**A G E N D A**
**JAMES CITY COUNTY DEVELOPMENT REVIEW COMMITTEE**
**REGULAR MEETING**
**Building A Large Conference Room**
**101 Mounts Bay Road, Williamsburg, VA 23185**
**May 24, 2023**
**4:00 PM**

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**A. CALL TO ORDER**

**B. ROLL CALL**

**C. MINUTES**

1. April 19, 2023 Meeting Minutes

**D. OLD BUSINESS**

**E. NEW BUSINESS**

1. C-23-0030. JCSA Five Forks Water Treatment Plant Building Addition
2. SP-23-0024. LifePointe East Parking Expansion
3. SPLN-22-0006. Settlement at Powhatan Creek Phase 4 Waterline Exception

**F. ADJOURNMENT**

**AGENDA ITEM NO. C.1.**

**ITEM SUMMARY**

DATE: 4/19/2023

TO: The Development Review Committee

FROM: Armani Franklin, Community Development Assistant

SUBJECT: April 19, 2023 Meeting Minutes

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**ATTACHMENTS:**

| | Description | Type |
|---|---|---|
| | April 19, 2023 Meeting Minutes | Minutes |

**REVIEWERS:**

| Department | Reviewer | Action | Date |
|---|---|---|---|
| Development Review Committee | Secretary, DRC | Approved | 5/24/2023 - 4:36 PM |

**MINUTES**
**JAMES CITY COUNTY DEVELOPMENT REVIEW COMMITTEE REGULAR MEETING**
**Building A Large Conference Room**
**101 Mounts Bay Road, Williamsburg, VA 23185**
**April 19, 2023**
**4:00 P.M.**

## A. CALL TO ORDER

Mr. Rodgers called the meeting to order at approximately 4 p.m.

## B. ROLL CALL

**Present:**
Steve Rodgers, Chair
Barbara Null
Rob Rose
Frank Polster

**Staff:**
Thomas Wysong, Senior Planner
Armani Franklin, Community Development Assistant

## C. MINUTES

1. April 19, 2023, Meeting Minutes

   Mr. Rodgers made a motion to Approve the minutes of the March 29, 2023, meeting.

   On a voice vote, the Development Review Committee (DRC)
   voted to approve the Minutes of the March 29, 2023, meeting (4-0).

## D. OLD BUSINESS

1. C-23-0013. 3150 Jolly Pond Road Subdivision Shared Driveway Exception Request

   The Committee discussed C-23-0013. 3150 Jolly Pond Road Subdivision Shared Driveway Exception Request which was continued from its March 29, 2023, meeting. The plan proposes a shared driveway exception to Section 19-73 of the James City County Subdivision Ordinance and seeks to permit direct access to Jolly Pond Road for an approved five-lot subdivision at 3148, 3158, 3140, 3120, and 3154 Jolly Pond Road, through existing frontage by removing the existing shared 25-foot Ingress/egress easement and any notes prohibiting access to Jolly Pond Road for each lot.

   The Committee and the applicant team discussed a newly proposed plan that allowed the least amount of access to Jolly Pond Road and still permitted developments on the parcels that were already approved. In the Exhibit provided, four driveways, instead of the originally proposed 5, were displayed.

A motion was made to recommend Approval of the exception with the condition that the Exception Request must match the exhibit provided. The motion passed by a vote of 4-0.

**E. NEW BUSINESS**

There was no new business.

**F. ADJOURNMENT**

Mr. Rodgers made a motion to Adjourn.

On a voice vote, the meeting was adjourned at approximately 4:27 p.m.

_____ _____

Mr. Rodgers, Chair Paul D. Holt, III, Secretary

**AGENDA ITEM NO. E.1.**

**ITEM SUMMARY**

DATE: 5/24/2023

TO: The Development Review Committee

FROM: Josh Crump, Principal Planner

SUBJECT: C-23-0030. JCSA Five Forks Water Treatment Plant Building Addition

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**ATTACHMENTS:**

| | Description | Type |
|---|---|---|
| 🗋 | 0. Staff Report | Staff Report |
| 🗋 | 1. Applicant Request | Backup Material |
| 🗋 | 2. Proposed Site Plan Layout | Exhibit |
| 🗋 | 3. SUP-0015-2010 Conditions | Backup Material |
| 🗋 | 4. Adopted Development Plan | Backup Material |

**REVIEWERS:**

| Department | Reviewer | Action | Date |
|---|---|---|---|
| Development Review Committee | Crump, Josh | Approved | 5/16/2023 - 3:29 PM |
| Development Review Committee | Holt, Paul | Approved | 5/16/2023 - 4:40 PM |
| Publication Management | Pobiak, Amanda | Approved | 5/16/2023 - 4:45 PM |
| Development Review Committee | Holt, Paul | Approved | 5/16/2023 - 4:46 PM |

## SUMMARY FACTS

| | |
|---|---|
| Applicant: | Ms. Karlyn Owens |
| Landowner: | James City Service Authority (JCSA) |
| Proposal: | To build a +/- 1,800-square-foot addition to JCSA Five Forks Water Treatment Facility for the storage of chemicals. |
| Location: | 4321 John Tyler Highway |
| Tax Map/Parcel No.: | 4620100038 |
| Project Acreage: | 20.67 acres |
| Current Zoning: | R-8, Rural Residential |
| Comprehensive Plan: | Federal, State, or County Land |
| Primary Service Area: | Inside |
| Staff Contact: | Josh Crump, Principal Planner |

## REASON FOR DEVELOPMENT REVIEW COMMITTEE REVIEW

The applicant is proposing to build a +/- 1,800-square-foot expansion to JCSA Five Forks Water Treatment Facility for the storage of chemicals. The adopted Special Use Permit (SUP) conditions require Development Review Committee (DRC) review of any proposed changes to the development and land clearing plan for a consistency determination.

## FACTORS FAVORABLE

1. The proposed construction would be located in an area that was previously disturbed.

2. The proposed addition is not visible from the public right-of-way and does not change the basic concept or character of the development.

3. Overall, staff finds the proposed addition consistent with the adopted development and land clearing plan.

## FACTORS UNFAVORABLE

1. None. Staff finds the proposed addition consistent with the adopted development and land clearing plan.

## PROJECT DESCRIPTION

To address the safety and operational concerns at the JCSA Five Forks Water Treatment Facility, JCSA is proposing to build a +/- 1,800-square-foot addition to the main facility for the storage of chemicals (see Attachment No. 1). The addition is being proposed at the back of the Treatment Facility building, where there is currently an existing concrete slab (see Attachment No. 2). The building addition will result in the loss of a few parking spaces and will reduce the amount of space that large trucks have available to drive up to the loading dock. Therefore, some minor paving improvements are necessary at the front of the building to allow for additional parking and adequate truck turnaround. No other sitework or changes to the building are proposed.

## PROJECT HISTORY

- Board of Supervisors: Following a 7 to 0 recommendation to approve from the Planning Commission, on June 11, 2002, the

Board of Supervisors approved Case No. SUP-22-2001 by a vote of 5 to 0 with conditions.

- Board of Supervisors: Following a 7 to 0 recommendation to approve from the Planning Commission, on March 25, 2003, the Board of Supervisors approved Case No. SUP-0003-2003 by a vote of 5 to 0 with amended conditions.
- Board of Supervisors: Following a 6 to 0 recommendation to approve from the Planning Commission, on August 12, 2003, the Board of Supervisors approved Case No. SUP-0014-2003 by a vote of 5 to 0 with amended conditions.
- Board of Supervisors: Following a 6 to 0 recommendation to approve from the Planning Commission, on August 10, 2010, the Board of Supervisors approved Case No. SUP-0015-2010 by a vote of 5 to 0 with amended conditions.
- DRC: The DRC reviewed the construction plan for the Water Treatment Facility (Case No. SP-0134-2002, Va. Code § 15.2-2232 consistency review) and the plan was granted preliminary approval by the Planning Commission on January 13, 2003.
- DRC: The DRC reviewed the conceptual plan for the proposal of the construction of two production wells (Case No. C-0073-2014) and unanimously recommended approval of a determination of consistency with the adopted development and land clearing plan at the October 29, 2014, DRC meeting and approval by the Planning Commission on November 5, 2014.

**SURROUNDING ZONING AND DEVELOPMENT**

North: MU, Mixed Use, single-family residential development and commercial and industrial property.

South: R-8, Rural Residential, single-family residential development and Williamsburg Unitarian Universalists Church.

East: PL, Public Lands, Clara Byrd Baker Elementary School.

West: R-8, Rural Residential, single-family residential development.

**STAFF ANALYSIS**

Per Condition No. 5 of SUP-0015-2010, "Development Plan: Development and land clearing of the site shall be generally in accordance with the "Preliminary Plan, Brackish Groundwater Desalination Facility…such accessory structures and minor changes as the Development Review Committee determines does not change the basic concept or character of the development" (see Attachment No. 3). In reviewing the Development Plan (see Attachment No. 4), staff finds the proposed addition would be considered an accessory structure and consistent with the adopted SUP conditions and Development Plan.

**STAFF RECOMMENDATION**

Staff recommends the DRC find the proposed facility addition consistent with the adopted development and land clearing plan for JCSA Five Forks Water Treatment Facility as the proposed construction would be located in an area that was previously disturbed, is not visible from the public right-of-way, and does not change the basic concept or character of the development.

JC/md
CP23-30FFWtrPlnt

Attachments:
1. Applicant Request
2. Proposed Site Plan Layout
3. SUP-0015-2010 Conditions
4. Adopted Development Plan

JCSA Water Treatment Facility Building Expansion

The JCSA currently owns and operates the Five Forks Water Treatment Facility (FFWTP) located at 4321 John Tyler Highway. The facility was initially permitted through James City County planning under SUP-0015-2010.

The FFWTP is part of the JCSA Central Water system and has a capacity to treat approximately 5 million gallons of water per day utilizing reverse osmosis technology. On average, the FFWTP produces 70%-80% of the water that is distributed to JCSA customers in the Central System. Several chemicals are used during the treatment process, three of which are delivered to the site in plastic totes ranging in size from 280-320 gallons. The facility currently lacks adequate storage for the chemical totes and as such, they are currently being stored on the process floor. This as a problem for several reasons:

- Currently there is no chemical containment for totes in the event of a spill or leak.
- There is no designated ventilation for chemical totes.
- There is no separation between chemicals that are not compatible with each other (zinc orthophosphate and sodium hydroxide).
- Operators often need to move the totes around to access other equipment. Having to move chemical totes around is time consuming and a safety hazard.
- A chemical spill on the process floor would require the plant to be shut down for an unknown duration of time.

To address the safety and operational problems associated with chemical storage, JCSA is proposing an 1800 square foot expansion to the building. JCSA has been working with AES consulting engineers and their team to develop plans for the addition. The proposed building addition includes a designated bay for each chemical, adequate ventilation, and separate containment for the chemicals.

The addition is being proposed at the back of the treatment facility building, where there is currently an existing concrete slab. The building addition will result in the loss of a few parking spaces and will reduce the amount of space that large trucks have available to drive up to the loading dock. Therefore, some minor paving improvements are necessary at the front of the building to allow for additional parking and adequate truck turn around. No other site work or changes to the building are proposed.

Photos are provided below showing the current facility, the location of the building addition and the current chemical storage. The proposed project is in accordance with SUP-0015-2010 since the development consists of accessory structures and minor changes that do not change the basic concept or character of the development. JCSA is requesting DRC approval to move forward with the project.

*Chemical totes stored on process floor.*

*Current front of FFWTP Facility – no proposed changes except for additional parking and asphalt turn-around*.

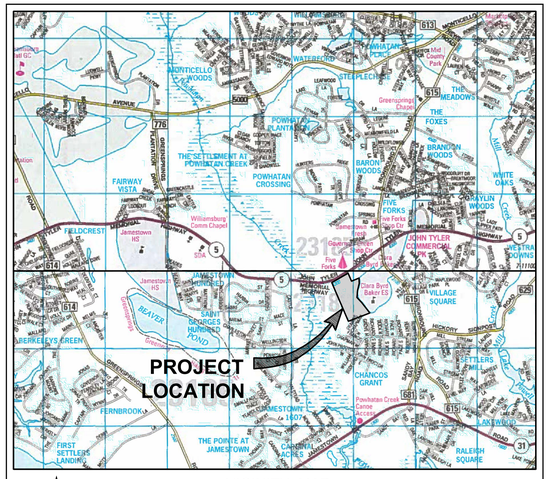
*Rear of facility where building expansion is proposed.*

## GENERAL NOTES:

1. THIS SITE LIES WITHIN THE JAMES RIVER - POWHATAN CREEK WATERSHED.
2. ALL ERRORS OR DISCREPANCIES WITH THE PLANS OR EXISTING SITE CONDITIONS SHALL BE REPORTED TO THE ENGINEER OR SURVEYOR OF RECORD BEFORE PROCEEDING WITH THE WORK.
3. CONTOUR INTERVAL IS 1 FOOT. EXISTING GRADE IS FROM A COMBINATION OF THE FOLLOWING: A COMBINATION OF FIELD SURVEYS.
4. ALL UTILITY AND SURVEY DATA SHOWN ON THE DRAWINGS HAS BEEN PROVIDED BY THE COMBINATION OF SURVEYS AS DESCRIBED ABOVE. INFORMATION HAS BEEN OBTAINED FROM THE BEST AVAILABLE SOURCES AT THE TIME OF THE SURVEY PROVIDED BY AES CONSULTING ENGINEERS BUT IS NOT REPRESENTED AS BEING COMPLETE AND ACCURATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT EXISTING UTILITIES AND UNDERGROUND STRUCTURES. DAMAGE TO EXISTING UTILITIES AND UNDERGROUND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR TO NO ADDITIONAL COST TO THE DEVELOPER.
5. EXISTING UTILITY LOCATIONS INDICATED ARE APPROXIMATE. FIELD VERIFY PRIOR TO COMMENCING THE WORK.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE DRAWINGS AND FOR EXCAVATION, STOCKPILES, STAGING AREAS, MOBILIZATION SITES, BEDDING/BACKFILL STOCKPILES, AND OTHER LAND DISTURBANCES NOT SPECIFICALLY ADDRESSED IN THE DRAWINGS OR CONTRACT DOCUMENTS. EROSION AND SEDIMENT CONTROL MEASURES SHALL MEET OR EXCEED THE MINIMUM STANDARDS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" (LATEST PUBLICATION) AND THE REQUIREMENTS OF THE LOCAL GOVERNING AUTHORITY.
7. ALL DISTURBED AREAS, INCLUDING BUT NOT LIMITED TO PAVEMENT, SHOULDERS, DITCHES, HEADWALLS, ENDWALLS, CULVERT PIPES, CURB AND GUTTER, UTILITIES, DRIVEWAYS, SIGNS, MAILBOXES, ETC., SHALL BE REPAIRED TO A CONDITION EQUAL TO OR BETTER THAN THOSE EXISTING PRIOR TO CONSTRUCTION OR AS SHOWN ON THE DRAWINGS. SIGNS, MAILBOXES, AND GUARDRAILS THAT ARE DISTURBED SHALL BE RETURNED TO THEIR ORIGINAL LOCATIONS DAILY AND MAINTAINED THROUGHOUT THE PROJECT.
8. THE CONTRACTOR SHALL REESTABLISH ALL PROPERTY PINS, MONUMENTS, WATER METERS, DRAINAGE CULVERTS, FENCES, UTILITY POLES, DRIVEWAYS, CURBS, GUTTERS, ETC. DISTURBED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE DEVELOPER/OWNER.
9. ALL PROPOSED UTILITIES SHALL BE PLACED UNDERGROUND AS PER JAMES CITY COUNTY ZONING ORDINANCE SECTION 24-200.
10. PRIVATELY OWNED UTILITIES SHOWN ON THIS PLAN ARE REGULATED BY THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE AND ENFORCED BY THE CODE COMPLIANCE DIVISION. THESE PRIVATELY OWNED UTILITIES MUST COMPLY FULLY WITH THE INTERNATIONAL PLUMBING CODE, THE NATIONAL FIRE PREVENTION ASSOCIATION STANDARD 24, AND THE INTERNATIONAL FIRE CODE. CONTRACTORS WORKING FROM THIS SITE PLAN ARE CAUTIONED NOT TO INSTALL OR CONCEAL PRIVATELY OWNED SITE UTILITIES WITHOUT OBTAINING REQUIRED PERMITS AND INSPECTIONS.
11. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND NOTIFY THE OWNER OF ANY DISCREPANCIES PRIOR TO AND DURING CONSTRUCTION.
12. ANY EXISTING, UNUSED WELLS SHALL BE ABANDONED IN ACCORDANCE WITH THE VIRGINIA PRIVATE WELL REGULATIONS AND JAMES CITY COUNTY CODE.
13. SOLID WASTE DISPOSAL SHALL BE PROVIDED BY A PRIVATE HAULER.
14. THE CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF THE APPROVED PLANS AT THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
15. CONTRACTORS SHALL NOTIFY MISS UTILITY @ 811 OR (800) 552-7001 PRIOR TO STARTING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND DETERMINING SIZES OF ALL UTILITIES PRIOR TO CONSTRUCTION. IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS, CONTACT THE ENGINEER BEFORE PROCEEDING.
16. THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO ALL OWNERS AND RESIDENTS OF PROPERTY ADJACENT TO THE PROJECT 30 DAYS PRIOR TO THE COMMENCEMENT OF WORK, UNLESS OTHERWISE DIRECTED BY THE OWNER. CONSTRUCTION WITHIN EASEMENTS OR ON PUBLIC RIGHT-OF-WAY NECESSITATES NOTICE WHETHER ADJACENT TO OR LOCATED ON THE ADJOINING PROPERTY. FAILURE TO PROVIDE THE MINIMUM NOTIFICATION TIME WILL RESULT IN SUSPENSION OF WORK.
17. THE ABSENCE OF THE OWNER OR THE ENGINEER AT THE JOB SITE DOES NOT, IN ANY WAY, RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PERFORM THE WORK IN ACCORDANCE WITH THE DRAWINGS, CONTRACT DOCUMENTS, ADDENDA, AND WRITTEN AUTHORIZED PLAN REVISIONS.
18. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS, AND ORDERS OF ANYBODY HAVING JURISDICTION. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION.
19. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM WITH THE CURRENT JAMES CITY COUNTY STANDARDS AND SPECIFICATIONS, VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS, VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS, AND ANY OTHER APPLICABLE CITY OR STATE ORDINANCES, CODES, AND LAWS PRIOR TO ANY CONSTRUCTION ACTIVITY.
20. THE CONTRACTOR SHALL USE ONLY NEW MATERIALS, PARTS AND PRODUCTS ON ALL PROJECTS. ALL MATERIALS SHALL BE STORED SO AS TO ASSURE THE PRESERVATION OF THEIR QUALITY AND FITNESS FOR THE WORK.
21. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS PRIOR TO COMMENCEMENT OF WORK INCLUDING, BUT NOT LIMITED TO, LAND DISTURBING, BUILDING, RIGHT-OF-WAY, AND UTILITY PERMITS.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF CONSTRUCTION EFFORTS WITH LOCAL EMERGENCY SERVICES AND ALL NECESSARY UTILITY COMPANIES INCLUDING, BUT NOT LIMITED TO, ELECTRICTY, NATURAL GAS, TELECOMMUNICATIONS, CABLE TELEVISION, WATER, SEWER, PRIVATE LIGHTING, AND OTHERS THAT MAY BE REQUIRED.
23. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO ALL SITE CONDITIONS PRIOR TO CONSTRUCTION.
24. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF ALL SITE IMPROVEMENTS, INCLUDING LANDSCAPING, AS SHOWN ON THE APPROVED PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL LINES AND GRADES REQUIRED.
25. THE CONTRACTOR SHALL REMOVE ALL EXCESS MATERIAL, INCLUDING SOIL AND DEBRIS, FROM THE SITE. ALL OBJECTIONABLE AND DELETERIOUS MATERIAL IS TO BE REMOVED FROM THE SITE AND DISPOSED OF IN A STATE APPROVED FACILITY MEETING THE REQUIREMENTS OF ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
26. THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF THE VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT (SECTION 56-265.14 ET. SEQ. CODE OF VIRGINIA, 1950, AS AMENDED) AND HEREBY AGREES TO HOLD THE DEVELOPER AND THE ENGINEER HARMLESS AGAINST ANY LOSS, DAMAGE, OR CLAIMS OF ANY NATURE WHATSOEVER ARISING OUT OF THE CONTRACTOR'S FAILURE TO COMPLY WITH THE REQUIREMENTS OF SAID ACT. THE CONTRACTOR IS REQUIRED TO COMPLY WITH THE VIRGINIA OVERHEAD HIGH VOLTAGE LINE SAFETY ACT (SECTIONS 59.1-406 THROUGH 59.1-414, CODE OF VIRGINIA, 1950, AS AMENDED). THE CONTRACTOR IS REQUIRED TO VISIT THE SITE AND NOTE THE POSITION OF OVERHEAD CABLES PRIOR TO CONSTRUCTION.
27. HORIZONTAL DATUM: NAD83 - VA SOUTH ZONE 4502
    VERTICAL DATUM: NAVD29
28. THE PROFESSIONAL WHOSE SEAL IS AFFIXED HEREON SHALL ACT AS THE "RESPONSIBLE LAND DISTURBER" FOR PURPOSES OF PLAN APPROVAL ONLY. PRIOR TO ISSUANCE OF THE LAND DISTURBING PERMIT, THE CONTRACTOR SHALL PROVIDE THE NAME OF A "RESPONSIBLE LAND DISTURBER" WHO SHALL ASSUME RESPONSIBILITY AS THE "RESPONSIBLE LAND DISTURBER" FOR THE CONSTRUCTION PHASE OF THE PROJECT. THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION SHOULD THE "RESPONSIBLE LAND DISTURBER" CHANGE DURING CONSTRUCTION.
29. ALL DROP INLETS SHALL BE STANDARD VDOT INLETS WITH TYPE "A" NOSE.
30. STORM SEWER PIPE SHALL BE CLASS III RCP OR SMOOTH WALL INTERIOR HDPE PIPE UNLESS OTHERWISE DESIGNATED. RCP SHALL BE USED IN ALL LOCATIONS UNDER CURB AND GUTTER.
31. STORM STRUCTURES SHALL CONFORM TO THE CURRENT VDOT ROAD AND BRIDGE STANDARDS AND VDOT SPECIFICATIONS. ALL MANHOLES SHALL INCLUDE INLET SHAPING (IS-1) AND MANHOLES DEEPER THAN 4 FEET SHALL HAVE STEPS (ST-1). PIPE BEDDING SHALL BE IN ACCORDANCE WITH VDOT PB-1 AND MANUF. SPECS/GUIDELINES.
32. ALL FILL MATERIAL SHALL BE VOID OF DEBRIS AND PLACED IN UNIFORM LIFTS OF NOT MORE THAN 6" IN LOOSE DEPTH. COMPACTION SHALL BE PERFORMED WITH HEAVY COMPACTION EQUIPMENT. COMPACT TO 95% MAXIMUM DRY DENSITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING COMPACTION TEST RESULTS BY A GEOTECHNICAL ENGINEER TO THE OWNER/DEVELOPER FOR VERIFICATION OF PROPER COMPACTION.
33. ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS.
34. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH DETAILS AND NOTES.
35. THE CONTRACTOR SHALL STRICTLY ADHERE TO THE CLEARING LIMITS AS SHOWN ON THE APPROVED PLAN. IF IT IS NECESSARY TO CLEAR TREES BEYOND THE LIMITS OF DISTURBANCE, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER AND COORDINATE THE WORK PRIOR TO ANY CLEARING.
36. ALL LIGHTING WILL BE IN COMPLIANCE WITH ARTICLE II, DIVISION 7 OF THE ZONING ORDINANCE.
37. ALL NEW SIGNS SHALL BE SET IN ACCORDANCE WITH ARTICLE II, DIVISION 3 OF THE JAMES CITY COUNTY ZONING ORDINANCE.
38. COORDINATION INCLUDES BEING THE PARTY RESPONSIBLE TO COORDINATE WITH DEVLOPER/OWNER TO ENSURE THAT OTHER UTILITIES (PUBLIC OR PRIVATE) DO NOT VIOLATE THE JCSA POLICY OF EXCLUSIVE OCCUPATION OF JCSA EASEMENTS OTHER THAN PERPENDICULAR CROSSINGS.
39. THE PROPERTY SHALL BE SERVED BY PUBLIC WATER AND PUBLIC SEWER.
40. ALL NEW MONUMENTS SHALL BE SET IN ACCORDANCE WITH SEC. 19-34 THROUGH 19-36 OF THE JAMES CITY COUNTY SUBDIVISION ORDINANCE.
41. SUBMISSION, REVIEW, AND APPROVAL OF RECORD DRAWINGS (AS-BUILTS) AND CONSTRUCTION CERTIFICATIONS FOR THE STORMWATER CONVEYANCE SYSTEMS AND STORMWATER MANAGEMENT FACILITY ARE REQUIRED PRIOR TO RELEASE OF THE POSTED BOND/SURETY. CONTRACTOR SHALL ENSURE THIS ACTIVITY IS ADEQUATELY COORDINATED AND PERFORMED BEFORE, DURING, AND FOLLOWING CONSTRUCTION IN ACCORDANCE WITH CURRENT COUNTY GUIDELINES.
42. ALL PROPOSED SOIL STOCKPILES SHALL ADHERE TO SECTION 24-46 OF THE JCC ZONING ORDINANCE.

# SITE PLAN
FOR
# JCSA WATER TREATMENT BUILDING EXPANSION

BERKELEY DISTRICT JAMES CITY COUNTY VIRGINIA




VICINITY MAP
(APPROXIMATE SCALE: 1"=2000')
MAP COPYRIGHT © KAPPA MAP GROUP LLC, (386) 873-3011. USED WITH PERMISSION - PERMITTED USE NUMBER BJE051082.

ORIGINAL SUBMITTAL DATE: 01/09/2023

## LEGEND

| EXISTING | PROPOSED | | EXISTING | PROPOSED |
|---|---|---|---|---|
| EX. WATER | WATER | | CENTERLINE/BASELINE | |
| EX. SAN. | SANITARY SEWER | | RIGHT OF WAY | |
| | STORM SEWER | | PROPERTY LINE | |
| EX. FORCEMAIN | FORCE MAIN | | ℄ DITCH/SWALE | |
| S | SANITARY MANHOLE | | CONCRETE LINED DITCH | |
| | STORM MANHOLE | | EXISTING TREELINE | |
| | CURB DROP INLET | | LIMITS OF CLEARING | |
| | YARD DROP INLET | | RIP RAP | |
| | FLARED END SECTION | | CURB | |
| | VALVE | | CURB AND GUTTER | |
| | FIRE HYDRANT ASSEMBLY | | REVERSE GUTTER PAN | |
| | BLOW-OFF VALVE | | EDGE OF PAVEMENT | |
| | AIR RELEASE ASSEMBLY | | EXISTING GROUND ELEVATION | |
| CO | CLEAN OUT | +251 | PROPOSED SPOT GRADE | TC0.00 |
| WM | WATER METER | 80 | CONTOUR | 80 |
| | STREETLIGHT | | | |

1. CONTRACTORS SHALL NOTIFY MISS UTILITY @ 811 OR (800) 552-7001 PRIOR TO STARTING CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND DETERMINING SIZES OF ALL UTILITIES PRIOR TO CONSTRUCTION.
3. IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS, CONTACT THE CONSTRUCTION MANGER BEFORE PROCEEDING.
4. GOVERNMENT WILL MARK ALL GOVERNMENT-OWNED UTILITIES.

| Sheet List Table | |
|---|---|
| Sheet Number | Sheet Title |
| C1.0 | COVER SHEET |
| C2.0 | ENVIRONMENTAL INVENTORY & DEMOLITION PLAN |
| C3.0 | SITE, UTILITY AND GRADING PLAN |
| C4.0 | E&SC NOTES & DETAILS |

## CERTIFIED RESPONSIBLE LAND DISTURBER:

T. RYAN STEPHENSON, P.E.
AES CONSULTING ENGINEERS
5248 OLDE TOWNE ROAD, SUITE 1
WILLIAMSBURG, VIRGINIA 23188
TELEPHONE: 757-253-0040

* FOR SITE PLAN REVIEW PROCESS ONLY. OWNER OR CONTRACTOR SHALL NAME RESPONSIBLE LAND DISTURBER FOR CONSTRUCTION PROCESS.

## OWNER/DEVELOPER INFORMATION:

JAMES CITY SERVICE AUTHORITY

CONTACT: MS. KARLYN OWENS
119 TEWNING ROAD
WILLIAMSBURG, VIRGINIA 23188

## PARKING CALCULATION:

EXISTING PARKING:
17 REGULAR SPACES
1 HC SPACE
=18 TOTAL PARKING SPACES

PROVIDED PARKING:
8 ADDITIONAL REGULAR PARKING SPACES
13 EXISTING SPACES
1 EXISTING HC SPACE
= 22 TOTAL PARKING SPACES

## SITE DATA:

| | | | |
|---|---|---|---|
| SITE ADDRESS: | 4321 JOHN TYLER HIGHWAY<br>WILLIAMSBURG, VIRGINIA 23188<br>LATITUDE: 37° 14' 55" N; LONGITUDE: 76° 46' 9" W | | |
| ZONING: | R8, RURAL RESIDENTIAL | | |
| PARCEL ID: | 4620100038 | | |
| OVERALL SITE AREA: | 900,195 S.F.±, | 20.67 AC.± | 100.00% |
| TOTAL DISTURBED AREA: | 9,751 S.F.±, | 0.22 AC.± | 1.08% |
| PROPOSED ADDITIONAL IMP. AREA: | 5,776 S.F.±, | 0.13 AC.± | |

FLOOD HAZARD MAP:
THIS PROPERTY IS LOCATED WITHIN FLOOD ZONE "X" AS SHOWN ON MAP NUMBER 51095C0182D EFFECTIVE ON 12/16/2015 OF THE FLOOD INSURANCE RATE MAPS FOR JAMES CITY COUNTY, VIRGINIA. ZONE "X" IS DEFINED AS AREAS OF MINIMAL FLOOD HAZARD.

## VSMP PERMIT DATA:

EXISTING PERMIT COVERAGE #: N/A

SITE LOCATED IN CHESAPEAKE BAY PRESERVATION AREA: Yes ☒ No ☐

| | |
|---|---|
| LOCATION OF OFF-SITE ACTIVITY: | N/A<br>Latitude: , Longitude: |
| STATUS OF ACTIVITY: | ☐ Federal ☐ State ☒ Public ☐ Private |
| NATURE OF CONSTRUCTION ACTIVITY: | ☐ Commercial ☐ Residential ☒ Industrial ☐ Other |
| NAME OF RECEIVING WATER(S): | JAMES RIVER - POWHATAN CREEK |
| NAME OF IMPAIRED WATER(S): | CHESAPEAKE BAY |
| HYDROLOGIC UNIT CODE (HUC): | JL31 |
| MUNICIPAL STORM SEWER SYSTEM (MS-4): | JAMES CITY COUNTY |
| COMMON PLAN OF DEVELOPMENT: | Yes ☐ No ☒ |

| Rev. | Date | Description | Revised By |
|---|---|---|---|
| | | | |

COMMONWEALTH OF VIRGINIA
T. RYAN STEPHENSON
Lic. No. 044405
PROFESSIONAL ENGINEER
01/09/2023

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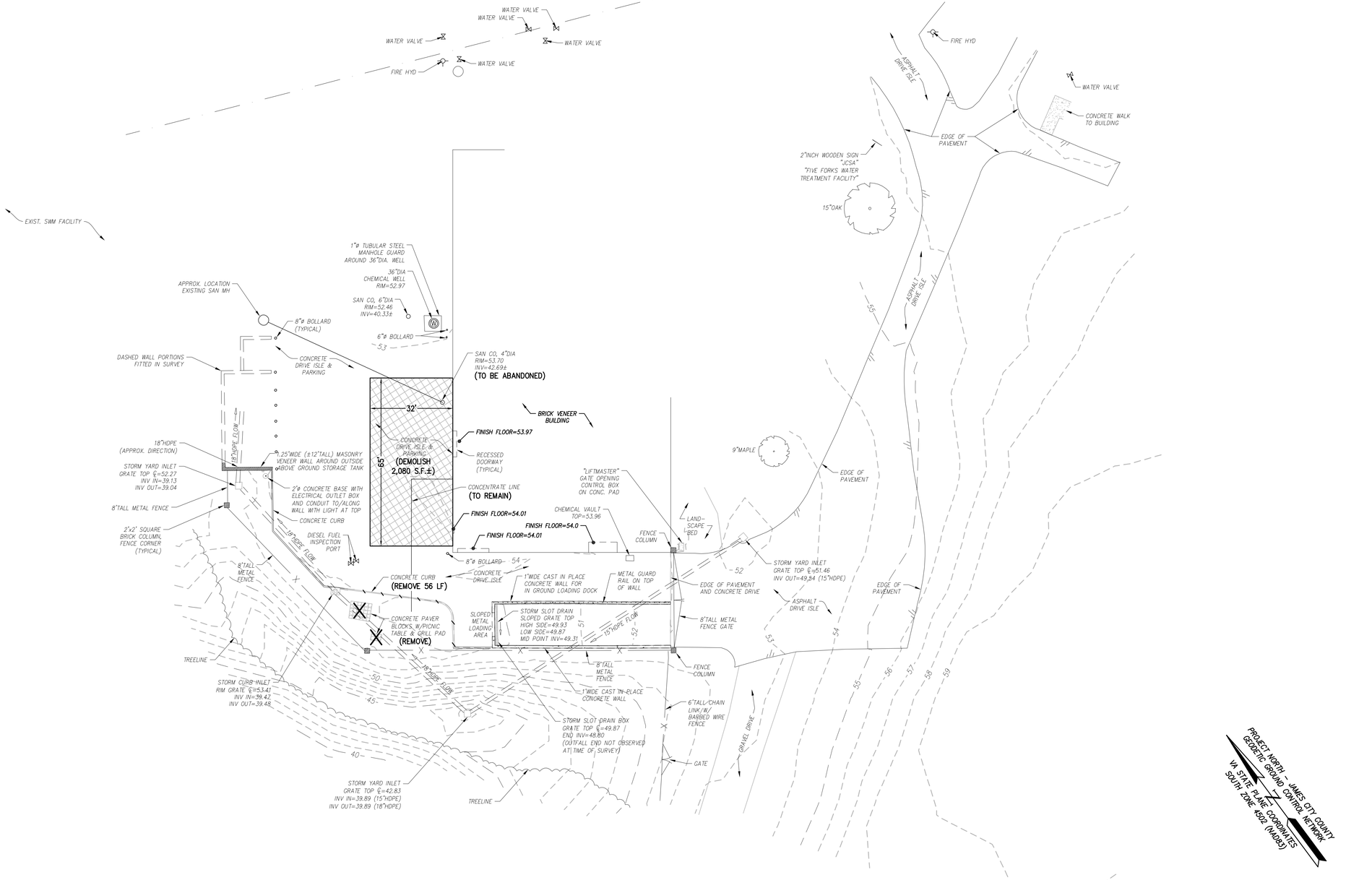
SITE PLAN FOR JCSA WATER TREATMENT BUILDING EXPANSION
JAMES CITY COUNTY VIRGINIA
BERKELEY DISTRICT

| | |
|---|---|
| Project Contacts: | TRS |
| Project Number: | W10648-03 |
| Scale: AS NOTED | Date: 01/09/2023 |
| Sheet Title: | COVER SHEET |
| Sheet Number | C1.0 |

S:\JOB\W10648- JCC Annual Services 2020\CSA - JCSA\03 JCSA Water Treatment Building Expansion\Engineering\Plans\W10648(3_C1.0 Cover Sheet).dwg, 1/9/2023 11:47:17 AM, rbaskervip




GRAPHIC SCALE

20' 0' 20' 40'

SCALE: 1" = 20'

## DEMOLITION LEGEND

- AREAS TO BE DEMOLISHED
- ITEMS TO BE REMOVED
- X — ITEMS TO BE REMOVED

NOTE:

EXISTING ROOF DOWNSPOUTS WILL NEED TO BE RELOCATED WITH BUILDING EXPANSION.

| Rev. | Date | Description | Revised By |
|---|---|---|---|
| | | | |

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COMMONWEALTH OF VIRGINIA — LICENSED PROFESSIONAL ENGINEER — RYAN STEPHENSON — Lic. No. 044405 — 01/09/2023

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SITE PLAN FOR

# JCSA WATER TREATMENT BUILDING EXPANSION

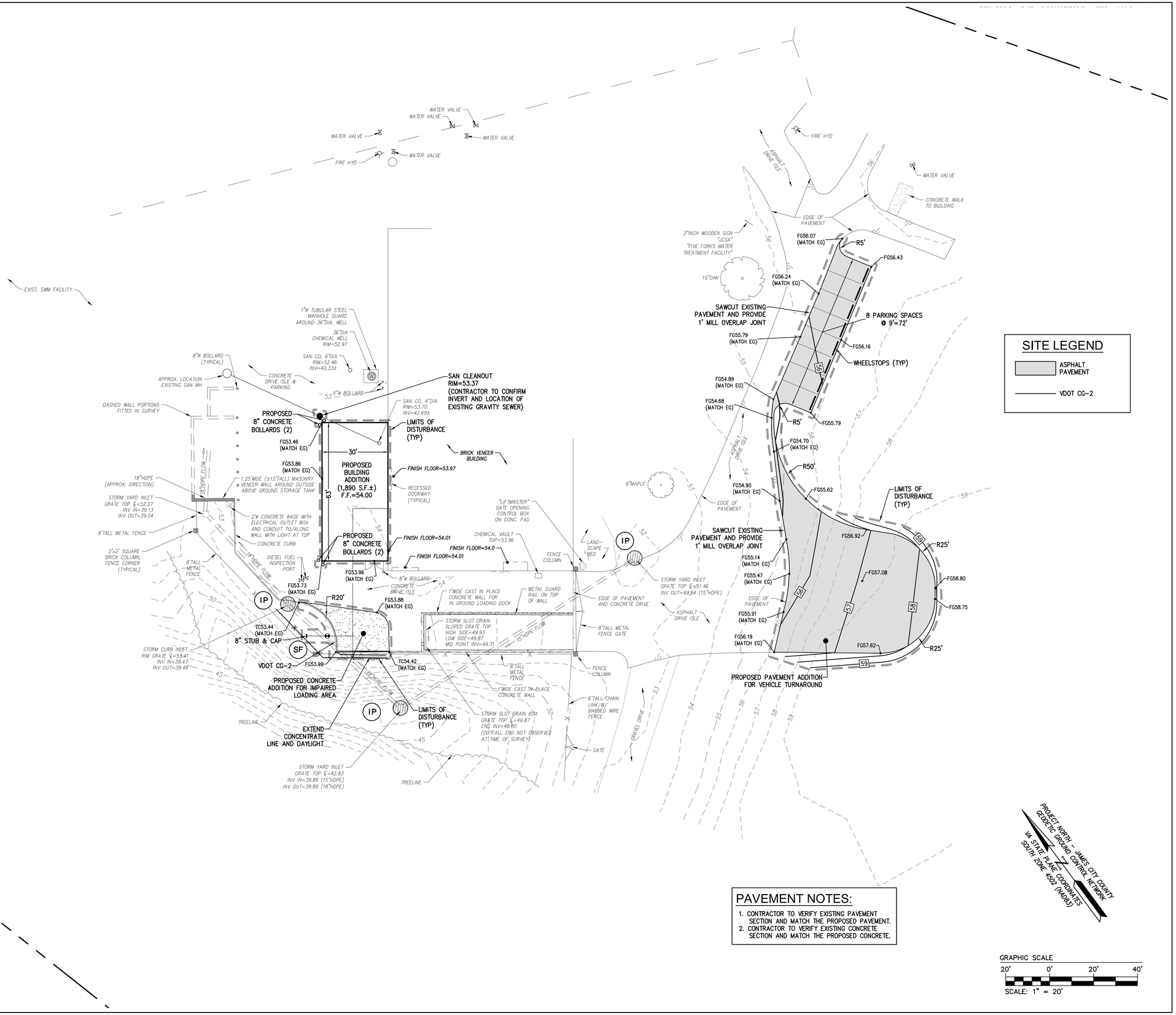
BERKELEY DISTRICT — JAMES CITY COUNTY — VIRGINIA

| | |
|---|---|
| Project Contacts: | TRS |
| Project Number: | W10648-03 |
| Scale: 1" = 20' | Date: 01/09/2023 |

Sheet Title: ENVIRONMENTAL INVENTORY & DEMOLITION PLAN

Sheet Number C2.0

S:\JOBS\W10648- JCC Annual Services 2020\CIDs - JCSA\03 JCSA Water Treatment Building Expansion\Engineering\Plans\W10648(03_C2.0 Environmental Inventory.dwg, 1/9/2023 11:47:48 AM, chase.kemp




| Rev. | Date | Description | Revised By |
|---|---|---|---|
| | | | |

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LICENSED PROFESSIONAL ENGINEER
C. RYAN STEPHENSON
Lic. No. 044405
01/09/2023


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SITE PLAN FOR
# JCSA WATER TREATMENT BUILDING EXPANSION
BERKELEY DISTRICT JAMES CITY COUNTY VIRGINIA

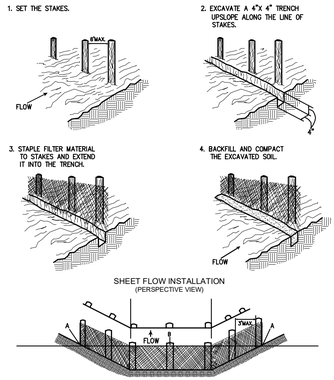
| | |
|---|---|
| Project Contacts: | TRS |
| Project Number: | W10648-03 |
| Scale: 1" = 20' | Date: 01/09/2023 |

Sheet Title:
SITE PLAN

Sheet Number
C3.0

S:\JOBS\W10648-JCC Annual Services 2020\CSA_JCSA\3-JCSA Water Treatment Building Expansion\Engineering\Plans\W10648-3_C3.0 Site Plan.dwg, 9/9/2021 11:47:54 AM, dsaarkamp

## CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)




SHEET FLOW INSTALLATION
(PERSPECTIVE VIEW)



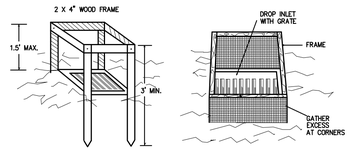

POINTS A SHOULD BE HIGHER THAN POINT B.

DRAINAGEWAY INSTALLATION
(FRONT ELEVATION)

SF

Plate 3.05-2

## SILT FENCE DROP INLET PROTECTION




PERSPECTIVE VIEWS



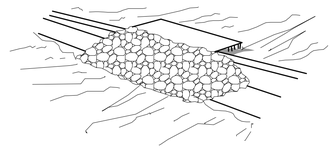

SPECIFIC APPLICATION

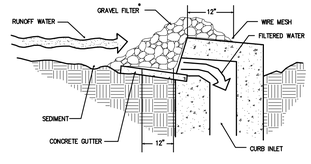
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OR OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

IP

Plate 3.07-1

## GRAVEL CURB INLET SEDIMENT FILTER






SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS, WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

* GRAVEL SHALL BE VDOT #3, #357 OR 5 COARSE AGGREGATE.

IP

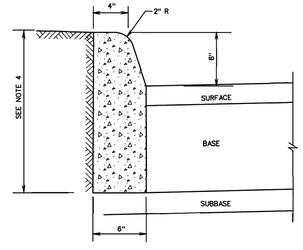
Plate 3.07-6

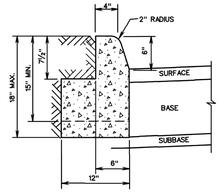
2016 ROAD & BRIDGE STANDARDS

CG-2

**NOTES:**

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. CURB HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) WILL BE PAID FOR AS RADIAL CURB.
4. THE DEPTH OF CURB MAY BE REDUCED AS MUCH AS 3" (15" DEPTH) OR INCREASED AS MUCH AS 3" (21" DEPTH) IN ORDER THAT THE BOTTOM OF CURB WILL COINCIDE WITH THE TOP OF A COURSE OF THE PAVEMENT SUBSTRUCTURE. OTHERWISE, THE DEPTH IS TO BE 18" AS SHOWN. NO ADJUSTMENT IN THE PRICE BID IS TO BE MADE FOR A DECREASE OR AN INCREASE IN DEPTH.
5. CG-2 IS TO BE USED ON ROADWAYS MEETING THE REQUIREMENTS FOR CC-6 AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL, IN THE SECTION ON GS URBAN STANDARDS.




**ACCEPTABLE ALTERNATIVE IF CURB IS EXTRUDED**

| SPECIFICATION REFERENCE | STANDARD 6" CURB | VDOT ROAD AND BRIDGE STANDARDS |
|---|---|---|
| 105<br>502 | VIRGINIA DEPARTMENT OF TRANSPORTATION | REVISION DATE: — SHEET 1 OF 1<br>201.01 |

2016 ROAD & BRIDGE STANDARDS

## EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION

THIS PLAN PROPOSES A 1,890 S.F. BUILDING ADDITION TO THE EXISTING JCSA WATER TREATMENT BUILDING. ADDITIONAL EXPANSION TO THE CONCRETE LOADING AREA AND AN ADDITIONAL 8 PARKING SPACES ARE PROPOSED. .

EXISTING SITE CONDITIONS

THIS SITE IS CURRENTLY DEVELOPED AS THE JCSA WATER TREATMENT FACILITY. THERE IS AN EXISTING STORMWATER FACILITY ON SITE.

OFFSITE AREAS

THERE ARE NO OFFSITE DISTURBANCES INCLUDED WITHIN THIS PLAN.

EROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE INDICATED, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH). THE MINIMUM STANDARDS OF THE VESCH SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED AND APPROVED BY THE JAMES CITY COUNTY ENVIRONMENTAL INSPECTOR. THESE MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO: INLET PROTECTION AND SILT FENCE.

MANAGEMENT STRATEGIES

1. CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
2. TEMPORARY SEEDING OR OTHER STABILIZATION WILL FOLLOW IMMEDIATELY AFTER GRADING.
3. AREAS, WHICH ARE NOT TO BE DISTURBED, WILL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC.
4. THE CONTRACTOR SHALL HAVE A CERTIFIED RESPONSIBLE LAND DISTURBER AND SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.

PERMANENT STABILIZATION

PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE LEFT DORMANT FOR MORE THAN ONE YEAR.

MAINTENANCE

IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

1. THE INLET PROTECTION WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP, WHICH COULD PREVENT POSITIVE DRAINAGE. IF THE INLET PROTECTION IS CLOGGED BY SEDIMENT, IT SHALL BE REMOVED AND CLEANED OR REPLACED.
2. THE SILT FENCE BARRIER AND SUPER SILT FENCE BARRIER WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALF WAY TO THE TOP OF THE BARRIER.

## SEQUENCE OF CONSTRUCTION

1. SCHEDULE AND HOLD A PRECONSTRUCTION CONFERENCE WITH JCC STORMWATER AND RESOURCE PROTECTION DIVISION. ENSURE THAT ALL NECESSARY WAIVERS, EXCEPTIONS, AND PERMITS AS REQUIRED ON A LOCAL, STATE, AND FEDERAL LEVEL HAVE BEEN OBTAINED.

2. INSTALL SILT FENCE AND INLET PROTECTION AS SHOWN ON SHEET C3.0. ADEQUATE EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED TO CONTROL THE MITIGATION OF SEDIMENT AT THIS TIME.

3. ONCE THE ALL EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED, THE CONTRACTOR SHALL BEGIN FULL PAVEMENT DEMOLITION OPERATIONS AS SHOWN ON SHEET C2.0.

4. FULL CLEARING AND GRUBBING ACTIVITIES MAY COMMENCE.

5. THE ROUGH GRADING OPERATIONS MAY NOW COMMENCE.

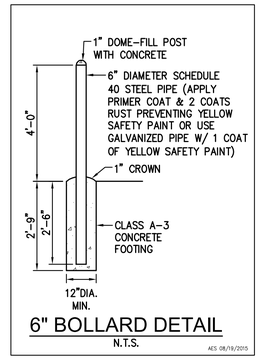
7. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY STABILIZATION SHALL BE APPLIED WITHIN 7 DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN 1 YEAR.

8. CONSTRUCTION OF BUILDING EXPANSION CAN BEGIN.

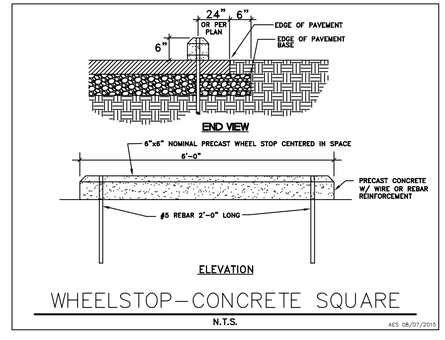
9. THE CONTRACTOR CAN NOW INSTALL THE CONCRETE CURBING, SUB-BASE, AND ROAD BASE.

11. FINAL AS-BUILTS/CONSTRUCTION CERTIFICATIONS GEOTECH REPORTS TO BE SUBMITTED AS NECESSARY.

12. PRIOR TO THE APPLICATION OF THE ROAD SURFACE, CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL OF THE CHIEF CIVIL ENGINEER IN ACCORDANCE WITH THE ADMINISTRATIVE GUIDELINES FOR CERTIFICATION OF PRIVATE STREETS CONTAINED WITHIN THESE PLANS. THE CONTRACTOR CAN NOW INSTALL THE ROAD SURFACE AND COMPLETE FINAL TOP SOILING AND SEEDING OF THE SITE.




6" BOLLARD DETAIL
N.T.S.
AES 08/18/2015




WHEELSTOP-CONCRETE SQUARE
N.T.S.
AES 08/07/2015

| Rev. | Date | Description | Revised By |
|---|---|---|---|
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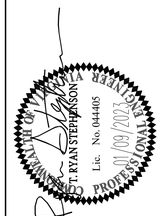


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SITE PLAN FOR
JCSA WATER TREATMENT
BUILDING EXPANSION
BERKELEY DISTRICT JAMES CITY COUNTY VIRGINIA

| | |
|---|---|
| Project Contacts: | TRS |
| Project Number: | W10648-03 |
| Scale: 1"=30' | Date: 01/09/2023 |

Sheet Title:
E&SC NOTES & DETAILS

Sheet Number
C10.0

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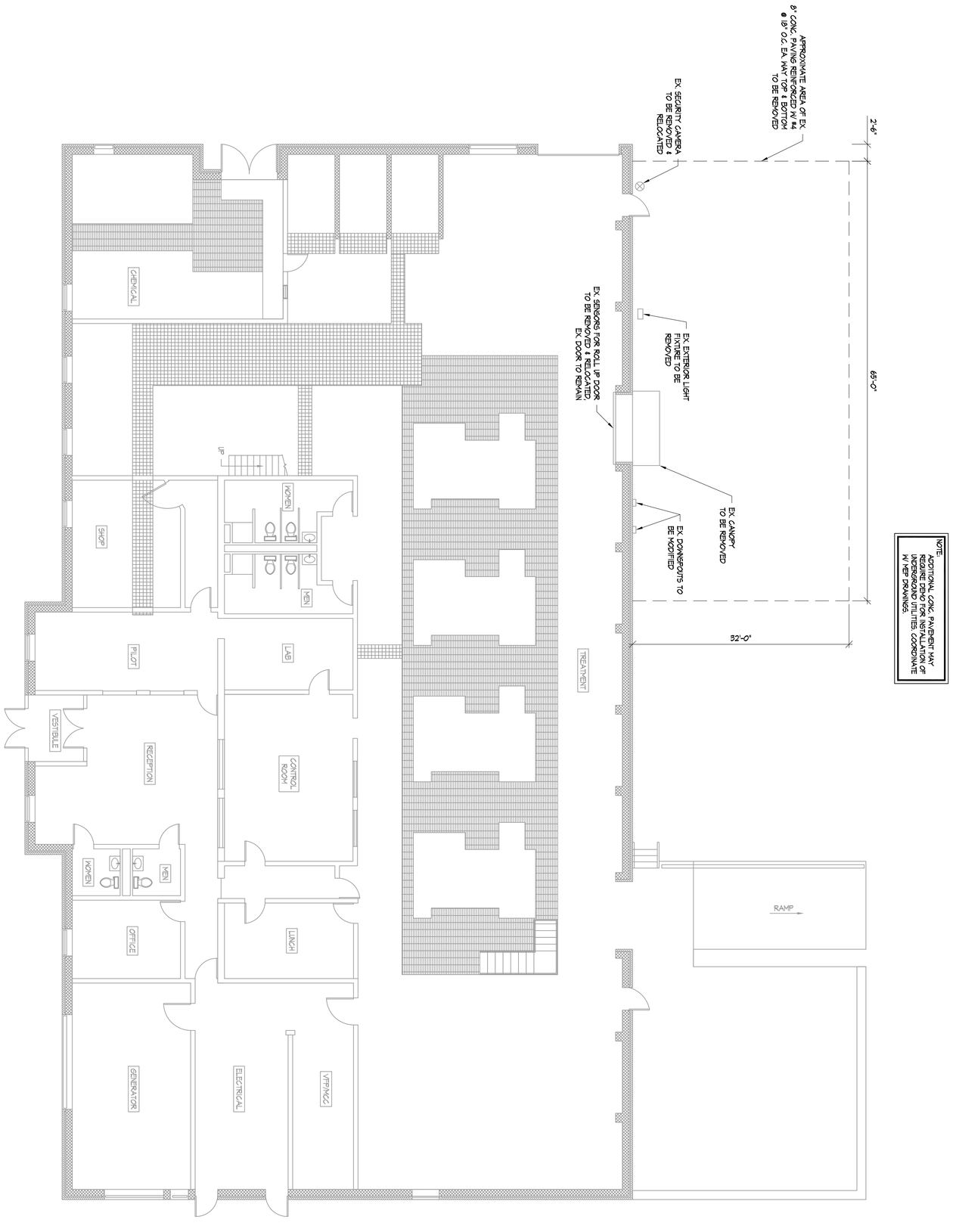
# DEMOLITION PLAN

SCALE: 1/8" = 1'-0"




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sheet A1 1 of X | DEMOLITION PLAN | | PRELIMINARY NOT FOR CONSTRUCTION | Date: 3/1/2023 | Project #: VA22ITILDES | Drawn by: DAS | Reviewed by: MAM |
| | FIVE FORKS WATER TREATMENT FACILITY STORAGE EXPANSION 4321 JOHN TYLER HIGHWAY JAMES CITY COUNTY VIRGINIA | No. | Revisions Date | | | | |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## OVERALL FLOOR PLAN

SCALE: 1/8" = 1'-0"

# BUILDING CODE DATA - 2018 IBC

1. OCCUPANCY USE GROUPS (SECTION 302.1)
   F-2 FACTORY
   H-4 HAZARDOUS [REMAINS UNCHANGED]

   MIXED SEPARATED USE (EXISTING H-4 IS SEPARATED W/ 2HR. RATED WALLS)

2. CONSTRUCTION TYPE (SECTION 602):
   EXISTING: III-B
   NEW: III-B

3. AREA LIMITS PER FLOOR (SECTION 506):

| AREA | ACTUAL AREA | ALLOWED |
|---|---|---|
| EXISTING BUILDING | 13,288 SF | 18,000 SF |
| ADDITION | 1,890 SF | |
| TOTAL BUILDING | 15,178 SF | 18,00 SF |

4. HEIGHT LIMITS (SECTIONS 504):

   -OVERALL BUILDING HEIGHT TO REMAIN UNCHANGED.
   -OVERALL # OF STORIES TO REMAIN UNCHANGED.

5. OCCUPANT LOAD (SECTION 1004.1):

   EXISTING OCCUPANT LOAD (CONSERVATIVELY ESTIMATED BASED ON 2012 IBC REQUIREMENTS)

| ROOM | FLOOR AREA (SQ. FT.) | DENSITY (SQ. FT./PERSON) | OCCUPANT LOAD |
|---|---|---|---|
| EXISTING INDUSTRIAL SPACE | 2,335 | 100 | 124 |
| EXISTING CHEMICAL STORAGE | 900 | 300 | 3 |
| EXISTING MEZZANINE (STORAGE) | 1,150 | 300 | 4 |
| EXISTING TOTAL | | | 131 |
| NEW INDUSTRIAL SPACE | 1,890 | 100 | 19 |
| NEW TOTAL | | | 150 |

6. MEANS OF EGRESS:

| AREA | EXITS REQUIRED | EXITS PROVIDED |
|---|---|---|
| EXISTING INDUSTRIAL AREA | 2 | 6 |
| EXISTING CHEMICAL STORAGE | 1 | 2 |
| NEW INDUSTRIAL AREA | 2 | 2 |

7. EGRESS TRAVEL DISTANCE: (TABLE 1016.2)
   LONGEST DISTANCE 100'-0"
   ALLOWABLE 200'-0"

8. PLUMBING OCCUPANCY COUNT

| OCCUPANCY DESCRIPTION: | F-2 | H-4(STORAGE) |
|---|---|---|
| MEN | 74 | 2 |
| WOMEN | 74 | 2 |
| TOTAL | 14 | 4 |

9. PLUMBING FIXTURE COUNT:

| | # REQ. (INCL. EX.) | PROVIDED (EX.) |
|---|---|---|
| WATER CLOSETS: | | |
| MEN | 1/100=0.76 | 3 |
| WOMEN | 1/100=0.76 | 3 |
| LAVATORIES: | | |
| MEN | 1/100=0.76 | 2 |
| WOMEN | 1/100=0.76 | 2 |
| WATERFOUNTAINS: | 1/400=0.38 | 1 |
| SERVICE SINK | 1 | 1 |

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Drawn by: DAS | Reviewed by: MAM
Project #: VA22111.DE5
Date: 3/1/2023

**PRELIMINARY NOT FOR CONSTRUCTION**

| No. | Revisions | Date |
|---|---|---|

OVERALL FLOOR PLAN AND BUILDING CODE DATA

FIVE FORKS WATER TREATMENT FACILITY
STORAGE EXPANSION
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY VIRGINIA

Sheet A2 2 of X

## DOOR SCHEDULE

| DOOR NUMBER | DOOR SIZE | FINISH | FRAME | HARDWARE SET | NOTES |
|---|---|---|---|---|---|
| ① | 8'-0" WIDE x 7'-0" TALL | PRE-FINISHED | HOLLOW METAL | 1 | 1, 2, 3 |
| ② | 10'-0" WIDE x 12'-0" TALL | PRE-FINISHED | HOLLOW METAL | 2 | 2, 3 |

## HARDWARE SCHEDULE

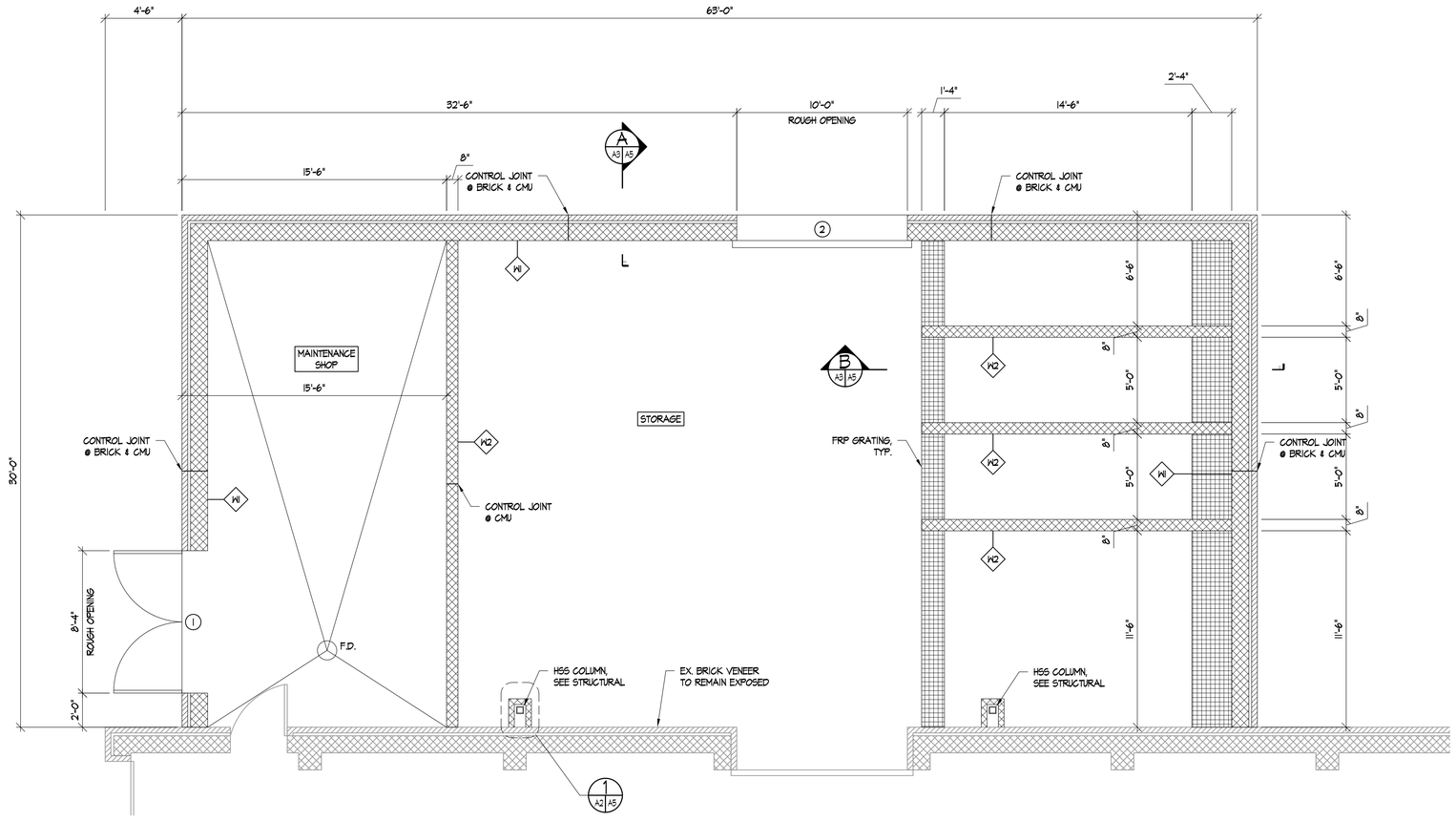
| SET # | DESCRIPTION | NOTES |
|---|---|---|
| 1 | HINGES, LOCKSET, CLOSER, WEATHER STRIPS, DOOR SWEEP | 2, 3 |
| 2 | MATCH HARDWARE FROM EX. ROLL-UP DOOR | 2, 3 |

## FINISH SCHEDULE

| ROOM NAME | FLOOR | WALLS | CEILING | NOTES |
|---|---|---|---|---|
| MAINTENANCE SHOP | CONCRETE - SEAL | CMU - PAINT, EX. BRICK - UNPAINTED | ACOUSTICAL TILE, INSTALL 10'-0" A.F.F. | - |
| STORAGE | CONCRETE - SEAL | CMU - PAINT, EX. BRICK - UNPAINTED | EXPOSED FRAMING | 4 |

## SCHEDULE NOTES

1. DOUBLE DOOR.
2. MATCH STYLES, MATERIALS, ETC. TO EXISTING AS CLOSE AS PRACTICAL.
3. PAINT COLORS/FINISHES TO BE SELECTED BY OWNER.
4. ALL EXPOSED STEEL SHALL BE PAINTED.




## ENLARGED FLOOR PLAN

SCALE: 1/4" = 1'-0"

1
A2 A3

## WALL SCHEDULE

| MARK | DESCRIPTION | DETAIL |
|---|---|---|
| W1 | EXTERIOR WALL - 12" CMU, 1 1/2" RIGID INSULATION, AIR SPACE, & 4" BRICK VENEER | 12" CMU<br>1 1/2" RIGID INSULATION<br>AIR CAVITY<br>4" BRICK VENEER<br>11'-6" |
| W2 | INTERIOR PARTITION WALL - 8" CMU | 8" CMU<br>11 5/8" |

PRELIMINARY NOT FOR CONSTRUCTION

| No. | Revisions | Date |
|---|---|---|

Date: 3/1/2023 | Project #: VA22111DES | Drawn by: DAS | Reviewed by: MAM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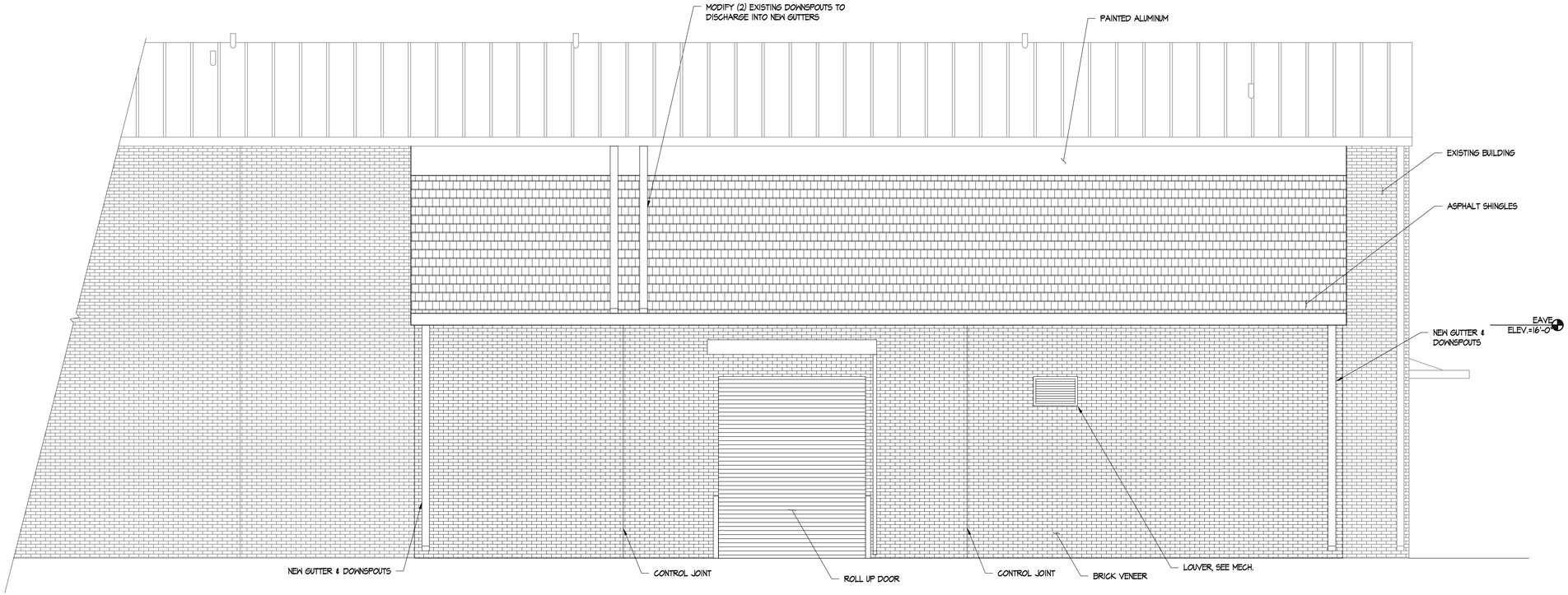
ENLARGED FLOOR PLAN, ROOF PLAN, SCHEDULES

# FIVE FORKS WATER TREATMENT FACILITY
## STORAGE EXPANSION
## 4321 JOHN TYLER HIGHWAY
## JAMES CITY COUNTY VIRGINIA

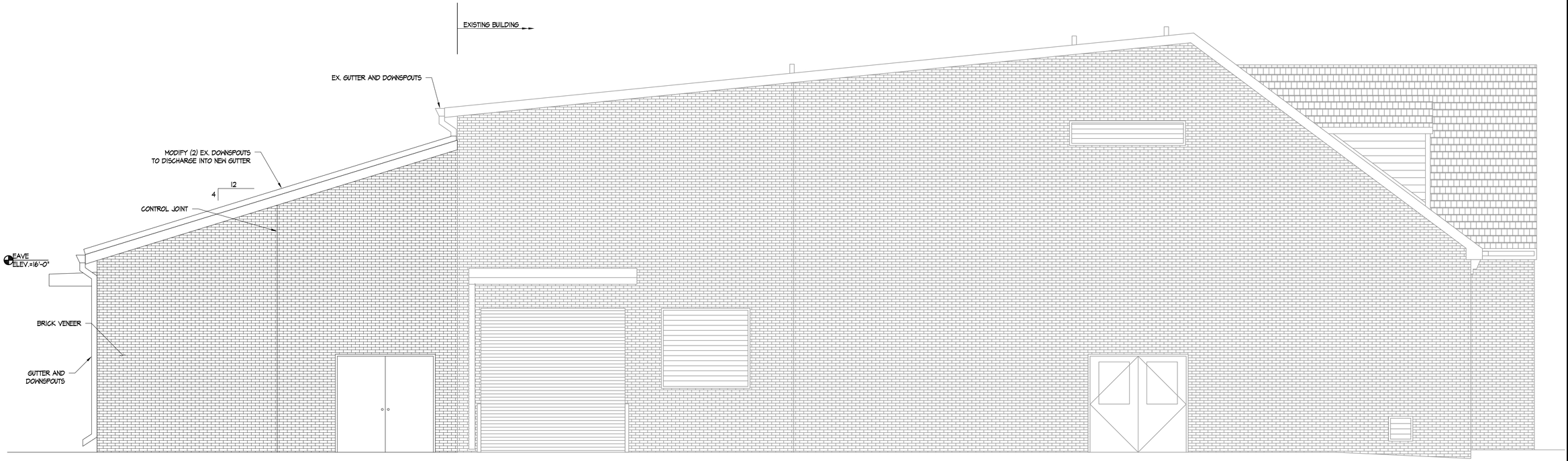
Sheet A3 3 of X




## ELEVATION

SCALE: 1/4" = 1'-0"

A2 A4




## ELEVTION

SCALE: 1/4" = 1'-0"

B
A2 A4

**PRELIMINARY NOT FOR CONSTRUCTION**

| No. | Revisions | Date |
|---|---|---|
| | | |

Date: 3/1/2023
Project #: VA22111.DES
Drawn by: DAS
Reviewed by: MAM

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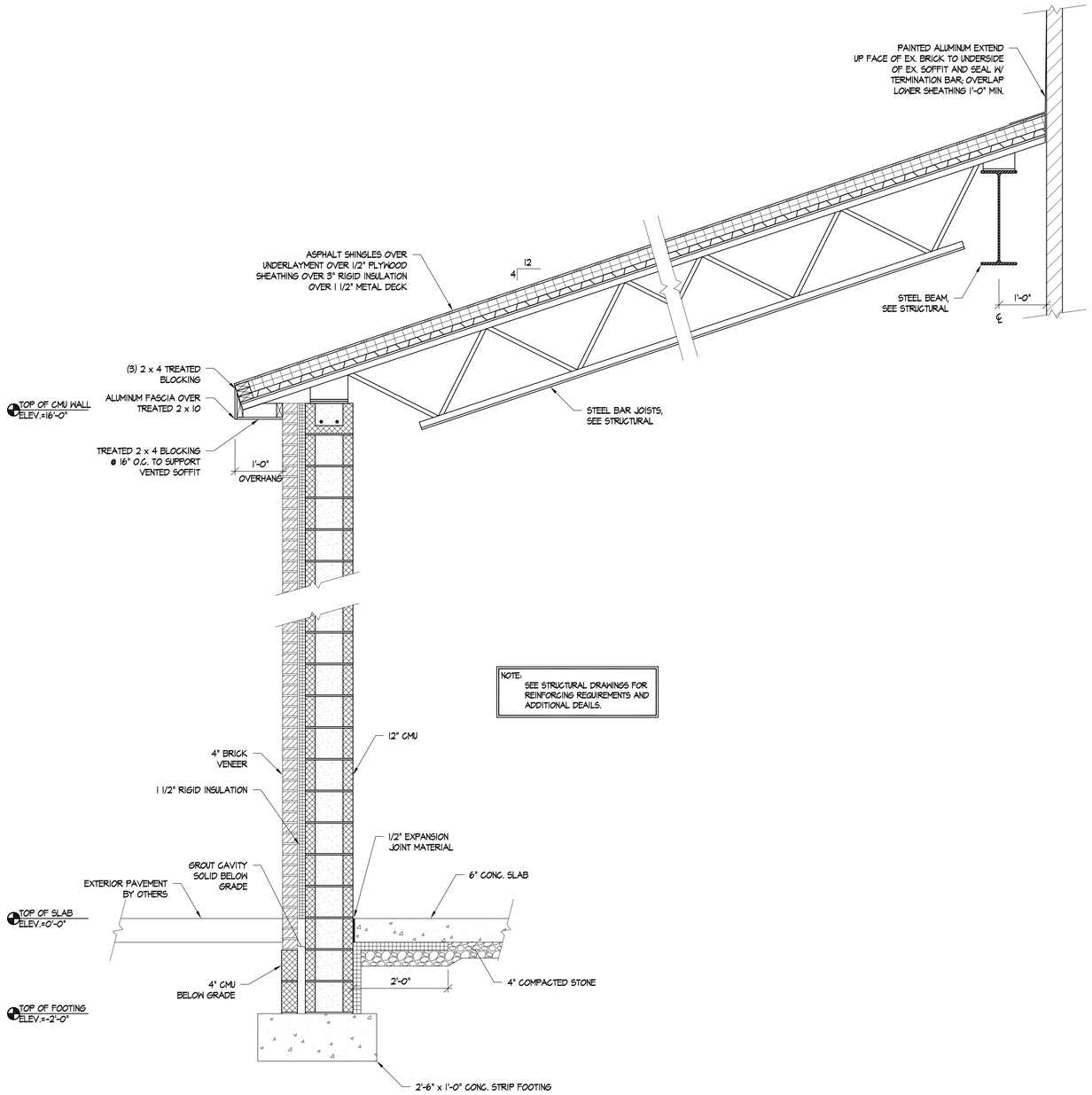
ELEVATIONS

FIVE FORKS WATER TREATMENT FACILITY
STORAGE EXPANSION
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY VIRGINIA

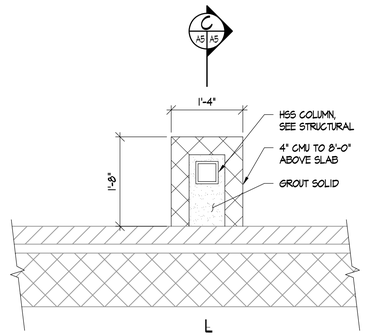
Sheet A4 4 of X




## SECTION

SCALE: 3/4" = 1'-0"

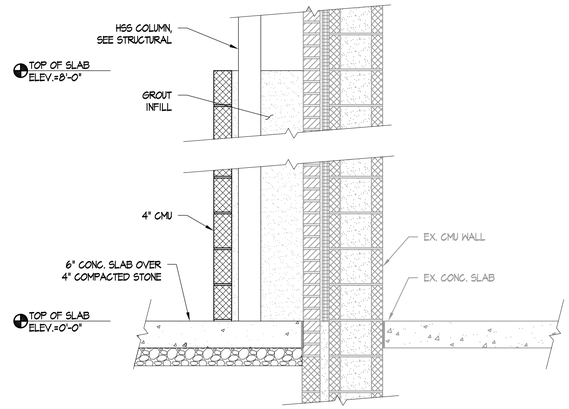
A5 | A5




## DETAIL

SCALE: 3/4" = 1'-0"

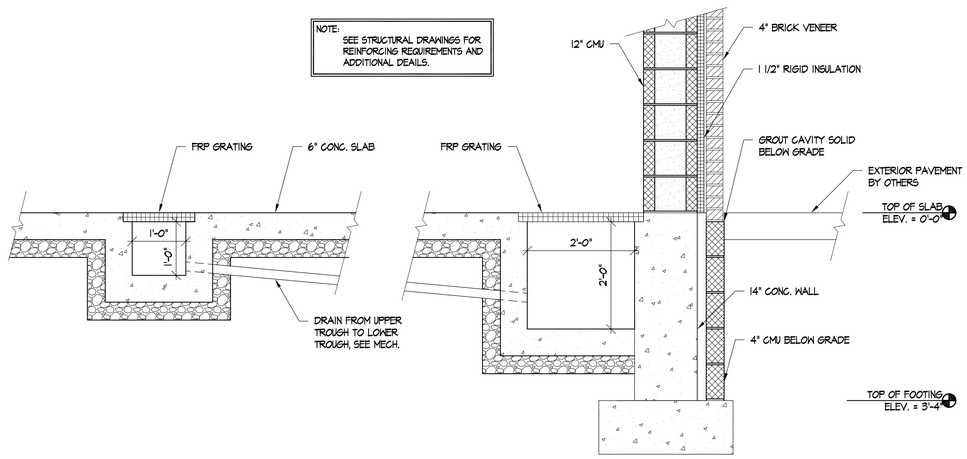
1 | A2 | A5




## SECTION

SCALE: 3/4" = 1'-0"

C | A5 | A5




## SECTION

SCALE: 3/4" = 1'-0"

B | A3 | A5

The Structures Group, Inc.
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www.thestructuresgroup.com

Reviewed by: MAM
Drawn by: DAS
Project #: VA22111.DES
Date: 3/1/2023

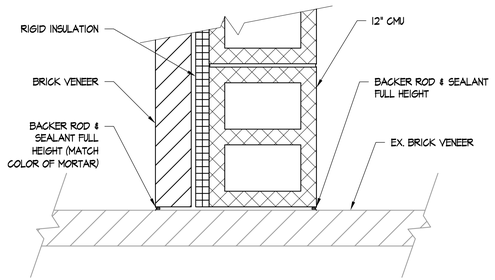
**PRELIMINARY NOT FOR CONSTRUCTION**

| No. | Revisions | Date |
|---|---|---|

SECTIONS

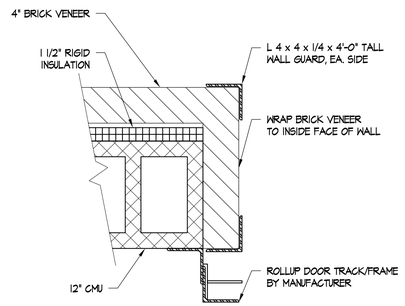
FIVE FORKS WATER TREATMENT FACILITY
STORAGE EXPANSION
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY VIRGINIA

Sheet A5 5 of X



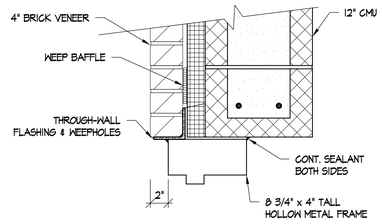

## DETAIL — TYP. EXTERIOR WALL INTERSECTION W/ EX. BUILDING

SCALE: 1 1/2" = 1'-0"



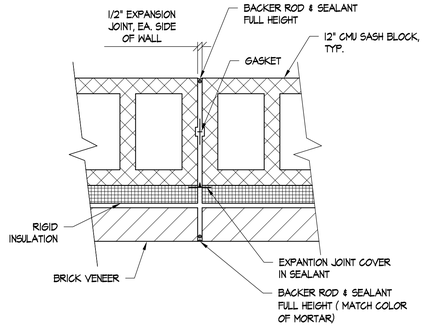

## DETAIL — ROLL-UP DOOR JAMB

SCALE: 1 1/2" = 1'-0"



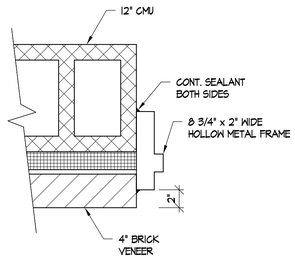

## DETAIL — TYP. DOOR HEAD

SCALE: 1 1/2" = 1'-0"



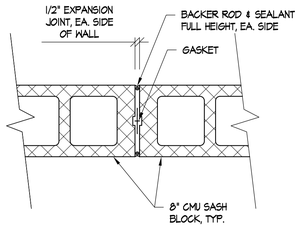

## DETAIL — TYPICAL CONTROL JOINT AT EXTERIOR WALL

SCALE: 1 1/2" = 1'-0"



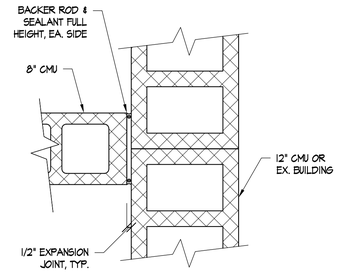

## DETAIL — TYP. DOOR JAMB

SCALE: 1 1/2" = 1'-0"




## DETAIL — TYPICAL CONTROL JOINT AT INTERIOR WALL

SCALE: 1 1/2" = 1'-0"




## DETAIL — TYP. INTERIOR WALL INTERSECTION

SCALE: 1 1/2" = 1'-0"

**PRELIMINARY NOT FOR CONSTRUCTION**

| No. | Revisions | Date |
|---|---|---|
| | | |

DETAILS

FIVE FORKS WATER TREATMENT FACILITY
STORAGE EXPANSION
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY VIRGINIA

Sheet A6 6 of X

Date: 3/1/2023 | Project #: VA22111.DES | Drawn by: DAS | Reviewed by: MAM

The Structures Group, Inc.
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# GENERAL NOTES

1. WORK PERFORMED SHALL COMPLY WITH THE FOLLOWING:
   A. THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VUSBC); 2018 EDITION
   B. THE INTERNATIONAL BUILDING CODE (IBC); 2018 EDITION AS AMENDED BY THE VUSBC.
   C. ALL APPLICABLE STATE AND LOCAL CODES, ORDINANCES AND REGULATIONS.

2. DESIGN LOADS:
   A. BUILDING RISK CATEGORY_____II
   B. GROUND SNOW, Pg_____15 PSF
      FLAT ROOF SNOW LOAD, Pf_____9.5 PSF
      SNOW EXPOSURE FACTOR, Ce_____0.9
      SNOW THERMAL FACTOR, Ct_____1.0
      SNOW IMPORTANCE FACTOR, I_____1.0
   C. ULTIMATE DESIGN WIND SPEED_____115 MPH
      EXPOSURE_____B
      INTERNAL PRESSURE COEFFICIENT_____±0.18

   F. LIVE LOADS:
      UNIFORM
      ROOF_____20 PSF

   G. SEISMIC DESIGN:
      SEISMIC IMPORTANCE FACTOR, I_____1.0
      MAPPED SPECTRAL RESPONSE ACCELERATION Ss_0.117
      MAPPED SPECTRAL RESPONSE ACCELERATION S1__0.043
      SITE SOIL CLASS_____D (ASSUMED)
      SPECTRAL COEFFICIENT, Sds_____0.125
      SPECTRAL COEFFICIENT, Sd1_____0.07
      SEISMIC DESIGN CATEGORY_____B
      BASIC STRUCTURAL SYSTEM_____MANSONRY SHEAR WALLS
      SEISMIC FORCE RESISTING SYSTEM_____A-9 (TABLE 1617.6.2)
      DESIGN BASE SHEAR_____13.3 KIPS
      SEISMIC RESPONSE COEFFICIENT Cs_____0.035
      RESPONSE MODIFICATION FACTOR R_____2
      SEISMIC ANALYSIS_____EQUIV. LATERAL FORCE PROCEDURE

3. THE CONTRACTOR SHALL VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION OF MEMBERS AND COMMENCING WORK.

4. PROVIDE TEMPORARY BRACING AS REQUIRED TO RESIST WIND AND OTHER LOADS DURING CONSTRUCTION.

5. FOR SHOP DRAWING SUBMITTALS, CONTRACTOR SHALL SUBMIT ONE (1) ELECTRONIC (PDF) SET OF SHOP DRAWINGS & PRODUCT SUBMITTALS. REPRODUCTIONS OF CONTRACT DRAWINGS ARE NOT TO BE SUBMITTED AS SHOP DRAWINGS.

6. THE CONTRACTOR SHALL PROTECT EXISTING STRUCTURES, EQUIPMENT, ADJACENT GROUNDS AND PLANTS DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE, AT NO ADDITIONAL COSTS TO THE OWNER, ANY ITEMS DAMAGED DURING THE CONSTRUCTION.

## CONCRETE:

7. REFER TO SPECIFICATION SECTION 033000 - CAST-IN-PLACE CONCRETE FOR ADDITIONAL INFORMATION.

8. CONCRETE FOR FOOTINGS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS AND A MAXIMUM WATER/CEMENT RATIO OF 0.55.

9. CONCRETE FOR SLABS OVER GRADE AND OTHER ABOVE GROUND CONSTRUCTION SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS AND A MAXIMUM WATER CEMENT RATIO OF 0.45 UNLESS NOTED OTHERWISE.

10. ALL CONCRETE SHALL BE MIXED, PLACED, AND TESTED IN ACCORDANCE WITH THE LATEST EDITION OF ACI 318.

11. ALL CONCRETE SHALL HAVE A SLUMP OF 4" ± 1" UNLESS NOTED OTHERWISE.

12. CONCRETE MIX DESIGNS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL PRIOR TO USE.

13. ALL CONCRETE TO BE POURED IN COLD WEATHER, AS DEFINED IN SECTION 1.1 OF ACI 306R, COLD WEATHER CONCRETING, SHALL FULLY COMPLY WITH ACI 306.1, STANDARD SPECIFICATIONS FOR COLD WEATHER CONCRETING, AND 306R.

14. ALL CONCRETE TO BE POURED IN HOT WEATHER, AS DEFINED IN SECTION 1.2 OF ACI 305R, HOT WEATHER CONCRETING, SHALL FULLY COMPLY WITH ACI 305.1, STANDARD SPECIFICATIONS FOR HOT WEATHER CONCRETING, AND ACI 305R.

15. REINFORCING BARS SHALL BE ASTM A-615, GRADE 60.

16. ALL CONCRETE REINFORCING SHALL BE DETAILED AND CONSTRUCTED PER ACI 318 AND ACI 350

17. CONTRACTOR SHALL SUBMIT REINFORCING SHOP DRAWINGS FOR CONCRETE REINFORCING STEEL FOR APPROVAL.

18. ALL CONCRETE REINFORCING STEEL SHALL HAVE CORNER OR "Z" BARS OF THE SAME DIAMETER AT ALL CORNERS AND CHANGES IN DIRECTION. CORNER AND "Z" BARS SHALL LAP CONTINUOUS BARS A MINIMUM OF 48 TIMES THE NOMINAL BAR DIAMETER ON BOTH ENDS.

19. SAW CUTTING CONTROL JOINTS SHALL BE PERFORMED AS SOON AS THE CONCRETE SLAB ON GRADE IS HARD ENOUGH TO SUPPORT THE CUTTING MACHINE WITHIN FIRST FOUR HOURS OF CURING. SAW CUT CONTROL JOINTS SHALL BE LOCATED WHERE INDICATED ON THE PLANS AND AT A MAXIMUM SPACING OF 12'-0" ON CENTER UNLESS NOTED OTHERWISE.

20. ALL CONCRETE EXPOSED TO THE EXTERIOR ENVIRONMENT OR TO DEICING CHEMICALS SHALL BE AIR-ENTRAINED 6% BY VOLUME ± 1% UNLESS SHOWN OTHERWISE ON DRAWING.

## MASONRY:

21. REFER TO SPECIFICATION SECTION 042000 - UNIT MASONRY FOR ADDITIONAL INFORMATION.

22. CONCRETE MASONRY UNITS SHALL BE IN ACCORDANCE WITH ASTM C-90. MORTAR TO CONFORM TO ASTM C-270, TYPE "S" BELOW GRADE AND TYPE "N" ABOVE GRADE. COLOR TO BE SELECTED BY OWNER. MASONRY GROUT TO CONFORM TO ASTM C476.

23. ALL CMU REINFORCING SHALL BE DETAILED AND CONSTRUCTED PER ACI 530.

24. CONTRACTOR SHALL SUBMIT REINFORCING SHOP DRAWINGS FOR CMU REINFORCING STEEL FOR APPROVAL.

25. ALL CONCRETE MASONRY CONSTRUCTION SHALL BE CONSTRUCTED TO HAVE A MINIMUM DESIGN COMPRESSIVE STRENGTH (F'm) OF 1,500 PSI. ALL MASONRY GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.

26. HORIZONTAL REINFORCING FOR SINGLE WYTHE AND MULTI-WYTHE COMPOSITE MASONRY WALLS SHALL BE DUR-O-WAL TRUSS TYPE WALL REINFORCING WITH #9 DEFORMED SIDE BARS AND #9 CROSS BARS. MINIMUM VERTICAL SPACING 16" O.C. ABOVE GRADE AND 8" O.C. BELOW GRADE. BRICK VENEER WALLS TO HAVE NON-CORROSIVE METAL TIES AT 16" O.C. VERTICALLY AND HORIZONTALLY.

27. BRICK MASONRY UNITS SHALL BE IN ACCORDANCE WITH ASTM C-216. COLOR AND BRICK TYPE SHALL BE SELECTED BY THE OWNER FROM CONTRACTOR SUPPLIED SAMPLES.

28. CONTRACTOR SHALL COURSE ALL BRICK VENEER AND ADJUST MISCELLANEOUS STEEL ANGLES AS REQUIRED, AND CUT AND PATCH MASONRY TO SUIT. CONTRACTOR TO SUPPLY ALL STEEL LINTELS REQUIRED FOR OPENINGS IN MASONRY WALLS.

29. CONTRACTOR SHALL CONSTRUCT WEEP HOLES IN ALL NEW BRICK VENEER AT 32" ON CENTER BELOW FLOOR FRAMING, BELOW WINDOW SILLS, AND AT ALL LINTELS. CONSTRUCT CONTINUOUS THROUGH-WALL FLASHING AT WEEP HOLE LOCATIONS IN EXTERIOR WALLS.

30. CONTRACTOR TO CONSTRUCT FLASHING WITH END DAMS FOR ALL OPENINGS IN EXTERIOR WALLS.

31. LINTEL SCHEDULE: UNLESS OTHERWISE SHOWN, CONSTRUCT ONE (1) LINTEL WITH 6" MINIMUM BEARING LENGTH FOR EACH 4" OF NOMINAL WALL THICKNESS AS FOLLOWS:

| WIDTH OF OPENING | MASONRY LINTEL |
|---|---|
| UP TO 4'-0" | L 3 1/2" x 3 1/2" x 1/4" |
| 4'-1" TO 5'-0" | L 4 x 3 1/2" x 5/16" |
| 5'-1" TO 6'-0" | L 5 x 3 1/2" x 5/16" |
| 6'-0" TO 8'-0" | L 6 x 3 1/2" x 3/8" |

   A. FOR STEEL ANGLE LINTELS, 3 1/2" LEG ALWAYS IN HORIZONTAL PLANE.
   B. CONTRACTOR TO CONSTRUCT FLASHING FOR ALL OPENINGS IN EXTERIOR WALLS.

## STRUCTURAL STEEL:

32. ALL STRUCTURAL STEEL FRAMING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF A.I.S.C. "MANUAL OF STEEL CONSTRUCTION". ALL STRUCTURAL STEEL BEAM AND COLUMN SHAPES SHALL BE ASTM A-992. ALL STEEL ANGLES, CHANNELS, AND PLATES SHALL BE ASTM A-36. ALL STRUCTURAL STEEL TUBES SHALL BE ASTM A500 GRADE B. ALL STRUCTURAL STEEL PIPES SHALL BE ASTM A53 GRADE B.

33. CONTRACTOR TO SUBMIT STRUCTURAL STEEL SHOP DRAWINGS FOR REVIEW BY THE STRUCTURAL ENGINEER OF RECORD (SER).

34. ALL STRUCTURAL STEEL SHOP WORK TO BE WELDED WITH E70XXX ELECTRODES. UNLESS NOTED OTHERWISE, FIELD WORK CONNECTIONS TO BE BOLTED WITH 3/4" HIGH STRENGTH A325X BOLTS OR WELDED WITH E70XXX ELECTRODES. PRE-DRILL HOLES IN STEEL MEMBERS AS REQUIRED FOR FASTENING, BLOCKING, ETC.

35. ALL COLUMNS SHALL BE FURNISHED WITH CAP PLATES AND BASE PLATES OF SIZES CALLED FOR AND SHALL BE SHOP WELDED. COLUMN BASE PLATES SHALL BEAR ON LEVELING NUTS SET IN 1" THICKNESS OF APPROVED SHRINK RESISTANT GROUT EXCEPT WHEN SHOWN OTHERWISE, AND ANCHORED WITH FOUR (4) 3/4" DIAMETER 12" HEADED BOLTS. SHIM UNDER BASE PLATES AS REQUIRED.

36. ALL COLUMN ANCHOR RODS SHALL BE ASTM F-1554 GRADE 36. ANCHOR RODS SHALL BE HOT DIPPED ZINC COATED GALVANIZED STEEL AND SHALL BE A MINIMUM 3/4" DIAMETER WITH 12" MINIMUM EMBEDMENT IN CONCRETE. EACH ANCHOR ROD MUST HAVE A PROPERLY SIZED AND TIGHTENED NUT AND WASHER.

37. ALL STEEL JOISTS SHALL CONFORM TO LATEST EDITION OF STANDARD LOAD TABLE DESIGN, FABRICATION AND ERECTION REQUIREMENTS OF THE "STEEL JOIST INSTITUTE" (SJI).

38. CONTRACTOR TO SUBMIT STEEL JOIST SHOP DRAWINGS FOR REVIEW BY STRUCTURAL ENGINEER OF RECORD.

39. STEEL JOISTS SHALL HAVE BRIDGING AS SPECIFIED BY SJI FOR ERECTION AND PERMANENT CONSTRUCTION.

40. STEEL JOISTS BOTTOM CHORDS SHALL BE DESIGNED FOR A 250 LB POINT LOAD ANYWHERE ALONG THE BOTTOM CHORD.

41. ADJACENT JOISTS SHALL HAVE MATCHING WEB CONFIGURATIONS TO ALLOW FOR THE INSTALLATION OF THE MEP SYSTEMS.

42. ALL STRUCTURAL STEEL FRAMING AND JOISTS TO HAVE ONE (1) SHOP COAT OF RUST INHIBITIVE PAINT AFTER FABRICAION, AND ONE (1) FINISH COAT OF APPROVED PAINT, UNLESS NOTED OTHERWISE. ALL EXPOSED STEEL TO HAVE TWO (2) COATS OF APPROVED COLOR SELECTED BY OWNER.

43.
44. STEEL DECK MATERIAL AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE "STEEL DECK INSTITUTE DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS, AND ROOF DECKS" AND WITH THE "STEEL DECK INSTITUTE DIAPHRAGM DESIGN MANUAL."

45. STEEL ROOF DECK SHALL BE GALVANIZED UNLESS NOTED OTHERWISE AND SHALL CONFORM TO LATEST EDITION OF ASTM A446, GRADE A. GALVANIZING SHALL CONFORM TO ASTM A525-87, CLASS G-90. ROOF AND FLOOR DECK DEPTH, GAGE AND PROFILE SHALL BE AS SPECIFIED ON THE DRAWINGS.

46. DECKING SHALL BE CONSTRUCTED TO SPAN CONTINUOUSLY OVER A MINIMUM OF TWO (2) SUPPORTS.

47. STEEL DECK SHALL BE WELDED TO SUPPORTING STEEL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND AS INDICATED ON THE DRAWINGS. WELDS SHALL NOT EXCEED 12" O.C. AT SUPPORTS.

48. FURNISH GALVANIZED ANCHORS REQUIRED FOR MISCELLANEOUS METAL WORK. FERROUS METAL, INCLUDING NUTS AND BOLTS, USED ON EXTERIOR OR IN UNHEATED AREAS, AND WHERE INDICATED, SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A-123.

## FOUNDATION:

49. CONTRACTOR SHALL NOTIFY "MISS UTILITY OF VIRGINIA" PRIOR TO BEGINNING EXCAVATION FOR LOCATIONS OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BEAR SOLE RESPONSIBILITY FOR COSTS ASSOCIATED WITH DAMAGE AND REPAIR OF ANY LINES MARKED BY MISS UTILITY OF VIRGINIA.

50. EXTERIOR FOOTINGS WERE DESIGNED TO BEAR ON UNDISTURBED SOIL BELOW THE FROST AND LINE A MINIMUM OF 2'-0" BELOW EXISTING GRADE WITH A MINIMUM SOIL BEARING PRESSURE OF 2,000 PSF. THE OWNER SHALL EMPLOY A GEOTECHNICAL ENGINEER TO VERIFY THAT THIS ALLOWABLE SOIL BEARING PRESSURE IS ATTAINABLE. IF THIS IS NOT ATTAINABLE, OWNER TO VERIFY THE OWNER/CONTRACTOR SHALL CONTACT ENGINEER FOR REDESIGN.

51. ALL UTILITIES WHICH CROSS FOOTINGS MUST PASS ABOVE FOOTINGS THROUGH THE FOUNDATION WALL, SLEEVE, PATCH AND PARGE. STEP FOOTINGS AS REQUIRED. REINFORCING SHALL BE CONTINUOUS AT ALL FOOTING STEPS.

52. BACKFILL WITHIN BUILDING PAD SHALL BE SM OR BETTER MATERIAL.

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Drawn by: DAS | Reviewed by: MAM
Project #: VA22111.DE5
Date: 5/1/2023

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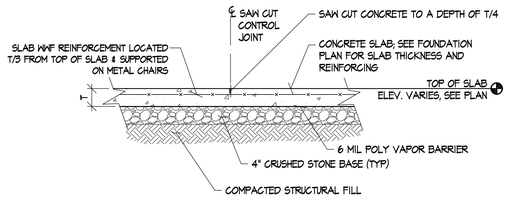
|---|---|---|

GENERAL NOTES

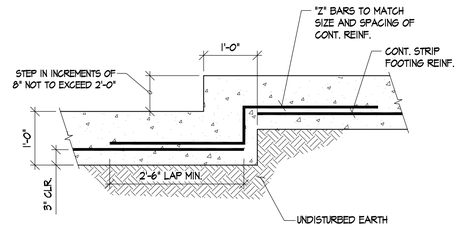
FIVE FORKS WATER TREATMENT FACILITY
STORAGE EXPANSION
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY VIRGINIA

Sheet S1 7 of X



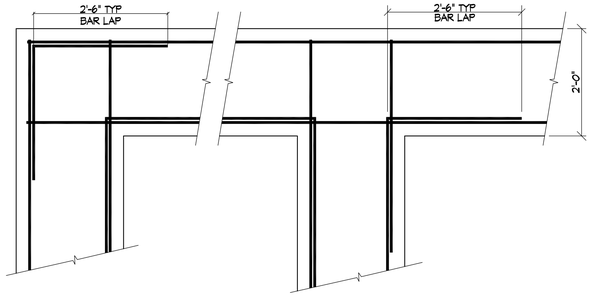

## DETAIL — TYP. SAW CUT JOINT

SCALE: 3/4" = 1'-0"



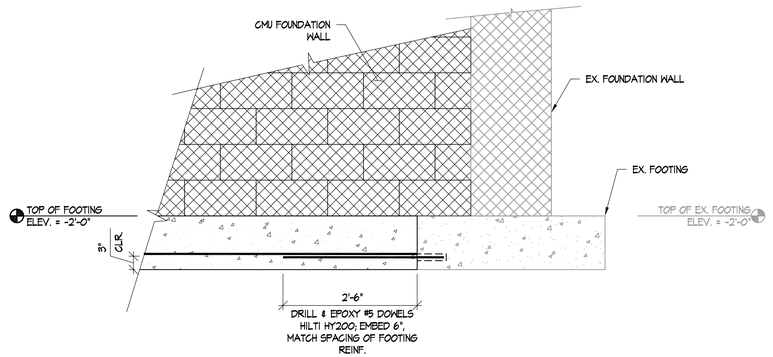

## DETAIL — TYP. STEP FOOTING

SCALE: 3/4" = 1'-0"



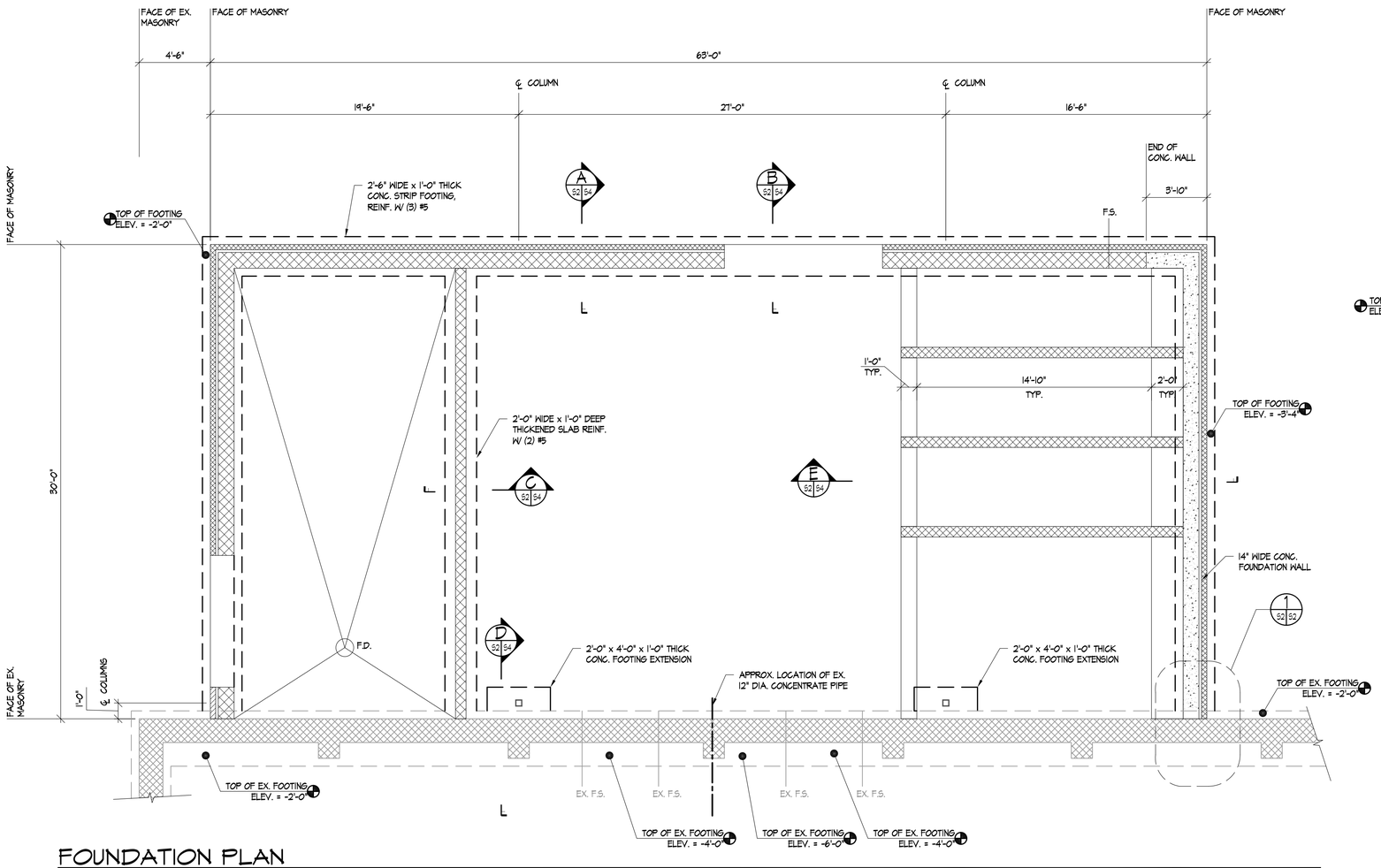

## DETAIL — TYP. REINF. FOR FOOTING CORNER

SCALE: 3/4" = 1'-0"



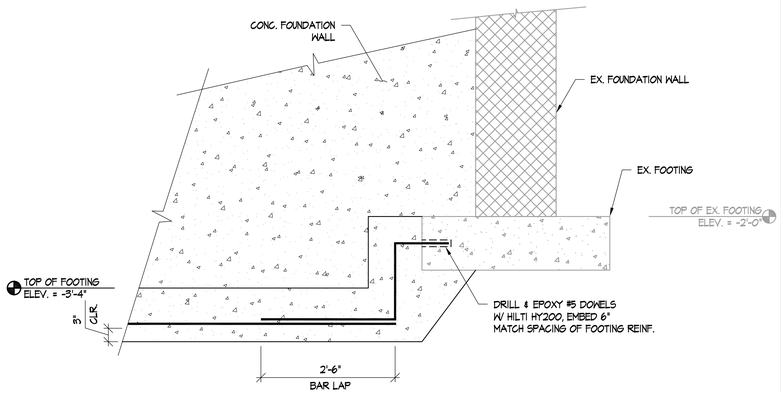

## DETAIL — TYP. FOOTING INTERSECTION W/ EX. FOOTING

SCALE: 1/4" = 1'-0"




## FOUNDATION PLAN

SCALE: 1/4" = 1'-0"




## DETAIL

SCALE: 1/4" = 1'-0"

1 52 52

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Drawn by: DAS | Reviewed by: MAM
Project #: VA22111.DE5
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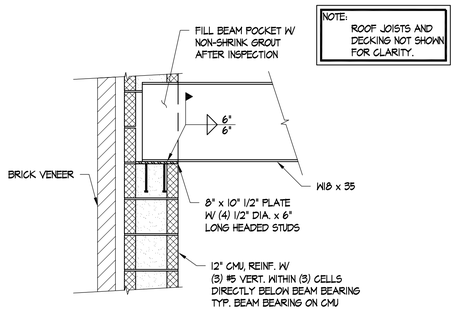
FOUNDATION PLAN AND DETAILS

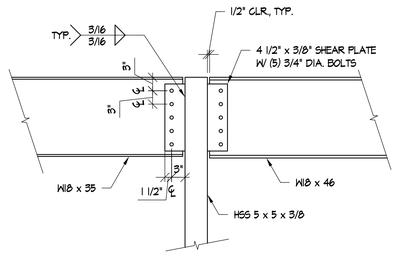
# FIVE FORKS WATER TREATMENT FACILITY STORAGE EXPANSION
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY VIRGINIA

Sheet 52 8 of X



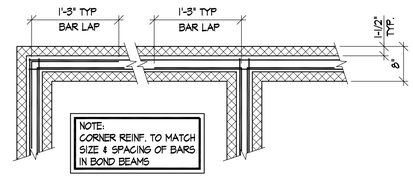

## DETAIL — BEAM BEARING CONNECTION

SCALE: 3/4" = 1'-0"



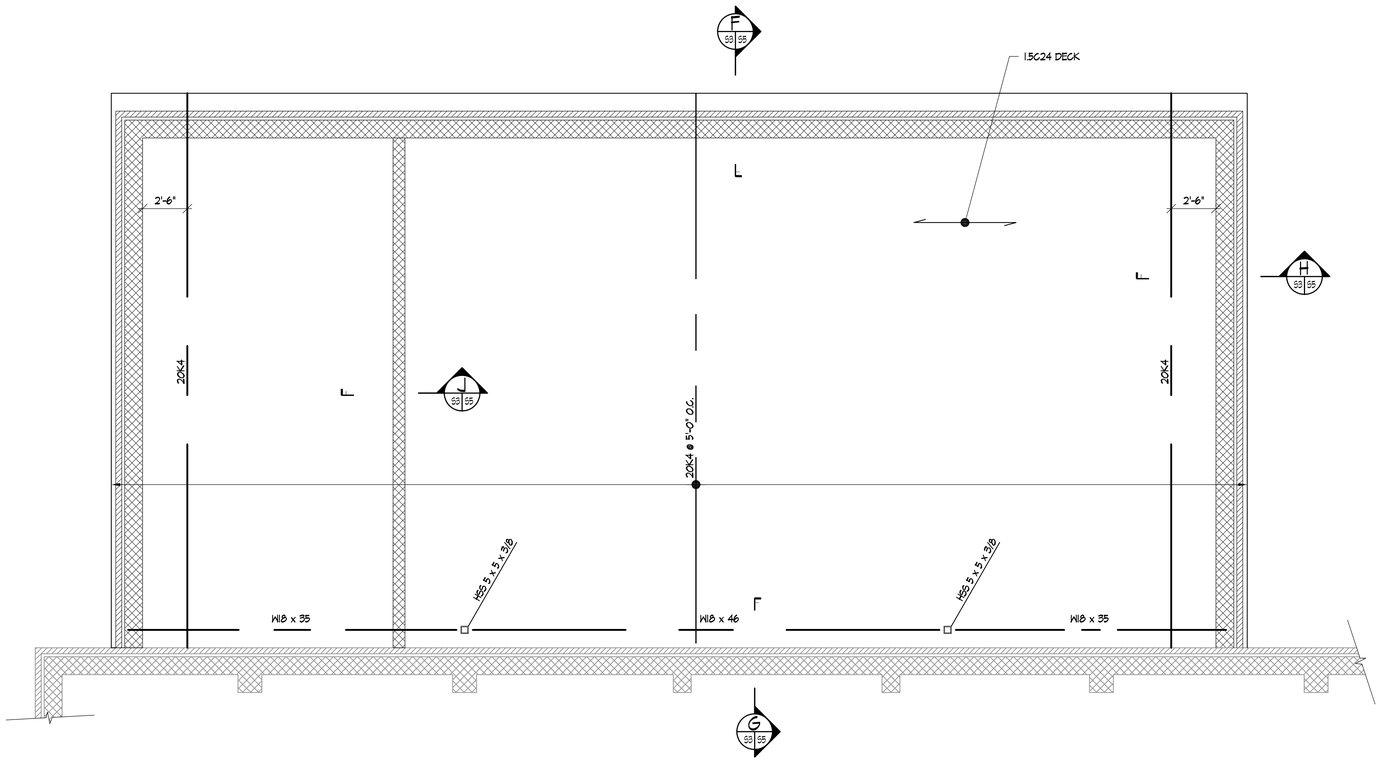

## DETAIL — BEAM TO COLUMN CONNECTION

SCALE: 3/4" = 1'-0"




## DETAIL — BOND BEAM CORNER/

SCALE: 3/4" = 1'-0"




## ROOF FRAMING PLAN

SCALE: 1/4" = 1'-0"

Date: 3/1/2023 | Project #: VA22111.DES | Drawn by: DAS | Reviewed by: MAM

The Structures Group, Inc.
1200 Old Colony Lane • Williamsburg, VA 23185
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www.thestructuresgroup.com

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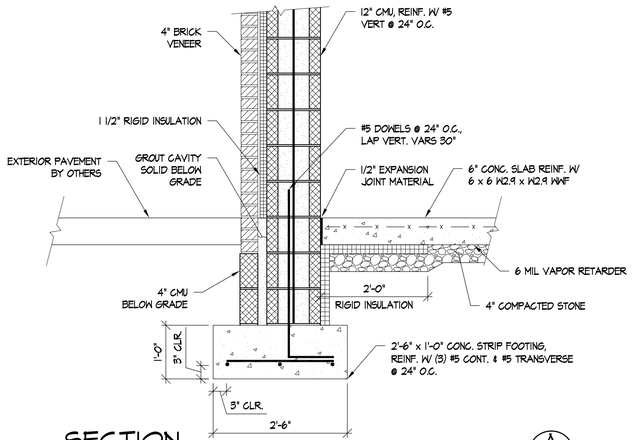
ROOF FRAMING PLAN AND DETAILS

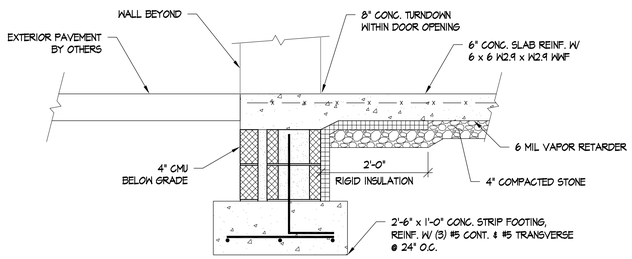
FIVE FORKS WATER TREATMENT FACILITY
STORAGE EXPANSION
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY VIRGINIA

Sheet S3 9 of X




## SECTION A

SCALE: 3/4" = 1'-0"




## SECTION B

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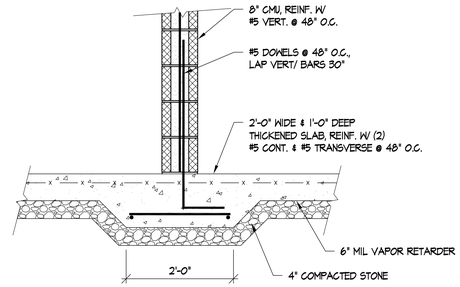


## SECTION C

SCALE: 3/4" = 1'-0"




## SECTION D

SCALE: 3/4" = 1'-0"




## SECTION E

SCALE: 3/4" = 1'-0"

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Date: 3/1/2023 | Project #: VA22111.DE5 | Drawn by: DAS | Reviewed by: MAM

**PRELIMINARY NOT FOR CONSTRUCTION**

| No. | Revisions | Date |
|---|---|---|

FOUNDATION SECTIONS

FIVE FORKS WATER TREATMENT FACILITY
STORAGE EXPANSION
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY VIRGINIA

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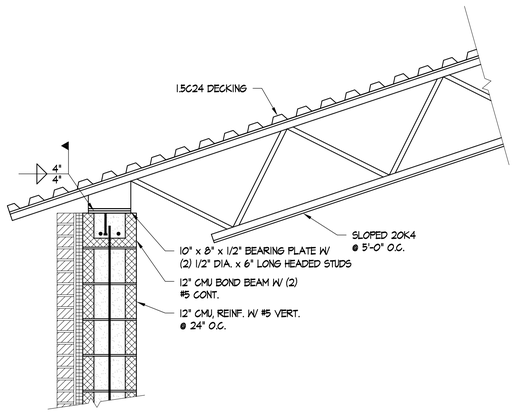
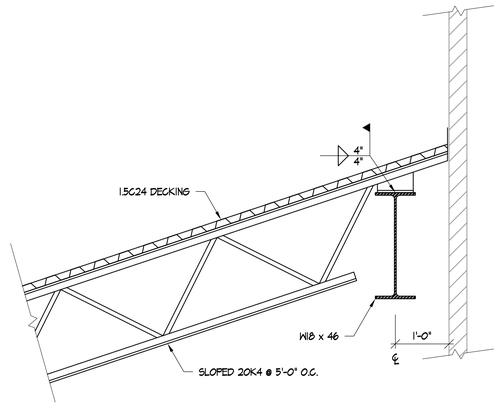



SECTION F S3 S5

SCALE: 3/4" = 1'-0"




SECTION G S3 S5

SCALE: 3/4" = 1'-0"




SECTION H S3 S5

SCALE: 3/4" = 1'-0"




SECTION J S3 S5

SCALE: 3/4" = 1'-0"

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FIVE FORKS WATER TREATMENT FACILITY
STORAGE EXPANSION
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY VIRGINIA

FRAMING SECTIONS

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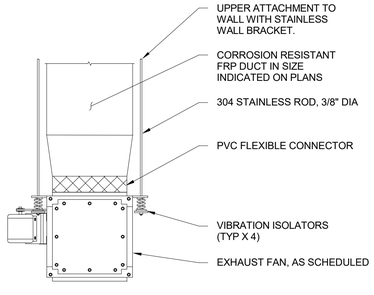
## MECHANICAL LEGEND

| | |
|---|---|
| SUPPLY DUCT UP | RECTANGULAR DUCT (FIRST DIMENSION REFERS TO SIDE VIEWED) |
| SUPPLY DUCT DOWN | ROUND DUCT SIZE |
| RETURN OR EXHAUST DUCT UP | DUCTWORK WITH INTERNAL LINER |
| RETURN OR EXHAUST DUCT DOWN | DOUBLE WALL DUCTWORK |
| OFFSET DUCT UP | FLEXIBLE DUCTWORK |
| OFFSET DUCT DOWN | NOTE: ALL DUCT SIZES ARE IN INCHES, NOMINAL INSIDE CLEAR FREE AREA. |
| DUCT BREAK (RECTANGULAR) | MANUAL BALANCING DAMPER IN DUCT |
| FLEX DUCT CONNECTOR | SUPPLY DIFFUSER |
| PIPE TURN UP - TEE OR ELBOW | RETURN GRILLE/REGISTER |
| PIPE TURN DOWN - TEE OR ELBOW | EXHAUST GRILLE/REGISTER |
| PIPE BREAK | EQUIPMENT IDENTIFICATION TAG (RTU-1: EQUIPMENT NUMBER, UNIT DESIGNATION) |
| DIRECTION OF SLOPE DOWN | DIFFUSER, GRILLE OR REGISTER TAG (200 / 8a-A: AIRFLOW (CFM), TAG, REFER TO DIFFUSER, GRILLE AND REGISTER SCHEDULE) |
| WALL MOUNTED TEMPERATURE SENSOR | MECHANICAL EQUIPMENT WITH REQUIRED SERVICE CLEARANCE INDICATED |
| WALL MOUNTED CARBON DIOXIDE SENSOR | EXISTING TO BE REMOVED |
| DUCT MOUNTED FIRE DAMPER (TYPE B) | DEMOLITION PLAN REFERENCE NOTE |
| LINE VOLTAGE THERMOSTAT | PLAN REFERENCE NOTE |
| DUCT SMOKE DETECTOR | EXTENT OF DEMOLITION |
| RETURN/TRANSFER/EXHAUST AIRFLOW DIRECTION | POINT OF CONNECTION - NEW TO EXISTING |
| SUPPLY AIRFLOW DIRECTION | |

| | | | |
|---|---|---|---|
| CHWR | CHILLED WATER RETURN | CHWS | CHILLED WATER SUPPLY |
| CA | COMPRESSED AIR | CD | CONDENSATE DRAIN |
| CWR | CONDENSER WATER RETURN | CWS | CONDENSER WATER SUPPLY |
| HR | HOT WATER RETURN | HS | HOT WATER SUPPLY |
| LP | PROPANE GAS | NG | NATURAL GAS |
| RL | REFRIGERANT LIQUID | RS | REFRIGERANT SUCTION |




INLINE FAN DETAIL

## MECHANICAL ABBREVIATIONS

| | |
|---|---|
| -AAV | AUTOMATIC AIR VENT |
| -ABV | ABOVE |
| -ADJ | ADJUSTABLE |
| -AF | AIR FOIL |
| -AFF | ABOVE FINISHED FLOOR |
| -AFG | ABOVE FINISHED GRADE |
| -AHU | AIR HANDLING UNIT |
| -AI | ANALOG INPUT |
| -AO | ANALOG OUTPUT |
| -APD | AIR PRESSURE DROP |
| -AS | AIR SEPEARTOR |
| -BAS | BUILDING AUTOMATION SYSTEM |
| -BEL | BELOW |
| -BHP | BRAKE HORSEPOWER |
| -BOTT | BOTTOM |
| -BTU | BRITISH THERMAL UNIT |
| -BTUH | BTU PER HOUR |
| -CAP | CAPACITY |
| -CD | CONDENSATE |
| -CFM | CUBIC FEET PER MINUTE |
| -CH | CHILLER |
| -CO | CLEANOUT |
| -CO2 | CARBON DIOXIDE |
| -CONT | CONTINUATION |
| -CT | COOLING TOWER |
| -CTR | CONTROL RELAY |
| -CV | CONSTANT VOLUME |
| -CWP | CONDENSER WATER PUMP |
| -DB | DRY BULB |
| -DDC | DIRECT DIGITAL CONTROL |
| -DI | DIGITAL INPUT |
| -DN | DOWN |
| -DO | DIGITAL OUTPUT |
| -DPS | DIFFERENTIAL PRESSURE SENSOR |
| -DWG | DRAWING |
| -EA | EACH |
| -EAT | ENTERING AIR TEMPERATURE |
| -ECM | ELECTRONICALLY COMPUTED MOTOR |
| -ENT | ENTERING |
| -ET | EXPANSION TANK |
| -ETC | ET CETERA |
| -EWT | ENTERING WATER TEMP |
| -EX | EXISTING |
| -EXT | EXTERNAL |
| -ESP | EXTERNAL STATIC PRESSURE |
| -°F | FAHRENHEIT, DEGREE |
| -FC | FORWARD CURVED |
| -FPM | FEET PER MINUTE |
| -FR | FROM |
| -FT | FEET |
| -FT H2O | FEET OF WATER |
| -FWE | FURNISHED W/EQUIPMENT |
| -GAL | GALLONS |
| -GPM | GALLONS PER MINUTE |
| -GRD | GROUND |
| -H20 | WATER COLUMN or WATER GAUGE |
| -HD | HEAD |
| -HP | HORSEPOWER |
| -HR | HOUR |
| -HX | HEAT EXCHANGER |
| -HZ | HERTZ |
| -KW | KILOWATTS |
| -LAT | LEAVING AIR TEMPERATURE |
| -LBS | POUNDS |
| -LWT | LEAVING WATER TEMPERATURE |
| -MAV | MANUAL AIR VENT |
| -MAX | MAXIMUM |
| -MBH | THOUSAND BTU PER HOUR |
| -MCA | MINIMUM CIRCUIT AMPS |
| -MERV | MINIMUM EFFICIENCY REPORTING VALUE |
| -MFG | MANUFACTURER |
| -MIN | MINIMUM |
| -MOP | MAXIMUM OVER-CURRENT PROTECTION |
| -MV | MANUAL VALVE |
| -NC | NORMALLY CLOSED |
| -NO | NORMALLY OPEN |
| -NTS | NOT TO SCALE |
| -OA | OUTSIDE AIR |
| -OAT | OUTSIDE AIR TEMPERATURE |
| -OBD | OPPOSED BLADE DAMPER |
| -OC | ON CENTER |
| -OCC | OCCUPANCY or OCCUPIED |
| -OFCI | OWNER FURNISHED, CONTRACTOR INSTALLED |
| -PCHP | PRIMARY CHILLED WATER PUMP |
| -PD | PRESSURE DROP |
| -PSI | POUNDS PER SQUARE INCH |
| -P/T | PRESSURE/TEST PORT |
| -PW | POWER WIRING |
| -RA | RETURN AIR |
| -RF | RETURN FAN |
| -RPM | REVOLUTIONS PER MINUTE |
| -RV | RELIEF VENT |
| -SA | SUPPLY AIR |
| -SCHP | SECONDARY CHILLED WATER PUMP |
| -SF | SAND FILTER |
| -S/S | START / STOP |
| -TCHP | TERTIARY CHILLED WATER PUMP |
| -TEMP | TEMPERATURE |
| -TS | TEMPERATURE SENSOR |
| -TYP | TYPICAL |
| -UON | UNLESS OTHERWISE NOTED |
| -V | VOLTS |
| -V | VALVE |
| -VEL | VELOCITY |
| -VFD | VARIABLE FREQUENCY DRIVE |
| -WPD | WATER SIDE PRESSURE DROP |
| -W | WATTS |
| -WB | WET BULB |
| -WC | WATER COLUMN |
| -WG | WATER GAUGE |
| -WT | WEIGHT |
| -w/ | WITH |

## MECHANICAL GENERAL NOTES

1. WORK INCLUDES PROVIDING A FIRST CLASS WORKING SYSTEM, TESTED AND READY FOR OPERATION, COMPLETE WITH LABOR, MATERIALS, APPARATUS, TRANSPORTATION, AND TOOLS REQUIRED FOR THE INSTALLATION, AS INDICATED.
2. ALL WORK SHALL COMPLY WITH 2018 VIRGINIA CONSTRUCTION CODE AND LOCAL BUILDING CODES, THE INTERNATIONAL PLUMBING AND MECHANICAL CODES (IMC 2018, IPC 2018) , NFPA CODES AND ALL OTHER APPLICABLE CODES. OBTAIN PERMITS, INSPECTIONS, LICENSES AND TESTS REQUIRED FOR THIS WORK AND PAY ALL FEES IN CONNECTION THEREWITH.
3. COORDINATE WORK CLOSELY WITH OTHER TRADES. ALL DIMENSIONS SHOWN ARE FOR THE CONVENIENCE OF THE CONTRACTOR, AND SHALL BE VERIFIED AND COORDINATED IN THE FIELD PRIOR TO INSTALLATION. FAILURE TO COORDINATE WORK WILL NOT BE CONSIDERED AS A BASIS FOR EXTRA PAYMENTS.
4. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT SHOW EXACT LOCATIONS OF DUCTWORK, PIPING AND EQUIPMENT. DO NOT SCALE DRAWINGS. ALL OFFSETS AND FITTINGS FOR COMPLETE INSTALLATION MAY NOT BE INDICATED ON THE DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AT THE BUILDING AND ANY CHANGES NECESSARY FOR COORDINATION WITH EXISTING CONDITIONS. WHERE TRANSITIONS ARE REQUIRED, CROSS-SECTIONAL AREA OF DUCTS SHALL BE MAINTAINED. MEASUREMENTS FOR VERTICAL CLEARANCES OF DUCTWORK SHALL BE TAKEN AT THE JOB SITE BEFORE FABRICATION OF ANY DUCTWORK. EQUIPMENT TO BE INSTALLED AND COORDINATED WITH OTHER SYSTEMS. IF CONFLICTS CANNOT BE RESOLVED THEY SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT / ENGINEER.
5. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF CONSTRUCTION SELECTED BY THE CONTRACTOR OR OF THE SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL TO THE WORK OF THE CONTRACTOR. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE FAILURE OF THE CONTRACTOR TO PERFORM THE WORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
6. ALL MATERIALS SHALL BEAR THE MANUFACTURER'S NAME, TRADE NAME AND BE U.L. LABELED IF REQUIRED. UNLESS NOTED OTHERWISE, ALL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER. ALL EQUIPMENT OF A SIMILAR TYPE SHALL BE OF THE SAME MANUFACTURER.
7. GUARANTEE / WARRANTY: ALL MECHANICAL EQUIPMENT, MATERIALS AND LABOR REQUIRED BY THESE SPECIFICATIONS AND ACCOMPANYING DRAWINGS SHALL BE GUARANTEED TO BE FREE FROM DEFECTIVE MATERIALS OR WORKMANSHIP FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE PROJECT EXCEPT EXTENDED WARRANTIES, AS SPECIFIED ELSEWHERE IN THESE DOCUMENTS ON SPECIFIC ITEMS OF EQUIPMENT, WILL BE FURNISHED BY THE TRADE PROVIDING THE EQUIPMENT.
8. CONTRACTOR SHALL FURNISH LOCATION AND SIZE OF OPENINGS REQUIRED FOR HVAC EQUIPMENT, DUCTWORK AND PIPING TO THE GENERAL CONTRACTOR IN TIME NOT TO DELAY BUILDING CONSTRUCTION.
9. ALL DUCTWORK DIMENSIONS SHOWN ARE IN INCHES AND INDICATE AIRFLOW SIZE.

## MECHANICAL DRAWING INDEX


| SHEET NUMBER | SHEET NAME |
|---|---|
| M001 | MECHANICAL - LEGEND, ABBREVIATIONS AND NOTES |
| M002 | MECHANICAL SCHEDULES |
| M101 | FIRST FLOOR HVAC NEW WORK |



COLONIAL ENGINEERED SOLUTIONS
5332 Arbor Place
Williamsburg Virginia 23188
Phone: (757) 634-3653


PROJECT TITLE:
FIVE FORKS WATER TREATMENT FACILITY
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY, VA

DRAWING TITLE:
MECHANICAL - LEGEND, ABBREVIATIONS AND NOTES

REVISIONS:

| No: | Revision: | Date: |
|---|---|---|
| 2 | ISSUE FOR APPROVAL | 02/24/23 |
| 1 | ISSUE FOR REVIEW | 10/14/22 |

| | |
|---|---|
| Project No.: | 174.2202 |
| Designed By: | JPM |
| Drawn By: | JPM |
| Checked By: | JPM |
| Scale: | AS NOTED |
| Date: | 02/24/2023 |
| Seal: | NOT FOR CONSTRUCTION |

Drawing No.
M001

## SPLIT-SYSTEM INDOOR UNIT SCHEDULE

| UNIT TAG | SERVICE TO | SERVED BY | AIRFLOW DATA | COOLING DATA | | HEATING DATA | ELECTRICAL DATA | | | | SELECTION BASED ON | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | SUPPLY AIRFLOW (CFM, LO-MED-HI) | TOTAL CAPACITY (BTU/HR) | SENSIBLE CAPACITY (BTU/HR) | CAPACITY (BTU/HR) | VOLT | PH | FLA | MOCP | MANUFACTURER | MODEL | |
| IDU-1 | MAINTENANCE SHOP | CU-1 | 270-380-430 | 17,700 | 12,600 | 12,600 | 208 | 1 | 0.21 | 15 | MITSUBISHI | NTXCKS18A112AA | NOTES 1, 2, 3, 4 |
| | | | | | | | | | | | | | |

GENERAL NOTES:

1) CEILING CASSETTE
2) PROVIDE WATER LEVEL DETECTOR IN CONDENSATE PAN.
3) POWERED FROM OUTDOOR UNIT
4) PROVIDE WITH WIRED CONTROLLER, SENSOR KIT, AND CONDENSATE PUMP

## CONDENSING UNIT SCHEDULE:

| UNIT NO. | SERVING | NOMINAL CAPACITY TONS | COOLING DATA | | HEATING DATA | | REFRIGERANT | | UNIT ELECTRIC DATA | | | | SELECTION BASED ON | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CAPACITY MBH | COND. °F | CAPACITY MBH | COND. °F | TYPE | QTY (LBS) | MCA | MOCP | VOLT | PHASE | MANUFACTURER | MODEL | |
| CU-1 | MAINT SHOP | 1.5 | 17,700 | 95 | 12900 | 17 | R-410A | 3.6 | 14.0 | 25 | 208 | 1 | MITSUBISHI | NTXSKS18A112AA | |
| | | | | | | | | | | | | | | | |

## FAN SCHEDULE

| UNIT TAG | SERVICE TO | TYPE | FAN FLOWRATE MAX (CFM) | TOTAL STATIC PRES. (IN. H20) | DRIVE | MOTOR DATA | | | CONTROL TYPE | | SELECTION BASED ON | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | HP | RPM | VOLT/PH | SPEED | CONTROL TYPE | MANUFACTURER | MODEL | |
| EF-1 | STORAGE BAY | INLINE | 250 | 0.50 | BELT | 0.75 | 1,800 | 277 / 1 | CONSTANT | CONSTANT FLOW | MK PLASTICS | AXB 300 | NOTES 1, 2, 3, 4, 5, 6 |
| EF-2 | STORAGE BAY | INLINE | 250 | 0.50 | BELT | 0.75 | 1,800 | 277 / 1 | CONSTANT | CONSTANT FLOW | MK PLASTICS | AXB 300 | NOTES 1, 2, 3, 4, 5, 6 |
| EF-3 | STORAGE BAY | INLINE | 250 | 0.50 | BELT | 0.75 | 1,800 | 277 / 1 | CONSTANT | CONSTANT FLOW | MK PLASTICS | AXB 300 | NOTES 1, 2, 3, 4, 5, 6 |
| EF-4 | STORAGE BAY | INLINE | 500 | 0.50 | BELT | 0.75 | 1,800 | 277 / 1 | CONSTANT | CONSTANT FLOW | MK PLASTICS | AXB 300 | NOTES 1, 2, 3, 4, 5, 6 |
| | | | | | | | | | | | | | |

NOTES:

1) BELT DRIVE, TEFC MOTOR
2) VERTICAL MOUNT
3) WALL MOUNT ANGLE BRACKETS WITH 3/4" DEFLECTION SPRING / NEOPRENE ISOLATORS
4) FRP / NON-METAL CONSTRUCTION FOR ALL COMPONENENTS IN AIR STREAM
5) OUTLET FLANGE
6) FRP DUCT DISCHARGE TO LOUVER ABOVE

## ELECTRIC UNIT HEATER SCHEDULE:

| UNIT NO. | SERVING | UNIT TYPE | TOTAL CAPACITY BTUH | ELECTRIC DATA | | | | SELECTION BASED ON | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | KW | VOLT | PH | FLA | MANUFACTURER | MODEL | |
| UH-1 | STORAGE | SUSP | 42600 | 12.5 | 480 | 3 | 15.1 | MARKEL | P3PUH12CA1 | NOTES 1, 2, 3, 4 |
| UH-2 | STORAGE | SUSP | 42600 | 12.5 | 480 | 3 | 15.1 | MARKEL | P3PUH12CA1 | NOTES 1, 2, 3, 4 |
| | | | | | | | | | | |

GENERAL NOTES:

1 WALL OR CEILING MOUNTING BRACKET, MOUNT AT 10 FT AFF
2 UNIT MOUNTED THERMOSTAT
3 UNIT MOUNTED DISCONNECT
4 EPOXY COATING

## LOUVER SCHEDULE

| TAG | SIZE W x H (IN) | FREE AREA (S.F.) | SERVICE | AIRFLOW (CFM) | PRESSURE DROP (IN WC) | SELECTION BASED ON | | REMARKS |
|---|---|---|---|---|---|---|---|---|
| | | | | | | MANUFACTURER | MODEL | |
| L-1 | 36x24 | 3 | INTAKE | 1250 | 0.05 | RUSKIN | ELF375 | NOTE 1, 3 |
| L-2 | 16x24 | 0.81 | EXHAUST | 250 | 0.1 | RUSKIN | SFG40 | NOTES 2, 3 |
| L-3 | 16x24 | 0.81 | EXHAUST | 250 | 0.1 | RUSKIN | SFG40 | NOTES 2, 3 |
| L-4 | 16x24 | 0.81 | EXHAUST | 250 | 0.1 | RUSKIN | SFG40 | NOTES 2, 3 |
| L-5 | 16x24 | 0.81 | EXHAUST | 250 | 0.1 | RUSKIN | SFG40 | NOTES 2, 3 |
| | | | | | | | | |

NOTES:

1) ALUIMINUM, DRAINABLE, STATIONARY LOUVER, STAINLESS BIRSCREEN
2) FIBERGLASS, STATIONARY LOUVER, PVC COATED BIRDSCREEN
3) COLOR TO MATCH BUILDING FINISH FROM STANDARD COLOR CHART.

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DRAWING TITLE:
MECHANICAL SCHEDULES

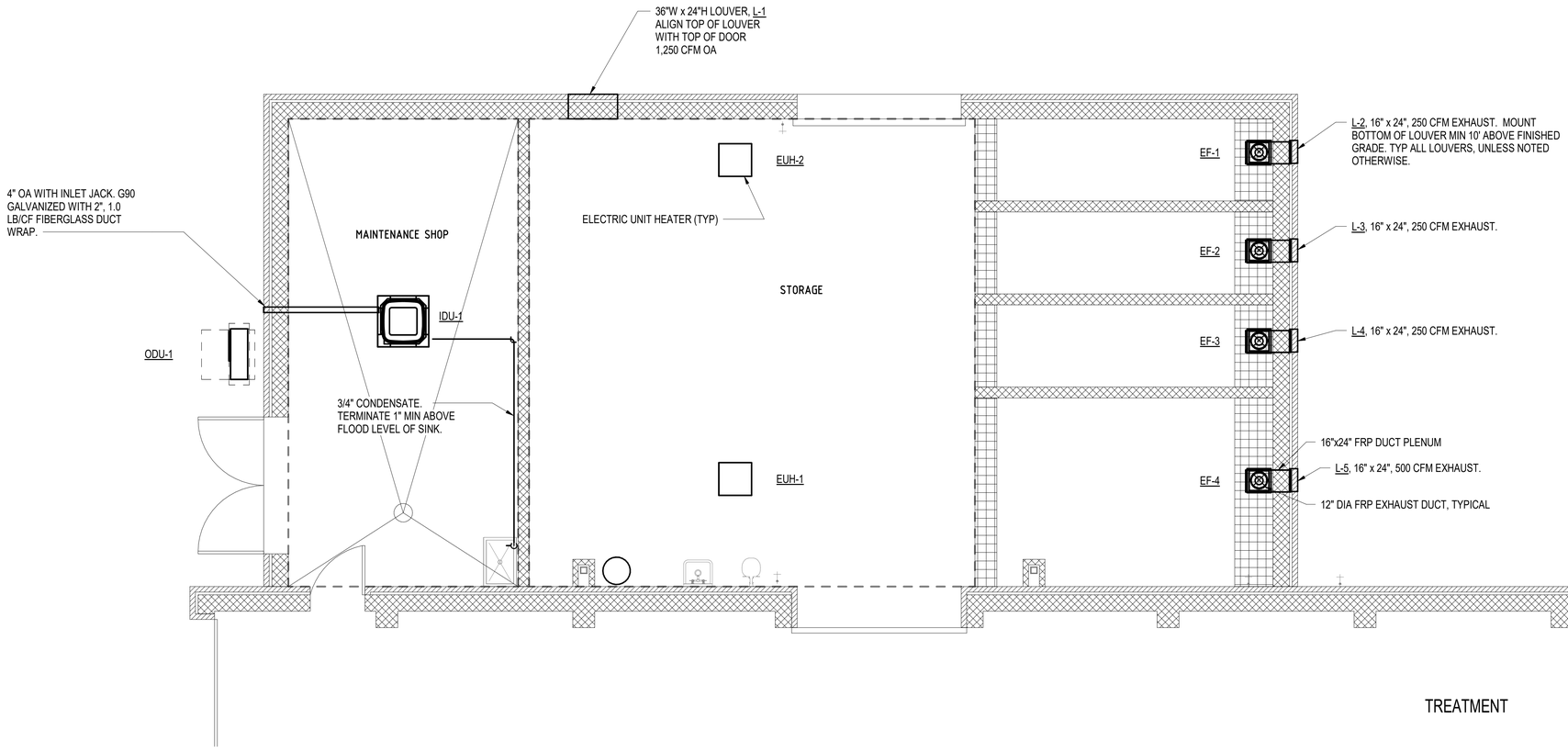
REVISIONS:

| No: | Revision: | Date: |
|---|---|---|
| 2 | ISSUE FOR APPROVAL | 02/24/23 |
| 1 | ISSUE FOR REVIEW | 10/14/22 |

Project No.: 174.2202
Designed By: JPM
Drawn By: JPM
Checked By: JPM
Scale: AS NOTED
Date: 02/24/2023
Seal:

NOT FOR CONSTRUCTION

Drawing No.
M002




## FIRST FLOOR NEW WORK

1/4" = 1'-0"

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Phone: (757) 634-3853

PROJECT TITLE:
FIVE FORKS WATER TREATMENT FACILITY
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY, VA

DRAWING TITLE:
FIRST FLOOR HVAC NEW WORK

REVISIONS:

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| | |
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| Scale: | AS NOTED |
| Date: | 02/24/2023 |

Seal:

NOT FOR CONSTRUCTION

Drawing No.
M101

## PLUMBING ABBREVIATIONS

| | |
|---|---|
| A.P. | ACCESS PANEL |
| AD | ACCESS DOOR |
| ADA | AMERICANS WITH DISABILITIES ACT |
| ASME | AMERICAN SOCIETY OF MECHANICAL ENGINEERS |
| BFP | BACKFLOW PREVENTOR |
| CO | CLEAN OUT |
| D | DRAIN |
| D.I. | DUCTILE IRON |
| DCW | DOMESTIC COLD WATER |
| DHW | DOMESTIC HOT WATER |
| DHWR | DOMESTIC HOT WATER RETURN |
| EA | EACH |
| ES | EMERGENCY SHOWER |
| EWC | ELECTRIC WATER COOLER |
| FCO | FLUSH FLOOR CLEANOUT |
| FD | FLOOR DRAIN |
| FDC | FIRE DEPARTMENT CONNECTION |
| FS | FLOOR SINK |
| GPF | GALLONS PER FLUSH |
| GPM | GALLONS PER MINUTE |
| HS- | HOSE STATION |
| HWR | DOMESTIC HOT WATER RECIRCULATION/RETURN |
| IW | INDIRECT WASTE |
| LAV | LAVATORY |
| LP | LIQUID PROPANE GAS |
| LV | LABORATORY VENT |
| MAX | MAXIMUM |
| MBH | THOUSANDS OF BRITISH THERMAL UNITS PER HOUR |
| MIN | MINIMUM |
| OF | OVERFLOW DRAIN |
| P.A. | PIPE ANCHOR |
| P.G. | PIPE GUIDE |
| PSI | POUNDS PER SQUARE INCH |
| PSIG | POUNDS PER SQUARE INCH GAUGE |
| PVC | POLYVINYL CHLORIDE |
| RL | RAIN LEADER |
| RPZ | REDUCED PRESSURE ZONE BACKFLOW PREVENTER |
| S & V | SOIL AND VENT |
| S, SAN | SANITARY |
| SH | SHOWER |
| STM | STORM |
| V | VENT |
| VTR | VENT THRU ROOF |
| W | WATER |
| W & T | WASTE AND TRAP |
| WC | WATER CLOSET |
| WC | WATER COLUMN |
| WCO | WALL CLEANOUT |
| WH | WALL HYDRANT |

## PIPING LEGEND

| | |
|---|---|
| SANITARY PIPING | |
| VENT PIPING | |
| ELBOW TURNED DOWN | |
| ELBOW TURNED UP | |
| TEE | |
| BRANCH OFF TOP OF MAIN | |
| BRANCH OFF BOTTOM OF MAIN | |
| REDUCED (CONCENTRIC) | |
| REDUCED (ECCENTRIC) | |
| CAP | |
| P-TRAP | |
| HOSE BIBB | |
| CLEAN OUT | |
| GATE VALVE | |
| BALL VALVE | |
| BUTTERFLY VALVE | |
| DOMESTIC COLD WATER | |
| DOMESTIC HOT WATER | |
| DOMESTIC HOT WATER RETURN | |
| STRAINER | |
| FLEXIBLE CONNECTOR | |
| THERMOMETER | |
| PRESSURE GAUGE | |
| WATER HAMMER ARRESTOR | PDI- |
| DRAIN VALVE | |
| UNION | |
| PRESSURE RELIEF VALVE | |

## PLUMBING GENERAL NOTES:

1. ALL WORK TO BE IN ACCORDANCE WITH THE VIRGINIA PLUMBING CODE, 2018 EDITION AND ALL OTHER FEDERAL, STATE, AND LOCAL CODES.
2. FOR CONTINUATION OF PIPING BEYOND LIMITS OF BUILDING, SEE SITE PLAN AND CIVIL PLANS.
3. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO ESTABLISH MINIMUM ACCEPTABLE QUALITY STANDARDS FOR MATERIALS, EQUIPMENT AND WORKMANSHIP, AND TO PROVIDE OPERABLE MECHANICAL SYSTEMS COMPLETE IN EVERY RESPECT.
4. THE DRAWINGS ARE DIAGRAMMATIC, INTENDING TO SHOW GENERAL ARRANGEMENT, CAPACITY AND LOCATION OF SYSTEM COMPONENTS, AND ARE NOT INTENDED TO BE RIGID IN DETAIL. FINAL PLACEMENT OF EQUIPMENT, OTHER SYSTEM COMPONENTS, AND COORDINATION OF ALL RELATED TRADES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
5. DUE TO THE SMALL SCALE OF THE DRAWINGS, AND TO UNFORESEEN JOB CONDITIONS, ALL REQUIRED OFFSETS AND FITTINGS MAY NOT BE SHOWN BUT SHALL BE PROVIDED AT NO ADDITIONAL CHANGE IN CONTRACT.
6. KEEP ALL PIPING CLEAR OF FOOTINGS. COORDINATE ALL CLOSE LOCATIONS WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
7. VENTS THRU ROOF SHALL TERMINATE MINIMUM THREE (3) FEET ABOVE OUTSIDE AIR INTAKES WITHIN 10 FEET. COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATIONS.
8. INSTALL ESCUTCHEONS FOR PIPING PENETRATIONS OF WALLS, CEILINGS, AND FINISHED FLOORS.
9. ADJUST PLUMBING SYSTEMS AND EQUIPMENT TO OPERATE SMOOTHLY AND EFFICIENTLY.
10. PROVIDE CODE APPROVED ADAPTER FITTINGS AS REQUIRED AT POINT OF CONNECTION TO FIXTURE AND EQUIPMENT.
11. ALL WATER LINES SHALL BE DISINFECTED PRIOR TO BEING PLACED IN OPERATION.
12. PROVIDE PLUMBING FIXTURES AND EQUIPMENT INDICATED. FIXTURES AND EQUIPMENT SHALL BE THE BEST GRADE OF THEIR RESPECTIVE KINDS, FREE FROM FLAWS, CRACKS, CRAZE, OR OTHER IMPERFECTIONS AND FURNISHED WITH ALL TRIM, FITTINGS, ADAPTERS AND CONNECTIONS AS REQUIRED. PLUMBING FIXTURES SHALL BE PROPERLY ADJUSTED AND READY FOR OPERATION.
13. COMPLETE FIXTURE INSTALLATION SHALL CONFORM TO 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
14. INSTALL TRAP GUARDS ON ALL FLOOR DRAINS IN LIEU OF TRAP PRIMERS. ALL TRAP GUARDS SHALL BE COMPLIANT WITH ASSE 1072.
15. INSTALL BUILDING SEWER CLEANOUTS AS BUILDING SEWERS LEAVES THE BUILDING.
16. EXACT LOCATION OF FLOOR AND ROOF DRAINS SHALL BE AS INDICATED ON ARCHITECTURAL PLANS.
17. INSTALL T&P VALVES ON ALL STORAGE TANK WATER HEATERS. ROUTE DISCHARGE PIPE TO NEAREST FLOOR DRAIN AND TERMINATE 1" ABOVE FLOOR.
18. INSTALL ALL EQUIPMENT SO THAT ALL CODE REQUIRED AND MANUFACTURER'S RECOMMENDED CLEARANCES ARE PROVIDED. UNLESS OTHERWISE DIRECTED, EQUIPMENT SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION.

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PROJECT TITLE:
FIVE FORKS WATER TREATMENT FACILITY
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY, VA

DRAWING TITLE:
PLUMBING COVER SHEET

REVISIONS:

| No: | Revision: | Date: |
|---|---|---|
| 2 | ISSUE FOR APPROVAL | 02/24/23 |
| 1 | ISSUE FOR REVIEW | 10/14/22 |

| | |
|---|---|
| Project No.: | 174.2202 |
| Designed By: | JPM |
| Drawn By: | JPM |
| Checked By: | JPM |
| Scale: | AS NOTED |
| Date: | 02/24/2023 |
| Seal: | |

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Drawing No.
P001

## PLUMBING FIXTURE SCHEDULE

| FIXTURE | FIXTURE TYPE | WASTE | VENT | DCW | DHW | FIXTURE | | | | FAUCET | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MANUFACTURER | MODEL | TYPE | SIZE | MANUFACTURER | MODEL | |
| P-1 | HANDWASH SINK | 1-1/2" | 1-1/2" | 1/2" | 1/2" | ELKAY | ELV2219SAC C | WALL HUNG LAVATORY | 22"x19"x5-1/2" | ELKAY | LKB721C SENSOR FAUCET | PROVIDE P-TRAP, WALL MOUNTING BRACKET, DRAIN GRID, WATER STOP VALVES, FITTING INSULATION COVERS, AND ALL FITTINGS REQUIRED FOR COMPLETE SYSTEM. |
| P-2 | MOP SINK | 3" | 1-1/2" | 3/4" | 3/4" | FIAT | TSB-500 | MOLDED STONE | 36"x24"x 12" | ELKAY | LK940BP03T4S 8" CENTERSET | VACUUM BREAKER, 4" WRISTBLADE, 3" DRAIN W/ STRAINER |
| P-3 | HOSE BIBB | - | - | 3/4" | - | WOODFORD | MODEL 24 | WALL HYDRANT | 3/4" | - | - | FOR NON-FREEZING AREAS, WITH INTEGRAL VACUUM BREAKER |
| P-4 | EYEWASH | 1-1/2" | 1-1/2" | 1/2" | 1/2" | GUARDIAN | G1894 | EYEWASH, PEDESTAL MOUNT, ALL STAINLESS... | - | - | - | PROVIDE G6020 THERMOSTSATIC MIXING VALVE, ANSI Z358.1, PROVIDE IDENTIFICATION SIGN |
| | | | | | | | | | | | | |

## ELECTRIC WATER HEATER SCHEDULE

| UNIT TAG | SERVICE TO | TYPE | RECOVERY @ 100°F RISE | STORAGE TANK VOLUME (GAL) | ELECTRIC DATA | | SELECTION BASED ON | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | KW | VOLT / PH | MANUFACTURER | MODEL | |
| EWH-1 | MAINTANCE | ELECTRIC STORAGE | 176 | 40 | 4 | 208/1 | A O SMITH | DEN 40 | |
| | | | | | | | | | |
| | | | | | | | | | |

## DRAIN SCHEDULE

| FIXTURE | DRAIN TYPE | SIZE (IN.) | BODY | SELECTION BASED ON | | REMARKS |
|---|---|---|---|---|---|---|
| | | | | MANUFACTURER | MODEL | |
| FD-A | FLOOR DRAIN | 3" | CAST IRON | JAY R SMITH | 2110 | MEDIUM DUTY, 8-1/2" ROUND TOP, NO-HUB OUTLET, TRAP GUARD, P-TRAP |
| CO-1 | CLEAN OUT | 4" | CAST IRON | JAY R SMITH | 4237 | |
| | | | | | | |

NOTES:

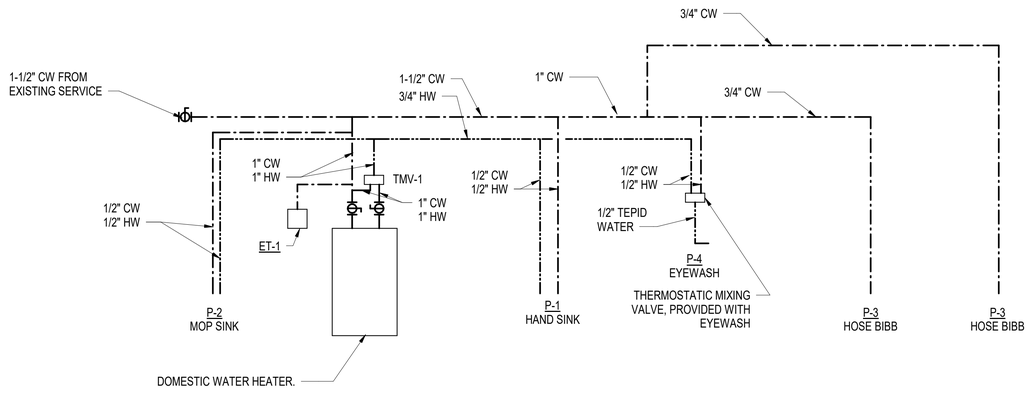
1) ALL DRAIN MANUFACTURER AND MODELS ARE THE BASIS OF DESIGN AND ARE FOR REFERENCE ONLY. ACCEPTABLE ALTERNATE MANUFACTURERS ARE JAY R SMITH, JOSAM, AND ZURN. SEE SPECIFICATIONS FOR FURTHER PRODUCT REQUIREMENTS.

## PIPING AND PIPING INSULATION SCHEDULE

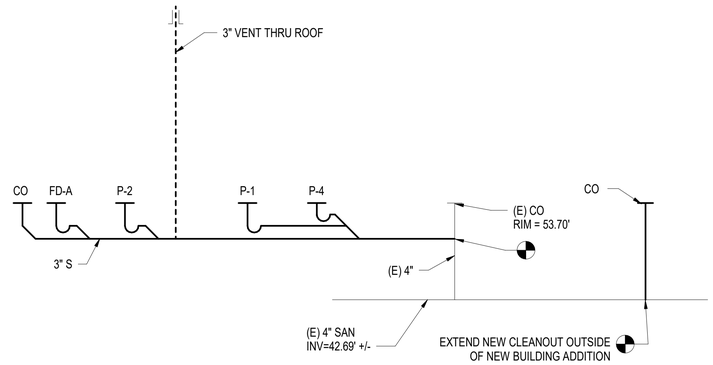
| SYSTEM | ABBREVIATION | LOCATION | PIPE SIZES | PIPING MATERIAL | JOINT TYPE | PIPE INSULATION | REMARKS |
|---|---|---|---|---|---|---|---|
| DOMESTIC COLD WATER | DCW | ABOVE GRADE | ALL | COPPER TYPE L | SOLDER | 1" FIBERGLASS W/ ASJ | SEE NOTES #1 |
| DOMESTIC HOT WATER SUPPLY & RETURN | DHW & DHWR | ALL | ALL | COPPER TYPE L | SOLDER | 1.5" FIBERGLASS W/ ASJ | SEE NOTES #1 |
| SANITARY | S | ABOVE CEILING AND EXPOSED | ALL | CAST IRON DWV | NO HUB | NONE | |
| | | CONCEALED AND BELOW GRADE | ALL | PVC | SOLVENT JOINT | NONE | |
| VENT | V | ALL | ALL | CAST IRON DWV | NO HUB | NONE | |
| ACID WASTE | AW | ALL | ALL | POLYPRO DWV | FUSION / MECH JOINT | NONE | |

NOTES:

1) ALL PIPING, VALVING, FITTINGS, AND JOINTS SHALL BE LEAD-FREE.




1 DOMESTIC WATER RISER




2 SANITARY WASTE RISER

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PROJECT TITLE:
FIVE FORKS WATER TREATMENT FACILITY
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY, VA

DRAWING TITLE:
PLUMBING DETAILS & SCHEDULES

REVISIONS:

| No: | Revision: | Date: |
|---|---|---|
| 2 | ISSUE FOR APPROVAL | 02/24/23 |
| 1 | ISSUE FOR REVIEW | 10/14/22 |

| | |
|---|---|
| Project No.: | 174.2202 |
| Designed By: | JPM |
| Drawn By: | JPM |
| Checked By: | JPM |
| Scale: | AS NOTED |
| Date: | 02/24/2023 |
| Seal: | |

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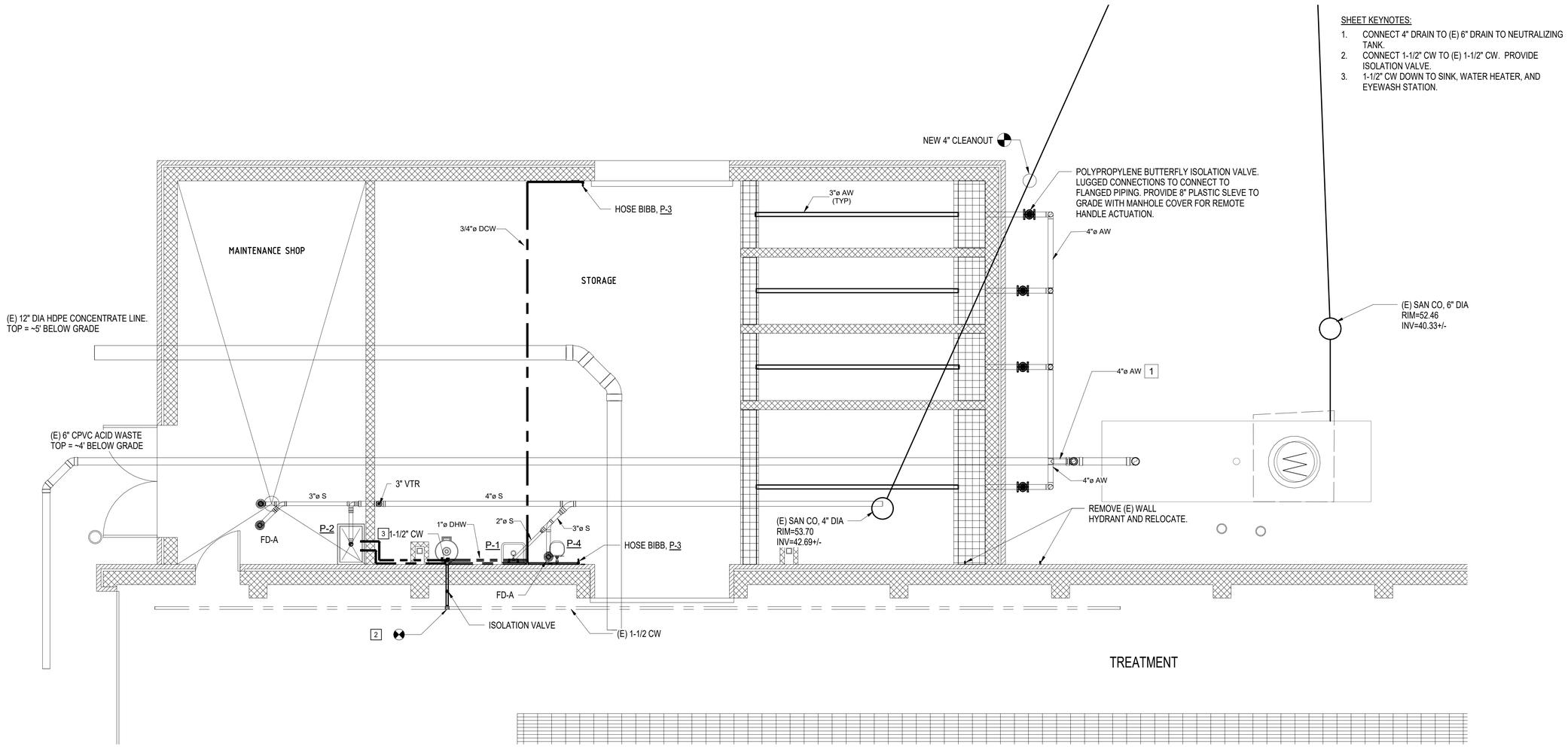
Drawing No.
P002




SHEET KEYNOTES:

1. CONNECT 4" DRAIN TO (E) 6" DRAIN TO NEUTRALIZING TANK.
2. CONNECT 1-1/2" CW TO (E) 1-1/2" CW. PROVIDE ISOLATION VALVE.
3. 1-1/2" CW DOWN TO SINK, WATER HEATER, AND EYEWASH STATION.

## FIRST FLOOR PLUMBING PLAN

1/4" = 1'-0"

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PROJECT TITLE:
FIVE FORKS WATER TREATMENT FACILITY
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY, VA

DRAWING TITLE:
PLUMBING FLOOR PLAN

REVISIONS:

| No: | Revision: | Date: |
|---|---|---|
| 2 | ISSUE FOR APPROVAL | 02/24/23 |
| 1 | ISSUE FOR REVIEW | 10/14/22 |

| | |
|---|---|
| Project No.: | 174.2202 |
| Designed By: | JPM |
| Drawn By: | JPM |
| Checked By: | JPM |
| Scale: | AS NOTED |
| Date: | 02/24/2023 |

Seal:
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Drawing No.
P101

ELECTRICAL SPECIFICATIONS:

1. ALL ELECTRICAL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE AND THE LATEST REVISION OF THE NATIONAL ELECTRICAL CODE ( 2017 NEC).

2. ALL ELECTRICAL EQUIPMENT AND MATERIAL USED SHALL BEAR THE UNDERWRITER'S LABORATORY (UL) LABEL FOR THE INTENDED APPLICATION, OR OTHER ORGANIZATION'S LABEL IF ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION AND CONCERN WITH PRODUCT EVALUATION.

3. THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS REQUIRED TO PROVIDE A COMPLETE WORKING SYSTEM AS SHOWN ON THE DRAWINGS AND ACQUIRE ALL PERMITS NECESSARY TO PERFORM WORK. ALL WORK SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER AND SHALL BE SUBJECT TO APPROVAL BY THE OWNER.

4. THE ELECTRICAL TRADE SHALL VISIT THE JOB SITE AND SURVEY ALL EXISTING CONDITIONS WHICH MAY AFFECT HIS WORK PRIOR TO CONTRACT PRICE AGREEMENT. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO ACCURATELY ESTIMATE THE DIFFICULTIES AND COST TO PERFORM WORK. THE ELECTRICAL TRADE SHALL COORDINATE ALL WORK WITH WORK OF OTHER TRADES. CONFLICTS DUE TO FAILURE OF THE ELECTRICAL TRADE TO COORDINATE WORK WILL BE CORRECTED AT THE EXPENSE OF THE ELECTRICAL TRADE, INCLUDING COSTS FOR REPAIRS TO WORK OF OTHER TRADES.

5. THE FOLLOWING WIRING SYSTEM SHALL BE ALLOWED PER NEC LIMITATIONS:

   A. STRANDED COPPER THWN OR THHN IN METALLIC CONDUIT OR NON METALLIC CONDUIT AS INDICATED.

   B. ALL UNDERGROUND WIRING SHALL BE TYPE XHHW

   ALL WIRES FOR 20 AMP CIRCUITS TO BE #12 ON RUNS 0' TO 100'; #10 ON RUNS 101' TO 250'; #8 ON RUNS 251' TO 500' AND #6 ON RUNS 501' AND ABOVE. ALL WIRE SHALL BE #12 AWG OR LARGER. ALL WIRE #8 AWG AND LARGER SHALL BE STRANDED.

6. ALL POWER LIMITED SHIELDED TWISTED PAIR CABLE SHALL BE AS MANUFACTURED BY BELDEN, ALPHA, WEST PENN, OR ANIXTER. FURNISH PROPER NUMBER OF CONTROL WIRING PAIRS, SHIELDING, INSULATION, ETC. AS REQUIRED BY CONTROLLED SYSTEM MANUFACTURER.

7. ALL CONDUIT TO BE RIGID HEAVY WALL CONDUIT (GRS), IMC OR EMT CONDUIT AS PERMITTED BY NEC AND THE LIMITATIONS BELOW AND EQUAL TO REPUBLIC, STEELDUCT, YOUNGSTOWN, OR WHEATLAND. LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHALL BE ANACONDA SEALTITE OR EQUAL FOR ALL EQUIPMENT AND MOTOR CONNECTIONS.

8. OUTLET BOXES:

   A. ALL CONCEALED OUTLET BOXES SHALL BE ONE-PIECE CONSTRUCTION WITH PROPER CONDUIT KNOCKOUTS AS REQUIRED, AND EQUAL TO STEEL CITY OR RACO. PROVIDE PROPER DEVICE COVER AS REQUIRED FOR DEVICES AND WALL FINISH. SUPPORT ALL WALL BOXES WITH STUD WALL BRACKETS.

   B. ALL CEILING OUTLET BOXES SHALL HAVE ADJUSTABLE BAR HANGERS AND PROPER FIXTURE ADAPTER COVER.

   C. ALL OUTLET COVER PLATES SHALL BE TYPE 302 STAMPED STAINLESS STEEL.

   D. SURFACE MOUNTED BOXES SHALL BE ALUMINUM FS BOXES.

9. VERIFY DOOR SWINGS SHOWN ON DRAWINGS BEFORE INSTALLING SWITCH BOXES TO INSURE PROPER LOCATION. INSTALL BOXES 4" FROM TRIM ON DOOR JAMB.

10. FURNISH AND INSTALL CONDUIT RUNS TO PRODUCE SWITCHING AND CIRCUIT CONTROL INDICATED ON THE DRAWINGS. ALLOW FOR MAKING CONNECTIONS TO ALL OUTLETS, MOTORS, ETC., INDICATED AND CHECK PLANS TO INSURE THAT ALL OUTLETS, ETC., HAVE A DESIGNATED CIRCUIT. NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOUND.

11. WIRING DEVICES (COLOR SELECTION BY THE OWNER):

   A. SWITCHES: BRYANT TECH-SPEC SERIES, OR EQUAL, SINGLE, THREE-WAY, FOUR WAY, ETC. AS REQUIRED.

   B. RECEPTACLES: BRYANT TECH-SPEC SERIES, OR EQUAL, DUPLEX RECEPTACLES, GFI, ETC. AS REQUIRED, WITH STAINLESS STEEL COVER PLATES, OR WHILE IN USE WEATHERPROOF PLATES WHERE REQUIRED.

12. FURNISH AND INSTALL ALL POWER AND CONTROL WIRING, CONDUIT, SWITCHES, LOW VOLTAGE TRANSFORMERS, PILOTS, AUXILIARY CONTACTS, ETC., AS REQUIRED BY ELECTRIC SEQUENCE CONTROL DIAGRAMS. FURNISH AND INSTALL ALL OTHER CONTROL DEVICES AS CALLED FOR BY ALL MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.

13. SAFETY SWITCHES: FURNISH AND INSTALL HEAVY DUTY SAFETY SWITCHES FOR EQUIPMENT AS REQUIRED BY THE NEC. ALL SWITCHES SHALL BE FUSIBLE, AND COMPLETE WITH FUSES. SWITCHES IN WET LOCATIONS SHALL BE NEMA 3R, OR 4X, AS REQUIRED.

14. TRANSFORMERS: FURNISH AND INSTALL SQUARE-D ENERGY SAVING WATCHDOG SERIES 80C RISE TRANSFORMERS, IN KVA RATINGS AS SPECIFIED ON THE DRAWINGS. THREE PHASE UNITS SHALL BE 480 VOLTS DELTA PRIMARY AND 208Y/120 VOLTS SECONDARY.

15. MOTOR DISCONNECT SWITCHES: FURNISH AND INSTALL DISCONNECT SWITCHES FOR ALL EXHAUST FANS. FINAL CONNECTION TO FAN TO BE FLEXIBLE CONDUIT, SUITABLE FOR THE SPACE.

16. MOTOR PROTECTIVE SWITCHES: FURNISH AND INSTALL MANUAL TYPE WITH OVERLOAD RELAY FOR EACH PHASE, WITH POLES AS REQUIRED AND SEPARATELY WIRED LED PILOT LIGHT. MP SWITCH AND PILOT SHALL BE MOUNTED ON ONE (1) SINGLE OR MULTI-GANG PLATE.

17. PANELBOARDS: PANELBOARDS SHALL BE SQUARE-D, CIRCUIT BREAKER TYPE, AS SCHEDULED. PANELBOARDS SHALL HAVE FULL NEUTRALS. PROVIDE GROUND BAR, NEUTRAL BAR WITH SAME CAPACITY AS MAINS, AND COMPLETE WITH ALL CIRCUIT PROTECTIVE DEVICES INDICATED. ALL BUS SHALL BE SILVER OR TIN PLATED COPPER. CABINETS, DOOR, AND TRIM SHALL BE MINIMUM 12 GAUGE STEEL, FINISHED IN GREY BAKED ENAMEL. MINIMUM CABINET DIMENSION SHALL BE 5-3/4" DEEP BY 20 INCHES WIDE. CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE, COMMON TRIP ON MULTI-POLE (HANDLE TIES SHALL NOT BE USED), ONE, TWO, OR THREE POLES AS INDICATED. MOUNT PANELBOARD CABINETS LEVEL AND PLUMB, 72 INCHES TO TOP ABOVE FLOOR.

18. GROUNDING NOTE: ALL GROUNDING SHALL BE IN ACCORDANCE WITH NEC.

19. LIGHT FIXTURES: REFER TO LIGHT FIXTURE SCHEDULE.

20. SEE MECHANICAL DRAWINGS FOR EXACT LOCATIONS AND NAMES OF MECHANICAL EQUIPMENT AND CONTROLS.

21. FIRE ALARM: EXTEND EXISTING INITIATION AND ANNUNCIATION CIRCUITS TO NEW DEVICES, FIRE ALARM CONTRACTOR TO PROVIDE PERMIT DRAWING AS REQUIRED FOR AHJ ON ALTERATIONS TO THE SYSTEM.

PANEL HM — VOLTS 480/277 — MAIN AMPS 100
MFG SQUARE-D — WIRE 4 — NEUTRAL AMPS 100
PNL TYPE NF — PHASE 3
ENCLOSURE SURFACE

| CIRCUIT NO | CIRCUIT DESCRIPTION | KVA | BRKR. FRAME | BRKR. POLES | BRKR. AMPS | BRKR. KAIC | WIRE PHASE | WIRE NEUT | WIRE EGC | CONDUIT | M.L.O. | CONDUIT | WIRE EGC | WIRE NEUT | WIRE PHASE | BRKR. KAIC | BRKR. AMPS | BRKR. POLES | BRKR. FRAME | KVA | CIRCUIT DESCRIPTION | CIRCUIT NO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EF-1 - STORAGE RM | 0.60 | EDB | 1 | 20 | 18 | 12 | 12 | 12 | 3/4 | | 3/4 | 12 | 12 | 12 | 18 | 20 | 1 | EDB | 12.4 | EUH -1 | 2 |
| 3 | EF-2 - STORAGE RM | 0.60 | EDB | 1 | 20 | 18 | 12 | 12 | 12 | 3/4 | | | | | | | | | | | | 4 |
| 5 | EF-3 - STORAGE RM | 0.60 | EDB | 1 | 20 | 18 | 12 | 12 | 12 | 3/4 | | | | | | | | | | | | 6 |
| 7 | EF-4 - STORAGE RM | 0.60 | EDB | 1 | 20 | 18 | 12 | 12 | 12 | 3/4 | | 3/4 | 12 | 12 | 12 | 18 | 20 | 1 | EDB | 12.4 | EUH - 2 | 8 |
| 9 | LIGHTS - MAINTENANCE RM | 1.4 | EDB | 1 | 20 | 18 | 12 | 12 | 12 | 3/4 | | | | | | | | | | | | 10 |
| 11 | LIGHTS - STORAGE RM | 0.5 | EDB | 1 | 20 | 18 | 12 | 12 | 12 | 3/4 | | | | | | | | | | | | 12 |
| 13 | SPARE | 0.0 | EDB | 1 | 20 | 18 | | | | | | 1 | 8 | | 6 | 18 | 50 | 3 | EDB | 10.96 | PANEL LM VIA TRANSFORMER | 14 |
| 15 | SPARE | 0.0 | EDB | 1 | 20 | 18 | | | | | | | | | | | | | | | | 16 |
| 17 | SPACE | 0.0 | EDB | 1 | | | | | | | | | | | | | | | | | | 18 |
| 19 | SPACE | 0.0 | EDB | 1 | | | | | | | | | | | | | | 1 | EDB | 0.0 | SPACE | 20 |
| 21 | SPACE | 0.0 | EDB | 1 | | | | | | | | | | | | | | 1 | EDB | 0.0 | SPACE | 22 |
| 23 | SPACE | 0.0 | EDB | 1 | | | | | | | | | | | | | | 1 | EDB | 0.0 | SPACE | 24 |
| 25 | SPACE | 0.0 | EDB | 1 | | | | | | | | | | | | | | 1 | EDB | 0.0 | SPACE | 26 |
| 27 | SPACE | 0.0 | EDB | 1 | | | | | | | | | | | | | | 1 | EDB | 0.0 | SPACE | 28 |
| 29 | SPACE | 0.0 | EDB | 1 | | | | | | | | | | | | | | 1 | EDB | 0.0 | SPACE | 30 |
| | TOTAL | 4.30 | ← ADD → | | | | | | | | | | | | | | | | TOTAL | 35.76 | = TOTAL | 40.06 KVA (48 AMPS) |

PANEL LOCATION: ELEC ROOM — REMARKS:

ACTUAL BREAKER INTERRUPTING CURRENT = KAIC * 1000
S/O = SPACE ONLY

PANEL LM — VOLTS 208/120 — MAIN BREAKER 100
MFG SQUARE-D — WIRE 4 — MAIN AMPS 100
PNL TYPE NQ — PHASE 3 — NEUTRAL AMPS 100
ENCLOSURE SURFACE — FEEDER FROM TRANSFORMER - 4-#1 & 1#6 G IN 1-1/2 CONDUIT.

| CIRCUIT NO | CIRCUIT DESCRIPTION | KVA | BRKR. FRAME | BRKR. POLES | BRKR. AMPS | BRKR. KAIC | WIRE PHASE | WIRE NEUT | WIRE EGC | CONDUIT | BREAKER | CONDUIT | WIRE EGC | WIRE NEUT | WIRE PHASE | BRKR. KAIC | BRKR. AMPS | BRKR. POLES | BRKR. FRAME | KVA | CIRCUIT DESCRIPTION | CIRCUIT NO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | REC'S MAINTENANCE SHOP | 0.36 | QOB | 1 | 20 | 10 | 12 | 12 | 12 | 3/4 | | 3/4 | 10 | 10 | 10 | 10 | 30 | 2 | QOB | 4.0 | WATER HEATER - STORAGE | 2 |
| 3 | REC'S MAINTENANCE SHOP | 0.36 | QOB | 1 | 20 | 10 | 12 | 12 | 12 | 3/4 | | | | | | | | | | | | 4 |
| 5 | REC'S MAINTENANCE SHOP | 0.36 | QOB | 1 | 20 | 10 | 12 | 12 | 12 | 3/4 | | 3/4 | 12 | 12 | 12 | 10 | 20 | 2 | QOB | 3.0 | ODU-1 / IDU-1 - MAINTENANCE ROOM | 6 |
| 7 | REC'S MAINTENANCE SHOP | 0.36 | QOB | 1 | 20 | 10 | 12 | 12 | 12 | 3/4 | | | | | | | | | | | | 8 |
| 9 | REC'S MAINTENANCE SHOP | 0.36 | QOB | 1 | 20 | 10 | 12 | 12 | 12 | 3/4 | | | | | | | 20 | 1 | QOB | 0.0 | SPARE | 10 |
| 11 | REC'S MAINTENANCE SHOP | 0.36 | QOB | 1 | 20 | 10 | 12 | 12 | 12 | 3/4 | | | | | | | 20 | 1 | QOB | 0.0 | SPARE | 12 |
| 13 | REC'S MAINTENANCE SHOP | 0.36 | QOB | 1 | 20 | 10 | 12 | 12 | 12 | 3/4 | | | | | | | 20 | 1 | QOB | 0.0 | SPARE | 14 |
| 15 | SPARE | 0.0 | QOB | 1 | 20 | 10 | | | | | | | | | | | 20 | 1 | QOB | 0.0 | SPARE | 16 |
| 17 | SPARE | 0.0 | QOB | 1 | 20 | 10 | | | | | | | | | | | 20 | 1 | QOB | 0.0 | SPARE | 18 |
| 19 | SPARE | 0.0 | QOB | 1 | 20 | 10 | | | | | | | | | | | 20 | 1 | QOB | 0.0 | SPARE | 20 |
| 21 | SPARE | 0.0 | QOB | 1 | 20 | 10 | | | | | | | | | | | 20 | 1 | QOB | 0.0 | SPARE | 22 |
| 23 | SPARE | 0.0 | QOB | 1 | 20 | 10 | | | | | | | | | | | 20 | 1 | QOB | 0.0 | SPARE | 24 |
| 25 | SPARE | 0.0 | QOB | 1 | 20 | 10 | | | | | | | | | | | | | | | | 26 |
| 27 | SPARE | 0.0 | QOB | 1 | 20 | 10 | | | | | | 3/4 | 12 | 12 | 12 | 10 | 20 | 3 | QOB | 1.44 | OVERHEAD DOOR | 28 |
| 29 | SPARE | 0.0 | QOB | 1 | 20 | 10 | | | | | | | | | | | | | | | | 30 |
| | TOTAL | 2.52 | ← ADD → | | | | | | | | | | | | | | | | TOTAL | 8.44 | = TOTAL | 10.96 KVA (30 AMPS) |

PANEL LOCATION: ELEC ROOM — REMARKS:

ACTUAL BREAKER INTERRUPTING CURRENT = KAIC * 1000
S/O = SPACE ONLY

## ELECTRICAL SYMBOLS

| SYSTEM | AFF TOP OF OUTLET UNLESS NOTED | SYMBOL | DESCRIPTION |
|---|---|---|---|
| BOXES/WIRING | | | ELECTRIC MOTOR |
| | | | CONDUIT ABOVE CEILING OF AREA WHERE SHOWN |
| | | | CONDUIT UNDER FLOOR OR GRADE OF AREA WHERE SHOWN |
| | | | GROUNDING ELECTRODE CONDUCTOR (GEC) CONNECTED TO GROUND |
| | 5'-0" | | DISCONNECT SWITCH, NEMA 3R OUTDOORS, NEMA 4X INDOORS |
| | | JB | JUNCTION BOX |
| | | JB | CEILING JUNCTION BOX |
| | 5'-0" | MP | MOTOR PROTECTIVE SWITCH, SEE SPECIFICATION SECTION 262900 FOR REQUIREMENTS |
| | 10'-0" | MD | MOTOR DISCONNECT , NEMA 4X SQUARE D MD3304X OR EQUAL |
| | 6'-0" | PNL | ELECTRICAL PANEL, SURFACE MOUNT |
| LIGHTING | | | CEILING OUTLET WITH SURFACE OR RECESSED LED FIXTURE |
| | AS SPEC'D | | WALL OUTLET WITH WALL MOUNTED LED FIXTURE |
| | | ⊗ | CEILING OUTLET WITH EXIT SIGN FIXTURE, SINGLE OR DOUBLE FACED, WITH DIRECTIONAL ARROWS WHERE SHOWN |
| | ABV DOOR LINTEL | ⊗ | WALL OUTLET WITH EXIT SIGN FIXTURE, SINGLE OR DOUBLE FACED, WITH DIRECTIONAL ARROWS WHERE SHOWN |
| | | | LIGHTING CONTROL WIRE |
| | 4'-0" | S | LOCAL SWITCH, SINGLE POLE, 120-277V, 20A |
| | 4'-0" | $S^3$ | LOCAL SWITCH, 3-WAY, 120-277V, 20A |
| | 4'-0" | $S^4$ | LOCAL SWITCH, 4-WAY, 120-277V, 20A |
| | 8'-0" | | EMERGENCY LIGHT UNIT - LITHONIA EU2C M6 |
| | | OS | OCCUPANCY SENSOR, CEILING MOUNT, 360 DEGREE |
| REC | 1'-8" | | 125V, 3W, 20A, 2P, 1Ø DUPLEX RECEPTACLE, WALL — NEMA 5-20R |
| | 1'-8" | | 125V, 3W, 20A, 2P, 1Ø DOUBLE DUPLEX RECEPTACLE, WALL IN DOUBLE-GANG BOX — NEMA 5-20R |
| | 1'-8" | G | 125V, 3W, 20A, 2P, 1Ø DUPLEX GROUND FAULT RECEPTACLE, WALL — NEMA 5-20R |
| | 1'-8" | WL | 125V, 3W, 20A, 2P, 1Ø DUPLEX GROUND FAULT RECEPTACLE, WALL, WITH WHILE-IN-USE COVER — NEMA 5-20R |
| FIRE/SEC | CEILING | S | FIRE ALARM SYSTEM SMOKE (PHOTOELECTRIC) DETECTOR |
| | CEILING | H | FIRE ALARM SYSTEM HEAT DETECTOR |
| | 4'-0" | F | FIRE ALARM SYSTEM DUAL ACTION MANUAL PULL STATION, WALL |
| | 7'-2" | | FIRE ALARM, SPEAKER/STROBE ALARM, WALL |
| | 7'-2" | | FIRE ALARM, STROBE ONLY ALARM, WALL |
| | | C | SECURITY SYSTEM DOOR POSITION SENSOR |
| | | EX | EXISTING SURVEILLANCE CAMERA, TO BE RELOCATED |

## LIGHT FIXTURE SCHEDULE

| MARK | DESCRIPTION | MANUF, | CATALOG NUMBER | LAMP TYPE | VOLTS | MOUNTING | WATTS | NOTES |
|---|---|---|---|---|---|---|---|---|
| A | LED FLAT PANEL FIXTURE 3400 LUMENS 5000K COLOR TEMP. | LITHONIA | CPX 2X2 3200 LM 50K M4 | LED | UNV | GRID | 37 | -- |
| B | LED VAPOR TIGHT FIXTURE 8' LONG, 8000 LUMENS, 5000K COLOR TEMP WHERE INDICATED PROVIDE FIXTURE MOUNTED SENOR | LITHONIA | CSVT-L96-8000LM-MVOLT-50K-(SBOR10) | LED | UNV | PENDANT | 68 | -- |
| C | EXTERIOR LED WALL PACK FIXTURE 6950 LUMENS, 4000K COLOR TEMP. | LITHONIA | TWX2 LED ALO 40K MVOLT DDBTXD SSS-QS-20-4C-DM28AS-DDBXD | LED | UNV | WALL | 54 | -- |


COLONIAL ENGINEERED SOLUTIONS
5332 Arbor Place
Williamsburg Virginia 23188
Phone: (757)-634-3653

INVERSITY CONSULTING ENGINEERS
250 Wylderose cmns, ste 102
Midlothian Virginia 23113
Phone: (804)-977-0403


PROJECT TITLE:
FIVE FORKS WATER TREATMENT FACILITY
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY VA

DRAWING TITLE:
ELECTRICAL - LEGEND, NOTES & SCHEDULES

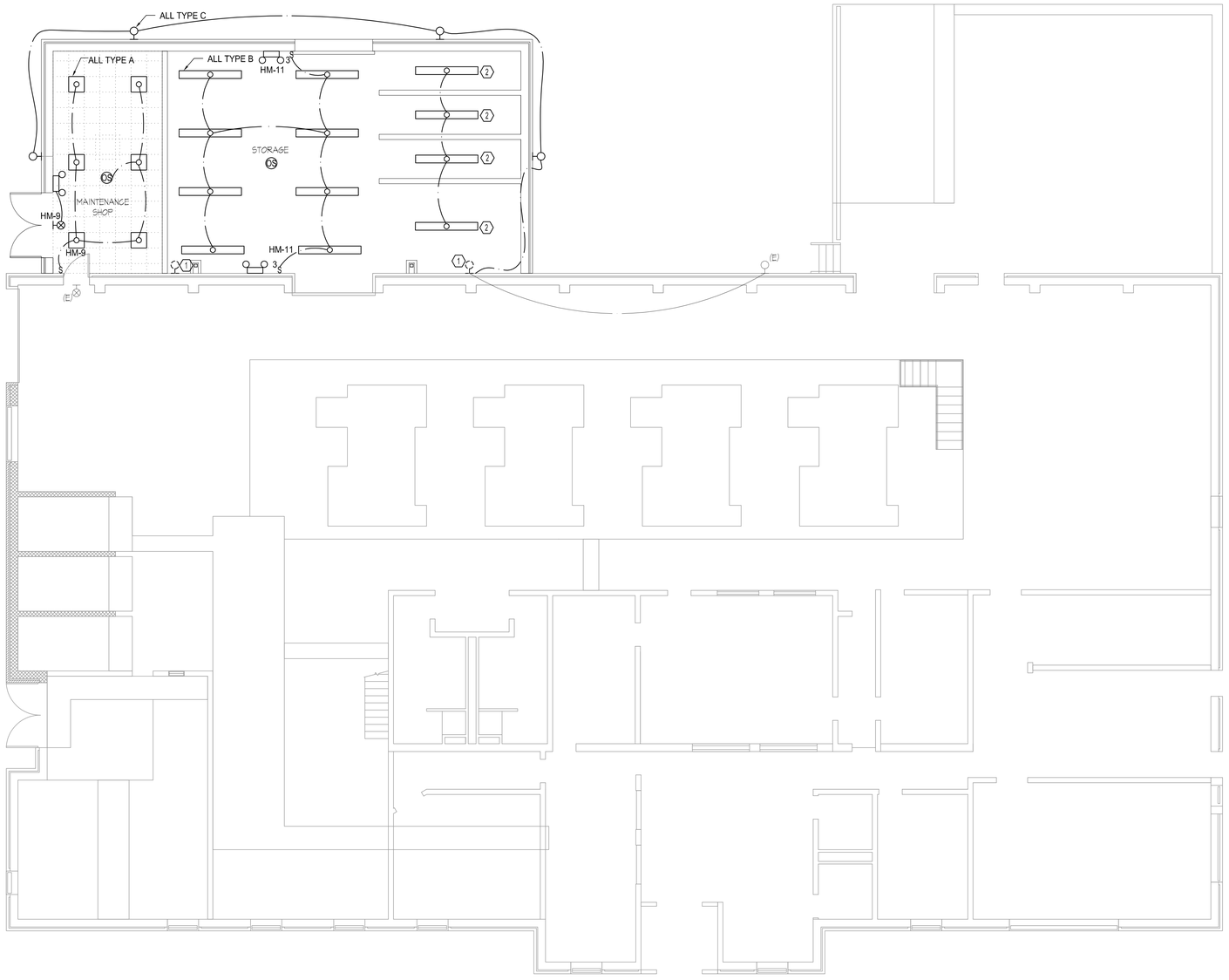
REVISIONS:

| No: | Revision: | Date: |
|---|---|---|
| 2 | ISSUE FOR APPROVAL | 02/24/23 |
| 1 | ISSUE FOR REVIEW | 10/14/22 |

Project No.: 174.2202
Designed By: CRN
Drawn By: CRN
Checked By: DEM
Scale: AS NOTED
Date: 02/24/2023
Seal:

NOT FOR CONSTRUCTION

Drawing No.
E001




GENERAL LIGHTING NOTES:

1. ALL WIRING IN STORAGE SHALL BE WITHIN PVC CONDUIT.
2. ALL WIRING WITHIN THE MAINTENANCE SHOP IN IMC CONDUIT.
3. ALL EXTERIOR FIXTURE TO BE MOUNTED AT 12'0" AFF.
4. ALL FIXTURES IN STORAGE ROOM TO BE MOUNTED BOTTOM OF THE STEEL STRUCTURE.

LIGHTING PLAN REFERENCE NOTES:

(1) DEMOLISH EXISTING WALL PACK, EXTEND EXISTING CIRCUIT TO SPECIFIED WALL PACKS SHOWN.

(2) PROVIDE INTEGRATED OCCUPANCY SENSOR ON EACH FIXTURE WITHIN CHEMICAL STORAGE BAYS.

## LIGHTING PLAN

SCALE: 1/8" = 1'-0"

COLONIAL ENGINEERED SOLUTIONS
5332 Arbor Place
Williamsburg Virginia 23188
Phone: (757)-634-3653

INVERSITY CONSULTING ENGINEERS
250 Wylderose cmns, ste 102
Midlothian Virginia 23113
Phone: (804)-977-0403

PROJECT TITLE:
FIVE FORKS WATER TREATMENT FACILITY
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY VA

DRAWING TITLE:
ELECTRICAL LIGHTING PLAN

REVISIONS:

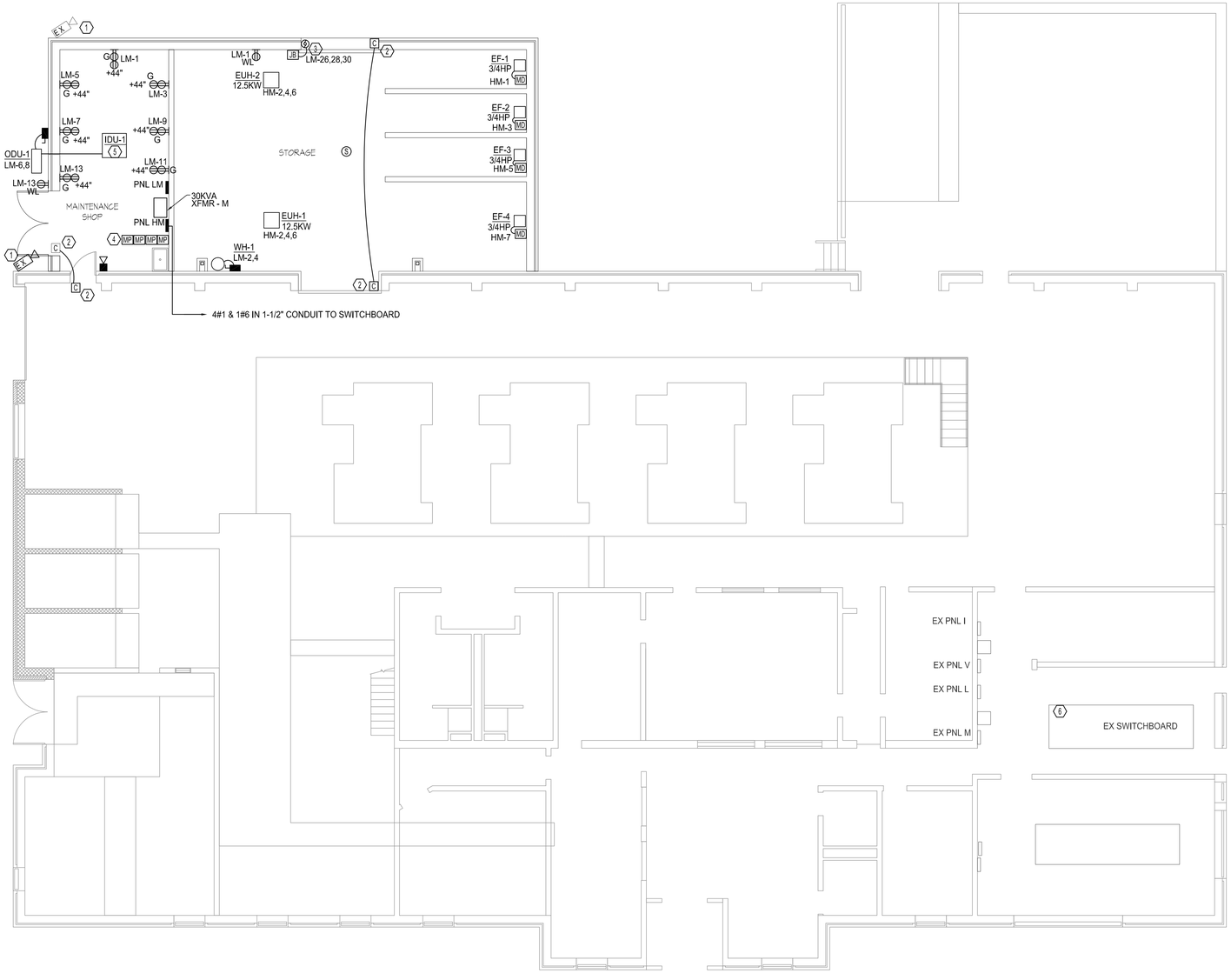
| No: | Revision: | Date: |
|---|---|---|
| 2 | ISSUE FOR APPROVAL | 02/24/23 |
| 1 | ISSUE FOR REVIEW | 10/14/22 |

| | |
|---|---|
| Project No.: | 174.2202 |
| Designed By: | CRN |
| Drawn By: | CRN |
| Checked By: | DEM |
| Scale: | AS NOTED |
| Date: | 02/24/2023 |

Seal:

NOT FOR CONSTRUCTION

Drawing No.
E101




## POWER PLAN

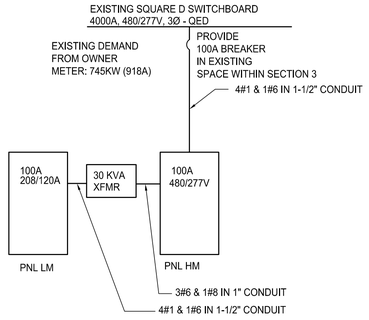
SCALE: 1/8" = 1'-0"

GENERAL POWER NOTES:

1. ALL WIRING IN STORAGE SHALL BE WITHIN PVC CONDUIT.
2. ALL WIRING WITHIN THE MAINTENANCE SHOP IN IMC CONDUIT.
3. ALL RECEPTACLES TO BE GFCI TYPE.

POWER PLAN REFERENCE NOTES:

1. RELOCATE SECURITY CAMERA AND EXTENT EXISTING WIRING IN KIND TO NEW CAMERA LOCATION SHOWN.
2. RELOCATE DOOR POSITION SWITCHS TO NEW EXTERIOR DOORS. EXTEND EXISTING WIRING IN KIND.
3. JUNCTION BOX FOR OVERHEAD DOOR CONTROLLER.
4. MOTOR PROTECTIVE SWITCHES FOR EXHAUST FANS 1 - 4, MOUNTED BESIDE PANEL HM AND LABELED WITH FAN NAME. PROVIDE RUNNING PILOT LIGHT. SQUARE D FG1P OR EQUAL.
5. INDOOR UNIT POWERED FROM OUTDOOR UNIT. PROVIDE WIRING BETWEEN UNITS BASED ON INSTALLED UNIT REQUIREMENTS.
6. PROVIDE 100A 3 POLE BREAKER IN EXISTING SPARE SPACE WITHIN EXISTING SQUARE D SWITCHBOARD. MATCH EXISTING KAIC / BREAKER RATINGS.




## RISER DIAGRAM

SCHEMATIC

COLONIAL ENGINEERED SOLUTIONS
5332 Arbor Place
Williamsburg Virginia 23188
Phone: (757)-634-3653

INVERSITY CONSULTING ENGINEERS
250 Wylderose cmns, ste 102
Midlothian Virginia 23113
Phone: (804)-977-0403

PROJECT TITLE:
FIVE FORKS WATER TREATMENT FACILITY
4321 JOHN TYLER HIGHWAY
JAMES CITY COUNTY VA

DRAWING TITLE:
ELECTRICAL POWER PLAN

REVISIONS:

| No: | Revision: | Date: |
|---|---|---|
| 2 | ISSUE FOR APPROVAL | 02/24/23 |
| 1 | ISSUE FOR REVIEW | 10/14/22 |

| | |
|---|---|
| Project No.: | 174.2202 |
| Designed By: | CRN |
| Drawn By: | CRN |
| Checked By: | DEM |
| Scale: | AS NOTED |
| Date: | 02/24/2023 |
| Seal: | NOT FOR CONSTRUCTION |

Drawing No.
E201

# RESOLUTION

## CASE NO. SUP-0015-2010. CHANCO'S GRANT GREENSPRINGS TRAIL AMENDMENT

WHEREAS, the Board of Supervisors of James City County has adopted, by Ordinance, specific land uses that shall be subjected to a Special Use Permit (SUP) process; and

WHEREAS, water facilities (public and private), including transmission mains, are specially permitted uses in the R-8 Zoning District; and

WHEREAS, Mr. Bernie Farmer, James City County General Services, has applied for an SUP to amend the conditions of Case No. SUP-0014-2003 to allow for construction of a greenway trail at the Five Forks Groundwater Treatment Facility; and

WHEREAS, the property is located at 3123 Ironbound Road, zoned R-8, Rural Residential District, and further identified as James City County Real Estate Tax Map No. 4620100034; and

WHEREAS, the Planning Commission of James City County, following its public hearing on July 7, 2010, voted 6 to 0 to approve this application.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, does hereby approve the issuance of SUP-0015-2010 as described herein with the following conditions:

1. Construction: Start of Construction on the Groundwater Treatment Facility, as defined in the Zoning Ordinance, shall commence within 36 months of approval of this SUP, or the permit shall become void.

2. Compliance: Construction, operation, and maintenance of the Groundwater Treatment Facility, water transmission main, production wells, and concentrate discharge main shall comply with all local, State, and Federal requirements.

3. Permits: All permits and easements shall be acquired prior to the commencement of construction for the water transmission main and concentrate discharge main.

4. Erosion and Sediment Control: The project shall comply with all Virginia erosion and sediment control regulations as specified in the 1992 Virginia Erosion and Sediment Control Handbook as amended.

5. Development Plan: Development and land clearing of the site shall be generally in accordance with the "Preliminary Plan, Brackish Groundwater Desalinization Facility" prepared by AES Consulting Engineers, March 19, 2002, with such accessory structures and minor changes as the Development Review Committee determines does not change the basic concept or character of the development.

6. Spill Containment: Prior to the issuance of a Certificate of Occupancy, a spill containment plan which addresses the chemical handling and storage areas shall be submitted to the Environmental Director and Fire Department for their review and approval.

7. Archaeology: A Phase I Archaeological Study for the any areas to be disturbed shall be submitted to the Director of Planning for review and approval prior to land disturbance for that area. A treatment plan shall be submitted and approved by the Director of Planning for all sites in the Phase I study that are recommended for a Phase II evaluation and/or identified as eligible for inclusion on the National Register of Historic Places. If a Phase II study is undertaken, such a study shall be approved by the Director of Planning and a treatment plan for said sites shall be submitted to, and approved by, the Director of Planning for sites that are determined to be eligible for inclusion on the National Register of Historic Places and/or those sites that require a Phase III study. If in the Phase III study, a site is determined eligible for nomination to the National Register of Historic Places and said site is to be preserved in place, the treatment plan shall include nomination of the site to the National Register of Historic Places. If a Phase III study is undertaken for said sites, such studies shall be approved by the Director of Planning prior to land disturbance within the study areas. All Phase I, Phase II, and Phase III studies shall meet the Virginia Department of Historic Resources Guidelines for Preparing Archaeological Resource Management Reports and the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation, as applicable, and shall be conducted under the supervision of a qualified archaeologist who meets the qualifications set forth in the Secretary of the Interior's Professional Qualification Standards. All approved treatment plans shall be incorporated into the plan of development for the site and the clearing, grading or construction activities thereon.

8. Lighting: All exterior light fixtures, including building lighting, on the Property shall have recessed fixtures with no lens, bulb, or globe extending below the casing. In addition, prior to final site plan approval, a lighting plan shall be submitted to, and approved by, the Director of Planning or his designee which indicates no glare outside the property lines. "Glare" shall be defined as more than 0.1 foot-candle at the property line or any direct view of the lighting source from the adjoining residential properties.

9. Architecture: Prior to final site plan approval, architectural elevations, building materials and colors shall be submitted to the Director of Planning for review and approval for all structures on the site. The intent of this condition is to ensure that all future buildings on the site are uniform and compatible in terms of design, materials and colors, have a residential appearance, and are designed for minimal visual impact.

10. Landscaping: Any accessory structures on the site, such as storage tanks and production well structures, shall be screened with enhanced landscaping or constructed with materials and colors matching the treatment facility. Enhanced landscaping shall be defined as either 133 percent of evergreen trees required by the Zoning Ordinance or 125 percent of general planting required by the Zoning Ordinance as determined by the Director of Planning.

11. Utilities: The water main shall be located within the limits of clearing for the access driveway to the site from John Tyler Highway, the existing James City Service Authority (JCSA) easement or within the Virginia Department of Transportation (VDOT) right-of-way.

12. Route 5 Buffer: A 250-foot undisturbed wooded buffer shall be maintained along John Tyler Highway with the exception of the clearing necessary for the driveway providing access to the site and any portion of the existing JCSA utility easement along John Tyler Highway. The driveway shall be curved in such a way to minimize views of the site from John Tyler Highway to the greatest extent possible, as determined by the Director of Planning.

13. Chanco's Grant Buffer: A 300-foot undisturbed wooded buffer shall be maintained along the southern property line of the treatment facility site adjacent to the Chanco's Grant subdivision. The buffer shall remain undisturbed with the exception of breaks for pedestrian connections, utilities, pedestrian walking and hiking trails, and other uses specifically approved by the Director of Planning. Any approved breaks shall avoid any major disturbance and clearing or impacts on any trees larger than eight inches in breast height diameter.

14. Greenway Trail: The trail shall be generally located as shown on the plan titled "Project Location Map: Powhatan Creek Trail" dated June 2010, and drawn by the Williamsburg Environmental Group, Inc. with the ability to adjust the precise alignment to avoid specimen trees. The trail shall be built generally consistent with the design details shown on the plan titled "Cross Section Detail: Powhatan Creek Trail" dated June 2010, and drawn by Williamsburg Environmental Group, Inc.

15. Community Character: The applicant shall avoid removing trees, bushes, and shrubs along the water main and concentrate discharge main corridors along Route 5, 4-H Club Road, and Jamestown Road. Trees, bushes, and shrubs damaged during construction shall be replaced with a tree, bush, or shrub of equal type as approved by the Director of Planning.

16. Dust and Siltation Control: For water main or concentrate main construction adjacent to existing development, adequate dust and siltation control measures shall be taken to prevent adverse effects on adjacent property. It is intended that the present and future results of the proposed water transmission main and concentrate discharge main do not create adverse effects on the public health, safety, comfort, convenience, or value of the surrounding property and uses thereon.

17. Access: Vehicular access to residences within the effected right-of-ways shall be maintained at all times.

18. Construction Time: All construction activity for the concentrate discharge main and the water main extension adjacent to existing residential development shall occur between the hours of 8 a.m. and 5 p.m., Monday through Friday.

19. Vehicle and Equipment Storage: Construction vehicles and equipment shall not be parked or stored along Route 5, 4-H Club Road, or Jamestown Road between the hours of 5 p.m. and 8 a.m.

20. Severability: This SUP is not severable. Invalidation of any word, phrase, clause, sentence, or paragraph shall invalidate the remainder.

James G. Kennedy
Chairman, Board of Supervisors

| SUPERVISOR | VOTE |
|---|---|
| MCGLENNON | AYE |
| GOODSON | AYE |
| ICENHOUR | AYE |
| JONES | AYE |
| KENNEDY | AYE |

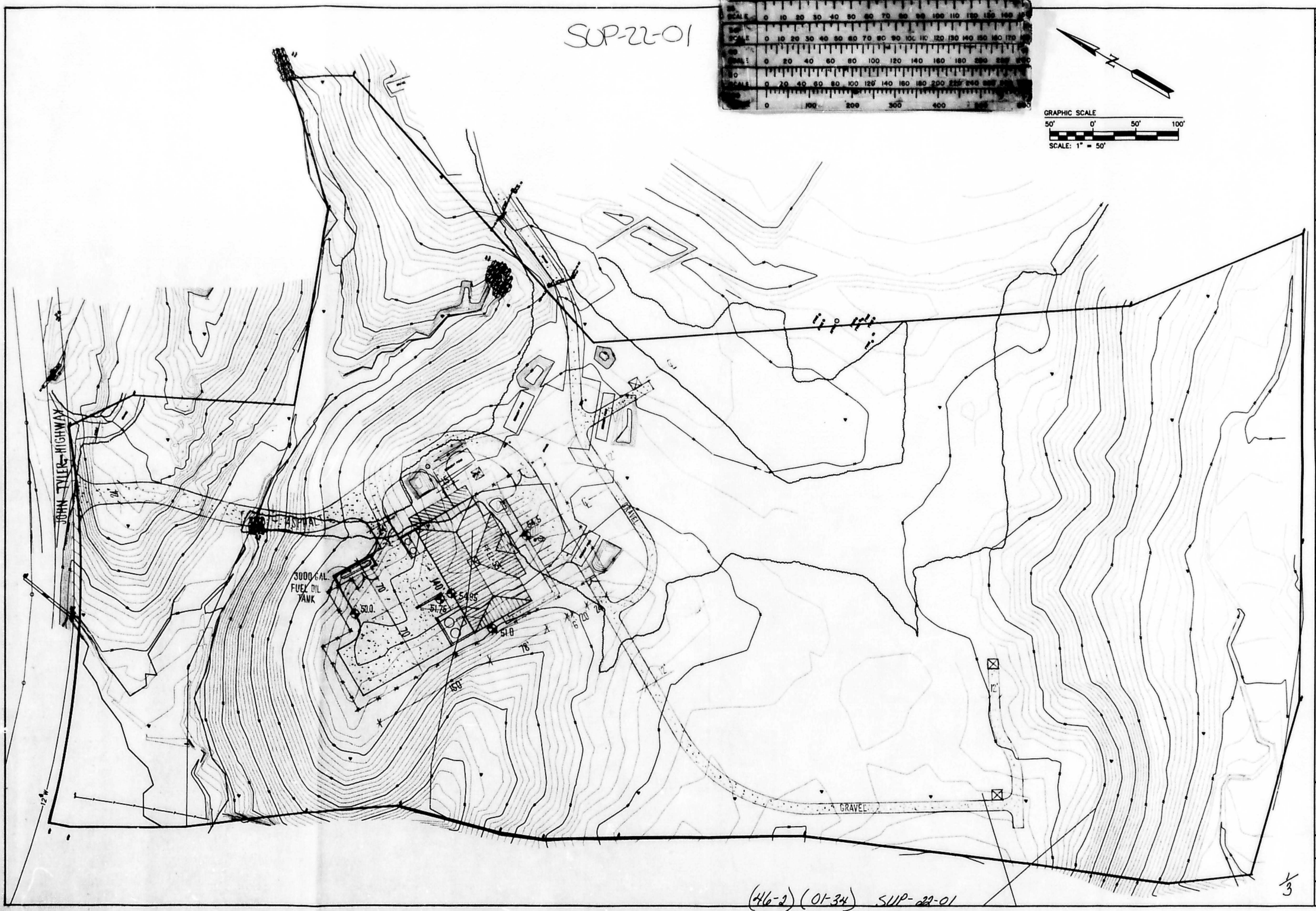
ATTEST:

Robert C. Middaugh
Clerk to the Board

Adopted by the Board of Supervisors of James City County, Virginia, this 10th day of August, 2010.

SUP15-2010_res

SUP-22-01

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DRAWING SHALL NOT BE SCALED.

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REVISIONS

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|---|---|---|---|

BUCHART HORN, INC.
460 McLAWS CIRCLE
WILLIAMSBURG, VA 23185
PHONE (757) 229-3559
FAX (757) 229-3721

BRACKISH GROUNDWATER DESALINATION FACILITY

PRELIMINARY SITE PLAN
1" = 50'

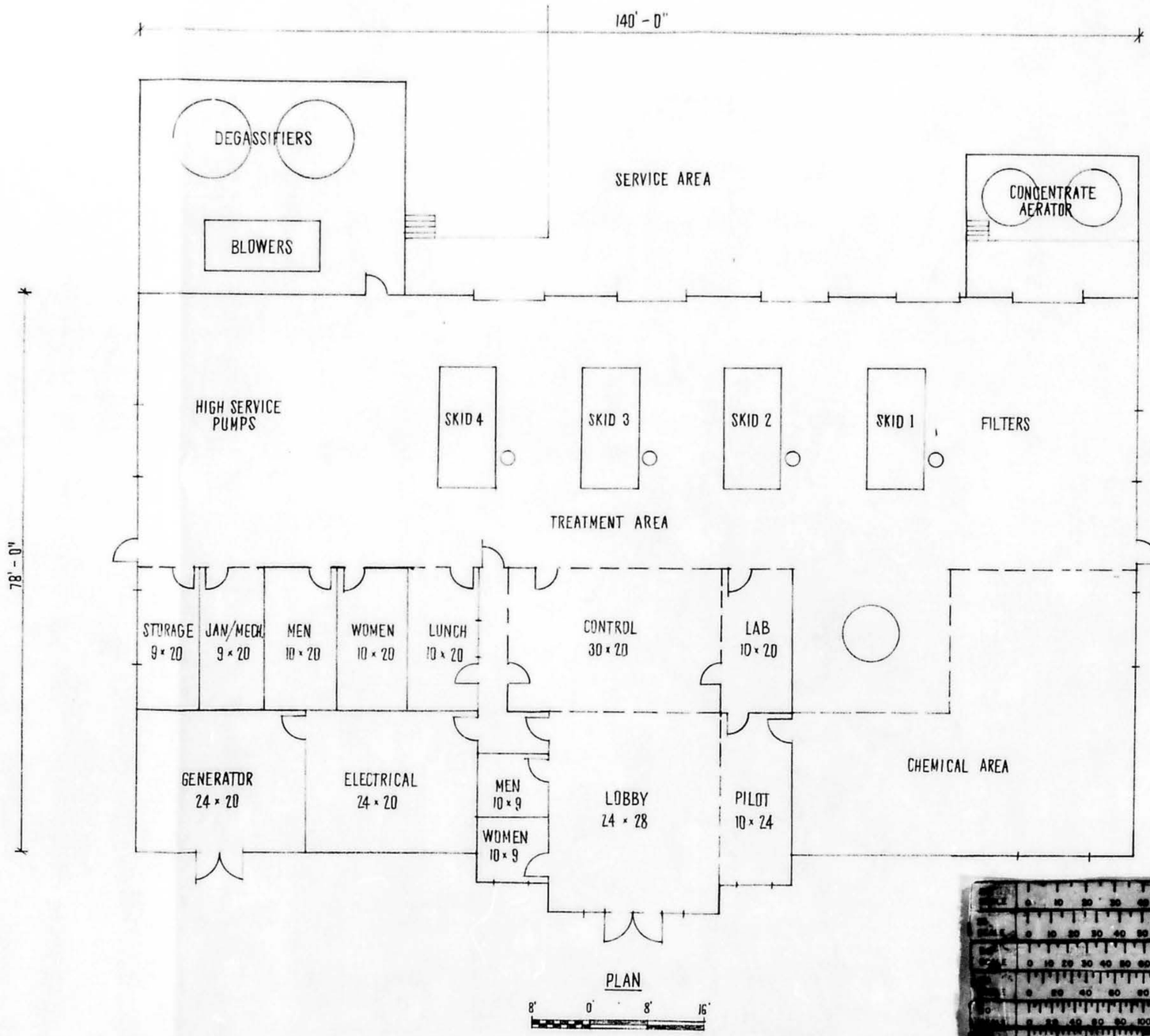
JCSA
JAMES CITY SERVICE AUTHORITY

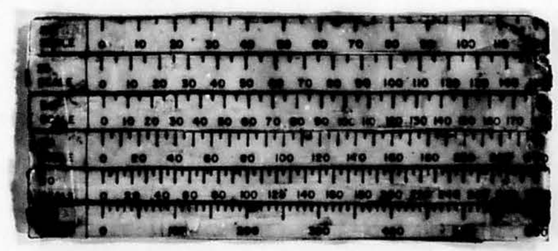
DRAWING NO.

SHEET NO.

BH PROJECT NO.
75767-00

(46-2)(01-34) SUP-22-01
JCSA Desalinization Site, Route 5



REVISIONS

| NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|

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BUCHART HORN, INC.
440 McLAWS CIRCLE
WILLIAMSBURG, VA 23185
PHONE (757) 229-3299
FAX (757) 220-3721

BRACKISH GROUNDWATER DESALINATION FACILITY

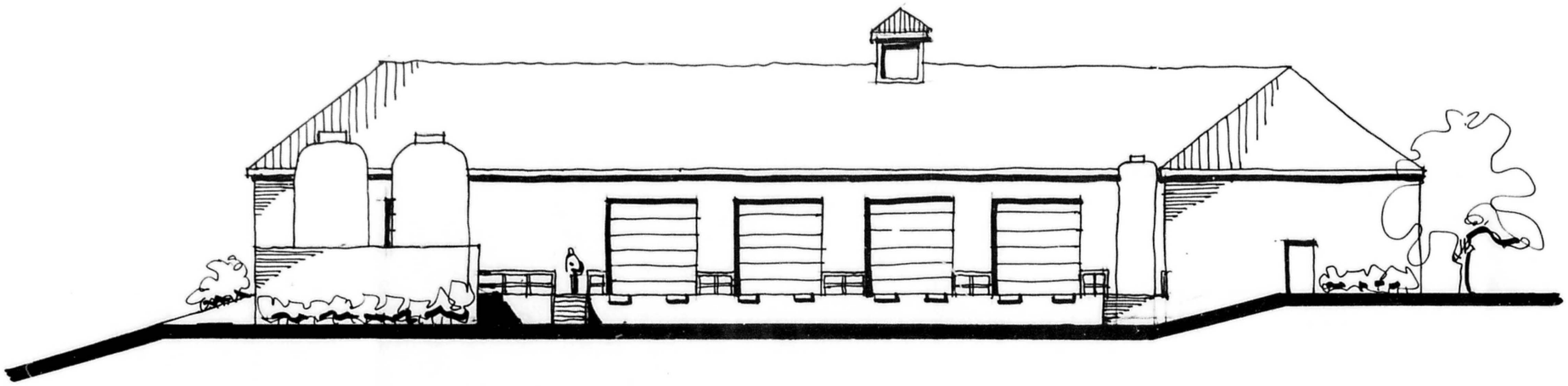
PRELIMINARY FLOOR PLAN
1/8" = 1'-0"

JCSA
JAMES CITY SERVICE AUTHORITY

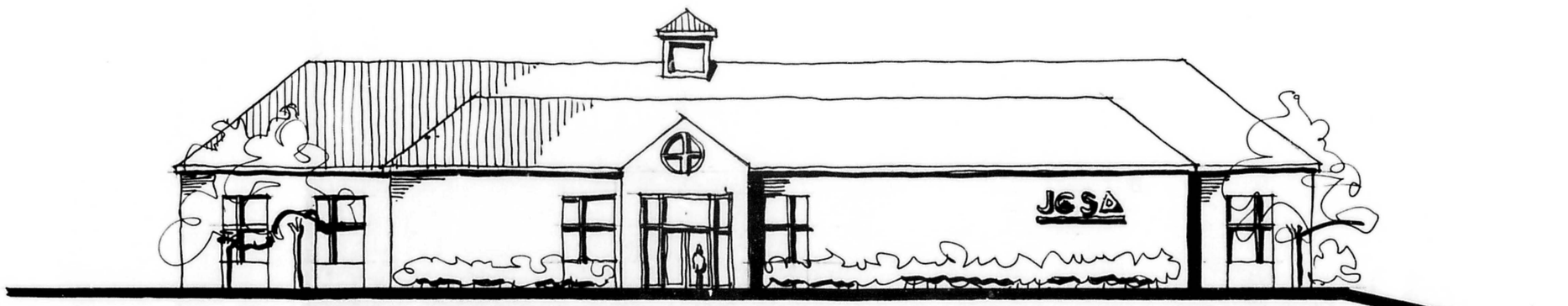
DRAWING NO.

SHEET NO.
2
3

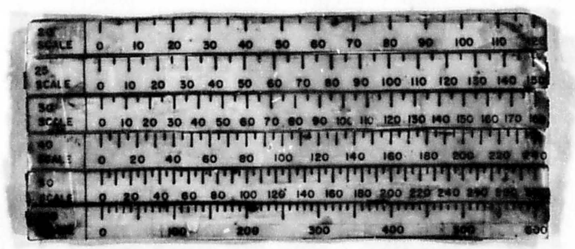
BH PROJECT NO.
75767-00



SERVICE AREA ELEVATION 4"=1'-0"




ENTRY ELEVATION 4"=1'-0"



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| NO | DESCRIPTION | BY | DATE |
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BUCHART HORN INC.
460 McLAWS CIRCLE
WILLIAMSBURG, VA 23185
PHONE (757) 229-3559
FAX (757) 220-3721

BRACKISH GROUNDWATER DESALINATION FACILITY

PRELIMINARY ELEVATIONS

4"=1'-0"

JCSA JAMES CITY SERVICE AUTHORITY

DRAWING NO.

SHEET NO.

BH PROJECT NO. 75767-00

3/3



These documents were printed from the official JCC Records Management Imaging site

**AGENDA ITEM NO. E.2.**

**ITEM SUMMARY**

DATE: 5/24/2023

TO: The Development Review Committee

FROM: Thomas Wysong, Senior Planner II

SUBJECT: SP-23-0024. LifePointe East Parking Expansion

---

**ATTACHMENTS:**

| | Description | Type |
|---|---|---|
| 🗋 | 0. Staff Report | Staff Report |
| 🗋 | 1. Proposed Site Layout | Exhibit |
| 🗋 | 2. Adopted Master Plan | Backup Material |
| 🗋 | 3. Applicant Request | Backup Material |
| 🗋 | 4. SUP Conditions | Backup Material |

**REVIEWERS:**

| Department | Reviewer | Action | Date |
|---|---|---|---|
| Development Review Committee | Crump, Josh | Approved | 5/16/2023 - 3:33 PM |
| Development Review Committee | Holt, Paul | Approved | 5/16/2023 - 4:41 PM |
| Publication Management | Pobiak, Amanda | Approved | 5/16/2023 - 4:47 PM |
| Development Review Committee | Holt, Paul | Approved | 5/16/2023 - 5:08 PM |

## SUMMARY FACTS

| | |
|---|---|
| Applicant: | Mr. Stephen Talley |
| Landowner: | LifePointe Christian Church Inc. |
| Proposal: | To build an additional 116 parking spaces in the East Parking Area to accommodate the growth in church attendance for the church use. |
| Location: | 8841 Richmond Road |
| Tax Map/Parcel No.: | 1110100029 |
| Project Acreage: | 10.22 acres |
| Current Zoning: | A-1, General Agricultural |
| Comprehensive Plan: | Rural Lands |
| Primary Service Area | Outside |
| Staff Contact: | Thomas Wysong, Senior Planner II |

## REASON FOR DEVELOPMENT REVIEW COMMITTEE REVIEW

The applicant is proposing an additional on-site parking lot that does not fully align with the approved Master Plan for LifePointe Christian Church (Special Use Permit (SUP)-0001-2018). Specifically, the proposed parking area exceeds the areas shown on the Master Plan and abuts an area designated for wooded preservation and buffering, which necessitate the Development Review Committee determining Master Plan consistency.

## FACTORS FAVORABLE

1. This alternate parking layout is not expected to negatively impact neighboring property owners.

2. This alternate parking layout does not negatively impact the rural character of the LifePointe site.

3. Overall, the proposed site design remains consistent with the Rural Lands Designation within the adopted 2045 Comprehensive Plan.

## FACTORS UNFAVORABLE

1. None, provided additional buffering and landscaping is conditioned upon approval.

## PROJECT DESCRIPTION

This proposal is for an additional 116 parking spaces in the East Parking Area to accommodate the use of the church. Per the applicant's narrative (Attachment No. 3), LifePointe's church attendance has grown considerably in the past two years, which has prompted the need for additional parking.

## PROJECT HISTORY

- The Board of Supervisors approved Case No. SUP-0001-2018 (Attachment No. 2) for LifePointe Christian Church on April 10, 2018.

- The County approved Phase 1 of the LifePointe site plan in February of 2020, which has been constructed.

- The applicant submitted a site plan in April of 2023 showing the

proposed additional parking (Attachment No. 1).

**SURROUNDING ZONING AND DEVELOPMENT**

North: A-1, General Agricultural, single-family residential development.

South: A-1, General Agricultural, single-family residential development.

East: A-1, General Agricultural, single-family residential development.

West: A-1, General Agricultural, single-family residential development.

**STAFF ANALYSIS**

Pursuant to Section 24-23 of the Zoning Ordinance, a development plan may deviate from the master plan if it is concluded that the development plan does not do the following:

1. Significantly affect the general location or classification of housing units or buildings as shown on the master plan;

2. Significantly alter the distribution of recreation or open space areas on the master plan;

3. Significantly affect the road layout as shown on the master plan; and

4. Significantly alter the character of land uses or other features or conflict with any building conditions placed on the corresponding legislatively approved case associated with the master plan.

**STAFF RECOMMENDATION**

Because the proposed parking area exceeds the area shown on the Master Plan and abuts an area designated for wooded preservation and buffering, staff is not able to approve the request administratively.

As noted above, staff finds this alternate parking layout is not expected to negatively impact neighboring property owners and that this alternate parking layout does not negatively impact the rural character of the LifePointe site. Staff therefore recommends approval of the alternate layout, with a condition that additional landscaping and buffering adjacent to the parking lot be reviewed by the Planning Director as part of the site plan review process to ensure the preservation of rural character and mitigation of impacts to neighboring properties.

TW/ap
SP23-24_LPointe

Attachments:
1. Proposed Site Plan Layout
2. Adopted Master Plan
3. Applicant Request
4. SUP-19-0020 Conditions

# Site Plan Amendment

| | |
|---|---|
| Issued for | **Approval** |
| Date Issued | **March 21, 2023** |
| Latest Issue | **March 21, 2023** |

# LifePointe Christian Church East Parking Area

SP-23-0024

8841 Richmond Road
James City County, Virginia

vhb.com

vhb

**Landscape Architecture / Civil / Survey**
351 McLaws Circle
Suite 3
Williamsburg, VA 23185
757.220.0500


## Owner

LifePointe Christian Church
P.O. Box 400
Toano, VA 23168
Contact: Phillip Murdock, Lead Minister
Phone: 757.741.1022

## Applicant

VHB
351 McLaws Circle
Suite 3
Williamsburg, Virginia 23185
Contact: Stephen Talley, PLA
Phone: 757.220.0500

Miss Utility of Virginia
1829 BLUE HILL CIRCLE
NE ROANOKE, VIRGINIA 24012

72 HOURS
BEFORE YOU DIG CALL
MISS UTILITY OF VIRGINIA

BEFORE YOU DIG ANYWHERE IN VIRGINIA! CALL 811 (IN VIRGINIA)
1-800-552-7001 (OUTSIDE VIRGINIA)

VA LAW REQUIRES 3 WORKING DAYS NOTICE BEFORE YOU EXCAVATE.

## Sheet Index


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|---|---|---|
| C1.01 | Legend and General Notes | 3/21/2023 |
| C1.02 | Special Use Permit and SWPPP Notes | 3/21/2023 |
| C1.03 | Environmental Inventory | 3/21/2023 |
| C1.04 | Overall Site Plan | 3/21/2023 |
| C2.01 | Demolition and Erosion & Sediment Control Plan | 3/21/2023 |
| C2.02 | Erosion & Sediment Control Details | 3/21/2023 |
| C3.01 | Layout and Materials Plan | 3/21/2023 |
| C4.01 | Grading and Drainage Plan | 3/21/2023 |
| C5.01 | Site Details | 3/21/2023 |
| L1.01 | Planting Plan | 3/21/2023 |
| L1.02 | Planting Calculations and Details | 3/21/2023 |
| SL1.01 | Site Lighting and Photometric Plan | 3/21/2023 |
| SL1.02 | Site Lighting Product Information | 3/21/2023 |


## STATISTICAL DATA

| | |
|---|---|
| PROJECT SITE ADDRESS | 8841 RICHMOND ROAD<br>TOANO, VA 23168-8816 |
| JAMES CITY COUNTY PARCEL ID. | 1110100029 |
| ZONING | A-1 |
| SPECIAL USE PERMIT | SUP 0001-2018 |
| SITE IS NOT LOCATED IN THE PSA OF JAMES CITY COUNTY | |
| TOTAL PARCEL AREA | 10.22 ACRES |
| TOTAL PROJECT AREA | 1.39 ACRES |
| TOTAL PARCEL DISTURBED AREA | 1.26 ACRES (55,025 SF) |
| TOTAL PARCEL PRE-DEVELOPMENT IMPERVIOUS AREA | 2.81 ACRES (27.5% OF PARCEL AREA) |
| TOTAL PARCEL POST-DEVELOPMENT IMPERVIOUS AREA | 3.65 ACRES (35.7% OF PARCEL AREA) |
| INCREASE IN PARCEL SITE IMPERVIOUS AREA | 0.84 ACRES (8.2% OF PARCEL AREA) |
| HYDROLOGIC UNIT CODE (HUC) | 6TH ORDER NWBD HUC CODE = JL27 |
| WATERSHED | DIASCUND CREEK |
| FLOODPLAIN ZONE | X |
| FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER | 51095C0039D EFFECTIVE DECEMBER 16, 2015 PROJECT APPEARS TO BE IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOODPLAIN) |

## NOTES

1. THIS SITE PLAN IS AN AMENDMENT TO APPROVED SITE PLAN SP-21-0117 FOR ADDITIONAL PARKING SPACES AND ASSOCIATED LIGHTING AND LANDSCAPING.
2. ALL MAINTENANCE OF TRAFFIC DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA WORK AREA PROTECTION MANUAL.
3. ALL UTILITIES CONSTRUCTED IN ASSOCIATION WITH THIS PROJECT SHALL BE PLACED UNDERGROUND.
4. WATER SUPPLY: EXISTING ON-SITE WELL
5. SANITARY SEWER SYSTEM: ON-SITE SEWAGE (APPROVED UNDER SP-21-0017)
6. STORM WATER QUALITY: WET POND LEVEL 2 (APPROVED UNDER SP-21-0017)
7. STORM WATER MANAGEMENT: WET POND LEVEL 2 (APPROVED UNDER SP-21-0017)
8. NO RETAINING WALLS ARE PART OF THIS PROJECT. ALL PROPOSED RETAINING WALLS 2 FEET OR TALLER MUST BE PERMITTED THROUGH THE JAMES CITY COUNTY CODES COMPLIANCE DIVISION.
9. CONSTRUCTION PHASING SHALL BE COORDINATED WITH JAMES CITY COUNTY FIRE DEPARTMENT TO ENSURE SITE ACCESS FOR FIRE AND EMS APPARATUS ARE MAINTAINED.

COMMONWEALTH OF VIRGINIA
ANTHONY J. LOUBIER
Lic. No. 054250
03/21/2023
PROFESSIONAL ENGINEER

JCC Case No: SP-23-0024
VHB Project : 34370.04
Issued for : Approval


\\VHB.COM\GBL\PROJ\WILLIAMSBURG\34370.04 LIFEPT_PARKINGSP_AMEND\CAD\LD\PLANSET\34370.04-COV 23 March 2023

# Legend

| Exist. | Prop. | |
|---|---|---|
| | | PROPERTY LINE |
| | | PROJECT LIMIT LINE |
| | | RIGHT-OF-WAY/PROPERTY LINE |
| | | EASEMENT |
| | | BUILDING SETBACK |
| | | PARKING SETBACK |
| 10+00 | 10+00 | BASELINE |
| | | CONSTRUCTION LAYOUT |
| | | ZONING LINE |
| | | TOWN LINE |
| | | LIMIT OF DISTURBANCE |
| | | WETLAND LINE WITH FLAG |
| | | FLOODPLAIN |
| BLSF | BLSF | BORDERING LAND SUBJECT TO FLOODING |
| BZ | BZ | WETLAND BUFFER ZONE |
| NDZ | NDZ | NO DISTURB ZONE |
| 200'RA | 200'RA | 200' RIVERFRONT AREA |
| | | GRAVEL ROAD |
| EOP | EOP | EDGE OF PAVEMENT |
| BB | BB | BITUMINOUS BERM |
| BC | BC | BITUMINOUS CURB |
| CC | CC | CONCRETE CURB |
| CG | CG | CURB AND GUTTER |
| CC | ECC | EXTRUDED CONCRETE CURB |
| CC | MCC | MONOLITHIC CONCRETE CURB |
| CC | PCC | PRECAST CONC. CURB |
| SGE | SGE | SLOPED GRAN. EDGING |
| VGC | VGC | VERT. GRAN. CURB |
| | | LIMIT OF CURB TYPE |
| | | SAWCUT |
| | | BUILDING |
| | EN | BUILDING ENTRANCE |
| | LD | LOADING DOCK |
| | | BOLLARD |
| D | D | DUMPSTER PAD |
| | | SIGN |
| | | DOUBLE SIGN |
| | | STEEL GUARDRAIL |
| | | WOOD GUARDRAIL |
| | | PATH |
| | | TREE LINE |
| | | WIRE FENCE |
| | | FENCE |
| | | STOCKADE FENCE |
| | | STONE WALL |
| | | RETAINING WALL |
| | | STREAM / POND / WATER COURSE |
| | | DETENTION BASIN |
| | | HAY BALES |
| | | SILT FENCE |
| | | SILT SOCK / STRAW WATTLE |
| 4 | 4 | MINOR CONTOUR |
| 20 | 20 | MAJOR CONTOUR |
| 10 | 10 | PARKING COUNT |
| | C10 | COMPACT PARKING STALLS |
| DYL | DYL | DOUBLE YELLOW LINE |
| SL | SL | STOP LINE |
| | | CROSSWALK |
| | | ACCESSIBLE CURB RAMP |
| | | ACCESSIBLE PARKING |
| VAN | VAN | VAN-ACCESSIBLE PARKING |

| Exist. | Prop. | |
|---|---|---|
| | | CONCRETE |
| | | HEAVY DUTY PAVEMENT |
| | | BUILDINGS |
| | | RIPRAP |
| | | CONSTRUCTION EXIT |
| 27.35 TC× | 27.35 TC× | TOP OF CURB ELEVATION |
| 26.85 BC× | 26.85 BC× | BOTTOM OF CURB ELEVATION |
| 132.75 × | 132.75 × | SPOT ELEVATION |
| 45.0 TW× 38.5 BW | 45.0 TW× 38.5 BW | TOP & BOTTOM OF WALL ELEVATION |
| | | BORING LOCATION |
| | | TEST PIT LOCATION |
| MW | MW | MONITORING WELL |
| UD | UD | UNDERDRAIN |
| 12"D | 12"D | DRAIN |
| 6"RD | 6"RD | ROOF DRAIN |
| 12"S | 12"S | SEWER |
| FM | FM | FORCE MAIN |
| OHW | OHW | OVERHEAD WIRE |
| 6"W | 6"W | WATER |
| 4"FP | 4"FP | FIRE PROTECTION |
| | 2"DW | DOMESTIC WATER |
| 3"G | G | GAS |
| E | E | ELECTRIC |
| STM | STM | STEAM |
| T | T | TELEPHONE |
| FA | FA | FIRE ALARM |
| CATV | CATV | CABLE TV |
| | | CATCH BASIN CONCENTRIC |
| | | CATCH BASIN ECCENTRIC |
| | | DOUBLE CATCH BASIN CONCENTRIC |
| | | DOUBLE CATCH BASIN ECCENTRIC |
| | | GUTTER INLET |
| | | DRAIN MANHOLE CONCENTRIC |
| | | DRAIN MANHOLE ECCENTRIC |
| | | TRENCH DRAIN |
| E | E | PLUG OR CAP |
| CO | CO | CLEANOUT |
| | | FLARED END SECTION |
| | | HEADWALL |
| S | S | SEWER MANHOLE CONCENTRIC |
| S | S | SEWER MANHOLE ECCENTRIC |
| CS | CS | CURB STOP & BOX |
| WV | WV | WATER VALVE & BOX |
| TSV | TSV | TAPPING SLEEVE, VALVE & BOX |
| | | SIAMESE CONNECTION |
| HYD | HYD | FIRE HYDRANT |
| WM | WM | WATER METER |
| PIV | PIV | POST INDICATOR VALVE |
| W | W | WATER WELL |
| GG | GG | GAS GATE |
| GM | GM | GAS METER |
| | EMH | ELECTRIC MANHOLE |
| EM | EM | ELECTRIC METER |
| | | LIGHT POLE |
| | TMH | TELEPHONE MANHOLE |
| T | T | TRANSFORMER PAD |
| | | UTILITY POLE |
| | | GUY POLE |
| | | GUY WIRE & ANCHOR |
| HH | HH | HAND HOLE |
| PB | PB | PULL BOX |
| | | MATCHLINE |

# Abbreviations

## General

| | |
|---|---|
| ABAN | ABANDON |
| ACR | ACCESSIBLE CURB RAMP |
| ADJ | ADJUST |
| APPROX | APPROXIMATE |
| BIT | BITUMINOUS |
| BS | BOTTOM OF STAIR |
| BWLL | BROKEN WHITE LANE LINE |
| CONC | CONCRETE |
| DYCL | DOUBLE YELLOW CENTER LINE |
| EL | ELEVATION |
| ELEV | ELEVATION |
| EX | EXISTING |
| FDN | FOUNDATION |
| FFE | FIRST FLOOR ELEVATION |
| GRAN | GRANITE |
| GTD | GRADE TO DRAIN |
| LA | LANDSCAPE AREA |
| LOD | LIMIT OF DISTURBANCE |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| NIC | NOT IN CONTRACT |
| NTS | NOT TO SCALE |
| PERF | PERFORATED |
| PROP | PROPOSED |
| REM | REMOVE |
| RET | RETAIN |
| R&D | REMOVE AND DISPOSE |
| R&R | REMOVE AND RESET |
| SWEL | SOLID WHITE EDGE LINE |
| SWLL | SOLID WHITE LANE LINE |
| TS | TOP OF STAIR |
| TYP | TYPICAL |

## Utility

| | |
|---|---|
| CB | CATCH BASIN |
| CMP | CORRUGATED METAL PIPE |
| CO | CLEANOUT |
| DCB | DOUBLE CATCH BASIN |
| DMH | DRAIN MANHOLE |
| CIP | CAST IRON PIPE |
| COND | CONDUIT |
| DIP | DUCTILE IRON PIPE |
| FES | FLARED END SECTION |
| FM | FORCE MAIN |
| F&G | FRAME AND GRATE |
| F&C | FRAME AND COVER |
| GI | GUTTER INLET |
| GT | GREASE TRAP |
| HDPE | HIGH DENSITY POLYETHYLENE PIPE |
| HH | HANDHOLE |
| HW | HEADWALL |
| HYD | HYDRANT |
| INV | INVERT ELEVATION |
| I= | INVERT ELEVATION |
| LP | LIGHT POLE |
| MES | METAL END SECTION |
| PIV | POST INDICATOR VALVE |
| PWW | PAVED WATER WAY |
| PVC | POLYVINYLCHLORIDE PIPE |
| RCP | REINFORCED CONCRETE PIPE |
| R= | RIM ELEVATION |
| RIM= | RIM ELEVATION |
| SMH | SEWER MANHOLE |
| TSV | TAPPING SLEEVE, VALVE AND BOX |
| UG | UNDERGROUND |
| UP | UTILITY POLE |

# Notes

## General

1. THE "MISS UTILITY LAW" REQUIRES FOR THE CONTRACTOR TO CALL 811 AT LEAST 3 WORKING DAYS IN ADVANCE OF THE PLANNED WORK TO ALLOW TIME FOR MARKING, THAT THE MARKS BE RESPECTED AND PROTECTED, AND THAT EXCAVATION BE COMPLETED CAREFULLY.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
3. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
4. AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL FOLLOW DETAIL PROVIDED BY VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK FOR SITE SPECIFIC SEEDING MIXTURES IN ACCORDANCE WITH STANDARD & SPECIFICATION 3.32.
5. WITHIN THE LIMITS OF THE BUILDING FOOTPRINT, THE SITE CONTRACTOR SHALL PERFORM EARTHWORK OPERATIONS REQUIRED UP TO SUBGRADE ELEVATIONS.
6. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
7. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
8. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
9. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
10. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
11. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
12. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
13. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
14. THIS PROJECT DISTURBS LESS THAN ONE ACRE OF LAND AND DOES NOT FALLS WITHIN THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP). GENERAL CONSTRUCTION PERMIT (GCP) PROGRAM AS ADMINISTERED BY THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) UNDER THE JURISDICTION OF THE EPA. A LOCAL JAMES CITY COUNTY PERMIT FOR SMALL LAND DISTURBANCE WILL BE REQUIRED.

## Utilities

1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
3. SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
4. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
   A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
   B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
   C. LANDSCAPE, TOPSOIL AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
5. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ARCHITECT.
6. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
7. UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLAN:
   A. WATER PIPES SHALL BE TYPE K COPPER.
   B. SANITARY SEWER PIPES SHALL BE AS NOTED ON THE PLANS.
   C. STORM DRAINAGE PIPES SHALL HIGH DENSITY POLYETHYLENE UNLESS OTHERWISE NOTED ON THE PLANS.
      • HDPE PIPE JOINTS TO CONFORM TO ASTM F477
      • RCP PIPE JOINTS TO CONFORM TO ASTM C443, C990, C655, C361, & C1619
8. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITEWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.
9. CONTRACTOR SHALL EXCAVATE AND BACKFILL TRENCHES FOR GAS IN ACCORDANCE WITH GAS COMPANY'S REQUIREMENTS.
10. ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4' MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.
11. LOCATION OF FITTINGS SHOWN HEREON ARE APPROXIMATE ONLY. CONTRACTOR SHALL DETERMINE ALL FITTING REQUIREMENTS AND LOCATIONS FROM ACTUAL FIELD CONDITIONS.
12. PIPE LENGTHS SHOWN HEREON ARE FROM CENTERLINE TO CENTERLINE OF STRUCTURE AND ARE APPROXIMATE. CONTRACTOR SHALL DETERMINE ACTUAL PIPE LENGTHS FROM FIELD CONDITIONS.
13. INVERTS CONTROL ELEVATIONS AT ALL STRUCTURES, SLOPES AND LENGTHS ARE APPROXIMATE ONLY.
14. RIM ELEVATIONS SHOWN HEREON ARE APPROXIMATE ONLY. CONTRACTOR SHALL SET ALL STRUCTURES FLUSH WITH FINAL GRADE.

## Layout and Materials

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
2. CURB RADII ARE 5 FEET TO FACE OF CURB UNLESS OTHERWISE NOTED.
3. CURBING SHALL BE VDOT CG-2 WITHIN THE SITE UNLESS OTHERWISE INDICATED ON THE PLANS.
4. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
5. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.
6. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
7. LAYOUT OF THE PROPOSED SITE IMPROVEMENTS WILL REQUIRE THE ASSISTANCE OF A REGISTERED SURVEYOR, USING AN ELECTRONIC FILE BASED ON A SURVEY FILE COORDINATE SYSTEM, TO ESTABLISH THE REQUIRED FIELD DATA AND CONTROLS PRIOR TO CONSTRUCTION.

## Demolition

1. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS. REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS AND UNSUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF 10 FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS.
2. EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
3. CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
4. THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.
5. UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

## Erosion Control

1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
2. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES, AND REMOVE SEDIMENT THEREFROM ON A WEEKLY BASIS AND WITHIN TWELVE HOURS AFTER EACH STORM EVENT AND DISPOSE OF SEDIMENTS IN AN UPLAND AREA SUCH THAT THEY DO NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND OR DIRECT DEPOSIT.
4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED OR OTHERWISE STABILIZED TO PREVENT EROSION.
5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.
6. ALL SOIL STABILIZATION BLANKETS AND MATTING SHALL BE INSPECTED PERIODICALLY BY THE CONTRACTOR TO CHECK FOR EROSION AND UNDERMINING. ANY DISLOCATION OR FAILURE SHOULD BE REPAIRED IMMEDIATELY. IF WASHOUTS OF BREAKOUTS OR BREAKAGE OCCURS, REINSTALL MATERIAL AFTER REPAIRING DAMAGE TO THE SLOPE OR CHANNEL AND RESEED. INSTALLATION OF BLANKETS AND MATTING SHALL FOLLOW THE REQUIREMENTS OF THE VESCH AND APPLICABLE MANUFACTURER RECOMMENDATIONS.

## Existing Conditions Information

BASE PLAN: THE PROPERTY LINES SHOWN WERE DETERMINED BY AN ACTUAL FIELD SURVEY CONDUCTED BY VHB, AND FROM PLANS OF RECORD. THE TOPOGRAPHY AND PHYSICAL FEATURES ARE BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON THE GROUND BY VHB, DURING DECEMBER 2018 OVERLAID WITH THE PREVIOUSLY PROPOSED IMPROVEMENTS. EXISTING CONDITIONS WITHIN THE PREVIOUSLY APPROVED LIMITS OF DISTURBANCE ARE BASED ON THE PROPOSED IMPROVEMENTS TO DATE AND ARE NOT REFLECTIVE OF AN ON-THE-GROUND SURVEY.

A. DELINEATION OF THE WETLANDS AND PLACEMENT OF THE FLAGS WAS PERFORMED BY: VHB

B. FLAGS MARKING THE WETLANDS WERE LOCATED BY: VHB

2. TOPOGRAPHY: ELEVATIONS SHOWN HEREON ARE IN FEET AND ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1929 (NGVD 29) AND ARE BASED ON JAMES CITY COUNTY CONTROL MONUMENT 349.
3. GEOTECHNICAL DATA INCLUDING TEST PIT AND BORING LOCATIONS AND ELEVATIONS WERE OBTAINED FROM HUFF MORRIS ARCHITECTS.

## Document Use

1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.

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757.220.0500

# LifePointe Christian Church East Parking Area

8841 Richmond Road
Toano, Virginia

| No. | Revision | Date | Appvd. |
|---|---|---|---|

Designed by KAM | Checked by SMT

Issued for: Approval

Date: March 21, 2023

Drawing Title: Legend and General Notes

SP-23-0024 (Drawing Number)

COMMONWEALTH OF VIRGINIA
ANTHONY J. LOUBIER
Lic. No. 054250
03/21/2023
PROFESSIONAL ENGINEER

C1.01

Sheet 2 of 14

Project Number: 34370.04

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## SEQUENCE OF CONSTRUCTION

1. FLAG LIMITS OF CLEARING.
2. CONDUCT PRE-CONSTRUCTION MEETING ON-SITE BETWEEN THE CONTRACTOR, OWNER, ENGINEER, AND ASSIGNED JCC SRP INSPECTOR.
3. NOTIFY JAMES CITY COUNTY STORMWATER & RESOURCE PROTECTION (SRP), VDOT AND VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) A MINIMUM OF 48-HOURS IN ADVANCE OF COMMENCEMENT OF CONSTRUCTION OPERATIONS.
4. INSTALL CONSTRUCTION ENTRANCE, INLET PROTECTION, AND PERIMETER CONTROLS.
5. DEMOLISH, CLEAR, AND GRUB SITE.
6. ROUGH GRADE AND INSTALL UNDERGROUND UTILITIES INCLUDING ELECTRICAL CONDUIT FOR LIGHT POLES.
7. BRING SITE TO FINAL SUBGRADE. INSTALL PAVEMENT AND REMAINING SITE IMPROVEMENTS.
8. AFTER FINAL SITE STABILIZATION AND UPON RECEIVING AUTHORIZATION FROM THE ASSIGNED JCC SRP INSPECTOR, REMOVE TEMPORARY EROSION CONTROL MEASURES.
9. DURING ALL PHASES OF CONSTRUCTION, THE SWPPP OPERATOR, SHALL PERFORM DAILY INSPECTIONS OF ALL RECEIVING DRAINAGE OUTFALLS. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSPECTED AND REPAIRED OR REPLACED AS NECESSARY AFTER EACH STORM EVENT.
10. OPERATOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL SEDIMENT CONTROLS AND REMOVAL OF SEDIMENT CAUSED BY CONSTRUCTION.
11. REVISED SEQUENCING AND EROSION AND SEDIMENT CONTROL METHODS SHALL BE SUBMITTED TO JCC SRP FOR APPROVAL.
12. TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED ONLY WHEN STABILIZATION HAS BEEN ESTABLISHED. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DESPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE DIRECTED BY THE COUNTY.

Saved Tuesday, March 21, 2023 9:31:37 AM KMCNINCH Plotted Wednesday, March 22, 2023 8:55:13 AM Kathleen McNinch

**RESOLUTION**

CASE NO. SUP-0001-2018. LIFEPOINTE CHRISTIAN CHURCH

WHEREAS, the Board of Supervisors of James City County, Virginia, has adopted by Ordinance specific land uses that shall be subjected to a Special Use Permit (SUP) process; and

WHEREAS, Ms. Victoria Mary Carmanica (the "Owner") owns property located at 8841 and 8851 Richmond Road, further identified as James City County Real Estate Tax Map Parcel Nos. 1110100029 and 1110100030A, respectively (together, the "Property"); and

WHEREAS, on behalf of the Owner, Mr. Gregory R. Davis, Esq. from Kaufman and Canoles representing LifePointe Christian Church, has applied for an SUP to allow a place of public assembly on the Property as shown on the exhibit titled "Master Plan LifePointe Christian Church" prepared by Vanasse Hangen Brustlin (VHB), dated March 2018; and

WHEREAS, a public hearing was advertised, adjoining property owners notified and a hearing conducted on Case No. SUP-0001-2018; and

WHEREAS, the Planning Commission, following its public hearing on March 7, 2018 recommended approval of the application by a vote of 7-0.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, after consideration of the factors in Section 24-9 of the James City County Code, does hereby approve the issuance of Case No. SUP-0001-2018 as described herein with the following conditions:

1. *Master Plan:* This SUP shall be valid for a place of public assembly (the "Project") located at 8841 and 8851 Richmond Road, further identified as James City County Real Estate Tax Map Nos. 1110100029 and 1110100030A, respectively (together, the "Property"). Development of the Project on the Property shall occur generally as shown on the exhibit drawn by VHB entitled, "Master Plan LifePointe Christian Church," dated March 2018, (the "Master Plan"), with any deviations considered pursuant to Section 24-23(a)(2) of the James City County Code (the "County Code"), as amended.

2. *Architectural Elevations/Design:* Any future building expansion shown on the Master Plan shall use a design and materials that are substantially in accord with the existing structures on the Property as shown in Attachment A of the document entitled "Natural Resources Inventory" prepared by VHB and dated January 22, 2017. Such determination shall be made by the Director of Planning prior to site plan approval for the expansion.

3. *Archaeological:* A Phase I Archaeological Study for the Property, excluding the existing structures, shall be submitted to and approved by the Director of Planning prior to land disturbance approval for the Project. A treatment plan shall be submitted to and approved by the Director of Planning for all sites in the Phase I study that are



recommended for a Phase II evaluation and/or identified as being eligible for inclusion on the National Register of Historic Places. If a Phase II study is undertaken, such a study shall be approved by the Director of Planning and a treatment plan for said sites shall be submitted to, and approved by, the Director of Planning for sites that are determined to be eligible for inclusion on the National Register of Historic Places and/or those sites that require a Phase III study. If in the Phase III study, a site is determined eligible for nomination to the National Register of Historic Places and said site is to be preserved in place, the treatment plan shall include nomination of the site to the National Register of Historic Places. If a Phase III study is undertaken for said sites, such studies shall be approved by the Director of Planning prior to preliminary approval within the study areas. All Phase I, Phase II, and Phase III studies shall meet the Virginia Department of Historic Resources' Guidelines for Preparing Archaeological Resource Management Reports and the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation, as applicable, and shall be conducted under the supervision of a qualified archaeologist who meets the qualifications set forth in the Secretary of the Interior's Professional Qualification Standards. All approved treatment plans shall be incorporated into the plan of development for the site and the clearing, grading or construction activities thereon.

4. *Ingress and Egress:* Only one ingress/egress point may be constructed from Richmond Road to the Property and it shall line up with the existing median opening. The intent of this condition is to limit the number of ingress/egress points along Richmond Road.

5. *Landscaping:* A landscape plan for the Property shall be submitted for review and approval by the Director of Planning with the initial plan of development for the Project and shall match the landscaping described in the text on the Master Plan. All landscaping on the landscape plan shall be installed or guaranteed prior to the issuance of the initial final Certificate of Occupancy (COP) for the Project. The amount of any surety guaranteeing installation of landscaping shall be determined by the Director of Planning or his designee. Any deviations to the landscape plan shall be considered pursuant to Section 24-23(a)(2) of the County Code, as amended.

6. *Signage:* The Property shall be allowed one exterior freestanding sign. The freestanding sign shall be externally illuminated, monument style, not exceed eight feet in height, and have a base of brick or other materials similar in type and color with the architecture of the Project. The Director of Planning shall approve the design of the freestanding sign prior to initial site plan approval and prior to any subsequent sign modifications.

7. *Traffic Analysis:* Turn lane warrant analyses, as determined by the Virginia Department of Transportation (VDOT), for the entrance and median opening improvements shall be submitted to and approved by the Director of Planning and VDOT prior to final site plan approval. If the approved analyses demonstrate that improvements are warranted, such improvements shall be shown on the initial site plan and shall be installed prior to the issuance of any COP for the Project.



8. *Traffic Management Plan:* Within 180 days after initial issuance of a COP for the Project, a Traffic Management Plan (the "TMP") addressing circulation and queuing of vehicles on the Property associated with peak occupancy periods for the Project shall be submitted to the Director of Planning for review and approval. The TMP shall be designed to limit the impact of traffic flows along Richmond Road and shall consist of measures such as, but not limited to, parking lot usage, signage, pavement markings or other vehicle control/directional devices, and manual traffic control (police officer or similar) at the intersection of Richmond Road and the Project entrance. The approved TMP shall be implemented on the Property for peak occupancy periods for the Project. The TMP shall be evaluated for its effectiveness within 180 days after initial implementation and, based on such evaluation, be revised as necessary to maintain consistency with this condition. Thereafter, the TMP shall be reevaluated and resubmitted to the Director of Planning by January 31 of each year for review and approval for consistency with this condition. The TMP shall be reevaluated and resubmitted until it accommodates the full occupancy of the Project as determined by the Director of Planning.

9. *Screening:* Dumpsters shall be screened with a brick enclosure or other materials substantially in accordance with the existing structures on the Property as shown in Attachment A of the document entitled "Natural Resources Inventory" prepared by VHB and dated January 22, 2017.

10. *Exterior Lighting:* All new exterior light fixtures on the Property, including new building lighting, shall have recessed fixtures with no lens, bulb, or globe extending below the casing. All new light poles shall not exceed 20 feet in height from finished grade unless otherwise approved by the Director of Planning. A lighting plan indicating no glare outside the boundaries of the Property shall be submitted for any new lighting. The lighting plan shall be approved by the Director of Planning or his designee prior to site plan approval. "Glare" shall be defined as more than 0.1 foot-candle at the property line or any direct view of the lighting source from the adjoining properties.

11. *Commencement of Construction:* Final site plan approval for the Project shall be obtained within 36 months from the date of approval of the SUP or the SUP shall be void. Prior to the site plan becoming invalid, a permanent COP shall be obtained for the "Main Church Building" shown on the Master Plan or the SUP shall be void.

12. *Severability:* The SUP is not severable. Invalidation of any word, phrase, clause, sentence or paragraph shall invalidate the remainder.

BE IT FURTHER RESOLVED that SUP-0001-2018 shall amend, replace and supersede SUP-0009-1999, which shall no longer have any force or effect.



Ruth M. Larson
Chair, Board of Supervisors

| VOTES | AYE | NAY | ABSTAIN |
|---|---|---|---|
| MCGLENNON | ✓ | | |
| SADLER | ✓ | | |
| HIPPLE | ✓ | | |
| LARSON | ✓ | | |
| ICENHOUR | ✓ | | |

ATTEST:

Teresa J. Fellows
Deputy Clerk to the Board

Adopted by the Board of Supervisors of James City County, Virginia, this 10th day of April, 2018.

SUP01-18LifePtCh-res

## Standard County Stormwater Pollution Prevention Plan Notes (Revised: July 1, 2014)

The following standard County notes shall become part of any approved stormwater pollution prevention plan (SWPPP) for plan of development projects in James City County, Virginia. Components of a SWPPP may include as applicable, a site erosion and sediment control (E&SC) plan, a site stormwater management (SWM) plan, and a site pollution prevention plan (PPP). The County's Division of Engineering and Resource Protection is designated by Chapter 8 of the County Code as the local Virginia Erosion and Sediment Control Program (VESCP) authority and Virginia Stormwater Management Program (VSMP) authority.

1. All the provisions of Virginia Erosion and Sediment Control (E&SC) Law and Regulations, the Virginia Stormwater Management Act and Regulations (VSMP), the Virginia BMP Clearinghouse website, State Erosion and Sediment Control and Stormwater Management Handbooks, and any associated technical bulletins and guidance documents as published by the State Water Control Board, the Virginia Department of Environmental Quality (DEQ), and the local VESCP and VSMP authority shall apply to the project.

2. Minimum Standards No. 1 through No. 19 of the Virginia Erosion and Sediment Control Regulations *9VAC25-840* et seq. shall apply to the project.

3. The owner, applicant, operator, or permittee shall be responsible to register for construction general permit (CGP) coverage, as applicable, in accordance with the General VPDES Permit for Discharge of Stormwater from Construction Activities (VAR10) Chapter 880; the Virginia Stormwater Management Program Regulations Chapter 870; and in accordance with current requirements of the Virginia Stormwater Management Program (VSMP), the State Water Control Board, the Virginia Department of Environmental Quality, Chapter 8 of the County Code and the local VESCP/VSMP authority.

4. The owner, applicant, operator or permittee shall provide the name of an individual holding a valid Responsible Land Disturber (RLD) certificate of competence who will be responsible for the land disturbing activity prior to engaging in the land disturbing activity. This will be necessary prior to issuance of a local land disturbing and/or stormwater construction permit for the project. The RLD is required to attend the preconstruction conference for the project.

5. The contractor is responsible to contact Miss Utility (Dial 811 in VA or 1-800-552-7001) prior to any utility or site work excavations.

6. All erosion and sediment control measures shall be planned, designed, implemented, installed and maintained in accordance with the provisions of the latest edition of the Virginia Erosion and Sediment Control Handbook (VESCH). The Contractor shall maintain, inspect, and repair all erosion and sediment control measures as needed throughout the life of the project to ensure continued acceptable performance.

7. A preconstruction conference (meeting) shall be held on site and include representatives from the local VESCP/VSMP authority, the owner/applicant/operator/permittee, the Responsible Land-Disturber (RLD), and the contractor, engineer, and other responsible agencies, as applicable, prior to authorization and issuance of a local land disturbing or stormwater construction permit. The owner, applicant, operator or permittee is required to coordinate scheduling of the preconstruction conference between all applicable parties. The contractor shall submit a Sequence of Construction and a revised Pollution Prevention Plan (P2 plan or PPP), if applicable, to the local VESCP/VSMP authority for review and approval prior to the preconstruction meeting.

8. A pollution prevention plan (P2 plan or PPP), if required, shall be developed, implemented and updated as necessary and must detail the design, installation, implementation, and maintenance of effective pollution prevention measures to: minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water and other wash waters; minimize the exposure of all materials on the site (such as building materials and products, construction waste, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, etc.) to precipitation and stormwater; minimize the discharge of pollutants from spills and leaks; implement chemical spill and leak prevention and response procedures; and include effective best management practices to prohibit the discharge of wastewater from: concrete washout areas, discharge of wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials; discharge of fuels, oils, other pollutants used in vehicle and equipment operation and maintenance activities; and the discharge of soaps and solvents used for vehicle and equipment washing. This plan shall be available onsite for review at reasonable times by the local VESCP/VSMP authority when requested.

9. The owner, applicant, operator, or permittee is responsible for all operator self-inspections as required in the pollution prevention plan (P2 plan or PPP) or as required as part of a developed Stormwater Pollution Prevention Plan (SWPPP). These inspections shall be made available, upon request, by the local VESCP/VSMP authority.

10. All perimeter erosion and sediment control (E&SC) measures shall be constructed as a first step in any land-disturbing activity and shall be made functional before upslope land disturbance activity takes place.

11. Additional safety fence or dust control measures, in accordance with the provisions of Minimum Standards & Specs. 3.01 and 3.39 of the Virginia Erosion and Sediment Control Handbook (VESCH), may be required to be implemented on the site in addition to that shown on the approved plan and specifications in order to ensure adequate protection of the health, safety and welfare of the public or if site conditions change, become apparent or alter significantly following the date of plan approval.

12. Erosion and sediment control measures may require minor field adjustments at or following time of construction to ensure their intended purpose is accomplished, to ensure adequate protection of the health, safety, and welfare of the public, or if site conditions change, become apparent or alter significantly following the date of plan approval. Local VESCP/VSMP authority approval shall be required for any deviation of erosion and sediment control measures from the approved plan.

13. Off-site waste or borrow areas shall be approved by the local VESCP/VSMP authority prior to the import of any borrow or export of any waste to or from the project site.

14. Temporary soil stockpiles shall comply with the provisions of Section 24-46 of the County Code.

15. Culvert and storm drain inlet protections, in accordance with the provisions of Minimum Standards & Specs. 3.07 and 3.08 of the Virginia Erosion and Sediment Control Handbook (VESCH), may be removed at the discretion of the assigned local VESCP/VSMP authority compliance inspector, should placement of the measure result in excessive road flooding, traffic or safety hazard, or result in the redirection of drainage onto or toward existing lots, homes, driveways, garages or other structures. Decisions shall be made by the VESCP/VSMP authority on a case-by-case basis based on field situations encountered.

16. Drainage facilities shall be installed and functional within 30 days following completion of rough grading at any point within the project.

17. No more than 300 feet of trench may be open at one time for underground utility lines, including storm water conveyances. All other provisions of Minimum Standard No. 16 of the Virginia Erosion and Sediment Control regulations apply.

18. Permanent or temporary stabilization of disturbed soil areas shall comply with Minimum Standard # 1 and # 3 of the Virginia Erosion and Sediment Control Regulations.

19. The term seeding, final vegetative cover or stabilization on the approved plan shall mean the successful germination and establishment of a stable grass cover from a properly prepared seedbed, in accordance with Minimum Standard # 1 and # 3 from the Virginia Erosion and Sediment Control Regulations, Minimum Standards & Specs. 3.29 through 3.37 of the Virginia Erosion and Sediment Control Handbook (VESCH), and any technical bulletins issued by the State Water Control Board or Virginia DEQ, as applicable. Irrigation, if necessary, shall comply with all applicable seasonal outdoor water use restrictions of the James City Service Authority.

20. If disturbed area stabilization is to be accomplished during the months of December, January or February, stabilization shall consist of Mulching in accordance with Minimum Standard & Spec. 3.35 of the Virginia Erosion and Sediment Control Handbook (VESCH). Seeding will then take place as soon as the season permits.

21. Temporary erosion and sediment control measures shall not be removed until all disturbed areas are stabilized. Removal shall not occur without authorization by the local VESCP/VSMP authority. Disturbances associated with the removal of temporary erosion and sediment control measures shall be properly stabilized.

22. No sediment trap or sediment basin shall be removed until a) at least 75 percent of the single-family lots within the drainage area to the trap or basin have been sold to a third party for the construction of homes (unrelated to the developer); and/or, b) 60 percent of the single-family lots within the drainage area to the trap or basin are completed and stabilized. A bulk sale of the lots to another builder does not satisfy this provision. Sediment traps and sediment basins shall not be removed without authorization of the local VESCP/VSMP authority.

23. Design and construction of private-type storm drainage systems, outside VDOT right-of-way, shall be performed in accordance with the current version of the James City County, Engineering and Resource Protection Division, Stormwater Drainage Conveyance Systems (Non-BMP related), General Design and Construction Guidelines (ie. County Drainage Standards).

24. Record Drawings (Asbuilts) and Construction Certifications are required for all stormwater facilities including stormwater management/BMP facilities and storm drainage conveyance systems. The certification process shall include an internal closed-circuit television camera (CCTV) post installation inspection performed by the owner in accordance with standards and specifications developed by the VSMP authority. Record drawings and construction certifications must meet established program requirements of the County's Chapter 8 Erosion and Sediment Control and VSMP Ordinance and the local VESCP/VSMP authority.

25. All stormwater facilities including BMPs, storm drainage pipes, stormwater conveyances, inlets, manholes, outfalls and roadside and other open channels shall be inspected by the local VESCP/VSMP authority, the owner, and the applicant/operator/permittee designated geotechnical engineer for the project in accordance with established County stormwater facility inspection program requirements.

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# LifePointe Christian Church East Parking Area

8841 Richmond Road
Toano, Virginia

| No. | Revision | Date | Appvd. |
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Designed by KAM | Checked by SMT

Issued for: Approval | Date: March 21, 2023

Drawing Title: Special Use Permit and Stormwater Pollution Prevention Plan Notes

SP-23-0024 (Drawing Number)

COMMONWEALTH OF VIRGINIA
ANTHONY J. LOUBIER
Lic. No. 054250
03/21/2023
PROFESSIONAL ENGINEER

C1.02

Sheet 3 of 14

Project Number: 34370.04

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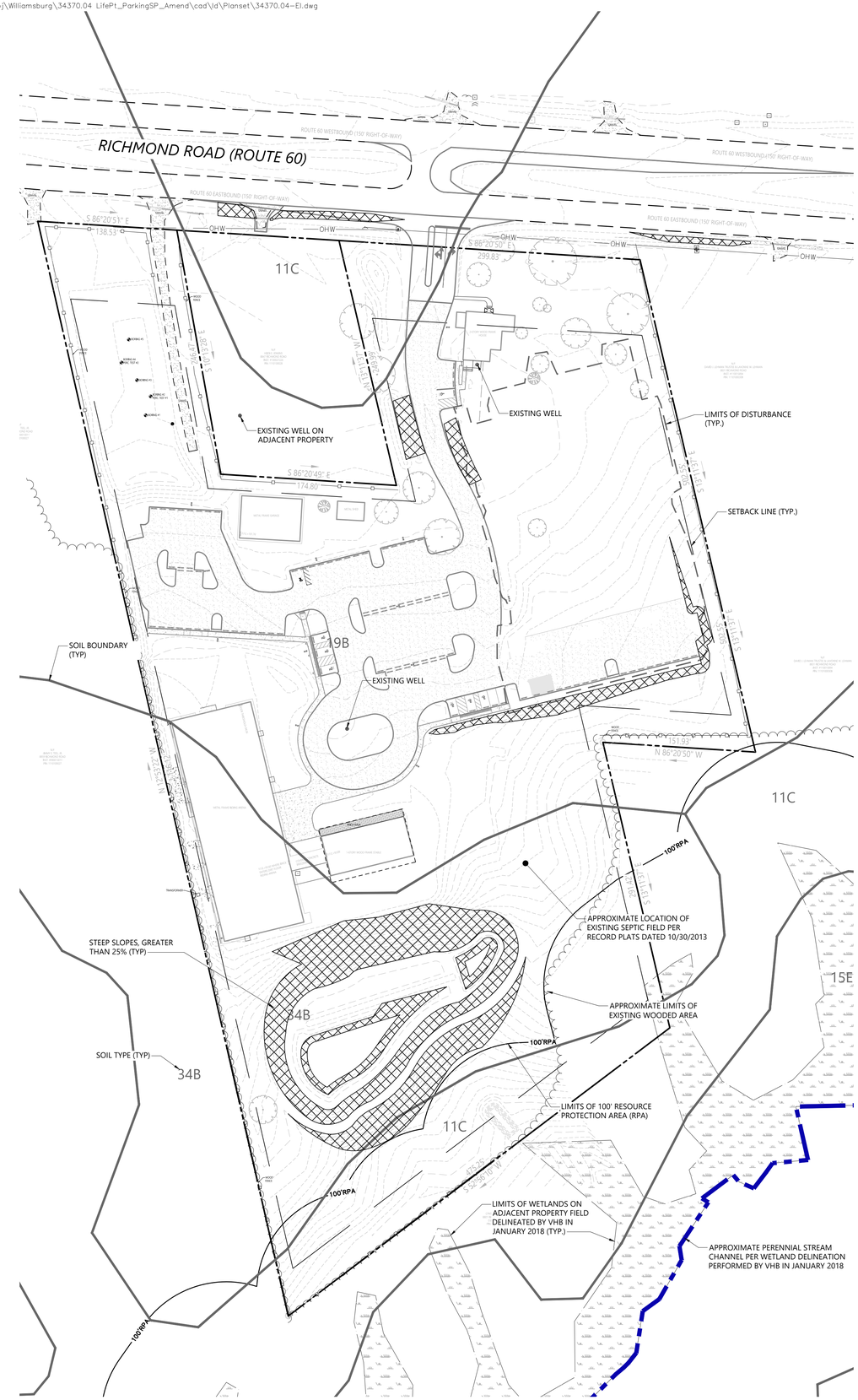


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SOIL TYPES

11C - CRAVEN-UCHEE COMPLEX, 6 TO 10% SLOPES
HSG RATING - D
CRAVEL PROFILE:
Surface layer: 0 to 10 inches—dark grayish brown loam
Subsoil: 10 to 22 inches—strong brown clay; red and yellowish brown masses of oxidized iron
22 to 36 inches—strong brown and yellowish brown clay; gray iron depletions and red
and yellowish red masses of oxidized iron
36 to 45 inches—strong brown clay; gray iron depletions and reddish brown and yellowish red masses of oxidized iron
45 to 70 inches—light gray clay loam; reddish brown and strong brown masses of oxidized iron
UCHEE PROFILE
Surface layer: 0 to 4 inches—dark gray loamy sand
Subsurface layer: 4 to 26 inches—light yellowish brown loamy sand
Subsoil: 26 to 30 inches—light yellowish brown and brownish yellow sandy loam
30 to 50 inches—brownish yellow sandy clay loam
Substratum: 50 to 62 inches—yellowish brown sandy clay loam; yellowish red and gray iron depletions and strong brown masses of oxidized iron
Contrasting components:
- Well drained, clayey Caroline and loamy Emporia soils; in similar areas
- Moderately well drained, loamy Slagle soils; in similar areas

Similar components:
- Soils that have a slope of 2 to 6 percent
- Soils that are severely eroded; in similar areas
- Soils that are gravelly; in similar areas
- Areas of ironstone outcrops

Available water capacity: Craven—moderate (about 8.4 inches); Uchee—moderate (about 6.5 inches)
Slowest saturated hydraulic conductivity: Craven—moderately low (about 0.06 in/hr); Uchee—moderately high (about 0.2 in/hr)
Drainage class: Craven—moderately well drained; Uchee—well drained
Seasonal high water table: Craven—at a depth of 2.0 to 3.0 feet from December to April; Uchee—at a depth of 3.5 to 5.0 feet from December to April
Water table kind: Craven—apparent; Uchee—perched
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Parent material: Craven—clayey marine sediments; Uchee—loamy and sandy marine sediments

19B - KEMPSVILLE-EMPORIA FINE SANDY LOAMS, 2 TO 6% SLOPES
HSG RATING - A
EMPORIA PROFILE
Surface layer: 0 to 4 inches—grayish brown fine sandy loam
Subsurface layer: 4 to 11 inches—brown fine sandy loam
Subsoil: 11 to 22 inches—yellowish brown loam
22 to 31 inches—yellowish brown clay loam; yellowish red and strong brown masses of oxidized iron
31 to 40 inches—yellowish brown clay; strong and yellowish red masses of oxidized iron
40 to 52 inches—yellowish red and strong brown clay; gray iron depletions
52 to 60 inches—yellowish brown and red sandy clay loam; gray iron depletions
Substratum: 60 to 72 inches—yellowish red sandy loam; gray iron depletions
KEMPSVILLE PROFILE
Surface layer: 0 to 8 inches—brown loamy sand
Subsoil: 8 to 12 inches—brown sandy loam
12 to 31 inches—strong brown sandy loam
31 to 40 inches—strong brown sandy loam; pale brown clay depletions
40 to 45 inches—strong brown sandy clay loam
45 to 64 inches—strong brown fine sandy loam; yellowish brown and yellowish red masses of oxidized iron
64 to 72 inches—strong brown sandy clay loam; yellowish brown and yellowish red masses of oxidized iron
Contrasting components:
- Well drained, clayey Caroline soils; in the higher areas
- Well drained, sandy and loamy Uchee soils; on small knolls
- Moderately well drained Slagle soils; in depressions and adjacent to drainageways

Similar components:
- Soils that are gravelly; in similar areas

Available water capacity: Emporia—moderate (about 8.1 inches); Kempsville- moderate (about 8.4 inches)
Slowest saturated hydraulic conductivity: Emporia—moderately high (about 0.2 in/hr); Kempsville—moderately high (about 0.6 in/hr)
Drainage class: Well drained
Seasonal high water table: Emporia—at a depth of 3.0 to 4.5 feet from November to April; Kempsville—at a depth of more than 6 feet
Water table kind: Emporia—perched; Kempsville—none
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Emporia—moderate; Kempsville—low
Runoff class: Emporia—low; Kempsville—very low
Parent material: Emporia—loamy and clayey marine sediments; Kempsville—loamy marine sediments

34B - UCHEE LOAMY FINE SAND, 2 TO 6% SLOPES
HSG RATING - B
Surface layer: 0 to 4 inches—dark gray loamy sand
Subsurface layer: 4 to 26 inches—light yellowish brown loamy sand
Subsoil: 26 to 30 inches—light yellowish brown and brownish yellow sandy loam
30 to 50 inches—brownish yellow sandy clay loam
Substratum:
50 to 62 inches—yellowish brown sandy clay loam; yellowish red and gray iron depletions and strong brown masses of oxidized iron
Contrasting components:
- Well drained, fine-loamy Emporia and Kempsville soils; in similar areas
- Moderately well drained Slagle soils; in depressions and areas adjacent to drainageways

Similar components:
- Soils that have a sandy surface horizon less than 20 inches thick; in similar areas
- Soils that have a slope of more than 6 percent

Available water capacity: Moderate (about 6.5 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.2 in/hr)
Drainage class: Well drained
Seasonal high water table: At a depth of 3.5 to 5.0 feet from December to April
Water table kind: Perched
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Low
Parent material: Loamy and sandy marine sediments

**PARCEL DATA:**
PROJECT AREA = 1.39 ACRES
TOTAL DISTURBED AREA = 1.26 ACRES
TOTAL PARCEL AREA = 10.22 ACRES

DISTURBED AREA WITHIN RPA = 0.00 ACRES
25% SLOPES DISTURBED AREA = 0.02 ACRES (0.1% OF PROJECT AREA) (DISTURBED STEEP SLOPES ARE WITHIN PREVIOUSLY APPROVED LIMITS OF DISTURBANCE UNDER SP-21-0117)

TOTAL DISTURBED NON-TIDAL WETLANDS AREA = 0.00 ACRES

PROJECT IMPERVIOUS AREAS

| | TOTAL PARCEL | RPA |
|---|---|---|
| PRE-DEVELOPMENT | 2.81 ACRES (27.5%) | 0.00 ACRES |
| POST DEVELOPMENT | 3.65 ACRES (35.7%) | 0.00 ACRES |
| PROJECT % INCREASE | 8.2% | 0.0% |
| RPA % INCREASE | 0.00% | 0.0% |

Project Description

The purpose of this project is to provide LifePointe Christian Church additional parking The site is zoned A1 General Agriculture. The full development of the property, per SUP 0001-2018, will expand their parking lot. The project also proposes the following site improvements, which were conceptually shown on the Master Plan: landscape buffering and parking.

This site encompasses an area of 10.22 acres, of which approximately 1.26 acres will be disturbed as a part of this project.

Existing Site Conditions

The LifePointe parcel is 10.22 acres in size. The existing site is developed with a church buidling, several sheds, parking lot, stormwater improvements, and utilities. Most of the remainder of the site is mowed pasture and lawn. The grades of the property range from nearly flat at approximately 0.5% slope to moderately steep at approximately 25%. Rainfall runoff from the site flows from moderately sloping upland areas into a tributary to Diascund Creek. The project is located within a James City County Agricultural District.

Adjacent Area

The LifePointe parcel is bounded by a residential property and Richmond Road to the north, residential properties and wooded areas to the west and east, and wooded areas to the south.

Offsite Disturbed Area

No offsite areas will be disturbed as part of this project.

Critical Erosion Areas

The proposed site work will entail construction of a gently sloped parking lot, sidewalk, and 509 sf of steep slopes. Sediment must be trapped on site. Blanket matting will be applied to steep slopes to help prevent erosion during stabilization.

Demolition

Onsite demolition is limited to select clearing, grubbing, and gravel removal for landscaped islands.

Utilities

Site lighting conduits and poles are the proposed utilities included in this amendment.

Proposed Grading and Paving

The proposed entranceway and parking lot will have a 2% cross-slope and a longitudinal slope no greater than 5%. The total proposed impervious surface of this project will be 1.04 acres. There are 2.47 acres of existing impervious surface within the project limits, of which approximately 1.97 acres is within the parcel area and 0.50 acres is within the VDOT Right-of-way. The proposed improvements that will be constructed as part of this site plan will result in an increase in impervious area of 1.04 acres, of which approximately 1.04 acres is within the parcel area.

Erosion and Sediment Control Measures

1. Construction Entrance (3.02): Reduces the amount of mud transported onto public roads by motor vehicles or runoff.
2. Silt Fence (3.05): Silt fence and silt fence with wire support shall be installed along the toe of all slopes and all other areas prone to the export of sediment offsite due to construction activities. Silt fence shall also be installed on the downhill side of the utility extensions.
3. Storm Drain Inlet Protection (3.07): All existing and proposed inlets shall be protected from sediment prior to permanent stabilization of the disturbed areas.
4. Tree Protection (3.38): Tree protection provides a physical barrier defining the limits of disturbance and shall be installed prior to clearing operations.

Stabilization Measures

1. Temporary Seeding (3.31): Establishes a temporary vegetative cover on disturbed areas that will not be brought to a final grade for a period longer than 30 days.
2. Permanent Seeding (3.32): Permanent seeding shall be applied to all disturbed areas on the site once the final grades have been established.

Stormwater Management Considerations

The previously approved site plan accounted for approximately one acre of additional impervious parking draining towards inlet 10. The existing wet pond BMP was designed for the maximum future impervious cover of the site. An updated drainage area map, VA runoff reduction method spreadsheet, and storm sewer design table will be submitted to James City County Stormwater and Resource Protection Division as part of this site plan amendment to verify that the proposed improvements are within the limits of the maximum development assumed in the previously approved calculations.

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**NOTES:**
1) TIDAL WETLANDS: THERE ARE NO TIDAL WETLANDS LOCATED WITHIN THE PARCEL AREA INCLUDING THE RPA AND RMA AREAS.

2) TIDAL SHORES: THERE ARE NO TIDAL SHORES LOCATED WITHIN THE PARCEL AREA INCLUDING THE RPA AND RMA.

3) NON-TIDAL WETLANDS: THERE ARE 0.017 AC. OF NON-TIDAL WETLANDS LOCATED WITHIN THE PARCEL AREA. THESE WETLANDS ARE NOT IMPACTED AS A PART OF THE PROJECT.

4) 100 FOOT RPA BUFFER: THE 100 FOOT RPA BUFFER IS SHOWN AS EXTENDING 100 FEET LANDWARD OF THE EXISTING WETLANDS ON THE ADJACENT PROPERTY TO THE SOUTH.

5) 25% SLOPES: SLOPES OF 25% OR GREATER ARE SHOWN ON THIS SHEET AND ARE BASED ON FIELD TOPOGRAPHIC SURVEYS OF THE AREA AND RECORD DRAWINGS.

6) FLOOD ZONE: THIS PROJECT IS LOCATED WITHIN FEMA FIRM ZONE X(AREAS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOOD PLAIN) AS SHOWN ON FEMA-NFIP FLOOD INSURANCE RATE MAP; COMMUNITY PANEL NO. 51095C0039D REVISED DECEMBER 16, 2015.

## Legend

APPROXIMATE WETLANDS PER VHB DELINEATION IN JANUARY 2018

APPROXIMATE PERENNIAL STREAM CHANNEL PER VHB DELINEATION IN JANUARY 2018

STEEP SLOPES >25%

APPROXIMATE SOIL BOUNDARY

0 30 60 120 Feet

# LifePointe Christian Church East Parking Area

**8841 Richmond Road**
**Toano, Virginia**

| No. | Revision | Date | Appvd. |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Designed by KAM | Checked by SMT
Issued for Approval | Date March 21, 2023

Drawing Title
**Environmental Inventory**

SP-23-0024 (Drawing Number)

COMMONWEALTH OF VIRGINIA
ANTHONY J. LOUBIER
Lic. No. 054250
03/21/2023
PROFESSIONAL ENGINEER

C1.03

Sheet 4 of 14

Project Number 34370.04

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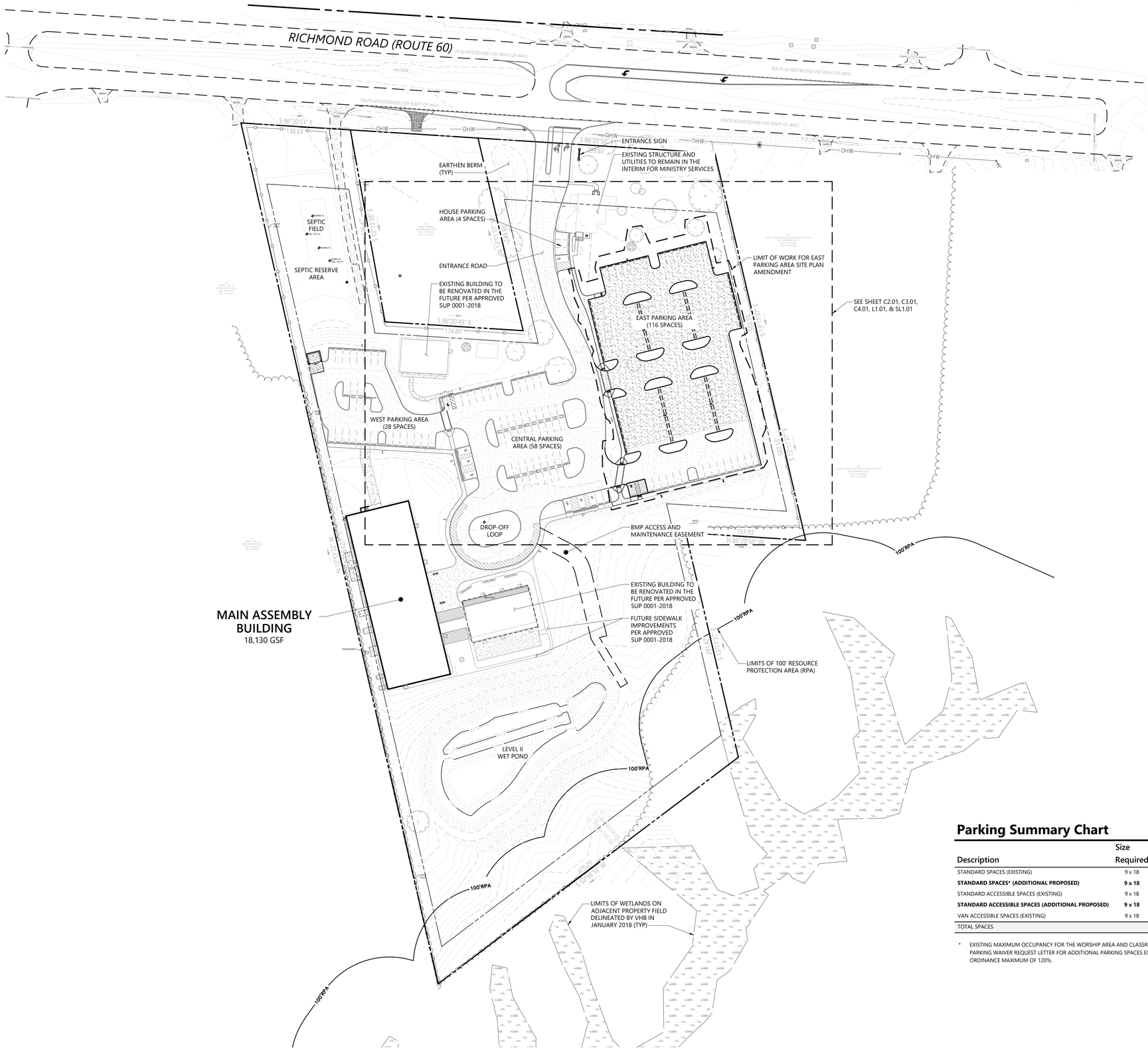


## Parking Summary Chart

| Description | Size Required | Size Provided | Spaces Provided |
|---|---|---|---|
| STANDARD SPACES (EXISTING) | 9 x 18 | 9 x 18 | 117 |
| **STANDARD SPACES* (ADDITIONAL PROPOSED)** | **9 x 18** | **9 x 18** | **81** |
| STANDARD ACCESSIBLE SPACES (EXISTING) | 9 x 18 | 9 x 18 | 4 |
| **STANDARD ACCESSIBLE SPACES (ADDITIONAL PROPOSED)** | **9 x 18** | **9 x 18** | **1** |
| VAN ACCESSIBLE SPACES (EXISTING) | 9 x 18 | 9 x 18 | 3 |
| TOTAL SPACES | | | 206 |

* EXISTING MAXIMUM OCCUPANCY FOR THE WORSHIP AREA AND CLASSROOMS IS 651 PERSONS. REFER TO PARKING WAIVER REQUEST LETTER FOR ADDITIONAL PARKING SPACES EXCEEDING THE JCC ZONING ORDINANCE MAXIMUM OF 120%.

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NOTE:
ALL FUTURE IMPROVEMENTS WILL REQUIRE SITE PLAN AMENDMENT.

## Legend

- APPROXIMATE WETLANDS PER VHB DELINEATION IN JANUARY 2018
- PROPOSED GRAVEL
- EXISTING GRAVEL
- EXISTING CONCRETE WALK
- PROPOSED CONCRETE WALK
- EXISTING BRICK WALK

0 30 60 120 Feet

# LifePointe Christian Church East Parking Area

**8841 Richmond Road**
**Toano, Virginia**

| No. | Revision | Date | Appvd. |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Designed by: KAM
Checked by: SMT
Issued for: Approval
Date: March 21, 2023

Drawing Title
**Overall Site Plan**

SP-23-0024 (Drawing Number)

COMMONWEALTH OF VIRGINIA
ANTHONY J. LOUBIER
Lic. No. 054250
03/21/2023
PROFESSIONAL ENGINEER

C1.04

Sheet 5 of 14

Project Number
34370.04

Saved Tuesday, March 21, 2023 9:33:22 AM KMCNINCH Plotted Wednesday, March 22, 2023 8:57:16 AM Kathleen McNinch

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## Demolition Notes

1. ARBORIST SHALL BE ON SITE DURING ANY WORK IN CRITICAL ROOT ZONE.
2. TREES TO BE RELOCATE SHALL BE INSPECTED FOR QUALITY AND HEALTH BY ARBORIST BEFORE AND AFTER RELOCATION.
3. CONTRACTOR SHALL REPLACE RELOCATED TREES IN KIND IN CASE OF DAMAGE OR DEATH.

## Demolition Legend

- DENOTES TREE REMOVAL; REMOVE ENTIRE TREE, STUMP AND STRUCTURAL ROOTS
- DENOTES REMOVAL OF ABOVE AND BELOW GROUND FEATURES
- DENOTES LIMITS OF WORK
- TREE PROTECTION FENCING

0 10 20 40 Feet

# LifePointe Christian Church East Parking Area

**8841 Richmond Road**
**Toano, Virginia**

| No. | Revision | Date | Appvd. |
|---|---|---|---|

Designed by SMT | Checked by AJL

Issued for: Approval

Date: March 21, 2023

Drawing Title
**Demolition and Erosion and Sediment Control Plan**

SP-23-0024 (Drawing Number)

COMMONWEALTH OF VIRGINIA
ANTHONY J. LOUBIER
Lic. No. 054250
03/21/2023
PROFESSIONAL ENGINEER

**C2.01**

Sheet 6 of 14

Project Number: 34370.04

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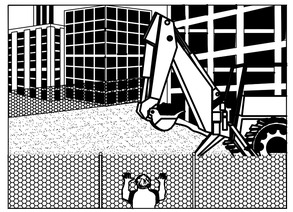
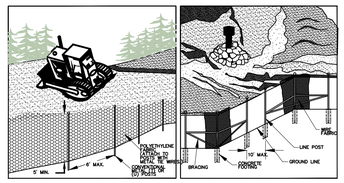


Perspective View



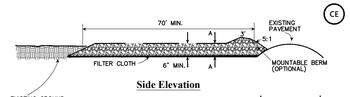

Perspective View
Plastic Fence

Perspective View
Metal Fence

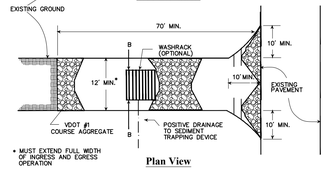
## A Safety Fence 6/08

N.T.S. Source: Virginia Erosion and Sediment Control Handbook Plate 3.01-1

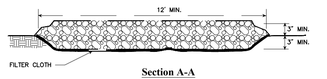
CE



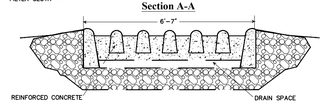

Side Elevation




Plan View




Section A-A

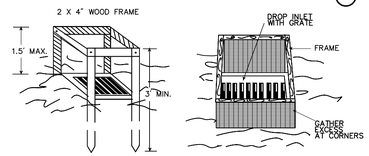



Section B-B

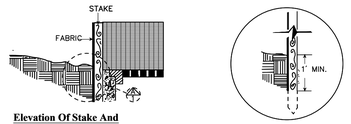
## D Stone Construction Entrance 6/08

N.T.S. Source: Virginia Erosion and Sediment Control Handbook Plate 3.02-1

IP




Perspective Views




Elevation Of Stake And Fabric Orientation




Detail A

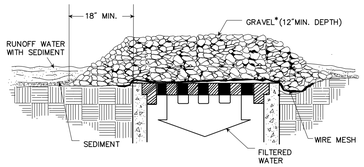
Specific Application

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OR OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

## G Silt Fence Drop Inlet Protection 6/08

N.T.S. Source: Virginia Erosion and Sediment Control Handbook Plate 3.07-1

IP




Specific Application

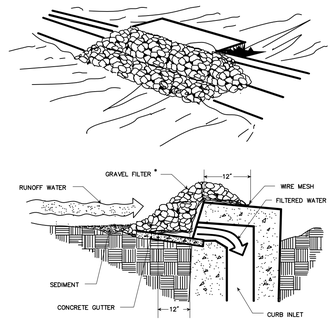
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

* GRAVEL SHALL BE VDOT #3, #357 OR #5 COARSE AGGREGATE.

## J Gravel and Wire Mesh Drop Inlet Sediment Filter 6/08

N.T.S. Source: Virginia Erosion and Sediment Control Handbook Plate 3.07-2

IP




Specific Application

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

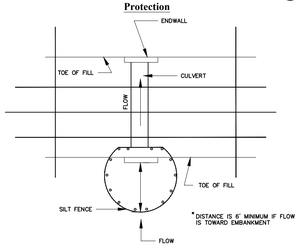
* GRAVEL SHALL BE VDOT #3, #357 OR 5 COARSE AGGREGATE.

## L Gravel Curb Inlet Sediment Filter 6/08

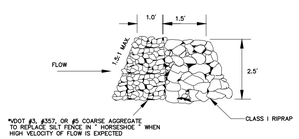
N.T.S. Source: Virginia Erosion and Sediment Control Handbook Plate 3.07-6

CIP

Silt Fence Culvert Inlet Protection




*Optional Stone Combination

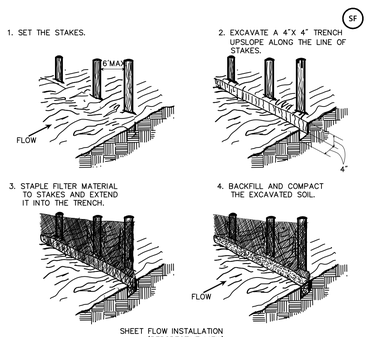


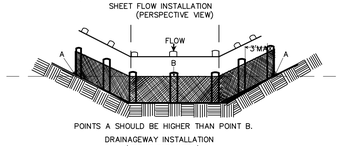

*VDOT #3, #357, OR #5 COARSE AGGREGATE TO REPLACE SILT FENCE IN " HORSESHOE " WHEN HIGH VELOCITY OF FLOW IS EXPECTED

## B Silt Fence Culvert Inlet Protection 6/08

N.T.S. Source: Virginia Erosion and Sediment Control Handbook Plate 3.08-1

SF

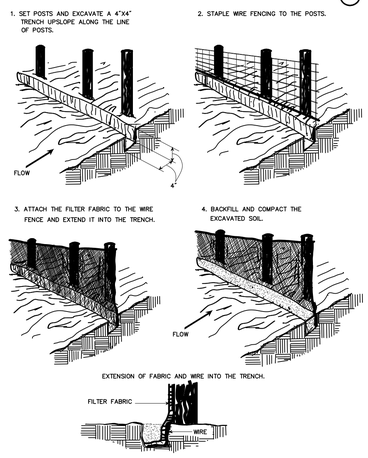



## E Construction of a Silt Fence (Without Wire Support) 6/08

N.T.S. Source: Virginia Erosion and Sediment Control Handbook Plate 3.05-2

SSF




## H Construction of a Silt Fence (With Wire Support) 6/08

N.T.S. Source: Virginia Erosion and Sediment Control Handbook Plate 3.05-1

PS

**TABLE 3.32-D**
**SITE SPECIFIC SEEDING MIXTURES FOR COASTAL PLAIN AREA**

| | Total Lbs. Per Acre |
|---|---|
| Minimum Care Lawn | |
| –Commercial or Residential | |
| –Kentucky 31 or Turf–Type Tall Fescue | 175–200 lbs. |
| or | |
| –Common Bermudagrass ** | 95 lbs. |
| High–Maintenance Lawn | |
| –Kentucky 31 or Turf–Type Tall Fescue | 200–500 lbs. |
| or | |
| –Hybrid Bermudagrass (seed) ** | 40 lbs. (unhulled) 30 lbs. (hulled) |
| –Hybrid Bermudagrass (by other vegetative establishment method, see Std. & Spec. 3.34) | |
| General Slope (3:1 or Less) | |
| –Kentucky 31 Fescue | 128 lbs. |
| –Red Top Grass | 2 lbs. |
| –Seasonal Nurse Crop* | 20 lbs. |
| | 150 lbs. |
| Low Maintenance Slope (Steeper than 3:1) | |
| –Kentucky 31 Tall Fescue | 95–108 lbs. |
| –Common Bermudagrass ** | 0–15 lbs. |
| –Red Top Grass | 2 lbs. |
| –Seasonal Nurse Crop* | 20 lbs. |
| –Sericea Lespedeza ** | 20 lbs. |
| | 150 lbs. |

* Use seasonal nurse crop in accordance with seeding dates as stated below:

| | |
|---|---|
| February, March through April | Annual Rye |
| May 1st through August | Foxtail Millet |
| September, October through November 15th | Annual Rye |
| November 16th through January | Winter Rye |

** May through October, use hulled seed. All other seeding periods, use unhulled seed. Weeping Lovegrass may be added to any slope or low–maintenance mix during warmer seeding periods; add 10–20 lbs./acre in mixes.

## K Permanent Seeding Specifications 6/08

N.T.S. Source: Virginia Erosion and Sediment Control Handbook Plate 3.32-D

TS

**TABLE 3.31-B**

**ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS**

**"QUICK REFERENCE FOR ALL REGIONS"**

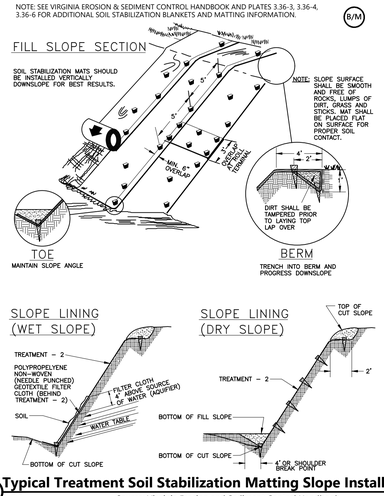
| Planting Dates | Species | Rate (lbs./acre) |
|---|---|---|
| Sept. 1 – Feb. 15 | 50/50 Mix of Annual Ryegrass (Lolium muti–florum) & Cereal (Winter) Rye (Secale cereale) | 50 – 100 |
| Feb. 16 – Apr. 30 | Annual Ryegrass (Lolium muti–florum) | 60 – 100 |
| May 1 – Aug. 31 | German Millet (Setaria italica) | 50 |

Note: Contractor shall coordinate all temporary seeding with owner's representative.

## M Temporary Seeding Specifications 6/08

N.T.S. Source: Virginia Erosion and Sediment Control Handbook PL 3.31-B

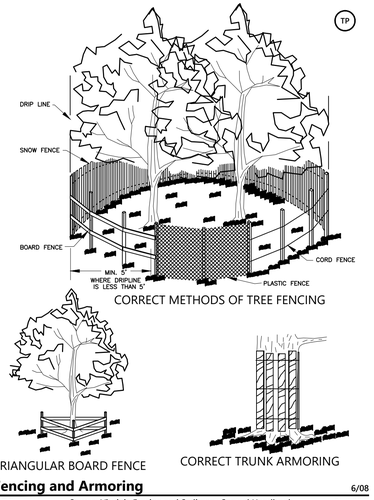
B/M




## C Typical Treatment Soil Stabilization Matting Slope Installation 6/08

N.T.S. Source: Virginia Erosion and Sediment Control Handbook PL 3.36.5

TP




## F Fencing and Armoring 6/08

N.T.S. Source: Virginia Erosion and Sediment Control Handbook PL 3.38.2

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# LifePointe Christian Church East Parking Area

8841 Richmond Road
Toano, Virginia

| No. | Revision | Date | Appvd. |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Designed by KAM | Checked by SMT

Issued for: Approval

Date: March 21, 2023

Drawing Title: Erosion and Sediment Control Details

SP-23-0024 (Drawing Number)

COMMONWEALTH OF VIRGINIA
ANTHONY J. LOUBIER
Lic. No. 054250
03/21/2023
PROFESSIONAL ENGINEER

C2.02

Sheet 7 of 14

Project Number: 34370.04

Saved Tuesday, March 21, 2023 9:36:09 AM KMCNINCH Plotted Wednesday, March 22, 2023 8:59:46 AM Kathleen McNinch

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NOTES:
1. LAYOUT OF THE PROPOSED SITE IMPROVEMENTS WILL REQUIRE THE ASSISTANCE OF A REGISTERED SURVEYOR, USING AN ELECTRONIC FILE BASED ON A SURVEY FILE COORDINATE SYSTEM, TO ESTABLISH THE REQUIRED FIELD DATA AND CONTROLS PRIOR TO CONSTRUCTION.

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N/F
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PIN: 1110100028

N/F
DAVID J. LEHMAN TRUSTEE & LAVONNE W. LEHMAN
8831 RICHMOND ROAD
INST. #110015894
PIN: 11101000308

2-STORY WOOD FRAME HOUSE

METAL FRAME GARAGE

F.F.E.=101.76'

METAL SHED

100' CCC BUFFER

LIMIT OF WORK (TYP)

TREE PROTECTION FENCING (TYP)

50' RADIUS FROM WELL

PROPERTY LINE

15' SIDE YARD SETBACK

LIGHT POLE (TYP)

EDGE OF PAVEMENT (TYP)

CONCRETE PARKING BUMPER (TYP)

PARKING STRIPES SHOWN FOR CLARITY ONLY

CONCRETE SIDEWALK (TYP)

CG-2 CONCRETE CURB (TYP)

CG-6 CONCRETE CURB AND GUTTER (TYP)

GRAVEL PAVEMENT (TYP)

CG-12 CURB RAMP

EXISTING GRAVEL PAVING (TYP)

EXISTING ASPHALT PAVING

EXISTING PARKING ISLAND

EXISTING CONCRETE BUMPER (TYP)

EXISTING CURB

DETECTABLE WARNING (TYP)

R7-8 SIGN

WOOD FENCE

35' REAR YARD SETBACK

## Legend

- TRUNCATED DOME DETECTABLE WARNING STRIP
- CONCRETE SIDEWALK
- GRAVEL PAVEMENT
- ASPHALT PAVEMENT
- (#) INDICATES NUMBER OF PARKING SPACES
- [#] INDICATES TOTAL SPACES FOR EACH PARKING AREA; (WEST, CENTRAL, EAST)

0 10 20 40 Feet

# LifePointe Christian Church East Parking Area

8841 Richmond Road
Toano, Virginia

| No. | Revision | Date | Appvd. |
|---|---|---|---|
| | | | |

Designed by KAM | Checked by SMT

Issued for: Approval

Date: March 21, 2023

Drawing Title: Layout and Materials Plan

SP-23-0024 (Drawing Number)

COMMONWEALTH OF VIRGINIA
ANTHONY J. LOUBIER
Lic. No. 054250
03/21/2023
PROFESSIONAL ENGINEER

C3.01

Sheet 8 of 14

Project Number: 34370.04

Saved Tuesday, March 21, 2023 4:52:19 PM KMCNINCH Plotted Wednesday, March 22, 2023 9:01:14 AM Kathleen McNinch

\\vhb.com\gbl\proj\Williamsburg\34370.04 LifePt_ParkingSP_Amend\cad\ld\Planset\34370.04-GD.dwg

Saved Tuesday, March 21, 2023 9:42:28 AM KMCNINCH Plotted Wednesday, March 22, 2023 9:03:24 AM Kathleen McNinch

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351 McLaws Circle
Suite 3
Williamsburg, VA 23185
757.220.0500

0 10 20 40 Feet

# LifePointe Christian Church East Parking Area

8841 Richmond Road
Toano, Virginia

| No. | Revision | Date | Appvd. |
|---|---|---|---|

Designed by KAM | Checked by SMT

Issued for Approval | Date March 21, 2023

Drawing Title
## Grading and Drainage Plan

SP-23-0024 Drawing Number

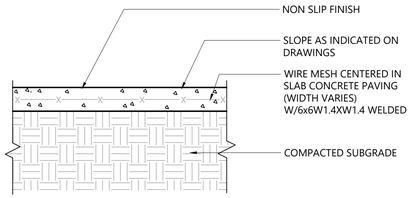
C4.01

Sheet 9 of 14

Project Number 34370.04

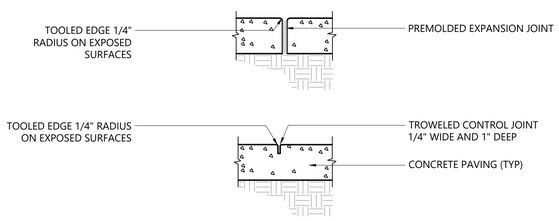
COMMONWEALTH OF VIRGINIA
ANTHONY J. LOUBIER
Lic. No. 054250
03/21/2023
PROFESSIONAL ENGINEER

\\vhb.com\gbl\proj\Williamsburg\34370.04 LifePt_ParkingSP_Amend\cad\d\Planset\34370.04-DT.dwg



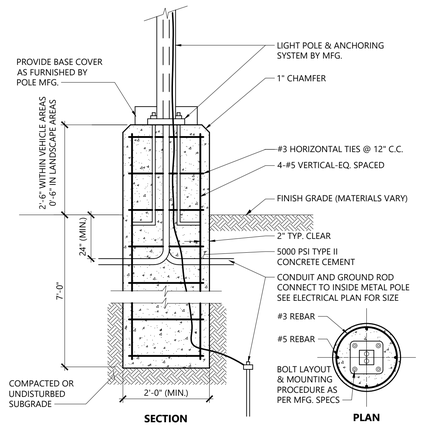

**NOTES:**
1. SEE TYPICAL EXPANSION AND CONTROL JOINT DETAIL THIS SHEET.
2. COORDINATE EXPANSION AND CONTROL JOINTS SPACING WITH CURB JOINTS.

## A 4" CONCRETE PAVING
Scale: 1" = 1'-0" Source: VHB




NOTES:
1. PROVIDE CONTROL JOINTS AT INTERVALS EQUAL TO THE WIDTH OF THE WALKWAY UNLESS OTHERWISE NOTED.SAW CUTTING IS NOT PERMITTED.
2. EXPANSION JOINTS SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 3 TIMES THE WIDTH OF THE WALK, AND AT JUNCTION POINTS OF CURBS AND ENTRANCES, AND ON BOTH SIDES OF ALL WALKWAY SECTIONS CONTAINING UTILITIES, ADJACENT TO WALLS OR OTHER FIXED OBJECTS. PREMOLDED, ½" JOINT FILLER SHALL BE USED EXTENDING FROM THE BOTTOM OF THE SLAB TO ½" OF ITS TOP SURFACE.
3. AS SOON AS CONCRETE WILL NOT SLUMP, FACE FORMS ARE TO BE REMOVED, IRREGULARITIES REMOVED, APPLY INDICATED FINISH AND LIQUID MEMBRANE SEAL OR OTHER APPROVED CURING MEDIUM APPLIED.
4. THE CONTRACTOR SHALL PREVENT THE TEMPERATURE AT THE SURFACE OF THE CONCRETE FORM FALLING BELOW 40 F DURING THE FIRST 72 HOURS IMMEDIATELY FOLLOWING CONCRETE PLACEMENT. PROTECTIVE MATERIAL SHALL BE LEFT IN PLACE FOR ADDITIONAL 48 HOURS IF FREEZING AIR TEMPERATURES ARE EXPECTED TO CONTINUE.
5. COORDINATE CONTROL JOINTS WITH ADJACENT CONCRETE PAVING.
6. EDGING TOOL SHALL BE SUBMITTED AND APPROVED BY OWNER'S REPRESENTATIVE.

## B CONCRETE JOINT DETAILS
Scale: 1" = 1'-0" Source: VHB

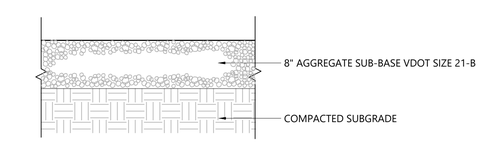



**NOTES**

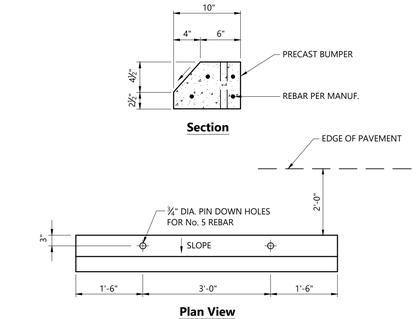
LIGHT POLE FOUNDATION DESIGN IS SUBJECT TO CHANGE BASED ON FINAL POLE AND FIXTURE SELECTION AND GEOTECHNICAL SITE INVESTIGATION.

## C Light Pole Foundation Detail
N.T.S. Source: VHB REV LD_310

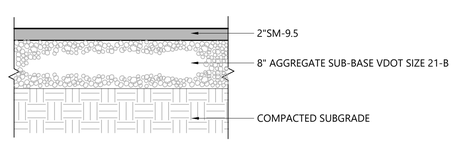
1/16



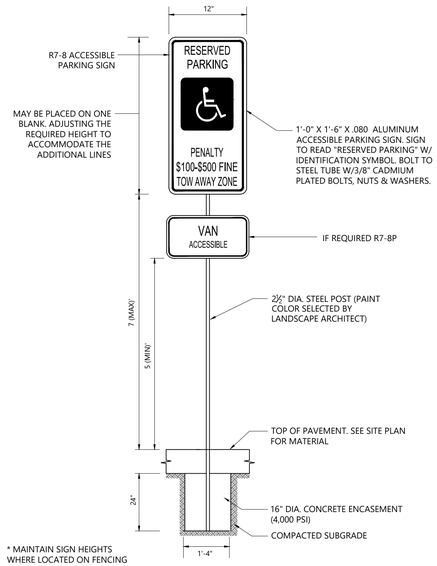

## D GRAVEL PAVEMENT
Scale: 1" = 1'-0" Source: VHB




## E CONCRETE BUMPER
N.T.S. Source: VHB

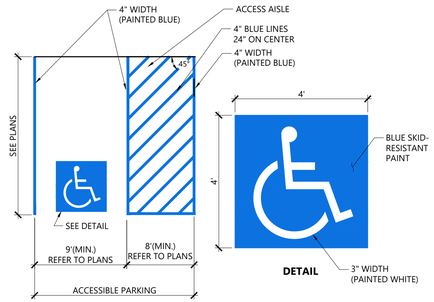



## F LIGHT DUTY ASPHALT PAVEMENT
Scale: 1" = 1'-0" Source: VHB




* MAINTAIN SIGN HEIGHTS WHERE LOCATED ON FENCING

## G ACCESSIBLE PARKING SIGN (R7-8 & R7-8P)
N.T.S. Source: VHB




**NOTES**

1. ALL DIMENSIONS TO EDGES OF 4" PAVEMENT STRIPING.
2. 9' STALL WIDTH REFERS TO 9' CLEAR BETWEEN INSIDE EDGES OF PAVEMENT MARKINGS.
3. ALL SLOPES THROUGHOUT THE ACCESSIBLE PARKING AND AISLE AREAS SHALL NOT EXCEED 1.75%.

## H ACCESSIBLE PARKING SPACE
N.T.S. Source: VHB

vhb.com
vhb
351 McLaws Circle
Suite 3
Williamsburg, VA 23185
757.220.0500

# LifePointe Christian Church East Parking Area

8841 Richmond Road
Toano, Virginia

| No. | Revision | Date | Appvd. |
|---|---|---|---|

Designed by KAM Checked by SMT

Issued for Approval

Date March 21, 2023

Drawing Title
**Site Details**

SP-23-0024 Drawing Number

COMMONWEALTH OF VIRGINIA
ANTHONY J. LOUBIER
Lic. No. 054250
03/21/2023
PROFESSIONAL ENGINEER

C5.01

Sheet 10 of 14

Project Number 34370.04

Saved Tuesday, March 21, 2023 9:44:47 AM KMCNINCH Plotted Wednesday, March 22, 2023 9:03:41 AM Kathleen McNinch

## GENERAL NOTES

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL BELOW GRADE AND ABOVE GROUND UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
2. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
3. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS GRAPHICALLY SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLANT LIST AND PLANT LABELS PRIOR TO BIDDING.
4. ALL DISTURBED AREAS NOT OTHERWISE NOTED ON CONTRACT DOCUMENTS SHALL BE SEEDED WITH PERMANENT SEED MIX AS SPECIFIED.
5. CONTRACTOR SHALL RE-ESTABLISH GRASS LAWN IN AREAS IMPACTED BY CONSTRUCTION.

## TREE PROTECTION

1. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TREE PROTECTION FENCE. ERECT FENCE AS SHOWN ON PLANS PRIOR TO BRINGING EQUIPMENT OR MATERIALS ON SITE OR STARTING CONSTRUCTION.
2. CONTRACTOR SHALL NOT OPERATE VEHICLES WITHIN THE TREE PROTECTION AREA. CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS, OR DISPOSE OF ANY WASTE MATERIALS, WITHIN THE TREE PROTECTION AREA.
3. DAMAGE TO EXISTING TREES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY A CERTIFIED ARBORIST AT THE CONTRACTOR'S EXPENSE.

**RATE: 6 LBS/1000 SF**
**SOWING DATES: 4/1-5/15 OR 8/15-11-15**
**EQUAL PARTS BLEND OF THREE VARIETIES FROM TALL FESCUE LIST BELOW**
**NTEP VA Recommended Tall Fescue Varieties (90-100% on a weight basis)**
**4th Millennium SRP (U43), Amity (CCR2), Traverse 2 SRP (W45), Raptor III (ZW-44), Rebounder (PICK- W43), Titanium 2LS (PPG-TF-152), Avenger II (PPG-TF-156), Technique (RZ2), Reflection (U45), Fayette (IS-TF-291), Supersonic (PPG-TF-170), Maestro (T31), Hemi, Rockwell (LTP-TWUU), Thor (PPG-TF-157), Paramount (PPG-TF-137), Temple (DZ1), Black Tail (PPG-TF-150), Firewall (PSG-WE1), Valkyrie LS (PPG-TF-172), GTO (BURL TF-2), Crossfire 4 (IS-TF-310-SEL)**

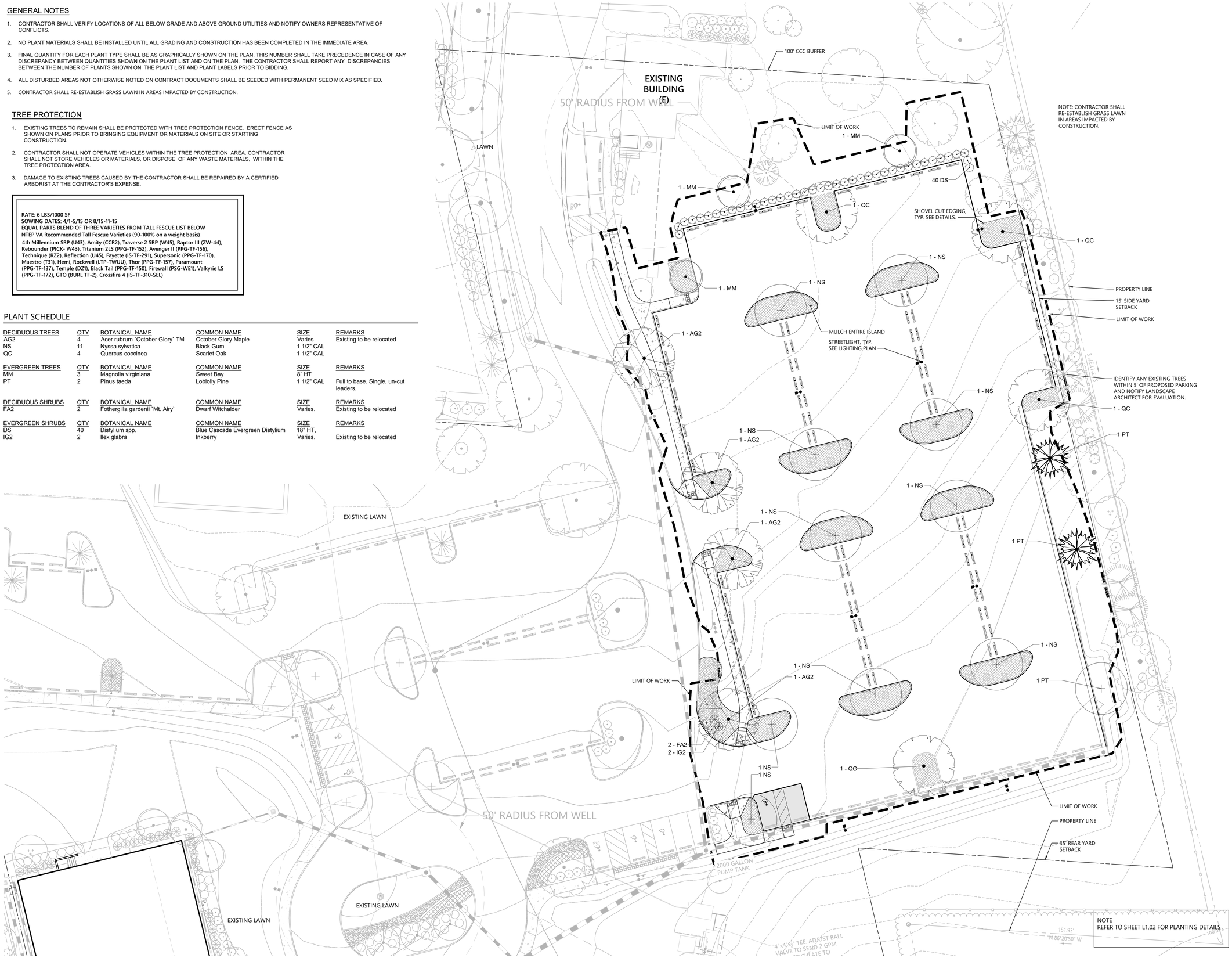
## PLANT SCHEDULE

| DECIDUOUS TREES | QTY | BOTANICAL NAME | COMMON NAME | SIZE | REMARKS |
|---|---|---|---|---|---|
| AG2 | 4 | Acer rubrum `October Glory` TM | October Glory Maple | Varies | Existing to be relocated |
| NS | 11 | Nyssa sylvatica | Black Gum | 1 1/2" CAL | |
| QC | 4 | Quercus coccinea | Scarlet Oak | 1 1/2" CAL | |

| EVERGREEN TREES | QTY | BOTANICAL NAME | COMMON NAME | SIZE | REMARKS |
|---|---|---|---|---|---|
| MM | 3 | Magnolia virginiana | Sweet Bay | 8` HT | |
| PT | 2 | Pinus taeda | Loblolly Pine | 1 1/2" CAL | Full to base. Single, un-cut leaders. |

| DECIDUOUS SHRUBS | QTY | BOTANICAL NAME | COMMON NAME | SIZE | REMARKS |
|---|---|---|---|---|---|
| FA2 | 2 | Fothergilla gardenii `Mt. Airy` | Dwarf Witchalder | Varies. | Existing to be relocated |

| EVERGREEN SHRUBS | QTY | BOTANICAL NAME | COMMON NAME | SIZE | REMARKS |
|---|---|---|---|---|---|
| DS | 40 | Distylium spp. | Blue Cascade Evergreen Distylium | 18" HT, | |
| IG2 | 2 | Ilex glabra | Inkberry | Varies. | Existing to be relocated |





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# LifePointe Christian Church East Parking Area

8841 Richmond Road
Toano, Virginia

| No. | Revision | Date | Appvd. |
|---|---|---|---|

Designed by KAM | Checked by SMT
Issued for Approval | Date March 21, 2023

Drawing Title: Planting Plan

SP-23-0024 (Drawing Number)

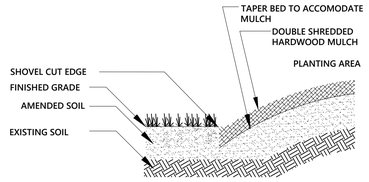
COMMONWEALTH OF VIRGINIA
STEPHEN M. TALLEY
Lic. No. 001983
03/21/2023
LANDSCAPE ARCHITECT

L1.01

Sheet 11 of 14

Project Number 34370.04

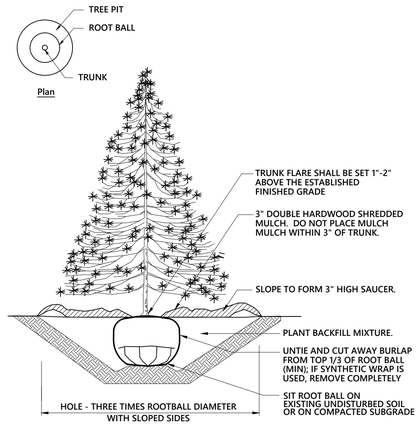

Saved Tuesday, March 21, 2023 4:50:42 PM KMCNINCH Plotted Wednesday, March 22, 2023 9:05:02 AM Kathleen McNinch




## A Shovel Cut Edging Detail 7/15

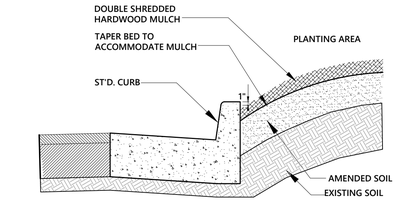
N.T.S. Source: VHB

| LIFEPOINTE CHRISTIAN CHURCH | | | |
|---|---|---|---|
| **8851 Richmond Road, James City County, Virginia** | | | |
| **LANDSCAPE CALCULATIONS DIVISION 4.- LANDSCAPING** | | | |
| **Sec. 24-87-88. - Administration and Tree protection and criteria for tree removal** | | | |
| **(b) Narrative** | **Required** | **Provided** | **Conclusion** |
| | Narrative shall accompany the plan explaining that only trees necessary for the development of the site are proposed to be removed. | Existing mature trees shall be preserved except for one tree impacted by the proposed parking lot. Tree protection fence will be located and detailed on the E & S plan sheets. | Meets Requirement. Phased clearing is not applicable. |
| **Sec. 24-90. - General standards** | | | |
| **(b) Native Plants** | **Required** | **Provided** | **Conclusion** |
| | The ordinance strongly encourages the planting of trees native to eastern Virginia and/or adaptable to the coastal conditions and climate of James City County. | Native trees and adapted cultivars of native trees will be specified where possible. | Meets Requirement |
| **Sec. 24-92. - Size requirements for new plantings** | | | |
| **Table: Size Requirements for New Plantings** | **Required** | **Provided** | **Conclusion** |
| | Trees- Deciduous Shade Tree (D)- min. 1.5" Cal. Evergreen Tree (E)- min. 8' Ht./ 1.25" Cal + 8' Ht. Ornamental Tree (D) or (E)- min. 8' Ht./ 1.25" Cal + 8' Ht. Shrub 18" if evergreen, 22" if deciduous | Proposed trees will meet or exceed minimum size requirements | Meets Requirement |
| **Sec. 24-96-98. - General landscape area standards** | | | |
| **Quantity & Diversity Requirements** | **Required** | **Provided** | **Conclusion** |
| CASE NO. SUP-0001-2018.LIFEPOINTE CHRISTIAN CHURCH RESOLUTION 5. Landscaping "shall match the landscaping described in the text on the Master Plan." Sec 24-96 Quantity and Diversity Requirements are applicable to landscape areas other than parking lots and planting adjacent to buildings. Sec. 24-98 Landscape area along right-of-way (1) Community Character Corridors are to have an average width of 50 feet. Square Footage Calculation: Square Footage = Applicable Average Width Requirement x Length of Right-of-Way Frontage Sec. 24-100 - Screening- transitional screening Type 1 Landscape Area: 1 large deciduous tree + 2 evergreen trees + 1 deciduous understory (ornamental) tree + 12 medium-sized shrubs. Type 2 Landscape Area: 4 deciduous understory (ornamental) trees + 12 large shrubs. | **Master Plan Landscape Buffer Summary: Enhanced landscape Area Type 1:** 15' wide buffer with wood split rail fence and planted with 1 large deciduous tree + 2 evergreen trees + 1 deciduous understory trees + 12 medium shrubs/ 100 LF. | **Buffer installed in Phase 1. No additonal buffer required.** | Meets Requirement |
| | **Master Plan Landscape Buffer Summary: Enhanced Landscape Area Type 2:** planted with 4 deciduous understory (ornamental) trees and 12 large shrubs per 100 LF of buffer. | **Buffer installed in Phase 1. No additonal buffer required.** | Meets Requirement |
| | **Master Plan Landscape Buffer Summary: 25' Landscaped Berm** is to be planted in accordance with Enhanced Landscape Area Type 1. Planted with 1 large deciduous tree + 2 evergreen trees + 1 deciduous understory trees + 12 medium shrubs/ 100 LF. | **Buffer installed in Phase 1. No additonal buffer required.** | Meets Requirement |
| **Sec. 24-100 - Screening-** | Structural aspects are to be screened from public view and adjoining property | Screening was provided in Phase 1. | Meets Requirement |
| **(d) Stormwater management facilities** | | | |
| **Sec. 24-99 - Off-street parking lot landscaping (Additional Parking Area; Revision 5)** | | | |
| **(1) General Requirements for Parking Lot Landscaping** | **Required** | **Provided** | **Conclusion** |
| | All parking lots shall be visually screened from public road rights-of-way by evergreen plantings or berms that create a screen a minimum of three feet in height. | Evergreen plantings with minimum 3' height. | Meets Requirement |
| **Percentage of Landscape Area** | Minimum 10% of surface area of parking including drives and circulation areas. Proposed Parking = 34913 x 0.10 = 3,491 SF. | Provided Planting area for Proposed Parking = **3,795 SF.** | |
| | Quantity Requirements- 1 tree + 2 shrubs per 5 parking spaces; 99 Proposed Parking spaces / 5 = 20 trees + 40 shrubs | 20 new trees + 40 new shrubs | |
| | Size and mixture: min. 25% Trees are to be evergreen (achieve min. 40' Ht); min 50% shrubs are to be evergreen | 5 trees are evergreen and 15 Trees are deciduous; 40 shrubs are evergreen and 0 shrubs are deciduous. | Meets Requirement |
| | Maximum spacing of trees is 99' apart throughout the parking lot. | Maximum spacing = 99' | |




## B Evergreen Tree Planting 7/15

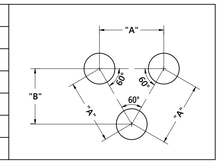
N.T.S. Source: VHB




## E Curb-Bed Edging Detail 7/15

N.T.S. Source: VHB

| PLANT SPACING ("A") | ROW SPACING ("B") |
|---|---|
| 6 IN. O.C. | 5 IN. O.C. |
| 8 IN. O.C. | 7 IN. O.C. |
| 10 IN. O.C. | 8-1/2 IN. O.C. |
| 12 IN. O.C. | 10-1/2 IN. O.C. |
| 15 IN. O.C. | 13 IN. O.C. |
| 18 IN. O.C. | 16 IN. O.C. |

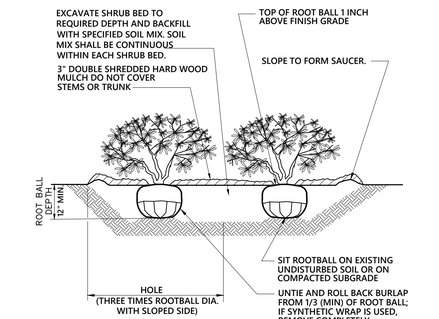






## C Perennial Plug Planting 7/15

N.T.S. Source: VHB

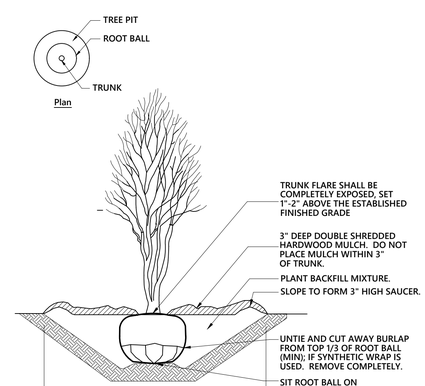



**Notes:**

1. LOOSEN ROOTS AT THE OUTER EDGE OF ROOTBALL OF CONTAINER GROWN SHRUBS.

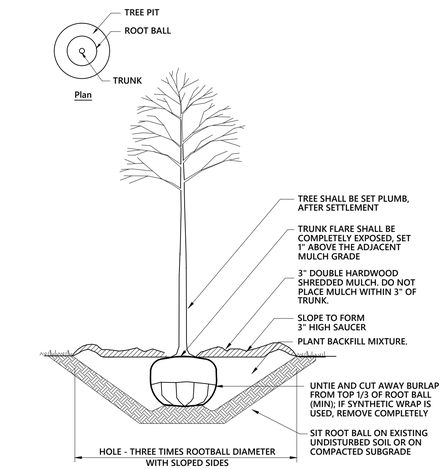
## F Shrub Bed Planting 7/15

N.T.S. Source: VHB REV




## D Multistem Tree Planting 7/15

N.T.S. Source: VHB




## G Tree Planting 7/15

N.T.S. Source: VHB


vhb.com

351 McLaws Circle
Suite 3
Williamsburg, VA 23185
757.220.0500


# LifePointe Christian Church East Parking Area

8841 Richmond Road
Toano, Virginia

| No. | Revision | Date | Appvd. |
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Designed by KAM Checked by SMT

Issued for Approval Date March 21, 2023

Drawing Title: Landscape Calculations & Details

SP-23-0024 Drawing Number

COMMONWEALTH OF VIRGINIA
STEPHEN M. TALLEY
Lic. No. 001983
03/21/2023
LANDSCAPE ARCHITECT

L1.02

Sheet 12 of 14

Project Number 34370.04


Saved Tuesday, March 21, 2023 4:50:42 PM KMCNINCH Plotted Wednesday, March 22, 2023 9:05:07 AM Kathleen McNinch

| Calculation Summary | | | | | | | |
|---|---|---|---|---|---|---|---|
| Label | CalcType | Units | Avg | Max | Min | Avg/Min | Max/Min |
| ALL CALCS AT GRADE | Illuminance | Fc | 0.74 | 4.4 | 0.0 | N.A. | N.A. |
| PROPERTY LINE | Illuminance | Fc | 0.00 | 0.0 | 0.0 | N.A. | N.A. |
| PARKING AND DRIVE | Illuminance | Fc | 1.55 | 4.4 | 0.2 | 7.75 | 22.00 |

| Luminaire Schedule | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Symbol | Qty | Label | Arrangement | Description | Mounting Height | LLD | LLF | Arr. Lum. Lumens | Arr. Watts |
| | 3 | A | Single | MRM-LED-07L-SIL-FT-40-70CRI-SINGLE | 20' | 1.000 | 0.960 | 7562 | 48 |
| | 1 | A1 | Single | MRM-LED-07L-SIL-FT-40-70CRI-IL-SNGLE | 20' | 1.000 | 0.960 | 4852 | 48 |
| | 2 | C | D-180 | MRM-LED-07L-SIL-SW-40-70CRI-D180 | 20' | 1.000 | 0.960 | 14584 | 96 |
| | 1 | C1 | D-180 | MRM-LED-07L-SIL-SW-40-70CRI-D180 | 18' | 1.000 | 0.960 | 14584 | 96 |
| | 1 | C2 | Single | MRM-LED-07L-SIL-SW-40-70CRI-SINGLE | 18' | 1.000 | 0.960 | 7292 | 48 |

100' CCC BUFFER
2-STORY WOOD FRAME HOUSE
LIMITS OF WORK (TYP)
N/F
HEIDI E. JENKINS
8801 RICHMOND ROAD
INST. #130027226
PIN: 1110100028
N/F
DAVID J. LEHMAN TRUSTEE & LAVONNE W. LEHMAN
8831 RICHMOND ROAD
INST. #110015894
PIN: 11101000308
A
A1
C1
C
C2
15' SIDE YARD SETBACK
PROPERTY LINE (TYP)
PROPOSED LIGHT POLE: 18' FIXTURE MOUNTING HEIGHT (TYP)
C5.01
EXISTING LIGHT (TYP)
35' REAR YARD SETBACK
METAL FRAME GARAGE
F.F.E.=101.76'
METAL SHED
174.80'
151.93'
N 88°50'00" W
100' RPA

0 10 20 40 Feet

## Legend

- PROPOSED LIGHT FIXTURE
- PROPOSED FOOT-CANDLE

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351 McLaws Circle
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757.220.0500

# LifePointe Christian Church East Parking Area

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Designed by KAM | Checked by SMT

Issued for: Approval

Date: March 21, 2023

Drawing Title: Site Lighting and Photometric Plan

SP-23-0024 (Drawing Number)

COMMONWEALTH OF VIRGINIA
ANTHONY J. LOUBIER
Lic. No. 054250
PROFESSIONAL ENGINEER
03/21/2023

SL1.01

Sheet 13 of 14

Project Number: 34370.04

Saved Wednesday, March 22, 2023 8:50:34 AM KMCNINCH Plotted Wednesday, March 22, 2023 9:06:53 AM Kathleen McNinch

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Shakespeare
A valmont BRAND

19845 US Highway 76
Newberry, SC 29108
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# STRAIGHT SQUARE COMPOSITE POLES

COMPOSITE TUFF-POLE®

Straight Square Composite Poles offer a unique solution to today's demanding requirements for lighting standards that enhance design. Their contemporary look is favored by architects, engineers and planners.

## BENEFITS

- Ease of installation
- Lightweight for easy handling
- Will not rust, rot or corrode
- Dent resistant
- Non-conductive

| 4" SQUARE SS4A AND SS4B SERIES | 5" SQUARE SS5A AND SS5B SERIES |
|---|---|
| (Anchor Base and Direct Burial) | (Anchor Base and Direct Burial) |
| 4" x 4" Straight Square | 5" x 5" Straight Square |
| Mounting Heights to 25' | Mounting Heights to 30' |
| Smooth Finish | Smooth Finish |
| Multiple Color Options | Multiple Color Options |
| Tenon Top or Capped for Side Drilling | Tenon Top or Capped for Side Drilling |
| Anchor Bolts Included (5/8" x 21" x 3") | Anchor Bolts Included (3/4" x 30" x 3") |
| Base Cover Included | Base Cover Included |
| 8" - 12.5" Bolt Circle | 10" - 12.5" Bolt Circle |

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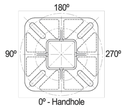
| SS4: Straight Square Composite Pole 4" Profile | | | | | | Anchor Base (SS4A-) | | Direct Burial (SS4B-) | |
|---|---|---|---|---|---|---|---|---|---|
| Anchor Base (A) or Direct Burial (B) | Mounting Height (ft) | Effective Projected Area (sq ft) 90 MPH | 100 MPH | 110 MPH | 120 MPH | Anchor Base Bolt Hole Circle (in) | Anchor Base Weight (lbs) | Direct Burial Shaft Length (ft) | Direct Burial Weight (lbs) |
| SS4_ - 10 | 10' | 21.5 | 17.0 | 13.7 | 11.1 | 8" - 12.5" | 27# | 13' | 28# |
| SS4_ - 15 | 15' | 12.9 | 9.8 | 7.5 | 5.7 | 8" - 12.5" | 37# | 19' | 40# |
| SS4_ - 20 | 20' | 7.4 | 5.2 | 3.5 | 2.3 | 8" - 12.5" | 47# | 25' | 55# |
| SS4_ - 25 | 25' | 3.8 | 2.1 | 0.8 | - | 8" - 12.5" | 57# | 30' | 70# |
| **SS5: Straight Square Composite Pole 5" Profile** | | | | | | **Anchor Base (SS5A-)** | | **Direct Burial (SS5B-)** | |
| SS5_ - 15 | 15' | 28.7 | 22.1 | 17.3 | 13.6 | 10" - 12.5" | 99# | 19' | 97# |
| SS5_ - 20 | 20' | 17.5 | 12.7 | 9.2 | 6.5 | 10" - 12.5" | 125# | 25' | 123# |
| SS5_ - 25 | 25' | 10.2 | 6.5 | 3.8 | 1.7 | 10" - 12.5" | 150# | 30' | 154# |
| SS5_ - 30 | 30' | 5.0 | 2.0 | - | - | 10" - 12.5" | 176# | 35' | 180# |

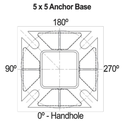
*Product improvements may be made without prior notice.*

- Reduced Lead Time (higher quantities may require longer lead time, consult factory)
- 30' Poles require shipment by flatbed and will ship first available flatbed.
- Freight Allowed $2,000.00, Prepaid & add under $2,000.00 SS4A and SS5A - Include anchor bolts and base cover
- SS4A and SS5A - Pre-Shipped Anchor Bolts are prepaid and add
- Standard colors are Black, Bronze, and Grey
- Standard tenon sizes are 2 3/8" and 3"
- For cut down poles use full length pole price (Ex. SS5A-22 use SS5A-25 price)
- Contact factory for pricing regarding options or modifications
- Advise Size, Location and Orientation of Drilling Requirements (Ref. Drawing)

**4 x 4 Anchor Base**




**5 x 5 Anchor Base**




**SS 5 A - 20 BZ 3T**

- **SS** — STRAIGHT SQUARE
- **5** — SERIES: 5 = 5" Square; 4 = 4" Square
- **A** — A = Anchor Base; B = Direct Burial
- **20** — MOUNTING HEIGHT: 10 = 10' *; 15 = 15'; 20 = 20'; 25 = 25'; 30 = 30' **. *Available in 4" only. **Available in 5" only
- **BZ** — COLOR: BK = Black; GR = Grey; BZ = Bronze. *Other Colors Available for Additional Charges
- **3T** — POLE TOP CONFIGURATION: 2T = 2 3/8" x 3 3/4" Tenon; 3T = 3" x 3 3/4" Tenon; 19 = 1 @ 90 Degree; 29 = 2 @ 90 Degree; 39 = 3 @ 90 Degree; 49 = 4 @ 90 Degree; 28 = 2 @ 180 Degree; ND = Capped (No Drilling)

TAPSHEET_2 02/18

Mirada Medium - MRM
Outdoor LED Area Light

## Features & Specifications (Cont.)

### Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
- Designed to mount to square or round poles.
- Luminaire is proudly manufactured in the U.S.of U.S. and imported parts.
- IP66 rated luminaire protects integral components from harsh environments.
- 3G rated for ANSI C136.31 high vibration applications
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 30 lbs in carton.

### Controls

**Wireless Controls System**

To make this fixture AirLink ready, simply order one of the following options:

a. The integrated Wireless Lighting Controller: ALSC or ALSCH (see ordering guide) as the controls option, or

b. Integrated Wireless Controller option (above) with integrated motion sensor: ALSCS (ordering guide for mounting heights) or

c. The 7-Pin Photoelectric Control Receptacle: CR7P as the controls option; and either the 5-Pin or 7-Pin Twist Lock Controller: ALSC UNV TLS or ALSC UNV TL7 as an accessory

To see how the components of AirLink system work together, reference the diagram in the controls section of this specsheet. For more information on our AirLink products, visit our website: www.lsi-airlink.com/airlink-synapse/

**Stand-Alone Controls**

- The integral passive infrared motion sensor (IMS) activates switching of luminaire light levels (see the controls section for more details).
- The 7-pin ANSI C136.41-2013 photocontrol receptacle option (CR7P) is available for twist lock photocontrols or wireless control modules.
- The Button Type Photocells (PCI) are capable of switching luminaires ON/OFF in response to the amount of available daylight.

### Installation

- A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment for installing/servicing.
- Included terminal block provides quick and easy on-site wiring.
- Utilizes LSI's traditional 3" drill pattern for easy fastening of LSI products. (See drawing on page 1)

### Warranty

- LSI LED Fixtures carry a 5-year warranty.

### Listings

- Listed to UL 1598 and UL 8750.
- RoHS Compliant.
- American Recovery and Reinvestment Act Funding Compliant.
- IDA compliant; with 3000K color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable For wet Locations.
- IP66 rated Luminaire, IP66 rated optical chamber.
- 3G rated for ANSI C136.31 high vibration applications
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.



## Performance

**ELECTRICAL DATA (AMPS)***

| Lumens | Watts | 120V | 208V | 240V | 277V | 347V | 480V |
|---|---|---|---|---|---|---|---|
| 7L | 53 | 0.4A | 0.3A | 0.2A | 0.2A | 0.2A | 0.1A |
| 9L | 69 | 0.6A | 0.3A | 0.3A | 0.2A | 0.2A | 0.1A |
| 12L | 94 | 0.8A | 0.5A | 0.4A | 0.3A | 0.3A | 0.2A |
| 18L | 150 | 1.2A | 0.7A | 0.6A | 0.5A | 0.4A | 0.3A |
| 24L | 187 | 1.6A | 0.9A | 0.8A | 0.7A | 0.5A | 0.4A |
| 30L | 247 | 2.1A | 1.2A | 1.0A | 0.9A | 0.7A | 0.5A |
| 36L | 317 | 2.6A | 1.5A | 1.3A | 1.1A | 0.9A | 0.7A |
| 42L | 390 | 3.2A | 1.9A | 1.6A | 1.4A | 1.1A | 0.8A |

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%

**ELECTRICAL DATA - PHOSPHOR CONVERTED AMBER (AMPS)***

| Lumens | Watts | 120V | 208V | 240V | 277V | 347V | 480V |
|---|---|---|---|---|---|---|---|
| 9L | 74.3 | 0.6A | 0.4A | 0.3A | 0.3A | 0.2A | 0.2A |
| 12L | 102.9 | 0.9A | 0.5A | 0.4A | 0.4A | 0.3A | 0.2A |

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%

**RECOMMENDED LUMEN MAINTENANCE1(24-42L)**

| Ambient | Initial2 | 25 hr2 | 50 hr2 | 75 hr2 | 100 hr2 |
|---|---|---|---|---|---|
| 0-40 C | 100% | 100% | 97% | 94% | 92% |

**RECOMMENDED LUMEN MAINTENANCE1(7-18L)**

| Ambient | Initial2 | 25 hr2 | 50 hr2 | 75 hr2 | 100 hr2 |
|---|---|---|---|---|---|
| 0-50 C | 100% | 96% | 92% | 88% | 84% |

1- Lumen maintenance values at 25C are calculated per TM-21 based on LM-80 data and in-situ testing.
2- In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times the IESNA LM-80-08 total test duration for the device under testing.
3- In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times the IESNA LM-80-08 total test duration for the device under testing.

**DELIVERED LUMENS***

| Lumen Package | Distribution | Phosphor Converted Amber (Peak 610nm) Delivered Lumens | Efficacy | BUG Rating | Wattage |
|---|---|---|---|---|---|
| 9L | 2 | 5848 | 80 | B2-U0-G2 | 74 |
| | 2 - IL | 3644 | 50 | B0-U0-G1 | |
| | 3 | 6018 | 82 | B1-U0-G2 | |
| | 3 - IL | 4468 | 61 | B0-U0-G2 | |
| | 5W | 5471 | 74 | B3-U0-G1 | |
| | FT | 5801 | 79 | B1-U0-G2 | |
| | FT - IL | 3649 | 50 | B0-U0-G1 | |
| | FTA | 5924 | 81 | B1-U0-G1 | |
| 12L | FTA - IL | 4243 | 58 | B1-U0-G1 | 102 |
| | 2 | 7530 | 74 | B2-U0-G2 | |
| | 2 - IL | 4692 | 46 | B0-U0-G1 | |
| | 3 | 7749 | 76 | B1-U0-G2 | |
| | 3 - IL | 5753 | 57 | B0-U0-G2 | |
| | 5W | 7045 | 69 | B3-U0-G2 | |
| | FT | 7470 | 73 | B2-U0-G2 | |
| | FT - IL | 4699 | 46 | B0-U0-G2 | |
| | FTA | 7628 | 75 | B2-U0-G2 | |
| | FTA - IL | 5464 | 54 | B1-U0-G1 | |

*LED Chips are frequently updated therefore values are nominal

**LUMINAIRE EPA CHART - MRM**

| Tilt Degree | 0° | 30° | 40° | Tilt Degree | 0° | 30° | 40° |
|---|---|---|---|---|---|---|---|
| Single | 0.5 | 1.5 | 1.9 | T90° | 1.0 | 2.5 | 2.8 |
| D180° | 1.0 | 1.5 | 1.9 | TN120° | 1.0 | 3.3 | 3.9 |
| D90° | 0.8 | 1.9 | 2.3 | Q90° | 1.0 | 2.5 | 2.8 |

Specifications and dimensions subject to change without notice.

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Mirada Medium - MRM
Outdoor LED Area Light

**DELIVERED LUMENS***

| Lumen Package | Distribution | CRI | 2700K CCT Delivered Lumens | Efficacy | BUG Rating | 3000K CCT Delivered Lumens | Efficacy | BUG Rating | 4000K CCT Delivered Lumens | Efficacy | BUG Rating | 5000K CCT Delivered Lumens | Efficacy | BUG Rating | Wattage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7L | 2 | 70 | 6550 | 124 | B2-U0-G1 | 6711 | 127 | B2-U0-G1 | 7208 | 137 | B2-U0-G2 | 7596 | 144 | B2-U0-G2 | 53 |
| | 2 - IL | 70 | 4068 | 77 | B0-U0-G1 | 4167 | 79 | B0-U0-G1 | 4476 | 85 | B0-U0-G1 | 4717 | 89 | B0-U0-G1 | |
| | 3 | 70 | 6724 | 127 | B1-U0-G2 | 6889 | 130 | B1-U0-G2 | 7400 | 140 | B1-U0-G2 | 7798 | 148 | B1-U0-G2 | |
| | 3 - IL | 70 | 4929 | 93 | B0-U0-G2 | 5050 | 96 | B0-U0-G2 | 5424 | 103 | B0-U0-G2 | 5716 | 108 | B0-U0-G2 | |
| | 5W | 70 | 6400 | 121 | B3-U0-G1 | 6557 | 124 | B3-U0-G1 | 7043 | 133 | B3-U0-G2 | 7422 | 141 | B3-U0-G2 | |
| | FT | 70 | 6540 | 124 | B1-U0-G2 | 6701 | 127 | B1-U0-G2 | 7197 | 136 | B1-U0-G2 | 7584 | 144 | B2-U0-G2 | |
| | FT - IL | 70 | 4231 | 80 | B0-U0-G2 | 4334 | 82 | B0-U0-G2 | 4656 | 88 | B0-U0-G2 | 4906 | 93 | B0-U0-G2 | |
| | FTA | 70 | 6636 | 126 | B1-U0-G1 | 6799 | 129 | B2-U0-G1 | 7303 | 138 | B2-U0-G1 | 7696 | 146 | B2-U0-G1 | |
| | FTA - IL | 70 | 4864 | 92 | B1-U0-G1 | 4984 | 94 | B1-U0-G1 | 5353 | 101 | B1-U0-G1 | 5641 | 107 | B1-U0-G1 | |
| 9L | 2 | 70 | 8349 | 122 | B2-U0-G2 | 8576 | 125 | B2-U0-G2 | 9396 | 137 | B2-U0-G2 | 9784 | 143 | B2-U0-G2 | 69 |
| | 2 IL | 70 | 5185 | 76 | B0-U0-G1 | 5326 | 78 | B0-U0-G1 | 5835 | 85 | B0-U0-G1 | 6076 | 89 | B0-U0-G1 | |
| | 3 | 70 | 8571 | 125 | B1-U0-G2 | 8804 | 129 | B1-U0-G2 | 9645 | 141 | B2-U0-G2 | 10044 | 147 | B2-U0-G2 | |
| | 3 IL | 70 | 6283 | 92 | B0-U0-G2 | 6454 | 94 | B0-U0-G2 | 7071 | 103 | B0-U0-G2 | 7363 | 107 | B0-U0-G2 | |
| | 5W | 70 | 8158 | 119 | B3-U0-G2 | 8380 | 122 | B3-U0-G2 | 9181 | 134 | B3-U0-G2 | 9560 | 140 | B4-U0-G2 | |
| | FT | 70 | 8337 | 122 | B2-U0-G2 | 8563 | 125 | B2-U0-G2 | 9382 | 137 | B2-U0-G2 | 9769 | 143 | B2-U0-G2 | |
| | FT IL | 70 | 5393 | 79 | B0-U0-G2 | 5540 | 81 | B0-U0-G2 | 6069 | 89 | B0-U0-G2 | 6320 | 92 | B0-U0-G2 | |
| | FTA | 70 | 8459 | 123 | B2-U0-G2 | 8689 | 127 | B2-U0-G2 | 9520 | 139 | B2-U0-G2 | 9913 | 145 | B2-U0-G2 | |
| | FTA IL | 70 | 6200 | 91 | B1-U0-G1 | 6369 | 93 | B1-U0-G1 | 6978 | 102 | B1-U0-G1 | 7266 | 106 | B1-U0-G1 | |
| 12L | 2 | 70 | 11157 | 119 | B2-U0-G2 | 11461 | 122 | B2-U0-G2 | 12556 | 134 | B3-U0-G2 | 13079 | 139 | B3-U0-G2 | 94 |
| | 2 IL | 70 | 6929 | 74 | B1-U0-G1 | 7117 | 76 | B1-U0-G2 | 7798 | 83 | B1-U0-G2 | 8119 | 86 | B1-U0-G2 | |
| | 3 | 70 | 11454 | 122 | B2-U0-G2 | 11766 | 125 | B2-U0-G2 | 12890 | 137 | B2-U0-G2 | 13423 | 143 | B2-U0-G2 | |
| | 3 IL | 70 | 8396 | 89 | B0-U0-G2 | 8625 | 92 | B0-U0-G2 | 9449 | 101 | B0-U0-G2 | 9839 | 105 | B0-U0-G2 | |
| | 5W | 70 | 10902 | 116 | B4-U0-G2 | 11199 | 119 | B4-U0-G2 | 12269 | 131 | B4-U0-G2 | 12775 | 136 | B4-U0-G2 | |
| | FT | 70 | 11141 | 119 | B2-U0-G2 | 11444 | 122 | B2-U0-G2 | 12538 | 133 | B3-U0-G3 | 13055 | 139 | B3-U0-G3 | |
| | FT IL | 70 | 7207 | 77 | B0-U0-G2 | 7403 | 79 | B0-U0-G2 | 8110 | 86 | B0-U0-G2 | 8445 | 90 | B0-U0-G2 | |
| | FTA | 70 | 11304 | 120 | B2-U0-G2 | 11612 | 124 | B2-U0-G2 | 12722 | 135 | B2-U0-G2 | 13247 | 141 | B3-U0-G2 | |
| | FTA IL | 70 | 8286 | 88 | B1-U0-G1 | 8511 | 91 | B1-U0-G1 | 9325 | 99 | B1-U0-G1 | 9710 | 103 | B1-U0-G1 | |
| 18L | 2 | 70 | 16714 | 112 | B3-U0-G3 | 17168 | 115 | B3-U0-G3 | 18809 | 126 | B3-U0-G3 | 19586 | 131 | B3-U0-G3 | 150 |
| | 2 IL | 70 | 10379 | 69 | B1-U0-G2 | 10662 | 71 | B1-U0-G2 | 11681 | 78 | B1-U0-G2 | 12165 | 81 | B1-U0-G2 | |
| | 3 | 70 | 17158 | 114 | B2-U0-G3 | 17625 | 118 | B2-U0-G3 | 19310 | 129 | B3-U0-G3 | 20107 | 134 | B3-U0-G3 | |
| | 3 IL | 70 | 12578 | 84 | B1-U0-G2 | 12924 | 86 | B1-U0-G2 | 14155 | 95 | B1-U0-G2 | 14739 | 99 | B1-U0-G3 | |
| | 5W | 70 | 16331 | 109 | B4-U0-G2 | 16776 | 112 | B4-U0-G2 | 18379 | 123 | B4-U0-G2 | 19138 | 128 | B5-U0-G3 | |
| | FT | 70 | 16689 | 112 | B3-U0-G3 | 17143 | 115 | B3-U0-G3 | 18781 | 126 | B3-U0-G4 | 19557 | 131 | B3-U0-G4 | |
| | FT IL | 70 | 10795 | 72 | B1-U0-G2 | 11089 | 74 | B1-U0-G2 | 12149 | 81 | B1-U0-G3 | 12651 | 85 | B1-U0-G3 | |
| | FTA | 70 | 16934 | 113 | B3-U0-G3 | 17395 | 116 | B3-U0-G3 | 19058 | 127 | B3-U0-G3 | 19844 | 133 | B3-U0-G3 | |
| | FTA IL | 70 | 12412 | 83 | B1-U0-G2 | 12750 | 85 | B1-U0-G2 | 13969 | 93 | B1-U0-G2 | 14546 | 97 | B1-U0-G2 | |
| 24L | 2 | 70 | 20880 | 112 | B3-U0-G3 | 22707 | 121 | B4-U0-G3 | 24776 | 130 | B4-U0-G3 | 24784 | 133 | B4-U0-G3 | 187 |
| | 2 IL | 70 | 13100 | 70 | B1-U0-G2 | 14243 | 76 | B1-U0-G2 | 15231 | 81 | B1-U0-G2 | 15550 | 83 | B1-U0-G2 | |
| | 3 | 70 | 21739 | 116 | B3-U0-G3 | 23636 | 126 | B3-U0-G4 | 25275 | 135 | B3-U0-G4 | 25854 | 138 | B3-U0-G4 | |
| | 3 IL | 70 | 15828 | 85 | B1-U0-G3 | 17209 | 92 | B1-U0-G3 | 18403 | 98 | B1-U0-G4 | 18788 | 100 | B1-U0-G4 | |
| | 5W | 70 | 20632 | 110 | B5-U0-G3 | 22432 | 120 | B5-U0-G3 | 23988 | 128 | B5-U0-G3 | 24496 | 131 | B5-U0-G3 | |
| | FT | 70 | 21611 | 116 | B3-U0-G4 | 23496 | 126 | B3-U0-G4 | 25126 | 134 | B3-U0-G4 | 25652 | 137 | B3-U0-G4 | |
| | FT IL | 70 | 13692 | 73 | B1-U0-G3 | 14886 | 80 | B1-U0-G3 | 15919 | 85 | B1-U0-G3 | 16252 | 87 | B1-U0-G3 | |
| | FTA | 70 | 21496 | 115 | B3-U0-G3 | 23371 | 125 | B3-U0-G3 | 24992 | 134 | B3-U0-G3 | 25515 | 136 | B3-U0-G3 | |
| | FTA IL | 70 | 15226 | 81 | B1-U0-G2 | 16555 | 89 | B1-U0-G2 | 17703 | 95 | B2-U0-G2 | 18073 | 97 | B2-U0-G2 | |
| 30L | 2 | 70 | 28581 | 116 | B4-U0-G3 | 29900 | 117 | B4-U0-G3 | 30905 | 125 | B4-U0-G3 | 31551 | 128 | B4-U0-G3 | 247 |
| | 2 IL | 70 | 16677 | 68 | B1-U0-G2 | 18132 | 73 | B1-U0-G2 | 19390 | 79 | B1-U0-G2 | 19796 | 80 | B1-U0-G2 | |
| | 3 | 70 | 27875 | 112 | B3-U0-G4 | 30089 | 122 | B3-U0-G4 | 32176 | 130 | B3-U0-G4 | 32850 | 133 | B3-U0-G4 | |
| | 3 IL | 70 | 20150 | 81 | B1-U0-G4 | 21908 | 89 | B1-U0-G4 | 23428 | 95 | B1-U0-G4 | 23918 | 97 | B1-U0-G4 | |
| | 5W | 70 | 26266 | 106 | B5-U0-G3 | 28557 | 116 | B5-U0-G3 | 30538 | 124 | B5-U0-G4 | 31177 | 126 | B5-U0-G4 | |
| | FT | 70 | 27512 | 111 | B3-U0-G4 | 29912 | 121 | B3-U0-G4 | 31987 | 130 | B3-U0-G4 | 32656 | 132 | B3-U0-G4 | |
| | FT IL | 70 | 17430 | 71 | B1-U0-G3 | 18951 | 77 | B1-U0-G4 | 20266 | 82 | B1-U0-G4 | 20690 | 84 | B1-U0-G4 | |
| | FTA | 70 | 27365 | 111 | B3-U0-G3 | 29737 | 120 | B4-U0-G3 | 31816 | 129 | B4-U0-G3 | 32482 | 132 | B4-U0-G3 | |
| | FTA IL | 70 | 19384 | 79 | B2-U0-G2 | 21075 | 85 | B2-U0-G2 | 22537 | 91 | B2-U0-G2 | 23008 | 93 | B2-U0-G2 | |
| 36L | 2 | 70 | 32214 | 102 | B4-U0-G3 | 35025 | 111 | B4-U0-G3 | 37454 | 118 | B4-U0-G3 | 38238 | 121 | B4-U0-G4 | 317 |
| | 2 IL | 70 | 20212 | 64 | B1-U0-G3 | 21975 | 69 | B1-U0-G3 | 23499 | 74 | B1-U0-G3 | 23991 | 76 | B1-U0-G4 | |
| | 3 | 70 | 33540 | 106 | B3-U0-G4 | 36466 | 115 | B3-U0-G5 | 38996 | 123 | B3-U0-G5 | 39812 | 126 | B3-U0-G5 | |
| | 3 IL | 70 | 24421 | 77 | B1-U0-G4 | 26551 | 84 | B1-U0-G4 | 28393 | 90 | B1-U0-G4 | 28987 | 92 | B1-U0-G5 | |
| | 5W | 70 | 31832 | 101 | B5-U0-G4 | 34609 | 109 | B5-U0-G4 | 37010 | 117 | B5-U0-G4 | 37785 | 119 | B5-U0-G4 | |
| | FT | 70 | 33342 | 105 | B3-U0-G5 | 36251 | 114 | B3-U0-G5 | 38766 | 122 | B4-U0-G5 | 39577 | 125 | B4-U0-G5 | |
| | FT IL | 70 | 21128 | 67 | B1-U0-G4 | 22968 | 73 | B1-U0-G4 | 24561 | 78 | B1-U0-G4 | 25075 | 79 | B1-U0-G4 | |
| | FTA | 70 | 33164 | 105 | B4-U0-G3 | 36058 | 114 | B4-U0-G4 | 38559 | 122 | B4-U0-G4 | 39366 | 124 | B4-U0-G3 | |
| | FTA IL | 70 | 23492 | 74 | B2-U0-G2 | 25541 | 81 | B2-U0-G2 | 27313 | 86 | B2-U0-G2 | 27885 | 88 | B2-U0-G2 | |
| 42L | 2 | 70 | 36785 | 94 | B4-U0-G4 | 39994 | 103 | B5-U0-G4 | 42768 | 110 | B5-U0-G4 | 43663 | 112 | B5-U0-G4 | 390 |
| | 2 IL | 70 | 23079 | 59 | B1-U0-G3 | 25093 | 64 | B2-U0-G3 | 26833 | 69 | B2-U0-G3 | 27396 | 70 | B2-U0-G3 | |
| | 3 | 70 | 38293 | 98 | B3-U0-G5 | 41640 | 107 | B4-U0-G5 | 44528 | 114 | B4-U0-G5 | 45460 | 117 | B4-U0-G5 | |
| | 3 IL | 70 | 27899 | 72 | B1-U0-G4 | 30319 | 78 | B1-U0-G5 | 32422 | 83 | B1-U0-G5 | 33100 | 85 | B1-U0-G5 | |
| | 5W | 70 | 36349 | 93 | B5-U0-G4 | 39520 | 101 | B5-U0-G4 | 42261 | 108 | B5-U0-G4 | 43145 | 111 | B5-U0-G4 | |
| | FT | 70 | 38073 | 98 | B4-U0-G5 | 41395 | 106 | B4-U0-G5 | 44266 | 114 | B4-U0-G5 | 45192 | 116 | B4-U0-G5 | |
| | FT IL | 70 | 24122 | 62 | B1-U0-G4 | 26226 | 67 | B1-U0-G4 | 28045 | 72 | B1-U0-G4 | 28632 | 73 | B1-U0-G4 | |
| | FTA | 70 | 37870 | 97 | B4-U0-G4 | 41174 | 106 | B4-U0-G4 | 44030 | 113 | B4-U0-G4 | 44991 | 115 | B4-U0-G4 | |
| | FTA IL | 70 | 26825 | 69 | B2-U0-G2 | 29165 | 75 | B2-U0-G2 | 31188 | 80 | B2-U0-G2 | 31841 | 82 | B2-U0-G2 | |

*LED Chips are frequently updated therefore values are nominal

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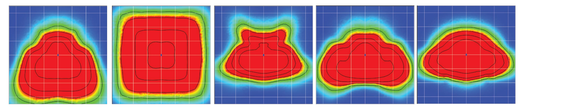
Mirada Medium - MRM
Outdoor LED Area Light

## Performance (Cont.)

All published luminaire photometric testing performed to IESNA LM-79 standards. ISO footcandle plots below demonstrate the Mirada (MRM) light patterns only. Not for total fixture output. For complete specifications and IES files, see website.




## Ordering Guide

TYPICAL ORDER EXAMPLE: **MRM LED 36L SIL FTA UNV DIM 50 70CRI ALSCS04 BRZ IL**

| Luminaire Prefix | Light Source | Lumen Package* | Light Output | Distribution | Orientation† | Voltage | Driver |
|---|---|---|---|---|---|---|---|
| MRM Mirada | LED | 7L - 7,000 lms<br>9L - 9,000 lms<br>12L - 12,000 lms<br>18L - 18,000 lms<br>24L - 24,000 lms<br>30L - 30,000 lms<br>36L - 36,000 lms<br>42L - 42,000 lms<br>*Consult factory for programmable wattages and lumen packages | SIL - Silicone | 2 - Type 2<br>3 - Type 3<br>SW - Type 5 Wide<br>FT - Forward Throw<br>FTA - Forward Throw Automotive | (blank) - standard<br>L - Optics rotated left 90<br>R - Optics rotated right 90 | UNV - Universal Voltage (120-277V)<br>HV - High Voltage (347-480V) | DIM - 0-10V Dimming (0-10%) |

| Color Temp | Color Rendering | Controls (Choose One) | Finish | Options |
|---|---|---|---|---|
| 50 - 5,000 CCT<br>40 - 4,000 CCT<br>30 - 3,000 CCT†<br>27 - 2,700 CCT†<br>AMB - Phosphor Converted Amber†,§ | 70CRI - 70 CRI | **(Blank)** - None<br>**Wireless Controls System**<br>ALSC - AirLink Synapse Control System †<br>ALSCH - AirLink Synapse Control System Host / Satellite †,§<br>ALSCS01 - AirLink Synapse Control System with 8-12' Motion Sensor †<br>ALSCHS01 - AirLink Synapse Control System Host / Satelite with 8-12' Motion Sensor †,§<br>ALSCS02 - AirLink Synapse Control System with 12-20' Motion Sensor†<br>ALSCHS02 - AirLink Synapse Control System Host / Satelite with 12-20' Motion Sensor †,§<br>ALSCS04 - AirLink Synapse Control System with 20-40' Motion Sensor †<br>ALSCHS04 - AirLink Synapse Control System Host / Satelite with 20-40' Motion Sensor †,§<br>**Stand-Alone Controls**<br>EXT - 0-10v Dimming (from external signal)<br>IMS08M1 - Integral Motion Sensor 8-12' 120-277V †,§<br>IMS08M2 - Integral Motion Sensor 12-20' 120-277V †,§<br>IMS08M4 - Integral Motion Sensor 20-40' 120-277V †,§<br>IMS08M10V - Integral Motion Sensor 8-12' 347-480V †,§,11<br>IMS08M20V - Integral Motion Sensor 12-20' 347-480V †,§,11<br>IMS08M40V - Integral Motion Sensor 20-40' 347-480V †,§,11<br>CR7P - 7 Pin Control Receptacle ANSI C136.41 †<br>**Button Type Photocells**<br>PCI120 - 120V<br>PCI208-277 - 208 -277V<br>PCI347 - 347V | BRZ - Bronze<br>BLK - Black<br>GPT - Graphite<br>MSV - Metallic Silver<br>WHT - White<br>PLP - Platinum Plus<br>SVG - Satin Verde Green | (Blank) - None<br>IL - Integral Louver HSS† |

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vhb.com

vhb

351 McLaws Circle
Suite 3
Williamsburg, VA 23185
757.220.0500

| Catalog # : | Project : |
|---|---|
| Prepared By : | Date : |

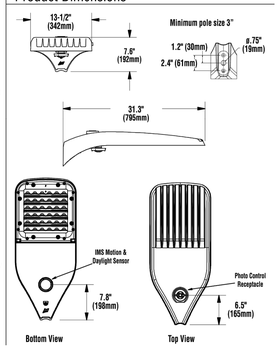
Mirada Medium - MRM
Outdoor LED Area Light

The Mirada's sleek design makes it perfectly-suited for architectural & commercial applications, while its cost-effective die-cast aluminum housing makes its acquisition cost very competitive. The Mirada offers high performance factory-rotatable silicone optics, 5 standard CCTs, 42,000+ delivered lumens, and is available with integral Airlink™ Wireless Controls.

IP66 · RoHS COMPLIANT · ARRA Funding Compliant · cULus LISTED · USA

Title 24 · IDA · DLC · DLC PREMIUM

## Product Dimensions




NOTE:

ALL NEW EXTERIOR LIGHTING, INCLUDING EXTERIOR BUILDING LIGHTING, SHALL RECEIVE RECESSED FIXTURES WITH NO LENS, BULB, OR GLOBE EXTENDING BELOW THE CASING.

# LifePointe Christian Church East Parking Area

8841 Richmond Road
Toano, Virginia

| No. | Revision | Date | Appvd. |
|---|---|---|---|
| | | | |

Designed by: KAM
Checked by: SMT

Issued for: Approval
Date: March 21, 2023

Drawing Title
**Site Lighting Product Information**

SP-23-0024
Drawing Number

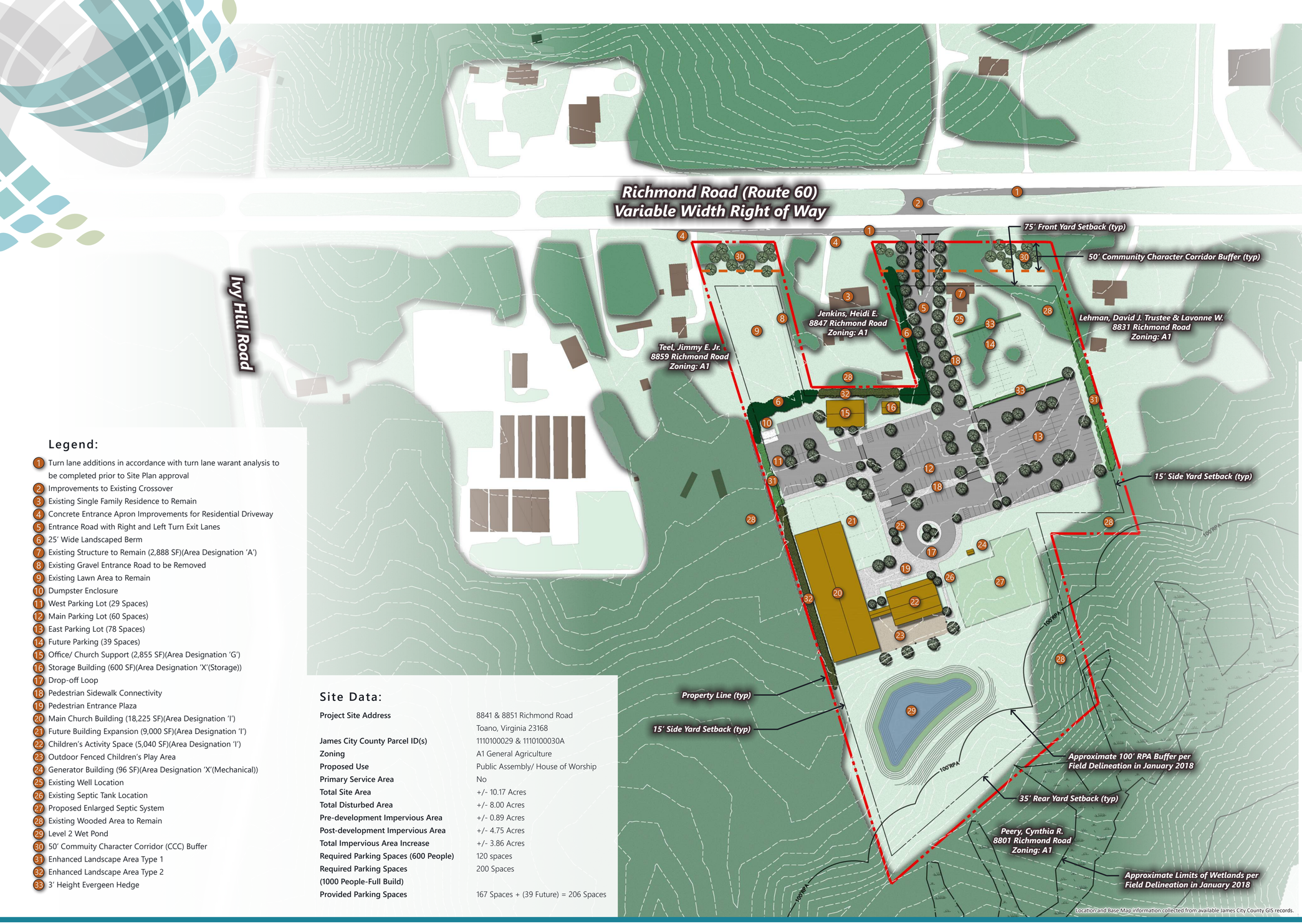
**SL1.02**

Sheet 14 of 14

Project Number
34370.04

COMMONWEALTH OF VIRGINIA
ANTHONY J. LOUBIER
Lic. No. 054250
09/21/2023
PROFESSIONAL ENGINEER

Saved Wednesday, March 22, 2023 8:50:34 AM, KMCNINCH Plotted Wednesday, March 22, 2023 9:07:00 AM Kathleen McNinch




## Legend:

1. Turn lane additions in accordance with turn lane warant analysis to be completed prior to Site Plan approval
2. Improvements to Existing Crossover
3. Existing Single Family Residence to Remain
4. Concrete Entrance Apron Improvements for Residential Driveway
5. Entrance Road with Right and Left Turn Exit Lanes
6. 25' Wide Landscaped Berm
7. Existing Structure to Remain (2,888 SF)(Area Designation 'A')
8. Existing Gravel Entrance Road to be Removed
9. Existing Lawn Area to Remain
10. Dumpster Enclosure
11. West Parking Lot (29 Spaces)
12. Main Parking Lot (60 Spaces)
13. East Parking Lot (78 Spaces)
14. Future Parking (39 Spaces)
15. Office/ Church Support (2,855 SF)(Area Designation 'G')
16. Storage Building (600 SF)(Area Designation 'X'(Storage))
17. Drop-off Loop
18. Pedestrian Sidewalk Connectivity
19. Pedestrian Entrance Plaza
20. Main Church Building (18,225 SF)(Area Designation 'I')
21. Future Building Expansion (9,000 SF)(Area Designation 'I')
22. Children's Activity Space (5,040 SF)(Area Designation 'I')
23. Outdoor Fenced Children's Play Area
24. Generator Building (96 SF)(Area Designation 'X'(Mechanical))
25. Existing Well Location
26. Existing Septic Tank Location
27. Proposed Enlarged Septic System
28. Existing Wooded Area to Remain
29. Level 2 Wet Pond
30. 50' Commuity Character Corridor (CCC) Buffer
31. Enhanced Landscape Area Type 1
32. Enhanced Landscape Area Type 2
33. 3' Height Evergeen Hedge

## Site Data:

| | |
|---|---|
| **Project Site Address** | 8841 & 8851 Richmond Road<br>Toano, Virginia 23168 |
| **James City County Parcel ID(s)** | 1110100029 & 1110100030A |
| **Zoning** | A1 General Agriculture |
| **Proposed Use** | Public Assembly/ House of Worship |
| **Primary Service Area** | No |
| **Total Site Area** | +/- 10.17 Acres |
| **Total Disturbed Area** | +/- 8.00 Acres |
| **Pre-development Impervious Area** | +/- 0.89 Acres |
| **Post-development Impervious Area** | +/- 4.75 Acres |
| **Total Impervious Area Increase** | +/- 3.86 Acres |
| **Required Parking Spaces (600 People)** | 120 spaces |
| **Required Parking Spaces (1000 People-Full Build)** | 200 Spaces |
| **Provided Parking Spaces** | 167 Spaces + (39 Future) = 206 Spaces |

## Landscape Buffers Summary

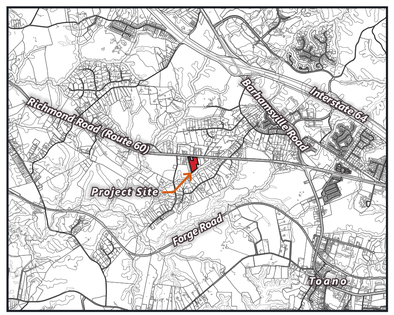
**Community Character Corridor (CCC) Buffer**
This wooded landscape treatment CCC buffer will retain existing mature trees and supplement the existing buffer with additional planting. The Community Character Corridor buffer will comply with the Board of Supervisors Adopted Policy for wooded Community Character Corridors.

**Enhanced Landscape Area Type 1**
This landscape area type is designed to buffer adjacent residential uses from proposed parking areas. A 15' wide buffer with a wood split rail fence and planted with 1 large deciduous tree, 2 evergreen trees, 1 deciduous understory tree and 12 medium-sized shrubs every 100 linear feet will be provided in these areas. The mixed evergreen and deciduous buffer approach will provide an aesthetic that strengthens the existing landscape character while still providing a visual screen between residential and parking uses. The proposed split rail fence will reinforce the rural landscape character of the site.

**Enhanced landscape Area Type 2**
This landscape area is designed to buffer adjacent residential uses from existing and proposed buildings on site. The landscape areas will be planted with 4 deciduous understory trees and 12 large shrubs every 100 linear feet.

**25' Landscaped Berm**
This landscape treatment consists of a 25' wide by 3' tall earthen berm with planting in accordance with "Enhanced Landscape Area Type 1" as described in this landscape buffers summary. This type of buffer will provide maximum visual screening from the adjacent residential property at 8847 Richmond Road.

**3' Height Evergreen Hedge**
This evergreen hedge is designed to screen the proposed parking area from the Public Right of Way. Plants will be installed at a minimum height of 24" and will be maintained at a height of at least 3' to screen the parking lot.




LOCATION MAP

SCALE IN MILES 0 0.5 1 N

SCALE IN FEET 0' 80' 160' N

# Master Plan

March 2018

351 McLaws Circle, Suite 3 | Williamsburg, Virginia 23185
Tel: 757.220.0500 | www.VHB.com

# LifePointe Christian Church

8841 & 8851 Richmond Road
Toano, Virginia 23168

## Thomas Wysong

**From:** Paul Holt
**Sent:** Tuesday, May 9, 2023 10:47 AM
**To:** Thomas Wysong
**Subject:** FW: [External]Re: LifePointe Waiver Parking Update

Please attach to the DRC staff report. Mr. Murdock will be at the meeting on the 24th as well.

---

**From:** Phillip Murdock <philm@lifepointechristian.net>
**Sent:** Monday, May 8, 2023 1:23 PM
**To:** Paul Holt <Paul.Holt@jamescitycountyva.gov>
**Cc:** BNice@davidnicebuilders.com; Scott Stevens <Scott.Stevens@jamescitycountyva.gov>
**Subject:** [External]Re: LifePointe Waiver Parking Update

Mr. Stevens and Mr. Holt,

I want to thank you again for your time this morning. Thank you for your attention to our needs on our church property.

I wanted to share with you some additional information that might be helpful for the DRC.

1. LifePointe currently averages more than 700 in attendance on Sunday mornings (spread between two services). This number has doubled in the last two years. We had 1400 in attendance for Easter this year.
2. Of that 700, we average more than 200 children of elementary age and below. Adequate parking is important for many reasons, one of which is the safety of little ones and/or families with strollers, who may be making their way through a congested parking lot.
3. We average 165 cars per service (two services each Sunday) and that number is steadily growing.
4. Additional parking also helps mitigate congestion in between services when people are leaving one service and arriving for the next. This is often when the parking lot is most congested. We anticipate adding a third service in 2024.
5. Currently, we have approximately 121 established parking spots.
6. The field (and other grassy locations) are currently used as overflow parking.

I hope this information and this slide is helpful. If you would like any additional information, please feel free to reach out.

Thanks,
Phillip

LIFEPOINTE CHRISTIAN CHURCH
TOANO, VA

**Average Sunday Morning Attendance**
700+ (two services)

**2023 Easter Attendance**
1400 (four services)

**Average Number of Children 10 yrs and Younger**
200

**Average Number of Cars Per Service**
165

**Current Number of Parking Spots**
121

**Current Campus Built In**
2021

**Projected Phase 2 Development**
3400 Sq Ft Expansion
Children's Space
2026

757.645.8017 - mobile

# RESOLUTION

## CASE NO. SUP-0001-2018. LIFEPOINTE CHRISTIAN CHURCH

WHEREAS, the Board of Supervisors of James City County, Virginia, has adopted by Ordinance specific land uses that shall be subjected to a Special Use Permit (SUP) process; and

WHEREAS, Ms. Victoria Mary Carmanica (the "Owner") owns property located at 8841 and 8851 Richmond Road, further identified as James City County Real Estate Tax Map Parcel Nos. 1110100029 and 1110100030A, respectively (together, the "Property"); and

WHEREAS, on behalf of the Owner, Mr. Gregory R. Davis, Esq. from Kaufman and Canoles representing LifePointe Christian Church, has applied for an SUP to allow a place of public assembly on the Property as shown on the exhibit titled "Master Plan LifePointe Christian Church" prepared by Vanasse Hangen Brustlin (VHB), dated March 2018; and

WHEREAS, a public hearing was advertised, adjoining property owners notified and a hearing conducted on Case No. SUP-0001-2018; and

WHEREAS, the Planning Commission, following its public hearing on March 7, 2018 recommended approval of the application by a vote of 7-0.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, after consideration of the factors in Section 24-9 of the James City County Code, does hereby approve the issuance of Case No. SUP-0001-2018 as described herein with the following conditions:

1. *Master Plan:* This SUP shall be valid for a place of public assembly (the "Project") located at 8841 and 8851 Richmond Road, further identified as James City County Real Estate Tax Map Nos. 1110100029 and 1110100030A, respectively (together, the "Property"). Development of the Project on the Property shall occur generally as shown on the exhibit drawn by VHB entitled, "Master Plan LifePointe Christian Church," dated March 2018, (the "Master Plan"), with any deviations considered pursuant to Section 24-23(a)(2) of the James City County Code (the "County Code"), as amended.

2. *Architectural Elevations/Design:* Any future building expansion shown on the Master Plan shall use a design and materials that are substantially in accord with the existing structures on the Property as shown in Attachment A of the document entitled "Natural Resources Inventory" prepared by VHB and dated January 22, 2017. Such determination shall be made by the Director of Planning prior to site plan approval for the expansion.

3. *Archaeological:* A Phase I Archaeological Study for the Property, excluding the existing structures, shall be submitted to and approved by the Director of Planning prior to land disturbance approval for the Project. A treatment plan shall be submitted to and approved by the Director of Planning for all sites in the Phase I study that are

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recommended for a Phase II evaluation and/or identified as being eligible for inclusion on the National Register of Historic Places. If a Phase II study is undertaken, such a study shall be approved by the Director of Planning and a treatment plan for said sites shall be submitted to, and approved by, the Director of Planning for sites that are determined to be eligible for inclusion on the National Register of Historic Places and/or those sites that require a Phase III study. If in the Phase III study, a site is determined eligible for nomination to the National Register of Historic Places and said site is to be preserved in place, the treatment plan shall include nomination of the site to the National Register of Historic Places. If a Phase III study is undertaken for said sites, such studies shall be approved by the Director of Planning prior to preliminary approval within the study areas. All Phase I, Phase II, and Phase III studies shall meet the Virginia Department of Historic Resources' Guidelines for Preparing Archaeological Resource Management Reports and the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation, as applicable, and shall be conducted under the supervision of a qualified archaeologist who meets the qualifications set forth in the Secretary of the Interior's Professional Qualification Standards. All approved treatment plans shall be incorporated into the plan of development for the site and the clearing, grading or construction activities thereon.

4. *Ingress and Egress:* Only one ingress/egress point may be constructed from Richmond Road to the Property and it shall line up with the existing median opening. The intent of this condition is to limit the number of ingress/egress points along Richmond Road.

5. *Landscaping:* A landscape plan for the Property shall be submitted for review and approval by the Director of Planning with the initial plan of development for the Project and shall match the landscaping described in the text on the Master Plan. All landscaping on the landscape plan shall be installed or guaranteed prior to the issuance of the initial final Certificate of Occupancy (COP) for the Project. The amount of any surety guaranteeing installation of landscaping shall be determined by the Director of Planning or his designee. Any deviations to the landscape plan shall be considered pursuant to Section 24-23(a)(2) of the County Code, as amended.

6. *Signage:* The Property shall be allowed one exterior freestanding sign. The freestanding sign shall be externally illuminated, monument style, not exceed eight feet in height, and have a base of brick or other materials similar in type and color with the architecture of the Project. The Director of Planning shall approve the design of the freestanding sign prior to initial site plan approval and prior to any subsequent sign modifications.

7. *Traffic Analysis:* Turn lane warrant analyses, as determined by the Virginia Department of Transportation (VDOT), for the entrance and median opening improvements shall be submitted to and approved by the Director of Planning and VDOT prior to final site plan approval. If the approved analyses demonstrate that improvements are warranted, such improvements shall be shown on the initial site plan and shall be installed prior to the issuance of any COP for the Project.

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8. *Traffic Management Plan:* Within 180 days after initial issuance of a COP for the Project, a Traffic Management Plan (the "TMP") addressing circulation and queuing of vehicles on the Property associated with peak occupancy periods for the Project shall be submitted to the Director of Planning for review and approval. The TMP shall be designed to limit the impact of traffic flows along Richmond Road and shall consist of measures such as, but not limited to, parking lot usage, signage, pavement markings or other vehicle control/directional devices, and manual traffic control (police officer or similar) at the intersection of Richmond Road and the Project entrance. The approved TMP shall be implemented on the Property for peak occupancy periods for the Project. The TMP shall be evaluated for its effectiveness within 180 days after initial implementation and, based on such evaluation, be revised as necessary to maintain consistency with this condition. Thereafter, the TMP shall be reevaluated and resubmitted to the Director of Planning by January 31 of each year for review and approval for consistency with this condition. The TMP shall be reevaluated and resubmitted until it accommodates the full occupancy of the Project as determined by the Director of Planning.

9. *Screening:* Dumpsters shall be screened with a brick enclosure or other materials substantially in accordance with the existing structures on the Property as shown in Attachment A of the document entitled "Natural Resources Inventory" prepared by VHB and dated January 22, 2017.

10. *Exterior Lighting:* All new exterior light fixtures on the Property, including new building lighting, shall have recessed fixtures with no lens, bulb, or globe extending below the casing. All new light poles shall not exceed 20 feet in height from finished grade unless otherwise approved by the Director of Planning. A lighting plan indicating no glare outside the boundaries of the Property shall be submitted for any new lighting. The lighting plan shall be approved by the Director of Planning or his designee prior to site plan approval. "Glare" shall be defined as more than 0.1 foot-candle at the property line or any direct view of the lighting source from the adjoining properties.

11. *Commencement of Construction:* Final site plan approval for the Project shall be obtained within 36 months from the date of approval of the SUP or the SUP shall be void. Prior to the site plan becoming invalid, a permanent COP shall be obtained for the "Main Church Building" shown on the Master Plan or the SUP shall be void.

12. *Severability:* The SUP is not severable. Invalidation of any word, phrase, clause, sentence or paragraph shall invalidate the remainder.

BE IT FURTHER RESOLVED that SUP-0001-2018 shall amend, replace and supersede SUP-0009-1999, which shall no longer have any force or effect.

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Ruth M. Larson
Chair, Board of Supervisors

| | VOTES | | |
|---|---|---|---|
| | AYE | NAY | ABSTAIN |
| MCGLENNON | ✓ | ___ | ___ |
| SADLER | ✓ | ___ | ___ |
| HIPPLE | ✓ | ___ | ___ |
| LARSON | ✓ | ___ | ___ |
| ICENHOUR | ✓ | ___ | ___ |

ATTEST:

Teresa J. Fellows
Deputy Clerk to the Board

Adopted by the Board of Supervisors of James City County, Virginia, this 10th day of April, 2018.

SUP01-18LifePtCh-res

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**AGENDA ITEM NO. E.3.**

**ITEM SUMMARY**

DATE: 5/24/2023

TO: The Development Review Committee

FROM: Ben Loppacker, Planner

SUBJECT: SPLN-22-0006. Settlement at Powhatan Creek Phase 4 Waterline Exception

---

**ATTACHMENTS:**

| | Description | Type |
|---|---|---|
| 🗋 | 0. Staff Report | Staff Report |
| 🗋 | 1. Location Map | Backup Material |
| 🗋 | 2. Z-0010-2003 Proffers | Backup Material |
| 🗋 | 3. Location of Proposed Disturbance | Backup Material |
| 🗋 | 4. Proposed Conditions | Backup Material |

**REVIEWERS:**

| Department | Reviewer | Action | Date |
|---|---|---|---|
| Development Review Committee | Crump, Josh | Approved | 5/17/2023 - 2:32 PM |
| Development Review Committee | Holt, Paul | Approved | 5/17/2023 - 2:34 PM |
| Publication Management | Daniel, Martha | Approved | 5/17/2023 - 2:39 PM |
| Development Review Committee | Holt, Paul | Approved | 5/17/2023 - 2:40 PM |

## SUMMARY FACTS

| | |
|---|---|
| Applicant: | Mr. Ryan Stephenson, AES |
| Landowner: | Windswept Development, LLC |
| Proposal: | To allow for the construction of a James City Service Authority (JCSA) waterline within the 150-foot buffer along Monticello Avenue in accordance with the proffers associated with The Settlement at Powhatan Creek. |
| Location: | 4101 Monticello Avenue |
| Tax Map/Parcel No.: | 3740100010 |
| Project Acreage: | +/- 14.56 acres |
| Zoning: | PUD-R, Planned Unit Development Residential, with proffers |
| Comprehensive Plan: | Low Density Residential |
| Primary Service Area: | Inside |
| Staff Contact: | Ben Loppacker, Planner |

## REASON FOR DEVELOPMENT REVIEW COMMITTEE REVIEW

Due to the size of the proposed development, JCSA has requested that the developer build an additional waterline to access the development. The applicant has proposed locating the waterline within the landscape buffer of the proposed subdivision.

The proffers for the development require a 150-foot greenbelt buffer along the property's Monticello Avenue frontage and Proffer No. 4 states, "With the prior approval of the Development Review Committee, utilities, drainage improvements, community entrance roads as shown generally on the Master Plan, pedestrian/bicycle trails, lighting, entrance features and signs may be located in the greenbelt buffer."

## FACTORS FAVORABLE

1. With the proposed improvements, the proposal continues to be compatible with surrounding zoning and development.

2. Staff finds the proposal consistent with the *Our County, Our Shared Future: James City County 2045 Comprehensive Plan*.

3. This proposal will be consistent with Proffer No. 4 listed in Case No. Z-10-03/MP-10-03.

## FACTORS UNFAVORABLE

1. Staff finds that while minimal, there will be impacts to the 150-foot buffer along Monticello Avenue through the removal of three existing trees.

## PROJECT DESCRIPTION

The submitted subdivision construction plan, SPLN-22-0006 (Attachment No. 3), consists of the addition of 68 townhouses located on the land designated Phase IV. The applicant is seeking to run a JCSA waterline through the 150-foot buffer along Monticello Avenue. The development fronts on Monticello Avenue, designated as a Community Character Conservation, Open Space, or Recreation by the 2045 Comprehensive Plan.

The impact associated with the construction of the proposed JCSA waterline would include the removal of three trees within the 150-foot buffer along Monticello Avenue. The path of the proposed waterline is shown in Attachment No. 3.

## PROJECT HISTORY

- The Board of Supervisors approved Case No. Z-0010-2003/MP-0010-2003 Rezoning for The Settlement at Powhatan Creek, (Attachment No. 2), on May 24, 2003, allowing for the development of all phases of The Settlement at Powhatan Creek. This is the current binding Master Plan for the site.

- On October 3, 2018, an amendment to the site plan for Phase III of The Settlement at Powhatan Creek, Case No. SP-0039-2016, was approved. This site plan amended SP-0037-2012, which was the site plan for Phase III of The Settlement at Powhatan Creek.

- S-23-0004 is a current Boundary Line Extinguishment proposal that would see Lot No. 3740100013 incorporated into Lot No. 3740100010. This would see the total lot size expanded to 15.08 acres.

## SURROUNDING ZONING AND DEVELOPMENT

North: PUD-R, Planned Unit Development Residential, single-family residential development.

East: PUD-R, Planned Unit Development Residential, common & natural open space.

South: PUD-R, Planned Unit Development Residential, common & natural open space.

West: PUD-R, Planned Unit Development Residential, single-family residential development.

## STAFF ANALYSIS

Staff finds that the disturbance proposed within the 150-foot buffer is generally consistent with the Master Plan and proffers referenced in the currently adopted Master Plan, Case No. Z-10-03/MP-10-03. The applicant has committed to defining an alignment within the buffer that will minimize impacts to existing trees within the buffer.

The applicant has stated that the only other ways to connect to the waterline on Monticello Avenue would be to route the waterpipe through the Virginia Department of Transportation Best Management Practice to the north of the property or to route the waterpipe through the wetlands and the Resource Protection Area buffer. Should the Development Review Committee not approve this application, the applicant would need to seek a waiver from JCSA to only have one point of failure for a subdivision of over 50 residential units.

## STAFF RECOMMENDATION

Staff recommends approval of the request with conditions to allow a JCSA waterline to be run through the 150-foot buffer along Monticello Avenue. Staff also finds this proposal to be consistent with the proffers approved with Case No. Z-10-03/MP-10-03.

BP/md
SPLN22-6_PowCrkPh4

Attachments:
1. Location Map
2. Z-0010-2003 Proffers
3. Location of Proposed Disturbance
4. Proposed Conditions

# JCC SPLN-22-0006,
# Settlement at Powhatan Creek Phase 4 DRC

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**Z-10-03/MP-10-03. Hiden Property Proffer Amendment**

SECOND AMENDED AND RESTATED

HIDEN PROPERTY PROFFERS

THESE AMENDED AND RESTATED PROFFERS are made as of this 24th day of November, 2003, by POWHATAN CROSSING, INC., a Virginia corporation, (together with its successors and assigns, "Owner").

RECITALS

A. Owner is the present or former owner of certain real property (the "Property") in James City County, Virginia consisting of approximately 403.7 acres more particularly described on Exhibit A attached hereto and made a part hereof.

B. In 1997 the Owner applied for and James City County (the "County") granted a rezoning of the Property from R-8, Rural Residential District, to PUD-R, Planned Unit Development-Residential District, with proffered conditions as set forth in Hiden Property Proffers dated October 29, 1997 and recorded in the Clerk's Office for the Circuit Court for. the City of Williamsburg and County of James City as Instrument No. 97019406 (the "Original Proffers"). In connection with the rezoning, Owner submitted and the County approved a Master Plan in accordance with the County Zoning, Ordinance entitled "Master Plan Hiden Property" and dated September 10, 1997 and revised October 15, 1997 (the "Original Master Plan").

C. In 2003 the Owner applied for and the County granted approval of a master plan and proffer amendment for the Property. In connection therewith, Owner submitted and the County approved an amended Master Plan in accordance with the County Zoning Ordinance entitled "Master Plan Amendment for Hiden Property for Jamestown, LLC" made by AES Consulting Engineers, Project No. 9254, dated 2/24/03, revised 4/25/03 (the "Approved Master Plan") and Amended and Restated Proffers dated July 8, 2003 and recorded in the Clerk's Office for the Circuit Court for the City of Williamsburg and County of James City as Instrument No.

030021212 (the "Approved Proffers").

D. Owner has now applied for an amendment to the Approved Master Plan for the Property pursuant to the County Zoning Ordinance and, in connection therewith,' desires to amend and restate the Approved Proffers.

NOW, THEREFORE, for and in consideration of the approval by the Board of Supervisors of James City County of the applied for amendment to the Original Master Plan and the Original Proffers and pursuant to Section 15.2-2297, et seq. of the Code of Virginia, 1950, as amended, and Section 24-16, et seq. of Chapter 20 of the Code of James City County, Virginia in accordance with Section 24-497(d) of the Code of James City County, Owner agrees that it shall meet and comply with all of the following conditions in developing the Property. If the applied for amendments are not granted by the County, these Amended and Restated Proffers shall thereupon be null and void and the Original Proffers and Original Master Plan shall remain in full force and effect.

CONDITIONS

1. Owners Association. All owners of lots or units within the Property by virtue of ownership of their lot or unit shall be members of a property owners association with the power to levy mandatory assessments. The articles of incorporation, bylaws and restrictive covenants (together, the "Governing Documents") creating and governing the association(s) shall be submitted to and reviewed by the County Attorney. The Governing Documents shall require that the association adopt an annual maintenance budget, which shall include a reserve for maintenance of stormwater management BMPs, private roads and parking areas, if applicable, and shall require that the association (i) assess all members for the maintenance of all properties owned or maintained by the association and (ii) file liens on members' properties for non-payment of such assessments and for the cost of remedying violations of, or otherwise enforcing, the Governing Documents.

2. Density. (a) There shall be no more than 150 single family lots permitted in Area 1 on the Property.

(b) There shall be no more than 400 dwelling units permitted in Area 2 on the Property. All dwelling units developed in Area 2 shall be age restricted to persons fifty-five (55) years of age or older ("Restricted Units") in accordance with the following parameters:

(i) It is the intent of the parties that Restricted Units shall be occupied by persons fifty-five (55) years of age or older and that no Restricted Units shall be occupied by a person under the age of eighteen (18). In some instances, persons under the age of fifty-five (55) but over the age of eighteen (18) shall be entitled to occupy Restricted Units, subject, at all times, to the laws and regulations governing age fifty-five (55) and over restricted housing as more particularly set forth and described in subparagraph (ii) below.

(ii) Each Restricted Unit within the Property shall be developed and operated in compliance with applicable federal and state laws and regulations regarding housing intended for occupancy by persons fifty five (55) years of age or older, including but not limited to: the Fair Housing Act, 42 U.S.C. §3601 et seq. and the exemption therefrom provided by 42 U.S.C. §3607 (b) (2) (C) regarding discrimination based on familial status; the Housing for Older Persons Act of 1995, 46 U.S.C. §3601 et seq.; the Virginia Fair Housing Law Va. Code §36-96.1 et seq.; any regulations adopted pursuant to the foregoing; any judicial decisions arising thereunder; any exemptions and/or qualifications thereunder; and any amendments to the foregoing as now or may hereafter exist. Specific provisions of the age restriction described above and provisions for enforcement same shall be set forth in a declaration of restrictive covenants and property owners' association documents applicable to the Restricted Units and each deed to a Restricted Unit shall make reference to such provisions.

(c) Any accessory commercial uses located in Area 2, such as bank offices, beauty salons and barbershops, shall be located and designed to serve residents of Area 2. Commercial

uses shall not be advertised from any public right-of-way.

3. Road Improvements. (a) Monticello Avenue. (i) Owner shall make a contribution of $2,800.00 to the County for each of the first 250 lots or units shown on subdivision plats or site plans of the Property. Such contributions shall be made available by the County for use by the District for the construction of Monticello Avenue or used by the County for any other project included in the County's capital improvement program, the need for which is generated in whole or in part by the development of the Property. Such contributions shall be made at the time of final subdivision plat or site plan approval for such lots or units.

(ii) There shall be no more than two entrances into the Property from Monticello Avenue, one into the portion of the property south of Monticello Avenue and one into the portion of the property north of Monticello Avenue. The two entrances shall be aligned. Owner shall construct right and left turn lanes on both approaches at the entrances to the Property from Monticello Avenue at the time such entrances are constructed.

(iii) At the request of the County, Owner shall install a traffic signal at the intersection of Monticello Avenue and the entrances to the Property at the earlier of (i) when Virginia Department of Transportation ("VDOT") signal warrants are met or (ii) when development has commenced on either side of Monticello Avenue and the County has issued certificates of occupancy for more than 55 lots or dwelling units utilizing the entrances onto Monticello Avenue; provided that VDOT and the County approves the installation of the traffic signal at that time. When certificates of occupancy for 412 dwelling units on the Property have been issued and if the traffic signal has not been installed at that time, Owner shall cause an updated traffic signal warrant analysis using actual traffic counts shall be submitted to VDOT and the County.

(b) All road improvements proffered hereby shall be constructed in accordance with VDOT standards.

(c) Unless otherwise approved by the Director of Planning, Owner shall reserve a

public right-of-way to provide a pedestrian connection from the Powhatan Secondary development to the Property and shall dedicate such right-of-way to the County upon the written request of the County Administrator.

4. Monticello Avenue Greenbelt. At the time of the conveyance of the Monticello Avenue right-of-way to the County or the District, the Owner shall designate 150-foot greenbelt buffers along the Property's Monticello Avenue frontage measured from a right-of-way line assuming a 120 foot right-of-way for Monticello Avenue (measured 60 feet on either side of the centerline of the right-of-way). The greenbelt buffers shall be exclusive of any lots or units and, except as permitted below, shall be undisturbed. With the prior approval of the Development Review Committee, utilities, drainage improvements, community entrance roads as shown generally on the Master Plan, pedestrian/bicycle trails, lighting, entrance features and signs may be located in the greenbelt buffer. A landscaping plan for the greenbelt buffer which may include, without limitation, select hand clearing and trimming of trees and other plants, planting of new landscaping, including trees and shrubs, and installation of landscaped berms, submitted to and approved by the Director of Planning may be implemented.

5. Archaeology. A Phase I Archaeological Study for Master Plan area shall be submitted to the Director of Planning for his review and approval prior to land disturbance. A treatment plan shall be submitted to, and approved by, the Director of Planning for all sites in the Phase I study that are recommended for a Phase II evaluation, and/or identified as being eligible for inclusion on the National Register of Historic Places. If a Phase II study is undertaken, such a study shall be approved by the Director of Planning and a treatment plan for said sites shall be submitted to, and approved by, the Director of Planning for sites that are determined to be eligible for inclusion on the National Register of Historic Places and/or those sites that require a Phase III study. If in the Phase II study, a site is determined eligible for nomination to the National Register of Historic Places and said site is to be preserved in place, the treatment plan shall include

nomination of the site to the National Register of Historic Places. If a Phase III study is undertaken for said sites, such studies shall be approved by the Director of Planning prior to land disturbance within the study area. All Phase 1, Phase II and Phase III studies shall meet the Virginia Department of Historic Resources' Guidelines for Preparing Archaeological Resource Management Reports and the Secretary of the Interior's Standard and Guidelines for Archaeological Documentation, as applicable, and shall be conducted under the supervision of a qualified archaeologist who meets the qualifications set forth in the Secretary of the Interior' Professional Qualification Standards. All approved treatment plans shall be incorporated into the plan of development for the site and shall be adhered to during the clearing, grading and construction activities thereon.

6. Environmental Protections. (a) The Owner and/or the owners association shall grant, free of charge, to the Williamsburg Land Conservancy, another County approved land conservation entity and/or the County a conservation easement with terms consistent with these Proffers over the area designated on the Master Plan as Conservation Area generally in the locations shown on the Master Plan. The exact boundaries of the Conservation Area shall be shown on subdivision plats and/or site plans of the Property based on the buffer line and Conservation Area shown and set out on the map entitled "Master Plan Amendment for Hiden Property for Jamestown, LLC" made by AES Consulting Engineers, Project No. 9254, dated 2/24/03, revised 4/25/03. The conservation easement over the Conservation Area shown on each individual subdivision plat or site plan shall be granted at the time of final approval thereof by the County. The Conservation Area shall remain undisturbed and in its natural state, preserving indigenous vegetation except as set forth below. With the prior approval of the County Engineer or his designee on a case by case basis, (i) dead, diseased and dying trees or shrubbery and invasive or poisonous plants may be removed from the Conservation Area; (ii) select hand clearing and pruning of trees shall be permitted in the Conservation Area permit sight lines or

vistas, and (iii) utilities, roads, pedestrian paths, trails and bridges may intrude into or cross the Conservation Area. No stormwater best. management practices ("BMPs") shall be permitted in the 100 foot Resource Protection Area ("RPA") imposed by County ordinance along the main stem of Powhatan Creek. With the prior approval of the County Environmental Division on a case by case basis, BMPs may be located in other RPAs and elsewhere in the Conservation Area, including RPA extensions shown on the Master Plan, but shall not be located in nor impact the channel flow unless specifically approved by the Environmental Division. The greenway proffered in Proffer 7 below and County trails and passive recreational facilities and structures located therein shall be permitted within the Conservation Area. If vegetation is removed from the Conservation Area it shall be replaced by indigenous vegetation that is equally or more effective in retarding runoff, preventing erosion and filtering nonpoint source pollution. Owner, at the request of the County, shall retain an environmental consultant acceptable to the County to prepare a three tiered restoration plan for the areas indicated on the "Revised Environmental Constraints Map Hiden Property" made by Williamsburg Environmental Group, Inc. and dated 8/1/97 and revised 9/16/97 where timbering operations resulted in the removal of trees from or land disturbance within the Conservation Area to provide for the restoration of ground cover, shrubs and trees for that portion of the Conservation Area as determined to be necessary by the consultant. If temporary stormwater BMP's are located in the Conservation Area, the restoration plan shall include a replanting plan for such BMP areas. The restoration plan shall include a phasing plan to ensure areas of the Conservation Area being restored have been stabilized prior to the commencement of development on adjacent developable areas. The restoration plan shall be submitted to the Environmental Division for review and approval. Owner shall implement the recommendations of the approved restoration plan. Road and utility crossings shall be generally perpendicular through the Conservation Area and Owner shall endeavor to design utility systems that do not intrude into the Conservation Area. The Conservation Area shall be maintained by

Owner unless the Williamsburg Land Conservancy, the other County approved land conservation entity or the County assumes responsibility therefor under its easement or the Conservation Area is conveyed to an owners association, at which time the association shall assume responsibility for its maintenance. The Conservation Area shall be exclusive of Lots.

(b) All stormwater runoff from paved parking areas or roads and from all building structures over 150 square feet in Area 2 of the Property shall be directed into BMPs unless otherwise approved by the Environmental Division

7. Greenway. Owner shall grant the County an easement within the Conservation Area for a greenway through the Property in the general location shown on the Master Plan as "James City County Greenway Trail" as subdivision plats or site plans for adjacent Property are approved and/or recorded. The County shall be entitled to construct a trail with a minimum 10' wide travel path (which will be open to the general public during daylight hours only), including necessary bridges, if any, through the James City County Greenway Trail and to install passive amenities such as benches, tables, gazebos, educational or descriptive markers or individual fitness stations. The location of the "James City County Greenway Trail" shall be varied within the Conservation Area by the Environmental Division to ensure the ability to construct a viable trail network. Owner shall grant the County suitable parking opportunities (through shared use of parking facilities required by site improvements) to the general public using the trail.

8. Recreation. (a) Owner shall provide the recreational facilities listed below in Area 1 shown on the Master Plan and make the cash contributions to the County described below before the County is obligated to approve final subdivision plats for more than 100 lots in Area 1:

- Parkland, including one playground of at least 1.9 acres.
- Cash contribution of $9,900 in lieu of multi-purpose courts.
- Cash contribution of $4,300 in lieu of playing fields.

(b) Owner shall provide the recreational facilities listed below in Area 2 shown on the

Master Plan and make the cash contributions described below to the County before the County is obligated to approve final subdivision plats or site plans for more than 235 dwelling units in Area 2:

- Recreation areas of at total of least 2.5 acres.
- Cash contribution of $13,650 in lieu of multi-purpose court.
- Cash contribution of $5,950 in lieu of playing fields.

The recreational facilities in Area 2 may be open only to owners in Area 2.

(c) All cash contributions proffered by this Proffer 8 shall be used by the County for recreation capital improvements, which may include trails within the greenway proffered in Proffer 7. The exact locations of the facilities proffered hereby and the equipment to be provided at such facilities shall be subject to the approval of the Development Review Committee. All recreational facilities proffered hereby shall be conveyed to and maintained by the owners association and shall be open to all members of the association in good standing.

(d) Owner shall construct a shoulder lane bikeway in accordance with VDOT standards along both sides of the main public collector roads within the Property north of Monticello Avenue.

9. Entrance Signs. The entrance signs, lighting, landscaping and entrance features at the entrances to the Property from Monticello Avenue shall be subject to the review and approval of the Director of Planning before a sign permit for such signs is issued. The entrance signs shall be monument type signs.

10. Powhatan Crossing Buffer. The Owner shall maintain a buffer along the Property's common boundary line with the Powhatan Crossing subdivision with the width and in the locations shown on the Master Plan. This buffer shall be exclusive of any lots and shall be undisturbed, except for, with the approval of the Development Review Committee, berms, landscape features, walls or fences or utility easements.

11. Cash Contributions for Community Impacts. (a) A contribution of $750.00 for each of the first 50 dwelling units developed on Area 2 of the Property shall be made to the James City Service Authority ("JCSA") in order to mitigate impacts on the County from the physical development and operation of Area 2 of the Property. The JCSA may use these funds for development of alternative water sources or any project related to improvements to the JCSA water system, the need for which is generated by the physical development and operation of Area 2 of the Property.

(b) A contribution of $700.00 for each of the first 50 dwelling units developed on Area 2 of the Property shall be made to the County in order to mitigate impacts on the County from the physical development and operation of Area 2 of the Property. The County may use these funds for any project in the County's capital improvement plan, the need for which is generated by the physical development and operation of Area 2 of the Property, including, without limitation, for emergency services equipment replacement and supply, traffic signal preemption equipment, library uses, and public use sites.

(c) A contribution of $500.00 for each of the first 50 dwelling units developed on Area 2 of the Property shall be made to the County in order to mitigate impacts on the County from the physical development and operation of Area 2 of the Property. The County may use these funds for any project in the County's capital improvement plan, the need for which is generated by the physical development and operation of Area 2 of the Property, including, without limitation, stream stabilization or other stormwater management projects in the Powhatan Creek watershed.

(d) The contributions described above, unless otherwise specified, shall be payable for each of the dwelling units developed within Area 2 of the Property at the time of final subdivision plat or final site plan approval by the County for the particular phase or section of dwelling units.

(e) The per unit contribution(s) paid in each year pursuant to this Section shall be adjusted annually beginning January 1, 2004 to reflect any increase or decrease for the preceding

year in the Consumer Price Index, U.S. City Average, All Urban Consumers (CPI-U) All Items (1982-84 = 100) (the "CPI") prepared and reported monthly by the U.S. Bureau of Labor Statistics of the United States Department of Labor. In no event shall the per unit contribution be adjusted to a sum less than the amounts set forth in paragraphs (a) and (b) of this Section. The adjustment shall be made by multiplying the per unit contribution for the preceding year by a fraction, the numerator of which shall be the CPI as of December 1 in the year preceding the calendar year most currently expired, and the denominator of which shall be the CPI as of December 1 in the preceding year, In the event a substantial change is made in the method of establishing the CPI, then the per unit contribution shall be adjusted based upon the figure that would have resulted had no change occurred in the manner of computing CPI. In the event that the CPI is not available, a reliable government or other independent publication evaluating information heretofore used in determining the CPI (approved in advance by the County Manager of Financial Management Services) shall be relied upon in establishing an inflationary factor for purposes of increasing the per unit contribution to approximate the rate of annual inflation in the County.

12. No Access to Powhatan Crossing. Prior to final approval of the first subdivision plat or site plan for development on the Property, Owner shall (i) convey to the Powhatan Crossing Homeowners Association by quitclaim deed all its right, title and interest in and to the access easement from Powhatan Crossing Drive to the Property adjacent to the recreational lot in Powhatan Crossing, (ii) install a. permanent cul de sac at the end of Powhatan Crossing Drive, and (iii) convey to the Powhatan Crossing Homeowners Association by quitclaim deed a strip of land between the permanent cul de sac and the Property such that the public road and the Property are no longer adjacent.

13. Water Conservation. The Owner and/or the owners association shall be responsible for developing water conservation standards to be submitted to and approved by the JCSA and

subsequently for enforcing these standards. The standards shall address such water conservation measures as limitations on the installation and use of irrigation systems and irrigation wells, the use of approved landscaping materials and the use of water conserving fixtures and appliances to promote water conservation and minimize the use of public water resources, including groundwater. The standards shall be approved by the JCSA prior to final subdivision or site plan approval.

14. Height Limitation. There shall be no building greater than two and one-half stories in height located within 300 feet of the Powhatan Crossing subdivision.

15. Private Streets. All streets (as defined by the County Code) within Area 2 of the Property shall be private and shall conform to VDOT construction standards. All private streets shall be certified to the satisfaction of the County Engineer as required by Section 19-49 of the County Code.

16. Headings. All section and subsection headings of Conditions herein are for convenience only and are not a part of these Proffers.

17. Severability. If any condition or part thereof set forth herein shall be held invalid or unenforceable for any reason by a court of competent jurisdiction, the invalidity or unenforceability of such condition or part thereof shall not invalidate any other remaining condition contained in these Proffers.

MATCHLINE - SHEET C6.0

MONTICELLO AVENUE
120' R/W - STATE ROUTE 5000
P.B. 73, PG. 52

150' GREENBELT BUFFER P.B. 76, PG. 10

APPROXIMATE LOCATION OF EXISTING JCSA WATERLINE

COS #1

150 L.F.± JCSA EASEMENT OFF-SITE

15' DRAINAGE EASEMENT

8" C900 PVC WATER MAIN
1-12"x8" TEE
1-8" G.V. & V.B.
(TIE INTO EXISTING WATERLINE)

EX. TREES WITHIN PROPOSED JCSA WATERLINE EASEMENT TO BE REMOVED (TYP)

LIMITS OF CLEARING (TYP)

3,000 S.F.± OF DISTURBANCE WITHIN GREEN BELT BUFFER DUE TO JCSA EASEMENT

20' WIDE JCSA WATERLINE EASEMENT

N16°51'07"W 150.00'

TREELINE (TYP.)

RIP RAP @ 24" RCP INV=22.10

LIMITS OF DISTURBANCE (TYP)

LIMITS OF CLEARING (TYP)

PROPOSED JCSA EASEMENT NOTES:

1. TOTAL JCSA WATERLINE LOOP CONNECTION EASEMENT: 150 L.F.± / (3,000 S.F.±)
2. APPROXIMATELY 3 TREES WILL BE REMOVED IN ORDER TO PROVIDE ADEQUATE CLEARING FOR THE 20' WIDE OFF-SITE SECTION OF JCSA WATERLINE EASEMENT.

N73°08'53"E 282.15'

WINDING CREEK

8" C900 PVC WATER MAIN

8" C900 PVC WATER MAIN
15' WIDE JCSA WATERLINE EASEMENT

STA 17+60, 6.8'L
END 8" PVC WATERLINE
START 8" DIP WATERLINE

STA 17+78, 6.0'L
END 8" DIP WATERLINE
START 8" PVC WATERLINE

8" C900 PVC WATER MAIN
STA 17+83, 4.9'L
1-8" 45° BEND (HORIZ.)

SAN MH#1-8
STA 18+05 28.6'R
TOP=29.49
INV OUT=25.80 (MH#1-6)
D=3.70'

5/8" WATER METER (TYP)

3/4" WATER LATERAL (TYP)

8" C900 PVC WATER MAIN
STA 16+75, 6.8'L
1-8"x8" TEE
2-8" G.V. & V.B.

4" CLEANOUT (TYP)

6" SEWER LATERAL (TYP)

8" DIP
273 LF
@ 0.40%

8" C900 PVC WATER MAIN
STA 18+27, 4.9'L
1-8" 45° BEND (HORIZ.)

8" C900 PVC WATER MAIN
STA 18+41, 6.7'L
1-8"x6" TEE
1-6" G.V. & V.B.
1-FIRE HYDRANT ASSEMBLY

BOLD STONE

ALLEY #1

SAN MH#1-2
STA 18+38 6.9'R
TOP=29.79
INV OUT=24.79 (MH#1-1 (60" DROP))
D=5.00'

8" PVC
194 LF
@ 0.74%

COS #3

8" C900 PVC WATER MAIN
STA 21+44, 6.7'L
1-8" 11.25° BEND (HORIZ.)

8" C900 PVC WATER MAIN
STA 21+24, 6.5'L
1-8" 22.5° BEND (HORIZ.)

8" DIP WATER MAIN
STA 20+34, 3.5'L
1-8" 45° BEND (HORIZ.)

8" C900 PVC WATER MAIN
STA 20+16, 6.8'L
1-8"x6" TEE
1-6" G.V. & V.B.
1-FIRE HYDRANT ASSEMBLY

8" C900 PVC WATER MAIN
STA 20+10, 6.5'L
1-8"x4" TEE
1-4" G.V. & V.B.

8" C900 PVC WATER MAIN
STA 19+98, 3.5'L
1-8" 45° BEND (HORIZ.)

8" C900 PVC WATER MAIN

4" C900 PVC WATER MAIN
STA 10+14, 4.9'R
1-4" 45° BEND (HORIZ.)

SAN MH#1-1 (60" DROP)
STA 10+28 6.1'R
TOP=30.45
INV IN=23.36 (MH#1-2)
INV IN=21.46 (MH#1-3)
INV OUT=21.36 (MH#1-0)
D=9.09'

8" DIP
139 LF
@ 0.42%

3/4" WATER LATERAL (TYP)

5/8" WATER METER (TYP)

STA 21+43, 6.9'L
END 8" DIP WATERLINE
START 8" PVC WATERLINE

STA 21+25, 6.7'L
END 8" PVC WATERLINE
START 8" DIP WATERLINE

SAN MH#1-3
STA 21+26 6.5'R
TOP=29.62
INV IN=22.12 (MH#1-4)
INV OUT=22.02 (MH#1-1 (60" DROP))
D=7.60'

4" CLEANOUT (TYP)

6" SEWER LATERAL (TYP)

8" DIP
132 LF
@ 0.42%

STA 20+40, 5.3'L
END 8" DIP WATERLINE
START 8" PVC WATERLINE

STA 20+22, 6.5'L
END 8" PVC WATERLINE
START 8" DIP WATERLINE

4" C900 PVC WATER MAIN

ALLEY #2

STA 10+54, 5.5'L
END 4" DIP WATERLINE
START 4" PVC WATERLINE

STA 10+36, 5.5'L
END 4" PVC WATERLINE
START 4" DIP WATERLINE

8" DIP
181 LF
@ 1.57%

4" C900 PVC WATER MAIN
STA 11+20, 5.5'L
1-4" BLOWOFF ASSEMBLY

SAN DROP MH#1-0 (60")
STA 12+07 4.5'R
TOP=23.50
INV IN=18.52 (MH#1-1 (60" DROP
INV IN=12.20 (MH 12040-003)
INV OUT=12.19 (MH 12040-002)
D=11.66'

S58°27'15"W 789.90'

14" PVC

TREELINE (TYP.)

EX. SAN MH12040-003
TOP= 24.36
INV IN= 12.59 (14" PVC)
INV OUT= 12.58 (MH#1-0)

LIMITS OF DISTURBANCE (TYP)

LIMITS OF CLEARING (TYP)

100' RPA BUFFER

LIMITS OF 100-YEAR FLOOD (TYP.)

LIMITS OF WETLANDS (TYP.)

RISER STRUCTURE
TOP (GRATE)= 25.78
INV= 21.21 (30" RCP)

LIMITS OF ZONE A FLOOD PLAIN (TYP.)

S16°51'07"E 150.00'

COS #2

21" PVC

30" RCP
INV= 20.77

EX. SAN MH
TOP= 17.11
INV IN= 9.21 (21" PVC)
INV OUT= 9.19 (21" PVC)

EX. SAN MH
TOP= 15.42
INV IN= 8.83 (21" PVC)
INV OUT= 8.87 (21" PVC)

EX. SAN MH
TOP= 17.83
INV IN= 8.63 (21" PVC)
INV OUT= 8.63 (21" PVC)

LIMITS OF ZONE AE FLOOD PLAIN (TYP.)

N73°08'53"E 477.70'

EX. SAN MH
TOP= 15.27
INV IN= 8.25 (12" PVC)
INV IN= 8.11 (21" PVC)
INV OUT= 8.02 (21" PVC)

S82°23'13"W 975.47'

EX. SAN MH12040-001
TOP= 16.51
INV IN= 11.31 (14" PVC)
INV OUT= 11.29 (14" PVC)

GENERAL UTILITY NOTE:

WATER METER BOXES ARE TO BE LOCATED A MINIMUM DISTANCE OF 18" OFF DRIVEWAYS.

GRAPHIC SCALE
30' 0' 30' 60'
SCALE: 1" = 30'

| Rev. | Date | Description | Revised By |
|---|---|---|---|
| 4 | 4/21/2023 | REVISED PER JCC COMMENTS | TRS |
| 3 | 3/14/2023 | REVISED PER JCC COMMENTS | TRS |
| 2 | 02/10/2023 | REVISED PER JCC COMMENTS | TRS |
| 1 | 10/27/2022 | REVISED PER JCC COMMENTS | TRS |

COMMONWEALTH OF VIRGINIA
LICENSED PROFESSIONAL ENGINEER
C. RYAN STEPHENSON
Lic. No. 044405
4/21/2023


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AES CONSULTING ENGINEERS
Hampton Roads | Central Virginia | Middle Peninsula


SITE PLAN
FOR
THE SETTLEMENT AT POWHATAN CREEK - PHASE 4
BERKELEY DISTRICT JAMES CITY COUNTY VIRGINIA

| | |
|---|---|
| Project Contacts: | TRS |
| Project Number: | 9254-17 |
| Scale: 1"=30' | Date: 06/28/2022 |

Sheet Title:
UTILITY PLAN

Sheet Number
C6.1


S:\JOBS\9254\17- Phase 4_For Offers\2023-05-16 JCSA Looped Waterline Connection Exhibit\9254-17_EX_L Utility Plan (2).dwg 5/10/2023 2:54:56 PM, Ronald Bailey

Proposed Conditions for SPLN-22-0006, Settlement at Powhatan Creek Waterline Exception Request

1. No more than three trees shall be cleared as a result of the proposed waterline construction, as shown on Exhibit 3. Such trees shall be replaced within the right-of-way buffer and meet the standards of Section 24-96 of the Zoning Ordinance. The three replacement trees shall be shown on the site plan prior to final site plan approval.