

February 26, 2024

PROJECT NAME: SWC US HWY 301 & SE HWY 42

PROJECT NUMBER: 2017110012

APPLICATION: MAJOR SITE PLAN #29798

- 1 DEPARTMENT: ENGDRN - STORMWATER REVIEW  
REVIEW ITEM: 6.13.10.B - Copy of NPDES Permit or NOI  
STATUS OF REVIEW: INFO  
REMARKS: Please provide a copy of the NPDES Permit or NOI prior to construction.
- 2 DEPARTMENT: ENGDRN - STORMWATER REVIEW  
REVIEW ITEM: Copy of District Permit (County Interest)  
STATUS OF REVIEW: INFO  
REMARKS: Please provide a copy of the District permit prior to construction.
- 3 DEPARTMENT: ENGTRF - TRAFFIC REVIEW  
REVIEW ITEM: Additional Traffic comments  
STATUS OF REVIEW: INFO  
REMARKS: 2/22/24 - A proportionate share agreement for the identified right turn lane is required to be executed prior to final site inspection.
- 4 DEPARTMENT: ENGIN - DEVELOPMENT REVIEW  
REVIEW ITEM: 2.12.4.K - List of approved waivers, their conditions, and the date of approval  
STATUS OF REVIEW: INFO  
REMARKS: 3/27/23 - add waivers if requested in the future
- 5 DEPARTMENT: ENGIN - DEVELOPMENT REVIEW  
REVIEW ITEM: Additional Development Review Comments  
STATUS OF REVIEW: INFO  
REMARKS: After approval, plans will be electronically stamped by the County. The applicant will receive an email indicating that approved plans are available for download and are located in the ePlans project Approved folder. For Development Review submittals, with the exception of Final Plats and Minor Site Plans, applicants are required to print, obtain required signatures, and sign and seal two 24"x 36" sets of the electronically stamped approved plan and deliver them to the Office of County Engineer, Development Review Section, located at 412 SE 25th Avenue Ocala, FL 34471. Upon receipt, a development order will be issued. Until such time as that development order is issued, the project does not have final approval and construction, if applicable, shall not commence. For plans requiring As-Builts, As-Builts and associated documentation shall be submitted on paper in accordance with current county requirements
- 6 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION  
REVIEW ITEM: Additional Landscape comments  
STATUS OF REVIEW: INFO  
REMARKS: Recommend alternate choice for Longleaf pine - inappropriate plant for the location - height issues, sap and needle drop issue, etc...
- 7 DEPARTMENT: ZONE - ZONING DEPARTMENT  
REVIEW ITEM: 4.4.4 -Sign (provisions for advertising signage), if it is a multi occupancy complex like shopping centers they must submit a master sign plan.  
STATUS OF REVIEW: INFO  
REMARKS: Identify location, size and dimension of any proposed signs.

8 DEPARTMENT: ZONE - ZONING DEPARTMENT  
REVIEW ITEM: 2.12.27 - Show location of outside storage areas  
STATUS OF REVIEW: INFO  
REMARKS:



**Marion County  
Board of County Commissioners**

Office of the County Engineer

412 SE 25th Ave.  
Ocala, FL 34471  
Phone: 352-671-8686  
Fax: 352-671-8687

29798

**DEVELOPMENT REVIEW PLAN APPLICATION**

Date: 02/22/2023

mm/dd/yyyy

**A. PROJECT INFORMATION:**

Project Name: SWC US Hwy 301 & SE Hwy 42

Parcel Number(s): 48399-004-00

Section 30 Township 17 Range 23 Land Use Vacant Zoning Classification B4

Commercial ☒ Residential ☐ Industrial ☐ Institutional ☐ Mixed Use ☐ Other ☐

Type of Plan: MAJOR SITE PLAN

Property Acreage +/-1.57ac Number of Lots \_\_\_\_\_ Miles of Roads \_\_\_\_\_

Location of Property with Crossroads SW Corner of US Hwy 301 & SE Hwy 42

Additional comments regarding this submittal \_\_\_\_\_

**B. CONTACT INFORMATION (fill in as applicable):**

**Engineer:**

Firm Name: Native Engineering, PLLC

Contact Name: Josh Bradley, PE

Mailing Address: PO Box 2995 City: Land O Lakes State: FL Zip Code: 34639

Phone # 813-536-2539 Alternate Phone # \_\_\_\_\_

Email(s) for contact via ePlans: adrian@nativefla.com

**Surveyor:**

Firm Name: TBD

Contact Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone # \_\_\_\_\_ Alternate Phone # \_\_\_\_\_

Email(s) for contact via ePlans: \_\_\_\_\_

**Owner:**

Owner: Solid Rock Property Group (Contract to Purchase) Contact Name: Chris Logan

Mailing Address: 210 S Gunlock Ave City: Tampa State: FL Zip Code: 33609

Phone # 813-576-0333 Alternate Phone # \_\_\_\_\_

Email address: clogan@solidrockpgr.com

**Developer:**

Developer: SRPG Summerfield, LLC

Contact Name: Chris Logan

Mailing Address: 4803 George Rd, Suite 330 City: Tampa State: FL Zip Code: 33634

Phone # 813-576-0333 Alternate Phone # \_\_\_\_\_

Email address: clogan@solidrockpgr.com

Revised 7/2017

*Empowering Marion for Success*

[www.marioncountyfl.org](http://www.marioncountyfl.org)

SITE CONSTRUCTION PLANS

FOR

MAJOR SITE PLAN FOR SWC  
US HWY 301 & SE HWY 42

SECTION 30, TOWNSHIP 17, RANGE 23  
MARION COUNTY, FL

SITE ADDRESS:

16554 S US HWY 301  
SUMMERFIELD, FL 34491

PREPARED FOR:

SRPG SUMMERFIELD, LLC  
4803 GEORGE RD; SUITE 330 TAMPA, FL 33634  
727-619-4585



LOCATION MAP

N.T.S

SITE DATA

PARCEL ID: 48399-004-00  
SITE ADDRESS: 16554 S US HWY 301  
SUMMERFIELD, FL 34491  
EXISTING ZONING: B-4  
EXISTING LAND USE: VACANT  
FUTURE LAND USE: COM  
EXISTING FLOOD ZONE: ZONE 'X'  
PANEL #: 12083C 0885 D,  
DATED: 8/28/08  
DEVELOPMENT TYPE: COMMERCIAL  
BUILDING USE: GAS / CONVENIENCE STORE  
BUILDING GROSS FLOOR AREA: 5,640 SF  
PARKING CALCULATIONS:  
REQUIRED SPACES FOR RETAIL:  
(1 SPACE PER 300 SF) 16 SPACES (4,650 SF / 300)  
TOTAL REQUIRED SPACES: 16 SPACES  
PROVIDED PARKING: 40 SPACES  
PRE-DEVELOPED IMPERVIOUS SURFACE:  
TOTAL AREA (BUILDINGS, PAVEMENT, ETC.): 0 SF  
POST-DEVELOPED IMPERVIOUS SURFACE:  
BUILDINGS: 5,843 SF  
\*PEDESTRIAN CONCRETE: 2,944 SF  
\*VEHICLE USE CONCRETE: 11,563 SF  
\*PAVEMENT (VUA): 31,711 SF  
TOTAL: 52,061 SF = 1.195 AC (78%)  
OPEN SPACE: 16,395 SF = 0.376 AC (22%)  
TOTAL AREA: 68,456 SF = 1.572 AC (±)  
F.A.R.: 5,640 SF/68,456 SF = 0.08  
\*NOT INCLUDING IMPERVIOUS AREAS INSIDE THE RIGHT-OF-WAY  
WATER SERVICE SUPPLIER: MARION COUNTY UTILITIES  
WASTEWATER SERVICE SUPPLIER: MARION COUNTY UTILITIES  
FIRE SERVICE SUPPLIER: MARION COUNTY UTILITIES  
ELECTRICAL SERVICE SUPPLIER: SUMTER ELECTRIC COOPERATIVE  
OWNER: FDE PROPERTIES LLC  
PO BOX 2009  
ASHLAND, KY 41105  
727-619-4585  
APPLICANT: SRPG SUMMERFIELD, LLC  
4803 GEORGE RD; SUITE 330  
TAMPA, FL 33634  
727-619-4585  
SURVEYOR: EBI SURVEYING  
8415 SUNSTATE STREET  
TAMPA, FL 33634  
813-886-6080

SHEET INDEX

SHEET #	DESCRIPTION
C1.0	COVER
C2.0	GENERAL NOTES
C3.0	EXISTING CONDITIONS & DEMOLITION PLAN
C4.0	EROSION CONTROL PLAN
C5.0	SITE PLAN
C6.0	PAVING, GRADING & DRAINAGE PLAN
C7.0	UTILITY PLAN
C8.0	GENERAL DETAILS SHEET
C9.0	DETAILS SHEET
C10.0	DETAILS SHEET
C11.0	DETAILS SHEET
C12.0	LIFT STATION CALCULATIONS
L1.0	LANDSCAPE PLAN
L2.0	LANDSCAPE DETAILS
L3.0	IRRIGATION PLAN

SUPPLEMENTAL SHEET INDEX

LIFT STATION DETAILS (BY OTHERS)  
SURVEY (BY OTHERS)  
PHOTOMETRIC PLAN (BY OTHERS)

LEGAL DESCRIPTION

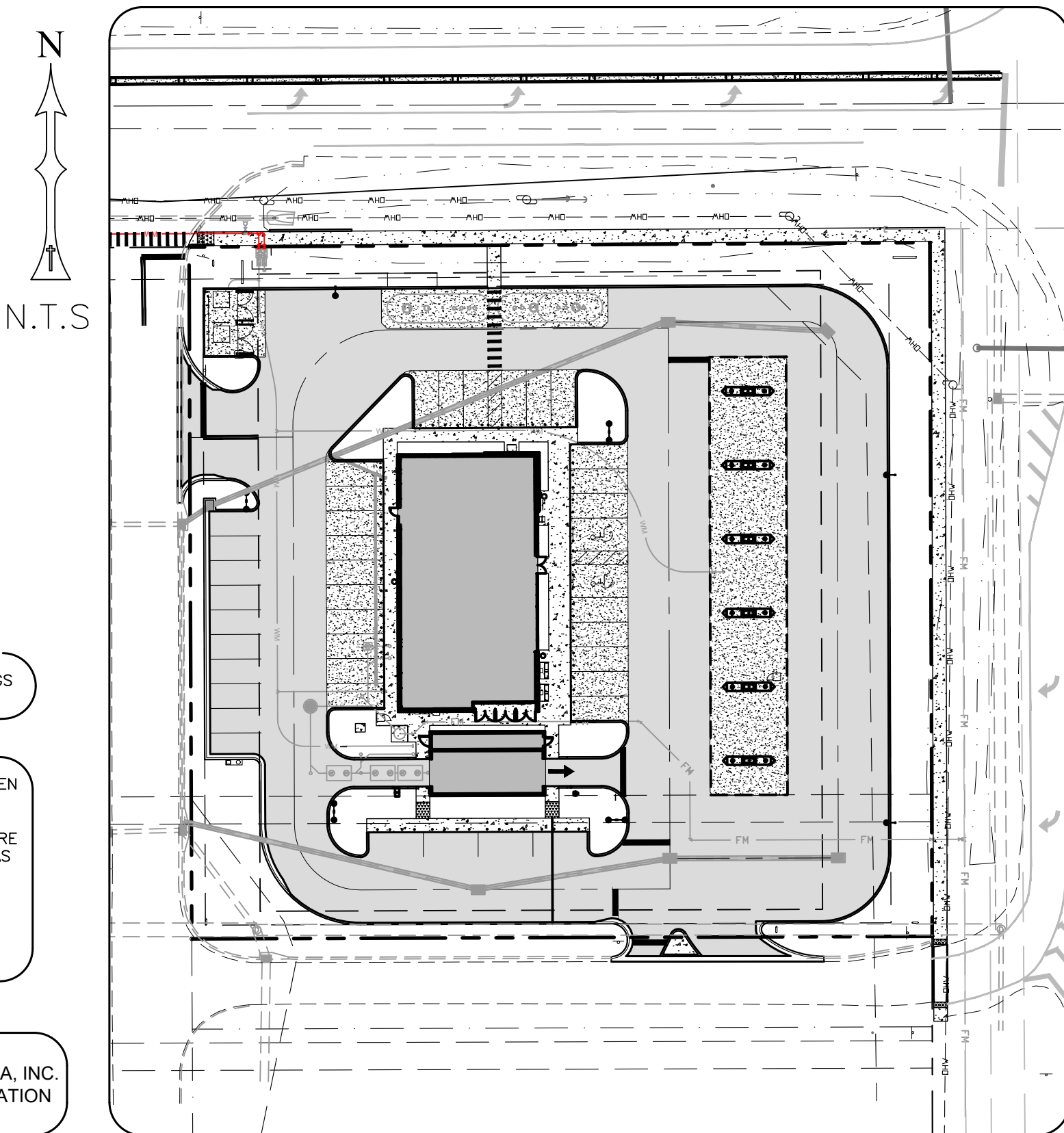
LOT 4 OF C AND K CORNER SUBDIVISION, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 13, PAGES 29 AND 30, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA.

COUNTY  
REVISION NOTE  
NO CHANGE TO THE WORK AS SHOWN ON THE APPROVED PLANS SHALL BE MADE WITHOUT NOTIFICATION TO AND APPROVAL BY THE OFFICE OF THE COUNTY ENGINEER.

SPRING PROTECTION  
PROJECT IS WITHIN SECONDARY SPRINGS PROTECTION AREA

CONCURRENCY NOTE  
THIS PROPOSED PROJECT HAS NOT BEEN GRANTED CONCURRENCY APPROVAL AND/OR GRANTED AND/OR RESERVED ANY PUBLIC FACILITY CAPACITIES. FUTURE RIGHTS TO DEVELOP THE PROPERTY HAS NOT BEEN OBTAINED. THE COMPLETION OF CONCURRENCY REVIEW AND/OR APPROVAL HAS BEEN DEFERRED TO LATER DEVELOPMENT REVIEW STAGES, SUCH AS, BUT NOT LIMITED TO, BUILDING PERMIT REVIEW.

CONTRACTOR SHALL CALL  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.  
AT LEAST 48 HOURS PRIOR TO EXCAVATION  
1-800-432-4770



PREPARED BY:

NATIVE  
engineering,pllc

P.O. BOX 2995  
LAND O' LAKES, FL 34639  
(813) 536-2539

ORIGINAL SET: FEB 2023  
REVISIONS

NO.	DATE	DESCRIPTION
1	6/21/23	REVISED PER AGENCY COMMENTS
2	12/22/23	REVISED PER AGENCY & CLIENT COMMENTS
3	01/31/24	REVISED PER COUNTY COMMENTS

I HEREBY CERTIFY THAT THESE PLANS AND CALCULATIONS WERE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE MARION COUNTY LAND DEVELOPMENT CODE (LDC), EXCEPT AS WAIVED;

JOSHUA S. BRADLEY, PE  
ENGINEER'S CERTIFICATION

DATE

I HEREBY CERTIFY THAT I, MY SUCCESSORS, AND ASSIGNS SHALL PERPETUALLY MAINTAIN THE IMPROVEMENTS AS SHOWN ON THIS PLAN.

CHRIS LOGAN  
SRPG SUMMERFIELD, LLC  
4803 GEORGE RD, SUITE 330  
TAMPA, FL 33634  
727-619-4585  
OWNER'S CERTIFICATION

DATE

JOSHUA S. BRADLEY  
State of Florida, Professional Engineer,  
License No. 60020

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSHUA S. BRADLEY, PE ON THE DATE INDICATED HERE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

C1.0

G:\SHARED DRIVES\CLIENTS\SOLID ROCK PROPERTY GROUP\1220305-00-SWC US HWY 301 & SE HWY 42\DRAWINGS\C2.0 GENERAL NOTES.DWG - 2/8/2024 5:07 PM

GENERAL NOTES

1. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE PROPOSED IMPROVEMENTS, THE ENGINEER, AND THE ARCHITECT.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO AGENCY REQUIREMENTS FOR OBTAINING THE DETAILED PLAN APPROVED BY THE WATER MANAGEMENT DISTRICT OR FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, AS APPLICABLE.
3. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF THE CURRENT EDITION.
4. THE FOLLOWING DOCUMENTS ARE CONSIDERED THE GOVERNING STANDARDS FOR THE PREPARATION OF THE SITE CONSTRUCTION PLANS.
  - FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION)
  - FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS (LATEST EDITION)
  - MARION COUNTY LAND DEVELOPMENT CODE FOR DESIGN AND CONSTRUCTION STANDARDS
5. THE CONTRACTOR SHALL OBTAIN AND FULLY FAMILIARIZE HIMSELF WITH THE CONTENTS OF THE ABOVE SPECIFICATIONS AND GUIDELINES. IN THE EVENT THAT A DISCREPANCY OCCURS BETWEEN THESE PLANS AND THE AFOREMENTIONED SPECIFICATIONS, THE SPECIFICATIONS SHALL TAKE PRECEDENCE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN WRITING. THE CONTRACTOR SHALL MAINTAIN AN "APPROVED FOR CONSTRUCTION" PLANS SET ALONG WITH A COPY OF ALL THE DOCUMENTS NOTED ABOVE ON THE PROJECT SITE AT ALL TIMES.
6. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK. ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE MARION COUNTY CODE OF ORDINANCES AND STANDARDS.
7. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRE-CAST AND MANUFACTURED ITEMS TO THE ENGINEER FOR APPROVAL. FAILURE TO OBTAIN APPROVAL BEFORE FABRICATION AND/OR INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE. A MINIMUM OF TWO WEEKS SHOULD BE PROVIDED FOR ENGINEER'S REVIEW.
8. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED BY OTHER CONTRACTORS AND UTILITY COMPANIES WITHIN AND ADJACENT TO THIS PROJECT. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES (INCLUDING, BUT NOT LIMITED TO LIGHTING, POWER, TELEPHONE, CABLE, GAS, ETC...).
9. THE WATER, SANITARY SEWER, AND STORM DRAINAGE FACILITIES ARE SUBJECT TO THE REVIEW AND APPROVAL OF APPLICABLE AGENCIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THE REQUIRED PERMITS TO PERFORM WORK IN THE PUBLIC RIGHT-OF-WAY, IF APPLICABLE.
10. IT WILL BE NECESSARY TO EXAMINE, COORDINATE AND ADJUST ACCORDINGLY THE PROPOSED LOCATIONS OF THE VARIOUS COMPONENTS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUBMIT COORDINATION DRAWINGS SHOWING PIPE SIZES, STRUCTURES, AND ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SCHEDULING AND COORDINATION OF THE UNDERGROUND WORK ASSOCIATED WITH THIS PROJECT.
11. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY ENVIRONMENTAL PROTECTION AGENCY PERMITTING WHERE REQUIRED. THIS INCLUDES FILING A NPDES NOTICE OF INTENT.
12. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT.
13. ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO BASE AND PAVEMENT CONSTRUCTION.
14. FORTY-EIGHT (48) HOUR NOTICE IS REQUIRED TO THE ENGINEER PRIOR TO SITE INSPECTIONS AND/OR WITNESSING OF STORM, WATER, AND SEWER TESTING.
15. CONTRACTOR SHALL SCHEDULE AND COORDINATE A PRE-CONSTRUCTION CONFERENCE WITH AGENCIES HAVING JURISDICTION.
16. CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE OWNER OR ENGINEER IMMEDIATELY FOR RESOLUTION.
17. THE DIMENSIONS AND LOCATIONS OF THE PROPOSED BUILDINGS SHOWN HEREON ARE APPROXIMATE ONLY. DO NOT UTILIZE SAID MEASUREMENTS FOR BUILDING LAYOUT. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS, LOCATION, AND CONNECTION TO ADJACENT STRUCTURES, DESIGNED BY OTHERS.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES WHETHER OR NOT THEY ARE INDICATED ON THESE PLANS, AND SHALL NOTIFY ALL UTILITY OWNERS A MINIMUM OF 48 HOURS IN ADVANCE OF CONSTRUCTION COMMENCEMENT. CONTRACTOR SHALL ABIDE BY FLA. STATUTE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT (CALL 1-800-432-4770). THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT TO AS-NEW CONDITION OF ANY EXISTING FACILITY OR UTILITY DAMAGED BY HIM, WHETHER OR NOT SHOWN HEREON. THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL UTILITY COMPANIES AND GOVERNING AGENCIES NECESSARY FOR CONSTRUCTION OF THE PROJECT, INCLUDING BUT NOT LIMITED TO THE MARION COUNTY WATER & WASTEWATER DEPARTMENTS, TAMPA ELECTRIC COMPANY, TECO PEOPLES GAS, FRONTIER, AND SPECTRUM.
19. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN PERMITS FOR ALL ON-SITE AND OFF-SITE WORK REQUIRED BY APPROPRIATE AGENCIES.
20. DEVIATIONS FROM THIS DRAWING ARE NOT PERMITTED WITHOUT THE WRITTEN CONSENT OF THE ENGINEER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES IN THE DRAWINGS PRIOR TO PROCEEDING.
21. ALL REQUIRED FILL SHALL MEET THE ARCHITECT'S SPECIFICATIONS.
22. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS AND LABOR REQUIRED FOR THE CONSTRUCTION, TESTING, INSPECTION AND COMPLETION OF THE PROJECT.
23. THE CONTRACTOR SHALL REPLACE ALL SURVEY STAKES DESTROYED.
24. THE CONTRACTOR SHALL NOTIFY ALL MARION COUNTY INSPECTION PERSONNEL OF THE CONSTRUCTION SCHEDULE AS THEY SO REQUIRE.
25. IT IS THE INTENT OF THIS DESIGN TO CONFORM TO ALL APPLICABLE ADA CODES AND REGULATIONS, BUT THE ENGINEER DOES NOT WARRANT OR GUARANTEE SAME TO THE USER OF THESE PLANS. THE USER OF THIS PLAN SHALL BECOME FAMILIAR WITH SAID ADA PROVISIONS AND ADD SAME TO THIS PLAN AS NECESSARY TO CONFORM TO SAID CODES.
26. ALL CONSTRUCTION WILL COMPLY WITH THE LATEST FLORIDA FIRE PREVENTION CODE AND FLORIDA BUILDING CODE.
27. PRIOR TO CONSTRUCTION COMMENCEMENT, THE CONTRACTOR SHALL OBTAIN FROM THE ENGINEER AND/OR THE OWNER COPIES OF ALL PERTINENT PERMITS AND APPROVALS RELATED TO THIS PROJECT. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PERMIT CONDITIONS AND INSPECTION REQUIREMENTS SPECIFIED BY THE PERMITS AND VARIOUS GOVERNMENTAL AGENCIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY POST ALL PERMITS ON-SITE AND TO ASSURE ALL CONSTRUCTION ACTIVITIES ARE IN COMPLIANCE WITH THE CONDITIONS OF ALL PERMITS AND APPROVALS. THE CONTRACTOR SHALL SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS.
28. AREAS DISTURBED BY THE CONTRACTOR OUTSIDE OF THE CONSTRUCTION SITE SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE PRE-CONSTRUCTION CONDITION.
29. THE CONTRACTOR SHALL NOT UNDERTAKE ANY WORK HE BELIEVES OR DEEMS WILL CONSTITUTE A CHANGE ORDER WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER AND THE OWNER.
30. THE CONTRACTOR SHALL MAINTAIN A SET OF FIELD DRAWINGS DEPICTING AS-BUILT CONDITIONS OF ALL IMPROVEMENTS, NOTING ANY FIELD ADJUSTMENTS. THE DRAWINGS SHALL INCLUDE VERTICAL AND HORIZONTAL LOCATIONS OF ALL IMPROVEMENTS AND SYSTEMS, INCLUDING SLOPE OF PIPES; TYPES OF PIPE FOR UTILITY SYSTEMS IF DIFFERENT FROM DESIGN; STORM STRUCTURES AND PIPE INVERTS, INCLUDING OUTFALL PIPE DATA; UTILITY CROSSING DETAILS IF DIFFERENT FROM DESIGN; HORIZONTAL LOCATION OF PRESSURE PIPE SYSTEMS DIFFERENT FROM DESIGN LOCATIONS; AND ALL OTHER DATA INDICATING DEVIATIONS FROM DESIGN, AS APPLICABLE. THE CONTRACTOR SHALL BE RESPONSIBLE TO SUBMIT A SET OF "AS BUILTS" PREPARED IN ACCORDANCE WITH F.A.C. RULE SJ-17.052(1), TO THE ENGINEER. EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY A PROFESSIONAL LAND SURVEYOR LICENSED TO PERFORM LAND SURVEYING SERVICES IN THE STATE OF FLORIDA. THE ENGINEER SHALL REVIEW THE "AS BUILTS" AND CONVERT THEM INTO RECORD DRAWINGS.
31. WORK PERFORMED BY THE CONTRACTOR SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON SITE OR ADJACENT TO THE SITE, BY OTHER CONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES, INCLUDING BUT NOT LIMITED TO COUNTY SUBCONTRACTORS AND UTILITY COMPANIES LISTED IN NOTE 5 ABOUT CONSTRUCTION ACTIVITIES ARE IN COMPLIANCE WITH THE CONDITIONS OF ALL PERMITS AND APPROVALS. THE CONTRACTOR SHALL SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS.
32. CONSTRUCTION HYGIENE AND OVERALL CLEANUP SHALL BE ACCOMPLISHED BY THE CONTRACTOR IN ACCORDANCE WITH STATE AND COUNTY STANDARDS, OR AS DIRECTED BY THE ENGINEER AND OWNER, TO THE SATISFACTION OF THE OWNER.
33. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ACCESS TO PRIVATE PROPERTY. ANY DAMAGE CAUSED BY THE CONTRACTOR IN THE PERFORMANCE OF HIS WORK SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER AND THE OWNER AT THE CONTRACTOR'S EXPENSE.
34. ANY DAMAGE TO STATE, COUNTY, OR LOCAL ROADS CAUSED BY THE CONTRACTOR'S HAULING OR EXCAVATION EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER, THE OWNER, AND THE APPLICABLE GOVERNMENTAL AGENCY.
35. ANY U.S.C. & G.S. MONUMENT WITHIN LIMITS OF CONSTRUCTION IS TO BE PROTECTED BY THE CONTRACTOR.
36. THIS DRAWING DELINEATES PAVEMENT AND DRAINAGE CONSTRUCTION ONLY (TO WITHIN 5 FT. OF ANY BUILDING) AND EXCLUDES WATERPROOFING, RETAINING WALL, VENTILATION OR STRUCTURAL DESIGNS. THE CONTRACTOR SHALL REFER TO THE DRAWINGS BY OTHERS TO INSURE SAID SUPPORT DESIGNS ARE COMPLETE AND DO NOT CONFLICT WITH THIS DRAWING PRIOR TO ANY OTHER CONSTRUCTION.
37. EROSION / SEDIMENTATION CONTROL - THE CONTRACTOR SHALL SUPPLY ALL EROSION / SEDIMENTATION BARRIERS (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, THE CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON THE GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. EROSION CONTROL MEASURES ARE TO BE IN PLACE AT THE START OF CONSTRUCTION AND TO REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED. THE CONTRACTOR IS TO INSPECT BARRIERS FOR DAMAGE DURING CONSTRUCTION AND MAINTAIN AS NEEDED. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EROSION ARE ENCOUNTERED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING THE DAMAGE. THE CONTRACTOR IS TO REMOVE AND CLEAN SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.
38. THE SITE SHALL BE FINE GRADED SUCH THAT ONLY STORM WATER RUNOFF INTENDED TO ENTER THE POND SHALL DO SO. ALL OTHER RUNOFF SHALL BE DIVERTED AROUND THE POND SO AS NOT TO CREATE A POINT DISCHARGE OR DETRIMENTALLY AFFECT ANY ADJACENT PROPERTIES OR RIGHTS-OF-WAY.
39. ALL METALLIC CULVERT PIPE MUST BE BITUMINOUS COATED PER AASHOW-190. ONLY D.I.P. AND R.C.P. CULVERT PIPE MAY BE INSTALLED WITHIN THE MARION COUNTY RIGHT-OF-WAY. ONLY FLORIDA REGISTERED SANITARY SEWER CONTRACTORS MAY INSTALL DRAINAGE CULVERTS WITHIN PRIVATE PROPERTY. REGISTERED UTILITY CONTRACTORS MAY INSTALL CULVERT PIPES WITHIN MARION COUNTY RIGHTS-OF-WAY.
40. CONSTRUCTION SHOWN ON THIS PLAN IS PERMITTED ONLY FOR THE WORK LOCATED WITHIN PRIVATE PROPERTY. ALL WORK WITHIN CITY RIGHTS-OF-WAY AND EASEMENTS WILL REQUIRE A SEPARATE PERMIT (TO BE OBTAINED BY THE CONTRACTOR) AND MAY REQUIRE ALTERATION TO THE CONSTRUCTION OR MATERIALS SHOWN ON THESE PLANS. RIGHT-OF-WAY PERMIT APPLICATIONS SHOULD BE SUBMITTED NO LATER THAN 30 DAYS BEFORE THE RIGHT-OF-WAY OR EASEMENT WORK IS TO COMMENCE. RIGHT-OF-WAY PERMIT REQUIRED PRIOR TO INITIATING CONSTRUCTION WITHIN CITY RIGHT-OF-WAY.
41. ALL SIGNAGE AND STRIPING TO COMPLY WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.), LATEST EDITION.
42. WITHIN 30 DAYS OF CONSTRUCTION COMPLETION THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH AN AS-BUILT SURVEY SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR SHOWING ALL DIMENSIONS, ELEVATIONS AND IMPROVEMENTS SHOWN ON THIS PLAN TO SUCH DETAIL AS THE ENGINEER NEEDS IN ORDER TO VERIFY WHETHER CONSTRUCTION HAS BEEN COMPLETED IN ACCORDANCE WITH THE DESIGN DRAWINGS.
43. ALL INLETS AND GRATE TOPS SHALL BE DESIGNED AND FURNISHED AS H-20 LOAD BEARING.

41. ALL EXISTING STORM MANHOLES THAT CONFLICT WITH THE PROPOSED ROAD AND/OR SIDEWALK GRADE SHALL BE ADJUSTED TO MATCH THE PROPOSED ROAD OR SIDEWALK ELEVATION IN ACCORDANCE WITH CITY STANDARDS, UNLESS OTHERWISE NOTED IN THE PLANS. ADJUSTED MANHOLE LIDS SHALL BE REPLACED WITH U.S. FOUNDRY 575 RING AND COVER.
42. ASPHALT & BASE TESTING REQUIREMENTS SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION) AND AS NOTED BELOW.

42.a. LOT SIZE SHALL BE BASED ON 2,000 TONS OF ASPHALT WITH A MINIMUM OF TWO PAVEMENT CORE SAMPLES REQUIRED PER SUBLOT. CORE SAMPLE LOCATIONS SHALL BE RANDOMLY SELECTED BY THE ENGINEER.

42.b. BASE TESTING SHALL BE IN ACCORDANCE WITH SECTION 200. ALL TESTING RESULTS SHALL BE PROVIDED TO THE ENGINEER PRIOR TO ACCEPTANCE.

FDOT GENERAL NOTES:

ALL CONSTRUCTION AND/OR MAINTENANCE ON THE FDOT RIGHT OF WAY SHALL CONFORM TO THE CURRENT FEDERAL MANUAL ON UNIFORM TRAFFIC DEVICES (MUTCD), THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL (LATEST EDITION), THE FDOT DESIGN MANUAL (FDM), THE STANDARD PLANS FOR ROAD CONSTRUCTION, THE STANDARD SPECIFICATIONS FOR BRIDGE CONSTRUCTION, PLANS PREPARATION MANUAL AND DRAINAGE MANUAL.

1. ANY NEW PROPOSED PLAN SHALL INCLUDE CROSS SECTIONS OF THE STATE ROAD ADEQUATELY REFLECTING ALL RIGHT OF WAY FEATURES INCLUDING EXISTING UTILITIES, STORM DRAIN STRUCTURES AND ANY ABOVE OR BELOW GROUND APPURTENANCES WHERE APPLICABLE.
2. ALL FDOT RIGHT-OF-WAY MUST BE RESTORED WITH ARGENTINA BAHIA SOD, MESH FREE.
3. FOR ANY EXISTING DRIVEWAYS AND ROADWAY TIE-IN POINTS THAT ARE TO BE REMOVED, THE DROP CURB AND DRIVEWAY/ROADWAY APRONS SHALL BE REMOVED AND AREA RE-GRADED AND RESTORED WITH TYPE "F" CURB AND STANDARD SIDEWALK THAT CONFORMS WITH F.D.O.T. STANDARD PLANS INDEX #520--001 & 522--001.
4. PRIOR TO REMOVAL OF ANY MATERIALS THE AREA MUST BE SAWCUT TO PREVENT ANY DAMAGE TO THE ROADWAY.
5. OPEN CUTTING OF ANY ROADWAY, DRIVEWAY OR SIDEWALK OUTSIDE THOSE LIMITS IDENTIFIED WITHIN THE PERMIT ARE NOT ALLOWED WITHOUT PRIOR APPROVAL OF BY THE F.D.O.T.
6. NO STOCK PILING, STORING OR SEMI-PERMANENT USE OF THE RIGHT OF WAY IS AUTHORIZED UNLESS SPECIFICALLY IDENTIFIED WITHIN THE PERMIT FOR THE DRIVEWAY.
7. CONTRACTOR IS REQUIRED TO HAVE A PRE-CONSTRUCTION MEETING 2 WEEKS PRIOR TO ANY CONSTRUCTION.
8. NO WORK SHALL BE PERFORMED DURING THE WEEKS OF ANY STATE OR FEDERAL HOLIDAYS UNLESS OTHERWISE APPROVED IN WRITING BY THE F.D.O.T.
9. THE CONTRACTOR SHALL HAVE AN AUTHORIZED PERSON AVAILABLE AT / OR NEAR THE WORK SITE ON A 24 HOUR BASIS, 7 DAYS A WEEK IN ORDER TO ADDRESS EMERGENCY ISSUES ASSOCIATED WITH THE PROJECT.
10. NO LANE CLOSURES FROM 8:00 AM TO 7:00 PM NORTHBOUND AND NO LANE CLOSURES FROM 7:00 AM TO 6:00 PM SOUTHBOUND.
11. THE PERMITTED WORK SCHEDULE IS DEFINED AS MONDAY THROUGH FRIDAY 7:00 AM TO 5:30 PM UNLESS OTHERWISE NOTED WITHIN THE PERMIT. ANY WORK DESIRED OUTSIDE OF THIS PERIOD MUST BE REQUESTED IN ADVANCE AND APPROVED BEFORE WORKING THE ALTERNATE SCHEDULE.
12. ALL TRAFFIC CONTROL AND PAVEMENT MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC. THE PERMITTEE SHALL FURNISH THE DEPARTMENT WITH THE MANUFACTURER'S CERTIFICATION THAT THE THERMOPLASTIC IS "LEAD-FREE". REMOVAL OF EXISTING STRIPING SHALL BE DONE BY MILLING AND RESURFACING OF THE FRICTION/SURFACE COURSE TO OBLITERATE OBSOLETE PAVEMENT MARKINGS.
13. ALL PROPOSED TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH AND CONSTRUCTED TO THE FDOT DESIGN STANDARDS INDEX SERIES 700--010 AND 711--001 SERIES. THE PROPERTY OWNER MUST MAINTAIN THE TRAFFIC SIGNS AND MARKINGS WITHIN THE DRIVEWAY.
14. THE FDOT REQUIRES DOCUMENTATION FOR SUCCESSFUL COMPLETION OF AN APPROVED WORK ZONE TRAFFIC CONTROL TRAINING COURSE FOR THE AGENCY, UTILITY OR CONTRACTOR EMPLOYEE(S) DESIGNING, INSTALLING AND/OR MAINTAINING THE APPROVED MAINTENANCE OF TRAFFIC PLAN. DOCUMENTATION IS TO BE FURNISHED TO THE DEPARTMENT AT THE PRE-CONSTRUCTION MEETING OR BEFORE OCCUPYING STATE RIGHT-OF-WAY DEMONSTRATING COMPLIANCE WITH DEPARTMENT PROCEDURE, TOPIC NO. 625--010--010.
15. MAINTENANCE OF TRAFFIC PLAN FOR WORK WITHIN THE DRIVEWAY SHALL BE IN ACCORDANCE WITH THE FDOT STANDARD PLANS INDEX 102--600, 102--602, & 102--660 SERIES ACCORDING TO THE TYPE OF ROADWAY AND TYPE OF WORK BEING PERFORMED.
16. SILT FENCE FOR EROSION CONTROL IN CONFORMANCE WITH DESIGN STANDARDS INDEX (DSI) 102 IS REQUIRED FOR ALL AREAS OF CONSTRUCTION WITHIN FDOT R/W. PERPENDICULAR TO AND PARALLEL WITH THE STATE ROAD.
17. POSTED SPEED ALONG SR35 (US HWY 301) IS 45 MPH; SE HWY 42 IS 45 MPH. ALL TEMPORARY TRAFFIC CONTROL DEVICES MUST BE DESIGNED AND CONSTRUCTED TO MEET THIS POSTED SPEED.
18. NO PEDESTRIAN PATHWAY IS TO BE REMOVED, BLOCKED, OR DISTURBED WITHOUT HAVING A SUFFICIENT DESIGNATED TEMPORARY PEDESTRIAN PATHWAY WITH ALL APPROPRIATE PEDESTRIAN MAINTENANCE OF TRAFFIC SIGNS (INDEX 102--660) IN PLACE PRIOR TO PATHWAY BEING AFFECTED.
19. \*\*THE DETECTABLE WARNING SURFACE MATERIALS MUST BE ON THE STATE'S APPROVED PRODUCTS LIST. (NON-PROPRIETARY).
20. \*\*MAINTENANCE OF TRAFFIC PLAN MUST BE IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX 102--660. PEDESTRIAN CONTROL FOR CLOSURE OF SIDEWALKS, A TEMPORARY PEDESTRIAN PATHWAY SHALL BE CONSTRUCTED BETWEEN THE EXISTING BACK-OF-CURB AND THE PROPOSED SIDEWALK. THIS TEMPORARY PEDESTRIAN PATHWAY IS TO BE CONSTRUCTED PRIOR TO THE REMOVAL OF THE EXISTING SIDEWALK AND SHALL REMAIN IN PLACE UNTIL PROPOSED SIDEWALK IS COMPLETED.
21. \*\*FOR FACILITIES WITH PUBLIC SIDEWALK WITHIN FDOT RIGHT OF WAY.
21. ALL TEMPORARY PEDESTRIAN PATHWAYS MUST BE FIRM AND UNYIELDING.
22. USE STANDARD #520--001, #522--002, AND #522--001 FOR THE CONSTRUCTION OR RECONSTRUCTION OF SIDEWALK & CURB - MUST MEET CURRENT ADA STANDARDS AND ALL CONCRETE PLACED IN THE RIGHT-OF-WAY SHALL BE A MINIMUM OF 6" THICK, CLASS 1, NON-STRUCTURAL, 3,000 PSI WITH FIBER MESH MATERIAL.
23. ALL CONCRETE PLACED IN THE RIGHT-OF-WAY SHALL BE A MINIMUM OF 6" THICK, FDOT CLASS 1 NON-STRUCTURAL, 2,500 PSI CONCRETE WITH FIBER MESH MATERIAL FROM A STATE APPROVED PLANT.
24. ANY SIDEWALK DAMAGED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED WITHIN 72 HOURS WITH A MINIMUM OF 6" THICK, CLASS 1, NON-STRUCTURAL, 2,500 PSI WITH FIBER MESH MATERIAL.
25. THE FDOT RETAINS THE RIGHT TO MAKE ALTERATIONS TO THE PERMIT, ATTACHED SKETCH OR CHARACTER OF WORK AS MAY BE CONSIDERED NECESSARY OR DESIRABLE DURING THE PROGRESS OF THE WORK FOR SATISFACTORY COMPLETION OF THE PROPOSED CONSTRUCTION.
26. THE PERMITTEE SHALL NOTIFY THE FDOT OF DATE COMPLETION, REQUEST A FINAL INSPECTION AND A NOTICE OF FINAL ACCEPTANCE.
27. THE DEPARTMENT RESERVES THE RIGHT TO MAKE ADJUSTMENTS TO ANY PERMITTED METHODS OF INSTALLATION, SCOPE OF WORK AND RESTORATION THAT MAYBE REQUIRED TO POSITIVELY SUPPORT LIFE, SAFELY AND ENVIRONMENTAL WELL-BEING OF ALL USERS OF THE TRANSPORTATION SYSTEM.
28. PIPE CULVERTS SHOWN ON THE PERMIT MUST MEET FDOT SPECIFICATIONS, TYPE, SIZE, AND LENGTH AS DESCRIBED ON THE PERMIT. EACH JOINT OR LENGTH OF PIPE SHALL HAVE FDOT STAMPS AFFIXED VERIFYING THIS APPROVAL. ALL CONCRETE PIPE JOINTS OTHER THAN 1" RING JOINTS MUST BE DIAPHER. ALL CULVERTS TO BE INSPECTED BY FDOT PRIOR TO PLACEMENT OF FILL.
29. ROADWAY RESTORATION SHALL UTILIZE 100 PSI FLOWABLE FILL MATERIAL AND ASPHALT PLACED WITHIN THE STATE RIGHT OF WAY SHALL BE PLACED "FULL DEPTH", (2) 2.5 LIFTS OF SP 12.5, AND (2) LIFTS OF SP 9.5 AT 1.5" EACH TYPICAL SECTIONS WILL NEED TO BE PROVIDED WITHIN THE PLANS FOR THE PAVEMENT PLACEMENT. A STAIR-STEP METHOD SHOULD BE INCORPORATED, PRIOR TO PLACING ASPHALT. IN ORDER TO AVOID VERTICAL JOINTS, MILLING OF THE PATCH MAY BE REQUIRED BASED ON THE PATCHED SURFACE PERFORMANCE. THE MILLING SHALL BE UTILIZED FOR SURFACE LEVELING TO A THICKNESS EQUAL TO OR GREATER THAN THE EXISTING FINISH COURSE MATERIAL. THE MILLING LIMITS ARE 50 FT OF THE PATCH ALONG THE LONGITUDINAL PATH OF THE LANE, FULL LANE WIDTH AND TO INCLUDE ANY ADJACENT BIKE LANES, SHARED PATH OR URBAN SHOULDER SECTIONS.
30. THE DEPARTMENT WILL REVIEW THE REVISIONS TO THE PLANS AND IF NEEDED CHANGES ARE NECESSARY THE DEPARTMENT WILL ADDRESS IT AT THAT TIME.
31. ANY SIDEWALK FRONTING THE PROPERTY THAT IS CRACKED, DAMAGED OR UNSTABLE AND IS CREATING AN ADA TRIP HAZARD MUST BE REPLACED BY SECTION, USING STANDARD #520--001, #522--002, AND #522--001 FOR THE CONSTRUCTION OF SIDEWALK AND MEET CURRENT ADA STANDARDS.
32. IF THE EXISTING HAND HOLES IN THE SIDEWALK NEED TO BE ADJUSTED DURING THE RESTORATION OF THE SIDEWALK PLEASE CONTACT THE UTILITY TO HAVE THE HAND HOLES ADJUSTED OR NOTIFY THE UTILITY THAT THE CONTRACTOR WILL BE ADJUSTING THEM.
33. CONTRACTOR TO PROVIDE C.E.I. INSPECTION PER FDOT SPECIFICATION 105 "CONTRACTOR QUALITY CONTROL GENERAL REQUIREMENT".
34. CONTRACTOR TO CONTACT FDOT CANDIS STARCHER 48 HOURS BEFORE WORKING IN FDOT ROW 352--620--3000 EXT. 3016.
35. CONTRACTOR TO PROVIDE DENSITY TESTING IN FDOT ROW PER FDOT SPECIFICATIONS 120 & 125.
36. FOR WORK WITHIN FDOT RIGHT-OF-WAY, THE CONTRACTOR SHALL PROVIDE A TEMPORARY TRAFFIC CONTROL PLAN PREPARED UNDER THE DIRECTION OF, AND SIGNED AND SEALED BY, A LICENSED FLORIDA PROFESSIONAL ENGINEER WHO IS EXPERIENCED IN PREPARING TRAFFIC CONTROL PLANS AND WHO IS CERTIFIED PER FDOT PROCEDURE, TOPIC NO. 625--010--010, FOR WORK WITHIN FDOT RIGHT-OF-WAY. THE FDOT REQUIRES DOCUMENTATION FOR SUCCESSFUL COMPLETION OF AN APPROVED WORK ZONE TRAFFIC CONTROL TRAINING COURSE FOR THE AGENCY, UTILITY, OR CONTRACTOR EMPLOYEE(S) DESIGNING, INSTALLING, AND/OR MAINTAINING THE APPROVED MAINTENANCE OF TRAFFIC PLAN IN ACCORDANCE WITH DEPARTMENT PROCEDURE, TOPIC NO. 625--010--010. ALL TEMPORARY TRAFFIC CONTROL DEVICES FOR THE FOLLOWING FACILITIES SHALL BE DESIGNED AND INSTALLED TO MEET THE EXISTING POSTED SPEEDS AS STATED FOR ALL TRAFFIC CONTROL PHASES: SR35 (US HWY 301) IS 45 MPH; SE HWY 42 IS 45 MPH.
37. CONTRACTOR SHALL COMPLY WITH OSHA'S STANDARDS 29 CFR PART 1926, SUBPART CC FOR VERTICAL AND HORIZONTAL CLEARANCES TO THE OVERHEAD DISTRIBUTION AND TRANSMISSION POWER LINES.
38. CONTACT MARION COUNTY SIGNAL DEPARTMENT 48-HOURS PRIOR TO WORKING WITHIN THE RIGHT OF WAY. CONTACT IS STAN TAYLOR AT 352--671--8686.

PROJECT SPECIFIC NOTES

1. THE CONTRACTOR IS TO COORDINATE HIS WORK AND SITE ACCESS WITH THE OTHER ENTITIES THAT MAY BE WORKING ON SITE. ANY CONFLICTS ON COORDINATION ISSUES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND/OR ENGINEER FOR MUTUAL RESOLUTION.
2. PORTIONS OF THIS SITE HAVE BEEN DEMOLISHED AND/OR MAY BE DIFFERENT THAN DEPICTED IN THESE DRAWINGS. PRE-BID SITE VISITS ARE REQUIRED BY ALL BIDDERS TO FAMILIARIZE THEMSELVES WITH SITE CONDITIONS. ALL ADDITIONAL DEMOLITION REQUIRED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
3. FORTY-EIGHT (48) HOUR NOTICE IS REQUIRED BY THE ENGINEER PRIOR TO SITE INSPECTIONS AND/OR WITNESSING OF WATER AND/OR SEWER TESTING.
4. ALL EXISTING TREES TO REMAIN SHALL BE BARRICADE PROTECTED FROM DAMAGE BY EQUIPMENT AND/OR PERSONNEL.

SAFETY NOTES

1. DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL OSHA SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
2. THE CONTRACTOR'S MAINTENANCE OF TRAFFIC PLAN MUST BE SUBMITTED AND APPROVED BY APPLICABLE AGENCIES AND ENGINEER PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES.
3. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION AND CONSTRUCTION WORK PER STANDARD 1910.12.
4. CONTRACTOR SHALL PROVIDE AND MAINTAIN ITS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH ITS HEALTH & SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUB CONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUB CONTRACTORS AND SUB CONTRACTOR'S EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL AND PROTECTION LAWS. THE FOLLOWING IS NOT TO BE PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS.
5. ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS AND FLORIDA TRENCH SAFETY ACT. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART P.
6. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS" SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.
7. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.
8. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.
9. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES. CALL SUNSHINE STATE ONE CALL AT 800--432--4770.

TESTING NOTES

1. TESTS SHALL BE LOCATED NO MORE THAN 500 FEET APART. TESTS SHALL BE PERFORMED ON EACH LIFT, EXCEPT THAT TESTS SHALL NOT BE FURTHER APART THAN ONE (1) FOOT VERTICALLY. FIELD DENSITIES SHALL BE TAKEN AT ALL ROAD CROSSINGS. FIELD DENSITIES FOR SANITARY LINES SHALL BE STAGGERED TO INCLUDE RESULTS OVER SERVICE LATERALS. THERE SHALL BE A MINIMUM OF ONE (1) TEST SERIES FOR EACH 6 INCHES OF LIFT OVER PIPELINE BETWEEN MANHOLES. TESTS AROUND STRUCTURES SHALL BE SPIRALED IN 6 INCH LIFTS. TESTS AROUND BOX CULVERTS SHALL DONE ON BOTH SIDES EVERY LIFT.
2. FOR FLEXIBLE PIPE (CORRUGATED STEEL OR ALUMINUM), 95% OF MAXIMUM DENSITY (AASHTO--199) PER FDOT SUPPLEMENTAL SPECIFICATIONS SUB ARTICLE 125--8.3.2 AS MODIFIED.
3. TESTS SHALL BE LOCATED NO MORE THAN 300 FEET APART. THERE SHALL BE NO LESS THAN THREE (3) TESTS PER ROAD.
4. APPLIES TO SITE CONCRETE SUCH AS CURBS, GUTTERS, FLUMES, DRIVEWAYS AND SIDEWALKS.
5. ENGINEER OF RECORD SHALL RECEIVE MATERIAL TESTING REPORTS NO LATER THAN ONE (1) WEEK FROM THE TEST DATE.
6. TESTING FOR RCP SHALL BEGIN AT THE SPRING LINE OF THE PIPE.
7. EMBANKMENT, FILL, AND BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED IN LIFTS NOT TO EXCEED TWELVE (12) INCHES VERTICALLY. EACH COMPACTED LIFT SHALL PASS THE AFOREMENTIONED TESTING CRITERIA BEFORE PROCEEDING TO THE NEXT VERTICAL LIFT.
8. DENSITY TESTS SHALL BE PERFORMED AT A MINIMUM FREQUENCY OF ONE TEST PER EVERY 250 SQUARE YARDS OF FILL MATERIAL BEING PLACED, PER VERTICAL LIFT.
9. IF SUCCESSIVE VERTICAL LIFTS ARE PLACED, THE DENSITY TESTS SHALL BE STAGGERED SO AS TO NOT BE REPEATED IN THE SAME LOCATION.

TESTING SCHEDULE

ITEM	TEST	TEST FREQUENCY
PIPE TRENCH BACK FILL OVER PIPELINES AND AROUND STRUCTURES FROM R.O.W. LINE TO R.O.W. LINE AND IN STRUCTURAL AREAS	OPTIMUM MOISTURE/MAXIMUM DENSITY 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180--57 (ASTM D1557--70)	PER SOIL TYPE (SEE NOTES 1 AND 2 IN TESTING NOTES)
STABILIZED SUB GRADE	OPTIMUM MOISTURE/MAXIMUM DENSITY MINIMUM 40 LBR 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180--57 (ASTM D1557--70)	PER MATERIAL TYPE PER MATERIAL TYPE (SEE NOTES 1 & 3 IN TESTING NOTES)
BASE (OTHER THAN SOIL CEMENT)	OPTIMUM MOISTURE/MAXIMUM DENSITY MINIMUM 100 LBR 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180--57 (ASTM D1557--70)--NO TOLERANCE GRADATION, ATTERBURG LIMITS	PER SOURCE PER SOURCE (SEE NOTE 3 IN TESTING NOTES)  EACH LIFT PER SOURCE
BASE (SOIL CEMENT)	SOIL CEMENT SHALL BE PLANT MIX OR PUG MILL MIX - NO MIX IN PLACE 95% MAXIMUM DRY DENSITY AS DETERMINED BY AASHTO T-134 D1557--70--NO TOLERANCE GRADATION, ATTERBURG LIMITS	1 PER 300 LF (MIN 1 PER STREET) 3 SAMPLES COMPACTED DAILY (300 PSI) 300 FT. INTERVALS (MIN 1 PER STREET)
CONCRETE (SEE NOTE 4 IN TESTING NOTES) (PER AASHTO & ASTM SPECS)	SLUMP TEST MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS COMPRESSIVE STRENGTH CYLINDERS  AIR CONTENT	ONE PER SET OF CYLINDERS 3,500 PSI ONE SET OF THREE (3) CYLINDERS FOR 100 CUBIC YARDS OR FRACTION THEREOF ONE PER SET OF CYLINDERS
ASPHALTIC CONCRETE (PER FDOT SECTION 320)	AGGREGATE ANALYSIS DESIGN MIX BITUMEN CONTENT GRADATION STABILITY FLOW PROPERTIES OF IN-PLACE MATERIALS (MARSHALL) THICKNESS 95% OF LAB DENSITY	ONE PER DESIGN ONE PER TYPE ONE PER DAY ONE PER DAY ONE PER DAY (SEE NOTE 3 IN TESTING NOTES) (SEE NOTE 3 IN TESTING NOTES)

SEPARATION OF WATER AND SEWER LINES

HORIZONTAL SEPARATION OF PIPELINES		ALTERNATE CONSTRUCTION
MINIMUM SEPARATION DISTANCE	BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED WASTEWATER LINE WHEN POSSIBLE	WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE
THREE FEET, AND PREFERABLY TEN FEET	STORM SEWER, STORMWATER FORCE MAIN, OR RECLAIMED WATER MAIN	1. USE OF PRESSURE--RATED PIPE CONFORMING TO THE AMERICAN WATER WORKS ASSOCIATION STANDARDS INTERIOR H.D. PIPE (C 62--555.330) F.A.C., FOR THE OTHER PIPELINE IF IT IS A GRAVITY-- OR VACUUM--TYPE PIPELINE; 2. USE OF WELDED, FUSED, OR OTHERWISE RESTRAINED JOINTS FOR EITHER 3. USE OF WATER TIGHT CASING PIPE OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE.
THREE FEET, AND PREFERABLY TEN FEET	VACUUM--TYPE SANITARY SEWER.	
SIX FEET, AND PREFERABLY TEN FEET	GRAVITY-- OR PRESSURE--TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR RECLAIMED WATER MAIN NOT REGULATED UNDER PART III OF CHAPTER 62--610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY--TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.	
TEN FEET	"ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM"	
VERTICAL SEPARATION OF PIPELINES		
MINIMUM SEPARATION DISTANCE FROM THE (OUTSIDE TO THE OUTSIDE)	NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED	WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THREE FEET HORIZONTALLY FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND IS BEING LAID LESS THAN THE REQUIRED MINIMUM VERTICAL DISTANCE FROM THE OTHER PIPELINE
6 INCHES, PREFERABLY 12 INCHES ABOVE	GRAVITY-- OR VACUUM--TYPE SANITARY SEWER OR STORM SEWER	1. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH--THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE WATER MAIN; AND 2. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH--THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE OTHER PIPELINE IF IT IS NEW AND IS CONVEYING WASTEWATER OR RECLAIMED WATER.
12 INCHES BELOW	GRAVITY-- OR VACUUM--TYPE SANITARY SEWER OR STORM SEWER	
12 INCHES ABOVE OR BELOW	PRESSURE--TYPE SANITARY SEWER, WASTEWATER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER MAIN	
ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM--TYPE SANITARY SEWERS, STORMWATER FORCE MAINS, OR RECLAIMED WATER MAINS, AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY-- OR PRESSURE--TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR RECLAIMED WATER MAINS.		

ORIGINAL SET: 2/23/23

REVISIONS

1	1				
2	1	01/31/24	REVISED PER COUNTY COMMENTS		
3	1	12/27/23	REVISED PER AGENCY & CLIENT COMMENTS		
4	1	02/12/23	REVISED PER AGENCY COMMENTS		

NO. DATE

NATIVE engineering,plc

FOR

SRPG SUMMERFIELD, LLC

4803 GEORGE RD; SUITE 330 TAMPA, FL 33634

MAJOR SITE PLAN FOR SWC US HWY 301 & SE HWY 42

LAND OF LAKES, FL 34639

(813) 536-2539

FLORIDA

MARION COUNTY

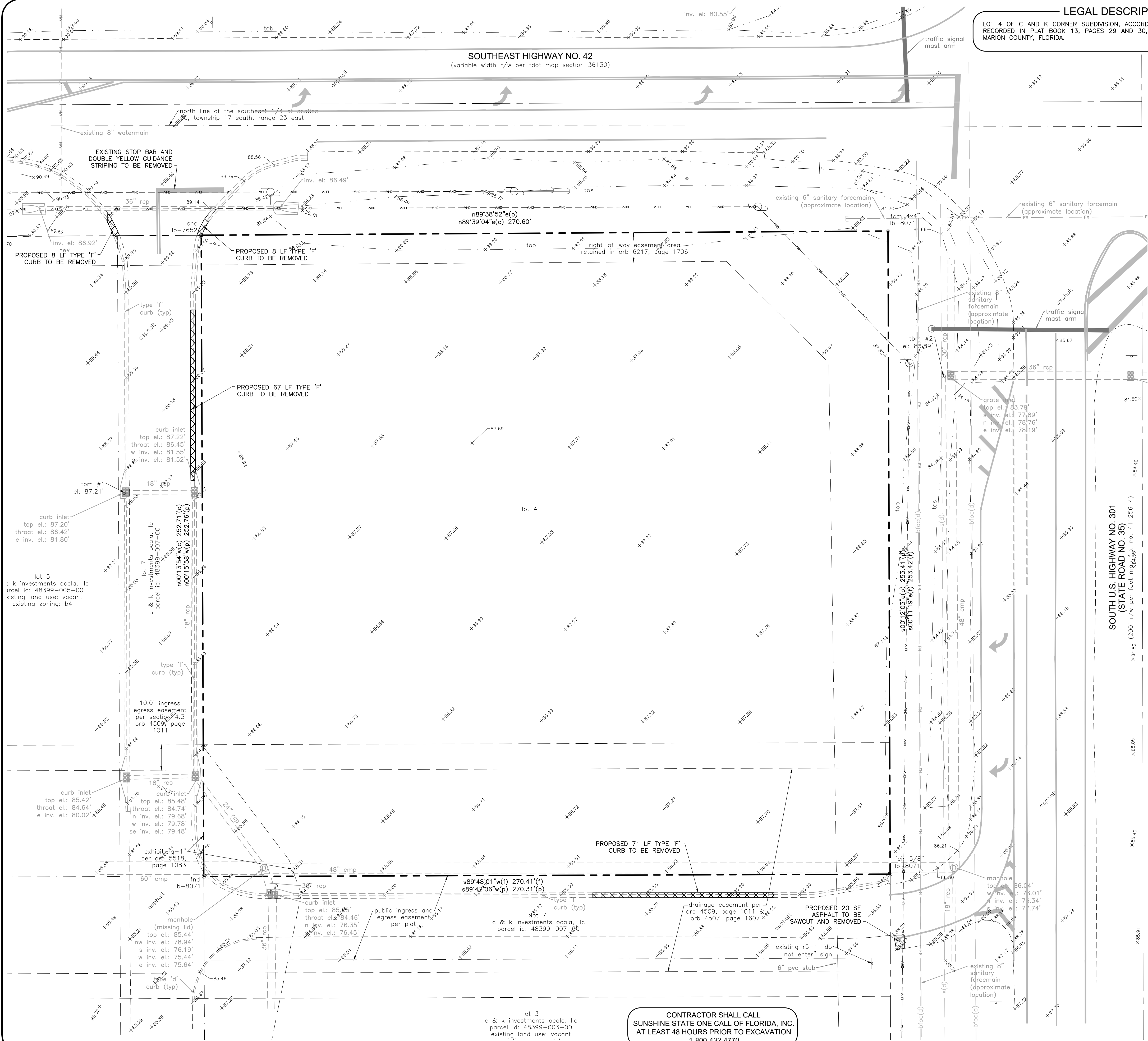
JOSHUA S. BRADLEY  
State of Florida,  
Professional Engineer,  
License No. 00020

THIS PLAN HAS BEEN ORIGINALLY PREPARED AND SEALED BY JOSHUA S. BRADLEY, A PROFESSIONAL ENGINEER IN THE STATE OF FLORIDA. ANY CHANGES OR REVISIONS INDICATED HEREIN, PRINTED OR OTHERWISE, HAVE BEEN CONSIDERED, SIGNED AND SEALED BY THE ENGINEER AND INDICATED BY HIS SIGNATURE AND VERIFIED ON ANY ELECTRONIC COPIES.

SHEET NUMBER

C2.0

S-T-R  
30-17-23



#### LEGAL DESCRIPTION

LOT 4 OF C AND K CORNER SUBDIVISION, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 13, PAGES 29 AND 30, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA.

#### ENGINEER'S NOTE

THIS IS NOT A SURVEY. THIS PLAN WAS CREATED BY NATIVE ENGINEERING, PLLC, IN REFERENCE TO A SURVEY DONE BY EBI SURVEYING.

#### FLOOD ZONE INFORMATION

SUBJECT PROPERTY SHOWN HEREON APPEARS TO BE LOCATED IN FLOOD ZONE 'X' PER F.I.R.M. NUMBER 12083C 0885 D; DATED 8/28/08. THE LOCAL F.E.M.A. AGENT SHOULD BE CONTACTED FOR VERIFICATION.

#### BENCHMARK NOTE

BASED ON A FLORIDA DEPARTMENT OF TRANSPORTATION BENCHMARK #60503004, HAVING AN ELEVATION OF 101.38 NAVD88  
CONVERSION: 1.00 NAVD88 = 1.902 NGVD29



#### SURVEYORS LEGEND

AC	AIR CONDITIONER	LB	LICENSED BUSINESS NUMBER
ADA	AMERICANS WITH DISABILITIES ACT	LP	LIGHT POLE
ID	IDENTIFICATION	LS	LICENSED SURVEYOR
(C)	CALCULATED MEASUREMENT	MW	MONITORING WELL
CO	CLEAN OUT	NAVD	NORTH AMERICAN VERTICAL DATUM
CONC	CONCRETE	NGVD	NORTH AMERICAN VERTICAL DATUM
CSW	CONCRETE SIDEWALK	OHW	OVERHEAD WIRE
(D)	DEED/DESCRIPTION DATA	ORB	OFFICIAL RECORDS BOOK
EBX	ELECTRIC BOX	(P)	PLAT MEASUREMENT - CALL
EL	ELEVATION	PP	POWER POLE
EM	ELECTRIC METER	PRM	PERMANENT REFERENCE MONUMENT
(F)	FIELD MEASUREMENT	PSM	PROFESSIONAL SURVEYOR & MAPPER
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	R/W	RIGHT-OF-WAY
F.F.	FINISHED FLOOR	SCIR	SET CAPPED IRON ROD
FOR	FOUND CAPPED IRON ROD	SND	SET NAIL AND DISK
FM	FOUND CONCRETE MONUMENT	SV	SEWER VALVE
FIP	FOUND IRON PIPE	TBM	TEMPORARY BENCHMARK
FIR	FOUND IRON ROD	WM	WATER METER
FND	FOUND NAIL AND DISK	WV	WATER VALVE
FPP	FOUND PINCHED PIPE		
INV.	INVERT		
	BACKFLOW PREVENTION DEVICE		TOP OF BANK
	CABLE RISER		T.O.E. OF SLOPE
	GRATE INLET		FENCE
	SANITARY SEWER STRUCTURE		OVERHEAD UTILITY LINES
	SPOT ELEVATION		UNDERGROUND GAS LINE
	STORM STRUCTURE		UNDERGROUND WATER LINE
	TELEPHONE PEDESTAL		UNDERGROUND FORCEMAIN
	TRAFFIC SIGNAL JUNCTION BOX		UNDERGROUND RECLAIMED WATER LINE
	TRAFFIC SIGNAL POLE		UNDERGROUND SANITARY SEWER LINE
	FIRE HYDRANT		
	SIGN		
	BOLLARD		

#### SURVEYORS NOTES

- NO UNDERGROUND IMPROVEMENTS OR UTILITIES WERE LOCATED EXCEPT THOSE SHOWN HEREON.
- UNLESS NOTED OTHERWISE, NO FOUNDATIONS WERE LOCATED.
- NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WAS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK REFLECTED HEREON.
- AN INSURANCE CERTIFICATE IS AVAILABLE UPON REQUEST.
- NO ZONING LETTER OR REPORT WAS PROVIDED.
- BEARING BASIS: FIELD AND CALCULATED BEARINGS SHOWN HEREON ARE BASED ON NORTH AMERICAN DATUM 1983, ADJUSTMENT OF 2011, FLORIDA WEST ZONE, RESULTING IN A BEARING OF S00°11'19"E ALONG THE EAST LINE OF LOT 4, AS SHOWN HEREON.
- THIS SURVEY MAP WAS PREPARED WITH THE BENEFIT OF A TITLE INSURANCE COMMITMENT PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY, FILE NO.: 2061-4869209, HAVING A COMMITMENT DATE OF JULY 27, 2020 @ 8:00 AM. AS TO SCHEDULE B-II EXCEPTIONS, THE FOLLOWING APPLY:
  - ITEM 1. DEFECTS, LIENS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY, CREATED, FIRST APPEARING IN THE PUBLIC RECORDS OR ATTACHING SUBSEQUENT TO THE EFFECTIVE DATE BUT PRIOR TO THE DATE THE PROPOSED INSURED ACQUIRES FOR VALUE OF RECORD THE ESTATE OR INTEREST OR MORTGAGE THEREON
    - NOT A SURVEY MATTER.
  - ITEM 2. ANY RIGHTS, INTERESTS, OR CLAIMS OF PARTIES IN POSSESSION OF THE LAND NOT SHOWN BY THE PUBLIC RECORDS
    - NOT A SURVEY MATTER.
  - ITEM 3. ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND.
    - RESOLVED BY THE PERFORMANCE OF THE SURVEY REFLECTED HEREON.
  - ITEM 4. ANY LIEN, FOR SERVICES, LABOR, OR MATERIALS IN CONNECTION WITH IMPROVEMENTS, REPAIRS OR RENOVATIONS PROVIDED BEFORE, ON, OR AFTER DATE OF POLICY, NOT SHOWN BY THE PUBLIC RECORDS.
    - NOT A SURVEY MATTER.
  - ITEM 5. ANY DISPUTE AS TO THE BOUNDARIES CAUSED BY A CHANGE IN THE LOCATION OF ANY WATER BODY WITHIN OR ADJACENT TO THE LAND PRIOR TO DATE OF POLICY, AND ANY ADVERSE CLAIM TO ALL OR PART OF THE LAND THAT IS, AT DATE OF POLICY, OR WAS PREVIOUSLY UNDER WATER.
    - NONE KNOWN.
  - ITEM 6. TAXES OR SPECIAL ASSESSMENTS NOT SHOWN AS LIENS IN THE PUBLIC RECORDS OR IN THE RECORDS OF THE LOCAL TAX COLLECTING AUTHORITY, AT DATE OF POLICY.
    - NOT A SURVEY MATTER.
  - ITEM 7. INTENTIONALLY DELETED.
  - ITEM 8. TAXES AND ASSESSMENTS FOR THE YEAR 2020 AND SUBSEQUENT YEARS, WHICH ARE NOT YET DUE AND PAYABLE
    - NOT A SURVEY MATTER.
  - ITEM 9. RESTRICTIONS, DEDICATIONS, CONDITIONS, RESERVATIONS, EASEMENTS AND OTHER MATTERS SHOWN ON THE PLAT OF C AND K CORNER SUBDIVISION, AS RECORDED IN PLAT BOOK 13, PAGE(S) 29 AND 30, BUT DELETING ANY COVENANT, CONDITION OR RESTRICTION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN TO THE EXTENT SUCH COVENANTS, CONDITIONS OR RESTRICTIONS VIOLATE 42 USC 3604(C).
    - APPLICABLE SURVEY MATTERS ARE SHOWN HEREON.
  - ITEM 10. EASEMENT GRANTED TO SUMTER ELECTRIC COOPERATIVE, INC. BY INSTRUMENT RECORDED IN BOOK 448, PAGE 577, AS PARTIALLY RELEASED IN BOOK 6217, PAGE 1706.
    - THERE IS AN AREA OF THE ORIGINAL EASEMENT RECORDED IN ORB 448, PAGE 577 RETAINED PER ORB 6217, PAGE 1706. THAT RETAINED PORTION IS SHOWN HEREON.
  - ITEM 11. EASEMENT GRANTED TO STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION BY INSTRUMENT RECORDED IN BOOK 4507, PAGE 1607.
    - EASEMENT DESCRIBED THEREIN LIES PARTIALLY WITHIN THE SUBJECT PARCEL AND IS SHOWN HEREON.
  - ITEM 12. TERMS AND CONDITIONS OF THE CONSTRUCTION, MAINTENANCE AND STORMWATER EASEMENT AGREEMENT BETWEEN C & K INVESTMENTS, INC., TRUSTEE, A FLORIDA CORPORATION AND MARION COUNTY, FLORIDA, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA RECORDED IN BOOK 4509, PAGE 1011.
    - EASEMENT DESCRIBED THEREIN LIES PARTIALLY WITHIN THE SUBJECT PARCEL AND IS SHOWN HEREON.
  - ITEM 13. COVENANT TO CONNECT TO MARION COUNTY WATER AND WASTEWATER SYSTEMS RECORDED IN BOOK 5516, PAGE 96.
    - LANDS DESCRIBED THEREIN INCLUDE ALL OF THE SUBJECT PARCEL.
  - ITEM 14. COVENANT FOR "PARALLEL ACCESS ROAD RECORDED IN BOOK 5518, PAGE 1071.
    - DOCUMENT CONTAINS NO PLOTTABLE ITEMS.
  - ITEM 15. COVENANT FOR SIDEWALK DEVELOPMENT RECORDED IN BOOK 5518, PAGE 1073.
    - DOCUMENT CONTAINS NO PLOTTABLE ITEMS.
  - ITEM 16. DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS, INCLUDING ANY AMENDMENTS OR MODIFICATIONS THEREOF, WHICH CONTAINS PROVISIONS FOR A PRIVATE CHARGE OR ASSESSMENTS, RECORDED IN BOOK 5518, PAGE 1083, AS AMENDED IN BOOK 6790, PAGE 1753, BUT DELETING ANY COVENANT, CONDITION OR RESTRICTION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN, TO THE EXTENT SUCH COVENANTS, CONDITIONS OR RESTRICTIONS VIOLATE 42 USC 3604(C).
    - EASEMENT DESCRIBED IN ORB 5518, PAGE 1083 LIES PARTIALLY WITHIN THE SUBJECT PARCEL AND IS SHOWN HEREON. ORB 6790, PAGE 1753 CONTAINS NO PLOTTABLE ITEMS.

ORIGINAL SET: 2/23/23

REVISIONS

NO.	DATE	DESCRIPTION
1		
2	07/31/24	REVISED PER COUNTY COMMENTS
3	12/27/23	REVISED PER AGENCY & CLIENT COMMENTS
4	02/27/23	REVISED PER AGENCY COMMENTS

**NATIVE**  
engineering,plc

FOR  
SRPG SUMMERFIELD, LLC

4803 GEORGE RD; SUITE 330 TAMPA, FL 33634

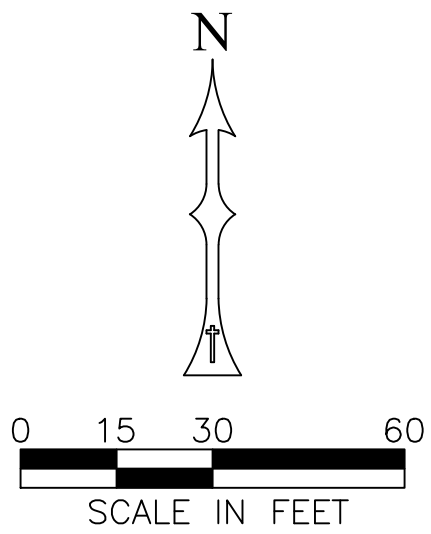
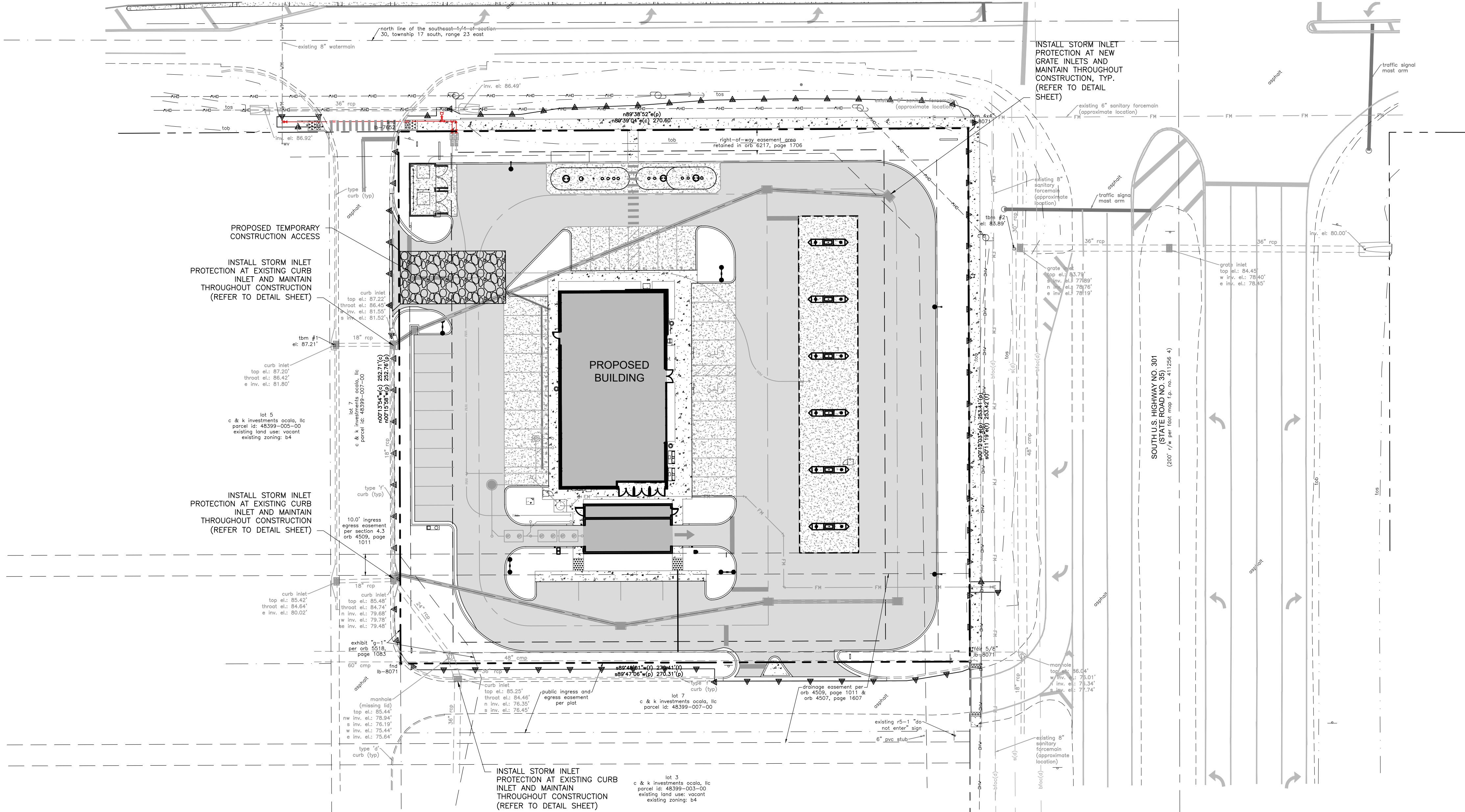
MAJOR SITE PLAN FOR SWC US HWY 301 & SE HWY 42

EXISTING  
CONDITIONS &  
DEMOLITION PLAN

SHEET NUMBER  
**C3.0**

S-T-R  
30-17-23

G:\SHARED DRIVES\CLIENTS\SOLID ROCK PROPERTY GROUP\122.035.00-SWC US HWY 301 & SE HWY 42\DRAWINGS\C4.0 EROSION CONTROL PLAN.DWG - 2/8/2024 5:07 PM



**CONTRACTOR CERTIFICATION STATEMENT**

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

TBD DATE

**RESPONSIBLE AUTHORITY CERTIFICATION STATEMENT**

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

TBD DATE

**EROSION CONTROL NOTES**

- PROPOSED SILT FENCE MUST REMAIN IN PLACE UNTIL FINISH GRADING FOR THE LANDSCAPE IS UNDERWAY.
- CONTRACTOR MUST CLEAN PAVEMENT AREAS DAILY DURING EARTHWORK OPERATIONS.
- EXISTING ENTRANCE DEMOLITION AREA & REPLACEMENT (WITH NEW DRIVEWAY, SIDEWALK, AND/OR GROUND COVER) IS TO BE COMPLETED WITHIN A SINGLE WORK PERIOD.
- WRAP ALL EXISTING ON-SITE GRATES PER GRATE INLET EROSION PROTECTION DETAIL (REFER TO DETAIL SHEET).
- UNDER THE DRIPLINE OF ALL EXISTING TREES (ON-SITE OR OFF-SITE) TO BE SAVED, SILT FENCE MUST BE BACKFILLED, NOT TRENCHED, TO AVOID NEGATIVE ROOT IMPACTS.

**STORM WATER POLLUTION PREVENTION PLAN**

CONTAINED ON THESE PLANS AND WITHIN THE FOLLOWING NOTES IS A STORM WATER POLLUTION PREVENTION PLAN (THE PLAN) WHICH HAS BEEN DEVELOPED BY NATIVE ENGINEERING, INC. IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION "NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM" (NPDES) GENERAL PERMIT.

THE FOLLOWING ENTITIES ARE IDENTIFIED AS TEAM MEMBERS OF "THE PLAN": NATIVE ENGINEERING, PLLC, THE DEVELOPER AS IDENTIFIED IN THE TITLE BOX OF THESE PLANS, AND THE SITE CONTRACTOR AND HIS SUB-CONTRACTORS. EACH TEAM MEMBER HAS SPECIFIC RESPONSIBILITIES AND OBLIGATIONS IN GENERAL REGARDING THE INVOLVEMENT AND RESPONSIBILITIES ON THE PROJECT, ARE TO IMPLEMENT ALL NECESSARY STORM WATER MANAGEMENT CONTROLS TO ASSURE COMPLIANCE WITH THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES, THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT PERMIT, THE APPLICABLE LOCAL GOVERNING AGENCY MARION COUNTY AND THE GUIDELINES LISTED IN THE SWPPP. THE DUTIES AND RESPONSIBILITIES OF THE TEAM MEMBERS AS THEY PERTAIN TO THE SWPPP ARE AS FOLLOWS:

**NATIVE ENGINEERING, PLLC.**

- DEVELOP STORM WATER POLLUTION PREVENTION PLAN (SWPPP) INCLUDING, BUT NOT LIMITED TO, RETENTION/DETENTION PONDS, CONTROL STRUCTURES, EROSION CONTROL METHODS AND LOCATIONS AND STABILIZATION CRITERIA. THIS DESIGN IS INCLUDED WITHIN THESE CONSTRUCTION PLANS AND THE FOLLOWING NOTES AND INSTRUCTIONS.
- SUBMIT AND OBTAIN THE NECESSARY DESIGN RELATED STORM WATER PERMITS FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFMD) AND OTHER APPLICABLE GOVERNMENTAL BODIES.
- UPON NOTIFICATION BY THE DEVELOPER OF HIS INTENT TO COMMENCE CONSTRUCTION, SUBMIT A NOTICE OF INTENT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION ON BEHALF OF THE DEVELOPER AND THE CONTRACTOR. ALSO, SUBMIT A COPY OF THE SWFMD PERMIT OR COMPLETENESS LETTER IF THE PERMIT IS NOT YET AVAILABLE. THIS SUBMITTAL WILL BE MADE NO LATER THAN 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION.
- SUBMIT TO SWFMD AND THE OPERATOR OF THE MUNICIPAL SEPARATE STORM WATER SYSTEM, IF APPLICABLE, A LETTER OF CONSTRUCTION COMMENCEMENT.
- COMPLETE AND SUBMIT A NOTICE OF TERMINATION AND CERTIFICATION FOR DEVELOPER AND CONTRACTOR. THE NOTE'S SHALL BE SUBMITTED NO MORE THAN 30 DAYS AFTER
- 5.a. COMPLETION OF THE PROJECT AND FINAL STABILIZATION OF THE SITE OR
- 5.b. WHEN RESPONSIBILITY FOR THE SITE HAS ENDED. FINAL STABILIZATION AS DEFINED BY FDEP AND EPA IS WHEN ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND A UNIFORM (E.G. EVENLY DISTRIBUTED, WITHOUT LARGE BARE AREAS) PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OF THE NATIVE BACKGROUND VEGETATIVE COVER FOR THE AREA HAS BEEN ESTABLISHED ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES. AS AN ALTERNATIVE, EQUIVALENT PERMANENT STABILIZATION MEASURES (SUCH AS RIPRAP, GRASS, OR GEOTEXTILES) MAY BE EMPLOYED. BOTH THE CLIENT AND CONTRACTOR SHALL NOTIFY NATIVE ENGINEERING WHEN ONE OF THESE CRITERIA HAS BEEN MET.

**CONTRACTOR**

- SIGN AND RETURN TO NATIVE ENGINEERING A NOTICE OF INTENT AND CERTIFICATION OF STORM WATER POLLUTION PREVENTION PLAN NO LATER THAN 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION. COPY NATIVE ENGINEERING AND THE DEVELOPER ON THE NO PERMIT. EACH SUB-CONTRACTOR APPLIED BY THE SWPPP MUST SUBMIT TO THE CONTRACTOR THAT THEY UNDERSTAND AND SHALL COMPLY WITH THE NPDES PERMIT AND SWPPP. A RECORD OF THESE CERTIFICATIONS SHALL BE MAINTAINED BY THE CONTRACTOR ON SITE.
- DURING CONSTRUCTION, ASSURE COMPLIANCE WITH THE DESIGNED STORM WATER POLLUTION PREVENTION PLANS PREPARED BY NATIVE ENGINEERING AND THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES.
- MAINTAIN A COPY OF THE CONSTRUCTION PLANS, WHICH INCLUDE THE STORM WATER POLLUTION PREVENTION PLAN BOTH NO'S AND ALL INSPECTION REPORTS AND CERTIFICATIONS ON SITE.
- UNDERTAKE ALL REASONABLE BEST MANAGEMENT PRACTICES (BMP'S) TO ASSURE THAT Silted OR OTHERWISE POLLUTED STORM WATER IS NOT ALLOWED TO DISCHARGE FROM THE SITE DURING ALL PHASES OF CONSTRUCTION. BMP THAT SHALL BE USED FOR STABILIZATION IS SODDING. STRUCTURAL EROSION AND SEDIMENT CONTROL BMP'S THAT SHALL BE USED INCLUDE: SILT FENCES (AS SHOWN, THIS SHEET) & EXISTING STORM DRAIN INLET PROTECTION (PER DETAIL THIS SHEET). ADDITIONAL BMP'S THAT MAY NEED TO BE IMPLEMENTED INCLUDE: (1) PROVIDING PROTECTED STORAGE AREAS FOR CHEMICALS, FUELS, SOLVENTS, FERTILIZERS, AND OTHER POTENTIALLY TOXIC MATERIALS; (2) PROVIDING WASTE RECEPTACLES AT CONVENIENT LOCATIONS AND PROVIDING REGULAR COLLECTION OF WASTES, INCLUDING BUILDING MATERIAL WASTES; (3) MINIMIZING OFF-SITE TRACKING OF SEDIMENTS; (4) MAKING ADEQUATE PREPARATIONS, INCLUDING TRAINING AND EQUIPMENT TO CONTAIN SPILLS OF OIL AND HAZARDOUS MATERIALS; AND (5) COMPLYING WITH APPLICABLE STATE OR LOCAL WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS AND THE USE OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR ALLOWABLE NON-STORM WATER COMPONENTS OF DISCHARGE.
- NOTIFY NATIVE ENGINEERING AND THE DEVELOPER IN WRITING OF ANY NON-STORM WATER POLLUTION SOURCES WHICH ARE BEING STORED, OR OTHERWISE USED DURING THE CONSTRUCTION OF THE PROJECT (I.E., FERTILIZERS, FUELS, PESTICIDES, OTHER CHEMICALS, ETC.). THIS NOTIFICATION SHOULD BE ACCOMPANIED WITH THE CONTRACTOR'S DESIGN AND METHODS TO PREVENT POLLUTION RUN-OFF FROM THESE SOURCES.
- DEVELOP A MAINTENANCE AND INSPECTION PLAN WHICH INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:
  - THE SPECIFIC AREAS TO BE INSPECTED AND MAINTAINED THAT INCLUDE ALL THE DISTURBED AREAS AND MATERIAL STORAGE AREAS OF THE SITE;
  - THE EROSION AND SEDIMENT CONTROLS IDENTIFIED IN THE SWPPP TO BE MAINTAINED AND INSPECTED AND THOSE ADDITIONAL CONTROLS THAT THE CONTRACTOR DEEMS NECESSARY;
  - MAINTENANCE PROCEDURES;
  - THE PROCEDURE TO FOLLOW IF ADDITIONAL WORK IS REQUIRED OR WHOM TO CALL;
  - INSPECTIONS AND MAINTENANCE FORMS; AND
  - THE PERSONNEL ASSIGNED TO EACH TASK;

THE FOLLOWING SHALL BE INSPECTED A MINIMUM OF ONCE A WEEK OR WITHIN 24 HOURS AFTER 0.25 INCHES OF RAINFALL: STABILIZATION MEASURES (ONCE A MONTH IF FULLY STABILIZED); STRUCTURAL CONTROLS; DISCHARGE POINTS; CONSTRUCTION ENTRANCE AND EXITS; AND AREAS USED FOR STORAGE OF EXPOSED MATERIALS.

AN INSPECTION FORM SHALL BE COMPLETED FOR EACH INSPECTION. ANY PERMIT VIOLATIONS SHOULD BE NOTED AND CORRECTIVE MEASURES TO BE TAKEN SHALL BE NOTED. IF REVISIONS TO THE SWPPP ARE NEEDED, A REPORT FORM FOR CHANGES IN THE SWPPP SHALL BE COMPLETED AND A COPY SENT TO NATIVE ENGINEERING. THE ORIGINAL SHALL BE KEPT ON-SITE AS DOCUMENTATION OF THE CHANGE. IF THE INSPECTION PASSES, A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE SWPPP AND THE NPDES PERMIT MUST BE SIGNED BY ONE OF THE FOLLOWING: THE PRINCIPAL EXECUTIVE OFFICE OR RANKING Elected OFFICIAL OF THE OPERATOR OF THE SWPPP OR A DULY AUTHORIZED REPRESENTATIVE OF THE PRINCIPAL EXECUTIVE OFFICIAL OF THE OPERATOR OF THE SWPPP. IF REQUIRED, STORM WATER DISCHARGE SAMPLES ARE TO BE TAKEN AT THE LOCATIONS SPECIFIED BY THE ENGINEER OF RECORD. THE SAMPLING SHOULD BE PERFORMED ACCORDING TO THE FOLLOWING CRITERIA: A GRAB BAG SAMPLE WILL BE TAKEN DURING REGULAR WORKING HOURS (ONCE PER MONTH) WITHIN THE FIRST 30 MINUTES OF A QUALIFYING EVENT (A RAIN EVENT AT 0.5 INCHES OR GREATER IN A 24 HOUR PERIOD) OR WITHIN THE FIRST 30 MINUTES OF THE BEGINNING OF THE DISCHARGE OF A PREVIOUSLY COLLECTED QUALIFYING EVENT FOR SETTABLE SOLIDS, TOTAL SUSPENDED SOLIDS, OR TURBIDITY FLOW. THIS DATA IS TO BE RECORDED AND SUBMITTED TO USEPA AND FDEP ONCE PER MONTH. RETAIN INSPECTION REPORTS AND CERTIFICATIONS FOR AT LEAST THREE YEARS.

- INITIATE SITE STABILIZATION MEASURES NO MORE THAN 14 DAYS AFTER CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ON ANY MAJOR PORTION OF THE SITE EXCEPT WHEN CONSTRUCTION WILL RESUME WITHIN 21 DAYS.
- NOTIFY NATIVE ENGINEERING WHEN IT IS TIME TO SUBMIT A NOTICE OF TERMINATION AS DEFINED UNDER PART E OF THE NATIVE ENGINEERING, INC. SECTION OF THE SWPPP. SIGN AND RETURN TO NATIVE ENGINEERING THE NOTICE OF TERMINATION FORM AND CERTIFICATION.

**DEVELOPER**

- NOTIFY NATIVE ENGINEERING OF YOUR INTENT TO COMMENCE CONSTRUCTION. SIGN THE NOTICE OF INTENT FORM AS OPERATOR OF THE STORM WATER DISCHARGE FACILITY AND PERMITTEE AND RETURN TO NATIVE ENGINEERING. COPY NATIVE ENGINEERING ON THE NO PERMIT WHEN IT IS RECEIVED.
- SIGN A CERTIFICATION OF STORM WATER POLLUTION PREVENTION PLAN AND RETURN TO NATIVE ENGINEERING.
- NOTIFY NATIVE ENGINEERING WHEN IT IS TIME TO SUBMIT A NOTICE OF TERMINATION AS DEFINED UNDER PART E OF THE NATIVE ENGINEERING, PLLC. SECTION OF THE SWPPP. SIGN AND RETURN TO NATIVE ENGINEERING FOR SUBMITTAL TO EPA A NOTICE OF TERMINATION FORM AND CERTIFICATION. PRE-DEVELOPED SITE INFORMATION:
  - TOTAL SITE ACREAGE: 1.57 AC
  - LAND USE: VACANT
  - VEGETATION: GRASS
  - SOIL TYPES: ARREDONDO SAND
  - ENDANGERED SPECIES: N/A

**PROJECT INFORMATION**

- PROJECT TYPE: COMMERCIAL
- ANTICIPATED CONSTRUCTION SEQUENCE IS AS FOLLOWS:
  - COMPLETE EROSION CONTROL INSTALLATION
  - CLEARING AND GRUBBING
  - EARTHWORK ACTIVITIES
  - STORM WATER SYSTEM CONSTRUCTION
  - UTILITY CONSTRUCTION
  - BASE AND PAVEMENT CONSTRUCTION
  - FINAL STABILIZATION
- ANTICIPATED START DATE: 06/2023
- ANTICIPATED COMPLETION DATE: 06/2024
- TOTAL ACRES DISTURBED: 1.57 AC (±)
- PRE-DEVELOPED IMPERVIOUS AREA: 0.00 AC (±)
- POST-DEVELOPED IMPERVIOUS AREA: 1.23 AC (±)
- THE STORM WATER MANAGEMENT SYSTEM, UPON COMPLETION OF CONSTRUCTION AND APPROPRIATE CERTIFICATION AND AS-BUILT SUBMITTALS WILL BE OPERATED AND MAINTAINED BY THE POTENTIAL SOURCE OF POLLUTION FROM THIS PROJECT IS ON-SITE DEVELOPMENT AND CONSTRUCTION ACTIVITY.
- DOES THE PROJECT DISCHARGE INTO A WATER BODY LISTED ON THE 1998 EPA APPROVED 303 (D) LIST FOR WATER SEGMENTS WHICH ARE IMPAIRED DUE TO TOTAL SUSPENDED SOLIDS? NO. IF SO, SAMPLING IS REQUIRED AS OUTLINED IN SECTION F.

CONTRACTOR SHALL CALL  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.  
AT LEAST 48 HOURS PRIOR TO EXCAVATION  
1-800-432-4770

**NATIVE**  
engineering,pllc  
P.O. BOX 2995  
LAND O' LAKES, FL 34639  
(813) 536-2539

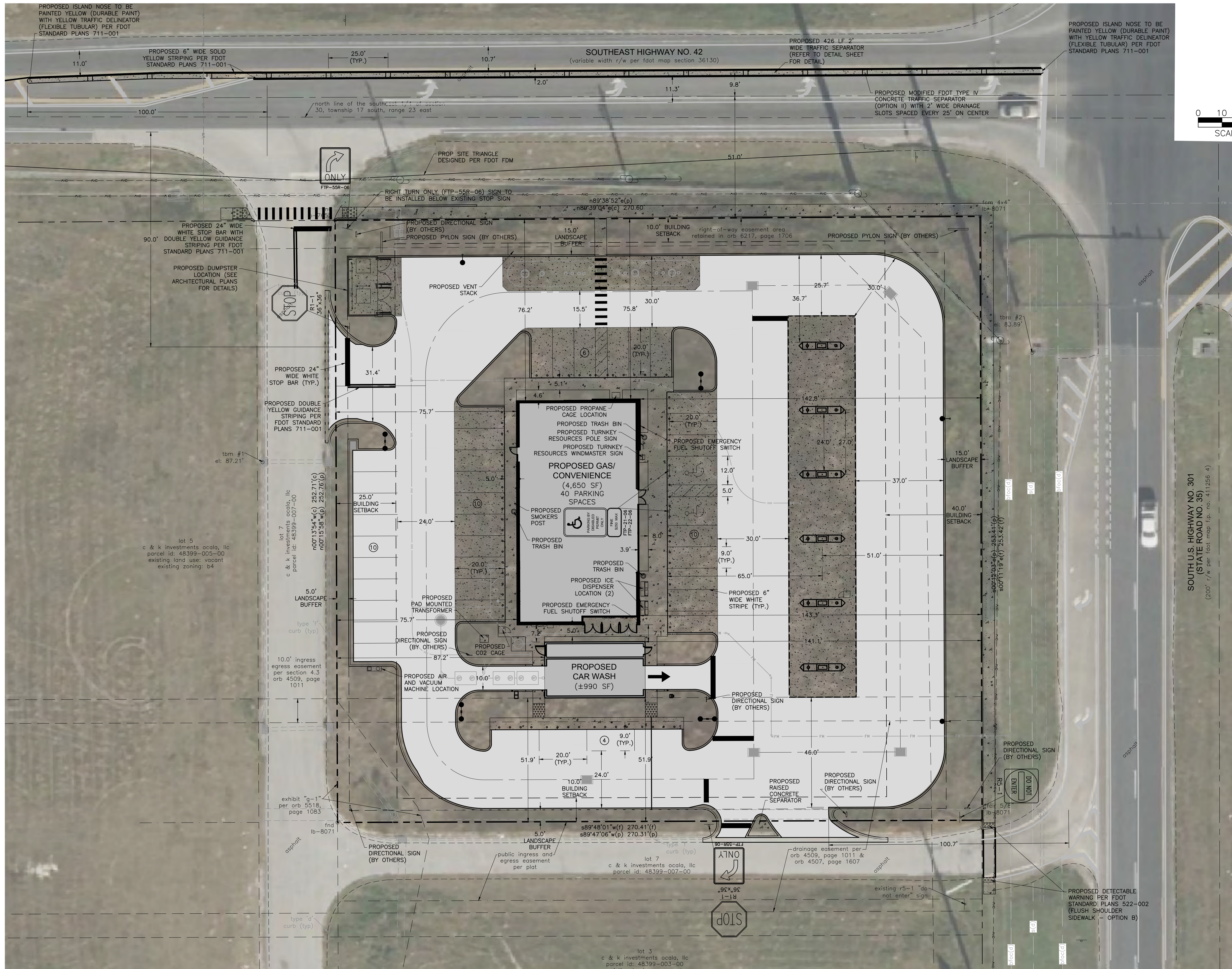
MAJOR SITE PLAN FOR SWC US HWY 301 & SE HWY 42  
FOR  
SRPG SUMMERFIELD, LLC  
4803 GEORGE RD; SUITE 330 TAMPA, FL 33634  
MARION COUNTY  
FLORIDA

EROSION  
CONTROL PLAN

JOSHUA S. BRADLEY  
State of Florida,  
Professional Engineer,  
License No. 00020  
THIS DRAWING HAS BEEN OPENLY  
BONDED AND SEALED BY JOSHUA S.  
BRADLEY, SEE THE DATE  
INDICATED HERE. PRINTED COPIES  
OF THIS DRAWING ARE NOT TO BE  
CONSIDERED, SIGNED AND SEALED  
AND THE SIGNATURE MUST BE  
VERIFIED ON ANY ELECTRONIC  
COPIES.

SHEET NUMBER  
**C4.0**  
S-T-R  
30-17-23

ORIGINAL SET: 2/23/23			
REVISIONS			
NO.	DATE	DESCRIPTION	
3	01/31/24	REVISED PER COUNTY COMMENTS	
2	12/22/23	REVISED PER AGENCY & CLIENT COMMENTS	
1	02/27/23	REVISED PER AGENCY COMMENTS	



**LEGEND**

- PROPERTY LINE
- PROPOSED CENTERLINE
- EXISTING EDGE OF PAVEMENT & BACK OF CURB
- PROPOSED EDGE OF PAVEMENT & BACK OF CURB
- EXISTING CONCRETE
- PROPOSED ASPHALT
- PROPOSED 4" THICK PEDESTRIAN CONCRETE (UNLESS OTHERWISE NOTED)
- PROPOSED 6" THICK 4,000 PSI FIBERMESH REINFORCED CONCRETE PAVEMENT
- PROPOSED RED ADA TRUNCATED DOMES
- PROPOSED ADA RAMP
- PARKING NUMBERS
- SITE LIGHT POLES

**NOTES**

**GENERAL**

1. CONTRACTOR SHALL PROTECT ALL COUNTY REGULATORY SIGNS DURING CONSTRUCTION AND REPLACE THOSE IN THE COUNTY RIGHT-OF-WAY WHEN CONSTRUCTION IS COMPLETED PRIOR TO ENGINEER FINAL.

**CULTURAL RESOURCES**

1. THERE ARE NO OBSERVED REGISTERED CULTURAL RESOURCES PRESENT ON SITE.

**TRAFFIC MARKING AND SIGNING**

1. FLORIDA STATUTE 316.0747 REQUIRES THAT ALL TRAFFIC CONTROL SIGNING AND MARKINGS ON PRIVATE PROPERTY OPENED TO THE GENERAL PUBLIC BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.

CONTRACTOR SHALL CALL  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.  
AT LEAST 48 HOURS PRIOR TO EXCAVATION  
1-800-432-4770

**ORIGINAL SET: 2/23/23**

NO.	DATE	DESCRIPTION
1		REVISIONS
2	12/22/23	REVISED PER AGENCY COMMENTS
3	01/31/24	REVISED PER COUNTY COMMENTS
4	02/12/24	REVISED PER AGENCY COMMENTS

**NATIVE engineering,plc**  
P.O. BOX 2995  
LAND O' LAKES, FL 34639  
(813) 536-2539

**MAJOR SITE PLAN FOR SWC US HWY 301 & SE HWY 42**  
FOR  
**SRPG SUMMERFIELD, LLC**  
4803 GEORGE RD; SUITE 330 TAMPA, FL 33634

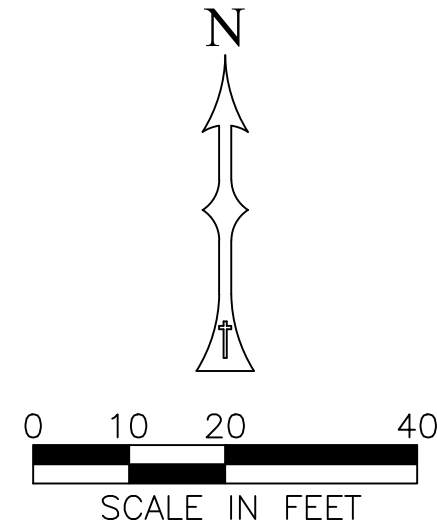
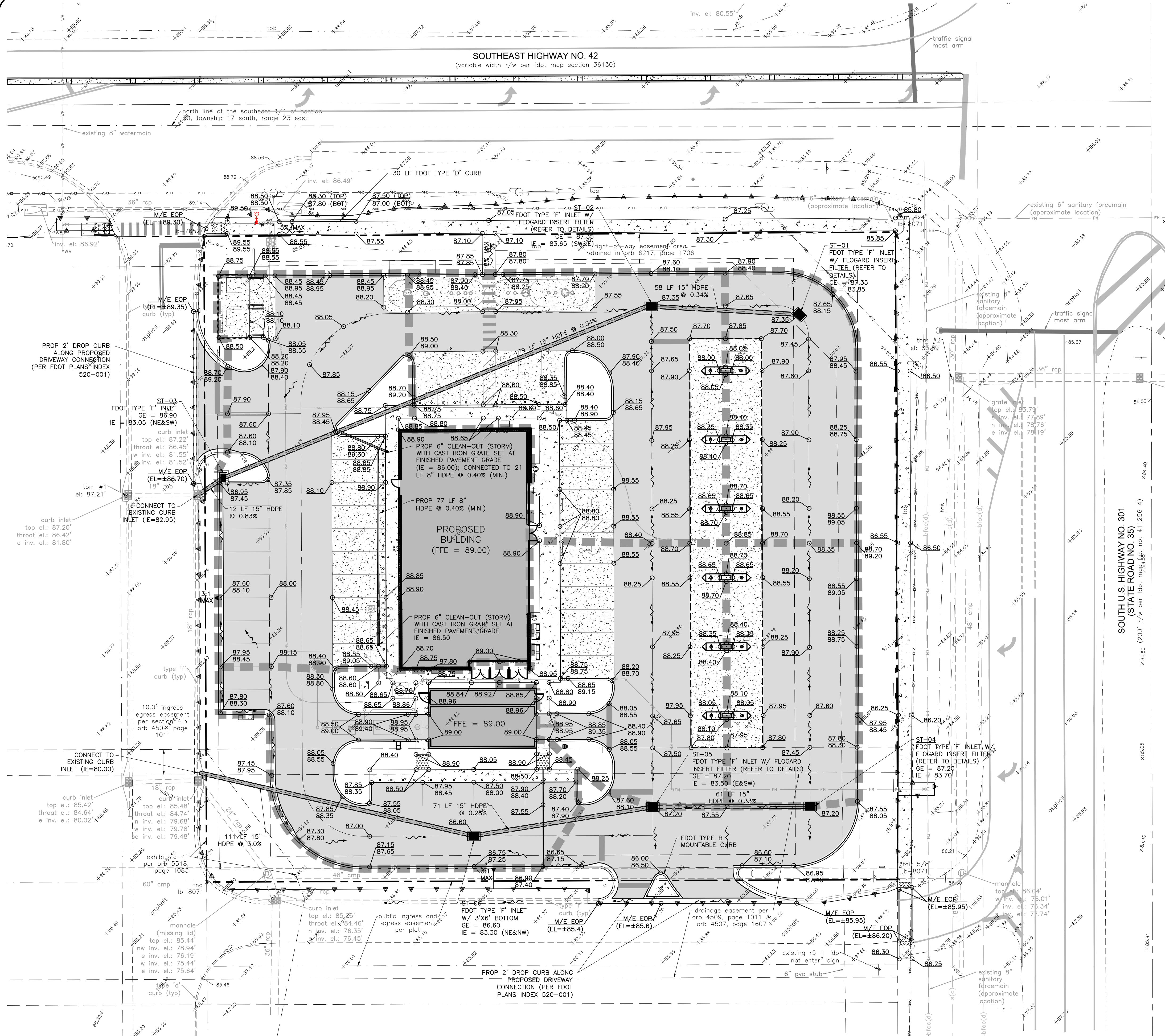
**SITE PLAN**

**JOSHUA S. BRADLEY**  
State of Florida,  
Professional Engineer,  
License No. 60020

THIS DRAWING HAS BEEN ORIGINALLY SIGNED AND SEALED BY JOSHUA S. BRADLEY, P.E. ON THE DATE INDICATED HERE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

**SHEET NUMBER**  
**C5.0**  
S-T-R  
30-17-23

G:\SHARED DRIVES\CLIENTS\SOLID ROCK PROPERTY GROUP\122035.00-SWC US HWY 301 & SE HWY 42\DRAWINGS\C6.0 PAVING, GRADING & DRAINAGE PLAN\DWG - 2/9/2024 5:07 PM



### GEOTECH NOTE

REFER TO REPORT BY SAME, INC. DATED 9/16/22, SECTION 5.0 (SUBSURFACE CONDITIONS) FOR RECOMMENDATION FOR REMOVAL OF UNSUITABLE EXISTING SOIL, IF APPLICABLE.

### FLOOD ZONE INFORMATION

SUBJECT PROPERTY SHOWN HEREON APPEARS TO BE LOCATED IN FLOOD ZONE X PER F.I.R.M. NUMBER 12083C 0885 D, DATED 8/28/08. THE LOCAL F.E.M.A. AGENT SHOULD BE CONTACTED FOR VERIFICATION.

### BENCHMARK NOTE

BASED ON A FLORIDA DEPARTMENT OF TRANSPORTATION BENCHMARK #60503004, HAVING AN ELEVATION OF 101.38 NAVD88

CONVERSION: 1.00 NAVD88 = 1.902 NGVD29

### LEGEND

- EXISTING SPOT ELEVATION
- FOP
- BOC/TOP OF S/W
- FLOW ARROW
- APPROXIMATE SOIL BORING LOCATIONS
- DRAINAGE SYSTEM PIPE & STRUCTURES
- EXISTING STORM SEWER
- PROPOSED TOP OF BANK
- PROPOSED ROOT PRUNING (TO BE DONE WITH DOSCO ROOT CUTTER OR APPROVED EQUAL)
- PROPOSED SILT FENCE
- PROPOSED TREE BARRICADE
- PROPOSED SUB-BASIN LINE
- PROPOSED ASPHALT PAVEMENT
- PROPOSED 4" THICK PEDESTRIAN CONCRETE (UNLESS OTHERWISE NOTED)
- PROPOSED 6" THICK 4,000 PSI FIBERMESH REINFORCED CONCRETE PAVEMENT
- PROPOSED 6" RIP-RAP

### GRADING NOTES

- ALL DISTURBED AREAS, WHETHER INCIDENTAL TO CONSTRUCTION AND OUTSIDE THE CONSTRUCTION LIMITS OR WITHIN THE CONSTRUCTION LIMITS, SHALL BE SODDED OR STABILIZED USING ALTERNATIVE METHODS APPROVED BY THE ENGINEER. UNLESS OTHERWISE SPECIFIED IN THE CONSTRUCTION PLANS, SOD SPECIES SHALL BE CONSISTENT WITH THE SPECIES SPECIFIED ON THE ASSOCIATED LANDSCAPE PLANS. IF NO LANDSCAPE PLANS ARE PROVIDED, SOD TYPE SHALL BE BAHIA.
- ALL RESTORED AREAS SHALL BE GRADED TO ENABLE POSITIVE DRAINAGE AND TO NOT HOLD WATER.
- ALL SLOPES STEEPER THAN 3:1 SHALL BE REINFORCED WITH STAKED SOD.
- CONTRACTOR TO ADJUST CROSS SLOPE IN ACCORDANCE WITH E.O.R. DIRECTION FOR INLETS NOT IMMEDIATELY ADJACENT TO LOW POINT CENTERLINE OF ROADWAY.
- ALL PROPOSED CURB SHALL BE FDOT TYPE "D" CURB UNLESS OTHERWISE NOTED.
- LENGTH OF STORM DRAINAGE PIPES IS APPROXIMATE - MEASURED FROM THE CENTER ON INLETS.
- EXISTING OFF-SITE DRAINAGE PATTERNS SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- DURING THE CONSTRUCTION PERIOD, GRATED INLETS AND JUNCTION BOX OPENINGS SHALL BE COVERED WITH AN APPROVED FILTER FABRIC (MIRAF 140N OR APPROVED EQUAL) TO PREVENT DEBRIS FROM ENTERING THE INLET.
- ALL DRAINAGE CULVERT JOINTS SHALL BE WRAPPED PER FDOT INDEX 280.
- CONTRACTOR SHALL USE 3500 PSI REINFORCED CONCRETE FOR ROADWAY USE AND/OR DRAINAGE STRUCTURES.
- ALL ROOF RUNOFF FROM PROPOSED BUILDING SHALL BE ROUTED TOWARDS & THROUGH PROPOSED DRAINAGE SYSTEM.
- WHERE PROPOSED ASPHALT PAVEMENT IS SHOWN FLUSH WITH PROPOSED CURBING, THE CONTRACTOR SHALL INSTALL A 3" (MIN.) TO 6" (MAX.) TRANSITION FROM NORMAL CURBING TO FLUSH.
- WHERE DETECTABLE WARNING MATS ARE REQUIRED, INSTALL ADA COMPLIANT YELLOW DETECTABLE WARNING MATS.
- SIDEWALK ADJACENT TO PROPOSED ASPHALT PAVEMENT TO BE CONSTRUCTED WITH TRENCH CURB (REFER TO DETAIL, SHEET C10.0).
- ALL CONDENSATE DRAIN LINES SHALL DISCHARGE TO THE PUBLIC STORM SYSTEM, DRY WELL, GRASS AREAS, OR TO WHERE THEY DON'T CREATE A TRIP AND FALL HAZARD BUT NOT TO THE SANITARY SEWER SYSTEM.
- WHERE ADA ACCESSIBLE ROUTES ARE LOCATED, SIDEWALK, LANDINGS, AND/OR DRIVE AREAS SHALL MEET FLORIDA ADA STANDARDS INCLUDING, BUT NOT LIMITED TO, 2% MAX CROSS SLOPE AND 5% MAX LONGITUDINAL SLOPE (50' MAX). IF THIS PLAN SHOWS PROPOSED GRADES EXCEEDING THESE SLOPES, CONTRACTOR SHALL CONTACT EOR IMMEDIATELY TO DISCUSS BEFORE CONSTRUCTING THE ROUTE. ANY NEWLY CONSTRUCTED SIDEWALK THAT IS NOT ADA COMPLIANT WILL NOT BE CERTIFIED BY THE EOR.
- WHERE SIDEWALK ADJUTING THE RETAINING WALL IS SHOWN TO BE HIGHER THAN THE WALL, CONTRACTOR TO THICKEN THE EDGE OF SIDEWALK TO BE A MINIMUM OF 4" BELOW THE TOP OF WALL.

### FDOT SPECIFIC NOTES

- USE STANDARD #520-001, #522-002, AND #522-001 FOR THE CONSTRUCTION OF SIDEWALK & CURB - MUST BE CONSTRUCTED AND INSPECTED TO MEET CURRENT ADA STANDARDS.
- ALL CONCRETE PLACED IN THE RIGHT-OF-WAY SHALL BE FROM AN FDOT CERTIFIED PLANT MEETING ALL MINIMUM REQUIREMENTS FOR CONSTRUCTION OF ROAD AND BRIDGE CONSTRUCTION.
- CONCRETE MUST BE A MINIMUM OF 6" THICK, 2,500 LB. CLASS 1, NON-STRUCTURAL WITH FIBER MESH MATERIAL.
- FOR ANY EXISTING DRIVEWAYS AND ROADWAY TIE-IN POINTS THAT ARE TO BE REMOVED, THE DROP CURB AND DRIVEWAY/ROADWAY SHALL BE REMOVED AND AREA RE-GRADED AND RESTORED WITH TYPE "F" CURB AND STANDARD SIDEWALK THAT CONFORMS WITH F.D.O.T. STANDARD INDEX #520-001 & 522-001.
- PROPOSED CONNECTION IS TO BE DESIGNED AND CONSTRUCTED PER F.D.O.T. STANDARD #A30-001 RURAL RADIAL TURN-OUT WITH A CROSS SLOPE THAT MEETS THE REQUIREMENT FOR "GENERAL APPLICATION." DESIGN FOR THE MAXIMUM SIZE VEHICLE: MINIMUM INGRESS RADI OF 35' AND MINIMUM EGRESS RADI OF 25'.
- ANY SIDEWALK FRONTING THE PROPERTY THAT IS CRACKED, DAMAGED OR UNSTABLE AND IS CREATING AN ADA TRIP HAZARD MUST BE REPLACES BY SECTION USING STANDARD #520-001, #522-002 AND #522-001 FOR THE CONSTRUCTION OF SIDEWALK AND MEET CURRENT ADA STANDARDS. ALL CONCRETE PLACED IN THE RIGHT OF WAY SHALL BE A MINIMUM 4" THICK, CERTIFIED FDOT CLASS 1 NON-STRUCTURAL, 2,500 PSI CONCRETE WITH FIBER MESH MATERIAL FROM A CERTIFIED STATE APPROVED PLANT.
- PRIOR TO REMOVAL OF ANY MATERIALS THE AREA MUST BE SAWCUT TO PREVENT ANY DAMAGE TO THE ROADWAY.
- THE DETECTABLE WARNING SURFACE MATERIALS MUST BE ON THE STATE'S QUALIFIED PRODUCTS LIST (NON-PROPRIETARY). THE DETECTABLE WARNING MAT SHALL BE GLED AND SOWNED IN PLACE.
- THE APPROPRIATE PEDESTRIAN OR # AS INDICATED WITHIN THE F.D.O.T. STANDARD INDEX #522-002 IS CR-F.

CONTRACTOR SHALL CALL  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.  
AT LEAST 48 HOURS PRIOR TO EXCAVATION  
1-800-432-4770

**NATIVE**  
engineering,plc  
P.O. BOX 2995  
LAND O' LAKES, FL 34639  
(813) 536-2539

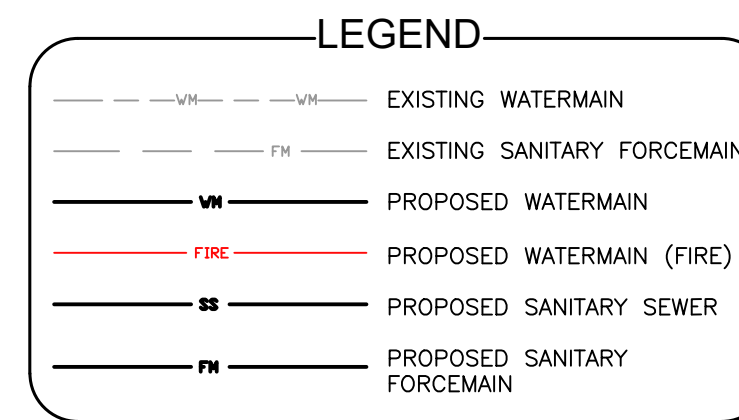
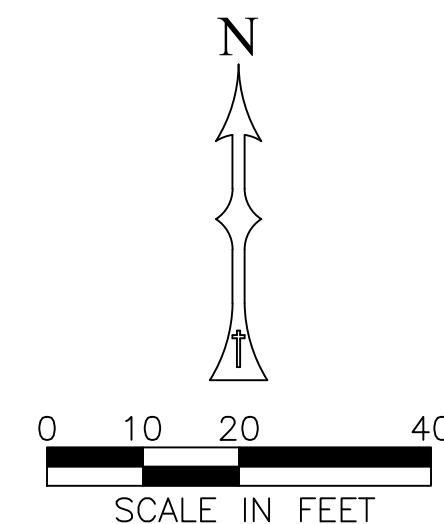
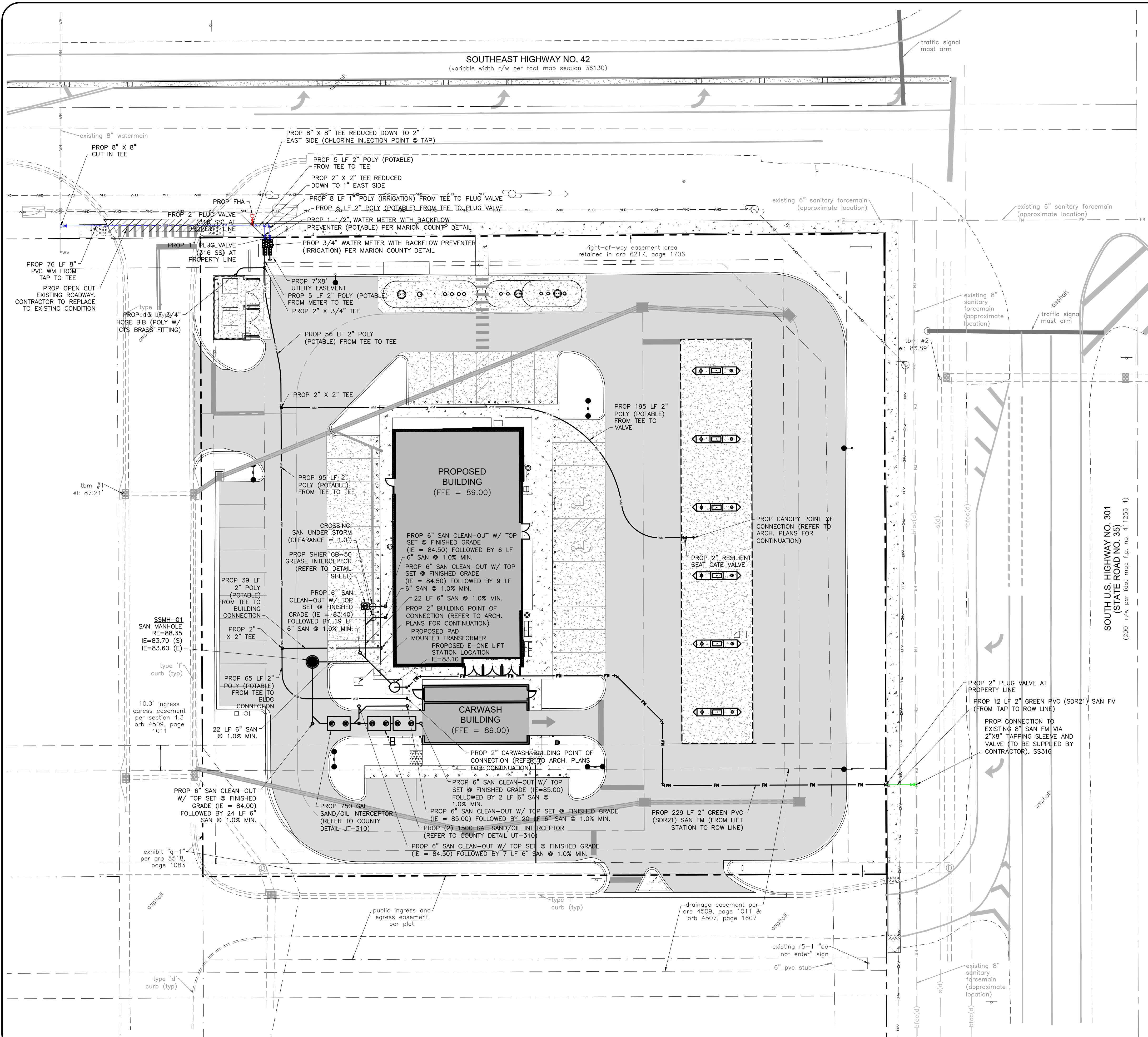
MAJOR SITE PLAN FOR SWC US HWY 301 & SE HWY 42  
FOR  
SRPG SUMMERFIELD, LLC  
4803 GEORGE RD; SUITE 330 TAMPA, FL 33634  
MARION COUNTY

PAVING, GRADING  
& DRAINAGE PLAN

JOSHUA S. BRADLEY  
State of Florida,  
Professional Engineer,  
License No. 00020  
THIS PLAN HAS BEEN ORIGINALLY  
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BRADLEY. ANY OTHER COPIES  
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COPIES.

SHEET NUMBER  
**C6.0**  
S-T-R  
30-17-23

ORIGINAL SET: 2/23/23		REVISED	NO.	DATE	DESCRIPTION
1					
2	0/21/24	REVISED PER COUNTY COMMENTS	3	0/21/24	REVISED PER COUNTY COMMENTS
3	12/22/23	REVISED PER AGENCY & CLIENT COMMENTS	1	12/22/23	REVISED PER AGENCY COMMENTS
4	7/27/23	REVISED PER AGENCY COMMENTS	1	7/27/23	REVISED PER AGENCY COMMENTS



FIRE FLOW REQUIREMENTS	
NFPA CONSTRUCTION TYPE = II (000)	PER NFPA TABLE 18.4.5.2.1: TYPE II (000) CONSTRUCTION W/ 4,650 SF BUILDING AREA; FIRE FLOW = 1,500 GPM, 2 HOURS DURATION

- ## UTILITY NOTES
1. PROPOSED WATER MAIN TO BE DEFLECTED OVER OR UNDER STORM AND SANITARY PIPE (MIN. 18" CLEARANCE). WHEN WATER MAIN IS BELOW SANITARY OR LESS THAN 18" CLEARANCE, SANITARY SEWER PIPE TO BE CONSTRUCTED WITH D.I.P. 18" ON EACH SIDE OF THE CROSSING.
  2. WATER AND SEWER LATERALS ARE TO BE ADJUSTED TO MAINTAIN 18" MINIMUM CLEARANCE WITH ALL OTHER UTILITIES.
  3. GRASS AND MULCH, OR SOLID SOD, ALL AREAS IN EXISTING RIGHT-OF-WAY DISTURBED BY THE PROPOSED IMPROVEMENTS.
  4. CONTRACTOR SHALL COORDINATE ALL WORK WITHIN, BUT NOT LIMITED TO, CITY/COUNTY RIGHTS-OF-WAY WITH UTILITY COMPANIES IN ORDER TO PREVENT DAMAGE TO UTILITY LINES AND/OR MAKING ADJUSTMENTS, IF REQUIRED.
  5. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO INITIATING CONSTRUCTION AND NOTIFY THE ENGINEER OF RECORD (E.O.R.) IN WRITING OF ANY CONFLICTS BEFORE CONSTRUCTION.
  6. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL ROAD CROSSING AND/OR UTILITY PERMITS, IF REQUIRED.
  7. ALL SANITARY SEWER MANHOLES TO BE INSTALLED WITHIN UNPAVED AREAS SHALL HAVE A WATER-TIGHT RING AND COVER.
  8. BENDS SHALL BE INSTALLED IN FORCE MAIN AND/OR WATER MAIN TO AVOID UNFORESEEN CONFLICTS IN EXISTING/PROPOSED STRUCTURES.
  9. THE JOINT DEFLECTION METHOD SHALL BE USED WHERE PRACTICAL IN LIEU OF INSTALLING BENDS.
  10. CONTRACTOR TO USE RISERS AS NECESSARY ON SANITARY LINES TO MAINTAIN MINIMUM REQUIRED SLOPES.
  11. CONTRACTOR TO EXPOSE WATER MAIN AND FURNISH TAPPING SLEEVE AND VALVE FOR WATER METER TAP.
  12. ANY PROPOSED ELECTRICAL, TELEPHONE, CABLE, & GAS SHOWN ON THIS PLAN ARE CONCEPTUAL. CONTRACTOR TO VERIFY THESE EXISTING UTILITY LOCATIONS & POINTS OF CONNECTION PRIOR TO THE START OF CONSTRUCTION.
  13. ALL NEW HYDRANTS SHALL BE FLOW TESTED BY A PRIVATE CONTRACTOR AND WITNESS BY FIRE PREVENTION. THE CAPS AND BONNETS SHALL ALSO BE PAINTED ACCORDING TO THE FLOW RATES IN NFPA 291

**FDOT LANE CLOSURE RESTRICTIONS**  
M.P. 0.000 TO M.P. 1.517  
NO LANE CLOSURES 1:00 PM TO 6:00 PM DIRECTION NORTHBOUND  
NO LANE CLOSURES 6:00 AM TO 2:00 PM DIRECTION SOUTHBOUND

**MCU INSPECTION NOTE**

MCU PERSONNEL ARE TO INSPECT ANY WORK PERFORMED ON OR AROUND EXISTING MCU INFRASTRUCTURE. A PRE-CONSTRUCTION MEETING IS REQUIRED TO BE HELD A MINIMUM OF 48 HOURS PRIOR TO START OF ANY CONSTRUCTION. IF THE PRE-CONSTRUCTION MEETING IS NOT COMPLETED, ANY WORK MAY BE HALTED TO SCHEDULE. CONTACT MCU'S CONSTRUCTION OFFICER AT 352-307-6163.

CONTRACTOR SHALL CALL  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.  
AT LEAST 48 HOURS PRIOR TO EXCAVATION  
1-800-432-4770

# UTILITY PLAN

**JOSHUA S. BRADLEY**  
 State of Florida  
 Professional Engineer,  
 License No. 60020

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSHUA S. BRADLEY, PE ON THE DATE INDICATED HERE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ORIGINAL SET: 2/23/23  
 REVISIONS

NO.	DATE	DESCRIPTION
1	12/27/23	REVISED PER COUNTY COMMENTS
2	12/27/23	REVISED PER AGENCY & CLIENT COMMENTS
1	6/27/23	REVISED PER AGENCY COMMENTS

MAJOR SITE PLAN FOR SWC US HWY 301 & SE HWY 42

FOR

SRPG SUMMERFIELD, LLC

4803 GEORGE RD; SUITE 330 TAMPA, FL 33634

MARION COUNTY

FLORIDA

NATIVE

engineering,pllc

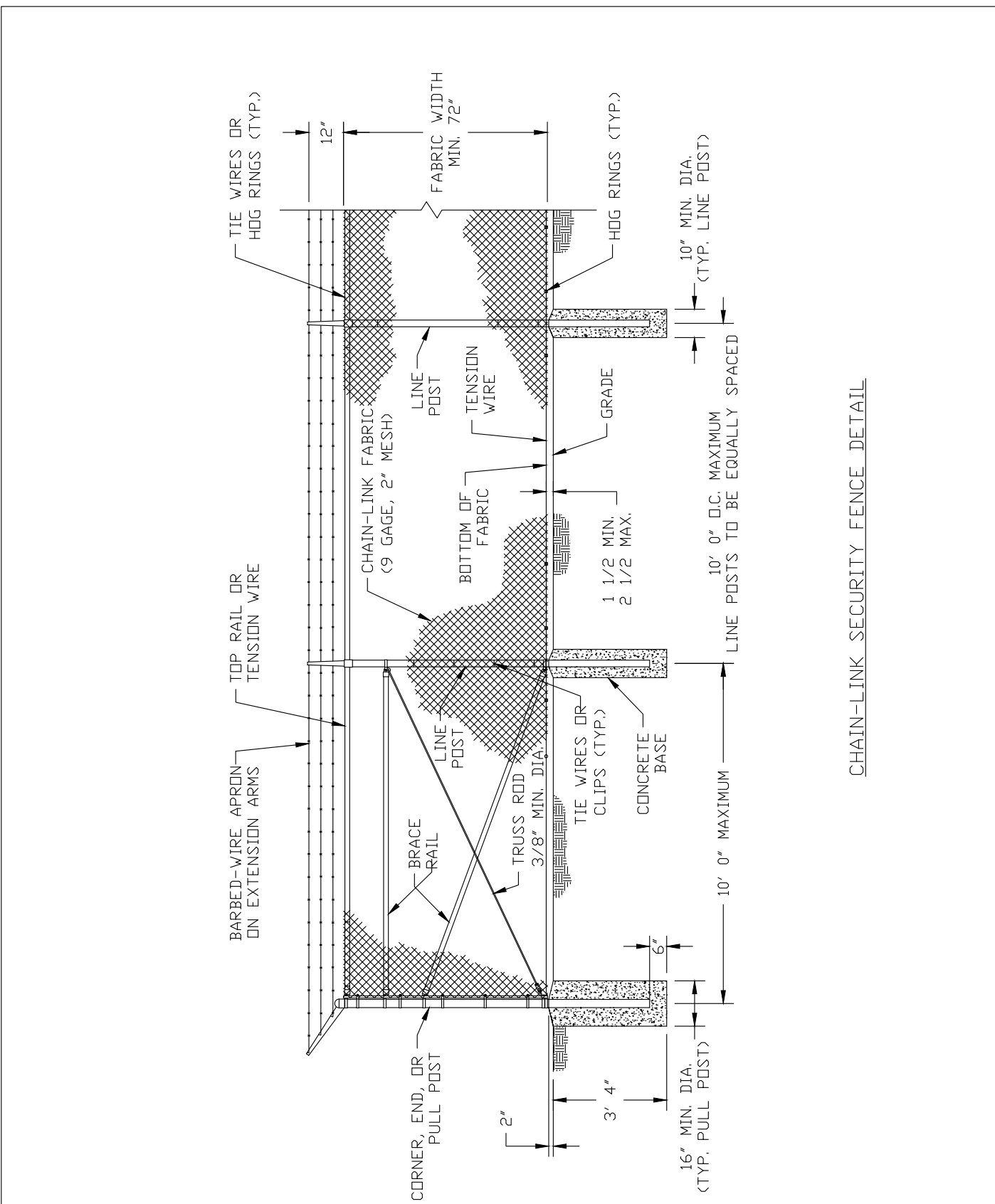
P.O. BOX 2995 4639  
 LAND 543-543-2539  
 (813) 543-2539

C7.0

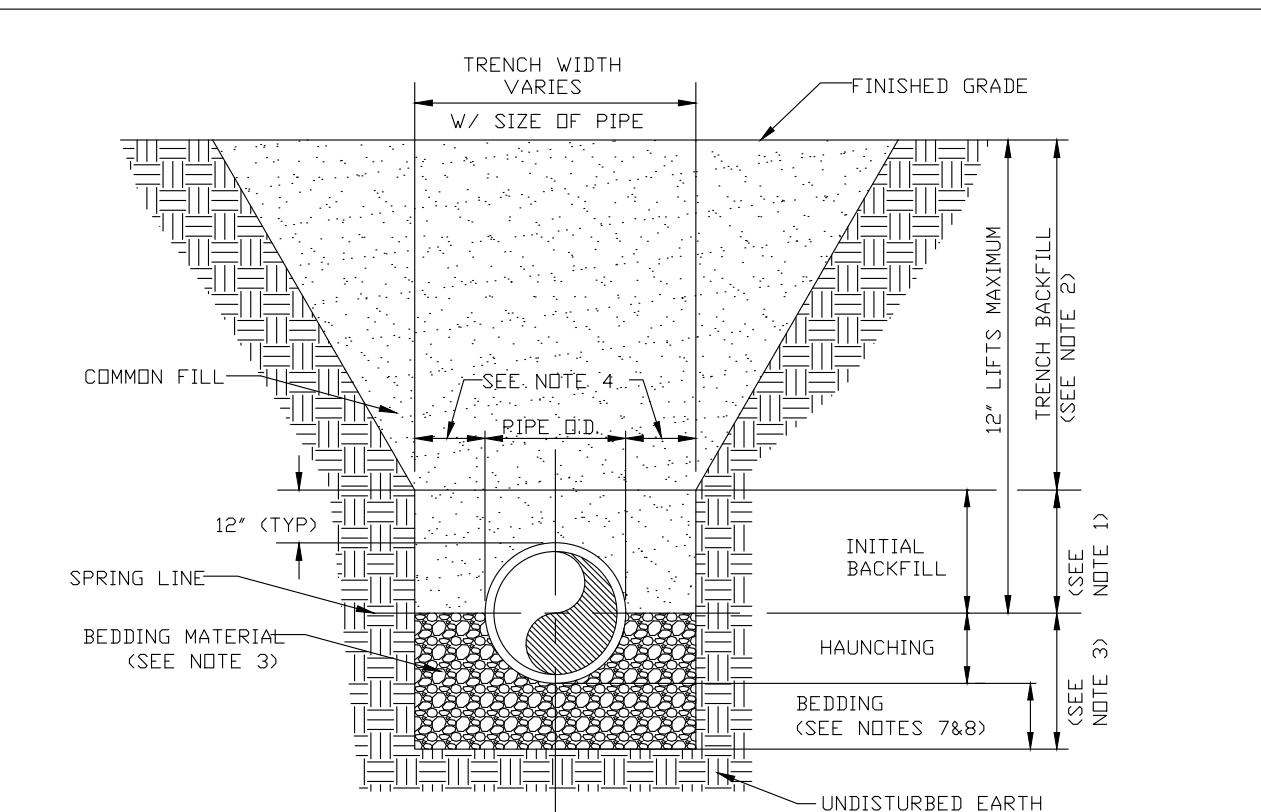
S-T-R  
 30-17-23



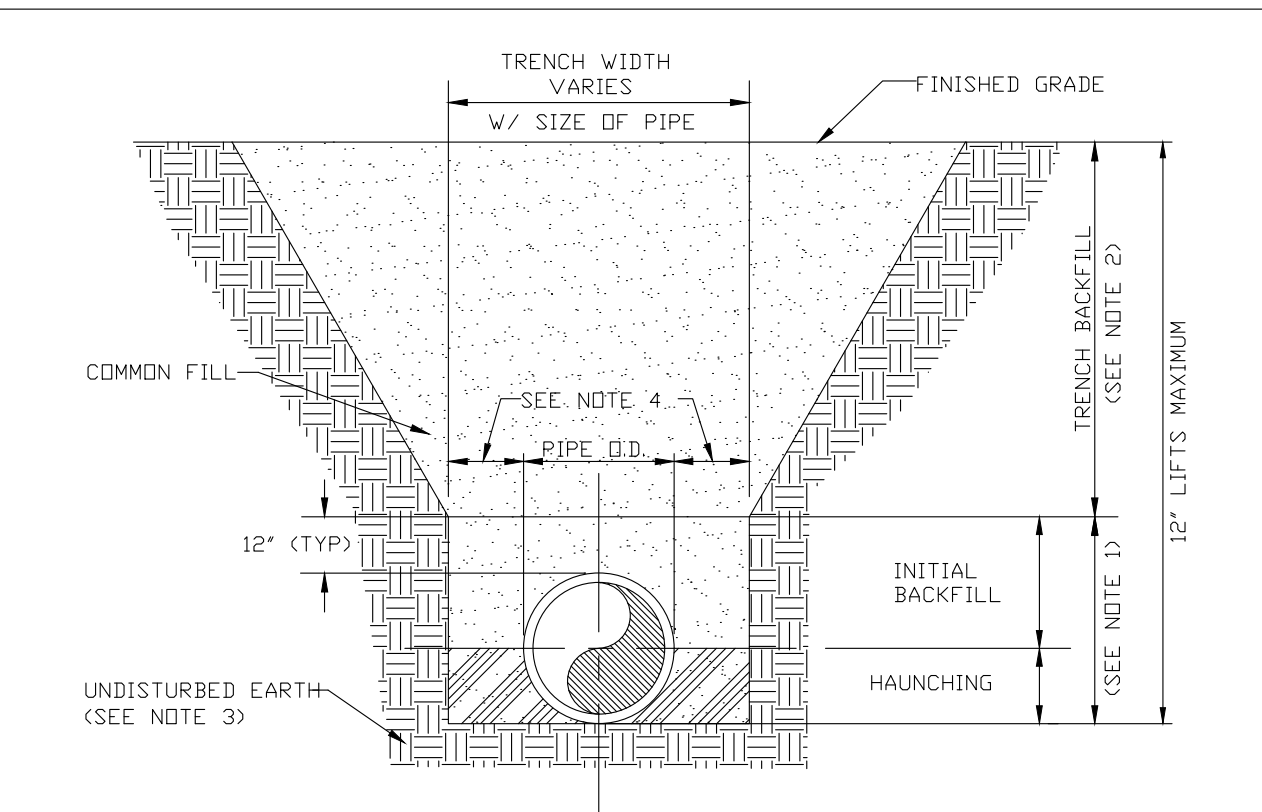
G:\SHARED DRIVES\CLIENTS\SOLID ROCK PROPERTY GROUP\122.035.00--SWC US HWY 301 & SE HWY 42\DRAWINGS\08.0-C11.0 DETAILS SHEET.DWG - 2/9/2024 5:08 PM



CHAIN-LINK SECURITY FENCE DETAIL



- NOTES:
1. INITIAL BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
  2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
  3. BEDDING MATERIAL SHALL CONFORM TO FOOT NO. 57 AGGREGATE.
  4. 15\"/>

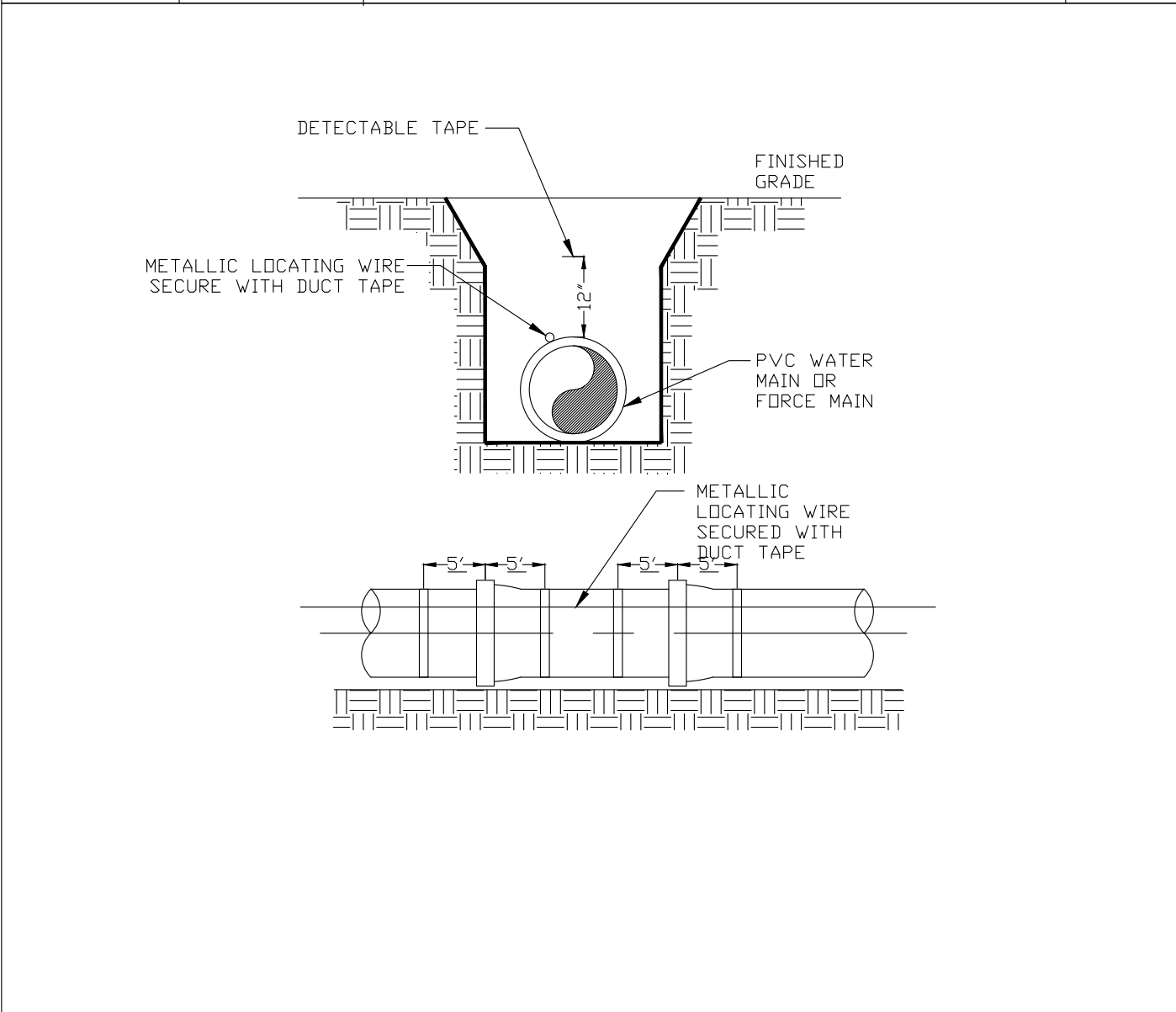


- NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
  2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
  3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH BEDDING AND TRENCHING 1 DETAIL MAY BE REQUIRED AS DIRECTED BY MCU.
  4. 15\"/>

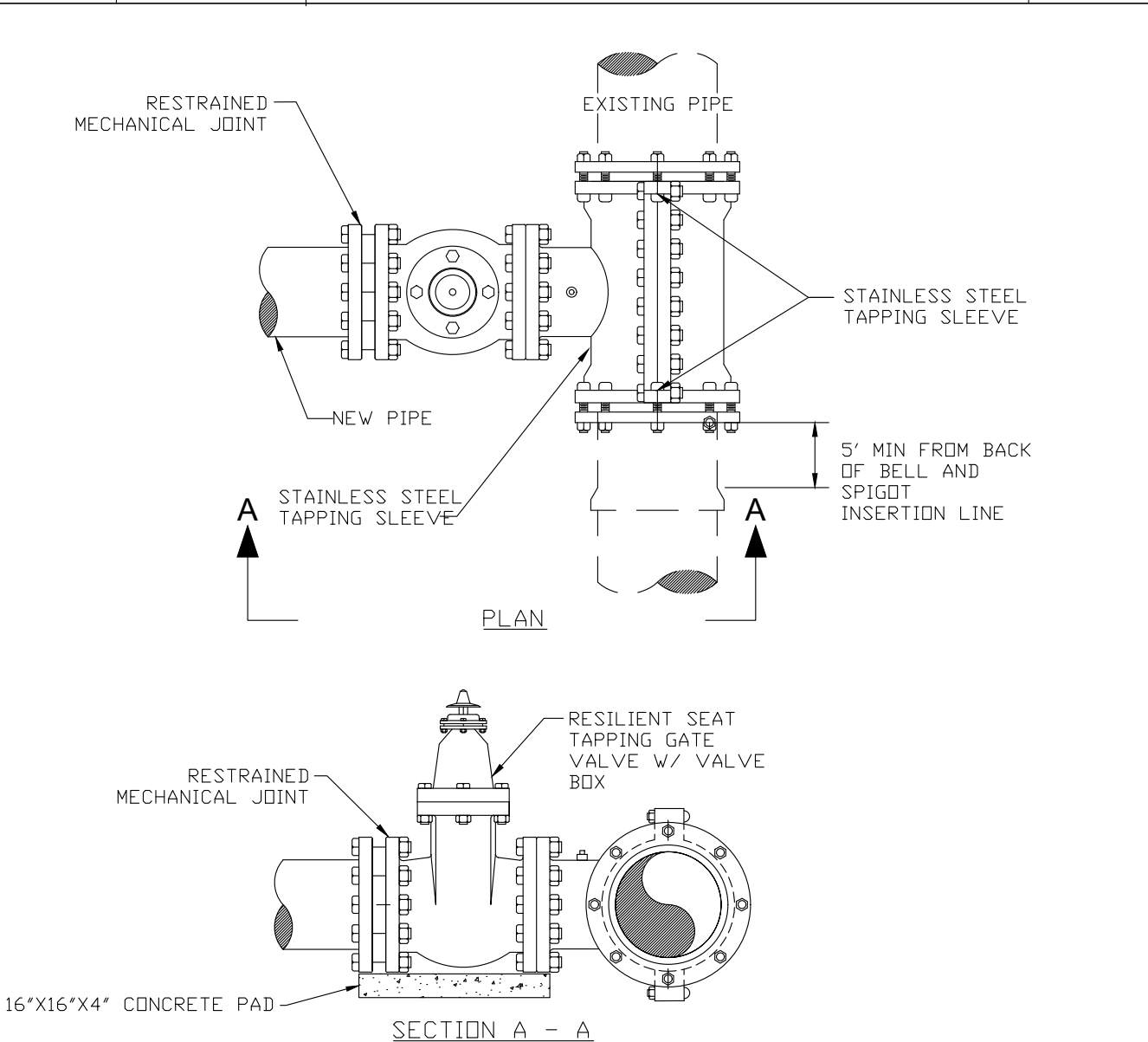
	MCBCC EFFECTIVE 04/13/2023	CHAIN LINK FENCE	7.3.2
	REVISION # NA		UT 100

	MCBCC EFFECTIVE 04/13/2023	BEDDING AND TRENCHING 1	7.3.2
	REVISION # 2		UT 102

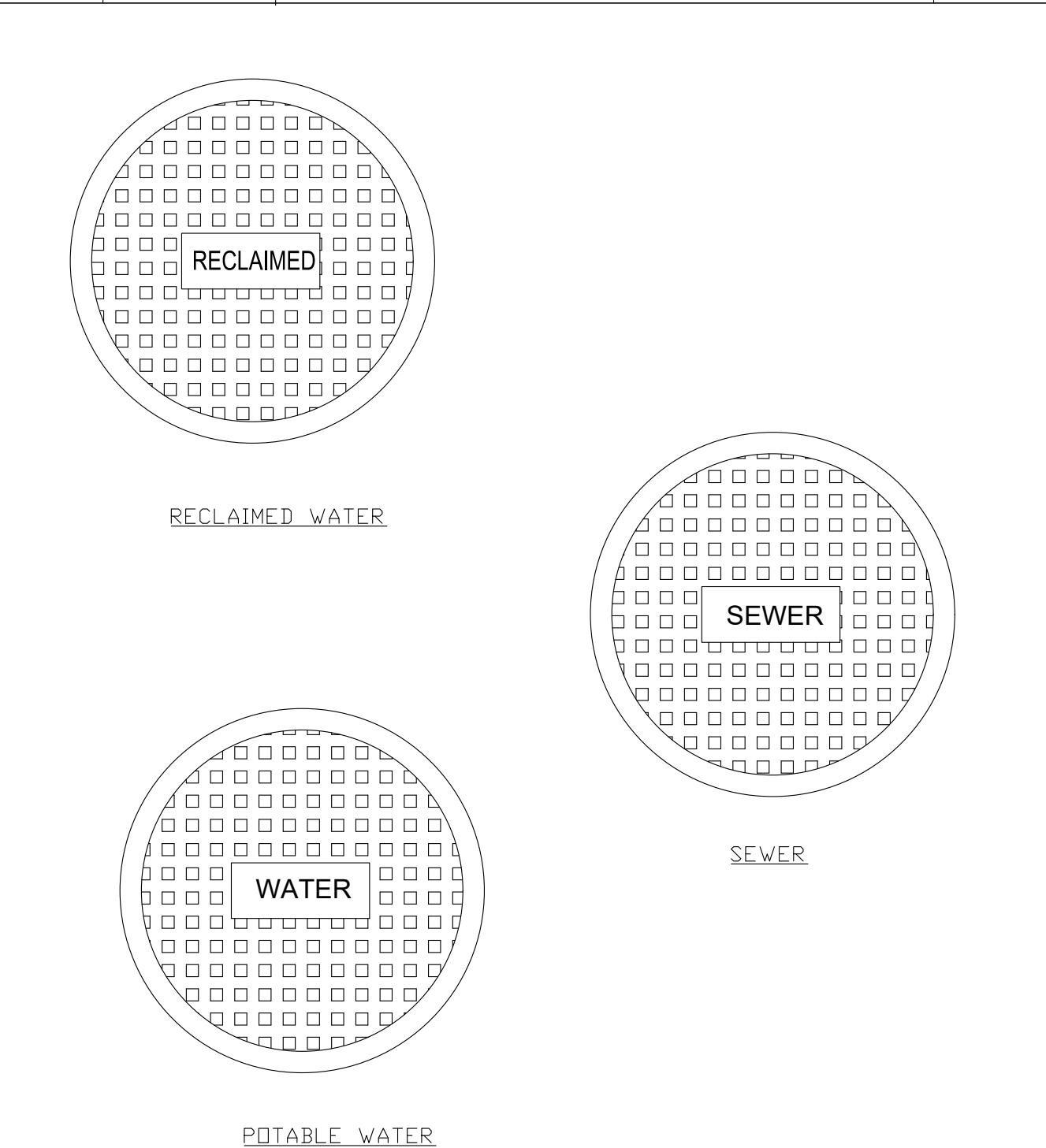
	MCBCC EFFECTIVE 04/13/2023	BEDDING AND TRENCHING 2	7.3.2
	REVISION # 2		UT 103



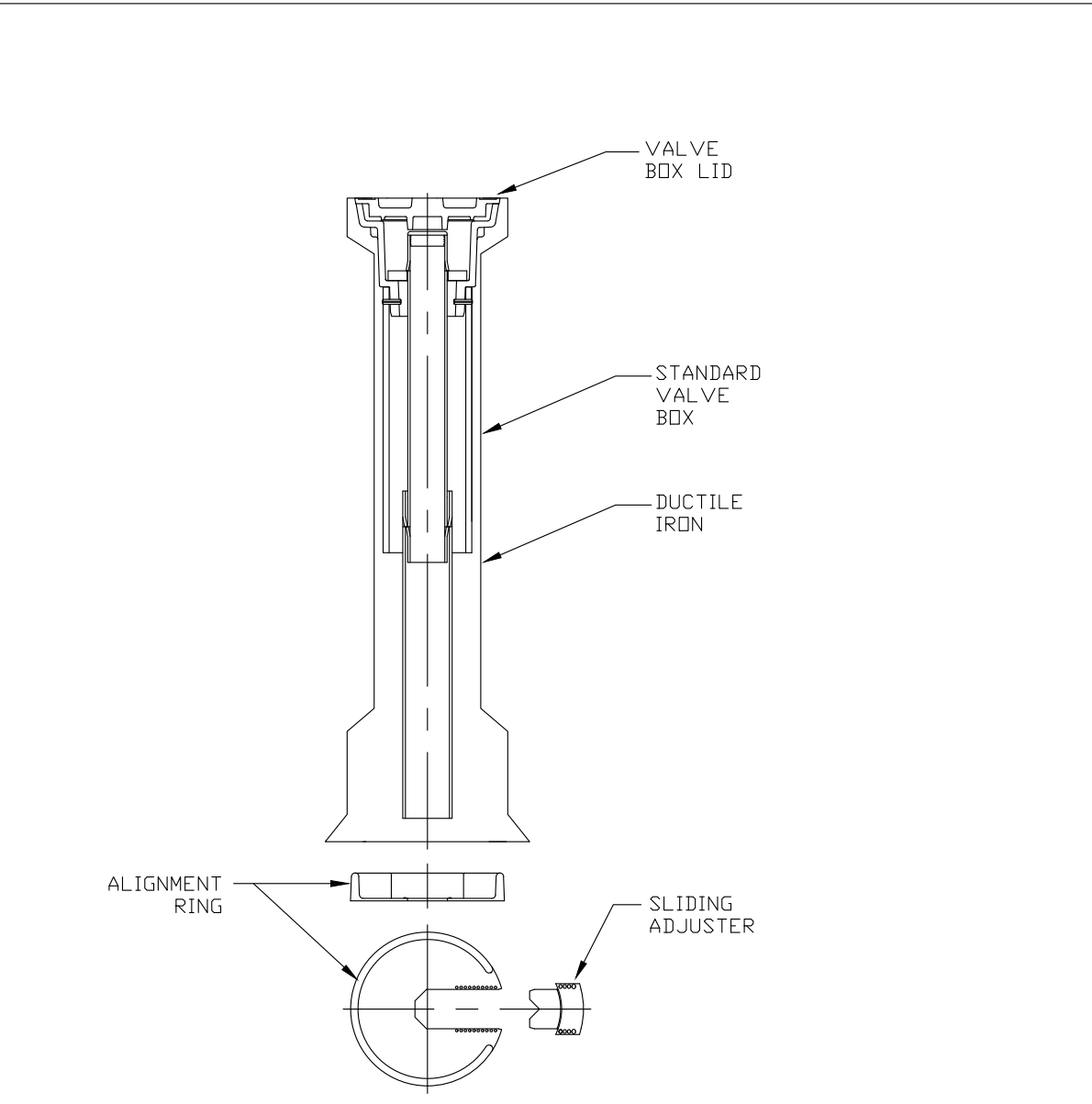
- NOTES:
1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED ON TOP OF THE PIPE.
  2. LOCATING WIRE SHALL TERMINATE AT EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12\"/>



- NOTES:
1. PRIOR TO BEGINNING THE TAPPING OPERATION, THE SLEEVE AND VALVE SHALL BE PRESSURE TESTED AT 150 PSI FOR A MINIMUM OF 30 MINUTES TO ENSURE THAT NO LEAKAGE WILL OCCUR.
  2. CONTRACTOR SHALL PROVIDE MCU PROOF OF PRESSURE TEST IN THE FORM OF A TAPPING TEST LOG WITH THE CONTRACTOR'S SIGNATURE.
  3. CONTRACTOR MUST CONFIRM RESTRAINTS IN ALL DIRECTIONS AND INSTALL ADDITIONAL RESTRAINTS AS NECESSARY TO COMPLY WITH LAND DEVELOPMENT CODE.
  4. ALL TAPS MUST BE LOCATED A MINIMUM OF 5\"/>



	MCBCC EFFECTIVE 04/13/2023	TYPICAL VALVE BOX COVER	7.3.2
	REVISION # NA		UT 108



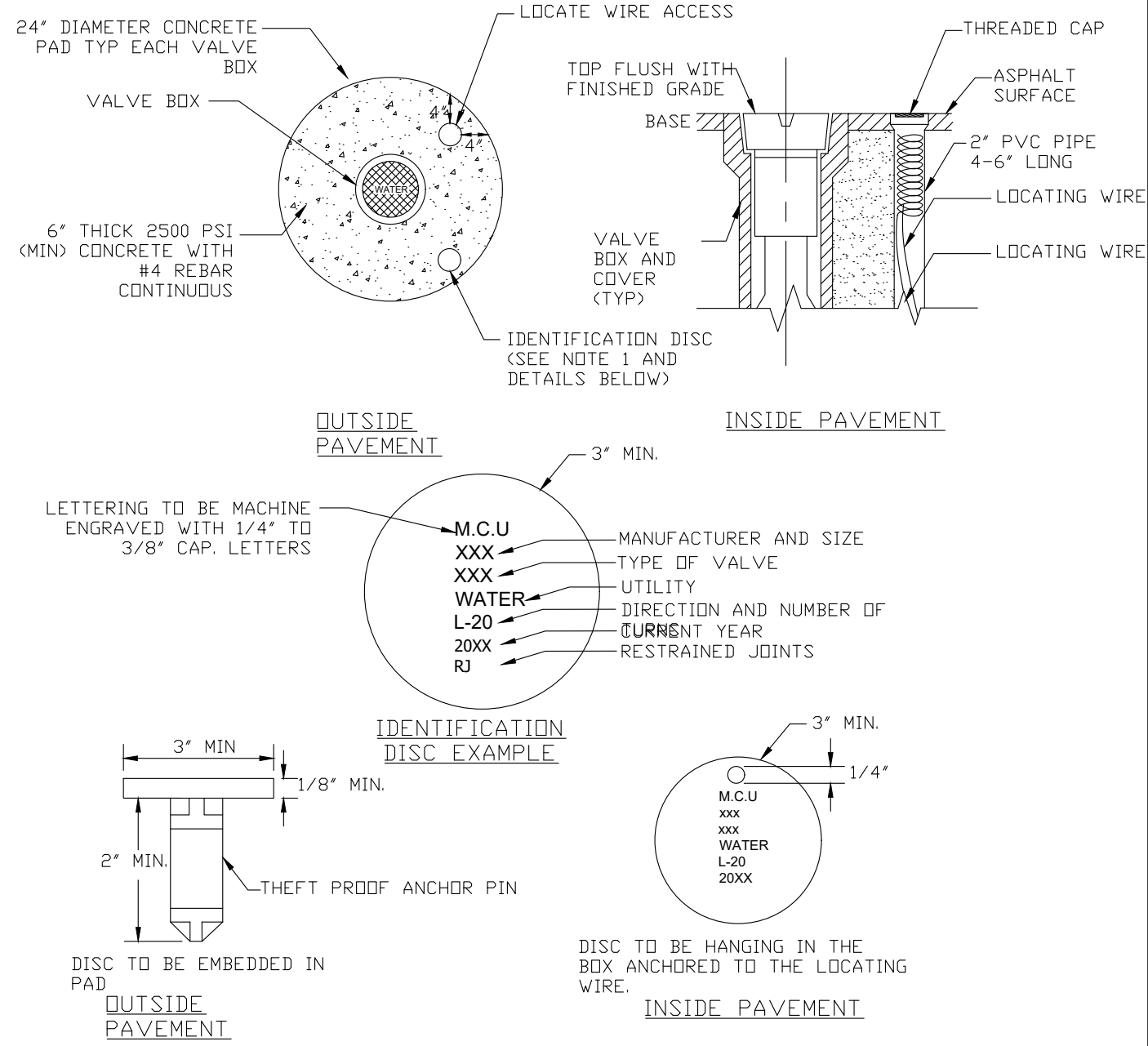
- NOTES:
1. FOR ALL MAINS 6.0' DEEP OR GREATER, PVC PIPE EXTENSIONS SHALL BE USED ON VALVE BOX INSTALLATION.

	MCBCC EFFECTIVE 04/13/2023	PIPE LOCATING WIRE AND DETECTABLE TAPE	7.3.2
	REVISION # 2		UT 104

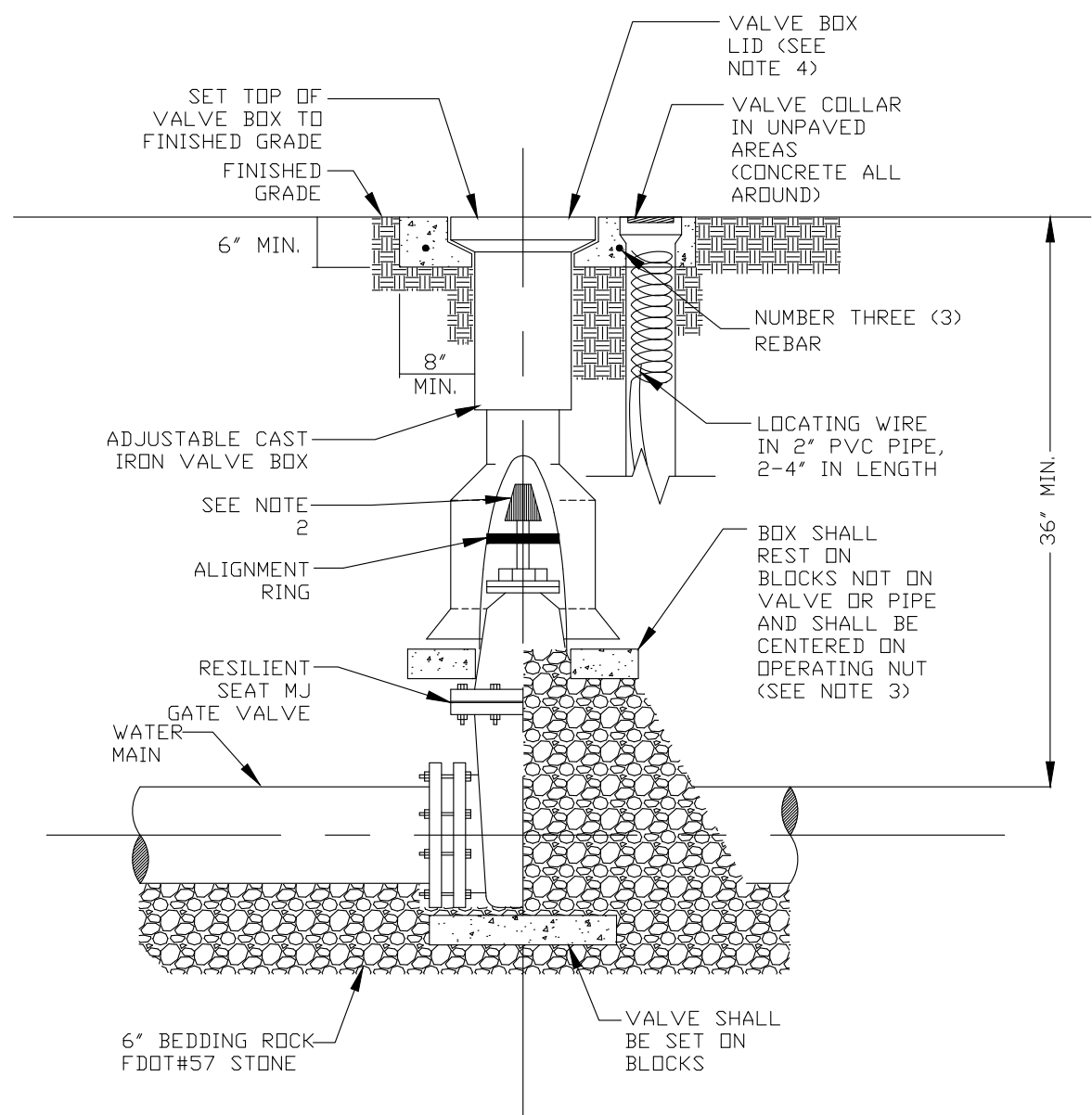
	MCBCC EFFECTIVE 04/13/2023	TAPPING SLEEVE AND GATE VALVE ASSEMBLY	7.3.2
	REVISION # 1		UT 109

	MCBCC EFFECTIVE 04/13/2023	SEALED VALVE BOX, ADJUSTABLE	7.3.2
	REVISION # 1		UT 111

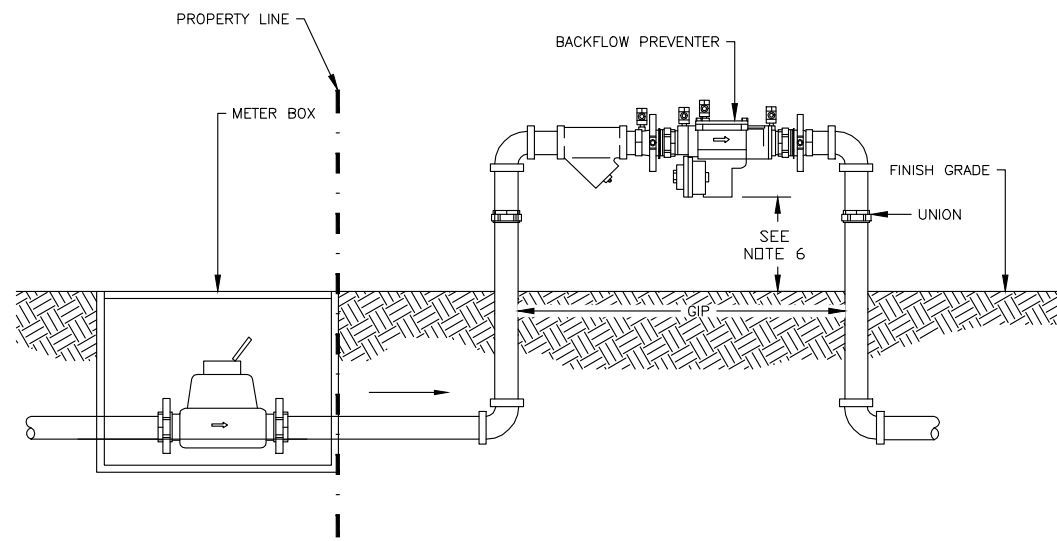
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- NOTES:
- BRONZE (OR STAINLESS STEEL) IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES, EXCEPT HYDRANT VALVES.
  - LOCATING WIRE SHALL TERMINATE AT EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.



- NOTES:
- PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION (SEE UT111).
  - THE ACTUATING NUT FOR VALVES DEEPER THAN SIX (6) FEET SHALL BE EXTENDED TO COME UP TO 3 FOOT DEPTH BELOW FINISHED GRADE.
  - VALVE BOX SHALL BE SET ON FIVE (5) SOLID COMMON BLOCKS.
  - VALVE BOX LID TO BE LETTERED WITH THE WORD "WATER" OR "RECLAIMED".
  - INSTALL BRASS ID TAG IN CONCRETE.



- NOTES:
- BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED AND MAINTAINED AS PER MARION COUNTY CROSS CONNECTION CONTROL ORDINANCE AND/OR PLUMBING CODE.
  - BACKFLOW PREVENTION ASSEMBLY TO BE INSTALLED LEVEL AND PLUMB.
  - MINIMUM CLEARANCE OF 24" TO BE MAINTAINED AROUND ASSEMBLY FOR TESTING.
  - ASSEMBLY MUST BE LISTED WITH THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH.
  - ALL BACKFLOW PREVENTION ASSEMBLIES MUST BE TESTED FOLLOWING INSTALLATION AND INITIATION OF WATER SERVICE. THE BACKFLOW PREVENTION ASSEMBLY TESTER MUST POSSESS A CURRENT AMERICAN WATER WORKS ASSOCIATION (AWWA) AND/OR AMERICAN BACKFLOW PREVENTION ASSOCIATION (ABPA) BACKFLOW TESTER CERTIFICATE. A COPY OF THE BACKFLOW PREVENTION ASSEMBLY TEST REPORT MUST BE SUBMITTED TO THE BACKFLOW & CCC COORDINATOR AT MCU WITHIN 14 DAYS FROM THE DATE OF INSTALLATION.
  - MIN. 12" MAX 18" ABOVE FINISHED GRADE AND FLOODPLAIN.
  - METERS LARGER THAN 2" WILL REQUIRE DISCUSSION WITH MCU.

	MCBCC EFFECTIVE 04/13/2023	7.3.2
	REVISION # 1	UT 112

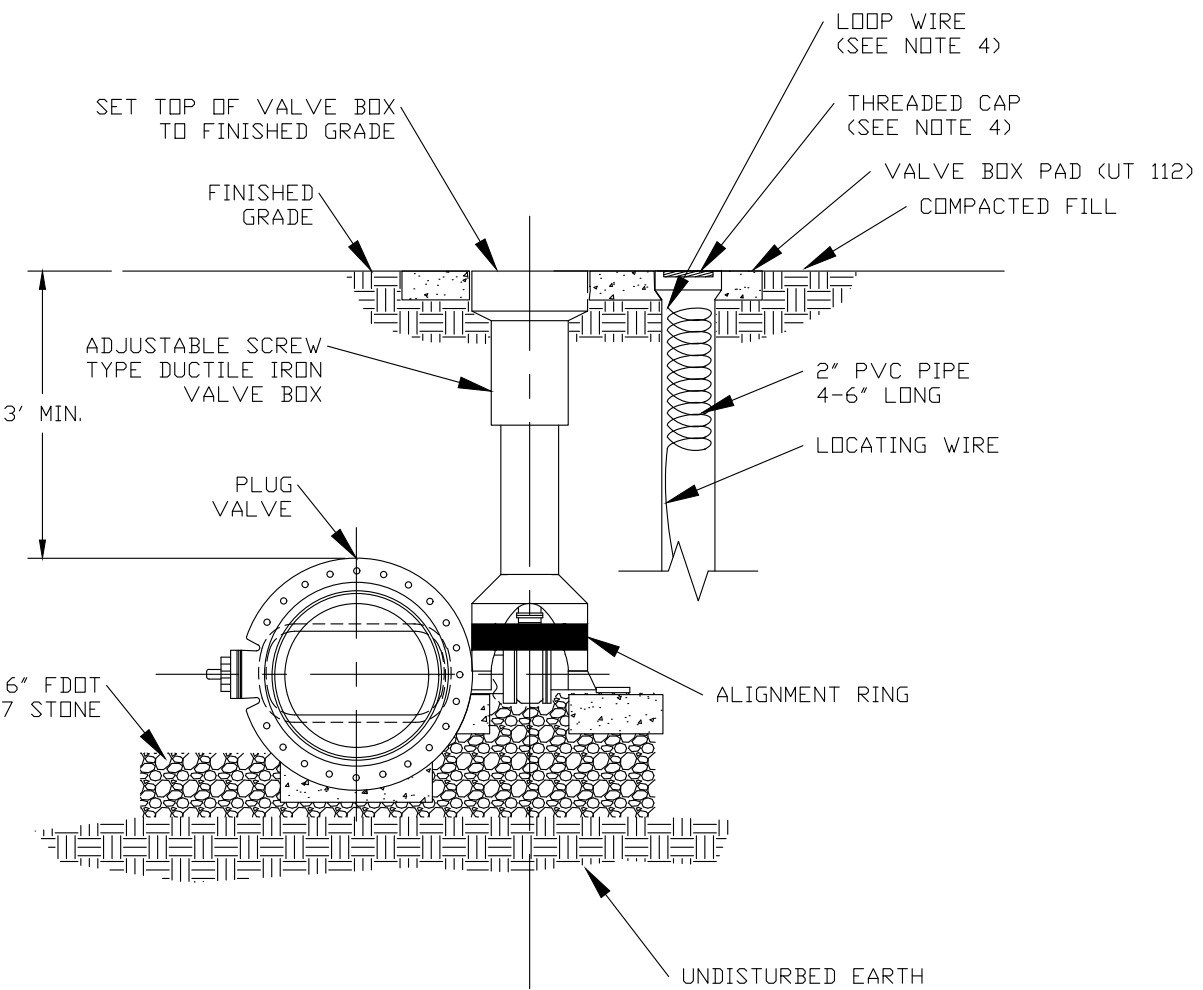
VALVE BOX PAD

	MCBCC EFFECTIVE 04/13/2023	7.3.2
	REVISION # 2	UT 204

GATE VALVE  
WATER AND RECLAIMED MAINS

	MCBCC EFFECTIVE 04/13/2023	7.3.2
	REVISION # 1	UT 209

2" AND SMALLER  
REDUCED PRESSURE AND/OR  
DOUBLE CHECK BACKFLOW ASSEMBLY



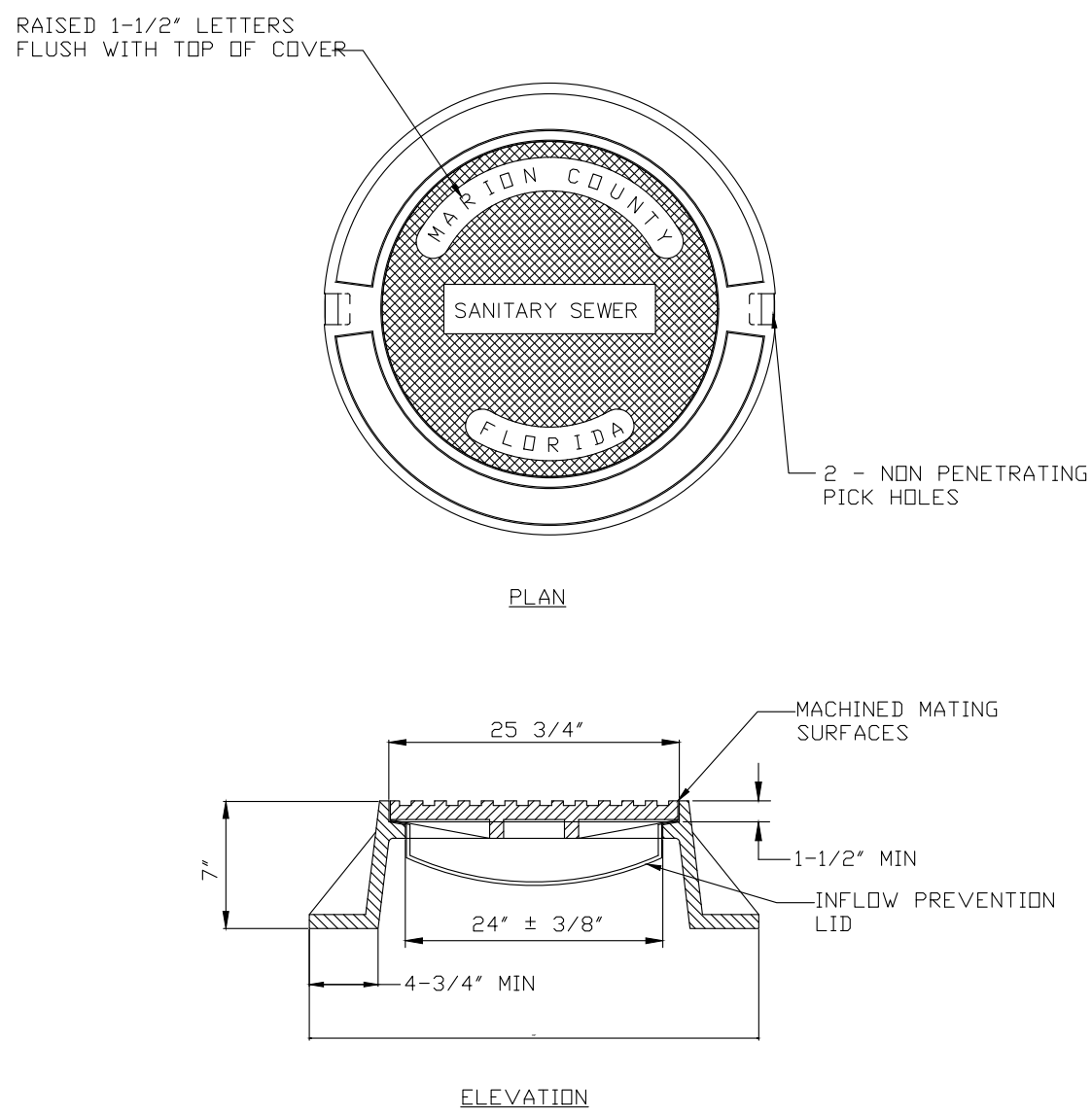
- NOTES:
- VALVE BOX INSTALLATION SHALL COMPLY WITH UT 111.
  - THE VALVE ACTUATING NUT SHALL BE EXTENDED UP TO BE WITHIN 3' OF FINISHED GRADE.
  - PROVIDE A PLASTIC DEBRIS SHIELD / ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE ACTUATING NUT AND MINIMIZE INFILTRATION.
  - LOCATING WIRE SHALL BE CONTINUOUS WITH NO SPLICES AND SHALL EXTEND 12" ABOVE TOP OF COLLAR. WIRE SHALL BE COLOR CODED TO MATCH THE UTILITY INSTALLED.
  - FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.
  - VALVE BOX SHALL BE SET ON SOLID COMMON BLOCKS.

	MCBCC EFFECTIVE 04/13/2023	7.3.2
	REVISION # 2	UT 304

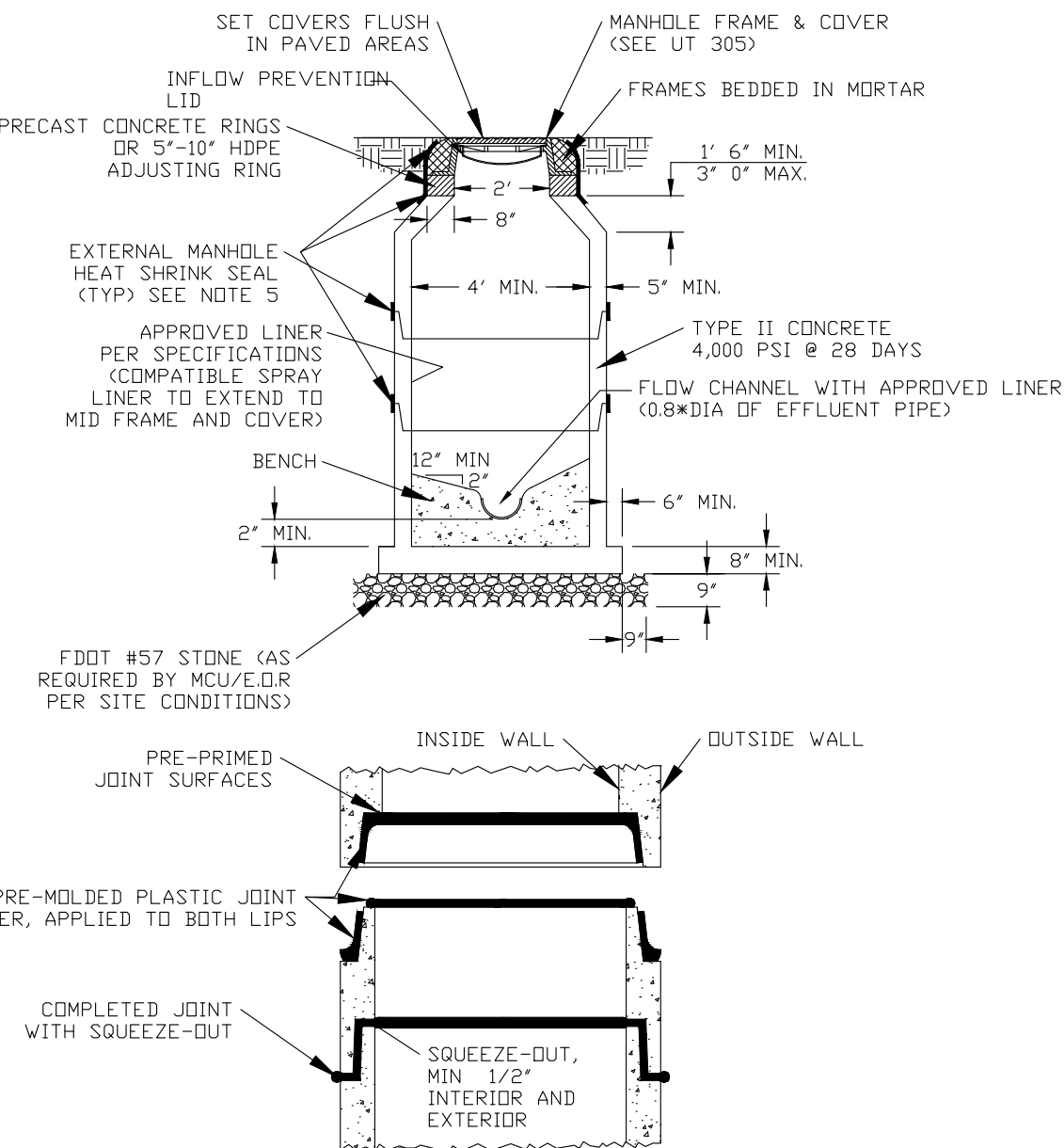
PLUG VALVE AND BOX

	MCBCC EFFECTIVE 04/13/2023	7.3.2
	REVISION # 2	UT 305

STANDARD SEWER MANHOLE  
FRAME AND COVER



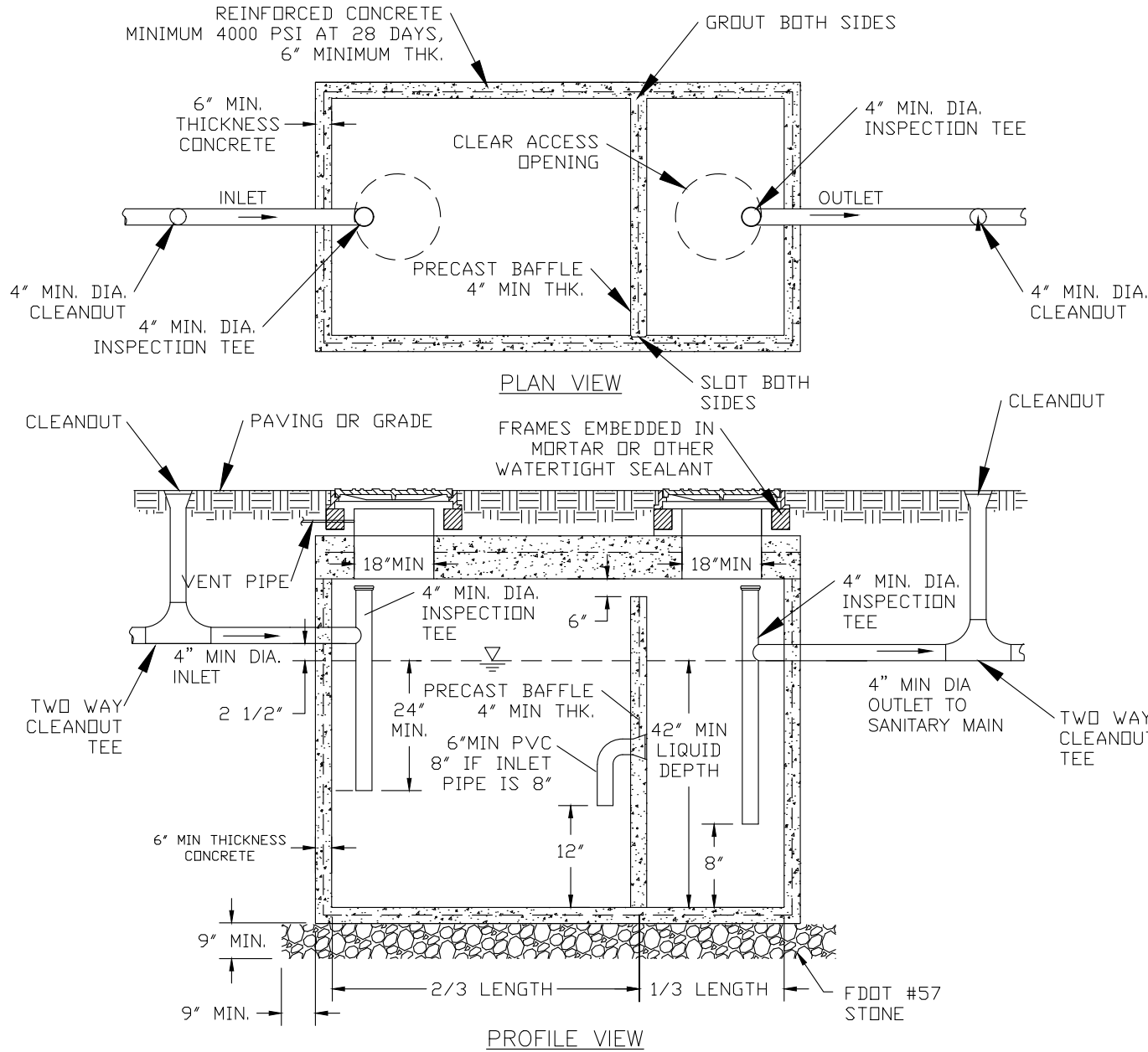
- NOTES:
- RING AND COVER SHALL BE COMPOSITE FOR DROP AND FORCEMAIN CONNECTIONS.



- NOTES:
- DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE GRAVITY MANHOLE CONNECTION DETAIL UT 303.
  - ECCENTRIC CONE DESIGN MAY ONLY BE USED FOR CONFLICT RESOLUTION WITH MCU APPROVAL. ALL MANHOLES REQUIRING DROP CONNECTIONS SHALL COMPLY WITH UT 303.
  - A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
  - LIFT HOLES THROUGH STRUCTURE ARE NOT PERMITTED.
  - USE EXTERNAL WRAP TO TIGHTLY WRAP MANHOLE AROUND CASTING JOINTS AND APPLY HIGH INTENSITY PROPANE TORCH TO EFFECTIVELY SEAL THEM FROM GROUND WATER INFILTRATION. ALL EXTERNAL HEAT SHRINK WRAPS SHALL BE INSPECTED IN PERSON, OR THROUGH A MCU APPROVED METHOD, BY A MCU CONSTRUCTION REPRESENTATIVE.
  - INFLOW PREVENTION LIDS SHALL BE REQUIRED FOR ALL MANHOLES.
  - PRECAST CONCRETE RINGS MAY BE SUBSTITUTED FOR HDPE RINGS.
  - SECTION HEIGHTS VARY AS REQUIRED, AND AS AVAILABLE.
  - IN LIEU OF SHRINK WRAPPING, MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH ASTM C1244 OR HYDROSTATIC TESTED IN ACCORDANCE WITH ASTM C969 AS REQUIRED BY MCU.
  - FLOW CHANNEL DEPTH AND WIDTH CANNOT BE LESS THAN 80% OF OUTFLOW PIPE.

	MCBCC EFFECTIVE 04/13/2023	7.3.2
	REVISION # 2	UT 306

PRECAST CONCRETE MANHOLE



- NOTES:
- SPECIFIC DESIGN DETAILS MUST IN ALL ASPECTS MEET APPLICABLE FLORIDA PLUMBING AND ADMINISTRATIVE CODE.
  - SIZE GREASE INTERCEPTOR PER MARION COUNTY LAND DEVELOPMENT CODE.
  - INTERCEPTORS SHALL BE WATER AND GAS TIGHT.
  - ALL FIXTURES LOCATED IN FOOD AND BEVERAGE PREPARATION AREAS SHALL BE ROUTED THROUGH GREASE INTERCEPTOR. RESTROOM WASTE SHALL NOT BE ROUTED THROUGH INTERCEPTOR.
  - BAFFLE REQUIRED; ALTERNATIVE DESIGNS ARE ACCEPTABLE. DESIGN MUST MEET FLORIDA PLUMBING AND ADMINISTRATIVE CODE.
  - LOADS: H-20 TRUCK WHEELS WITH 30% IMPACT PER AASHTO. TRAFFIC BEARING FRAME AND COVER TO MEET FDOT STANDARDS IF APPLICABLE.

	MCBCC EFFECTIVE 04/13/2023	7.3.2
	REVISION # 1	UT 310

GREASE INTERCEPTOR

ORIGINAL SET: 2/23/23			
REVISIONS			
NO.	DATE	DESCRIPTION	
1			
2			
3	01/31/24	REVISED PER COUNTY COMMENTS	
4	12/22/23	REVISED PER AGENCY & CLIENT COMMENTS	
5	02/27/23	REVISED PER AGENCY COMMENTS	

**NATIVE**  
engineering,plc  
P.O. BOX 2995  
LAND O' LAKES, FL 34639  
(813) 536-2539

MAJOR SITE PLAN FOR SWC US HWY 301 & SE HWY 42  
FOR  
SRPG SUMMERFIELD, LLC  
4803 GEORGE RD; SUITE 330 TAMPA, FL 33634  
MARION COUNTY  
FLORIDA

DETAILS  
SHEET

JOSHUA S. BRADLEY  
State of Florida,  
Professional Engineer,  
License No. 90020  
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SHEET NUMBER  
**C10.0**

S-T-R  
30-17-23

G:\SHARED DRIVES\CLIENTS\SOLID ROCK PROPERTY GROUP\122.035.00--SWC US HWY 301 & SE HWY 42\DRAWINGS\08.0--C11.0 DETAILS SHEET.DWG - 2/8/2024 5:08 PM

### FloGard Plus Replacement and Repair

#### Parts of the FloGard Plus Inlet Filter-

1. FloGard Stainless Steel Support Frame
2. Fossil Rock Absorbent Pouches
3. Liner
4. GeoGrid Support Basket & Cable

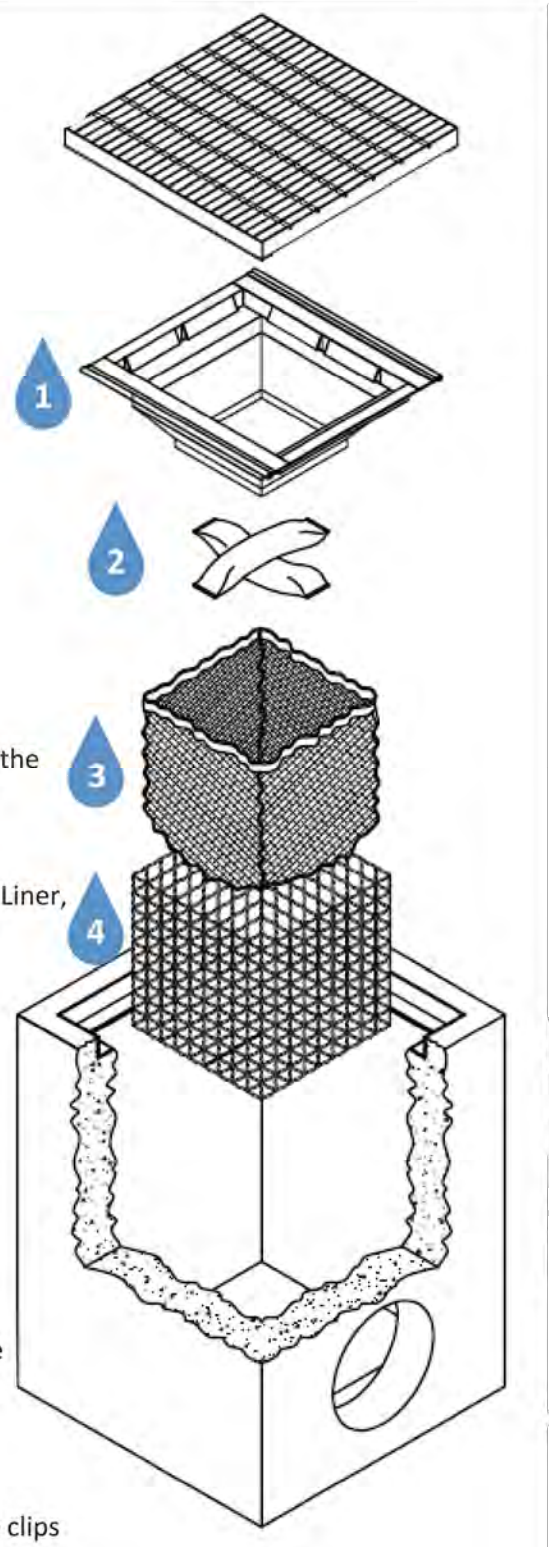
\* Grate and Basin NOT INCLUDED

#### Disassembly:

1. Clear FloGard of any existing debris by hand or vacuum.
2. Unclip and remove the Fossil Rock pouches from the inside Liner.
3. Lift the FloGard from the catch basin.
4. Using a slotted screw driver, carefully pry open the metal tabs holding the GeoGrid and Cable in place. Separate the GeoGrid and Liner from the FloGard frame.
5. Unclip the Liner from the inside of the GeoGrid. If you are reusing the Liner, rinse thoroughly with water and inspect for tears. (If torn, mend with stainless steel wire or replace the Liner).
6. Rinse and inspect the GeoGrid Basket and the reinforcing cable. (If torn, mend with stainless steel wire or replace the GeoGrid).
7. Rinse and inspect the Stainless Steel FloGard frame.

#### Reassembly:

1. Fully expand the GeoGrid Basket and orient to the FloGard frame. Hook cable and GeoGrid to the FloGard frame metal tabs and close the tabs using slotted screwdriver. Move around the FloGard until all tabs are closed and GeoGrid is secured to the Frame.
2. Expand and orient the Liner, locating the clips at each corner and side. Push the Liner through the center of the FloGard frame and secure the clips to the GeoGrid Basket close to the top support cable. Push the Liner to expand inside of the basket.
3. Clip new Fossil Rock Rubberizer pouches to the inside of the Liner.
4. Lower FloGard back into the basin, replace grate.



1

#### GENERAL SPECIFICATIONS FOR MAINTENANCE OF FLO-GARD+PLUS® CATCH BASIN INSERT FILTERS

##### SCOPE:

Federal, State and Local Clean Water Act regulations and those of insurance carriers require that stormwater filtration systems be maintained and serviced on a recurring basis. The intent of the regulations is to ensure that the systems, on a continuing basis, efficiently remove pollutants from stormwater runoff thereby preventing pollution of the nation's water resources. These specifications apply to the FloGard+Plus® Catch Basin Insert Filter.

##### RECOMMENDED FREQUENCY OF SERVICE:

Drainage Protection Systems (DPS) recommends that installed Flo-Gard+Plus® Catch Basin Insert Filters be serviced on a recurring basis. Ultimately, the frequency depends on the amount of runoff, pollutant loading and interference from debris (leaves, vegetation, cans, paper, etc.); however, it is recommended that each installation be serviced a minimum of three times per year, with a change of filter medium once per year. DPS technicians are available to do an on-site evaluation, upon request.

##### RECOMMENDED TIMING OF SERVICE:

DPS guidelines for the timing of service are as follows:

1. For areas with a definite rainy season: Prior to, during and following the rainy season.
2. For areas subject to year-round rainfall: On a recurring basis (at least three times per year).
3. For areas with winter snow and summer rain: Prior to and just after the snow season and during the summer rain season.
4. For installed devices not subject to the elements (washracks, parking garages, etc.): On a recurring basis (no less than three times per years).

##### SERVICE PROCEDURES:

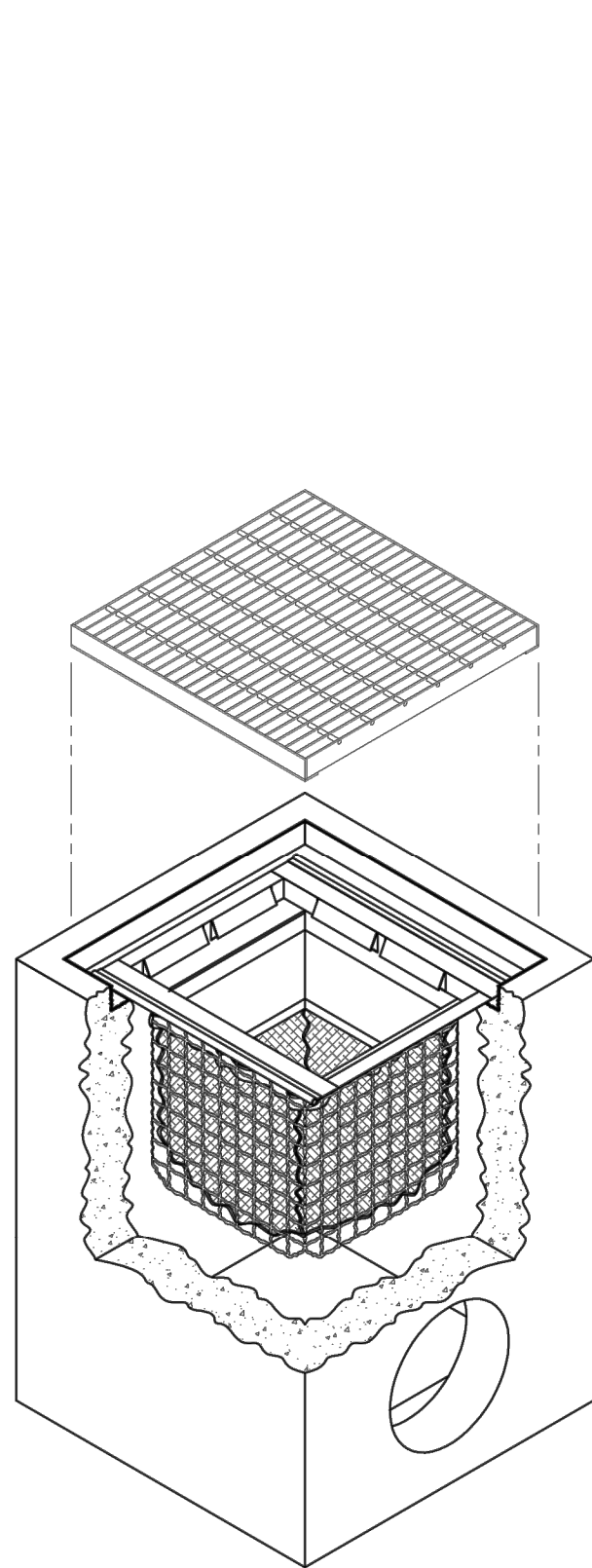
1. The catch basin grate shall be removed and set to one side. The catch basin shall be visually inspected for defects and possible illegal dumping. If illegal dumping has occurred, the proper authorities and property owner representative shall be notified as soon as practicable.
2. Using an industrial vacuum, the collected materials shall be removed from the liner. (Note: DPS uses a truck-mounted vacuum for servicing Flo-Gard+Plus® catch basin inserts.)
3. When all of the collected materials have been removed, the filter medium pouches shall be removed by unsnapping the tether from the D-ring and set to one side. The filter liner, gaskets, stainless steel frame and mounting brackets, etc. shall be inspected for continued serviceability. Minor damage or defects found shall be corrected on-the-spot and a notation made on the Maintenance Record. More extensive deficiencies that affect the efficiency of the filter (torn liner, etc.), if approved by the customer representative, will be corrected and an invoice submitted to the representative along with the Maintenance Record.
4. The filter medium pouches shall be inspected for defects and continued serviceability and replaced as necessary and the pouch tethers re-attached to the liner's D-ring. See below.
5. The grate shall be replaced.

#### REPLACEMENT AND DISPOSAL OF EXPOSED FILTER MEDIUM AND COLLECTED DEBRIS

The frequency of filter medium pouch exchange will be in accordance with the existing DPS-Customer Maintenance Contract. DPS recommends that the medium be changed at least once per year. During the appropriate service, or if so determined by the service technician during a non-scheduled service, the filter medium pouches will be replaced with new pouches. Once the exposed pouches and debris have been removed, DPS has possession and must dispose of it in accordance with local, state and federal agency requirements.

DPS also has the capability of servicing all manner of catch basin inserts and catch basins without inserts, underground oil/water separators, stormwater interceptors and other such devices. All DPS personnel are highly qualified technicians and are confined space trained and certified. Call us at (888) 950-8826 for further information and assistance.

FGP-0001



FloGard® FILTER  
-INSTALLED INTO CATCH BASIN-

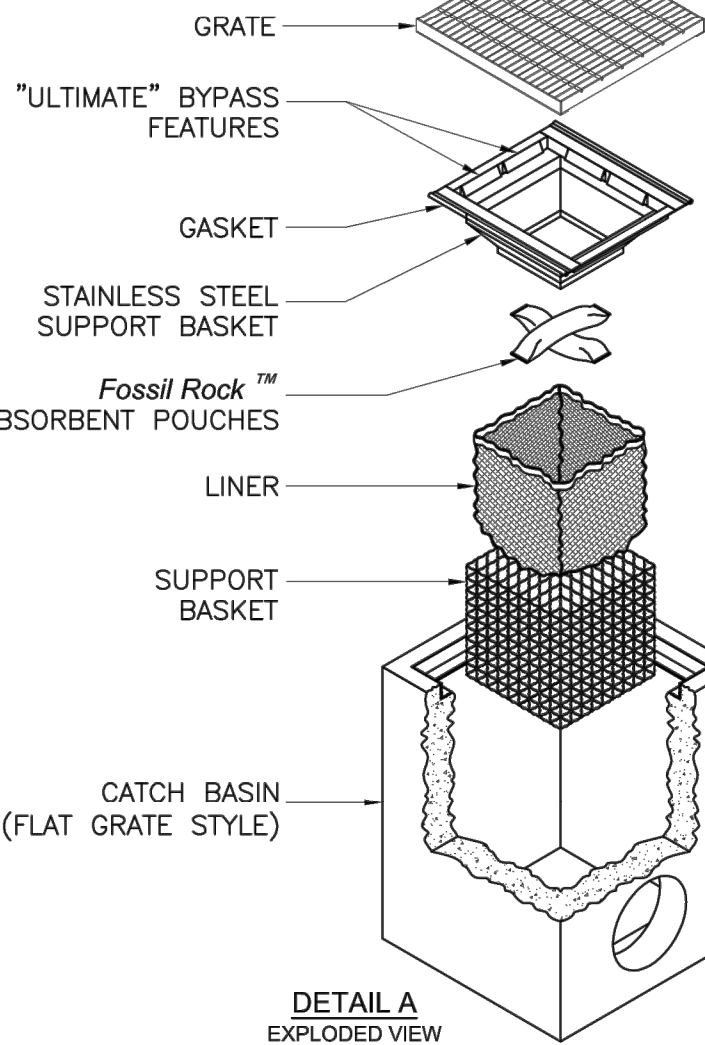
U.S. PATENT # 6,00,023 & 6,877,029



**FloGard®**  
Catch Basin Insert Filter  
Grated Inlet Style



**Oldcastle®**  
Stormwater Solutions  
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DRAWING NO. FGP-0001 REV. G ECO ECO-0142 DATE JPR 11/3/06 SHEET 1 OF 2



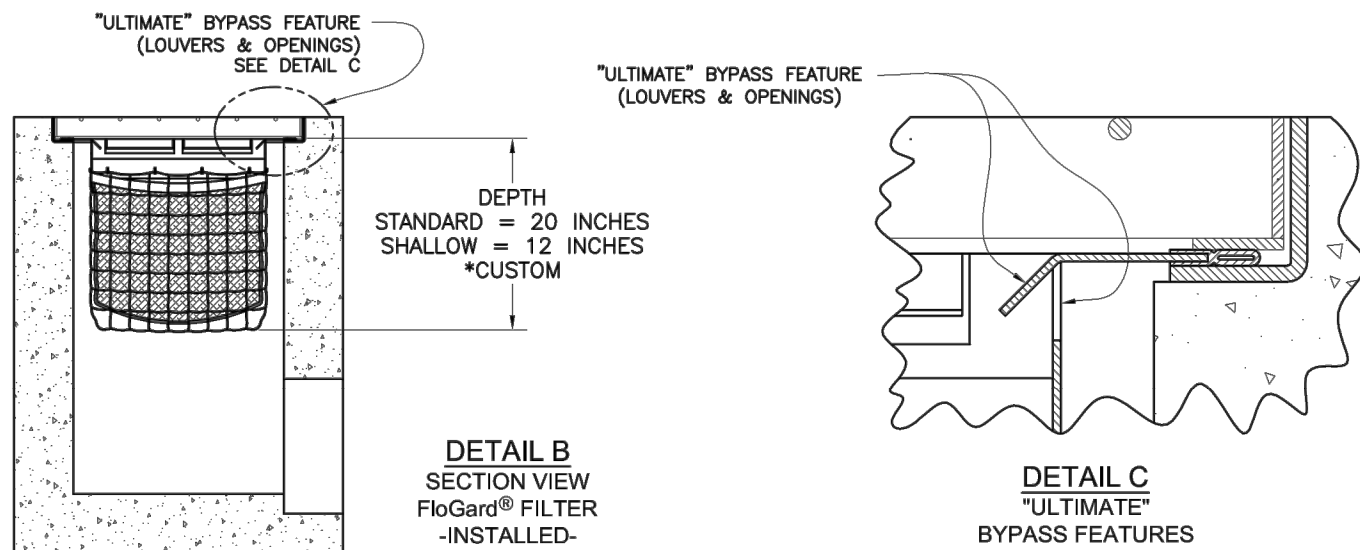
DETAIL A  
EXPLODED VIEW

#### NOTES:

1. Filter insert shall have a high flow bypass feature.
2. Filter support frame shall be constructed from stainless steel Type 304.
3. Filter medium shall be *Fossil Rock™*, installed and maintained in accordance with manufacturer specifications.
4. Storage capacity reflects 80% of maximum solids collection prior to impeding filtering bypass.

FGP-0001

U.S. PATENT # 6,00,023 & 6,877,029



\* MANY OTHER STANDARD & CUSTOM SIZES & DEPTHS AVAILABLE UPON REQUEST.

SPECIFIER CHART									
MODEL NO.	STANDARD & SHALLOW DEPTH (Data in these columns is the same for both STANDARD & SHALLOW versions)			STANDARD DEPTH -20 Inches-		MODEL NO.	SHALLOW DEPTH -12 Inches-		
STANDARD DEPTH	INLET ID Inside Dimension (inch x inch)	GRATE OD Outside Dimension (inch x inch)	TOTAL BYPASS CAPACITY (cu. ft. / sec.)	SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)	SHALLOW DEPTH	SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)	
FGP-12F	12 X 12	12 X 14	2.8	0.3	0.4	FGP-12F8	.15	.25	
FGP-16F	16 X 16	16 X 19	4.7	0.8	0.7	FGP-16F8	.45	.4	
FGP-18F	18 X 18	18 X 20	4.7	0.8	0.7	FGP-18F8	.45	.4	
FGP-1824F	16 X 22	18 X 24	5.0	1.5	1.2	FGP-1824F8	.85	.7	
FGP-1836F	18 X 36	18 X 40	6.9	2.3	1.6	FGP-1836F8	1.3	.9	
FGP-2024F	18 X 22	20 X 24	5.9	1.2	1.0	FGP-2024F8	.7	.55	
FGP-21F	22 X 22	22 X 24	6.1	2.2	1.5	FGP-21F8	1.25	.85	
FGP-24F	24 X 24	24 X 27	6.1	2.2	1.5	FGP-24F8	1.25	.85	
FGP-2430F	24 X 30	26 X 30	7.0	2.8	1.8	FGP-2430F8	1.6	1.05	
FGP-2436F	24 X 36	24 X 40	8.0	3.4	2.0	FGP-2436F8	1.95	1.15	
FGP-2448F	24 X 48	26 X 48	9.3	4.4	2.4	FGP-2448F8	2.5	1.35	
FGP-28F	28 X 28	32 X 32	6.3	2.2	1.5	FGP-28F8	1.25	.85	
FGP-30F	30 X 30	30 X 34	8.1	3.6	2.0	FGP-30F8	2.05	1.15	
FGP-36F	36 X 36	36 X 40	9.1	4.6	2.4	FGP-36F8	2.65	1.35	
FGP-3648F	36 X 48	40 X 48	11.5	6.8	3.2	FGP-3648F8	3.9	1.85	
FGP-48F	48 X 48	48 X 54	13.2	9.5	3.9	FGP-48F8	5.45	2.25	
FGP-SD24F	24 X 24	28 X 28	6.1	2.2	1.5	FGP-SD24F8	1.25	.85	



**FloGard®**  
Catch Basin Insert Filter  
Grated Inlet Style



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DRAWING NO. FGP-0001 REV. G ECO ECO-0142 DATE JPR 11/3/06 SHEET 2 OF 2

DETAILS  
SHEET

MAJOR SITE PLAN FOR SWC US HWY 301 & SE HWY 42

FOR  
SRPG SUMMERFIELD, LLC

4803 GEORGE RD; SUITE 330 TAMPA, FL 33634

FLORIDA

JOSHUA S. BRADLEY  
State of Florida,  
Professional Engineer,  
License No. 60020

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SHEET NUMBER

C11.0

S-T-R  
30-17-23

ORIGINAL SET: 2/23/23

REVISIONS

NO.	DATE	DESCRIPTION
1		
2	12/27/23	REVISED PER AGENCY & CLIENT COMMENTS
3	01/31/24	REVISED PER COUNTY COMMENTS

G:\SHARED DRIVES\CLIENTS\SOLID ROCK PROPERTY GROUP\122.035.00--SWC US HWY 301 & SE HWY 42\DRAWINGS\LIFT STATION DETAILS & C11.0 LS CALCS.DWG - 12/19/2023 2:45 PM

SANITARY LIFT STATION CALCULATIONS

Project Name: SWC US Hwy 301 & SE Hwy 42  
Revision Date: 19-Sep-23

L. DESIGN CAPACITY

A. Average Daily Flow (ADF):				
Description/Location	# of RR	Cars/Day	Flow Rate (GPD)	ADF
Convenience Store	2		250 (Per RR)	500
Car Wash		50	8 gpd/car	400
Total Average Daily Flow in Gallons Per Day (GPD) =				900

B. Peak Hour Flow  
Peak Factor [PF] : 3  
Peak Hour Flow = (ADF x PF)/1440

Peak Hour Flow (GPM) = 1.9  
Flow at Operating Point (GPM) = 38.0

Size of Force Main (in.) = 2 0.0218056 (area of pipe in sf)  
Velocity at Operating Point (FPS) = 3.9  
(Min. Velocity in Force Main = 2.0 FPS)

II. WETWELL DESIGN

A. Design Criteria:  
\* Max pump motor cycle rate = 6 starts per hour  
\* Max detention time and min flow = 30 minutes

B. Pump Control Level Settings:  
\* Pump cycling rates are at a max when inflow equals 1/2 the design pumping rate of [GPM]:  
Wetwell Volume Required (V) Between Lead Pump Start and Pump Shut-off Level:  
 $V = (\text{Cycle Period} \times 1/2 \text{ Pump Rate})/4$  [GAL] = 2.3  
Wetwell Diameter (D) [FT] = 3  
Wetwell Volume (GAL/FT) = 53  
Wetwell Level Change Between Pump Stop and Lead Pump Start [FT] = 0.04  
Design For [IN] = 6

Control Elevations Table	
Description	Elevation
Bottom	77.00
Pump Off	78.50
Pump On	79.00
High Water Alarm	80.00
Influent Invert	81.50
Min. Top of Slab	87.80

Page 1

III. SYSTEM CURVE CALCULATIONS

A. Friction Loss

Pump Station Piping - 2" Force Main				
Item	Size (inches)	Quantity	Equivalent Length (ft)	Total (ft)
Tee				0
90 Degree Elbow	2	2	5	10
Check Valve	2	1	22.5	22.5
Gate/Plug Valve	2	1	2.5	2.5
45 Degree Bend				0
Wye				0
TOTAL =				35

Length of pipe throughout pump station [ft] = 15  
Total Equivalent Length [ft] = 50

2" PVC Force Main Piping from PS to Property Line (Estimated)				
Item	Size (inches)	Quantity	Equivalent Length (ft)	Total (ft)
Tee				0
90 Degree Elbow	2	1	5	5
Check Valve				0
Gate/Plug Valve	2	1	2.5	2.5
45 Degree Bend	2	2	2.667	5.334
Wye				0
TOTAL =				12.834

Length of 2" FM from PS to the Property Line [ft] = 181 (Estimated)  
Total Equivalent Length of 2" PVC FM [ft] = 193.8

4" PVC Force Main Piping from Property Line to POC				
Item	Size (inches)	Quantity	Equivalent Length (ft)	Total (ft)
Tee				0
90 Degree Elbow			10	0
Check Valve			45	0
Gate/Plug Valve	4	1	5	5
45 Degree Bend			5.33	0
22.5 Degree Bend			2.667	0.00
TOTAL =				5.0

Length of pipe [ft] = 121  
Total Equivalent Length [ft] = 126.0

B. Static Head  
Pipe C/L at Highest Discharge Point = 86.80 [B1]  
Low Water Level (All Pumps Off) = 78.50 [B2]  
Total Static Head (B1-B2) = 8.30

Page 2

System Curve							
Description	Flow Rate (GPM)						
	0	10	20	30	40	50	60
FM Piping (2" Inside LS)	0.000	0.180	0.649	1.374	2.339	3.534	4.952
On-Site 2" FM	0.000	0.698	2.515	5.325	9.067	13.700	19.196
Off-Site 4" FM	0.000	0.016	0.056	0.118	0.202	0.305	0.427
Static Lift (FT)	8.30	8.30	8.30	8.30	8.30	8.30	8.30
Pressure @ Tie-In (FT)							
*Max Pressure	53	53	53	53	53	53	53
*Min Pressure	42	42	42	42	42	42	42
Total Dynamic Head (FT)							
*All Pumps On	61.30	62.19	64.52	68.12	72.91	78.84	85.87
*Pumping Alone	50.30	51.19	53.52	57.12	61.91	67.84	74.87
Selected Pump Head (ft)	82.00	72.00	60.00	45.00	10.00	n/a	n/a

$h_f = [(10.44L \times (\text{flow}^{1.85})) / (c^{1.85} \times d^{4.87})]$   
c = 120 for pvc  
c = 100 for DIP

IV. FLOTATION CALCULATIONS - CONCRETE WETWELL

A. Assumptions  
\* Concrete (Reinforced) [lbs/ft^3] = 150  
\* Fiberglass [lbs/ft^3] = 10  
\* Saturated Soil [lbs/ft^3] = 120  
\* Water [lbs/ft^3] = 62.4  
\* Dimensions in Feet  
\* No Water in Wetwell  
\* Neglect Top Slab Weight  
\* Neglect Soil Friction  
\* (A) Wetwell Inside Diam. [FT] = 3  
\* (B) Wetwell Outside Diam. [FT] = 3.2  
\* (C) Wetwell Base Slab (Dia.) [FT] = 5.2  
\* (D) Wetwell Slab Thickness [FT] = 1  
\* (E) Wetwell Barrel Height [FT] = 10.13  
\* Round Wetwell Barrel  
\* Circular Wetwell Base  
\* The Water Table is at Grade

B. Barrel Weight = [B^2 - A^2] x (3.14/4)(E)(3) = 99 lbs

C. Bottom Slab Weight = (C^2) x 3.14/4(D)(150) = 3184 lbs

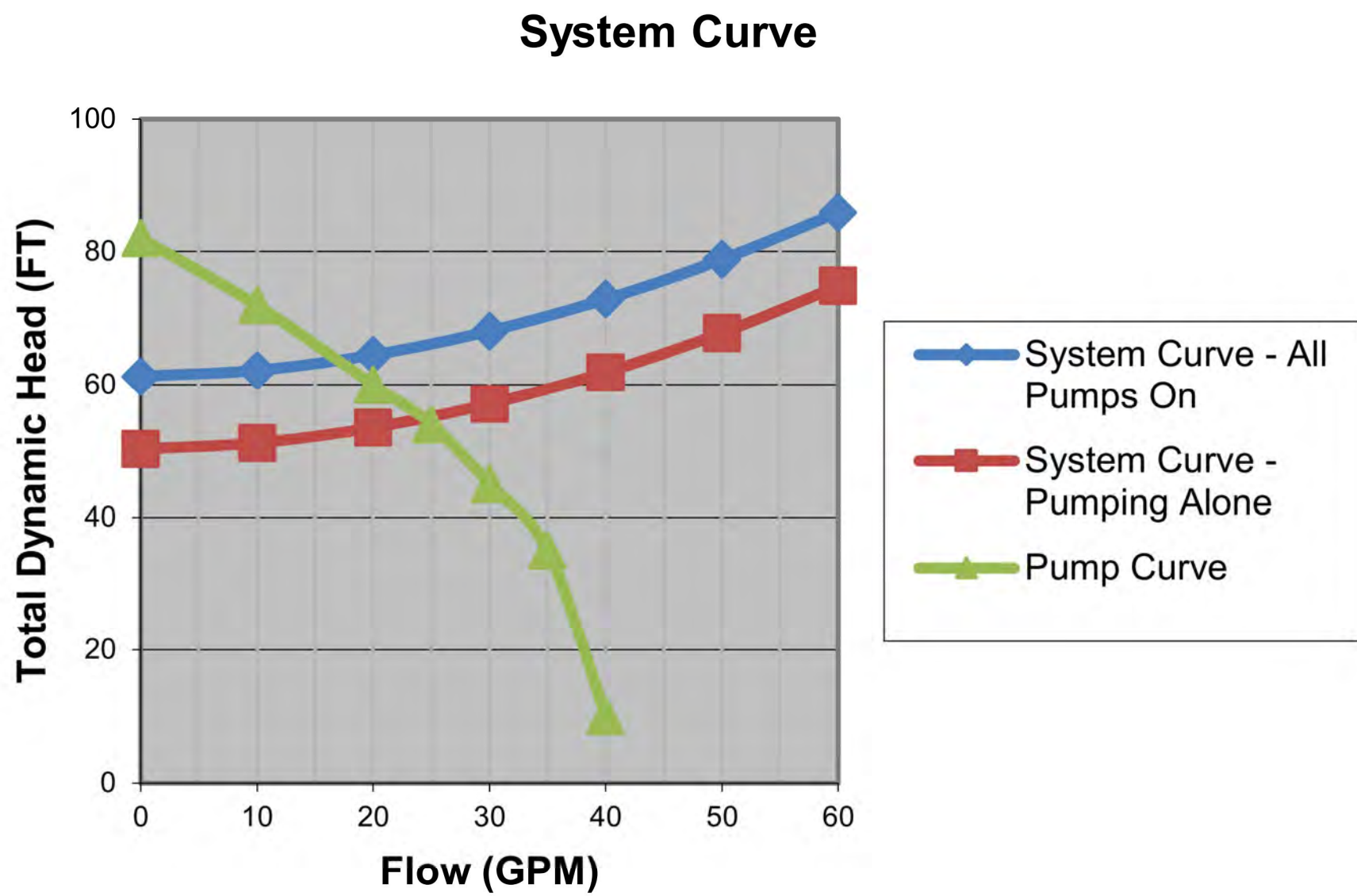
D. Soil Weight = [(C^2) - (B^2)] x 3.14/4(E)(120 - 62.4) = 7698 lbs

E. TOTAL WEIGHT = 10980 lbs

F. Weight of Water Displaced = [(B^2) x (3.14/4)(E) + (C^2) x (3.14/4)(D)] x 62.4 = 6407 lbs

\* 10,980 > 6,407; Therefore, Will Not Float Factor of Safety = 1.71

Page 3



ORIGINAL SET: 2/23/23	
REVISIONS	
1	
2	
12/19/23	REVISED PER COUNTY & CLIENT COMMENTS
12/19/23	REVISED PER AGENCY COMMENTS
NO.	DATE
DESCRIPTION	

NATIVE engineering,plc  
P.O. BOX 2995  
LAND O' LAKES, FL 34639  
(813) 536-2539

MAJOR SITE PLAN FOR SWC US HWY 301 & SE HWY 42  
FOR  
SRPG SUMMERFIELD, LLC  
4803 GEORGE RD; SUITE 330 TAMPA, FL 33634  
MARION COUNTY  
FLORIDA

LIFT STATION  
CALCULATIONS

JOSHUA S. BRADLEY  
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Professional Engineer,  
License No. 60020  
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SHEET NUMBER

C11.0

S-T-R  
30-17-23

SANITARY LIFT STATION CALCULATIONS

Project Name: SWC US Hwy 301 & SE Hwy 42  
Revision Date: 30-Jan-24

L. DESIGN CAPACITY

A. Average Daily Flow (ADF):				
Description/Location	# of RR	Cars/Day	Flow Rate (GPD)	ADF
Convenience Store	3		250 (Per RR)	750
Car Wash		20	8.23 gpd/car	165
Total Average Daily Flow in Gallons Per Day (GPD) =				915

B. Peak Hour Flow  
Peak Factor [PF]: 3  
Peak Hour Flow = (ADF x PF)/1440

Peak Hour Flow (GPM) = 1.9  
Flow at Operating Point (GPM) = 38.0

Size of Force Main (in.) = 2 0.0218056 (area of pipe in sf)  
Velocity at Operating Point (FPS) = 3.9  
(Min. Velocity in Force Main = 2.0 FPS)

II. WETWELL DESIGN

A. Design Criteria:  
\* Max pump motor cycle rate = 6 starts per hour  
\* Max detention time and min flow = 30 minutes

B. Pump Control Level Settings:  
\* Pump cycling rates are at a max when inflow equals 1/2 the design pumping rate of [GPM]:  
Wetwell Volume Required (V) Between Lead Pump Start and Pump Shut-off Level:  
 $V = (\text{Cycle Period} \times 1/2 \text{ Pump Rate})/4$  [GAL] = 2.4  
Wetwell Diameter (D) [FT] = 3  
Wetwell Volume (GAL/FT) = 53  
Wetwell Level Change Between Pump Stop and Lead Pump Start [FT] = 0.05  
Design For [IN] = 6

Control Elevations Table	
Description	Elevation
Bottom	80.60
Pump Off	81.60
Pump On	82.10
High Water Alarm	82.60
Influent Invert	83.10
Min. Top of Slab	88.60

Page 1

III. SYSTEM CURVE CALCULATIONS

A. Friction Loss

Pump Station Piping - 2" Force Main				
Item	Size (inches)	Quantity	Equivalent Length (ft)	Total (ft)
Tee				0
90 Degree Elbow	2	2	5	10
Check Valve	2	1	22.5	22.5
Gate/Plug Valve	2	1	2.5	2.5
45 Degree Bend				0
Wye				0
TOTAL =				35

Length of pipe throughout pump station [ft] = 15  
Total Equivalent Length [ft] = 50

2" PVC Force Main Piping from PS to Property Line (Estimated)				
Item	Size (inches)	Quantity	Equivalent Length (ft)	Total (ft)
Tee				0
90 Degree Elbow	2	1	5	5
Check Valve				0
Gate/Plug Valve	2	1	2.5	2.5
45 Degree Bend	2	4	2.667	10.668
Wye				0
TOTAL =				18.168

Length of 2" FM from PS to the Property Line [ft] = 229  
Total Equivalent Length of 2" PVC FM [ft] = 247.2

2" PVC Force Main Piping from Property Line to POC				
Item	Size (inches)	Quantity	Equivalent Length (ft)	Total (ft)
Tee				0
90 Degree Elbow				0
Check Valve				0
Gate/Plug Valve	2	1	2.5	2.5
45 Degree Bend				0
22.5 Degree Bend				0.00
TOTAL =				2.5

Length of pipe [ft] = 121  
Total Equivalent Length [ft] = 123.5

B. Static Head  
Pipe C/L at Highest Discharge Point = 87.60 [B1]  
Low Water Level (All Pumps Off) = 81.60 [B2]  
Total Static Head (B1-B2) = 6.00

Page 2

System Curve							
Description	Flow Rate (GPM)						
	0	10	20	30	40	50	60
FM Piping (2" Inside LS)	0.000	0.180	0.649	1.374	2.339	3.534	4.952
On-Site 2" FM	0.000	0.890	3.207	6.790	11.561	17.470	24.478
Off-Site 2" FM	0.000	0.444	1.602	3.393	5.777	8.729	12.231
Static Lift (FT)	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Pressure @ Tie-In (FT)							
*Max Pressure	53	53	53	53	53	53	53
*Min Pressure	42	42	42	42	42	42	42
Total Dynamic Head (FT)							
*All Pumps On	59.00	60.51	64.46	70.56	78.68	88.73	100.66
*Pumping Alone	48.00	49.51	53.46	59.56	67.68	77.73	89.66
Selected Pump Head (ft)	82.00	72.00	60.00	45.00	10.00	n/a	n/a

$h_f = [(10.44L \times (\text{flow}^{1.85})) / (c^{1.85} \times d^{4.87})]$   
c = 120 for pvc  
c = 100 for DIP

IV. FLOTATION CALCULATIONS - CONCRETE WETWELL

A. Assumptions  
\* Concrete (Reinforced) [lbs/ft<sup>3</sup>] = 150  
\* Fiberglass [lbs/ft<sup>3</sup>] = 10  
\* Saturated Soil [lbs/ft<sup>3</sup>] = 120  
\* Water [lbs/ft<sup>3</sup>] = 62.4  
\* Dimensions in Feet  
\* No Water in Wetwell  
\* Neglect Top Slab Weight  
\* Neglect Soil Friction  
\* (A) Wetwell Inside Diam. [FT] = 3  
\* (B) Wetwell Outside Diam. [FT] = 3.2  
\* (C) Wetwell Base Slab (Dia.) [FT] = 5.2  
\* (D) Wetwell Slab Thickness [FT] = 1  
\* (E) Wetwell Barrel Height [FT] = 7.33  
\* Round Wetwell Barrel  
\* Circular Wetwell Base  
\* The Water Table is at Grade

B. Barrel Weight = [B^2 - A^2] x (3.14/4)(E)(3) = 71 lbs

C. Bottom Slab Weight = (C^2) x 3.14/4(D)(150) = 3184 lbs

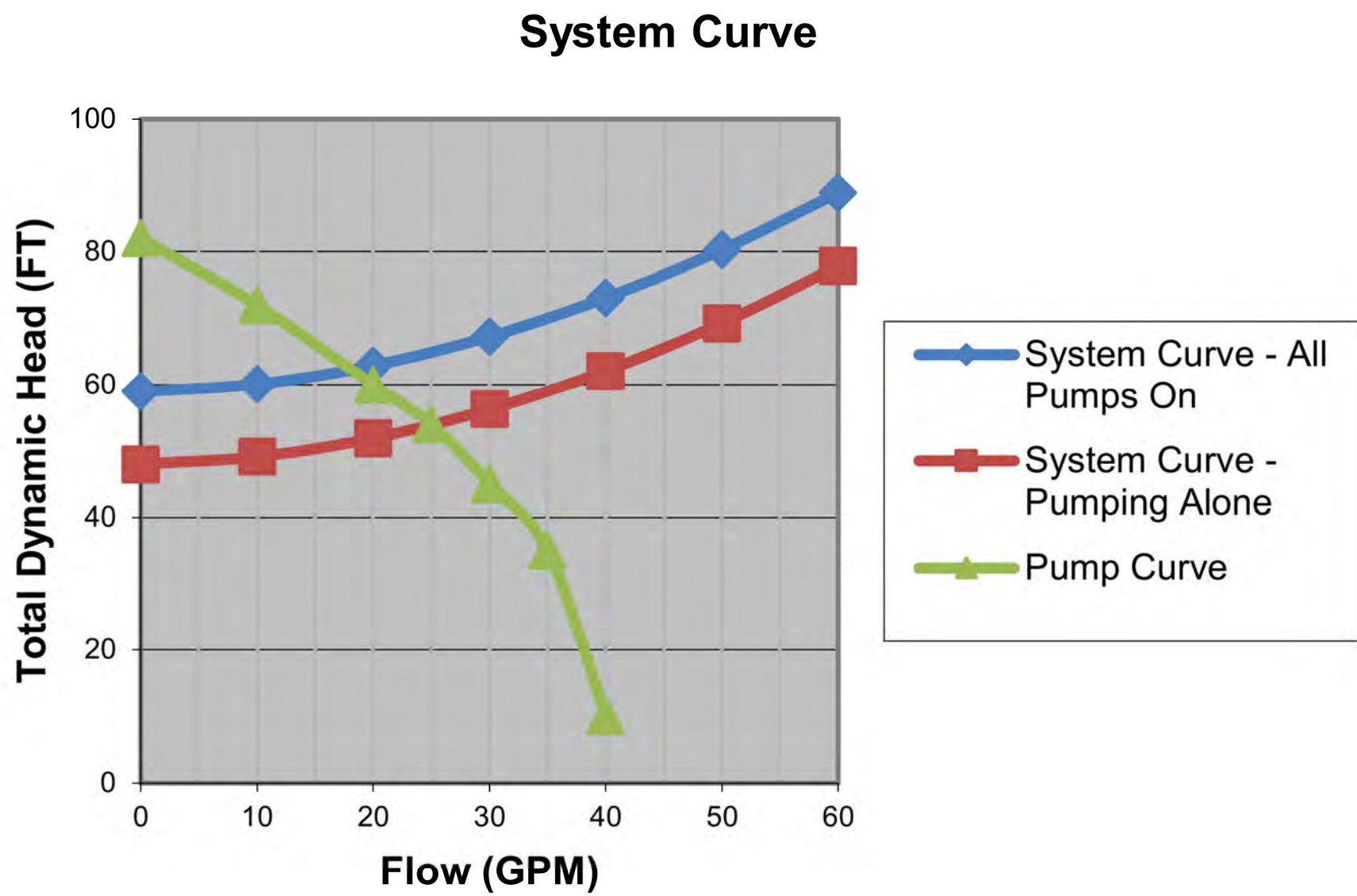
D. Soil Weight = [(C^2) - (B^2)] x 3.14/4(E)(120 - 62.4) = 5571 lbs

E. TOTAL WEIGHT = 8826 lbs

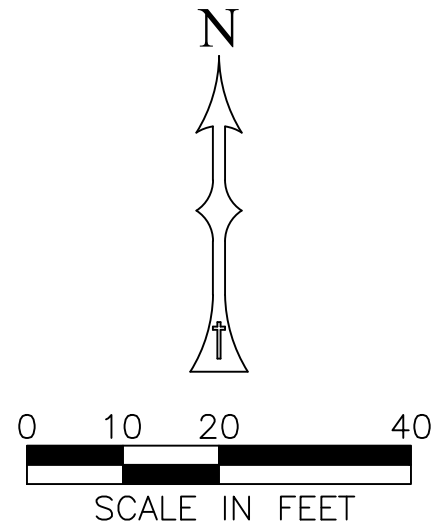
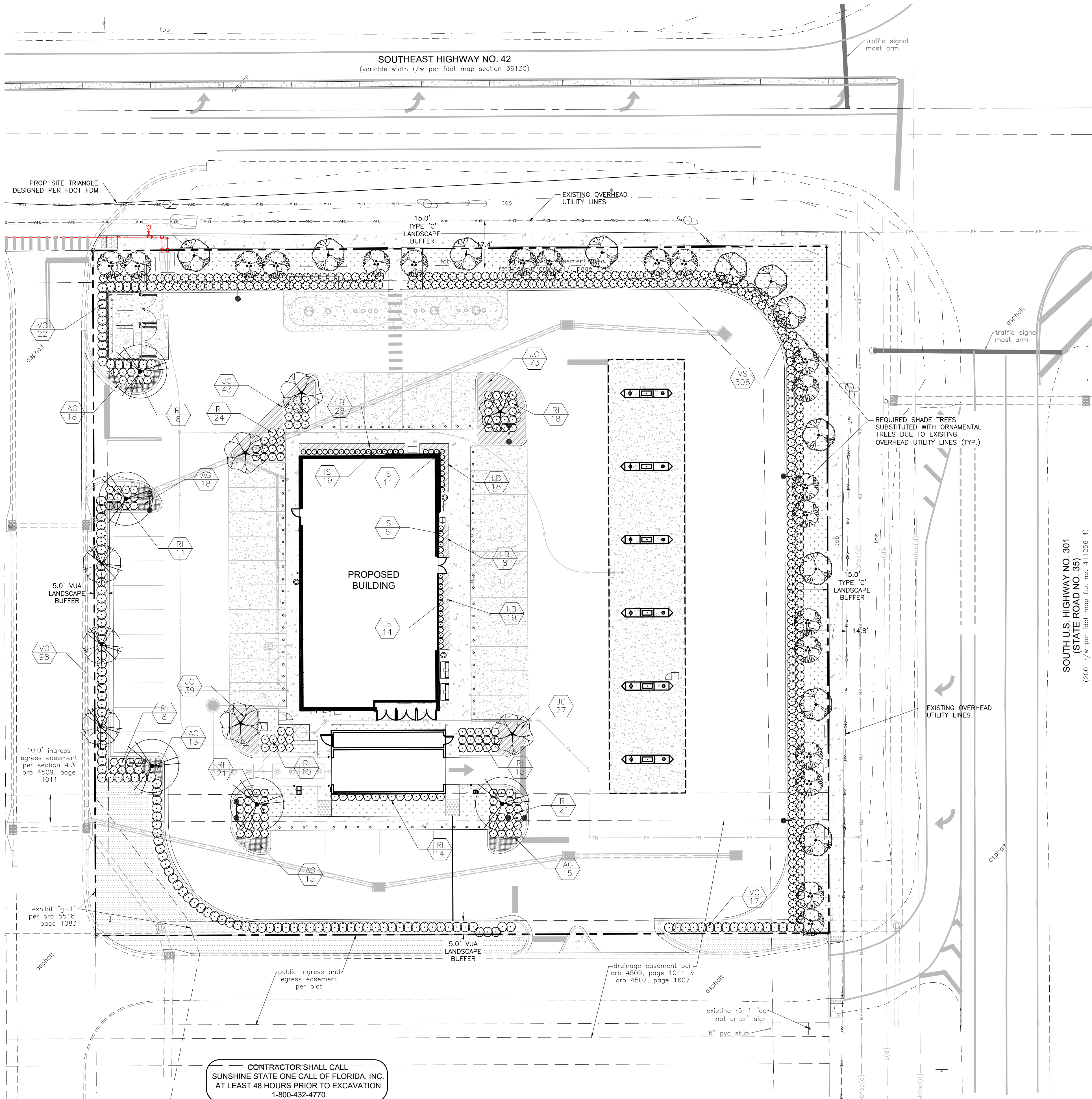
F. Weight of Water Displaced = [(B^2) x (3.14/4)(E) + (C^2) x (3.14/4)(D)] x 62.4 = 5003 lbs

\* 8,826 > 5,003; Therefore, Will Not Float Factor of Safety = 1.76

Page 3



G:\SHARED DRIVES\CLIENTS\SOLID ROCK PROPERTY GROUP\122.035.00--SWC US HWY 301 & SE HWY 42\DRAWINGS\L1.0 LANDSCAPE PLAN.DWG - 2/8/2024 5:08 PM



LANDSCAPE DATA TABLE			
SITE AREA:	68,456 SF 1.57 AC		
EXISTING TREES PRESERVED:	N/A		
SHADE TREES REQUIRED:	1 TREE/ 3,000 SF OF SITE AREA		
SHADE TREES PROVIDED:	*13 OF 23 TREES		
TOTAL TREES PROVIDED:	44		
*11 ORNAMENTAL TREES SUBSTITUTED DUE TO OVERHEAD UTILITY CONFLICTS			
LANDSCAPED AREA REQUIRED:	20% OF SITE AREA		
PROVIDED:	20.9%(14,339/ 68,456)		

PLANT SCHEDULE									
TREES	CODE	QTY	COMMON / BOTANICAL NAME	SPEC	CONTAINER	CAL	NATIVE	D.T.	
	QV	5	LIVE OAK QUERCUS VIRGINIANA 'BOARDWALK'	10' HT; 4' SPR	45 GAL	3.5"	YES	YES	
	MS	5	SWEETBAY MAGNOLIA MAGNOLIA VIRGINIANA	10' HT; 4' SPR	25 GAL	3.5"	YES	YES	
	UA	3	WINGED ELM ULMUS ALATA	10' HT; 4' SPR	45 GAL	3.5"	YES	YES	
UNDERSTORY TREES	CODE	QTY	COMMON / BOTANICAL NAME	SPEC	CONTAINER	CAL	NATIVE	D.T.	
	LW	20	NATCHEZ CRAPE MYRTLE LAGERSTROEMIA INDICA X FAURIEI 'NATCHEZ'	6' HT	MULTI-TRUNK	1" PER	NO	YES	
	LI2	11	TUSCARORA CRAPE MYRTLE LAGERSTROEMIA INDICA X FAURIEI 'TUSCARORA'	8' HT	30 GAL	2"	NO	YES	
SHRUBS	CODE	QTY	COMMON / BOTANICAL NAME	SPEC	CONTAINER	SPC	NATIVE	D.T.	
	IS	50	DWARF YAUPON HOLLY ILEX VOMITORIA 'SCHILLINGS DWARF'	18" HT	3 GAL	24" O.C.	YES	YES	
	RI	158	INDIAN HAWTHORN RHAPHIOLEPIS INDICA	24" HT	3 GAL	30" O.C.	NO	YES	
	VS	308	SANDANKWA VIBURNUM VIBURNUM SUSPENSUM	24" HT	7 GAL	30" O.C.	YES	YES	
	VO	137	WALTER'S VIBURNUM VIBURNUM OBOVATUM	36" HT	7 GAL	36" O.C.	YES	YES	
GROUND COVERS	CODE	QTY	COMMON / BOTANICAL NAME	SPEC	CONTAINER	SPC	NATIVE	D.T.	
	LB	71	BIG BLUE LILYTURF LIRIOPE MUSCARI 'BIG BLUE'	---	1 GAL	12" O.C.	NO	YES	
	AG	79	PERENNIAL PEANUT ARACHIS GLABRATA	---	1 GAL	12" O.C.	NO	YES	
	JC	202	SHORE JUNIPER JUNIPERUS CONFERTA 'BLUE PACIFIC'	---	1 GAL	12" O.C.	NO	YES	
SOD/SEED	CODE	QTY	COMMON / BOTANICAL NAME	SPEC	CONTAINER	SPC	NATIVE	D.T.	
	PN	---	BAHIAGRASS PASPALUM NOTATUM	---	---	---	---	---	
	SS	---	ST. AUGUSTINE GRASS STENOTAPHRUM SECUNDATUM	---	---	---	---	---	

#### NOTES

- CONTRACTOR TO CONFIRM ALL PLANT COUNTS FROM DRAWING PRIOR TO INSTALLATION.
- ALL SPECIFICATIONS ARE MINIMUMS FOR EACH PART OF THE SPECIFICATION.
- ALL PLANT MATERIAL SHALL BE FLORIDA NO.1 GRADE AS DEFINED BY "GRADES AND STANDARDS FOR NURSERY PLANTS", FLORIDA DEPARTMENT OF AGRICULTURE.
- INSTALLATION SHALL MEAN SURVIVAL IN PERPETUITY, AND REPLACEMENT IF NECESSARY, OF ALL MATERIALS. DEAD AND/OR DYING PLANT MATERIAL SHALL BE REPLACED BY THE OWNER WITHIN 30 DAYS OF NOTIFICATION BY THE COUNTY.
- ANY AREAS SUBJECT TO EROSION MUST BE ADEQUATELY STABILIZED WITH VEGETATIVE MATERIAL THAT WILL, WITHIN A REASONABLE TIME FRAME, DETER SOIL DISTURBANCE. SODDING, PLUGGING, SPRIGGING OR SEEDING IS ACCEPTABLE FOR STABILIZATION; HOWEVER, SODDING MAY BE REQUIRED IN AREAS OF EROSION-PRONE SOILS OR WHERE SLOPES ARE GREATER THAN 5:1. VEGETATION OTHER THAN GRASS IS ACCEPTABLE UNLESS OTHERWISE SPECIFIED.
- ALL LANDSCAPE AREAS NOT PLANTED WITH TREES, SHRUBS OR GROUND COVER SHALL BE SODDED. SOD TO BE ST. AUGUSTINE (STENOTAPHRUM SECUNDATUM), OR OTHER APPROVED SHALLOW-ROOTED TURF GRASS IN AREAS THAT ARE PROVIDED WITH CENTRAL AUTOMATIC IRRIGATION SYSTEMS. SOD TO BE BAHIA GRASS (PASPALUM NOTATUM), OR OTHER APPROVED DEEP-ROOTED GRASS IN ALL OTHER AREAS UNLESS OTHERWISE SPECIFIED.
- SHRUBBERY USED FOR SCREENING UTILITIES SHALL BE A MINIMUM HEIGHT OF 36 INCHES, SPACED A MAXIMUM 3 FEET ON CENTER AND BE INSTALLED AT AN ELEVATION EQUIVALENT TO THE PROPOSED ADJACENT FINISHED ELEVATION.
- UPON COMPLETION OF THE INSTALLATION, THE CONTRACTOR SHALL REQUEST AN INSPECTION BY THE DESIGN PROFESSIONAL. A LANDSCAPE AND IRRIGATION AS-BUILT CERTIFICATION SHALL BE SIGNED AND SEALED BY THE DESIGN PROFESSIONAL AND SUBMITTED TO THE COUNTY LANDSCAPE ARCHITECT PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

CONTRACTOR SHALL CALL  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.  
AT LEAST 48 HOURS PRIOR TO EXCAVATION  
1-800-432-4770

NATIVE engineering,plc  
P.O. BOX 2995  
LAND O' LAKES, FL 34639  
(813) 536-2539

MAJOR SITE PLAN FOR SWC US HWY 301 & SE HWY 42  
FOR  
SRPG SUMMERFIELD, LLC  
4803 GEORGE RD; SUITE 330 TAMPA, FL 33634

LANDSCAPE PLAN

BRIAN BLAZEWSK  
State of Florida  
Registered Landscape Architect  
License No. LA0667484  
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY BRIAN BLAZEWSK. RLA ON THE DATE INDICATED HERE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED IN ANY ELECTRONIC COPIES.

SHEET NUMBER

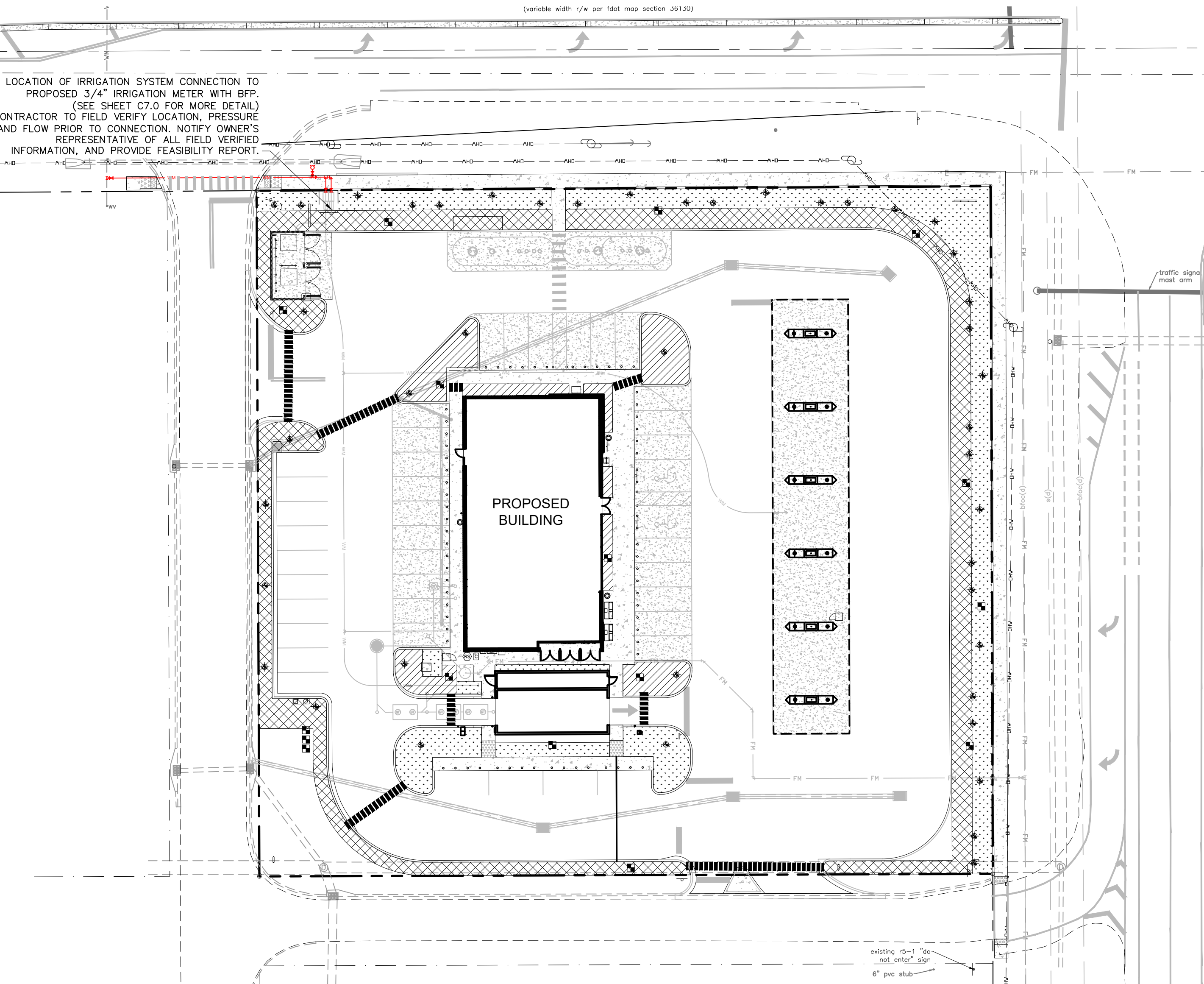
L1.0

S-T-R  
30-17-23

ORIGINAL SET: 2/23/23  
REVISIONS

NO.	DATE	DESCRIPTION
1		
2	12/27/23	REVISED PER AGENCY COMMENTS
3	01/31/24	REVISED PER COUNTY COMMENTS





#### GENERAL REQUIREMENTS

1. THIS IRRIGATION PLAN IS DIAGRAMMATIC IN NATURE, ITS PURPOSE IS TO PROVIDE GENERAL IRRIGATION GUIDELINES TO BE USED FOR GENERAL SITE PERMITTING PURPOSES ONLY.
2. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR PRODUCING, DESIGNING AND PERMITTING THE FINAL IRRIGATION PLAN THAT PROVIDES 100% COVERAGE TO ALL NEW LANDSCAPING AND SOD. THE PLANS SHALL BE PREPARED BY A CERTIFIED IRRIGATION DESIGNER AND SUBMITTED TO NATIVE ENGINEERING, PLLC FOR APPROVAL. THE PLANS SHALL BE PREPARED AND DESIGNED IN ACCORDANCE WITH FLORIDA IRRIGATION SOCIETY DESIGN STANDARDS AND REGULATIONS LOCALLY GOVERNING THE PROJECT. PRODUCTION AND DESIGN COSTS SHALL BE INCLUDED IN THE PRICE BID FOR IRRIGATION.
3. CODE REQUIREMENTS SHALL BE THOSE OF STATE AND MUNICIPAL CODES AND REGULATIONS LOCALLY GOVERNING THIS PROJECT, PROVIDING THAT ANY REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS, NOT CONFLICTING THEREWITH, BUT EXCEEDING THE CODE REQUIREMENTS, SHALL GOVERN UNLESS WRITTEN PERMISSION TO THE CONTRARY IS GRANTED BY NATIVE ENGINEERING, PLLC.
4. EXTREME CARE SHALL BE EXERCISED AT ALL TIMES BY THE CONTRACTOR IN EXCAVATING AND WORKING IN THE PROJECT AREA DUE TO EXISTING UTILITIES AND IRRIGATION SYSTEMS TO REMAIN. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR EXPENSES INCURRED IN THE REPAIR OF DAMAGES CAUSED BY THEIR OPERATION.
5. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND MAINTAINING EXISTING IRRIGATION MAIN LINES THAT SUPPLY WATER TO AREAS ON THE SITE AS NOTED ON THE DRAWINGS AND OUTSIDE OF THE PROPOSED LIMIT OF WORK. THE CONTRACTOR SHALL RELOCATE OR REPLACE EXISTING IRRIGATION MAIN LINE PIPING AS REQUIRED TO PROVIDE CONTINUOUS SUPPLY OF WATER TO ALL AREAS OF EXISTING IRRIGATION ON SITE.
6. PROVIDING CONTINUOUS WATER SUPPLY SHALL INCLUDE HAND WATERING AND/OR THE USE OF WATERING TRUCKS TO PROVIDE ADEQUATE WATER.
7. PLAN LOCATIONS OF SLEEVES, ZONES AND OTHER EQUIPMENT ARE DIAGRAMMATIC AND INDICATE THE SPACING AND RELATIVE LOCATIONS OF ALL INSTALLATIONS. FINAL SITE CONDITIONS AND EXISTING AND PROPOSED PLANTINGS SHALL DETERMINE FINAL LOCATIONS AND ADJUSTED AS NECESSARY AND AS DIRECTED TO MEET EXISTING AND PROPOSED CONDITIONS AND OBTAIN COMPLETE WATER COVERAGE. MINOR CHANGES IN LOCATIONS OF THE ABOVE FROM LOCATIONS SHOWN SHALL BE MADE AS NECESSARY TO AVOID EXISTING AND PROPOSED TREES, PIPING, UTILITIES, STRUCTURES, ETC. AT THE CONTRACTOR'S EXPENSE OR WHEN DIRECTED BY NATIVE ENGINEERING, PLLC.
8. POINT OF CONNECTION SHALL BE APPROXIMATELY AS SHOWN ON DRAWINGS, CONNECT NEW UNDERGROUND PIPING AND VALVES AND PROVIDE ALL FLANGES, ADAPTERS OR OTHER NECESSARY FITTINGS FOR CONNECTION.
9. NO FITTINGS SHALL BE INSTALLED ON PIPE UNDERNEATH PAVEMENT OR WALLS.
10. CONTRACTOR TO FULLY RESTORE ALL AREAS DISTURBED BY HIS WORK. PROVIDE A SMOOTH TRANSITION BETWEEN THE REPAIRED DISTURBED AREAS AND THE UNDISTURBED AREAS. SOIL, DEBRIS AND EXCAVATED MATERIALS SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR IN ACCORDANCE WITH APPLICABLE ORDINANCES AND LAWS.
11. CONTRACTOR TO FULLY RESTORE ALL AREAS DISTURBED BY HIS WORK. PROVIDE A SMOOTH TRANSITION BETWEEN THE REPAIRED DISTURBED AREAS AND THE UNDISTURBED AREAS. SOIL, DEBRIS AND EXCAVATED MATERIALS SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR IN ACCORDANCE WITH APPLICABLE ORDINANCES AND LAWS.

#### PERMITS AND REGULATIONS

1. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS RELATED TO THIS SECTION OF THE WORK UNLESS PREVIOUSLY EXCLUDED UNDER PROVISION OF THE CONTRACT OR GENERAL CONDITIONS. THE CONTRACTOR SHALL COMPLY WITH ALL LAWS AND ORDINANCES BEARING ON THE OPERATION OR CONDUCT OF THE WORK AS DRAWN AND SPECIFIED. IF THE CONTRACTOR OBSERVES THAT A CONFLICT EXISTS BETWEEN PERMIT REQUIREMENTS AND THE WORK OUTLINED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROMPTLY NOTIFY NATIVE ENGINEERING, PLLC IN WRITING INCLUDING A DESCRIPTION OF ANY NECESSARY CHANGES AND CHANGES TO THE CONTRACT PRICE RESULTING FROM CHANGES IN THE WORK.
2. WHEREVER REFERENCES ARE MADE TO STANDARDS OR CODES IN ACCORDANCE WITH WHICH WORK IS TO BE PERFORMED OR TESTED, THE EDITION OR REVISION OF THE STANDARDS AND CODES CURRENT ON THE EFFECTIVE DATE OF THIS CONTRACT SHALL APPLY, UNLESS OTHERWISE EXPRESSLY SET FORTH.
3. IN CASE OF CONFLICT AMONG ANY REFERENCED STANDARDS OR CODES OR BETWEEN ANY REFERENCED STANDARDS AND CODES AND THE SPECIFICATIONS, THE MORE RESTRICTIVE STANDARD SHALL APPLY OR OWNER'S REPRESENTATIVE SHALL DETERMINE WHICH SHALL GOVERN.

#### POINT OF CONNECTION

1. THE POINT OF CONNECTION OF THE IRRIGATION SYSTEM TO ITS ELECTRICAL POWER SOURCES SHALL BE PROVIDED BY THE GENERAL CONTRACTOR'S LICENSED ELECTRICAL CONTRACTOR PER GOVERNING CODES AT THE LOCATION SHOWN ON THE DRAWINGS. THE IRRIGATION CONTRACTOR WILL CONNECT THE POWER TO PROVIDED JUNCTION BOX OR GROUNDED PLUG RECEPTACLE.
2. THE POINT OF CONNECTION OF THE IRRIGATION SYSTEM TO ITS POTABLE AND OR NON-POTABLE WATER SOURCES, INCLUDING THE MAIN SHUTOFF VALVE AND BACKFLOW PREVENTER SHALL BE PROVIDED BY THE GENERAL CONTRACTOR'S LICENSED PLUMBING CONTRACTOR PER GOVERNING CODES AT THE LOCATION SHOWN ON THE DRAWINGS.

#### PROTECTION

1. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PROTECTION OF ALL THEIR WORK FROM DAMAGE, DESTRUCTION, OR LOSS, AND SHALL PROTECT THE OWNER'S PROPERTY FROM DAMAGE ARISING IN CONNECTION WITH THIS CONTRACT. CONTRACTOR SHALL MAKE GOOD ANY SUCH DAMAGE, DESTRUCTION, LOSS OR INJURY. CONTRACTOR SHALL ADEQUATELY PROTECT ADJACENT PROPERTY AS PROVIDED BY LAW AND THE CONTRACT DOCUMENTS.
2. THE CONTRACTOR SHALL MAINTAIN SUFFICIENT SAFEGUARDS, SUCH AS RAILINGS, TEMPORARY WALKS, LIGHTS, ETC., AGAINST THE OCCURRENCE OF ACCIDENTS, INJURIES OR DAMAGE TO ANY PERSON OR PROPERTY RESULTING FROM THEIR WORK, AND SHALL ALONE BE RESPONSIBLE FOR THE SAME IF SUCH OCCURS.
3. ALL EXISTING PAVING, STRUCTURES, EQUIPMENT OR PLANT MATERIAL SHALL BE PROTECTED AT ALL TIMES, INCLUDING THE IRRIGATION SYSTEM RELATED TO PLANTS, FROM DAMAGE BY WORKERS AND EQUIPMENT. THE CONTRACTOR SHALL FOLLOW ALL PROTECTION REQUIREMENTS INCLUDING PLANT PROTECTION PROVISION OF THE GENERAL CONTRACT DOCUMENTS. ALL DAMAGES SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE, REPAIRS AND OR REPLACEMENT SHALL BE TO THE SATISFACTION OF NATIVE ENGINEERING, PLLC, INCLUDING THE SELECTION OF A CONTRACTOR TO UNDERTAKE THE REPAIR OR MAINTENANCE. REPAIRS SHALL BE AT NO COST TO THE OWNER.
4. CONTRACTOR TO EXERCISE CAUTION AND AVOID DAMAGE TO ROOTS OF EXISTING TREES TO REMAIN. PRESERVE ALL ROOTS 1" DIAMETER AND LARGER, ROOTS TO BE SEVERED CLEANLY WITH A SHARP CUTTING TOOL. MAIN LINE LOCATION AS SHOWN ON PLANS SHALL BE FIELD ADJUSTED BY CONTRACTOR TO AVOID CONFLICTS WITH PROPOSED LANDSCAPING AND EXISTING TREES TO REMAIN.
5. FOR TREES DAMAGED TO THE POINT WHERE THEY WILL NOT BE EXPECTED TO SURVIVE OR WHICH ARE SEVERELY DISFIGURED AND THAT ARE TOO LARGE TO REPLACE, THE COST OF DAMAGES SHALL BE AS DETERMINED BY THE OWNER'S ARBORIST USING ACCEPTED TREE VALUE EVALUATION METHODS.
6. THE CONTRACTOR SHALL REFRAIN FROM TRENCHING WITHIN THE DRIP LINE OF ANY EXISTING TREE TO REMAIN. NATIVE ENGINEERING, PLLC MAY REQUIRE THE CONTRACTOR TO RELOCATE PROPOSED IRRIGATION WORK, BORE LINES BENEATH ROOTS OR USE AIR SPADE TECHNOLOGY TO DIG TRENCHES THROUGH AND UNDER THE ROOT SYSTEM TO AVOID DAMAGE TO EXISTING TREE ROOT AREAS.
7. ALL PRESSURE MAIN LINES UNDER ASPHALT PAVEMENT SHALL BE WITHIN SLEEVES AS SHOWN ON PLANS.

#### UTILITIES

1. CONTRACTOR SHALL CAREFULLY EXAMINE THE CIVIL, RECORD, AND SURVEY DRAWINGS TO BECOME FAMILIAR WITH THE EXISTING UNDERGROUND CONDITIONS BEFORE DIGGING.
2. DO NOT BEGIN ANY EXCAVATION UNTIL ALL UNDERGROUND UTILITIES HAVE BEEN LOCATED AND MARKED.
3. DETERMINE LOCATION OF UNDERGROUND UTILITIES AND PERFORM WORK IN A MANNER THAT WILL AVOID POSSIBLE DAMAGE. HAND EXCAVATE, AS REQUIRED, MAINTAIN STAKES AND OR MARKINGS SET BY OTHERS UNTIL PARTIES CONCERNED MUTUALLY AGREE TO THEIR REMOVAL.

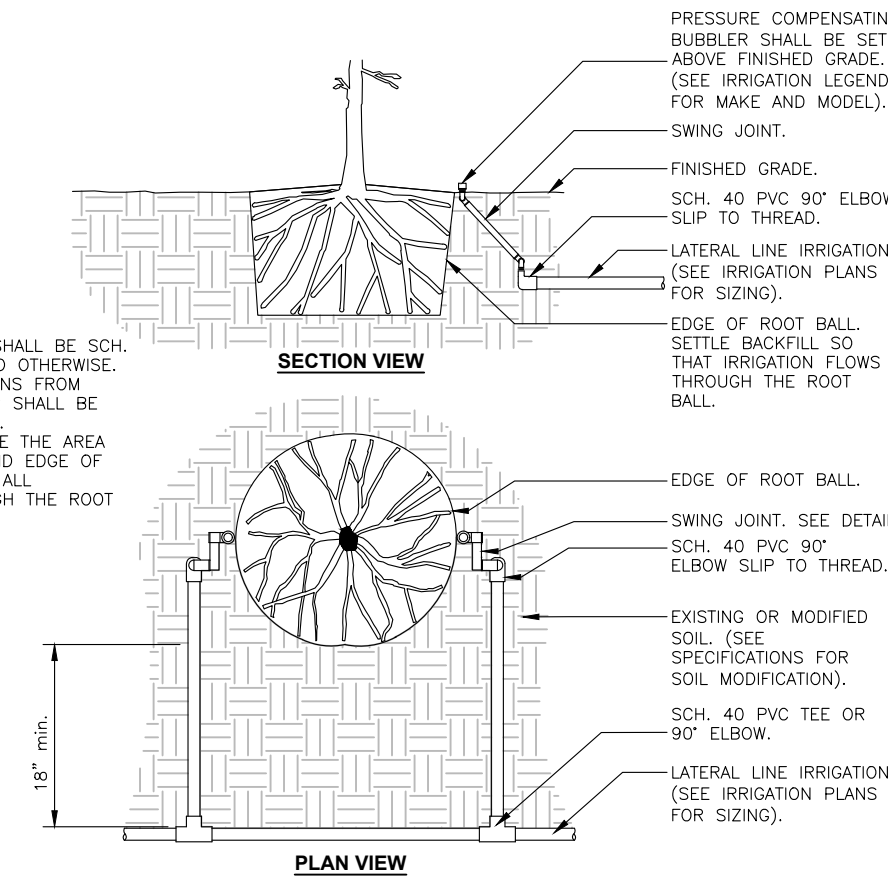
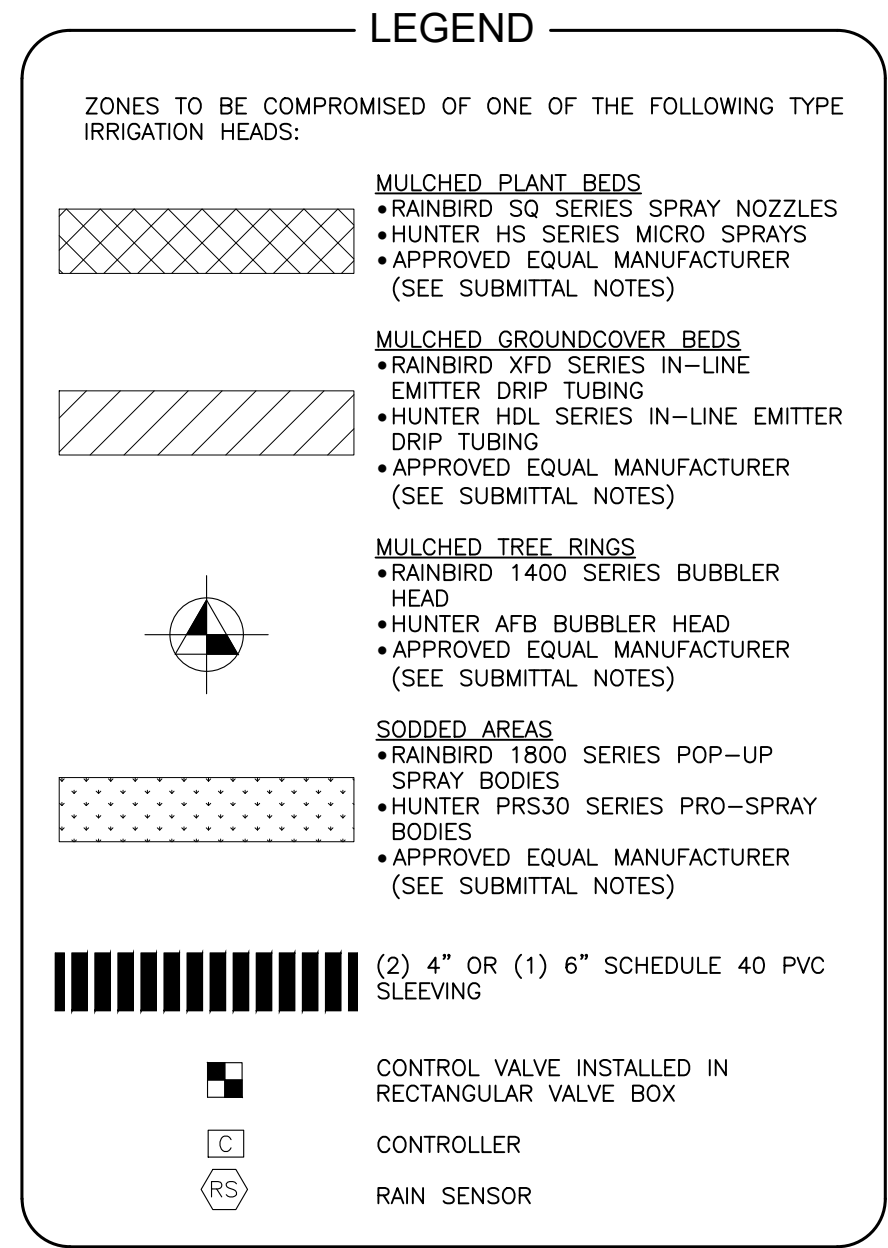
#### RECLAIMED WATER SYSTEM DESIGNATION

1. WHERE IRRIGATION SYSTEMS USE RECLAIMED WATER, ALL PRODUCTS INCLUDING VALVE BOXES, LATERAL AND MAIN LINE PIPE, ETC. WHERE APPLICABLE AND/OR REQUIRED BY LOCAL CODE SHALL HAVE THE RECLAIMED WATER PURPLE COLOR DESIGNATION.

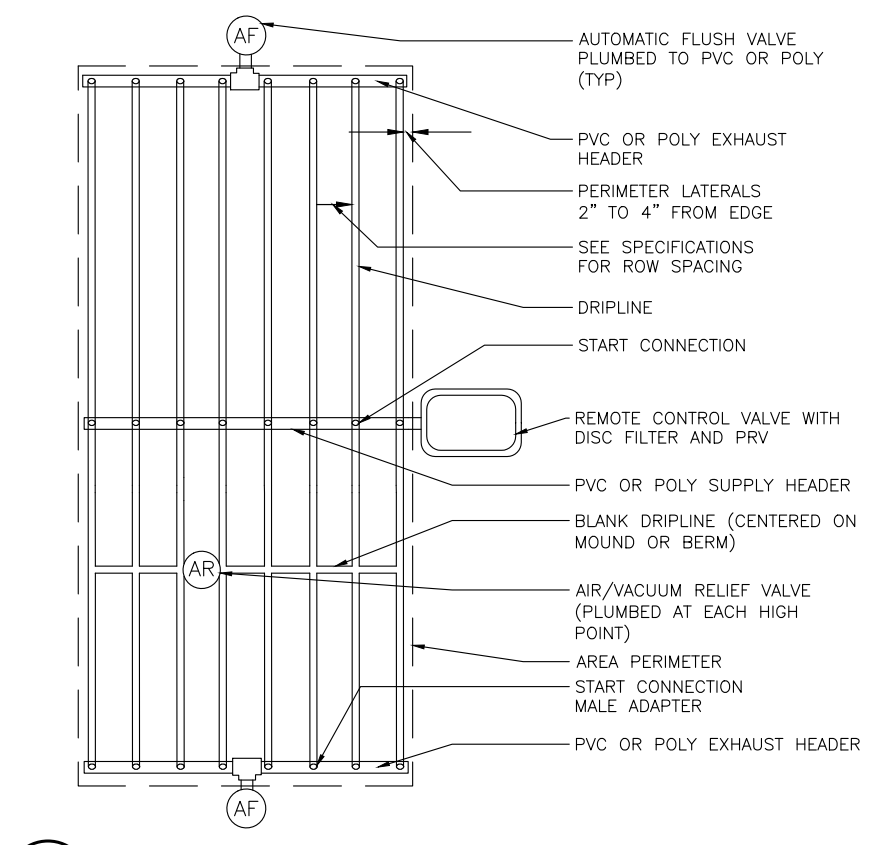
#### COMPLETION INSPECTION REQUIREMENTS

1. IRRIGATION INSTALLATION PROFESSIONALS SHALL BE ACCOUNTABLE FOR THE PROPER INSTALLATION AND COMPLIANCE WITH THE CONDITIONS OF THE IRRIGATION PERMIT AND APPROVED PLANS.
2. UPON COMPLETION OF THE INSTALLATION, THE CONTRACTOR OR OWNER SHALL REQUEST AN INSPECTION BY THE IRRIGATION DESIGN PROFESSIONAL. PRIOR TO THE INSPECTION, THE IRRIGATION INSTALLATION PROFESSIONAL SHALL PRODUCE A CLEAR AND LEGIBLE AS-BUILT DIAGRAM WHICH ACCURATELY REPRESENTS THE IRRIGATION SYSTEM WAS INSTALLED. THE DIAGRAM SHALL BE PRESENTED AND REVIEWED DURING THE FINAL INSPECTION. THE DIAGRAM MAY BE A MARKED-UP COPY OF THE APPROVED IRRIGATION PLAN AND SHALL INCLUDE AT A MINIMUM:
  - a. LOCATIONS OF ALL MAINLINES AND MAINLINE VALVES;
  - b. LOCATIONS OF ALL CONTROL VALVES;
  - c. WATER DEMAND PER ZONE IN GPM, AND
  - d. TOTAL WATER DEMAND PER OPERATING CYCLE.
3. THE IRRIGATION INSTALLATION PROFESSIONAL SHALL ALSO PROVIDE TO THE OWNER:
  - a. IRRIGATION SYSTEM SCHEDULING INFORMATION;
  - b. A COPY OF THE IRRIGATION CONTROLLER OWNER'S MANUAL;
  - c. IRRIGATION SYSTEM MAINTENANCE SCHEDULE, WHICH INCLUDES:
    - i. INSTRUCTIONS FOR SEASONAL ADJUSTMENTS OF CONTROLLER AND SENSORS.
    - ii. INSTRUCTIONS COVERING HOW AND WHEN TO CHECK FOR LEAKS.
    - iii. A SCHEDULE FOR CHECKING FOR PROPER IRRIGATION DISTRIBUTION COVERAGE.
  - d. WITHIN 60 DAYS AFTER INSTALLATION THE IRRIGATION CONTROLLER SHALL BE ADJUSTED TO BE SET IN ACCORDANCE WITH THE APPLICABLE IRRIGATION SCHEDULE SET FORTH IN THIS CODE.
4. UPON COMPLETION OF THE IRRIGATION SYSTEM INSTALLATION AND THE ACCEPTANCE OF THE AS-BUILT DIAGRAM AND OPERATIONAL INFORMATION, A FINAL INSPECTION AND LANDSCAPE/IRRIGATION RELEASE SHALL BE SIGNED AND SEALED BY THE IRRIGATION DESIGN PROFESSIONAL AND SUBMITTED TO THE COUNTY'S LANDSCAPE ARCHITECT.

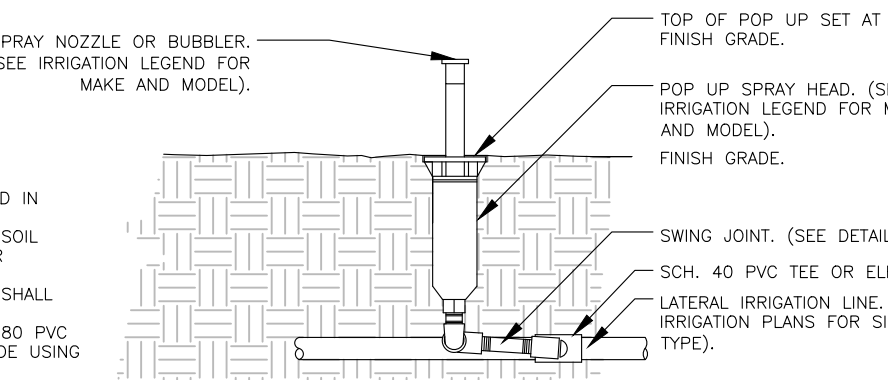
CONTRACTOR SHALL CALL  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.  
AT LEAST 48 HOURS PRIOR TO EXCAVATION  
1-800-432-4770



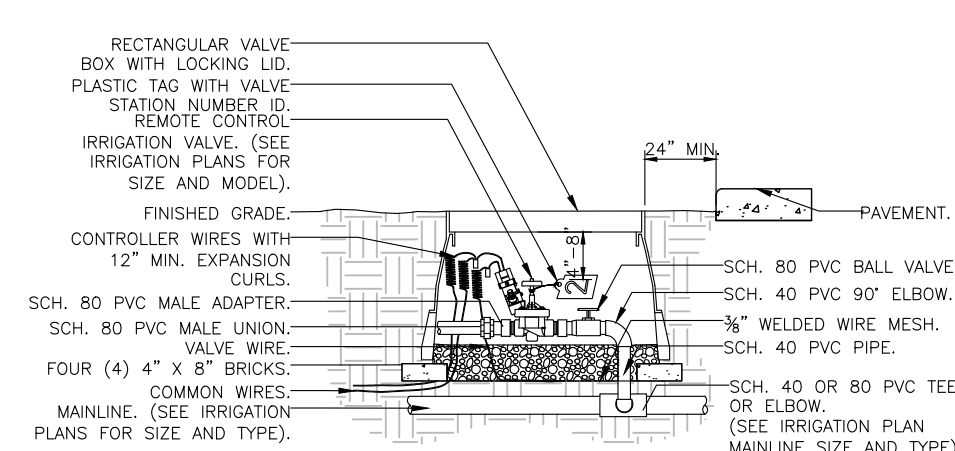
4 IRRIGATION BUBBLER DETAIL



5 TYPICAL DRIP-LINE CENTER FEED LAYOUT

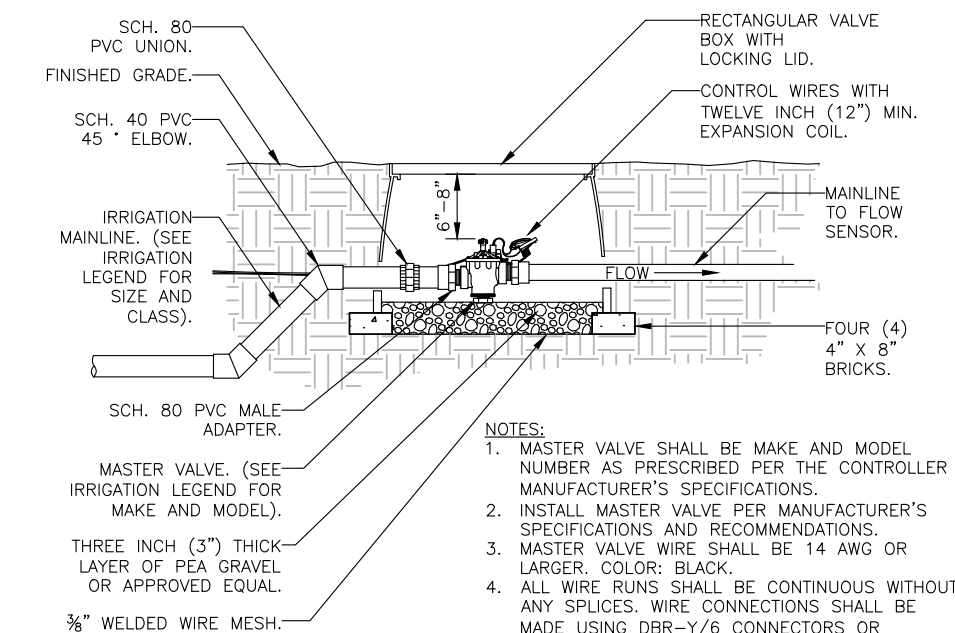


6 POP-UP SPRAY DETAIL



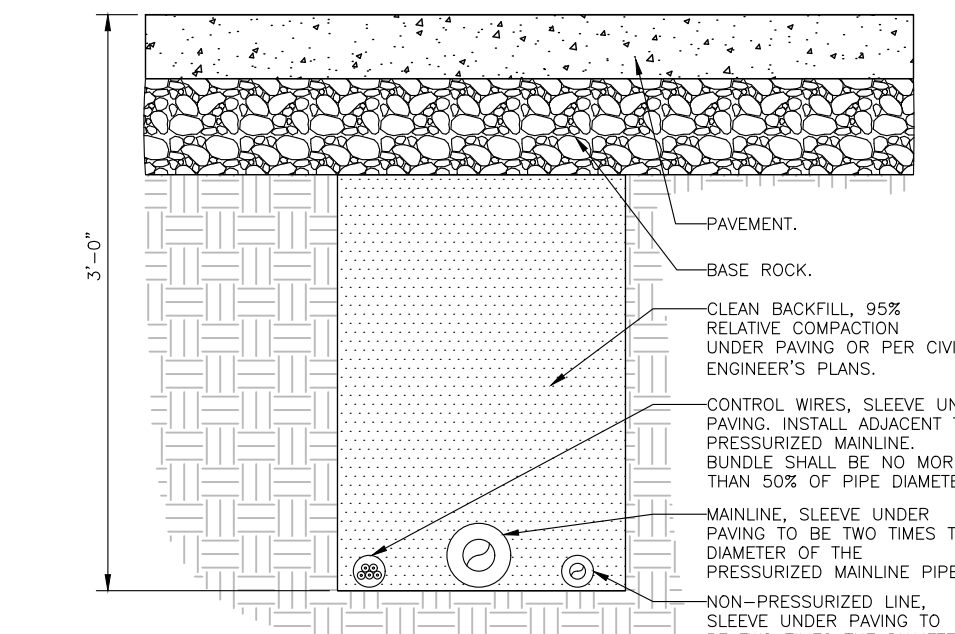
- NOTES:
1. LOCATE VALVE BOX WITHIN 24" OF PAVEMENT EDGE IN PLANTING AREA WHERE EASILY ACCESSIBLE WHENEVER POSSIBLE.
  2. COMMON WIRE AND CONTROLLER WIRE SHALL BE DIRECT BURIAL 14 AWG OR LARGER, COLOR: COMMON (WHITE), CONTROLLER WIRE FOR TURF (BLUE), AND CONTROLLER WIRE FOR SHRUBS (RED). (SEE SPECIFICATIONS FOR 2-WIRE CONTROLLERS).
  3. ALL WIRE RUNS SHALL BE CONTINUOUS WITHOUT ANY SPLICES UNLESS APPROVED BY THE OWNER'S REPRESENTATIVE. SEE SPLICE BOX DETAIL. WIRE CONNECTIONS SHALL BE MADE USING DBR/Y-6 CONNECTORS OR APPROVED EQUAL.
  4. VALVE BOX SHALL BE WRAPPED WITH MIN. 3 MIL THICK PLASTIC AND SECURE IT USING DUCT TAPE OR ELECTRICAL TAPE.
  5. MAINLINES 4" OR LARGER SHALL USE SADDLES AT THE CONNECTIONS POINTS TO THE IRRIGATION VALVE. (SEE SPECIFICATIONS FOR IRRIGATIONS SADDLES).
  6. ALL SCH. 80 PVC TO SCH. 40 PVC THREADED CONNECTIONS SHALL BE MADE USING TEFLON TAPE.
  7. VALVE BOXES SHALL BE LOCATED IN PLANTING AREAS.

1 REMOTE-CONTROL VALVE DETAIL



- NOTES:
1. MASTER VALVE SHALL BE MAKE AND MODEL NUMBER AS PRESCRIBED FOR THE CONTROLLER MANUFACTURER'S SPECIFICATIONS.
  2. INSTALL MASTER VALVE PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
  3. MASTER VALVE WIRE SHALL BE 14 AWG OR LARGER, COLOR: BLACK.
  4. ALL WIRE RUNS SHALL BE CONTINUOUS WITHOUT ANY SPLICES. WIRE CONNECTIONS SHALL BE MADE USING DBR-Y-6 CONNECTORS OR APPROVED EQUAL.
  5. WRAP VALVE BOX WITH MIN. 3 MIL THICK PLASTIC AND SECURE IT TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
  6. PLACE MASTER VALVE/ FLOW SENSOR DETAIL FOR LINEAR DIMENSIONS.
  7. VALVE BOXES SHALL BE LOCATED IN PLANTING AREAS.

2 MASTER VALVE DETAIL



- NOTES:
1. SEE IRRIGATION LEGEND FOR MAINLINE SIZE AND TYPE.
  2. ALL SLEEVES SHALL BE SCH. 40 PVC PIPE.
  3. ALL SLEEVES SHALL EXTEND 12" BEYOND THE EDGE OF PAVEMENT.
  4. END OF SLEEVES SHALL BE LOCATED WITH A WOODEN STAKE OR PVC PIPE. LOCATORS SHALL RUN CONTINUOUSLY FROM THE END OF THE SLEEVE TO FINISHED GRADE.

3 SLEEVE DETAIL

NATIVE engineering,plc  
P.O. BOX 2995  
LAND O' LAKES, FL 34639  
(813) 536-2539

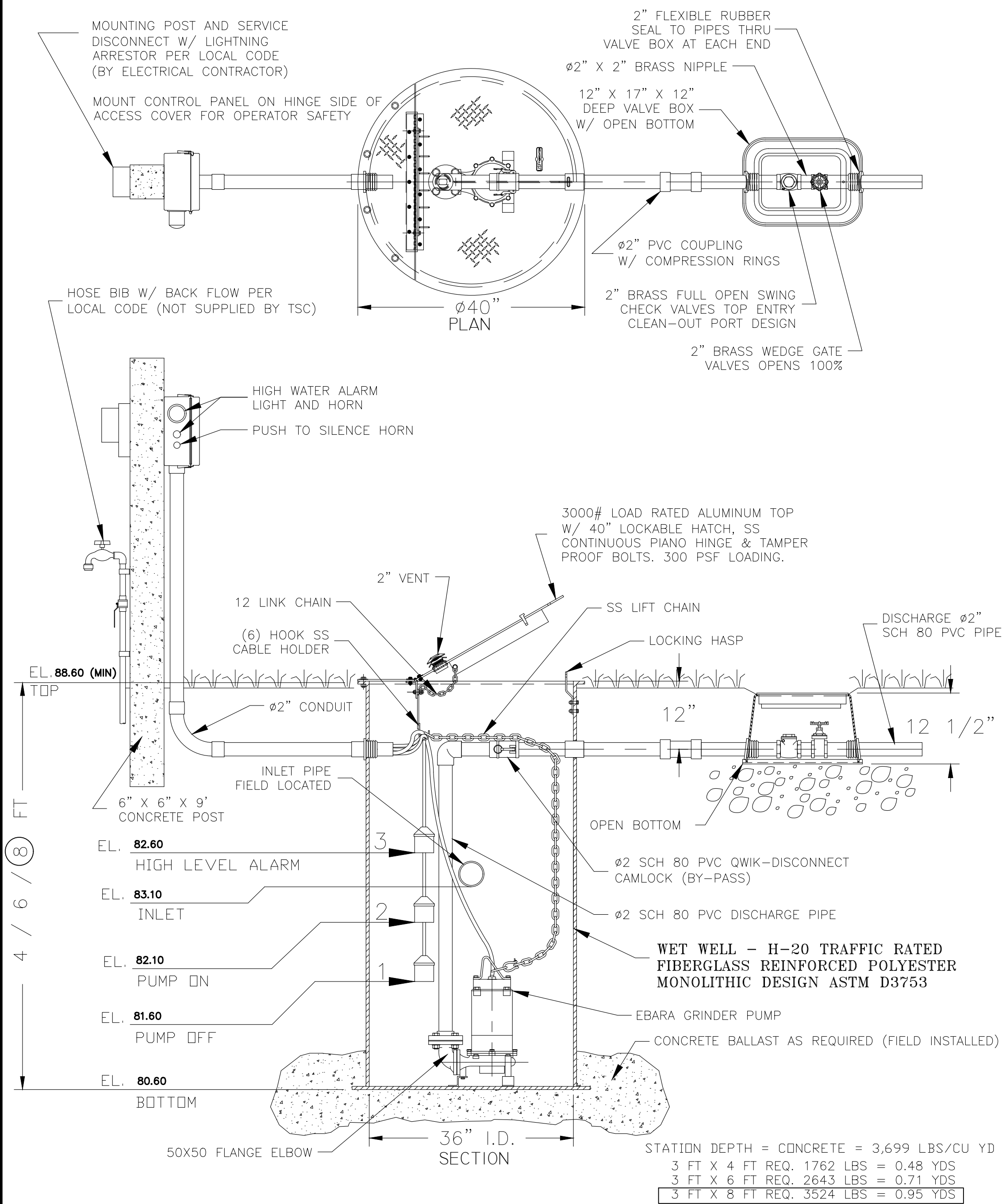
MAJOR SITE PLAN FOR SWC US HWY 301 & SE HWY 42  
FOR  
SRPG SUMMERFIELD, LLC  
4803 GEORGE RD, SUITE 330 TAMPA, FL 33634  
MARION COUNTY  
FLORIDA

ORIGINAL SET: 2/23/23  
REVISIONS  
NO. DATE DESCRIPTION  
1  
2  
3 01/31/24 REVISED PER COUNTY COMMENTS  
2 12/22/23 REVISED PER AGENCY & CLIENT COMMENTS  
02/27/23 REVISED PER AGENCY COMMENTS

IRRIGATION PLAN  
BRIAN BLAZEWSKI  
State of Florida  
Registered Landscape Architect  
License No. LA0667484  
THIS FIRM HAS BEEN DIGITALLY  
SIGNED BY BRIAN BLAZEWSKI  
BLAZEWSKI, BIA ON THE DATE  
2024.02.08. ANY REPRODUCTION  
OF THIS DOCUMENT ARE NOT  
CONSIDERED SIGNED AND SEALED  
UNLESS THEY ALSO INCLUDE THE  
SIGNATURE AND SEAL OF THE  
DESIGNER.

SHEET NUMBER  
L3.0  
S-T-R  
30-17-23

©



36" SIMPLEX GRINDER STATION  
WITH VALVE BOX AND CONTROL PANEL  
TSC PRE-FAB PUMP SOLUTIONS®

MODEL  
TSC1-36.4 R9.dwg©

2. MOUNTING POST AND SERVICE DISCONNECT PER LOCAL CODE

1. CONCRETE BALLAST AS REQUIRED

FIELD INSTALL BY CONTRACTOR

JOB: \_\_\_\_\_

QS: \_\_\_\_\_

## GENERAL NOTES

FURNISH AND INSTALL EBARA SUBMERSIBLE GRINDER PUMP:

DESIGN CONDITION:

MODEL	32 DGII, DGF	2	HP
GPM	10-40	10-100	FT/TDH
VOLTAGE	208/230 OR 460	SINGLE OR THREE	PHASE
DISCHARGE	2"	143mm	IMPELLER

SEWAGE GRINDER PUMP: 1. RATED FOR TWENTY (20) STARTS PER HOUR.

2. AIR FILLED MOTOR DESIGNED FOR SEWAGE APPLICATION WITH CLASS F INSULATION.

3. DUAL MECHANICAL SHAFT SEALS (SILICON CARBIDE / SILICON CARBIDE) LOCATED OUT OF THE PUMPAGE, IN A SEPARATE OIL FILLED CHAMBER.

4. HIGH TEMPERATURE BALL BEARINGS B-10 RATING OF 60,000 HOURS. UPPER BEARING - SINGLE ROW AND LOWER BEARINGS - DOUBLE ROW TYPE.

5. PUMP SHAFT HORSEPOWER (BHP) SHALL NOT EXCEED MOTOR RATED HORSEPOWER THROUGHOUT THE ENTIRE OPERATING RANGE OF THE PUMP PERFORMANCE CURVE.

6. SINGLE PHASE MOTOR SHALL BE DUAL WOUND, CAPACITOR START-RUN AND CAPABLE OF OPERATING ON 208/230 VOLT WITH A 10% TOLERANCE VOLTAGE (190 TO 260). THREE PHASE MOTOR SHALL BE DUAL WOUND AND CAPABLE OF OPERATING ON 208/230 VOLT WITH A 10% TOLERANCE VOLTAGE (190 TO 260) OR OPERATE ON 460 VOLT BY CHANGING THE MOTOR LEADS INSIDE THE PUMP.

FIBERGLASS WET WELL: SHALL BE A ONE PIECE UNIT WITH INTEGRAL BOTTOM, WALL AND UPPER FLANGE. THE ENTIRE FIBERGLASS WET WELL SHALL HAVE A DYNAMIC LOAD RATING OF 16,000 FT/LBS. EACH UNIT MUST BE SERIAL NUMBERED TO IDENTIFY THE TEST PROCEDURE. ASTM D 3753 & H-20 SPECIFICATIONS SHALL BE REQUIRED AS MINIMUM.

ALUMINUM HATCH: TSC MODEL-40R (40") ROUND LOCKABLE HINGED TOP, REINFORCED FOR LOAD RATING OF 300 LBS/FT OPENS 180° WITH LOCKING DEVICE FOR HASP TYPE PADLOCK AND STAINLESS STEEL HARDWARE.

VALVE BOX: HIGH-IMPACT, HIGH-DENSITY POLYETHYLENE CONSTRUCTION

ACCESSORIES: #304 S/S - CABLE HOLDER, PUMP LIFTING CHAIN AND HARDWARE.

VALVES: SHALL BE SEWAGE SERVICE DESIGN BRASS SWING CHECK VALVE WITH TOP ENTRY CLEAN-OUT PORT AND BRASS WEDGE GATE VALVE OPEN 100%.

PIPING: 2" SCHEDULE 80 PVC.

FLOAT SWITCHES: UL LISTED SJ ELECTRO MODEL (SJ 30 MSWENO).

PUMP SUPPLIER SHALL PROVIDE SUBMERSIBLE PUMP, CONTROL PANEL, FLOAT SWITCHES, WET WELL, ALUMINUM HATCH, VALVE BOX AND ACCESSORIES TO INSURE PROPER OPERATION AND WARRANTY.

THE COMPLETE PACKAGE STATION SHALL HAVE DISCHARGE PIPING ASSEMBLED BY TECHNICAL SALES CORPORATION READY TO SHIP FOR FIELD INSTALLATION. THE MANUFACTURER OF PRE-FAB PUMP SOLUTIONS®

TECHNICAL SALES CORPORATION, 4621 N. HALE AVE TAMPA, FL 33614 (813)876-9256

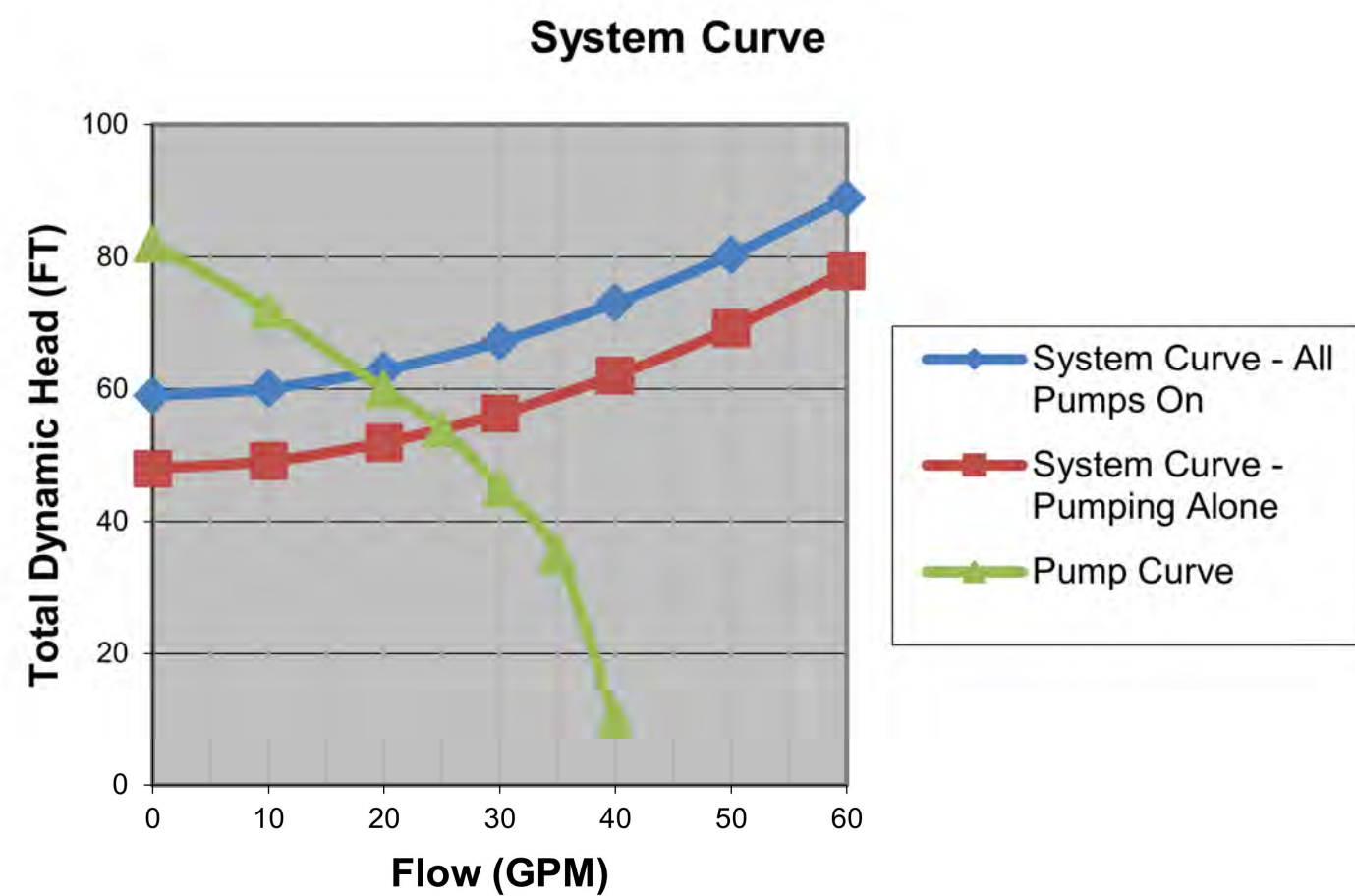
CONTROL PANEL -SHALL BE MANUFACTURED BY A "UL" LISTED SHOP

CONTROL PANEL SHALL BE TSC MODEL # CW200 IN A NEMA 4X FIBERGLASS ENCLOSURE. THE PANEL SHALL MEET STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) REQUIREMENT FOR SIMPLEX GRINDER STATION (SUBJECT TO REVIEW).

FLOAT SWITCHES AND CONTROL SYSTEM SHALL BE UL LISTED AND ALL COMPONENTS SHALL BE UL LISTED.

ELECTRICAL CONTRACTOR TO PROVIDE SERVICE DISCONNECT WITH LIGHTNING ARRESTOR MOUNTED PER LOCAL CODES.

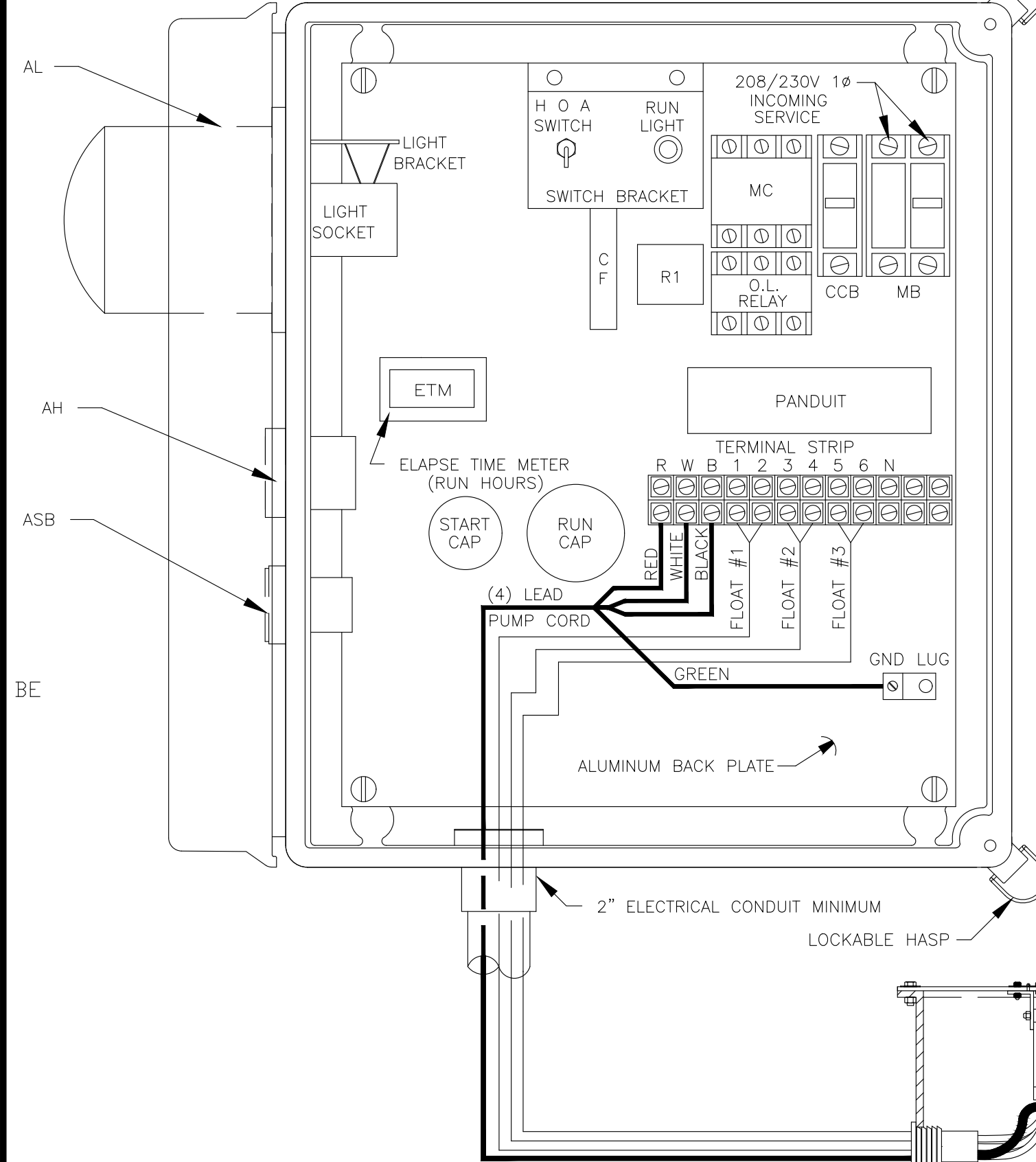
THE CONTROL PANEL SHALL BE SUITABLY INSTALLED TO PREVENT SETTLING OR TIPPING.



## CONTROL PANEL LAYOUT

CW2000LETM2V - 208/230V 1Ø

COMPONENT LAYOUT MAY VARY WITH VOLTAGE



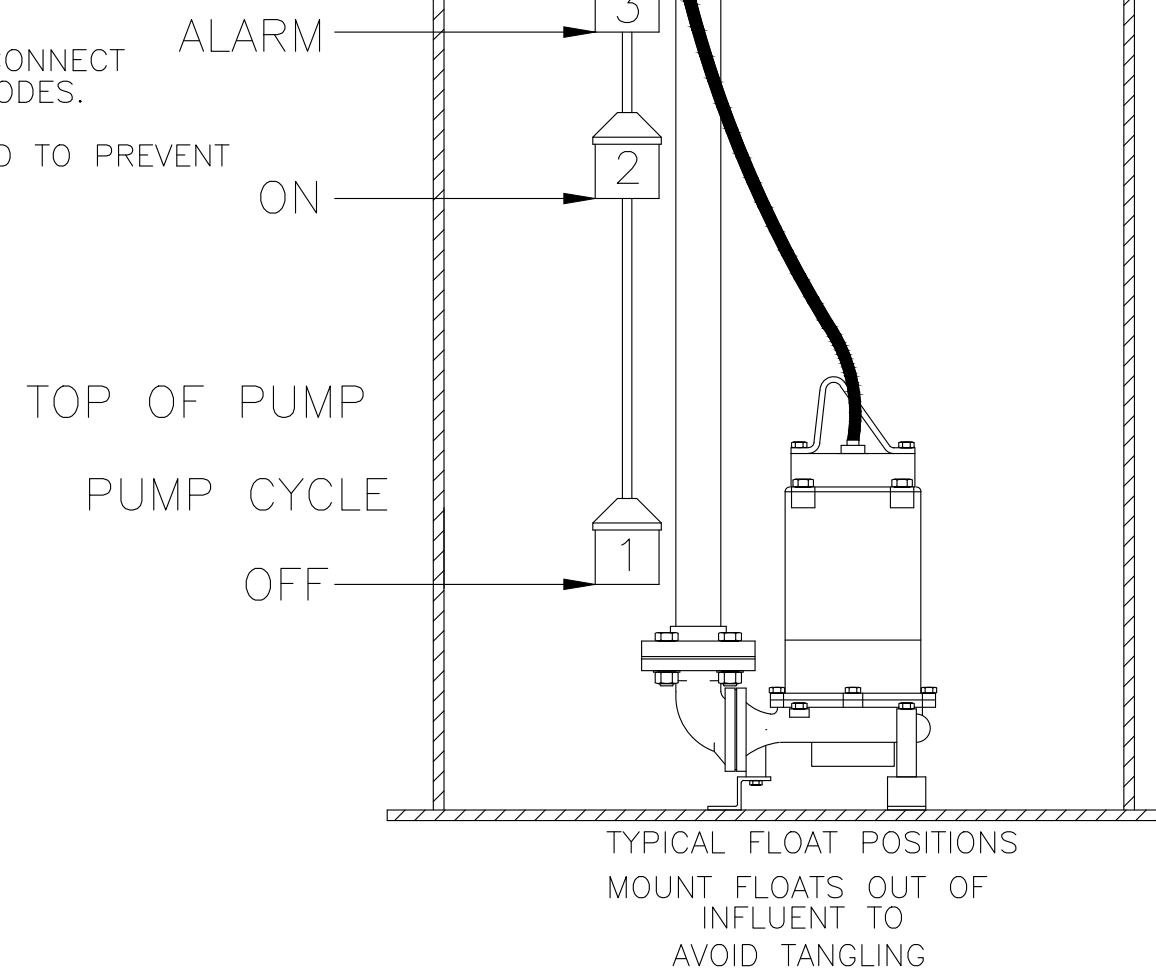
CONTROL PANEL -SHALL BE MANUFACTURED BY A "UL" LISTED SHOP

CONTROL PANEL SHALL BE TSC MODEL # CW201 IN A NEMA 4X FIBERGLASS ENCLOSURE. THE PANEL SHALL MEET CODE REQUIREMENTS GOVERNING "ON SITE" PRIVATE LIFT STATIONS.

FLOAT SWITCHES AND CONTROL SYSTEM SHALL BE UL LISTED AND ALL COMPONENTS SHALL BE UL LISTED.

ELECTRICAL CONTRACTOR TO PROVIDE SERVICE DISCONNECT WITH LIGHTNING ARRESTOR MOUNTED PER LOCAL CODES.

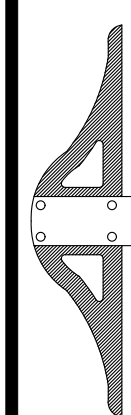
THE CONTROL PANEL SHALL BE SUITABLY INSTALLED TO PREVENT SETTLING OR TIPPING.



## LEGEND

AL	VISUAL HIGH WATER ALARM LIGHT
AH	AUDIBLE HIGH WATER ALARM HORN
ASB	HIGH WATER ALARM SILENCE BUTTON
CCB	CONTROL CIRCUIT BREAKER
CF	CONTROL FUSE
ETM	ELAPSE TIME METER (RUN HOURS)
GL	GROUND LUG
HOA	HAND - OFF - AUTO SWITCH
K	BLEED RESISTOR
MB	MOTOR BREAKER
MC	MOTOR CONTACTOR
OL	ADJUSTABLE OVERLOAD RELAY
R1	ALARM SILENCE CONTROL RELAY
RC	RUN CAPACITOR
SC	START CAPACITOR
SR	START RELAY
PUMPS MUST HAVE INTEGRAL OVERLOAD PROTECTION	

TSC SIMPLEX GRINDER PUMP STATION  
FIBERGLASS WET WELL



TECHNICAL SALES  
CORPORATION

TSC PRE-FAB PUMP SOLUTIONS®

WATERWORKS & WASTEWATER SPECIALTIES






Representing Innovative Manufacturers

MODEL TSCE1-36.4©

4621 N. HALE AVENUE PH (813)876-9256  
TAMPA, FL 33614 FAX (813)874-1194

EMAIL: Sales@TSCtampa.com

REV-9 2009 SCALE: N.T.S.

Symbol	Qty	Label	Arrangement	LMF	Lum. Lumens	Lum. Watts	Part Number	BUG Rating
	7	CPY-F-4L	Single	1.000	4590	31	CPY250-C-4L-57K7-F-UL-DM-WH-HZ	B2-U0-G1
	24	CPY-F-8L	SINGLE	1.000	8475	53	CPY250-C-13L-57K7-F-UL-DM-WH-HZ	B3-U0-G1
	3	XSPLG-3ME	SINGLE	1.000	23800	184	XSPLG-D-HT-3ME-24L-57K7-UL-BZ-N	B3-U0-G4
	4	XSPLG-4ME-2(180)	2 @ 180°	1.000	23800	184	XSPLG-D-HT-4ME-24L-57K7-UL-BZ-N	B4-U0-G3
	13	XSPW	WALL MOUNT	1.000	4270	31	XSPW-B-WM-3ME-4L-57K-UL-BZ	B1-U0-G1

Calculation Summary: 1.0 LLF						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
All Calc Points	Fc	5.11	17.6	0.1	51.10	176.00
Gas Canopy	Fc	32.26	43.6	16.0	2.02	2.73
Paved Area	Fc	6.88	17.6	1.0	6.88	17.60

Pole Schedule  
(7) SSS-4-7-17-CW-BS-OT-N-BZ (17" x 4" x 7ga STEEL SQUARE POLE, Tenon)  
Proposed poles meet 180 MPH sustained winds.

Additional Equipment:  
(3) PD-1H4BZ (Single Horizontal Tenon)  
(4) PD-2H4(180)BZ (Twin Horizontal Tenon @ 180°)

\*\*\* CUSTOMER TO VERIFY ORDERING INFORMATION AND CATALOGUE NUMBER PRIOR TO PLACING ORDER \*\*\*

