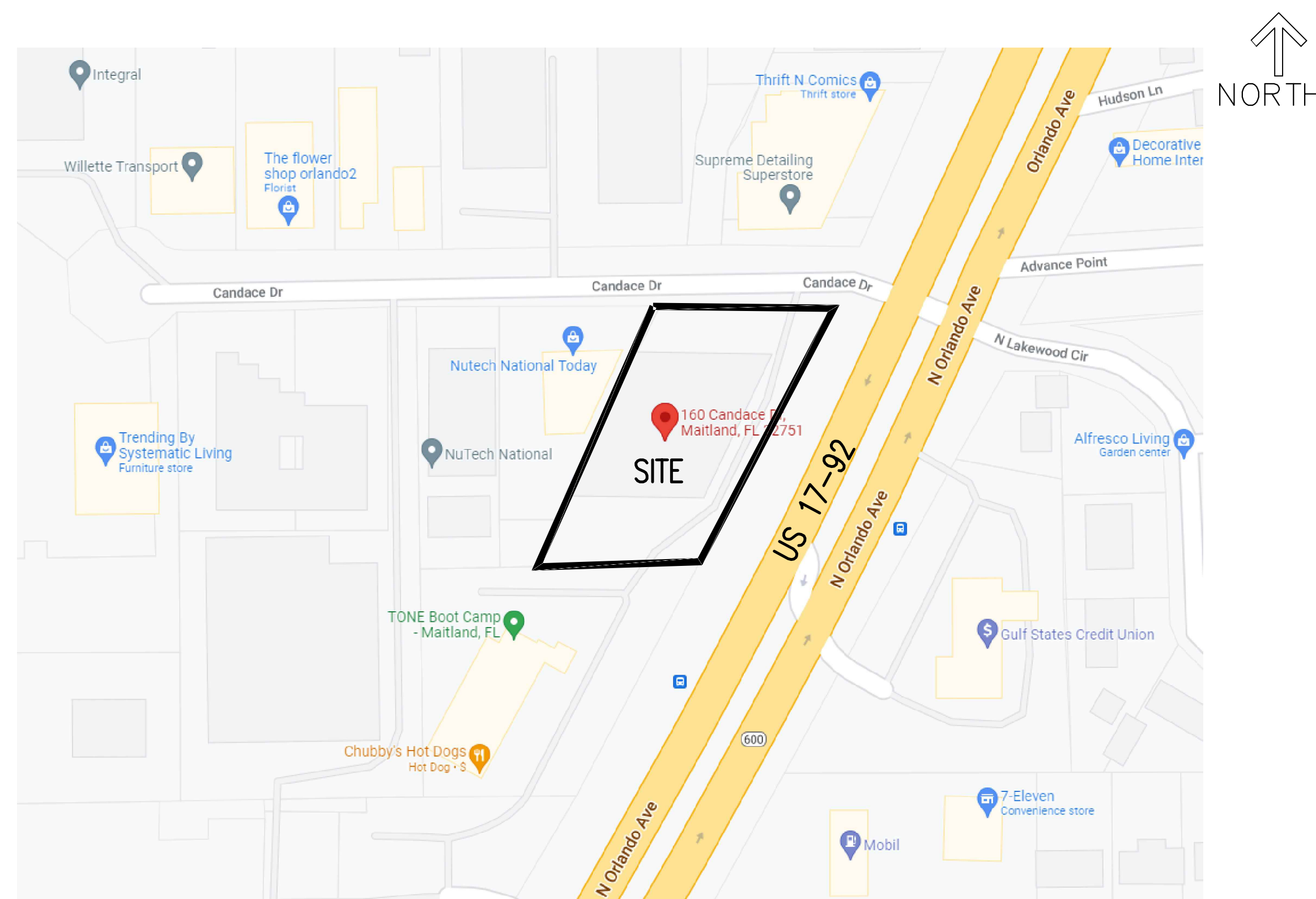


SITE PLANS OF: CANDACE CARWASH

160 CANDACE DRIVE
MAITLAND FL, 32751



VICINITY MAP

N.T.S.

PARCEL ID: 19-21-30-519-0B00-0250

STATEMENT OF INTENDED USE

AUTOMATED CARWASH AND VACUUM STALLS

UTILITY COMPANIES

SANITARY SEWER: SEMINOLE COUNTY
(407) 665-7446

WATER DISTRIBUTION: SEMINOLE COUNTY
(407) 571-8345

ELECTRICAL POWER: DUKE ENERGY
(800) 700-8744

TELEPHONE: CENTURY LINK
(407) 917-4835

FIRE/POLICE: SEMINOLE COUNTY
(407) 665-5175

GARBAGE: PRIVATE COLLECTION
(407) 774-0800

LEGAL DESCRIPTION

LOTS 25 AND 26, BLOCK B, SEMINOLE INDUSTRIAL PARK 2ND. ADD.,
ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 16, PAGE 79,
PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA. +/- 1.016 AC

PROJECT DIRECTORY

DEVELOPER: K2 ENTERPRISE GROUP, LLC
5305 GRAVES ROAD
CINCINNATI, OHIO 45243
TODD & JACK KIRBY

ENGINEER: AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211
WINTER SPRINGS, FLORIDA 32708
JOHNNY HERBERT IV, P.E., JOHNNY@AMERICANCIVILENGINEERING.COM
CELL 407-376-1777, OFFICE 407-327-7700,

SURVEYOR: ASSOCIATED LAND SURVEY & MAPPING, INC.
1681 POWELL STREET
LONGWOOD, FLORIDA 32750
(407) 869-5002 OFFICE
(407) 869-8393 FAX

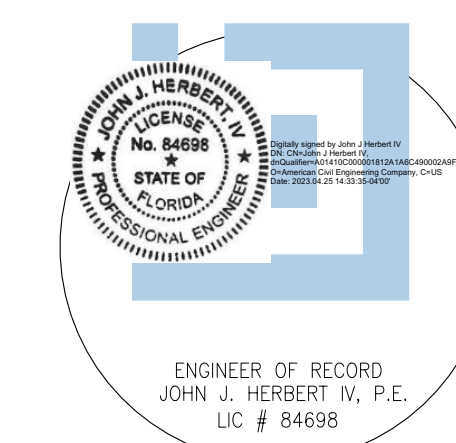
GEOTECHNICAL ENGINEERING: ANDREYEV ENGINEERING, INC.
4055 ST. JOHN'S PARKWAY
SANFORD, FLORIDA 32771
(407) 330-7763 OFFICE

ARCHITECT: PARKER WALTER GROUP, INC
1555 FRUITVILLE ROAD
SARASOTA FLORIDA 34236
(941) 366-2477 OFFICE

PLANS ISSUED FOR: DATE
SEMINOLE CO. SITE PLAN REVIEW 4/24/2023

INDEX OF SHEETS

SHEET	DESCRIPTION
C1.0	COVER SHEET
C2.0	GENERAL NOTES
C3.0	SWPP PLANS
C4.0	SITE PLAN
C5.0	GRADING PLAN
C6.0	UTILITY SITE PLAN
C7.0	VEHICLE TURN PLAN
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LI1.0	IRRIGATION PLAN
LI2.0	IRRIGATION PLAN 2



AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708
(407) 327-7700

PLAN DATE: 4/25/2023

CERT. OF AUTHORIZATION NO. 8729

C1.0

PZ22-06000035
08/02/23
APPROVED
Seminole County Government
Planning & Development Division

SEC. A. GENERAL CONSTRUCTION NOTES:

- 1. THE FOLLOWING GENERAL NOTES APPLY TO ALL CONSTRUCTION AS DEPICTED ON THE SITE CONSTRUCTION PLANS.
2. ALL PROPOSED SITE CONSTRUCTION SHALL BE PURSUANT TO INFORMATION SHOWN ON THESE PLANS AS APPROVED BY THE GOVERNING AUTHORITIES.
3. ALL CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE STATE, FEDERAL AND LOCAL CODES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE PRIOR TO BIDDING AND ACCEPTING THE WORK.
5. ANY PROPOSED FIELD CHANGES WHICH SUBSTANTIALLY DEVIATE FROM THIS PLAN SHALL BE APPROVED BY THE GOVERNING AUTHORITIES AND THE ENGINEER PRIOR TO THE CHANGE TO MADE IN THE FIELD.
6. ALL WORK AND MATERIALS FURNISHED SHALL BE IN REASONABLE CONFORMITY WITH THE LINES, GRADES, GRADING SECTIONS, CROSS SECTIONS, DIMENSIONS, MATERIAL REQUIREMENTS AND TESTING REQUIREMENTS THAT ARE SPECIFIED IN THE CONTRACT, PLANS OR SPECIFICATIONS.
7. ANY DISCREPANCY BETWEEN THE CONSTRUCTION INFORMATION SHOWN ON THE PLANS AND THE ACTUAL FIELD CONDITIONS SHALL IMMEDIATELY BE BROUGHT TO THE ENGINEER'S ATTENTION.
8. ALL IMPROVEMENTS SHOWN ON THESE PLANS SHALL BE CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH INFORMATION SHOWN ON THESE PLANS.
9. THE INTENT AND/OR INTERPRETATION OF THESE CONSTRUCTION PLANS IF REQUIRED, SHALL BE MADE BY THE ENGINEER OF RECORD.
10. ALL HORIZONTAL LAYOUT FOR SITE CONSTRUCTION SHALL BE BASED ON THE APPROVED PLAN AND/OR PLAN, AND PERFORMED BY QUALIFIED PERSONNEL.
11. ALL ELEVATIONS REFER TO THE DATUM AS INDICATED ON THE SURVEY (BY OTHERS).
12. THE CONTRACTOR SHALL TAKE CARE DURING THE CONSTRUCTION TO AVOID DISTURBING ANY EXISTING SURVEY MONUMENTS.
13. THE CONTRACTOR SHALL HIRE A PROFESSIONAL TESTING LABORATORY AS NECESSARY TO PERFORM ALL TESTS REQUIRED BY THIS CONSTRUCTION.
14. THE CONTRACTOR SHALL NOTIFY AMERICAN CIVIL ENGINEERING COMPANY 24 HOURS IN ADVANCE PRIOR TO ANY TESTING AND SUPPLY THE ENGINEER WITH REQUIRED TEST RESULTS.
15. THE DESIGN AND ENGINEERING OF THIS PROJECT IS BASED ON INFORMATION SUPPLIED BY OTHERS.
16. EXISTING SOILS CONDITIONS WHICH DIFFER FROM THE SOILS REPORT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AT TIME OF DISCOVERY.
17. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS CONTROLLING POLLUTION OF THE ENVIRONMENT AND EROSION/SEDIMENT CONTROL.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE BUFFER AND EROSION AND DETENTION FACILITIES UNTIL THE WORK HAS BEEN ACCEPTED BY THE OWNER.
19. ANY FUEL STORAGE AREAS SHALL HAVE PRIOR OWNERS APPROVAL AND APPROPRIATE MEASURES SHALL BE TAKEN TO INSURE PROTECTION OF GROUNDWATER AND SOIL RESOURCES.
20. SITE WORK PERFORMED ON THIS PROJECT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON THE SITE.
21. THE INFORMATION ON THESE CONSTRUCTION PLANS ARE SUBJECT TO APPROVAL BY THE CITY, COUNTY, STATE AND FEDERAL AGENCIES.
22. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.
23. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT GUARANTEED AND SHALL BE INVESTIGATED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO INSTALLATION OF UNDERGROUND PIPES, FOOTERS OR EXCAVATION.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COST WHICH MAY OCCUR DUE TO TO ANY DAMAGES CAUSED BY THE CONTRACTOR TO EXISTING UTILITY STRUCTURES OR PROPERTY.
25. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS AFFECTED UTILITY COMPANIES IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION.
26. CHAPTER 77-153 OF THE FLORIDA STATUTES REQUIRES THAT AN EXCAVATOR NOTIFY ALL GAS UTILITIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATING.
27. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF THE PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS.
28. UPON NOTICE FROM THE CONTRACTOR THAT CONSTRUCTION IS COMPLETE AND READY FOR ACCEPTANCE, THE ENGINEER SHALL MAKE FINAL INSPECTION AND NOTIFY THE CONTRACTOR AND OWNER OF ANY INCOMPLETE AND/OR DEFECTIVE WORK.
29. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE.
30. THE CONTRACTOR SHALL PROVIDE COMPLETE "AS-BUILT" INFORMATION TO THE ENGINEER RELATIVE TO THE LOCATION OF ALL WATER LINES, WATER SERVICES, VALVE LOCATIONS, SEWER SERVICES, STORM LINES, INVERTS OF STRUCTURES, FINAL RETENTION AREAS, FINISH PAVEMENT GRADES AND CONSTRUCTION BENCH MARKS FOR VERIFICATION.
31. ENGINEER TO PROVIDE RECORD DRAWINGS AND CERTIFICATIONS TO THE ISSUED PERMITS.

48 HOURS BEFORE DIGGING CALL TOLL FREE 811 SUNSHINE STATE ONE CALL OF FLORIDA, INC.

SEC. B. EARTHWORK:

- 1. EXISTING TOPOGRAPHY AND CONTOURS ARE BASED ON THE SURVEY (BY OTHERS).
2. A GEOTECHNICAL SOILS REPORT HAS BEEN PREPARED FOR THIS PROJECT.
3. THE CONTRACTOR SHALL READ AND ADHERE TO ALL RECOMMENDATIONS CONTAINED IN THE SOILS REPORT.
4. EXISTING TREES, PLANTS AND SHRUBS WHICH ARE MARKED OR DESIGNATED AS PART OF THE LANDSCAPING SHALL BE CAREFULLY PROTECTED DURING CONSTRUCTION.
5. DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE AND PROPER SOIL EROSION CONTROL MEASURES, AS NECESSARY.
6. ALL SITE CLEARING AND GRUBBING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 110 OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
7. ALL EXCAVATION AND EMBANKMENT SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 120 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
8. ALL FILL AREAS GREATER THAN 12 INCHES IN HEIGHT SHALL BE COMPACTED IN 12 INCH LIFTS.
9. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED UNLESS OTHERWISE NOTED ON THESE PLANS.
10. ALL DESIGNATED AREAS TO BE SOODED PER THE PLANS, SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 575 OF THE F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
11. THE CONTRACTOR SHALL NOT COMPACT, STABILIZE, OR CONSTRUCT BASE COURSE WITHIN LANDSCAPE ISLANDS OR MEDIANS.
12. FINISH FLOOR ELEVATIONS ARE TYPICALLY 6 INCHES ABOVE DESIGN FINISHED GRADE AT OUTSIDE PERIMETER OF BUILDINGS EXCEPT AT ENTRIES AND WHERE OTHERWISE SHOWN ON THE GRADING PLAN.
13. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONTROL DUST, MUD AND EROSION DURING CONSTRUCTION AND SHALL PROTECT ALL ADJACENT PROPERTIES AND RIGHTS-OF-WAY FROM DAMAGE BY EROSION, SEDIMENTATION OR OTHER POTENTIAL CONSTRUCTION RELATED DUST.
14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EXISTING SITE AND SOIL CONDITIONS AND DETERMINE IF ANY OFF-SITE MATERIALS WILL NEED TO BE IMPORTED TO ACHIEVE THE GRADES SPECIFIED ON THE PLANS.
15. ALL EXCESS FILL FROM THE SITE SHALL BE STOCKPILED BY THE CONTRACTOR, IN A LOCATION DETERMINED BY THE OWNER OR THE OWNER'S REPRESENTATIVE AND THE ENGINEER.
16. ALL AREAS INDICATED SHALL BE COMPLETELY CLEAR OF ALL TIMBER, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH, AND ALL OTHER DEBRIS AND OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE GROUND.
17. PRIOR TO BID PREPARATION, THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE OVERALL SITE CONDITIONS AND PERFORM ADDITIONAL INVESTIGATIONS AS DETERMINED NECESSARY TO UNDERSTAND THE LIMIT AND DEPTH OF EXPECTED ORGANIC SILT PEAT AREAS.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE BUFFER AND EROSION AND DETENTION FACILITIES UNTIL THE WORK HAS BEEN ACCEPTED BY THE OWNER.
19. ANY FUEL STORAGE AREAS SHALL HAVE PRIOR OWNERS APPROVAL AND APPROPRIATE MEASURES SHALL BE TAKEN TO INSURE PROTECTION OF GROUNDWATER AND SOIL RESOURCES.
20. SITE WORK PERFORMED ON THIS PROJECT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON THE SITE.
21. THE INFORMATION ON THESE CONSTRUCTION PLANS ARE SUBJECT TO APPROVAL BY THE CITY, COUNTY, STATE AND FEDERAL AGENCIES.
22. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.
23. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT GUARANTEED AND SHALL BE INVESTIGATED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO INSTALLATION OF UNDERGROUND PIPES, FOOTERS OR EXCAVATION.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COST WHICH MAY OCCUR DUE TO TO ANY DAMAGES CAUSED BY THE CONTRACTOR TO EXISTING UTILITY STRUCTURES OR PROPERTY.
25. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS AFFECTED UTILITY COMPANIES IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION.
26. CHAPTER 77-153 OF THE FLORIDA STATUTES REQUIRES THAT AN EXCAVATOR NOTIFY ALL GAS UTILITIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATING.
27. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF THE PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS.
28. UPON NOTICE FROM THE CONTRACTOR THAT CONSTRUCTION IS COMPLETE AND READY FOR ACCEPTANCE, THE ENGINEER SHALL MAKE FINAL INSPECTION AND NOTIFY THE CONTRACTOR AND OWNER OF ANY INCOMPLETE AND/OR DEFECTIVE WORK.
29. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE.
30. THE CONTRACTOR SHALL PROVIDE COMPLETE "AS-BUILT" INFORMATION TO THE ENGINEER RELATIVE TO THE LOCATION OF ALL WATER LINES, WATER SERVICES, VALVE LOCATIONS, SEWER SERVICES, STORM LINES, INVERTS OF STRUCTURES, FINAL RETENTION AREAS, FINISH PAVEMENT GRADES AND CONSTRUCTION BENCH MARKS FOR VERIFICATION.
31. ENGINEER TO PROVIDE RECORD DRAWINGS AND CERTIFICATIONS TO THE ISSUED PERMITS.

SEC. C. DRAINAGE:

- 1. ALL DRAINAGE RELATED CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ST. JOHNS RIVER WATER MANAGEMENT DISTRICT REQUIREMENTS FOR THIS PROJECT.
2. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. THE ABOVE F.D.O.T. CONSTRUCTION DETAILS ARE HEREBY INCORPORATED THESE PLANS BY REFERENCE.
4. PIPE LENGTHS SHOWN REPRESENT SCALED DIMENSIONS BETWEEN CENTER-LINES OF DRAINAGE STRUCTURES AND FROM END OF HEADWALLS AND MITERED END SECTIONS.
5. ALL STORMWATER DRAINAGE PIPES SHALL BE REINFORCED CONCRETE PIPE (ASTM C-76, CLASS II) UNLESS NOTED OTHERWISE.

SEC. D. PAVING:

- 1. ALL PAVEMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH F.D.O.T. CURRENT CONSTRUCTION SPECIFICATIONS.
2. ALL PAVING SURFACES IN INTERSECTIONS AND ADJACENT SECTIONS SHALL BE GRADED TO DRAIN POSITIVELY IN THE DIRECTION SHOWN BY THE FLOW ARROWS ON THE PLANS AND TO PROVIDE A SMOOTHLY TRANSITIONED DRIVING SURFACE FOR VEHICLES WITH NO SHARP BREAKS IN GRADE, AND NO UNUSUALLY STEEP OR EXCESS CROSS SLOPES.
3. MOW RETENTION AREAS REGULARLY TO MAINTAIN WEED OVERGROWTH AND PROMOTE TURF GROWTH.
4. INSPECT RETENTION AREAS PERIODICALLY FOR ACCUMULATION OF DEBRIS AND TRASH.
5. INSPECT RETENTION AREA BOTTOMS FOR DEPOSITS OF SAND AND/OR SILT AND REMOVE.
6. PERCOLATION PERFORMANCE SHALL BE EVALUATED YEARLY FOR EACH DRY RETENTION AREA.
7. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE ENGINEER FOR APPROVAL.
8. THE CONTRACTOR IS TO PROVIDE A 1/2" BITUMINOUS EXPANSION JOINT MATERIAL AT ABUTMENT OF CONCRETE AND ANY STRUCTURE.
9. ALL ON-SITE PAVEMENT MARKINGS SHALL BE MADE WITH NON-THERMOPLASTIC PAINT TO FOOT STANDARD SPECIFICATIONS.
10. CURBING SHALL BE CONSTRUCTED WHERE NOTED ON THE CONSTRUCTION PLANS.
11. CONCRETE FOR CURBS SHALL BE DEPARTMENT OF TRANSPORTATION CLASS "T" CONCRETE WITH A 28-DAY COMPRESSION STRENGTH OF 3000 PSI.
12. CURBS SHALL HAVE SAW CUT CONSTRUCTION JOINTS AND SHALL BE CONSTRUCTED AT INTERVALS NOT TO EXCEED 10'-0" ON CENTER.
13. PAVEMENT MARKINGS AND SIGNAGE SHALL BE PROVIDED AS SHOWN ON THE CONSTRUCTION PLANS AND SHALL MEET THE REQUIREMENTS OF THE OWNER/OPERATOR.
14. A MINIMUM OF 2-WAY TRAFFIC SHALL BE MAINTAINED IN THE WORK SITE AREA.
15. ALL CONSTRUCTION WARNING SIGNAGE SHALL BE PLACED PRIOR TO COMMENCEMENT OF CONSTRUCTION AND BE MAINTAINED THROUGHOUT CONSTRUCTION.
16. LIGHTED WARNING DEVICES ARE TO BE OPERATIONAL PRIOR TO DUSK EACH NIGHT DURING CONSTRUCTION.

SEC. E. EROSION CONTROL:

- 1. APPROVED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING, EXCAVATION, FILLING OR OTHER LAND DISTURBING ACTIVITIES.
2. DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO INSURE AGAINST POLLUTING, SILTING OR DISTURBING TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING DRAINAGE SYSTEM AND ADJACENT WATER BODIES AND WETLANDS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL PERMIT CONDITIONS RELATED TO SUCH MEASURES.
4. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL ORDINANCES, POLICIES AND/OR OTHER REGULATIONS REGARDING TRAFFIC AND PEDESTRIAN TEMPORARY BARRICADES, LIGHTS, SIGNALS, SIGNAGE ETC.
5. PRIOR TO COMMENCING WORK THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL BARRICADES, WARNING SIGNS, AND MARKINGS FOR HAZARDS AND THE CONTROL OF TRAFFIC IN REASONABLE CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS OR AS DIRECTED BY F.D.O.T.
6. THE CONTRACTOR SHALL CONTROL HIS OPERATIONS AND THOSE OF HIS SUBCONTRACTORS AND ALL SUPPLIERS TO ASSURE THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC.
7. THE CONTRACTOR SHALL COMPLY WITH ALL LEGAL LOAD RESTRICTIONS IN THE HAULING OF MATERIALS IN PUBLIC ROADS BEYOND THE LIMITS OF THE WORK.
8. ALL STRIPING SHALL BE THERMOPLASTIC AND SHALL MEET THE REQUIREMENTS OF FOOT SPECIFICATIONS AND SUPPLEMENTS.
9. REFLECTIVE PAVEMENT MARKERS SHALL MEET THE REQUIREMENTS OF FOOT SPECIFICATIONS AND SUPPLEMENTS.
10. ALL SIGNS WITHIN FOOT RIGHT-OF-WAY SHALL MEET THE REQUIREMENTS OF FOOT SPECIFICATIONS AND SUPPLEMENTS.
11. REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH CURRENT FOOT STANDARDS.

SEC. F. DRY POND & SWALE RETENTION AREAS:

- 1. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL SYSTEMS FOR CONFORMANCE WITH THE SITE CONSTRUCTION PLANS AND FIELD CHANGES.
2. THE CONTRACTOR SHALL REPAIR ALL EROSION AND SEDIMENT CONTROL SYSTEMS AS REQUIRED FOR CONTINUED FUNCTION.
3. MOW RETENTION AREAS REGULARLY TO MAINTAIN WEED OVERGROWTH AND PROMOTE TURF GROWTH.
4. INSPECT RETENTION AREAS PERIODICALLY FOR ACCUMULATION OF DEBRIS AND TRASH.
5. INSPECT RETENTION AREA BOTTOMS FOR DEPOSITS OF SAND AND/OR SILT AND REMOVE.
6. PERCOLATION PERFORMANCE SHALL BE EVALUATED YEARLY FOR EACH DRY RETENTION AREA.
7. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE ENGINEER FOR APPROVAL.
8. THE CONTRACTOR IS TO PROVIDE A 1/2" BITUMINOUS EXPANSION JOINT MATERIAL AT ABUTMENT OF CONCRETE AND ANY STRUCTURE.
9. ALL ON-SITE PAVEMENT MARKINGS SHALL BE MADE WITH NON-THERMOPLASTIC PAINT TO FOOT STANDARD SPECIFICATIONS.
10. CURBING SHALL BE CONSTRUCTED WHERE NOTED ON THE CONSTRUCTION PLANS.
11. CONCRETE FOR CURBS SHALL BE DEPARTMENT OF TRANSPORTATION CLASS "T" CONCRETE WITH A 28-DAY COMPRESSION STRENGTH OF 3000 PSI.
12. CURBS SHALL HAVE SAW CUT CONSTRUCTION JOINTS AND SHALL BE CONSTRUCTED AT INTERVALS NOT TO EXCEED 10'-0" ON CENTER.
13. PAVEMENT MARKINGS AND SIGNAGE SHALL BE PROVIDED AS SHOWN ON THE CONSTRUCTION PLANS AND SHALL MEET THE REQUIREMENTS OF THE OWNER/OPERATOR.
14. A MINIMUM OF 2-WAY TRAFFIC SHALL BE MAINTAINED IN THE WORK SITE AREA.
15. ALL CONSTRUCTION WARNING SIGNAGE SHALL BE PLACED PRIOR TO COMMENCEMENT OF CONSTRUCTION AND BE MAINTAINED THROUGHOUT CONSTRUCTION.
16. LIGHTED WARNING DEVICES ARE TO BE OPERATIONAL PRIOR TO DUSK EACH NIGHT DURING CONSTRUCTION.

SEC. G. WORKS IN PUBLIC RIGHT-OF-WAY:

- 1. ALL LOCAL, STATE AND FEDERAL ORDINANCES, POLICIES AND/OR OTHER REGULATIONS REGARDING TRAFFIC AND PEDESTRIAN TEMPORARY BARRICADES, LIGHTS, SIGNALS, SIGNAGE ETC. SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. PRIOR TO COMMENCING WORK THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL BARRICADES, WARNING SIGNS, AND MARKINGS FOR HAZARDS AND THE CONTROL OF TRAFFIC IN REASONABLE CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS OR AS DIRECTED BY F.D.O.T.
3. THE CONTRACTOR SHALL CONTROL HIS OPERATIONS AND THOSE OF HIS SUBCONTRACTORS AND ALL SUPPLIERS TO ASSURE THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC.
4. THE CONTRACTOR SHALL COMPLY WITH ALL LEGAL LOAD RESTRICTIONS IN THE HAULING OF MATERIALS IN PUBLIC ROADS BEYOND THE LIMITS OF THE WORK.
5. ALL STRIPING SHALL BE THERMOPLASTIC AND SHALL MEET THE REQUIREMENTS OF FOOT SPECIFICATIONS AND SUPPLEMENTS.
6. REFLECTIVE PAVEMENT MARKERS SHALL MEET THE REQUIREMENTS OF FOOT SPECIFICATIONS AND SUPPLEMENTS.
7. ALL SIGNS WITHIN FOOT RIGHT-OF-WAY SHALL MEET THE REQUIREMENTS OF FOOT SPECIFICATIONS AND SUPPLEMENTS.
8. REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH CURRENT FOOT STANDARDS.

SEC. K. WATER DISTRIBUTION:

- 1. ALL WATER DISTRIBUTION SYSTEM RELATED ITEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL UTILITIES PROVIDER REQUIREMENTS.
2. ALL MATERIALS FURNISHED BY THE CONTRACTOR UNDER THIS SECTION SHALL BE NEW, HIGH GRADE AND FREE FROM DEFECTS.
3. PRESSURE AND LEAKAGE TESTS FOR NEWLY-INSTALLED WATER DISTRIBUTION SYSTEM PRESSURE PIPES AND APPURTENANCES SHALL BE PERFORMED IN CONFORMANCE WITH F.D.E.P. AND LOCAL UTILITIES PROVIDER.
4. ALL WATER LINES SHALL BE INSTALLED IN A DRY TRENCH.
5. PRESSURE AND LEAKAGE TESTS FOR NEWLY-INSTALLED WATER DISTRIBUTION SYSTEM PRESSURE PIPES AND APPURTENANCES SHALL BE PERFORMED IN CONFORMANCE WITH CITY, COUNTY AND FOOT STANDARDS.
6. DISINFECT POTABLE WATER MAINS IN ACCORDANCE WITH AWWA C651 STANDARD PROCEDURES FOR DISINFECTING WATER MAINS.
7. ALL PVC PIPE MUST BEAR THE NSF LOGO FOR POTABLE WATER USE.
8. PRIOR TO THE CONNECTION TO ANY EXISTING MAIN, THE PROPOSED WATER MAIN SHALL BE DISINFECTED, HAVE ENGINEER APPROVED PRESSURE TESTING AND HAVE DEEP CLEARANCE.
9. THE WATERMANS SHALL BE INSTALLED AS NOTED ON THE PLANS.

SEC. H. SAFETY:

- 1. DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED BY THE CONTRACTOR.
2. 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.
3. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS.

SEC. L. DEMOLITION:

- 1. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND LICENSES FOR PERFORMING THE DEMOLITION WORK AND SHALL FURNISH A COPY OF SAME TO THE ENGINEER PRIOR TO COMMENCING THE WORK.
2. THE CONTRACTOR SHALL MODIFY ALL UTILITY COMPANIES OR LOCAL AUTHORITIES FURNISHING GAS, WATER, ELECTRICAL, TELEPHONE, OR UTILITY/SEWER SERVICE.
3. THE CONTRACTOR SHALL PROTECT ALL UTILITIES AND OTHER IMPROVEMENTS SHOWN ON THESE PLANS.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL TREES, STRUCTURES, AND UTILITIES NOT MARKED FOR REMOVAL OR DEMOLITION.
5. THE CONTRACTOR TO REMOVE ALL BUILDING STRUCTURES MARKED FOR DEMOLITION WHICH INCLUDES ALL FOOTERS ASSOCIATED WITH THE STRUCTURE.
6. THE CONTRACTOR SHALL REMOVE ALL PAVING MARKED FOR DEMOLITION WHICH INCLUDES ALL ASPHALT, CONCRETE, BASE, GRAVEL, BRICK AND SIDEWALK.
7. THE CONTRACTOR SHALL REMOVE ALL TREES MARKED FOR REMOVAL WHICH INCLUDES THE ROOTS ASSOCIATED WITH THE TREE.
8. THE CONTRACTOR IS TO REMOVE ALL UNSAVAGEABLE MATERIALS AND YARD WASTE FROM THE SITE IMMEDIATELY AND DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
9. THE CONTRACTOR SHALL SAW-CUT A SMOOTH STRAIGHT EDGE ON ANY PAVEMENT PROPOSED FOR DEMOLITION PRIOR TO ITS REMOVAL.

SEC. I. UNDERGROUND UTILITIES:

- 1. THE ENGINEER RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO UNCOVER, RETEST AND/OR PERFORM ANY ACTION NECESSARY TO ENSURE THAT THE IMPROVEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL COORDINATE ALL BACKFILL OPERATIONS WITH THE PROJECT SOILS ENGINEER AND SUBMIT TEST REPORTS TO ENGINEER PRIOR TO BEGINNING WORK ON THE NEXT ITEM OF WORK.
3. THE CONTRACTOR SHALL RECOGNIZE AND ABIDE BY ALL OSHA EXCAVATION SAFETY STANDARDS, INCLUDING THE FLORIDA TRENCH SAFETY ACT.
4. FLORIDA LAW (653.851) REQUIRES THAT PERSONS MAKING EXCAVATIONS IN PUBLIC OR PRIVATE STREETS, ALLEYS, RIGHT-OF-WAY OR UTILITY EASEMENTS WITH HAND TOOLS OR POWER EQUIPMENT MUST FIRST OBTAIN INFORMATION ON THE LOCATION OF UNDERGROUND UTILITY RISE LINES.
5. ALL WORK SHALL BE OPEN TO AND SUBJECT TO INSPECTION.
6. THE CONTRACTOR SHALL COORDINATE THE INSTALLATIONS OF UTILITY CONDUITS (SLEEVES) UNDER PAVED AREAS WITH EACH UTILITY COMPANY PRIOR TO BASE INSTALLATION.
7. ALL DOWNSPOUTS ASSOCIATED WITH THE INSTALLATION AND CONSTRUCTION OF THE UNDERGROUND UTILITIES: STORMWATER PIPES AND MANHOLES; SANITARY SEWER MAINS, FORCE MAINS, MANHOLES, AND LIFT STATIONS; AND STORMWATER MANAGEMENT SYSTEMS SHALL BE INCLUDED AS PART OF THE CONSTRUCTION BID COSTS.

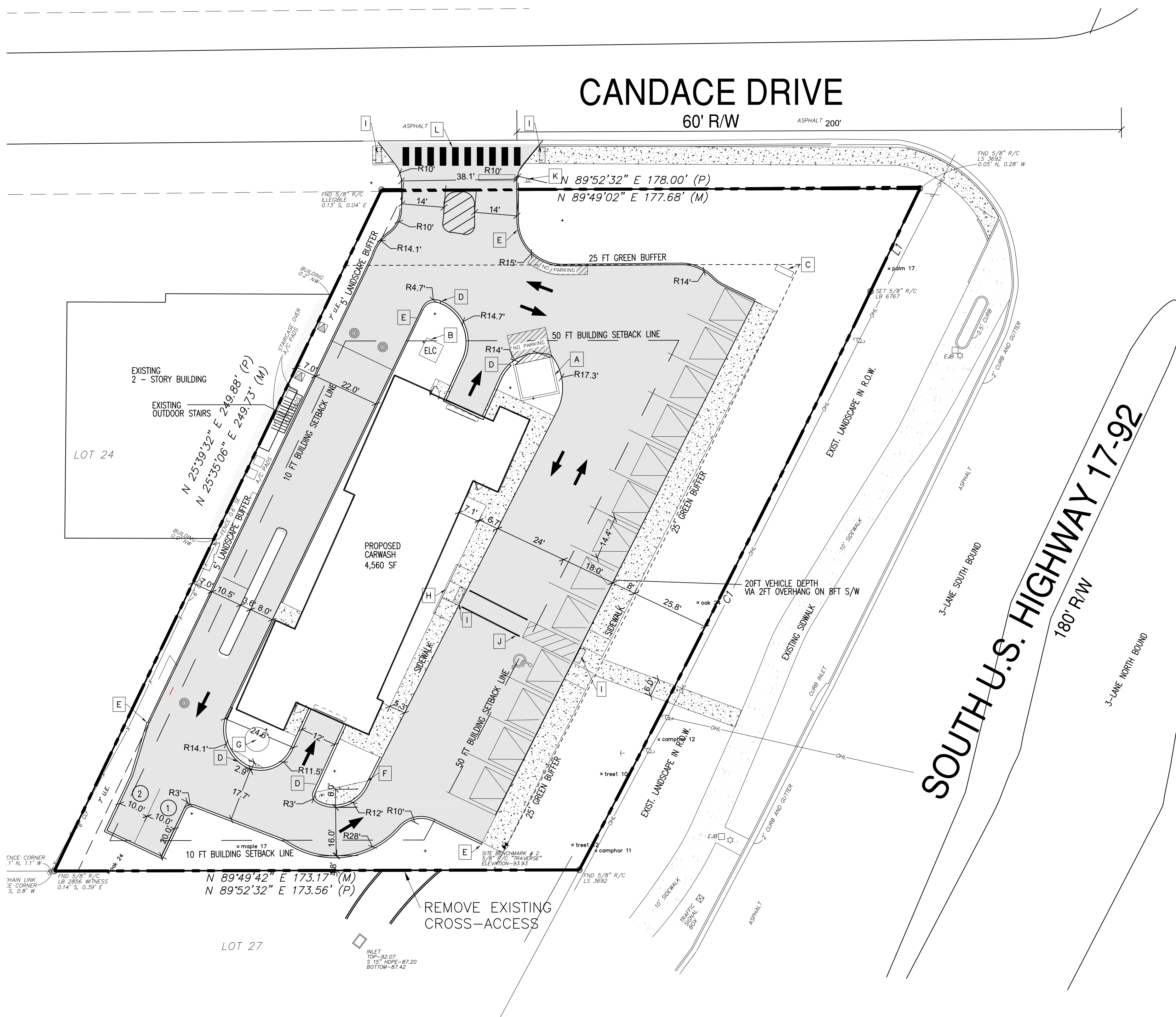
SEC. J. SANITARY SEWER SYSTEM:

- 1. ALL SEWER COLLECTION SYSTEM RELATED ITEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL STANDARDS, THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND HEALTH DEPT. REQUIREMENTS.
2. IF UNSUITABLE MATERIAL IN THE VICINITY OF SANITARY SEWER LINES ARE FOUND DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHO WILL DIRECT THE CONTRACTOR TO REMOVE THE UNSUITABLE MATERIAL AND PREPARE THE TRENCH WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS OR AS DIRECTED BY F.D.O.T.
3. ALL SANITARY SEWER MAINS AND LATERALS WITH IN THE R.O.W. SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.
4. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW WORK TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING CONNECTION POINT AND NOTIFY OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.
5. ALL SANITARY SEWER COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADING.
6. THE CONTRACTOR SHALL PROVIDE CERTIFIED UTILITY RECORD DRAWINGS, RECORD AND SEALED BY A PROFESSIONAL LAND SURVEYOR.
7. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON ALL GRAVITY SEWER IN ACCORDANCE WITH THE REGULATION AGENCY HAVING JURISDICTION.
8. ALL FORCE MAINS SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION.

LEGEND

- PROPERTY LINE
LOT LINE
PROPOSED BUILDING
SETBACK LINE
WATER SURFACE
PROPOSED EDGE OF PAVEMENT (EOP)
PROPOSED 6"x16" CONC. CURB
PROPOSED TYPE F CURB
PROPOSED 24" MAMI CURB
PROPOSED ASPHALT PAVEMENT
PROPOSED CONCRETE PAWING
PROPOSED GRAVEL/SHELL PAVEMENT
PROPOSED HANDICAPED SPACE
SANITARY MANHOLE
SANITARY SEWER MAIN
SANITARY SEWER FORCEMAIN
POTABLE WATER MAIN
SINGLE WATER SERVICE
DOUBLE WATER SERVICE
GATE VALVE
FIRE HYDRANT
PLUG VALVE
CHECK VALVE
DOUBLE DETECTOR CHECK VALVE
REDUCED PRESSURE DOUBLE CHECK VALVE
POST INDICATOR VALVE
FLUSH VALVE ASSEMBLY
PLUG VALVE
STORM RUNOFF DIRECTION
STORM DRAINAGE PIPE
TEMPERARY SILT FENCE
PROPOSED FINISHED GRADE
PROPOSED FOOT TYPE C INLET
PROPOSED FOOT TYPE D INLET
CURB INLET TYPE P-1
CURB INLET TYPE P-2
CURB INLET TYPE P-3
CURB INLET TYPE P-4
P-5 INLET
STORM JUNCTION BOX
CONTROL STRUCTURE
WINGED CONCRETE ENWALL
CONCRETE MITERED END
CONCRETE FLUME W/ RUBBLE RIP RAP

AMERICAN CIVIL ENGINEERING CO. 307 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708 (407) 327-7700
GENERAL NOTES
CANDACE CARWASH
160 CANDACE DRIVE, MAITLAND FL 32751
4/25/2023
PROJECT NO. 22185
C2.0



DEVELOPMENT INFORMATION

- PROJECT NAME: CANDACE CAR WASH
- TAX ID NUMBER: 19-21-30-519-0800-0250
- TOTAL DEVELOPMENT AREA: 1.016 AC
- EXISTING USE: VACANT BUILDING
- PROPOSED USE: CAR WASH, 8AM - 8PM
- FUTURE LAND USE: IND (INDUSTRIAL)
- EXISTING ZONING: M-1 INDUSTRIAL
- MAXIMUM INTENSITY SURFACE RATIO: 0.50 PROPOSED 0.10
- MAX. BUILDING HEIGHT: 35 FT. PROPOSED 22 FT
- THIS SITE DOES NOT CONTAIN ANY WETLANDS OR FLOODPLAINS
- WATER AND SEWER SERVICE TO BE PROVIDED BY SEMINOLE COUNTY.
- THIS PROJECT WILL BE CONSTRUCTED IN ONE (1) PHASE.
- FIRE PROTECTION WILL BE PROVIDED WITH ON-SITE FIRE HYDRANTS
- ON-SITE SOILS CONSISTS OF URBAN LAND (NO. 34) HYDRAULIC GROUP N/A
- MANAGEMENT OF ALL FACILITIES WILL BE BY THE APPLICANT.
- PROPOSED USE OF FACILITY: CAR WASH, SINGLE STORY
- DRAINAGE: CONNECT TO EXISTING INLET PART OF MASTER PERMIT 79606-2, WITH REDUCTION OF EXISTING IMPERVIOUS AREA, SEE SHEET C5.0 EX-1 INLET
- THE PARKING LOT SHALL BE LANDSCAPED AS REQUIRED IN SEC. 30.1292.
- MAXIMUM ALLOWED FLOOR AREA RATIO (FAR) 0.65, PROPOSED FAR 0.10



DEVELOPMENT AREA DATA:

PROJECT LAND AREA DATA:	44,256 SF	100%	(1.016 AC)
BUILDING FOOTPRINT AREA:	4,560 SF	10%	
PARKING AND DRIVE AISLES:	17,313 SF	39%	
SIDEWALK PAVEMENT:	1,637 SF	4%	
MISC. IMPERVIOUS AREA:	350 SF	1%	
TOTAL IMPERVIOUS AREA:	23,797 SF	54%	(0.546 AC)
TOTAL PERVIOUS AREA:	20,459 SF	46%	(0.470 AC)
REQUIRED OPEN SPACE:	25% X 44,256 SF =	11,064 SF	
PROVIDED OPEN SPACE:	LANDSCAPE	20,459 SF	

REQUIRED BUILDING SETBACKS	PROVIDED BUILDING SETBACKS
FRONT SETBACK 50 FT	FRONT SETBACK US 17-92 78 FT
SIDE SETBACK 10 FT	FRONT SETBACK CANDACE 83 FT
REAR SETBACK 10 FT	SIDE SETBACK 52 FT
	REAR SETBACK 32 FT

PARKING ANALYSIS:

PARKING SHALL BE IN ACCORDANCE WITH SEC. 30.1221 OF THE SCLDC; ONE (1) SPACE FOR EACH EMPLOYEE

SEMINOLE CO. CRITERIA	NUMBER OF EMPLOYEES (455 SF)	3 SPACES
TOTAL REQUIRED:		3 SPACES
TOTAL PROVIDED:		3 SPACES
HANDICAP PARKING	REQUIRED ADA PARKING	1 SPACES
	PROVIDED ADA PARKING	1 SPACES

SITE ITEMS

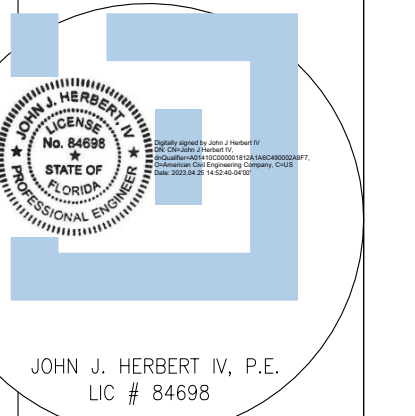
- A) CMU DUMPSTER ENCLOSURE 10' X 12'
- B) TRANSFORMER PAD (3 PHASE, 480V 1000A)
- C) SITE SIGN SEE ARCHITECT PLANS
- D) TYPE B CURB
- E) TYPE D CURB
- F) TYPE F CURB
- G) LIFT STATION (C13.0)
- H) ADA CURB FDOT INDEX 522-002 CR-C
- I) ADA DETECTABLE WARNING, FDOT INDEX 522-002
- J) CROSSWALK STANARD FDOT INDEX 711-001
- K) STOP SIGN (R1-1) & 24" WHITE STOP BAR
- L) CROSSWALK SPECIAL EMPHASIS FDOT INDEX 711-001

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 ENGINEER: JOHN J. HERBERT IV, P.E.
 CHECKED BY: TOM SHELTON, P.E.
 TECHNICIAN: J.W.H.
 PROJECT NO: 22185

REVISIONS	DATE

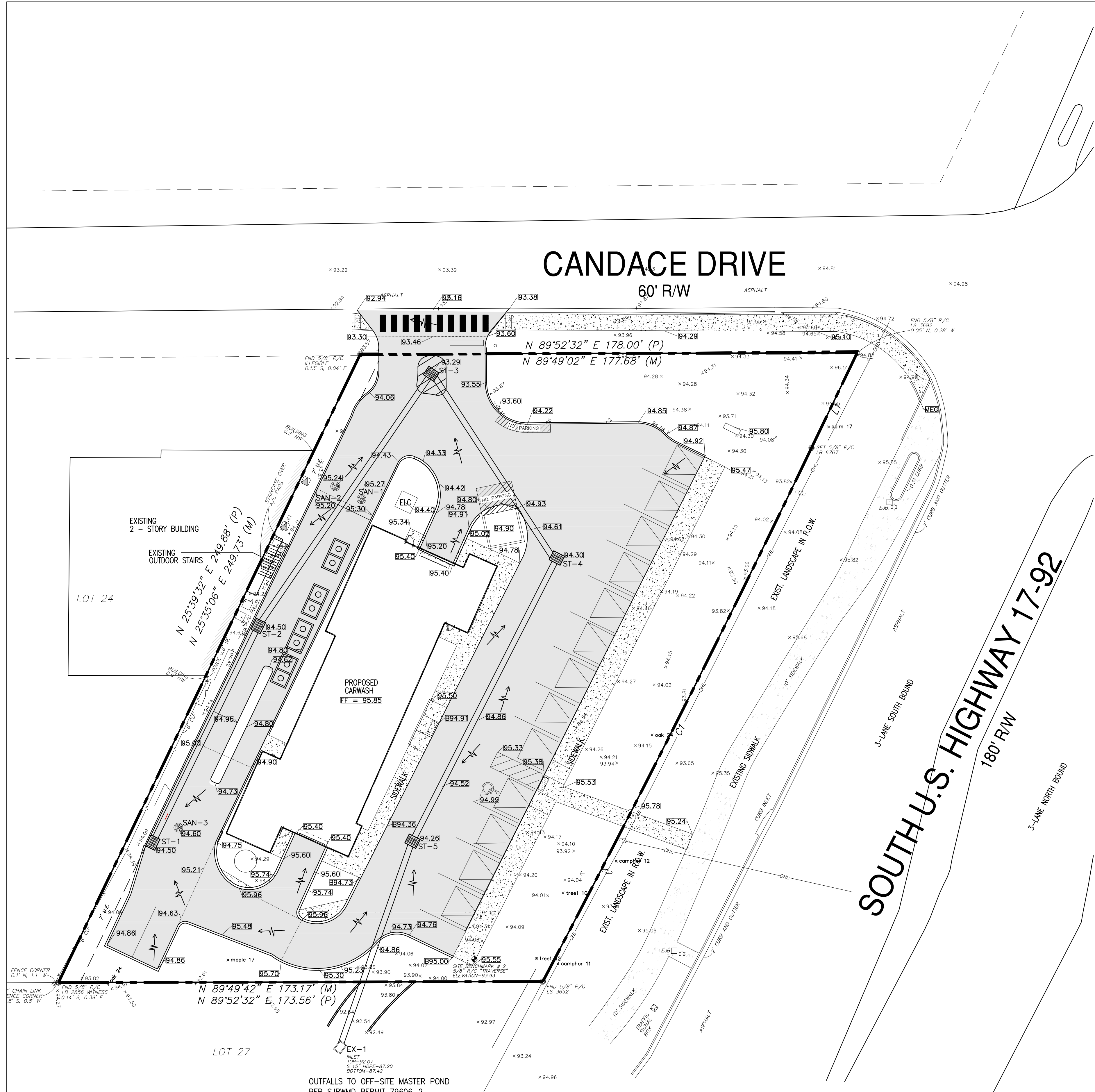
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SITE PLAN
CANDACE CARWASH
 160 CANDACE DRIVE, MAITLAND FL 32751



4/25/2023
SITE PLAN
PROJECT NO. 22185
C4.0

PZ22-06000035
 08/02/23
APPROVED
 Seminole County Government
 Planning & Development Division



NOTE: ELEVATIONS BASED ON NAVD 88, PER SURVEY PROVIDED BY ASSOCIATED LAND SURVEYING AND MAPPING INC



PAVING SPECIFICATIONS – ASPHALT SURFACE/CONC. FINES BASE:

SPECIFICATIONS FOR THE PARKING AREA AND DRIVES ARE AS FOLLOWS:

SURFACE COURSE:

- A). 1.50" FDOT ASPHALT CONCRETE TYPE 9.5, COMPACTED TO A MIN. OF 95% OF THE MARSHALL DESIGN DENSITY. AFTER PLACEMENT AND FIELD COMPACTION, THE WEARING SURFACE SHOULD BE CORED TO EVALUATE MATERIAL THICKNESS AND TO PERFORM LABORATORY DENSITIES. CORES SHOULD BE TAKEN AT A FREQUENCY OF ONE (1) CORE PER 10,000 SF OF PLACED PAVEMENT.

BASE REQUIREMENTS:

- A). 8" PLACED RECYCLED CRUSHED CONCRETE FINES COMPACTED TO A MINIMUM DENSITY OF 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY

SUB-BASE REQUIREMENTS: FOR CRUSHED CONCRETE FINES BASE

- A). 12" STABILIZED SUBGRADE TO HAVE A MIN. FBV=75 AND BE COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) VALUE. LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) VALUE.

PAVING SPECIFICATIONS –CONCRETE (ALTERNATE PAVEMENT)

PAVEMENT:

SPECIFICATIONS FOR THE PARKING AREA AND DRIVES ARE AS FOLLOWS:

- 5.50" OF 4000 PSI CONCRETE WITH 6-6X10-10 WWF (AUTOMOTIVE AREAS) (LIGHT BROOM FINISH & SAW CUT 3/4" CONTROL JOINTS AT 10' GRIDS) PORTLAND CEMENT TYPE I

BASE REQUIREMENTS: (NONE)

SUB-BASE REQUIREMENTS FOR: CONCRETE PAVEMENT

- A). COMPACT TO 98% OF THE MODIFIED PROCTOR MAX. DENSITY ACCORDING TO AASHTO T-180 FOR TOP 12". REPAIR ALL RUTS

NOTE: ALL MATERIALS AND CONSTRUCTION METHODS TO MEET CURRENT FDOT STANDARDS AND SPECIFICATIONS.

STORM STRUCTURE TABLE

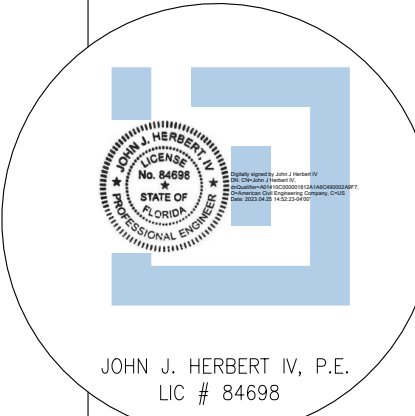
	TOP	CONNECTIONS	TYPE
ST-1	94.50	OUT 89.50 24" RCP NORTH 82LF @ 0.46% TO ST-2	FDOT TYPE-D
ST-2	94.50	IN 89.12 24" RCP SOUTH OUT 89.12 24" RCP N.E. 106LF @ 0.46% TO ST-3	FDOT TYPE-D
ST-3	93.29	IN 88.64 24" RCP S.W. OUT 88.64 24" RCP S.E. 76LF @ 0.46% TO ST-4	FDOT TYPE-D
ST-4	94.30	IN 88.29 24" RCP N.W. OUT 88.29 24" RCP S.W. 110LF @ 0.46% TO ST-5	FDOT TYPE-D
ST-5	94.26	IN 87.78 24" RCP N.W. OUT 87.78 24" RCP SOUTH 75LF @ 0.46% TO EX-1 ELV. 87.43	FDOT TYPE-D

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 TECHNICIAN: J.W.H.
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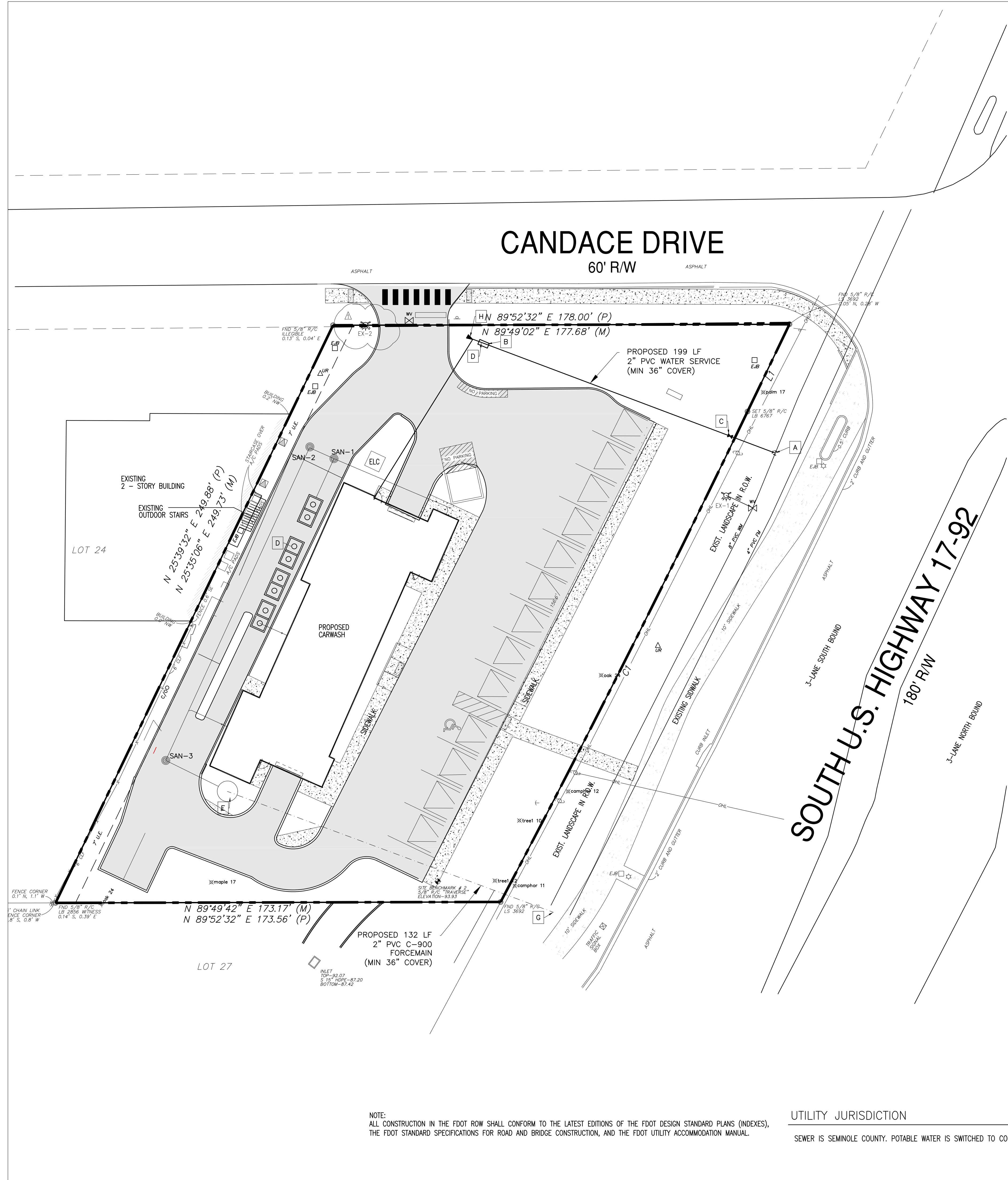
GRADING PLAN
CANDACE CARWASH

160 CANDACE DRIVE, MAITLAND FL 32751



4/25/2023
 GRADING PLAN
 PROJECT NO. 22185

C5.0



- UTILITY KEY
- A) 2" TAP ON EXISTING COUNTY 8" W.W.M.
 - B) 2" METER (C11.0 212) & DDCVA (C11.0 203)
 - C) PROPOSED 2" GATE VALVE
 - D) SAMPLE POINT (C12, 221)
 - E) PROPOSED LIFT STATION (C13.0)
 - F) PROPOSED 2" FORCE MAIN PVC C-900 DR18
 - G) CONNECT TO EXISTING 4" PVC FORCEMAIN
 - H) PROPOSED THRUST BLOCK



SEWER STRUCTURE TABLE

	TOP	CONNECTIONS	TYPE
SAN-1	95.27	IN 91.68 8" PVC N.E. OUT 91.58 8" PVC SDR-35 WEST 8LF @ 0.45% TO SAN-2	4' DIA MANHOLE TYP.
SAN-2	95.24	IN 91.54 8" PVC EAST OUT 91.44 8" PVC SDR-35 SOUTH 124LF @ 0.45% TO SAN-3	4' DIA MANHOLE TYP.
SAN-3	94.60	IN 90.88 8" PVC NORTH OUT 90.78 8" PVC SDR-35 EAST 21LF @ 0.45% TO LIFT STATION	4' DIA MANHOLE TYP.
LIFT	95.00	IN 90.68 8" PVC NORTH OUT 136LF 2" FORCEMAIN C900 PVC DR18 TIED INTO COUNTY MAIN IN ROW	LIFT STATION SEE C16.0

FIRE DEPARTMENT NOTES

1. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF A PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. (NFPA 1, 16.1.4).
2. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
3. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS. (NFPA 1, 16.4.3.1).
4. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3).
5. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
6. A 36 IN. CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60 IN. (1524 MM) SHALL BE PROVIDED IN FRONT OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 212 IN. NFPA 1, 18.5.7.
7. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6 IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10.
8. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH. NFPA 1, 18.2.2.2.

NFPA CHAPTER 18.5.4.3 NFPA 1, 2018 ED.
NEEDED FIRE FLOW DETERMINATION

BUILDING	
TYPE OF CONSTRUCTION:	VB
NUMBER OF FLOORS:	1
TOTAL FLOOR AREA:	4,560 SF
AUTOMATIC FIRE SPRINKLER:	NO
TABLE 18.4.5.1.2 MIN. FIRE FLOW:	1,750 GPM
FIRE SPRINKLER REDUCTION:	NONE
CALCULATED REQUIRED FIRE FLOW:	1,750 GPM
MINIMUM FIRE FLOW REQUIRED:	1,750 GPM @ 20 PSI RESIDUAL
FLOW DURATION:	2 HOURS

NFPA ANNEX I FIRE HYD. LOCATIONS & DISTRIBUTION

BUILDING	
MINIMUM FIRE FLOW REQUIRED:	1,750 GPM
FLOW DURATION:	2 HOURS
PROVIDED FIRE FLOW	
1. EXISTING FIRE HYD. # 1 (105' FROM BLDG.)	
1. EXISTING FIRE HYD. # 2 (60' FROM BLDG.)	
DISTANCE FROM RISK = 0 TO 300 FT	
EXISTING FIRE HYD. NO. 1	= 1,000 GPM
EXISTING FIRE HYD. NO. 2	= 1,500 GPM
TOTAL PROVIDED FLOW CREDIT	= 2,500 GPM
REQUIRED FLOW	= 1,750 GPM
FIRE FLOW IS O.K.	

UTILITY JURISDICTION

SEWER IS SEMINOLE COUNTY. POTABLE WATER IS SWITCHED TO COUNTY FROM CITY OF ALTAMONTE

NOTE:
ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARD PLANS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL.

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CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22185

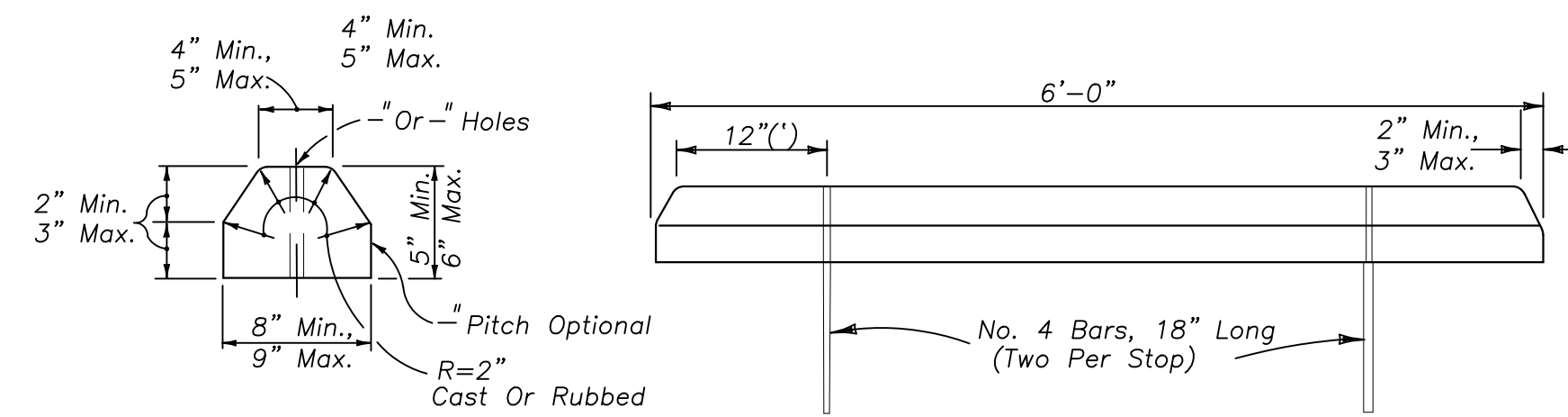
REVISIONS	DATE	REV #	DESCRIPTION
	7/17/2023		SHOW EXISTING HYDRANT TO REMAIN

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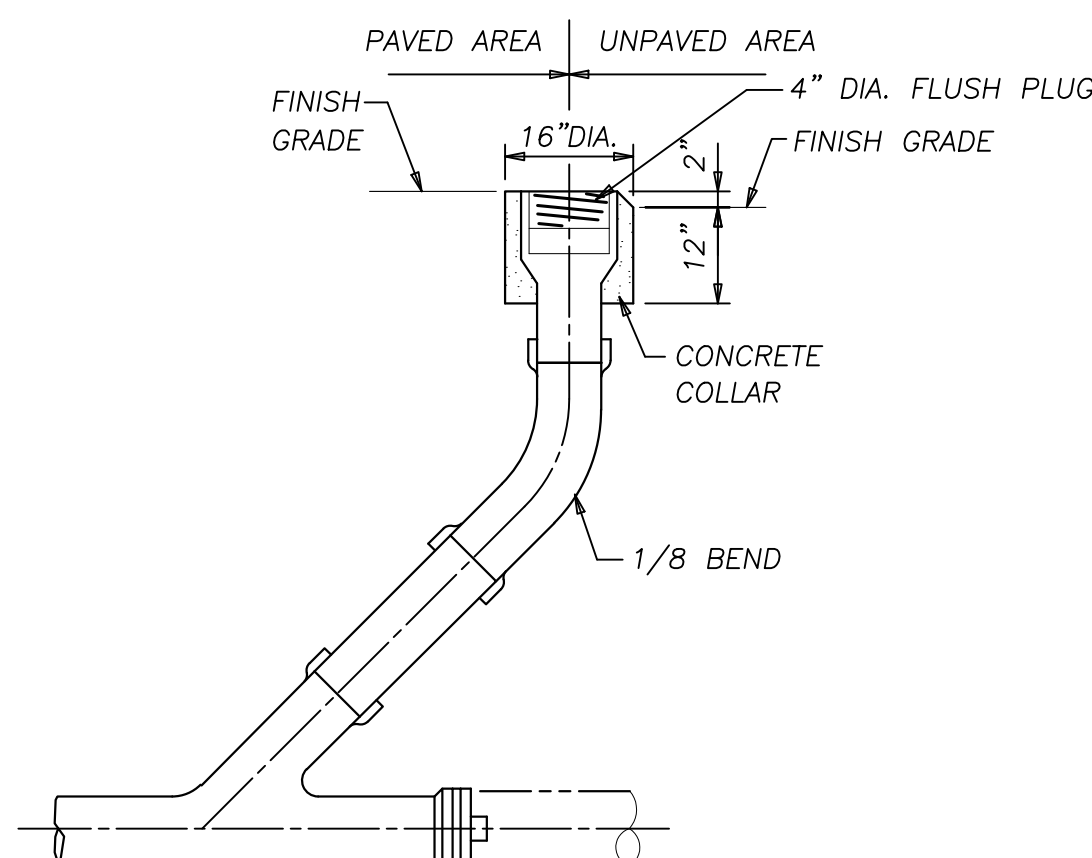
UTILITY PLAN
CANDACE CARWASH
160 CANDACE DRIVE, MAITLAND FL 32751

JOHN J. HERBERT IV, P.E.
LIC # 84698

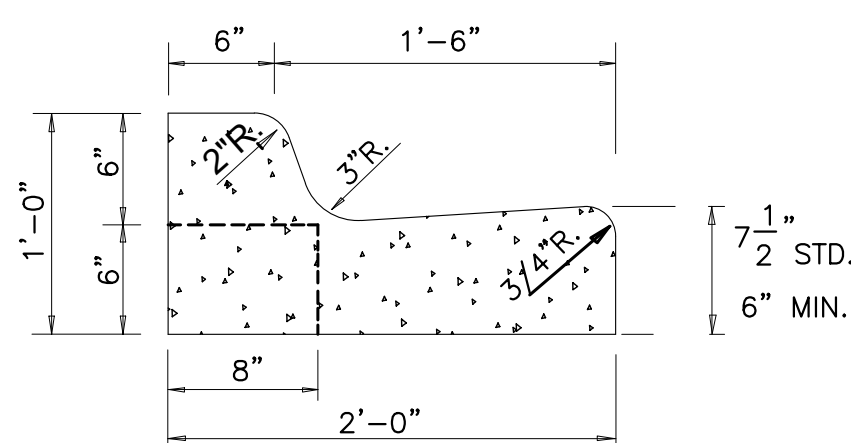
7/17/2023
UTILITY PLAN
PROJECT NO. 22185
C6.0



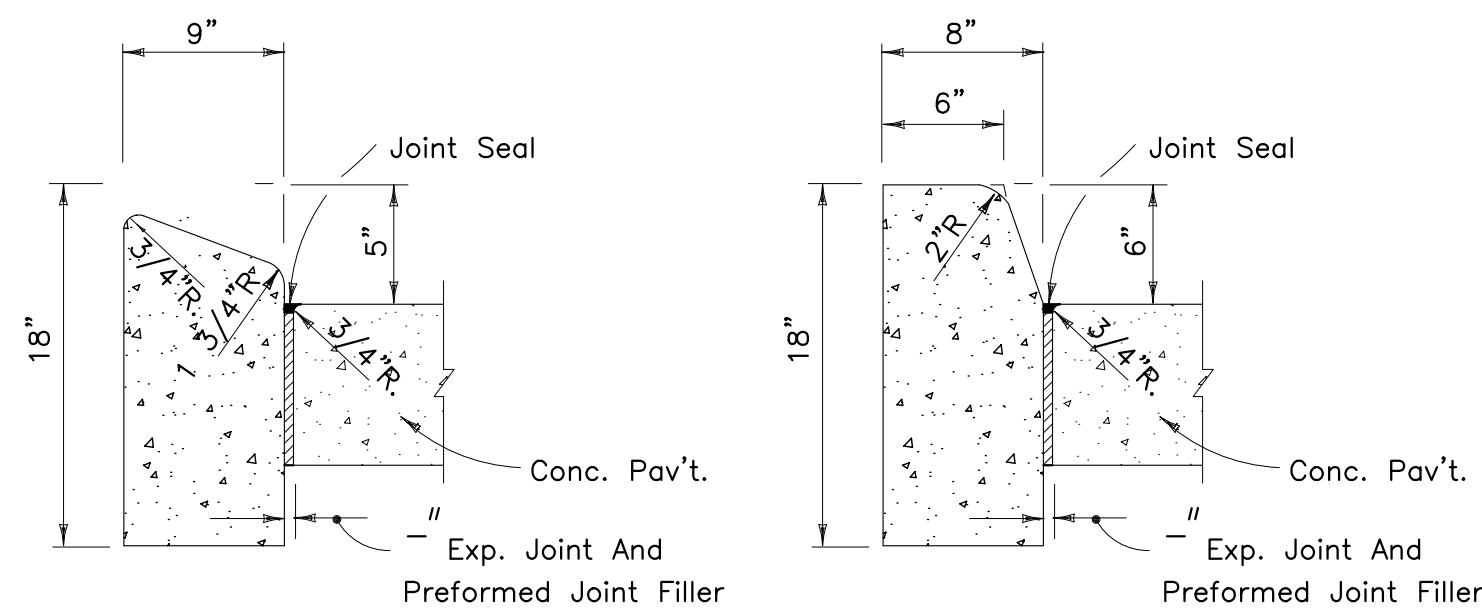
CONCRETE WHEEL STOP
NTS



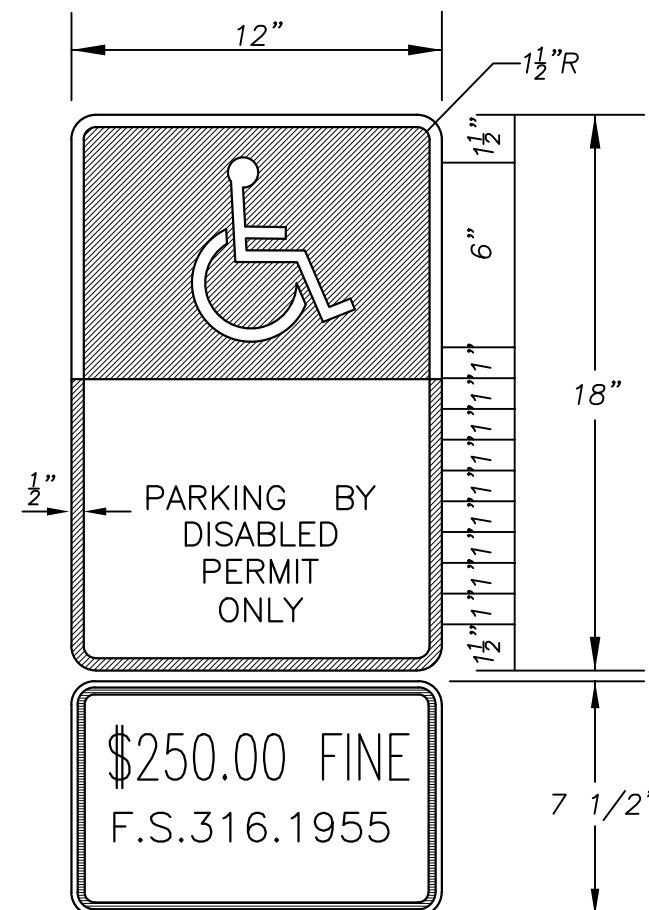
TYPICAL STORM DRAIN CLEANOUT DETAIL
NTS



TYPE F



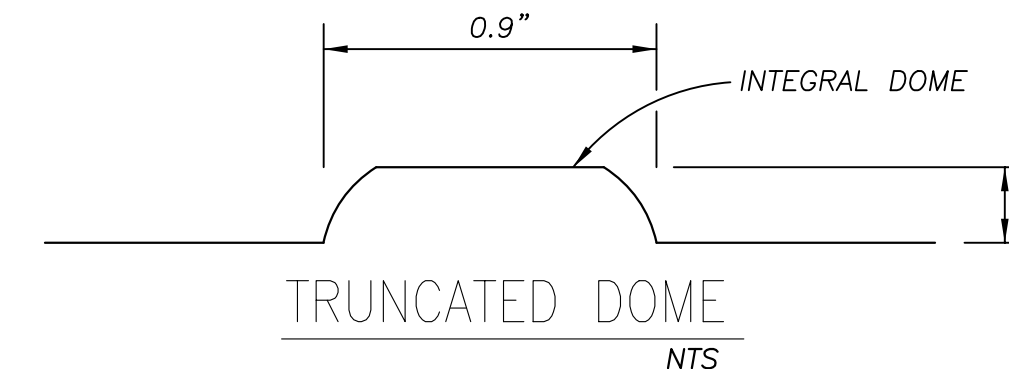
CURB DETAILS
FDOT INDEX 520-001



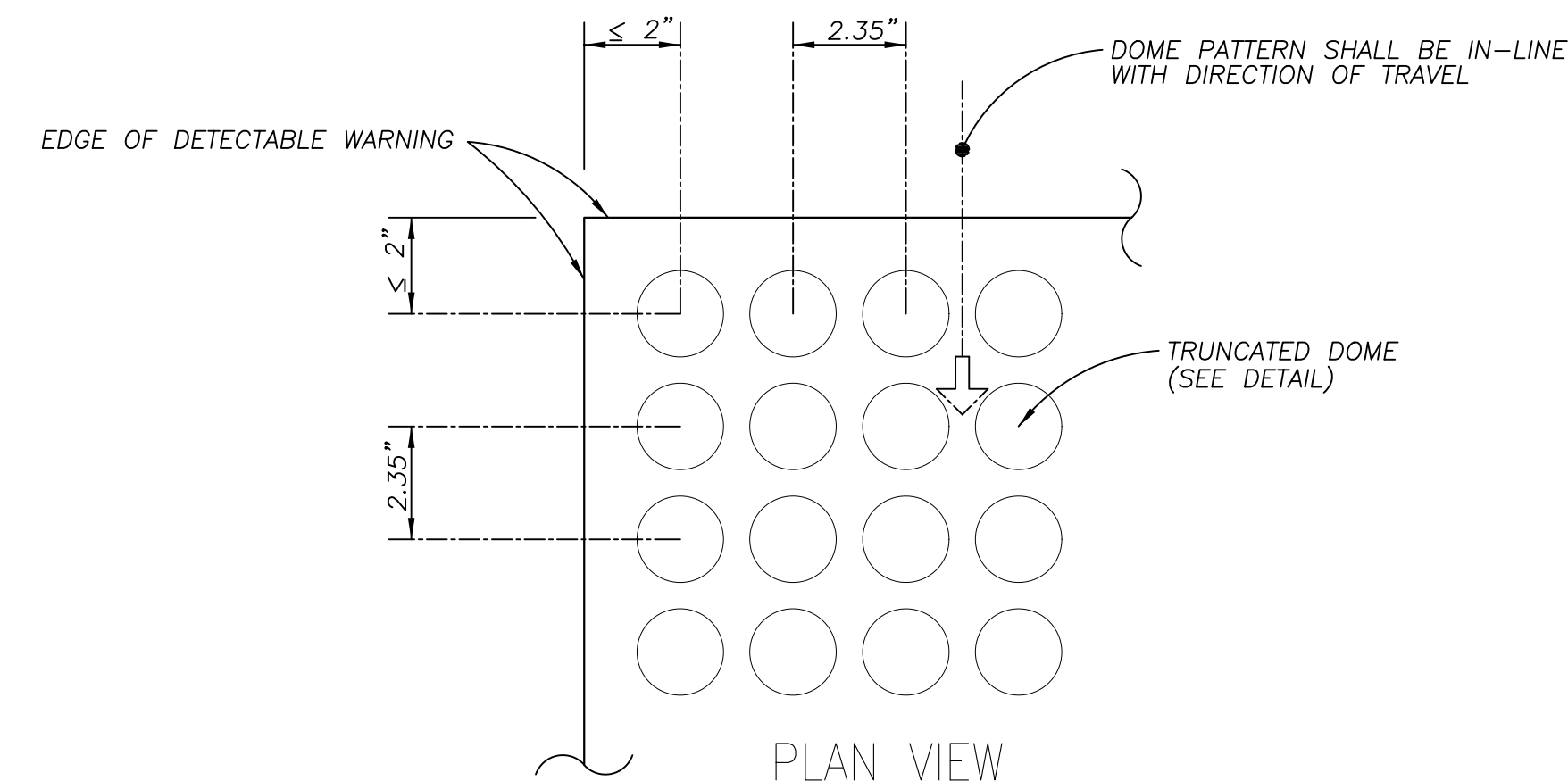
TYPICAL RESERVED PARKING SIGNAGE
NTS

NOTE: (HANDICAP SIGN ONLY)

1. ALL LETTERS SHALL BE BLACK AND 1" IN HEIGHT. LETTERS ARE TO BE SERIES "B" OR "C", PER MUTCD.
2. TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK BORDER.
4. ONE SIGN REQUIRED FOR EACH PARKING SPACE.
5. HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORMED TRAFFIC CONTROL DEVICES (MUTCD)

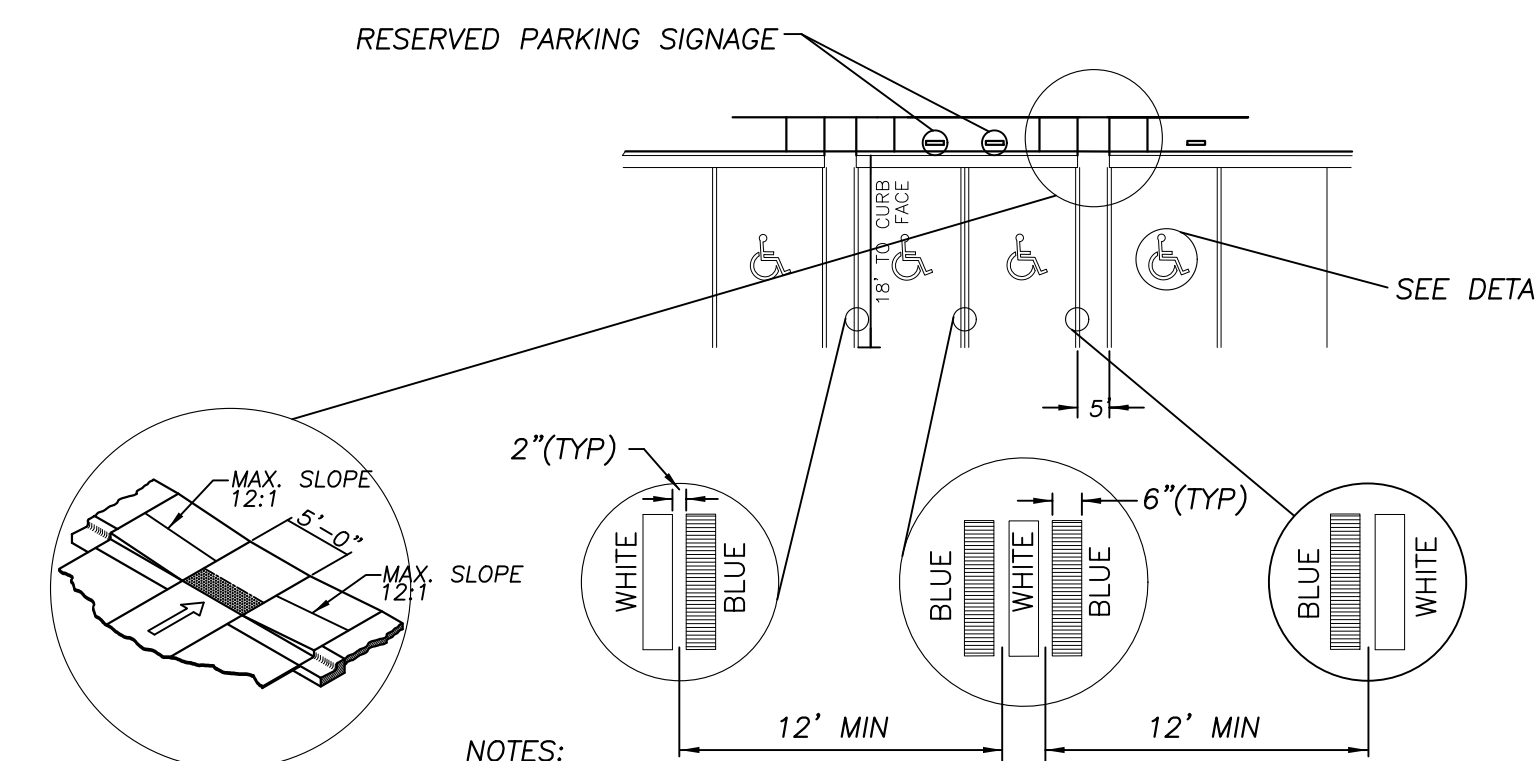


TRUNCATED DOME
NTS



ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 mm) FROM THE BACK OF CURB.

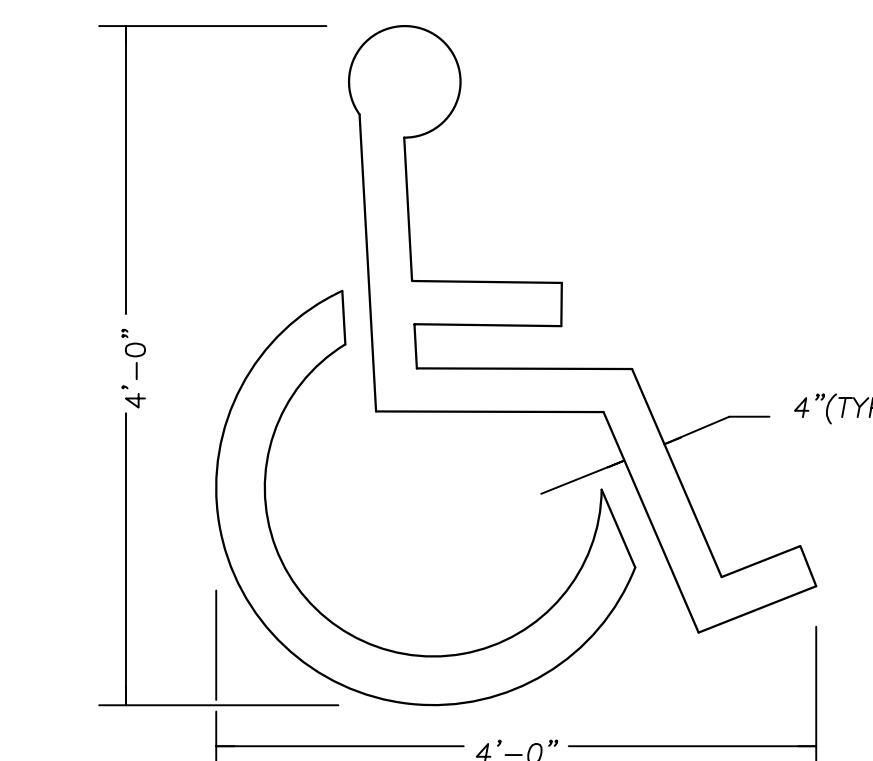
CURB RAMP DETECTABLE WARNING
FDOT INDEX 522-002 NTS



NOTES:

1. EACH SUCH PARKING SPACE SHALL BE CONSPICUOUSLY OUTLINED IN BLUE PAINT, AND SHALL BE POSTED AND MAINTAINED WITH A PERMANENT, ABOVE GRADE SIGN BEARING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY, OR THE CAPTION "PARKING BY DISABLED PERMIT ONLY," OR BEARING BOTH SUCH SYMBOL AND CAPTION. SUCH SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. ALL HANDICAPPED PARKING SPACES MUST BE SIGNED AND MARKED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE DEPARTMENT OF TRANSPORTATION.
2. FL DOT RECOMMENDS MEASURING PARKING SPACE WIDTH FROM CENTER TO CENTER BETWEEN BLUE AND WHITE STRIPES.

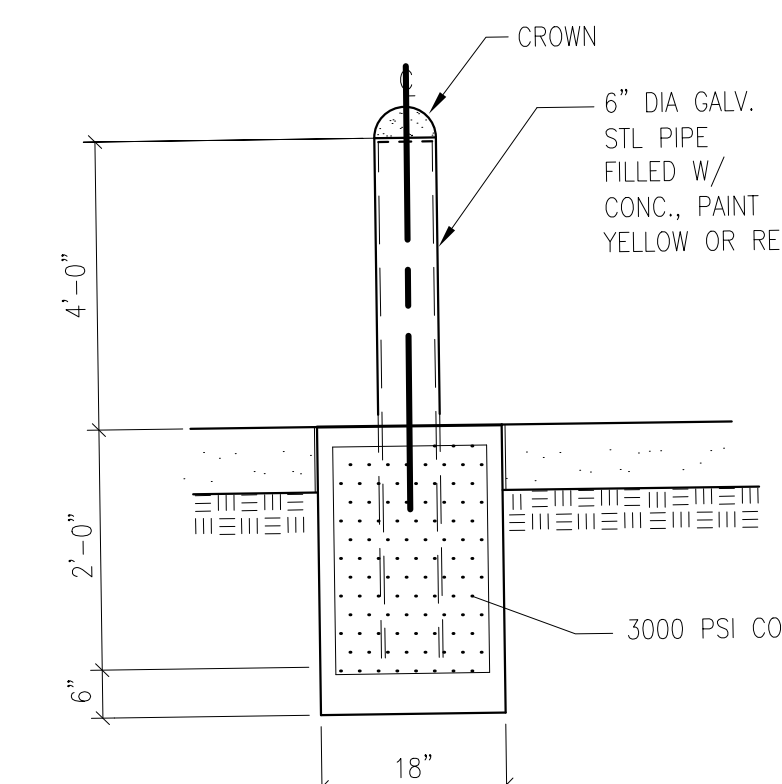
HANDICAP PARKING STRIPING FOR MULTIPLE SPACES
NTS



NOTE:

THIS SYMBOL TO BE WHITE D.O.T. THERMOPLASTIC

TYPICAL PAVEMENT SYMBOL FOR HANDICAPPED PARKING
NTS



BOLLARD POST DETAIL

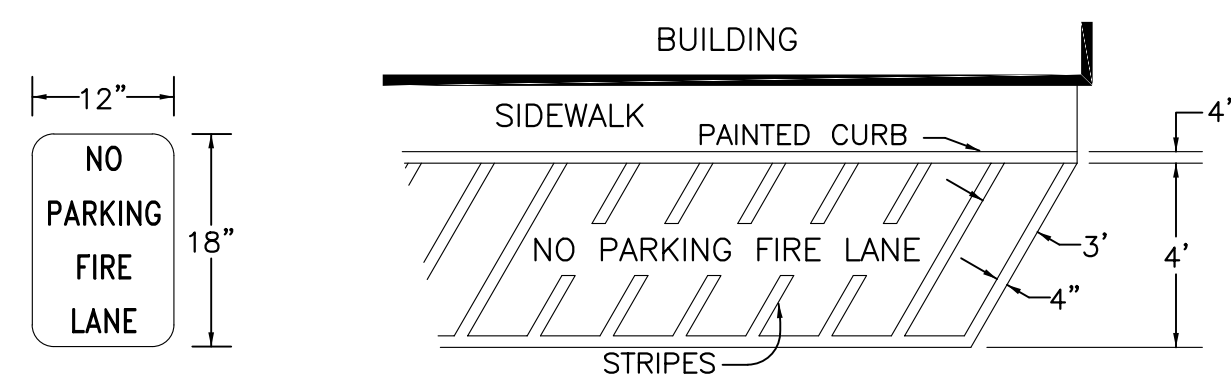
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CHECKED BY: TOM SKEELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22185
MADE IN USA

REVISIONS	DATE

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cert. of authorization number 0723

DETAIL SHEET 1
CANDACE CARWASH
160 CANDACE DRIVE, MAITLAND FL 32751
4/25/2023
DETAIL SHEET 1
PROJECT NO. 22185
C8.0

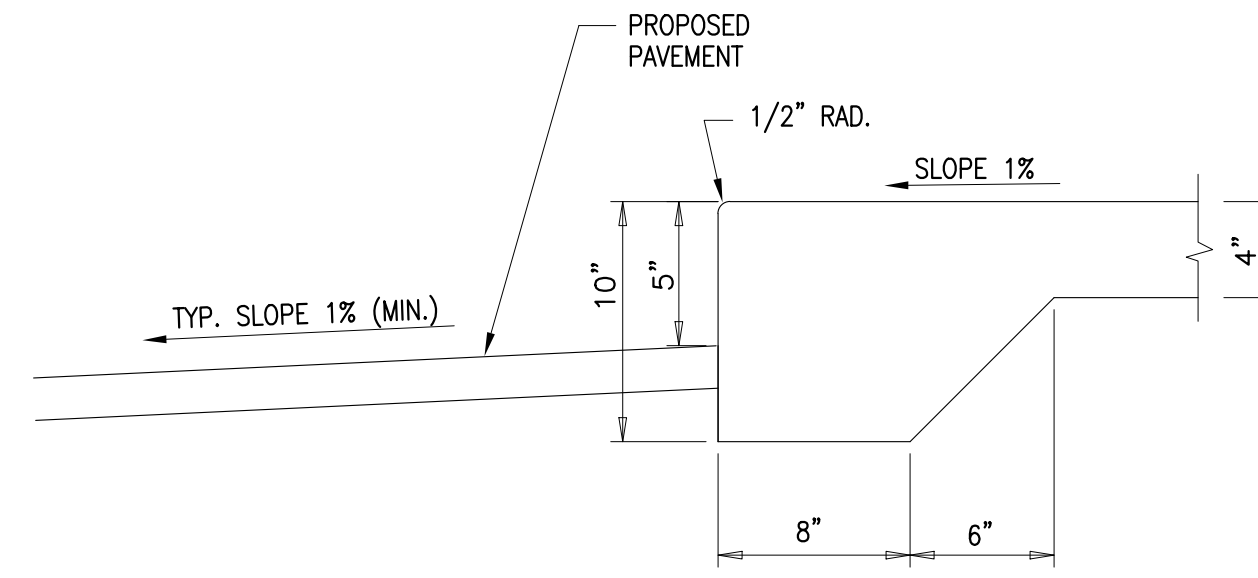
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08/02/23
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Seminole County Government
Planning & Development Division



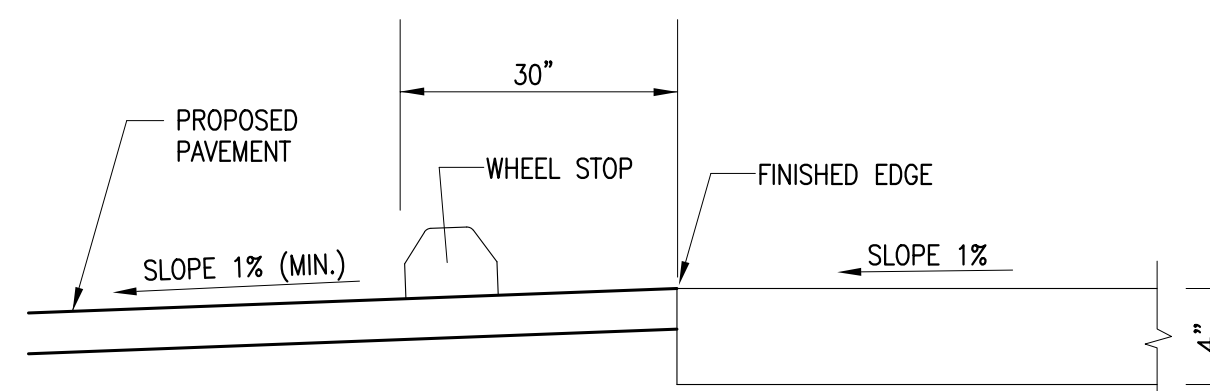
FIRE VEHICLE ACCESS ROUTES MARKING

1. SIGNS SHALL BE TWELVE (12) INCHES WIDE BY EIGHTEEN (18) INCHES IN HEIGHT, WHITE WITH THREE-INCH HIGH RED LETTERS NOT LESS THAN ONE-HALF INCH WIDE TO READ "NO PARKING FIRE LANE".
2. SIGNS SHALL BE DOUBLE FACED, SPACED NOT GREATER THAN ONE HUNDRED (100) FEET APART.
3. SIGNS SHALL BE MOUNTED ON METAL POSTS, NOT LESS THAN TWO (2) INCHES IN SIZE WITH BOTTOM OF SIGN NOT LESS THAN SEVEN (7) FEET FROM GRADE TO BOTTOM OF SIGN.
4. WHERE A CURB IS PROVIDED, FOUR (4) OF CURB TOP AND FACE TO BE TRAFFIC YELLOW (F.D.O.T. TRAFFIC RATED PAVEMENT PAINT). STRIPES FOUR (4) INCHES WIDE EXTENDING OUTWARD TO A WIDTH OF FOUR (4) FEET FROM CURB WITH THREE (3) FEET BETWEEN EACH STRIPE. STRIPING TO BE YELLOW THERMOPLASTIC OR EQUIVALENT.
5. LETTERS NOT LESS THAN FOUR (4) INCHES IN HEIGHT AND NOT LESS THAN TWO (2) INCHES IN WIDTH WITHIN THE STRIPING (BETWEEN THE POSTED SIGNS) TO READ "NO PARKING FIRE LANE". LETTERING TO BE TRAFFIC YELLOW F.D.O.T. TRAFFIC RATED PAVEMENT PAINT.
6. SIGNS AND PAINTING ARE TO BE MAINTAINED BY THE RESPONSIBLE PARTY OF THE PROPERTY.

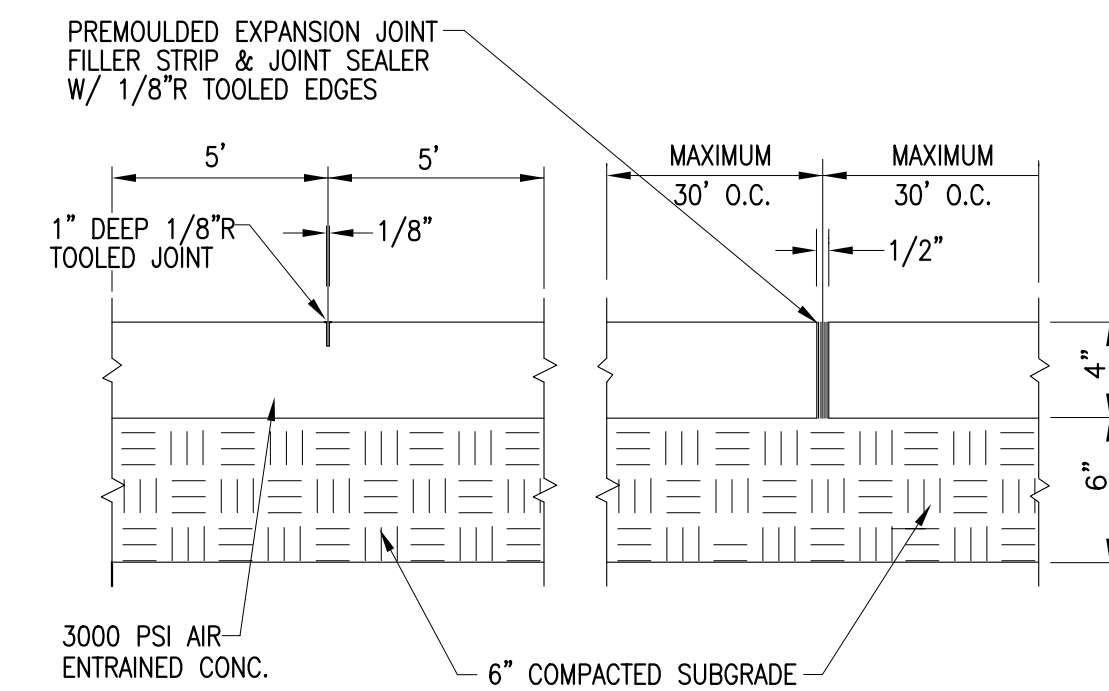
TYPICAL FIRE LANE REQUIREMENTS
(ACCESS ROUTE MARKINGS & SIGN POSTING)



SIDEWALK/PAVEMENT STEP-UP DETAIL
N.T.S.



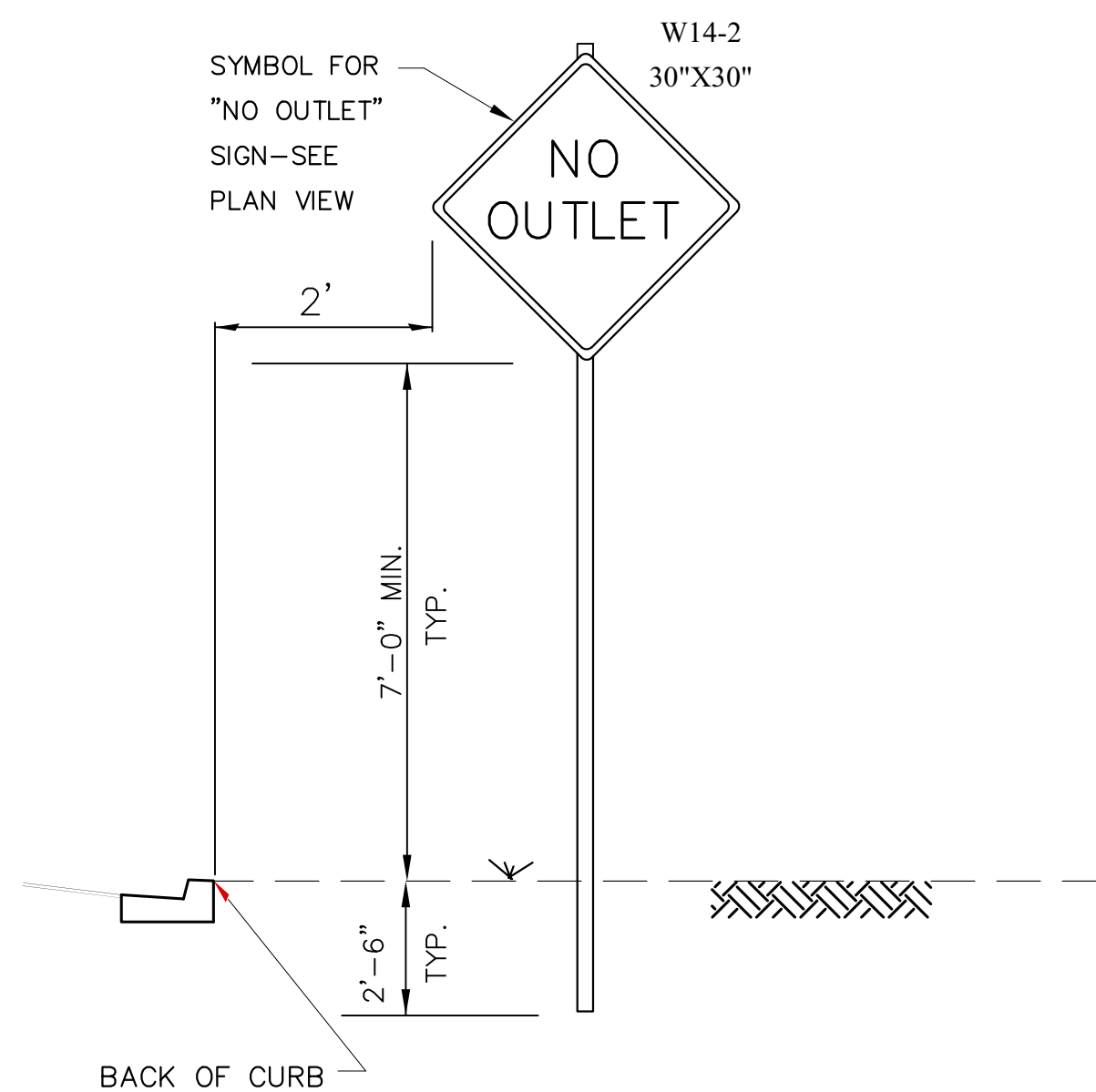
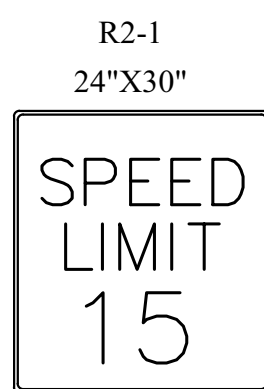
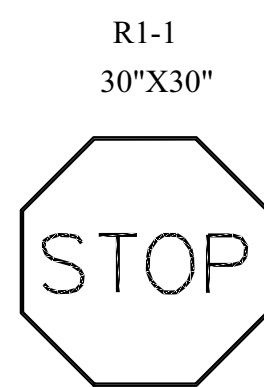
SIDEWALK/PAVEMENT FLUSH DETAIL
N.T.S.



CONCRETE SIDEWALK DETAIL
N.T.S.

NOTES:

1. A THICKENED EDGE SHALL BE PROVIDED BETWEEN SIDEWALK AND DRIVEWAYS OR PARKING LOT.
2. SLOPE CONC. SIDEWALKS AWAY FROM BUILDINGS TO PROVIDE POSITIVE DRAINAGE.
3. PROVIDE 1% CROSS SLOPE ON CONC. WALKS TYP.
4. PROVIDE CONTROL JOINTS @ INTERVALS EQUAL TO SIDEWALK WIDTH (W).
5. PROVIDE PREMOULDED EXPANSION JOINT WHERE CONC. WALK ABUTS BLDG., POLES, AND OTHER CONC. WALKS.

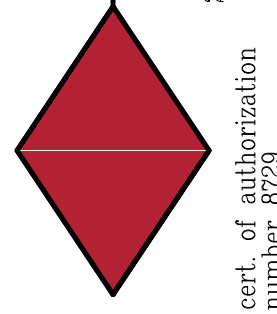


TRAFFIC SIGN DETAILS

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ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PRODUCT NO. 22185

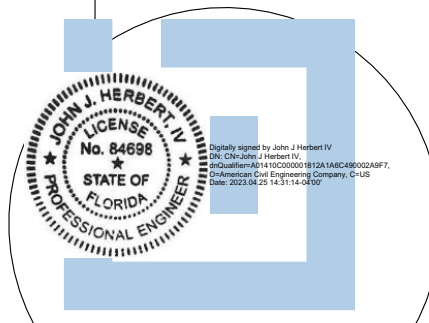
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CANDACE CARWASH
160 CANDACE DRIVE, MAITLAND FL 32751

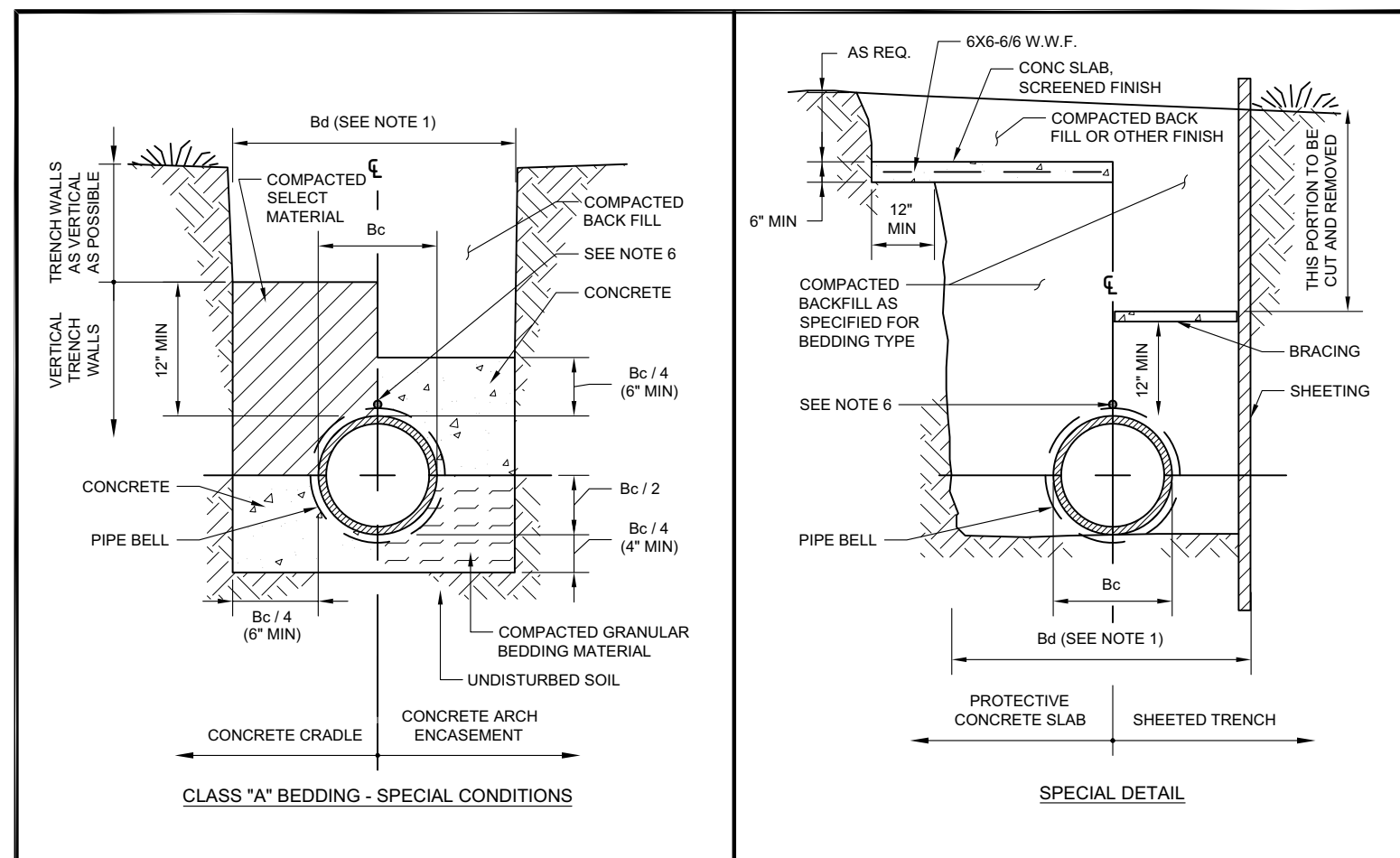


JOHN J. HERBERT IV, P.E.
LIC # 84698

4/25/2023
DETAIL SHEET II
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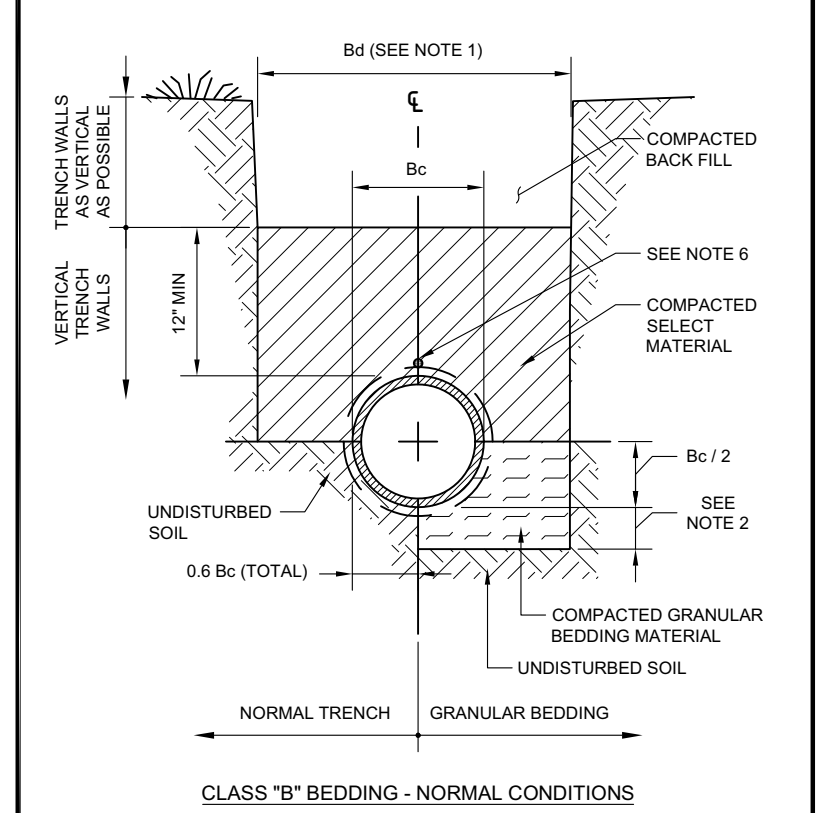
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PZ22-06000035
08/02/23
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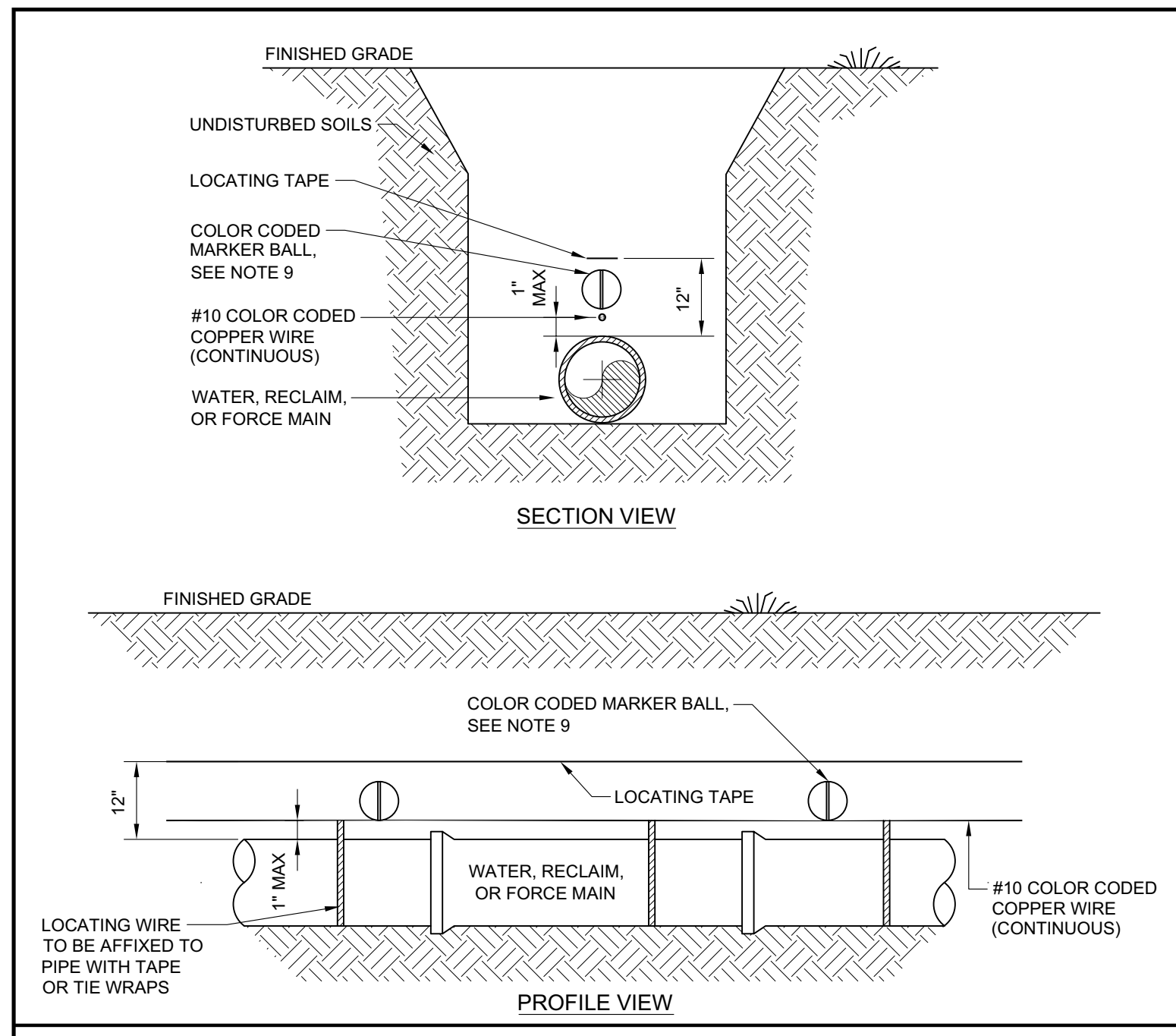


NOTES:

- B_c = PIPE O.D.
 B_d = TRENCH WIDTH AT TOP OF PIPE
MAX $B_d = B_c + 24"$
MIN $B_d = \text{MAX DIM. OF BELL} + 8"$ (UNSHEETED TRENCH)
MAX DIM. OF BELL + 12" (SHEETED TRENCH)
- DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL BE AS REQUIRED TO REACH SUITABLE FOUNDATION FOR NON-CUSHIONING MATERIAL. DEPTH SHALL BE 6" BELOW BOTTOM OF UTILITY.
- SHEETING SHALL BE DRIVEN BELOW THE UTILITY INVERT IF REQUIRED FOR LATERAL SUPPORT OR UNSUITABLE MATERIAL REMOVAL. WHERE DRIVEN BELOW PIPE INVERT, SHEETING SHALL BE CUT OFF A MINIMUM OF 12" ABOVE TOP OF PIPE, OR HIGHER AS AUTHORIZED BY THE ENGINEER, AND LEFT IN PLACE. IN NO CASE SHALL SHEETING LEFT IN PLACE EXTEND HIGHER THAN 30' BELOW SURFACE GRADE UNLESS SPECIFICALLY APPROVED. BRACING SHALL BE APPROVED AS REQUIRED.
- PROTECTIVE CONCRETE SLABS ARE REQUIRED WHENEVER DEPTH OF COVER IS LESS THAN 36" AND IF APPROVED BY THE UTILITY.
- BACKFILL TO BE COMPACTED TO 98% DENSITY OF AASHTO T180 MODIFIED PROCTOR IN AREAS TO BE PAVED AND 95% IN OTHERS.
- REF. STANDARD DETAIL 109 - PIPE MATERIAL LOCATION FOR FULL LOCATION MATERIAL REQUIREMENTS.



SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION
TRENCHING AND BEDDING
DATE: 05/18/21
FIGURE: 101



NOTES:

- REF. UTILITY ENGINEERING MANUAL, FOR REQUIRED COLORS AND TEXT FOR ALL LOCATE MATERIALS.
- LOCATING WIRE SHALL BE CONTINUOUS, COLOR CODED, INSULATED, 10 GAUGE SOLID CORE COPPER, AND SUITABLE FOR DETECTION WITH LOCATION EQUIPMENT.
- LOCATING WIRE SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE, WITH TAPE OR TIE WRAPS.
- LOCATING WIRE SHALL TERMINATE PER DETAILS 111 AND/OR 110.
- LOCATING WIRE IS NOT REQUIRED FOR GRAVITY SEWER.
- LOCATE TAPE SHALL BE MINIMUM WIDTH OF 4" FOR PIPES UP TO 12" IN DIAMETER, 6" FOR PIPES 14" AND GREATER, PLASTIC AND METALIZED FOIL, COLOR CODED WITH TEXT APPROPRIATE FOR SERVICE, AND SUITABLE FOR DETECTION WITH LOCATION EQUIPMENT.
- LOCATING TAPE SHALL BE BURIED 12 INCHES DIRECTLY ABOVE THE CENTERLINE OF THE PIPE, WITH PRINTED SIDE UP FOR VISUAL IDENTIFICATION.
- MARKER BALLS SHALL BE 4 INCHES IN DIAMETER, COLOR CODED, AND A PASSIVE DEVICE CAPABLE OF REFLECTING A SPECIFICALLY DESIGNATED REPULSE FREQUENCY TUNED TO THE UTILITY BEING USED.
- MARKER BALLS SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE, UNLESS MARKER BALL DEPTH IS GREATER THAN 6' BELOW FINISHED GRADE, IN WHICH CASE THE MARKER BALL SHALL BE SET AT 18" TO 24" BELOW FINISHED GRADE. SPACING SHALL BE EVERY 100 LINEAR FEET AND AT EVERY BEND, TEE, REDUCER AND VALVE. MARKER BALLS SHALL BE INDICATED ON RECORD DRAWINGS AS "E.M.B."

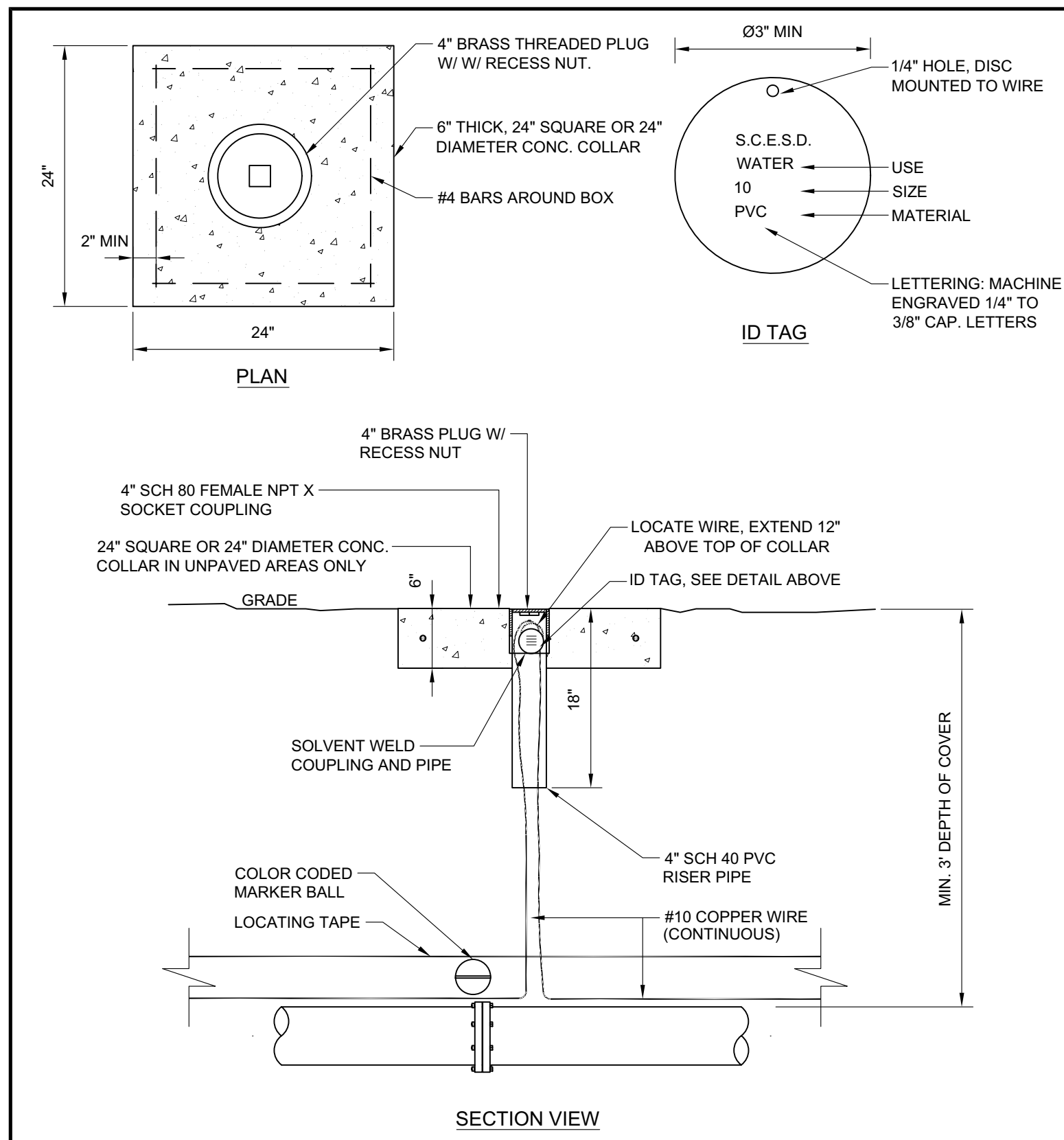
SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION
PIPE MATERIAL LOCATION
DATE: 05/18/21
FIGURE: 109

OTHER MAIN	HORIZONTAL SEPARATION	CROSSING ⁽¹⁾	JOINT SPACING ⁽²⁾
STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER ⁽³⁾	3" MIN	12" MIN	CENTER ONE FULL LENGTH OF PIPE
VACUUM SANITARY SEWER	10" PREFERRED 3" MIN	12" PREFERRED 6" MIN	CENTER ONE FULL LENGTH OF PIPE
GRAVITY SANITARY SEWER, PRESSURE SANITARY SEWER, SANITARY SEWER FORCE MAIN, RECLAIMED WATER ⁽⁴⁾	10" PREFERRED 6" MIN	12" MIN	CENTER ONE FULL LENGTH OF PIPE
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10' MIN.	---	---

NOTES:

- WATER MAIN SHOULD CROSS ABOVE ANY OTHER PIPE. WHEN WATER MAIN MUST BE BELOW ANOTHER PIPE, THE MINIMUM SEPARATION BETWEEN OUTSIDE OF WATER MAIN AND OUTSIDE OF OTHER PIPE IS 12".
- AT ALL UTILITY CROSSINGS 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. SEE ALTERNATIVE ARRANGEMENTS.
- RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-101 F.A.C.
- RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-101 F.A.C.
- FOR STORM SEWER: 12" PREFERRED, 6" MIN.
- FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6" ABOVE THE TOP OF THE GRAVITY SANITARY SEWER MAIN HORIZONTAL SEPARATION SHALL BE 3" MIN.
- FOR GRAVITY SANITARY SEWER: 12" PREFERRED, 6" MIN.
- NO WATER PIPE SHALL PASS THROUGH OR BE CONSTRUCTED TOUCHING ANY PART OF A SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
- PROF. OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS MUST BE AT LEAST 10 FEET FROM ANY EXISTING OR PROP. "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0005 (2), F.S., AND RULE 64E-8.002, F.A.C.
- WHERE IT IS NOT POSSIBLE TO MEET THE SEPARATION REQUIREMENTS, THE FOLLOWING ALTERNATIVE CONSTRUCTION VARIANCES ARE ACCEPTABLE ONLY WITH THE EXPRESSED WRITTEN CONSENT OF THE UTILITIES ENGINEERING DIVISION.
- 10.1. WHERE A WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE AND/OR WHERE A WATER MAIN CROSSING HAS LESS THAN THE MINIMUM REQUIRED DISTANCE BETWEEN JOINTS.
- 10.1.1. USE OF PRESSURE RATED PIPE CONFORMING TO AWWA STANDARDS, FOR A GRAVITY OR VACUUM TYPE PIPE LINE.
- 10.1.2. USE OF WELDED, FUSED OR OTHERWISE RESTRAINED JOINTS FOR EITHER PIPE.
- 10.1.3. USE OF WATERTIGHT CASING PIPE OR CONCRETE ENCASEMENT AT LEAST 6" PREFERRED, 4" MIN. THICK FOR EITHER PIPE. REFERENCE DETAIL 107.
- 10.2. WHERE A WATER MAIN IS BEING LAID LESS THAN 3 FEET HORIZONTALLY FROM ANOTHER PIPE LINE AND/OR WHERE A WATER MAIN IS BEING LAID WITH LESS THAN THE REQUIRED MINIMUM VERTICAL SEPARATION.
- 10.2.1. USE OF PIPE OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (AT LEAST EQUAL TO 0.25" THICK D.I.P.) OR CONCRETE ENCASEMENT AT 6" PREFERRED, 4" MIN. THICK FOR THE WATER MAIN AND THE OTHER PIPE LINE IF THE OTHER PIPE LINE CONVEYS WASTEWATER OR RECLAIMED WATER. REFERENCE DETAIL 107.
11. FOR PIPE CROSSING CONFLICTS REFERENCE DETAIL 106. CONFLICTS SHALL NOT BE RESOLVED BY DEFLECTING PIPE JOINTS.
12. THIS DETAIL IS PROVIDED FOR CONVENIENCE. REFERENCE FAC 62-555.314 FOR FULL REQUIREMENTS.

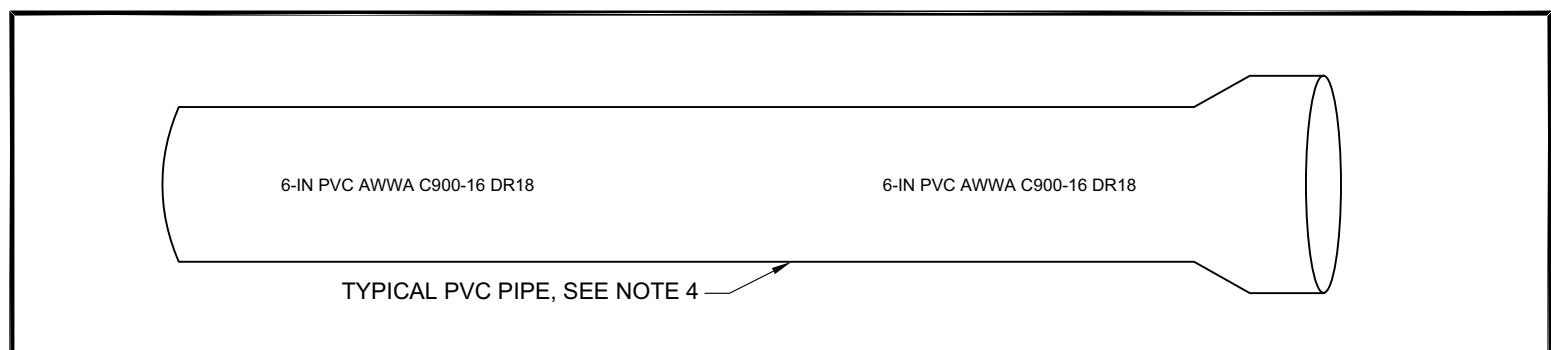
SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION
FAC 62-555.314 SEPARATION REQUIREMENTS
DATE: 05/18/21
FIGURE: 105



NOTES:

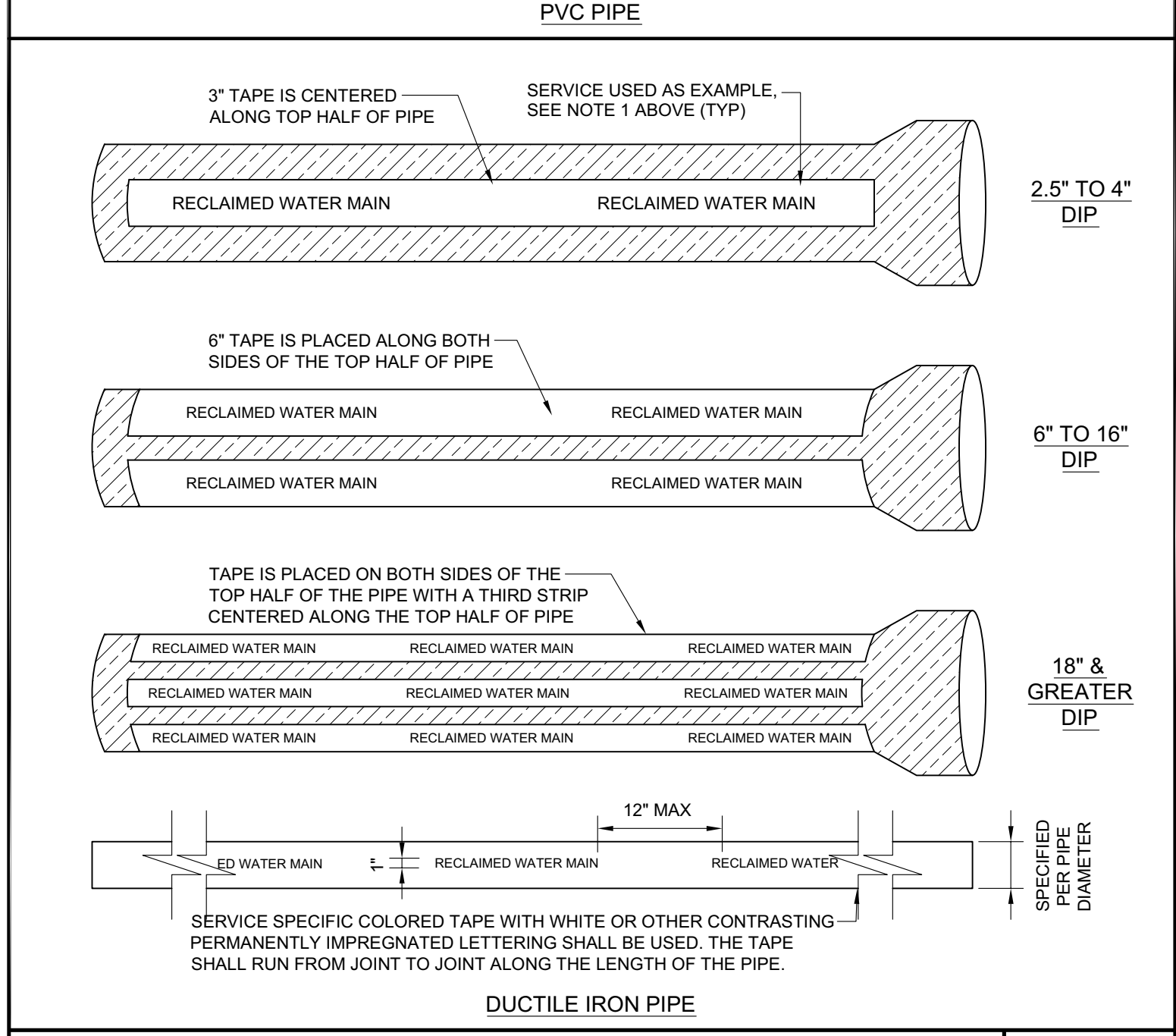
- LOCATOR WIRE ACCESS - 4" SCHEDULE 80 PVC, FEMALE ADAPTER COUPLING AND 4" BRASS PLUG WITH RECESSED NUT. TERMINATE INSULATED, SOLID 10 GAUGE COPPER LOCATOR WIRES AT TOP WITH 12" OF EXTRA WIRE. INSULATED WIRE SHALL BE COLOR CODED.
- TO BE USED IN UNPAVED AREAS ONLY.
- LOCATE WIRE ACCESS THROUGH LOCATING WIRE TERMINAL OR VALVE BOX REQUIRED AT MINIMUM EVERY 500 LF.
- REF. DETAIL 109 FOR FULL LOCATION MATERIAL REQUIREMENTS.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION
LOCATING WIRE TERMINAL
DATE: 05/18/21
FIGURE: 110

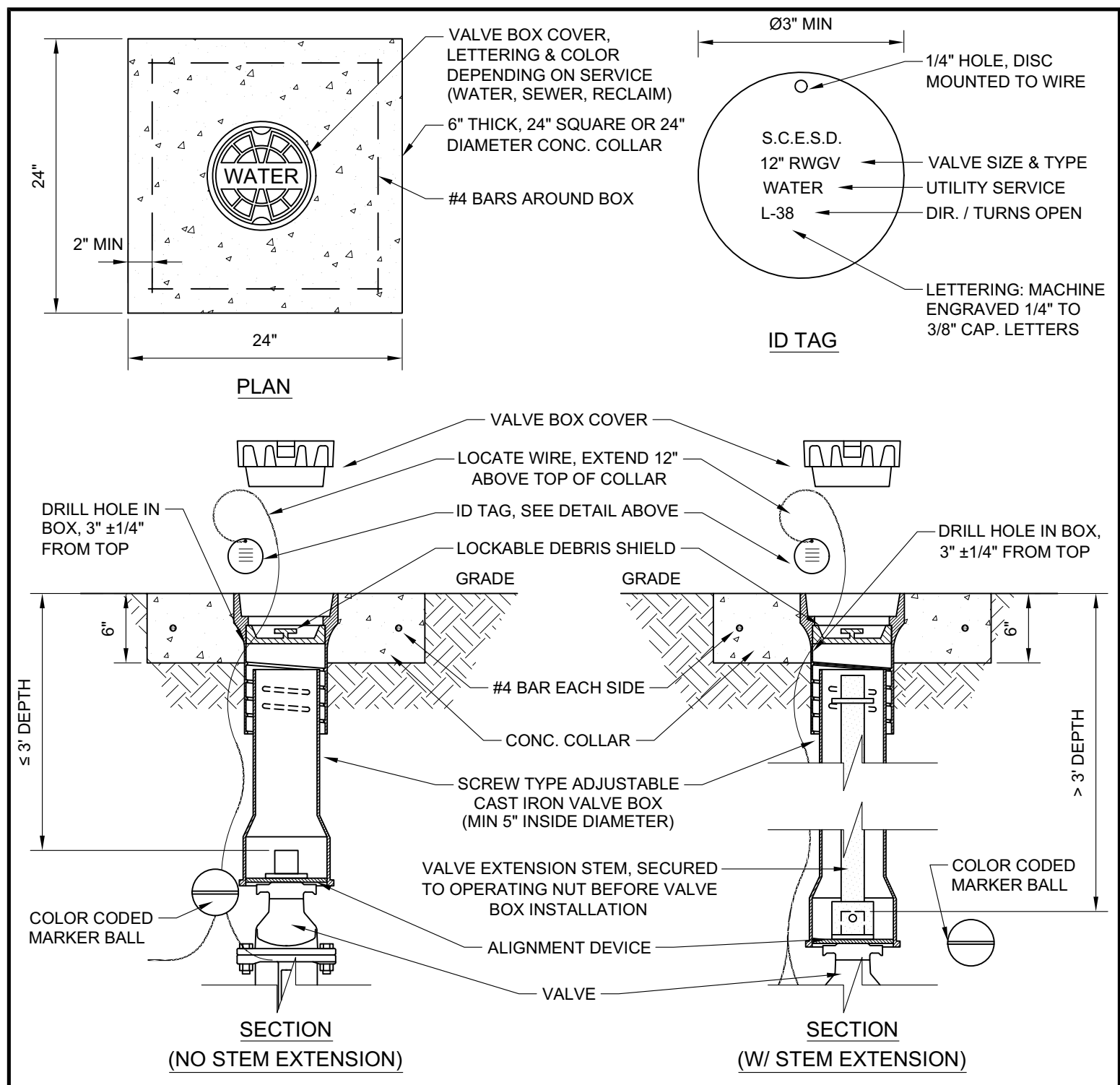


NOTES:

- PIPE MARKING SHALL CONFORM TO THE REQUIREMENTS TO AWWA C900.
- MARKING MARKING SHALL BE OF CONTRASTING COLOR AND REMAIN LEGIBLE AFTER NORMAL HANDLING, STORAGE AND INSTALLATION.
- THE PIPE SHALL BE INSTALLED SUCH THAT LETTERING IS ORIENTATED AT THE TOP OF THE PIPE.
- REF. UTILITY ENGINEERING MANUAL, FOR PVC PIPE COLORS.



SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION
PIPE IDENTIFICATION
DATE: 05/18/21
FIGURE: 108



NOTES:

- VALVE COVER SHALL BE ROUND AND MARKED AND COATED FOR RESPECTIVE UTILITY SERVICE.
- VALVE COVERS SHALL BE LOCKABLE TYPE WHEN IN PAVED AREAS.
- VALVE BOXES SHALL NOT BE LOCATED IN STREET CURBS.
- VALVE BOX AND COLLAR TOP SHALL BE SET TO FINISHED GRADE.
- ANY VALVE OPERATING NUT DEEPER THAN 3" FROM FINAL GRADE WILL REQUIRE A VALVE NUT EXTENSION, MECHANICALLY FASTENED TO THE VALVE OPERATING NUT, WITH TOP OF EXTENSION SET WITHIN 3" OF FINAL GRADE.
- VALVE BOX DEBRIS SHIELD SHALL BE LOCKABLE, COLOR CODED TO SERVICE AND INCLUDE ATTACHED LOCATING COIL.
- VALVE BOXES SHALL BE ADJUSTED TO MIRROR TO ALLOW FUTURE VALVE ADJUSTMENTS. PVC OR DUCTILE IRON PIPE SHALL NOT BE USED AS VALVE BOX EXTENSION.
- VALVE BOX ALIGNMENT DEVICE SHALL BE INSTALLED BELOW OPERATING NUT.
- LOCATE WIRES SHALL BE CONTINUOUS WITH NO SPLICES, EXTEND A MINIMUM OF 12" ABOVE TOP OF COLLAR, AND BE COLOR CODED TO MATCH THE RESPECTIVE UTILITY SERVICE.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION
VALVE BOX AND COLLAR
DATE: 05/18/21
FIGURE: 112

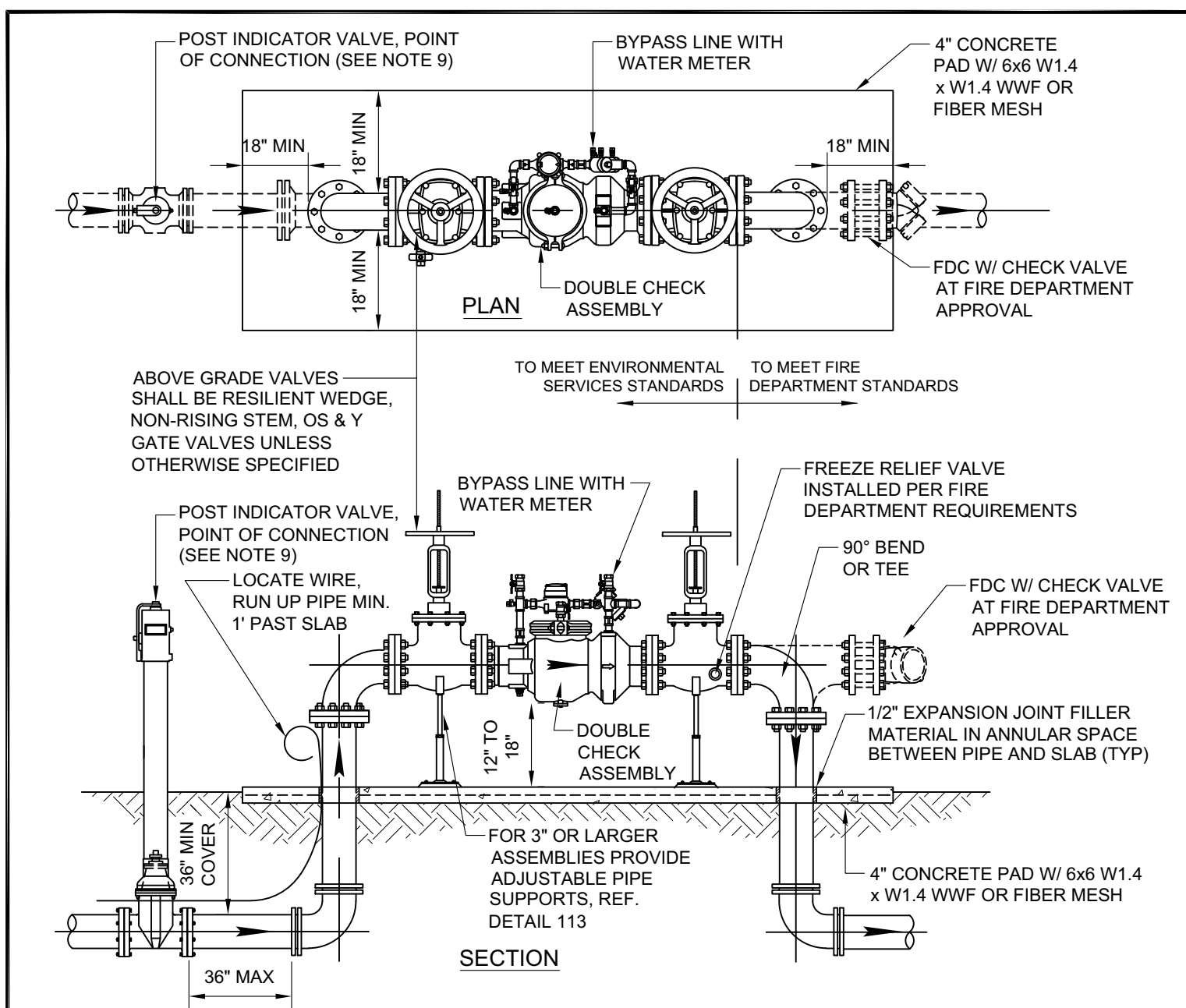
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CHECKED BY: TOM SHELTON, P.E.
TECHNICAL: J.W.H.
PROJECT NO. 22185
DATE: _____
REVISIONS: _____

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307 N. MOSS RD., SUITE 211, WINTER SPRINGS, FL 32708
(407) 357-7700

UTILITY DETAIL SHEET 1
CANDACE CARWASH
160 CANDACE DRIVE, MAITLAND FL 32751

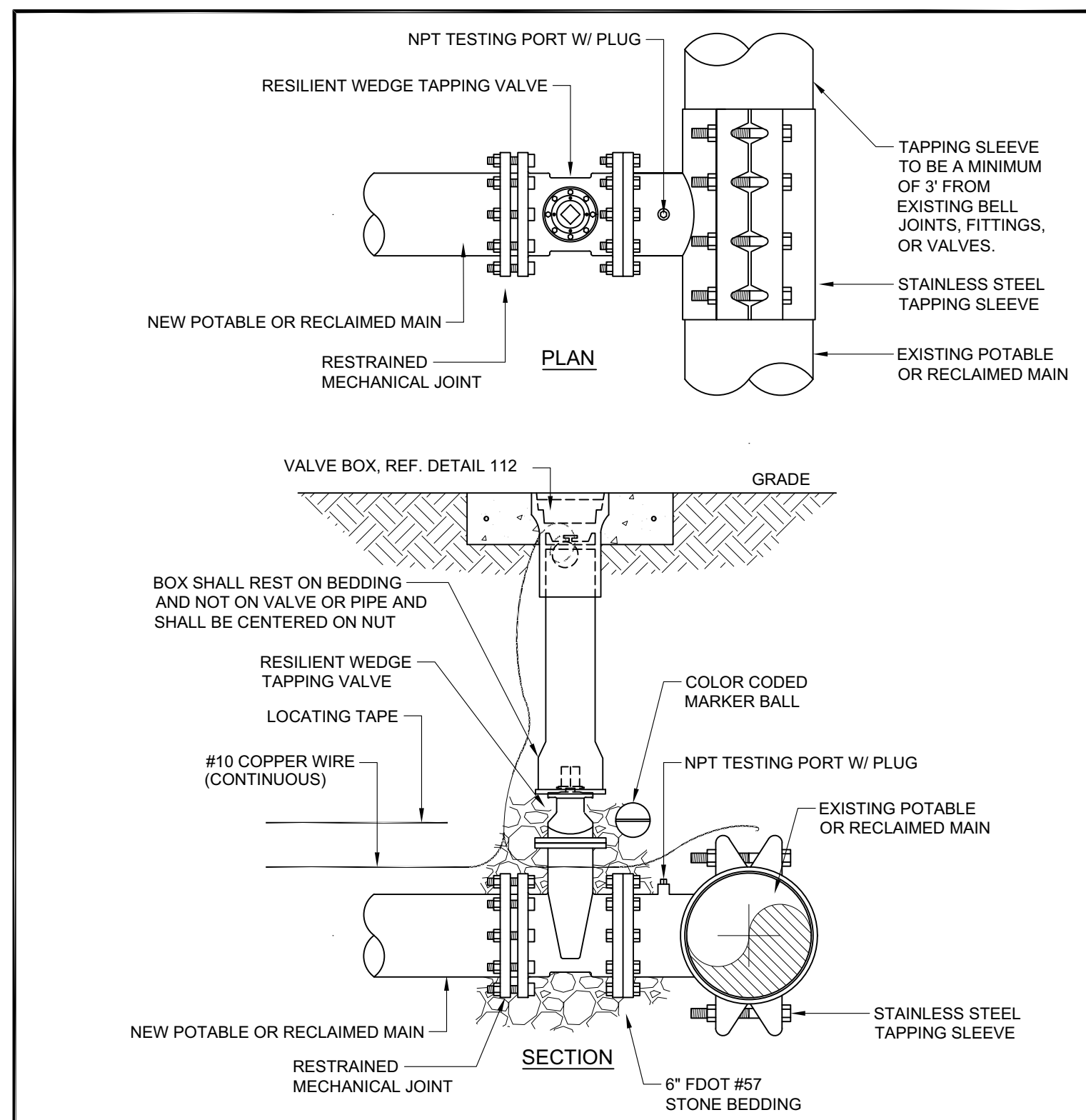
PROFESSIONAL ENGINEER
JOHN J. HERBERT IV, P.E.
LIC # 84698

4/25/2023
UTILITY DETAIL SHEET 1
PROJECT NO. 22185
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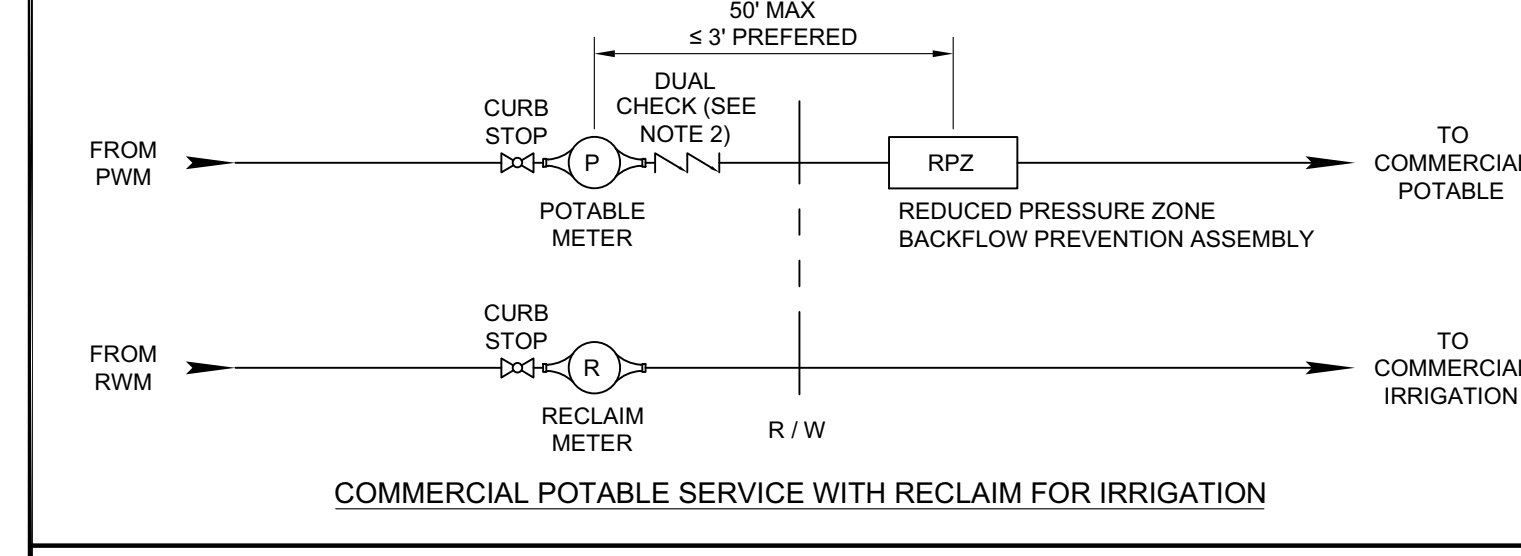
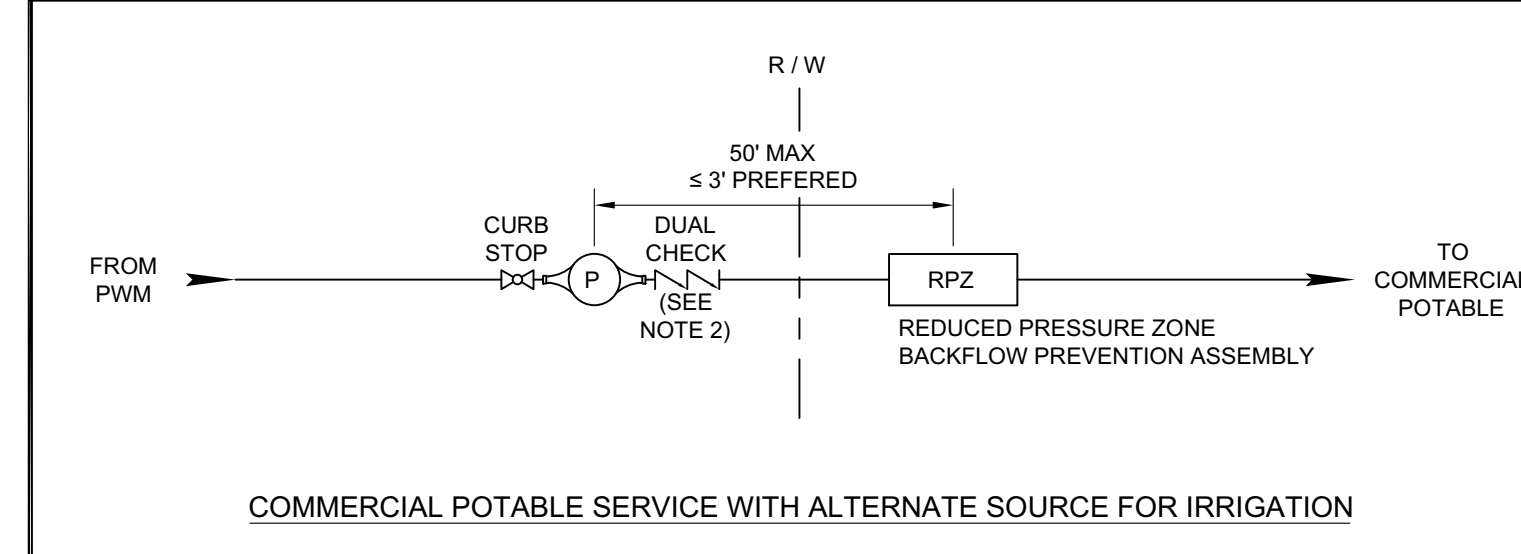
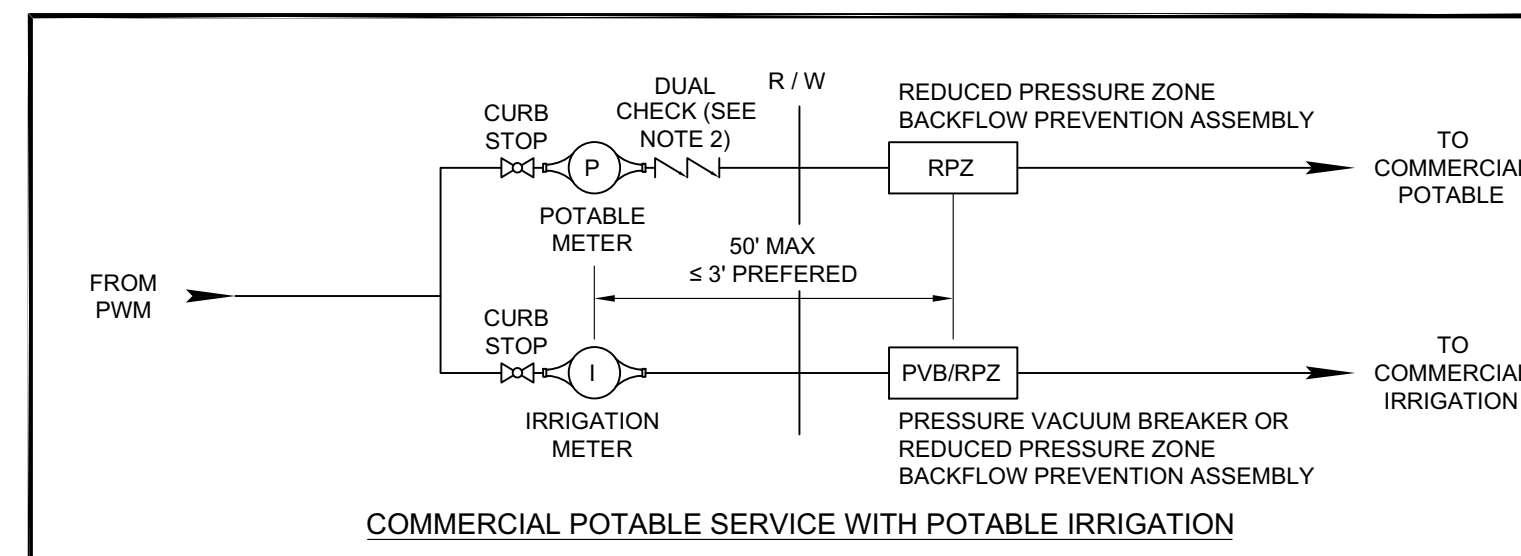
- NOTES:
1. BY-PASS METER ASSEMBLY SHALL BE REQUIRED ON MONITORED FIRE SPRINKLER PROTECTION SYSTEMS.
 2. THREE (3) INCH DIAMETER AND GREATER METER AND BACKFLOW ASSEMBLIES SHALL MEET REQUIREMENTS SET BY SEMINOLE COUNTY CROSS-CONNECTION CONTROL ORDINANCE 270.11, OR LATEST EDITION.
 3. THE OWNER/CUSTOMER, AT HIS OR HER OWN EXPENSE, SHALL INSTALL, OPERATE, TEST, AND MAINTAIN APPROVED BACKFLOW PREVENTION ASSEMBLIES, AS DIRECTED BY SEMINOLE COUNTY ENVIRONMENTAL SERVICES.
 4. ALL PIPE AND FITTINGS, LABOR, AND APPURTENANCES SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.
 5. THREE (3) INCH DIAMETER AND GREATER ABOVE GRADE PIPE AND FITTINGS SHALL BE FLANGED DUCTILE IRON WITH 316 S.S. HARDWARE. BELOW GRADE FITTINGS SHALL BE RESTRAINED MECHANICAL JOINTS.
 6. THREE (3) INCH DIAMETER AND GREATER FIRE LINES SHALL BE DUCTILE IRON PIPE FROM THE CONNECTION TO THE MAIN TO THE ASSEMBLY IF BOTH ARE LOCATED ON THE SAME SIDE OF THE STREET.
 7. THE CHECK VALVE ASSEMBLY, VALVES, PIPING, BYPASS METER AND DOUBLE CHECK SHALL BE COATED IN ACCORDANCE TO THE SEMINOLE COUNTY UTILITY ENGINEERING MANUAL.
 8. BYPASS METER AND BACKFLOW PREVENTER SHALL BE ASSEMBLED WITH APPROPRIATE FITTINGS TO ALLOW REMOVAL AND RE-INSTALLATION.
 9. POST INDICATOR VALVE SHALL BE INSTALLED UPSTREAM OF DOUBLE DETECTOR CHECK VALVE ASSEMBLY AND DOWNSTREAM OF ALL OTHER POTABLE WATER CONNECTIONS.
 10. CONCRETE PAD SHALL EXTEND 18 INCHES OUT FROM OUTSIDE EDGE OF ABOVE GRADE PIPING, ALL AROUND, AND SHALL BE A CONTINUOUS MONOLITHIC POUR, REINFORCED WITH 6"x6" W1.4W1.4 WF OR FIBER-MESH.
 11. TAMPER SWITCHES SHALL BE INSTALLED PER AND INSPECTED BY FIRE DEPARTMENT.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION DATE: 05/18/21
DOUBLE DETECTOR CHECK VALVE ASSEMBLY FIGURE: 203



- NOTES:
1. THIS DETAIL IS INCOMPLETE WITHOUT ACCOMPANYING DETAIL 111 AND 112.
 2. TAPPING SLEEVE AND VALVE SHALL BE INSTALLED AND TESTED UNDER WITNESS OF A REPRESENTATIVE FROM SEMINOLE COUNTY UTILITY ENGINEERING DIVISION.
 3. TAPPING SLEEVE SHALL BE INSTALLED TO EXISTING MAIN PER MANUFACTURER'S INSTRUCTIONS, ALL HARDWARE TO BE TORQUED TO MANUFACTURER'S SPECIFICATIONS.
 4. TAPPING SLEEVE AND VALVE SHALL BE PRESSURE TESTED IN ACCORDANCE TO THE UTILITY ENGINEERING MANUAL (150 PSI FOR 15 MINUTES FOR POTABLE AND RECLAIM WATER MAINS) PRIOR TO TAPPING EXISTING MAIN.
 5. VALVE EXTENSION STEM REQUIRED IF TOP OF VALVE OPERATING NUT IS GREATER THAN 3\"/>

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION DATE: 05/18/21
POTABLE & RECLAIM MAIN WET TAP FIGURE: 204



- NOTES:
1. APPLICABLE FOR COMMERCIAL SERVICE INSTALLATIONS UP TO 2\"/>

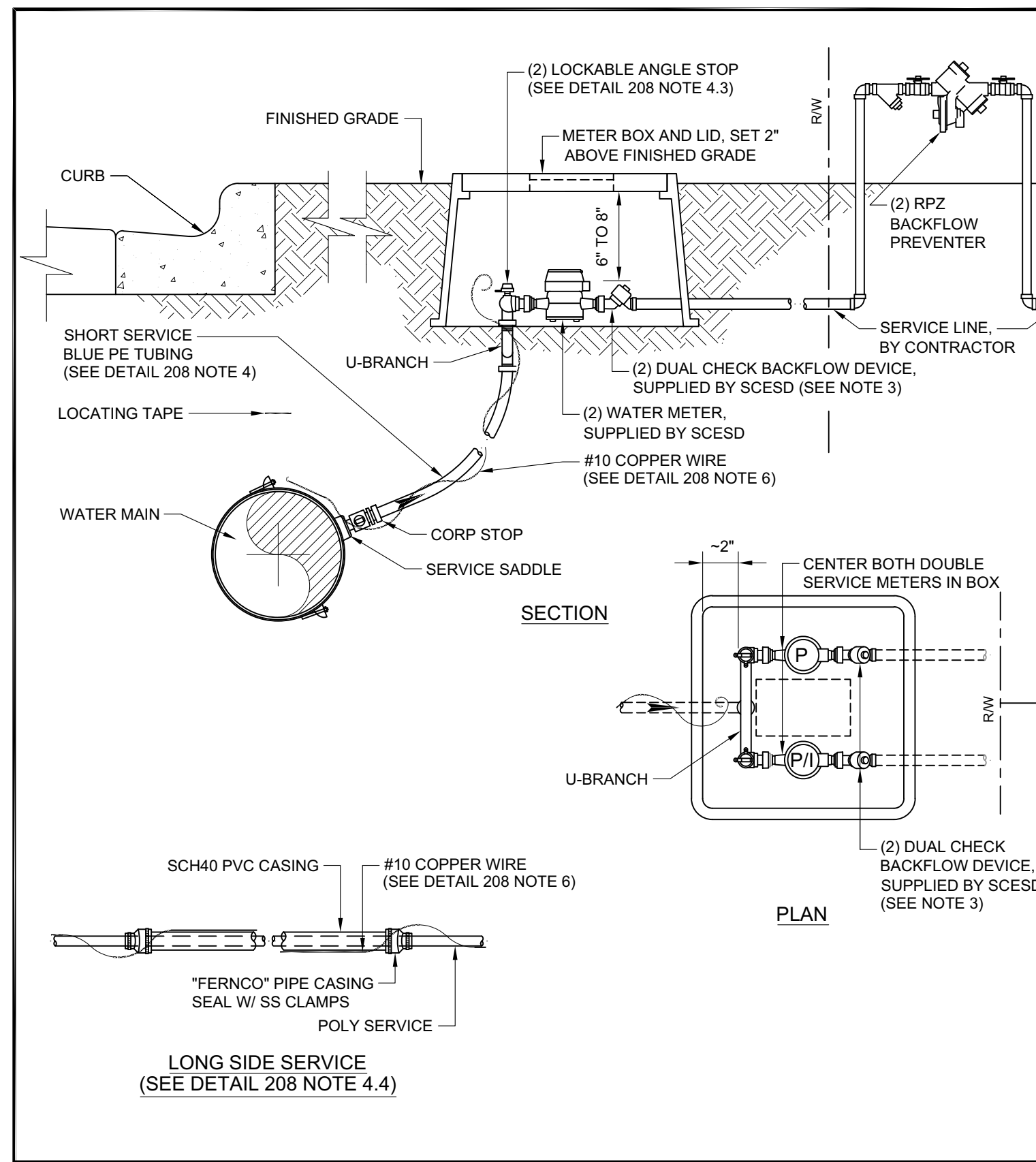
SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION DATE: 05/18/21
COMMERCIAL CROSS CONNECTION CONTROL (≤ 2\"/>

TABLE 208.1 SINGLE POTABLE OR RECLAIM METER SERVICE MATERIALS						
METER	SERVICE SADDLE		CORPORATION STOP	SERVICE LINE	CURB STOPS	
	PVC/DIP MAIN	HDPE MAIN			SHORT SERVICE	LONG SERVICE
SINGLE 3/4"	X" x 1" CC W/ DOUBLE STEEL STRAPS	X" x 2" CC W/ DOUBLE SS BANDS	1" CC x 1" PACKED JOINT CTS	1" DR9 PE3408PE4710 TUBING	1" PACKED JOINT CTS x 5/8X3/4" MSN ANGLE STOP	1" PACKED JOINT CTS x 5/8X3/4" MSN STRAIGHT STOP
SINGLE 1"	X" x 1" CC W/ DOUBLE STEEL STRAPS	X" x 1" CC W/ DOUBLE SS BANDS	1" CC x 1" PACKED JOINT CTS	1" DR9 PE3408PE4710 TUBING	1" PACKED JOINT CTS x 1" MSN ANGLE STOP	1" PACKED JOINT CTS x 1" MSN STRAIGHT STOP
SINGLE 1-1/2"	X" x 1-1/2" FPT W/ DOUBLE STEEL STRAPS	X" x 1-1/2" FPT W/ DOUBLE SS BANDS	1-1/2" MPT x 1-1/2" PACKED JOINT CTS	1-1/2" DR9 PE3408PE4710 TUBING	1-1/2" PACKED JOINT CTS x 1-1/2" MF ANGLE STOP	1-1/2" PACKED JOINT CTS x 1-1/2" MF STRAIGHT STOP
SINGLE 2"	X" x 2" FPT W/ DOUBLE STEEL STRAPS	X" x 2" FPT W/ DOUBLE SS BANDS	2" MPT x 2" PACKED JOINT CTS	2" DR9 PE3408PE4710 TUBING	2" PACKED JOINT CTS x 2" MF ANGLE STOP	2" PACKED JOINT CTS x 2" MF STRAIGHT STOP

TABLE 208.2 DOUBLE POTABLE / IRRIGATION METER SERVICE MATERIALS						
METER	SERVICE SADDLE		CORPORATION STOP	SERVICE LINE	CURB STOPS	
	PVC/DIP MAIN	HDPE MAIN			SHORT SERVICE	LONG SERVICE
DOUBLE 3/4"	X" x 1-1/2" FPT W/ DOUBLE STEEL STRAPS	X" x 1-1/2" FPT W/ DOUBLE SS BANDS	1-1/2" MPT x 1-1/2" PACKED JOINT CTS	1-1/2" DR9 PE3408PE4710 TUBING	3/4" FPT x 5/8X3/4" MSN ANGLE STOP	3/4" FPT x 5/8X3/4" MSN STRAIGHT STOP
DOUBLE 1"	X" x 1-1/2" FPT W/ DOUBLE STEEL STRAPS	X" x 1-1/2" FPT W/ DOUBLE SS BANDS	1-1/2" MPT x 1-1/2" PACKED JOINT CTS	1-1/2" DR9 PE3408PE4710 TUBING	1" FPT x 1" MSN ANGLE STOP	1" FPT x 1" MSN STRAIGHT STOP

TABLE 208.3 DOUBLE RECLAIM METER SERVICE MATERIALS						
METER	SERVICE SADDLE		CORPORATION STOP	SERVICE LINE	CURB STOPS	
	PVC/DIP MAIN	HDPE MAIN			SHORT SERVICE	LONG SERVICE
DOUBLE 1"	X" x 1-1/2" FPT W/ DOUBLE STEEL STRAPS	X" x 1-1/2" FPT W/ DOUBLE SS BANDS	1-1/2" MPT x 1-1/2" PACKED JOINT CTS	1-1/2" DR9 PE3408PE4710 TUBING	1" PACKED JOINT CTS x 1" MSN ANGLE STOP	1" PACKED JOINT CTS x 1" MSN STRAIGHT STOP

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION DATE: 05/18/21
METER SET NOTES AND MATERIALS FIGURE: 208



- NOTES:
1. THIS DETAIL IS INCOMPLETE WITHOUT DETAIL 208 - METER SET NOTES.
 2. DETAIL APPLICABLE FOR DOUBLE COMMERCIAL POTABLE / IRRIGATION METER SETS FROM 3/4\"/>

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION DATE: 05/18/21
DOUBLE COMMERCIAL POTABLE / IRRIGATION METER FIGURE: 212

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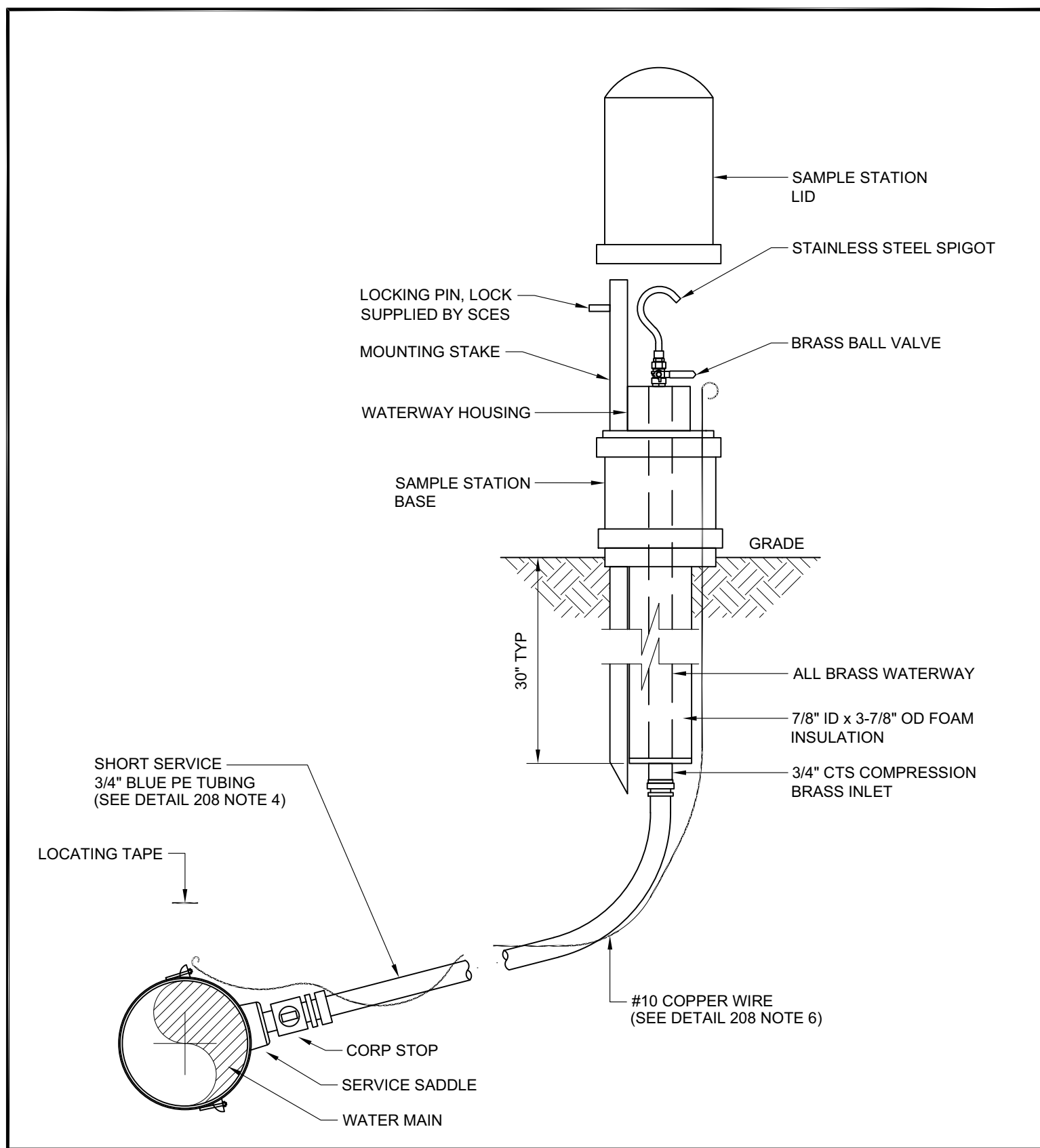
UTILITY DETAIL SHEET II
CANDACE CARWASH
 160 CANDACE DRIVE, MAITLAND FL 32751

JOHN H. HERBERT IV, P.E.
 LIC # 84698

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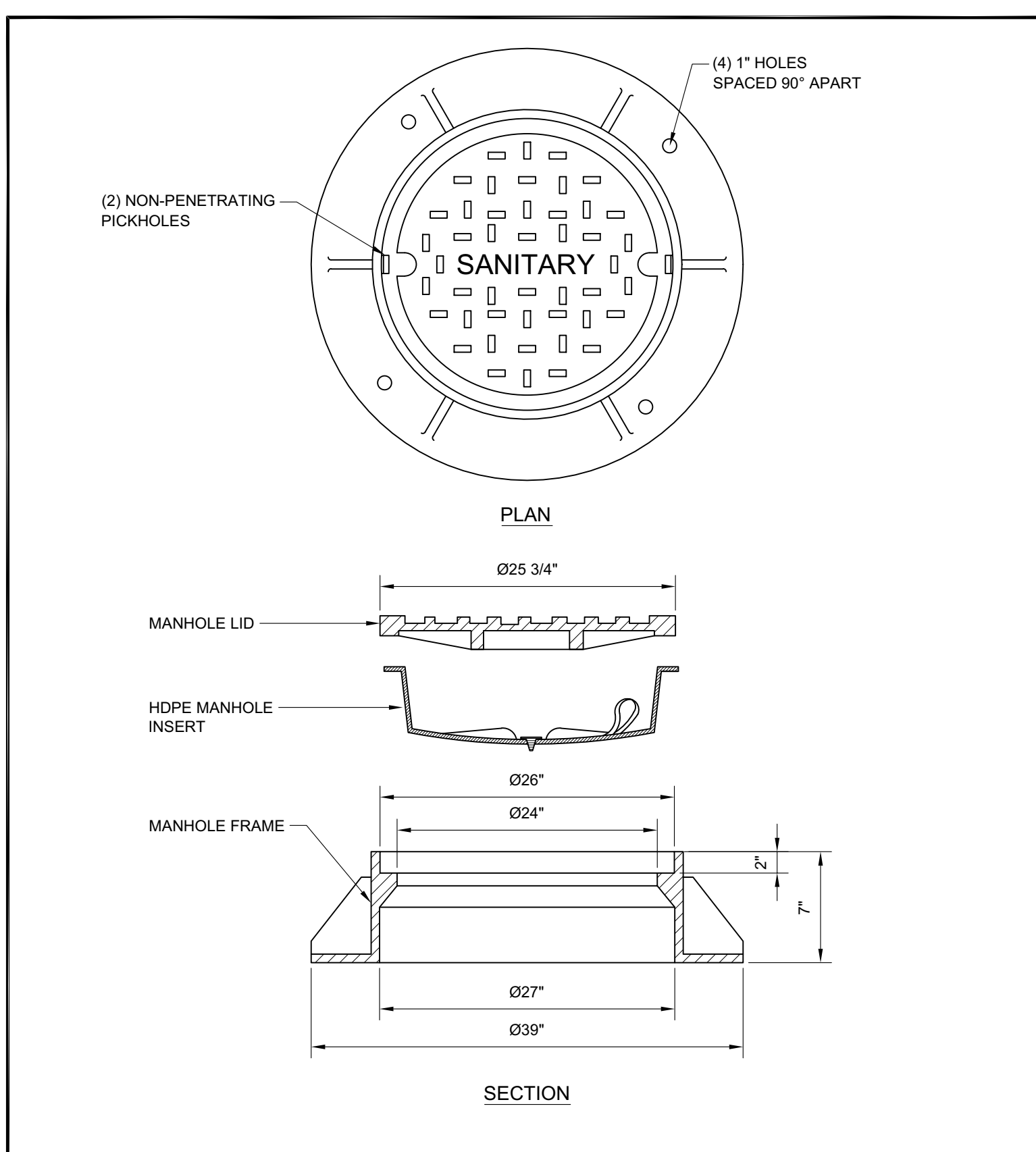


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 Seminole County Government
 Planning & Development Division



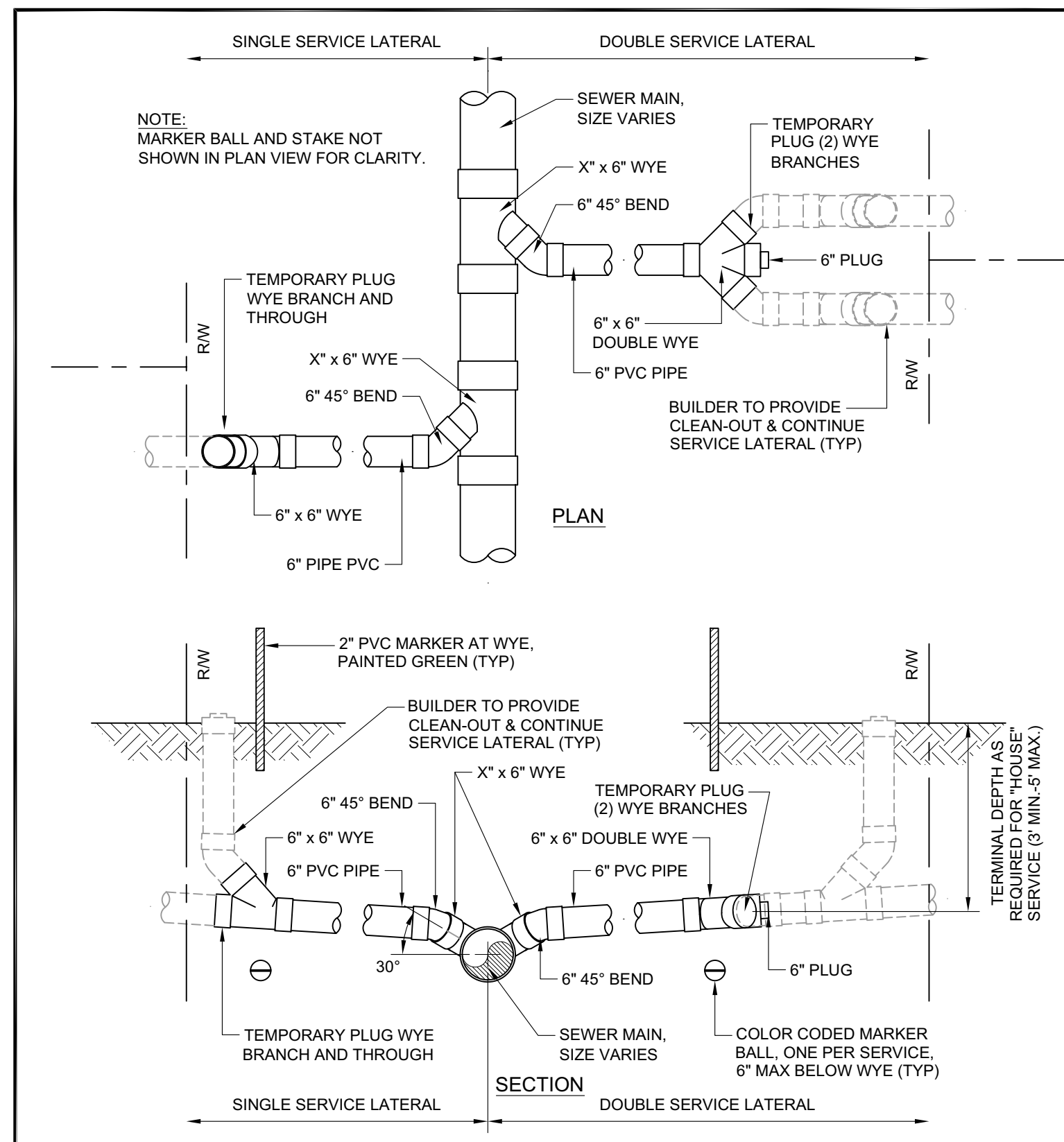
NOTES:
 1. SAMPLE POINT STATIONS SHALL BE LOCATED AT ALL INTERCONNECTS, ENTRANCE TO GATED COMMUNITIES AND EVERY 3,000 LINEAR FEET ON ANY TRUNK/TRANSMISSION WATER MAIN AS TO BE DETERMINED BY SEMINOLE COUNTY ENVIRONMENTAL SERVICES OPERATIONS AND/OR ENGINEERING DIVISIONS.
 2. REFERENCE DETAIL 208 FOR SERVICE MATERIALS.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION	DATE: 05/18/21
SAMPLE POINT STATION	FIGURE: 221



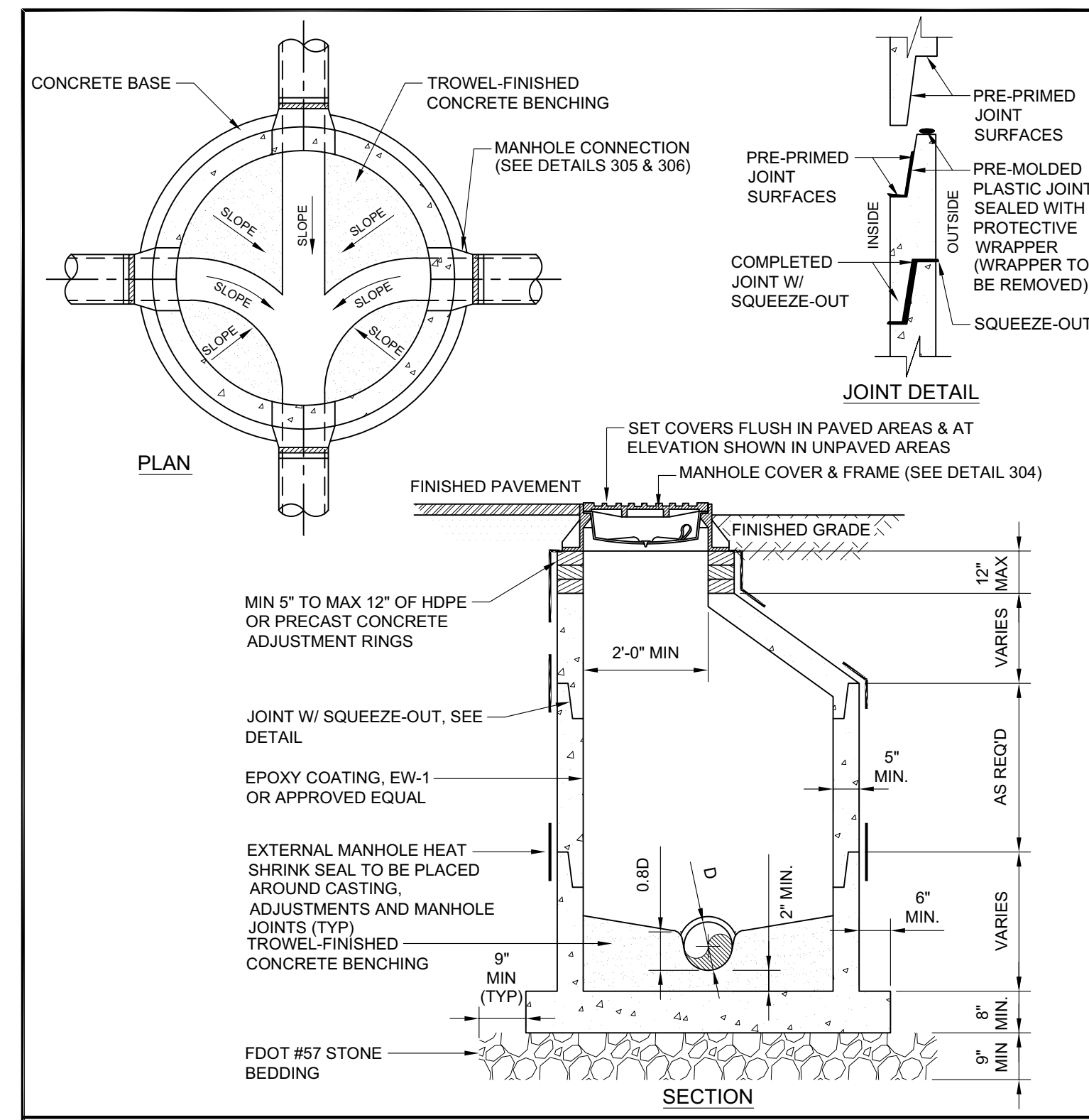
NOTES:
 1. LOAD CLASSIFICATION: HEAVY DUTY, AASHTO M306.
 2. MATERIAL: GRAY IRON CONFORMING TO ASTM A48 CL35B.
 3. COVER TO BE MARKED WITH RAISED LETTERING "SEWER".
 4. FRAME AND COVER SHALL HAVE MACHINED WATERTIGHT MATING SURFACES.
 5. DETAIL APPLICABLE TO PUBLIC AND PRIVATELY OWNED MANHOLES.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION	DATE: 05/18/21
MANHOLE COVER & FRAME	FIGURE: 304



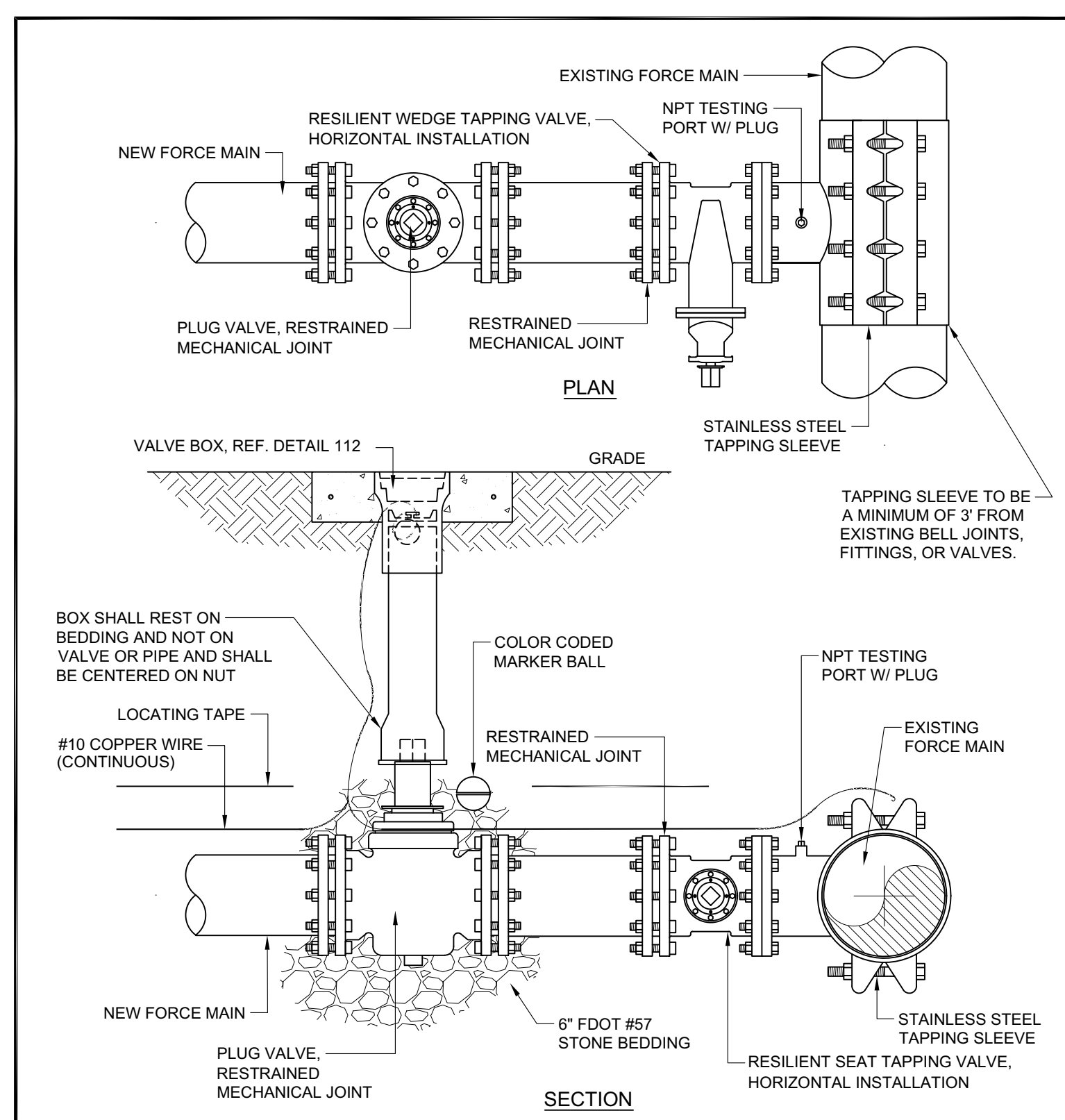
NOTES:
 1. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SEWER MAINS' SPRING LINE.
 2. SERVICE LATERAL SHALL BE TEMPORARILY PLUGGED AT TERMINAL WYE BY DEVELOPER.
 3. LATERAL LOCATIONS SHALL BE MARKED BY ETCHING OR CUTTING A 3\"/>

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION	DATE: 05/18/21
SANITARY SEWER SERVICE LAYOUT	FIGURE: 301



NOTES:
 1. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT GRAVITY SEWER IS 24\"/>

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION	DATE: 05/18/21
ECCENTRIC MANHOLE	FIGURE: 302



NOTES:
 1. THIS DETAIL IS INCOMPLETE WITHOUT ACCOMPANYING DETAIL 111 AND 112.
 2. TAPPING SLEEVE AND VALVE SHALL BE INSTALLED AND TESTED UNDER WITNESS OF A REPRESENTATIVE FROM SEMINOLE COUNTY UTILITY ENGINEERING DIVISION.
 3. TAPPING SLEEVE SHALL BE INSTALLED TO EXISTING MAIN PER MANUFACTURES INSTRUCTIONS. ALL HARDWARE TO BE TORQUED TO MANUFACTURES SPECIFICATIONS.
 4. TAPPING SLEEVE AND VALVE SHALL BE PRESSURE TESTED IN ACCORDANCE TO THE UTILITY ENGINEERING MANUAL (100 PSI FOR 15 MINUTES FOR SANITARY SEWER FORCE MAINS) PRIOR TO TAPPING EXISTING MAIN.
 5. VALVE EXTENSION STEM REQUIRED IF TOP OF VALVE OPERATING NUT IS GREATER THAN 3\"/>

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION	DATE: 05/18/21
FORCE MAIN WET TAP	FIGURE: 314

NOTE: ALL INFORMATION CONTAINED HEREIN IS PROPERTY OF AMERICAN CIVIL ENGINEERING CO. ALL RIGHTS RESERVED. COPY RIGHT 2022.
 ENGINEER: JOHN J. HERBERT IV, P.E.
 CHECKED BY: TOM SHELTON, P.E.
 TECHNICIAN: J.W.H.
 PROJECT NO. 22185
 MADE IN USA

DATE	REVISIONS

AMERICAN CIVIL ENGINEERING CO.
 307 N. MOSS RD., SUITE 211, WINTER SPRINGS, FL 32708
 (407) 327-7700
 cert. of authorization number 0723

UTILITY DETAIL SHEET III
CANDACE CARWASH
 160 CANDACE DRIVE, MAITLAND FL 32751
 JOHN J. HERBERT IV, P.E.
 LIC # 84698
 4/25/2023
 UTILITY DETAIL SHEET III
 PROJECT NO. 22185
C12.0

APPROVED
 Seminole County Government
 Planning & Development Division

NOTE: COMPLETE SYSTEM TO BE SUPPLIED BY:
RILEY & COMPANY, INC.
 SANFORD, FL 32773
 (407)265-9963

NO SUBSTITUTIONS - NO ALTERNATES
LIFT STATION WILL BE PRIVATELY OWNED AND MAINTAINED.

The H-20 Load Rated Fiberglass Wetwell Must Be Manufactured By L.F. Manufacturing, Giddings, Texas, Which Includes a 20 Yr. Warranty.
 Certification of the wetwell H-20 load rating must be supplied with submittals.
 H-20 certification must be signed and sealed by an engineer registered in the State of Florida.
 After the H-20 load rated wetwell has been installed, the ASTM Certification Number and Serial Tracking Number must be visible inside wetwell.

PUMPS: (3 YR. WARRANTY)
 Submersible grinder pumps shall be HOMA Model RC30045. The pumps shall be installed in the H-20 GP FRP wetwell utilizing a slide rail system. The grinder unit shall be capable of macerating materials normally found in domestic and commercial sewage into a fine slurry which will pass through the pump and the HDPE discharge piping.
 Stator winding shall be open type with Class H insulation and shall be heat-shrink fitted into the stator housing. The use of pins, bolts, or other fastening devices is not acceptable.
 A heat sensor thermostat shall be attached to the top end of the motor winding and shall be connected in series with the magnetic contactor coil in the control panel to stop motor if winding temperature exceeds 140 C., but shall automatically reset when the winding temperature returns to normal. Two heat sensor thermostats shall be used on three phase motors.
 The pump motor grinder shaft shall be AISI 430F SS threaded to take the pump impeller and the grinder impeller.
 Upper & lower mechanical seals shall be Silicon Carbide vs Silicon Carbide.

DUPLEX CONTROL PANEL: (3 YR. WARRANTY)
 To insure complete unit and warranty responsibility the electrical control panel must be manufactured and built by the pump supplier. The pump supplier must be a TUV (UL508A CERTIFIED) manufacturing facility, with a minimum of 10 years history in the manufacturing of electrical control panels.

The enclosure shall be NEMA 4X, minimum 30" high x 30" wide x 10" deep fiberglass with 4 point latching system.
 The enclosure shall have external mounting feet to allow for wall mounting.
 The following components shall be mounted through the enclosure:
 1- ea. Red Alarm Beacon (Light) 4" x 4" Minimum Diameter
 1- ea. Alarm Horn (minimum 95 DCB)
 1- ea. Generator Receptacle w/ weatherproof cover(SCM460 -UL 1686)
 1- ea. Alarm Silence Pushbutton

The back panel shall be fabricated from .125, 5052-H32 marine alloy aluminum. All components shall be mounted by machined stainless steel screws.

The following components shall be mounted to back panel:
 2- ea. Motor Contactors
 1- ea. Phase Monitor (3 Ph) w/2 N/O & 1 N/C Contacts
 1- ea. Control Transformer (480 Volt Only) (Min. 500VA)
 1- ea. Lightning Arrestor
 1- ea. Silence Relay Module
 1- ea. Duplex Alternator w/ Pump Selector Switch
 1- ea. Model RCBB5AH Battery Back-Up w/ Smart Charger For The High Level Alarm System
 20- ea. Terminals For Field Connections
 6- ea. Terminals For Motor Connections (Single Phase Only)
 7- ea. Grounding Lugs
 1- ea. Seal Failure Relay

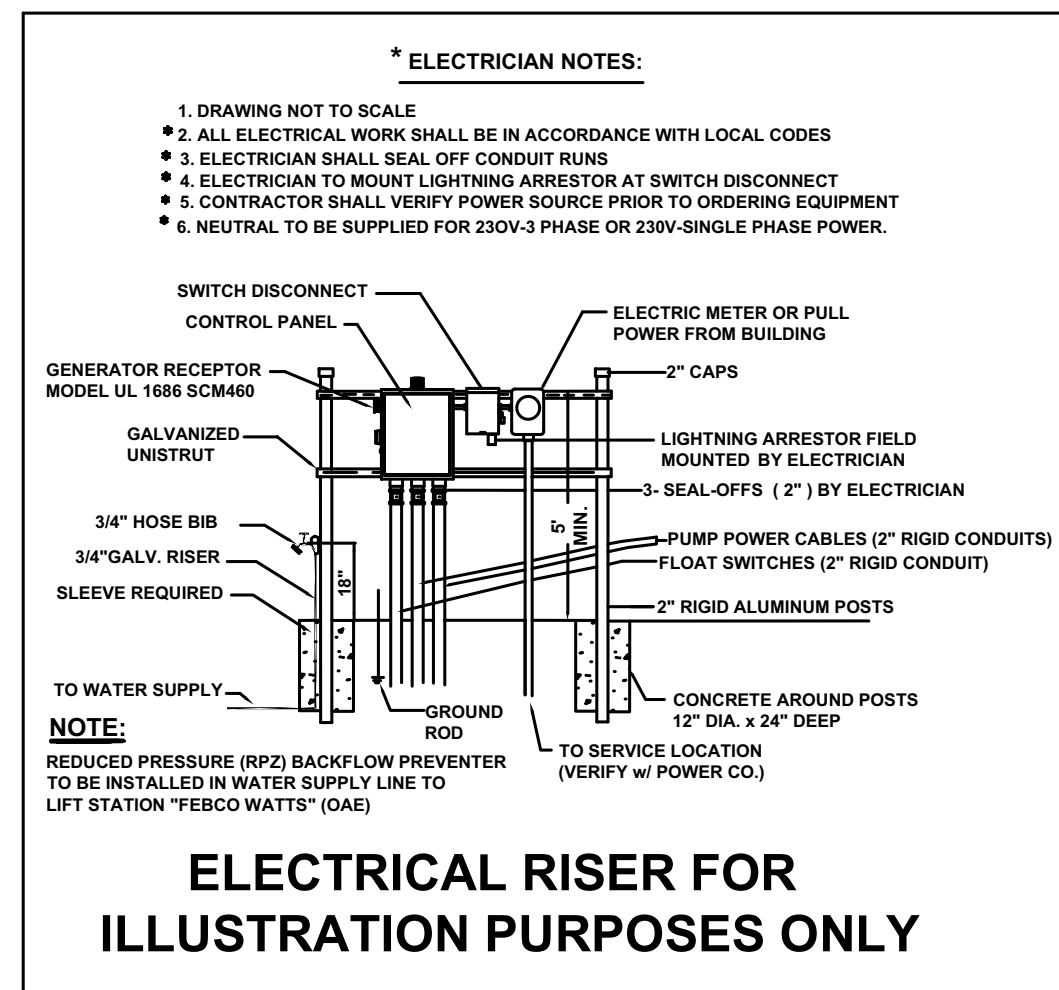
The inner door shall be fabricated from .080, 5052-H32 marine alloy aluminum. The inner door shall have a continuous aluminum piano hinge.

The following components shall be mounted through the inner door:
 1- ea. Main Circuit Breaker
 1- ea. Emergency Circuit Breaker
 1- ea. Mechanical Interlock For Emergency And Main Breakers (UL Listed)
 2- ea. Short Circuit Protectors w/ Auxiliary Contacts
 1- ea. Control Circuit Breaker
 2- ea. Seal Failure Indicator Lights
 1- ea. Hand-Off-Auto Selector Switches
 2- ea. Pump Run Pilot Lights
 1- ea. Power On Pilot Light
 2- ea. Elapse Time Meters (Non-Resettable)
 1- ea. GFI Duplex Convenience Outlet

RILEY & Company, Inc. (H-20 GP)

w/ BATTERY BACK-UP FOR AUDIO - VISUAL ALARMS ©

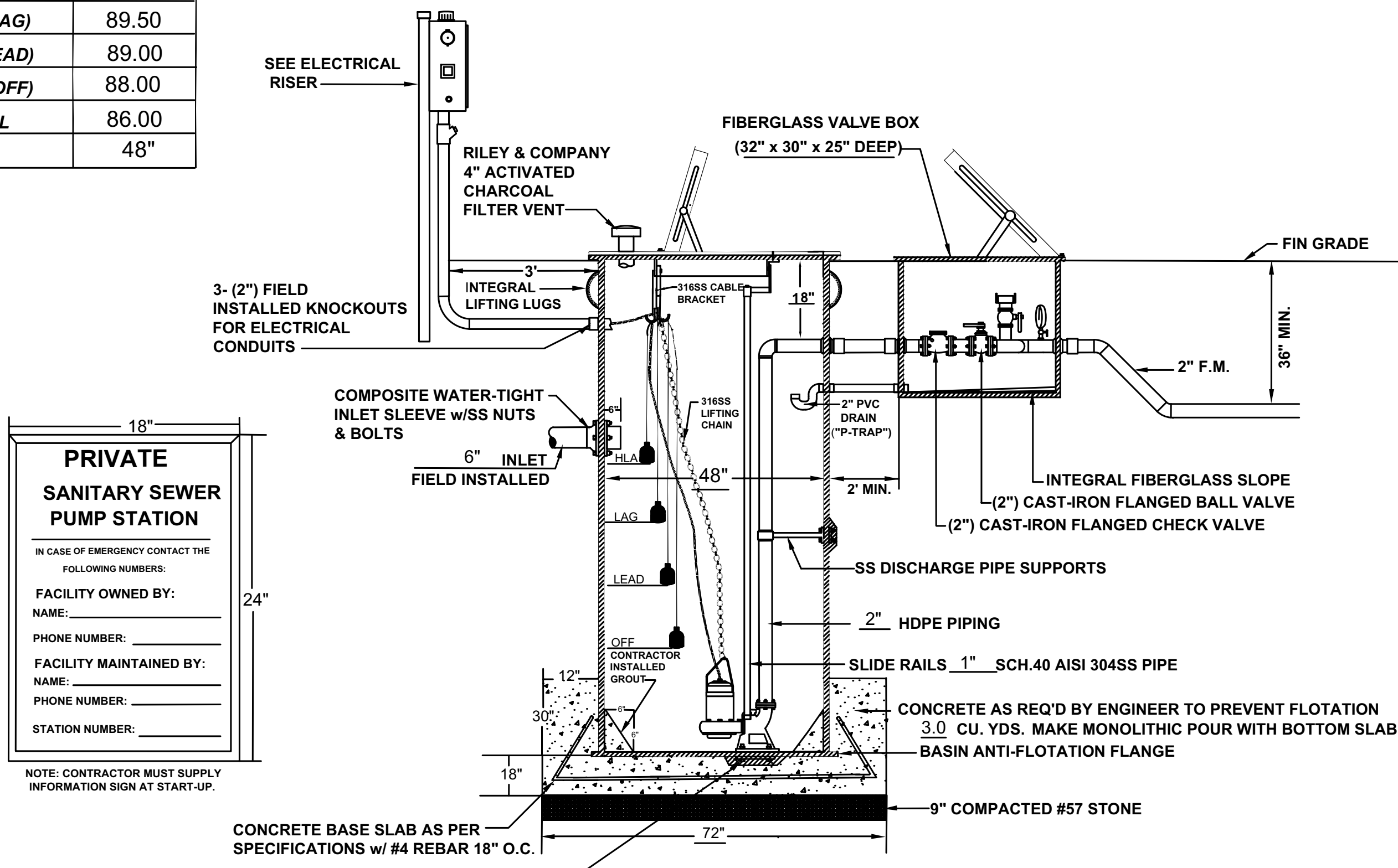
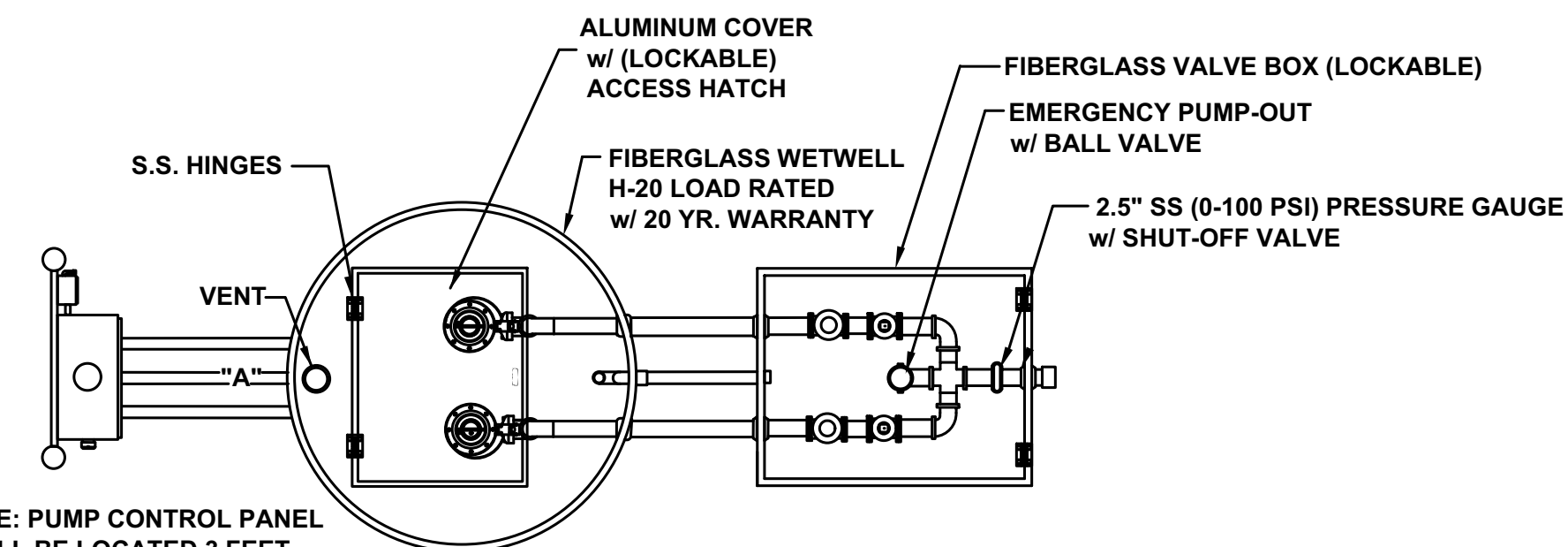
PUMP DATA		ELEVATIONS	
PRIMARY PUMP CAPACITY	103 GPM	TOP OF WETWELL	95.00
PRIMARY TDH	61 'TDH	INLET INVERT	90.68
PUMP MANUFACTURER	HOMA	HIGH LEVEL ALARM (HLA)	90.00
PUMP MODEL #	RC30045	2nd PUMP ON (LAG)	89.50
R.P.M.	3450	1st PUMP ON (LEAD)	89.00
HORSEPOWER	4.10	PUMPS OFF (OFF)	88.00
IMPELLER DIAMETER	5 9/16"	BOTTOM OF WETWELL	86.00
ELECTRICAL/ VOLTS / PHASE	230V/3	WETWELL DIAMETER	48"
FULL LOAD AMPS/ PER PUMP	10.40		
PUMP DISCHARGE SIZE	2"		



NOTES:

- Water service with hose bibb and reduced pressure backflow preventer to be installed near lift station. (See Electrical Riser Illustration)
- System shall be operated and maintained to provide uninterrupted service as required by DEP Chapter 62-604.500.
- Approved Operation & Maintenance Manual(O&M) shall be kept available for operation and maintenance personnel
- A weather resistant emergency contact sign shall be installed at the lift station and made visible to the public (Lettering shall be min. 2" in height)
- INSPECTION & TESTING: A factory representative shall be provide for a one (1) time start-up and shall have complete knowledge of the proper operation and maintenance for the complete system.

10-24-2022



PRIVATE SANITARY SEWER PUMP STATION

IN CASE OF EMERGENCY CONTACT THE FOLLOWING NUMBERS:

FACILITY OWNED BY:
 NAME: _____
 PHONE NUMBER: _____

FACILITY MAINTAINED BY:
 NAME: _____
 PHONE NUMBER: _____
 STATION NUMBER: _____

NOTE: ELECTRICAL INFORMATION IS SHOWN FOR REFERENCE ONLY AND IS NOT INCLUDED AS PART OF THE ENGINEERING DESIGN OR CERTIFICATION BY THE PROFESSIONAL ENGINEER. ANY ELECTRICAL DESIGN NEEDED FOR THE LIFT STATION SHALL BE CONFIRMED AND CERTIFIED BY A PROFESSIONAL ELECTRICAL ENGINEER.

THIS IS A COPYRIGHTED DRAWING. ANY CHANGES OR MODIFICATIONS WITHOUT WRITTEN APPROVAL FROM RILEY & COMPANY, INC. IS STRICTLY PROHIBITED ©

REVISIONS	BY

RILEY & Company, Inc.
 5491 Benchmark Lane
 Sanford, FL 32773
 PH. 407-265-9963

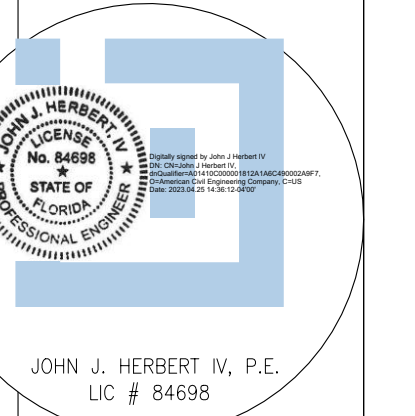
CANDACE CARWASH

DRAWN
CHECKED
DATE
SCALE
JOB NO.

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 ENGINEER: JOHN J. HERBERT IV, P.E.
 CHECKED BY: TOM SHELTON, P.E.
 TECHNICIAN: J.W.H.
 PROJECT NO. 22185
 DATE

AMERICAN CIVIL ENGINEERING CO.
 207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
 (407) 327-7700
 cert. of authorization number 0729

LIFT STATION
CANDACE CARWASH
 160 CANDACE DRIVE, MAITLAND FL 32751



4/25/2023
 LIFT STATION
 PROJECT NO. 22185

C13.0

P222-06000035
 08/02/23
APPROVED
 Seminole County Government
 Planning & Development Division

Lighting Design Information: Calculated lighting levels are based on specific luminaire and are based on specific luminaire and are based on specific luminaire. Any inaccuracies in the layout or installation, lighting design, or other factors may affect the lighting results. The lighting design is based on the information provided in the drawings and is not a guarantee of performance. The lighting design is based on the information provided in the drawings and is not a guarantee of performance. The lighting design is based on the information provided in the drawings and is not a guarantee of performance.

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SITE LIGHTING CALCULATIONS
CANDACE CAR WASH MAITLAND (WO#45822558)
160 CANDACE DR MAITLAND FL 32751

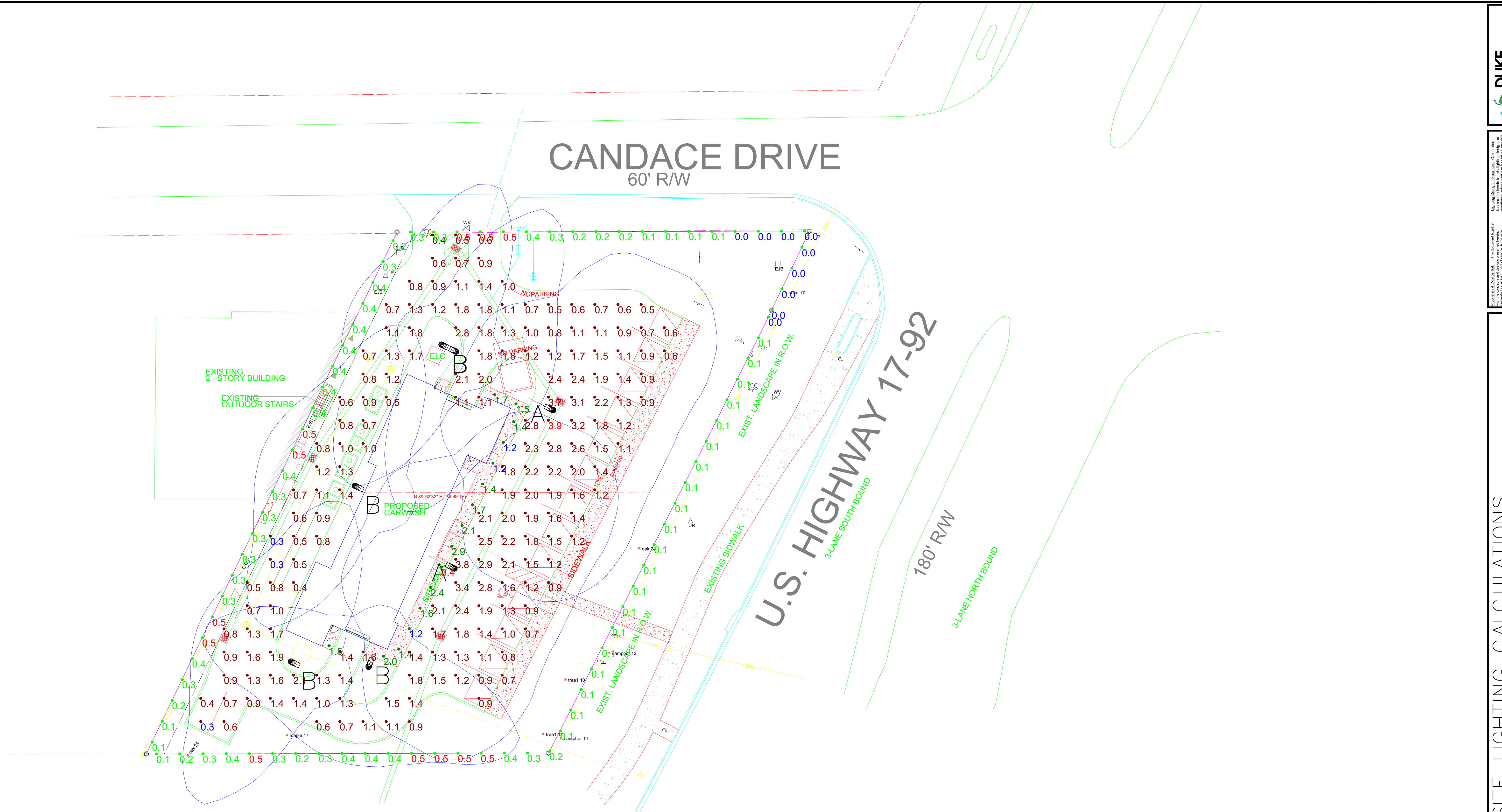
Designer
G. SEEL
Date
3/25/2023
Scale
AS SHOWN
Drawing No.
SLS-001
1 OF 1

CANDACE DRIVE

60' R/W

U.S. HIGHWAY 17-92

3-LANE SOUTH BOUND
180' R/W
3-LANE NORTH BOUND

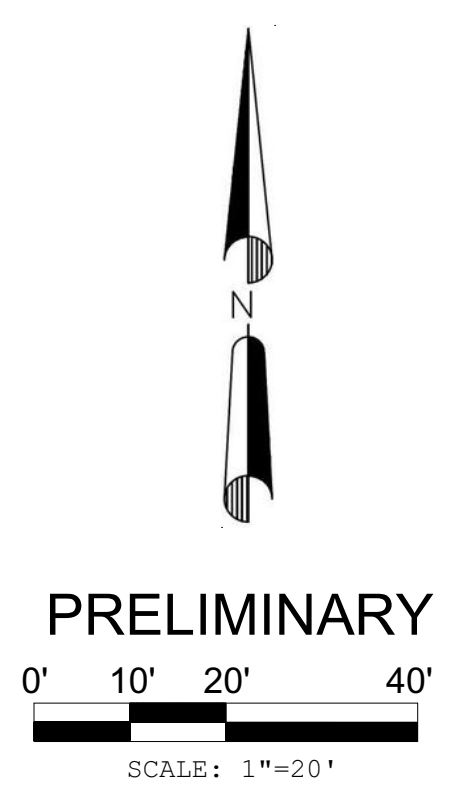


FIXTURE MOUNTING HEIGHT IS 24'8"

Luminaire Schedule			
Symbol	Label	Qty	Description
	A	2	110W, ROADWAY III 3K, GRAY
	B	5	50W, LED ROADWAY II, GRAY

Parts List			
Item No.	Qty	Description	CU Number
1	5	50W, LED ROADWAY II, GRAY	LFIX-RW-LED-50-GRAY-II-MICRO-3000K-OH-F
2	2	110W, ROADWAY III 3K, GRAY	LFIX-RW-LED-110-GRAY-III-3000K-OH-F
3	5	ARM, 20" UP GALV	LBKT-UP-STL-20IN-GALV-12IN-F
4	2	ARM, 6' UP GALV	LBKT-UP-STL-6FT-GALV-30IN-F
5	6	POLE, 30' CONCRETE, TENON, GRAY	LPOLE-T1-CTE-30FT-F

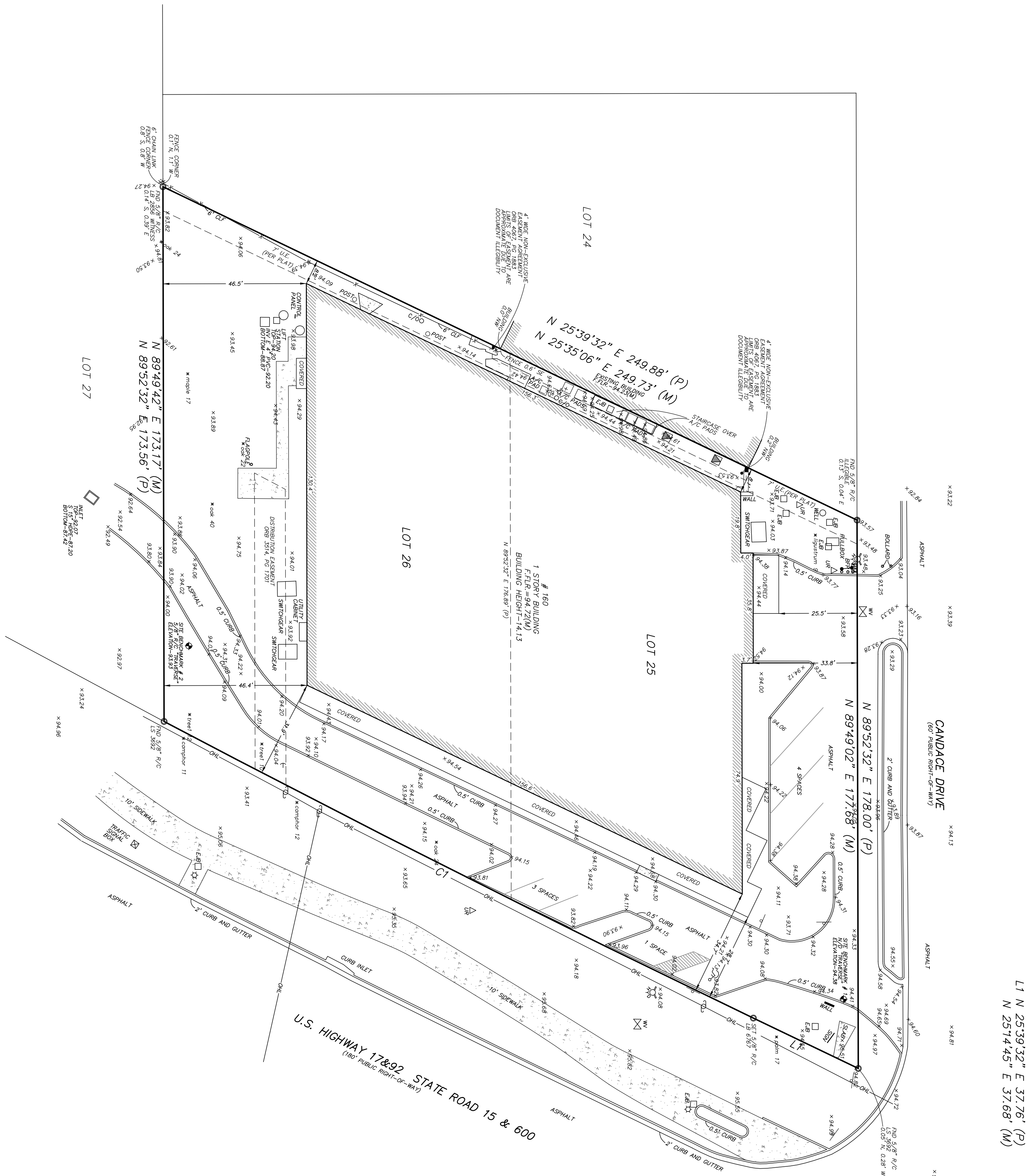
Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts1	Fc	1.36	3.9	0.3	4.53	13.00
Property Lines	Fc	0.24	0.5	0.0	N.A.	N.A.
Sidewalk	Fc	1.79	3.4	1.2	1.49	2.83



ELECTRICAL FILE: CONSULT ELECTRICAL ENGINEER FOR LOCATION OF WIRING IN BUILDING. WORK ON THE ELECTRICAL AND/OR THE STAMP SHOULD BE DONE IN ACCORDANCE WITH THE CODES OF THE STATE AND LOCAL JURISDICTIONS. THE LOCATION OF UTILITIES IS SHOWN FOR INFORMATION ONLY. THE LOCATION OF UTILITIES IS NOT GUARANTEED BY THIS SURVEY. THE LOCATION OF UTILITIES IS NOT GUARANTEED BY THIS SURVEY. THE LOCATION OF UTILITIES IS NOT GUARANTEED BY THIS SURVEY.

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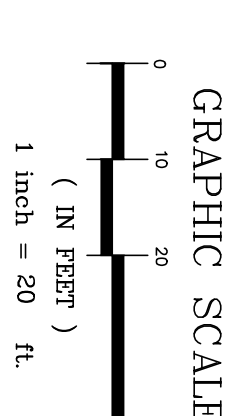
BOUNDARY & TOPOGRAPHIC SURVEY
 LOTS 25 & 26, BLOCK B, SEMINOLE INDUSTRIAL PARK 2ND. ADD.
 MAINTENANCE DRIVE, SEMINOLE COUNTY, FLORIDA



L1 N 25°39'32" E 37.76' (P)
 N 25°14'45" E 37.68' (M)

C1 (M)
 Δ = 211.26"
 R = 5599.65'
 L = 214.10'
 CB = N26°43'44"E
 CH = 214.09'
 C1 (P)
 Δ = 211.26"
 R = 5599.65'
 L = 214.11'
 CB = N26°43'44"E
 CH = 214.09'

- LEGEND**
- FOUND
 - REBAR AND CAP
 - CONCRETE FOUNDATION
 - CONCRETE FOUNDATION
 - ROW PIPE
 - MEASURED
 - OVERHEAD UTILITY LINE
 - OFFICIAL RECORDS BOOK
 - TOP OF BANK
 - CHAIN LINK FENCE
 - BACKFLOW PREVENTER
 - CURB AND GUTTER
 - TRAVEL AND SECTION
 - CONCRETE
 - LIHT POLE
 - FIRE HYDRANT
 - WATER VALVE
 - WATER METER
 - UTILITY POLE
 - POWER METER
 - SANITARY MANHOLE
 - TELEPHONE MANHOLE
 - TRAFFIC SIGNAL POLE
 - SEWER VALVE
 - CLEANOUT
 - SOFT ANCHOR
 - UTILITY RISER
 - ELECTRIC JUNCTION BOX



SURVEYOR'S REPORT/NOTES:

- 1) SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
- 2) PROPERTY SHOWN HEREON LIES IN FLOOD ZONE "X" PER FIRM MAP PANEL NO. 12117C0165 F, DATED SEPTEMBER 28, 2007.
- 3) DISTANCES SHOWN HEREON ARE IN FEET AND DECIMALS THEREOF.
- 4) UNLESS NOTED OTHERWISE, NO UNDERGROUND IMPROVEMENTS, FOUNDATIONS, FOOTERS OR ROOF OVERHANGS HAVE BEEN LOCATED. ENVIRONMENTAL CONDITIONS AND GOVERNMENTAL REQUIREMENTS NOT DETERMINED BY SURVEYOR.
- 5) SYMBOLS NOT TO SCALE.
- 6) THIS MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1" = 20'.
- 7) BUILDING TIES ARE NOT TO BE USED TO CONSTRUCT DEED OR PLATTED LINES.
- 8) THE LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR EASEMENTS, RIGHTS OF WAY, RESTRICTIONS, USES, OWNERSHIP OR MATTERS OF RECORD BY THIS FIRM. THIS SURVEY WAS PREPARED WITH THE BENEFIT OF REBELTY NATIONAL TITLE INSURANCE COMPANY COMMITMENT ORDER NO. 10252276, DATED 02/20/2022. FLOTABLE EASEMENTS CONTAINED THEREIN ARE SHOWN HEREON.
- 9) BEARINGS SHOWN HEREON ARE BASED ON A CALCULATED LINE BETWEEN THE NW CORNER OF LOT 25 AND THE SE CORNER OF LOT 26, BEING S 18°12'25" E PER RECORD PLAT.
- 10) ELEVATIONS SHOWN HEREON ARE BASED ON SEMINOLE COUNTY BENCHMARK # 8164801, HAVING AN ELEVATION OF 92.54 (NA1088 DATUM).
- 11) TREES 6" AND LARGER WERE LOCATED AND IDENTIFIED WITH GENERAL DESCRIPTION. IF MORE SPECIFIC IDENTIFICATION IS NECESSARY, CLIENT WILL NEED TO CONTACT AN ARBORIST.

LEGAL DESCRIPTION (PER TITLE COMMITMENT)

LOTS 25 AND 26, BLOCK B, SEMINOLE INDUSTRIAL PARK 2ND. ADD., ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 16, PAGE 79, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA.

TOGETHER WITH AN EASEMENT FOR THE BENEFIT OF THE ABOVE MENTIONED PARCELS AS CONTAINED IN THE ENTRANCE ROAD AGREEMENT BY AND BETWEEN CONTEMPORARY CARS, INC., A FLORIDA CORPORATION, GRANTOR, AND ANDRE F. HICKMAN AND HAROLD A. MILLER AS CO-TRUSTEES OF THE JAMES W. HICKMAN REVOCABLE TRUST, GRANTEE, RECORDED NOVEMBER 30, 2001 IN OFFICIAL PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, OVER, UNDER AND ACROSS THE LANDS DESCRIBED THEREIN.

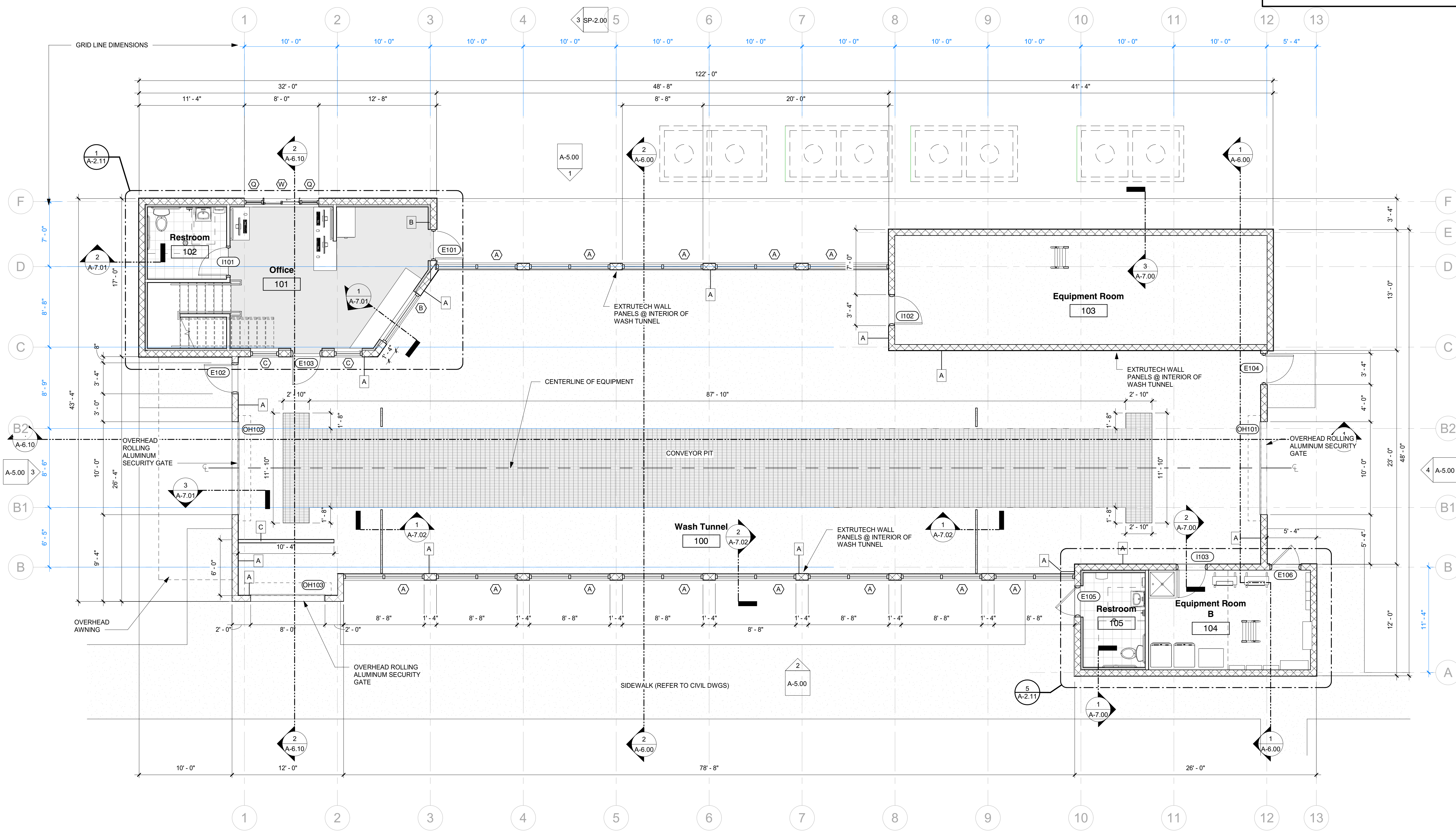
TOGETHER WITH AN EASEMENT FOR THE BENEFIT OF THE ABOVE MENTIONED PARCELS AS CONTAINED IN THE GRANTOR ESTATEMENT BY AND BETWEEN CONTEMPORARY CARS, INC., A FLORIDA CORPORATION, GRANTOR, AND ANDRE F. HICKMAN AND HAROLD A. MILLER AS CO-TRUSTEES OF THE JAMES W. HICKMAN REVOCABLE TRUST, GRANTEE, RECORDED NOVEMBER 30, 2001 IN OFFICIAL RECORDS BOOK 4229, PAGE 1779, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, OVER, UNDER AND ACROSS THE LANDS DESCRIBED THEREIN.

CERTIFIED TO:
 FEEN INVESTMENTS, LLC
 FIDELITY NATIONAL TITLE INSURANCE COMPANY
 42 CANDACE DR. LLC

JACK D REED
 Digitally signed by JACK D REED
 Date: 2023.01.06 12:35:09 -05'00'

NOTES:

- GC TO CO-ORDINATE/VERIFY ALL EQUIPMENT REQUIREMENTS AND LOCATIONS WITH OWNER
- GC TO PRICE AND INSTALL ALL REQUIRED EQUIPMENT UTILITY CONNECTIONS (MECHANICAL, ELECTRICAL, PLUMBING), INCLUDING ALL REQUIRED UNDER SLAB CONDUITS AND DRAW LINES. VERIFY/CO-ORDINATE WITH OWNER.



ARCHITECTURE
ENGINEERING
PLANNING

SARASOTA, FLORIDA
941-366-2377 FAX: 941-365-5446
Brent A. Parker, AIA, LEED AP, FAS, FLS
Thomas R. Walter, AIA, LEED AP, FAS, FLS



BLU WAZE Express Car Wash

Market Place
9151 Allico Rd.
Fort Myers, FL

Issue Dates
Revisions

FLOOR PLAN

Scale: 3/16" = 1'-0"

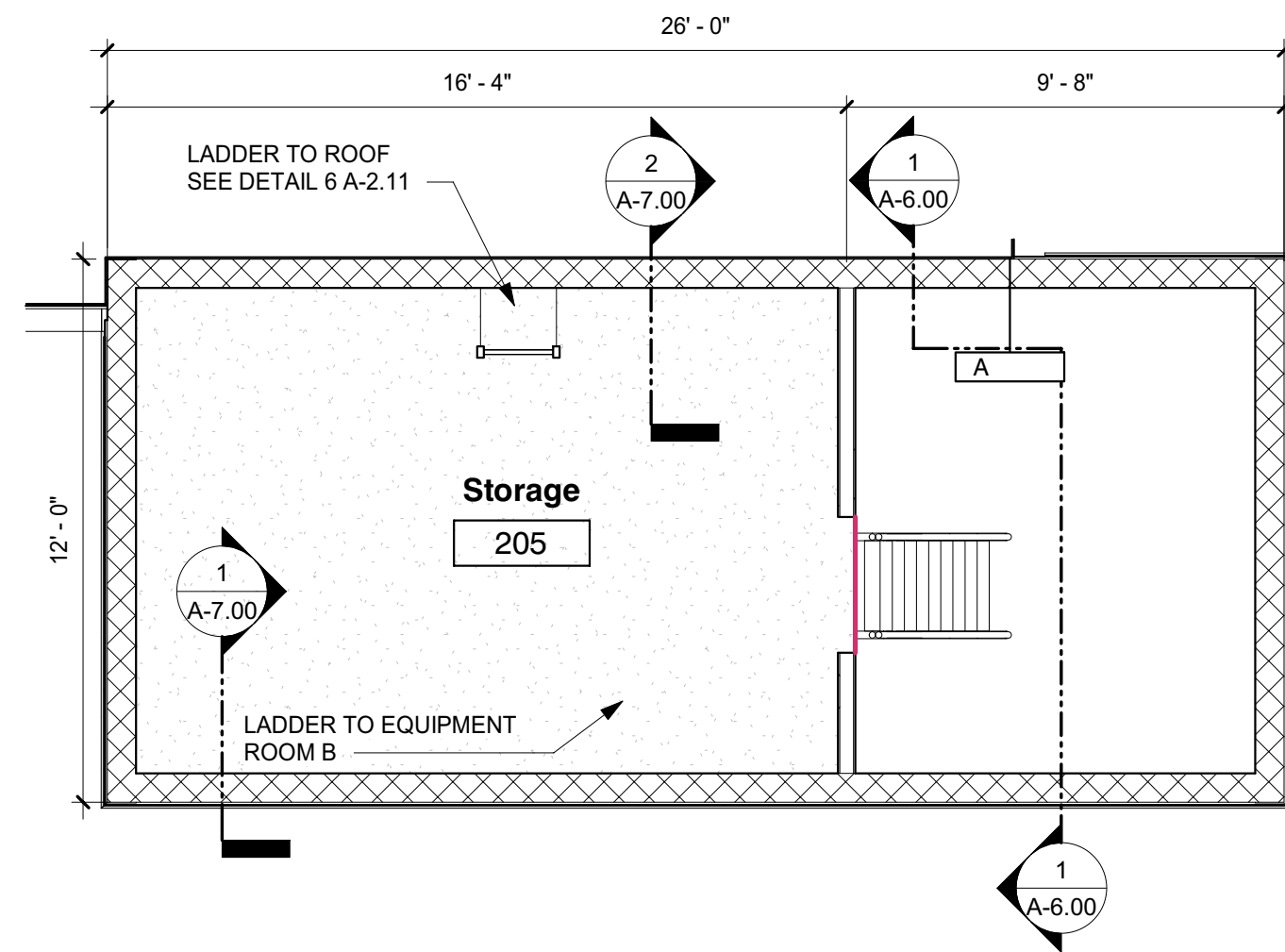
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Project No.
21049

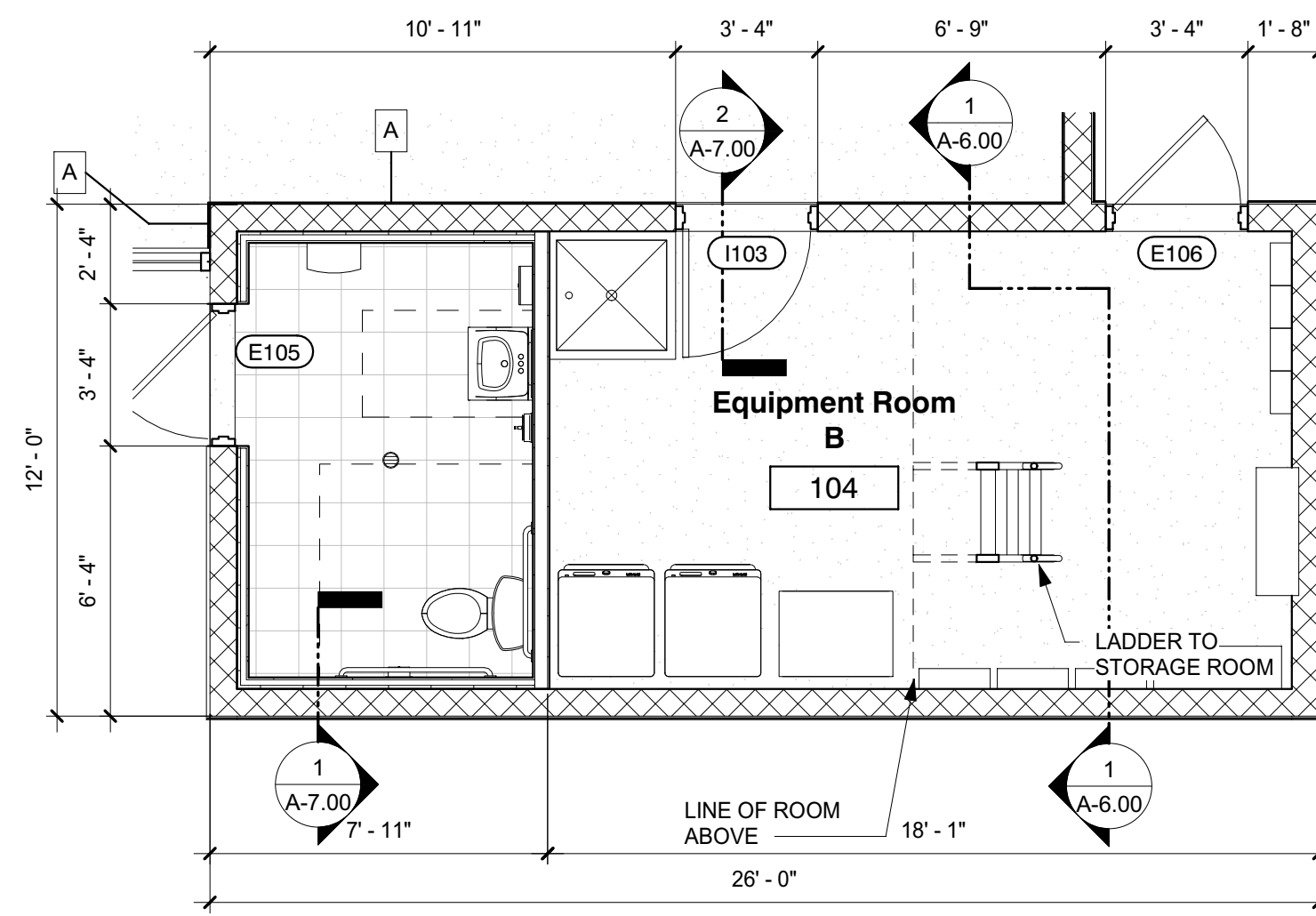
Drawn By
CT/DC

A-2.10

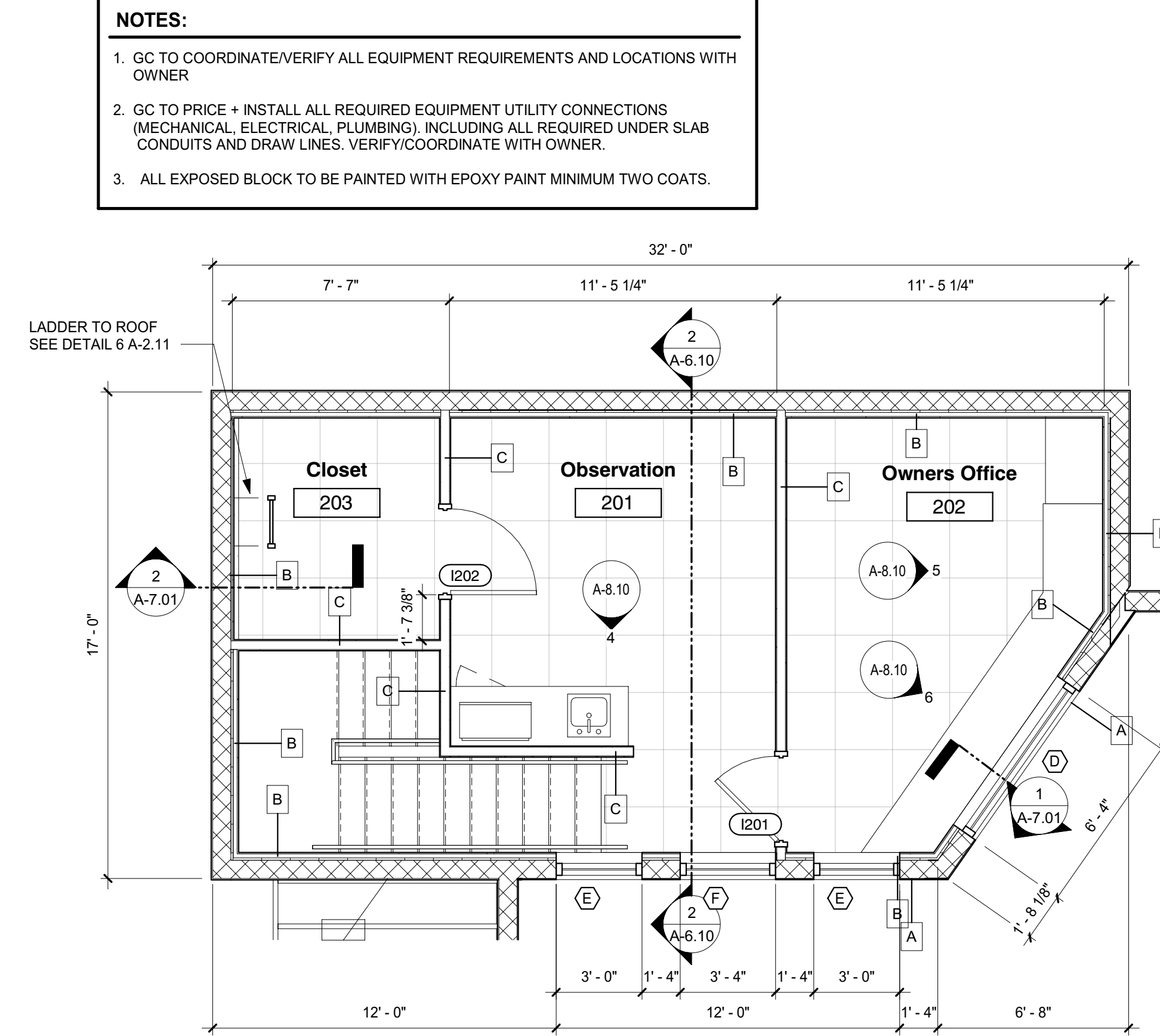
Date of Issue



7 Floor plan - Tower B level 2
Scale: 1/4" = 1'-0"



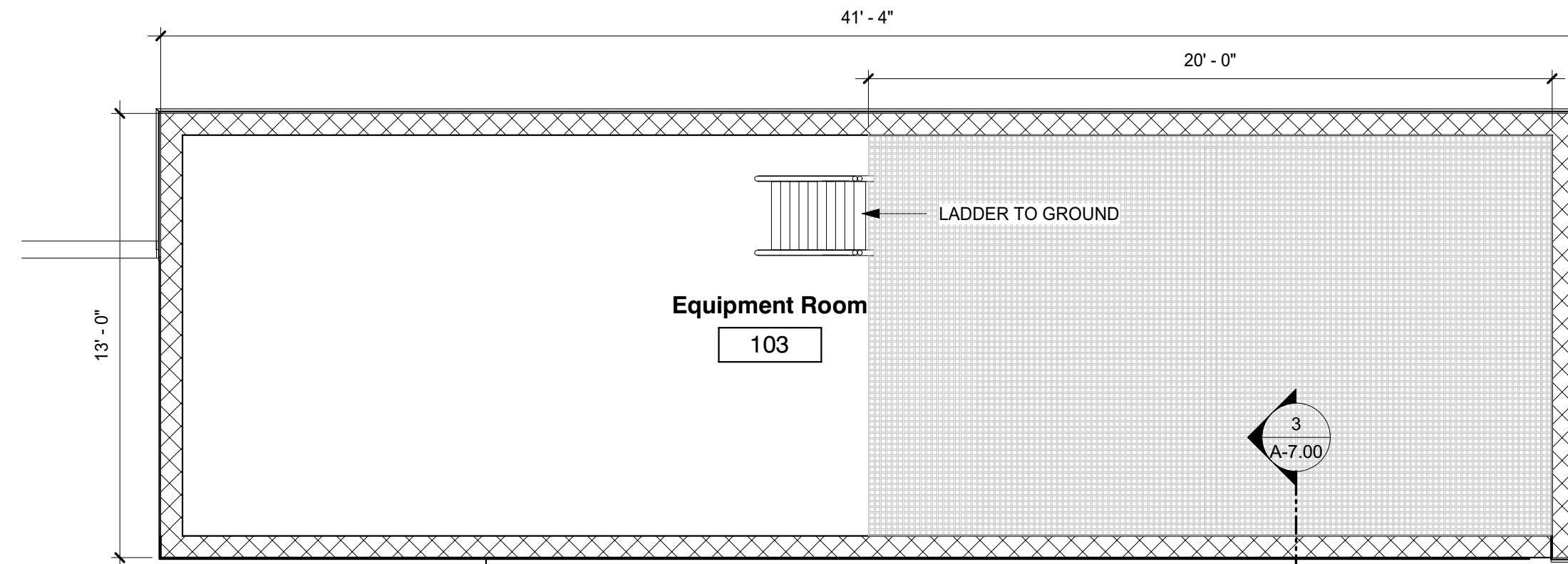
5 Floor plan - Tower B
Scale: 1/4" = 1'-0"



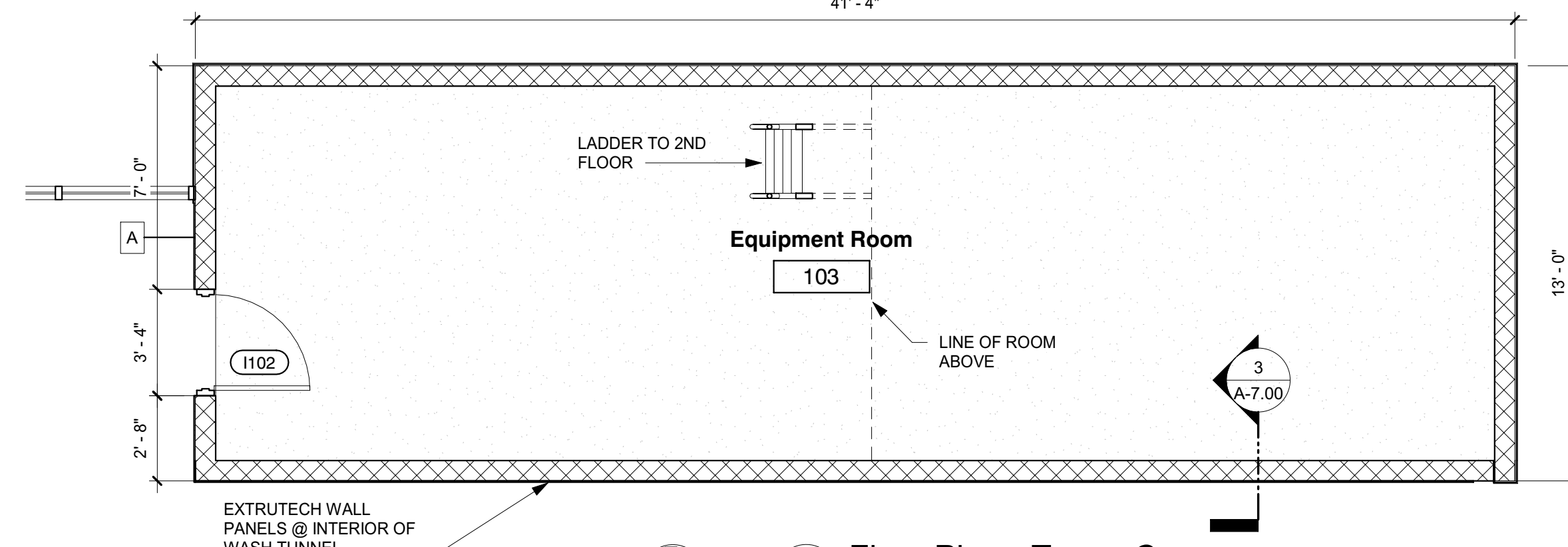
2 Enlarged Floor Plan - Tower A - Level 2
Scale: 1/4" = 1'-0"

- NOTES:**
- GC TO COORDINATE/VERIFY ALL EQUIPMENT REQUIREMENTS AND LOCATIONS WITH OWNER
 - GC TO PRICE + INSTALL ALL REQUIRED EQUIPMENT UTILITY CONNECTIONS (MECHANICAL, ELECTRICAL, PLUMBING), INCLUDING ALL REQUIRED UNDER SLAB CONDUITS AND DRAW LINES. VERIFY/COORDINATE WITH OWNER.
 - ALL EXPOSED BLOCK TO BE PAINTED WITH EPOXY PAINT MINIMUM TWO COATS.

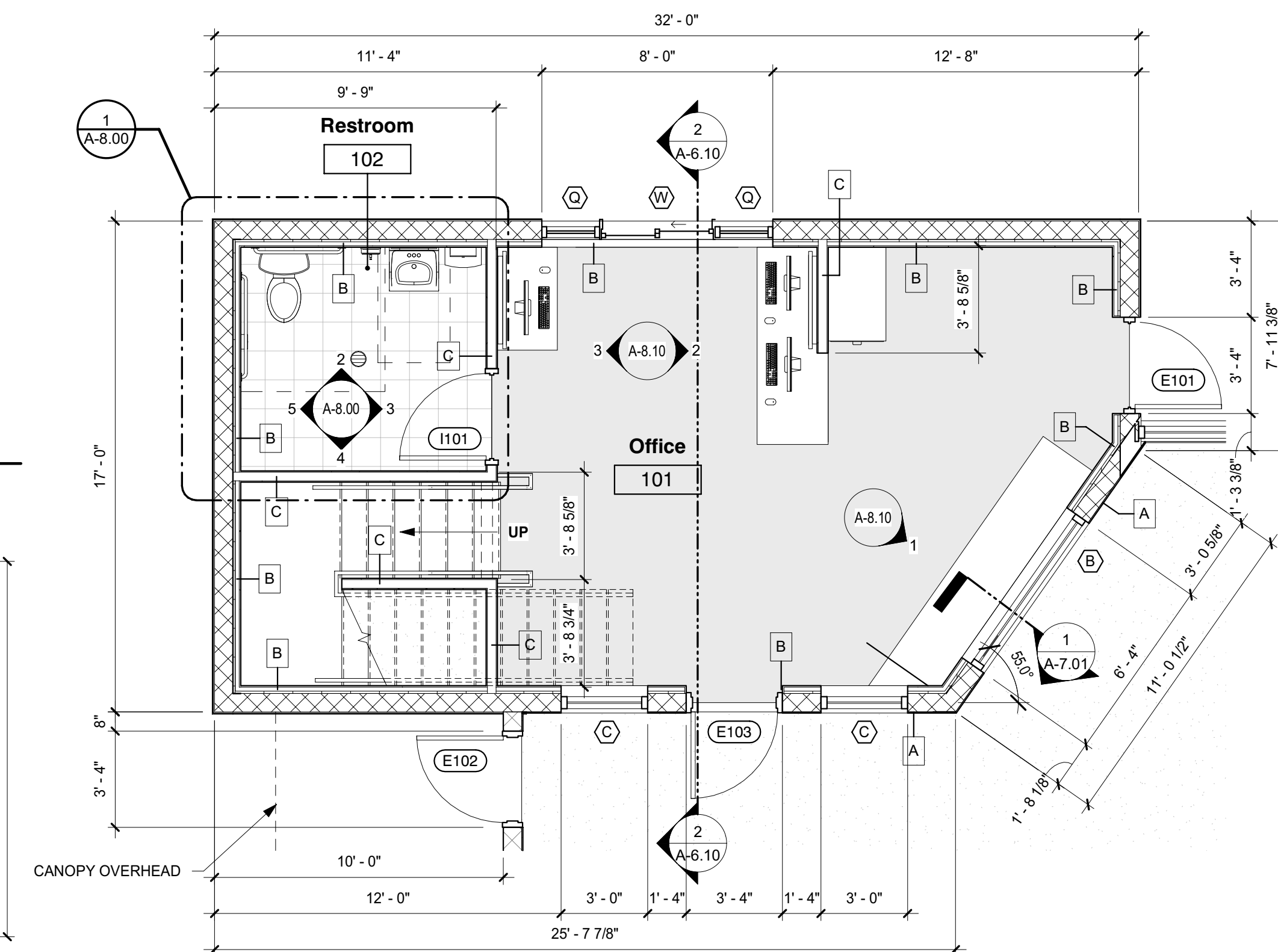
LADDER SCHEDULE				
LADDER LOCATION	BTM. OF LADDER STRINGER ELEVATION	TOP RUNG ELEVATION	LADDER MATERIAL	CAGE REQ'D
EQUIPMENT ROOM #103	0" AFF	10' 2" AFF	ALUMINIUM	NO
EQUIPMENT ROOM B #104	0" AFF	10' AFF	ALUMINIUM	NO
STORAGE #205	10' AFF	22' 1/2" AFF	ALUMINIUM	NO
CLOSET #203	10' 1/2" AFF	20' 10" AFF	ALUMINIUM	NO



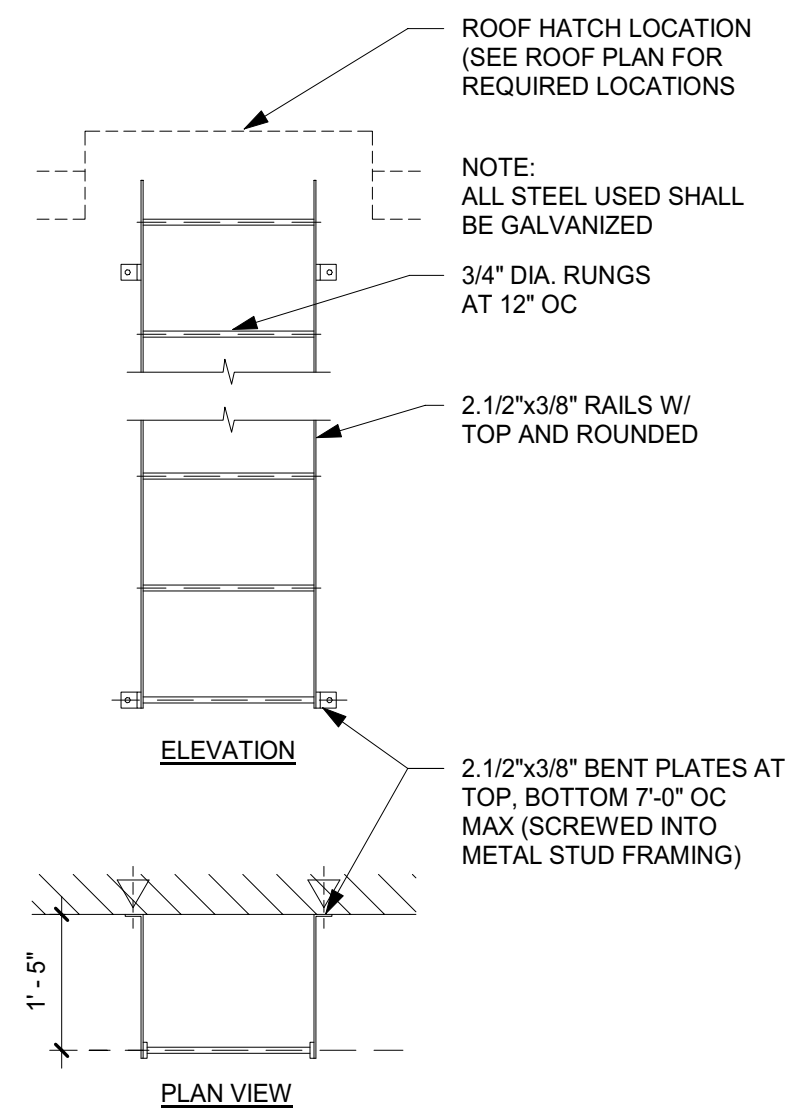
4 Floor Plan - Tower C Level 2
Scale: 1/4" = 1'-0"



3 Floor Plan - Tower C
Scale: 1/4" = 1'-0"



1 Enlarged Floor Plan - Tower A - Level 1
Scale: 1/4" = 1'-0"



6 TYPICAL LADDER DETAIL
Scale: 1/2" = 1'-0"

IF PLOTTED AT 11" X 17", SCALE IS ONE HALF AS NOTED. NOT VALID WITHOUT EMBOSSED SEAL AND SIGNATURE OF THE ARCHITECT. © 2021 BY PARKER WALTER GROUP INC.

**ARCHITECTURE
ENGINEERING
PLANNING**
 SARASOTA, FLORIDA
 941-366-2377 • FAX: 941-365-5446
 Brent A. Parker, AR 7299 Tom Thornburgh, PE 38293
 Thomas R. Walter, AR 7305 AA 2389 / CA 2768
 www.pwgroup.com

**Parker
Walter
GROUP INC.**
 BLU WAZE Express Car Wash
 Wash
 Market Place
 9151 Allico Rd.
 Fort Myers, FL

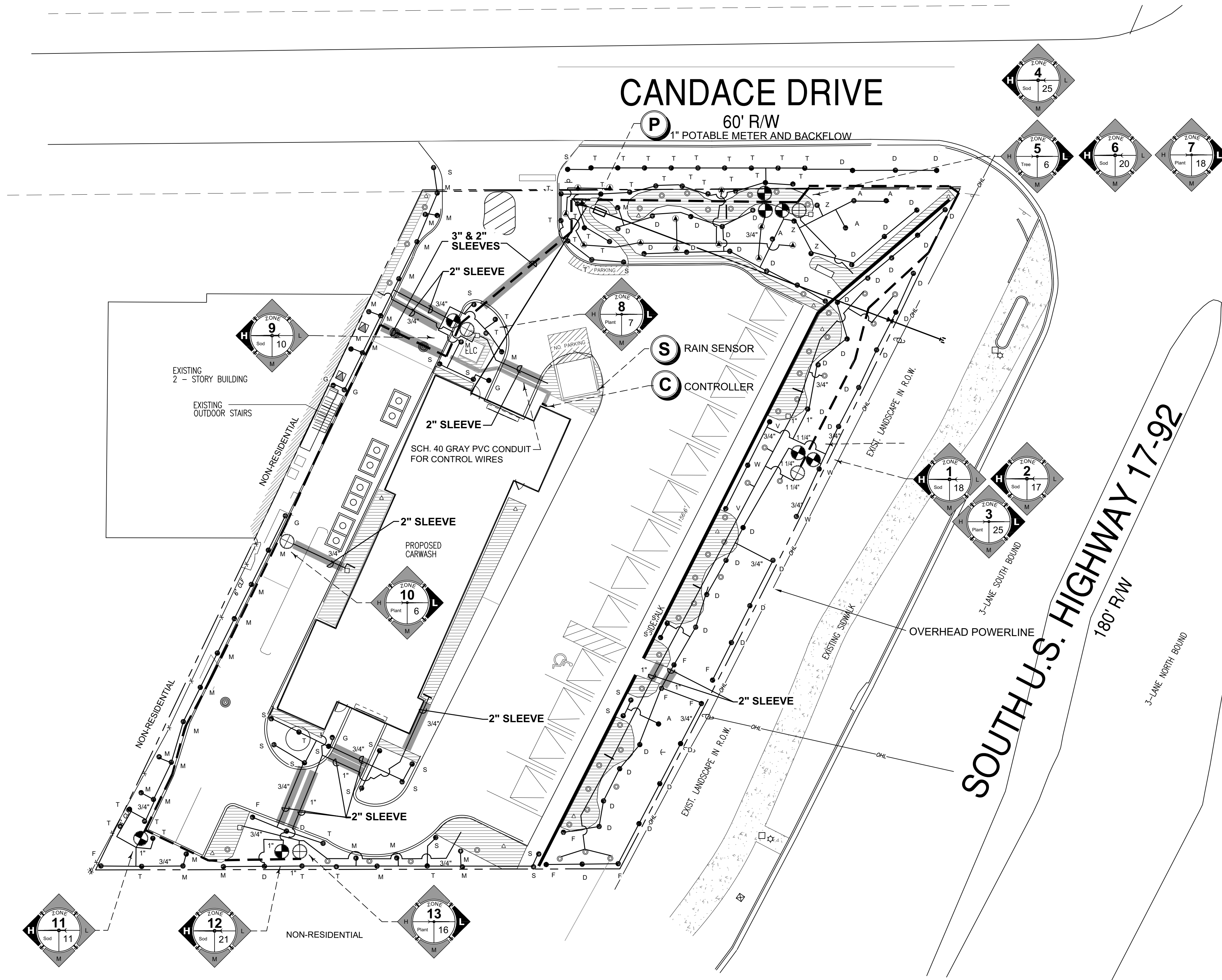
Issue Dates
Revisions

**ENLARGED FLOOR
PLANS**
 Scale : As indicated

Plot Date
 6/21/2022 1:01:45 PM
 Project No.
 21049
 Drawn By
 DC / CT

A-2.11

Date of Issue



NOZZLE CHART

LETTER	SPEC.	COLOR	G.P.M. 40 PSI	DISTANCE	RADIUS	ZONE LABELS
A	MP2000	RED	1.47	19'	FULL	360
B	MP CORNER	TURQUOISE	.45	14'	CORNER	105
C	MP CORNER	TURQUOISE	.19	14'	CORNER	45
D	MP2000	BLACK	.74	19'	HALF	180
F	MP2000	BLACK	.40	19'	QUARTER	90
G	MP END STRIP	COPPER	.22	5' X 15'	END STRIP	
H	RAIN_XPCN	BLACK	.23	4.5'	HALF PATTERN	
K	MP815	OLIVE	1.87	8'-16"	FULL	360
M	MP SIDE S	BROWN	.44	5' X 30'	SIDE STRIP	
S	MP815	MAROON	.49	8'-16"	90 ~ 180	
T	MP815	MAROON	.93	8'-16"	90 ~ 180	
V	MP3000	BLUE	.86	30'	QUARTER	90
W	MP3000	BLUE	1.82	30'	HALF	180
X	MP3000	YELLOW	2.73	30'	THREE QTR.	270
Y	MP3000	GRAY	3.64	30'	FULL	360
Z	MP2000	GREEN	1.10	19'	THREE QTR.	270

THE NOZZLES LISTED SHOW THE TYPE OF MP ROTATOR NOZZLE THAT SHOULD BE USED. THE CONTRACTOR SHOULD INSTALL CORRECT NOZZLE IN EACH HEAD AS SHOWN BY THE LETTER BESIDE THE HEAD ON THE PLAN. DO NOT USE MP1000 SERIES NOZZLES. THE GPM, DISTANCE AND ANGLE ON THE NOZZLE CHART ARE APPROXIMATE. THE CONTRACTOR SHALL ADJUST ALL NOZZLES TO PROVIDE THE 100% COVERAGE, BUT LIMIT OVERTHROW ON TO BUILDINGS, WALLS, PAVEMENT, ETC. THE HEADS SHALL BE SPACED AS PER THE PLAN. SCALE THE PLAN FOR DISTANCE. DO NOT ASSUME THAT ALL HEADS ARE SPACED AS PER CONVENTIONAL SPRAY HEADS. THE PRECIPITATION RATE FOR THESE NOZZLES IS LESS THAN A CONVENTIONAL SPRAY NOZZLE. FOLLOW THE ZONE CHART FOR AN APPROXIMATE RUN TIME FOR EACH ZONE, BUT SET THE RUN TIME ON THE CONTROLLER BASED ON THE SPECIFIC SITE CONDITIONS. DO NOT SUBSTITUTE WITH STANDARD NOZZLES.

ZONE CHART

ZONE	PLANT	IRRIGATION	WATER	PRECIP.	APPLIC.	GPM	MINUTES	TOTAL	AREA	
(TYPE)	(TYPE)	(DEMAND)	(RATE)	(IN)	(PER WEEK REQ.)	(GPM)	(PER CYCLE)	(GALLONS)	(S.F.)	
1	SOD	SPRAY	HIGH	0.75	1.5	18	60	1,080	2,165	
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3	PLANT	DRIP	LOW	1.5	0.5	25	10	250	1,017	
4	SOD	SPRAY	HIGH	0.75	1.5	25	60	1,500	1,416	
5	TREE	BUBBLER	LOW	1.5	0.5	6	10	60	0	
6	SOD	SPRAY	HIGH	0.75	1.5	20	60	1,200	1,769	
7	PLANT	DRIP	LOW	1.5	0.5	18	10	180	835	
8	PLANT	DRIP	LOW	1.5	0.5	7	10	70	271	
9	SOD	SPRAY	HIGH	0.75	1.5	10	60	600	649	
10	PLANT	DRIP	LOW	1.5	0.5	6	10	60	281	
11	SOD	SPRAY	HIGH	0.75	1.5	11	60	660	1,096	
12	SOD	SPRAY	HIGH	0.75	1.5	21	60	1,260	1,404	
13	PLANT	DRIP	LOW	1.5	0.5	16	10	160	909	
TOTAL GPM PER RUN CYCLE							200	480	8,100	
TOTAL GPM PER WEEK (PEAK WEEKLY DEMAND)									16,200	

THE RUN TIMES SHOWN FOR THE ZONE IS FOR ONE RUN CYCLE AND WILL PROVIDE HALF THE REQUIRED AMOUNT OF WATER NEEDED PER WEEK. TWO RUN CYCLES PER WEEK ARE REQUIRED TO PROVIDE THE TOTAL WEEKLY REQUIREMENT. ALL RUN TIMES SHALL BE SET TO FOLLOW THE CURRENT WATER MANAGEMENT DISTRICT REGULATIONS AND REDUCED TO ONLY ONE RUN TIME PER WEEK WHEN RESTRICTED BY DAYLIGHT SAVINGS TIME OR WATER RESTRICTIONS. THE ZONE CHART IS PROVIDED AS A GENERAL OUTLINE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE TO SET THE RUN TIMES BASED ON THE SPECIFIC SITE CONDITIONS AND PLANT REQUIREMENTS. THIS SHALL INCLUDE, BUT NOT LIMITED TO, SOIL TYPE, DRAINAGE, SLOPES, SUN EXPOSURE AND THE ESTABLISHMENT PERIOD. THE TOTAL GPM REQUIRED PER YEAR WILL BE LESS THAN THE PEAK DEMAND PER WEEK TIMES 52 WEEKS, BASED ON THE RUN TIMES BEING REDUCED BY SENSORS AND A REDUCED WATER DEMAND IN THE WINTER MONTHS.

APPROVED
Seminole County Government
Planning & Development Division

Digitally signed
by Larry W. Spade
Date: 2023.05.22
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THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY LARRY W. SPADE USING A DIGITAL SIGNATURE AND DATE PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



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SEMINOLE COUNTY

DATE	12-29-22
PER COUNTY COMMENTS	
PER COUNTY COMMENTS	
REVISIONS	
PROJECT NO.	22185
TECHNICIAN	J.W.H.
CHECKED BY	TOM SHELTON, P.E.
ENGINEER	GAIL J. HERBERT IV, P.E.
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IRRIGATION PLAN
CANDACE CARWASH
160 CANDACE DRIVE, MAITLAND FL 32751

5/22/2023
IRRIGATION PLAN
PROJECT NO. 22185

L11.0

GENERAL NOTES

- REFER TO THE LANDSCAPE PLANS WHEN TRENCHING TO AVOID TREES AND SHRUBS. HAND DIG AROUND ANY EXISTING TREES. DO NOT CUT ANY ROOTS OVER 2" IN DIAMETER.
- ALL MAINLINE PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 18" OF COVER. ALL LATERAL PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 12" OF COVER.
- ALL POP-UP ROTATORS AND SPRAYS SHALL BE INSTALLED USING AN 18" PVC FLEX PIPE CONNECTION. DO NOT USE POLYETHYLENE PIPE. USE WELDON 737 WITH A PURPLE PRIMER OR RED HOT CHRISTY'S BLUE GLUE ON ALL CONNECTIONS.
- ADJUST ALL NOZZLES TO REDUCE WATER WASTE ON HARD SURFACES, WINDOWS AND BLDG. WALLS. THROTTLE ALL VALVES ON SHRUB LINES AS REQUIRED TO PREVENT FOGGING. USE ADJUSTABLE NOZZLES WHERE REQUIRED TO AVOID ANY WATER ON BUILDING WINDOWS.
- NO RISER SHALL BE USED.
- ALL CONTROL WIRE CONNECTIONS SHALL BE MADE IN VALVE BOXES USING 3M DBR-Y WIRE CONNECTORS AND SEALANT WITH WIRE NUTS.
- THE CONTRACTOR SHALL PREPARE AN AS-BUILT DRAWING SHOWING ALL IRRIGATION INSTALLATION. THE CONTRACTOR SHALL NEATLY MARK IN RED INK ON A WHITE BOND PAPER COPY OF THE IRRIGATION PLAN ANY INSTALLATION THAT DEVIATES FROM THE PLAN. THE AS-BUILT DRAWING SHALL ALSO LOCATE ALL MAINLINE AND VALVES BY SHOWING EXACT MEASUREMENTS FROM HARD SURFACES. MEASUREMENTS SHALL BE MARKED ON THE PLAN EVEN WHEN THE EQUIPMENT IS INSTALLED IN THE EXACT LOCATION AS THE PLAN. PROVIDE THE OWNER A PDF OF THE AS-BUILT PLAN.
- ALL VALVES, GATE VALVES AND QUICK COUPLERS SHALL BE INSTALLED IN VALVE BOXES. THE VALVE BOXES SHALL BE PURPLE WHEN USING RECLAIMED WATER.
- ANY PIPING SHOWN OUTSIDE THE PROPERTY LINE OR RUNNING OUTSIDE A LANDSCAPE AREA IS SHOWN THERE FOR CLARITY ONLY. ALL LINES SHALL BE INSTALLED ON THE PROPERTY AND INSIDE THE LANDSCAPE AREAS OR INSIDE A SCH. 40 SLEEVE.
- ALL HEADS SHALL BE INSTALLED A MINIMUM OF 24" FROM ANY WALL AND A MINIMUM OF 6" FROM ANY SIDEWALK, PATIO OR ROAD. (MINIMUM OF 2'-0" WHERE THERE ARE NO BUMPER STOPS) THE EXACT HEIGHT OF ANY 1/2" POP-UP THAT IS SHOWN IN A SHRUB BED SHALL BE DETERMINED BY THE OWNER'S REPRESENTATIVE IN THE FIELD. INSTALL THE 1/2" POP-UP HIGHER WHERE BLOCKED BY TALL SHRUBS.
- THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO DAMAGE ANY EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIRS AND COST OF ANY DAMAGE CAUSED BY THEIR WORK.
- ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST ALL DEFECTS IN EQUIPMENT AND WORKMANSHIP OR AS OUTLINED IN THE WRITTEN SPECIFICATIONS.
- ELECTRICAL SERVICE TO LOCATION OF THE CONTROLLER, WELL OR PUMP SHALL BE PROVIDED TO A JUNCTION BOX OR DISCONNECT AT THE EQUIPMENT LOCATION BY THE ELECTRICAL CONTRACTOR OR BY OWNER WHEN IT IS NOT PART OF THE BID PACKAGE. CONFIRM THE LOCATION OF THE CONTROLLER WITH THE OWNER OR GENERAL CONTRACTOR BEFORE ANY INSTALLATION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCALE THE PLAN AND CHECK NOZZLE TYPES TO DETERMINE THE CORRECT SPACING OF THE HEADS. THE CONTRACTOR SHALL NOT SPACE THE HEADS FURTHER APART OR USE LESS HEADS THAN SHOWN ON THE PLAN. ANY CHANGES TO THE HEAD SPACING OR LAYOUT, WITHOUT THE CONSENT OF THE LANDSCAPE ARCHITECT OR OWNER, SHALL HOLD THE IRRIGATION CONTRACTOR RESPONSIBLE FOR WARRANTY OF THE PLANTS AND OR SOG IN THESE AREAS.
- 48 HOURS BEFORE DIGGING, CALL 1-800-433-4770 (SUNSHINE STATE ONE CALL CENTER).
- INSTALL THREE EXTRA CONTROL WIRES TO EACH TERMINATION OF THE MAIN. ALL CONTROL WIRES SHALL BE INSTALLED INSIDE OF SCH. 40 GRAY PVC CONDUIT WHERE THEY CANNOT BE UNDER THE MAIN.

DRIP TUBING NOTES

- INSTALL ALL DRIP TUBING AT GROUND LEVEL AFTER PLANT INSTALLATION. INSTALL NETAFIM TL56 U SHAPED WIRE STABILIZERS A MIN. OF 4' O.C. TO HOLD THE LINES IN PLACE.
- KEEP ALL DRIP LINE CLEAN AT ALL TIMES BEFORE THE FINAL CONNECTION. ALL TUBE ENDS SHALL BE INTERCONNECTED TO ALL OTHER DRIP TUBES. DO NOT DEAD END TUBING. SINGLE ROWS SHALL HAVE A END CAP AND NOT BENT OVER OR TAPED.
- AVOID SHARP BENDS IN THE TUBING. DO NOT BEND THE TUBING WITH LESS THAN A 12" RADIUS. THERE SHALL NOT BE ANY KINKS IN THE TUBING.
- ALL DRIP TUBING SHALL HAVE UNIFORM SPACING AND BURIAL DEPTH. THE PLAN DOES NOT ALWAYS REFLECT THE EXACT SPACING OR LAYOUT OF THE TUBING. LAYOUT THE TUBING DOWN THE LONGEST WIDTH WHEN POSSIBLE. ADAPT THE TUBING TO CURVED BEDS OR PLANTERS AS REQUIRED. ADJUST AND ADAPT THE TUBING FOR ALL TREES. REFER TO THE TREE DRIP RING DETAIL.
- INSTALL DRIP TUBING TO ALL AREAS THAT SHALL RECEIVE PLANT MATERIAL. SEE THE LANDSCAPE PLAN FOR THE EXACT LOCATIONS. THERE SHALL BE A MINIMUM OF TWO ROWS OF TUBING ON A SINGLE ROW OF PLANTS.
- SPACE TUBING AS NOTED ON THE PLAN. DO NOT SNAKE TUBING BACK AND FORTH EXCEPT WHERE SHOWN ON THE PLAN. ALWAYS INSTALL A HEADER PIPE UNLESS THE TOTAL GALLONAGE OF AN AREA IS 3 GPM OR LESS.
- REFER TO THE MANUFACTURERS DRIP INSTALLATION MANUAL FOR INSTALLATION INSTRUCTIONS. ALL FITTINGS SHALL BE THE SAME TYPE AND MANUFACTURER AS THE DRIP TUBING.
- ALWAYS FLUSH ALL LINES BEFORE FINAL CONNECTION.
- INSTALL A 'A' SYSTEM ON INDICATOR FLAG ON EVERY ZONE WHERE IT IS SEEN FROM THE CONTROL VALVE.
- INSTALL FLUSH VALVES WHERE SHOWN AT THE ENDS OF EACH RUN OF DRIP TUBING AND ONE FOR EVERY 15 GPM OF TUBING.
- CLEARLY AND NEATLY MARK THE TOP OF EACH VALVE BOX WITH THE TYPE OF EQUIPMENT THAT IT CONTAINS. (I.E. VALVE, FLUSH VALVE, ETC.)
- THE DRIP ZONE VALVE ASSEMBLY SHALL BE PLACED INSIDE AN ARMOR JUMBO VALVE BOX. THE VALVE SHALL BE INSTALLED AS PER THE DETAIL ON THE PLANS.
- THE DRIP TUBING SHALL HAVE EMITTERS EVERY 12" AND SHALL BE SPACED 12" APART IN GROUND COVER BEDS AND A MINIMUM OF TWO ROWS FOR EACH ROW OF SHRUBS WHEN THE SHRUBS ARE SPACED FARTHER THAN 2' ON CENTER.
- REFER TO THE ZONE CONTROL KIT DETAIL FOR FILTER SIZES.
- THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE HISHER WORK WITH THE LANDSCAPE CONTRACTOR.

LEGEND

Symbol	Description
●	HUNTER PRS40 6" POP-UP SPRAY HEAD
⊙	TWO HUNTER AFB ADJUSTABLE FLOOD BUBBLERS PER TREE.
—	CLASS 200 PVC DRIP HEADER PIPE-REFER TO DETAIL
⊖	NETAFIM DRIP BUBBLER TREE RING- REFER TO DRIP BUBBLER DETAIL
□	NETAFIM FLAG INDICATOR-REFER TO THE DETAIL
△	NETAFIM FLUSH VALVE
▨	NETAFIM TECHLINE CV 17MM DRIP TUBING- 1 GPH EMITTERS EVERY 12". PLACE ROWS 12" APART IN ALL GROUND COVER BEDS. INSTALL A DOUBLE ROW ON ALL HEDGE ROWS. REFER TO ALL NOTES AND DETAILS ON THIS SHEET.
---	CLASS 200 PVC MAINLINE-1 1/2"
---	CLASS 200 PVC LATERAL LINE- SIZE AS SHOWN UNTIL A SMALLER SIZE IS SHOWN. MINIMUM SIZE OF 3/4"
▬	SCH. 40 SLEEVE (MINIMUM OF 24" DEPTH AND 2 SIZES LARGER THAN THE PIPE SIZE OR AS LABELED ON THE PLAN)
⊕	HUNTER ICV ELECTRIC VALVE. SIZE AS SHOWN BELOW. INSTALL VALVE IN A 11"x17" VALVE BOX AND COVER 0-25 GPM=1"
⊕	HUNTER ZONE CONTROL KIT- REFER TO THE DETAIL.
⊖	CONTROLLER- HUNTER ICC-2. WHERE SHOWN ON THE PLAN. INSTALL WITH A HUNTER MINI-CLIK RAIN SENSOR. GROUND WITH A MINIMUM 8' COPPER CLAD ROD. SLEEVE TO AS REQUIRED.
⊖	POINT OF CONNECTION TO A 1" POTABLE IRRIGATION METER AND BACKFLOW PREVENTER. REFER TO THE UTILITY PLAN FOR THE EXACT LOCATION AND DETAILS.

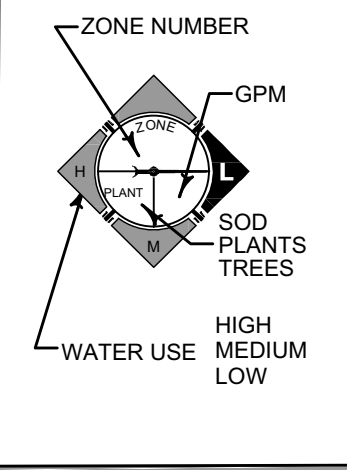
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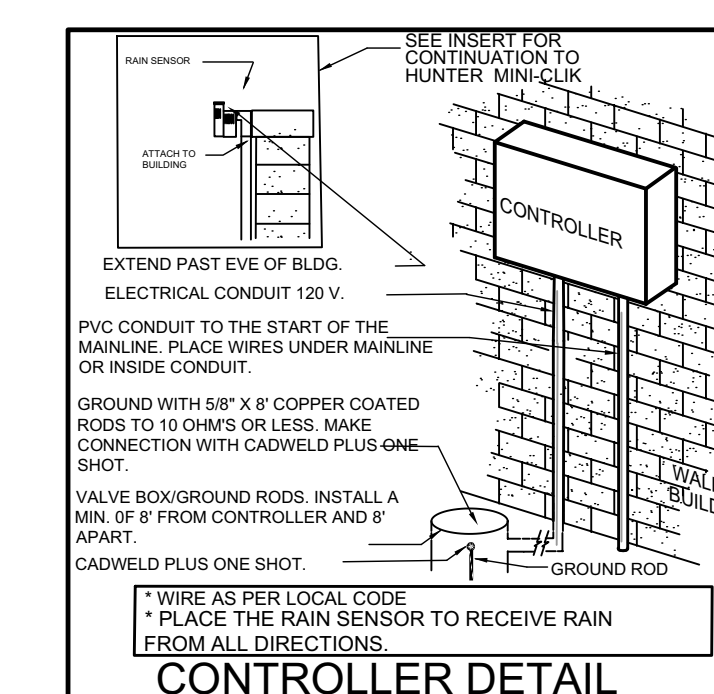
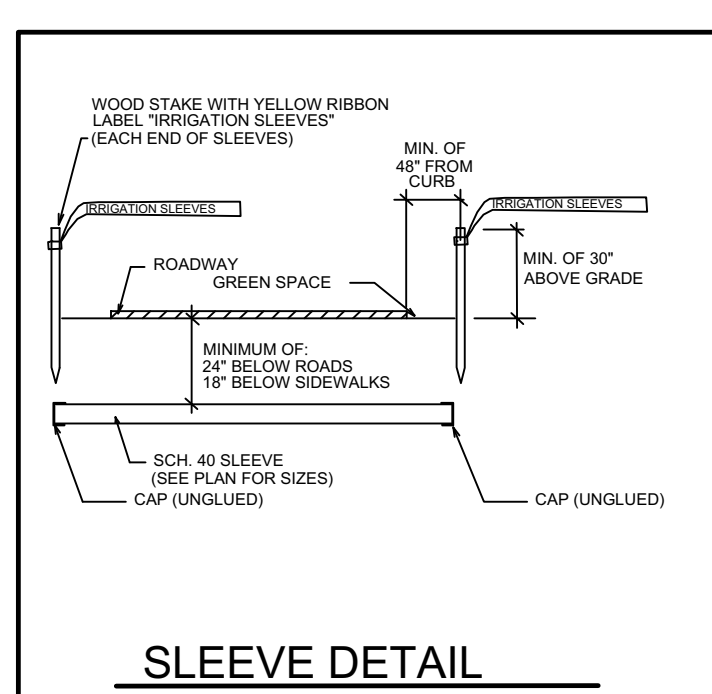
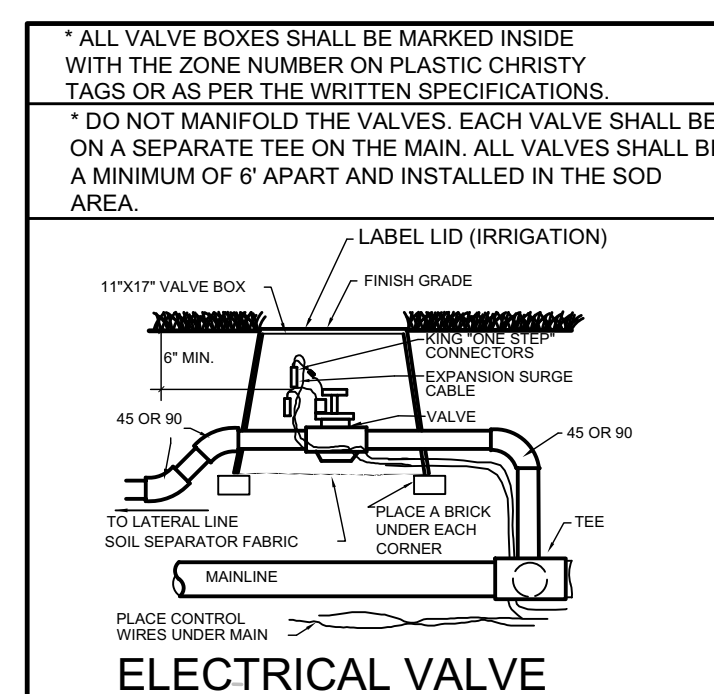
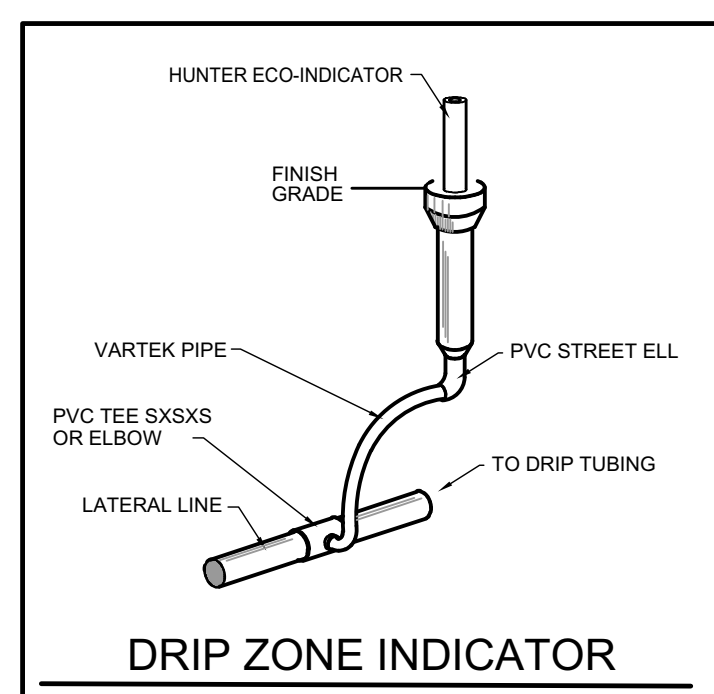
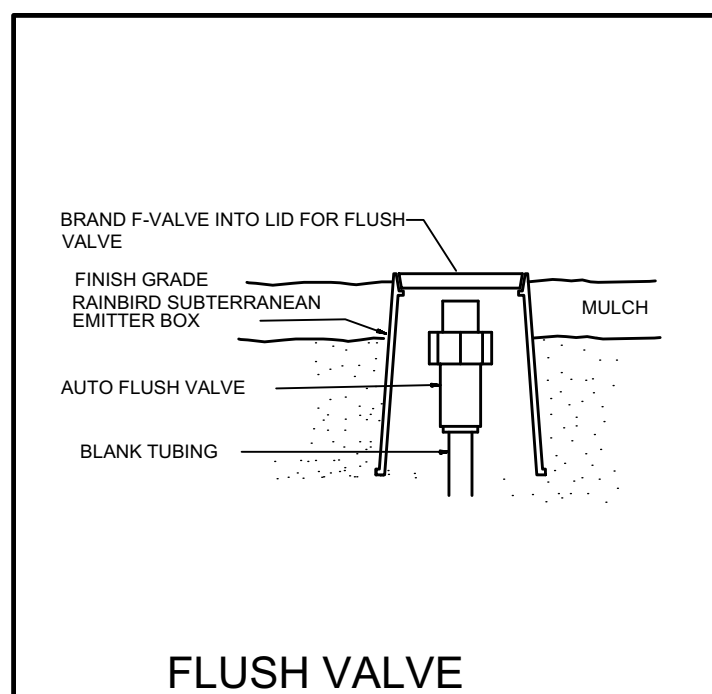
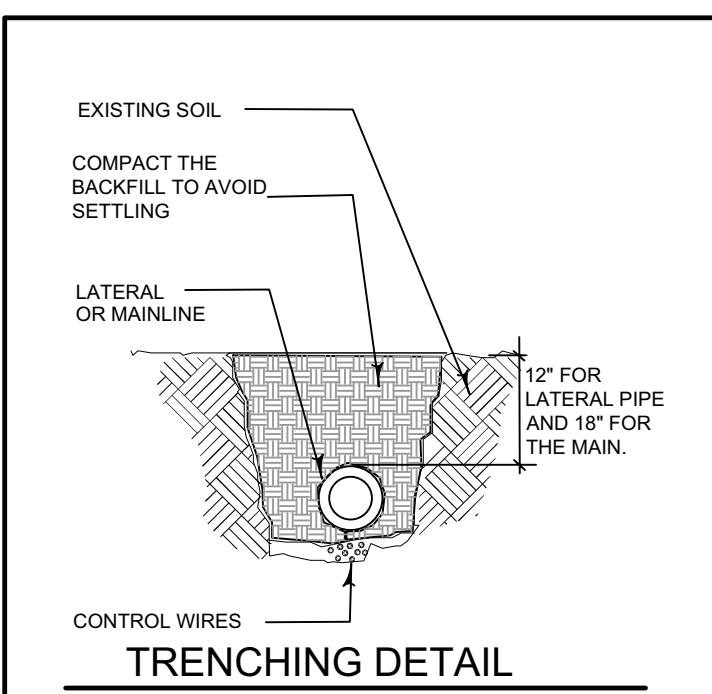
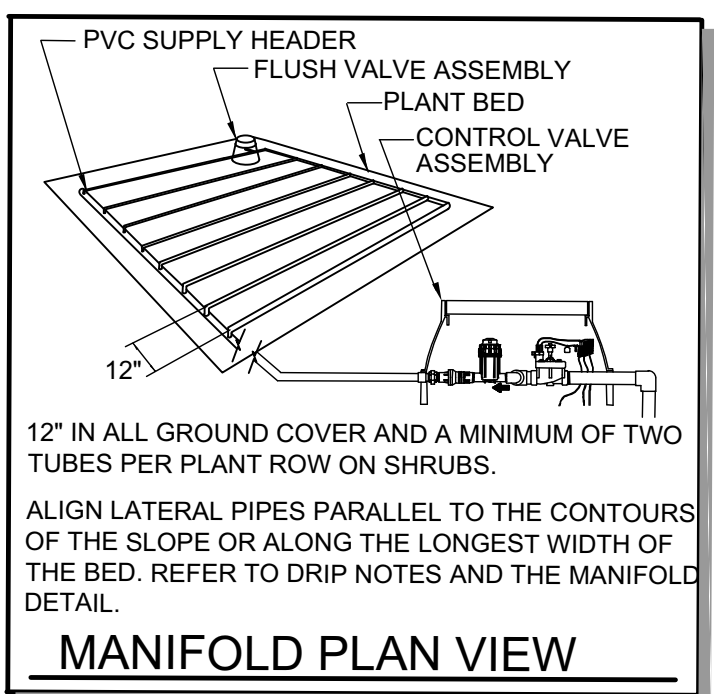
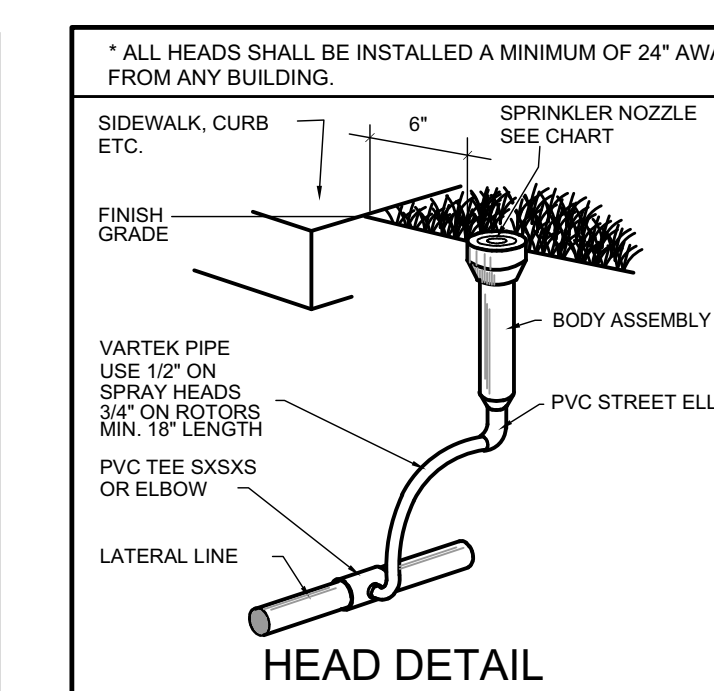
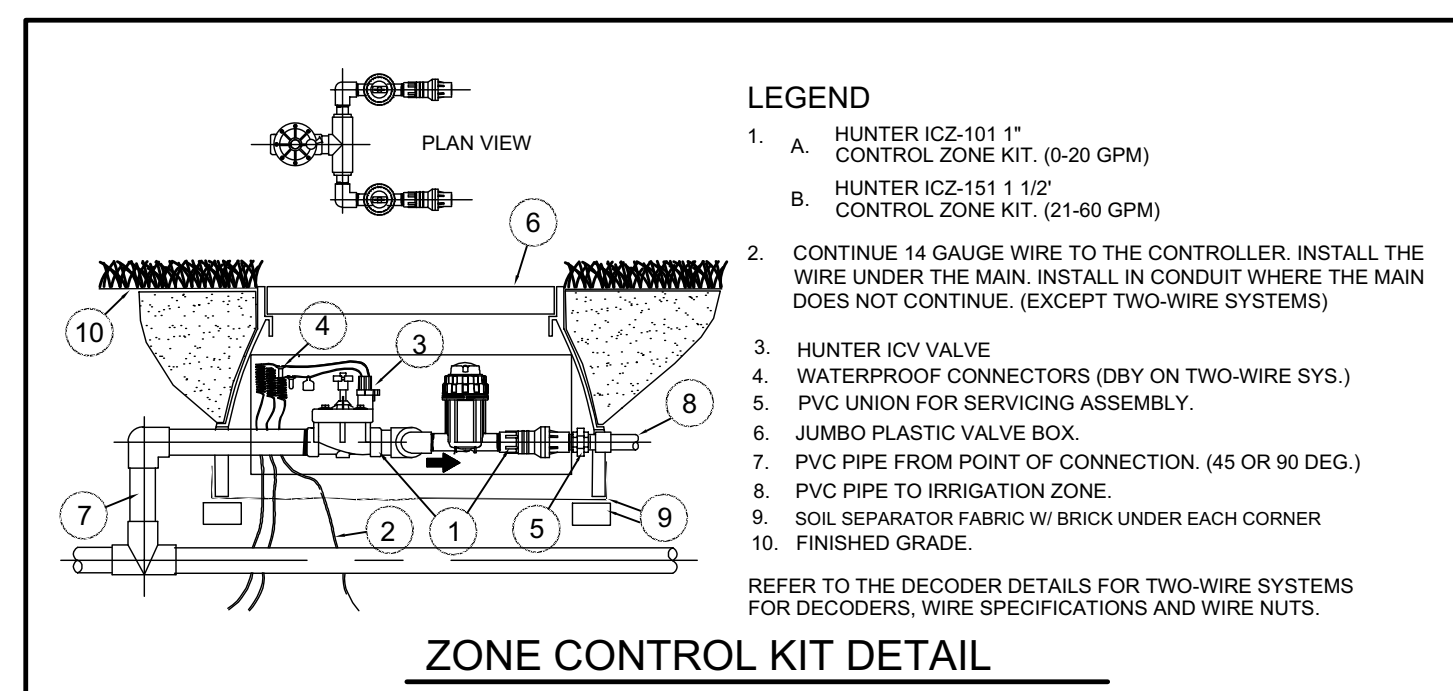
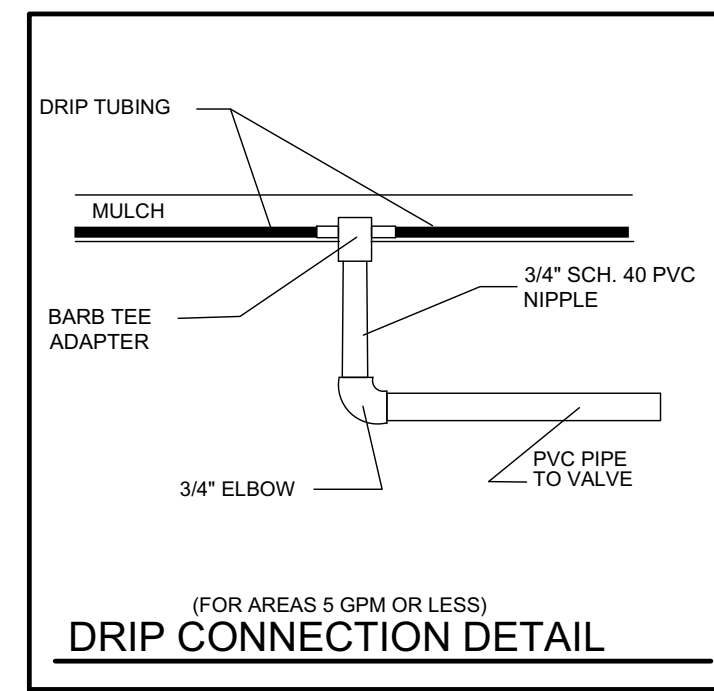
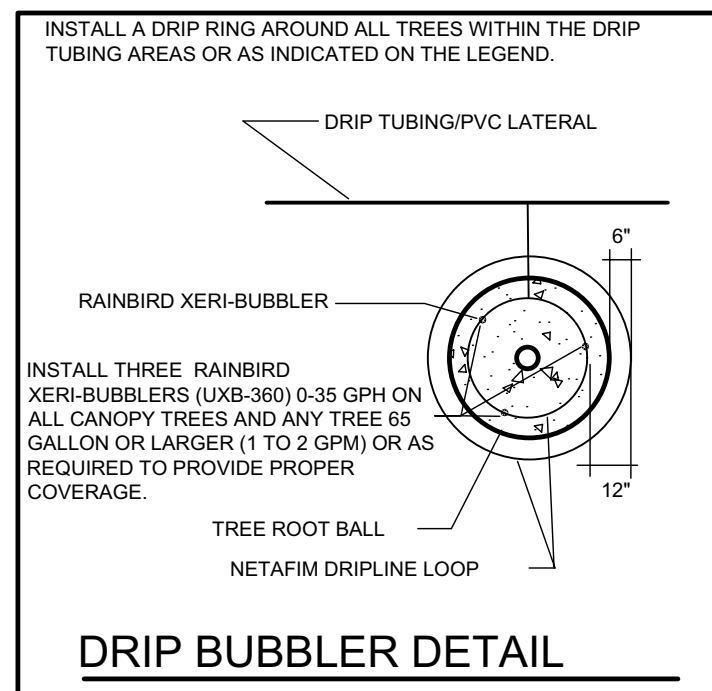
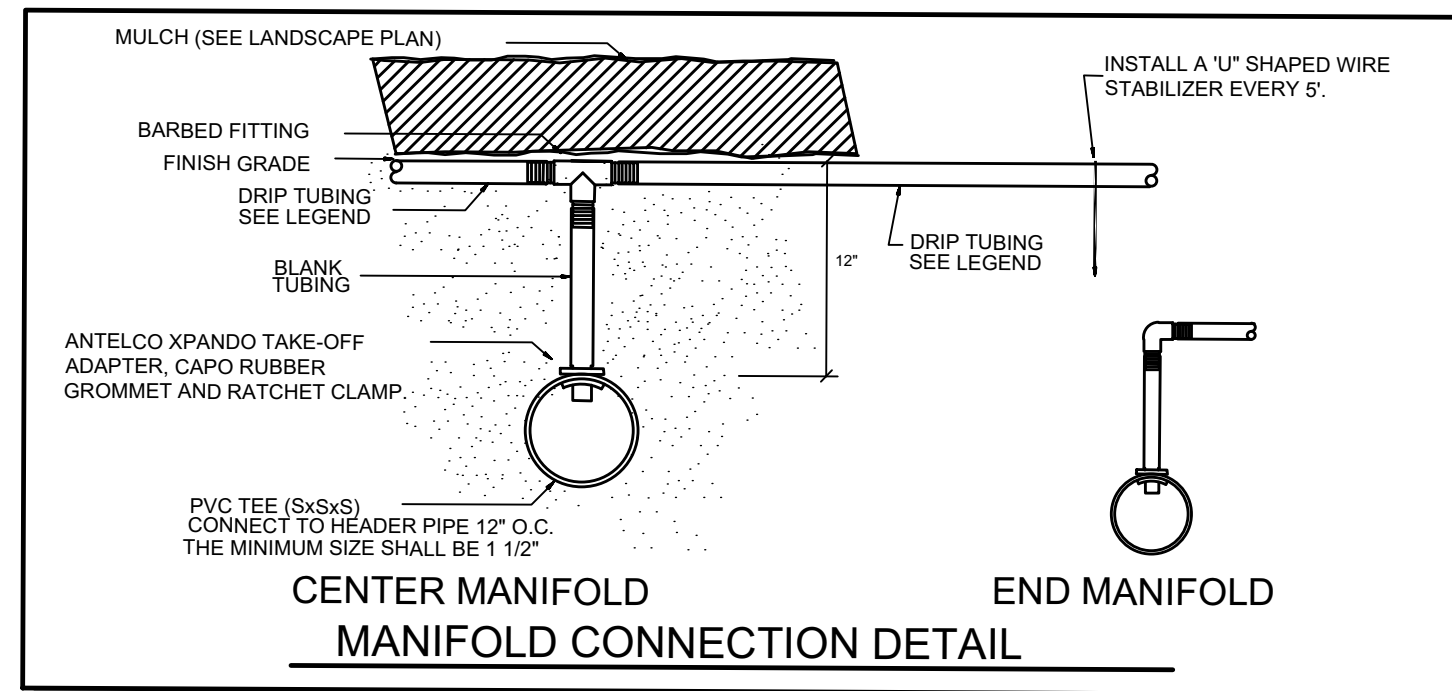
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 207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
 (407) 327-7700
 cert. of authorization number 0769

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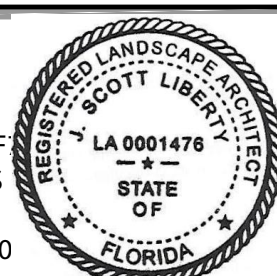
4/4/2023
 IRRIGATION PLAN
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 LI2.0

P222-06000035
08/02/23

APPROVED
Seminole County Government
Planning & Development Division

J. Scott Liberty

Digitally signed by JOHN S LIBERTY
 DN: c=US, o=Florida, dnQualifier=A01410D0000017F0977AAB0008969, cn=JOHN S LIBERTY
 Date: 2023.04.04 12:35:39 -0400



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 5621 REVELWOOD LOOP, WINTER PARK, FL 32782
 PHONE: 407-719-2124 FAX: 407-671-6304

SEMINOLE COUNTY

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