121.5081 | 11.40 |
| 050YR004YR | smf-2b | 121.7581 | 11.40 |
| 050YR004YR | smf-2b | 122.0081 | 11.40 |
| 050YR004YR | smf-2b | 122.2581 | 11.40 |
| 050YR004YR | smf-2b | 122.5081 | 11.40 |
| 050YR004YR | smf-2b | 122.7581 | 11.40 |
| 050YR004YR | smf-2b | 123.0081 | 11.40 |

**50yr-4hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR004YR | smf-2c | 144.5081 | 11.87 |
| 050YR004YR | smf-2c | 144.7581 | 11.87 |
| 050YR004YR | smf-2c | 145.0081 | 11.87 |
| 050YR004YR | smf-2c | 145.2581 | 11.87 |
| 050YR004YR | smf-2c | 145.5081 | 11.87 |
| 050YR004YR | smf-2c | 145.7581 | 11.87 |
| 050YR004YR | smf-2c | 146.0081 | 11.87 |
| 050YR004YR | smf-2c | 146.2581 | 11.86 |
| 050YR004YR | smf-2c | 146.5081 | 11.86 |
| 050YR004YR | smf-2c | 146.7581 | 11.86 |
| 050YR004YR | smf-2c | 147.0081 | 11.86 |
| 050YR004YR | smf-2c | 147.2581 | 11.86 |
| 050YR004YR | smf-2c | 147.5081 | 11.86 |
| 050YR004YR | smf-2c | 147.7581 | 11.86 |
| 050YR004YR | smf-2c | 148.0081 | 11.86 |
| 050YR004YR | smf-2c | 148.2581 | 11.86 |
| 050YR004YR | smf-2c | 148.5081 | 11.86 |
| 050YR004YR | smf-2c | 148.7581 | 11.86 |
| 050YR004YR | smf-2c | 149.0081 | 11.86 |
| 050YR004YR | smf-2c | 149.2581 | 11.86 |
| 050YR004YR | smf-2c | 149.5081 | 11.86 |
| 050YR004YR | smf-2c | 149.7581 | 11.86 |
| 050YR004YR | smf-2c | 150.0081 | 11.85 |
| 050YR004YR | smf-2c | 150.2581 | 11.85 |
| 050YR004YR | smf-2c | 150.5081 | 11.85 |
| 050YR004YR | smf-2c | 150.7581 | 11.85 |
| 050YR004YR | smf-2c | 151.0081 | 11.85 |
| 050YR004YR | smf-2c | 151.2581 | 11.85 |
| 050YR004YR | smf-2c | 151.5081 | 11.85 |
| 050YR004YR | smf-2c | 151.7581 | 11.85 |
| 050YR004YR | smf-2c | 152.0081 | 11.85 |
| 050YR004YR | smf-2c | 152.2581 | 11.85 |
| 050YR004YR | smf-2c | 152.5081 | 11.85 |
| 050YR004YR | smf-2c | 152.7581 | 11.85 |
| 050YR004YR | smf-2c | 153.0081 | 11.85 |
| 050YR004YR | smf-2c | 153.2581 | 11.85 |
| 050YR004YR | smf-2c | 153.5081 | 11.85 |
| 050YR004YR | smf-2c | 153.7581 | 11.85 |
| 050YR004YR | smf-2c | 154.0081 | 11.85 |
| 050YR004YR | smf-2c | 154.2581 | 11.85 |
| 050YR004YR | smf-2c | 154.5081 | 11.85 |
| 050YR004YR | smf-2c | 154.7581 | 11.85 |

**50yr-4hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR004YR | smf-3a | 123.7581 | 11.93 |
| 050YR004YR | smf-3a | 124.0081 | 11.93 |
| 050YR004YR | smf-3a | 124.2581 | 11.93 |
| 050YR004YR | smf-3a | 124.5081 | 11.92 |
| 050YR004YR | smf-3a | 124.7581 | 11.92 |
| 050YR004YR | smf-3a | 125.0081 | 11.92 |
| 050YR004YR | smf-3a | 125.2581 | 11.92 |
| 050YR004YR | smf-3a | 125.5081 | 11.92 |
| 050YR004YR | smf-3a | 125.7581 | 11.92 |
| 050YR004YR | smf-3a | 126.0081 | 11.92 |
| 050YR004YR | smf-3a | 126.2581 | 11.92 |
| 050YR004YR | smf-3a | 126.5081 | 11.92 |
| 050YR004YR | smf-3a | 126.7581 | 11.92 |
| 050YR004YR | smf-3a | 127.0081 | 11.92 |
| 050YR004YR | smf-3a | 127.2581 | 11.92 |
| 050YR004YR | smf-3a | 127.5081 | 11.91 |
| 050YR004YR | smf-3a | 127.7581 | 11.91 |
| 050YR004YR | smf-3a | 128.0081 | 11.91 |
| 050YR004YR | smf-3a | 128.2581 | 11.91 |
| 050YR004YR | smf-3a | 128.5081 | 11.91 |
| 050YR004YR | smf-3a | 128.7581 | 11.91 |
| 050YR004YR | smf-3a | 129.0081 | 11.91 |
| 050YR004YR | smf-3a | 129.2581 | 11.91 |
| 050YR004YR | smf-3a | 129.5081 | 11.91 |
| 050YR004YR | smf-3a | 129.7581 | 11.91 |
| 050YR004YR | smf-3a | 130.0081 | 11.91 |
| 050YR004YR | smf-3a | 130.2581 | 11.91 |
| 050YR004YR | smf-3a | 130.5081 | 11.91 |
| 050YR004YR | smf-3a | 130.7581 | 11.90 |
| 050YR004YR | smf-3a | 131.0081 | 11.90 |
| 050YR004YR | smf-3a | 131.2581 | 11.90 |
| 050YR004YR | smf-3a | 131.5081 | 11.90 |
| 050YR004YR | smf-3a | 131.7581 | 11.90 |
| 050YR004YR | smf-3a | 132.0081 | 11.90 |
| 050YR004YR | smf-3a | 132.2581 | 11.90 |
| 050YR004YR | smf-3a | 132.5081 | 11.90 |
| 050YR004YR | smf-3a | 132.7581 | 11.90 |
| 050YR004YR | smf-3a | 133.0081 | 11.90 |
| 050YR004YR | smf-3a | 133.2581 | 11.90 |
| 050YR004YR | smf-3a | 133.5081 | 11.90 |
| 050YR004YR | smf-3a | 133.7581 | 11.90 |
| 050YR004YR | smf-3a | 134.0081 | 11.90 |

**50yr-4hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR004YR | smf-3b | 155.5081 | 11.28 |
| 050YR004YR | smf-3b | 155.7581 | 11.28 |
| 050YR004YR | smf-3b | 156.0081 | 11.28 |
| 050YR004YR | smf-3b | 156.2581 | 11.27 |
| 050YR004YR | smf-3b | 156.5081 | 11.27 |
| 050YR004YR | smf-3b | 156.7581 | 11.27 |
| 050YR004YR | smf-3b | 157.0081 | 11.27 |
| 050YR004YR | smf-3b | 157.2581 | 11.27 |
| 050YR004YR | smf-3b | 157.5081 | 11.27 |
| 050YR004YR | smf-3b | 157.7581 | 11.27 |
| 050YR004YR | smf-3b | 158.0081 | 11.27 |
| 050YR004YR | smf-3b | 158.2581 | 11.27 |
| 050YR004YR | smf-3b | 158.5081 | 11.27 |
| 050YR004YR | smf-3b | 158.7581 | 11.27 |
| 050YR004YR | smf-3b | 159.0081 | 11.27 |
| 050YR004YR | smf-3b | 159.2581 | 11.27 |
| 050YR004YR | smf-3b | 159.5081 | 11.27 |
| 050YR004YR | smf-3b | 159.7581 | 11.27 |
| 050YR004YR | smf-3b | 160.0081 | 11.26 |
| 050YR004YR | smf-3b | 160.2581 | 11.26 |
| 050YR004YR | smf-3b | 160.5081 | 11.26 |
| 050YR004YR | smf-3b | 160.7581 | 11.26 |
| 050YR004YR | smf-3b | 161.0081 | 11.26 |
| 050YR004YR | smf-3b | 161.2581 | 11.26 |
| 050YR004YR | smf-3b | 161.5081 | 11.26 |
| 050YR004YR | smf-3b | 161.7581 | 11.26 |
| 050YR004YR | smf-3b | 162.0081 | 11.26 |
| 050YR004YR | smf-3b | 162.2581 | 11.26 |
| 050YR004YR | smf-3b | 162.5081 | 11.26 |
| 050YR004YR | smf-3b | 162.7581 | 11.26 |
| 050YR004YR | smf-3b | 163.0081 | 11.26 |
| 050YR004YR | smf-3b | 163.2581 | 11.26 |
| 050YR004YR | smf-3b | 163.5081 | 11.26 |
| 050YR004YR | smf-3b | 163.7581 | 11.26 |
| 050YR004YR | smf-3b | 164.0081 | 11.25 |
| 050YR004YR | smf-3b | 164.2581 | 11.25 |
| 050YR004YR | smf-3b | 164.5081 | 11.25 |
| 050YR004YR | smf-3b | 164.7581 | 11.25 |
| 050YR004YR | smf-3b | 165.0081 | 11.25 |
| 050YR004YR | smf-3b | 165.2581 | 11.25 |
| 050YR004YR | smf-3b | 165.5081 | 11.25 |
| 050YR004YR | smf-3b | 165.7581 | 11.25 |

**50yr-4hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR008HR | smf-1a | 218.7543 | 12.46 |
| 050YR008HR | smf-1a | 219.0043 | 12.46 |
| 050YR008HR | smf-1a | 219.2543 | 12.46 |
| 050YR008HR | smf-1a | 219.5043 | 12.46 |
| 050YR008HR | smf-1a | 219.7543 | 12.46 |
| 050YR008HR | smf-1a | 220.0043 | 12.46 |
| 050YR008HR | smf-1a | 220.2543 | 12.46 |
| 050YR008HR | smf-1a | 220.5043 | 12.46 |
| 050YR008HR | smf-1a | 220.7543 | 12.46 |
| 050YR008HR | smf-1a | 221.0043 | 12.46 |
| 050YR008HR | smf-1a | 221.2543 | 12.46 |
| 050YR008HR | smf-1a | 221.5043 | 12.46 |
| 050YR008HR | smf-1a | 221.7543 | 12.46 |
| 050YR008HR | smf-1a | 222.0043 | 12.46 |
| 050YR008HR | smf-1a | 222.2543 | 12.46 |
| 050YR008HR | smf-1a | 222.5043 | 12.46 |
| 050YR008HR | smf-1a | 222.7543 | 12.46 |
| 050YR008HR | smf-1a | 223.0043 | 12.46 |
| 050YR008HR | smf-1a | 223.2543 | 12.46 |
| 050YR008HR | smf-1a | 223.5043 | 12.45 |
| 050YR008HR | smf-1a | 223.7543 | 12.45 |
| 050YR008HR | smf-1a | 224.0043 | 12.45 |
| 050YR008HR | smf-1a | 224.2543 | 12.45 |
| 050YR008HR | smf-1a | 224.5043 | 12.45 |
| 050YR008HR | smf-1a | 224.7543 | 12.45 |
| 050YR008HR | smf-1a | 225.0043 | 12.45 |
| 050YR008HR | smf-1a | 225.2543 | 12.45 |
| 050YR008HR | smf-1a | 225.5043 | 12.45 |
| 050YR008HR | smf-1a | 225.7543 | 12.45 |
| 050YR008HR | smf-1a | 226.0043 | 12.45 |
| 050YR008HR | smf-1a | 226.2543 | 12.45 |
| 050YR008HR | smf-1a | 226.5043 | 12.45 |
| 050YR008HR | smf-1a | 226.7543 | 12.45 |
| 050YR008HR | smf-1a | 227.0043 | 12.45 |
| 050YR008HR | smf-1a | 227.2543 | 12.45 |
| 050YR008HR | smf-1a | 227.5043 | 12.45 |
| 050YR008HR | smf-1a | 227.7543 | 12.45 |
| 050YR008HR | smf-1a | 228.0043 | 12.45 |
| 050YR008HR | smf-1a | 228.2543 | 12.45 |
| 050YR008HR | smf-1a | 228.5043 | 12.45 |
| 050YR008HR | smf-1a | 228.7543 | 12.45 |
| 050YR008HR | smf-1a | 229.0043 | 12.45 |

**50yr-8hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR008HR | smf-1b | 110.0043 | 13.02 |
| 050YR008HR | smf-1b | 110.2543 | 13.02 |
| 050YR008HR | smf-1b | 110.5043 | 13.02 |
| 050YR008HR | smf-1b | 110.7543 | 13.02 |
| 050YR008HR | smf-1b | 111.0043 | 13.02 |
| 050YR008HR | smf-1b | 111.2543 | 13.02 |
| 050YR008HR | smf-1b | 111.5043 | 13.01 |
| 050YR008HR | smf-1b | 111.7543 | 13.01 |
| 050YR008HR | smf-1b | 112.0043 | 13.01 |
| 050YR008HR | smf-1b | 112.2543 | 13.01 |
| 050YR008HR | smf-1b | 112.5043 | 13.01 |
| 050YR008HR | smf-1b | 112.7543 | 13.01 |
| 050YR008HR | smf-1b | 113.0043 | 13.01 |
| 050YR008HR | smf-1b | 113.2543 | 13.01 |
| 050YR008HR | smf-1b | 113.5043 | 13.01 |
| 050YR008HR | smf-1b | 113.7543 | 13.01 |
| 050YR008HR | smf-1b | 114.0043 | 13.01 |
| 050YR008HR | smf-1b | 114.2543 | 13.00 |
| 050YR008HR | smf-1b | 114.5043 | 13.00 |
| 050YR008HR | smf-1b | 114.7543 | 13.00 |
| 050YR008HR | smf-1b | 115.0043 | 13.00 |
| 050YR008HR | smf-1b | 115.2543 | 13.00 |
| 050YR008HR | smf-1b | 115.5043 | 13.00 |
| 050YR008HR | smf-1b | 115.7543 | 13.00 |
| 050YR008HR | smf-1b | 116.0043 | 13.00 |
| 050YR008HR | smf-1b | 116.2543 | 13.00 |
| 050YR008HR | smf-1b | 116.5043 | 13.00 |
| 050YR008HR | smf-1b | 116.7543 | 13.00 |
| 050YR008HR | smf-1b | 117.0043 | 13.00 |
| 050YR008HR | smf-1b | 117.2543 | 13.00 |
| 050YR008HR | smf-1b | 117.5043 | 13.00 |
| 050YR008HR | smf-1b | 117.7543 | 13.00 |
| 050YR008HR | smf-1b | 118.0043 | 13.00 |
| 050YR008HR | smf-1b | 118.2543 | 13.00 |
| 050YR008HR | smf-1b | 118.5043 | 13.00 |
| 050YR008HR | smf-1b | 118.7543 | 13.00 |
| 050YR008HR | smf-1b | 119.0043 | 13.00 |
| 050YR008HR | smf-1b | 119.2543 | 13.00 |
| 050YR008HR | smf-1b | 119.5043 | 13.00 |
| 050YR008HR | smf-1b | 119.7543 | 13.00 |
| 050YR008HR | smf-1b | 120.0043 | 13.00 |
| 050YR008HR | smf-1b | 120.2543 | 13.00 |

**50yr-8hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR008HR | smf-2a | 179.7543 | 12.12 |
| 050YR008HR | smf-2a | 180.0043 | 12.12 |
| 050YR008HR | smf-2a | 180.2543 | 12.12 |
| 050YR008HR | smf-2a | 180.5043 | 12.12 |
| 050YR008HR | smf-2a | 180.7543 | 12.12 |
| 050YR008HR | smf-2a | 181.0043 | 12.12 |
| 050YR008HR | smf-2a | 181.2543 | 12.12 |
| 050YR008HR | smf-2a | 181.5043 | 12.12 |
| 050YR008HR | smf-2a | 181.7543 | 12.12 |
| 050YR008HR | smf-2a | 182.0043 | 12.12 |
| 050YR008HR | smf-2a | 182.2543 | 12.12 |
| 050YR008HR | smf-2a | 182.5043 | 12.12 |
| 050YR008HR | smf-2a | 182.7543 | 12.12 |
| 050YR008HR | smf-2a | 183.0043 | 12.12 |
| 050YR008HR | smf-2a | 183.2543 | 12.11 |
| 050YR008HR | smf-2a | 183.5043 | 12.11 |
| 050YR008HR | smf-2a | 183.7543 | 12.11 |
| 050YR008HR | smf-2a | 184.0043 | 12.11 |
| 050YR008HR | smf-2a | 184.2543 | 12.11 |
| 050YR008HR | smf-2a | 184.5043 | 12.11 |
| 050YR008HR | smf-2a | 184.7543 | 12.11 |
| 050YR008HR | smf-2a | 185.0043 | 12.11 |
| 050YR008HR | smf-2a | 185.2543 | 12.11 |
| 050YR008HR | smf-2a | 185.5043 | 12.11 |
| 050YR008HR | smf-2a | 185.7543 | 12.11 |
| 050YR008HR | smf-2a | 186.0043 | 12.11 |
| 050YR008HR | smf-2a | 186.2543 | 12.11 |
| 050YR008HR | smf-2a | 186.5043 | 12.11 |
| 050YR008HR | smf-2a | 186.7543 | 12.11 |
| 050YR008HR | smf-2a | 187.0043 | 12.11 |
| 050YR008HR | smf-2a | 187.2543 | 12.11 |
| 050YR008HR | smf-2a | 187.5043 | 12.11 |
| 050YR008HR | smf-2a | 187.7543 | 12.11 |
| 050YR008HR | smf-2a | 188.0043 | 12.11 |
| 050YR008HR | smf-2a | 188.2543 | 12.11 |
| 050YR008HR | smf-2a | 188.5043 | 12.11 |
| 050YR008HR | smf-2a | 188.7543 | 12.10 |
| 050YR008HR | smf-2a | 189.0043 | 12.10 |
| 050YR008HR | smf-2a | 189.2543 | 12.10 |
| 050YR008HR | smf-2a | 189.5043 | 12.10 |
| 050YR008HR | smf-2a | 189.7543 | 12.10 |
| 050YR008HR | smf-2a | 190.0043 | 12.10 |

**50yr-8hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR008HR | smf-2b | 144.5043 | 11.41 |
| 050YR008HR | smf-2b | 144.7543 | 11.41 |
| 050YR008HR | smf-2b | 145.0043 | 11.41 |
| 050YR008HR | smf-2b | 145.2543 | 11.41 |
| 050YR008HR | smf-2b | 145.5043 | 11.41 |
| 050YR008HR | smf-2b | 145.7543 | 11.41 |
| 050YR008HR | smf-2b | 146.0043 | 11.41 |
| 050YR008HR | smf-2b | 146.2543 | 11.41 |
| 050YR008HR | smf-2b | 146.5043 | 11.41 |
| 050YR008HR | smf-2b | 146.7543 | 11.41 |
| 050YR008HR | smf-2b | 147.0043 | 11.40 |
| 050YR008HR | smf-2b | 147.2543 | 11.40 |
| 050YR008HR | smf-2b | 147.5043 | 11.40 |
| 050YR008HR | smf-2b | 147.7543 | 11.40 |
| 050YR008HR | smf-2b | 148.0043 | 11.40 |
| 050YR008HR | smf-2b | 148.2543 | 11.40 |
| 050YR008HR | smf-2b | 148.5043 | 11.40 |
| 050YR008HR | smf-2b | 148.7543 | 11.40 |
| 050YR008HR | smf-2b | 149.0043 | 11.40 |
| 050YR008HR | smf-2b | 149.2543 | 11.40 |
| 050YR008HR | smf-2b | 149.5043 | 11.40 |
| 050YR008HR | smf-2b | 149.7543 | 11.40 |
| 050YR008HR | smf-2b | 150.0043 | 11.40 |
| 050YR008HR | smf-2b | 150.2543 | 11.40 |
| 050YR008HR | smf-2b | 150.5043 | 11.40 |
| 050YR008HR | smf-2b | 150.7543 | 11.40 |
| 050YR008HR | smf-2b | 151.0043 | 11.40 |
| 050YR008HR | smf-2b | 151.2543 | 11.40 |
| 050YR008HR | smf-2b | 151.5043 | 11.40 |
| 050YR008HR | smf-2b | 151.7543 | 11.40 |
| 050YR008HR | smf-2b | 152.0043 | 11.40 |
| 050YR008HR | smf-2b | 152.2543 | 11.40 |
| 050YR008HR | smf-2b | 152.5043 | 11.40 |
| 050YR008HR | smf-2b | 152.7543 | 11.40 |
| 050YR008HR | smf-2b | 153.0043 | 11.40 |
| 050YR008HR | smf-2b | 153.2543 | 11.40 |
| 050YR008HR | smf-2b | 153.5043 | 11.40 |
| 050YR008HR | smf-2b | 153.7543 | 11.40 |
| 050YR008HR | smf-2b | 154.0043 | 11.40 |
| 050YR008HR | smf-2b | 154.2543 | 11.40 |
| 050YR008HR | smf-2b | 154.5043 | 11.40 |
| 050YR008HR | smf-2b | 154.7543 | 11.40 |

**50yr-8hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR008HR | smf-2c | 172.2543 | 11.87 |
| 050YR008HR | smf-2c | 172.5043 | 11.87 |
| 050YR008HR | smf-2c | 172.7543 | 11.87 |
| 050YR008HR | smf-2c | 173.0043 | 11.87 |
| 050YR008HR | smf-2c | 173.2543 | 11.87 |
| 050YR008HR | smf-2c | 173.5043 | 11.87 |
| 050YR008HR | smf-2c | 173.7543 | 11.87 |
| 050YR008HR | smf-2c | 174.0043 | 11.87 |
| 050YR008HR | smf-2c | 174.2543 | 11.87 |
| 050YR008HR | smf-2c | 174.5043 | 11.87 |
| 050YR008HR | smf-2c | 174.7543 | 11.86 |
| 050YR008HR | smf-2c | 175.0043 | 11.86 |
| 050YR008HR | smf-2c | 175.2543 | 11.86 |
| 050YR008HR | smf-2c | 175.5043 | 11.86 |
| 050YR008HR | smf-2c | 175.7543 | 11.86 |
| 050YR008HR | smf-2c | 176.0043 | 11.86 |
| 050YR008HR | smf-2c | 176.2543 | 11.86 |
| 050YR008HR | smf-2c | 176.5043 | 11.86 |
| 050YR008HR | smf-2c | 176.7543 | 11.86 |
| 050YR008HR | smf-2c | 177.0043 | 11.86 |
| 050YR008HR | smf-2c | 177.2543 | 11.86 |
| 050YR008HR | smf-2c | 177.5043 | 11.86 |
| 050YR008HR | smf-2c | 177.7543 | 11.86 |
| 050YR008HR | smf-2c | 178.0043 | 11.86 |
| 050YR008HR | smf-2c | 178.2543 | 11.86 |
| 050YR008HR | smf-2c | 178.5043 | 11.86 |
| 050YR008HR | smf-2c | 178.7543 | 11.86 |
| 050YR008HR | smf-2c | 179.0043 | 11.86 |
| 050YR008HR | smf-2c | 179.2543 | 11.85 |
| 050YR008HR | smf-2c | 179.5043 | 11.85 |
| 050YR008HR | smf-2c | 179.7543 | 11.85 |
| 050YR008HR | smf-2c | 180.0043 | 11.85 |
| 050YR008HR | smf-2c | 180.2543 | 11.85 |
| 050YR008HR | smf-2c | 180.5043 | 11.85 |
| 050YR008HR | smf-2c | 180.7543 | 11.85 |
| 050YR008HR | smf-2c | 181.0043 | 11.85 |
| 050YR008HR | smf-2c | 181.2543 | 11.85 |
| 050YR008HR | smf-2c | 181.5043 | 11.85 |
| 050YR008HR | smf-2c | 181.7543 | 11.85 |
| 050YR008HR | smf-2c | 182.0043 | 11.85 |
| 050YR008HR | smf-2c | 182.2543 | 11.85 |
| 050YR008HR | smf-2c | 182.5043 | 11.85 |

**50yr-8hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR008HR | smf-3a | 158.0043 | 11.92 |
| 050YR008HR | smf-3a | 158.2543 | 11.92 |
| 050YR008HR | smf-3a | 158.5043 | 11.92 |
| 050YR008HR | smf-3a | 158.7543 | 11.92 |
| 050YR008HR | smf-3a | 159.0043 | 11.92 |
| 050YR008HR | smf-3a | 159.2543 | 11.92 |
| 050YR008HR | smf-3a | 159.5043 | 11.91 |
| 050YR008HR | smf-3a | 159.7543 | 11.91 |
| 050YR008HR | smf-3a | 160.0043 | 11.91 |
| 050YR008HR | smf-3a | 160.2543 | 11.91 |
| 050YR008HR | smf-3a | 160.5043 | 11.91 |
| 050YR008HR | smf-3a | 160.7543 | 11.91 |
| 050YR008HR | smf-3a | 161.0043 | 11.91 |
| 050YR008HR | smf-3a | 161.2543 | 11.91 |
| 050YR008HR | smf-3a | 161.5043 | 11.91 |
| 050YR008HR | smf-3a | 161.7543 | 11.91 |
| 050YR008HR | smf-3a | 162.0043 | 11.91 |
| 050YR008HR | smf-3a | 162.2543 | 11.91 |
| 050YR008HR | smf-3a | 162.5043 | 11.91 |
| 050YR008HR | smf-3a | 162.7543 | 11.91 |
| 050YR008HR | smf-3a | 163.0043 | 11.91 |
| 050YR008HR | smf-3a | 163.2543 | 11.91 |
| 050YR008HR | smf-3a | 163.5043 | 11.90 |
| 050YR008HR | smf-3a | 163.7543 | 11.90 |
| 050YR008HR | smf-3a | 164.0043 | 11.90 |
| 050YR008HR | smf-3a | 164.2543 | 11.90 |
| 050YR008HR | smf-3a | 164.5043 | 11.90 |
| 050YR008HR | smf-3a | 164.7543 | 11.90 |
| 050YR008HR | smf-3a | 165.0043 | 11.90 |
| 050YR008HR | smf-3a | 165.2543 | 11.90 |
| 050YR008HR | smf-3a | 165.5043 | 11.90 |
| 050YR008HR | smf-3a | 165.7543 | 11.90 |
| 050YR008HR | smf-3a | 166.0043 | 11.90 |
| 050YR008HR | smf-3a | 166.2543 | 11.90 |
| 050YR008HR | smf-3a | 166.5043 | 11.90 |
| 050YR008HR | smf-3a | 166.7543 | 11.90 |
| 050YR008HR | smf-3a | 167.0043 | 11.90 |
| 050YR008HR | smf-3a | 167.2543 | 11.90 |
| 050YR008HR | smf-3a | 167.5043 | 11.90 |
| 050YR008HR | smf-3a | 167.7543 | 11.90 |
| 050YR008HR | smf-3a | 168.0043 | 11.90 |
| 050YR008HR | smf-3a | 168.2543 | 11.90 |

**50yr-8hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR008HR | smf-3b | 196.2543 | 11.26 |
| 050YR008HR | smf-3b | 196.5043 | 11.26 |
| 050YR008HR | smf-3b | 196.7543 | 11.26 |
| 050YR008HR | smf-3b | 197.0043 | 11.26 |
| 050YR008HR | smf-3b | 197.2543 | 11.26 |
| 050YR008HR | smf-3b | 197.5043 | 11.26 |
| 050YR008HR | smf-3b | 197.7543 | 11.26 |
| 050YR008HR | smf-3b | 198.0043 | 11.26 |
| 050YR008HR | smf-3b | 198.2543 | 11.26 |
| 050YR008HR | smf-3b | 198.5043 | 11.26 |
| 050YR008HR | smf-3b | 198.7543 | 11.26 |
| 050YR008HR | smf-3b | 199.0043 | 11.25 |
| 050YR008HR | smf-3b | 199.2543 | 11.25 |
| 050YR008HR | smf-3b | 199.5043 | 11.25 |
| 050YR008HR | smf-3b | 199.7543 | 11.25 |
| 050YR008HR | smf-3b | 200.0043 | 11.25 |
| 050YR008HR | smf-3b | 200.2543 | 11.25 |
| 050YR008HR | smf-3b | 200.5043 | 11.25 |
| 050YR008HR | smf-3b | 200.7543 | 11.25 |
| 050YR008HR | smf-3b | 201.0043 | 11.25 |
| 050YR008HR | smf-3b | 201.2543 | 11.25 |
| 050YR008HR | smf-3b | 201.5043 | 11.25 |
| 050YR008HR | smf-3b | 201.7543 | 11.25 |
| 050YR008HR | smf-3b | 202.0043 | 11.25 |
| 050YR008HR | smf-3b | 202.2543 | 11.25 |
| 050YR008HR | smf-3b | 202.5043 | 11.25 |
| 050YR008HR | smf-3b | 202.7543 | 11.25 |
| 050YR008HR | smf-3b | 203.0043 | 11.25 |
| 050YR008HR | smf-3b | 203.2543 | 11.25 |
| 050YR008HR | smf-3b | 203.5043 | 11.25 |
| 050YR008HR | smf-3b | 203.7543 | 11.25 |
| 050YR008HR | smf-3b | 204.0043 | 11.25 |
| 050YR008HR | smf-3b | 204.2543 | 11.25 |
| 050YR008HR | smf-3b | 204.5043 | 11.25 |
| 050YR008HR | smf-3b | 204.7543 | 11.25 |
| 050YR008HR | smf-3b | 205.0043 | 11.25 |
| 050YR008HR | smf-3b | 205.2543 | 11.25 |
| 050YR008HR | smf-3b | 205.5043 | 11.25 |
| 050YR008HR | smf-3b | 205.7543 | 11.25 |
| 050YR008HR | smf-3b | 206.0043 | 11.25 |
| 050YR008HR | smf-3b | 206.2543 | 11.25 |
| 050YR008HR | smf-3b | 206.5043 | 11.25 |

**50yr-8hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR024HR | smf-1a | 318.5054 | 12.47 |
| 050YR024HR | smf-1a | 318.7554 | 12.47 |
| 050YR024HR | smf-1a | 319.0054 | 12.46 |
| 050YR024HR | smf-1a | 319.2554 | 12.46 |
| 050YR024HR | smf-1a | 319.5054 | 12.46 |
| 050YR024HR | smf-1a | 319.7554 | 12.46 |
| 050YR024HR | smf-1a | 320.0054 | 12.46 |
| 050YR024HR | smf-1a | 320.2554 | 12.46 |
| 050YR024HR | smf-1a | 320.5054 | 12.46 |
| 050YR024HR | smf-1a | 320.7554 | 12.46 |
| 050YR024HR | smf-1a | 321.0054 | 12.46 |
| 050YR024HR | smf-1a | 321.2554 | 12.46 |
| 050YR024HR | smf-1a | 321.5054 | 12.46 |
| 050YR024HR | smf-1a | 321.7554 | 12.46 |
| 050YR024HR | smf-1a | 322.0054 | 12.46 |
| 050YR024HR | smf-1a | 322.2554 | 12.46 |
| 050YR024HR | smf-1a | 322.5054 | 12.46 |
| 050YR024HR | smf-1a | 322.7554 | 12.46 |
| 050YR024HR | smf-1a | 323.0054 | 12.46 |
| 050YR024HR | smf-1a | 323.2554 | 12.46 |
| 050YR024HR | smf-1a | 323.5054 | 12.46 |
| 050YR024HR | smf-1a | 323.7554 | 12.46 |
| 050YR024HR | smf-1a | 324.0054 | 12.46 |
| 050YR024HR | smf-1a | 324.2554 | 12.46 |
| 050YR024HR | smf-1a | 324.5054 | 12.46 |
| 050YR024HR | smf-1a | 324.7554 | 12.46 |
| 050YR024HR | smf-1a | 325.0054 | 12.46 |
| 050YR024HR | smf-1a | 325.2554 | 12.46 |
| 050YR024HR | smf-1a | 325.5054 | 12.46 |
| 050YR024HR | smf-1a | 325.7554 | 12.46 |
| 050YR024HR | smf-1a | 326.0054 | 12.46 |
| 050YR024HR | smf-1a | 326.2554 | 12.46 |
| 050YR024HR | smf-1a | 326.5054 | 12.46 |
| 050YR024HR | smf-1a | 326.7554 | 12.46 |
| 050YR024HR | smf-1a | 327.0054 | 12.46 |
| 050YR024HR | smf-1a | 327.2554 | 12.46 |
| 050YR024HR | smf-1a | 327.5054 | 12.45 |
| 050YR024HR | smf-1a | 327.7554 | 12.45 |
| 050YR024HR | smf-1a | 328.0054 | 12.45 |
| 050YR024HR | smf-1a | 328.2554 | 12.45 |
| 050YR024HR | smf-1a | 328.5054 | 12.45 |
| 050YR024HR | smf-1a | 328.7554 | 12.45 |

**50yr-24hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR024HR | smf-1b | 193.7554 | 13.02 |
| 050YR024HR | smf-1b | 194.0054 | 13.02 |
| 050YR024HR | smf-1b | 194.2554 | 13.02 |
| 050YR024HR | smf-1b | 194.5054 | 13.02 |
| 050YR024HR | smf-1b | 194.7554 | 13.02 |
| 050YR024HR | smf-1b | 195.0054 | 13.02 |
| 050YR024HR | smf-1b | 195.2554 | 13.02 |
| 050YR024HR | smf-1b | 195.5054 | 13.02 |
| 050YR024HR | smf-1b | 195.7554 | 13.01 |
| 050YR024HR | smf-1b | 196.0054 | 13.01 |
| 050YR024HR | smf-1b | 196.2554 | 13.01 |
| 050YR024HR | smf-1b | 196.5054 | 13.01 |
| 050YR024HR | smf-1b | 196.7554 | 13.01 |
| 050YR024HR | smf-1b | 197.0054 | 13.01 |
| 050YR024HR | smf-1b | 197.2554 | 13.01 |
| 050YR024HR | smf-1b | 197.5054 | 13.01 |
| 050YR024HR | smf-1b | 197.7554 | 13.01 |
| 050YR024HR | smf-1b | 198.0054 | 13.01 |
| 050YR024HR | smf-1b | 198.2554 | 13.01 |
| 050YR024HR | smf-1b | 198.5054 | 13.01 |
| 050YR024HR | smf-1b | 198.7554 | 13.01 |
| 050YR024HR | smf-1b | 199.0054 | 13.01 |
| 050YR024HR | smf-1b | 199.2554 | 13.01 |
| 050YR024HR | smf-1b | 199.5054 | 13.01 |
| 050YR024HR | smf-1b | 199.7554 | 13.01 |
| 050YR024HR | smf-1b | 200.0054 | 13.01 |
| 050YR024HR | smf-1b | 200.2554 | 13.01 |
| 050YR024HR | smf-1b | 200.5054 | 13.00 |
| 050YR024HR | smf-1b | 200.7554 | 13.00 |
| 050YR024HR | smf-1b | 201.0054 | 13.00 |
| 050YR024HR | smf-1b | 201.2554 | 13.00 |
| 050YR024HR | smf-1b | 201.5054 | 13.00 |
| 050YR024HR | smf-1b | 201.7554 | 13.00 |
| 050YR024HR | smf-1b | 202.0054 | 13.00 |
| 050YR024HR | smf-1b | 202.2554 | 13.00 |
| 050YR024HR | smf-1b | 202.5054 | 13.00 |
| 050YR024HR | smf-1b | 202.7554 | 13.00 |
| 050YR024HR | smf-1b | 203.0054 | 13.00 |
| 050YR024HR | smf-1b | 203.2554 | 13.00 |
| 050YR024HR | smf-1b | 203.5054 | 13.00 |
| 050YR024HR | smf-1b | 203.7554 | 13.00 |
| 050YR024HR | smf-1b | 204.0054 | 13.00 |

**50yr-24hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR024HR | smf-2a | 268.5054 | 12.12 |
| 050YR024HR | smf-2a | 268.7554 | 12.12 |
| 050YR024HR | smf-2a | 269.0054 | 12.12 |
| 050YR024HR | smf-2a | 269.2554 | 12.12 |
| 050YR024HR | smf-2a | 269.5054 | 12.12 |
| 050YR024HR | smf-2a | 269.7554 | 12.12 |
| 050YR024HR | smf-2a | 270.0054 | 12.12 |
| 050YR024HR | smf-2a | 270.2554 | 12.12 |
| 050YR024HR | smf-2a | 270.5054 | 12.12 |
| 050YR024HR | smf-2a | 270.7554 | 12.11 |
| 050YR024HR | smf-2a | 271.0054 | 12.11 |
| 050YR024HR | smf-2a | 271.2554 | 12.11 |
| 050YR024HR | smf-2a | 271.5054 | 12.11 |
| 050YR024HR | smf-2a | 271.7554 | 12.11 |
| 050YR024HR | smf-2a | 272.0054 | 12.11 |
| 050YR024HR | smf-2a | 272.2554 | 12.11 |
| 050YR024HR | smf-2a | 272.5054 | 12.11 |
| 050YR024HR | smf-2a | 272.7554 | 12.11 |
| 050YR024HR | smf-2a | 273.0054 | 12.11 |
| 050YR024HR | smf-2a | 273.2554 | 12.11 |
| 050YR024HR | smf-2a | 273.5054 | 12.11 |
| 050YR024HR | smf-2a | 273.7554 | 12.11 |
| 050YR024HR | smf-2a | 274.0054 | 12.11 |
| 050YR024HR | smf-2a | 274.2554 | 12.11 |
| 050YR024HR | smf-2a | 274.5054 | 12.11 |
| 050YR024HR | smf-2a | 274.7554 | 12.11 |
| 050YR024HR | smf-2a | 275.0054 | 12.11 |
| 050YR024HR | smf-2a | 275.2554 | 12.11 |
| 050YR024HR | smf-2a | 275.5054 | 12.11 |
| 050YR024HR | smf-2a | 275.7554 | 12.11 |
| 050YR024HR | smf-2a | 276.0054 | 12.11 |
| 050YR024HR | smf-2a | 276.2554 | 12.11 |
| 050YR024HR | smf-2a | 276.5054 | 12.11 |
| 050YR024HR | smf-2a | 276.7554 | 12.11 |
| 050YR024HR | smf-2a | 277.0054 | 12.11 |
| 050YR024HR | smf-2a | 277.2554 | 12.11 |
| 050YR024HR | smf-2a | 277.5054 | 12.11 |
| 050YR024HR | smf-2a | 277.7554 | 12.11 |
| 050YR024HR | smf-2a | 278.0054 | 12.11 |
| 050YR024HR | smf-2a | 278.2554 | 12.11 |
| 050YR024HR | smf-2a | 278.5054 | 12.10 |
| 050YR024HR | smf-2a | 278.7554 | 12.10 |

**50yr-24hr SMF-2a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR024HR | smf-2b | 227.7554 | 11.41 |
| 050YR024HR | smf-2b | 228.0054 | 11.41 |
| 050YR024HR | smf-2b | 228.2554 | 11.41 |
| 050YR024HR | smf-2b | 228.5054 | 11.41 |
| 050YR024HR | smf-2b | 228.7554 | 11.41 |
| 050YR024HR | smf-2b | 229.0054 | 11.41 |
| 050YR024HR | smf-2b | 229.2554 | 11.41 |
| 050YR024HR | smf-2b | 229.5054 | 11.41 |
| 050YR024HR | smf-2b | 229.7554 | 11.41 |
| 050YR024HR | smf-2b | 230.0054 | 11.41 |
| 050YR024HR | smf-2b | 230.2554 | 11.41 |
| 050YR024HR | smf-2b | 230.5054 | 11.41 |
| 050YR024HR | smf-2b | 230.7554 | 11.41 |
| 050YR024HR | smf-2b | 231.0054 | 11.41 |
| 050YR024HR | smf-2b | 231.2554 | 11.41 |
| 050YR024HR | smf-2b | 231.5054 | 11.41 |
| 050YR024HR | smf-2b | 231.7554 | 11.41 |
| 050YR024HR | smf-2b | 232.0054 | 11.41 |
| 050YR024HR | smf-2b | 232.2554 | 11.41 |
| 050YR024HR | smf-2b | 232.5054 | 11.41 |
| 050YR024HR | smf-2b | 232.7554 | 11.41 |
| 050YR024HR | smf-2b | 233.0054 | 11.40 |
| 050YR024HR | smf-2b | 233.2554 | 11.40 |
| 050YR024HR | smf-2b | 233.5054 | 11.40 |
| 050YR024HR | smf-2b | 233.7554 | 11.40 |
| 050YR024HR | smf-2b | 234.0054 | 11.40 |
| 050YR024HR | smf-2b | 234.2554 | 11.40 |
| 050YR024HR | smf-2b | 234.5054 | 11.40 |
| 050YR024HR | smf-2b | 234.7554 | 11.40 |
| 050YR024HR | smf-2b | 235.0054 | 11.40 |
| 050YR024HR | smf-2b | 235.2554 | 11.40 |
| 050YR024HR | smf-2b | 235.5054 | 11.40 |
| 050YR024HR | smf-2b | 235.7554 | 11.40 |
| 050YR024HR | smf-2b | 236.0054 | 11.40 |
| 050YR024HR | smf-2b | 236.2554 | 11.40 |
| 050YR024HR | smf-2b | 236.5054 | 11.40 |
| 050YR024HR | smf-2b | 236.7554 | 11.40 |
| 050YR024HR | smf-2b | 237.0054 | 11.40 |
| 050YR024HR | smf-2b | 237.2554 | 11.40 |
| 050YR024HR | smf-2b | 237.5054 | 11.40 |
| 050YR024HR | smf-2b | 237.7554 | 11.40 |
| 050YR024HR | smf-2b | 238.0054 | 11.40 |

**50yr-24hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR024HR | smf-2c | 271.0054 | 11.86 |
| 050YR024HR | smf-2c | 271.2554 | 11.86 |
| 050YR024HR | smf-2c | 271.5054 | 11.85 |
| 050YR024HR | smf-2c | 271.7554 | 11.85 |
| 050YR024HR | smf-2c | 272.0054 | 11.85 |
| 050YR024HR | smf-2c | 272.2554 | 11.85 |
| 050YR024HR | smf-2c | 272.5054 | 11.85 |
| 050YR024HR | smf-2c | 272.7554 | 11.85 |
| 050YR024HR | smf-2c | 273.0054 | 11.85 |
| 050YR024HR | smf-2c | 273.2554 | 11.85 |
| 050YR024HR | smf-2c | 273.5054 | 11.85 |
| 050YR024HR | smf-2c | 273.7554 | 11.85 |
| 050YR024HR | smf-2c | 274.0054 | 11.85 |
| 050YR024HR | smf-2c | 274.2554 | 11.85 |
| 050YR024HR | smf-2c | 274.5054 | 11.85 |
| 050YR024HR | smf-2c | 274.7554 | 11.85 |
| 050YR024HR | smf-2c | 275.0054 | 11.85 |
| 050YR024HR | smf-2c | 275.2554 | 11.85 |
| 050YR024HR | smf-2c | 275.5054 | 11.85 |
| 050YR024HR | smf-2c | 275.7554 | 11.85 |
| 050YR024HR | smf-2c | 276.0054 | 11.85 |
| 050YR024HR | smf-2c | 276.2554 | 11.85 |
| 050YR024HR | smf-2c | 276.5054 | 11.85 |
| 050YR024HR | smf-2c | 276.7554 | 11.85 |
| 050YR024HR | smf-2c | 277.0054 | 11.85 |
| 050YR024HR | smf-2c | 277.2554 | 11.85 |
| 050YR024HR | smf-2c | 277.5054 | 11.85 |
| 050YR024HR | smf-2c | 277.7554 | 11.85 |
| 050YR024HR | smf-2c | 278.0054 | 11.85 |
| 050YR024HR | smf-2c | 278.2554 | 11.85 |
| 050YR024HR | smf-2c | 278.5054 | 11.85 |
| 050YR024HR | smf-2c | 278.7554 | 11.85 |
| 050YR024HR | smf-2c | 279.0054 | 11.85 |
| 050YR024HR | smf-2c | 279.2554 | 11.85 |
| 050YR024HR | smf-2c | 279.5054 | 11.85 |
| 050YR024HR | smf-2c | 279.7554 | 11.85 |
| 050YR024HR | smf-2c | 280.0054 | 11.85 |
| 050YR024HR | smf-2c | 280.2554 | 11.85 |
| 050YR024HR | smf-2c | 280.5054 | 11.85 |
| 050YR024HR | smf-2c | 280.7554 | 11.85 |
| 050YR024HR | smf-2c | 281.0054 | 11.85 |
| 050YR024HR | smf-2c | 281.2554 | 11.85 |

**50yr-24hr SMF-2c**

1D Nodes - Time Series | Clay County Economic Development Building | 14131

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR024HR | smf-3a | 261.7554 | 11.92 |
| 050YR024HR | smf-3a | 262.0054 | 11.92 |
| 050YR024HR | smf-3a | 262.2554 | 11.92 |
| 050YR024HR | smf-3a | 262.5054 | 11.92 |
| 050YR024HR | smf-3a | 262.7554 | 11.92 |
| 050YR024HR | smf-3a | 263.0054 | 11.92 |
| 050YR024HR | smf-3a | 263.2554 | 11.91 |
| 050YR024HR | smf-3a | 263.5054 | 11.91 |
| 050YR024HR | smf-3a | 263.7554 | 11.91 |
| 050YR024HR | smf-3a | 264.0054 | 11.91 |
| 050YR024HR | smf-3a | 264.2554 | 11.91 |
| 050YR024HR | smf-3a | 264.5054 | 11.91 |
| 050YR024HR | smf-3a | 264.7554 | 11.91 |
| 050YR024HR | smf-3a | 265.0054 | 11.91 |
| 050YR024HR | smf-3a | 265.2554 | 11.91 |
| 050YR024HR | smf-3a | 265.5054 | 11.91 |
| 050YR024HR | smf-3a | 265.7554 | 11.91 |
| 050YR024HR | smf-3a | 266.0054 | 11.91 |
| 050YR024HR | smf-3a | 266.2554 | 11.91 |
| 050YR024HR | smf-3a | 266.5054 | 11.91 |
| 050YR024HR | smf-3a | 266.7554 | 11.91 |
| 050YR024HR | smf-3a | 267.0054 | 11.91 |
| 050YR024HR | smf-3a | 267.2554 | 11.91 |
| 050YR024HR | smf-3a | 267.5054 | 11.91 |
| 050YR024HR | smf-3a | 267.7554 | 11.91 |
| 050YR024HR | smf-3a | 268.0054 | 11.91 |
| 050YR024HR | smf-3a | 268.2554 | 11.91 |
| 050YR024HR | smf-3a | 268.5054 | 11.91 |
| 050YR024HR | smf-3a | 268.7554 | 11.91 |
| 050YR024HR | smf-3a | 269.0054 | 11.91 |
| 050YR024HR | smf-3a | 269.2554 | 11.91 |
| 050YR024HR | smf-3a | 269.5054 | 11.90 |
| 050YR024HR | smf-3a | 269.7554 | 11.90 |
| 050YR024HR | smf-3a | 270.0054 | 11.90 |
| 050YR024HR | smf-3a | 270.2554 | 11.90 |
| 050YR024HR | smf-3a | 270.5054 | 11.90 |
| 050YR024HR | smf-3a | 270.7554 | 11.90 |
| 050YR024HR | smf-3a | 271.0054 | 11.90 |
| 050YR024HR | smf-3a | 271.2554 | 11.90 |
| 050YR024HR | smf-3a | 271.5054 | 11.90 |
| 050YR024HR | smf-3a | 271.7554 | 11.90 |
| 050YR024HR | smf-3a | 272.0054 | 11.90 |

**50yr-24hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR024HR | smf-3b | 305.0054 | 11.27 |
| 050YR024HR | smf-3b | 305.2554 | 11.27 |
| 050YR024HR | smf-3b | 305.5054 | 11.27 |
| 050YR024HR | smf-3b | 305.7554 | 11.27 |
| 050YR024HR | smf-3b | 306.0054 | 11.26 |
| 050YR024HR | smf-3b | 306.2554 | 11.26 |
| 050YR024HR | smf-3b | 306.5054 | 11.26 |
| 050YR024HR | smf-3b | 306.7554 | 11.26 |
| 050YR024HR | smf-3b | 307.0054 | 11.26 |
| 050YR024HR | smf-3b | 307.2554 | 11.26 |
| 050YR024HR | smf-3b | 307.5054 | 11.26 |
| 050YR024HR | smf-3b | 307.7554 | 11.26 |
| 050YR024HR | smf-3b | 308.0054 | 11.26 |
| 050YR024HR | smf-3b | 308.2554 | 11.26 |
| 050YR024HR | smf-3b | 308.5054 | 11.26 |
| 050YR024HR | smf-3b | 308.7554 | 11.26 |
| 050YR024HR | smf-3b | 309.0054 | 11.26 |
| 050YR024HR | smf-3b | 309.2554 | 11.26 |
| 050YR024HR | smf-3b | 309.5054 | 11.26 |
| 050YR024HR | smf-3b | 309.7554 | 11.26 |
| 050YR024HR | smf-3b | 310.0054 | 11.26 |
| 050YR024HR | smf-3b | 310.2554 | 11.26 |
| 050YR024HR | smf-3b | 310.5054 | 11.26 |
| 050YR024HR | smf-3b | 310.7554 | 11.26 |
| 050YR024HR | smf-3b | 311.0054 | 11.26 |
| 050YR024HR | smf-3b | 311.2554 | 11.26 |
| 050YR024HR | smf-3b | 311.5054 | 11.26 |
| 050YR024HR | smf-3b | 311.7554 | 11.26 |
| 050YR024HR | smf-3b | 312.0054 | 11.26 |
| 050YR024HR | smf-3b | 312.2554 | 11.26 |
| 050YR024HR | smf-3b | 312.5054 | 11.26 |
| 050YR024HR | smf-3b | 312.7554 | 11.26 |
| 050YR024HR | smf-3b | 313.0054 | 11.26 |
| 050YR024HR | smf-3b | 313.2554 | 11.26 |
| 050YR024HR | smf-3b | 313.5054 | 11.25 |
| 050YR024HR | smf-3b | 313.7554 | 11.25 |
| 050YR024HR | smf-3b | 314.0054 | 11.25 |
| 050YR024HR | smf-3b | 314.2554 | 11.25 |
| 050YR024HR | smf-3b | 314.5054 | 11.25 |
| 050YR024HR | smf-3b | 314.7554 | 11.25 |
| 050YR024HR | smf-3b | 315.0054 | 11.25 |
| 050YR024HR | smf-3b | 315.2554 | 11.25 |

**50yr-24hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR072HR | smf-1a | 558.2525 | 12.46 |
| 050YR072HR | smf-1a | 558.5025 | 12.46 |
| 050YR072HR | smf-1a | 558.7525 | 12.46 |
| 050YR072HR | smf-1a | 559.0025 | 12.46 |
| 050YR072HR | smf-1a | 559.2525 | 12.46 |
| 050YR072HR | smf-1a | 559.5025 | 12.46 |
| 050YR072HR | smf-1a | 559.7525 | 12.46 |
| 050YR072HR | smf-1a | 560.0025 | 12.46 |
| 050YR072HR | smf-1a | 560.2525 | 12.46 |
| 050YR072HR | smf-1a | 560.5025 | 12.46 |
| 050YR072HR | smf-1a | 560.7525 | 12.46 |
| 050YR072HR | smf-1a | 561.0025 | 12.46 |
| 050YR072HR | smf-1a | 561.2525 | 12.46 |
| 050YR072HR | smf-1a | 561.5025 | 12.46 |
| 050YR072HR | smf-1a | 561.7525 | 12.46 |
| 050YR072HR | smf-1a | 562.0025 | 12.46 |
| 050YR072HR | smf-1a | 562.2525 | 12.46 |
| 050YR072HR | smf-1a | 562.5025 | 12.46 |
| 050YR072HR | smf-1a | 562.7525 | 12.46 |
| 050YR072HR | smf-1a | 563.0025 | 12.46 |
| 050YR072HR | smf-1a | 563.2525 | 12.46 |
| 050YR072HR | smf-1a | 563.5025 | 12.46 |
| 050YR072HR | smf-1a | 563.7525 | 12.46 |
| 050YR072HR | smf-1a | 564.0025 | 12.46 |
| 050YR072HR | smf-1a | 564.2525 | 12.46 |
| 050YR072HR | smf-1a | 564.5025 | 12.46 |
| 050YR072HR | smf-1a | 564.7525 | 12.46 |
| 050YR072HR | smf-1a | 565.0025 | 12.46 |
| 050YR072HR | smf-1a | 565.2525 | 12.46 |
| 050YR072HR | smf-1a | 565.5025 | 12.46 |
| 050YR072HR | smf-1a | 565.7525 | 12.46 |
| 050YR072HR | smf-1a | 566.0025 | 12.46 |
| 050YR072HR | smf-1a | 566.2525 | 12.46 |
| 050YR072HR | smf-1a | 566.5025 | 12.46 |
| 050YR072HR | smf-1a | 566.7525 | 12.46 |
| 050YR072HR | smf-1a | 567.0025 | 12.46 |
| 050YR072HR | smf-1a | 567.2525 | 12.46 |
| 050YR072HR | smf-1a | 567.5025 | 12.46 |
| 050YR072HR | smf-1a | 567.7525 | 12.46 |
| 050YR072HR | smf-1a | 568.0025 | 12.46 |
| 050YR072HR | smf-1a | 568.2525 | 12.45 |
| 050YR072HR | smf-1a | 568.5025 | 12.45 |

**50yr-72hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR072HR | smf-1b | 417.0025 | 13.01 |
| 050YR072HR | smf-1b | 417.2525 | 13.01 |
| 050YR072HR | smf-1b | 417.5025 | 13.01 |
| 050YR072HR | smf-1b | 417.7525 | 13.01 |
| 050YR072HR | smf-1b | 418.0025 | 13.01 |
| 050YR072HR | smf-1b | 418.2525 | 13.01 |
| 050YR072HR | smf-1b | 418.5025 | 13.01 |
| 050YR072HR | smf-1b | 418.7525 | 13.01 |
| 050YR072HR | smf-1b | 419.0025 | 13.01 |
| 050YR072HR | smf-1b | 419.2525 | 13.01 |
| 050YR072HR | smf-1b | 419.5025 | 13.01 |
| 050YR072HR | smf-1b | 419.7525 | 13.01 |
| 050YR072HR | smf-1b | 420.0025 | 13.01 |
| 050YR072HR | smf-1b | 420.2525 | 13.01 |
| 050YR072HR | smf-1b | 420.5025 | 13.01 |
| 050YR072HR | smf-1b | 420.7525 | 13.01 |
| 050YR072HR | smf-1b | 421.0025 | 13.01 |
| 050YR072HR | smf-1b | 421.2525 | 13.01 |
| 050YR072HR | smf-1b | 421.5025 | 13.01 |
| 050YR072HR | smf-1b | 421.7525 | 13.01 |
| 050YR072HR | smf-1b | 422.0025 | 13.01 |
| 050YR072HR | smf-1b | 422.2525 | 13.01 |
| 050YR072HR | smf-1b | 422.5025 | 13.01 |
| 050YR072HR | smf-1b | 422.7525 | 13.01 |
| 050YR072HR | smf-1b | 423.0025 | 13.01 |
| 050YR072HR | smf-1b | 423.2525 | 13.01 |
| 050YR072HR | smf-1b | 423.5025 | 13.01 |
| 050YR072HR | smf-1b | 423.7525 | 13.01 |
| 050YR072HR | smf-1b | 424.0025 | 13.01 |
| 050YR072HR | smf-1b | 424.2525 | 13.01 |
| 050YR072HR | smf-1b | 424.5025 | 13.01 |
| 050YR072HR | smf-1b | 424.7525 | 13.01 |
| 050YR072HR | smf-1b | 425.0025 | 13.01 |
| 050YR072HR | smf-1b | 425.2525 | 13.01 |
| 050YR072HR | smf-1b | 425.5025 | 13.01 |
| 050YR072HR | smf-1b | 425.7525 | 13.01 |
| 050YR072HR | smf-1b | 426.0025 | 13.01 |
| 050YR072HR | smf-1b | 426.2525 | 13.01 |
| 050YR072HR | smf-1b | 426.5025 | 13.00 |
| 050YR072HR | smf-1b | 426.7525 | 13.00 |
| 050YR072HR | smf-1b | 427.0025 | 13.00 |
| 050YR072HR | smf-1b | 427.2525 | 13.00 |

**50yr-72hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR072HR | smf-2a | 485.7525 | 12.11 |
| 050YR072HR | smf-2a | 486.0025 | 12.11 |
| 050YR072HR | smf-2a | 486.2525 | 12.11 |
| 050YR072HR | smf-2a | 486.5025 | 12.11 |
| 050YR072HR | smf-2a | 486.7525 | 12.11 |
| 050YR072HR | smf-2a | 487.0025 | 12.11 |
| 050YR072HR | smf-2a | 487.2525 | 12.11 |
| 050YR072HR | smf-2a | 487.5025 | 12.11 |
| 050YR072HR | smf-2a | 487.7525 | 12.11 |
| 050YR072HR | smf-2a | 488.0025 | 12.11 |
| 050YR072HR | smf-2a | 488.2525 | 12.11 |
| 050YR072HR | smf-2a | 488.5025 | 12.11 |
| 050YR072HR | smf-2a | 488.7525 | 12.11 |
| 050YR072HR | smf-2a | 489.0025 | 12.11 |
| 050YR072HR | smf-2a | 489.2525 | 12.11 |
| 050YR072HR | smf-2a | 489.5025 | 12.11 |
| 050YR072HR | smf-2a | 489.7525 | 12.11 |
| 050YR072HR | smf-2a | 490.0025 | 12.11 |
| 050YR072HR | smf-2a | 490.2525 | 12.11 |
| 050YR072HR | smf-2a | 490.5025 | 12.11 |
| 050YR072HR | smf-2a | 490.7525 | 12.11 |
| 050YR072HR | smf-2a | 491.0025 | 12.11 |
| 050YR072HR | smf-2a | 491.2525 | 12.11 |
| 050YR072HR | smf-2a | 491.5025 | 12.11 |
| 050YR072HR | smf-2a | 491.7525 | 12.11 |
| 050YR072HR | smf-2a | 492.0025 | 12.11 |
| 050YR072HR | smf-2a | 492.2525 | 12.11 |
| 050YR072HR | smf-2a | 492.5025 | 12.11 |
| 050YR072HR | smf-2a | 492.7525 | 12.11 |
| 050YR072HR | smf-2a | 493.0025 | 12.11 |
| 050YR072HR | smf-2a | 493.2525 | 12.11 |
| 050YR072HR | smf-2a | 493.5025 | 12.11 |
| 050YR072HR | smf-2a | 493.7525 | 12.11 |
| 050YR072HR | smf-2a | 494.0025 | 12.11 |
| 050YR072HR | smf-2a | 494.2525 | 12.11 |
| 050YR072HR | smf-2a | 494.5025 | 12.10 |
| 050YR072HR | smf-2a | 494.7525 | 12.10 |
| 050YR072HR | smf-2a | 495.0025 | 12.10 |
| 050YR072HR | smf-2a | 495.2525 | 12.10 |
| 050YR072HR | smf-2a | 495.5025 | 12.10 |
| 050YR072HR | smf-2a | 495.7525 | 12.10 |
| 050YR072HR | smf-2a | 496.0025 | 12.10 |

**50yr-72hr SMF-2a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR072HR | smf-2b | 439.0025 | 11.41 |
| 050YR072HR | smf-2b | 439.2525 | 11.41 |
| 050YR072HR | smf-2b | 439.5025 | 11.41 |
| 050YR072HR | smf-2b | 439.7525 | 11.41 |
| 050YR072HR | smf-2b | 440.0025 | 11.41 |
| 050YR072HR | smf-2b | 440.2525 | 11.41 |
| 050YR072HR | smf-2b | 440.5025 | 11.41 |
| 050YR072HR | smf-2b | 440.7525 | 11.41 |
| 050YR072HR | smf-2b | 441.0025 | 11.41 |
| 050YR072HR | smf-2b | 441.2525 | 11.41 |
| 050YR072HR | smf-2b | 441.5025 | 11.41 |
| 050YR072HR | smf-2b | 441.7525 | 11.41 |
| 050YR072HR | smf-2b | 442.0025 | 11.41 |
| 050YR072HR | smf-2b | 442.2525 | 11.41 |
| 050YR072HR | smf-2b | 442.5025 | 11.41 |
| 050YR072HR | smf-2b | 442.7525 | 11.41 |
| 050YR072HR | smf-2b | 443.0025 | 11.41 |
| 050YR072HR | smf-2b | 443.2525 | 11.41 |
| 050YR072HR | smf-2b | 443.5025 | 11.41 |
| 050YR072HR | smf-2b | 443.7525 | 11.41 |
| 050YR072HR | smf-2b | 444.0025 | 11.41 |
| 050YR072HR | smf-2b | 444.2525 | 11.41 |
| 050YR072HR | smf-2b | 444.5025 | 11.41 |
| 050YR072HR | smf-2b | 444.7525 | 11.40 |
| 050YR072HR | smf-2b | 445.0025 | 11.40 |
| 050YR072HR | smf-2b | 445.2525 | 11.40 |
| 050YR072HR | smf-2b | 445.5025 | 11.40 |
| 050YR072HR | smf-2b | 445.7525 | 11.40 |
| 050YR072HR | smf-2b | 446.0025 | 11.40 |
| 050YR072HR | smf-2b | 446.2525 | 11.40 |
| 050YR072HR | smf-2b | 446.5025 | 11.40 |
| 050YR072HR | smf-2b | 446.7525 | 11.40 |
| 050YR072HR | smf-2b | 447.0025 | 11.40 |
| 050YR072HR | smf-2b | 447.2525 | 11.40 |
| 050YR072HR | smf-2b | 447.5025 | 11.40 |
| 050YR072HR | smf-2b | 447.7525 | 11.40 |
| 050YR072HR | smf-2b | 448.0025 | 11.40 |
| 050YR072HR | smf-2b | 448.2525 | 11.40 |
| 050YR072HR | smf-2b | 448.5025 | 11.40 |
| 050YR072HR | smf-2b | 448.7525 | 11.40 |
| 050YR072HR | smf-2b | 449.0025 | 11.40 |
| 050YR072HR | smf-2b | 449.2525 | 11.40 |

**50yr-72hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR072HR | smf-2c | 507.7525 | 11.86 |
| 050YR072HR | smf-2c | 508.0025 | 11.86 |
| 050YR072HR | smf-2c | 508.2525 | 11.86 |
| 050YR072HR | smf-2c | 508.5025 | 11.86 |
| 050YR072HR | smf-2c | 508.7525 | 11.86 |
| 050YR072HR | smf-2c | 509.0025 | 11.86 |
| 050YR072HR | smf-2c | 509.2525 | 11.86 |
| 050YR072HR | smf-2c | 509.5025 | 11.86 |
| 050YR072HR | smf-2c | 509.7525 | 11.86 |
| 050YR072HR | smf-2c | 510.0025 | 11.86 |
| 050YR072HR | smf-2c | 510.2525 | 11.86 |
| 050YR072HR | smf-2c | 510.5025 | 11.86 |
| 050YR072HR | smf-2c | 510.7525 | 11.86 |
| 050YR072HR | smf-2c | 511.0025 | 11.86 |
| 050YR072HR | smf-2c | 511.2525 | 11.86 |
| 050YR072HR | smf-2c | 511.5025 | 11.86 |
| 050YR072HR | smf-2c | 511.7525 | 11.86 |
| 050YR072HR | smf-2c | 512.0025 | 11.86 |
| 050YR072HR | smf-2c | 512.2525 | 11.85 |
| 050YR072HR | smf-2c | 512.5025 | 11.85 |
| 050YR072HR | smf-2c | 512.7525 | 11.85 |
| 050YR072HR | smf-2c | 513.0025 | 11.85 |
| 050YR072HR | smf-2c | 513.2525 | 11.85 |
| 050YR072HR | smf-2c | 513.5025 | 11.85 |
| 050YR072HR | smf-2c | 513.7525 | 11.85 |
| 050YR072HR | smf-2c | 514.0025 | 11.85 |
| 050YR072HR | smf-2c | 514.2525 | 11.85 |
| 050YR072HR | smf-2c | 514.5025 | 11.85 |
| 050YR072HR | smf-2c | 514.7525 | 11.85 |
| 050YR072HR | smf-2c | 515.0025 | 11.85 |
| 050YR072HR | smf-2c | 515.2525 | 11.85 |
| 050YR072HR | smf-2c | 515.5025 | 11.85 |
| 050YR072HR | smf-2c | 515.7525 | 11.85 |
| 050YR072HR | smf-2c | 516.0025 | 11.85 |
| 050YR072HR | smf-2c | 516.2525 | 11.85 |
| 050YR072HR | smf-2c | 516.5025 | 11.85 |
| 050YR072HR | smf-2c | 516.7525 | 11.85 |
| 050YR072HR | smf-2c | 517.0025 | 11.85 |
| 050YR072HR | smf-2c | 517.2525 | 11.85 |
| 050YR072HR | smf-2c | 517.5025 | 11.85 |
| 050YR072HR | smf-2c | 517.7525 | 11.85 |
| 050YR072HR | smf-2c | 518.0025 | 11.85 |

**50yr-72hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR072HR | smf-3a | 534.5025 | 11.91 |
| 050YR072HR | smf-3a | 534.7525 | 11.91 |
| 050YR072HR | smf-3a | 535.0025 | 11.91 |
| 050YR072HR | smf-3a | 535.2525 | 11.91 |
| 050YR072HR | smf-3a | 535.5025 | 11.91 |
| 050YR072HR | smf-3a | 535.7525 | 11.91 |
| 050YR072HR | smf-3a | 536.0025 | 11.91 |
| 050YR072HR | smf-3a | 536.2525 | 11.91 |
| 050YR072HR | smf-3a | 536.5025 | 11.91 |
| 050YR072HR | smf-3a | 536.7525 | 11.91 |
| 050YR072HR | smf-3a | 537.0025 | 11.91 |
| 050YR072HR | smf-3a | 537.2525 | 11.91 |
| 050YR072HR | smf-3a | 537.5025 | 11.91 |
| 050YR072HR | smf-3a | 537.7525 | 11.91 |
| 050YR072HR | smf-3a | 538.0025 | 11.91 |
| 050YR072HR | smf-3a | 538.2525 | 11.91 |
| 050YR072HR | smf-3a | 538.5025 | 11.91 |
| 050YR072HR | smf-3a | 538.7525 | 11.91 |
| 050YR072HR | smf-3a | 539.0025 | 11.91 |
| 050YR072HR | smf-3a | 539.2525 | 11.91 |
| 050YR072HR | smf-3a | 539.5025 | 11.91 |
| 050YR072HR | smf-3a | 539.7525 | 11.91 |
| 050YR072HR | smf-3a | 540.0025 | 11.91 |
| 050YR072HR | smf-3a | 540.2525 | 11.91 |
| 050YR072HR | smf-3a | 540.5025 | 11.90 |
| 050YR072HR | smf-3a | 540.7525 | 11.90 |
| 050YR072HR | smf-3a | 541.0025 | 11.90 |
| 050YR072HR | smf-3a | 541.2525 | 11.90 |
| 050YR072HR | smf-3a | 541.5025 | 11.90 |
| 050YR072HR | smf-3a | 541.7525 | 11.90 |
| 050YR072HR | smf-3a | 542.0025 | 11.90 |
| 050YR072HR | smf-3a | 542.2525 | 11.90 |
| 050YR072HR | smf-3a | 542.5025 | 11.90 |
| 050YR072HR | smf-3a | 542.7525 | 11.90 |
| 050YR072HR | smf-3a | 543.0025 | 11.90 |
| 050YR072HR | smf-3a | 543.2525 | 11.90 |
| 050YR072HR | smf-3a | 543.5025 | 11.90 |
| 050YR072HR | smf-3a | 543.7525 | 11.90 |
| 050YR072HR | smf-3a | 544.0025 | 11.90 |
| 050YR072HR | smf-3a | 544.2525 | 11.90 |
| 050YR072HR | smf-3a | 544.5025 | 11.90 |
| 050YR072HR | smf-3a | 544.7525 | 11.90 |

**50yr-72hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 050YR072HR | smf-3b | 624.2525 | 11.26 |
| 050YR072HR | smf-3b | 624.5025 | 11.26 |
| 050YR072HR | smf-3b | 624.7525 | 11.26 |
| 050YR072HR | smf-3b | 625.0025 | 11.26 |
| 050YR072HR | smf-3b | 625.2525 | 11.26 |
| 050YR072HR | smf-3b | 625.5025 | 11.26 |
| 050YR072HR | smf-3b | 625.7525 | 11.25 |
| 050YR072HR | smf-3b | 626.0025 | 11.25 |
| 050YR072HR | smf-3b | 626.2525 | 11.25 |
| 050YR072HR | smf-3b | 626.5025 | 11.25 |
| 050YR072HR | smf-3b | 626.7525 | 11.25 |
| 050YR072HR | smf-3b | 627.0025 | 11.25 |
| 050YR072HR | smf-3b | 627.2525 | 11.25 |
| 050YR072HR | smf-3b | 627.5025 | 11.25 |
| 050YR072HR | smf-3b | 627.7525 | 11.25 |
| 050YR072HR | smf-3b | 628.0025 | 11.25 |
| 050YR072HR | smf-3b | 628.2525 | 11.25 |
| 050YR072HR | smf-3b | 628.5025 | 11.25 |
| 050YR072HR | smf-3b | 628.7525 | 11.25 |
| 050YR072HR | smf-3b | 629.0025 | 11.25 |
| 050YR072HR | smf-3b | 629.2525 | 11.25 |
| 050YR072HR | smf-3b | 629.5025 | 11.25 |
| 050YR072HR | smf-3b | 629.7525 | 11.25 |
| 050YR072HR | smf-3b | 630.0025 | 11.25 |
| 050YR072HR | smf-3b | 630.2525 | 11.25 |
| 050YR072HR | smf-3b | 630.5025 | 11.25 |
| 050YR072HR | smf-3b | 630.7525 | 11.25 |
| 050YR072HR | smf-3b | 631.0025 | 11.25 |
| 050YR072HR | smf-3b | 631.2525 | 11.25 |
| 050YR072HR | smf-3b | 631.5025 | 11.25 |
| 050YR072HR | smf-3b | 631.7525 | 11.25 |
| 050YR072HR | smf-3b | 632.0025 | 11.25 |
| 050YR072HR | smf-3b | 632.2525 | 11.25 |
| 050YR072HR | smf-3b | 632.5025 | 11.25 |
| 050YR072HR | smf-3b | 632.7525 | 11.25 |
| 050YR072HR | smf-3b | 633.0025 | 11.25 |
| 050YR072HR | smf-3b | 633.2525 | 11.25 |
| 050YR072HR | smf-3b | 633.5025 | 11.25 |
| 050YR072HR | smf-3b | 633.7525 | 11.25 |
| 050YR072HR | smf-3b | 634.0025 | 11.25 |
| 050YR072HR | smf-3b | 634.2525 | 11.25 |
| 050YR072HR | smf-3b | 634.5025 | 11.25 |

**50yr-72hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR001HR | smf-1a | 115.5019 | 12.48 |
| 100YR001HR | smf-1a | 115.7519 | 12.48 |
| 100YR001HR | smf-1a | 116.0019 | 12.48 |
| 100YR001HR | smf-1a | 116.2519 | 12.48 |
| 100YR001HR | smf-1a | 116.5019 | 12.48 |
| 100YR001HR | smf-1a | 116.7519 | 12.48 |
| 100YR001HR | smf-1a | 117.0019 | 12.48 |
| 100YR001HR | smf-1a | 117.2519 | 12.48 |
| 100YR001HR | smf-1a | 117.5019 | 12.48 |
| 100YR001HR | smf-1a | 117.7519 | 12.48 |
| 100YR001HR | smf-1a | 118.0019 | 12.48 |
| 100YR001HR | smf-1a | 118.2519 | 12.48 |
| 100YR001HR | smf-1a | 118.5019 | 12.48 |
| 100YR001HR | smf-1a | 118.7519 | 12.47 |
| 100YR001HR | smf-1a | 119.0019 | 12.47 |
| 100YR001HR | smf-1a | 119.2519 | 12.47 |
| 100YR001HR | smf-1a | 119.5019 | 12.47 |
| 100YR001HR | smf-1a | 119.7519 | 12.47 |
| 100YR001HR | smf-1a | 120.0019 | 12.47 |
| 100YR001HR | smf-1a | 120.2519 | 12.47 |
| 100YR001HR | smf-1a | 120.5019 | 12.47 |
| 100YR001HR | smf-1a | 120.7519 | 12.47 |
| 100YR001HR | smf-1a | 121.0019 | 12.47 |
| 100YR001HR | smf-1a | 121.2519 | 12.47 |
| 100YR001HR | smf-1a | 121.5019 | 12.47 |
| 100YR001HR | smf-1a | 121.7519 | 12.47 |
| 100YR001HR | smf-1a | 122.0019 | 12.47 |
| 100YR001HR | smf-1a | 122.2519 | 12.46 |
| 100YR001HR | smf-1a | 122.5019 | 12.46 |
| 100YR001HR | smf-1a | 122.7519 | 12.46 |
| 100YR001HR | smf-1a | 123.0019 | 12.46 |
| 100YR001HR | smf-1a | 123.2519 | 12.46 |
| 100YR001HR | smf-1a | 123.5019 | 12.46 |
| 100YR001HR | smf-1a | 123.7519 | 12.46 |
| 100YR001HR | smf-1a | 124.0019 | 12.46 |
| 100YR001HR | smf-1a | 124.2519 | 12.46 |
| 100YR001HR | smf-1a | 124.5019 | 12.46 |
| 100YR001HR | smf-1a | 124.7519 | 12.46 |
| 100YR001HR | smf-1a | 125.0019 | 12.46 |
| 100YR001HR | smf-1a | 125.2519 | 12.46 |
| 100YR001HR | smf-1a | 125.5019 | 12.46 |
| 100YR001HR | smf-1a | 125.7519 | 12.45 |

**100yr-1hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR001HR | smf-1b | 45.2519 | 13.07 |
| 100YR001HR | smf-1b | 45.5019 | 13.07 |
| 100YR001HR | smf-1b | 45.7519 | 13.07 |
| 100YR001HR | smf-1b | 46.0019 | 13.07 |
| 100YR001HR | smf-1b | 46.2519 | 13.06 |
| 100YR001HR | smf-1b | 46.5019 | 13.06 |
| 100YR001HR | smf-1b | 46.7519 | 13.06 |
| 100YR001HR | smf-1b | 47.0019 | 13.06 |
| 100YR001HR | smf-1b | 47.2519 | 13.06 |
| 100YR001HR | smf-1b | 47.5019 | 13.05 |
| 100YR001HR | smf-1b | 47.7519 | 13.05 |
| 100YR001HR | smf-1b | 48.0019 | 13.05 |
| 100YR001HR | smf-1b | 48.2519 | 13.05 |
| 100YR001HR | smf-1b | 48.5019 | 13.04 |
| 100YR001HR | smf-1b | 48.7519 | 13.04 |
| 100YR001HR | smf-1b | 49.0019 | 13.04 |
| 100YR001HR | smf-1b | 49.2519 | 13.04 |
| 100YR001HR | smf-1b | 49.5019 | 13.04 |
| 100YR001HR | smf-1b | 49.7519 | 13.04 |
| 100YR001HR | smf-1b | 50.0019 | 13.03 |
| 100YR001HR | smf-1b | 50.2519 | 13.03 |
| 100YR001HR | smf-1b | 50.5019 | 13.03 |
| 100YR001HR | smf-1b | 50.7519 | 13.03 |
| 100YR001HR | smf-1b | 51.0019 | 13.03 |
| 100YR001HR | smf-1b | 51.2519 | 13.02 |
| 100YR001HR | smf-1b | 51.5019 | 13.02 |
| 100YR001HR | smf-1b | 51.7519 | 13.02 |
| 100YR001HR | smf-1b | 52.0019 | 13.02 |
| 100YR001HR | smf-1b | 52.2519 | 13.02 |
| 100YR001HR | smf-1b | 52.5019 | 13.01 |
| 100YR001HR | smf-1b | 52.7519 | 13.01 |
| 100YR001HR | smf-1b | 53.0019 | 13.01 |
| 100YR001HR | smf-1b | 53.2519 | 13.01 |
| 100YR001HR | smf-1b | 53.5019 | 13.01 |
| 100YR001HR | smf-1b | 53.7519 | 13.01 |
| 100YR001HR | smf-1b | 54.0019 | 13.00 |
| 100YR001HR | smf-1b | 54.2519 | 13.00 |
| 100YR001HR | smf-1b | 54.5019 | 13.00 |
| 100YR001HR | smf-1b | 54.7519 | 13.00 |
| 100YR001HR | smf-1b | 55.0019 | 13.00 |
| 100YR001HR | smf-1b | 55.2519 | 13.00 |
| 100YR001HR | smf-1b | 55.5019 | 13.00 |

**100yr-1hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR001HR | smf-2a | 122.0019 | 12.12 |
| 100YR001HR | smf-2a | 122.2519 | 12.12 |
| 100YR001HR | smf-2a | 122.5019 | 12.12 |
| 100YR001HR | smf-2a | 122.7519 | 12.12 |
| 100YR001HR | smf-2a | 123.0019 | 12.12 |
| 100YR001HR | smf-2a | 123.2519 | 12.12 |
| 100YR001HR | smf-2a | 123.5019 | 12.12 |
| 100YR001HR | smf-2a | 123.7519 | 12.12 |
| 100YR001HR | smf-2a | 124.0019 | 12.12 |
| 100YR001HR | smf-2a | 124.2519 | 12.11 |
| 100YR001HR | smf-2a | 124.5019 | 12.11 |
| 100YR001HR | smf-2a | 124.7519 | 12.11 |
| 100YR001HR | smf-2a | 125.0019 | 12.11 |
| 100YR001HR | smf-2a | 125.2519 | 12.11 |
| 100YR001HR | smf-2a | 125.5019 | 12.11 |
| 100YR001HR | smf-2a | 125.7519 | 12.11 |
| 100YR001HR | smf-2a | 126.0019 | 12.11 |
| 100YR001HR | smf-2a | 126.2519 | 12.11 |
| 100YR001HR | smf-2a | 126.5019 | 12.11 |
| 100YR001HR | smf-2a | 126.7519 | 12.11 |
| 100YR001HR | smf-2a | 127.0019 | 12.11 |
| 100YR001HR | smf-2a | 127.2519 | 12.11 |
| 100YR001HR | smf-2a | 127.5019 | 12.11 |
| 100YR001HR | smf-2a | 127.7519 | 12.11 |
| 100YR001HR | smf-2a | 128.0019 | 12.11 |
| 100YR001HR | smf-2a | 128.2519 | 12.10 |
| 100YR001HR | smf-2a | 128.5019 | 12.10 |
| 100YR001HR | smf-2a | 128.7519 | 12.10 |
| 100YR001HR | smf-2a | 129.0019 | 12.10 |
| 100YR001HR | smf-2a | 129.2519 | 12.10 |
| 100YR001HR | smf-2a | 129.5019 | 12.10 |
| 100YR001HR | smf-2a | 129.7519 | 12.10 |
| 100YR001HR | smf-2a | 130.0019 | 12.10 |
| 100YR001HR | smf-2a | 130.2519 | 12.10 |
| 100YR001HR | smf-2a | 130.5019 | 12.10 |
| 100YR001HR | smf-2a | 130.7519 | 12.10 |
| 100YR001HR | smf-2a | 131.0019 | 12.10 |
| 100YR001HR | smf-2a | 131.2519 | 12.10 |
| 100YR001HR | smf-2a | 131.5019 | 12.10 |
| 100YR001HR | smf-2a | 131.7519 | 12.10 |
| 100YR001HR | smf-2a | 132.0019 | 12.10 |
| 100YR001HR | smf-2a | 132.2519 | 12.10 |

**100yr-1hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR001HR | smf-2b | 83.2519 | 11.43 |
| 100YR001HR | smf-2b | 83.5019 | 11.42 |
| 100YR001HR | smf-2b | 83.7519 | 11.42 |
| 100YR001HR | smf-2b | 84.0019 | 11.42 |
| 100YR001HR | smf-2b | 84.2519 | 11.42 |
| 100YR001HR | smf-2b | 84.5019 | 11.42 |
| 100YR001HR | smf-2b | 84.7519 | 11.42 |
| 100YR001HR | smf-2b | 85.0019 | 11.42 |
| 100YR001HR | smf-2b | 85.2519 | 11.42 |
| 100YR001HR | smf-2b | 85.5019 | 11.42 |
| 100YR001HR | smf-2b | 85.7519 | 11.41 |
| 100YR001HR | smf-2b | 86.0019 | 11.41 |
| 100YR001HR | smf-2b | 86.2519 | 11.41 |
| 100YR001HR | smf-2b | 86.5019 | 11.41 |
| 100YR001HR | smf-2b | 86.7519 | 11.41 |
| 100YR001HR | smf-2b | 87.0019 | 11.41 |
| 100YR001HR | smf-2b | 87.2519 | 11.41 |
| 100YR001HR | smf-2b | 87.5019 | 11.41 |
| 100YR001HR | smf-2b | 87.7519 | 11.41 |
| 100YR001HR | smf-2b | 88.0019 | 11.40 |
| 100YR001HR | smf-2b | 88.2519 | 11.40 |
| 100YR001HR | smf-2b | 88.5019 | 11.40 |
| 100YR001HR | smf-2b | 88.7519 | 11.40 |
| 100YR001HR | smf-2b | 89.0019 | 11.40 |
| 100YR001HR | smf-2b | 89.2519 | 11.40 |
| 100YR001HR | smf-2b | 89.5019 | 11.40 |
| 100YR001HR | smf-2b | 89.7519 | 11.40 |
| 100YR001HR | smf-2b | 90.0019 | 11.40 |
| 100YR001HR | smf-2b | 90.2519 | 11.40 |
| 100YR001HR | smf-2b | 90.5019 | 11.40 |
| 100YR001HR | smf-2b | 90.7519 | 11.40 |
| 100YR001HR | smf-2b | 91.0019 | 11.40 |
| 100YR001HR | smf-2b | 91.2519 | 11.40 |
| 100YR001HR | smf-2b | 91.5019 | 11.40 |
| 100YR001HR | smf-2b | 91.7519 | 11.40 |
| 100YR001HR | smf-2b | 92.0019 | 11.40 |
| 100YR001HR | smf-2b | 92.2519 | 11.40 |
| 100YR001HR | smf-2b | 92.5019 | 11.40 |
| 100YR001HR | smf-2b | 92.7519 | 11.40 |
| 100YR001HR | smf-2b | 93.0019 | 11.40 |
| 100YR001HR | smf-2b | 93.2519 | 11.40 |
| 100YR001HR | smf-2b | 93.5019 | 11.40 |

**100yr-1hr SMF-2b**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR001HR | smf-2c | 118.0019 | 11.86 |
| 100YR001HR | smf-2c | 118.2519 | 11.86 |
| 100YR001HR | smf-2c | 118.5019 | 11.86 |
| 100YR001HR | smf-2c | 118.7519 | 11.86 |
| 100YR001HR | smf-2c | 119.0019 | 11.85 |
| 100YR001HR | smf-2c | 119.2519 | 11.85 |
| 100YR001HR | smf-2c | 119.5019 | 11.85 |
| 100YR001HR | smf-2c | 119.7519 | 11.85 |
| 100YR001HR | smf-2c | 120.0019 | 11.85 |
| 100YR001HR | smf-2c | 120.2519 | 11.85 |
| 100YR001HR | smf-2c | 120.5019 | 11.85 |
| 100YR001HR | smf-2c | 120.7519 | 11.85 |
| 100YR001HR | smf-2c | 121.0019 | 11.85 |
| 100YR001HR | smf-2c | 121.2519 | 11.85 |
| 100YR001HR | smf-2c | 121.5019 | 11.85 |
| 100YR001HR | smf-2c | 121.7519 | 11.85 |
| 100YR001HR | smf-2c | 122.0019 | 11.85 |
| 100YR001HR | smf-2c | 122.2519 | 11.85 |
| 100YR001HR | smf-2c | 122.5019 | 11.85 |
| 100YR001HR | smf-2c | 122.7519 | 11.85 |
| 100YR001HR | smf-2c | 123.0019 | 11.85 |
| 100YR001HR | smf-2c | 123.2519 | 11.85 |
| 100YR001HR | smf-2c | 123.5019 | 11.85 |
| 100YR001HR | smf-2c | 123.7519 | 11.85 |
| 100YR001HR | smf-2c | 124.0019 | 11.85 |
| 100YR001HR | smf-2c | 124.2519 | 11.85 |
| 100YR001HR | smf-2c | 124.5019 | 11.85 |
| 100YR001HR | smf-2c | 124.7519 | 11.85 |
| 100YR001HR | smf-2c | 125.0019 | 11.85 |
| 100YR001HR | smf-2c | 125.2519 | 11.85 |
| 100YR001HR | smf-2c | 125.5019 | 11.85 |
| 100YR001HR | smf-2c | 125.7519 | 11.85 |
| 100YR001HR | smf-2c | 126.0019 | 11.85 |
| 100YR001HR | smf-2c | 126.2519 | 11.85 |
| 100YR001HR | smf-2c | 126.5019 | 11.85 |
| 100YR001HR | smf-2c | 126.7519 | 11.85 |
| 100YR001HR | smf-2c | 127.0019 | 11.85 |
| 100YR001HR | smf-2c | 127.2519 | 11.85 |
| 100YR001HR | smf-2c | 127.5019 | 11.85 |
| 100YR001HR | smf-2c | 127.7519 | 11.85 |
| 100YR001HR | smf-2c | 128.0019 | 11.85 |
| 100YR001HR | smf-2c | 128.2519 | 11.85 |

**100yr-1hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR001HR | smf-3a | 89.7519 | 11.91 |
| 100YR001HR | smf-3a | 90.0019 | 11.91 |
| 100YR001HR | smf-3a | 90.2519 | 11.91 |
| 100YR001HR | smf-3a | 90.5019 | 11.91 |
| 100YR001HR | smf-3a | 90.7519 | 11.91 |
| 100YR001HR | smf-3a | 91.0019 | 11.91 |
| 100YR001HR | smf-3a | 91.2519 | 11.90 |
| 100YR001HR | smf-3a | 91.5019 | 11.90 |
| 100YR001HR | smf-3a | 91.7519 | 11.90 |
| 100YR001HR | smf-3a | 92.0019 | 11.90 |
| 100YR001HR | smf-3a | 92.2519 | 11.90 |
| 100YR001HR | smf-3a | 92.5019 | 11.90 |
| 100YR001HR | smf-3a | 92.7519 | 11.90 |
| 100YR001HR | smf-3a | 93.0019 | 11.90 |
| 100YR001HR | smf-3a | 93.2519 | 11.90 |
| 100YR001HR | smf-3a | 93.5019 | 11.90 |
| 100YR001HR | smf-3a | 93.7519 | 11.90 |
| 100YR001HR | smf-3a | 94.0019 | 11.90 |
| 100YR001HR | smf-3a | 94.2519 | 11.90 |
| 100YR001HR | smf-3a | 94.5019 | 11.90 |
| 100YR001HR | smf-3a | 94.7519 | 11.90 |
| 100YR001HR | smf-3a | 95.0019 | 11.90 |
| 100YR001HR | smf-3a | 95.2519 | 11.90 |
| 100YR001HR | smf-3a | 95.5019 | 11.90 |
| 100YR001HR | smf-3a | 95.7519 | 11.90 |
| 100YR001HR | smf-3a | 96.0019 | 11.90 |
| 100YR001HR | smf-3a | 96.2519 | 11.90 |
| 100YR001HR | smf-3a | 96.5019 | 11.90 |
| 100YR001HR | smf-3a | 96.7519 | 11.90 |
| 100YR001HR | smf-3a | 97.0019 | 11.90 |
| 100YR001HR | smf-3a | 97.2519 | 11.90 |
| 100YR001HR | smf-3a | 97.5019 | 11.90 |
| 100YR001HR | smf-3a | 97.7519 | 11.90 |
| 100YR001HR | smf-3a | 98.0019 | 11.90 |
| 100YR001HR | smf-3a | 98.2519 | 11.90 |
| 100YR001HR | smf-3a | 98.5019 | 11.90 |
| 100YR001HR | smf-3a | 98.7519 | 11.90 |
| 100YR001HR | smf-3a | 99.0019 | 11.90 |
| 100YR001HR | smf-3a | 99.2519 | 11.90 |
| 100YR001HR | smf-3a | 99.5019 | 11.90 |
| 100YR001HR | smf-3a | 99.7519 | 11.90 |
| 100YR001HR | smf-3a | 100.0019 | 11.90 |

**100yr-1hr SMF-3a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR001HR | smf-3b | 124.5019 | 11.26 |
| 100YR001HR | smf-3b | 124.7519 | 11.26 |
| 100YR001HR | smf-3b | 125.0019 | 11.26 |
| 100YR001HR | smf-3b | 125.2519 | 11.26 |
| 100YR001HR | smf-3b | 125.5019 | 11.25 |
| 100YR001HR | smf-3b | 125.7519 | 11.25 |
| 100YR001HR | smf-3b | 126.0019 | 11.25 |
| 100YR001HR | smf-3b | 126.2519 | 11.25 |
| 100YR001HR | smf-3b | 126.5019 | 11.25 |
| 100YR001HR | smf-3b | 126.7519 | 11.25 |
| 100YR001HR | smf-3b | 127.0019 | 11.25 |
| 100YR001HR | smf-3b | 127.2519 | 11.25 |
| 100YR001HR | smf-3b | 127.5019 | 11.25 |
| 100YR001HR | smf-3b | 127.7519 | 11.25 |
| 100YR001HR | smf-3b | 128.0019 | 11.25 |
| 100YR001HR | smf-3b | 128.2519 | 11.25 |
| 100YR001HR | smf-3b | 128.5019 | 11.25 |
| 100YR001HR | smf-3b | 128.7519 | 11.25 |
| 100YR001HR | smf-3b | 129.0019 | 11.25 |
| 100YR001HR | smf-3b | 129.2519 | 11.25 |
| 100YR001HR | smf-3b | 129.5019 | 11.25 |
| 100YR001HR | smf-3b | 129.7519 | 11.25 |
| 100YR001HR | smf-3b | 130.0019 | 11.25 |
| 100YR001HR | smf-3b | 130.2519 | 11.25 |
| 100YR001HR | smf-3b | 130.5019 | 11.25 |
| 100YR001HR | smf-3b | 130.7519 | 11.25 |
| 100YR001HR | smf-3b | 131.0019 | 11.25 |
| 100YR001HR | smf-3b | 131.2519 | 11.25 |
| 100YR001HR | smf-3b | 131.5019 | 11.25 |
| 100YR001HR | smf-3b | 131.7519 | 11.25 |
| 100YR001HR | smf-3b | 132.0019 | 11.25 |
| 100YR001HR | smf-3b | 132.2519 | 11.25 |
| 100YR001HR | smf-3b | 132.5019 | 11.25 |
| 100YR001HR | smf-3b | 132.7519 | 11.25 |
| 100YR001HR | smf-3b | 133.0019 | 11.25 |
| 100YR001HR | smf-3b | 133.2519 | 11.25 |
| 100YR001HR | smf-3b | 133.5019 | 11.25 |
| 100YR001HR | smf-3b | 133.7519 | 11.25 |
| 100YR001HR | smf-3b | 134.0019 | 11.25 |
| 100YR001HR | smf-3b | 134.2519 | 11.25 |
| 100YR001HR | smf-3b | 134.5019 | 11.25 |
| 100YR001HR | smf-3b | 134.7519 | 11.25 |

100yr-1hr SMF-3b

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR002HR | smf-1a | 159.2553 | 12.46 |
| 100YR002HR | smf-1a | 159.5053 | 12.46 |
| 100YR002HR | smf-1a | 159.7553 | 12.46 |
| 100YR002HR | smf-1a | 160.0053 | 12.46 |
| 100YR002HR | smf-1a | 160.2553 | 12.46 |
| 100YR002HR | smf-1a | 160.5053 | 12.46 |
| 100YR002HR | smf-1a | 160.7553 | 12.46 |
| 100YR002HR | smf-1a | 161.0053 | 12.46 |
| 100YR002HR | smf-1a | 161.2553 | 12.46 |
| 100YR002HR | smf-1a | 161.5053 | 12.46 |
| 100YR002HR | smf-1a | 161.7553 | 12.46 |
| 100YR002HR | smf-1a | 162.0053 | 12.45 |
| 100YR002HR | smf-1a | 162.2553 | 12.45 |
| 100YR002HR | smf-1a | 162.5053 | 12.45 |
| 100YR002HR | smf-1a | 162.7553 | 12.45 |
| 100YR002HR | smf-1a | 163.0053 | 12.45 |
| 100YR002HR | smf-1a | 163.2553 | 12.45 |
| 100YR002HR | smf-1a | 163.5053 | 12.45 |
| 100YR002HR | smf-1a | 163.7553 | 12.45 |
| 100YR002HR | smf-1a | 164.0053 | 12.45 |
| 100YR002HR | smf-1a | 164.2553 | 12.45 |
| 100YR002HR | smf-1a | 164.5053 | 12.45 |
| 100YR002HR | smf-1a | 164.7553 | 12.45 |
| 100YR002HR | smf-1a | 165.0053 | 12.45 |
| 100YR002HR | smf-1a | 165.2553 | 12.45 |
| 100YR002HR | smf-1a | 165.5053 | 12.45 |
| 100YR002HR | smf-1a | 165.7553 | 12.45 |
| 100YR002HR | smf-1a | 166.0053 | 12.45 |
| 100YR002HR | smf-1a | 166.2553 | 12.45 |
| 100YR002HR | smf-1a | 166.5053 | 12.45 |
| 100YR002HR | smf-1a | 166.7553 | 12.45 |
| 100YR002HR | smf-1a | 167.0053 | 12.45 |
| 100YR002HR | smf-1a | 167.2553 | 12.45 |
| 100YR002HR | smf-1a | 167.5053 | 12.45 |
| 100YR002HR | smf-1a | 167.7553 | 12.45 |
| 100YR002HR | smf-1a | 168.0053 | 12.45 |
| 100YR002HR | smf-1a | 168.2553 | 12.45 |
| 100YR002HR | smf-1a | 168.5053 | 12.45 |
| 100YR002HR | smf-1a | 168.7553 | 12.45 |
| 100YR002HR | smf-1a | 169.0053 | 12.45 |
| 100YR002HR | smf-1a | 169.2553 | 12.45 |
| 100YR002HR | smf-1a | 169.5053 | 12.45 |

**100yr-2hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR002HR | smf-1b | 67.0053 | 13.02 |
| 100YR002HR | smf-1b | 67.2553 | 13.02 |
| 100YR002HR | smf-1b | 67.5053 | 13.02 |
| 100YR002HR | smf-1b | 67.7553 | 13.01 |
| 100YR002HR | smf-1b | 68.0053 | 13.01 |
| 100YR002HR | smf-1b | 68.2553 | 13.01 |
| 100YR002HR | smf-1b | 68.5053 | 13.01 |
| 100YR002HR | smf-1b | 68.7553 | 13.01 |
| 100YR002HR | smf-1b | 69.0053 | 13.01 |
| 100YR002HR | smf-1b | 69.2553 | 13.01 |
| 100YR002HR | smf-1b | 69.5053 | 13.00 |
| 100YR002HR | smf-1b | 69.7553 | 13.00 |
| 100YR002HR | smf-1b | 70.0053 | 13.00 |
| 100YR002HR | smf-1b | 70.2553 | 13.00 |
| 100YR002HR | smf-1b | 70.5053 | 13.00 |
| 100YR002HR | smf-1b | 70.7553 | 13.00 |
| 100YR002HR | smf-1b | 71.0053 | 13.00 |
| 100YR002HR | smf-1b | 71.2553 | 13.00 |
| 100YR002HR | smf-1b | 71.5053 | 13.00 |
| 100YR002HR | smf-1b | 71.7553 | 13.00 |
| 100YR002HR | smf-1b | 72.0053 | 13.00 |
| 100YR002HR | smf-1b | 72.2553 | 13.00 |
| 100YR002HR | smf-1b | 72.5053 | 13.00 |
| 100YR002HR | smf-1b | 72.7553 | 13.00 |
| 100YR002HR | smf-1b | 73.0053 | 13.00 |
| 100YR002HR | smf-1b | 73.2553 | 13.00 |
| 100YR002HR | smf-1b | 73.5053 | 13.00 |
| 100YR002HR | smf-1b | 73.7553 | 13.00 |
| 100YR002HR | smf-1b | 74.0053 | 13.00 |
| 100YR002HR | smf-1b | 74.2553 | 13.00 |
| 100YR002HR | smf-1b | 74.5053 | 13.00 |
| 100YR002HR | smf-1b | 74.7553 | 13.00 |
| 100YR002HR | smf-1b | 75.0053 | 13.00 |
| 100YR002HR | smf-1b | 75.2553 | 13.00 |
| 100YR002HR | smf-1b | 75.5053 | 13.00 |
| 100YR002HR | smf-1b | 75.7553 | 13.00 |
| 100YR002HR | smf-1b | 76.0053 | 13.00 |
| 100YR002HR | smf-1b | 76.2553 | 13.00 |
| 100YR002HR | smf-1b | 76.5053 | 13.00 |
| 100YR002HR | smf-1b | 76.7553 | 13.00 |
| 100YR002HR | smf-1b | 77.0053 | 13.00 |
| 100YR002HR | smf-1b | 77.2553 | 13.00 |

**100yr-2hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR002HR | smf-2a | 142.7553 | 12.11 |
| 100YR002HR | smf-2a | 143.0053 | 12.11 |
| 100YR002HR | smf-2a | 143.2553 | 12.11 |
| 100YR002HR | smf-2a | 143.5053 | 12.11 |
| 100YR002HR | smf-2a | 143.7553 | 12.11 |
| 100YR002HR | smf-2a | 144.0053 | 12.10 |
| 100YR002HR | smf-2a | 144.2553 | 12.10 |
| 100YR002HR | smf-2a | 144.5053 | 12.10 |
| 100YR002HR | smf-2a | 144.7553 | 12.10 |
| 100YR002HR | smf-2a | 145.0053 | 12.10 |
| 100YR002HR | smf-2a | 145.2553 | 12.10 |
| 100YR002HR | smf-2a | 145.5053 | 12.10 |
| 100YR002HR | smf-2a | 145.7553 | 12.10 |
| 100YR002HR | smf-2a | 146.0053 | 12.10 |
| 100YR002HR | smf-2a | 146.2553 | 12.10 |
| 100YR002HR | smf-2a | 146.5053 | 12.10 |
| 100YR002HR | smf-2a | 146.7553 | 12.10 |
| 100YR002HR | smf-2a | 147.0053 | 12.10 |
| 100YR002HR | smf-2a | 147.2553 | 12.10 |
| 100YR002HR | smf-2a | 147.5053 | 12.10 |
| 100YR002HR | smf-2a | 147.7553 | 12.10 |
| 100YR002HR | smf-2a | 148.0053 | 12.10 |
| 100YR002HR | smf-2a | 148.2553 | 12.10 |
| 100YR002HR | smf-2a | 148.5053 | 12.10 |
| 100YR002HR | smf-2a | 148.7553 | 12.10 |
| 100YR002HR | smf-2a | 149.0053 | 12.10 |
| 100YR002HR | smf-2a | 149.2553 | 12.10 |
| 100YR002HR | smf-2a | 149.5053 | 12.10 |
| 100YR002HR | smf-2a | 149.7553 | 12.10 |
| 100YR002HR | smf-2a | 150.0053 | 12.10 |
| 100YR002HR | smf-2a | 150.2553 | 12.10 |
| 100YR002HR | smf-2a | 150.5053 | 12.10 |
| 100YR002HR | smf-2a | 150.7553 | 12.10 |
| 100YR002HR | smf-2a | 151.0053 | 12.10 |
| 100YR002HR | smf-2a | 151.2553 | 12.10 |
| 100YR002HR | smf-2a | 151.5053 | 12.10 |
| 100YR002HR | smf-2a | 151.7553 | 12.10 |
| 100YR002HR | smf-2a | 152.0053 | 12.10 |
| 100YR002HR | smf-2a | 152.2553 | 12.10 |
| 100YR002HR | smf-2a | 152.5053 | 12.10 |
| 100YR002HR | smf-2a | 152.7553 | 12.10 |
| 100YR002HR | smf-2a | 153.0053 | 12.10 |

**100yr-2hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR002HR | smf-2b | 103.0053 | 11.42 |
| 100YR002HR | smf-2b | 103.2553 | 11.42 |
| 100YR002HR | smf-2b | 103.5053 | 11.42 |
| 100YR002HR | smf-2b | 103.7553 | 11.42 |
| 100YR002HR | smf-2b | 104.0053 | 11.41 |
| 100YR002HR | smf-2b | 104.2553 | 11.41 |
| 100YR002HR | smf-2b | 104.5053 | 11.41 |
| 100YR002HR | smf-2b | 104.7553 | 11.41 |
| 100YR002HR | smf-2b | 105.0053 | 11.41 |
| 100YR002HR | smf-2b | 105.2553 | 11.41 |
| 100YR002HR | smf-2b | 105.5053 | 11.41 |
| 100YR002HR | smf-2b | 105.7553 | 11.41 |
| 100YR002HR | smf-2b | 106.0053 | 11.41 |
| 100YR002HR | smf-2b | 106.2553 | 11.41 |
| 100YR002HR | smf-2b | 106.5053 | 11.40 |
| 100YR002HR | smf-2b | 106.7553 | 11.40 |
| 100YR002HR | smf-2b | 107.0053 | 11.40 |
| 100YR002HR | smf-2b | 107.2553 | 11.40 |
| 100YR002HR | smf-2b | 107.5053 | 11.40 |
| 100YR002HR | smf-2b | 107.7553 | 11.40 |
| 100YR002HR | smf-2b | 108.0053 | 11.40 |
| 100YR002HR | smf-2b | 108.2553 | 11.40 |
| 100YR002HR | smf-2b | 108.5053 | 11.40 |
| 100YR002HR | smf-2b | 108.7553 | 11.40 |
| 100YR002HR | smf-2b | 109.0053 | 11.40 |
| 100YR002HR | smf-2b | 109.2553 | 11.40 |
| 100YR002HR | smf-2b | 109.5053 | 11.40 |
| 100YR002HR | smf-2b | 109.7553 | 11.40 |
| 100YR002HR | smf-2b | 110.0053 | 11.40 |
| 100YR002HR | smf-2b | 110.2553 | 11.40 |
| 100YR002HR | smf-2b | 110.5053 | 11.40 |
| 100YR002HR | smf-2b | 110.7553 | 11.40 |
| 100YR002HR | smf-2b | 111.0053 | 11.40 |
| 100YR002HR | smf-2b | 111.2553 | 11.40 |
| 100YR002HR | smf-2b | 111.5053 | 11.40 |
| 100YR002HR | smf-2b | 111.7553 | 11.40 |
| 100YR002HR | smf-2b | 112.0053 | 11.40 |
| 100YR002HR | smf-2b | 112.2553 | 11.40 |
| 100YR002HR | smf-2b | 112.5053 | 11.40 |
| 100YR002HR | smf-2b | 112.7553 | 11.40 |
| 100YR002HR | smf-2b | 113.0053 | 11.40 |
| 100YR002HR | smf-2b | 113.2553 | 11.40 |

**100yr-2hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR002HR | smf-2c | 126.2553 | 11.88 |
| 100YR002HR | smf-2c | 126.5053 | 11.88 |
| 100YR002HR | smf-2c | 126.7553 | 11.88 |
| 100YR002HR | smf-2c | 127.0053 | 11.88 |
| 100YR002HR | smf-2c | 127.2553 | 11.88 |
| 100YR002HR | smf-2c | 127.5053 | 11.88 |
| 100YR002HR | smf-2c | 127.7553 | 11.88 |
| 100YR002HR | smf-2c | 128.0053 | 11.88 |
| 100YR002HR | smf-2c | 128.2553 | 11.88 |
| 100YR002HR | smf-2c | 128.5053 | 11.88 |
| 100YR002HR | smf-2c | 128.7553 | 11.88 |
| 100YR002HR | smf-2c | 129.0053 | 11.88 |
| 100YR002HR | smf-2c | 129.2553 | 11.88 |
| 100YR002HR | smf-2c | 129.5053 | 11.87 |
| 100YR002HR | smf-2c | 129.7553 | 11.87 |
| 100YR002HR | smf-2c | 130.0053 | 11.87 |
| 100YR002HR | smf-2c | 130.2553 | 11.87 |
| 100YR002HR | smf-2c | 130.5053 | 11.87 |
| 100YR002HR | smf-2c | 130.7553 | 11.87 |
| 100YR002HR | smf-2c | 131.0053 | 11.87 |
| 100YR002HR | smf-2c | 131.2553 | 11.87 |
| 100YR002HR | smf-2c | 131.5053 | 11.87 |
| 100YR002HR | smf-2c | 131.7553 | 11.87 |
| 100YR002HR | smf-2c | 132.0053 | 11.87 |
| 100YR002HR | smf-2c | 132.2553 | 11.87 |
| 100YR002HR | smf-2c | 132.5053 | 11.87 |
| 100YR002HR | smf-2c | 132.7553 | 11.86 |
| 100YR002HR | smf-2c | 133.0053 | 11.86 |
| 100YR002HR | smf-2c | 133.2553 | 11.86 |
| 100YR002HR | smf-2c | 133.5053 | 11.86 |
| 100YR002HR | smf-2c | 133.7553 | 11.86 |
| 100YR002HR | smf-2c | 134.0053 | 11.86 |
| 100YR002HR | smf-2c | 134.2553 | 11.86 |
| 100YR002HR | smf-2c | 134.5053 | 11.86 |
| 100YR002HR | smf-2c | 134.7553 | 11.86 |
| 100YR002HR | smf-2c | 135.0053 | 11.86 |
| 100YR002HR | smf-2c | 135.2553 | 11.86 |
| 100YR002HR | smf-2c | 135.5053 | 11.86 |
| 100YR002HR | smf-2c | 135.7553 | 11.86 |
| 100YR002HR | smf-2c | 136.0053 | 11.86 |
| 100YR002HR | smf-2c | 136.2553 | 11.85 |
| 100YR002HR | smf-2c | 136.5053 | 11.85 |

**100yr-2hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR002HR | smf-3a | 107.5053 | 11.92 |
| 100YR002HR | smf-3a | 107.7553 | 11.92 |
| 100YR002HR | smf-3a | 108.0053 | 11.92 |
| 100YR002HR | smf-3a | 108.2553 | 11.92 |
| 100YR002HR | smf-3a | 108.5053 | 11.91 |
| 100YR002HR | smf-3a | 108.7553 | 11.91 |
| 100YR002HR | smf-3a | 109.0053 | 11.91 |
| 100YR002HR | smf-3a | 109.2553 | 11.91 |
| 100YR002HR | smf-3a | 109.5053 | 11.91 |
| 100YR002HR | smf-3a | 109.7553 | 11.91 |
| 100YR002HR | smf-3a | 110.0053 | 11.91 |
| 100YR002HR | smf-3a | 110.2553 | 11.91 |
| 100YR002HR | smf-3a | 110.5053 | 11.91 |
| 100YR002HR | smf-3a | 110.7553 | 11.91 |
| 100YR002HR | smf-3a | 111.0053 | 11.91 |
| 100YR002HR | smf-3a | 111.2553 | 11.90 |
| 100YR002HR | smf-3a | 111.5053 | 11.90 |
| 100YR002HR | smf-3a | 111.7553 | 11.90 |
| 100YR002HR | smf-3a | 112.0053 | 11.90 |
| 100YR002HR | smf-3a | 112.2553 | 11.90 |
| 100YR002HR | smf-3a | 112.5053 | 11.90 |
| 100YR002HR | smf-3a | 112.7553 | 11.90 |
| 100YR002HR | smf-3a | 113.0053 | 11.90 |
| 100YR002HR | smf-3a | 113.2553 | 11.90 |
| 100YR002HR | smf-3a | 113.5053 | 11.90 |
| 100YR002HR | smf-3a | 113.7553 | 11.90 |
| 100YR002HR | smf-3a | 114.0053 | 11.90 |
| 100YR002HR | smf-3a | 114.2553 | 11.90 |
| 100YR002HR | smf-3a | 114.5053 | 11.90 |
| 100YR002HR | smf-3a | 114.7553 | 11.90 |
| 100YR002HR | smf-3a | 115.0053 | 11.90 |
| 100YR002HR | smf-3a | 115.2553 | 11.90 |
| 100YR002HR | smf-3a | 115.5053 | 11.90 |
| 100YR002HR | smf-3a | 115.7553 | 11.90 |
| 100YR002HR | smf-3a | 116.0053 | 11.90 |
| 100YR002HR | smf-3a | 116.2553 | 11.90 |
| 100YR002HR | smf-3a | 116.5053 | 11.90 |
| 100YR002HR | smf-3a | 116.7553 | 11.90 |
| 100YR002HR | smf-3a | 117.0053 | 11.90 |
| 100YR002HR | smf-3a | 117.2553 | 11.90 |
| 100YR002HR | smf-3a | 117.5053 | 11.90 |
| 100YR002HR | smf-3a | 117.7553 | 11.90 |

**100yr-2hr SMF-3a**

1D Nodes - Time Series | Clay County Economic Development Building | 15683

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR002HR | smf-3b | 141.2553 | 11.27 |
| 100YR002HR | smf-3b | 141.5053 | 11.27 |
| 100YR002HR | smf-3b | 141.7553 | 11.27 |
| 100YR002HR | smf-3b | 142.0053 | 11.27 |
| 100YR002HR | smf-3b | 142.2553 | 11.27 |
| 100YR002HR | smf-3b | 142.5053 | 11.27 |
| 100YR002HR | smf-3b | 142.7553 | 11.27 |
| 100YR002HR | smf-3b | 143.0053 | 11.27 |
| 100YR002HR | smf-3b | 143.2553 | 11.27 |
| 100YR002HR | smf-3b | 143.5053 | 11.27 |
| 100YR002HR | smf-3b | 143.7553 | 11.27 |
| 100YR002HR | smf-3b | 144.0053 | 11.27 |
| 100YR002HR | smf-3b | 144.2553 | 11.27 |
| 100YR002HR | smf-3b | 144.5053 | 11.26 |
| 100YR002HR | smf-3b | 144.7553 | 11.26 |
| 100YR002HR | smf-3b | 145.0053 | 11.26 |
| 100YR002HR | smf-3b | 145.2553 | 11.26 |
| 100YR002HR | smf-3b | 145.5053 | 11.26 |
| 100YR002HR | smf-3b | 145.7553 | 11.26 |
| 100YR002HR | smf-3b | 146.0053 | 11.26 |
| 100YR002HR | smf-3b | 146.2553 | 11.26 |
| 100YR002HR | smf-3b | 146.5053 | 11.26 |
| 100YR002HR | smf-3b | 146.7553 | 11.26 |
| 100YR002HR | smf-3b | 147.0053 | 11.26 |
| 100YR002HR | smf-3b | 147.2553 | 11.26 |
| 100YR002HR | smf-3b | 147.5053 | 11.26 |
| 100YR002HR | smf-3b | 147.7553 | 11.26 |
| 100YR002HR | smf-3b | 148.0053 | 11.25 |
| 100YR002HR | smf-3b | 148.2553 | 11.25 |
| 100YR002HR | smf-3b | 148.5053 | 11.25 |
| 100YR002HR | smf-3b | 148.7553 | 11.25 |
| 100YR002HR | smf-3b | 149.0053 | 11.25 |
| 100YR002HR | smf-3b | 149.2553 | 11.25 |
| 100YR002HR | smf-3b | 149.5053 | 11.25 |
| 100YR002HR | smf-3b | 149.7553 | 11.25 |
| 100YR002HR | smf-3b | 150.0053 | 11.25 |
| 100YR002HR | smf-3b | 150.2553 | 11.25 |
| 100YR002HR | smf-3b | 150.5053 | 11.25 |
| 100YR002HR | smf-3b | 150.7553 | 11.25 |
| 100YR002HR | smf-3b | 151.0053 | 11.25 |
| 100YR002HR | smf-3b | 151.2553 | 11.25 |
| 100YR002HR | smf-3b | 151.5053 | 11.25 |

**100yr-2hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR004YR | smf-1a | 175.0075 | 12.46 |
| 100YR004YR | smf-1a | 175.2575 | 12.46 |
| 100YR004YR | smf-1a | 175.5075 | 12.46 |
| 100YR004YR | smf-1a | 175.7575 | 12.46 |
| 100YR004YR | smf-1a | 176.0075 | 12.46 |
| 100YR004YR | smf-1a | 176.2575 | 12.46 |
| 100YR004YR | smf-1a | 176.5075 | 12.46 |
| 100YR004YR | smf-1a | 176.7575 | 12.46 |
| 100YR004YR | smf-1a | 177.0075 | 12.46 |
| 100YR004YR | smf-1a | 177.2575 | 12.46 |
| 100YR004YR | smf-1a | 177.5075 | 12.46 |
| 100YR004YR | smf-1a | 177.7575 | 12.46 |
| 100YR004YR | smf-1a | 178.0075 | 12.46 |
| 100YR004YR | smf-1a | 178.2575 | 12.46 |
| 100YR004YR | smf-1a | 178.5075 | 12.46 |
| 100YR004YR | smf-1a | 178.7575 | 12.46 |
| 100YR004YR | smf-1a | 179.0075 | 12.46 |
| 100YR004YR | smf-1a | 179.2575 | 12.46 |
| 100YR004YR | smf-1a | 179.5075 | 12.45 |
| 100YR004YR | smf-1a | 179.7575 | 12.45 |
| 100YR004YR | smf-1a | 180.0075 | 12.45 |
| 100YR004YR | smf-1a | 180.2575 | 12.45 |
| 100YR004YR | smf-1a | 180.5075 | 12.45 |
| 100YR004YR | smf-1a | 180.7575 | 12.45 |
| 100YR004YR | smf-1a | 181.0075 | 12.45 |
| 100YR004YR | smf-1a | 181.2575 | 12.45 |
| 100YR004YR | smf-1a | 181.5075 | 12.45 |
| 100YR004YR | smf-1a | 181.7575 | 12.45 |
| 100YR004YR | smf-1a | 182.0075 | 12.45 |
| 100YR004YR | smf-1a | 182.2575 | 12.45 |
| 100YR004YR | smf-1a | 182.5075 | 12.45 |
| 100YR004YR | smf-1a | 182.7575 | 12.45 |
| 100YR004YR | smf-1a | 183.0075 | 12.45 |
| 100YR004YR | smf-1a | 183.2575 | 12.45 |
| 100YR004YR | smf-1a | 183.5075 | 12.45 |
| 100YR004YR | smf-1a | 183.7575 | 12.45 |
| 100YR004YR | smf-1a | 184.0075 | 12.45 |
| 100YR004YR | smf-1a | 184.2575 | 12.45 |
| 100YR004YR | smf-1a | 184.5075 | 12.45 |
| 100YR004YR | smf-1a | 184.7575 | 12.45 |
| 100YR004YR | smf-1a | 185.0075 | 12.45 |
| 100YR004YR | smf-1a | 185.2575 | 12.45 |

**100yr-4hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR004YR | smf-1b | 80.7575 | 13.02 |
| 100YR004YR | smf-1b | 81.0075 | 13.02 |
| 100YR004YR | smf-1b | 81.2575 | 13.02 |
| 100YR004YR | smf-1b | 81.5075 | 13.02 |
| 100YR004YR | smf-1b | 81.7575 | 13.02 |
| 100YR004YR | smf-1b | 82.0075 | 13.02 |
| 100YR004YR | smf-1b | 82.2575 | 13.02 |
| 100YR004YR | smf-1b | 82.5075 | 13.02 |
| 100YR004YR | smf-1b | 82.7575 | 13.01 |
| 100YR004YR | smf-1b | 83.0075 | 13.01 |
| 100YR004YR | smf-1b | 83.2575 | 13.01 |
| 100YR004YR | smf-1b | 83.5075 | 13.01 |
| 100YR004YR | smf-1b | 83.7575 | 13.01 |
| 100YR004YR | smf-1b | 84.0075 | 13.01 |
| 100YR004YR | smf-1b | 84.2575 | 13.01 |
| 100YR004YR | smf-1b | 84.5075 | 13.01 |
| 100YR004YR | smf-1b | 84.7575 | 13.00 |
| 100YR004YR | smf-1b | 85.0075 | 13.00 |
| 100YR004YR | smf-1b | 85.2575 | 13.00 |
| 100YR004YR | smf-1b | 85.5075 | 13.00 |
| 100YR004YR | smf-1b | 85.7575 | 13.00 |
| 100YR004YR | smf-1b | 86.0075 | 13.00 |
| 100YR004YR | smf-1b | 86.2575 | 13.00 |
| 100YR004YR | smf-1b | 86.5075 | 13.00 |
| 100YR004YR | smf-1b | 86.7575 | 13.00 |
| 100YR004YR | smf-1b | 87.0075 | 13.00 |
| 100YR004YR | smf-1b | 87.2575 | 13.00 |
| 100YR004YR | smf-1b | 87.5075 | 13.00 |
| 100YR004YR | smf-1b | 87.7575 | 13.00 |
| 100YR004YR | smf-1b | 88.0075 | 13.00 |
| 100YR004YR | smf-1b | 88.2575 | 13.00 |
| 100YR004YR | smf-1b | 88.5075 | 13.00 |
| 100YR004YR | smf-1b | 88.7575 | 13.00 |
| 100YR004YR | smf-1b | 89.0075 | 13.00 |
| 100YR004YR | smf-1b | 89.2575 | 13.00 |
| 100YR004YR | smf-1b | 89.5075 | 13.00 |
| 100YR004YR | smf-1b | 89.7575 | 13.00 |
| 100YR004YR | smf-1b | 90.0075 | 13.00 |
| 100YR004YR | smf-1b | 90.2575 | 13.00 |
| 100YR004YR | smf-1b | 90.5075 | 13.00 |
| 100YR004YR | smf-1b | 90.7575 | 13.00 |
| 100YR004YR | smf-1b | 91.0075 | 13.00 |

**100yr-4hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR004YR | smf-2a | 154.5075 | 12.12 |
| 100YR004YR | smf-2a | 154.7575 | 12.12 |
| 100YR004YR | smf-2a | 155.0075 | 12.12 |
| 100YR004YR | smf-2a | 155.2575 | 12.12 |
| 100YR004YR | smf-2a | 155.5075 | 12.12 |
| 100YR004YR | smf-2a | 155.7575 | 12.12 |
| 100YR004YR | smf-2a | 156.0075 | 12.12 |
| 100YR004YR | smf-2a | 156.2575 | 12.12 |
| 100YR004YR | smf-2a | 156.5075 | 12.12 |
| 100YR004YR | smf-2a | 156.7575 | 12.12 |
| 100YR004YR | smf-2a | 157.0075 | 12.11 |
| 100YR004YR | smf-2a | 157.2575 | 12.11 |
| 100YR004YR | smf-2a | 157.5075 | 12.11 |
| 100YR004YR | smf-2a | 157.7575 | 12.11 |
| 100YR004YR | smf-2a | 158.0075 | 12.11 |
| 100YR004YR | smf-2a | 158.2575 | 12.11 |
| 100YR004YR | smf-2a | 158.5075 | 12.11 |
| 100YR004YR | smf-2a | 158.7575 | 12.11 |
| 100YR004YR | smf-2a | 159.0075 | 12.11 |
| 100YR004YR | smf-2a | 159.2575 | 12.11 |
| 100YR004YR | smf-2a | 159.5075 | 12.11 |
| 100YR004YR | smf-2a | 159.7575 | 12.11 |
| 100YR004YR | smf-2a | 160.0075 | 12.11 |
| 100YR004YR | smf-2a | 160.2575 | 12.11 |
| 100YR004YR | smf-2a | 160.5075 | 12.11 |
| 100YR004YR | smf-2a | 160.7575 | 12.11 |
| 100YR004YR | smf-2a | 161.0075 | 12.11 |
| 100YR004YR | smf-2a | 161.2575 | 12.11 |
| 100YR004YR | smf-2a | 161.5075 | 12.11 |
| 100YR004YR | smf-2a | 161.7575 | 12.10 |
| 100YR004YR | smf-2a | 162.0075 | 12.10 |
| 100YR004YR | smf-2a | 162.2575 | 12.10 |
| 100YR004YR | smf-2a | 162.5075 | 12.10 |
| 100YR004YR | smf-2a | 162.7575 | 12.10 |
| 100YR004YR | smf-2a | 163.0075 | 12.10 |
| 100YR004YR | smf-2a | 163.2575 | 12.10 |
| 100YR004YR | smf-2a | 163.5075 | 12.10 |
| 100YR004YR | smf-2a | 163.7575 | 12.10 |
| 100YR004YR | smf-2a | 164.0075 | 12.10 |
| 100YR004YR | smf-2a | 164.2575 | 12.10 |
| 100YR004YR | smf-2a | 164.5075 | 12.10 |
| 100YR004YR | smf-2a | 164.7575 | 12.10 |

**100yr-4hr SMF-2a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR004YR | smf-2b | 112.7575 | 11.43 |
| 100YR004YR | smf-2b | 113.0075 | 11.43 |
| 100YR004YR | smf-2b | 113.2575 | 11.43 |
| 100YR004YR | smf-2b | 113.5075 | 11.43 |
| 100YR004YR | smf-2b | 113.7575 | 11.43 |
| 100YR004YR | smf-2b | 114.0075 | 11.43 |
| 100YR004YR | smf-2b | 114.2575 | 11.43 |
| 100YR004YR | smf-2b | 114.5075 | 11.43 |
| 100YR004YR | smf-2b | 114.7575 | 11.43 |
| 100YR004YR | smf-2b | 115.0075 | 11.43 |
| 100YR004YR | smf-2b | 115.2575 | 11.42 |
| 100YR004YR | smf-2b | 115.5075 | 11.42 |
| 100YR004YR | smf-2b | 115.7575 | 11.42 |
| 100YR004YR | smf-2b | 116.0075 | 11.42 |
| 100YR004YR | smf-2b | 116.2575 | 11.42 |
| 100YR004YR | smf-2b | 116.5075 | 11.42 |
| 100YR004YR | smf-2b | 116.7575 | 11.42 |
| 100YR004YR | smf-2b | 117.0075 | 11.42 |
| 100YR004YR | smf-2b | 117.2575 | 11.42 |
| 100YR004YR | smf-2b | 117.5075 | 11.42 |
| 100YR004YR | smf-2b | 117.7575 | 11.42 |
| 100YR004YR | smf-2b | 118.0075 | 11.41 |
| 100YR004YR | smf-2b | 118.2575 | 11.41 |
| 100YR004YR | smf-2b | 118.5075 | 11.41 |
| 100YR004YR | smf-2b | 118.7575 | 11.41 |
| 100YR004YR | smf-2b | 119.0075 | 11.41 |
| 100YR004YR | smf-2b | 119.2575 | 11.41 |
| 100YR004YR | smf-2b | 119.5075 | 11.41 |
| 100YR004YR | smf-2b | 119.7575 | 11.41 |
| 100YR004YR | smf-2b | 120.0075 | 11.41 |
| 100YR004YR | smf-2b | 120.2575 | 11.41 |
| 100YR004YR | smf-2b | 120.5075 | 11.41 |
| 100YR004YR | smf-2b | 120.7575 | 11.41 |
| 100YR004YR | smf-2b | 121.0075 | 11.40 |
| 100YR004YR | smf-2b | 121.2575 | 11.40 |
| 100YR004YR | smf-2b | 121.5075 | 11.40 |
| 100YR004YR | smf-2b | 121.7575 | 11.40 |
| 100YR004YR | smf-2b | 122.0075 | 11.40 |
| 100YR004YR | smf-2b | 122.2575 | 11.40 |
| 100YR004YR | smf-2b | 122.5075 | 11.40 |
| 100YR004YR | smf-2b | 122.7575 | 11.40 |
| 100YR004YR | smf-2b | 123.0075 | 11.40 |

**100yr-4hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR004YR | smf-2c | 144.5075 | 11.87 |
| 100YR004YR | smf-2c | 144.7575 | 11.87 |
| 100YR004YR | smf-2c | 145.0075 | 11.87 |
| 100YR004YR | smf-2c | 145.2575 | 11.87 |
| 100YR004YR | smf-2c | 145.5075 | 11.87 |
| 100YR004YR | smf-2c | 145.7575 | 11.87 |
| 100YR004YR | smf-2c | 146.0075 | 11.87 |
| 100YR004YR | smf-2c | 146.2575 | 11.87 |
| 100YR004YR | smf-2c | 146.5075 | 11.87 |
| 100YR004YR | smf-2c | 146.7575 | 11.87 |
| 100YR004YR | smf-2c | 147.0075 | 11.87 |
| 100YR004YR | smf-2c | 147.2575 | 11.87 |
| 100YR004YR | smf-2c | 147.5075 | 11.87 |
| 100YR004YR | smf-2c | 147.7575 | 11.87 |
| 100YR004YR | smf-2c | 148.0075 | 11.87 |
| 100YR004YR | smf-2c | 148.2575 | 11.86 |
| 100YR004YR | smf-2c | 148.5075 | 11.86 |
| 100YR004YR | smf-2c | 148.7575 | 11.86 |
| 100YR004YR | smf-2c | 149.0075 | 11.86 |
| 100YR004YR | smf-2c | 149.2575 | 11.86 |
| 100YR004YR | smf-2c | 149.5075 | 11.86 |
| 100YR004YR | smf-2c | 149.7575 | 11.86 |
| 100YR004YR | smf-2c | 150.0075 | 11.86 |
| 100YR004YR | smf-2c | 150.2575 | 11.86 |
| 100YR004YR | smf-2c | 150.5075 | 11.86 |
| 100YR004YR | smf-2c | 150.7575 | 11.86 |
| 100YR004YR | smf-2c | 151.0075 | 11.86 |
| 100YR004YR | smf-2c | 151.2575 | 11.86 |
| 100YR004YR | smf-2c | 151.5075 | 11.86 |
| 100YR004YR | smf-2c | 151.7575 | 11.86 |
| 100YR004YR | smf-2c | 152.0075 | 11.85 |
| 100YR004YR | smf-2c | 152.2575 | 11.85 |
| 100YR004YR | smf-2c | 152.5075 | 11.85 |
| 100YR004YR | smf-2c | 152.7575 | 11.85 |
| 100YR004YR | smf-2c | 153.0075 | 11.85 |
| 100YR004YR | smf-2c | 153.2575 | 11.85 |
| 100YR004YR | smf-2c | 153.5075 | 11.85 |
| 100YR004YR | smf-2c | 153.7575 | 11.85 |
| 100YR004YR | smf-2c | 154.0075 | 11.85 |
| 100YR004YR | smf-2c | 154.2575 | 11.85 |
| 100YR004YR | smf-2c | 154.5075 | 11.85 |
| 100YR004YR | smf-2c | 154.7575 | 11.85 |

**100yr-4hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR004YR | smf-3a | 123.7575 | 11.93 |
| 100YR004YR | smf-3a | 124.0075 | 11.93 |
| 100YR004YR | smf-3a | 124.2575 | 11.93 |
| 100YR004YR | smf-3a | 124.5075 | 11.93 |
| 100YR004YR | smf-3a | 124.7575 | 11.93 |
| 100YR004YR | smf-3a | 125.0075 | 11.93 |
| 100YR004YR | smf-3a | 125.2575 | 11.92 |
| 100YR004YR | smf-3a | 125.5075 | 11.92 |
| 100YR004YR | smf-3a | 125.7575 | 11.92 |
| 100YR004YR | smf-3a | 126.0075 | 11.92 |
| 100YR004YR | smf-3a | 126.2575 | 11.92 |
| 100YR004YR | smf-3a | 126.5075 | 11.92 |
| 100YR004YR | smf-3a | 126.7575 | 11.92 |
| 100YR004YR | smf-3a | 127.0075 | 11.92 |
| 100YR004YR | smf-3a | 127.2575 | 11.92 |
| 100YR004YR | smf-3a | 127.5075 | 11.92 |
| 100YR004YR | smf-3a | 127.7575 | 11.92 |
| 100YR004YR | smf-3a | 128.0075 | 11.92 |
| 100YR004YR | smf-3a | 128.2575 | 11.91 |
| 100YR004YR | smf-3a | 128.5075 | 11.91 |
| 100YR004YR | smf-3a | 128.7575 | 11.91 |
| 100YR004YR | smf-3a | 129.0075 | 11.91 |
| 100YR004YR | smf-3a | 129.2575 | 11.91 |
| 100YR004YR | smf-3a | 129.5075 | 11.91 |
| 100YR004YR | smf-3a | 129.7575 | 11.91 |
| 100YR004YR | smf-3a | 130.0075 | 11.91 |
| 100YR004YR | smf-3a | 130.2575 | 11.91 |
| 100YR004YR | smf-3a | 130.5075 | 11.91 |
| 100YR004YR | smf-3a | 130.7575 | 11.91 |
| 100YR004YR | smf-3a | 131.0075 | 11.91 |
| 100YR004YR | smf-3a | 131.2575 | 11.91 |
| 100YR004YR | smf-3a | 131.5075 | 11.90 |
| 100YR004YR | smf-3a | 131.7575 | 11.90 |
| 100YR004YR | smf-3a | 132.0075 | 11.90 |
| 100YR004YR | smf-3a | 132.2575 | 11.90 |
| 100YR004YR | smf-3a | 132.5075 | 11.90 |
| 100YR004YR | smf-3a | 132.7575 | 11.90 |
| 100YR004YR | smf-3a | 133.0075 | 11.90 |
| 100YR004YR | smf-3a | 133.2575 | 11.90 |
| 100YR004YR | smf-3a | 133.5075 | 11.90 |
| 100YR004YR | smf-3a | 133.7575 | 11.90 |
| 100YR004YR | smf-3a | 134.0075 | 11.90 |

**100yr-4hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR004YR | smf-3b | 166.0075 | 11.26 |
| 100YR004YR | smf-3b | 166.2575 | 11.26 |
| 100YR004YR | smf-3b | 166.5075 | 11.25 |
| 100YR004YR | smf-3b | 166.7575 | 11.25 |
| 100YR004YR | smf-3b | 167.0075 | 11.25 |
| 100YR004YR | smf-3b | 167.2575 | 11.25 |
| 100YR004YR | smf-3b | 167.5075 | 11.25 |
| 100YR004YR | smf-3b | 167.7575 | 11.25 |
| 100YR004YR | smf-3b | 168.0075 | 11.25 |
| 100YR004YR | smf-3b | 168.2575 | 11.25 |
| 100YR004YR | smf-3b | 168.5075 | 11.25 |
| 100YR004YR | smf-3b | 168.7575 | 11.25 |
| 100YR004YR | smf-3b | 169.0075 | 11.25 |
| 100YR004YR | smf-3b | 169.2575 | 11.25 |
| 100YR004YR | smf-3b | 169.5075 | 11.25 |
| 100YR004YR | smf-3b | 169.7575 | 11.25 |
| 100YR004YR | smf-3b | 170.0075 | 11.25 |
| 100YR004YR | smf-3b | 170.2575 | 11.25 |
| 100YR004YR | smf-3b | 170.5075 | 11.25 |
| 100YR004YR | smf-3b | 170.7575 | 11.25 |
| 100YR004YR | smf-3b | 171.0075 | 11.25 |
| 100YR004YR | smf-3b | 171.2575 | 11.25 |
| 100YR004YR | smf-3b | 171.5075 | 11.25 |
| 100YR004YR | smf-3b | 171.7575 | 11.25 |
| 100YR004YR | smf-3b | 172.0075 | 11.25 |
| 100YR004YR | smf-3b | 172.2575 | 11.25 |
| 100YR004YR | smf-3b | 172.5075 | 11.25 |
| 100YR004YR | smf-3b | 172.7575 | 11.25 |
| 100YR004YR | smf-3b | 173.0075 | 11.25 |
| 100YR004YR | smf-3b | 173.2575 | 11.25 |
| 100YR004YR | smf-3b | 173.5075 | 11.25 |
| 100YR004YR | smf-3b | 173.7575 | 11.25 |
| 100YR004YR | smf-3b | 174.0075 | 11.25 |
| 100YR004YR | smf-3b | 174.2575 | 11.25 |
| 100YR004YR | smf-3b | 174.5075 | 11.25 |
| 100YR004YR | smf-3b | 174.7575 | 11.25 |
| 100YR004YR | smf-3b | 175.0075 | 11.25 |
| 100YR004YR | smf-3b | 175.2575 | 11.25 |
| 100YR004YR | smf-3b | 175.5075 | 11.25 |
| 100YR004YR | smf-3b | 175.7575 | 11.25 |
| 100YR004YR | smf-3b | 176.0075 | 11.25 |
| 100YR004YR | smf-3b | 176.2575 | 11.25 |

**100yr-4hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR008HR | smf-1a | 218.7546 | 12.47 |
| 100YR008HR | smf-1a | 219.0046 | 12.47 |
| 100YR008HR | smf-1a | 219.2546 | 12.47 |
| 100YR008HR | smf-1a | 219.5046 | 12.47 |
| 100YR008HR | smf-1a | 219.7546 | 12.47 |
| 100YR008HR | smf-1a | 220.0046 | 12.47 |
| 100YR008HR | smf-1a | 220.2546 | 12.46 |
| 100YR008HR | smf-1a | 220.5046 | 12.46 |
| 100YR008HR | smf-1a | 220.7546 | 12.46 |
| 100YR008HR | smf-1a | 221.0046 | 12.46 |
| 100YR008HR | smf-1a | 221.2546 | 12.46 |
| 100YR008HR | smf-1a | 221.5046 | 12.46 |
| 100YR008HR | smf-1a | 221.7546 | 12.46 |
| 100YR008HR | smf-1a | 222.0046 | 12.46 |
| 100YR008HR | smf-1a | 222.2546 | 12.46 |
| 100YR008HR | smf-1a | 222.5046 | 12.46 |
| 100YR008HR | smf-1a | 222.7546 | 12.46 |
| 100YR008HR | smf-1a | 223.0046 | 12.46 |
| 100YR008HR | smf-1a | 223.2546 | 12.46 |
| 100YR008HR | smf-1a | 223.5046 | 12.46 |
| 100YR008HR | smf-1a | 223.7546 | 12.46 |
| 100YR008HR | smf-1a | 224.0046 | 12.46 |
| 100YR008HR | smf-1a | 224.2546 | 12.46 |
| 100YR008HR | smf-1a | 224.5046 | 12.46 |
| 100YR008HR | smf-1a | 224.7546 | 12.46 |
| 100YR008HR | smf-1a | 225.0046 | 12.46 |
| 100YR008HR | smf-1a | 225.2546 | 12.46 |
| 100YR008HR | smf-1a | 225.5046 | 12.46 |
| 100YR008HR | smf-1a | 225.7546 | 12.46 |
| 100YR008HR | smf-1a | 226.0046 | 12.46 |
| 100YR008HR | smf-1a | 226.2546 | 12.45 |
| 100YR008HR | smf-1a | 226.5046 | 12.45 |
| 100YR008HR | smf-1a | 226.7546 | 12.45 |
| 100YR008HR | smf-1a | 227.0046 | 12.45 |
| 100YR008HR | smf-1a | 227.2546 | 12.45 |
| 100YR008HR | smf-1a | 227.5046 | 12.45 |
| 100YR008HR | smf-1a | 227.7546 | 12.45 |
| 100YR008HR | smf-1a | 228.0046 | 12.45 |
| 100YR008HR | smf-1a | 228.2546 | 12.45 |
| 100YR008HR | smf-1a | 228.5046 | 12.45 |
| 100YR008HR | smf-1a | 228.7546 | 12.45 |
| 100YR008HR | smf-1a | 229.0046 | 12.45 |

**100yr-8hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR008HR | smf-1b | 110.0046 | 13.02 |
| 100YR008HR | smf-1b | 110.2546 | 13.02 |
| 100YR008HR | smf-1b | 110.5046 | 13.02 |
| 100YR008HR | smf-1b | 110.7546 | 13.02 |
| 100YR008HR | smf-1b | 111.0046 | 13.02 |
| 100YR008HR | smf-1b | 111.2546 | 13.02 |
| 100YR008HR | smf-1b | 111.5046 | 13.02 |
| 100YR008HR | smf-1b | 111.7546 | 13.02 |
| 100YR008HR | smf-1b | 112.0046 | 13.02 |
| 100YR008HR | smf-1b | 112.2546 | 13.02 |
| 100YR008HR | smf-1b | 112.5046 | 13.01 |
| 100YR008HR | smf-1b | 112.7546 | 13.01 |
| 100YR008HR | smf-1b | 113.0046 | 13.01 |
| 100YR008HR | smf-1b | 113.2546 | 13.01 |
| 100YR008HR | smf-1b | 113.5046 | 13.01 |
| 100YR008HR | smf-1b | 113.7546 | 13.01 |
| 100YR008HR | smf-1b | 114.0046 | 13.01 |
| 100YR008HR | smf-1b | 114.2546 | 13.01 |
| 100YR008HR | smf-1b | 114.5046 | 13.01 |
| 100YR008HR | smf-1b | 114.7546 | 13.01 |
| 100YR008HR | smf-1b | 115.0046 | 13.01 |
| 100YR008HR | smf-1b | 115.2546 | 13.00 |
| 100YR008HR | smf-1b | 115.5046 | 13.00 |
| 100YR008HR | smf-1b | 115.7546 | 13.00 |
| 100YR008HR | smf-1b | 116.0046 | 13.00 |
| 100YR008HR | smf-1b | 116.2546 | 13.00 |
| 100YR008HR | smf-1b | 116.5046 | 13.00 |
| 100YR008HR | smf-1b | 116.7546 | 13.00 |
| 100YR008HR | smf-1b | 117.0046 | 13.00 |
| 100YR008HR | smf-1b | 117.2546 | 13.00 |
| 100YR008HR | smf-1b | 117.5046 | 13.00 |
| 100YR008HR | smf-1b | 117.7546 | 13.00 |
| 100YR008HR | smf-1b | 118.0046 | 13.00 |
| 100YR008HR | smf-1b | 118.2546 | 13.00 |
| 100YR008HR | smf-1b | 118.5046 | 13.00 |
| 100YR008HR | smf-1b | 118.7546 | 13.00 |
| 100YR008HR | smf-1b | 119.0046 | 13.00 |
| 100YR008HR | smf-1b | 119.2546 | 13.00 |
| 100YR008HR | smf-1b | 119.5046 | 13.00 |
| 100YR008HR | smf-1b | 119.7546 | 13.00 |
| 100YR008HR | smf-1b | 120.0046 | 13.00 |
| 100YR008HR | smf-1b | 120.2546 | 13.00 |

**100yr-8hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR008HR | smf-2a | 190.2546 | 12.11 |
| 100YR008HR | smf-2a | 190.5046 | 12.11 |
| 100YR008HR | smf-2a | 190.7546 | 12.11 |
| 100YR008HR | smf-2a | 191.0046 | 12.10 |
| 100YR008HR | smf-2a | 191.2546 | 12.10 |
| 100YR008HR | smf-2a | 191.5046 | 12.10 |
| 100YR008HR | smf-2a | 191.7546 | 12.10 |
| 100YR008HR | smf-2a | 192.0046 | 12.10 |
| 100YR008HR | smf-2a | 192.2546 | 12.10 |
| 100YR008HR | smf-2a | 192.5046 | 12.10 |
| 100YR008HR | smf-2a | 192.7546 | 12.10 |
| 100YR008HR | smf-2a | 193.0046 | 12.10 |
| 100YR008HR | smf-2a | 193.2546 | 12.10 |
| 100YR008HR | smf-2a | 193.5046 | 12.10 |
| 100YR008HR | smf-2a | 193.7546 | 12.10 |
| 100YR008HR | smf-2a | 194.0046 | 12.10 |
| 100YR008HR | smf-2a | 194.2546 | 12.10 |
| 100YR008HR | smf-2a | 194.5046 | 12.10 |
| 100YR008HR | smf-2a | 194.7546 | 12.10 |
| 100YR008HR | smf-2a | 195.0046 | 12.10 |
| 100YR008HR | smf-2a | 195.2546 | 12.10 |
| 100YR008HR | smf-2a | 195.5046 | 12.10 |
| 100YR008HR | smf-2a | 195.7546 | 12.10 |
| 100YR008HR | smf-2a | 196.0046 | 12.10 |
| 100YR008HR | smf-2a | 196.2546 | 12.10 |
| 100YR008HR | smf-2a | 196.5046 | 12.10 |
| 100YR008HR | smf-2a | 196.7546 | 12.10 |
| 100YR008HR | smf-2a | 197.0046 | 12.10 |
| 100YR008HR | smf-2a | 197.2546 | 12.10 |
| 100YR008HR | smf-2a | 197.5046 | 12.10 |
| 100YR008HR | smf-2a | 197.7546 | 12.10 |
| 100YR008HR | smf-2a | 198.0046 | 12.10 |
| 100YR008HR | smf-2a | 198.2546 | 12.10 |
| 100YR008HR | smf-2a | 198.5046 | 12.10 |
| 100YR008HR | smf-2a | 198.7546 | 12.10 |
| 100YR008HR | smf-2a | 199.0046 | 12.10 |
| 100YR008HR | smf-2a | 199.2546 | 12.10 |
| 100YR008HR | smf-2a | 199.5046 | 12.10 |
| 100YR008HR | smf-2a | 199.7546 | 12.10 |
| 100YR008HR | smf-2a | 200.0046 | 12.10 |
| 100YR008HR | smf-2a | 200.2546 | 12.10 |
| 100YR008HR | smf-2a | 200.5046 | 12.10 |

**100yr-8hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR008HR | smf-2b | 144.5046 | 11.42 |
| 100YR008HR | smf-2b | 144.7546 | 11.42 |
| 100YR008HR | smf-2b | 145.0046 | 11.42 |
| 100YR008HR | smf-2b | 145.2546 | 11.42 |
| 100YR008HR | smf-2b | 145.5046 | 11.42 |
| 100YR008HR | smf-2b | 145.7546 | 11.42 |
| 100YR008HR | smf-2b | 146.0046 | 11.41 |
| 100YR008HR | smf-2b | 146.2546 | 11.41 |
| 100YR008HR | smf-2b | 146.5046 | 11.41 |
| 100YR008HR | smf-2b | 146.7546 | 11.41 |
| 100YR008HR | smf-2b | 147.0046 | 11.41 |
| 100YR008HR | smf-2b | 147.2546 | 11.41 |
| 100YR008HR | smf-2b | 147.5046 | 11.41 |
| 100YR008HR | smf-2b | 147.7546 | 11.41 |
| 100YR008HR | smf-2b | 148.0046 | 11.41 |
| 100YR008HR | smf-2b | 148.2546 | 11.41 |
| 100YR008HR | smf-2b | 148.5046 | 11.41 |
| 100YR008HR | smf-2b | 148.7546 | 11.41 |
| 100YR008HR | smf-2b | 149.0046 | 11.41 |
| 100YR008HR | smf-2b | 149.2546 | 11.41 |
| 100YR008HR | smf-2b | 149.5046 | 11.41 |
| 100YR008HR | smf-2b | 149.7546 | 11.40 |
| 100YR008HR | smf-2b | 150.0046 | 11.40 |
| 100YR008HR | smf-2b | 150.2546 | 11.40 |
| 100YR008HR | smf-2b | 150.5046 | 11.40 |
| 100YR008HR | smf-2b | 150.7546 | 11.40 |
| 100YR008HR | smf-2b | 151.0046 | 11.40 |
| 100YR008HR | smf-2b | 151.2546 | 11.40 |
| 100YR008HR | smf-2b | 151.5046 | 11.40 |
| 100YR008HR | smf-2b | 151.7546 | 11.40 |
| 100YR008HR | smf-2b | 152.0046 | 11.40 |
| 100YR008HR | smf-2b | 152.2546 | 11.40 |
| 100YR008HR | smf-2b | 152.5046 | 11.40 |
| 100YR008HR | smf-2b | 152.7546 | 11.40 |
| 100YR008HR | smf-2b | 153.0046 | 11.40 |
| 100YR008HR | smf-2b | 153.2546 | 11.40 |
| 100YR008HR | smf-2b | 153.5046 | 11.40 |
| 100YR008HR | smf-2b | 153.7546 | 11.40 |
| 100YR008HR | smf-2b | 154.0046 | 11.40 |
| 100YR008HR | smf-2b | 154.2546 | 11.40 |
| 100YR008HR | smf-2b | 154.5046 | 11.40 |
| 100YR008HR | smf-2b | 154.7546 | 11.40 |

**100yr-8hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR008HR | smf-2c | 172.2546 | 11.88 |
| 100YR008HR | smf-2c | 172.5046 | 11.88 |
| 100YR008HR | smf-2c | 172.7546 | 11.88 |
| 100YR008HR | smf-2c | 173.0046 | 11.88 |
| 100YR008HR | smf-2c | 173.2546 | 11.87 |
| 100YR008HR | smf-2c | 173.5046 | 11.87 |
| 100YR008HR | smf-2c | 173.7546 | 11.87 |
| 100YR008HR | smf-2c | 174.0046 | 11.87 |
| 100YR008HR | smf-2c | 174.2546 | 11.87 |
| 100YR008HR | smf-2c | 174.5046 | 11.87 |
| 100YR008HR | smf-2c | 174.7546 | 11.87 |
| 100YR008HR | smf-2c | 175.0046 | 11.87 |
| 100YR008HR | smf-2c | 175.2546 | 11.87 |
| 100YR008HR | smf-2c | 175.5046 | 11.87 |
| 100YR008HR | smf-2c | 175.7546 | 11.87 |
| 100YR008HR | smf-2c | 176.0046 | 11.87 |
| 100YR008HR | smf-2c | 176.2546 | 11.87 |
| 100YR008HR | smf-2c | 176.5046 | 11.87 |
| 100YR008HR | smf-2c | 176.7546 | 11.87 |
| 100YR008HR | smf-2c | 177.0046 | 11.87 |
| 100YR008HR | smf-2c | 177.2546 | 11.87 |
| 100YR008HR | smf-2c | 177.5046 | 11.86 |
| 100YR008HR | smf-2c | 177.7546 | 11.86 |
| 100YR008HR | smf-2c | 178.0046 | 11.86 |
| 100YR008HR | smf-2c | 178.2546 | 11.86 |
| 100YR008HR | smf-2c | 178.5046 | 11.86 |
| 100YR008HR | smf-2c | 178.7546 | 11.86 |
| 100YR008HR | smf-2c | 179.0046 | 11.86 |
| 100YR008HR | smf-2c | 179.2546 | 11.86 |
| 100YR008HR | smf-2c | 179.5046 | 11.86 |
| 100YR008HR | smf-2c | 179.7546 | 11.86 |
| 100YR008HR | smf-2c | 180.0046 | 11.86 |
| 100YR008HR | smf-2c | 180.2546 | 11.86 |
| 100YR008HR | smf-2c | 180.5046 | 11.86 |
| 100YR008HR | smf-2c | 180.7546 | 11.86 |
| 100YR008HR | smf-2c | 181.0046 | 11.86 |
| 100YR008HR | smf-2c | 181.2546 | 11.86 |
| 100YR008HR | smf-2c | 181.5046 | 11.86 |
| 100YR008HR | smf-2c | 181.7546 | 11.86 |
| 100YR008HR | smf-2c | 182.0046 | 11.85 |
| 100YR008HR | smf-2c | 182.2546 | 11.85 |
| 100YR008HR | smf-2c | 182.5046 | 11.85 |

**100yr-8hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR008HR | smf-3a | 158.0046 | 11.92 |
| 100YR008HR | smf-3a | 158.2546 | 11.92 |
| 100YR008HR | smf-3a | 158.5046 | 11.92 |
| 100YR008HR | smf-3a | 158.7546 | 11.92 |
| 100YR008HR | smf-3a | 159.0046 | 11.92 |
| 100YR008HR | smf-3a | 159.2546 | 11.92 |
| 100YR008HR | smf-3a | 159.5046 | 11.92 |
| 100YR008HR | smf-3a | 159.7546 | 11.92 |
| 100YR008HR | smf-3a | 160.0046 | 11.92 |
| 100YR008HR | smf-3a | 160.2546 | 11.92 |
| 100YR008HR | smf-3a | 160.5046 | 11.92 |
| 100YR008HR | smf-3a | 160.7546 | 11.91 |
| 100YR008HR | smf-3a | 161.0046 | 11.91 |
| 100YR008HR | smf-3a | 161.2546 | 11.91 |
| 100YR008HR | smf-3a | 161.5046 | 11.91 |
| 100YR008HR | smf-3a | 161.7546 | 11.91 |
| 100YR008HR | smf-3a | 162.0046 | 11.91 |
| 100YR008HR | smf-3a | 162.2546 | 11.91 |
| 100YR008HR | smf-3a | 162.5046 | 11.91 |
| 100YR008HR | smf-3a | 162.7546 | 11.91 |
| 100YR008HR | smf-3a | 163.0046 | 11.91 |
| 100YR008HR | smf-3a | 163.2546 | 11.91 |
| 100YR008HR | smf-3a | 163.5046 | 11.91 |
| 100YR008HR | smf-3a | 163.7546 | 11.91 |
| 100YR008HR | smf-3a | 164.0046 | 11.91 |
| 100YR008HR | smf-3a | 164.2546 | 11.91 |
| 100YR008HR | smf-3a | 164.5046 | 11.91 |
| 100YR008HR | smf-3a | 164.7546 | 11.90 |
| 100YR008HR | smf-3a | 165.0046 | 11.90 |
| 100YR008HR | smf-3a | 165.2546 | 11.90 |
| 100YR008HR | smf-3a | 165.5046 | 11.90 |
| 100YR008HR | smf-3a | 165.7546 | 11.90 |
| 100YR008HR | smf-3a | 166.0046 | 11.90 |
| 100YR008HR | smf-3a | 166.2546 | 11.90 |
| 100YR008HR | smf-3a | 166.5046 | 11.90 |
| 100YR008HR | smf-3a | 166.7546 | 11.90 |
| 100YR008HR | smf-3a | 167.0046 | 11.90 |
| 100YR008HR | smf-3a | 167.2546 | 11.90 |
| 100YR008HR | smf-3a | 167.5046 | 11.90 |
| 100YR008HR | smf-3a | 167.7546 | 11.90 |
| 100YR008HR | smf-3a | 168.0046 | 11.90 |
| 100YR008HR | smf-3a | 168.2546 | 11.90 |

**100yr-8hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR008HR | smf-3b | 196.2546 | 11.27 |
| 100YR008HR | smf-3b | 196.5046 | 11.27 |
| 100YR008HR | smf-3b | 196.7546 | 11.27 |
| 100YR008HR | smf-3b | 197.0046 | 11.27 |
| 100YR008HR | smf-3b | 197.2546 | 11.27 |
| 100YR008HR | smf-3b | 197.5046 | 11.27 |
| 100YR008HR | smf-3b | 197.7546 | 11.26 |
| 100YR008HR | smf-3b | 198.0046 | 11.26 |
| 100YR008HR | smf-3b | 198.2546 | 11.26 |
| 100YR008HR | smf-3b | 198.5046 | 11.26 |
| 100YR008HR | smf-3b | 198.7546 | 11.26 |
| 100YR008HR | smf-3b | 199.0046 | 11.26 |
| 100YR008HR | smf-3b | 199.2546 | 11.26 |
| 100YR008HR | smf-3b | 199.5046 | 11.26 |
| 100YR008HR | smf-3b | 199.7546 | 11.26 |
| 100YR008HR | smf-3b | 200.0046 | 11.26 |
| 100YR008HR | smf-3b | 200.2546 | 11.26 |
| 100YR008HR | smf-3b | 200.5046 | 11.26 |
| 100YR008HR | smf-3b | 200.7546 | 11.26 |
| 100YR008HR | smf-3b | 201.0046 | 11.26 |
| 100YR008HR | smf-3b | 201.2546 | 11.26 |
| 100YR008HR | smf-3b | 201.5046 | 11.26 |
| 100YR008HR | smf-3b | 201.7546 | 11.26 |
| 100YR008HR | smf-3b | 202.0046 | 11.26 |
| 100YR008HR | smf-3b | 202.2546 | 11.26 |
| 100YR008HR | smf-3b | 202.5046 | 11.25 |
| 100YR008HR | smf-3b | 202.7546 | 11.25 |
| 100YR008HR | smf-3b | 203.0046 | 11.25 |
| 100YR008HR | smf-3b | 203.2546 | 11.25 |
| 100YR008HR | smf-3b | 203.5046 | 11.25 |
| 100YR008HR | smf-3b | 203.7546 | 11.25 |
| 100YR008HR | smf-3b | 204.0046 | 11.25 |
| 100YR008HR | smf-3b | 204.2546 | 11.25 |
| 100YR008HR | smf-3b | 204.5046 | 11.25 |
| 100YR008HR | smf-3b | 204.7546 | 11.25 |
| 100YR008HR | smf-3b | 205.0046 | 11.25 |
| 100YR008HR | smf-3b | 205.2546 | 11.25 |
| 100YR008HR | smf-3b | 205.5046 | 11.25 |
| 100YR008HR | smf-3b | 205.7546 | 11.25 |
| 100YR008HR | smf-3b | 206.0046 | 11.25 |
| 100YR008HR | smf-3b | 206.2546 | 11.25 |
| 100YR008HR | smf-3b | 206.5046 | 11.25 |

**100yr-8hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR024HR | smf-1a | 329.0068 | 12.46 |
| 100YR024HR | smf-1a | 329.2568 | 12.46 |
| 100YR024HR | smf-1a | 329.5068 | 12.46 |
| 100YR024HR | smf-1a | 329.7568 | 12.46 |
| 100YR024HR | smf-1a | 330.0068 | 12.46 |
| 100YR024HR | smf-1a | 330.2568 | 12.46 |
| 100YR024HR | smf-1a | 330.5068 | 12.46 |
| 100YR024HR | smf-1a | 330.7568 | 12.46 |
| 100YR024HR | smf-1a | 331.0068 | 12.46 |
| 100YR024HR | smf-1a | 331.2568 | 12.46 |
| 100YR024HR | smf-1a | 331.5068 | 12.46 |
| 100YR024HR | smf-1a | 331.7568 | 12.46 |
| 100YR024HR | smf-1a | 332.0068 | 12.46 |
| 100YR024HR | smf-1a | 332.2568 | 12.46 |
| 100YR024HR | smf-1a | 332.5068 | 12.46 |
| 100YR024HR | smf-1a | 332.7568 | 12.46 |
| 100YR024HR | smf-1a | 333.0068 | 12.46 |
| 100YR024HR | smf-1a | 333.2568 | 12.46 |
| 100YR024HR | smf-1a | 333.5068 | 12.46 |
| 100YR024HR | smf-1a | 333.7568 | 12.46 |
| 100YR024HR | smf-1a | 334.0068 | 12.46 |
| 100YR024HR | smf-1a | 334.2568 | 12.46 |
| 100YR024HR | smf-1a | 334.5068 | 12.46 |
| 100YR024HR | smf-1a | 334.7568 | 12.46 |
| 100YR024HR | smf-1a | 335.0068 | 12.45 |
| 100YR024HR | smf-1a | 335.2568 | 12.45 |
| 100YR024HR | smf-1a | 335.5068 | 12.45 |
| 100YR024HR | smf-1a | 335.7568 | 12.45 |
| 100YR024HR | smf-1a | 336.0068 | 12.45 |
| 100YR024HR | smf-1a | 336.2568 | 12.45 |
| 100YR024HR | smf-1a | 336.5068 | 12.45 |
| 100YR024HR | smf-1a | 336.7568 | 12.45 |
| 100YR024HR | smf-1a | 337.0068 | 12.45 |
| 100YR024HR | smf-1a | 337.2568 | 12.45 |
| 100YR024HR | smf-1a | 337.5068 | 12.45 |
| 100YR024HR | smf-1a | 337.7568 | 12.45 |
| 100YR024HR | smf-1a | 338.0068 | 12.45 |
| 100YR024HR | smf-1a | 338.2568 | 12.45 |
| 100YR024HR | smf-1a | 338.5068 | 12.45 |
| 100YR024HR | smf-1a | 338.7568 | 12.45 |
| 100YR024HR | smf-1a | 339.0068 | 12.45 |
| 100YR024HR | smf-1a | 339.2568 | 12.45 |

**100yr-24hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR024HR | smf-1b | 193.7568 | 13.02 |
| 100YR024HR | smf-1b | 194.0068 | 13.02 |
| 100YR024HR | smf-1b | 194.2568 | 13.02 |
| 100YR024HR | smf-1b | 194.5068 | 13.02 |
| 100YR024HR | smf-1b | 194.7568 | 13.02 |
| 100YR024HR | smf-1b | 195.0068 | 13.02 |
| 100YR024HR | smf-1b | 195.2568 | 13.02 |
| 100YR024HR | smf-1b | 195.5068 | 13.02 |
| 100YR024HR | smf-1b | 195.7568 | 13.02 |
| 100YR024HR | smf-1b | 196.0068 | 13.02 |
| 100YR024HR | smf-1b | 196.2568 | 13.02 |
| 100YR024HR | smf-1b | 196.5068 | 13.02 |
| 100YR024HR | smf-1b | 196.7568 | 13.02 |
| 100YR024HR | smf-1b | 197.0068 | 13.02 |
| 100YR024HR | smf-1b | 197.2568 | 13.02 |
| 100YR024HR | smf-1b | 197.5068 | 13.02 |
| 100YR024HR | smf-1b | 197.7568 | 13.02 |
| 100YR024HR | smf-1b | 198.0068 | 13.01 |
| 100YR024HR | smf-1b | 198.2568 | 13.01 |
| 100YR024HR | smf-1b | 198.5068 | 13.01 |
| 100YR024HR | smf-1b | 198.7568 | 13.01 |
| 100YR024HR | smf-1b | 199.0068 | 13.01 |
| 100YR024HR | smf-1b | 199.2568 | 13.01 |
| 100YR024HR | smf-1b | 199.5068 | 13.01 |
| 100YR024HR | smf-1b | 199.7568 | 13.01 |
| 100YR024HR | smf-1b | 200.0068 | 13.01 |
| 100YR024HR | smf-1b | 200.2568 | 13.01 |
| 100YR024HR | smf-1b | 200.5068 | 13.01 |
| 100YR024HR | smf-1b | 200.7568 | 13.01 |
| 100YR024HR | smf-1b | 201.0068 | 13.01 |
| 100YR024HR | smf-1b | 201.2568 | 13.01 |
| 100YR024HR | smf-1b | 201.5068 | 13.01 |
| 100YR024HR | smf-1b | 201.7568 | 13.01 |
| 100YR024HR | smf-1b | 202.0068 | 13.01 |
| 100YR024HR | smf-1b | 202.2568 | 13.01 |
| 100YR024HR | smf-1b | 202.5068 | 13.01 |
| 100YR024HR | smf-1b | 202.7568 | 13.00 |
| 100YR024HR | smf-1b | 203.0068 | 13.00 |
| 100YR024HR | smf-1b | 203.2568 | 13.00 |
| 100YR024HR | smf-1b | 203.5068 | 13.00 |
| 100YR024HR | smf-1b | 203.7568 | 13.00 |
| 100YR024HR | smf-1b | 204.0068 | 13.00 |

**100yr-24hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR024HR | smf-2a | 279.0068 | 12.11 |
| 100YR024HR | smf-2a | 279.2568 | 12.11 |
| 100YR024HR | smf-2a | 279.5068 | 12.11 |
| 100YR024HR | smf-2a | 279.7568 | 12.11 |
| 100YR024HR | smf-2a | 280.0068 | 12.11 |
| 100YR024HR | smf-2a | 280.2568 | 12.11 |
| 100YR024HR | smf-2a | 280.5068 | 12.11 |
| 100YR024HR | smf-2a | 280.7568 | 12.11 |
| 100YR024HR | smf-2a | 281.0068 | 12.11 |
| 100YR024HR | smf-2a | 281.2568 | 12.11 |
| 100YR024HR | smf-2a | 281.5068 | 12.11 |
| 100YR024HR | smf-2a | 281.7568 | 12.11 |
| 100YR024HR | smf-2a | 282.0068 | 12.11 |
| 100YR024HR | smf-2a | 282.2568 | 12.11 |
| 100YR024HR | smf-2a | 282.5068 | 12.11 |
| 100YR024HR | smf-2a | 282.7568 | 12.11 |
| 100YR024HR | smf-2a | 283.0068 | 12.11 |
| 100YR024HR | smf-2a | 283.2568 | 12.10 |
| 100YR024HR | smf-2a | 283.5068 | 12.10 |
| 100YR024HR | smf-2a | 283.7568 | 12.10 |
| 100YR024HR | smf-2a | 284.0068 | 12.10 |
| 100YR024HR | smf-2a | 284.2568 | 12.10 |
| 100YR024HR | smf-2a | 284.5068 | 12.10 |
| 100YR024HR | smf-2a | 284.7568 | 12.10 |
| 100YR024HR | smf-2a | 285.0068 | 12.10 |
| 100YR024HR | smf-2a | 285.2568 | 12.10 |
| 100YR024HR | smf-2a | 285.5068 | 12.10 |
| 100YR024HR | smf-2a | 285.7568 | 12.10 |
| 100YR024HR | smf-2a | 286.0068 | 12.10 |
| 100YR024HR | smf-2a | 286.2568 | 12.10 |
| 100YR024HR | smf-2a | 286.5068 | 12.10 |
| 100YR024HR | smf-2a | 286.7568 | 12.10 |
| 100YR024HR | smf-2a | 287.0068 | 12.10 |
| 100YR024HR | smf-2a | 287.2568 | 12.10 |
| 100YR024HR | smf-2a | 287.5068 | 12.10 |
| 100YR024HR | smf-2a | 287.7568 | 12.10 |
| 100YR024HR | smf-2a | 288.0068 | 12.10 |
| 100YR024HR | smf-2a | 288.2568 | 12.10 |
| 100YR024HR | smf-2a | 288.5068 | 12.10 |
| 100YR024HR | smf-2a | 288.7568 | 12.10 |
| 100YR024HR | smf-2a | 289.0068 | 12.10 |
| 100YR024HR | smf-2a | 289.2568 | 12.10 |

**100yr-24hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR024HR | smf-2b | 238.2568 | 11.41 |
| 100YR024HR | smf-2b | 238.5068 | 11.41 |
| 100YR024HR | smf-2b | 238.7568 | 11.41 |
| 100YR024HR | smf-2b | 239.0068 | 11.41 |
| 100YR024HR | smf-2b | 239.2568 | 11.40 |
| 100YR024HR | smf-2b | 239.5068 | 11.40 |
| 100YR024HR | smf-2b | 239.7568 | 11.40 |
| 100YR024HR | smf-2b | 240.0068 | 11.40 |
| 100YR024HR | smf-2b | 240.2568 | 11.40 |
| 100YR024HR | smf-2b | 240.5068 | 11.40 |
| 100YR024HR | smf-2b | 240.7568 | 11.40 |
| 100YR024HR | smf-2b | 241.0068 | 11.40 |
| 100YR024HR | smf-2b | 241.2568 | 11.40 |
| 100YR024HR | smf-2b | 241.5068 | 11.40 |
| 100YR024HR | smf-2b | 241.7568 | 11.40 |
| 100YR024HR | smf-2b | 242.0068 | 11.40 |
| 100YR024HR | smf-2b | 242.2568 | 11.40 |
| 100YR024HR | smf-2b | 242.5068 | 11.40 |
| 100YR024HR | smf-2b | 242.7568 | 11.40 |
| 100YR024HR | smf-2b | 243.0068 | 11.40 |
| 100YR024HR | smf-2b | 243.2568 | 11.40 |
| 100YR024HR | smf-2b | 243.5068 | 11.40 |
| 100YR024HR | smf-2b | 243.7568 | 11.40 |
| 100YR024HR | smf-2b | 244.0068 | 11.40 |
| 100YR024HR | smf-2b | 244.2568 | 11.40 |
| 100YR024HR | smf-2b | 244.5068 | 11.40 |
| 100YR024HR | smf-2b | 244.7568 | 11.40 |
| 100YR024HR | smf-2b | 245.0068 | 11.40 |
| 100YR024HR | smf-2b | 245.2568 | 11.40 |
| 100YR024HR | smf-2b | 245.5068 | 11.40 |
| 100YR024HR | smf-2b | 245.7568 | 11.40 |
| 100YR024HR | smf-2b | 246.0068 | 11.40 |
| 100YR024HR | smf-2b | 246.2568 | 11.40 |
| 100YR024HR | smf-2b | 246.5068 | 11.40 |
| 100YR024HR | smf-2b | 246.7568 | 11.40 |
| 100YR024HR | smf-2b | 247.0068 | 11.40 |
| 100YR024HR | smf-2b | 247.2568 | 11.40 |
| 100YR024HR | smf-2b | 247.5068 | 11.40 |
| 100YR024HR | smf-2b | 247.7568 | 11.40 |
| 100YR024HR | smf-2b | 248.0068 | 11.40 |
| 100YR024HR | smf-2b | 248.2568 | 11.40 |
| 100YR024HR | smf-2b | 248.5068 | 11.40 |

**100yr-24hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR024HR | smf-2c | 271.0068 | 11.87 |
| 100YR024HR | smf-2c | 271.2568 | 11.87 |
| 100YR024HR | smf-2c | 271.5068 | 11.86 |
| 100YR024HR | smf-2c | 271.7568 | 11.86 |
| 100YR024HR | smf-2c | 272.0068 | 11.86 |
| 100YR024HR | smf-2c | 272.2568 | 11.86 |
| 100YR024HR | smf-2c | 272.5068 | 11.86 |
| 100YR024HR | smf-2c | 272.7568 | 11.86 |
| 100YR024HR | smf-2c | 273.0068 | 11.86 |
| 100YR024HR | smf-2c | 273.2568 | 11.86 |
| 100YR024HR | smf-2c | 273.5068 | 11.86 |
| 100YR024HR | smf-2c | 273.7568 | 11.86 |
| 100YR024HR | smf-2c | 274.0068 | 11.86 |
| 100YR024HR | smf-2c | 274.2568 | 11.86 |
| 100YR024HR | smf-2c | 274.5068 | 11.86 |
| 100YR024HR | smf-2c | 274.7568 | 11.86 |
| 100YR024HR | smf-2c | 275.0068 | 11.86 |
| 100YR024HR | smf-2c | 275.2568 | 11.86 |
| 100YR024HR | smf-2c | 275.5068 | 11.86 |
| 100YR024HR | smf-2c | 275.7568 | 11.86 |
| 100YR024HR | smf-2c | 276.0068 | 11.86 |
| 100YR024HR | smf-2c | 276.2568 | 11.86 |
| 100YR024HR | smf-2c | 276.5068 | 11.86 |
| 100YR024HR | smf-2c | 276.7568 | 11.86 |
| 100YR024HR | smf-2c | 277.0068 | 11.86 |
| 100YR024HR | smf-2c | 277.2568 | 11.86 |
| 100YR024HR | smf-2c | 277.5068 | 11.86 |
| 100YR024HR | smf-2c | 277.7568 | 11.86 |
| 100YR024HR | smf-2c | 278.0068 | 11.86 |
| 100YR024HR | smf-2c | 278.2568 | 11.85 |
| 100YR024HR | smf-2c | 278.5068 | 11.85 |
| 100YR024HR | smf-2c | 278.7568 | 11.85 |
| 100YR024HR | smf-2c | 279.0068 | 11.85 |
| 100YR024HR | smf-2c | 279.2568 | 11.85 |
| 100YR024HR | smf-2c | 279.5068 | 11.85 |
| 100YR024HR | smf-2c | 279.7568 | 11.85 |
| 100YR024HR | smf-2c | 280.0068 | 11.85 |
| 100YR024HR | smf-2c | 280.2568 | 11.85 |
| 100YR024HR | smf-2c | 280.5068 | 11.85 |
| 100YR024HR | smf-2c | 280.7568 | 11.85 |
| 100YR024HR | smf-2c | 281.0068 | 11.85 |
| 100YR024HR | smf-2c | 281.2568 | 11.85 |

**100yr-24hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR024HR | smf-3a | 272.2568 | 11.91 |
| 100YR024HR | smf-3a | 272.5068 | 11.90 |
| 100YR024HR | smf-3a | 272.7568 | 11.90 |
| 100YR024HR | smf-3a | 273.0068 | 11.90 |
| 100YR024HR | smf-3a | 273.2568 | 11.90 |
| 100YR024HR | smf-3a | 273.5068 | 11.90 |
| 100YR024HR | smf-3a | 273.7568 | 11.90 |
| 100YR024HR | smf-3a | 274.0068 | 11.90 |
| 100YR024HR | smf-3a | 274.2568 | 11.90 |
| 100YR024HR | smf-3a | 274.5068 | 11.90 |
| 100YR024HR | smf-3a | 274.7568 | 11.90 |
| 100YR024HR | smf-3a | 275.0068 | 11.90 |
| 100YR024HR | smf-3a | 275.2568 | 11.90 |
| 100YR024HR | smf-3a | 275.5068 | 11.90 |
| 100YR024HR | smf-3a | 275.7568 | 11.90 |
| 100YR024HR | smf-3a | 276.0068 | 11.90 |
| 100YR024HR | smf-3a | 276.2568 | 11.90 |
| 100YR024HR | smf-3a | 276.5068 | 11.90 |
| 100YR024HR | smf-3a | 276.7568 | 11.90 |
| 100YR024HR | smf-3a | 277.0068 | 11.90 |
| 100YR024HR | smf-3a | 277.2568 | 11.90 |
| 100YR024HR | smf-3a | 277.5068 | 11.90 |
| 100YR024HR | smf-3a | 277.7568 | 11.90 |
| 100YR024HR | smf-3a | 278.0068 | 11.90 |
| 100YR024HR | smf-3a | 278.2568 | 11.90 |
| 100YR024HR | smf-3a | 278.5068 | 11.90 |
| 100YR024HR | smf-3a | 278.7568 | 11.90 |
| 100YR024HR | smf-3a | 279.0068 | 11.90 |
| 100YR024HR | smf-3a | 279.2568 | 11.90 |
| 100YR024HR | smf-3a | 279.5068 | 11.90 |
| 100YR024HR | smf-3a | 279.7568 | 11.90 |
| 100YR024HR | smf-3a | 280.0068 | 11.90 |
| 100YR024HR | smf-3a | 280.2568 | 11.90 |
| 100YR024HR | smf-3a | 280.5068 | 11.90 |
| 100YR024HR | smf-3a | 280.7568 | 11.90 |
| 100YR024HR | smf-3a | 281.0068 | 11.90 |
| 100YR024HR | smf-3a | 281.2568 | 11.90 |
| 100YR024HR | smf-3a | 281.5068 | 11.90 |
| 100YR024HR | smf-3a | 281.7568 | 11.90 |
| 100YR024HR | smf-3a | 282.0068 | 11.90 |
| 100YR024HR | smf-3a | 282.2568 | 11.90 |
| 100YR024HR | smf-3a | 282.5068 | 11.90 |

**100yr-24hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR024HR | smf-3b | 315.5068 | 11.26 |
| 100YR024HR | smf-3b | 315.7568 | 11.26 |
| 100YR024HR | smf-3b | 316.0068 | 11.26 |
| 100YR024HR | smf-3b | 316.2568 | 11.26 |
| 100YR024HR | smf-3b | 316.5068 | 11.26 |
| 100YR024HR | smf-3b | 316.7568 | 11.26 |
| 100YR024HR | smf-3b | 317.0068 | 11.26 |
| 100YR024HR | smf-3b | 317.2568 | 11.26 |
| 100YR024HR | smf-3b | 317.5068 | 11.26 |
| 100YR024HR | smf-3b | 317.7568 | 11.26 |
| 100YR024HR | smf-3b | 318.0068 | 11.26 |
| 100YR024HR | smf-3b | 318.2568 | 11.26 |
| 100YR024HR | smf-3b | 318.5068 | 11.26 |
| 100YR024HR | smf-3b | 318.7568 | 11.26 |
| 100YR024HR | smf-3b | 319.0068 | 11.26 |
| 100YR024HR | smf-3b | 319.2568 | 11.26 |
| 100YR024HR | smf-3b | 319.5068 | 11.26 |
| 100YR024HR | smf-3b | 319.7568 | 11.26 |
| 100YR024HR | smf-3b | 320.0068 | 11.26 |
| 100YR024HR | smf-3b | 320.2568 | 11.26 |
| 100YR024HR | smf-3b | 320.5068 | 11.26 |
| 100YR024HR | smf-3b | 320.7568 | 11.26 |
| 100YR024HR | smf-3b | 321.0068 | 11.25 |
| 100YR024HR | smf-3b | 321.2568 | 11.25 |
| 100YR024HR | smf-3b | 321.5068 | 11.25 |
| 100YR024HR | smf-3b | 321.7568 | 11.25 |
| 100YR024HR | smf-3b | 322.0068 | 11.25 |
| 100YR024HR | smf-3b | 322.2568 | 11.25 |
| 100YR024HR | smf-3b | 322.5068 | 11.25 |
| 100YR024HR | smf-3b | 322.7568 | 11.25 |
| 100YR024HR | smf-3b | 323.0068 | 11.25 |
| 100YR024HR | smf-3b | 323.2568 | 11.25 |
| 100YR024HR | smf-3b | 323.5068 | 11.25 |
| 100YR024HR | smf-3b | 323.7568 | 11.25 |
| 100YR024HR | smf-3b | 324.0068 | 11.25 |
| 100YR024HR | smf-3b | 324.2568 | 11.25 |
| 100YR024HR | smf-3b | 324.5068 | 11.25 |
| 100YR024HR | smf-3b | 324.7568 | 11.25 |
| 100YR024HR | smf-3b | 325.0068 | 11.25 |
| 100YR024HR | smf-3b | 325.2568 | 11.25 |
| 100YR024HR | smf-3b | 325.5068 | 11.25 |
| 100YR024HR | smf-3b | 325.7568 | 11.25 |

**100yr-24hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR072HR | smf-1a | 600.2558 | 12.46 |
| 100YR072HR | smf-1a | 600.5058 | 12.46 |
| 100YR072HR | smf-1a | 600.7558 | 12.46 |
| 100YR072HR | smf-1a | 601.0058 | 12.46 |
| 100YR072HR | smf-1a | 601.2558 | 12.46 |
| 100YR072HR | smf-1a | 601.5058 | 12.45 |
| 100YR072HR | smf-1a | 601.7558 | 12.45 |
| 100YR072HR | smf-1a | 602.0058 | 12.45 |
| 100YR072HR | smf-1a | 602.2558 | 12.45 |
| 100YR072HR | smf-1a | 602.5058 | 12.45 |
| 100YR072HR | smf-1a | 602.7558 | 12.45 |
| 100YR072HR | smf-1a | 603.0058 | 12.45 |
| 100YR072HR | smf-1a | 603.2558 | 12.45 |
| 100YR072HR | smf-1a | 603.5058 | 12.45 |
| 100YR072HR | smf-1a | 603.7558 | 12.45 |
| 100YR072HR | smf-1a | 604.0058 | 12.45 |
| 100YR072HR | smf-1a | 604.2558 | 12.45 |
| 100YR072HR | smf-1a | 604.5058 | 12.45 |
| 100YR072HR | smf-1a | 604.7558 | 12.45 |
| 100YR072HR | smf-1a | 605.0058 | 12.45 |
| 100YR072HR | smf-1a | 605.2558 | 12.45 |
| 100YR072HR | smf-1a | 605.5058 | 12.45 |
| 100YR072HR | smf-1a | 605.7558 | 12.45 |
| 100YR072HR | smf-1a | 606.0058 | 12.45 |
| 100YR072HR | smf-1a | 606.2558 | 12.45 |
| 100YR072HR | smf-1a | 606.5058 | 12.45 |
| 100YR072HR | smf-1a | 606.7558 | 12.45 |
| 100YR072HR | smf-1a | 607.0058 | 12.45 |
| 100YR072HR | smf-1a | 607.2558 | 12.45 |
| 100YR072HR | smf-1a | 607.5058 | 12.45 |
| 100YR072HR | smf-1a | 607.7558 | 12.45 |
| 100YR072HR | smf-1a | 608.0058 | 12.45 |
| 100YR072HR | smf-1a | 608.2558 | 12.45 |
| 100YR072HR | smf-1a | 608.5058 | 12.45 |
| 100YR072HR | smf-1a | 608.7558 | 12.45 |
| 100YR072HR | smf-1a | 609.0058 | 12.45 |
| 100YR072HR | smf-1a | 609.2558 | 12.45 |
| 100YR072HR | smf-1a | 609.5058 | 12.45 |
| 100YR072HR | smf-1a | 609.7558 | 12.45 |
| 100YR072HR | smf-1a | 610.0058 | 12.45 |
| 100YR072HR | smf-1a | 610.2558 | 12.45 |
| 100YR072HR | smf-1a | 610.5058 | 12.45 |

**100yr-72hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR072HR | smf-1b | 427.5058 | 13.01 |
| 100YR072HR | smf-1b | 427.7558 | 13.01 |
| 100YR072HR | smf-1b | 428.0058 | 13.01 |
| 100YR072HR | smf-1b | 428.2558 | 13.01 |
| 100YR072HR | smf-1b | 428.5058 | 13.01 |
| 100YR072HR | smf-1b | 428.7558 | 13.01 |
| 100YR072HR | smf-1b | 429.0058 | 13.01 |
| 100YR072HR | smf-1b | 429.2558 | 13.01 |
| 100YR072HR | smf-1b | 429.5058 | 13.01 |
| 100YR072HR | smf-1b | 429.7558 | 13.01 |
| 100YR072HR | smf-1b | 430.0058 | 13.00 |
| 100YR072HR | smf-1b | 430.2558 | 13.00 |
| 100YR072HR | smf-1b | 430.5058 | 13.00 |
| 100YR072HR | smf-1b | 430.7558 | 13.00 |
| 100YR072HR | smf-1b | 431.0058 | 13.00 |
| 100YR072HR | smf-1b | 431.2558 | 13.00 |
| 100YR072HR | smf-1b | 431.5058 | 13.00 |
| 100YR072HR | smf-1b | 431.7558 | 13.00 |
| 100YR072HR | smf-1b | 432.0058 | 13.00 |
| 100YR072HR | smf-1b | 432.2558 | 13.00 |
| 100YR072HR | smf-1b | 432.5058 | 13.00 |
| 100YR072HR | smf-1b | 432.7558 | 13.00 |
| 100YR072HR | smf-1b | 433.0058 | 13.00 |
| 100YR072HR | smf-1b | 433.2558 | 13.00 |
| 100YR072HR | smf-1b | 433.5058 | 13.00 |
| 100YR072HR | smf-1b | 433.7558 | 13.00 |
| 100YR072HR | smf-1b | 434.0058 | 13.00 |
| 100YR072HR | smf-1b | 434.2558 | 13.00 |
| 100YR072HR | smf-1b | 434.5058 | 13.00 |
| 100YR072HR | smf-1b | 434.7558 | 13.00 |
| 100YR072HR | smf-1b | 435.0058 | 13.00 |
| 100YR072HR | smf-1b | 435.2558 | 13.00 |
| 100YR072HR | smf-1b | 435.5058 | 13.00 |
| 100YR072HR | smf-1b | 435.7558 | 13.00 |
| 100YR072HR | smf-1b | 436.0058 | 13.00 |
| 100YR072HR | smf-1b | 436.2558 | 13.00 |
| 100YR072HR | smf-1b | 436.5058 | 13.00 |
| 100YR072HR | smf-1b | 436.7558 | 13.00 |
| 100YR072HR | smf-1b | 437.0058 | 13.00 |
| 100YR072HR | smf-1b | 437.2558 | 13.00 |
| 100YR072HR | smf-1b | 437.5058 | 13.00 |
| 100YR072HR | smf-1b | 437.7558 | 13.00 |

**100yr-72hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR072HR | smf-2a | 496.2558 | 12.11 |
| 100YR072HR | smf-2a | 496.5058 | 12.11 |
| 100YR072HR | smf-2a | 496.7558 | 12.11 |
| 100YR072HR | smf-2a | 497.0058 | 12.11 |
| 100YR072HR | smf-2a | 497.2558 | 12.11 |
| 100YR072HR | smf-2a | 497.5058 | 12.11 |
| 100YR072HR | smf-2a | 497.7558 | 12.11 |
| 100YR072HR | smf-2a | 498.0058 | 12.11 |
| 100YR072HR | smf-2a | 498.2558 | 12.11 |
| 100YR072HR | smf-2a | 498.5058 | 12.11 |
| 100YR072HR | smf-2a | 498.7558 | 12.11 |
| 100YR072HR | smf-2a | 499.0058 | 12.11 |
| 100YR072HR | smf-2a | 499.2558 | 12.11 |
| 100YR072HR | smf-2a | 499.5058 | 12.11 |
| 100YR072HR | smf-2a | 499.7558 | 12.11 |
| 100YR072HR | smf-2a | 500.0058 | 12.11 |
| 100YR072HR | smf-2a | 500.2558 | 12.11 |
| 100YR072HR | smf-2a | 500.5058 | 12.11 |
| 100YR072HR | smf-2a | 500.7558 | 12.11 |
| 100YR072HR | smf-2a | 501.0058 | 12.11 |
| 100YR072HR | smf-2a | 501.2558 | 12.11 |
| 100YR072HR | smf-2a | 501.5058 | 12.11 |
| 100YR072HR | smf-2a | 501.7558 | 12.11 |
| 100YR072HR | smf-2a | 502.0058 | 12.11 |
| 100YR072HR | smf-2a | 502.2558 | 12.11 |
| 100YR072HR | smf-2a | 502.5058 | 12.11 |
| 100YR072HR | smf-2a | 502.7558 | 12.11 |
| 100YR072HR | smf-2a | 503.0058 | 12.11 |
| 100YR072HR | smf-2a | 503.2558 | 12.11 |
| 100YR072HR | smf-2a | 503.5058 | 12.11 |
| 100YR072HR | smf-2a | 503.7558 | 12.11 |
| 100YR072HR | smf-2a | 504.0058 | 12.10 |
| 100YR072HR | smf-2a | 504.2558 | 12.10 |
| 100YR072HR | smf-2a | 504.5058 | 12.10 |
| 100YR072HR | smf-2a | 504.7558 | 12.10 |
| 100YR072HR | smf-2a | 505.0058 | 12.10 |
| 100YR072HR | smf-2a | 505.2558 | 12.10 |
| 100YR072HR | smf-2a | 505.5058 | 12.10 |
| 100YR072HR | smf-2a | 505.7558 | 12.10 |
| 100YR072HR | smf-2a | 506.0058 | 12.10 |
| 100YR072HR | smf-2a | 506.2558 | 12.10 |
| 100YR072HR | smf-2a | 506.5058 | 12.10 |

**100yr-72hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR072HR | smf-2b | 460.0058 | 11.41 |
| 100YR072HR | smf-2b | 460.2558 | 11.41 |
| 100YR072HR | smf-2b | 460.5058 | 11.41 |
| 100YR072HR | smf-2b | 460.7558 | 11.41 |
| 100YR072HR | smf-2b | 461.0058 | 11.41 |
| 100YR072HR | smf-2b | 461.2558 | 11.41 |
| 100YR072HR | smf-2b | 461.5058 | 11.41 |
| 100YR072HR | smf-2b | 461.7558 | 11.41 |
| 100YR072HR | smf-2b | 462.0058 | 11.41 |
| 100YR072HR | smf-2b | 462.2558 | 11.41 |
| 100YR072HR | smf-2b | 462.5058 | 11.41 |
| 100YR072HR | smf-2b | 462.7558 | 11.41 |
| 100YR072HR | smf-2b | 463.0058 | 11.41 |
| 100YR072HR | smf-2b | 463.2558 | 11.41 |
| 100YR072HR | smf-2b | 463.5058 | 11.41 |
| 100YR072HR | smf-2b | 463.7558 | 11.41 |
| 100YR072HR | smf-2b | 464.0058 | 11.41 |
| 100YR072HR | smf-2b | 464.2558 | 11.41 |
| 100YR072HR | smf-2b | 464.5058 | 11.41 |
| 100YR072HR | smf-2b | 464.7558 | 11.41 |
| 100YR072HR | smf-2b | 465.0058 | 11.41 |
| 100YR072HR | smf-2b | 465.2558 | 11.41 |
| 100YR072HR | smf-2b | 465.5058 | 11.41 |
| 100YR072HR | smf-2b | 465.7558 | 11.41 |
| 100YR072HR | smf-2b | 466.0058 | 11.41 |
| 100YR072HR | smf-2b | 466.2558 | 11.40 |
| 100YR072HR | smf-2b | 466.5058 | 11.40 |
| 100YR072HR | smf-2b | 466.7558 | 11.40 |
| 100YR072HR | smf-2b | 467.0058 | 11.40 |
| 100YR072HR | smf-2b | 467.2558 | 11.40 |
| 100YR072HR | smf-2b | 467.5058 | 11.40 |
| 100YR072HR | smf-2b | 467.7558 | 11.40 |
| 100YR072HR | smf-2b | 468.0058 | 11.40 |
| 100YR072HR | smf-2b | 468.2558 | 11.40 |
| 100YR072HR | smf-2b | 468.5058 | 11.40 |
| 100YR072HR | smf-2b | 468.7558 | 11.40 |
| 100YR072HR | smf-2b | 469.0058 | 11.40 |
| 100YR072HR | smf-2b | 469.2558 | 11.40 |
| 100YR072HR | smf-2b | 469.5058 | 11.40 |
| 100YR072HR | smf-2b | 469.7558 | 11.40 |
| 100YR072HR | smf-2b | 470.0058 | 11.40 |
| 100YR072HR | smf-2b | 470.2558 | 11.40 |

**100yr-72hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR072HR | smf-2c | 528.7558 | 11.86 |
| 100YR072HR | smf-2c | 529.0058 | 11.86 |
| 100YR072HR | smf-2c | 529.2558 | 11.86 |
| 100YR072HR | smf-2c | 529.5058 | 11.86 |
| 100YR072HR | smf-2c | 529.7558 | 11.86 |
| 100YR072HR | smf-2c | 530.0058 | 11.86 |
| 100YR072HR | smf-2c | 530.2558 | 11.86 |
| 100YR072HR | smf-2c | 530.5058 | 11.86 |
| 100YR072HR | smf-2c | 530.7558 | 11.86 |
| 100YR072HR | smf-2c | 531.0058 | 11.86 |
| 100YR072HR | smf-2c | 531.2558 | 11.86 |
| 100YR072HR | smf-2c | 531.5058 | 11.86 |
| 100YR072HR | smf-2c | 531.7558 | 11.86 |
| 100YR072HR | smf-2c | 532.0058 | 11.86 |
| 100YR072HR | smf-2c | 532.2558 | 11.86 |
| 100YR072HR | smf-2c | 532.5058 | 11.86 |
| 100YR072HR | smf-2c | 532.7558 | 11.86 |
| 100YR072HR | smf-2c | 533.0058 | 11.86 |
| 100YR072HR | smf-2c | 533.2558 | 11.86 |
| 100YR072HR | smf-2c | 533.5058 | 11.86 |
| 100YR072HR | smf-2c | 533.7558 | 11.86 |
| 100YR072HR | smf-2c | 534.0058 | 11.86 |
| 100YR072HR | smf-2c | 534.2558 | 11.86 |
| 100YR072HR | smf-2c | 534.5058 | 11.86 |
| 100YR072HR | smf-2c | 534.7558 | 11.86 |
| 100YR072HR | smf-2c | 535.0058 | 11.86 |
| 100YR072HR | smf-2c | 535.2558 | 11.86 |
| 100YR072HR | smf-2c | 535.5058 | 11.86 |
| 100YR072HR | smf-2c | 535.7558 | 11.86 |
| 100YR072HR | smf-2c | 536.0058 | 11.85 |
| 100YR072HR | smf-2c | 536.2558 | 11.85 |
| 100YR072HR | smf-2c | 536.5058 | 11.85 |
| 100YR072HR | smf-2c | 536.7558 | 11.85 |
| 100YR072HR | smf-2c | 537.0058 | 11.85 |
| 100YR072HR | smf-2c | 537.2558 | 11.85 |
| 100YR072HR | smf-2c | 537.5058 | 11.85 |
| 100YR072HR | smf-2c | 537.7558 | 11.85 |
| 100YR072HR | smf-2c | 538.0058 | 11.85 |
| 100YR072HR | smf-2c | 538.2558 | 11.85 |
| 100YR072HR | smf-2c | 538.5058 | 11.85 |
| 100YR072HR | smf-2c | 538.7558 | 11.85 |
| 100YR072HR | smf-2c | 539.0058 | 11.85 |

**100yr-72hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR072HR | smf-3a | 545.0058 | 11.91 |
| 100YR072HR | smf-3a | 545.2558 | 11.90 |
| 100YR072HR | smf-3a | 545.5058 | 11.90 |
| 100YR072HR | smf-3a | 545.7558 | 11.90 |
| 100YR072HR | smf-3a | 546.0058 | 11.90 |
| 100YR072HR | smf-3a | 546.2558 | 11.90 |
| 100YR072HR | smf-3a | 546.5058 | 11.90 |
| 100YR072HR | smf-3a | 546.7558 | 11.90 |
| 100YR072HR | smf-3a | 547.0058 | 11.90 |
| 100YR072HR | smf-3a | 547.2558 | 11.90 |
| 100YR072HR | smf-3a | 547.5058 | 11.90 |
| 100YR072HR | smf-3a | 547.7558 | 11.90 |
| 100YR072HR | smf-3a | 548.0058 | 11.90 |
| 100YR072HR | smf-3a | 548.2558 | 11.90 |
| 100YR072HR | smf-3a | 548.5058 | 11.90 |
| 100YR072HR | smf-3a | 548.7558 | 11.90 |
| 100YR072HR | smf-3a | 549.0058 | 11.90 |
| 100YR072HR | smf-3a | 549.2558 | 11.90 |
| 100YR072HR | smf-3a | 549.5058 | 11.90 |
| 100YR072HR | smf-3a | 549.7558 | 11.90 |
| 100YR072HR | smf-3a | 550.0058 | 11.90 |
| 100YR072HR | smf-3a | 550.2558 | 11.90 |
| 100YR072HR | smf-3a | 550.5058 | 11.90 |
| 100YR072HR | smf-3a | 550.7558 | 11.90 |
| 100YR072HR | smf-3a | 551.0058 | 11.90 |
| 100YR072HR | smf-3a | 551.2558 | 11.90 |
| 100YR072HR | smf-3a | 551.5058 | 11.90 |
| 100YR072HR | smf-3a | 551.7558 | 11.90 |
| 100YR072HR | smf-3a | 552.0058 | 11.90 |
| 100YR072HR | smf-3a | 552.2558 | 11.90 |
| 100YR072HR | smf-3a | 552.5058 | 11.90 |
| 100YR072HR | smf-3a | 552.7558 | 11.90 |
| 100YR072HR | smf-3a | 553.0058 | 11.90 |
| 100YR072HR | smf-3a | 553.2558 | 11.90 |
| 100YR072HR | smf-3a | 553.5058 | 11.90 |
| 100YR072HR | smf-3a | 553.7558 | 11.90 |
| 100YR072HR | smf-3a | 554.0058 | 11.90 |
| 100YR072HR | smf-3a | 554.2558 | 11.90 |
| 100YR072HR | smf-3a | 554.5058 | 11.90 |
| 100YR072HR | smf-3a | 554.7558 | 11.90 |
| 100YR072HR | smf-3a | 555.0058 | 11.90 |
| 100YR072HR | smf-3a | 555.2558 | 11.90 |

**100yr-72hr SMF-3a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| 100YR072HR | smf-3b | 634.7558 | 11.26 |
| 100YR072HR | smf-3b | 635.0058 | 11.26 |
| 100YR072HR | smf-3b | 635.2558 | 11.26 |
| 100YR072HR | smf-3b | 635.5058 | 11.26 |
| 100YR072HR | smf-3b | 635.7558 | 11.26 |
| 100YR072HR | smf-3b | 636.0058 | 11.26 |
| 100YR072HR | smf-3b | 636.2558 | 11.26 |
| 100YR072HR | smf-3b | 636.5058 | 11.26 |
| 100YR072HR | smf-3b | 636.7558 | 11.26 |
| 100YR072HR | smf-3b | 637.0058 | 11.26 |
| 100YR072HR | smf-3b | 637.2558 | 11.26 |
| 100YR072HR | smf-3b | 637.5058 | 11.26 |
| 100YR072HR | smf-3b | 637.7558 | 11.26 |
| 100YR072HR | smf-3b | 638.0058 | 11.26 |
| 100YR072HR | smf-3b | 638.2558 | 11.26 |
| 100YR072HR | smf-3b | 638.5058 | 11.26 |
| 100YR072HR | smf-3b | 638.7558 | 11.26 |
| 100YR072HR | smf-3b | 639.0058 | 11.26 |
| 100YR072HR | smf-3b | 639.2558 | 11.25 |
| 100YR072HR | smf-3b | 639.5058 | 11.25 |
| 100YR072HR | smf-3b | 639.7558 | 11.25 |
| 100YR072HR | smf-3b | 640.0058 | 11.25 |
| 100YR072HR | smf-3b | 640.2558 | 11.25 |
| 100YR072HR | smf-3b | 640.5058 | 11.25 |
| 100YR072HR | smf-3b | 640.7558 | 11.25 |
| 100YR072HR | smf-3b | 641.0058 | 11.25 |
| 100YR072HR | smf-3b | 641.2558 | 11.25 |
| 100YR072HR | smf-3b | 641.5058 | 11.25 |
| 100YR072HR | smf-3b | 641.7558 | 11.25 |
| 100YR072HR | smf-3b | 642.0058 | 11.25 |
| 100YR072HR | smf-3b | 642.2558 | 11.25 |
| 100YR072HR | smf-3b | 642.5058 | 11.25 |
| 100YR072HR | smf-3b | 642.7558 | 11.25 |
| 100YR072HR | smf-3b | 643.0058 | 11.25 |
| 100YR072HR | smf-3b | 643.2558 | 11.25 |
| 100YR072HR | smf-3b | 643.5058 | 11.25 |
| 100YR072HR | smf-3b | 643.7558 | 11.25 |
| 100YR072HR | smf-3b | 644.0058 | 11.25 |
| 100YR072HR | smf-3b | 644.2558 | 11.25 |
| 100YR072HR | smf-3b | 644.5058 | 11.25 |
| 100YR072HR | smf-3b | 644.7558 | 11.25 |
| 100YR072HR | smf-3b | 645.0058 | 11.25 |

**100yr-72hr SMF-3b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| MN024HR | smf-1a | 84.0081 | 12.46 |
| MN024HR | smf-1a | 84.2581 | 12.46 |
| MN024HR | smf-1a | 84.5081 | 12.45 |
| MN024HR | smf-1a | 84.7581 | 12.45 |
| MN024HR | smf-1a | 85.0081 | 12.45 |
| MN024HR | smf-1a | 85.2581 | 12.45 |
| MN024HR | smf-1a | 85.5081 | 12.45 |
| MN024HR | smf-1a | 85.7581 | 12.45 |
| MN024HR | smf-1a | 86.0081 | 12.45 |
| MN024HR | smf-1a | 86.2581 | 12.45 |
| MN024HR | smf-1a | 86.5081 | 12.45 |
| MN024HR | smf-1a | 86.7581 | 12.45 |
| MN024HR | smf-1a | 87.0081 | 12.45 |
| MN024HR | smf-1a | 87.2581 | 12.45 |
| MN024HR | smf-1a | 87.5081 | 12.45 |
| MN024HR | smf-1a | 87.7581 | 12.45 |
| MN024HR | smf-1a | 88.0081 | 12.45 |
| MN024HR | smf-1a | 88.2581 | 12.45 |
| MN024HR | smf-1a | 88.5081 | 12.45 |
| MN024HR | smf-1a | 88.7581 | 12.45 |
| MN024HR | smf-1a | 89.0081 | 12.45 |
| MN024HR | smf-1a | 89.2581 | 12.45 |
| MN024HR | smf-1a | 89.5081 | 12.45 |
| MN024HR | smf-1a | 89.7581 | 12.45 |
| MN024HR | smf-1a | 90.0081 | 12.45 |
| MN024HR | smf-1a | 90.2581 | 12.45 |
| MN024HR | smf-1a | 90.5081 | 12.45 |
| MN024HR | smf-1a | 90.7581 | 12.45 |
| MN024HR | smf-1a | 91.0081 | 12.45 |
| MN024HR | smf-1a | 91.2581 | 12.45 |
| MN024HR | smf-1a | 91.5081 | 12.45 |
| MN024HR | smf-1a | 91.7581 | 12.45 |
| MN024HR | smf-1a | 92.0081 | 12.45 |
| MN024HR | smf-1a | 92.2581 | 12.45 |
| MN024HR | smf-1a | 92.5081 | 12.45 |
| MN024HR | smf-1a | 92.7581 | 12.45 |
| MN024HR | smf-1a | 93.0081 | 12.45 |
| MN024HR | smf-1a | 93.2581 | 12.45 |
| MN024HR | smf-1a | 93.5081 | 12.45 |
| MN024HR | smf-1a | 93.7581 | 12.45 |
| MN024HR | smf-1a | 94.0081 | 12.45 |
| MN024HR | smf-1a | 94.2581 | 12.45 |

**MnAnn24hr SMF-1a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| MN024HR | smf-1b | 169.2581 | 13.02 |
| MN024HR | smf-1b | 169.5081 | 13.02 |
| MN024HR | smf-1b | 169.7581 | 13.02 |
| MN024HR | smf-1b | 170.0081 | 13.02 |
| MN024HR | smf-1b | 170.2581 | 13.02 |
| MN024HR | smf-1b | 170.5081 | 13.02 |
| MN024HR | smf-1b | 170.7581 | 13.02 |
| MN024HR | smf-1b | 171.0081 | 13.02 |
| MN024HR | smf-1b | 171.2581 | 13.01 |
| MN024HR | smf-1b | 171.5081 | 13.01 |
| MN024HR | smf-1b | 171.7581 | 13.01 |
| MN024HR | smf-1b | 172.0081 | 13.01 |
| MN024HR | smf-1b | 172.2581 | 13.01 |
| MN024HR | smf-1b | 172.5081 | 13.01 |
| MN024HR | smf-1b | 172.7581 | 13.01 |
| MN024HR | smf-1b | 173.0081 | 13.01 |
| MN024HR | smf-1b | 173.2581 | 13.01 |
| MN024HR | smf-1b | 173.5081 | 13.01 |
| MN024HR | smf-1b | 173.7581 | 13.01 |
| MN024HR | smf-1b | 174.0081 | 13.01 |
| MN024HR | smf-1b | 174.2581 | 13.01 |
| MN024HR | smf-1b | 174.5081 | 13.01 |
| MN024HR | smf-1b | 174.7581 | 13.01 |
| MN024HR | smf-1b | 175.0081 | 13.00 |
| MN024HR | smf-1b | 175.2581 | 13.00 |
| MN024HR | smf-1b | 175.5081 | 13.00 |
| MN024HR | smf-1b | 175.7581 | 13.00 |
| MN024HR | smf-1b | 176.0081 | 13.00 |
| MN024HR | smf-1b | 176.2581 | 13.00 |
| MN024HR | smf-1b | 176.5081 | 13.00 |
| MN024HR | smf-1b | 176.7581 | 13.00 |
| MN024HR | smf-1b | 177.0081 | 13.00 |
| MN024HR | smf-1b | 177.2581 | 13.00 |
| MN024HR | smf-1b | 177.5081 | 13.00 |
| MN024HR | smf-1b | 177.7581 | 13.00 |
| MN024HR | smf-1b | 178.0081 | 13.00 |
| MN024HR | smf-1b | 178.2581 | 13.00 |
| MN024HR | smf-1b | 178.5081 | 13.00 |
| MN024HR | smf-1b | 178.7581 | 13.00 |
| MN024HR | smf-1b | 179.0081 | 13.00 |
| MN024HR | smf-1b | 179.2581 | 13.00 |
| MN024HR | smf-1b | 179.5081 | 13.00 |

**MnAnn24hr SMF-1b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| MN024HR | smf-2a | 233.5081 | 12.11 |
| MN024HR | smf-2a | 233.7581 | 12.11 |
| MN024HR | smf-2a | 234.0081 | 12.11 |
| MN024HR | smf-2a | 234.2581 | 12.11 |
| MN024HR | smf-2a | 234.5081 | 12.11 |
| MN024HR | smf-2a | 234.7581 | 12.11 |
| MN024HR | smf-2a | 235.0081 | 12.11 |
| MN024HR | smf-2a | 235.2581 | 12.11 |
| MN024HR | smf-2a | 235.5081 | 12.11 |
| MN024HR | smf-2a | 235.7581 | 12.11 |
| MN024HR | smf-2a | 236.0081 | 12.11 |
| MN024HR | smf-2a | 236.2581 | 12.11 |
| MN024HR | smf-2a | 236.5081 | 12.11 |
| MN024HR | smf-2a | 236.7581 | 12.11 |
| MN024HR | smf-2a | 237.0081 | 12.11 |
| MN024HR | smf-2a | 237.2581 | 12.11 |
| MN024HR | smf-2a | 237.5081 | 12.11 |
| MN024HR | smf-2a | 237.7581 | 12.11 |
| MN024HR | smf-2a | 238.0081 | 12.10 |
| MN024HR | smf-2a | 238.2581 | 12.10 |
| MN024HR | smf-2a | 238.5081 | 12.10 |
| MN024HR | smf-2a | 238.7581 | 12.10 |
| MN024HR | smf-2a | 239.0081 | 12.10 |
| MN024HR | smf-2a | 239.2581 | 12.10 |
| MN024HR | smf-2a | 239.5081 | 12.10 |
| MN024HR | smf-2a | 239.7581 | 12.10 |
| MN024HR | smf-2a | 240.0081 | 12.10 |
| MN024HR | smf-2a | 240.2581 | 12.10 |
| MN024HR | smf-2a | 240.5081 | 12.10 |
| MN024HR | smf-2a | 240.7581 | 12.10 |
| MN024HR | smf-2a | 241.0081 | 12.10 |
| MN024HR | smf-2a | 241.2581 | 12.10 |
| MN024HR | smf-2a | 241.5081 | 12.10 |
| MN024HR | smf-2a | 241.7581 | 12.10 |
| MN024HR | smf-2a | 242.0081 | 12.10 |
| MN024HR | smf-2a | 242.2581 | 12.10 |
| MN024HR | smf-2a | 242.5081 | 12.10 |
| MN024HR | smf-2a | 242.7581 | 12.10 |
| MN024HR | smf-2a | 243.0081 | 12.10 |
| MN024HR | smf-2a | 243.2581 | 12.10 |
| MN024HR | smf-2a | 243.5081 | 12.10 |
| MN024HR | smf-2a | 243.7581 | 12.10 |

**MnAnn24hr SMF-2a**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| MN024HR | smf-2b | 192.7581 | 11.42 |
| MN024HR | smf-2b | 193.0081 | 11.42 |
| MN024HR | smf-2b | 193.2581 | 11.42 |
| MN024HR | smf-2b | 193.5081 | 11.42 |
| MN024HR | smf-2b | 193.7581 | 11.42 |
| MN024HR | smf-2b | 194.0081 | 11.42 |
| MN024HR | smf-2b | 194.2581 | 11.42 |
| MN024HR | smf-2b | 194.5081 | 11.41 |
| MN024HR | smf-2b | 194.7581 | 11.41 |
| MN024HR | smf-2b | 195.0081 | 11.41 |
| MN024HR | smf-2b | 195.2581 | 11.41 |
| MN024HR | smf-2b | 195.5081 | 11.41 |
| MN024HR | smf-2b | 195.7581 | 11.41 |
| MN024HR | smf-2b | 196.0081 | 11.41 |
| MN024HR | smf-2b | 196.2581 | 11.41 |
| MN024HR | smf-2b | 196.5081 | 11.41 |
| MN024HR | smf-2b | 196.7581 | 11.41 |
| MN024HR | smf-2b | 197.0081 | 11.41 |
| MN024HR | smf-2b | 197.2581 | 11.41 |
| MN024HR | smf-2b | 197.5081 | 11.41 |
| MN024HR | smf-2b | 197.7581 | 11.41 |
| MN024HR | smf-2b | 198.0081 | 11.41 |
| MN024HR | smf-2b | 198.2581 | 11.41 |
| MN024HR | smf-2b | 198.5081 | 11.41 |
| MN024HR | smf-2b | 198.7581 | 11.41 |
| MN024HR | smf-2b | 199.0081 | 11.40 |
| MN024HR | smf-2b | 199.2581 | 11.40 |
| MN024HR | smf-2b | 199.5081 | 11.40 |
| MN024HR | smf-2b | 199.7581 | 11.40 |
| MN024HR | smf-2b | 200.0081 | 11.40 |
| MN024HR | smf-2b | 200.2581 | 11.40 |
| MN024HR | smf-2b | 200.5081 | 11.40 |
| MN024HR | smf-2b | 200.7581 | 11.40 |
| MN024HR | smf-2b | 201.0081 | 11.40 |
| MN024HR | smf-2b | 201.2581 | 11.40 |
| MN024HR | smf-2b | 201.5081 | 11.40 |
| MN024HR | smf-2b | 201.7581 | 11.40 |
| MN024HR | smf-2b | 202.0081 | 11.40 |
| MN024HR | smf-2b | 202.2581 | 11.40 |
| MN024HR | smf-2b | 202.5081 | 11.40 |
| MN024HR | smf-2b | 202.7581 | 11.40 |
| MN024HR | smf-2b | 203.0081 | 11.40 |

**MnAnn24hr SMF-2b**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| MN024HR | smf-2c | 225.5081 | 11.86 |
| MN024HR | smf-2c | 225.7581 | 11.86 |
| MN024HR | smf-2c | 226.0081 | 11.86 |
| MN024HR | smf-2c | 226.2581 | 11.86 |
| MN024HR | smf-2c | 226.5081 | 11.86 |
| MN024HR | smf-2c | 226.7581 | 11.85 |
| MN024HR | smf-2c | 227.0081 | 11.85 |
| MN024HR | smf-2c | 227.2581 | 11.85 |
| MN024HR | smf-2c | 227.5081 | 11.85 |
| MN024HR | smf-2c | 227.7581 | 11.85 |
| MN024HR | smf-2c | 228.0081 | 11.85 |
| MN024HR | smf-2c | 228.2581 | 11.85 |
| MN024HR | smf-2c | 228.5081 | 11.85 |
| MN024HR | smf-2c | 228.7581 | 11.85 |
| MN024HR | smf-2c | 229.0081 | 11.85 |
| MN024HR | smf-2c | 229.2581 | 11.85 |
| MN024HR | smf-2c | 229.5081 | 11.85 |
| MN024HR | smf-2c | 229.7581 | 11.85 |
| MN024HR | smf-2c | 230.0081 | 11.85 |
| MN024HR | smf-2c | 230.2581 | 11.85 |
| MN024HR | smf-2c | 230.5081 | 11.85 |
| MN024HR | smf-2c | 230.7581 | 11.85 |
| MN024HR | smf-2c | 231.0081 | 11.85 |
| MN024HR | smf-2c | 231.2581 | 11.85 |
| MN024HR | smf-2c | 231.5081 | 11.85 |
| MN024HR | smf-2c | 231.7581 | 11.85 |
| MN024HR | smf-2c | 232.0081 | 11.85 |
| MN024HR | smf-2c | 232.2581 | 11.85 |
| MN024HR | smf-2c | 232.5081 | 11.85 |
| MN024HR | smf-2c | 232.7581 | 11.85 |
| MN024HR | smf-2c | 233.0081 | 11.85 |
| MN024HR | smf-2c | 233.2581 | 11.85 |
| MN024HR | smf-2c | 233.5081 | 11.85 |
| MN024HR | smf-2c | 233.7581 | 11.85 |
| MN024HR | smf-2c | 234.0081 | 11.85 |
| MN024HR | smf-2c | 234.2581 | 11.85 |
| MN024HR | smf-2c | 234.5081 | 11.85 |
| MN024HR | smf-2c | 234.7581 | 11.85 |
| MN024HR | smf-2c | 235.0081 | 11.85 |
| MN024HR | smf-2c | 235.2581 | 11.85 |
| MN024HR | smf-2c | 235.5081 | 11.85 |
| MN024HR | smf-2c | 235.7581 | 11.85 |

**MnAnn24hr SMF-2c**

Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| MN024HR | smf-3a | 226.7581 | 11.92 |
| MN024HR | smf-3a | 227.0081 | 11.92 |
| MN024HR | smf-3a | 227.2581 | 11.92 |
| MN024HR | smf-3a | 227.5081 | 11.92 |
| MN024HR | smf-3a | 227.7581 | 11.92 |
| MN024HR | smf-3a | 228.0081 | 11.92 |
| MN024HR | smf-3a | 228.2581 | 11.92 |
| MN024HR | smf-3a | 228.5081 | 11.92 |
| MN024HR | smf-3a | 228.7581 | 11.92 |
| MN024HR | smf-3a | 229.0081 | 11.92 |
| MN024HR | smf-3a | 229.2581 | 11.92 |
| MN024HR | smf-3a | 229.5081 | 11.92 |
| MN024HR | smf-3a | 229.7581 | 11.92 |
| MN024HR | smf-3a | 230.0081 | 11.92 |
| MN024HR | smf-3a | 230.2581 | 11.92 |
| MN024HR | smf-3a | 230.5081 | 11.92 |
| MN024HR | smf-3a | 230.7581 | 11.91 |
| MN024HR | smf-3a | 231.0081 | 11.91 |
| MN024HR | smf-3a | 231.2581 | 11.91 |
| MN024HR | smf-3a | 231.5081 | 11.91 |
| MN024HR | smf-3a | 231.7581 | 11.91 |
| MN024HR | smf-3a | 232.0081 | 11.91 |
| MN024HR | smf-3a | 232.2581 | 11.91 |
| MN024HR | smf-3a | 232.5081 | 11.91 |
| MN024HR | smf-3a | 232.7581 | 11.91 |
| MN024HR | smf-3a | 233.0081 | 11.91 |
| MN024HR | smf-3a | 233.2581 | 11.91 |
| MN024HR | smf-3a | 233.5081 | 11.91 |
| MN024HR | smf-3a | 233.7581 | 11.91 |
| MN024HR | smf-3a | 234.0081 | 11.91 |
| MN024HR | smf-3a | 234.2581 | 11.91 |
| MN024HR | smf-3a | 234.5081 | 11.91 |
| MN024HR | smf-3a | 234.7581 | 11.91 |
| MN024HR | smf-3a | 235.0081 | 11.91 |
| MN024HR | smf-3a | 235.2581 | 11.91 |
| MN024HR | smf-3a | 235.5081 | 11.91 |
| MN024HR | smf-3a | 235.7581 | 11.91 |
| MN024HR | smf-3a | 236.0081 | 11.91 |
| MN024HR | smf-3a | 236.2581 | 11.90 |
| MN024HR | smf-3a | 236.5081 | 11.90 |
| MN024HR | smf-3a | 236.7581 | 11.90 |
| MN024HR | smf-3a | 237.0081 | 11.90 |

**MnAnn24hr SMF-3a**

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| MN024HR | smf-3b | 259.5081 | 11.26 |
| MN024HR | smf-3b | 259.7581 | 11.26 |
| MN024HR | smf-3b | 260.0081 | 11.26 |
| MN024HR | smf-3b | 260.2581 | 11.26 |
| MN024HR | smf-3b | 260.5081 | 11.26 |
| MN024HR | smf-3b | 260.7581 | 11.26 |
| MN024HR | smf-3b | 261.0081 | 11.26 |
| MN024HR | smf-3b | 261.2581 | 11.25 |
| MN024HR | smf-3b | 261.5081 | 11.25 |
| MN024HR | smf-3b | 261.7581 | 11.25 |
| MN024HR | smf-3b | 262.0081 | 11.25 |
| MN024HR | smf-3b | 262.2581 | 11.25 |
| MN024HR | smf-3b | 262.5081 | 11.25 |
| MN024HR | smf-3b | 262.7581 | 11.25 |
| MN024HR | smf-3b | 263.0081 | 11.25 |
| MN024HR | smf-3b | 263.2581 | 11.25 |
| MN024HR | smf-3b | 263.5081 | 11.25 |
| MN024HR | smf-3b | 263.7581 | 11.25 |
| MN024HR | smf-3b | 264.0081 | 11.25 |
| MN024HR | smf-3b | 264.2581 | 11.25 |
| MN024HR | smf-3b | 264.5081 | 11.25 |
| MN024HR | smf-3b | 264.7581 | 11.25 |
| MN024HR | smf-3b | 265.0081 | 11.25 |
| MN024HR | smf-3b | 265.2581 | 11.25 |
| MN024HR | smf-3b | 265.5081 | 11.25 |
| MN024HR | smf-3b | 265.7581 | 11.25 |
| MN024HR | smf-3b | 266.0081 | 11.25 |
| MN024HR | smf-3b | 266.2581 | 11.25 |
| MN024HR | smf-3b | 266.5081 | 11.25 |
| MN024HR | smf-3b | 266.7581 | 11.25 |
| MN024HR | smf-3b | 267.0081 | 11.25 |
| MN024HR | smf-3b | 267.2581 | 11.25 |
| MN024HR | smf-3b | 267.5081 | 11.25 |
| MN024HR | smf-3b | 267.7581 | 11.25 |
| MN024HR | smf-3b | 268.0081 | 11.25 |
| MN024HR | smf-3b | 268.2581 | 11.25 |
| MN024HR | smf-3b | 268.5081 | 11.25 |
| MN024HR | smf-3b | 268.7581 | 11.25 |
| MN024HR | smf-3b | 269.0081 | 11.25 |
| MN024HR | smf-3b | 269.2581 | 11.25 |
| MN024HR | smf-3b | 269.5081 | 11.25 |
| MN024HR | smf-3b | 269.7581 | 11.25 |

**MnAnn24hr SMF-3b**

Inputs

## Simple Basin: pre-1

| | |
|---|---|
| Scenario: | Icpr3 |
| Node: | pre-1 |
| Hydrograph Method: | NRCS Unit Hydrograph |
| Infiltration Method: | Curve Number |
| Time of Concentration: | 10.0000 min |
| Max Allowable Q: | 0.00 cfs |
| Time Shift: | 0.0000 hr |
| Unit Hydrograph: | UH484 |
| Peaking Factor: | 484.0 |
| Area: | 1.2100 ac |
| Curve Number: | 93.0 |
| % Impervious: | 0.00 |
| % DCIA: | 0.00 |
| % Direct: | 0.00 |
| Rainfall Name: | |

Comment:

## Simple Basin: ws-1

| | |
|---|---|
| Scenario: | Icpr3 |
| Node: | smf-1a |
| Hydrograph Method: | NRCS Unit Hydrograph |
| Infiltration Method: | Curve Number |
| Time of Concentration: | 10.0000 min |
| Max Allowable Q: | 999999.00 cfs |
| Time Shift: | 0.0000 hr |
| Unit Hydrograph: | UH484 |
| Peaking Factor: | 484.0 |
| Area: | 0.2500 ac |
| Curve Number: | 98.0 |
| % Impervious: | 0.00 |
| % DCIA: | 0.00 |
| % Direct: | 0.00 |
| Rainfall Name: | |

Comment:

## Simple Basin: ws-2

| | |
|---|---|
| Scenario: | Icpr3 |
| Node: | smf-2a |
| Hydrograph Method: | NRCS Unit Hydrograph |
| Infiltration Method: | Curve Number |
| Time of Concentration: | 10.0000 min |
| Max Allowable Q: | 999999.00 cfs |

Inputs

| | |
|---|---|
| Time Shift: | 0.0000 hr |
| Unit Hydrograph: | UH484 |
| Peaking Factor: | 484.0 |
| Area: | 0.5600 ac |
| Curve Number: | 98.0 |
| % Impervious: | 0.00 |
| % DCIA: | 0.00 |
| % Direct: | 0.00 |
| Rainfall Name: | |

Comment:

## Simple Basin: ws-3

| | |
|---|---|
| Scenario: | Icpr3 |
| Node: | smf-3a |
| Hydrograph Method: | NRCS Unit Hydrograph |
| Infiltration Method: | Curve Number |
| Time of Concentration: | 10.0000 min |
| Max Allowable Q: | 999999.00 cfs |
| Time Shift: | 0.0000 hr |
| Unit Hydrograph: | Uh484 |
| Peaking Factor: | 484.0 |
| Area: | 0.4300 ac |
| Curve Number: | 98.0 |
| % Impervious: | 0.00 |
| % DCIA: | 0.00 |
| % Direct: | 0.00 |
| Rainfall Name: | |

Comment:

## Node: g-1

| | |
|---|---|
| Scenario: | Icpr3 |
| Type: | Time/Stage |
| Base Flow: | 0.00 cfs |
| Initial Stage: | 0.00 ft |
| Warning Stage: | 0.00 ft |
| Boundary Stage: | |

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 0.00 |
| 0 | 0 | 0 | 99999.0000 | 0.00 |

Comment:

Node: g-2

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 0.00 |
| 0 | 0 | 0 | 99999.0000 | 0.00 |

Comment:

Node: g-3

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 0.00 |
| 0 | 0 | 0 | 99999.0000 | 0.00 |

Comment:

Node: outfall

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 7.65 ft
Warning Stage: 0.00 ft
Boundary Stage:

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 7.65 |
| 0 | 0 | 0 | 99999.0000 | 7.65 |

Comment:

Node: pre-1

Scenario: Icpr3
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 14.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 14.00 |
| 0 | 0 | 0 | 99999.0000 | 14.00 |

Comment:

Node: smf-1a

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 12.45 ft
Warning Stage: 14.40 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 12.45 | 0.00 | 0 |
| 12.53 | 0.00 | 87 |
| 12.62 | 0.00 | 173 |
| 12.70 | 0.01 | 260 |
| 12.78 | 0.01 | 347 |
| 12.87 | 0.01 | 433 |
| 12.95 | 0.01 | 521 |
| 13.03 | 0.02 | 693 |
| 13.12 | 0.02 | 862 |
| 13.20 | 0.02 | 1028 |
| 13.28 | 0.03 | 1190 |
| 13.37 | 0.03 | 1347 |
| 13.45 | 0.03 | 1500 |
| 13.53 | 0.04 | 1645 |
| 13.62 | 0.04 | 1784 |
| 13.70 | 0.04 | 1913 |

Comment:

Node: smf-1b

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs

Inputs

Initial Stage: 13.00 ft
Warning Stage: 14.75 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 13.00 | 0.00 | 0 |
| 13.08 | 0.00 | 32 |
| 13.17 | 0.00 | 64 |
| 13.25 | 0.00 | 96 |
| 13.33 | 0.00 | 129 |
| 13.42 | 0.00 | 161 |
| 13.50 | 0.00 | 193 |
| 13.58 | 0.01 | 255 |
| 13.67 | 0.01 | 316 |
| 13.75 | 0.01 | 376 |
| 13.83 | 0.01 | 434 |
| 13.92 | 0.01 | 491 |
| 14.00 | 0.01 | 546 |
| 14.08 | 0.01 | 599 |
| 14.17 | 0.01 | 649 |
| 14.25 | 0.02 | 697 |
| 14.33 | 0.02 | 738 |
| 14.42 | 0.02 | 775 |
| 14.50 | 0.02 | 809 |
| 14.58 | 0.02 | 841 |
| 14.67 | 0.02 | 873 |
| 14.75 | 0.02 | 905 |
| 14.83 | 0.02 | 937 |
| 14.92 | 0.02 | 969 |
| 15.00 | 0.02 | 1001 |

Comment:

Node: smf-2a

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 12.10 ft
Warning Stage: 14.00 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 12.10 | 0.00 | 0 |
| 12.18 | 0.00 | 149 |
| 12.27 | 0.01 | 298 |
| 12.35 | 0.01 | 446 |
| 12.43 | 0.01 | 595 |
| 12.52 | 0.02 | 744 |
| 12.60 | 0.02 | 892 |

Inputs

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 12.68 | 0.03 | 1191 |
| 12.77 | 0.03 | 1485 |
| 12.85 | 0.04 | 1772 |
| 12.93 | 0.05 | 2052 |
| 13.02 | 0.05 | 2324 |
| 13.10 | 0.06 | 2587 |
| 13.18 | 0.07 | 2840 |
| 13.27 | 0.07 | 3079 |
| 13.35 | 0.08 | 3302 |
| 13.43 | 0.08 | 3500 |
| 13.52 | 0.08 | 3671 |
| 13.60 | 0.09 | 3828 |
| 13.68 | 0.09 | 3977 |
| 13.77 | 0.09 | 4126 |
| 13.85 | 0.10 | 4275 |
| 13.93 | 0.10 | 4423 |
| 14.02 | 0.10 | 4572 |
| 14.10 | 0.11 | 4721 |

Comment:

Node: smf-2b

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.40 ft
Warning Stage: 13.30 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 11.40 | 0.00 | 0 |
| 11.48 | 0.00 | 48 |
| 11.57 | 0.00 | 97 |
| 11.65 | 0.00 | 145 |
| 11.73 | 0.00 | 194 |
| 11.82 | 0.01 | 243 |
| 11.90 | 0.01 | 291 |
| 11.98 | 0.01 | 382 |
| 12.07 | 0.01 | 471 |
| 12.15 | 0.01 | 558 |
| 12.23 | 0.01 | 643 |
| 12.32 | 0.02 | 726 |
| 12.40 | 0.02 | 806 |
| 12.48 | 0.02 | 884 |
| 12.57 | 0.02 | 958 |
| 12.65 | 0.02 | 1027 |
| 12.73 | 0.03 | 1089 |

Inputs

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 12.82 | 0.03 | 1144 |
| 12.90 | 0.03 | 1195 |
| 12.98 | 0.03 | 1244 |
| 13.07 | 0.03 | 1292 |
| 13.15 | 0.03 | 1341 |
| 13.23 | 0.03 | 1389 |
| 13.32 | 0.03 | 1438 |
| 13.40 | 0.03 | 1486 |

Comment:

Node: smf-2c

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.85 ft
Warning Stage: 14.30 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 11.85 | 0.00 | 0 |
| 11.93 | 0.00 | 68 |
| 12.02 | 0.00 | 136 |
| 12.10 | 0.00 | 205 |
| 12.18 | 0.01 | 273 |
| 12.27 | 0.01 | 341 |
| 12.35 | 0.01 | 409 |
| 12.43 | 0.01 | 537 |
| 12.52 | 0.02 | 662 |
| 12.60 | 0.02 | 785 |
| 12.68 | 0.02 | 904 |
| 12.77 | 0.02 | 1021 |
| 12.85 | 0.03 | 1134 |
| 12.93 | 0.03 | 1243 |
| 13.02 | 0.03 | 1347 |
| 13.10 | 0.03 | 1444 |
| 13.18 | 0.04 | 1532 |
| 13.27 | 0.04 | 1609 |
| 13.35 | 0.04 | 1681 |
| 13.43 | 0.04 | 1749 |
| 13.52 | 0.04 | 1817 |
| 13.60 | 0.04 | 1885 |
| 13.68 | 0.04 | 1954 |
| 13.77 | 0.05 | 2022 |
| 13.85 | 0.05 | 2090 |

Comment:

Node: smf-3a

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.90 ft
Warning Stage: 13.80 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 11.90 | 0.00 | 0 |
| 11.98 | 0.00 | 44 |
| 12.07 | 0.00 | 88 |
| 12.15 | 0.00 | 132 |
| 12.23 | 0.00 | 175 |
| 12.32 | 0.01 | 219 |
| 12.40 | 0.01 | 263 |
| 12.48 | 0.01 | 348 |
| 12.57 | 0.01 | 433 |
| 12.65 | 0.01 | 515 |
| 12.73 | 0.01 | 595 |
| 12.82 | 0.02 | 673 |
| 12.90 | 0.02 | 749 |
| 12.98 | 0.02 | 822 |
| 13.07 | 0.02 | 891 |
| 13.15 | 0.02 | 955 |
| 13.23 | 0.02 | 1013 |
| 13.32 | 0.02 | 1063 |
| 13.40 | 0.03 | 1109 |
| 13.48 | 0.03 | 1153 |
| 13.57 | 0.03 | 1197 |
| 13.65 | 0.03 | 1240 |
| 13.73 | 0.03 | 1284 |
| 13.82 | 0.03 | 1328 |
| 13.90 | 0.03 | 1372 |

Comment:

Node: smf-3b

Scenario: Icpr3
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 11.25 ft
Warning Stage: 13.10 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 11.25 | 0.00 | 0 |
| 11.33 | 0.00 | 44 |
| 11.42 | 0.00 | 88 |

Inputs

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 11.50 | 0.00 | 132 |
| 11.58 | 0.00 | 175 |
| 11.67 | 0.01 | 219 |
| 11.75 | 0.01 | 263 |
| 11.83 | 0.01 | 348 |
| 11.92 | 0.01 | 433 |
| 12.00 | 0.01 | 515 |
| 12.08 | 0.01 | 595 |
| 12.17 | 0.02 | 673 |
| 12.25 | 0.02 | 749 |
| 12.33 | 0.02 | 822 |
| 12.42 | 0.02 | 891 |
| 12.50 | 0.02 | 955 |
| 12.58 | 0.02 | 1013 |
| 12.67 | 0.02 | 1063 |
| 12.75 | 0.03 | 1109 |
| 12.83 | 0.03 | 1153 |
| 12.92 | 0.03 | 1197 |
| 13.00 | 0.03 | 1240 |
| 13.08 | 0.03 | 1284 |
| 13.17 | 0.03 | 1328 |
| 13.25 | 0.03 | 1372 |

Comment:

| Drop Structure Link: ds-1 | | Upstream Pipe | | Downstream Pipe | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 13.00 ft | Invert: | 12.25 ft |
| From Node: | smf-1a | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-2a | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.25 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Solution: | Combine | Default: | 0.00 ft | Default: | 0.00 ft |
| Increments: | 10 | Op Table: | | Op Table: | |
| Pipe Count: | 1 | Ref Node: | | Ref Node: | |
| Damping: | 0.0000 ft | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Length: | 15.00 ft | Top Clip | | | |
| FHWA Code: | 1 | Default: | 0.00 ft | Default: | 0.00 ft |
| Entr Loss Coef: | 0.00 | Op Table: | | Op Table: | |
| Exit Loss Coef: | 1.00 | Ref Node: | | Ref Node: | |
| Bend Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Bend Location: | 0.00 dec | | | | |
| Energy Switch: | Energy | | | | |

Pipe Comment:

| Weir Component | |
|---|---|
| Weir: | 1 |

Bottom Clip

Inputs

| | | | |
|---|---|---|---|
| Weir Count: | 1 | | |
| Weir Flow Direction: | Both | Default: | 0.00 ft |
| Damping: | 0.0000 ft | Op Table: | |
| Weir Type: | Sharp Crested Vertical | Ref Node: | |
| Geometry Type: | Rectangular | **Top Clip** | |
| Invert: | 13.70 ft | Default: | 0.00 ft |
| Control Elevation: | 13.70 ft | Op Table: | |
| Max Depth: | 1.50 ft | Ref Node: | |
| Max Width: | 1.50 ft | **Discharge Coefficients** | |
| Fillet: | 0.00 ft | Weir Default: | 3.200 |
| | | Weir Table: | |
| | | Orifice Default: | 0.600 |
| | | Orifice Table: | |

Weir Comment:

Drop Structure Comment:

| Drop Structure Link: ds-2 | | Upstream Pipe | | Downstream Pipe | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 11.40 ft | Invert: | 6.40 ft |
| From Node: | smf-2a | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | outfall | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.50 ft | Max Depth: | 1.50 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Solution: | Combine | Default: | 0.00 ft | Default: | 0.00 ft |
| Increments: | 10 | Op Table: | | Op Table: | |
| Pipe Count: | 1 | Ref Node: | | Ref Node: | |
| Damping: | 0.0000 ft | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Length: | 20.00 ft | Top Clip | | | |
| FHWA Code: | 1 | Default: | 0.00 ft | Default: | 0.00 ft |
| Entr Loss Coef: | 0.00 | Op Table: | | Op Table: | |
| Exit Loss Coef: | 1.00 | Ref Node: | | Ref Node: | |
| Bend Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Bend Location: | 0.00 dec | | | | |
| Energy Switch: | Energy | | | | |

Pipe Comment:

| Weir Component | | | |
|---|---|---|---|
| Weir: | 1 | **Bottom Clip** | |
| Weir Count: | 1 | Default: | 0.00 ft |
| Weir Flow Direction: | Both | Op Table: | |
| Damping: | 0.0000 ft | Ref Node: | |
| Weir Type: | Sharp Crested Vertical | **Top Clip** | |
| Geometry Type: | Rectangular | Default: | 0.00 ft |
| Invert: | 12.77 ft | Op Table: | |
| Control Elevation: | 12.77 ft | Ref Node: | |
| Max Depth: | 0.90 ft | **Discharge Coefficients** | |
| Max Width: | 3.50 ft | Weir Default: | 3.200 |

Inputs

| | | | |
|---|---|---|---|
| Fillet: | 0.00 ft | Weir Table: | |
| | | Orifice Default: | 0.600 |
| | | Orifice Table: | |

Weir Comment:

Drop Structure Comment:

| Drop Structure Link: ds-3 | | Upstream Pipe | | Downstream Pipe | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 12.00 ft | Invert: | 11.90 ft |
| From Node: | smf-3a | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-2b | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.25 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Solution: | Combine | Default: | 0.00 ft | Default: | 0.00 ft |
| Increments: | 10 | Op Table: | | Op Table: | |
| Pipe Count: | 1 | Ref Node: | | Ref Node: | |
| Damping: | 0.0000 ft | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Length: | 29.00 ft | Top Clip | | | |
| FHWA Code: | 1 | Default: | 0.00 ft | Default: | 0.00 ft |
| Entr Loss Coef: | 0.00 | Op Table: | | Op Table: | |
| Exit Loss Coef: | 1.00 | Ref Node: | | Ref Node: | |
| Bend Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Bend Location: | 0.00 dec | | | | |
| Energy Switch: | Energy | | | | |

Pipe Comment:

| Weir Component | | Bottom Clip | |
|---|---|---|---|
| Weir: | 1 | Default: | 0.00 ft |
| Weir Count: | 1 | Op Table: | |
| Weir Flow Direction: | Both | Ref Node: | |
| Damping: | 0.0000 ft | Top Clip | |
| Weir Type: | Sharp Crested Vertical | Default: | 0.00 ft |
| Geometry Type: | Rectangular | Op Table: | |
| Invert: | 12.90 ft | Ref Node: | |
| Control Elevation: | 12.90 ft | Discharge Coefficients | |
| Max Depth: | 0.35 ft | Weir Default: | 3.200 |
| Max Width: | 3.50 ft | Weir Table: | |
| Fillet: | 0.00 ft | Orifice Default: | 0.600 |
| | | Orifice Table: | |

Weir Comment:

Drop Structure Comment:

| Percolation Link: perc-1a | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-1a | | |
| To Node: | g-1 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 214.00 ft |
| Flow Direction: | Both | Perimeter 2: | 215.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 216.00 ft |
| Water Table Elevation: | 11.45 ft | Distance P1 to P2: | 20.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 180.00 ft |
| Horizontal Conductivity: | 3.000 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 10.000 fpd | # of Cells P2 to P3: | 45 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 1.00 ft | | |
| Comment: | | | |

| Percolation Link: perc-1b | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-1b | | |
| To Node: | g-1 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 130.00 ft |
| Flow Direction: | Both | Perimeter 2: | 131.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 132.00 ft |
| Water Table Elevation: | 12.00 ft | Distance P1 to P2: | 20.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 180.00 ft |
| Horizontal Conductivity: | 3.000 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 10.000 fpd | # of Cells P2 to P3: | 45 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 1.00 ft | | |
| Comment: | | | |

| Percolation Link: perc-2a | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-2a | | |
| To Node: | g-2 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 338.00 ft |
| Flow Direction: | Both | Perimeter 2: | 339.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 340.00 ft |
| Water Table Elevation: | 11.09 ft | Distance P1 to P2: | 20.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 180.00 ft |
| Horizontal Conductivity: | 3.000 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 10.000 fpd | # of Cells P2 to P3: | 45 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 1.00 ft | | |
| Comment: | | | |

| Percolation Link: perc-2b | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-2b | | |
| To Node: | g-2 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 158.00 ft |
| Flow Direction: | Both | Perimeter 2: | 159.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 160.00 ft |
| Water Table Elevation: | 10.38 ft | Distance P1 to P2: | 20.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 180.00 ft |
| Horizontal Conductivity: | 3.000 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 10.000 fpd | # of Cells P2 to P3: | 45 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 1.00 ft | | |
| Comment: | | | |

| Percolation Link: perc-2c | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-2c | | |
| To Node: | g-2 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 175.00 ft |
| Flow Direction: | Both | Perimeter 2: | 176.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 177.00 ft |
| Water Table Elevation: | 10.85 ft | Distance P1 to P2: | 20.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 180.00 ft |
| Horizontal Conductivity: | 3.000 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 10.000 fpd | # of Cells P2 to P3: | 45 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 1.00 ft | | |
| Comment: | | | |

| Percolation Link: perc-3 | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-3b | | |
| To Node: | g-3 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 144.00 ft |
| Flow Direction: | Both | Perimeter 2: | 145.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 146.00 ft |
| Water Table Elevation: | 10.22 ft | Distance P1 to P2: | 10.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 180.00 ft |
| Horizontal Conductivity: | 3.000 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 10.000 fpd | # of Cells P2 to P3: | 45 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 1.00 ft | | |
| Comment: | | | |

| Percolation Link: perc-3a | | | |
|---|---|---|---|
| Scenario: | Icpr3 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | smf-3a | | |
| To Node: | g-3 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 145.00 ft |
| Flow Direction: | Both | Perimeter 2: | 146.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 147.00 ft |
| Water Table Elevation: | 10.88 ft | Distance P1 to P2: | 20.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 180.00 ft |
| Horizontal Conductivity: | 3.000 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 10.000 fpd | # of Cells P2 to P3: | 45 |
| Fillable Porosity: | 0.250 | | |
| Layer Thickness: | 1.00 ft | | |

Comment:

| Pipe Link: pipe-1b | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 13.15 ft | Invert: | 12.95 ft |
| From Node: | smf-1b | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-1a | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.23 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 23.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 0 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

| Pipe Link: pipe-2a | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 12.60 ft | Invert: | 12.60 ft |
| From Node: | smf-2b | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-2a | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.25 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 5.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 0 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |

Inputs

| | | | | | |
|---|---|---|---|---|---|
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

| Pipe Link: pipe-2b | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 12.35 ft | Invert: | 12.35 ft |
| From Node: | smf-2c | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-2b | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.25 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 20.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 0 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

| Pipe Link: pipe-2c | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 12.60 ft | Invert: | 12.60 ft |
| From Node: | smf-2c | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-2a | Geometry: Circular | | Geometry: Circular | |
| Link Count: | 1 | Max Depth: | 1.25 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 5.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 0 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

| Pipe Link: pipe-3b | | Upstream | | Downstream | |
|---|---|---|---|---|---|
| Scenario: | Icpr3 | Invert: | 13.00 ft | Invert: | 11.75 ft |
| From Node: | smf-3a | Manning's N: | 0.0110 | Manning's N: | 0.0110 |
| To Node: | smf-3b | Geometry: Circular | | Geometry: Circular | |

Inputs

| | | | | | |
|---|---|---|---|---|---|
| Link Count: | 1 | Max Depth: | 1.25 ft | Max Depth: | 1.25 ft |
| Flow Direction: | Both | Bottom Clip | | | |
| Damping: | 0.0000 ft | Default: | 0.00 ft | Default: | 0.00 ft |
| Length: | 5.00 ft | Op Table: | | Op Table: | |
| FHWA Code: | 0 | Ref Node: | | Ref Node: | |
| Entr Loss Coef: | 0.00 | Manning's N: | 0.0000 | Manning's N: | 0.0000 |
| Exit Loss Coef: | 0.00 | Top Clip | | | |
| Bend Loss Coef: | 0.00 | Default: | 0.00 ft | Default: | 0.00 ft |
| Bend Location: | 0.00 dec | Op Table: | | Op Table: | |
| Energy Switch: | Energy | Ref Node: | | Ref Node: | |
| | | Manning's N: | 0.0000 | Manning's N: | 0.0000 |

Comment:

## Simulation: 003YR001HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 12:24:28 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 721.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 99999.0000 | 15.0000 |

#### Restart File

Save Restart: False

Inputs

## Resources & Lookup Tables

| Resources | | Lookup Tables | |
|---|---|---|---|
| Rainfall Folder: | Icpr3 | Boundary Stage Set: | |
| | | Extern Hydrograph Set: | |
| Unit Hydrograph Folder: | ICPR3 | Curve Number Set: | |
| | | Green-Ampt Set: | |
| | | Vertical Layers Set: | |
| | | Impervious Set: | |

## Tolerances & Options

| | | | |
|---|---|---|---|
| Time Marching: | SAOR | IA Recovery Time: | 1.0000 hr |
| Max Iterations: | 6 | | |
| Over-Relax Weight Fact: | 0.5 dec | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-1 |
| | | Rainfall Amount: | 2.60 in |
| Edge Length Option: | Automatic | Storm Duration: | 1.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 003YR002HR

| | |
|---|---|
| Scenario: | Icpr3 |
| Run Date/Time: | 9/15/2023 12:33:53 PM |
| Program Version: | ICPR4 4.07.02 |

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 722.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

## Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 2.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FDOT-2

Rainfall Amount: 3.10 in

Storm Duration: 2.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 003YR004HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 12:44:19 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 724.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 4.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-4 |
| | | Rainfall Amount: | 3.60 in |
| Edge Length Option: | Automatic | Storm Duration: | 4.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 003YR008HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 12:55:16 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 728.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 4.30 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 003YR024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 1:06:38 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-24
Rainfall Amount: 5.80 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 003YR072HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 1:16:41 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 792.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 72.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-72 |
| | | Rainfall Amount: | 7.60 in |
| Edge Length Option: | Automatic | Storm Duration: | 72.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 005YR001HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 1:27:09 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 721.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

| | | | |
|---|---|---|---|
| Time Marching: | SAOR | IA Recovery Time: | 1.0000 hr |
| Max Iterations: | 6 | | |
| Over-Relax Weight Fact: | 0.5 dec | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-1 |
| | | Rainfall Amount: | 2.80 in |
| Edge Length Option: | Automatic | Storm Duration: | 1.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 005YR002HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 1:39:27 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 722.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 2.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-2
Rainfall Amount: 3.40 in
Storm Duration: 2.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 005YR004HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 1:48:58 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 724.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec

IA Recovery Time: 4.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-4 |
| | | Rainfall Amount: | 4.10 in |
| Edge Length Option: | Automatic | Storm Duration: | 4.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 005YR008HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 2:02:33 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 728.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

| | | | |
|---|---|---|---|
| Time Marching: | SAOR | IA Recovery Time: | 8.0000 hr |
| Max Iterations: | 6 | | |
| Over-Relax Weight Fact: | 0.5 dec | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-8 |
| | | Rainfall Amount: | 4.80 in |
| Edge Length Option: | Automatic | Storm Duration: | 8.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 005YR024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 2:12:19 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-24
Rainfall Amount: 6.50 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 005YR072HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 2:22:32 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 792.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec

IA Recovery Time: 72.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-72 |
| | | Rainfall Amount: | 8.00 in |
| Edge Length Option: | Automatic | Storm Duration: | 72.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 010YR001HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 2:33:03 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 721.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 99999.0000 | 15.0000 |

#### Restart File

Inputs

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 3.10 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 010YR002HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 2:42:33 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 722.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 2.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-2
Rainfall Amount: 3.80 in
Storm Duration: 2.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 010YR004HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 2:52:06 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 724.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 4.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-4 |
| | | Rainfall Amount: | 4.60 in |
| Edge Length Option: | Automatic | Storm Duration: | 4.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 010YR008HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 3:03:02 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 728.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

| | | | |
|---|---|---|---|
| Time Marching: | SAOR | IA Recovery Time: | 8.0000 hr |
| Max Iterations: | 6 | | |
| Over-Relax Weight Fact: | 0.5 dec | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-8 |
| | | Rainfall Amount: | 5.60 in |
| Edge Length Option: | Automatic | Storm Duration: | 8.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 010YR024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 3:12:44 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-24
Rainfall Amount: 7.60 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 010YR072HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 3:23:36 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 792.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 72.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-72 |
| | | Rainfall Amount: | 8.90 in |
| Edge Length Option: | Automatic | Storm Duration: | 72.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 025YR001HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 3:33:54 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 721.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 99999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 3.60 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 025YR002HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 3:44:08 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 722.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 2.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-2
Rainfall Amount: 4.30 in
Storm Duration: 2.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 025YR004HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 3:53:58 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 724.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 4.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-4 |
| | | Rainfall Amount: | 5.20 in |
| Edge Length Option: | Automatic | Storm Duration: | 4.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 025YR008HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 4:03:24 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 728.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

| | | | |
|---|---|---|---|
| Time Marching: | SAOR | IA Recovery Time: | 8.0000 hr |
| Max Iterations: | 6 | | |
| Over-Relax Weight Fact: | 0.5 dec | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-8 |
| | | Rainfall Amount: | 6.20 in |
| Edge Length Option: | Automatic | Storm Duration: | 8.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 025YR024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 4:13:09 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 60.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 5.0000 |
| 0 | 0 | 0 | 999999.0000 | 5.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: ICPR3

Unit Hydrograph Folder: ICPR3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-24
Rainfall Amount: 8.50 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 113 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 025YR072HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 4:28:29 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 792.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 72.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-72 |
| | | Rainfall Amount: | 11.00 in |
| Edge Length Option: | Automatic | Storm Duration: | 72.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 050YR001HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 4:39:04 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 721.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 99999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 4.00 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 050YR002HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 4:48:27 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 722.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 2.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-2
Rainfall Amount: 4.90 in
Storm Duration: 2.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 050YR004YR

Scenario: Icpr3
Run Date/Time: 9/15/2023 4:59:04 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 724.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec

IA Recovery Time: 4.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-4 |
| | | Rainfall Amount: | 5.80 in |
| Edge Length Option: | Automatic | Storm Duration: | 4.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 050YR008HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 5:08:59 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 728.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Inputs

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 8.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-8
Rainfall Amount: 7.00 in
Storm Duration: 8.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 050YR024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 5:18:28 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

## Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FDOT-24

Rainfall Amount: 9.60 in

Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 050YR072HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 5:28:25 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 792.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 72.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-72 |
| | | Rainfall Amount: | 12.00 in |
| Edge Length Option: | Automatic | Storm Duration: | 72.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 100YR001HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 5:38:39 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 721.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 99999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: ICPR3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 1.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-1
Rainfall Amount: 4.40 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 100YR002HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 5:48:02 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 722.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

## Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 2.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FDOT-2

Rainfall Amount: 5.40 in

Storm Duration: 2.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 100YR004YR

Scenario: Icpr3
Run Date/Time: 9/15/2023 5:58:02 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 724.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec

IA Recovery Time: 4.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-4 |
| | | Rainfall Amount: | 6.50 in |
| Edge Length Option: | Automatic | Storm Duration: | 4.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 100YR008HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 6:07:43 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 728.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

| | | | |
|---|---|---|---|
| Time Marching: | SAOR | IA Recovery Time: | 8.0000 hr |
| Max Iterations: | 6 | | |
| Over-Relax Weight Fact: | 0.5 dec | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-8 |
| | | Rainfall Amount: | 7.50 in |
| Edge Length Option: | Automatic | Storm Duration: | 8.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 100YR024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 6:17:33 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|

| | | Inputs |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FDOT-24
Rainfall Amount: 11.10 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Inputs

## Simulation: 100YR072HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 6:27:25 PM
Program Version: ICPR4 4.07.02

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 792.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3
Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 72.0000 hr

Inputs

| | | | |
|---|---|---|---|
| Fact: | | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~FDOT-72 |
| | | Rainfall Amount: | 13.80 in |
| Edge Length Option: | Automatic | Storm Duration: | 72.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: MN024HR

Scenario: Icpr3
Run Date/Time: 9/15/2023 6:37:51 PM
Program Version: ICPR4 4.07.02

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 744.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 9999999.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |
| 0 | 0 | 0 | 999999999.0000 | 15.0000 |

#### Restart File

Inputs

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder: Icpr3

Unit Hydrograph Folder: Icpr3

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 4.70 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] | |
|---|---|---|---|---|
| WQTV | smf-1a | 0.0000 | 13.70 | SMF-1a WQTV begin |
| WQTV | smf-1a | 0.2503 | 13.60 | |
| WQTV | smf-1a | 0.5010 | 13.49 | |
| WQTV | smf-1a | 0.7522 | 13.39 | |
| WQTV | smf-1a | 1.0013 | 13.32 | |
| WQTV | smf-1a | 1.2534 | 13.29 | |
| WQTV | smf-1a | 1.5063 | 13.26 | |
| WQTV | smf-1a | 1.7549 | 13.24 | |
| WQTV | smf-1a | 2.0038 | 13.23 | |
| WQTV | smf-1a | 2.2522 | 13.21 | |
| WQTV | smf-1a | 2.5005 | 13.20 | |
| WQTV | smf-1a | 2.7505 | 13.19 | |
| WQTV | smf-1a | 3.0005 | 13.18 | |
| WQTV | smf-1a | 3.2505 | 13.17 | |
| WQTV | smf-1a | 3.5005 | 13.16 | |
| WQTV | smf-1a | 3.7505 | 13.15 | |
| WQTV | smf-1a | 4.0005 | 13.14 | |
| WQTV | smf-1a | 4.2505 | 13.13 | |
| WQTV | smf-1a | 4.5005 | 13.12 | |
| WQTV | smf-1a | 4.7505 | 13.12 | |
| WQTV | smf-1a | 5.0005 | 13.11 | |
| WQTV | smf-1a | 5.2505 | 13.10 | |
| WQTV | smf-1a | 5.5005 | 13.10 | |
| WQTV | smf-1a | 5.7505 | 13.09 | |
| WQTV | smf-1a | 6.0005 | 13.08 | |
| WQTV | smf-1a | 6.2505 | 13.08 | |
| WQTV | smf-1a | 6.5005 | 13.07 | |
| WQTV | smf-1a | 6.7505 | 13.07 | |
| WQTV | smf-1a | 7.0005 | 13.06 | |
| WQTV | smf-1a | 7.2505 | 13.05 | |
| WQTV | smf-1a | 7.5005 | 13.05 | |
| WQTV | smf-1a | 7.7505 | 13.04 | |
| WQTV | smf-1a | 8.0005 | 13.04 | |
| WQTV | smf-1a | 8.2505 | 13.03 | |
| WQTV | smf-1a | 8.5005 | 13.03 | |
| WQTV | smf-1a | 8.7505 | 13.02 | |
| WQTV | smf-1a | 9.0005 | 13.02 | |
| WQTV | smf-1a | 9.2505 | 13.02 | |
| WQTV | smf-1a | 9.5005 | 13.01 | |
| WQTV | smf-1a | 9.7505 | 13.01 | |
| WQTV | smf-1a | 10.0005 | 13.00 | |
| WQTV | smf-1a | 10.2505 | 13.00 | |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-1a | 10.5005 | 12.99 |
| WQTV | smf-1a | 10.7505 | 12.99 |
| WQTV | smf-1a | 11.0005 | 12.98 |
| WQTV | smf-1a | 11.2505 | 12.98 |
| WQTV | smf-1a | 11.5005 | 12.98 |
| WQTV | smf-1a | 11.7505 | 12.97 |
| WQTV | smf-1a | 12.0005 | 12.97 |
| WQTV | smf-1a | 12.2505 | 12.96 |
| WQTV | smf-1a | 12.5005 | 12.96 |
| WQTV | smf-1a | 12.7505 | 12.95 |
| WQTV | smf-1a | 13.0005 | 12.95 |
| WQTV | smf-1a | 13.2505 | 12.95 |
| WQTV | smf-1a | 13.5005 | 12.94 |
| WQTV | smf-1a | 13.7505 | 12.94 |
| WQTV | smf-1a | 14.0005 | 12.93 |
| WQTV | smf-1a | 14.2505 | 12.93 |
| WQTV | smf-1a | 14.5005 | 12.92 |
| WQTV | smf-1a | 14.7505 | 12.92 |
| WQTV | smf-1a | 15.0005 | 12.92 |
| WQTV | smf-1a | 15.2505 | 12.91 |
| WQTV | smf-1a | 15.5005 | 12.91 |
| WQTV | smf-1a | 15.7505 | 12.90 |
| WQTV | smf-1a | 16.0005 | 12.90 |
| WQTV | smf-1a | 16.2505 | 12.89 |
| WQTV | smf-1a | 16.5005 | 12.89 |
| WQTV | smf-1a | 16.7505 | 12.88 |
| WQTV | smf-1a | 17.0005 | 12.88 |
| WQTV | smf-1a | 17.2505 | 12.87 |
| WQTV | smf-1a | 17.5005 | 12.87 |
| WQTV | smf-1a | 17.7505 | 12.86 |
| WQTV | smf-1a | 18.0005 | 12.86 |
| WQTV | smf-1a | 18.2505 | 12.85 |
| WQTV | smf-1a | 18.5005 | 12.85 |
| WQTV | smf-1a | 18.7505 | 12.85 |
| WQTV | smf-1a | 19.0005 | 12.84 |
| WQTV | smf-1a | 19.2505 | 12.84 |
| WQTV | smf-1a | 19.5005 | 12.83 |
| WQTV | smf-1a | 19.7505 | 12.83 |
| WQTV | smf-1a | 20.0005 | 12.82 |
| WQTV | smf-1a | 20.2505 | 12.82 |
| WQTV | smf-1a | 20.5005 | 12.82 |
| WQTV | smf-1a | 20.7505 | 12.81 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-1a | 21.0005 | 12.81 |
| WQTV | smf-1a | 21.2505 | 12.80 |
| WQTV | smf-1a | 21.5005 | 12.80 |
| WQTV | smf-1a | 21.7505 | 12.80 |
| WQTV | smf-1a | 22.0005 | 12.79 |
| WQTV | smf-1a | 22.2505 | 12.79 |
| WQTV | smf-1a | 22.5005 | 12.78 |
| WQTV | smf-1a | 22.7505 | 12.78 |
| WQTV | smf-1a | 23.0005 | 12.78 |
| WQTV | smf-1a | 23.2505 | 12.77 |
| WQTV | smf-1a | 23.5005 | 12.77 |
| WQTV | smf-1a | 23.7505 | 12.77 |
| WQTV | smf-1a | 24.0005 | 12.76 |
| WQTV | smf-1a | 24.2505 | 12.76 |
| WQTV | smf-1a | 24.5005 | 12.76 |
| WQTV | smf-1a | 24.7505 | 12.75 |
| WQTV | smf-1a | 25.0005 | 12.75 |
| WQTV | smf-1a | 25.2505 | 12.75 |
| WQTV | smf-1a | 25.5005 | 12.74 |
| WQTV | smf-1a | 25.7505 | 12.74 |
| WQTV | smf-1a | 26.0005 | 12.74 |
| WQTV | smf-1a | 26.2505 | 12.73 |
| WQTV | smf-1a | 26.5005 | 12.73 |
| WQTV | smf-1a | 26.7505 | 12.73 |
| WQTV | smf-1a | 27.0005 | 12.72 |
| WQTV | smf-1a | 27.2505 | 12.72 |
| WQTV | smf-1a | 27.5005 | 12.72 |
| WQTV | smf-1a | 27.7505 | 12.71 |
| WQTV | smf-1a | 28.0005 | 12.71 |
| WQTV | smf-1a | 28.2505 | 12.71 |
| WQTV | smf-1a | 28.5005 | 12.71 |
| WQTV | smf-1a | 28.7505 | 12.70 |
| WQTV | smf-1a | 29.0005 | 12.70 |
| WQTV | smf-1a | 29.2505 | 12.70 |
| WQTV | smf-1a | 29.5005 | 12.70 |
| WQTV | smf-1a | 29.7505 | 12.69 |
| WQTV | smf-1a | 30.0005 | 12.69 |
| WQTV | smf-1a | 30.2505 | 12.69 |
| WQTV | smf-1a | 30.5005 | 12.68 |
| WQTV | smf-1a | 30.7505 | 12.68 |
| WQTV | smf-1a | 31.0005 | 12.68 |
| WQTV | smf-1a | 31.2505 | 12.68 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-1a | 31.5005 | 12.67 |
| WQTV | smf-1a | 31.7505 | 12.67 |
| WQTV | smf-1a | 32.0005 | 12.67 |
| WQTV | smf-1a | 32.2505 | 12.67 |
| WQTV | smf-1a | 32.5005 | 12.66 |
| WQTV | smf-1a | 32.7505 | 12.66 |
| WQTV | smf-1a | 33.0005 | 12.66 |
| WQTV | smf-1a | 33.2505 | 12.66 |
| WQTV | smf-1a | 33.5005 | 12.65 |
| WQTV | smf-1a | 33.7505 | 12.65 |
| WQTV | smf-1a | 34.0005 | 12.65 |
| WQTV | smf-1a | 34.2505 | 12.65 |
| WQTV | smf-1a | 34.5005 | 12.65 |
| WQTV | smf-1a | 34.7505 | 12.64 |
| WQTV | smf-1a | 35.0005 | 12.64 |
| WQTV | smf-1a | 35.2505 | 12.64 |
| WQTV | smf-1a | 35.5005 | 12.64 |
| WQTV | smf-1a | 35.7505 | 12.63 |
| WQTV | smf-1a | 36.0005 | 12.63 |
| WQTV | smf-1a | 36.2505 | 12.63 |
| WQTV | smf-1a | 36.5005 | 12.63 |
| WQTV | smf-1a | 36.7505 | 12.62 |
| WQTV | smf-1a | 37.0005 | 12.62 |
| WQTV | smf-1a | 37.2505 | 12.62 |
| WQTV | smf-1a | 37.5005 | 12.62 |
| WQTV | smf-1a | 37.7505 | 12.62 |
| WQTV | smf-1a | 38.0005 | 12.61 |
| WQTV | smf-1a | 38.2505 | 12.61 |
| WQTV | smf-1a | 38.5005 | 12.61 |
| WQTV | smf-1a | 38.7505 | 12.61 |
| WQTV | smf-1a | 39.0005 | 12.61 |
| WQTV | smf-1a | 39.2505 | 12.60 |
| WQTV | smf-1a | 39.5005 | 12.60 |
| WQTV | smf-1a | 39.7505 | 12.60 |
| WQTV | smf-1a | 40.0005 | 12.60 |
| WQTV | smf-1a | 40.2505 | 12.60 |
| WQTV | smf-1a | 40.5005 | 12.59 |
| WQTV | smf-1a | 40.7505 | 12.59 |
| WQTV | smf-1a | 41.0005 | 12.59 |
| WQTV | smf-1a | 41.2505 | 12.59 |
| WQTV | smf-1a | 41.5005 | 12.59 |
| WQTV | smf-1a | 41.7505 | 12.58 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-1a | 42.0005 | 12.58 |
| WQTV | smf-1a | 42.2505 | 12.58 |
| WQTV | smf-1a | 42.5005 | 12.58 |
| WQTV | smf-1a | 42.7505 | 12.58 |
| WQTV | smf-1a | 43.0005 | 12.57 |
| WQTV | smf-1a | 43.2505 | 12.57 |
| WQTV | smf-1a | 43.5005 | 12.57 |
| WQTV | smf-1a | 43.7505 | 12.57 |
| WQTV | smf-1a | 44.0005 | 12.57 |
| WQTV | smf-1a | 44.2505 | 12.57 |
| WQTV | smf-1a | 44.5005 | 12.56 |
| WQTV | smf-1a | 44.7505 | 12.56 |
| WQTV | smf-1a | 45.0005 | 12.56 |
| WQTV | smf-1a | 45.2505 | 12.56 |
| WQTV | smf-1a | 45.5005 | 12.56 |
| WQTV | smf-1a | 45.7505 | 12.55 |
| WQTV | smf-1a | 46.0005 | 12.55 |
| WQTV | smf-1a | 46.2505 | 12.55 |
| WQTV | smf-1a | 46.5005 | 12.55 |
| WQTV | smf-1a | 46.7505 | 12.55 |
| WQTV | smf-1a | 47.0005 | 12.55 |
| WQTV | smf-1a | 47.2505 | 12.54 |
| WQTV | smf-1a | 47.5005 | 12.54 |
| WQTV | smf-1a | 47.7505 | 12.54 |
| WQTV | smf-1a | 48.0005 | 12.54 |
| WQTV | smf-1a | 48.2505 | 12.54 |
| WQTV | smf-1a | 48.5005 | 12.54 |
| WQTV | smf-1a | 48.7505 | 12.54 |
| WQTV | smf-1a | 49.0005 | 12.53 |
| WQTV | smf-1a | 49.2505 | 12.53 |
| WQTV | smf-1a | 49.5005 | 12.53 |
| WQTV | smf-1a | 49.7505 | 12.53 |
| WQTV | smf-1a | 50.0005 | 12.53 |
| WQTV | smf-1a | 50.2505 | 12.53 |
| WQTV | smf-1a | 50.5005 | 12.52 |
| WQTV | smf-1a | 50.7505 | 12.52 |
| WQTV | smf-1a | 51.0005 | 12.52 |
| WQTV | smf-1a | 51.2505 | 12.52 |
| WQTV | smf-1a | 51.5005 | 12.52 |
| WQTV | smf-1a | 51.7505 | 12.52 |
| WQTV | smf-1a | 52.0005 | 12.52 |
| WQTV | smf-1a | 52.2505 | 12.51 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-1a | 52.5005 | 12.51 |
| WQTV | smf-1a | 52.7505 | 12.51 |
| WQTV | smf-1a | 53.0005 | 12.51 |
| WQTV | smf-1a | 53.2505 | 12.51 |
| WQTV | smf-1a | 53.5005 | 12.51 |
| WQTV | smf-1a | 53.7505 | 12.51 |
| WQTV | smf-1a | 54.0005 | 12.50 |
| WQTV | smf-1a | 54.2505 | 12.50 |
| WQTV | smf-1a | 54.5005 | 12.50 |
| WQTV | smf-1a | 54.7505 | 12.50 |
| WQTV | smf-1a | 55.0005 | 12.50 |
| WQTV | smf-1a | 55.2505 | 12.50 |
| WQTV | smf-1a | 55.5005 | 12.50 |
| WQTV | smf-1a | 55.7505 | 12.49 |
| WQTV | smf-1a | 56.0005 | 12.49 |
| WQTV | smf-1a | 56.2505 | 12.49 |
| WQTV | smf-1a | 56.5005 | 12.49 |
| WQTV | smf-1a | 56.7505 | 12.49 |
| WQTV | smf-1a | 57.0005 | 12.49 |
| WQTV | smf-1a | 57.2505 | 12.49 |
| WQTV | smf-1a | 57.5005 | 12.49 |
| WQTV | smf-1a | 57.7505 | 12.48 |
| WQTV | smf-1a | 58.0005 | 12.48 |
| WQTV | smf-1a | 58.2505 | 12.48 |
| WQTV | smf-1a | 58.5005 | 12.48 |
| WQTV | smf-1a | 58.7505 | 12.48 |
| WQTV | smf-1a | 59.0005 | 12.48 |
| WQTV | smf-1a | 59.2505 | 12.48 |
| WQTV | smf-1a | 59.5005 | 12.48 |
| WQTV | smf-1a | 59.7505 | 12.48 |
| WQTV | smf-1a | 60.0005 | 12.47 |
| WQTV | smf-1a | 60.2505 | 12.47 |
| WQTV | smf-1a | 60.5005 | 12.47 |
| WQTV | smf-1a | 60.7505 | 12.47 |
| WQTV | smf-1a | 61.0005 | 12.47 |
| WQTV | smf-1a | 61.2505 | 12.47 |
| WQTV | smf-1a | 61.5005 | 12.47 |
| WQTV | smf-1a | 61.7505 | 12.47 |
| WQTV | smf-1a | 62.0005 | 12.47 |
| WQTV | smf-1a | 62.2505 | 12.46 |
| WQTV | smf-1a | 62.5005 | 12.46 |
| WQTV | smf-1a | 62.7505 | 12.46 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] | |
|---|---|---|---|---|
| WQTV | smf-1a | 63.0005 | 12.46 | |
| WQTV | smf-1a | 63.2505 | 12.46 | |
| WQTV | smf-1a | 63.5005 | 12.46 | |
| WQTV | smf-1a | 63.7505 | 12.46 | |
| WQTV | smf-1a | 64.0005 | 12.46 | |
| WQTV | smf-1a | 64.2505 | 12.46 | |
| WQTV | smf-1a | 64.5005 | 12.45 | SMF-1a WQTV end |
| WQTV | smf-1a | 64.7505 | 12.45 | |
| WQTV | smf-1a | 65.0005 | 12.45 | |
| WQTV | smf-1a | 65.2505 | 12.45 | |
| WQTV | smf-1a | 65.5005 | 12.45 | |
| WQTV | smf-1a | 65.7505 | 12.45 | |
| WQTV | smf-1a | 66.0005 | 12.45 | |
| WQTV | smf-1a | 66.2505 | 12.45 | |
| WQTV | smf-1a | 66.5005 | 12.45 | |
| WQTV | smf-1a | 66.7505 | 12.45 | |
| WQTV | smf-1a | 67.0005 | 12.45 | |
| WQTV | smf-1a | 67.2505 | 12.45 | |
| WQTV | smf-1a | 67.5005 | 12.45 | |
| WQTV | smf-1a | 67.7505 | 12.45 | |
| WQTV | smf-1a | 68.0005 | 12.45 | |
| WQTV | smf-1a | 68.2505 | 12.45 | |
| WQTV | smf-1a | 68.5005 | 12.45 | |
| WQTV | smf-1a | 68.7505 | 12.45 | |
| WQTV | smf-1a | 69.0005 | 12.45 | |
| WQTV | smf-1a | 69.2505 | 12.45 | |
| WQTV | smf-1a | 69.5005 | 12.45 | |
| WQTV | smf-1a | 69.7505 | 12.45 | |
| WQTV | smf-1a | 70.0005 | 12.45 | |
| WQTV | smf-1a | 70.2505 | 12.45 | |
| WQTV | smf-1a | 70.5005 | 12.45 | |
| WQTV | smf-1a | 70.7505 | 12.45 | |
| WQTV | smf-1a | 71.0005 | 12.45 | |
| WQTV | smf-1a | 71.2505 | 12.45 | |
| WQTV | smf-1a | 71.5005 | 12.45 | |
| WQTV | smf-1a | 71.7505 | 12.45 | |
| WQTV | smf-1a | 72.0005 | 12.45 | |
| WQTV | smf-1a | 72.2505 | 12.45 | |
| WQTV | smf-1a | 72.5005 | 12.45 | |
| WQTV | smf-1a | 72.7505 | 12.45 | |
| WQTV | smf-1a | 73.0005 | 12.45 | |
| WQTV | smf-1a | 73.2505 | 12.45 | |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] | |
|---|---|---|---|---|
| WQTV | smf-1a | 73.5005 | 12.45 | |
| WQTV | smf-1a | 73.7505 | 12.45 | |
| WQTV | smf-1a | 74.0005 | 12.45 | |
| WQTV | smf-1a | 74.2505 | 12.45 | |
| WQTV | smf-1a | 74.5005 | 12.45 | |
| WQTV | smf-1a | 74.7505 | 12.45 | |
| WQTV | smf-1a | 75.0005 | 12.45 | |
| WQTV | smf-1a | 75.2505 | 12.45 | |
| WQTV | smf-1a | 75.5005 | 12.45 | |
| WQTV | smf-1a | 75.7505 | 12.45 | |
| WQTV | smf-1a | 76.0005 | 12.45 | |
| WQTV | smf-1a | 76.2505 | 12.45 | |
| WQTV | smf-1a | 76.5005 | 12.45 | |
| WQTV | smf-1a | 76.7505 | 12.45 | |
| WQTV | smf-1a | 77.0005 | 12.45 | |
| WQTV | smf-1a | 77.2505 | 12.45 | |
| WQTV | smf-1a | 77.5005 | 12.45 | |
| WQTV | smf-1a | 77.7505 | 12.45 | |
| WQTV | smf-1a | 78.0005 | 12.45 | |
| WQTV | smf-1a | 78.2505 | 12.45 | |
| WQTV | smf-1a | 78.5005 | 12.45 | |
| WQTV | smf-1a | 78.7505 | 12.45 | |
| WQTV | smf-1a | 79.0005 | 12.45 | |
| WQTV | smf-1a | 79.2505 | 12.45 | |
| WQTV | smf-1a | 79.5005 | 12.45 | |
| WQTV | smf-1a | 79.7505 | 12.45 | |
| WQTV | smf-1a | 80.0005 | 12.45 | |
| WQTV | smf-1b | 0.0000 | 14.00 | SMF-1b WQTV begin |
| WQTV | smf-1b | 0.2503 | 13.90 | |
| WQTV | smf-1b | 0.5010 | 13.79 | |
| WQTV | smf-1b | 0.7522 | 13.69 | |
| WQTV | smf-1b | 1.0013 | 13.60 | |
| WQTV | smf-1b | 1.2534 | 13.55 | |
| WQTV | smf-1b | 1.5063 | 13.51 | |
| WQTV | smf-1b | 1.7549 | 13.48 | |
| WQTV | smf-1b | 2.0038 | 13.45 | |
| WQTV | smf-1b | 2.2522 | 13.41 | |
| WQTV | smf-1b | 2.5005 | 13.38 | |
| WQTV | smf-1b | 2.7505 | 13.36 | |
| WQTV | smf-1b | 3.0005 | 13.33 | |
| WQTV | smf-1b | 3.2505 | 13.31 | |
| WQTV | smf-1b | 3.5005 | 13.29 | |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] | |
|---|---|---|---|---|
| WQTV | smf-1b | 3.7505 | 13.27 | |
| WQTV | smf-1b | 4.0005 | 13.26 | |
| WQTV | smf-1b | 4.2505 | 13.24 | |
| WQTV | smf-1b | 4.5005 | 13.23 | |
| WQTV | smf-1b | 4.7505 | 13.21 | |
| WQTV | smf-1b | 5.0005 | 13.20 | |
| WQTV | smf-1b | 5.2505 | 13.18 | |
| WQTV | smf-1b | 5.5005 | 13.17 | |
| WQTV | smf-1b | 5.7505 | 13.16 | |
| WQTV | smf-1b | 6.0005 | 13.15 | |
| WQTV | smf-1b | 6.2505 | 13.14 | |
| WQTV | smf-1b | 6.5005 | 13.12 | |
| WQTV | smf-1b | 6.7505 | 13.11 | |
| WQTV | smf-1b | 7.0005 | 13.10 | |
| WQTV | smf-1b | 7.2505 | 13.09 | |
| WQTV | smf-1b | 7.5005 | 13.09 | |
| WQTV | smf-1b | 7.7505 | 13.08 | |
| WQTV | smf-1b | 8.0005 | 13.07 | |
| WQTV | smf-1b | 8.2505 | 13.06 | |
| WQTV | smf-1b | 8.5005 | 13.05 | |
| WQTV | smf-1b | 8.7505 | 13.04 | |
| WQTV | smf-1b | 9.0005 | 13.04 | |
| WQTV | smf-1b | 9.2505 | 13.03 | |
| WQTV | smf-1b | 9.5005 | 13.02 | |
| WQTV | smf-1b | 9.7505 | 13.02 | |
| WQTV | smf-1b | 10.0005 | 13.01 | |
| WQTV | smf-1b | 10.2505 | 13.00 | SMF-1b WQTV end |
| WQTV | smf-1b | 10.5005 | 13.00 | |
| WQTV | smf-1b | 10.7505 | 13.00 | |
| WQTV | smf-1b | 11.0005 | 13.00 | |
| WQTV | smf-1b | 11.2505 | 13.00 | |
| WQTV | smf-1b | 11.5005 | 13.00 | |
| WQTV | smf-1b | 11.7505 | 13.00 | |
| WQTV | smf-1b | 12.0005 | 13.00 | |
| WQTV | smf-1b | 12.2505 | 13.00 | |
| WQTV | smf-1b | 12.5005 | 13.00 | |
| WQTV | smf-1b | 12.7505 | 13.00 | |
| WQTV | smf-1b | 13.0005 | 13.00 | |
| WQTV | smf-1b | 13.2505 | 13.00 | |
| WQTV | smf-1b | 13.5005 | 13.00 | |
| WQTV | smf-1b | 13.7505 | 13.00 | |
| WQTV | smf-1b | 14.0005 | 13.00 | |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] | |
|---|---|---|---|---|
| WQTV | smf-1b | 77.2505 | 13.00 | |
| WQTV | smf-1b | 77.5005 | 13.00 | |
| WQTV | smf-1b | 77.7505 | 13.00 | |
| WQTV | smf-1b | 78.0005 | 13.00 | |
| WQTV | smf-1b | 78.2505 | 13.00 | |
| WQTV | smf-1b | 78.5005 | 13.00 | |
| WQTV | smf-1b | 78.7505 | 13.00 | |
| WQTV | smf-1b | 79.0005 | 13.00 | |
| WQTV | smf-1b | 79.2505 | 13.00 | |
| WQTV | smf-1b | 79.5005 | 13.00 | |
| WQTV | smf-1b | 79.7505 | 13.00 | |
| WQTV | smf-1b | 80.0005 | 13.00 | |
| WQTV | smf-2a | 0.0000 | 12.77 | SMF-2a WQTV begin |
| WQTV | smf-2a | 0.2503 | 12.67 | |
| WQTV | smf-2a | 0.5010 | 12.57 | |
| WQTV | smf-2a | 0.7522 | 12.50 | |
| WQTV | smf-2a | 1.0013 | 12.46 | |
| WQTV | smf-2a | 1.2534 | 12.43 | |
| WQTV | smf-2a | 1.5063 | 12.40 | |
| WQTV | smf-2a | 1.7549 | 12.38 | |
| WQTV | smf-2a | 2.0038 | 12.37 | |
| WQTV | smf-2a | 2.2522 | 12.35 | |
| WQTV | smf-2a | 2.5005 | 12.34 | |
| WQTV | smf-2a | 2.7505 | 12.33 | |
| WQTV | smf-2a | 3.0005 | 12.32 | |
| WQTV | smf-2a | 3.2505 | 12.30 | |
| WQTV | smf-2a | 3.5005 | 12.29 | |
| WQTV | smf-2a | 3.7505 | 12.28 | |
| WQTV | smf-2a | 4.0005 | 12.27 | |
| WQTV | smf-2a | 4.2505 | 12.27 | |
| WQTV | smf-2a | 4.5005 | 12.26 | |
| WQTV | smf-2a | 4.7505 | 12.25 | |
| WQTV | smf-2a | 5.0005 | 12.24 | |
| WQTV | smf-2a | 5.2505 | 12.23 | |
| WQTV | smf-2a | 5.5005 | 12.23 | |
| WQTV | smf-2a | 5.7505 | 12.22 | |
| WQTV | smf-2a | 6.0005 | 12.21 | |
| WQTV | smf-2a | 6.2505 | 12.21 | |
| WQTV | smf-2a | 6.5005 | 12.20 | |
| WQTV | smf-2a | 6.7505 | 12.19 | |
| WQTV | smf-2a | 7.0005 | 12.19 | |
| WQTV | smf-2a | 7.2505 | 12.18 | |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] | |
|---|---|---|---|---|
| WQTV | smf-2a | 7.5005 | 12.18 | |
| WQTV | smf-2a | 7.7505 | 12.17 | |
| WQTV | smf-2a | 8.0005 | 12.16 | |
| WQTV | smf-2a | 8.2505 | 12.16 | |
| WQTV | smf-2a | 8.5005 | 12.15 | |
| WQTV | smf-2a | 8.7505 | 12.15 | |
| WQTV | smf-2a | 9.0005 | 12.14 | |
| WQTV | smf-2a | 9.2505 | 12.14 | |
| WQTV | smf-2a | 9.5005 | 12.14 | |
| WQTV | smf-2a | 9.7505 | 12.13 | |
| WQTV | smf-2a | 10.0005 | 12.13 | |
| WQTV | smf-2a | 10.2505 | 12.12 | |
| WQTV | smf-2a | 10.5005 | 12.12 | |
| WQTV | smf-2a | 10.7505 | 12.12 | |
| WQTV | smf-2a | 11.0005 | 12.11 | |
| WQTV | smf-2a | 11.2505 | 12.11 | |
| WQTV | smf-2a | 11.5005 | 12.10 | SMF-2a WQTV end |
| WQTV | smf-2a | 11.7505 | 12.10 | |
| WQTV | smf-2a | 12.0005 | 12.10 | |
| WQTV | smf-2a | 12.2505 | 12.10 | |
| WQTV | smf-2a | 12.5005 | 12.10 | |
| WQTV | smf-2a | 12.7505 | 12.10 | |
| WQTV | smf-2a | 13.0005 | 12.10 | |
| WQTV | smf-2a | 13.2505 | 12.10 | |
| WQTV | smf-2a | 13.5005 | 12.10 | |
| WQTV | smf-2a | 13.7505 | 12.10 | |
| WQTV | smf-2a | 14.0005 | 12.10 | |
| WQTV | smf-2a | 14.2505 | 12.10 | |
| WQTV | smf-2a | 14.5005 | 12.10 | |
| WQTV | smf-2a | 14.7505 | 12.10 | |
| WQTV | smf-2a | 15.0005 | 12.10 | |
| WQTV | smf-2a | 15.2505 | 12.10 | |
| WQTV | smf-2a | 15.5005 | 12.10 | |
| WQTV | smf-2a | 15.7505 | 12.10 | |
| WQTV | smf-2a | 16.0005 | 12.10 | |
| WQTV | smf-2a | 16.2505 | 12.10 | |
| WQTV | smf-2a | 16.5005 | 12.10 | |
| WQTV | smf-2a | 16.7505 | 12.10 | |
| WQTV | smf-2a | 17.0005 | 12.10 | |
| WQTV | smf-2a | 17.2505 | 12.10 | |
| WQTV | smf-2a | 17.5005 | 12.10 | |
| WQTV | smf-2a | 17.7505 | 12.10 | |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] | |
|---|---|---|---|---|
| WQTV | smf-2a | 70.5005 | 12.10 | |
| WQTV | smf-2a | 70.7505 | 12.10 | |
| WQTV | smf-2a | 71.0005 | 12.10 | |
| WQTV | smf-2a | 71.2505 | 12.10 | |
| WQTV | smf-2a | 71.5005 | 12.10 | |
| WQTV | smf-2a | 71.7505 | 12.10 | |
| WQTV | smf-2a | 72.0005 | 12.10 | |
| WQTV | smf-2a | 72.2505 | 12.10 | |
| WQTV | smf-2a | 72.5005 | 12.10 | |
| WQTV | smf-2a | 72.7505 | 12.10 | |
| WQTV | smf-2a | 73.0005 | 12.10 | |
| WQTV | smf-2a | 73.2505 | 12.10 | |
| WQTV | smf-2a | 73.5005 | 12.10 | |
| WQTV | smf-2a | 73.7505 | 12.10 | |
| WQTV | smf-2a | 74.0005 | 12.10 | |
| WQTV | smf-2a | 74.2505 | 12.10 | |
| WQTV | smf-2a | 74.5005 | 12.10 | |
| WQTV | smf-2a | 74.7505 | 12.10 | |
| WQTV | smf-2a | 75.0005 | 12.10 | |
| WQTV | smf-2a | 75.2505 | 12.10 | |
| WQTV | smf-2a | 75.5005 | 12.10 | |
| WQTV | smf-2a | 75.7505 | 12.10 | |
| WQTV | smf-2a | 76.0005 | 12.10 | |
| WQTV | smf-2a | 76.2505 | 12.10 | |
| WQTV | smf-2a | 76.5005 | 12.10 | |
| WQTV | smf-2a | 76.7505 | 12.10 | |
| WQTV | smf-2a | 77.0005 | 12.10 | |
| WQTV | smf-2a | 77.2505 | 12.10 | |
| WQTV | smf-2a | 77.5005 | 12.10 | |
| WQTV | smf-2a | 77.7505 | 12.10 | |
| WQTV | smf-2a | 78.0005 | 12.10 | |
| WQTV | smf-2a | 78.2505 | 12.10 | |
| WQTV | smf-2a | 78.5005 | 12.10 | |
| WQTV | smf-2a | 78.7505 | 12.10 | |
| WQTV | smf-2a | 79.0005 | 12.10 | |
| WQTV | smf-2a | 79.2505 | 12.10 | |
| WQTV | smf-2a | 79.5005 | 12.10 | |
| WQTV | smf-2a | 79.7505 | 12.10 | |
| WQTV | smf-2a | 80.0005 | 12.10 | |
| WQTV | smf-2b | 0.0000 | 12.77 | SMF-2b WQTV begin |
| WQTV | smf-2b | 0.2503 | 12.67 | |
| WQTV | smf-2b | 0.5010 | 12.57 | |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-2b | 0.7522 | 12.47 |
| WQTV | smf-2b | 1.0013 | 12.39 |
| WQTV | smf-2b | 1.2534 | 12.33 |
| WQTV | smf-2b | 1.5063 | 12.30 |
| WQTV | smf-2b | 1.7549 | 12.27 |
| WQTV | smf-2b | 2.0038 | 12.24 |
| WQTV | smf-2b | 2.2522 | 12.22 |
| WQTV | smf-2b | 2.5005 | 12.20 |
| WQTV | smf-2b | 2.7505 | 12.19 |
| WQTV | smf-2b | 3.0005 | 12.17 |
| WQTV | smf-2b | 3.2505 | 12.16 |
| WQTV | smf-2b | 3.5005 | 12.15 |
| WQTV | smf-2b | 3.7505 | 12.13 |
| WQTV | smf-2b | 4.0005 | 12.12 |
| WQTV | smf-2b | 4.2505 | 12.11 |
| WQTV | smf-2b | 4.5005 | 12.10 |
| WQTV | smf-2b | 4.7505 | 12.09 |
| WQTV | smf-2b | 5.0005 | 12.08 |
| WQTV | smf-2b | 5.2505 | 12.07 |
| WQTV | smf-2b | 5.5005 | 12.06 |
| WQTV | smf-2b | 5.7505 | 12.06 |
| WQTV | smf-2b | 6.0005 | 12.05 |
| WQTV | smf-2b | 6.2505 | 12.04 |
| WQTV | smf-2b | 6.5005 | 12.03 |
| WQTV | smf-2b | 6.7505 | 12.02 |
| WQTV | smf-2b | 7.0005 | 12.02 |
| WQTV | smf-2b | 7.2505 | 12.01 |
| WQTV | smf-2b | 7.5005 | 12.00 |
| WQTV | smf-2b | 7.7505 | 12.00 |
| WQTV | smf-2b | 8.0005 | 11.99 |
| WQTV | smf-2b | 8.2505 | 11.98 |
| WQTV | smf-2b | 8.5005 | 11.98 |
| WQTV | smf-2b | 8.7505 | 11.97 |
| WQTV | smf-2b | 9.0005 | 11.96 |
| WQTV | smf-2b | 9.2505 | 11.96 |
| WQTV | smf-2b | 9.5005 | 11.95 |
| WQTV | smf-2b | 9.7505 | 11.95 |
| WQTV | smf-2b | 10.0005 | 11.94 |
| WQTV | smf-2b | 10.2505 | 11.93 |
| WQTV | smf-2b | 10.5005 | 11.93 |
| WQTV | smf-2b | 10.7505 | 11.92 |
| WQTV | smf-2b | 11.0005 | 11.92 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-2b | 11.2505 | 11.91 |
| WQTV | smf-2b | 11.5005 | 11.90 |
| WQTV | smf-2b | 11.7505 | 11.90 |
| WQTV | smf-2b | 12.0005 | 11.89 |
| WQTV | smf-2b | 12.2505 | 11.89 |
| WQTV | smf-2b | 12.5005 | 11.88 |
| WQTV | smf-2b | 12.7505 | 11.88 |
| WQTV | smf-2b | 13.0005 | 11.87 |
| WQTV | smf-2b | 13.2505 | 11.86 |
| WQTV | smf-2b | 13.5005 | 11.86 |
| WQTV | smf-2b | 13.7505 | 11.85 |
| WQTV | smf-2b | 14.0005 | 11.85 |
| WQTV | smf-2b | 14.2505 | 11.84 |
| WQTV | smf-2b | 14.5005 | 11.83 |
| WQTV | smf-2b | 14.7505 | 11.83 |
| WQTV | smf-2b | 15.0005 | 11.82 |
| WQTV | smf-2b | 15.2505 | 11.81 |
| WQTV | smf-2b | 15.5005 | 11.81 |
| WQTV | smf-2b | 15.7505 | 11.80 |
| WQTV | smf-2b | 16.0005 | 11.80 |
| WQTV | smf-2b | 16.2505 | 11.79 |
| WQTV | smf-2b | 16.5005 | 11.78 |
| WQTV | smf-2b | 16.7505 | 11.78 |
| WQTV | smf-2b | 17.0005 | 11.77 |
| WQTV | smf-2b | 17.2505 | 11.77 |
| WQTV | smf-2b | 17.5005 | 11.76 |
| WQTV | smf-2b | 17.7505 | 11.76 |
| WQTV | smf-2b | 18.0005 | 11.75 |
| WQTV | smf-2b | 18.2505 | 11.74 |
| WQTV | smf-2b | 18.5005 | 11.74 |
| WQTV | smf-2b | 18.7505 | 11.73 |
| WQTV | smf-2b | 19.0005 | 11.73 |
| WQTV | smf-2b | 19.2505 | 11.72 |
| WQTV | smf-2b | 19.5005 | 11.72 |
| WQTV | smf-2b | 19.7505 | 11.72 |
| WQTV | smf-2b | 20.0005 | 11.71 |
| WQTV | smf-2b | 20.2505 | 11.71 |
| WQTV | smf-2b | 20.5005 | 11.70 |
| WQTV | smf-2b | 20.7505 | 11.70 |
| WQTV | smf-2b | 21.0005 | 11.69 |
| WQTV | smf-2b | 21.2505 | 11.69 |
| WQTV | smf-2b | 21.5005 | 11.68 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-2b | 21.7505 | 11.68 |
| WQTV | smf-2b | 22.0005 | 11.68 |
| WQTV | smf-2b | 22.2505 | 11.67 |
| WQTV | smf-2b | 22.5005 | 11.67 |
| WQTV | smf-2b | 22.7505 | 11.66 |
| WQTV | smf-2b | 23.0005 | 11.66 |
| WQTV | smf-2b | 23.2505 | 11.66 |
| WQTV | smf-2b | 23.5005 | 11.65 |
| WQTV | smf-2b | 23.7505 | 11.65 |
| WQTV | smf-2b | 24.0005 | 11.64 |
| WQTV | smf-2b | 24.2505 | 11.64 |
| WQTV | smf-2b | 24.5005 | 11.64 |
| WQTV | smf-2b | 24.7505 | 11.63 |
| WQTV | smf-2b | 25.0005 | 11.63 |
| WQTV | smf-2b | 25.2505 | 11.63 |
| WQTV | smf-2b | 25.5005 | 11.62 |
| WQTV | smf-2b | 25.7505 | 11.62 |
| WQTV | smf-2b | 26.0005 | 11.62 |
| WQTV | smf-2b | 26.2505 | 11.61 |
| WQTV | smf-2b | 26.5005 | 11.61 |
| WQTV | smf-2b | 26.7505 | 11.61 |
| WQTV | smf-2b | 27.0005 | 11.60 |
| WQTV | smf-2b | 27.2505 | 11.60 |
| WQTV | smf-2b | 27.5005 | 11.60 |
| WQTV | smf-2b | 27.7505 | 11.59 |
| WQTV | smf-2b | 28.0005 | 11.59 |
| WQTV | smf-2b | 28.2505 | 11.59 |
| WQTV | smf-2b | 28.5005 | 11.58 |
| WQTV | smf-2b | 28.7505 | 11.58 |
| WQTV | smf-2b | 29.0005 | 11.58 |
| WQTV | smf-2b | 29.2505 | 11.57 |
| WQTV | smf-2b | 29.5005 | 11.57 |
| WQTV | smf-2b | 29.7505 | 11.57 |
| WQTV | smf-2b | 30.0005 | 11.56 |
| WQTV | smf-2b | 30.2505 | 11.56 |
| WQTV | smf-2b | 30.5005 | 11.56 |
| WQTV | smf-2b | 30.7505 | 11.56 |
| WQTV | smf-2b | 31.0005 | 11.55 |
| WQTV | smf-2b | 31.2505 | 11.55 |
| WQTV | smf-2b | 31.5005 | 11.55 |
| WQTV | smf-2b | 31.7505 | 11.54 |
| WQTV | smf-2b | 32.0005 | 11.54 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-2b | 32.2505 | 11.54 |
| WQTV | smf-2b | 32.5005 | 11.54 |
| WQTV | smf-2b | 32.7505 | 11.53 |
| WQTV | smf-2b | 33.0005 | 11.53 |
| WQTV | smf-2b | 33.2505 | 11.53 |
| WQTV | smf-2b | 33.5005 | 11.52 |
| WQTV | smf-2b | 33.7505 | 11.52 |
| WQTV | smf-2b | 34.0005 | 11.52 |
| WQTV | smf-2b | 34.2505 | 11.52 |
| WQTV | smf-2b | 34.5005 | 11.51 |
| WQTV | smf-2b | 34.7505 | 11.51 |
| WQTV | smf-2b | 35.0005 | 11.51 |
| WQTV | smf-2b | 35.2505 | 11.51 |
| WQTV | smf-2b | 35.5005 | 11.50 |
| WQTV | smf-2b | 35.7505 | 11.50 |
| WQTV | smf-2b | 36.0005 | 11.50 |
| WQTV | smf-2b | 36.2505 | 11.50 |
| WQTV | smf-2b | 36.5005 | 11.49 |
| WQTV | smf-2b | 36.7505 | 11.49 |
| WQTV | smf-2b | 37.0005 | 11.49 |
| WQTV | smf-2b | 37.2505 | 11.49 |
| WQTV | smf-2b | 37.5005 | 11.48 |
| WQTV | smf-2b | 37.7505 | 11.48 |
| WQTV | smf-2b | 38.0005 | 11.48 |
| WQTV | smf-2b | 38.2505 | 11.48 |
| WQTV | smf-2b | 38.5005 | 11.48 |
| WQTV | smf-2b | 38.7505 | 11.47 |
| WQTV | smf-2b | 39.0005 | 11.47 |
| WQTV | smf-2b | 39.2505 | 11.47 |
| WQTV | smf-2b | 39.5005 | 11.47 |
| WQTV | smf-2b | 39.7505 | 11.46 |
| WQTV | smf-2b | 40.0005 | 11.46 |
| WQTV | smf-2b | 40.2505 | 11.46 |
| WQTV | smf-2b | 40.5005 | 11.46 |
| WQTV | smf-2b | 40.7505 | 11.46 |
| WQTV | smf-2b | 41.0005 | 11.45 |
| WQTV | smf-2b | 41.2505 | 11.45 |
| WQTV | smf-2b | 41.5005 | 11.45 |
| WQTV | smf-2b | 41.7505 | 11.45 |
| WQTV | smf-2b | 42.0005 | 11.45 |
| WQTV | smf-2b | 42.2505 | 11.44 |
| WQTV | smf-2b | 42.5005 | 11.44 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] | |
|---|---|---|---|---|
| WQTV | smf-2b | 42.7505 | 11.44 | |
| WQTV | smf-2b | 43.0005 | 11.44 | |
| WQTV | smf-2b | 43.2505 | 11.44 | |
| WQTV | smf-2b | 43.5005 | 11.44 | |
| WQTV | smf-2b | 43.7505 | 11.43 | |
| WQTV | smf-2b | 44.0005 | 11.43 | |
| WQTV | smf-2b | 44.2505 | 11.43 | |
| WQTV | smf-2b | 44.5005 | 11.43 | |
| WQTV | smf-2b | 44.7505 | 11.43 | |
| WQTV | smf-2b | 45.0005 | 11.42 | |
| WQTV | smf-2b | 45.2505 | 11.42 | |
| WQTV | smf-2b | 45.5005 | 11.42 | |
| WQTV | smf-2b | 45.7505 | 11.42 | |
| WQTV | smf-2b | 46.0005 | 11.42 | |
| WQTV | smf-2b | 46.2505 | 11.42 | |
| WQTV | smf-2b | 46.5005 | 11.41 | |
| WQTV | smf-2b | 46.7505 | 11.41 | |
| WQTV | smf-2b | 47.0005 | 11.41 | |
| WQTV | smf-2b | 47.2505 | 11.41 | |
| WQTV | smf-2b | 47.5005 | 11.41 | |
| WQTV | smf-2b | 47.7505 | 11.41 | |
| WQTV | smf-2b | 48.0005 | 11.40 | SMF-2b WQTV end |
| WQTV | smf-2b | 48.2505 | 11.40 | |
| WQTV | smf-2b | 48.5005 | 11.40 | |
| WQTV | smf-2b | 48.7505 | 11.40 | |
| WQTV | smf-2b | 49.0005 | 11.40 | |
| WQTV | smf-2b | 49.2505 | 11.40 | |
| WQTV | smf-2b | 49.5005 | 11.40 | |
| WQTV | smf-2b | 49.7505 | 11.40 | |
| WQTV | smf-2b | 50.0005 | 11.40 | |
| WQTV | smf-2b | 50.2505 | 11.40 | |
| WQTV | smf-2b | 50.5005 | 11.40 | |
| WQTV | smf-2b | 50.7505 | 11.40 | |
| WQTV | smf-2b | 51.0005 | 11.40 | |
| WQTV | smf-2b | 51.2505 | 11.40 | |
| WQTV | smf-2b | 51.5005 | 11.40 | |
| WQTV | smf-2b | 51.7505 | 11.40 | |
| WQTV | smf-2b | 52.0005 | 11.40 | |
| WQTV | smf-2b | 52.2505 | 11.40 | |
| WQTV | smf-2b | 52.5005 | 11.40 | |
| WQTV | smf-2b | 52.7505 | 11.40 | |
| WQTV | smf-2b | 53.0005 | 11.40 | |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] | |
|---|---|---|---|---|
| WQTV | smf-2b | 74.2505 | 11.40 | |
| WQTV | smf-2b | 74.5005 | 11.40 | |
| WQTV | smf-2b | 74.7505 | 11.40 | |
| WQTV | smf-2b | 75.0005 | 11.40 | |
| WQTV | smf-2b | 75.2505 | 11.40 | |
| WQTV | smf-2b | 75.5005 | 11.40 | |
| WQTV | smf-2b | 75.7505 | 11.40 | |
| WQTV | smf-2b | 76.0005 | 11.40 | |
| WQTV | smf-2b | 76.2505 | 11.40 | |
| WQTV | smf-2b | 76.5005 | 11.40 | |
| WQTV | smf-2b | 76.7505 | 11.40 | |
| WQTV | smf-2b | 77.0005 | 11.40 | |
| WQTV | smf-2b | 77.2505 | 11.40 | |
| WQTV | smf-2b | 77.5005 | 11.40 | |
| WQTV | smf-2b | 77.7505 | 11.40 | |
| WQTV | smf-2b | 78.0005 | 11.40 | |
| WQTV | smf-2b | 78.2505 | 11.40 | |
| WQTV | smf-2b | 78.5005 | 11.40 | |
| WQTV | smf-2b | 78.7505 | 11.40 | |
| WQTV | smf-2b | 79.0005 | 11.40 | |
| WQTV | smf-2b | 79.2505 | 11.40 | |
| WQTV | smf-2b | 79.5005 | 11.40 | |
| WQTV | smf-2b | 79.7505 | 11.40 | |
| WQTV | smf-2b | 80.0005 | 11.40 | |
| WQTV | smf-2c | 0.0000 | 12.77 | SMF-2c WQTV begin |
| WQTV | smf-2c | 0.2503 | 12.67 | |
| WQTV | smf-2c | 0.5010 | 12.57 | |
| WQTV | smf-2c | 0.7522 | 12.47 | |
| WQTV | smf-2c | 1.0013 | 12.41 | |
| WQTV | smf-2c | 1.2534 | 12.37 | |
| WQTV | smf-2c | 1.5063 | 12.35 | |
| WQTV | smf-2c | 1.7549 | 12.33 | |
| WQTV | smf-2c | 2.0038 | 12.31 | |
| WQTV | smf-2c | 2.2522 | 12.29 | |
| WQTV | smf-2c | 2.5005 | 12.27 | |
| WQTV | smf-2c | 2.7505 | 12.25 | |
| WQTV | smf-2c | 3.0005 | 12.24 | |
| WQTV | smf-2c | 3.2505 | 12.22 | |
| WQTV | smf-2c | 3.5005 | 12.21 | |
| WQTV | smf-2c | 3.7505 | 12.20 | |
| WQTV | smf-2c | 4.0005 | 12.18 | |
| WQTV | smf-2c | 4.2505 | 12.17 | |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-2c | 4.5005 | 12.16 |
| WQTV | smf-2c | 4.7505 | 12.15 |
| WQTV | smf-2c | 5.0005 | 12.14 |
| WQTV | smf-2c | 5.2505 | 12.13 |
| WQTV | smf-2c | 5.5005 | 12.12 |
| WQTV | smf-2c | 5.7505 | 12.11 |
| WQTV | smf-2c | 6.0005 | 12.11 |
| WQTV | smf-2c | 6.2505 | 12.10 |
| WQTV | smf-2c | 6.5005 | 12.09 |
| WQTV | smf-2c | 6.7505 | 12.08 |
| WQTV | smf-2c | 7.0005 | 12.08 |
| WQTV | smf-2c | 7.2505 | 12.07 |
| WQTV | smf-2c | 7.5005 | 12.06 |
| WQTV | smf-2c | 7.7505 | 12.05 |
| WQTV | smf-2c | 8.0005 | 12.05 |
| WQTV | smf-2c | 8.2505 | 12.04 |
| WQTV | smf-2c | 8.5005 | 12.03 |
| WQTV | smf-2c | 8.7505 | 12.03 |
| WQTV | smf-2c | 9.0005 | 12.02 |
| WQTV | smf-2c | 9.2505 | 12.02 |
| WQTV | smf-2c | 9.5005 | 12.01 |
| WQTV | smf-2c | 9.7505 | 12.01 |
| WQTV | smf-2c | 10.0005 | 12.00 |
| WQTV | smf-2c | 10.2505 | 11.99 |
| WQTV | smf-2c | 10.5005 | 11.99 |
| WQTV | smf-2c | 10.7505 | 11.98 |
| WQTV | smf-2c | 11.0005 | 11.98 |
| WQTV | smf-2c | 11.2505 | 11.97 |
| WQTV | smf-2c | 11.5005 | 11.97 |
| WQTV | smf-2c | 11.7505 | 11.96 |
| WQTV | smf-2c | 12.0005 | 11.96 |
| WQTV | smf-2c | 12.2505 | 11.95 |
| WQTV | smf-2c | 12.5005 | 11.95 |
| WQTV | smf-2c | 12.7505 | 11.95 |
| WQTV | smf-2c | 13.0005 | 11.94 |
| WQTV | smf-2c | 13.2505 | 11.94 |
| WQTV | smf-2c | 13.5005 | 11.93 |
| WQTV | smf-2c | 13.7505 | 11.93 |
| WQTV | smf-2c | 14.0005 | 11.92 |
| WQTV | smf-2c | 14.2505 | 11.92 |
| WQTV | smf-2c | 14.5005 | 11.92 |
| WQTV | smf-2c | 14.7505 | 11.91 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] | |
|---|---|---|---|---|
| WQTV | smf-2c | 15.0005 | 11.91 | |
| WQTV | smf-2c | 15.2505 | 11.91 | |
| WQTV | smf-2c | 15.5005 | 11.90 | |
| WQTV | smf-2c | 15.7505 | 11.90 | |
| WQTV | smf-2c | 16.0005 | 11.89 | |
| WQTV | smf-2c | 16.2505 | 11.89 | |
| WQTV | smf-2c | 16.5005 | 11.89 | |
| WQTV | smf-2c | 16.7505 | 11.88 | |
| WQTV | smf-2c | 17.0005 | 11.88 | |
| WQTV | smf-2c | 17.2505 | 11.88 | |
| WQTV | smf-2c | 17.5005 | 11.88 | |
| WQTV | smf-2c | 17.7505 | 11.87 | |
| WQTV | smf-2c | 18.0005 | 11.87 | |
| WQTV | smf-2c | 18.2505 | 11.87 | |
| WQTV | smf-2c | 18.5005 | 11.86 | |
| WQTV | smf-2c | 18.7505 | 11.86 | |
| WQTV | smf-2c | 19.0005 | 11.86 | |
| WQTV | smf-2c | 19.2505 | 11.85 | SMF-2c WQTV end |
| WQTV | smf-2c | 19.5005 | 11.85 | |
| WQTV | smf-2c | 19.7505 | 11.85 | |
| WQTV | smf-2c | 20.0005 | 11.85 | |
| WQTV | smf-2c | 20.2505 | 11.85 | |
| WQTV | smf-2c | 20.5005 | 11.85 | |
| WQTV | smf-2c | 20.7505 | 11.85 | |
| WQTV | smf-2c | 21.0005 | 11.85 | |
| WQTV | smf-2c | 21.2505 | 11.85 | |
| WQTV | smf-2c | 21.5005 | 11.85 | |
| WQTV | smf-2c | 21.7505 | 11.85 | |
| WQTV | smf-2c | 22.0005 | 11.85 | |
| WQTV | smf-2c | 22.2505 | 11.85 | |
| WQTV | smf-2c | 22.5005 | 11.85 | |
| WQTV | smf-2c | 22.7505 | 11.85 | |
| WQTV | smf-2c | 23.0005 | 11.85 | |
| WQTV | smf-2c | 23.2505 | 11.85 | |
| WQTV | smf-2c | 23.5005 | 11.85 | |
| WQTV | smf-2c | 23.7505 | 11.85 | |
| WQTV | smf-2c | 24.0005 | 11.85 | |
| WQTV | smf-2c | 24.2505 | 11.85 | |
| WQTV | smf-2c | 24.5005 | 11.85 | |
| WQTV | smf-2c | 24.7505 | 11.85 | |
| WQTV | smf-2c | 25.0005 | 11.85 | |
| WQTV | smf-2c | 25.2505 | 11.85 | |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] | |
|---|---|---|---|---|
| WQTV | smf-2c | 78.0005 | 11.85 | |
| WQTV | smf-2c | 78.2505 | 11.85 | |
| WQTV | smf-2c | 78.5005 | 11.85 | |
| WQTV | smf-2c | 78.7505 | 11.85 | |
| WQTV | smf-2c | 79.0005 | 11.85 | |
| WQTV | smf-2c | 79.2505 | 11.85 | |
| WQTV | smf-2c | 79.5005 | 11.85 | |
| WQTV | smf-2c | 79.7505 | 11.85 | |
| WQTV | smf-2c | 80.0005 | 11.85 | |
| WQTV | smf-3a | 0.0000 | 13.00 | SMF-3a WQTV begin |
| WQTV | smf-3a | 0.2503 | 12.85 | |
| WQTV | smf-3a | 0.5010 | 12.74 | |
| WQTV | smf-3a | 0.7522 | 12.64 | |
| WQTV | smf-3a | 1.0013 | 12.56 | |
| WQTV | smf-3a | 1.2534 | 12.52 | |
| WQTV | smf-3a | 1.5063 | 12.49 | |
| WQTV | smf-3a | 1.7549 | 12.46 | |
| WQTV | smf-3a | 2.0038 | 12.44 | |
| WQTV | smf-3a | 2.2522 | 12.43 | |
| WQTV | smf-3a | 2.5005 | 12.41 | |
| WQTV | smf-3a | 2.7505 | 12.39 | |
| WQTV | smf-3a | 3.0005 | 12.38 | |
| WQTV | smf-3a | 3.2505 | 12.36 | |
| WQTV | smf-3a | 3.5005 | 12.34 | |
| WQTV | smf-3a | 3.7505 | 12.33 | |
| WQTV | smf-3a | 4.0005 | 12.31 | |
| WQTV | smf-3a | 4.2505 | 12.29 | |
| WQTV | smf-3a | 4.5005 | 12.28 | |
| WQTV | smf-3a | 4.7505 | 12.26 | |
| WQTV | smf-3a | 5.0005 | 12.25 | |
| WQTV | smf-3a | 5.2505 | 12.24 | |
| WQTV | smf-3a | 5.5005 | 12.23 | |
| WQTV | smf-3a | 5.7505 | 12.21 | |
| WQTV | smf-3a | 6.0005 | 12.20 | |
| WQTV | smf-3a | 6.2505 | 12.19 | |
| WQTV | smf-3a | 6.5005 | 12.18 | |
| WQTV | smf-3a | 6.7505 | 12.17 | |
| WQTV | smf-3a | 7.0005 | 12.16 | |
| WQTV | smf-3a | 7.2505 | 12.15 | |
| WQTV | smf-3a | 7.5005 | 12.15 | |
| WQTV | smf-3a | 7.7505 | 12.14 | |
| WQTV | smf-3a | 8.0005 | 12.13 | |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] | |
|---|---|---|---|---|
| WQTV | smf-3a | 8.2505 | 12.12 | |
| WQTV | smf-3a | 8.5005 | 12.11 | |
| WQTV | smf-3a | 8.7505 | 12.10 | |
| WQTV | smf-3a | 9.0005 | 12.10 | |
| WQTV | smf-3a | 9.2505 | 12.09 | |
| WQTV | smf-3a | 9.5005 | 12.08 | |
| WQTV | smf-3a | 9.7505 | 12.07 | |
| WQTV | smf-3a | 10.0005 | 12.07 | |
| WQTV | smf-3a | 10.2505 | 12.06 | |
| WQTV | smf-3a | 10.5005 | 12.05 | |
| WQTV | smf-3a | 10.7505 | 12.05 | |
| WQTV | smf-3a | 11.0005 | 12.04 | |
| WQTV | smf-3a | 11.2505 | 12.04 | |
| WQTV | smf-3a | 11.5005 | 12.03 | |
| WQTV | smf-3a | 11.7505 | 12.02 | |
| WQTV | smf-3a | 12.0005 | 12.02 | |
| WQTV | smf-3a | 12.2505 | 12.01 | |
| WQTV | smf-3a | 12.5005 | 12.01 | |
| WQTV | smf-3a | 12.7505 | 12.00 | |
| WQTV | smf-3a | 13.0005 | 12.00 | |
| WQTV | smf-3a | 13.2505 | 11.99 | |
| WQTV | smf-3a | 13.5005 | 11.98 | |
| WQTV | smf-3a | 13.7505 | 11.98 | |
| WQTV | smf-3a | 14.0005 | 11.97 | |
| WQTV | smf-3a | 14.2505 | 11.97 | |
| WQTV | smf-3a | 14.5005 | 11.96 | |
| WQTV | smf-3a | 14.7505 | 11.96 | |
| WQTV | smf-3a | 15.0005 | 11.96 | |
| WQTV | smf-3a | 15.2505 | 11.95 | |
| WQTV | smf-3a | 15.5005 | 11.95 | |
| WQTV | smf-3a | 15.7505 | 11.94 | |
| WQTV | smf-3a | 16.0005 | 11.94 | |
| WQTV | smf-3a | 16.2505 | 11.93 | |
| WQTV | smf-3a | 16.5005 | 11.93 | |
| WQTV | smf-3a | 16.7505 | 11.93 | |
| WQTV | smf-3a | 17.0005 | 11.92 | |
| WQTV | smf-3a | 17.2505 | 11.92 | |
| WQTV | smf-3a | 17.5005 | 11.92 | |
| WQTV | smf-3a | 17.7505 | 11.91 | |
| WQTV | smf-3a | 18.0005 | 11.91 | |
| WQTV | smf-3a | 18.2505 | 11.90 | SMF-3a WQTV end |
| WQTV | smf-3a | 18.5005 | 11.90 | |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-3a | 71.2505 | 11.90 |
| WQTV | smf-3a | 71.5005 | 11.90 |
| WQTV | smf-3a | 71.7505 | 11.90 |
| WQTV | smf-3a | 72.0005 | 11.90 |
| WQTV | smf-3a | 72.2505 | 11.90 |
| WQTV | smf-3a | 72.5005 | 11.90 |
| WQTV | smf-3a | 72.7505 | 11.90 |
| WQTV | smf-3a | 73.0005 | 11.90 |
| WQTV | smf-3a | 73.2505 | 11.90 |
| WQTV | smf-3a | 73.5005 | 11.90 |
| WQTV | smf-3a | 73.7505 | 11.90 |
| WQTV | smf-3a | 74.0005 | 11.90 |
| WQTV | smf-3a | 74.2505 | 11.90 |
| WQTV | smf-3a | 74.5005 | 11.90 |
| WQTV | smf-3a | 74.7505 | 11.90 |
| WQTV | smf-3a | 75.0005 | 11.90 |
| WQTV | smf-3a | 75.2505 | 11.90 |
| WQTV | smf-3a | 75.5005 | 11.90 |
| WQTV | smf-3a | 75.7505 | 11.90 |
| WQTV | smf-3a | 76.0005 | 11.90 |
| WQTV | smf-3a | 76.2505 | 11.90 |
| WQTV | smf-3a | 76.5005 | 11.90 |
| WQTV | smf-3a | 76.7505 | 11.90 |
| WQTV | smf-3a | 77.0005 | 11.90 |
| WQTV | smf-3a | 77.2505 | 11.90 |
| WQTV | smf-3a | 77.5005 | 11.90 |
| WQTV | smf-3a | 77.7505 | 11.90 |
| WQTV | smf-3a | 78.0005 | 11.90 |
| WQTV | smf-3a | 78.2505 | 11.90 |
| WQTV | smf-3a | 78.5005 | 11.90 |
| WQTV | smf-3a | 78.7505 | 11.90 |
| WQTV | smf-3a | 79.0005 | 11.90 |
| WQTV | smf-3a | 79.2505 | 11.90 |
| WQTV | smf-3a | 79.5005 | 11.90 |
| WQTV | smf-3a | 79.7505 | 11.90 |
| WQTV | smf-3a | 80.0005 | 11.90 |
| WQTV | smf-3b | 0.0000 | 12.60 |
| WQTV | smf-3b | 0.2503 | 12.50 |
| WQTV | smf-3b | 0.5010 | 12.39 |
| WQTV | smf-3b | 0.7522 | 12.29 |
| WQTV | smf-3b | 1.0013 | 12.18 |
| WQTV | smf-3b | 1.2534 | 12.13 |

SMF-3b WQTV begin

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-3b | 1.5063 | 12.09 |
| WQTV | smf-3b | 1.7549 | 12.06 |
| WQTV | smf-3b | 2.0038 | 12.04 |
| WQTV | smf-3b | 2.2522 | 12.02 |
| WQTV | smf-3b | 2.5005 | 12.01 |
| WQTV | smf-3b | 2.7505 | 11.99 |
| WQTV | smf-3b | 3.0005 | 11.98 |
| WQTV | smf-3b | 3.2505 | 11.96 |
| WQTV | smf-3b | 3.5005 | 11.95 |
| WQTV | smf-3b | 3.7505 | 11.94 |
| WQTV | smf-3b | 4.0005 | 11.93 |
| WQTV | smf-3b | 4.2505 | 11.92 |
| WQTV | smf-3b | 4.5005 | 11.91 |
| WQTV | smf-3b | 4.7505 | 11.90 |
| WQTV | smf-3b | 5.0005 | 11.89 |
| WQTV | smf-3b | 5.2505 | 11.88 |
| WQTV | smf-3b | 5.5005 | 11.87 |
| WQTV | smf-3b | 5.7505 | 11.86 |
| WQTV | smf-3b | 6.0005 | 11.86 |
| WQTV | smf-3b | 6.2505 | 11.85 |
| WQTV | smf-3b | 6.5005 | 11.84 |
| WQTV | smf-3b | 6.7505 | 11.83 |
| WQTV | smf-3b | 7.0005 | 11.83 |
| WQTV | smf-3b | 7.2505 | 11.82 |
| WQTV | smf-3b | 7.5005 | 11.81 |
| WQTV | smf-3b | 7.7505 | 11.81 |
| WQTV | smf-3b | 8.0005 | 11.80 |
| WQTV | smf-3b | 8.2505 | 11.79 |
| WQTV | smf-3b | 8.5005 | 11.79 |
| WQTV | smf-3b | 8.7505 | 11.78 |
| WQTV | smf-3b | 9.0005 | 11.78 |
| WQTV | smf-3b | 9.2505 | 11.77 |
| WQTV | smf-3b | 9.5005 | 11.76 |
| WQTV | smf-3b | 9.7505 | 11.76 |
| WQTV | smf-3b | 10.0005 | 11.75 |
| WQTV | smf-3b | 10.2505 | 11.74 |
| WQTV | smf-3b | 10.5005 | 11.74 |
| WQTV | smf-3b | 10.7505 | 11.73 |
| WQTV | smf-3b | 11.0005 | 11.73 |
| WQTV | smf-3b | 11.2505 | 11.72 |
| WQTV | smf-3b | 11.5005 | 11.71 |
| WQTV | smf-3b | 11.7505 | 11.71 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-3b | 12.0005 | 11.70 |
| WQTV | smf-3b | 12.2505 | 11.69 |
| WQTV | smf-3b | 12.5005 | 11.69 |
| WQTV | smf-3b | 12.7505 | 11.68 |
| WQTV | smf-3b | 13.0005 | 11.67 |
| WQTV | smf-3b | 13.2505 | 11.67 |
| WQTV | smf-3b | 13.5005 | 11.66 |
| WQTV | smf-3b | 13.7505 | 11.65 |
| WQTV | smf-3b | 14.0005 | 11.65 |
| WQTV | smf-3b | 14.2505 | 11.64 |
| WQTV | smf-3b | 14.5005 | 11.63 |
| WQTV | smf-3b | 14.7505 | 11.63 |
| WQTV | smf-3b | 15.0005 | 11.62 |
| WQTV | smf-3b | 15.2505 | 11.62 |
| WQTV | smf-3b | 15.5005 | 11.61 |
| WQTV | smf-3b | 15.7505 | 11.61 |
| WQTV | smf-3b | 16.0005 | 11.60 |
| WQTV | smf-3b | 16.2505 | 11.59 |
| WQTV | smf-3b | 16.5005 | 11.59 |
| WQTV | smf-3b | 16.7505 | 11.58 |
| WQTV | smf-3b | 17.0005 | 11.58 |
| WQTV | smf-3b | 17.2505 | 11.57 |
| WQTV | smf-3b | 17.5005 | 11.57 |
| WQTV | smf-3b | 17.7505 | 11.57 |
| WQTV | smf-3b | 18.0005 | 11.56 |
| WQTV | smf-3b | 18.2505 | 11.56 |
| WQTV | smf-3b | 18.5005 | 11.55 |
| WQTV | smf-3b | 18.7505 | 11.55 |
| WQTV | smf-3b | 19.0005 | 11.54 |
| WQTV | smf-3b | 19.2505 | 11.54 |
| WQTV | smf-3b | 19.5005 | 11.53 |
| WQTV | smf-3b | 19.7505 | 11.53 |
| WQTV | smf-3b | 20.0005 | 11.53 |
| WQTV | smf-3b | 20.2505 | 11.52 |
| WQTV | smf-3b | 20.5005 | 11.52 |
| WQTV | smf-3b | 20.7505 | 11.52 |
| WQTV | smf-3b | 21.0005 | 11.51 |
| WQTV | smf-3b | 21.2505 | 11.51 |
| WQTV | smf-3b | 21.5005 | 11.51 |
| WQTV | smf-3b | 21.7505 | 11.50 |
| WQTV | smf-3b | 22.0005 | 11.50 |
| WQTV | smf-3b | 22.2505 | 11.49 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-3b | 22.5005 | 11.49 |
| WQTV | smf-3b | 22.7505 | 11.49 |
| WQTV | smf-3b | 23.0005 | 11.49 |
| WQTV | smf-3b | 23.2505 | 11.48 |
| WQTV | smf-3b | 23.5005 | 11.48 |
| WQTV | smf-3b | 23.7505 | 11.48 |
| WQTV | smf-3b | 24.0005 | 11.47 |
| WQTV | smf-3b | 24.2505 | 11.47 |
| WQTV | smf-3b | 24.5005 | 11.47 |
| WQTV | smf-3b | 24.7505 | 11.46 |
| WQTV | smf-3b | 25.0005 | 11.46 |
| WQTV | smf-3b | 25.2505 | 11.46 |
| WQTV | smf-3b | 25.5005 | 11.46 |
| WQTV | smf-3b | 25.7505 | 11.45 |
| WQTV | smf-3b | 26.0005 | 11.45 |
| WQTV | smf-3b | 26.2505 | 11.45 |
| WQTV | smf-3b | 26.5005 | 11.44 |
| WQTV | smf-3b | 26.7505 | 11.44 |
| WQTV | smf-3b | 27.0005 | 11.44 |
| WQTV | smf-3b | 27.2505 | 11.44 |
| WQTV | smf-3b | 27.5005 | 11.43 |
| WQTV | smf-3b | 27.7505 | 11.43 |
| WQTV | smf-3b | 28.0005 | 11.43 |
| WQTV | smf-3b | 28.2505 | 11.43 |
| WQTV | smf-3b | 28.5005 | 11.42 |
| WQTV | smf-3b | 28.7505 | 11.42 |
| WQTV | smf-3b | 29.0005 | 11.42 |
| WQTV | smf-3b | 29.2505 | 11.42 |
| WQTV | smf-3b | 29.5005 | 11.41 |
| WQTV | smf-3b | 29.7505 | 11.41 |
| WQTV | smf-3b | 30.0005 | 11.41 |
| WQTV | smf-3b | 30.2505 | 11.41 |
| WQTV | smf-3b | 30.5005 | 11.40 |
| WQTV | smf-3b | 30.7505 | 11.40 |
| WQTV | smf-3b | 31.0005 | 11.40 |
| WQTV | smf-3b | 31.2505 | 11.40 |
| WQTV | smf-3b | 31.5005 | 11.40 |
| WQTV | smf-3b | 31.7505 | 11.39 |
| WQTV | smf-3b | 32.0005 | 11.39 |
| WQTV | smf-3b | 32.2505 | 11.39 |
| WQTV | smf-3b | 32.5005 | 11.39 |
| WQTV | smf-3b | 32.7505 | 11.39 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-3b | 33.0005 | 11.38 |
| WQTV | smf-3b | 33.2505 | 11.38 |
| WQTV | smf-3b | 33.5005 | 11.38 |
| WQTV | smf-3b | 33.7505 | 11.38 |
| WQTV | smf-3b | 34.0005 | 11.38 |
| WQTV | smf-3b | 34.2505 | 11.37 |
| WQTV | smf-3b | 34.5005 | 11.37 |
| WQTV | smf-3b | 34.7505 | 11.37 |
| WQTV | smf-3b | 35.0005 | 11.37 |
| WQTV | smf-3b | 35.2505 | 11.37 |
| WQTV | smf-3b | 35.5005 | 11.36 |
| WQTV | smf-3b | 35.7505 | 11.36 |
| WQTV | smf-3b | 36.0005 | 11.36 |
| WQTV | smf-3b | 36.2505 | 11.36 |
| WQTV | smf-3b | 36.5005 | 11.36 |
| WQTV | smf-3b | 36.7505 | 11.36 |
| WQTV | smf-3b | 37.0005 | 11.35 |
| WQTV | smf-3b | 37.2505 | 11.35 |
| WQTV | smf-3b | 37.5005 | 11.35 |
| WQTV | smf-3b | 37.7505 | 11.35 |
| WQTV | smf-3b | 38.0005 | 11.35 |
| WQTV | smf-3b | 38.2505 | 11.35 |
| WQTV | smf-3b | 38.5005 | 11.34 |
| WQTV | smf-3b | 38.7505 | 11.34 |
| WQTV | smf-3b | 39.0005 | 11.34 |
| WQTV | smf-3b | 39.2505 | 11.34 |
| WQTV | smf-3b | 39.5005 | 11.34 |
| WQTV | smf-3b | 39.7505 | 11.34 |
| WQTV | smf-3b | 40.0005 | 11.33 |
| WQTV | smf-3b | 40.2505 | 11.33 |
| WQTV | smf-3b | 40.5005 | 11.33 |
| WQTV | smf-3b | 40.7505 | 11.33 |
| WQTV | smf-3b | 41.0005 | 11.33 |
| WQTV | smf-3b | 41.2505 | 11.33 |
| WQTV | smf-3b | 41.5005 | 11.33 |
| WQTV | smf-3b | 41.7505 | 11.32 |
| WQTV | smf-3b | 42.0005 | 11.32 |
| WQTV | smf-3b | 42.2505 | 11.32 |
| WQTV | smf-3b | 42.5005 | 11.32 |
| WQTV | smf-3b | 42.7505 | 11.32 |
| WQTV | smf-3b | 43.0005 | 11.32 |
| WQTV | smf-3b | 43.2505 | 11.32 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-3b | 43.5005 | 11.31 |
| WQTV | smf-3b | 43.7505 | 11.31 |
| WQTV | smf-3b | 44.0005 | 11.31 |
| WQTV | smf-3b | 44.2505 | 11.31 |
| WQTV | smf-3b | 44.5005 | 11.31 |
| WQTV | smf-3b | 44.7505 | 11.31 |
| WQTV | smf-3b | 45.0005 | 11.31 |
| WQTV | smf-3b | 45.2505 | 11.31 |
| WQTV | smf-3b | 45.5005 | 11.30 |
| WQTV | smf-3b | 45.7505 | 11.30 |
| WQTV | smf-3b | 46.0005 | 11.30 |
| WQTV | smf-3b | 46.2505 | 11.30 |
| WQTV | smf-3b | 46.5005 | 11.30 |
| WQTV | smf-3b | 46.7505 | 11.30 |
| WQTV | smf-3b | 47.0005 | 11.30 |
| WQTV | smf-3b | 47.2505 | 11.30 |
| WQTV | smf-3b | 47.5005 | 11.29 |
| WQTV | smf-3b | 47.7505 | 11.29 |
| WQTV | smf-3b | 48.0005 | 11.29 |
| WQTV | smf-3b | 48.2505 | 11.29 |
| WQTV | smf-3b | 48.5005 | 11.29 |
| WQTV | smf-3b | 48.7505 | 11.29 |
| WQTV | smf-3b | 49.0005 | 11.29 |
| WQTV | smf-3b | 49.2505 | 11.29 |
| WQTV | smf-3b | 49.5005 | 11.29 |
| WQTV | smf-3b | 49.7505 | 11.28 |
| WQTV | smf-3b | 50.0005 | 11.28 |
| WQTV | smf-3b | 50.2505 | 11.28 |
| WQTV | smf-3b | 50.5005 | 11.28 |
| WQTV | smf-3b | 50.7505 | 11.28 |
| WQTV | smf-3b | 51.0005 | 11.28 |
| WQTV | smf-3b | 51.2505 | 11.28 |
| WQTV | smf-3b | 51.5005 | 11.28 |
| WQTV | smf-3b | 51.7505 | 11.28 |
| WQTV | smf-3b | 52.0005 | 11.27 |
| WQTV | smf-3b | 52.2505 | 11.27 |
| WQTV | smf-3b | 52.5005 | 11.27 |
| WQTV | smf-3b | 52.7505 | 11.27 |
| WQTV | smf-3b | 53.0005 | 11.27 |
| WQTV | smf-3b | 53.2505 | 11.27 |
| WQTV | smf-3b | 53.5005 | 11.27 |
| WQTV | smf-3b | 53.7505 | 11.27 |

WQTV Recovery Analysis

| Sim | Node Name | Relative Time [hrs] | Stage [ft] |
|---|---|---|---|
| WQTV | smf-3b | 54.0005 | 11.27 |
| WQTV | smf-3b | 54.2505 | 11.27 |
| WQTV | smf-3b | 54.5005 | 11.27 |
| WQTV | smf-3b | 54.7505 | 11.26 |
| WQTV | smf-3b | 55.0005 | 11.26 |
| WQTV | smf-3b | 55.2505 | 11.26 |
| WQTV | smf-3b | 55.5005 | 11.26 |
| WQTV | smf-3b | 55.7505 | 11.26 |
| WQTV | smf-3b | 56.0005 | 11.26 |
| WQTV | smf-3b | 56.2505 | 11.26 |
| WQTV | smf-3b | 56.5005 | 11.26 |
| WQTV | smf-3b | 56.7505 | 11.26 |
| WQTV | smf-3b | 57.0005 | 11.26 |
| WQTV | smf-3b | 57.2505 | 11.25 |
| WQTV | smf-3b | 57.5005 | 11.25 |
| WQTV | smf-3b | 57.7505 | 11.25 |
| WQTV | smf-3b | 58.0005 | 11.25 |
| WQTV | smf-3b | 58.2505 | 11.25 |
| WQTV | smf-3b | 58.5005 | 11.25 |
| WQTV | smf-3b | 58.7505 | 11.25 |
| WQTV | smf-3b | 59.0005 | 11.25 |
| WQTV | smf-3b | 59.2505 | 11.25 |
| WQTV | smf-3b | 59.5005 | 11.25 |
| WQTV | smf-3b | 59.7505 | 11.25 |
| WQTV | smf-3b | 60.0005 | 11.25 |
| WQTV | smf-3b | 60.2505 | 11.25 |
| WQTV | smf-3b | 60.5005 | 11.25 |
| WQTV | smf-3b | 60.7505 | 11.25 |
| WQTV | smf-3b | 61.0005 | 11.25 |
| WQTV | smf-3b | 61.2505 | 11.25 |
| WQTV | smf-3b | 61.5005 | 11.25 |
| WQTV | smf-3b | 61.7505 | 11.25 |
| WQTV | smf-3b | 62.0005 | 11.25 |
| WQTV | smf-3b | 62.2505 | 11.25 |
| WQTV | smf-3b | 62.5005 | 11.25 |
| WQTV | smf-3b | 62.7505 | 11.25 |
| WQTV | smf-3b | 63.0005 | 11.25 |
| WQTV | smf-3b | 63.2505 | 11.25 |
| WQTV | smf-3b | 63.5005 | 11.25 |
| WQTV | smf-3b | 63.7505 | 11.25 |
| WQTV | smf-3b | 64.0005 | 11.25 |
| WQTV | smf-3b | 64.2505 | 11.25 |

SMF-3b WQTV end

# Appendix B

Operation and Maintenance Requirements and
Erosion and Sedimentation Control Requirements

Proposed operation and maintenance and soil erosion and sediment control practices are outlined in the following paragraphs.

*Surface water Management Facilities*

The man-made surface water facility shall be maintained free of sediments and debris. Areas shall be inspected on a routine basis and nuisance plants shall be removed a minimum of twice annually. Grassed areas shall be mowed a minimum of 6 times per year. The natural systems shall be least disturbed as possible. Minimal maintenance is required for the natural and undisturbed areas. All ponds shall be inspected monthly. Monthly documentation shall be noted based upon the inspection findings.

*Erosion Control*

All erosion damage at spillways, outfall structures, and along pond side slopes shall be repaired (grading and grassing) as conditions occur. All side slopes and other areas disturbed by construction shall be stabilized by sodding, hydro-mulching or other appropriate vegetative or non-vegetative erosion control measures.

*Swale/Ditch*

All swales, if any, shall be maintained free of debris and sediment. Sediments shall be removed when the depth has been reduced by 20 percent. Sediments removed from swales/ditches should be evenly spread over grassed areas away from the stormwater management facilities.

*Culverts, Pipes and Structures*

All pipes, if any, shall be inspected bi-annually. Culverts and pipes shall be maintained free of debris and sediment. Sediments removed from culverts and pipes should be evenly spread over grassed areas away from the stormwater management facilities.

The structures and paved flow lines, if any, shall be maintained clear of debris. Remove any debris and silt collected in inlets and pipes as routine inspections dictates.

*Inspection Reporting*

Annual inspection reports, prepared by a properly licensed professional engineer, should be submitted to the water management district as appropriate. The engineer shall inspect the site and report on the status and function of the system. Noted deficiencies and/or maintenance requirements shall be reported to the owner with recommendations for repairs. Repairs shall be executed.

*Limerock/Sinkhole*

If continuous limerock is encountered during excavation of the swales/pond or if a sinkhole forms in the area of a drainage swale/pond the engineer of record shall be notified by either the contractor or the established operation and maintenance entity. The engineer of record shall inspect the repaired area upon completion of the repair.

Where continuous limerock is encountered during excavation of the swales/ponds, the limerock shall be over excavated by 2 feet and replaced with clayey soils that extend 2 feet beyond the perimeter of the limerock outcropping. The clayey soil shall have at least 20% passing the no. 200 sieve, compacted to 95% of standard proctor, and compacted in a wet condition with moisture 2% - 4% above optimum.

All swales/ponds shall be inspected monthly for sinkhole occurrence. Should a sinkhole occur, the area shall be repaired as soon as possible. Repair shall include filling (limerock such as road base material, clay/sand mixture, or concrete if necessary). A 2-foot deep cap that extends 2 feet beyond the perimeter of the sinkhole shall be constructed with clayey soils. The clayey soil shall have at least 20% passing the no. 200 sieve, compacted to 95% of standard proctor, and compacted in a wet condition with moisture 2% - 4% above optimum. The clay soil cap shall be re-graded to prevent concentration of waters (ponding) and re-vegetated.

*Outfall Structures*

All outfall and drawdown orifices are to be inspected bi-annually for sediment or debris in the flow line of weirs or orifices. All sediment and debris should be removed and disposed of in an approved manner.

Operation & Maintenance Entity:

Clay County
P.O. Box 1366
Green Cove Springs, FL 32043

# Appendix C

Geotechnical Report

Engineering & Consulting, Inc.

# SUMMARY REPORT OF A GEOTECHNICAL SITE EXPLORATION

## PROPOSED CLAY COUNTY ECONOMIC DEVELOPMENT OFFICE GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA

## GSE PROJECT NO. 16102

Prepared For:

**WALKER ARCHITECTS**

JULY 2023

GSE Engineering & Consulting, Inc.

July 10, 2023

Gaurav Lohiya, Principal
Walker Architects
2035 NW 13th Street
Gainesville, Florida 32609

Subject: Summary Report of a Geotechnical Site Exploration
**Proposed Clay County Economic Development Office**
Green Cove Springs, Clay County, Florida
GSE Project No. 16102

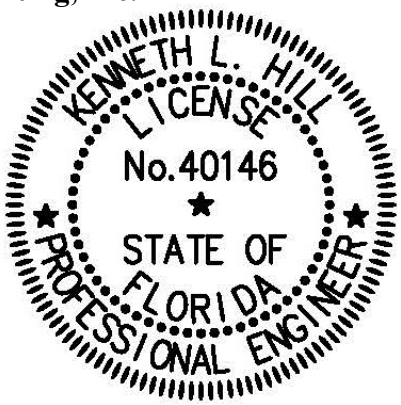
GSE Engineering & Consulting, Inc. (GSE) is pleased to submit this geotechnical site exploration report for the above referenced project.

Presented herein are the findings and conclusions of our exploration, including the geotechnical parameters and recommendations to assist with building foundation, pavement, and stormwater management designs.

GSE appreciates this opportunity to have assisted you on this project. If you have any questions or comments concerning this report, please contact us.

Sincerely,

**GSE Engineering & Consulting, Inc.**




This item has been digitally signed and sealed by

on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Angelina X. Liu, E.I.
Staff Engineer

Kenneth L. Hill, P.E.
Principal Engineer
Florida Registration No. 40146

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1. Project Site Location Map
2. Site Plan Showing Approximate Locations of Field Tests

# 1.0 INTRODUCTION

## 1.1 General

GSE Engineering & Consulting, Inc. (GSE) has completed this geotechnical exploration for the proposed Clay County Economic Development office in Green Cove Springs, Clay County, Florida. This exploration was performed in accordance with GSE Proposal No. 2023-176 (Rev.2) dated March 22, 2023. Gaurav Lohiya, Principal of Walker Architects, authorized our services on March 22, 2023.

## 1.2 Project Description

This project consists of a four-story building and associated improvements. The site is located at the south corner of the U.S. Highway 17 and Walburg Street intersection in Green Cove Springs, Clay County, Florida (Figure 1).

Walker Architects provided information about the project and survey of the existing site conditions. The project will consist of a four-story building with a 20,000 square ground floor area (80,000 square feet total area). The building will be constructed in two phases, with two stories initially constructed and two stories planned for the future. The project is also expected to include a parking lot and underground stormwater management facilities. You provided preliminary site plans that show the layout of the proposed improvements.

We anticipate the structure will be either concrete masonry unit or steel and concrete frame construction. Preliminary structural loads were provided and will be on the order of 4 to 10 kips per foot for load bearing walls, and less than 500 kips for columns. Based on the encountered groundwater depth, we anticipate the finished floor of the structure will be set about 2 feet above the existing site grades.

A recent aerial photograph of the site was obtained and reviewed. The site plan and aerial photograph were used in preparation of this exploration and report.

## 1.3 Purpose

The purpose of this geotechnical exploration was to determine the general subsurface conditions, evaluate these conditions with respect to the proposed construction, and prepare geotechnical parameters and recommendations to assist with building foundation, stormwater management, and pavement designs.

# 2.0 FIELD AND LABORATORY TESTS

## 2.1 General Description

The procedures used for field sampling and testing are in general accordance with industry standards of care and established geotechnical engineering practices for this geographic region. This exploration consisted of performing six (6) Standard Penetration Test (SPT) borings to a depth of 40 feet below land surface (bls) within the proposed building area, and six (6) auger borings to a depth of 15 feet bls within the proposed underground stormwater management facilities and pavement areas.

The soil borings were performed at the approximate locations as shown on Figure 2. The borings were located at the site using the provided site plan, Global Positioning System (GPS) coordinates, and obvious site features as reference. The boring locations should be considered approximate. The soil borings were performed from June 22 to 26, 2023.

## 2.2 Auger Borings

The auger borings were performed in accordance with ASTM D1452. The borings were performed with flight auger equipment that was rotated into the ground in a manner that reduces soil disturbance. After penetrating to the required depth, the auger was retracted and the soils collected on the auger flights were field classified and placed in sealed containers. Representative samples of each stratum were retained from the auger boring. Results from the auger borings are provided in Section 5.1.

## 2.3 Standard Penetration Test Borings

The soil borings were performed with a drill rig employing flight auger drilling techniques and Standard Penetration Testing (SPT) in accordance with ASTM D1586. The SPTs were performed continuously to 10 feet and at 5-foot intervals thereafter. Soil samples were obtained at the depths where the SPTs were performed. The soil samples were classified in the field, placed in sealed containers, and returned to our laboratory for further evaluation.

After drilling to the sampling depth, the standard two-inch O.D. split-barrel sampler was seated by driving it 6 inches into the undisturbed soil. The sampler was then driven an additional 12 inches by blows of a 140-pound hammer falling 30 inches. The number of blows required to produce the next 12 inches of penetration were recorded as the penetration resistance (N-value). These values and the complete SPT boring logs are provided in Section 5.2.

Upon completion of the sampling, the boreholes were abandoned in accordance with Water Management District guidelines.

## 2.4 Soil Laboratory Tests

The soil samples recovered from the soil borings were returned to our laboratory, and examined to confirm the field descriptions. Representative samples were then selected for laboratory testing. The laboratory tests consisted of nine (9) percent soil fines passing the No. 200 sieve determinations, nine (9) natural moisture content determinations, and four (4) constant head hydraulic conductivity tests. These tests were performed in order to aid in classifying the soils and to further evaluate their engineering properties. The laboratory tests are provided in Section 5.3.

# 3.0 FINDINGS

## 3.1 Surface Conditions

Angelina X Liu, E.I. with GSE visited the site on June 9, 2023 to observe the site conditions and mark the boring locations.

The site is open and easily accessible. There is an existing one-story building near the center of the site, with a parking lot in the eastern portion of the site. The western portion of the site is a mowed lawn. The site is bordered by Palmetto Avenue to the northwest, by Walburg Street to northeast, and by U.S. Highway 17 to the southeast. Developed land border the site on the south.

The topography at the site is relatively flat. Regional topography is gently to moderately sloping. The provided topographic survey indicates the ground surface elevations at the site are near 12 to 14 feet[1], very gently sloping down to the west.

## 3.2 Subsurface Conditions

The locations of the auger and SPT borings are provided on Figure 2. Complete logs for the borings are provided in Sections 5.1 and 5.2. Descriptions for the soils encountered are accompanied by the Unified Soil Classification System symbol (SM, SP-SM, etc.) and are based on visual examination of the recovered soil samples and the laboratory tests performed. Stratification boundaries between the soil types should be considered approximate, as the actual transition between soil types may be gradual.

The auger borings P-1 to P-5 located in the exist pavement area encountered surficial asphalt overlying limerock base course. The asphalt was 0.75 to 2.0 inches thick, and the limerock was approximately 3.5 to 5.0 inches thick.

The auger borings located in the proposed parking lot, driveways, and underground stormwater management facility areas encountered relatively consistent soil conditions. Auger borings initially encountered 1 to 2.5 feet of silty sand (SM) overlying sand with silt, and poorly graded sand (SP, SP-SM) to the explored depths of 15 feet bls.

The SPT borings located within the proposed building area generally encountered soil conditions similar to those in the stormwater management facility borings. The borings initially encountered 22 to 29 feet of silty sand, sand with silt, poorly graded sand, and sand with silt and clay (SM, SP-SM, SP, SP-SM/SC). This was underlain by silty clayey sand, sand with silt and clay, poorly graded sand (SM-SC, SP-SM/SC, SP) with 3 to 9 feet of interbedded layers of clay-rich soils (CL/CH) to the explored depths of 40 feet bls.

The layers of poorly graded sand, sand with silt, sand with silt and clay and silty sand (SP, SP-SM, SP-SM/SC, SM) are generally in a very loose to very dense condition with N-values ranging from 0 to over 50 blows per foot. The underlying silty clayey sand (SM-SC) is generally in a very loose to medium dense condition with N-values ranging from 1 to 21 blows per foot. The clay-rich soils (CL/CH) are generally in a soft to stiff condition with N-values ranging from 3 to 10 blows per foot.

[1] Conceptual Layout, Sheet No. C-1, Project Number 23-0204.

Weight-of-hammer strength materials were encountered in boring B-3 at depths from 34.5 to 36 feet bls, and boring B-6 at depths from 39 to 40 feet bls. Overall, the borings encountered a lower relative soil strength profile within the clay-rich soil layers.

The groundwater table was encountered in the auger and SPT borings at depths of 2.5 to 3.5 feet bls at the time of our investigation.

### 3.3 Review of Published Data

The majority of the site is mapped as one soil series by the Soil Conservation Service (SCS) Soil Survey for Clay County[2]. The following soil description is from the Soil Survey.

***Leon fine sand –*** This soil is nearly level and poorly drained. It is in broad areas on the flatwoods. The mapped areas are irregular in shape or elongated and range from 10 to 100 acres. Slopes are smooth and range from 0-2 percent.

Typically, this soil has a surface layer of very dark gray fine sand about 4 inches thick. The subsurface layer, to a depth of about 16 inches, is light gray fine sand. The subsoil is fine sand. The upper part, to a depth of 20 inches, is black. The sand grains are well coated with organic material. The next layer, to a depth of 26 inches, is very dark grayish brown with organic coatings on the sand grains. Below that layer, to depth of 67 inches, the subsoil is dark brown. The low part to a depth of 80 inches, is black with organic coatings on most of the sand grains.

Included with this soil in mapping are small areas of Lynn Haven, Mandarin, Ona, Pottsburg, and Sapelo soils. Also included are soils that are similar to Leon soil, but they are very poorly drained and have a thick surface layer. The included soils make up about 20 percent or less of the map unit.

This soil has a high-water table at a depth of less than 12 inches for 1 to 4 months during most years. It recedes to a depth of more than 40 inches during very dry periods. The available water capacity is low. The permeability is moderate or moderately rapid.

### 3.4 Laboratory Soil Analysis

Selected soil samples recovered from the soil borings were analyzed for the percent soil fines passing the No. 200 sieve, natural moisture content, and hydraulic conductivity. Samples selected for laboratory testing were collected at depths ranging from 0.5 to 30 feet bls. These tests were performed to confirm visual soil classification and evaluate their engineering properties. The complete laboratory report is provided in Section 5.3.

The laboratory tests indicate the tested soils consist of poorly graded sand (SP), sand with silt (SP-SM), and clay (CL/CH). The tested poorly graded sand (SP) contains approximately 2.8 percent soil fines passing the No. 200 sieve with a natural moisture content of about 29 percent.

The tested sand with silt (SP-SM) contains approximately 5.5 to11 percent soil fines passing the No. 200 sieve with natural moisture contents of about 8.8 to 21 percent. The tested clay (CH) contains approximately 89 percent soil fines passing the No. 200 sieve with a natural moisture content of about 64 percent.

[2] Soil Survey of Hamilton County, Florida. Soil Conservation Service, U.S. Department of Agriculture.

The constant head hydraulic conductivity test results indicate the tested sand with silt (SP-SM) has hydraulic conductivity values of 2.6 to 10 feet per day.

# 4.0 EVALUATION AND RECOMMENDATIONS

## 4.1 General

The following recommendations are made based upon our understanding of the proposed construction, a review of the attached soil borings and laboratory test data, and experience with similar projects and subsurface conditions. If plans or the location of proposed construction changes from those discussed previously, GSE requests the opportunity to review and possibly amend our recommendations with respect to those changes.

The final design of a foundation system is dependent upon adequate integration of geotechnical and structural engineering considerations. Consequently, GSE must review the final foundation design in order to evaluate the effectiveness and applicability of our initial analyses, and to determine if additional recommendations may be warranted. Without such a review, the recommendations presented herein could be misinterpreted or misapplied resulting in potentially unacceptable performance of the foundation system.

The performance of site improvements may be sensitive to their post-construction relationship to site groundwater levels, seepage zones, or soil/rock characteristics exposed at final site grades. GSE recommends that use of boring information for final design of all site improvements be predicated on proper horizontal and vertical control of borings.

In this section of the report, we present our geotechnical parameters and recommendations to assist with building foundation, stormwater management, and pavement designs as well as our general site preparation guidelines.

## 4.2 Groundwater

The groundwater table was encountered in the auger and SPT borings at depths of 2.5 to 3.5 feet bls at the time of our exploration. We anticipate the seasonal high groundwater table to be 2 to 2.5 feet bls. Estimates for the seasonal high groundwater tables are presented on the individual boring logs.

## 4.3 Building Foundations

The soil borings near the proposed building footprint encountered relatively consistent soil conditions. The borings initially encountered 22 to 29 feet of silty sand, sand with silt, poorly graded sand, and sand with silt and clay (SM, SP-SM, SP, SP-SM/SC). This was underlain by silty clayey sand, sand with silt and clay, poorly graded sand (SM-SC, SP-SM/SC, SP) with 3 to 9 feet of interbedded layers of clay-rich soils (CL/CH) to the explored depths of 20 feet bls.

Based upon the soil conditions encountered and our limited understanding of the structural loads and site grading, we recommend the building be supported by conventional, shallow strip and/or spread foundations. We recommend the shallow foundations be designed for a maximum allowable gross bearing pressure of 4,000 psf. The gross bearing pressure is defined as the soil contact pressure that can be imposed from the maximum structural loads, weight of the concrete foundations, and weight of the soil above the foundations. The foundations should be designed based upon the maximum load that could be imposed by all loading conditions.

The foundations should be embedded a minimum of 18 inches below the lowest adjacent grade. Interior foundations or thickened sections should be embedded a minimum of 12 inches. The foundations should have minimum widths of 18 inches for strip footings, and 24 inches for columns, even though the maximum soil bearing pressure may not be fully developed.

Due to the mostly sandy nature of the majority of the near-surface soils, we expect settlement to be mostly elastic in nature. The majority of the settlement will occur on application of the loads, during and immediately following construction. Using the recommended maximum bearing pressure, the assumed maximum structural loads, and the field and laboratory test data which we have correlated into the strength and compressibility characteristics of the subsurface soils, we estimate the total settlements of the structure to be 1 inch or less, with approximately half of it occurring upon load application (during construction).

Differential settlement results from differences in applied bearing pressures and the variations in the compressibility characteristics of the subsurface soils. For the building pad prepared as recommended, we anticipate differential settlement of less than 1/2 inch.

Post-construction settlement of the structures will be influenced by several interrelated factors, such as (1) subsurface stratification and strength/compressibility characteristics of the bearing soils; (2) footing size, bearing level, applied loads, and resulting bearing pressures beneath the foundation; (3) site preparation and earthwork construction techniques used by the contractor, and (4) external factors, including but not limited to vibration from off-site sources and groundwater fluctuations beyond those normally anticipated for the naturally-occurring site and soil conditions which are present.

Our settlement estimates for the structure are based upon our limited understanding of the structural loads and site grading and the use of successful adherence to the site preparation recommendations presented later in this report. Any deviation from our project understanding and/or our site preparation recommendations could result in an increase in the estimated post-construction settlement of the structure.

## 4.4 Flexible Pavement

Overall soil conditions encountered by our borings at this site are suitable for supporting conventional limerock base and asphalt wearing surface pavements. We have not been provided the anticipated traffic loading conditions; therefore, the following pavement component recommendations should be used only as guidelines. The below recommendations are intended to be minimums. Increasing base course and asphalt thicknesses would increase the design life of the pavement.

We recommend a minimum of either 12 to 24 inches of separation (depending upon the pavement section design) be present between the bottom of the base course and the estimated seasonal high groundwater table. If this separation cannot be achieved by site grading, GSE recommends underdrains be used beneath the base course.

### 4.4.1 Stabilized Subgrade

If a crushed limerock or recycled concrete base is used, we recommend a stabilized subgrade be located beneath the base. The stabilized subgrade should have a minimum Limerock Bearing Ratio (LBR) of 40, with minimum thicknesses of 6 inches for automobile parking areas and 12 inches for driveways.

The stabilized subgrade can be imported material or a mixture of imported and on-site material. If a mix is proposed, a mix design should be performed to determine the optimum mix proportions. The stabilized subgrade should be compacted to a minimum of 98 percent of the Modified Proctor maximum dry density (ASTM D1557) for soils with less than 15 percent fines content. Soils with 15 percent or greater fines content should be compacted to 100 percent of the Standard Proctor maximum dry density (ASTM D698).

### 4.4.2 Base Course

The base course can consist of either crushed limerock, soil cement, or recycled concrete. If you should use a soil cement base course, a stabilized subgrade is not required.

Limerock should have a LBR of at least 100, be obtained from a FDOT approved source and meet FDOT gradation requirements. The base course thickness should be a minimum of 6 inches in automobile parking areas, and 8 inches in driveway areas. The base course should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D1557). We recommend a minimum 24 inches separation between the bottom of the limerock base course and the estimated seasonal high-water table. If site grading does not allow for this separation, we recommend underdrains be considered.

Soil cement can consist of an imported material or a blend of the on-site soils and cement. A mix design should be performed to determine the optimum cement content. We recommend the soil cement have a minimum 28-day compressive strength of 500 psi. Soil cement can be blended off-site (in a pug mill) or on site. Soil cement pills should be cast from each day's production to verify the recommended compressive strength has been achieved at 28 days. We recommend the soil cement base course be a minimum of 8 inches thick throughout the project. We recommend a minimum 18 inches separation between the bottom of the soil cement base course and the estimated seasonal high water table. If site grading does not allow for this separation, we recommend underdrains be considered.

Recycled concrete should have an LBR of at least 150, be obtained from a FDOT approved source and meet FDOT gradation requirements. The base course thickness should be a minimum of 8 inches. The base course should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D1557). We recommend a minimum 12 inches separation between the bottom of the recycled concrete base course and the estimated seasonal high water table. If site grading does not allow for this separation, we recommend underdrains be considered.

### 4.4.3 Wearing Surface

The asphalt-wearing surface should consist of an FDOT Type SP Hot Mix Asphalt mixture. For automobile parking areas, the thickness should be a minimum of 1.5 inches. For driveway areas, the thickness should be a minimum of 2 inches. The asphalt-wearing surface should consist of an SP-12.5 mix. The asphalt should be compacted to at least 95 percent of the mix design density.

The constructability of differing asphalt thicknesses may be difficult, and having a uniform 2-inch-thick asphalt wearing surface may be more practical.

## 4.5 Rigid Pavement

Concrete pavement is a rigid pavement that results in smaller load transfers to the subgrade soils than flexible pavement. For concrete pavement subgrade, we recommend using the existing surficial sands or recommended clean sand (SP) fill, compacted to at least 98 percent of the Modified Proctor maximum dry density without additional stabilization with the following stipulations:

1. Subgrade soils must be compacted to at least 98 percent of Modified Proctor maximum dry density to a depth of at least 2 feet prior to placement of concrete.
2. The surface of the subgrade soils must be smooth and any disturbances or wheel rutting corrected prior to placement of the concrete.
3. The subgrade soils must be moistened prior to placement of concrete.
4. Concrete pavement thickness should be uniform throughout, with the exception of thickened edges (curb or footing).
5. The bottom of the pavement should be separated from the estimated seasonal high groundwater level by at least 18 inches.
6. Limerock or any other impermeable base is not suitable unless it meets the minimum recommended permeability of 10 ft/day.
7. The upper 12 inches of subgrade underlying the base course must also be "free-draining" and water that enters the base and subgrade must be allowed to seep out by gravity or if this is not possible, underdrains must be incorporated into the subgrade. A "bathtub" condition within the base/subgrade must be avoided.

Our recommendations for slab thickness for heavy-duty concrete pavements is based on a.) subgrade soils are compacted to 98 percent of the Modified Proctor maximum dry density, b.) modulus of subgrade reaction (k) of 200 pounds per cubic inch, c.) a 20-year design life, and d.) previously stated design parameters. For an anticipated heavy-duty traffic group, a minimum pavement thickness of 8 inches is recommended, using Table 3.4 from the FDOT *Rigid Pavement Design Manual*, January 2019. For a light-duty traffic group, a minimum pavement thickness of 5.5 inches is recommended, using Table 2.4 from the ACI 330 Guide for Design and Construction of Concrete Parking Lots, ACI 330R-01.

We recommend using concrete with a minimum 28-day compressive strength of 4,000 pounds per square inch and a minimum 28-day flexural strength (modulus of rupture) of at least 600 pounds per square inch based on the third point loading of concrete beam test samples. Minimum control joint spacing of 15 by 15 feet is suggested for heavy duty and 12.5 by 12.5 feet for light duty. Layout of sawcut control joints should form square panels, and the depth of sawcut joint should be at least 1/4 of the concrete slab thickness (a minimum 2-inch sawcut control joint depth for the recommended 8-inch slab thickness). The joints should be sawed within six hours of concrete placement or as soon as the concrete has developed sufficient strength to support workers and equipment.

For further details on concrete pavement construction, refer to "Guide to Jointing Non-reinforced Concrete Pavements" published by the Florida Concrete and Products Associates, Inc. and "Building Quality Concrete Parking Areas", published by the Portland Cement Association.

## 4.6 Site Preparation

The soils at this site should be suitable for supporting the proposed construction using normal, good practice site preparation procedures. The following recommendations are our general guidelines for site preparation.

### 4.6.1 Stripping

Strip the construction limits and 10 feet beyond the perimeter of all grass, roots, topsoil, pavement, and other deleterious materials. You should expect to strip to depths of 12 or more inches. Deeper stripping will likely be necessary due to major root systems present at the site.

### 4.6.2 Dewatering

Temporary dewatering maybe necessary for this project. However, if needed, we anticipate dewatering can be accomplished with sumps placed near the construction area, or with underdrains connected to a vacuum pump.

In any case, the site should always be graded to promote runoff and limit the amount of ponding. Localized ponding of stormwater is expected without proper grading during construction, and could render previously acceptable surfaces unacceptable.

### 4.6.3 Proof-Rolling

Proof-roll the subgrade with heavy rubber-tired equipment, such as a loaded front-end loader or dump truck, to identify any loose or soft zones not found by the soil borings. The proof-rolling should be monitored by a geotechnical engineer or qualified technician. Undercut or otherwise treat these zones as recommended by the geotechnical engineer in this report.

### 4.6.4 Proof Compaction

Compact the subgrade to a density of at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557). The specified compaction should be obtained to a depth of **2 feet** below the foundation bottoms and the existing grade prior to placing fill. Vibratory roller equipment should not be used within approximately 100 feet of existing structures. Lighter “walk-behind” compaction equipment may be used to achieve the degree of compaction.

Should clayey sand be encountered at the bearing surface, this material should be probed and visually confirmed to be unyielding in the upper 12 inches in lieu of density testing. If the foundation excavations penetrate the clayey sand, the excavation should be performed in a manner that reduces soil disturbance. Clayey sand soils (with fines content in excess of 15 percent) that are removed and replaced or appreciably disturbed need to be re-compacted to 98 percent of the Standard Proctor maximum dry density (ASTM D698).

### 4.6.5 Fill Placement

Imported fill placed to raise the site grades should consist of clean sand having less than 10 percent passing the No. 200 sieve. On-site soils meeting the requirements of Section 4.9 may also be used as structural fill. The fill should be placed in maximum 12-inch loose lifts that are compacted to at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557). If lighter “walk-behind” compaction equipment is used, this may require lifts of 4 inches or less to achieve the required degree of compaction.

## 4.7 Quality Control and Construction Materials Testing

It should be noted that the geotechnical engineering design does not end with the advertisement of the construction documents. As the geotechnical engineer of record, GSE is the most qualified to perform the construction materials testing that will be required for this project. The benefits of having the geotechnical engineer of record also perform the construction materials testing are numerous. If GSE continues to be involved with the project through construction, we will be able to constantly re-evaluate and possibly alter our geotechnical recommendations in a timely and cost-effective manner once final design and construction techniques are developed. This often results in cost savings for the project.

We recommend performing compaction testing beneath the concrete floor slab and the building foundations. We recommend one test be performed every 50 linear feet of continuous footing and every other column footing, per foot depth of fill or native material. We recommend a compaction test be performed for each 2,500 square feet of floor area or 10,000 square feet of pavement area per foot of fill or native material, or a minimum of three tests each, whichever is greater. Test all footing excavations to a depth of **24 inches** at the frequencies stated above.

## 4.8 Stormwater Management

The soil conditions at the stormwater management facility are relatively consistent. The borings initially encountered 1 to 2.5 feet of sand with silt to silty sand (SP/SM, SM) overlying sand with silt, and poorly graded sand (SP, SP-SM) to the explored depths of 15 feet bls.

The water table was encountered in the auger borings at 3 to 3.5 feet bls at the time of our exploration. We anticipate the seasonal high groundwater table to be 2.0 feet bls.

The laboratory permeability tests indicate the tested sand with silt (SP-SM) has hydraulic conductivity values of 2.6 to 10 feet per day. The sand with silt encountered just below land surface was not tested for hydraulic conductivity, but these soils are very fine and are expected to have hydraulic conductivity values at least one order of magnitude lower than the deeper sand with silt. In our opinion, this upper soil layer will significantly limit the recovery of the stormwater facilities. To improve the overall infiltration characteristics of the subgrade beneath the stormwater facilities, ***we recommend the areas of stormwater management facilities, and to a distance of 5 feet beyond the perimeter of underground systems, we be excavated/undercut and replaced with clean sand fill having less than 5 percent soil fines passing the No. 200 sieve. The intent is to remove these semi-confining soils from beneath the stormwater systems to improve their recovery characteristics. These soils consist of the dark brown sand with silt to silty sand. Excavating to depths of 2 to 3 feet is anticipated. These excavated soils are suitable for use as fill in other areas of the site.***

Based upon our findings and test results and our recommended subgrade remediation beneath the stormwater systems, our recommended soil parameters for the stormwater management design in the explored areas are presented below. The recommended parameters consider the results of the permeability tests, wash 200 determinations, and our experience with these types of soils. The parameters below do not consider a factor of safety.

***Proposed Stormwater Management Facility***

1. Base elevation of effective or mobilized aquifer (average depth of confining layer) equal to 25 feet bls (based upon adjacent SPT borings).
2. Unsaturated vertical infiltration rate of 20 feet per day (based upon expected values for clean sand fill beneath the systems).
3. Horizontal hydraulic conductivity equal to 6 feet per day.
4. Specific yield (fillable porosity) of 25 percent.
5. Average seasonal high groundwater table depth equal to 2 feet bls.

## 4.9 Fill Suitability

The soils encountered at this site within the explored depths range from sands (SP) to clays (CL/CH). A discussion of the suitability for reuse as structural fill for each soil classification according to the Unified Soil Classification System (USCS) designation is provided below.

SP, SP/SM – Sands (SP) and sand with silt (SP/SM) have less than 5 percent and 12 percent soil fines passing the No. 200 sieve, respectively, and are typically well draining soils that are suitable for reuse as structural fill. The sands with silt may require moisture conditioning (drying) to make the material more workable. These soils will require stockpiling and drying before they are reused if they are excavated from below the water table.

SM – Silty sands (SM) can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Silty sands are typically non-plastic or have low plasticity, and can be reused as structural fill with precautions. Silty sands can be moisture sensitive and difficult to work and compact and can rut if the moisture content is near or above the optimum moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun are typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable silty sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Silty sands with more than 30 percent soil fines are especially moisture sensitive, and are not recommended for reuse as structural fill. These soils will behave more as sandy silt, and for this reason, very silty sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SM/ML. Silty sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

SC – Clayey sand (SC) soils can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Clayey sands can have a high range of plasticity, varying from a PI of 7 or greater and plotting above the A-line to highly plastic. Friable clayey sands are typically suitable for use as structural fill with precautions. Clayey sands will be moisture sensitive and difficult to work and compact and can rut during placement if the moisture content is near or above the natural moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun are typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable clayey sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Clayey sands with more than 30 percent soil fines passing the No. 200 sieve are especially moisture sensitive and are typically highly plastic, and are not recommended for reuse as structural fill. These soils will behave more as sandy clay, and for this reason, very clayey sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SC/CH or SC/CL. Clayey sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

ML, MH, CL, CH – Silts and clays are not suitable materials for reuse as structural fill.

When using on-site soils as fill materials, we recommend the silty and clayey sand soils (SM, SC) be used in the lower depths of the fill. Sand and sand with silt (SP, SP-SM) should be used in the upper portions of the fill. We recommend a minimum of 2 feet of sand (SP, SP-SM) cover the silty and clayey sand fill materials to reduce the potential for soggy surface conditions due to the low permeability characteristics of the silty and clayey sand materials.

### 4.10 Surface Water Control and Landscaping

Roof gutters should be considered to divert runoff away from the building. The gutter downspouts should discharge a minimum of 10 feet from the structure to reduce the amount of water collecting around the foundations. Where possible, the gutter downspouts should discharge directly into the storm sewer system or onto the asphalt paved areas in order to reduce the amount of water collecting around the foundations. Grading of the site should be such that water is diverted away from the building on all sides to reduce the potential for erosion and water infiltration along the foundation.

With respect to landscaping, it is recommended that any trees and large “tree-like” shrubbery with potential for developing large root systems be planted a minimum distance of half their mature height, and preferably their expected final height, away from the structure. The purpose of this is to reduce the potential for foundation or slab movements from the growth of root systems as the landscaping matures. Consideration should also be given to using landscaping that has a low water demand, so that excessive irrigation is not conducted around the structures.

# 5.0 FIELD DATA

## 5.1 Auger Boring Logs

GSE Engineering & Consulting, Inc.
GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

**CLIENT** Walker Architects
**PROJECT NAME** Proposed Clay County Economic Development Office
**PROJECT NUMBER** 16102
**PROJECT LOCATION** Green Cove Springs, Clay County, Florida

## BORING NUMBER P-1

DATE PERFORMED 6/26/2023
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
AT TIME OF DRILLING 3.2 ft
ESTIMATED SEASONAL HIGH 2.0 ft
LOGGED BY WDI
CHECKED BY AXL
NOTES Approximate Surface Elevation 12 ft

| DEPTH (ft) | SAMPLE TYPE NUMBER | MATERIAL DESCRIPTION |
|---|---|---|
| 0.0 | | ASPHALT (0.75") 0.1 |
| | | LIMEROCK (4") 0.4 |
| | AU 1 | (SP-SM) Dark brown SAND with silt<br>*%PASS-200 = 10.4*<br>*MC = 14.5* |
| | | 2.0 |
| 2.5 | AU 2 | (SP-SM) Brown SAND with silt |
| 5.0 | | |
| 7.5 | AU 3 | |
| 10.0 | | |
| 12.5 | | 13.0 |
| | AU 4 | (SP-SM) Gray SAND with silt |
| 15.0 | | 15.0 |
| | | Bottom of borehole at 15.0 feet. |

## BORING NUMBER P-2

DATE PERFORMED 6/26/2023
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
AT TIME OF DRILLING 3.5 ft
ESTIMATED SEASONAL HIGH 2.0 ft
LOGGED BY WDI
CHECKED BY AXL
NOTES Approximate Surface Elevation 12.5 ft

| DEPTH (ft) | SAMPLE TYPE NUMBER | MATERIAL DESCRIPTION |
|---|---|---|
| 0.0 | | ASPHALT (2") 0.2 |
| | | LIMEROCK (4") 0.5 |
| | AU 1 | (SM) Dark brown silty SAND 1.0 |
| | | (SP-SM) Brown SAND with silt |
| | AU 2 PS | *%PASS-200 = 8.4*<br>*MC = 8.9*<br>*$k_h$ = 2.6 ft/day* |
| 2.5 | | |
| 5.0 | | |
| 7.5 | AU 3 | |
| 10.0 | | |
| 12.5 | | |
| | AU 4 | |
| 15.0 | | 15.0 |
| | | Bottom of borehole at 15.0 feet. |

(Continued Next Page)



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GSE Engineering & Consulting, Inc.
GSE Engineering
5590 SW 64th St
Gainesville, FL 32608
Telephone: 3523773233

**CLIENT** Walker Architects
**PROJECT NAME** Proposed Clay County Economic Development Office
**PROJECT NUMBER** 16102
**PROJECT LOCATION** Green Cove Springs, Clay County, Florida

## BORING NUMBER P-3

DATE PERFORMED 6/26/2023
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
AT TIME OF DRILLING 3.0 ft
ESTIMATED SEASONAL HIGH 2.5 ft
LOGGED BY WDI
CHECKED BY AXL
NOTES Approximate Surface Elevation 13.5 ft

| DEPTH (ft) | SAMPLE TYPE NUMBER | MATERIAL DESCRIPTION |
|---|---|---|
| 0.0 | | ASPHALT (1.5") 0.2 |
| | AU 1 | LIMEROCK (5") 0.5 |
| | | (SM) Dark brown silty SAND 1.0 |
| | AU 2 PS | (SP-SM) Brown SAND with silt |
| 2.5 | | *%PASS-200 = 6.4* |
| | | *MC = 12* |
| | | *$k_h$ = 4.6 ft/day* |
| 5.0 | | |
| 7.5 | AU 3 | |
| 10.0 | | |
| 12.5 | AU 4 | |
| 15.0 | | 15.0 Bottom of borehole at 15.0 feet. |

## BORING NUMBER P-4

DATE PERFORMED 6/26/2023
DRILLING CONTRACTOR Whitaker Drilling
GROUND WATER LEVELS:
AT TIME OF DRILLING 3.0 ft
ESTIMATED SEASONAL HIGH 2.5 ft
LOGGED BY WDI
CHECKED BY AXL
NOTES Approximate Surface Elevation 14 ft

| DEPTH (ft) | SAMPLE TYPE NUMBER | MATERIAL DESCRIPTION |
|---|---|---|
| 0.0 | | ASPHALT (0.75") 0.1 |
| | | LIMEROCK (3.5") 0.4 |
| | AU 1 | (SM) Dark brown silty SAND 2.0 |
| | AU 2 PS | (SP-SM) Brown SAND with silt |
| 2.5 | | *%PASS-200 = 7.3* |
| | | *MC = 12* |
| | | *$k_h$ = 5.1 ft/day* |
| 5.0 | | |
| 7.5 | AU 3 | |
| 10.0 | | |
| 12.5 | AU 4 | |
| 15.0 | | 15.0 Bottom of borehole at 15.0 feet. |

(Continued Next Page)



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Telephone: 3523773233

**CLIENT** Walker Architects

**PROJECT NAME** Proposed Clay County Economic Development Office

**PROJECT NUMBER** 16102

**PROJECT LOCATION** Green Cove Springs, Clay County, Florida

## BORING NUMBER P-5

DATE PERFORMED 6/26/2023

DRILLING CONTRACTOR Whitaker Drilling

GROUND WATER LEVELS:

AT TIME OF DRILLING 3.0 ft

ESTIMATED SEASONAL HIGH 2.5 ft

LOGGED BY WDI

CHECKED BY AXL

NOTES Approximate Surface Elevation 14 ft

| DEPTH (ft) | GRAPHIC LOG | SAMPLE TYPE NUMBER | MATERIAL DESCRIPTION |
|---|---|---|---|
| 0.0 | | | ASPHALT (1") 0.1 |
| | | AU 1 | LIMEROCK (4") 0.4 |
| | | | (SM) Dark brown silty SAND |
| 2.5 | | | 2.5 |
| | | AU 2 | (SP-SM) Brown SAND with silt |
| 5.0 | | | |
| 7.5 | | | |
| 10.0 | | | |
| | | AU 3 | |
| 12.5 | | | |
| 15.0 | | | 15.0 |
| | | | Bottom of borehole at 15.0 feet. |

## BORING NUMBER P-6

DATE PERFORMED 6/26/2023

DRILLING CONTRACTOR Whitaker Drilling

GROUND WATER LEVELS:

AT TIME OF DRILLING 3.3 ft

ESTIMATED SEASONAL HIGH 2.5 ft

LOGGED BY WDI

CHECKED BY AXL

NOTES Approximate Surface Elevation 14 ft

| DEPTH (ft) | GRAPHIC LOG | SAMPLE TYPE NUMBER | MATERIAL DESCRIPTION |
|---|---|---|---|
| 0.0 | | AU 1 | (SM) Dark brown silty SAND |
| | | | 1.0 |
| | | AU 2 PS | (SP-SM) Brown SAND with silt |
| 2.5 | | | *%PASS-200 = 5.5* |
| | | | *MC = 8.8* |
| | | | *$k_h$ = 10 ft/day* |
| 5.0 | | | |
| | | | 6.0 |
| | | | (SP) Pale brown and gray SAND |
| 7.5 | | AU 3 | |
| 10.0 | | | |
| 12.5 | | AU 4 | |
| 15.0 | | | 15.0 |
| | | | Bottom of borehole at 15.0 feet. |

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## 5.2 Standard Penetration Test Soil Boring Logs

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# BORING NUMB

**CLIENT** Walker Architects
**PROJECT NAME** Proposed Clay County Economic Development Office
**PROJECT NUMBER** 16102
**PROJECT LOCATION** Green Cove Springs, Clay County, Florida
**DATE STARTED** 6/22/23 **COMPLETED** 6/22/23
**GROUND ELEVATION** 12 ft **HOLE SIZE**
**DRILLING CONTRACTOR** Whitaker Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Mud Rotary
**AT TIME OF DRILLING** 2.6 ft
**LOGGED BY** WDI **CHECKED BY** AXL
**ESTIMATED SEASONAL HIGH** 2.0 ft
**NOTES**

| DEPTH (ft) | MATERIAL DESCRIPTION | CONTACT DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, % | ▲ SPT N VALUE ▲ |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (SP-SM) Loose gray SAND with silt | | | | | | | | | 20 40 60 80 |
| | | 2.5 | SPT 1 | 3-3-3 (6) | | | | | | |
| | (SP-SM) Loose to medium dense brown SAND with silt | | SPT 2 | 3-3-4 (7) | | | | | | |
| 5 | | | SPT 3 | 3-4-4 (8) | | | | | | |
| | | | SPT 4 | 7-8-10 (18) | | | | | | |
| | | | SPT 5 | 9-10-15 (25) | | | | | | |
| 10 | | | SPT 6 | 6-9-12 (21) | | | | | | |
| | | | SPT 7 | 9-9-10 (19) | | | | | | |
| 15 | | | | | | | | | | |
| | | | SPT 8 | 4-7-8 (15) | | | | | | |
| 20 | | | | | | | | | | |

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# BORING NUMB

**CLIENT** Walker Architects

**PROJECT NAME** Proposed Clay County Economic Development Office

**PROJECT NUMBER** 16102

**PROJECT LOCATION** Green Cove Springs, Clay County, Florida

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | CONTACT DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, % | ▲ SPT N VALUE ▲ (20 40 60 80) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (SP-SM) Loose to medium dense brown SAND with silt *(continued)* | 23.5 | | | | | | | | |
| 25 | | (SM-SC) Medium dense gray silty clayey SAND | | SPT 9 | 11-10-11 (21) | | | | | | |
| | | | 28.5 | | | | | | | | |
| | | (CL/CH) Soft gray CLAY | | SPT 10 | 1-1-2 (3) | | | | 89 | 64 | |
| 30 | | | | | | | | | | | |
| | | | 33.5 | | | | | | | | |
| | | (SM-SC) Loose gray silty clayey SAND | | SPT 11 | 3-2-2 (4) | | | | | | |
| 35 | | | 36 | | | | | | | | |
| | | (SP-SM/SC) Very hard gray SAND with silt and clay | | | | | | | | | |
| | | | 39.4 | SPT 12 | 30-50/5" 50/5" | | | | | | >> |
| | | Bottom of borehole at 39.4 feet. | | | | | | | | | |

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# BORING NUMB

**CLIENT** Walker Architects
**PROJECT NAME** Proposed Clay County Economic Development Office
**PROJECT NUMBER** 16102
**PROJECT LOCATION** Green Cove Springs, Clay County, Florida
**DATE STARTED** 6/26/23 **COMPLETED** 6/26/23
**GROUND ELEVATION** 12 ft **HOLE SIZE**
**DRILLING CONTRACTOR** Whitaker Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Mud Rotary
**AT TIME OF DRILLING** 3.5 ft
**LOGGED BY** WDI **CHECKED BY** AXL
**ESTIMATED SEASONAL HIGH** 2.0 ft
**NOTES**

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | CONTACT DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, % | ▲ SPT N VALUE ▲ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | (SM) Medium dense dark gray silty SAND | | | | | | | | | 20 40 60 80 |
| | | | 2 | SPT 1 | 3-3-9 (12) | | | | | | |
| | | (SP-SM) Medium dense to dense brown SAND with silt | | SPT 2 | 10-10-12 (22) | | | | | | |
| 5 | | | | SPT 3 | 13-14-17 (31) | | | | | | |
| | | | 6.5 | SPT 4 | 13-16-20 (36) | | | | | | |
| | | (SP) Dense pale brown and gray SAND | | SPT 5 | 13-17-21 (38) | | | | | | |
| 10 | | | | SPT 6 | 15-20-25 (45) | | | | | | |
| | | | 13.5 | | | | | | | | |
| | | (SP) Loose brown SAND | | SPT 7 | 4-5-3 (8) | | | | | | |
| 15 | | | | | | | | | | | |
| | | | 18.5 | | | | | | | | |
| | | (SP-SM) Loose to medium dense gray SAND with silt | | SPT 8 | 6-6-7 (13) | | | | | | |
| 20 | | | | | | | | | | | |

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# BORING NUMB

**CLIENT** Walker Architects

**PROJECT NAME** Proposed Clay County Economic Development Office

**PROJECT NUMBER** 16102

**PROJECT LOCATION** Green Cove Springs, Clay County, Florida

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | CONTACT DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, % | ▲ SPT N VALUE ▲ 20 40 60 80 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (SP-SM) Loose to medium dense gray SAND with silt *(continued)* | | | | | | | | | |
| 25 | | | | SPT 9 | 7-4-5 (9) | | | | | | |
| | | | 28.5 | | | | | | | | |
| | | (SM-SC) Very loose gray silty clayey SAND | | SPT 10 | 2-2-2 (4) | | | | | | |
| 30 | | | | | | | | | | | |
| | | | 33.5 | | | | | | | | |
| | | (CL/CH) Firm gray sandy CLAY | | SPT 11 | 3-2-3 (5) | | | | | | |
| 35 | | | | | | | | | | | |
| | | | 36.5 | | | | | | | | |
| | | (SP-SM/SC) Loose gray SAND with silt and clay and shells | | | | | | | | | |
| 40 | | | 40 | SPT 12 | 5-5-4 (9) | | | | | | |
| | | Bottom of borehole at 40.0 feet. | | | | | | | | | |

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# BORING NUMB

**CLIENT** Walker Architects
**PROJECT NAME** Proposed Clay County Economic Development Office
**PROJECT NUMBER** 16102
**PROJECT LOCATION** Green Cove Springs, Clay County, Florida
**DATE STARTED** 6/26/23 **COMPLETED** 6/26/23
**GROUND ELEVATION** 13 ft **HOLE SIZE**
**DRILLING CONTRACTOR** Whitaker Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Mud Rotary
**AT TIME OF DRILLING** 3.0 ft
**LOGGED BY** WDI **CHECKED BY** AXL
**ESTIMATED SEASONAL HIGH** 2.0 ft
**NOTES**

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | CONTACT DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, % | ▲ SPT N VALUE ▲ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | (SP-SM) Loose dark gray SAND with silt | | | | | | | | | 20 40 60 80 |
| | | | 2 | SPT 1 | 2-3-5 (8) | | | | 11 | 12 | |
| | | (SP) Loose to medium dense pale brown SAND | | SPT 2 | 4-5-6 (11) | | | | | | |
| | | | 4 | | | | | | | | |
| | | (SP) Medium dense pale brown SAND | | SPT 3 | 7-10-10 (20) | | | | | | |
| 5 | | | | SPT 4 | 9-9-8 (17) | | | | | | |
| | | | | SPT 5 | 8-9-10 (19) | | | | | | |
| | | | | SPT 6 | 7-14-16 (30) | | | | | | |
| 10 | | | | | | | | | | | |
| | | | | SPT 7 | 5-8-8 (16) | | | | | | |
| 15 | | | | | | | | | | | |
| | | | 18.5 | | | | | | | | |
| | | (SP) Loose brown SAND | | SPT 8 | 3-4-5 (9) | | | | | | |
| 20 | | | | | | | | | | | |

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# BORING NUMB

**CLIENT** Walker Architects

**PROJECT NAME** Proposed Clay County Economic Development Office

**PROJECT NUMBER** 16102

**PROJECT LOCATION** Green Cove Springs, Clay County, Florida

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | CONTACT DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, % | ▲ SPT N VALUE ▲ 20 40 60 80 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (SP) Loose brown SAND *(continued)* | 23.5 | | | | | | | | |
| 25 | | (SP-SM/SC) Loose gray SAND with silt and clay | | SPT 9 | 7-4-4 (8) | | | | | | |
| | | | 29 | | | | | | | | |
| 30 | | (CL/CH) Soft gray CLAY with sand | | SPT 10 | 1-1-2 (3) | | | | | | |
| | | | 33.5 | | | | | | | | |
| 35 | | (SM-SC) Very loose gray silty clayey SAND with shell<br>*Weight-of-Hammer from 34.5 to 36 ft bls.* | | SPT 11 | 1-1-0 (1) | | | | | | |
| | | | 38.5 | | | | | | | | |
| 40 | | (SM-SC) Loose gray silty clayey SAND | 40 | SPT 12 | 3-3-4 (7) | | | | | | |
| | | Bottom of borehole at 40.0 feet. | | | | | | | | | |

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# BORING NUMB

**CLIENT** Walker Architects
**PROJECT NAME** Proposed Clay County Economic Development Office
**PROJECT NUMBER** 16102
**PROJECT LOCATION** Green Cove Springs, Clay County, Florida
**DATE STARTED** 6/22/23 **COMPLETED** 6/22/23
**GROUND ELEVATION** 14 ft **HOLE SIZE**
**DRILLING CONTRACTOR** Whitaker Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Mud Rotary
**AT TIME OF DRILLING** 3.3 ft
**LOGGED BY** WDI **CHECKED BY** AXL
**ESTIMATED SEASONAL HIGH** 2.0 ft
**NOTES**

| DEPTH (ft) | MATERIAL DESCRIPTION | CONTACT DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) |
|---|---|---|---|---|
| 0 | (SP-SM) Loose gray SAND with silt | | | |
| | | | SPT 1 | 2-3-3 (6) |
| | | 2.5 | | |
| | (SP-SM) Very loose to loose brown SAND with silt | | | |
| | | | SPT 2 | 3-3-1 (4) |
| 5 | | | SPT 3 | 1-1-1 (2) |
| | | | SPT 4 | 1-2-3 (5) |
| | | 7.5 | | |
| | (SP) Medium dense pale brown SAND | | SPT 5 | 1-5-9 (14) |
| 10 | | | SPT 6 | 7-13-17 (30) |
| | | | | |
| | | | SPT 7 | 9-7-9 (16) |
| 15 | | | | |
| | | | SPT 8 | 6-4-8 (12) |
| 20 | | | | |

LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, %

▲ SPT N VALUE ▲
20 40 60 80

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# BORING NUMB

**CLIENT** Walker Architects
**PROJECT NAME** Proposed Clay County Economic Development Office
**PROJECT NUMBER** 16102
**PROJECT LOCATION** Green Cove Springs, Clay County, Florida

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | CONTACT DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, % | ▲ SPT N VALUE ▲ (20 40 60 80) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (SP) Medium dense pale brown SAND *(continued)* | 23.5 | | | | | | | | |
| 25 | | (SP) Medium dense gray SAND | | SPT 9 | 8-10-13 (23) | | | | | | |
| | | | 28.5 | | | | | | | | |
| 30 | | (SM-SC) Very loose gray silty clayey SAND | | SPT 10 | 1-1-1 (2) | | | | | | |
| 35 | | | | SPT 11 | 2-2-2 (4) | | | | | | |
| | | | 38.5 | | | | | | | | |
| 40 | | (SM-SC) Loose gray silty clayey SAND with shells | 40 | SPT 12 | 3-3-4 (7) | | | | | | |
| | | Bottom of borehole at 40.0 feet. | | | | | | | | | |

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# BORING NUMB

**CLIENT** Walker Architects
**PROJECT NAME** Proposed Clay County Economic Development Office
**PROJECT NUMBER** 16102
**PROJECT LOCATION** Green Cove Springs, Clay County, Florida
**DATE STARTED** 6/22/23 **COMPLETED** 6/22/23
**GROUND ELEVATION** 13.5 ft **HOLE SIZE**
**DRILLING CONTRACTOR** Whitaker Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Mud Rotary
**AT TIME OF DRILLING** 3.0 ft
**LOGGED BY** WDI **CHECKED BY** AXL
**ESTIMATED SEASONAL HIGH** 2.0 ft
**NOTES**

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | CONTACT DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, % | ▲ SPT N VALUE ▲ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | (SM) Loose dark gray silty SAND with roots | | | | | | | | | 20 40 60 80 |
| | | | 2 | SPT 1 | 2-3-6 (9) | | | | | | |
| | | (SP-SM) Loose to medium dense brown SAND with silt | | SPT 2 | 4-6-7 (13) | | | | | | |
| 5 | | | | SPT 3 | 4-4-5 (9) | | | | | | |
| | | | 5.5 | | | | | | | | |
| | | (SP-SM/SC) Medium dense brown, gray, and orange SAND with silt and clay | | SPT 4 | 3-4-9 (13) | | | | | | |
| | | | 7.5 | SPT 5 | 4-6-8 (14) | | | | | | |
| | | (SP-SM) Medium dense brown SAND with silt | | SPT 6 | 3-10-11 (21) | | | | 6.5 | 21 | |
| 10 | | | | | | | | | | | |
| | | | | SPT 7 | 12-11-11 (22) | | | | | | |
| 15 | | | | | | | | | | | |
| | | | | SPT 8 | 4-5-9 (14) | | | | | | |
| 20 | | | | | | | | | | | |

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# BORING NUMB

**CLIENT** Walker Architects

**PROJECT NAME** Proposed Clay County Economic Development Office

**PROJECT NUMBER** 16102

**PROJECT LOCATION** Green Cove Springs, Clay County, Florida

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | CONTACT DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, % | ▲ SPT N VALUE ▲ (20 40 60 80) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (SM-SC) Medium dense gray silty clayey SAND | 22 | | | | | | | | |
| 25 | | | | SPT 9 | 8-7-6 (13) | | | | | | |
| | | | 28 | | | | | | | | |
| | | (CL/CH) Soft to firm gray CLAY with lenses of sand | | | | | | | | | |
| 30 | | | | SPT 10 | 1-2-4 (6) | | | | | | |
| | | | | | | | | | | | |
| 35 | | | | SPT 11 | 3-2-2 (4) | | | | | | |
| | | | 37 | | | | | | | | |
| | | (SM-SC) Medium dense gray silty clayey SAND with shells | | | | | | | | | |
| 40 | | | 40 | SPT 12 | 5-7-9 (16) | | | | | | |
| | | Bottom of borehole at 40.0 feet. | | | | | | | | | |

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# BORING NUMB

**CLIENT** Walker Architects
**PROJECT NAME** Proposed Clay County Economic Development Office
**PROJECT NUMBER** 16102
**PROJECT LOCATION** Green Cove Springs, Clay County, Florida
**DATE STARTED** 6/22/23 **COMPLETED** 6/22/23
**GROUND ELEVATION** 13 ft **HOLE SIZE**
**DRILLING CONTRACTOR** Whitaker Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Mud Rotary
▼ **AT TIME OF DRILLING** 2.5 ft
**LOGGED BY** WDI **CHECKED BY** AXL
▽ **ESTIMATED SEASONAL HIGH** 2.0 ft
**NOTES**

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | CONTACT DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, % | ▲ SPT N VALUE ▲ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | (SP-SM) Loose dark brown SAND with silt | | SPT 1 | 3-2-3 (5) | | | | | | |
| | | | 3 | SPT 2 | 4-5-5 (10) | | | | | | |
| 5 | | (SP) Loose to medium dense pale brown SAND | | SPT 3 | 5-7-8 (15) | | | | | | |
| | | | | SPT 4 | 7-7-8 (15) | | | | | | |
| | | | | SPT 5 | 7-9-13 (22) | | | | | | |
| | | | 9 | SPT 6 | 7-13-18 (31) | | | | | | |
| 10 | | (SP) Dense pale brown and gray SAND | | | | | | | | | |
| | | | 13.5 | | | | | | | | |
| | | (SP) Medium dense brown SAND | | SPT 7 | 4-5-6 (11) | | | | | | |
| 15 | | | | | | | | | | | |
| | | | | SPT 8 | 4-5-9 (14) | | | | 2.8 | 29 | |
| 20 | | | | | | | | | | | |

20 40 60 80

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# BORING NUMB

**CLIENT** Walker Architects

**PROJECT NAME** Proposed Clay County Economic Development Office

**PROJECT NUMBER** 16102

**PROJECT LOCATION** Green Cove Springs, Clay County, Florida

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | CONTACT DEPTH (ft) | SAMPLE TYPE NUMBER | BLOW COUNTS (N VALUE) | LIQUID LIMIT, % | PLASTIC LIMIT, % | PLASTICITY INDEX | PERCENT PASS NO. 200 SIEVE | MOISTURE CONTENT, % | ▲ SPT N VALUE ▲ (20 40 60 80) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (SP) Medium dense brown SAND *(continued)* | 23.5 | | | | | | | | |
| 25 | | (SP-SM/SC) Loose gray SAND with silt and clay | | SPT 9 | 4-5-4 (9) | | | | | | |
| | | | 28.5 | | | | | | | | |
| 30 | | (CL/CH) Stiff gray CLAY | | SPT 10 | 5-7-3 (10) | | | | | | |
| | | | 31.5 | | | | | | | | |
| 35 | | (SP) Medium dense gray SAND with shell | | SPT 11 | 7-9-7 (16) | | | | | | |
| | | | 37 | | | | | | | | |
| 40 | | (SP) Very loose to medium dense gray SAND<br>*Weight-of-Hammer from 39 to 40 ft bls.* | | SPT 12 | 1-0-0 (0) | | | | | | |
| 45 | | | 45 | SPT 13 | 3-4-10 (14) | | | | | | |
| | | Bottom of borehole at 45.0 feet. | | | | | | | | | |



SPT BORINGS - GINT STD US.GDT - 7/10/23 07:54 - Q:\PROJECTS\16102 PROPOSED CLAY COUNTY ECONOMIC DEVELOPMENT OFFICE\16102 BORINGS\16102 BORINGS.GPJ

## 5.3 Laboratory Results

GSE Engineering & Consulting, Inc.

## SUMMARY REPORT OF LABORATORY TEST RESULTS

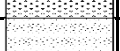
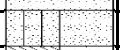
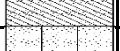
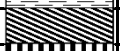
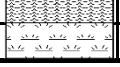
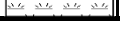
Project Number: 16102

Project Name: Proposed Clay County Economic Devlopment Office

| Boring Number | Depth (ft) | Soil Description | Natural Moisture Content (%) | Liquid Limit | Plastic Limit | Plasticity Index | Percent Passing No. 200 Sieve | Organic Content (%) | Hydraulic Conductivity (ft/day) | Unified Soil Classification |
|---|---|---|---|---|---|---|---|---|---|---|
| P-1 | 0.5-1 | Dark brown SAND with silt | 14.5 | | | | 10.4 | | | SP-SM |
| P-2 | 1-3 | Brown SAND with silt | 8.9 | | | | 8.4 | | 2.6 | SP-SM |
| P-3 | 1-3 | Brown SAND with silt | 12 | | | | 6.4 | | 4.6 | SP-SM |
| P-4 | 2-4 | Brown SAND with silt | 12 | | | | 7.3 | | 5.1 | SP-SM |
| P-6 | 1-3 | Brown SAND with silt | 8.8 | | | | 5.5 | | 10 | SP-SM |
| B-1 | 28.5-30 | Gray CLAY | 64 | | | | 89 | | | CL/CH |
| B-3 | 1-2.5 | Dark brown SAND with silt | 12 | | | | 11 | | | SP-SM |
| B-5 | 8.5-10 | Brown SAND with silt | 21 | | | | 6.5 | | | SP-SM |
| B-6 | 18.5-20 | Gray SAND | 29 | | | | 2.8 | | | SP |

## 5.4 Key to Soil Classification

# KEY TO SOIL CLASSIFICATION CHART

| Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests | | | | SYMBOLS | | GROUP NAME |
|---|---|---|---|---|---|---|
| | | | | GRAPHIC | LETTER | |
| COARSE-GRAINED SOILS | Gravels | Clean Gravels | Cu ≥ 4 and 1 ≤ Cc ≤ 3 | | **GW** | Well graded GRAVEL |
| More than 50% retained on No. 200 sieve | More than 50% of coarse fraction retained on No. 4 sieve | Less than 5% fines | Cu < 4 and/or 1 > Cc > 3 | | **GP** | Poorly graded GRAVEL |
| | | Gravels with fines | Fines classify as ML or MH | | **GM** | Silty GRAVEL |
| | | More than 12% fines | Fines classify as CL or CH | | **GC** | Clayey GRAVEL |
| | Sands | Clean Sands | Cu ≥ 6 and 1 ≤ Cc ≤ 3 |  | **SW** | Well graded SAND |
| | 50% or more of coarse fraction passes No. 4 sieve | Less than 5% fines | Cu < 6 and/or 1 > Cc > 3 |  | **SP** | Poorly graded SAND |
| | | Sand with fines | Fines classify as ML or MH | | **SP-SM** | SAND with silt |
| | | 5% ≤ fines < 12% | Fines classify as CL or CH | | **SP-SC** | SAND with clay |
| | | Sand with fines | Fines classify as ML or MH |  | **SM** | Silty SAND |
| | | 12% ≤ fines < 30% | Fines classify as CL or CH | | **SC** | Clayey SAND |
| | | Sand with fines | Fines classify as ML or MH | | **SM** | Very silty SAND |
| | | 30% fines or more | Fines classify as CL or CH | | **SC** | Very clayey SAND |
| FINE-GRAINED SOILS | Clays | inorganic | 50% ≤ fines < 70% | | **CL/CH** | Sandy CLAY |
| 50% or more passes the No. 200 sieve | | | 70% ≤ fines < 85% | | **CL/CH** | CLAY with sand |
| | | | fines ≥ 85% | | **CL/CH** | CLAY |
| | Silts and Clays | inorganic | PI > 7 and plots on/above "A" line | | **CL** | Lean CLAY |
| | Liquid Limit less than 50 | | PI < 4 or plots below "A" line |  | **ML** | SILT |
| | | organic | Liquid Limit - oven dried / Liquid Limit - not dried < 0.75 | | **OL** | Organic clay / Organic silt |
| | Silts and Clays | inorganic | PI plots on or above "A" line | | **CH** | Fat CLAY |
| | Liquid Limit 50 or more | | PI plots below "A" line |  | **MH** | Elastic SILT |
| | | organic | Liquid Limit - oven dried / Liquid Limit - not dried < 0.75 |  | **OH** | Organic clay / Organic silt |
| HIGHLY ORGANIC SOILS | Primarily organic matter, dark in color, and organic odor | | | | **PT** | PEAT |

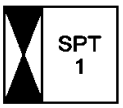
## CORRELATION OF PENETRATION RESISTANCE WITH RELATIVE DENSITY AND CONSISTENCY

| | No. OF BLOWS, N | RELATIVE DENSITY |
|---|---|---|
| | 0 - 4 | Very Loose |
| | 5 - 10 | Loose |
| SANDS: | 11 - 30 | Medium dense |
| | 31 - 50 | Dense |
| | OVER 50 | Very Dense |

| | No. OF BLOWS, N | CONSISTENCY |
|---|---|---|
| | 0 - 2 | Very Soft |
| SILTS | 3 - 4 | Soft |
| & | 5 - 8 | Firm |
| CLAYS: | 9 - 15 | Stiff |
| | 16 - 30 | Very Stiff |
| | 31 - 50 | Hard |
| | OVER 50 | Very Hard |

| | No. OF BLOWS, N | RELATIVE DENSITY |
|---|---|---|
| | 0 - 8 | Very Soft |
| | 9 - 18 | Soft |
| LIMESTONE: | 19 - 32 | Moderately Hard |
| | 33 - 50 | Hard |
| | OVER 50 | Very Hard |

## SAMPLE GRAPHIC TYPE LEGEND




Location of SPT Sample

Location of Auger Sample

## PARTICLE SIZE IDENTIFICATION

| | | |
|---|---|---|
| BOULDERS: | | Greater than 300 mm |
| COBBLES: | | 75 mm to 300 mm |
| GRAVEL: | Coarse - | 19.0 mm to 75 mm |
| | Fine - | 4.75 mm to 19.0 mm |
| SANDS: | Coarse - | 2.00 mm to 4.75 mm |
| | Medium - | 0.425 mm to 2.00 mm |
| | Fine - | 0.075 mm to 0.425 mm |
| SILTS & CLAYS: | | Less than 0.075 mm |

## LABORATORY TEST LEGEND

| | | |
|---|---|---|
| LL | = | Liquid Limit, % |
| PL | = | Plastic Limit, % |
| PI | = | Plasticity Index, % |
| % PASS - 200 | = | Percent Passing the No. 200 Sieve |
| MC | = | Moisture Content, % |
| ORG | = | Organic Content, % |
| $k_h$ | = | Horizontal Hydraulic Conductivity, |

# 6.0 LIMITATIONS

## 6.1 Warranty

This report has been prepared for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty either expressed or implied as to the professional advice provided in the report.

## 6.2 Auger and SPT Borings

The determination of soil type and conditions was performed from the ground surface to the maximum depth of the borings, only. Any changes in subsurface conditions that occur between or below the borings would not have been detected or reflected in this report.

Soil classifications that were made in the field are based upon identifiable textural changes, color changes, changes in composition or changes in resistance to penetration in the intervals from which the samples were collected. Abrupt changes in soil type, as reflected in boring logs and/or cross sections may not actually occur, but instead, be transitional.

Depth to the water table is based upon observations made during the performance of the auger and SPT borings. This depth is an estimate and does not reflect the annual variations that would be expected in this area due to fluctuations in rainfall and rates of evapotranspiration.

## 6.3 Site Figures

The measurements used for the preparation of the figures in this report were made using the provided site plan and by estimating distances from existing structures and site features. Figures in this report were not prepared by a licensed land surveyor and should not be interpreted as such.

## 6.4 Unanticipated Soil Conditions

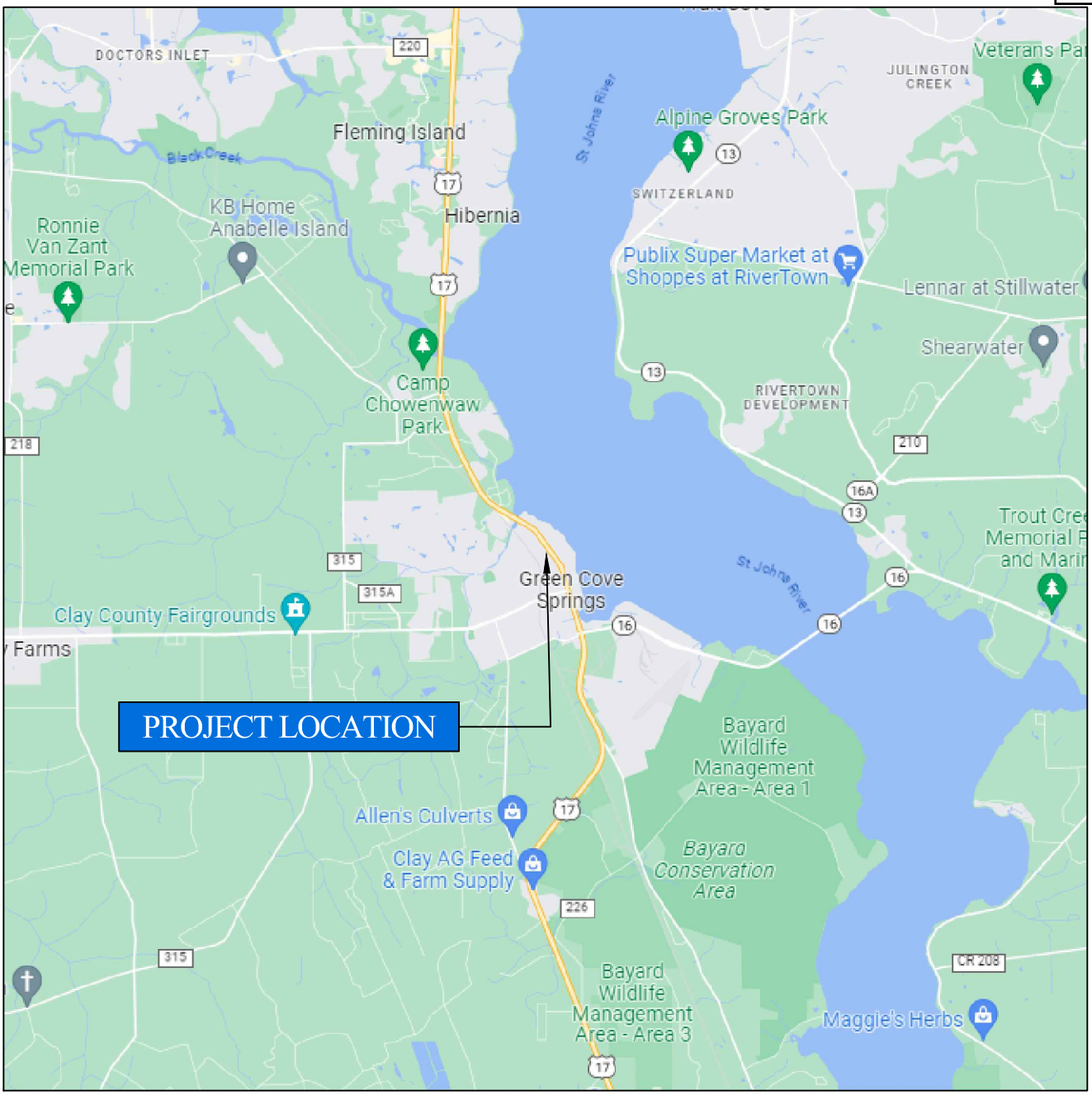
The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on Figure 2. This report does not reflect any variations that may occur between these borings.

The nature and extent of variations between borings may not become known until excavation begins. If variations appear, we may have to re-evaluate our recommendations after performing on-site observations and noting the characteristics of any variations.

## 6.5 Misinterpretation of Soil Engineering Report

GSE Engineering & Consulting, Inc. is responsible for the conclusions and opinions contained within this report based upon the data relating only to the specific project and location discussed herein. If others make the conclusions or recommendations based upon the data presented, those conclusions or recommendations are not the responsibility of GSE.

# FIGURES




NORTH

NOT TO SCALE

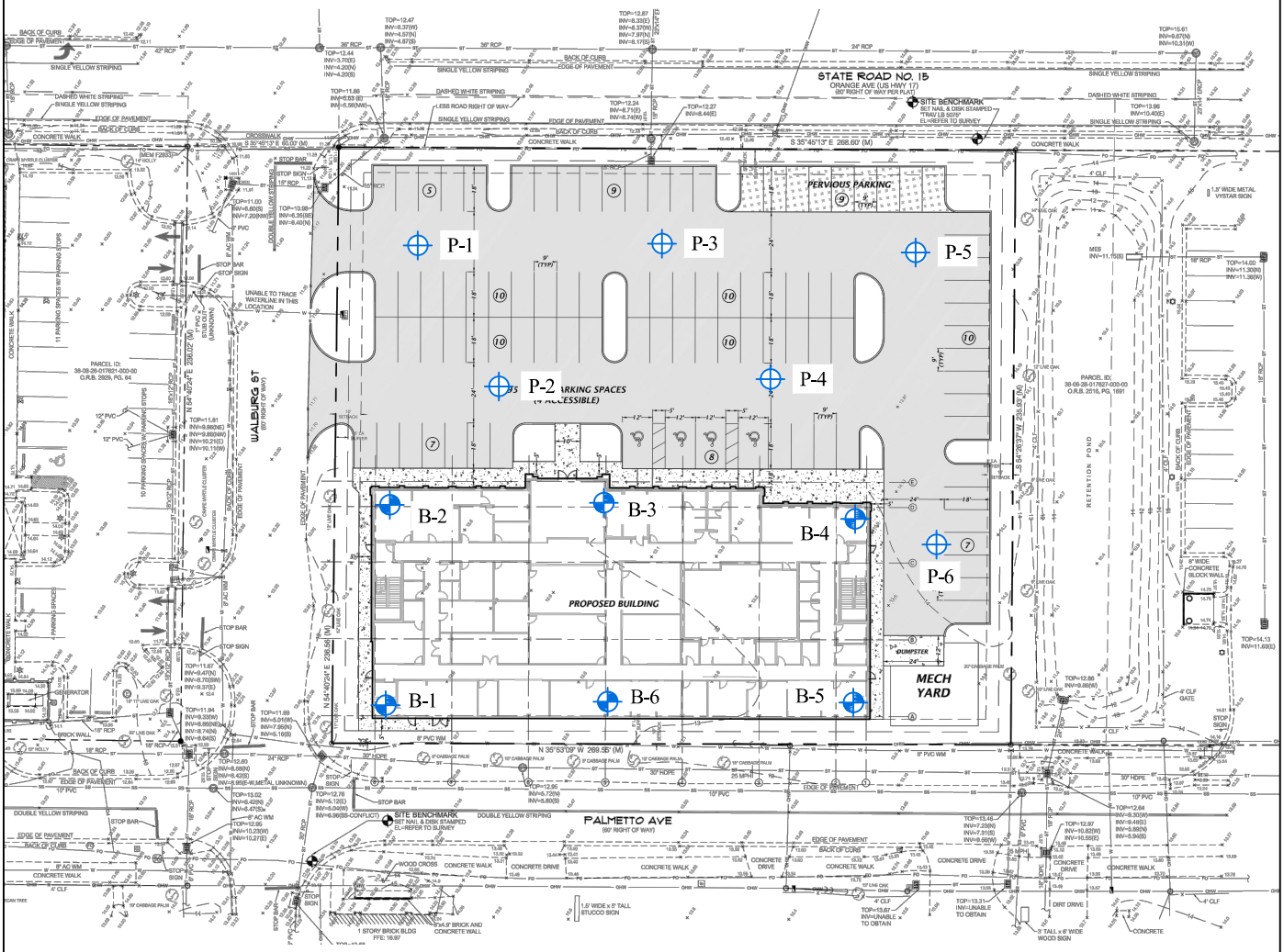
PROJECT SITE LOCATION MAP

PROPOSED CLAY COUNTY ECONOMIC DEVELOPMENT OFFICE
GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA
GSE PROJECT NO. 16102

DESIGNED BY: AXL
CHECKED BY : KLH
DRAWN BY : AXL

GSE Engineering & Consulting, Inc.

FIGURE 1




LEGEND:

- SPT BORING
- AUGER BORING

NORTH

0 70'

SCALE: 1" = 70' APPROX.

PROPOSED CLAY COUNTY ECONOMIC DEVELOPMENT OFFICE
GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA
GSE PROJECT NO. 16102

SITE PLAN SHOWING APPROXIMATE LOCATIONS OF FIELD TESTS

DESIGNED BY: AXL
CHECKED BY : KLH
DRAWN BY : AXL

GSE Engineering & Consulting, Inc.

FIGURE 2