CONSTRUCTION PLANS

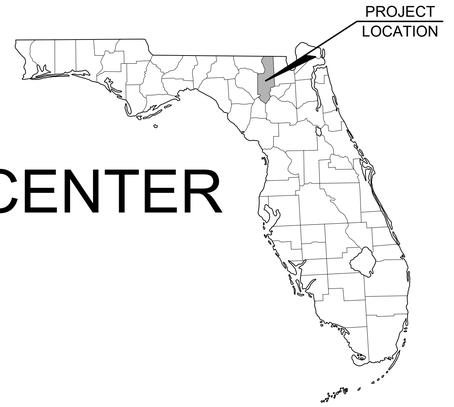
FOR

COLUMBIA STORM PROCESSING AND SERVICE CENTER

FOR

FLORIDA POWER & LIGHT COMPANY

DECEMBER 2022



OWNER/DEVELOPER:

FLORIDA POWER & LIGHT COMPANY
700 UNIVERSE BOULEVARD
JUNO BEACH, FLORIDA 33408
(561) 694-4000

ARCHITECT:

LITTLE DIVERSIFIED ARCHITECTURAL CONSULTING
201 S. ORANGE AVENUE, SUITE 800
ORLANDO, FLORIDA 32801
(407) 218-8282

ENGINEER:

KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FL 32258
(904) 828-3900

LANDSCAPE ARCHITECT:

KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FL 32258
(904) 828-3900

ENVIRONMENTAL CONSULTANT:

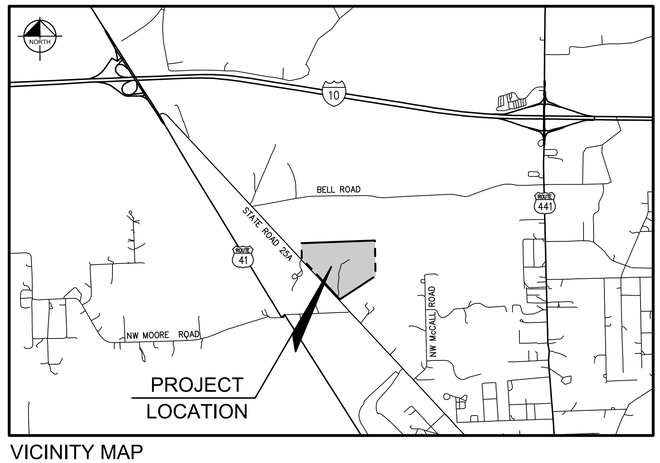
ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.
7027 SW 24TH AVENUE
GAINESVILLE, FLORIDA 32607
(352) 332-0444

SURVEYOR:

AVIROM & ASSOCIATES, INC.
2506 SE WILLOUGHBY BOULEVARD
STUART, FLORIDA 34994
(772) 781-6266

GEOTECHNICAL ENGINEER:

TERRACON
8001 BAYMEADOWS WAY, SUITE 1
JACKSONVILLE, FLORIDA 32256
(904) 900-6494



VICINITY MAP

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

PROJECT DATUM: NAVD'88

CALL 48 HOURS BEFORE YOU DIG

811

IT'S THE LAW! DIAL 811

Know what's **below.** **Call** before you dig.

SUNSHINE STATE ONE CALL OF FLORIDA, INC.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

INDEX OF DRAWINGS

SHEET NUMBER	SHEET TITLE
C-001	COVER SHEET
C-002	SIGNATURE SHEET
C-003	GENERAL NOTES
C-004	UTILITY NOTES
C-101	PRE-DEVELOPMENT PLAN
C-102	POST DEVELOPMENT PLAN
C-103	OVERALL SITE PLAN
C-104	PHASING PLAN
C-105	PHASING NOTES
C-200	OVERALL CLEARING AND DEMOLITION PLAN
C-201	CLEARING AND DEMOLITION PLAN
C-202	CLEARING AND DEMOLITION PLAN
C-203	CLEARING AND DEMOLITION PLAN
C-204	CLEARING AND DEMOLITION PLAN
C-205	BEST MANAGEMENT PRACTICES DETAILS
C-206	STORMWATER POLLUTION PREVENTION PLAN
C-207	MAINTENANCE OF TRAFFIC PLAN
C-208	MAINTENANCE OF TRAFFIC PLAN
C-209	MAINTENANCE OF TRAFFIC PLAN
C-210	MAINTENANCE OF TRAFFIC PLAN
C-301	PAVING AND GEOMETRY PLAN
C-302	PAVING AND GEOMETRY PLAN
C-303	PAVING AND GEOMETRY PLAN
C-304	PAVING AND GEOMETRY PLAN
C-305	PAVING AND GEOMETRY PLAN
C-306	PAVING AND GEOMETRY PLAN

INDEX OF DRAWINGS

SHEET NUMBER	SHEET TITLE
C-307	PAVING AND GEOMETRY PLAN
C-308	PAVING AND GEOMETRY PLAN
C-400	OVERALL GRADING AND DRAINAGE PLAN
C-401	GRADING AND DRAINAGE PLAN
C-402	GRADING AND DRAINAGE PLAN
C-403	GRADING AND DRAINAGE PLAN
C-404	GRADING AND DRAINAGE PLAN
C-405	GRADING AND DRAINAGE PLAN
C-406	GRADING AND DRAINAGE PLAN
C-407	GRADING AND DRAINAGE PLAN
C-408	GRADING AND DRAINAGE PLAN
C-500	OVERALL UTILITY PLAN
C-501	UTILITY PLAN
C-502	UTILITY PLAN
C-503	UTILITY PLAN
C-504	UTILITY PLAN
C-505	UTILITY PLAN
C-506	UTILITY PLAN
C-507	OFF-SITE UTILITY PLAN
C-508	OFF-SITE UTILITY PLAN
C-509	OFF-SITE UTILITY PLAN
C-510	OFF-SITE UTILITY PLAN
C-511	OFF-SITE UTILITY PLAN
C-512	OFF-SITE UTILITY PLAN
C-513	OFF-SITE UTILITY PLAN
C-601	SIGNAGE AND MARKING PLAN

INDEX OF DRAWINGS

SHEET NUMBER	SHEET TITLE
C-602	SIGNAGE AND MARKING PLAN
C-603	SIGNAGE AND MARKING PLAN
C-604	SIGNAGE AND MARKING PLAN
C-605	SIGNAGE AND MARKING PLAN
C-606	SIGNAGE AND MARKING PLAN
C-607	SIGNAGE AND MARKING PLAN
C-608	SIGNAGE AND MARKING PLAN
C-801	SITE DETAILS
C-802	SITE DETAILS
C-803	SITE DETAILS
C-804	DRAINAGE DETAILS
C-809	UTILITY DETAILS
C-810	UTILITY DETAILS
C-811	UTILITY DETAILS
C-812	UTILITY DETAILS
C-813	UTILITY DETAILS
C-814	UTILITY DETAILS
C-815	PRIVATE PUMP STATION DETAIL
LP-100	OVERALL PLANTING PLAN
LP-101	PLANTING PLAN
LP-102	PLANTING PLAN
LP-103	PLANTING PLAN
LP-104	PLANTING PLAN
LP-105	PLANTING PLAN
LP-106	PLANTING PLAN
LP-107	PLANTING PLAN

INDEX OF DRAWINGS

SHEET NUMBER	SHEET TITLE
LP-108	PLANTING PLAN
LP-150	PLANTING PLAN NOTES
LP-151	PLANTING PLAN DETAILS
IR-101	IRRIGATION PLAN
IR-102	IRRIGATION PLAN
IR-103	IRRIGATION PLAN
IR-104	IRRIGATION PLAN
IR-105	IRRIGATION PLAN
IR-106	IRRIGATION PLAN
IR-107	IRRIGATION PLAN
IR-108	IRRIGATION PLAN
IR-150	IRRIGATION NOTES AND DETAILS
IR-151	IRRIGATION DETAILS
IR-152	IRRIGATION PUMP DETAILS
IR-153	IRRIGATION PUMP DETAILS
IR-154	IRRIGATION PUMP DETAILS

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---

COVER SHEET

COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-001

Plotted By:Erole, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 08:32:49am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\Plan Sheets\C-001 COVER SHEET.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 08:33:00am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-002 SIGNATURE SHEET.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



Kimley-Horn and Associates, Inc.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
CERTIFICATE OF AUTHORIZATION: 696
TAYLOR E. HILL, P.E. No. 88631

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY TAYLOR E. HILL, P.E. ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15–23.004, F.A.C.

INDEX OF DRAWINGS

SHEET NUMBER	SHEET TITLE
C–001	COVER SHEET
C–002	SIGNATURE SHEET
C–003	GENERAL NOTES
C–004	UTILITY NOTES
C–101	PRE–DEVELOPMENT PLAN
C–102	POST DEVELOPMENT PLAN
C–103	OVERALL SITE PLAN
C–104	PHASING PLAN
C–105	PHASING NOTES
C–200	OVERALL CLEARING AND DEMOLITION PLAN
C–201	CLEARING AND DEMOLITION PLAN
C–202	CLEARING AND DEMOLITION PLAN
C–203	CLEARING AND DEMOLITION PLAN
C–204	CLEARING AND DEMOLITION PLAN
C–205	BEST MANAGEMENT PRACTICES DETAILS
C–206	STORMWATER POLLUTION PREVENTION PLAN
C–207	MAINTENANCE OF TRAFFIC PLAN
C–208	MAINTENANCE OF TRAFFIC PLAN
C–209	MAINTENANCE OF TRAFFIC PLAN
C–210	MAINTENANCE OF TRAFFIC PLAN
C–301	PAVING AND GEOMETRY PLAN
C–302	PAVING AND GEOMETRY PLAN
C–303	PAVING AND GEOMETRY PLAN
C–304	PAVING AND GEOMETRY PLAN
C–305	PAVING AND GEOMETRY PLAN
C–306	PAVING AND GEOMETRY PLAN
C–307	PAVING AND GEOMETRY PLAN
C–308	PAVING AND GEOMETRY PLAN
C–400	OVERALL GRADING AND DRAINAGE PLAN
C–401	GRADING AND DRAINAGE PLAN
C–402	GRADING AND DRAINAGE PLAN
C–403	GRADING AND DRAINAGE PLAN
C–404	GRADING AND DRAINAGE PLAN
C–405	GRADING AND DRAINAGE PLAN
C–406	GRADING AND DRAINAGE PLAN
C–407	GRADING AND DRAINAGE PLAN
C–408	GRADING AND DRAINAGE PLAN
C–500	OVERALL UTILITY PLAN
C–501	UTILITY PLAN
C–502	UTILITY PLAN
C–503	UTILITY PLAN
C–504	UTILITY PLAN
C–505	UTILITY PLAN
C–506	UTILITY PLAN
C–507	OFF–SITE UTILITY PLAN
C–508	OFF–SITE UTILITY PLAN
C–509	OFF–SITE UTILITY PLAN
C–510	OFF–SITE UTILITY PLAN
C–511	OFF–SITE UTILITY PLAN
C–512	OFF–SITE UTILITY PLAN
C–513	OFF–SITE UTILITY PLAN
C–601	SIGNAGE AND MARKING PLAN
C–602	SIGNAGE AND MARKING PLAN
C–603	SIGNAGE AND MARKING PLAN
C–604	SIGNAGE AND MARKING PLAN
C–605	SIGNAGE AND MARKING PLAN
C–606	SIGNAGE AND MARKING PLAN
C–607	SIGNAGE AND MARKING PLAN
C–608	SIGNAGE AND MARKING PLAN
C–801	SITE DETAILS
C–802	SITE DETAILS
C–803	SITE DETAILS
C–804	DRAINAGE DETAILS
C–815	PRIVATE PUMP STATION DETAIL



Kimley–Horn and Associates, Inc.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
CERTIFICATE OF AUTHORIZATION: 696
MATTHEW A. JURNEY, PLA No. LA6666993

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW A. JURNEY, PLA ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

INDEX OF DRAWINGS

SHEET NUMBER	SHEET TITLE
LP–100	OVERALL PLANTING PLAN
LP–101	PLANTING PLAN
LP–102	PLANTING PLAN
LP–103	PLANTING PLAN
LP–104	PLANTING PLAN
LP–105	PLANTING PLAN
LP–106	PLANTING PLAN
LP–107	PLANTING PLAN
LP–108	PLANTING PLAN
LP–150	PLANTING PLAN NOTES
LP–151	PLANTING PLAN DETAILS
IR–101	IRRIGATION PLAN
IR–102	IRRIGATION PLAN
IR–103	IRRIGATION PLAN
IR–104	IRRIGATION PLAN
IR–105	IRRIGATION PLAN
IR–106	IRRIGATION PLAN
IR–107	IRRIGATION PLAN
IR–108	IRRIGATION PLAN
IR–150	IRRIGATION PLAN
IR–151	IRRIGATION PLAN

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY–HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904–828–3900
WWW.KIMLEY–HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---

SIGNATURE SHEET

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-002

GENERAL NOTES:

1. ALL WORK AND MATERIALS SHALL BE IN COMPLETE ACCORDANCE WITH ALL RELATIVE COLUMBIA COUNTY AND CITY OF LAKE CITY UTILITIES STANDARDS, SPECIFICATIONS, AND REQUIREMENTS.
2. ELEVATIONS ARE BASED ON NAVD 1988 DATUM. SURVEYS PROVIDED BY AVIROM & ASSOCIATES, INC. DATED SEPTEMBER 30, 2021.
3. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND BECOMING FAMILIAR WITH THE SITE PRIOR TO CONSTRUCTION AND BIDDING.
4. THE CONTRACTOR SHALL ADHERE TO ALL NOTES PROVIDED IN THESE CONSTRUCTION DRAWINGS.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PERMITTED CONSTRUCTION DOCUMENTS. ANY DEVIATION FROM THE APPROVED CONSTRUCTION DOCUMENTS SHALL BE THE SOLE RESPONSIBILITY OF THE ORGANIZATION AND/OR ENTITY RESPONSIBLE FOR THE INSTALLATION TO UPDATE/REPLACE ANY DEFICIENT MATERIAL/EQUIPMENT NECESSARY TO BRING THE FINAL PRODUCT TO THE STANDARDS OF THE PERMITTED CONSTRUCTION DOCUMENTS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL/DISPOSAL OF ANY UNSUITABLE MATERIAL FROM HIS OPERATION, FURNISHING AND COMPACTING SUITABLE REPLACEMENT BACKFILL MATERIAL IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INCLUDING RIGHT-OF-WAY PERMITS, AND INSURANCE REQUIRED FOR THE PROJECT.
8. THE LOCATION OF ALL UTILITIES SHOWN ON THE DRAWINGS ARE FROM INFORMATION PROVIDED BY THE SURVEYOR, CITY OF LAKE CITY UTILITIES AND LIMITED FIELD OBSERVATIONS.
9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM, IN THE FIELD, THE LOCATIONS AND ELEVATIONS SHOWN PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION AND BUILDING PLACEMENT WITH ALL OTHER UTILITIES CONSTRUCTION.
11. CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE EROSION AND TURBIDITY CONTROLS DURING AND FOLLOWING CONSTRUCTION UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED TO AVOID ADVERSE ENVIRONMENTAL IMPACTS TO OFF-SITE PROPERTY AND DRAINAGE SYSTEMS.
12. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH STORMWATER POLLUTION PREVENTION PLAN (SWPPP) INCLUDED HEREIN. SWPPP SHALL BE MAINTAINED, ADJUSTED, AUGMENTED AND UPDATED BY THE SITE CONTRACTOR ACCORDING TO SITE CONDITIONS IN ORDER TO COMPLY WITH THE NPDES PERMIT CONDITIONS.
13. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH THESE CONSTRUCTION PLANS AND PROJECT SPECIFICATIONS.
14. ALL AREAS OF DISTURBED COUNTY, OR STATE RIGHT-OF-WAY SHALL BE SODDED.
15. THE CONTRACTOR SHALL PROVIDE A TEMPORARY WATER SERVICE OR WATER TRUCK FOR WASH-DOWN OF VEHICLES LEAVING THE PROJECT SITE IF NECESSARY.
16. THE CONTRACTOR(S) SHALL NOTIFY ALL APPLICABLE UTILITIES COMPANIES, THE ENGINEER OF RECORD, AND THE PROPERTY OWNER 48 HOURS PRIOR TO INITIATING ANY EXCAVATION ACTIVITIES, OR AS SPECIFIED BY THE UTILITIES COMPANIES AND THE PERMITS OBTAINED FOR THE WORK.
17. THE ENGINEER OF RECORD SHALL BE GIVEN FORTY EIGHT HOURS (48-HR) NOTICE OF ALL MEETINGS AND OR TESTING MEASURES RELATED TO SAID PROJECT.
18. THERE ARE TO BE NO OPEN TRENCHES AT THE END OF EACH WORK DAY.
19. WHERE TRENCH EXCAVATION EXCEEDS FIVE (5) FEET IN DEPTH, THE CONTRACTOR SHALL SUBMIT A TRENCH SAFETY SYSTEM FOR APPROVAL TO ENGINEER. THE TRENCH SAFETY SYSTEM SHALL BE COMPLIANT WITH OSHA STANDARD 29 CFR SECTION 1926.650 SUBPART P. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION THAT THE TRENCH SAFETY SYSTEM IS IN COMPLIANCE WITH THE STATED OSHA STANDARD.
20. CONSTRUCTION WARNING SIGNS ARE TO BE MOUNTED AND ERECTED BEFORE CONSTRUCTION CAN COMMENCE. THESE AND ALL TRAFFIC CONTROL DEVICES SHALL FOLLOW THE STANDARDS SET FORTH BY THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS WELL AS FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD INDEX.
21. THE CONTRACTOR IS RESPONSIBLE FOR CLEARLY IDENTIFYING THE AREA OF CONSTRUCTION AND SAFELY ROUTING ALL VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE CONSTRUCTION AREA. THE CONSTRUCTION AREA SHALL BE CLEARLY MARKED AT ALL TIMES.
22. THE CONTRACTOR(S) SHALL LOCATE, VERIFY, AND IDENTIFY ALL EXISTING UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THE PLANS PRIOR TO ANY EXCAVATING ACTIVITIES.
23. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO EXCAVATION AND TAKE ALL MEASURES NECESSARY TO PROTECT UTILITIES DURING CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPONSIBLE UTILITY COMPANY, THE ENGINEER OF RECORD, AND THE COUNTY.
24. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES, SURVEY MONUMENTS, MARKERS, CORNERS, AND EXISTING FEATURES IN THE AREA. ANY DAMAGE SHALL BE REPLACED/REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY HIS OPERATIONS.
26. A COPY OF THE CONTRACTORS GENERAL LICENSE AND/OR UNDERGROUND UTILITY LICENSE SHALL BE PROVIDED AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE.
27. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR PROCEDURES IN PROPERLY PREPARING THE SITE FOR CONSTRUCTION OF FOUNDATIONS, PAVEMENT AND ALL ELEMENTS RELATED TO THIS PROJECT.
28. GEOTECHNICAL REPORT IS PROVIDED BY TERRACON CONSULTANTS, INC. (904) 900-6494, DATED APRIL 21, 2022.
29. USE OF ANY MATERIALS CLASSIFIED BY THE GEOTECHNICAL REPORT AS UNSUITABLE SHALL NOT BE USED AS FILL SOIL UNLESS A METHOD OF MAKING THE MATERIAL SUITABLE IS APPROVED BY THE GEOTECHNICAL REPORT ENGINEER AND THE CLIENT.
30. ALL UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE SITE IN ACCORDANCE WITH THE GEOTECHNICAL RECOMMENDATIONS. COSTS FOR EXCAVATION AND OFFSITE HAULING AND DISPOSAL SHALL BE BORNE THE THE CONTRACTOR.
31. TEMPORARY CONTROL OF GROUNDWATER SHOULD FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORTS.
32. COLUMBIA COUNTY INSPECTOR SHALL BE CONTACTED 24 HOURS PRIOR TO ALL NECESSARY SITE WORK INSPECTIONS AND 5 DAYS PRIOR TO THE FINAL INSPECTION.
33. ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

DEMOLITION NOTES:

1. ALL DEMOLITION MATERIALS TO BE REMOVED FROM SITE AND PROPERLY DISPOSED OF AT AN APPROVED LANDFILL.
2. THE INTENT OF THE DEMOLITION PLAN IS TO DEPICT EXISTING FEATURES THAT ENCUMBER THE PROPOSED CONSTRUCTION AREA AND ARE SCHEDULED FOR REMOVAL. SOME INCIDENTAL ITEMS MAY HAVE BEEN INADVERTENTLY OMITTED FROM THE PLAN. THE CONTRACTOR IS ENCOURAGED TO THOROUGHLY INSPECT THE SITE AS WELL AS REVIEW THE PLANS AND SPECIFICATIONS PRIOR TO SUBMITTING PRICING. CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR INCIDENTAL ITEMS NOT SHOWN ON THE DEMOLITION PLAN.
3. THE DEMOLITION PLAN IS BASED ON AVAILABLE UTILITY INFORMATION AND MAY OR MAY NOT BE ALL INCLUSIVE FOR THIS SITE. ANY UTILITIES ENCOUNTERED DURING DEMOLITION THAT ARE NOT DEPICTED/ADDRESSED ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER, ARCHITECT, AND PROJECT ENGINEER IMMEDIATELY.
4. ALL FEATURES IDENTIFIED ON THIS PLAN WHICH ARE LISTED TO BE DEMOLISHED ARE TO BE REMOVED FROM THE SITE. AFTER DEMOLITION IS COMPLETE THE SITE SHALL BE DELIVERED IN A CONDITION SUITABLE FOR DEVELOPMENT.
5. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING AIRBORNE DUST AND POLLUTANTS BY USING WATER SPRINKLING OR OTHER SUITABLE MEANS OF CONTROL.
6. CONTRACTOR TO USE CARE IN HANDLING DEBRIS FROM SITE TO ENSURE THE SAFETY OF THE PUBLIC. HAUL ROUTE TO BE CLOSELY MONITORED FOR DEBRIS OR MATERIALS TRACKED ONTO ADJOINING ROADWAYS, SIDEWALKS, ETC. ROADWAYS AND WALKWAYS TO BE CLEARED DAILY OR AS NECESSARY TO MAINTAIN PUBLIC SAFETY.
7. DEWATERING SHOULD BE ANTICIPATED AND ALL COSTS, PERMITS AND EQUIPMENT FOR DEWATERING SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.
8. ALL ASPHALT TO BE REMOVED SHALL BE SAW CUT ADJACENT TO REMAINING IMPROVEMENTS.
9. SEE LANDSCAPE PLAN FOR TREE REMOVAL/RELOCATION AND TREE PROTECTION.
10. DEMOLITION CONTRACTOR SHALL CONSTRUCT EROSION CONTROL MEASURES AS SHOWN ON THIS PLAN AS NECESSARY DURING DEMOLITION OPERATIONS OR AS DIRECTED BY THE ENGINEER, CITY OR COUNTY INSPECTOR TO PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM SOIL EROSION AND SEDIMENTATION.
11. VARIATIONS TO CONDITIONS OR DISCREPANCIES IN ACTUAL FIELD CONDITIONS AS THEY APPLY TO THE DEMOLITION OR SITE DEVELOPMENT WORK MUST BE BROUGHT TO THE OWNER'S REPRESENTATIVE AND ENGINEER'S ATTENTION PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION.
12. CONTRACTOR SHALL LOCATE, IDENTIFY, PROPERLY TERMINATE, AND MARK ALL EXISTING UTILITIES WITHIN THE DEMOLITION AREA THAT ARE TO REMAIN AND PROTECT THEM FROM DAMAGE.
13. THE DEMOLITION CONTRACTOR MUST NOTIFY ALL UTILITY COMPANIES, FIRE MARSHALL, AND OWNER'S REPRESENTATIVE PRIOR TO INTERRUPTION OF ANY UTILITY SERVICE. NOTIFICATION MUST BE MADE PER THE PROJECT SPECIFICATIONS. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH AND ADHERENCE TO EACH UTILITY COMPANY'S AND FIRE MARSHAL'S REGULATIONS REGARDING SERVICE INTERRUPTION.
14. THE DEMOLITION CONTRACTOR MUST PROTECT ALL LANDSCAPING AND OTHER FEATURES DESIGNATED TO REMAIN AND REPLACE SUCH ITEMS IF DISTURBED DURING DEMOLITION.
15. CONTRACTOR SHALL CONDUCT ALL DEMOLITION OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC AND/OR PRIVATE ACCESSES AND FACILITIES. ALL AREAS OUTSIDE OF THE PAVEMENT REMOVAL LINE MUST BE MAINTAINED FOR PUBLIC ACCESS.
16. THE DEMOLITION CONTRACTOR MUST PROTECT BENCH MARKS PROPERTY CORNERS, AND ALL OTHER SURVEY MONUMENTS FROM DAMAGE OR DISPLACEMENT. IF A MARKER MUST BE REMOVED, IT SHALL BE REPLACED BY A LICENSED LAND SURVEYOR AND REPLACED.
17. THE DEMOLITION CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEASURES AS REQUIRED IN ACCORDANCE WITH THE U.S. DEPT. OF TRANSPORTATION "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND GOVERNING MUNICIPALITY REQUIREMENTS.
18. DEPRESSIONS AND VOID AREAS CAUSED BY DEMOLITION WORK ARE TO BE FILLED TO SUBGRADE AND PROPERLY COMPACTED TO THE EXISTING ELEVATION TO AVOID WATER PONDING.
19. THE DEMOLITION CONTRACTOR SHALL ACQUIRE ALL PERMITS AND PAY ALL ASSOCIATED FEES PERTAINING TO THE DEMOLITION AND DISPOSAL REQUIREMENTS. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR ADHERENCE TO ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS REGARDING THIS WORK. IF THERE ARE NO LOCAL, STATE OR FEDERAL REQUIREMENTS THE DEMOLITION CONTRACTOR SHALL ACQUIRE AN ENGINEERS CERTIFICATION THAT THE WORK HAS BEEN DONE IN ACCORDANCE WITH THE PLANS.
20. THE DEMOLITION CONTRACTOR SHALL COORDINATE THE DEMOLITION TO LEAVE ACCESS AND UTILITY SERVICE TO THE NEIGHBORING BUILDINGS AT ALL TIMES.
21. THE DEMOLITION CONTRACTOR SHALL FIELD LOCATE, MARK, AND PROTECT ALL EXISTING UTILITIES.
22. CODES
    ALL CODES REGULATING DEMOLITION WORK SHALL BE COMPLIED WITH. THE CONTRACTOR SHALL PUT UP AND MAINTAIN SUCH BARRIERS AND WARNING LIGHTS, AS MAY BE NECESSARY OR REQUIRED BY CODE, TO PROTECT AND PREVENT UNAUTHORIZED PERSONNEL FROM ENTERING THE DEMOLITION WORK AREA. ALL DEMOLITION OPERATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) INSOFAR AS THEY APPLY TO DEMOLITION WORK TO BE PERFORMED UNDER THIS CONTRACT.
23. PROTECTION OF BUILDINGS & EQUIPMENT
    TEMPORARY PROTECTIVE DEVICES, AS REQUIRED SHALL BE INSTALLED ADJACENT TO THE DEMOLITION WORK FOR PROTECTION OR PERSONNEL, EXISTING ADJACENT BUILDINGS, STRUCTURES AND EQUIPMENT AGAINST DUST, FALLING OR FLYING DEBRIS. ANY DAMAGE TO EXISTING STRUCTURES, FACILITIES AND/OR EQUIPMENT RESULTING FROM DEMOLITION WORK SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.
24. DISPOSAL OF EXISTING EQUIPMENT & DEBRIS
    ALL DEBRIS AND EXISTING MATERIALS AND EQUIPMENT SHALL BE HAULED AWAY AND DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL MAKE HIS OWN ARRANGEMENTS FOR OBTAINING DISPOSAL AREAS. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PREVENT SPILLAGE OF MATERIALS BEING HAULED IN PUBLIC STREETS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMMEDIATELY CLEAN UP ANY SPILLAGE WHICH MAY ACCIDENTALLY OCCUR.
25. CLEANUP
    THE CONTRACTOR SHALL MAINTAIN AN ORDER OF NEATNESS AND GOOD HOUSEKEEPING. TOOLS, SCAFFOLDING AND OTHER DEMOLITION EQUIPMENT MUST AT ALL TIMES BE KEPT IN A NEAT AND ORDERLY ARRANGEMENT. AT THE CONCLUSION OF THE DEMOLITION OPERATIONS, THE ENTIRE WORK AREA SHALL BE LEFT IN A CLEAN CONDITION AS REQUIRED FOR SUBSEQUENT NEW WORK.

PAVING AND DRAINAGE NOTES:

1. ALL GRADING, PLACEMENT OF FILL, AND COMPACTION SHALL BE IN ACCORDANCE WITH COLUMBIA COUNTY STANDARD SPECIFICATIONS AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. IN THE EVENT OF A STANDARD CONFLICT, THE COLUMBIA COUNTY SPECIFICATIONS AND STANDARDS SHALL HAVE PRIORITY.
2. THE CONTRACTOR SHALL CONSTRUCT ALL DRAINAGE STRUCTURES TO THE DESIGN ELEVATIONS SHOWN AND IN COMPLIANCE WITH TYPICAL CONSTRUCTION DETAILS.
3. ALL PIPE LENGTHS SHOWN HEREIN ARE APPROXIMATE LENGTHS FROM CENTER TO CENTER OF THE RELATED STRUCTURES.
4. ALL PIPE LENGTHS ARE SCALED AND MAY REQUIRE SLIGHT FIELD ADJUSTMENTS TO FIT CONDITIONS. ALL PIPE CROSSINGS SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTOR MAX. DRY DENSITY (ASTM D1557) AT 1' LIFTS.
5. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF THE PAVING AND DRAINAGE FACILITIES WITH ALL OTHER CONSTRUCTION. WATER AND SANITARY SEWER ARE PROVIDED AS PART OF THESE CONSTRUCTION DOCUMENTS.
6. ALL PIPE JOINTS SHALL BE PROPERLY FITTED AND SEALED PER PRODUCT MANUFACTURERS SPECIFICATIONS.
7. THE CONTRACTOR SHALL COORDINATE ALL NOTIFICATIONS AND UTILITY LOCATION EFFORTS WITH THE UTILITY OWNERS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
8. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES DURING CONSTRUCTION. REFER TO THE CONSTRUCTION POLLUTION PREVENTION PLAN.
9. COMPACTION DENSITIES FOR ALL ROADWAY CROSSINGS ARE TO BE TAKEN IN ONE-FOOT (1') LIFTS.
10. LIMEROCK BEARING RATIOS FOR SUBGRADE AT FORTY (40) AND LIMEROCK OR ALTERNATIVE BASE COURSE AT ONE HUNDRED (100). THERE WILL BE NO UNDER TOLERANCE. CRUSHED CONCRETE IS AN ACCEPTABLE ALTERNATIVE TO LIMEROCK, ONLY IF IT MEETS THE SPECIFICATIONS DEFINED IN THE GEOTECHNICAL REPORT AS "BASE COURSE."
11. ALL MATERIAL USED FOR BACKFILL SHALL BE CLASS A3 FREE DRAINING SAND.
12. ALL CONSTRUCTION LINES & GRADES SHALL BE ESTABLISHED AND MAINTAINED BY THE CONTRACTOR.
13. CONTRACTOR WILL CLEAR, GRUB AND DISPOSE OF ALL DEBRIS AND SURFACE ORGANICS TO FIRM MATERIAL IN ALL EASEMENTS, ROAD RIGHT-OF-WAYS AND DETENTION AREAS. DISPOSAL SHALL BE INCLUDED IN THE CONTRACT.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF DOWNSTREAM TURBIDITY/ SILTATION THROUGH THE USE OF HAY BALES, SCREENS, SILTATION BASINS, CHEMICAL FLOCCULATION AND/OR ANY OTHER SUITABLE MEANS REQUIRED TO MEET FLORIDA STREAM STANDARDS. SEED AND MULCH ALL DISTURBED AREAS, SOD AS REQUIRED TO CONTROL EROSION THROUGH FINAL INSPECTION AND TO PRODUCE A UNIFORM STAND OF GRASS THROUGHOUT.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR BRICKING UP CURB INLETS TO FINISHED GRADE AND FURNISHING AND MAINTAINING ALL HARDWARE.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING CURB TRANSITIONS TO FINISH GRADE.
17. UNDERDRAINS SHALL BE INSTALLED IN ALL CASES WHERE THE SEASONAL HIGH WATER TABLE IS CLOSER THAN 12 INCHES BELOW THE PROPOSED SUBGRADE OF ANY ROAD, REGARDLESS OF PLANS. UNDERDRAINS SHALL BE STUBBED OUT 20' FROM ALL CURB INLETS FOR FUTURE POSSIBLE USE.
18. FILTER WRAP ALL DRAINAGE JOINTS TO COLUMBIA COUNTY SPECIFICATIONS.
19. A 2' STRIP OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS.
20. ALL POND SIDE SLOPES SHALL BE STABILIZED WITH ESTABLISHED VEGETATIVE COVER AT TIME OF FINAL INSPECTION.
21. ACCESSIBLE RAMPS SHALL BE INSTALLED WHEREVER THE SIDEWALK MEETS THE CURB.
22. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING ALL ADA PARKING SPACES AND ACCESSIBLE ROUTES, PURSUANT TO THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION, LATEST EDITION IN EFFECT AT THE TIME THE PROJECT WAS APPROVED BY THE COLUMBIA COUNTY. IF THERE ARE DISCREPANCIES IN THE CONSTRUCTION DRAWINGS REGARDING GRADES ON SLOPES COMPARED TO ADA REQUIREMENTS, CONTRACTOR SHALL NOTIFY ENGINEER FOR CLARIFICATION, PRIOR TO IMPLEMENTATION. CONTRACTOR WILL BE RESPONSIBLE FOR ANY PAVEMENT, PARKING STALLS, SIDEWALKS, OR OTHER ADA ELEMENTS ASSOCIATED WITH THIS PROJECT THAT DOES NOT CONFORM TO ADA GUIDELINES AND THE INTENT OF THESE PLANS.
23. CONTRACTOR SHALL INSTALL GRADE-STAKES TO CONFIRM ADA COMPLIANCE FOR ALL ACCESSIBLE ROUTES AND PARKING FACILITIES WITHIN THE PROJECT. ADA COMPLIANCE SHALL BE DETERMINED BY THE FLORIDA BUILDING CODE (LATEST EDITION) FOR ACCESSIBILITY. AFTER REVIEW OF THE GRADE-STAKES, CONTRACTOR SHALL SCHEDULE A PRE-POUR/PRE-PAVE MEETING WITH ENGINEER AND OWNER'S REPRESENTATIVE TO CONFIRM ADA COMPLIANCE OR TO IDENTIFY ANY AREAS NOT MEETING ADA CRITERIA. ANY CONCRETE OR PAVEMENT PLACED THAT EXCEEDS ADA CRITERIA FOR SLOPE, RAMPS, LANDINGS, AND ADA DIMENSIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
24. ALL ROADWAYS, DRIVEWAYS, AND BUILDING PAD LOCATIONS SHOULD BE PROOF ROLLED PRIOR TO IMPORTATION OF ADDITIONAL FILL OR SUBBASE MATERIAL (LIMEROCK OR CRUSH-CRETE). IN THE EVENT THAT PROPOSED COMPACTION AND DENSITIES CANNOT BE ACHIEVED, CONTRACTOR SHALL NOTIFY ENGINEER TO AID IN DETERMINING LIMITS OF UNSUITABLE MATERIALS.

COLUMBIA COUNTY SIGNAGE NOTES:

1. ALL SIGNS WITHIN COLUMBIA COUNTY RIGHT-OF-WAYS MUST MEET COLUMBIA COUNTY STANDARDS.

SIGNAGE AND PAVEMENT MARKING NOTES:

1. PAVEMENT MARKINGS SHOULD BE PLACED AS SHOWN ON THE PLANS AND DETAIL SHEETS.
2. ANY REQUIRED TEMPORARY MARKINGS MUST BE IN PLACE BEFORE OPENING LANES OF TRAFFIC. PAY ITEMS FOR TEMPORARY PAVEMENT MARKINGS ARE TO BE INCLUDED IN THE TABULATION OF QUANTITIES.
3. THE REMOVAL OF EXISTING PAVEMENT MARKINGS WILL BE CONSIDERED AN INCIDENTAL ITEM WITH NO ADDITIONAL COMPENSATION PROVIDED.
4. ALL PERMANENT PAVEMENT MARKINGS SHALL BE EXTRUDED THERMOPLASTIC AND MEET CURRENT COLUMBIA COUNTY SPECIFICATIONS AND/OR FDOT STANDARD SPECIFICATIONS, LATEST EDITION.
5. THERMOPLASTIC PAVEMENT MARKINGS ARE TO BE PLACED NO SOONER THAN 30 CALENDAR DAYS AFTER THE COMPLETION OF THE FINAL PAVEMENT LAYER.
6. A BITUMINOUS REFLECTIVE PAVEMENT MARKER (RPM) ADHESIVE MEETING CURRENT COLUMBIA COUNTY AND/OR FDOT SPECIFICATIONS SHALL BE USED ON ASPHALT ROADWAYS.
7. THE CONTRACTOR SHALL USE CLASS – B REFLECTIVE PAVEMENT MARKERS (RPMS) INSTALLED TO MEET CURRENT COLUMBIA COUNTY SPECIFICATIONS AND/OR FDOT STANDARD SPECIFICATIONS.
8. REFLECTIVE PAVEMENT MARKERS THAT DO NOT CONFLICT WITH PERMANENT (THERMOPLASTIC) MARKINGS SHALL BE PLACED ON ALL FINAL ASPHALTIC CONCRETE SURFACES IMMEDIATELY AFTER THE TEMPORARY PERMANENT STRIPING IS IN PLACE.
9. PAVEMENT MARKINGS REMOVAL:
   a. PAINT BLACKOUT METHOD OF PAVEMENT MARKINGS REMOVAL IS NOT ACCEPTABLE.
   b. GRINDING OR HYDRO BLAST METHODS SHALL BE USED ON WEATHERED ASPHALT SURFACES.
   c. REMOVAL ON NEW ASPHALT SURFACES SHALL BE BY HYDRO BLAST METHOD ONLY.
10. THE CONTRACTOR SHALL CONTACT THE PAVEMENT MARKING INSPECTOR 48 HOURS PRIOR TO INSTALLING ANY PAVEMENT MARKINGS ON ANY COLUMBIA COUNTY ROADWAY OR STREET.
11. IN THE EVENT OF A CONFLICT BETWEEN THE SPECIFICATIONS OF THE COLUMBIA COUNTY AND THE SPECIFICATIONS OF THE FDOT, THE COLUMBIA COUNTY WILL PREVAIL.

SHOP DRAWING AND "AS-BUILT" REQUIREMENTS:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRODUCE, SUBMIT AND OBTAIN APPROVAL OF REPRODUCIBLE "AS-BUILT" DRAWINGS FROM JURISDICTIONAL AGENCIES AS MAY BE REQUIRED.
2. "AS-BUILT" INFORMATION SHALL BE MAINTAINED BY THE CONTRACTOR. CONTRACTOR SHALL EMPLOY THE SERVICES OF A SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO DETERMINE ALL "AS-BUILT" INFORMATION. UPON COMPLETION OF THE WORK THE CONTRACTOR SHALL PROVIDE UP TO SIX COPIES AND AN AUTOCAD FILE OF AS-BUILT DRAWINGS TO THE ENGINEER.
3. THERE SHALL BE A MINIMUM THREE (3) DAYS NOTICE GIVEN FOR SCHEDULING THE FINAL INSPECTION.
4. FIVE DAYS PRIOR TO THE FINAL INSPECTION FOUR (4) SETS OF BLACKLINE AS-BUILTS AND COPY ON COMPACT DISK IN AUTOCAD FORMAT SHOWING THE REQUIRED INFORMATION, SHALL BE SUBMITTED TO THE ENGINEER OF RECORD.

METHODS OF DAM AND POND EMBANKMENT CONSTRUCTION:

1. EACH NEW DAM OR POND EMBANKMENT SHALL BE CONSTRUCTED TO MEET OR EXCEED THE MINIMUM SAFETY REQUIREMENTS OF THE SPECIFICATIONS AND DESIGN FOR THAT DAM OR POND EMBANKMENT.
2. DRAGLINES, DRAG SCRAPERS, TRACTOR, OR OTHER APPROPRIATE EARTH MOVING EQUIPMENT SHALL BE USED TO PLACE MATERIALS USED IN DAM OR POND EMBANKMENT CONSTRUCTION.
3. THE SOIL SHALL BE COMPACTED AND DENSITY TESTS SHALL BE PERFORMED TO ENSURE THAT THE DESIGNED DENSITIES ARE OBTAINED.
4. THE DISTRICT ENGINEER SHALL BE ADVISED OF THE DATE ON WHICH CONSTRUCTION OR SHAPING OF A NEW DAM WILL BEGIN SO THAT HE CAN INSPECT THE SITE.
5. AREAS AROUND ANY WATER LEVEL CONTROL STRUCTURE PIPE, ANY OTHER CONDUIT, OR ANY SURFACE OF DISCONTINUITY BETWEEN MATERIALS WITHIN THE MASS OF THE DAM OR EMBANKMENT SHALL BE CAREFULLY INSTALLED TO AVOID POTENTIAL CONCENTRATION OF SEEPAGES.
6. ALL CONDUITS THROUGH DAMS OR EMBANKMENTS SHALL HAVE TWO OR MORE SEEPAGE COLLARS SPACED IN ACCORDANCE WITH GOOD ENGINEERING PRACTICES PERTINENT TO THE MATERIAL USED FOR THE FILL.
7. TWO COLLARS WILL BE INSTALLED WITHIN THE CORE WHEN THERE IS CORE WITHIN A DAM OR EMBANKMENT.
8. ALL PIPES AND JOINTS IN PIPES EXTENDING THROUGH A DAM OR EMBANKMENT SHALL BE MADE LEAK-PROOF AND SHALL BE CONSTRUCTED OF MATERIAL SUITABLE FOR THE FLUIDS CARRIED AND LOAD IMPOSED.
9. IN ORDER TO AVOID LEAKS ASSOCIATED WITH DIFFERENTIAL SETTLEMENT, CONDUITS THROUGH DAMS OR EMBANKMENTS SHALL NOT BE RIGIDLY SUPPORTED BY PILES OR PIERS.
10. BACKFILL AROUND CONDUITS SHALL BE OF A DENSITY THAT IS EQUAL TO OR GREATER THAN THOSE OF THE SURROUNDING EMBANKMENT. PARTICULAR ATTENTION SHALL BE DEVOTED TO THE LOWER THIRD OF THE CONDUIT.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

GENERAL NOTES

COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-003

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 08:33:12am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-003_GENERAL NOTES.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

CITY OF LAKE CITY UTILITY NOTES:

A. THE UTILITY PLAN AND PLAT SHOWS ALL PUBLIC UTILITY EASEMENTS (PUE'S) IN A METES AND BOUNDS FORMAT. UPON CITY'S APPROVAL OF PLANS FOR DEVELOPMENTS NOT BEING PLATTED, OWNER MAY CHOOSE TO GRANT THE METES AND BOUNDS EASEMENTS AS SHOWN, OR A BLANKET EASEMENT OVER THE ENTIRE PROPERTY, PROVIDED FACILITIES ARE INSTALLED WITHIN THE PRESCRIBED DISTANCES AS SHOWN ON THE UTILITY PLANS AND IN ACCORDANCE WITH THE UTILITY SEPARATION REQUIREMENTS TABLE IN APPENDIX C OF THE CITY OF LAKE CITY W/WW/RCW DESIGN STANDARDS.

B. ALL CONSTRUCTION MATERIALS AND METHODS FOR POTABLE WATER, WASTEWATER, AND RECLAIMED WATER SYSTEMS SHALL BE IN CONFORMANCE WITH CITY OF LAKE CITY'S MOST RECENT POTABLE WATER, WASTEWATER AND RECLAIMED WATER SYSTEM DESIGN STANDARDS, AND APPROVED MATERIALS MANUAL.

C. POTABLE WATER AND WASTEWATER MAINS SHALL MAINTAIN A MINIMUM 10 FEET HORIZONTAL AND 1.5 FOOT VERTICAL SEPARATION.

D. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FOR POTABLE WATER MAINS, WASTEWATER FORCE MAINS, AND RECLAIMED WATER MAINS, AND 15 FEET FOR GRAVITY WASTEWATER MAINS SHALL BE PROVIDED AND MAINTAINED FROM TREES, BUILDINGS, TRANSFORMERS, AND ALL PERMANENT STRUCTURES. LIVE OAK TREES REQUIRE AN ADDITIONAL 5 FEET OF HORIZONTAL CLEARANCE. SERVICE LATERALS REQUIRE 5 FEET LESS CLEARANCE FOR EACH OF THE UTILITIES; NOTE THAT WATER SERVICE LATERALS SHALL BE INSTALLED WITHIN 3" SLEEVES. (SEE CITY OF LAKE CITY STANDARDS – HORIZONTAL SEPARATION DISTANCES FOR PARALLEL AND PERPENDICULAR CLEARANCE FROM OTHER OBJECTS TABLE.)

E. POTABLE WATER SERVICES, REQUIRING A SEPARATE WATER METER, SHALL BE PROVIDED TO EACH LOT, BUILDING OR PARCEL. FOR COMMERCIAL, MULTIFAMILY, AND INSTITUTIONAL DEVELOPMENTS, THE DEVELOPER SHALL BE RESPONSIBLE FOR INSTALLING POTABLE WATER SERVICES AND YOKE ASSEMBLY PACKAGE UP TO AND INCLUDING THE METER YOKE, BOX (INSTALLED AT FINAL GRADE) AND ASSOCIATED APPURTENANCES, FOR METERS 1" AND SMALLER (SEE CITY OF LAKE CITY W/WW/RCW CONSTRUCTION DETAILS), WITH A ONE–YEAR WARRANTY.

F. 2" VALVES LOCATED IN PAVED AREAS, INCLUDING SIDEWALKS, SHALL BE CITY OF LAKE CITY APPROVED CAST IRON, RESILIENT SEAT GATE VALVES WITH STANDARD 2" OPERATING NUT, THREADED WITH BRASS NIPPLE BETWEEN THE VALVES AND TAPPING SADDLE OR TAPPED TEE.

G. WATER MAINS 4" IN DIAMETER AND GREATER, PLACED UNDER ROADWAYS, SHALL BE CEMENT LINED DUCTILE IRON PIPE (CLDIP) EXTENDING 5 FEET PAST THE BACK OF CURB (3 FEET WITHIN CITY OF LAKE CITY LIMITS). TRACER WIRE INSTALLED ON PVC WATER MAINS SHALL CONTINUE ACROSS THE CLDIP SECTIONS.

H. 1" AND 2" WATER SERVICE CROSSINGS LOCATED UNDER ROADWAYS SHALL BE ENCASED IN 3" SCH 40 PVC EXTENDING 5' PAST THE BACK OF CURB (3 FEET INSIDE CITY OF LAKE CITY LIMITS).

I. ANCHORING TEES, COUPLINGS, AND BENDS SHALL BE USED ON ALL FIRE HYDRANT ASSEMBLIES.

J. ALL PRESSURIZED MAIN FITTINGS SHALL BE MECHANICAL JOINT WITH RESTRAINED JOINT GLANDS; A SUFFICIENT LENGTH OF THE PIPE CONNECTED TO THE FITTINGS SHALL BE MECHANICALLY RESTRAINED TO PROVIDE REACTION AS SPECIFIED ON THE RESTRAINED JOINT STANDARD IN THE CONSTRUCTION DETAILS OF THE CITY OF LAKE CITY STANDARDS. CALCULATIONS FOR REQUIRED RESTRAINT LENGTH MUST BE PROVIDED IF THE SPECIFIED RESTRAINT LENGTH, DUE TO SOIL TYPE OR DEPTH OF COVER, DIFFERS FROM THOSE PROVIDED ON THESE DETAILS.

K. ALL SANITARY WASTEWATER SERVICE LATERALS SHALL BE MIN. 4" DIAMETER PVC (SDR 35) AT 1.00% MIN. SLOPE UNLESS OTHERWISE LABELED.

L. WASTEWATER CLEANOUT COVERS LOCATED WITHIN PAVEMENT AND SIDEWALKS ADJACENT TO PAVED AREAS SHALL BE RATED FOR TRAFFIC LOAD BEARING. WASTEWATER CLEANOUT COVERS IN OTHER SIDEWALKS/WALKWAYS SHALL BE BRASS WITH A SQUARE RECESS.

M. MANHOLES WHICH ARE NOT INSTALLED UNDER PAVEMENT SHALL HAVE A RIM ELEVATION AT LEAST 6" ABOVE FINISHED GRADE, AND A 10:1 SLOPE TO FINISHED GRADE.

N. UNLESS OTHERWISE NOTED ON THE PLANS, THE FINISHED FLOOR ELEVATIONS OF BUILDINGS SHALL BE A MINIMUM OF 6" ABOVE THE LOWEST UPSTREAM MANHOLE TOP. IF THIS IS INFEASIBLE, A WASTEWATER SERVICE LATERAL BACKWATER VALVE (BWV) IS REQUIRED ON THE CUSTOMER SIDE OF THE CLEANOUT.

O. WHEN A POTABLE OR RECLAIMED WATER MAIN, OR A WASTEWATER FORCE MAIN IS ROUTED WITHIN 10 FT. OF AN ELECTRIC TRANSFORMER, A 20 FT. LENGTH OF DIP SHALL BE CENTERED ON THE TRANSFORMER WITH MECHANICAL RESTRAINT AT EACH END. NO FITTINGS OR VALVES SHALL OCCUR WITHIN 10 FT. OF THE NEAREST EDGE OF THE TRANSFORMER. A MINIMUM CLEARANCE OF 3' SHALL BE MAINTAINED BETWEEN THE MAIN AND THE TRANSFORMER.

NOTES:

1. THE CONTRACTOR SHALL PROTECT EXISTING UNDERGROUND UTILITIES AND APPURTENANCES FROM DAMAGE DURING CONSTRUCTION OPERATIONS.
2. THE LOCATION OF EXISTING UTILITIES, STORM DRAINAGE STRUCTURES AND OTHER ABOVE AND BELOW–GRADE IMPROVEMENTS ARE APPROXIMATE AS SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION, SIZE AND INVERT ELEVATIONS OF SUCH PRIOR TO THE START OF CONSTRUCTION.
3. A MINIMUM OF 15' SEPARATION IS REQUIRED BETWEEN UTILITIES AND TREES UNLESS A ROOT BARRIER IS PROVIDED.
4. GAS, PHONE AND ELECTRIC SERVICES SHOWN FOR INFORMATIONAL PURPOSES ONLY. DRY UTILITY COMPANIES MAY ALTER THE DESIGN LAYOUT DURING THEIR REVIEW.
5. SEE PLUMBING DRAWINGS FOR EXACT UTILITY CONNECTION LOCATIONS AT THE BUILDING. LOCATIONS SHOWN ON THIS PLAN ARE FOR GENERAL COORDINATION PURPOSES ONLY AND SHOULD BE VERIFIED PRIOR TO INSTALLATION.
6. CONTRACTOR TO PROVIDE TAMPER SWITCHES IN THE VAULT AND THE POST INDICATING SPRINKLER CONTROL VALVE.
7. SEE ELECTRICAL DRAWINGS FOR COORDINATION WITH SITE LIGHTING, TELECOMMUNICATIONS REQUIREMENTS.
8. GENERAL CONTRACTOR SHALL NOTIFY CITY OF LAKE CITY INSPECTORS 48 HOURS BEFORE CONNECTING TO ANY EXISTING LINE IN ACCORDANCE WITH LOCAL REQUIREMENTS CALL 386.758.5492.
9. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL TAP AND TIE ON FEES REQUIRED, AS WELL AS COST OF UNDERGROUND SERVICE CONNECTIONS TO THE BUILDING.
10. ELECTRICAL SERVICE TO PAD MOUNTED TRANSFORMER SHALL BE RUN UNDERGROUND, FROM ROAD RIGHT–OF–WAY TO TRANSFORMER LOCATION. ASSOCIATED COST BY GENERAL CONTRACTOR.
11. MECHANICAL RESTRAINTS SHALL BE PROVIDED ON 4" AND LARGER WATER LINES AT ALL BENDS, TEES, AND FIRE HYDRANTS.
12. TERMINATE WATER–SERVICE PIPING AT BUILDING WALL UNTIL BUILDING WATER PIPING SYSTEMS ARE INSTALLED. TERMINATE PIPING WITH VALVE AND CAP, PLUG, OR FLANGE AS REQUIRED FOR PIPING MATERIAL. MAKE CONNECTIONS TO BUILDING WATER PIPING SYSTEMS WHEN THOSE SYSTEMS ARE INSTALLED.
13. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS AND CITY STANDARDS.
14. REFER TO PLUMBING AND/OR FIRE PROTECT. SHEETS FOR FIRE LINE LEAD–IN LOCATION AND DETAIL.
15. RUN FIRE LINE AS SPECIFIED IN NOTE NO. 12 THIS SHEET.
16. REFER TO PLUMBING SHEETS FOR LOCATION OF SEWER, DOMESTIC, AND IRRIGATION CONNECTIONS.
17. ALL PIPING SHALL BE INSTALLED WITH A MINIMUM OF 36" OF COVER.
18. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES
19. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY EXACT LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
20. ALL NECESSARY INSPECTIONS, CERTIFICATIONS AND AS–BUILT SURVEYS REQUIRED BY CODES AND UTILITY COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED SCHEDULED SUBSTANTIAL COMPLETION AND THE FINAL C.O.
21. CONTRACTOR IS TO COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
22. FIRE HYDRANT FLOW TEST PERFORMED BY CITY OF LAKE CITY ON JUNE, 30TH 2014 INDICATES 1,443 GPM AVAILABLE WATER AT 20 PSI.
23. CONTRACTOR TO PROVIDE FITTINGS AS REQUIRED TO DEFLECT PROPOSED WATER LINES UNDER EXISTING STORMWATER AND EXISTING UTILITY LINES. PROPOSED WATER LINES SHALL HAVE A MINIMUM OF 36" OF COVER BELOW PROPOSED GRADE. PROPOSED WATER LINES SHALL HAVE A MINIMUM OF 6" VERTICAL SEPARATION WHEN DEFLECTED ABOVE AND A MINIMUM OF 12" VERTICAL SEPARATION WHEN DEFLECTED BELOW.
24. SPRINKLER SUPPLY MAINS SHALL TERMINATE 1' ABOVE FINISH FLOOR. INSTALLATION SHOULD BE COORDINATED WITH ARCHITECTURAL DETAILS AND LOCATION OF FIRE RISER.

FIRE PROTECTION:

1. FIRE PROTECTION FOR THE PURPOSE OF THESE PLANS IS ANY UNDERGROUND WATER LINE NOT OWNED AND MAINTAINED BY A PUBLIC UTILITY AS WELL AS ANY PRIVATE FIRE SERVICE MAIN AND PIPE AND ITS APPURTENANCES ON PRIVATE PROPERTY (1) BETWEEN A SOURCE OF WATER AND THE BASE OF THE SYSTEM RISER FOR WATER–BASED FIRE PROTECTION SYSTEMS, (2) BETWEEN A SOURCE OF WATER AND INLETS TO FOAM–MAKING SYSTEMS, (3) BETWEEN A SOURCE OF WATER AND THE BASE ELBOW OF PRIVATE HYDRANTS OR MONITOR NOZZLES AND (4) USED AS FIRE PUMP SUCTION AND DISCHARGE PIPING, (5) BEGINNING AT THE INLET SIDE OF THE CHECK VALVE ON A GRAVITY OR PRESSURE TANK.
2. THIS SHALL ALSO APPLY TO COMBINED SERVICE MAINS USED TO CARRY WATER FOR FIRE SERVICE AND OTHER USES. I.E. DOMESTIC.
3. STANDARDS TO BE REFERENCED ARE TO BE THE MOST CURRENT AS ADOPTED BY THE FLORIDA FIRE PREVENTION CODE:
   NFPA 24, INSTALLATION OF PRIVATE FIRE SERVICE MAINS & THEIR APPURTENANCES
   NFPA 20, STANDARD FOR INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
   NFPA 22, STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION
   NFPA 16, STANDARD ON DELUGE FOAM–WATER SPRINKLER & FOAM–WATER SPRAY SYSTEMS
   NFPA 1963 STANDARD FOR FIRE HOSE CONNECTIONS
4. ITEMS ON THE CONSTRUCTION PLANS SHALL INCLUDE BUT NOT LIMITED TO SCALE DRAWINGS AND DETAILS AND TO INCLUDE THE FOLLOWING ITEMS WHEN THEY ARE APPLICABLE TO THE SYSTEM BEING INSTALLED:

(1) NAME OF OWNER AND OCCUPANT.
(2) LOCATION, INCLUDING STREET ADDRESS.
(3) POINT OF COMPASS.
(4) A GRAPHIC REPRESENTATION OF THE SCALE USED ON ALL PLANS.
(5) NAME AND ADDRESS OF CONTRACTOR.
(6) SIZE AND LOCATION OF ALL WATER SUPPLIES.
(7) SIZE AND LOCATION OF ALL PIPING, INDICATING, WHERE POSSIBLE, THE CLASS AND TYPE AND DEPTH OF EXISTING PIPE, THE CLASS AND TYPE OF NEW PIPE TO BE INSTALLED, AND THE DEPTH TO WHICH IT IS TO BE BURIED.
(8) SIZE, TYPE, AND LOCATION OF VALVES. INDICATE IF LOCATED IN PIT OR IF OPERATION IS BY POST INDICATOR OR KEY WRENCH THROUGH A CURB BOX.
(9) LOCATION OF FIRE DEPARTMENT CONNECTIONS, IF PART OF PRIVATE FIRE SERVICE MAIN SYSTEM, INCLUDING DETAIL OF CONNECTIONS.
(10) SPRINKLER AND STANDPIPE RISERS AND MONITOR NOZZLES TO BE SUPPLIED BY THE SYSTEM.
(11) LOCATION OF FIRE DEPARTMENT CONNECTIONS, IF PART OF PRIVATE FIRE SERVICE MAIN SYSTEM, INCLUDING DETAIL OF CONNECTIONS.
(12) ALL COMPONENTS MUST HAVE LISTING WITH FIRE PROTECTION PER NFPA 24.
(13) ALL FIRE HYDRANTS INSTALLED IN ST. JOHNS COUNTY MUST HAVE A SINGLE 4.5 INCH HOSE OUTLET, AND TWO (2.5) INCH HOUSE OUTLETS, ALL WITH MALE NH STANDARD THREADS, IN ACCORDANCE WITH NFPA 1963.

5. CONTRACTORS INSTALLING THE UNDERGROUND PIPING IN ACCORDANCE WITH THE ABOVE REFERENCE STANDARDS FOR A FIRE PROTECTION SYSTEM USING WATER AS THE EXTINGUISHING AGENT BEGINNING AT THE POINT AT WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND ENDING NO MORE THAN 1 FOOT ABOVE THE FLOOR SHALL BE REQUIRED TO HAVE A CLASS I, II, OR V FIRE PROTECTION CONTRACTORS LICENSE PURSUANT TO CHAPTER 633, FLORIDA STATUTES. GENERAL CONTRACTORS ARE REMINDED THAT THEY ARE RESPONSIBLE FOR VERIFYING THAT THEIR SUBCONTRACTORS HOLD THE REQUIRED LICENSES. CONTRACTORS FOUND TO BE VIOLATING THIS REQUIREMENT MAY BE REPORTED TO THE DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION AND/OR THE STATE FIRE MARSHAL'S REGULATORY LICENSING SECTION.
6. NOTE: MINIMUM WORKING PRESSURE OF THE UNDERGROUND PIPING SHALL BE 150 PSI. NFPA 24 REQUIRES SPECIFIC PVC PIPING TO MEET TABLE C–900 WITH MANUFACTURING LISTING FOR FIRE PROTECTION.
7. ALL FIRE LINES MUST BE INSPECTED BY THE FIRE MARSHAL'S OFFICE PRIOR TO BACKFILL. THE CODE REQUIRES ALL JOINTS EXPOSED FOR INSPECTION WITH FILL IN–BETWEEN JOINTS. ALL PIPING AND ATTACHED APPURTENANCES SUBJECTED TO SYSTEM WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200 PSI OR 50 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, AND SHALL MAINTAIN THAT PRESSURE WITHOUT LOSS FOR2 HOURS.

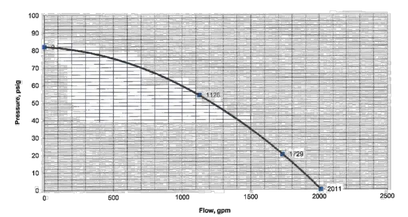
City of Lake City
Water flow report

HYDRANT # & LOCATION: 2188 CR 25A — DATE: 4/13/2022
TEST BY: Al/John — Day: Wednesday — Time: 13:45 — Minutes: 2
WATER SUPPLIED BY: Municipal
PURPOSE OF TEST: request

DATA

FLOW HYDRANT(S)	A1	A2	A3
SIZE OPENING:	2.5	2.5	2.5
COEFFICIENT:	0.9		
PITOT READING:	45		
GPM:	1126	0	0

TOTAL FLOW DURING TEST: 1126 GPM
STATIC READING: 82 PSI — RESIDUAL: 54 PSI
RESULTS: AT 20 PSI RESIDUAL 1729 GPM — AT 0 PSI 2011 GPM
ESTIMATED CONSUMPTION: 2251 GAL.
REMARKS:



No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY–HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904–828–3900
WWW.KIMLEY–HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ——
DRAWN BY: ——
CHECKED BY: ——

UTILITY NOTES

COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR:
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-004

Plotted By:Erale, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 08:33:23am K:\JAX_Civil\045687000 – FPL Columbia County\Jumbo Count\Cadd\PlanSheets\C–004 UTILITY NOTES.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley–Horn and Associates, Inc. shall be without liability to Kimley–Horn and Associates, Inc.

LEGEND:

CN	CURVE NUMBER
TC	TIME OF CONCENTRATION
	BASIN DIVIDE
→	FLOW PATH
80	EXISTING CONTOUR
	OFFSITE AREA
	AREA OF TYPE B SOIL CURVE NUMBERS. SEE NOTE.

NOTES:

1. AREA OF TYPE B SOILS CONSIST OF A SHWL GREATER THAN 24" BELOW EXISTING GRADES. SEE GEOTECHNICAL ENGINEERING REPORT PROVIDED BY TERRACON, DATED APRIL 21, 2022.

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ----
DRAWN BY: ----
CHECKED BY: ----

PRE-DEVELOPMENT PLAN

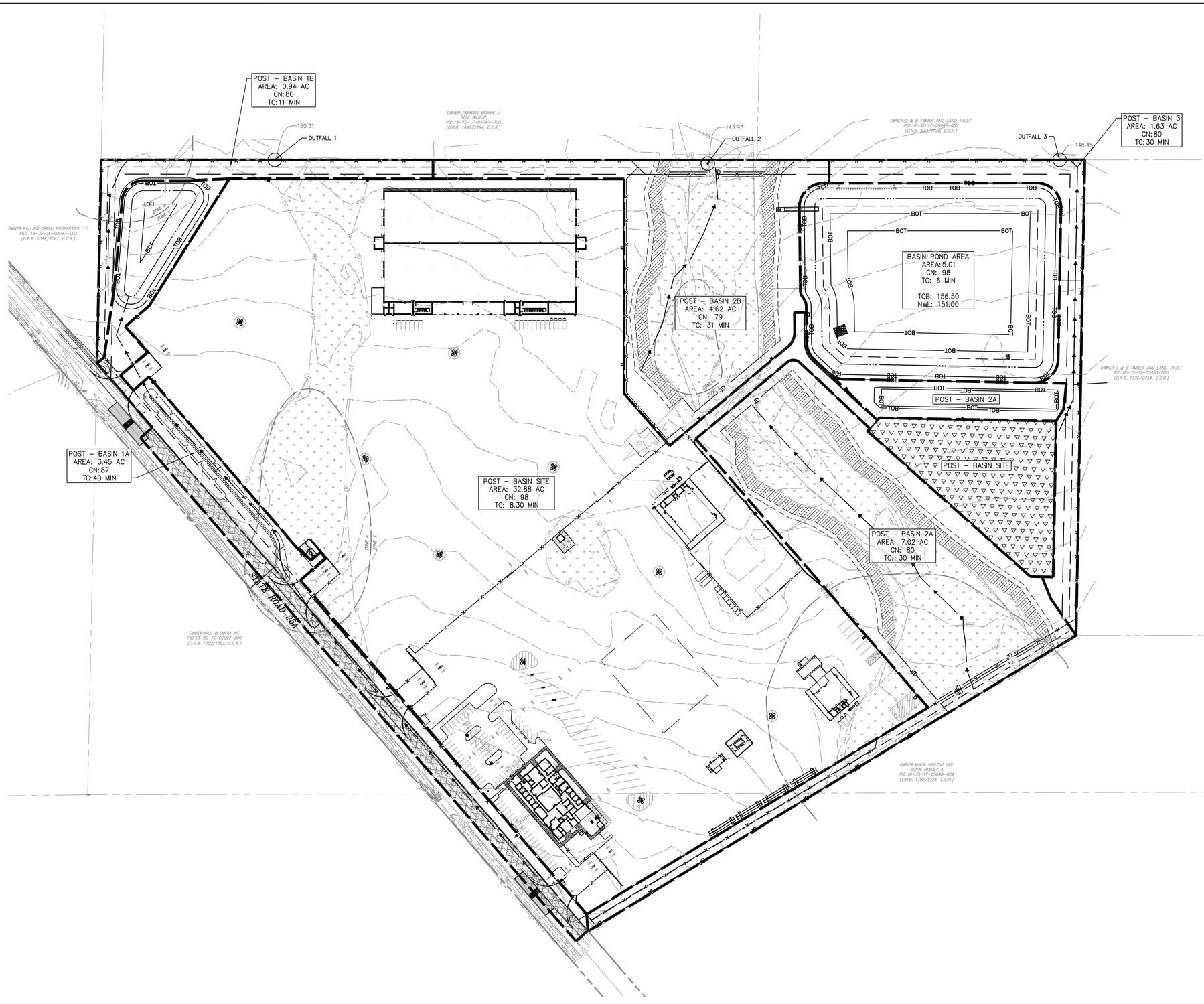
COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY

COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-101

Plotted By:Erole, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 08:33:36am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-101 PRE-DEVELOPMENT PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND:

CN	CURVE NUMBER
TC	TIME OF CONCENTRATION
	BASIN DIVIDE
	OFFSITE AREA

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ----
DRAWN BY: ----
CHECKED BY: ----

POST DEVELOPMENT PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY

COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-102

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 08:33:51am K:\JAX_Civil\045687000 – FPL Columbia County\Civil\Data\PlanSheets\C-102 POST DEVELOPMENT PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

ZONING: RR
LAND USE: RESIDENTIAL–VERY LOW

7' HIGH CHAIN LINK FENCING WITH 1' HIGH "V" SHAPED BRACKET CONTAINING 6–STRANDS BARB WIRE

OWNER: TIMMONS BOBBIE J BELL MILBUR
PID: 18–3S–17–05047–000
(O.R.B. 1442/2294, C.C.R.)

OWNER: D & B TIMBER AND LAND TRUST
PID: 18–3S–17–05046–000
(O.R.B. 933/1738, C.C.R.)

15' LANDSCAPE BUFFER
30' BUILDING SETBACK

OWNER: FALLING CREEK PROPERTIES LLC
PID: 13–3S–16–02097–003
(O.R.B. 1089/2061, C.C.R.)

BLDG F
HEIGHT = 32'–2"
100,634 SF
F.F.E = 158.50
STORM LOGISTICS WAREHOUSE

AUTOMATIC SLIDING GATE (KNOX BOX TO BE PROVIDED ON THE FENCE ADJACENT TO THE GATE)

ACCESS CARD READER

STORMWATER MANAGEMENT POND (4.60 AC.)

OWNER: D & B TIMBER AND LAND TRUST
PID: 18–3S–17–05053–000
(O.R.B. 1376/2754, C.C.R.)

15' LANDSCAPE BUFFER
30' BUILDING SETBACK

7' HIGH CHAIN LINK FENCING WITH 1' HIGH "V" SHAPED BRACKET CONTAINING 6–STRANDS BARB WIRE

209' TO BELL RD
257' TO DRIVEWAY

EXISTING COMMERCIAL DRIVEWAY (ASPHALT)

STORM STAGING AREA

FUTURE RADIO TOWER (DESIGN AND INSTALL BY OWNER)

ROLLING GATE

BLDG E
HEIGHT 25'–0"
7,327 SF
F.F.E. = 158.00
ISC STORES WAREHOUSE

'OVERFLOW PERVIOUS PARKING AREA

15' LANDSCAPE BUFFER

568'

PRIVATE LIFT STATION

AUTOMATIC SLIDING GATE (KNOX BOX TO BE PROVIDED ON THE FENCE ADJACENT TO THE GATE)

ACCESS CARD READER

ROLLING GATE

ENVIRONMENTAL SHED

MATERIAL STORAGE YARD

APPRENTICE TRAINING AREA

7' HIGH CHAIN LINK FENCING WITH 1' HIGH "V" SHAPED BRACKET CONTAINING 6–STRANDS BARB WIRE

AUTOMATIC SLIDING GATE (KNOX BOX TO BE PROVIDED ON THE FENCE ADJACENT TO THE GATE)

OWNER: HILL & SMITH INC.
PID: 13–3S–16–02097–000
(O.R.B. 1359/1324, C.C.R.)

ACCESS CARD READER

BLDG G
HEIGHT = 11'–6"
260 SF
F.F.E = 164.00
I.T. HUT

BLDG D
HEIGHT = 16'–5.5"
193 SF
F.F.E. = 157.90
TRUCK WASH

BLDG C
HEIGHT = 30'–0"
4,800 SF
F.F.E = 158.00
FLEET GARAGE

COUNTY ROAD 25A

STORM STAGING

309'

6,000 GALLON MIXED FUEL SYSTEM

DIALECTRIC TEST SHED

DIALECTRIC TEST AREA & SHED

BLDG A
HEIGHT = 17'–4"
13,090 SF
F.F.E = 164.50
SERVICE CENTER OFFICE BUILDING

EMPLOYEE PARKING (52 SPACES)

OWNER: KUKA VINCENT LEE
KUKA TRACEY A
PID: 18–3S–17–05048–004
(O.R.B. 1395/1724, C.C.R.)

ZONING: I
LAND USE: INDUSTRIAL

ZONING: RR
LAND USE: RESIDENTIAL–VERY LOW

BLDG B
HEIGHT = 12'–5"
450 SF
F.F.E. = 160.50
TRUCK STOCK

7' HIGH CHAIN LINK FENCING WITH 1' HIGH "V" SHAPED BRACKET CONTAINING 6–STRANDS BARB WIRE

7' HIGH CHAIN LINK FENCING WITH 1' HIGH "V" SHAPED BRACKET CONTAINING 6–STRANDS BARB WIRE

523'

VISITOR PARKING (20 SPACES)

15' LANDSCAPE BUFFER

30' BUILDING SETBACK

94'

AUTOMATIC SLIDING GATE (KNOX BOX TO BE PROVIDED ON THE FENCE ADJACENT TO THE GATE)

ACCESS CARD READER

526' TO MOORE RD

987' TO DRIVEWAY

NORTH

GRAPHIC SCALE IN FEET
0 50 100 200

LEGEND:

- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- STABILIZED PERVIOUS PARKING
- UPLAND BUFFER

BUILDING LEGEND:

BUILDING A – SERVICE CENTER OFFICE BUILDING
BUILDING B – TRUCK STOCK
BUILDING C – FLEET GARAGE
BUILDING D – TRUCK WASH
BUILDING E – ISC STORES WAREHOUSE
BUILDING F – STORM LOGISTICS WAREHOUSE
BUILDING G – IT HUT

SITE DATA:

ADDRESS:	COUNTY ROAD 25A, COLUMBIA COUNTY FL 32055
PARCEL NUMBER:	18–3S–17–05048–000 18–3S–17–05048–003
CURRENT ZONING:	I (INDUSTRIAL)
TOTAL PARCEL AREA:	54.50 AC

BUILDING	USE	AREA (SF)	HEIGHT
BLDG A	SERVICE CENTER	13,090	17'–4"
BLDG B	TRUCK STOCK	450	12'–5"
BLDG C	FLEET GARAGE	4,800	30'–0"
BLDG D	TRUCK WASH	193	16'–5.5"
BLDG E	ISC STORES WAREHOUSE	7,327	25'–0"
BLDG F	STORM LOGISTICS WAREHOUSE	100,634	32'–2"
BLDG G	IT HUT	260	11'–6"
	TOTAL	126,754	

BUILDING LOT COVERAGE: 5.34%
IMPERVIOUS SURFACE RATIO: 57.22%

REQUIRED PARKING:
OFFICE USE (1 SPACE/200 SF)
BLDG A: 66 SPACES

WAREHOUSE USE (1 SPACE/6,000 SF)
BLDG C: 1 SPACE
BLDG E: 2 SPACES
BLDG F: 17 SPACES
TOTAL PARKING REQUIRED: 86 SPACES

PROVIDED PARKING:
STANDARD PARKING 106 SPACES
ADA PARKING 5 SPACES
TOTAL PARKING 111 SPACES

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

JURISDICTIONAL AGENCY PERMITS

PERMITS REQUIRE FOR THE DEVELOPMENT OF THIS PROPERTY INCLUDE:

COLUMBIA COUNTY, FL	–	SITE AND DEVELOPMENT REVIEW AND APPROVAL VARIANCE REVIEW AND APPROVAL
SUWANNEE RIVER WATER MANAGEMENT DISTRICT	–	INDIVIDUAL ENVIRONMENTAL RESOURCE PERMIT
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	–	WATER AND WASTEWATER PERMIT STATE 404 PROGRAM INDIVIDUAL PERMIT NPDES NOI

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY–HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904–828–3900
WWW.KIMLEY–HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ____
DRAWN BY: ____
CHECKED BY: ____

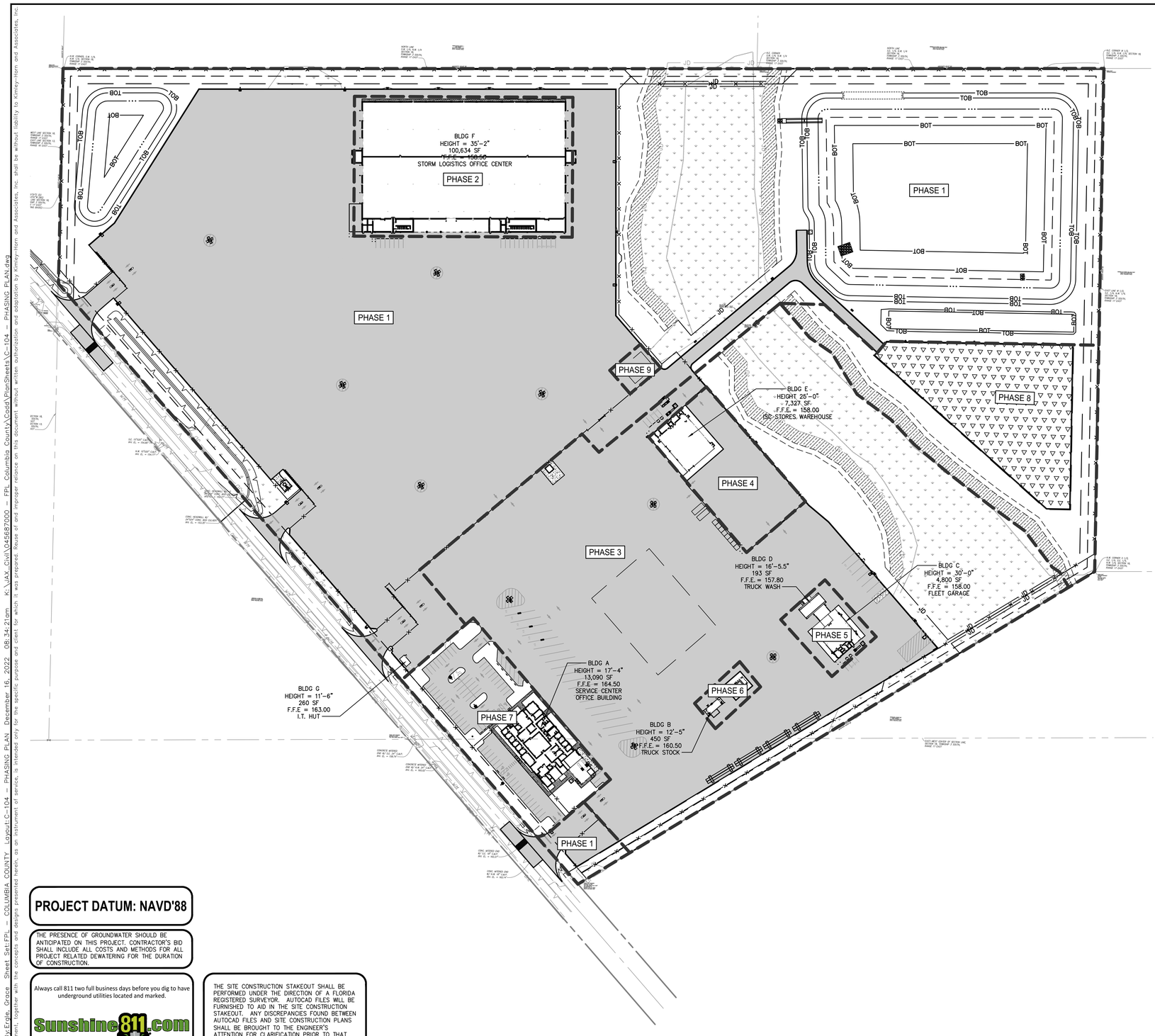
OVERALL SITE PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-103

Plotted By: Erale, Grone Sheet Set: FPL – COLUMBIA COUNTY Layout: 01 December 16, 2022 08:34:06pm K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C–103 OVERALL SITE PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley–Horn and Associates, Inc. shall be without liability to Kimley–Horn and Associates, Inc.



GRAPHIC SCALE IN FEET
0 50 100 200

NORTH

NOTES:

1. FOR DETAILED PHASING NOTES, PLEASE REFER TO SHEET C-105

PHASE BREAKDOWN:

PHASE 1

BUILDING	SIZE(SF)	HEIGHT (FT)	USE
BLDG G	260	11'-6"	IT HUT

LOT COVERAGE:	2,373,907 SF (54.50 AC)	SITE %	PHASE %
PHASE AREA:	1,341,897 SF	56.53%	100%
BUILDING AREA:	260 SF	0.01%	0.02%
IMPERVIOUS AREA:	669,247 SF	28.19%	49.87%
OPEN SPACE			
PERVIOUS AREA:	425,900 SF	17.94%	31.74%
STORMWATER AREA:	246,514 SF	10.38%	18.37%

PHASE 2

BUILDING	SIZE(SF)	HEIGHT (FT)	USE
BLDG F	100,634	32'-2"	STORM LOGISTICS WAREHOUSE

LOT COVERAGE:	2,373,907 SF (54.50 AC)	SITE %	PHASE %
PHASE AREA:	118,785 SF	5.00%	100%
BUILDING AREA:	100,634SF	4.24%	84.72%
IMPERVIOUS AREA:	18,151 SF	0.76%	15.28%
OPEN SPACE			
PERVIOUS AREA:	0 SF	0.00%	0.00%
STORMWATER AREA:	0 SF	0.00%	0.00%

PHASE 3

BUILDING	SIZE(SF)	HEIGHT (FT)	USE
BLDG --	--	--	--

LOT COVERAGE:	2,373,907 SF (54.50 AC)	SITE %	PHASE %
PHASE AREA:	608,337 SF	25.63%	100%
BUILDING AREA:	0 SF	0.00%	0.00%
IMPERVIOUS AREA:	398,606 SF	16.79%	65.52%
OPEN SPACE			
PERVIOUS AREA:	209,731 SF	8.83%	34.48%
STORMWATER AREA:	0 SF	0.00%	0.00%

PHASE 4

BUILDING	SIZE(SF)	HEIGHT (FT)	USE
BLDG E	7,327	25'-0"	ISC STORES WAREHOUSE

LOT COVERAGE:	2,373,907 SF (54.50 AC)	SITE %	PHASE %
PHASE AREA:	45,484 SF	1.92%	100%
BUILDING AREA:	7,327 SF	0.31%	16.11%
IMPERVIOUS AREA:	38,157 SF	1.61%	83.89%
OPEN SPACE			
PERVIOUS AREA:	0 SF	0.00%	0.00%
STORMWATER AREA:	0 SF	0.00%	0.00%

PHASE 5

BUILDING	SIZE(SF)	HEIGHT (FT)	USE
BLDG C	4,800	30'-0"	FLEET GARAGE
BLDG D	193	16'-5.5"	TRUCK WASH

LOT COVERAGE:	2,373,907 SF (51.50 AC)	SITE %	PHASE %
PHASE AREA:	17,710 SF	0.75%	100%
BUILDING AREA:	4,993 SF	0.21%	28.19%
IMPERVIOUS AREA:	12,717 SF	0.54%	71.81%
OPEN SPACE			
PERVIOUS AREA:	0 SF	0.00%	0.00%
STORMWATER AREA:	0 SF	0.00%	0.00%

PHASE 6

BUILDING	SIZE(SF)	HEIGHT (FT)	USE
BLDG B	450	12'-5"	TRUCK STOCK

LOT COVERAGE:	2,373,907 SF (54.50 AC)	SITE %	PHASE %
PHASE AREA:	7,800 SF	0.33%	100%
BUILDING AREA:	450 SF	0.02%	5.77%
IMPERVIOUS AREA:	7,350 SF	0.31%	97.23%
OPEN SPACE			
PERVIOUS AREA:	0 SF	0.00%	0.00%
STORMWATER AREA:	0 SF	0.00%	0.00%

PHASE 7

BUILDING	SIZE(SF)	HEIGHT (FT)	USE
BLDG A	13,090	17'-4"	SERVICE CENTER

LOT COVERAGE:	2,373,907 SF (54.50 AC)	SITE %	PHASE %
PHASE AREA:	77,348 SF	3.26%	100%
BUILDING AREA:	13,090 SF	0.55%	16.91%
IMPERVIOUS AREA:	31,111 SF	1.31%	40.22%
OPEN SPACE			
PERVIOUS AREA:	33 160 SF	1.40%	42.87%
STORMWATER AREA:	0 SF	0.00%	0.00%

PHASE 8

BUILDING	SIZE(SF)	HEIGHT (FT)	USE
BLDG --	--	--	--

LOT COVERAGE:	2,373,907 SF (54.50 AC)	SITE %	PHASE %
PHASE AREA:	151,780 SF	6.39%	100%
BUILDING AREA:	0 SF	0.00%	0.00%
IMPERVIOUS AREA:	0 SF	0.00%	0.00%
OPEN SPACE			
PERVIOUS AREA:	151,780 SF	6.39%	100%
STORMWATER AREA:	0 SF	0.00%	0.00%

PHASE 9

BUILDING	SIZE(SF)	HEIGHT (FT)	USE
BLDG --	--	--	--

LOT COVERAGE:	2,373,907 SF (54.50 AC)	SITE %	PHASE %
PHASE AREA:	4,838 SF	0.20%	100%
BUILDING AREA:	0 SF	0.00%	0.00%
IMPERVIOUS AREA:	4,838 SF	0.20%	100%
OPEN SPACE			
PERVIOUS AREA:	0 SF	0.00%	0.00%
STORMWATER AREA:	0 SF	0.00%	0.00%

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	DATE	SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
045687000	DECEMBER 2022	AS SHOWN	----	----	----

PHASING PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY

COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-104

Plotted By: Eagle, Grace Sheet Set: FPL – COLUMBIA COUNTY Layout: C-104 – PHASING PLAN December 16, 2022 08:34:21am K:\JAX_Civil\045687000 – FPL Columbia County\Cad\PlanSheets\C-104 – PHASING PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

PHASING NOTES

ALL PHASES

1. ALL AREAS WITHIN EACH PHASE SHALL BE ADEQUATELY STABILIZED WITH EROSION CONTROL MEASURES DURING CONSTRUCTION. SEE CLEARING AND DEMOLITION PLANS, STORMWATER POLLUTION PREVENTION PLAN, AND BEST MANAGEMENT PRACTICES DETAILS SHEET
2. ALL EROSION CONTROL MEASURES SHALL BE REMOVED UPON PHASE COMPLETION
3. FIRE PROTECTION SHALL BE PROVIDED TO EACH PHASE DURING CONSTRUCTION DURATION. WATER SUPPLY FOR PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIALS ACCUMULATE ON SITE AND WITHIN EACH PHASE. THIS CAN BE MET BY A PRESSURIZED FIRE HYDRANT OR A 5000-GALLON TANK FILLED WITH WATER FITTED WITH THE APPROPRIATE FIRE CONNECTION AVAILABLE FOR THE FIRE DEPARTMENT IN CASE OF FIRE.
4. REFER TO ARCHITECTURAL, STRUCTURAL, AND MEP DRAWINGS FOR CONSTRUCTION INFORMATION FOR ALL SITE BUILDINSG. REFER TO ELECTRICAL SITE DRAWINGS FOR SITE LIGHTING AND ALL ASSOCIATED ELECTRICAL INFRASTRUCTURE.

PHASE 1

PHASE DESCRIPTION:

- CONSTRUCTION AND COMPLETION OF THE FOLLOWING:
  - -CLEAR, GRUB, AND BEGIN INITIAL EARTHWORK ACTIVITIES THROUGHOUT THE ENTIRE SITE
  - -COMPLETE ALL PROPOSED WETLAND IMPACTS
  - -CONSTRUCT ACCESS ROADWAY THROUGH EASTERN WETLAND CROSSING
  - -GRADE SITE TO MEET THE REQUIRED SUB-BASE ELEVATIONS
  - -INSTALL SITE PERIMETER FENCING AND SECURITY
  - -INSTALL AND MAINTAIN MAINTENANCE OF TRAFFIC DEVICES
  - -CREATE DRIVEWAY CONNECTIONS ON CR-25A
  - -INSTALL STORMWATER MANAGEMENT FACILITIES AND COMPENSATION STORAGE PONDS
  - -INSTALL STORMWATER PIPING AND DRAINAGE STRUCTURES THROUGHOUT PHASE AREA
  - -INSTALL SITE WATERMAIN AND POTABLE WATER SUPPLY LINES
  - -INSTALL SITE GRAVITY SEWER MANHOLES AND LINES
  - -INSTALL PRIVATE LIFT STATION
  - -INSTALL FORCEMAIN ALONG CR-25A
  - -INSTALL CONNECTION POINTS FOR FUTURE PHASES FOR WATER, SEWER, AND STORM
  - -CONSTRUCT IT HUT (BUILDING G)
  - -INSTALL SITE LIGHTING WITHIN SUB-PHASE AREA
  - -INSTALL FINAL SITE PAVING AND STRIPING WITHIN PHASE AREA
- ALL DISTURBED AREAS MUST BE ADEQUATELY STABILIZE (SEE NOTE #1 ABOVE)
- FIRE PROTECTION VIA FIRE HYDRANTS OR OTHER APPROVED METHODS (SEE NOTE #3 ABOVE)
- ALL ROAD MARKINGS AND SIGNAGE, PRIVATE LANDSCAPING, AND ENVIRONMENTAL SIGNAGE ASSOCIATED WITH SUB-PHASE

PHASE 2

PHASE DESCRIPTION:

- CONSTRUCTION AND COMPLETION OF THE FOLLOWING:
  - -CONSTRUCT STORM LOGISTICS WAREHOUSE (BUILDING F)
  - -COMPLETE BUILDING CONNECTIONS TO SUBSURFACE STORM AND UTILITY POINTS OF CONNECTION INSTALLED IN PHASE 1
- ALL DISTURBED AREAS MUST BE ADEQUATELY STABILIZE (SEE NOTE #1 ABOVE)
- FIRE PROTECTION VIA FIRE HYDRANTS OR OTHER APPROVED METHODS (SEE NOTE #3 ABOVE)
- ALL ROAD MARKINGS AND SIGNAGE, PRIVATE LANDSCAPING, AND ENVIRONMENTAL SIGNAGE ASSOCIATED WITH SUB-PHASE

PHASE 3

PHASE DESCRIPTION:

- CONSTRUCTION AND COMPLETION OF THE FOLLOWING:
  - -CLEAR, GRUB, AND BEGIN INITIAL EARTHWORK ACTIVITIES THROUGHOUT THE ENTIRE SITE
  - -GRADE SITE TO MEET THE REQUIRED SUB-BASE ELEVATIONS THROUGHOUT THE ENTIRE SITE
  - -INSTALL STORMWATER PIPING AND DRAINAGE STRUCTURES THROUGHOUT SUB-PHASE AREA
  - -INSTALL SITE WATERMAIN AND POTABLE WATER SUPPLY LINES
  - -INSTALL SITE GRAVITY SEWER MANHOLES AND LINES
  - -INSTALL CONNECTION POINTS FOR FUTURE PHASES FOR WATER, SEWER, AND STORM
  - -INSTALL SITE LIGHTING WITHIN SUB-PHASE AREA
  - -INSTALL FINAL SITE PAVING AND STRIPING WITHIN PHASE AREA
- ALL DISTURBED AREAS MUST BE ADEQUATELY STABILIZE (SEE NOTE #1 ABOVE)
- FIRE PROTECTION VIA FIRE HYDRANTS OR OTHER APPROVED METHODS (SEE NOTE #3 ABOVE)
- ALL ROAD MARKINGS AND SIGNAGE, PRIVATE LANDSCAPING, AND ENVIRONMENTAL SIGNAGE ASSOCIATED WITH SUB-PHASE

PHASE 4

PHASE DESCRIPTION:

- CONSTRUCTION AND COMPLETION OF THE FOLLOWING:
  - -CONSTRUCT ISC STORES WAREHOUSE (BUILDING E)
  - -COMPLETE BUILDING CONNECTIONS TO SUBSURFACE STORM AND UTILITY POINTS OF CONNECTION INSTALLED IN PHASE 3
- ALL DISTURBED AREAS MUST BE ADEQUATELY STABILIZE (SEE NOTE #1 ABOVE)
- FIRE PROTECTION VIA FIRE HYDRANTS OR OTHER APPROVED METHODS (SEE NOTE #3 ABOVE)
- ALL ROAD MARKINGS AND SIGNAGE, PRIVATE LANDSCAPING, AND ENVIRONMENTAL SIGNAGE ASSOCIATED WITH SUB-PHASE

PHASE 5

PHASE DESCRIPTION:

- CONSTRUCTION AND COMPLETION OF THE FOLLOWING:
  - -CONSTRUCT FLEET GARAGE (BUILDING C) AND TRUCK WASH (BUILDING D)
  - -COMPLETE BUILDING CONNECTIONS TO SUBSURFACE STORM AND UTILITY POINTS OF CONNECTION INSTALLED IN PHASE 3
- ALL DISTURBED AREAS MUST BE ADEQUATELY STABILIZE (SEE NOTE #1 ABOVE)
- FIRE PROTECTION VIA FIRE HYDRANTS OR OTHER APPROVED METHODS (SEE NOTE #3 ABOVE)
- ALL ROAD MARKINGS AND SIGNAGE, PRIVATE LANDSCAPING, AND ENVIRONMENTAL SIGNAGE ASSOCIATED WITH SUB-PHASE

PHASE 6

PHASE DESCRIPTION:

- CONSTRUCTION AND COMPLETION OF THE FOLLOWING:
  - -CONSTRUCT TRUCK STOCK (BUILDING B) AND FUEL STATION
  - -COMPLETE BUILDING CONNECTIONS TO SUBSURFACE STORM AND UTILITY POINTS OF CONNECTION INSTALLED IN PHASE 3
- ALL DISTURBED AREAS MUST BE ADEQUATELY STABILIZE (SEE NOTE #1 ABOVE)
- FIRE PROTECTION VIA FIRE HYDRANTS OR OTHER APPROVED METHODS (SEE NOTE #3 ABOVE)
- ALL ROAD MARKINGS AND SIGNAGE, PRIVATE LANDSCAPING, AND ENVIRONMENTAL SIGNAGE ASSOCIATED WITH SUB-PHASE

PHASE 7

PHASE DESCRIPTION:

- CONSTRUCTION AND COMPLETION OF THE FOLLOWING:
  - -CONSTRUCT SERVICE CENTER BUILDING (BUILDING A)
  - -COMPLETE BUILDING CONNECTIONS TO SUBSURFACE STORM AND UTILITY POINTS OF CONNECTION INSTALLED IN PHASE 3
- ALL DISTURBED AREAS MUST BE ADEQUATELY STABILIZE (SEE NOTE #1 ABOVE)
- FIRE PROTECTION VIA FIRE HYDRANTS OR OTHER APPROVED METHODS (SEE NOTE #3 ABOVE)
- ALL ROAD MARKINGS AND SIGNAGE, PRIVATE LANDSCAPING, AND ENVIRONMENTAL SIGNAGE ASSOCIATED WITH SUB-PHASE

PHASE 8

PHASE DESCRIPTION:

- CONSTRUCTION AND COMPLETION OF THE FOLLOWING:
  - -CONSTRUCT PERVIOUS PARKING AREA
  - -INSTALL SITE LIGHTING WITHIN SUB-PHASE AREA
- ALL DISTURBED AREAS MUST BE ADEQUATELY STABILIZE (SEE NOTE #1 ABOVE)
- FIRE PROTECTION VIA FIRE HYDRANTS OR OTHER APPROVED METHODS (SEE NOTE #3 ABOVE)
- ALL ROAD MARKINGS AND SIGNAGE, PRIVATE LANDSCAPING, AND ENVIRONMENTAL SIGNAGE ASSOCIATED WITH SUB-PHASE

PHASE 9

PHASE DESCRIPTION:

- CONSTRUCTION AND COMPLETION OF THE FOLLOWING:
  - -INSTALL RADIO TOWER
- ALL DISTURBED AREAS MUST BE ADEQUATELY STABILIZE (SEE NOTE #1 ABOVE)
- FIRE PROTECTION VIA FIRE HYDRANTS OR OTHER APPROVED METHODS (SEE NOTE #3 ABOVE)
- ALL ROAD MARKINGS AND SIGNAGE, PRIVATE LANDSCAPING, AND ENVIRONMENTAL SIGNAGE ASSOCIATED WITH SUB-PHASE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	GEE
DRAWN BY:	MLW
CHECKED BY:	TEH

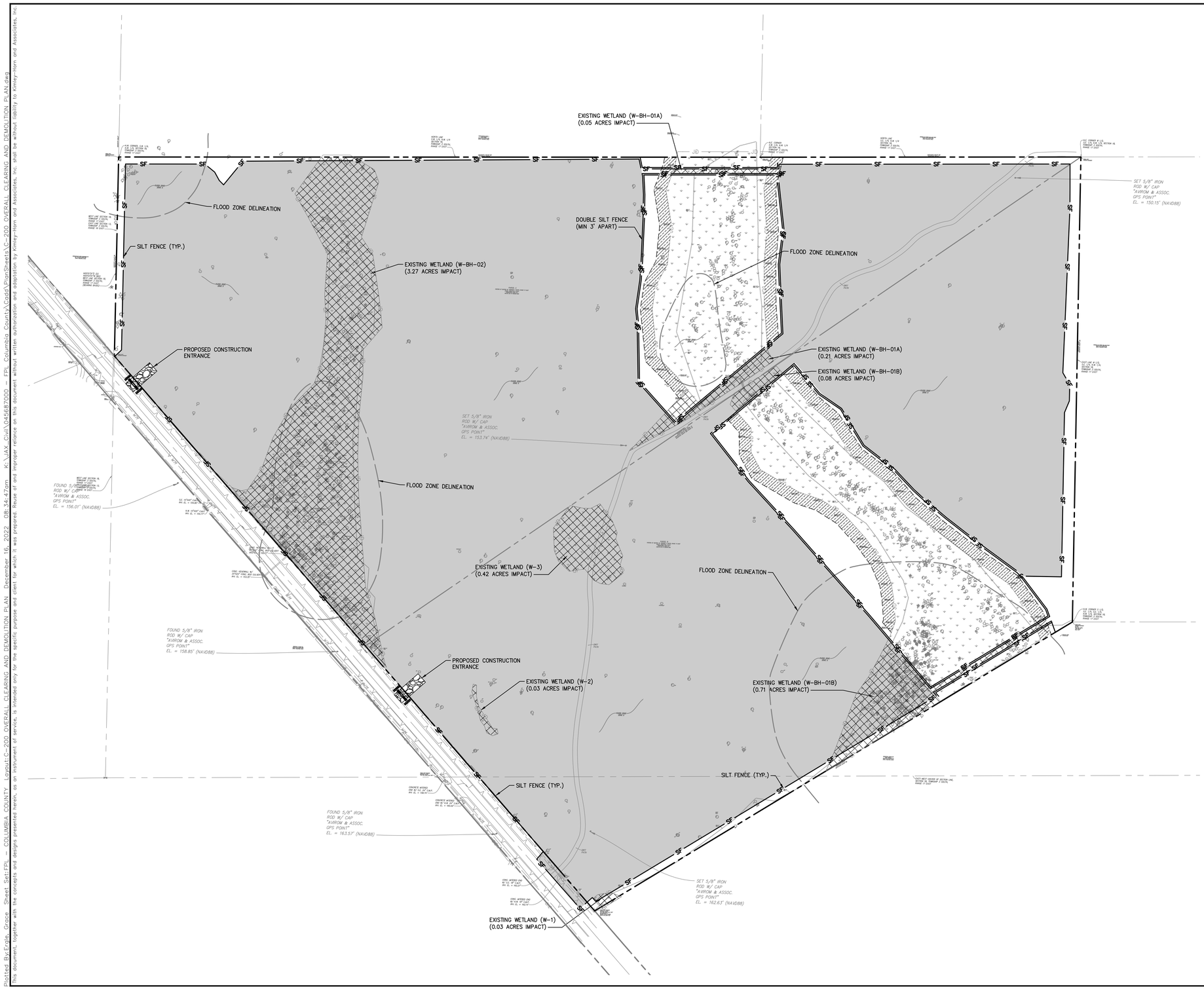
PHASING NOTES

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-105

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:C-105 PHASING NOTES December 16, 2022 08:34:30am K:\JAX_Civil\045687000 – FPL Columbia County\Civil\PlanSheets\C-105 PHASING NOTES.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. FOR DEMOLITION NOTES REFER TO SHEET C-003

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

TAYLOR E. HILL, P.E.
FLORIDA LICENSE NUMBER
88631
FOR ENGINEER OF RECORD SIGNATURE AND SEAL
TAYLOR E. HILL, P. REFER TO SIGNATURE SHEET

KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
045687000	DECEMBER 2022	AS SHOWN	----	----	----

OVERALL CLEARING AND DEMOLITION PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-200

Plotted By:Erole, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:C-200 OVERALL CLEARING AND DEMOLITION PLAN December 16, 2022 08:34:47am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-200 OVERALL CLEARING AND DEMOLITION PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Eagle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 08:35:04am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-201 CLEARING AND DEMOLITION PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND:

- SF — SILT FENCE
- X X X X X X X — DEMOLITION LINE
- WETLAND IMPACTS
- CLEARING LIMITS
- UPLAND BUFFER

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. FOR DEMOLITION NOTES REFER TO SHEET C-003

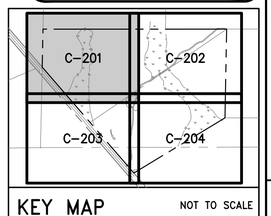
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN PARK WAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

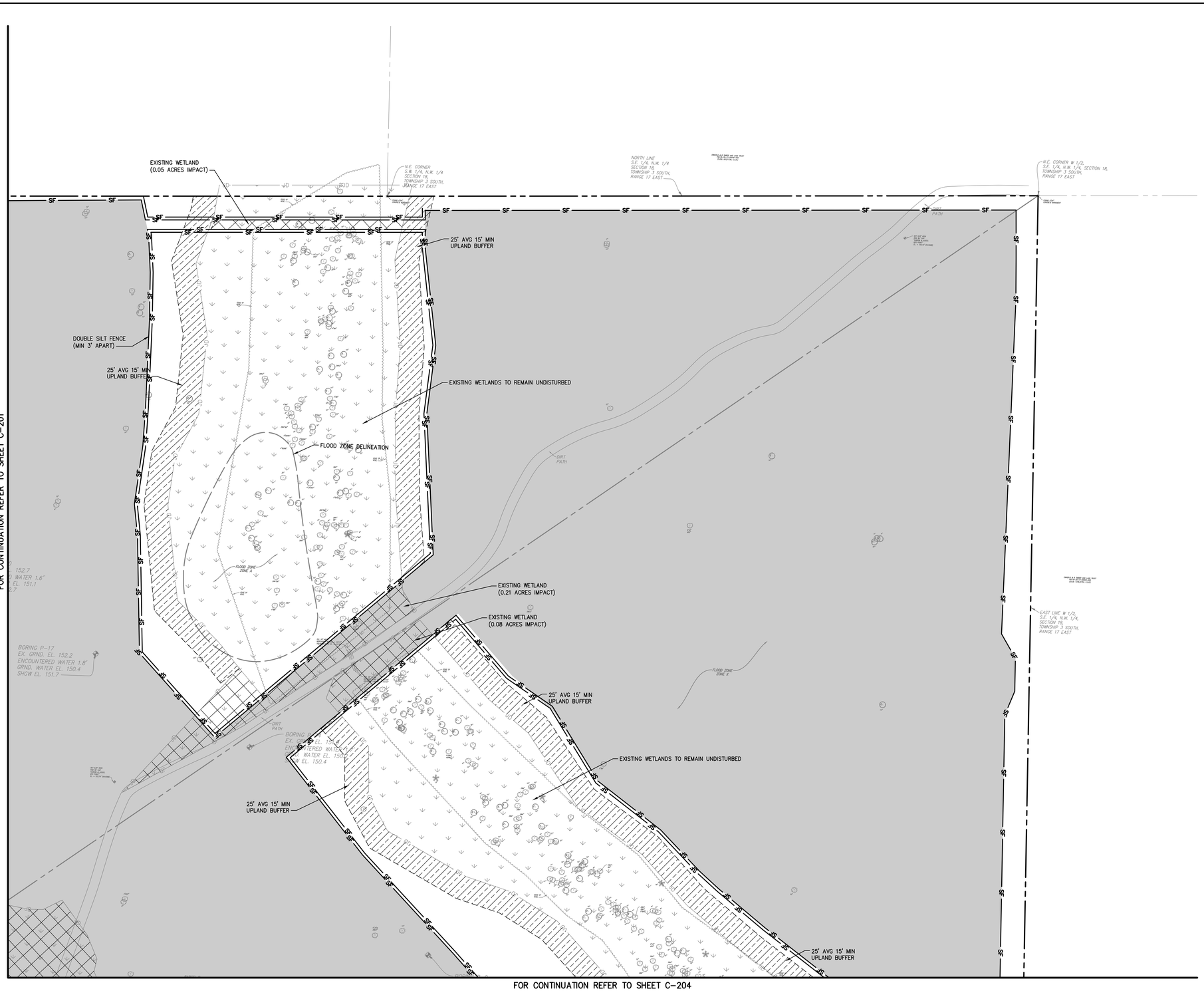
KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	———
DRAWN BY:	———
CHECKED BY:	———

CLEARING AND DEMOLITION PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-201



NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND:

- SF — SILT FENCE
- X X X X X X X — DEMOLITION LINE
- PAVEMENT REMOVAL
- CLEARING LIMITS
- UPLAND BUFFER

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. FOR DEMOLITION NOTES REFER TO SHEET C-003

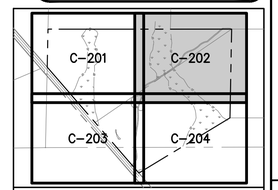
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	____
DRAWN BY:	____
CHECKED BY:	____

CLEARING AND DEMOLITION PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-202

Plotted By: Engle, Grace Sheet Set: FPL – COLUMBIA COUNTY Layout: 02 December 16, 2022 08:35:12am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-201 CLEARING AND DEMOLITION PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Erale_Grone Sheet Set:FPL – COLUMBIA COUNTY Layout:03 December 16, 2022 08:35:21am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-201 CLEARING AND DEMOLITION PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FOR CONTINUATION REFER TO SHEET C-201

S.E. 15"X20" C.M.P. INV. EL. = 154.80'

N.W. 15"X20" C.M.P. INV. EL. = 154.77'

CONC. HEADWALL W/ 24"X24" CONC. BOX CULVERT INV. EL. = 152.77'

CONC. HEADWALL W/ 24"X24" CONC. BOX CULVERT INV. EL. = 153.35'

FLOOD ZONE DELINEATION

BORING P-15
EX. GRND. EL. 157.3
ENCOUNTERED WATER 4.4'
GRND. WATER EL. 152.9
SHGW EL. 155.3

EXISTING WETLAND
(3.27 ACRES IMPACT)

BORING P-13
EX. GRND. EL. 155.3
ENCOUNTERED WATER 1.0'
GRND. WATER EL. 154.3
SHGW EL. 155.3

EXISTING WETLAND
(0.42 ACRES IMPACT)

BORING P-12
EX. GRND. EL. 158.2
ENCOUNTERED WATER 4.1'
GRND. WATER EL. 154.1
SHGW EL. 156.2

BORING P-10
EX. GRND. EL. 158.5
ENCOUNTERED WATER 4.7'
GRND. WATER EL. 153.8
SHGW EL. 156.5

PROPOSED CONSTRUCTION ENTRANCE

24'

HAYBALES (TYP.)

36" RCP

EXISTING WETLAND
(0.03 ACRES IMPACT)

BORING P-5
EX. GRND. EL. 161.0
ENCOUNTERED WATER 3.2'
GRND. WATER EL. 157.8
SHGW EL. 160.0

DIRT PATH

SILT FENCE (TYP.)

CONCRETE MITERED END W/ S.E. 24" C.M.P. INV. EL. = 158.74'

CONCRETE MITERED END W/ N.W. 24" C.M.P. INV. EL. = 160.02'

CONC. MITERED END W/ S.E. 18" C.M.P. INV. EL. = 162.27'

CONC. MITERED END W/ N.W. 18" C.M.P. INV. EL. = 162.14'

EXISTING WETLAND
(0.03 ACRES IMPACT)

FOR CONTINUATION REFER TO SHEET C-204

NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND:

- SF —— SILT FENCE
- X X X X X X X · DEMOLITION LINE
- PAVEMENT REMOVAL
- CLEARING LIMITS
- UPLAND BUFFER

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. FOR DEMOLITION NOTES REFER TO SHEET C-003

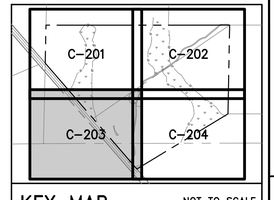
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000	DATE DECEMBER 2022
SCALE: AS SHOWN	
DESIGNED BY: ____	DRAWN BY: ____
CHECKED BY: ____	

CLEARING AND DEMOLITION PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-203

FOR CONTINUATION REFER TO SHEET C-202

FOR CONTINUATION REFER TO SHEET C-203



NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

LEGEND:

- SF — SILT FENCE
- X X X X X X X — DEMOLITION LINE
- PAVEMENT REMOVAL
- CLEARING LIMITS
- UPLAND BUFFER

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. FOR DEMOLITION NOTES REFER TO SHEET C-003

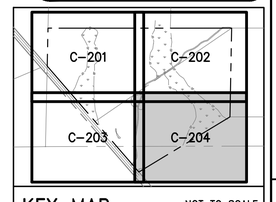
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

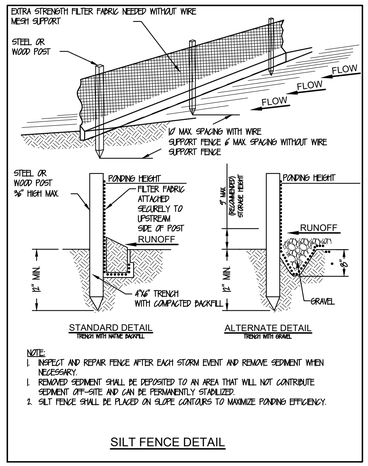
FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ____
DRAWN BY: ____
CHECKED BY: ____

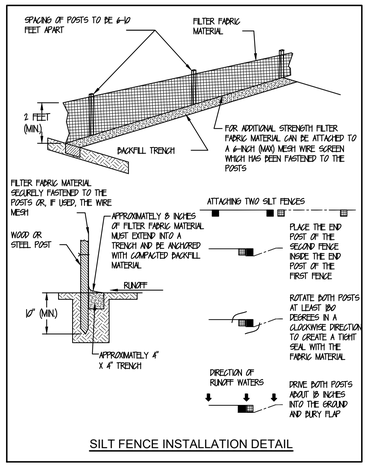
CLEARING AND DEMOLITION PLAN
COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-204

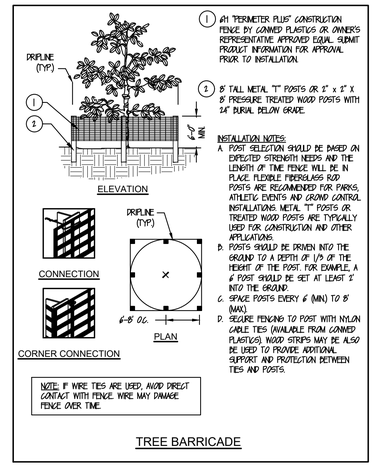
Plotted By:Eagle, Grace Sheet Set:FPL - COLUMBIA COUNTY Layout:04 December 16, 2022 08:35:29pm K:\Jax_Civil\045687000 - FPL Columbia County\Cadd\PlanSheets\C-201 CLEARING AND DEMOLITION PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



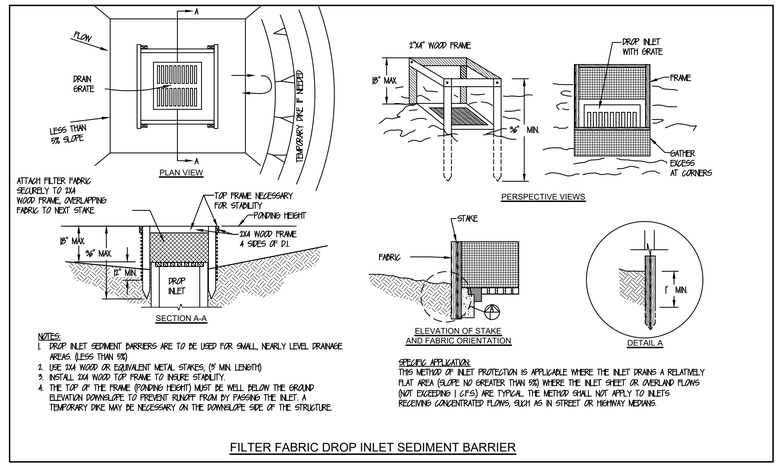
SILT FENCE DETAIL



SILT FENCE INSTALLATION DETAIL



TREE BARRICADE



FILTER FABRIC DROP INLET SEDIMENT BARRIER

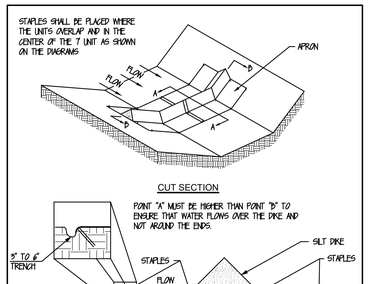
GRAVEL CURB INLET SEDIMENT FILTER WITH OVERFLOW WEIR

CURB INLET SEDIMENT BARRIER

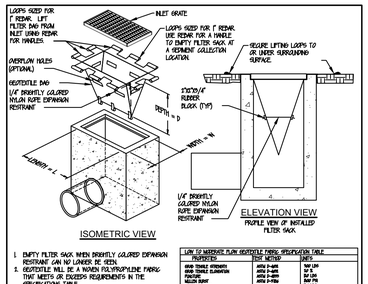
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

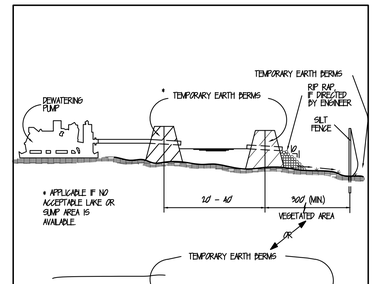
CURB AND GUTTER SEDIMENT BARRIER

BLOCK AND AGGREGATE INLET SEDIMENT DEVISE

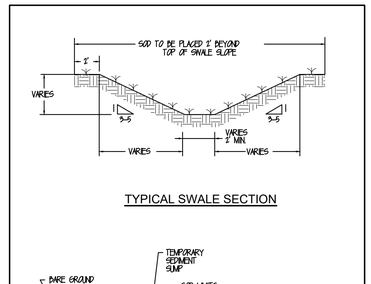


TEMPORARY CHECK DAM

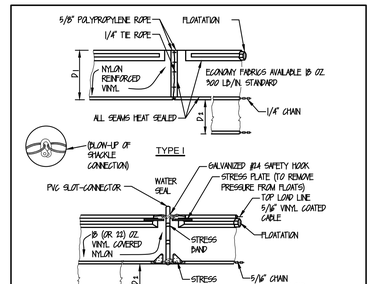




TYPICAL DEWATERING DISCHARGE PLAN



TEMPORARY SEDIMENT SUMP



FLOATING TURBIDITY BARRIERS

Plotted By: Engle, Grace Sheet Set: FPL — COLUMBIA COUNTY Layout: 01 December 16, 2022 08:35:41pm K:\JAX_Civil\045687000 — FPL Columbia County\Cadd\PlanSheets\C-205 BEST MANAGEMENT PRACTICES DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	____
DRAWN BY:	____
CHECKED BY:	____

BEST MANAGEMENT PRACTICES DETAILS
COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-205

STORM WATER POLLUTION PREVENTION PLAN

SITE DESCRIPTION:

PROJECT NAME AND LOCATION:

COLUMBIA STORM PROCESSING AND SERVICE CENTER
CR 25A
COLUMBIA COUNTY, FLORIDA 32055

*SEE COVER SHEET FOR LOCATION MAP

DEVELOPER NAME AND ADDRESS:

FLORIDA POWER & LIGHT COMPANY
700 UNIVERSE BLVD
JUNO BEACH, FLORIDA 33408
CONTACT: JON ROSENTHAL
(561) 694-4000

PROJECT DESCRIPTION:

THE PROJECT WILL CONSIST OF PARTIAL SITE DEMOLITION, BUILDING CONSTRUCTION AND ASSOCIATED PAVING, GRADING, DRAINAGE AND UTILITY CONNECTIONS.

CONTRIBUTING DRAINAGE AREA: 55.55 ACRES

ULTIMATE RECEIVING WATERS: FALLING CREEK

ACTIVITIES THAT REQUIRE EROSION CONTROL:

SITE CLEARING AND GRUBBING; PROVIDING A STABILIZED CONSTRUCTION ENTRANCE, PERIMETER, AND OTHER EROSION AND SEDIMENT CONTROLS; SITE GRADING; INSTALLATION OF STORM WATER, SANITARY SEWER, AND WATER INFRASTRUCTURE; CURB AND GUTTER, ROADWAYS, AND SIDEWALKS; LANDSCAPING.

*SEE PLANS FOR THE LOCATION OF TEMPORARY SEDIMENT BARRIERS AND OTHER EROSION CONTROL METHODS.

SEQUENCE OF MAJOR ACTIVITIES:

THE ORDER OF CONSTRUCTION IS AS FOLLOWS:

1. PROVIDE STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AND OTHER EROSION CONTROL METHODS
3. CLEAR AND GRUB FOR SEDIMENT BASIN
4. CONSTRUCT STORMWATER PONDS
5. FINISH CLEARING AND GRUBBING
6. REMOVE AND STORE TOPSOIL
7. PROVIDE INITIAL GRADING AS REQUIRED
8. STABILIZE ALL DISTURBED AREAS AS SOON AS POSSIBLE
9. INSTALL UTILITIES, STORM SEWER, CURB AND GUTTER
10. INSTALL BASE TO ROAD AND PARKING AREA
11. FINISH GRADING ENTIRE SITE
12. PROVIDE REQUIRED LANDSCAPING
13. CONSTRUCT FINAL PAVING
14. REMOVE ACCUMULATED SEDIMENT
15. REMOVE ANY ITEMS THAT ARE NOT REQUIRED

TIMING OF CONTROL MEASURES:

THE INSTALLATION OF SILT FENCE (AND OTHER EROSION CONTROL MEASURES), A STABILIZED ENTRANCE AND SEDIMENT BASIN SHALL OCCUR PRIOR TO CLEARING AND GRUBBING ACTIVITY. AFTER CONSTRUCTION IS COMPLETE, THE ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE AREAS SHALL BE REGRADED AND PERMANENTLY STABILIZED AS SHOWN ON THE PLANS.

EROSION AND SEDIMENT CONTROLS:

BEST MANAGEMENT PRACTICES SHALL BE USED FOR THIS PROJECT TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN-OFF. THE LOCATION AND DETAILS OF EROSION CONTROL METHODS ARE SHOWN ON THE PLANS. THE SUB-CONTRACTOR(S) IS/ARE RESPONSIBLE FOR PLACING AND MAINTAINING THESE CONTROL METHODS AS SHOWN ON THE PLANS OR AS REQUIRED. HE/SHE SHALL ALSO PROVIDE THE REQUIRED EROSION PROTECTION AS REQUIRED BY LOCAL, STATE AND FEDERAL LAW. OFFSITE SHALL BE COVERED WITH A TARPAULIN.

STORM WATER MANAGEMENT:

STORM WATER COLLECTION SHALL BE PROVIDED BY CURB AND GUTTER AND DRAINAGE INLETS FOR THE DEVELOPED AREAS. THE AREAS THAT ARE REGRADED BUT NOT DEVELOPED SHALL BE STABILIZED IMMEDIATELY AFTER REGRADING. THE ENTIRE SITE SHALL DRAIN TO A SWMF. THE SWMF SHALL BE IN THE AREA OF THE TEMPORARY SEDIMENT BASINS. WHEN SLOPES HAVE BEEN STABILIZED, THE SEDIMENT THAT HAS ACCUMULATED SHALL BE REMOVED FROM THE BASIN AND THE APPROPRIATE VEGETATION SHALL BE PLANTED.

STABILIZATION PRACTICES:

TEMPORARY STABILIZATION – TOPSOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASE FOR AT LEAST 21 DAYS, SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH WITHIN 14 DAYS OF THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED REQUIRED CAN BE FOUND IN TABLE 1.65 A OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, WHERE SOILS ARE ACIDIC 2 TONS OF PULVERIZED AGRICULTURAL LIMESTONE SHOULD BE ADDED PER ACRE AND 450 POUNDS OF 10-20-20 FERTILIZER SHALL BE APPLIED TO EACH ACRE. AFTER SEEDING, EACH AREA SHALL BE IMMEDIATELY MULCHED WITH STRAW OR EQUIVALENT EQUAL. AREAS OF THE SITE WHICH ARE TO BE PAVED SHALL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILE AND STONE SUB-BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED.

PERMANENT STABILIZATION – DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE APPROPRIATE PERMANENT SEED MIX CAN BE FOUND IN TABLES 1.66A, 1.66B AND 1.66C OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, 2 TONS/ACRE OF FINELY GROUND AGRICULTURAL LIMESTONE AND THE PROPER FERTILIZER BASED ON THE TYPE OF SEEDING SHALL BE APPLIED TO EACH ACRE TO PROVIDE PLANT NUTRIENTS. AFTER SEEDING, EACH AREA SHALL BE MULCHED IMMEDIATELY.

STRUCTURAL PRACTICES:

EARTH DIKE – IF REQUIRED, AN EARTH DIKE SHALL BE CONSTRUCTED ALONG THE SITE PERIMETER. A PORTION OF THE DIKE SHALL DIVERT RUN-ON AROUND THE CONSTRUCTION SITE. THE REMAINING PORTION OF THE DIKE SHALL COLLECT RUNOFF FROM THE DISTURBED AREA AND DIRECT THE RUNOFF TO THE SEDIMENT BASIN.

SEDIMENT BASIN – A SEDIMENT BASIN SHALL BE CONSTRUCTED IN THE COMMON DRAINAGE AREA FOR THE SITE. THIS STORAGE POND SHALL HAVE A VOLUME OF 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE. ALL SEDIMENT COLLECTED IN THE BASIN MUST BE REMOVED FROM THE BASIN UPON COMPLETION OF CONSTRUCTION. SEDIMENT FROM THE BASIN MAY BE USED AS FILL ON THE SITE IF IT IS SUITABLE SOIL.

WASTE DISPOSAL:

WASTE MATERIALS – ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A METAL DUMPSTER WITH A SECURE LID IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITIES TO HAVE THE DUMPSTER EMPTIED AT LEAST TWICE A WEEK AND THE WASTE TAKEN TO AN APPROPRIATE LANDFILL. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE. THE SUPERINTENDENT SHALL ORGANIZE TRAINING FOR THE EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH WASTE MATERIALS. THE SUPERINTENDENT SHALL BE RESPONSIBLE FOR POSTING AND ENFORCING WASTE MATERIAL PROCEDURES.

HAZARDOUS WASTE – HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS OR AS DIRECTED BY THE MANUFACTURER. THE SUPERINTENDENT SHALL ORGANIZE THE PROPER TRAINING FOR EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH HAZARDOUS WASTE MATERIALS. THESE PROCEDURES SHALL BE POSTED ON THE SITE. THE PERSON WHO MANAGES THE SITE SHALL BE RESPONSIBLE FOR ENFORCING THE PROCEDURES.

SANITARY WASTE – SANITARY WASTE SHALL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITY FOR COLLECTION OF THE SANITARY WASTE AT LEAST THREE TIMES A WEEK TO PREVENT SPILLAGE ONTO THE SITE.

OFFSITE TRACKING:

A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO REDUCE SEDIMENT TRACKING OFFSITE. THE MAJOR ROAD CONNECTED TO THE PROJECT SHALL BE CLEANED ONCE A DAY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK RESULTING FROM CONSTRUCTION TRAFFIC. ALL TRUCKS HAULING MATERIALS OFFSITE SHALL BE COVERED WITH A TARPAULIN.

ITEMS REQUIRING POLLUTION PREVENTION:

THE FOLLOWING ITEMS ARE EXPECTED TO BE PRESENT ON THE PROJECT SITE: ASPHALT, CONCRETE, CLEANING SUPPLIES, DETERGENTS, FERTILIZERS, MASONARY BLOCKS/BRICKS, METAL PIECES, PAINT, PETROLEUM BASED PRODUCTS, ROOFING SUPPLIES, TAR, WOOD.

THE FOLLOWING ARE NON-STORM WATER SOURCES THAT WILL BE ENCOUNTERED AT THE SITE AND SHOULD BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE:
- UNCONTAMINATED GROUNDWATER EXPOSED DURING EXCAVATION
- WATER FROM WATER LINE FLUSHING
- PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

SPILL PREVENTION AND CONTROL:

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING:

- SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.
- STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT COMPLETION.
- ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF CONTAINER.
- ALL CONSTRUCTION MATERIALS STORED SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE, STORED UNDER A ROOF OR PROTECTIVE COVER.
- PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER.
- ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

HAZARDOUS PRODUCTS:

- MATERIALS SHOULD BE KEPT IN ORIGINAL CONTAINER WITH LABELS UNLESS THE ORIGINAL CONTAINERS CANNOT BE RESEALED. IF ORIGINAL CONTAINERS CANNOT BE USED, LABELS AND PRODUCT INFORMATION SHALL BE SAVED.
- PROPER DISPOSAL PRACTICES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.

PRODUCT SPECIFIC PRACTICES:

- PETROLEUM PRODUCTS MUST BE STORED IN PROPER CONTAINERS AND CLEARLY LABELED. VEHICLES CONTAINING PETROLEUM PRODUCTS SHALL BE PERIODICALLY INSPECTED FOR LEAKS. PRECAUTIONS SHALL BE TAKEN TO AVOID LEAKAGE OF PETROLEUM PRODUCTS ON SITE.
- THE MINIMUM AMOUNT OF FERTILIZER SHALL BE USED AND MIXED INTO THE SOIL IN ORDER TO LIMIT EXPOSURE TO STORM WATER. FERTILIZERS SHALL BE STORED IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
- PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN AN APPROVED MANNER.
- CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES:

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
- SPILL CLEANUP INFORMATION SHALL BE POSTED ON SITE TO INFORM EMPLOYEES ABOUT CLEANUP PROCEDURES AND RESOURCES.
- THE FOLLOWING CLEAN-UP EQUIPMENT MUST BE KEPT ON-SITE NEAR THE MATERIAL STORAGE AREA: GLOVES, MOPS, RAGS, BROOMS, DUST PANS, SAND, SAWDUST, LIQUID ABSORBER, GOGGLES, AND TRASH CONTAINERS.
- ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE.
- WHEN CLEANING A SPILL, THE AREA SHOULD BE WELL VENTILATED AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE COVERING TO PREVENT INJURY.
- TOXIC SPILLS MUST BE REPORTED TO THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.
- AFTER A SPILL, THE PREVENTION PLAN SHALL BE REVIEWED AND CHANGED TO PREVENT FURTHER SIMILAR SPILLS FROM OCCURRING. THE CAUSE OF THE SPILL, MEASURES TO PREVENT IT, AND HOW TO CLEAN THE SPILL UP SHALL BE RECORDED.
- THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS. THE SUPERINTENDENT ALSO OVERSEES THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR EDUCATING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

MAINTENANCE AND INSPECTION PRACTICES

THE FOLLOWING ARE MAINTENANCE AND INSPECTION PRACTICES THAT SHALL BE COMPLETED BY THE CONTRACTOR:

- ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL BY THE SUPERINTENDENT OR SOMEONE UNDER HIS/HER DIRECT SUPERVISION.
- ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE KEPT IN GOOD CONDITION. REPAIRS MUST BE MADE WITHIN 24 HOURS OF REPORT.
- THE SILT FENCE SHALL BE CLEARED OF SEDIMENT WHEN SEDIMENT MEASURES ONE-THIRD THE HEIGHT OF THE FENCE.
- THE SILT FENCE SHALL BE INSPECTED PERIODICALLY FOR HEIGHT OF SEDIMENT AND CONDITION OF FENCE.
- THE SEDIMENT BASINS/DITCHES SHALL BE CHECKED MONTHLY FOR DEPTH OF SEDIMENT. THEY SHALL BE CLEANED WHEN SEDIMENT REACHES 10% OF TOTAL CAPACITY AND AFTER CONSTRUCTION IS COMPLETE.
- THE DIVERSION DIKE SHALL BE INSPECTED MONTHLY. ANY BREACHES SHALL BE PROMPTLY REPAIRED.
- ALL SEEDING SHALL BE CHECKED FOR PROPER GROWTH AND UNIFORMITY. UNSTABALIZED AREAS SHALL BE RE-SODDED.
- A MAINTENANCE REPORT SHALL BE COMPLETED DAILY AFTER EACH INSPECTION OF THE SEDIMENT AND EROSION CONTROL METHODS. THE REPORTS SHALL BE FILED IN AN ORGANIZED MANNER AND RETAINED ON-SITE DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETED, THE REPORTS SHALL BE SAVED FOR AT LEAST THREE YEARS. THE REPORTS SHALL BE AVAILABLE FOR ANY AGENCY THAT HAS JURISDICTION OVER EROSION CONTROL.
- THE SUPERINTENDENT SHALL ORGANIZE THE TRAINING FOR INSPECTION PROCEDURES AND PROPER EROSION CONTROL METHODS FOR EMPLOYEES THAT COMPLETE INSPECTIONS AND REPORTS.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE/DATE	COMPANY NAME/ADDRESS	RESPONSIBILITY

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ----
DRAWN BY: ----
CHECKED BY: ----

STORMWATER POLLUTION PREVENTION PLAN
COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-206

Plotted By:Engle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 08:35:51pm K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-206 STORMWATER POLLUTION PREVENTION PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Ergle, Grace Sheet Set:FPL — COLUMBIA COUNTY Layout:C-207 December 16, 2022 08:36:04am K:\JAX_Civil\045687000 — FPL Columbia County\Code\PlanSheets\C-207 MAINTENANCE OF TRAFFIC PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

SHEET	TABLE OF CONTENTS
1	General Notes, TTC Tables
2	Definitions Temporary Traffic Control Devices Overhead Work Railroads Sight Distance Above Ground Hazard
3	Clear Zone Widths For Work Zones Superelevation Length Of Lane Closures Overweight/Oversize Vehicles Lane Widths High-Visibility Safety Apparel Speed Reduction Signing
4	Flagger Control Survey Work Zones Signs
5	Work Zone Sign Supports
6	Commonly Used Warning and Regulatory Signs In Work Zones
7	Manholes/Crosswalks/Joints Truck Mounted Attenuators Signals Channelizing Devices Channelizing Devices Consistency Advanced Warning Arrow Boards
8	Drop-Offs In Work Zones
9	Business Entrance Temporary Asphalt Separator
10	Channelizing Devices Notes Temporary Barrier Notes
11	Pavement Markings

GENERAL NOTES:

1. This Index contains information specific to the Federal and State guidelines and standards for the preparation of traffic control plans and for the execution of traffic control in work zones, for construction and maintenance operations and utility work on highways, roads and streets on the State Highway System. Certain requirements in this Index are based on the high volume nature of State Highways. For highways, roads and streets off the State Highway System, the local agency (City/County) having jurisdiction may adopt requirements based on the minimum requirements provided in the MUTCD.

2. Use this Index in accordance with the Plans and Indexes 102-601 through 102-680. Indexes 102-601 through 102-680 are Department-specific typical applications of commonly encountered situations. Adjust device location or number thereof as recommended by the Worksite Traffic Supervisor and approved by the Engineer. Devices include, but are not limited to, flaggers, portable temporary signals, signs, pavement markings, and channelizing devices. Comply with MUTCD or applicable Department criteria for any changes and document the reason for the change.

3. Except for emergencies, any road closure on State Highway System must comply with Section 335.15, F.S.

TABLE 1
CHANNELIZING DEVICE SPACING

Work Zone Speed (mph)	Max. Spacing (feet)			
	Cones or Temporary Tubular Markers		Type I Barricades, Type II Barricades, Vertical Panels, or Drums	
	Taper	Tangent	Taper	Tangent
≤ 45	25	50	25	50
≥ 50	25	50	50	100

TABLE 2
TAPER LENGTH "L"

Work Zone Speed (mph)	Min. Length (feet)
≤ 40	$L = \frac{WS^2}{60}$
≥ 45	$L = WS$

Where: W = width of offset in feet
S = speed in mph

TABLE 3
WORK ZONE SIGN SPACING "X"

Road Type	Min. Spacing (feet)
Arterials and Collectors with Work Zone Speed ≤ 40 mph	200
Arterials and Collectors with Work Zone Speed ≥ 45 mph	500
Limited Access Roadways *	1,500

* For Limited access roadways with work zone speed ≤ 55 mph, the minimum spacing may be reduced in accordance with the MUTCD and as approved by the Engineer.

TABLE 4
BUFFER LENGTH "B"

Work Zone Speed (mph)	Min. Length (feet)
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730

Note: When Buffer Length "B" cannot be attained due to geometric constraints, use the greatest length possible, but not less than 155 feet.

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	INDEX	SHEET
11/01/20					102-600	1 of 11

DEFINITIONS

Regulatory Speed (In Work Zones)

The maximum permitted travel speed posted for the work zone is indicated by the regulatory speed limit signs. The work zone speed must be shown or noted in the plans. This speed should be used as the minimum design speed to determine runout lengths, departure rates, flare rates, lengths of need, clear zone widths, taper lengths, crash cushion requirements, marker spacings, superelevation and other similar features.

Advisory Speed

The maximum recommended travel speed through a curve or a hazardous area.

Travel Way

The portion of the roadway for the movement of vehicles. For traffic control through work zones, travel way may include the temporary use of shoulders and any other permanent or temporary surface intended for use as a lane for the movement of vehicular traffic.

a. Travel Lane: The designated widths of roadway pavement marked to carry through traffic and to separate it from opposing traffic or traffic occupying other traffic lanes.

b. Auxiliary Lane: The designated widths of roadway pavement marked to separate speed change, turning, passing and climbing maneuvers from through traffic.

Detour, Lane Shift, and Diversion

A detour is the redirection of traffic onto another roadway to bypass the temporary traffic control zone. A lane shift is the redirection of traffic onto a different section of the permanent pavement. A diversion is the redirection of traffic onto a temporary roadway, usually adjacent to the permanent roadway and within the limits of the right of way.

Aboveground Hazard

An aboveground hazard is any object, material or equipment other than traffic control devices that encroaches upon the travel way or that is located within the clear zone which does not meet the Department's safety criteria, i.e., anything that is greater than 4" in height and is firm and unyielding or doesn't meet breakaway requirements.

TEMPORARY TRAFFIC CONTROL DEVICES

All temporary traffic control devices shall be ON the Department's Approved Products List (APL). Ensure the appropriate APL number is permanently marked on the device in a readily visible location.

All temporary traffic control devices shall be removed as soon as practical when they are no longer needed. When work is suspended for short periods of time, temporary traffic control devices that are no longer appropriate shall be removed or covered. Do not store temporary traffic control devices on the shoulder, sidewalk, or other roadway facility not affected by the work when work is suspended.

Arrow Boards, Portable Changeable Message Signs, Radar Speed Display Trailer, Portable Regulatory Signs, and any other trailer mounted device shall be delineated with a channelizing device placed at each corner when in use and shall be moved outside the travel way and clear zone or be shielded by a barrier or crash cushion when not in use.

OVERHEAD WORK

Work is only allowed over a traffic lane when one of the following options is used:

OPTION 1 (OVERHEAD WORK USING A MODIFIED LANE CLOSURE)

Overhead work using a modified lane closure is allowed if all of the following conditions are met:

a. Work operation is located in a signalized intersection and limited to signals, signs, lighting and utilities.
b. Work operations are 60 minutes or less.
c. Speed limit is 45 mph or less.
d. Aerial lift equipment in the work area has high-intensity, rotating, flashing, oscillating, or strobe lights operating.
e. Aerial lift equipment is placed directly below the work area to close the lane.
f. Traffic control devices are placed in advance of the vehicle/equipment closing the lane using a minimum 100 foot taper.
g. Volume or complexity of the roadway may dictate additional devices, signs, flagmen and/or a traffic control officer.

OPTION 2 (OVERHEAD WORK ABOVE AN OPEN TRAFFIC LANE)

Overhead work above a open traffic lane is allowed if all of the following conditions are met:

a. Work operation is located on a utility pole, light pole, signal pole, or their appurtenances.
b. Work operations are 60 minutes or less.
c. Speed limit is 45 mph or less.
d. No encroachment by any part of the work activities and equipment within an area bounded by 2 feet outside the edge of travel way and 18 feet high.
e. Aerial lift equipment in the work area has high-intensity, rotating, flashing, oscillating, or strobe lights operating.
f. Volume or complexity of the roadway may dictate additional devices, signs, flagmen and/or a traffic control officer.
g. Adequate precautions are taken to prevent parts, tools, equipment and other objects from falling into open lanes of traffic.
h. Other Governmental Agencies, Rail Facilities, or Codes may require a greater clearance. The greater clearance required prevails as the rule.

OPTION 3 (OVERHEAD WORK ADJACENT TO AN OPEN TRAFFIC LANE)

Overhead work adjacent to an open traffic lane is allowed if all of the following conditions are met:

a. Work operation is located on a utility pole, light pole, signal pole, or their appurtenances.
b. Work operations are 1 day or less.
c. Speed limit is 45 mph or less.
d. No encroachment by any part of the work activities and equipment within 2 feet from the edge of travel way up to 18' height.
   Above 18' in height, no encroachment by any part of the work activities and equipment over the open traffic lane (except as allowed in Option 2 for work operations of 60 minutes or less).
e. Aerial lift equipment in the work area has high-intensity, rotating, flashing, oscillating, or strobe lights operating.
f. Volume or complexity of the roadway may dictate additional devices, signs, flagmen and/or a traffic control officer.
g. Adequate precautions are taken to prevent parts, tools, equipment and other objects from falling into open lanes of traffic.
h. Other Governmental Agencies, Rail Facilities, or Codes may require a greater clearance. The greater clearance required prevails as the rule.

OPTION 4 (OVERHEAD WORK MAINTAINING TRAFFIC WITH NO ENCROACHMENT BELOW THE OVERHEAD WORK AREA)

Traffic shall be detoured, shifted, diverted or paced as to not encroach in the area directly below the overhead work operations in accordance with the appropriate index drawing or detailed in the plans. This option applies to, but not limited to, the following construction activities:

a. Beam, girder, segment, and bent/pier cap placement.
b. Form and falsework placement and removal.
c. Concrete placement.
d. Railing construction located at edge of deck.
e. Structure demolition.

OPTION 5 (CONDUCTOR/CABLE PULLING ABOVE AN OPEN TRAFFIC LANE)

Overhead cable and/or de-energized conductor installations initial pull to proper tension shall be done in accordance with the appropriate Index or temporary traffic control plan.

Continuous pulling operations of secured cable and/or conductors are allowed over open lane(s) of traffic with no encroachment by any part of the work activities, materials or equipment within the minimal vertical clearance above the travel way. The utility shall take precautions to ensure that pull ropes and conductors/cables at no time fall below the minimum vertical clearance.

On Limited Access facilities, a site specific temporary traffic control plan is required. The temporary traffic control plan shall include:

a. The temporary traffic control set up for the initial pulling of the pull rope across the roadway.
b. During pulling operations, advance warning consisting of no less than a Changeable Message Sign upstream of the work area with alternating messages, "Overhead Work Ahead" and "Be Prepared to Stop" followed by a traffic control officer and police vehicle with blue lights flashing during the pulling operation.

RAILROADS

Railroad crossings affected by a construction project should be evaluated for traffic controls to reduce queuing on the tracks. The evaluation should include as a minimum traffic volumes, distance from the tracks to the intersections, lane closure or taper locations, signal timing, etc.

SIGHT DISTANCE

Tapers: Transition tapers should be obvious to drivers. If restricted sight distance is a problem (e.g., a sharp vertical or horizontal curve), the taper should begin well in advance of the view obstruction. The beginning of tapers should not be hidden behind curves.

Intersections: Traffic control devices at intersections must provide sight distances for the road user to perceive potential conflicts and to traverse the intersection safely. Construction equipment and materials shall not restrict intersection sight distance.

ABOVEGROUND HAZARD

Aboveground hazards (see definitions) are to be considered work areas during working hours and treated with appropriate work zone traffic control procedures. During nonworking hours, all objects, materials and equipment that constitute an aboveground hazard must be stored/placed outside the travel way and clear zone or be shielded by a barrier or crash cushion.

For aboveground hazards within a work zone the clear zone required should be based on the regulatory speed posted during construction.

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	INDEX	SHEET
11/01/20					102-600	2 of 11

CLEAR ZONE WIDTHS FOR WORK ZONES

The term "clear zone" describes the unobstructed relatively flat area, impacted by construction, extending outward from the edge of the traffic lane. The table below gives clear zone widths in work zones for medians and roadside conditions other than for roadside canals; where roadside canals are present, clear zone widths are to conform with the distances to canals as described in the FDOT Design Manual 215.2.

TABLE 5
CLEAR ZONE WIDTHS FOR WORK ZONES

WORK ZONE SPEED (MPH)	TRAVEL LANES & MULTILANE RAMPS (feet)	AUXILIARY LANES & SINGLE LANE RAMPS (feet)
60-70	30	18
55	24	14
45-50	18	10
30-40	14	10
ALL SPEEDS CURB & GUTTER	4' BEHIND FACE OF CURB	4' BEHIND FACE OF CURB

NOTE: For temporary conditions where existing curb has been removed but not reconstructed, curb and gutter values may be used.

SUPERELEVATION

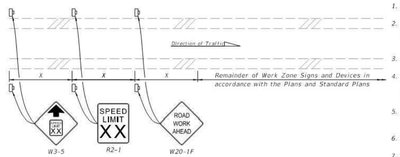
Horizontal curves constructed in conjunction with work zone traffic control should have the required superelevation applied to the design radii. Under conditions where normal crown controls curvature, the minimum radii that can be applied are listed in the table below.

TABLE 6
MINIMUM RADII FOR NORMAL CROWN

WORK ZONE POSTED SPEED	MINIMUM RADIUS
MPH	feet
70	4090
65	3130
60	2400
55	1840
50	1390
45	1080
40	820
35	610
30	430
Superelevate When Smaller Radii is Used	

LENGTH OF LANE CLOSURES

For interstates and state highways with a posted speed of 55MPH or greater, lane closures must not exceed 3 miles (includes taper, buffer, and work zone) in any given direction and must not close two consecutive interchanges.



SPEED REDUCTION SIGNING

NOTES:

1. X=Work Zone Sign Spacing
2. When called for in the Plans, use this detail in accordance with the Plans and Standard Plans. Place the speed reduction signs (W3-5 and R2-1) in advance of the "Road Work Ahead" sign (W20-1F) as shown.
3. Do not use this detail in conjunction with the Motorist Awareness System.
4. For speed reductions greater than 10 MPH, reduce the speed in 10 MPH increments of 'x' distance. Do not reduce the speed below the minimum statutory speed for the class of facility.
5. Place additional "Speed Limit" signs (R2-1) at intervals of no more than one mile for rural conditions and 1,000 feet for urban conditions.
6. For undivided roadways, omit the signs shown in the median.
7. Remove temporary regulatory speed signs as soon as the conditions requiring the reduced speed no longer exist. Once the work zone regulatory speeds are removed, the regulatory speed existing prior to construction will automatically go back into effect.

OVERWEIGHT/OVERSIZE VEHICLES

Restrictions to Lane Widths, Heights or Load Capacity can greatly impact the movement of over dimensioned loads. The Contractor shall notify the Engineer who in turn shall notify the State Permits Office, phone no. (850) 410-5777, at least seven calendar days in advance of implementing a maintenance of traffic plan which will impact the flow of overweight/oversized vehicles. Information provided shall include location, type of restriction (height, width or weight) and restriction time frames. When the roadway is restored to normal service the State Permits Office shall be notified immediately.

LANE WIDTHS

Lane widths of through roadways should be maintained through work zone travel ways wherever practical. Provide minimum widths for work zone travel lanes as follows: 11' For Interstate with at least one 12 lane provided in each direction, unless formally excepted by the Federal Highway Administration; 11' for all other limited access roadways; and 10' for all other facilities.

HIGH-VISIBILITY SAFETY APPAREL

All high-visibility safety apparel shall meet the requirements of the International Safety Equipment Association (ISEA) and the American National Standards Institute (ANSI) for "High-Visibility Safety Apparel", and labeled as ANSI/ISEA 107-2004 or newer. The apparel background (outer) material color shall be either fluorescent orange-red or fluorescent yellow-green as defined by the standard. The retroreflective material shall be orange, yellow, white, silver, yellow-green, or a fluorescent version of these colors, and shall be visible at a minimum distance of 1,000 feet. Class 3 apparel may be substituted for Class 2 apparel. Replace apparel that is not visible at 1,000 feet.

WORKERS: All workers within the right-of-way shall wear ANSI/ISEA Class 2 apparel. Workers operating machinery or equipment in which loose clothing could become entangled during operation shall wear fitted high-visibility safety apparel. Workers inside the bucket of a bucket truck are not required to wear high-visibility safety apparel.

UTILITIES: When other industry apparel safety standards require utility workers to wear apparel that is inconsistent with FDOT requirements such as NFPA, OSHA, ANSI, etc., the other standards for apparel may prevail.

FLAGGERS: For daytime activities, Flaggers shall wear ANSI/ISEA Class 2 apparel. For nighttime activities, Flaggers shall wear ANSI/ISEA Class 3 apparel.

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	INDEX	SHEET
11/01/20					102-600	3 of 11

FLAGGER CONTROL

Where flaggers are used, a FLAGGER symbol or legend sign must replace the WORKERS symbol or legend sign.

The flagger must be clearly visible to approaching traffic for a distance sufficient to permit proper response by the motorist to the flagging instructions, and to permit traffic to reduce speed or to stop as required before entering the work site. Flaggers shall be positioned to maintain maximum color contrast between the Flagger's high-visibility safety apparel and equipment and the work area background.

Hand-Signaling Devices

STOP/SLOW paddles are the primary hand-signaling device. The STOP/SLOW paddle shall have an octagonal shape on a rigid handle. If the STOP/SLOW paddle is placed on a rigid staff, the minimum length of the staff, measured from the bottom of the paddle to the end of the staff that rests on the ground, must not be less than 6 ft. STOP/SLOW paddles shall be at least 24 inches wide with letters at least 6 inches high and should be fabricated from light semirigid material. The background of the STOP face shall be red with white letters and border. The background of the SLOW face shall be orange with black letters and border. When used at night-time, the STOP/SLOW paddle shall be retroreflectorized.

Flag use is limited to immediate emergencies, intersections, and when working on the centerline or shared left turn lanes where two (2) flaggers are required and there is opposing traffic in the adjacent lanes. Flags, when used, shall be a minimum of 24 inches square, made of a good grade of red material, and securely fastened to a staff that is approximately 36 inches in length. When used at nighttime, flags shall be retroreflectorized red.

Flashlight, lantern or other lighted signal that will display a red warning light shall be used at night.

Flagger Stations

Flagger stations shall be located far enough in advance of the work area so that approaching road users will have sufficient distance to stop before entering the work area. When used at nighttime, the flagger station shall be illuminated.

SURVEY WORK ZONES

The SURVEY CREW AHEAD symbol or legend sign shall be the principal Advance Warning Sign used for Traffic Control Through Survey Work Zones and may replace the ROAD WORK AHEAD sign when lane closures occur, at the discretion of the Party Chief.

When Traffic Control Through Work Zones is being used for survey purposes only, the END ROAD WORK sign as called for on certain 102 Series of Indexes should be omitted.

Survey Between Active Traffic Lanes or Shared Left Turn Lanes

The following provisions apply to Main Roadway Traffic Control Work Zones. These provisions must be adjusted by the Party Chief to fit roadway and traffic conditions when the Survey Work Zone includes intersections.

(A) A STAY IN YOUR LANE (M0T-1-06) sign shall be added to the Advance Warning Sign sequence as the second most immediate sign from the work area.

(B) Elevation Surveys-Cones may be used at the discretion of the Party Chief to protect prism holder and flagger(s). Cones, if used, may be placed at up to 50' intervals along the break line throughout the work zone.

(C) Horizontal Control-With traffic flow in the same direction, cones shall be used to protect the backsight tripod and/or instrument. Cones shall be placed at the equipment, and up to 50' intervals for at least 200' towards the flow of traffic.

(D) Horizontal Control-With traffic flow in opposite directions, cones shall be used to protect the backsight tripod and/or instrument. Cones shall be placed at the equipment, and up to 50' intervals for at least 200' in both directions towards the flow of traffic.

SIGNS

SIGN MATERIALS

Mesh signs and non-retroreflective vinyl signs may only be used for daylight operations. Non-retroreflective vinyl signs must meet the requirements of Specifications Section 994.

Retroreflective vinyl signs meeting the requirements of Specification Section 994 may be used for daylight or night operations not to exceed 1 day except as noted in the Indexes.

Rigid or Lightweight sign panels may be used in accordance with the vendor APL drawing for the sign stand to which they are attached.

INTERSECTING ROAD SIGNING

Signing for the control of traffic entering and leaving work zones by way of intersecting crossroads shall be adequate to make drivers aware of work zone conditions. When Work operations exceed 60 minutes, place the ROAD WORK AHEAD sign on the side street entering the work zone.

ADJOINING AND/OR OVERLAPPING WORK ZONE SIGNING

Adjoining work zones may not have sufficient spacing for standard placement of signs and other traffic control devices in their advance warning areas or in some cases other areas within their traffic control zones. Where such restraints or conflicts occur or are likely to occur, one of the following methods will be employed to avoid conflicts and prevent conditions that could lead to misunderstanding on the part of the traveling public as to the intended travel way by the traffic control procedure applied:

(A) For scheduled projects the engineer in responsible charge of project design will resolve anticipated work zone conflicts during the development of the project traffic control plan. This may entail revision of plans on preceding projects and coordination of plans on concurrent projects.

(B) Unanticipated conflicts arising between adjoining in progress highway construction projects will be resolved by the Resident Engineer for projects under his residency, and, by the District Construction Engineer for in progress projects under adjoining residencies.

(C) The District Maintenance Engineer will resolve anticipated and occurring conflicts within scheduled maintenance operations.

(D) The Unit Maintenance Engineer will resolve conflicts that occur within routine maintenance works; between routine maintenance work, unscheduled work and/or permitted work; and, between unit controlled maintenance works and highway construction projects.

SIGN COVERING AND INTERMITTENT WORK STOPPAGE SIGNING

Existing or temporary traffic control signs that are no longer applicable or are inconsistent with intended travel paths shall be removed or fully covered.

Sign blanks or other available coverings must completely cover the existing sign. Rigid sign coverings shall be the same size as the sign it is covering, and bolted in a manner to prevent movement.

Sign covers are incidental to work operations and are not paid for separately.

SIGNING FOR DETOURS, LANE SHIFTS AND DIVERSIONS

Detours should be signed clearly over their entire length so that motorists can easily determine how to return to the original roadway. The reverse curve (W1-4) warning sign should be used for the advanced warning for a lane shift. A diversion should be signed as a lane shift.

EXTENDED DISTANCE ADVANCE WARNING SIGN

Advance Warning Signs shall be used at extended distance of one-half mile or more when limited sight distance or the nature of the obstruction may require a motorist to bring their vehicle to a stop. Extended distance Advanced Warning Signs may be required on any type roadway, but particularly be considered on multilane divided highways where vehicle speed is generally in the higher range (45 MPH or more).

UTILITY WORK AHEAD SIGN

The UTILITY WORK AHEAD (W21-7) sign may be used as an alternate to the ROAD WORK AHEAD or the ROAD WORK XX FT (W20-1) sign for utility operations on or adjacent to a highway.

LENGTH OF ROAD WORK SIGN

The length of road work sign (G20-1) bearing the legend ROAD WORK NEXT____ MILES is required for all projects of more than 2 miles in length. The number of miles entered should be rounded up to the nearest mile. The sign shall be located at begin construction points.

GROOVED PAVEMENT AHEAD SIGN

The GROOVED PAVEMENT AHEAD sign is required 500 feet in advance of a milled or grooved surface open to traffic. The W8-15P placard shall be used in conjunction with the GROOVED PAVEMENT AHEAD sign.

END ROAD WORK SIGN

The END ROAD WORK sign (G20-2) should be installed on all projects, but may be omitted where the work operation is less than 1 day. The sign should be placed approximately 500 feet beyond the end of a construction or maintenance project unless other distance is called for in the plans. When other Construction or Maintenance Operations occur within 1 mile this sign should be omitted and signing coordinated in accordance with Index 102-600, ADJOINING AND/OR OVERLAPPING WORK ZONE SIGNING.

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	INDEX	SHEET
11/01/20					102-600	4 of 11

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PKWY W., SUITE 2350
JACKSONVILLE, FL 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	DATE	SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
045687000	DECEMBER 2022	AS SHOWN	----	----	----

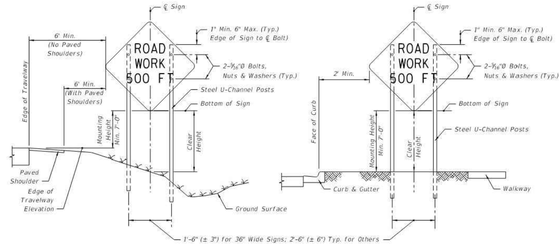
MAINTENANCE OF TRAFFIC PLAN
COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-207

Plotted By:Ergle, Grace Sheet Set:FPL — COLUMBIA COUNTY Layout:C-208 December 16, 2022 08:36:06am K:\JAX_Civil\045687000 — FPL Columbia County\Code\PlanSheets\C-207 MAINTENANCE OF TRAFFIC PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

TEMPORARY SIGN SUPPORT NOTES:

1. All signs shall be post mounted when work operations exceed one day except for:
   a. Road closure signs mounted in accordance with the vendor drawing for the Type III Barricade shown on the APL.
   b. Pedestrian and bicycle advanced warning or pedestrian regulatory signs mounted on sign supports in accordance with the vendor drawing shown on the APL.
   c. Median barrier mounted signs per Index 700-013.
   d. Bridge mounted signs per Index 700-012.
2. Unless shielded with barrier or outside of the Clear Zone, signs mounted on temporary supports or barricades, and barricade/sign combination must be crashworthy in accordance with NCHRP 350 requirements and included on the Approved Products List (APL).
3. Use only approved systems listed on the Department's Approved Products List (APL).
4. Manufacturers seeking approval of U-Channel and steel square tube sign support assemblies for inclusion on the Approved Products List (APL) must submit a APL application, design calculations (for square tube only), and detailed drawings showing the product meets all the requirements of this Index.
5. Provide 3 lb/ft Steel U-Channel Posts with a minimum section modulus of 0.43 in³ for 60 ksi steel, a minimum section modulus of 0.37 in³ for 70 ksi steel, or a minimum section modulus of 0.34 in³ for 80 ksi steel.
6. Provide 4 lb/ft Steel U-Channel Posts with a minimum section modulus of 0.56 in³ for 60 ksi steel, or a minimum section modulus of 0.47 in³ for 70 ksi or 80 ksi steel.
7. U-channel posts shall conform with ASTM A 499, Grade 60, or ASTM A 576, Grade 1080 (with a minimum yield strength of 60 ksi). Square tube posts shall conform with ASTM A 653, Grade 50, or ASTM A 1011, Grade 50.
8. Sign attachment bolts, washers, nuts, and spacers shall conform with ASTM A307 or A 36.
9. For diamond warning signs with supplement plaque (up to 5 ft² in area), use 4 lb/ft posts for up to 10 ft Clear Height (measure to the bottom of diamond warning sign).
10. Install 4 lb/ft Steel U-Channel Posts with approved breakaway splice in accordance with the manufacturer's detail shown on the APL.
11. The contractor may install 3 lb/ft Steel U-Channel Posts with approved breakaway splice in accordance with the manufacturer's detail shown on the APL.
12. Install all posts plumb.
13. The contractor may set posts in preformed holes to the specified depth with suitable backfill tamped securely on all sides, or drive 3 lb/ft sign posts and any size base post in accordance with the manufacturer's detail shown on the APL.

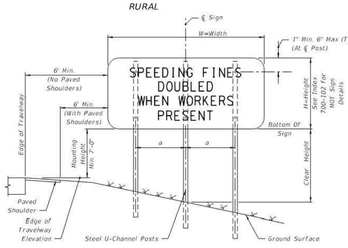


2 POST SIGN SUPPORT MOUNTING DETAILS (SINGLE POST SIMILAR) RURAL

2 POST SIGN SUPPORT MOUNTING DETAILS (SINGLE POST SIMILAR) URBAN

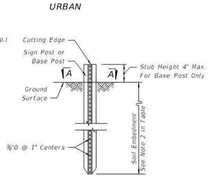
TABLE 7 POST AND FOUNDATION TABLE FOR WORK ZONE SIGNS		
SIGN SHAPE	SIGN SIZE (inches)	NUMBER OF STEEL U-CHANNEL POSTS
Octagon	30x30	1
	36x36x36	1
Triangle	48x48x48	1
	60x60x60	2
Rectangle (W x H)	24x18	1
	24x30	1
	30x24	1
	36x18	1
	36x24	1
	48x18	1
	48x24	1
	36x48	2
	48x30	2
	48x36	2
	54x36	2
	48x60	3
	60x54	3
	72x48	3
	120x60*	4*
Square	30x30	1
	36x36	2
	48x48	2
Diamond (See Note 7)	48x48	2
Circle	360	2

Notes For Table:
1. Use 3 lb/ft posts for Clear Height up to 10' and 4 lb/ft posts for Clear Height up to 12'.
* Use 4 lb/ft U-channel sign post with a mounting height of 7' min. and 8' max. Attach sign panel using Z-bracket detail on Sheet 6.
2. Minimum foundation depth is 4.0' for 3 lb/ft posts and 4.5' for 4 lb/ft posts.
3. For both 3 lb/ft and 4 lb/ft base or sign posts installed in rock, a minimum cumulative depth of 2' of rock layer is required.
4. The soil plate as shown on the APL vendor drawing is not required for base posts or sign posts installed in existing rock (as defined in Note 3), asphalt roadway, shoulder pavement or soil under sidewalk.



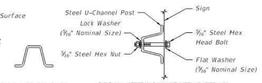
3 POST SIGN SUPPORT MOUNTING DETAILS

Where W = 48": a = 1' - 4½" (± 1")
W = 60": a = 1' - 9" (± 1")
W = 72": a = 2' - 1" (± 1")



TYPICAL FOUNDATION DETAIL

See APL for post, splice and connection details. No bolts installed closer than 1" to cutting edge.

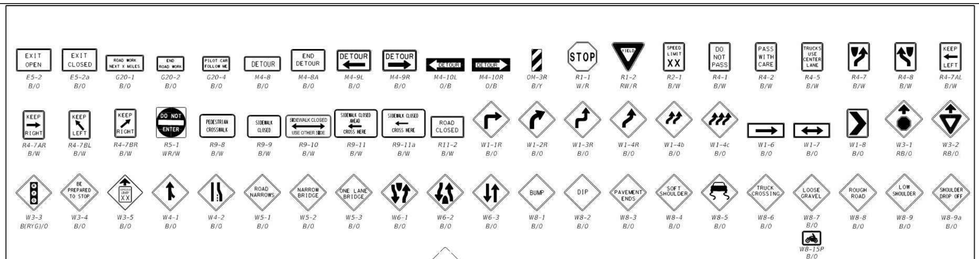


SECTION A-A (SCHEMATIC)

SIGN ATTACHMENT DETAIL (WITHOUT Z-BRACKET)

WORK ZONE SIGN SUPPORTS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	INDEX 102-600	SHEET 5 of 11



Notes:
1. The size of diamond shaped Temporary Traffic Control (TTC) warning signs shall be a minimum of 48" X 48".
2. Fluorescent orange shall be used for all orange colored work zone signs.
3. The sign shields, symbols and messages contained on this sheet are provided for ready reference to those signs used in the development of the 102 Series of Indexes and are commonly used in the development of traffic control plans. For additional signs and sign detail information refer to the STANDARD HIGHWAY SIGNS MANUAL as specified in the MUTCD. Special signs for traffic control plans will be as approved by the State Traffic Plans Engineer.

   The sign codes shown on this sheet are for the purpose of identifying cell names found in the Traffic Control Cell Library (TCZ.cel).

   The STANDARD HIGHWAY SIGNS MANUAL should be referenced for the official sign codes for use in the development of traffic control plans.

   See Index 700-102 for MOT sign details.

COLOR CODES
Legend and/or Symbol Background
O-Orange (Reflectorized) R-Red (Reflectorized)
B-Black (Non-Reflectorized) Y-Yellow (Reflectorized)
W-White (Reflectorized) G-Green (Reflectorized)

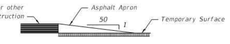
COMMONLY USED WARNING AND REGULATORY SIGNS IN WORK ZONES

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	INDEX 102-600	SHEET 6 of 11

MANHOLES/CROSSWALKS/JOINTS

Manholes extending 1" or more above the travel lane and crosswalks having an uneven surface greater than ½" shall have a temporary asphalt apron constructed as shown in the diagram below.

All transverse joints that have a difference in elevation of 1" or more shall have a temporary asphalt apron constructed as shown in the diagram below.



The apron is to be removed prior to constructing the next lift of asphalt. The cost of the temporary asphalt shall be included in the contract unit price for Maintenance of Traffic, LS.

SIGNALS

Existing traffic signal operations that require modification in order to carry out work zone traffic control shall be included in the Plans and be approved by the District Traffic Operations Engineer.

Refer to Specification 102-9 for additional information.

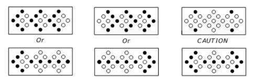
ADVANCE WARNING ARROW BOARDS

An arrow board in the arrow or chevron mode shall be used only for stationary or moving lane closures on multilane roadways.

For shoulder work, blocking the shoulder, for roadside work near the shoulder, or for temporarily closing one lane on a two-lane, two-way roadway, an arrow board shall be used only in the caution mode.

A single arrow board shall not be used to merge traffic laterally more than one lane. When arrow boards are used to close multiple lanes, a single board shall be used at the merging taper for each closed lane.

When Advance Warning Arrow Boards are used at night, the intensity of the flashers shall be reduced during darkness when lower intensities are desirable.



MODES

TRUCK/TRAILER-MOUNTED ATTENUATORS

Truck/Trailer-mounted attenuators (TMA) can be used for moving operations and short-term stationary operations. For moving operations, see Index 102-607. For short-term, stationary operations, see Part VI of the MUTCD.

CHANNELIZING DEVICES

Channelizing devices for work zone traffic control shall be as prescribed in Part VI of the MUTCD, subject to supplemental revisions provided in the contract documents and the 102 Series of Indexes. Lighting Devices must not be used to supplement channelization.

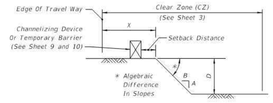
CHANNELIZING DEVICE CONSISTENCY

Barricades, vertical panels, cones, tubular markers and drums shall not be intermixed within either the lateral transition or within the tangent alignment.

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	INDEX 102-600	SHEET 7 of 11

DROP-OFF CONDITION NOTES

1. These conditions and treatments can be applied only in work areas that fall within a properly signed work zone.
2. When drop-offs occur within the clear zone due to construction or maintenance activities, protection devices are required (See Table 8). A drop-off is defined as a drop in elevation, parallel to the adjacent travel lanes, greater than 3" with slope (A:B) steeper than 1:4. In superelevated sections, the algebraic difference in slopes should not exceed 0.25 (See Drop-off Condition Detail).
3. Drop-offs may be mitigated by placement of slopes with optional base material per Specifications Section 285. Slopes shallower than 1:4 may be required to avoid algebraic difference in slopes greater than 0.25. Include the cost for the placement and removal of the material in Maintenance of Traffic, LS. Use of this treatment in lieu of a temporary barrier is not eligible for CSIP consideration. Conduct daily inspections for deficiencies related to erosion, excessive slopes, rutting or other adverse conditions. Repair any deficiencies immediately.
4. For Setback Distance, refer to the Index or Approved Products List (APL) drawing of the selected barrier.
5. For Conditions 1 and 3 provided in Table 8, any drop-off condition that is created and restored within the same work period will not be subject to use of temporary barriers; however, channelizing devices will be required.
6. When permanent curb heights are ≥ 6", no channelizing device will be required. For curb heights < 6", see Table 8.



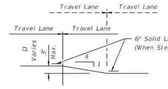
DROP-OFF CONDITION DETAIL

Table 8
Drop-off Protection Requirements

Condition	X (ft)	D (in.)	Device Required
1	0-12	> 3	Temporary Barrier
2	> 12-CZ	> 3 to ≤ 5	Channelizing Device
3	0-CZ	> 5	Temporary Barrier
4	Removal of Bridge or Retaining Wall Barrier		Temporary Barrier
5	Removal of portions of Bridge Deck		Temporary Barrier

TRAVEL LANE TREATMENT FOR MILLING OR RESURFACING NOTES

1. This treatment applies to resurfacing or milling operations between adjacent travel lanes.
2. Whenever there is a difference in elevation between adjacent travel lanes, the W8-11 sign with "UNEVEN LANES" is required at intervals of ½ mile maximum.
3. If D is 1½" or less, no treatment is required.
4. Treatment allowed only when D is 3" or less.
5. If the slope is steeper than 1:4 (not to be steeper than 1:1), the R4-1 and M0T-1-06 signs shall be used as a supplement to the W8-11; this condition should never exceed 3 miles in length.



TRAVEL LANE TREATMENT FOR MILLING OR RESURFACING DETAIL

PEDESTRIAN WAY DROP-OFF CONDITION NOTES

1. A pedestrian way drop-off is defined as:
   a. a drop in elevation greater than 10" that is closer than 2' from the edge of the pedestrian way
   b. a slope steeper than 1:2 that begins closer than 2' from the edge of the pedestrian way when the total drop-off is greater than 60"
2. Protect any drop-off adjacent to a pedestrian way with pedestrian longitudinal channelizing devices, temporary barrier wall, or approved handrail.

DROP-OFFS IN WORK ZONES

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	INDEX 102-600	SHEET 8 of 11

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

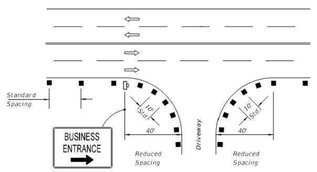
12740 GATEWAY PARK PLACE, SUITE 2350
JACKSONVILLE, FL 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	____
DRAWN BY:	____
CHECKED BY:	____

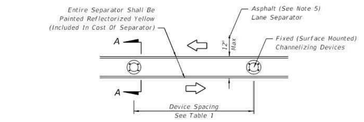
MAINTENANCE OF TRAFFIC PLAN
COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR:
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-208

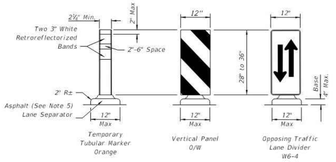


1. For single business entrances, place one 24" x 36" business sign for each driveway entrance affected. Signs shall show specific business names. Logos may be provided by business owners. Standard BUSINESS ENTRANCE sign in Index 700-102 may be used when approved by the Engineer.
2. When several businesses share a common driveway entrance, place one 24" x 36" standard BUSINESS ENTRANCE sign in accordance with Index 700-102 at the common driveway entrance.
3. Channelizing devices shall be placed at a reduced spacing on each side of the driveway entrance, but shall not restrict sight distance for the driveway users.
4. Business entrance signs are intended to guide motorist to business entrances moved/modified or disturbed during construction projects. Business entrance signs are not required where there is minimal disruption to business driveways which is often the case with resurfacing type projects.

PLACEMENT OF BUSINESS ENTRANCE SIGNS AND CHANNELIZING DEVICES AT BUSINESS ENTRANCE



PLAN



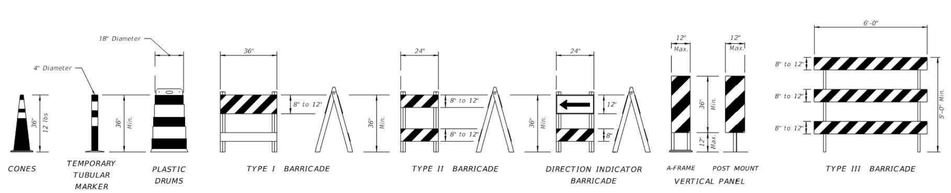
FIXED (SURFACE MOUNTED) CHANNELIZING DEVICES

SECTION AA

1. Temporary lane separators shall be supplemented with any of the following approved fixed (surface mounted) channelizing devices: temporary tubular markers, vertical panels, or opposing traffic lane divider panels. Opposing traffic lane divider panels (W6-4) shall only be used as center lane dividers to separate opposing vehicular traffic on a two-lane, two-way operation. Temporary Tubular Markers, Vertical Panels and Opposing Traffic Lane Divider panels shall not be interlined within the limits where the temporary lane separator is used. The connection between the channelizing device and the temporary lane separator curb shall hold the channelizing device in a vertical position.
2. Reflectorized materials shall have a smooth sealed outer surface which will display the same approximate color day and night. Furnish channelizing devices having retroreflective sheeting meeting the requirements of Section 990.
3. 12" openings for drainage shall be constructed in the asphalt and portable temporary lane separator at a maximum spacing of 25' in areas with grades of 1% or less or 50' in areas with grades over 1% as directed by the Engineer.
4. Tapered ends shall be used at the beginning and end of each run of the temporary lane separator to form a gradual increase in height from the pavement level to the top of the temporary lane separator.
5. The Contractor has the option of using portable temporary lane separators containing fixed channelizing devices in lieu of the temporary asphalt separator and channelizing devices detailed on this sheet. The portable temporary lane separator shall cone in portable sections that can be connected to maintain continuous alignment between the separate curb sections. Each temporary lane separator section shall be 36 inches to 48 inches in total length. Portable temporary lane separators shall duplicate the color of the pavement marking. Portable temporary lane separators shall be one of those listed on the Approved Products List.

TEMPORARY LANE SEPARATOR

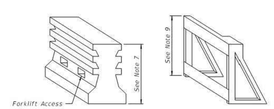
LAST REVISION 11/01/20	REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	INDEX 102-600	SHEET 9 of 11



CHANNELIZING DEVICES

CHANNELIZING DEVICE NOTES:

1. The details shown on this sheet are for the following purposes:
   a. For ease of identification and
   b. To provide information that supplements or supersedes that provided by the MUTCD.
2. The Type III Barricade shall have a unit length of 6'-0" only. When barricades of greater lengths are required those lengths shall be in multiples of the 6'-0" unit.
3. No sign panel should be mounted on any channelizing device unless the channelizing device/sign combination was found to be crashworthy and the sign panel is mounted in accordance with the vendor drawing for the channelizing device shown on the Approved Products List (APL).
4. Ballast shall not be placed on top rails or any striped rails or higher than 13" above the driving surface.
5. The direction indicator barricade may be used in tapers and transitions where specific directional guidance to drivers is necessary. If used, direction indicator barricades shall be used in series to direct the driver through the transition and into the intended travel lane.
6. The splicing of sheeting is not permitted on channelizing devices or MOT signs.
7. For rails less than 3'-0" long, 4" stripes shall be used.
8. Cones shall:
   a. Be used only in active work zones where workers are present.
   b. Be reflectorized as per the MUTCD with Department-approved reflective collars when used at night.
9. For pedestrian longitudinal channelizing devices, the device shall have a minimum of 8" continuous detectable edging above the walkway. A gap not exceeding a height of 2" is allowed to facilitate drainage. The top surface of the device shall be a minimum height of 32" and have a 6" or less difference in any plane at all connection points between the devices to facilitate hand trailing. The bottom and the top surface of the device shall be in the same vertical plane. If pedestrian drop-off protection is required, the device shall have a footprint or offset of at least 2', otherwise the device must be at least 42" in height above the walkway and be anchored or ballasted to withstand a 200 lb lateral point load at the top of the device.



PEDESTRIAN LONGITUDINAL CHANNELIZING DEVICES

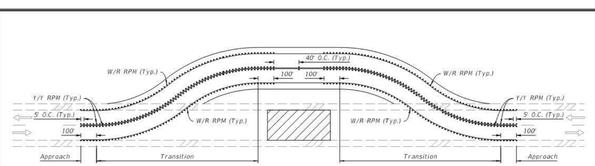
TEMPORARY BARRIER NOTES:

1. Where a barrier is specified, any of the types below may be used in accordance with the applicable Index:

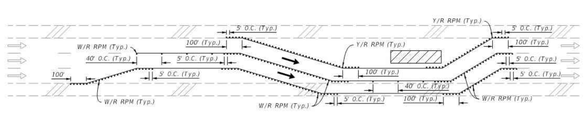
Index	Description
102-100	Temporary Barrier
102-120	Low Profile Barrier
536-001	Guardrail

2. Trailer Mounted Barriers may be used to provide positive protection for workers within the work areas. APL drawings may be used as a guide to develop project specific Temporary Traffic Control Plans that are signed and sealed by the Contractor's Engineer.

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	INDEX 102-600	SHEET 10 of 11



RPM PLACEMENT ON TWO-LANE ROADWAYS

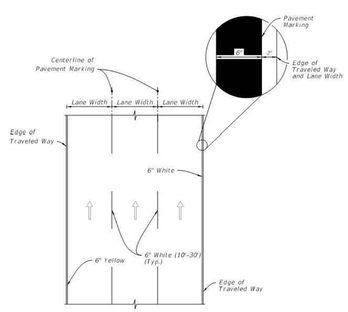


RPM PLACEMENT ON MULTILANE ROADWAYS
(Lane Shift Shown, Other Multilane Typical Applications Similar)

NOTES:
1. Install RPMs as a supplement to:
   a. All lane lines
   b. Edge lines in transitions (e.g., merges, diversions, lane shifts)
   c. Edge lines of gore areas
2. Extend pavement marking and 5' RPM spacing by 100' in each direction for all transitions regardless of the line type.
3. Place RPMs in accordance with this detail and Index 706-001.

SYMBOLS:
- Work Area
- Lane Identification and Direction of Traffic

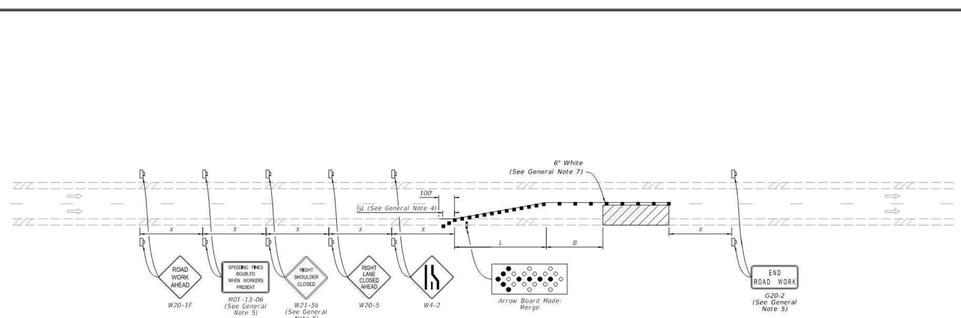
RPM PLACEMENT IN WORK ZONES



PLACEMENT OF PAVEMENT MARKINGS

WORK ZONE PAVEMENT MARKINGS

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	INDEX 102-600	SHEET 11 of 11



SINGLE LANE CLOSURE

SYMBOLS:
- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Lane Identification and Direction of Traffic
- Arrow Board

GENERAL NOTES:
1. L = Taper Length
   B = Buffer Length
   X = Work Zone Sign Distance
   See Index 102-600 for "L", "B", "X", and channelizing device spacing values.
2. On undivided highways the median signs as shown are to be omitted.
3. On limited access facilities, omit "Shoulder Closed Ahead" signs (W21-5b) and associated work zone sign spacing distances.
4. If the paved shoulder is less than 4' in width, omit the taper and channelizing devices from the paved shoulder.
5. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2) and "Shoulder Closed Ahead" (W21-5b), along with associated work zone sign distances, may be omitted when the work zone will be in place for 24 hours or less. For Single Lane Closures, arrow boards and buffer (B) may also be omitted when the work zone will be in place for 60 minutes or less and the speed limit is 45 mph or less.
6. Use inverted plan of the illustrations for work on left side of roadways.
7. Temporary pavement markings may be omitted when the work zone is in place for 3 days or less.
8. If the work encroaches on a marked bicycle lane or ridable shoulder, close the lane or shoulder in accordance with the Plans.

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	MULTILANE ROADWAY, LANE CLOSURES	INDEX 102-613	SHEET 1 of 5

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL

REFER TO SIGNATURE SHEET

KHA PROJECT 045687000	DATE DECEMBER 2022	SCALE: AS SHOWN	DESIGNED BY: ----	DRAWN BY: ----	CHECKED BY: ----

MAINTENANCE OF TRAFFIC PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR:
FLORIDA POWER & LIGHT COMPANY

COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-209

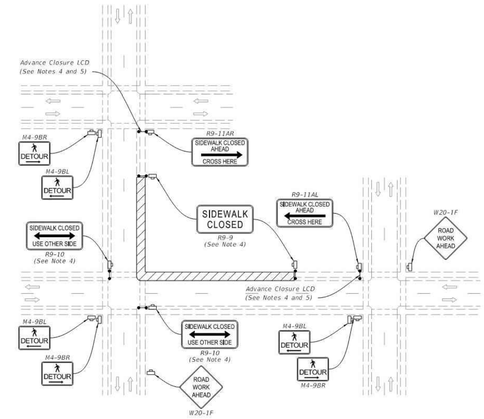
Plotted By:Eagle, Grace Sheet Set:FPL — COLUMBIA COUNTY Layout:C-209 December 16, 2022 08:36:10am K:\JAX_Civil\045687000 — FPL Columbia County\Cadd\PlanSheets\C-207 MAINTENANCE OF TRAFFIC PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

NOTES:

1. Cover or deactivate pedestrian traffic signal display(s) controlling closed crosswalks.
2. Place pedestrian LCDs across the full width of the closed sidewalk.
3. For post mounted signs located near or adjacent to a sidewalk, maintain a minimum 7' clearance from the bottom of the sign panel to the surface of the sidewalk.
4. "Sidewalk Closed" signs (R9-XX) may be mounted on pedestrian LCDs in accordance with the manufacturer's instructions.
5. Omit the Advance Closure LCD if it blocks access to other pedestrian facilities (e.g., transit stops, residences, or business entrances).

SYMBOLS:

- Work Area
- D Work Zone Sign
- Lane Identification and Direction of Traffic
- Pedestrian Longitudinal Channelizing Device (LCD)

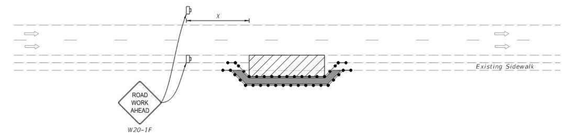


PEDESTRIAN DETOUR

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	SIDEWALK CLOSURE	INDEX	SHEET
11/01/20	REVISION				102-660	1 of 2

NOTES:

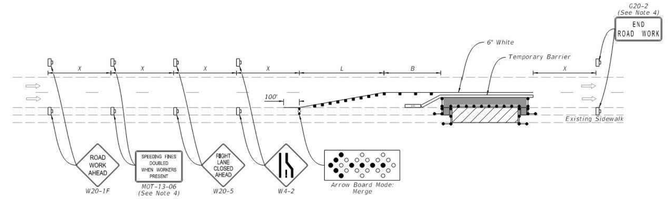
1. L=Taper Length
   B=Buffer Length
   X=Work Zone Sign Distance
   See Index 102-600 for "L", "B", "X", channelizing device spacing values.
2. Provide a 5' wide temporary pedestrian way with a maximum cross-slope of 0.02, except where space restrictions warrant a minimum width of 4'. Provide a 5' x 5' passing space for temporary pedestrian ways less than 5' in width at intervals not to exceed 200'.
3. When temporary pedestrian ways require curb ramps, meet the requirements of Index 522-002. Detectable warnings are not required for curb ramps diverting pedestrian traffic into a closed lane.
4. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2), along with associated work zone sign distances, may be omitted when the work zone will be in place for 24 hours or less.



TEMPORARY PEDESTRIAN WAY

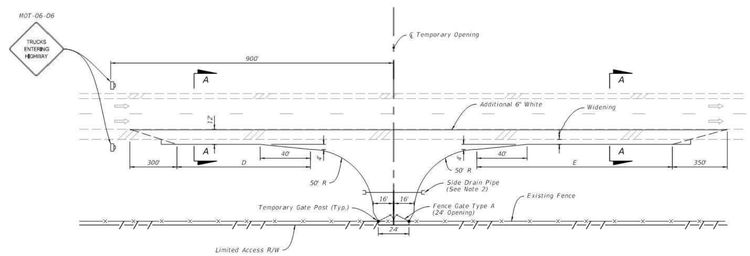
SYMBOLS:

- Work Area
- Temporary Pedestrian Way
- Channelizing Device (See Index 102-000)
- D Work Zone Sign
- Lane Identification and Direction of Traffic
- Pedestrian Longitudinal Channelizing Device (LCD)
- Arrow Board
- Crash Cushion



TEMPORARY PEDESTRIAN WAY DIVERTING TRAFFIC INTO THE TRAVELED WAY
(Temporary Barrier Shown, Low Profile Barrier Similar)

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	SIDEWALK CLOSURE	INDEX	SHEET
11/01/20	REVISION				102-660	2 of 2



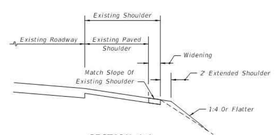
NOTES:

1. X = Work Zone Sign Distance, see Index 102-600 for "X" value.
2. Use mitered end sections for any end sections within the clear zone.
3. Match cross slope of existing shoulder for widening.
4. Provide 2' of unpaved shoulder outside of the widening.
5. No more than two (2) access openings will be allowed on each project.
6. Do not vary from the plan detail without approval of the Engineer.

SYMBOLS:

- D Work Zone Sign
- Lane Identification and Direction of Traffic

LENGTH OF ACCESS LANES		
Grade	D (feet)	E (feet)
2% or less	590	1540
3 to 4% Upgrade	530	2310
3 to 4% Downgrade	710	925



SECTION A-A

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	LIMITED ACCESS TEMPORARY OPENING	INDEX	SHEET
11/01/20	REVISION				102-665	1 of 1

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	____
DRAWN BY:	____
CHECKED BY:	____

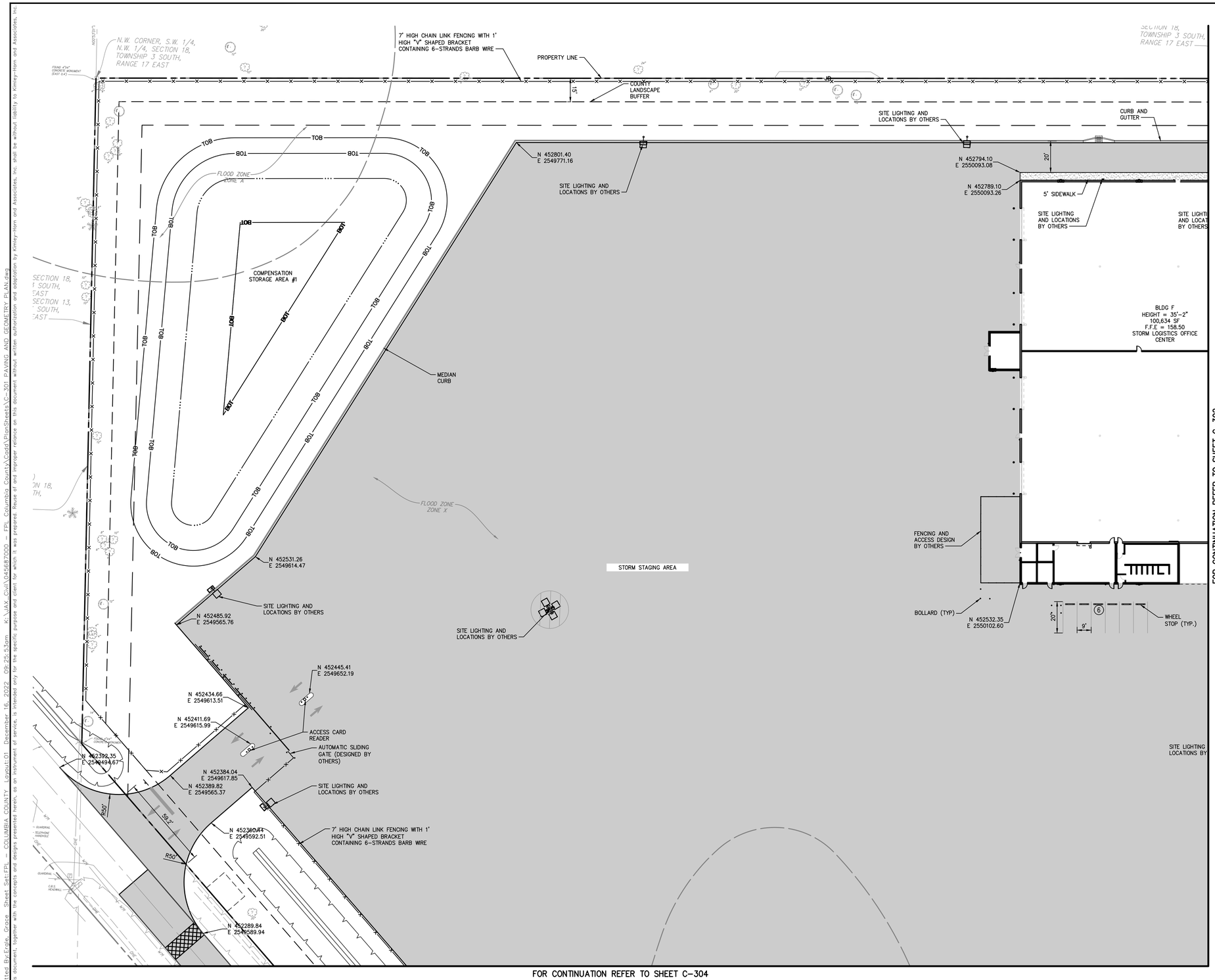
MAINTENANCE OF TRAFFIC PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR:
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-210

Plotted By:Ergle, Grace Sheet Set:FPL — COLUMBIA COUNTY Layout:C-210 December 16, 2022 08:36:13am K:\JAX_Civil\045687000 — FPL Columbia County\Cadd\PlanSheets\C-207 MAINTENANCE OF TRAFFIC PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EOP	EDGE OF PAVMENT
FOC	FACE OF CURB
	ADA ROUTE
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	STABILIZED PERVIOUS PARKING
	UPLAND BUFFER

NOTES:

1. ALL RADII MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

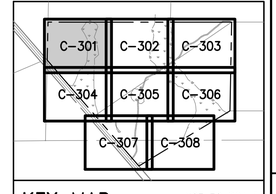
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

PAVING AND GEOMETRY PLAN

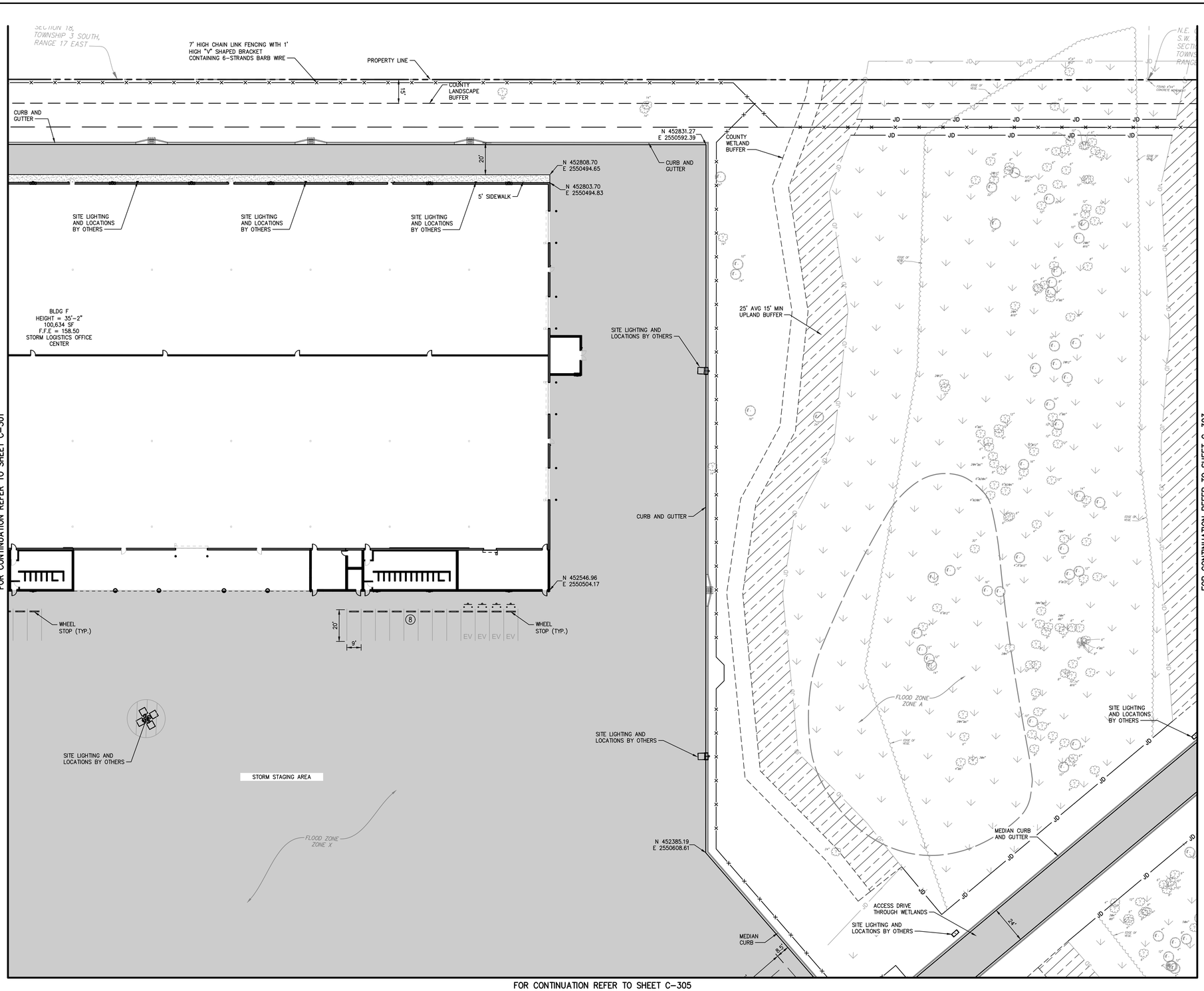
COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA

COLUMBIA COUNTY

SHEET NUMBER
C-301

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 09:25:53am K:\JAX_Civil\045687000 – FPL Columbia County\Civil\Plan Sheets\C-301 PAVING AND GEOMETRY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EOP	EDGE OF PAVMENT
FOC	FACE OF CURB
	ADA ROUTE
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	STABILIZED PERVIOUS PARKING
	UPLAND BUFFER

NOTES:

1. ALL RADII MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

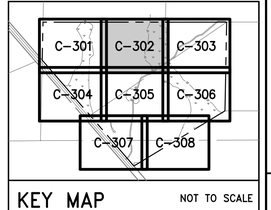
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	DATE	SCALE: AS SHOWN	DESIGNED BY:	DRAWN BY:	CHECKED BY:
045687000	DECEMBER 2022		----	----	----

PAVING AND GEOMETRY PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-302

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:02 December 16, 2022 09:26:00am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-301 PAVING AND GEOMETRY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Eagle, Grace Sheet Set:FPL — COLUMBIA COUNTY Layout:03 December 16, 2022 09:26:05am K:\JAX_Civil\045687000 — FPL Columbia County\Cadd\Plan Sheets\C-301 PAVING AND GEOMETRY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FOR CONTINUATION REFER TO SHEET C-302

N.E. CORNER S.W. 1/4, N.W. 1/4 SECTION 18, TOWNSHIP 3 SOUTH, RANGE 17 EAST

FOUND 4"x4" CONCRETE MONUMENT

SECTION 18, TOWNSHIP 3 SOUTH, RANGE 17 EAST

S.E. 1/4, N.W. TOWNSHIP 3 SO RANGE 17 EAS

7' HIGH CHAIN LINK FENCING WITH 1' HIGH "V" SHAPED BRACKET CONTAINING 6-STRANDS BARB WIRE

25' AVG 15' MIN UPLAND BUFFER

114'

EMERGENCY SPILLWAY (6" BELOW TOB)

COUNTY WETLAND BUFFER

SWMF #1

7' HIGH CHAIN LINK FENCING WITH 1' HIGH "V" SHAPED BRACKET CONTAINING 6-STRANDS BARB WIRE

COUNTY LANDSCAPE BUFFER

15'

N 452567.86
E 2550979.04

N 452566.88
E 2550959.07

IRRIGATION METER PAD (SEE IRRIGATION PLANS FOR ADDITIONAL INFORMATION)

N 452526.93
E 2550961.02

N 452505.59
E 2550982.08

SITE LIGHTING AND LOCATIONS BY OTHERS

N 452494.20
E 2550946.65

N 452463.28
E 2550974.29

N 452466.56
E 2551001.16

24'

N 452462.97
E 2550947.86

COUNTY WETLAND BUFFER

ACCESS DRIVE THROUGH WETLANDS

MEDIAN CURB

25' AVG 15' MIN UPLAND BUFFER

FLOOD ZONE ZONE X

N 452348.06
E 2551139.02

N 452354.52
E 2551144.86

N 452361.32
E 2551513.08

MEDIAN CURB

SITE LIGHTING AND LOCATIONS BY OTHERS

SITE LIGHTING AND LOCATIONS BY OTHERS

SITE LIGHTING AND LOCATIONS BY OTHERS

RIBBON CURB

N 452332.89
E 2551125.98

EAST LINE W 1/4, S.E. 1/4, N.W. 1/4, SECTION 18, TOWNSHIP 3 SOU RANGE 17 EAST

FOR CONTINUATION REFER TO SHEET C-306

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EOP	EDGE OF PAVMENT
FOC	FACE OF CURB
	ADA ROUTE
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	STABILIZED PERVIOUS PARKING
	UPLAND BUFFER

NOTES:

1. ALL RADII MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

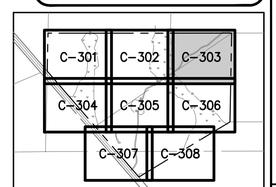
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

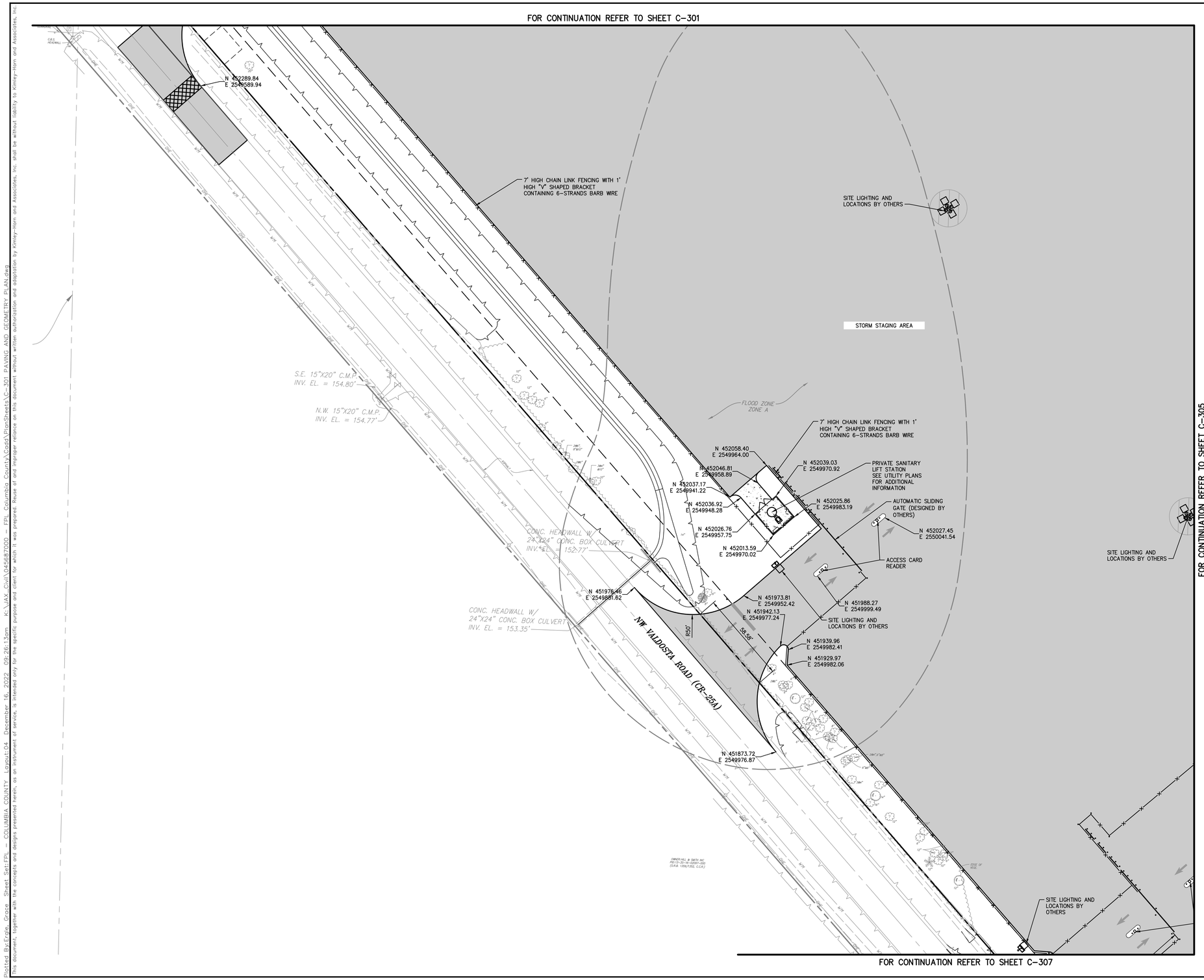
KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

PAVING AND GEOMETRY PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-303



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EOP	EDGE OF PAVMENT
FOC	FACE OF CURB
	ADA ROUTE
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	STABILIZED PERVIOUS PARKING
	UPLAND BUFFER

NOTES:

1. ALL RADII MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

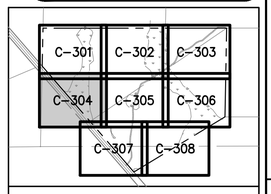
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ____
DRAWN BY: ____
CHECKED BY: ____

PAVING AND GEOMETRY PLAN
COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-304

Plotted By: Eryle Grace Sheet Set: FPL – COLUMBIA COUNTY Layout: 04 December 16, 2022 09:26:13am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-301 PAVING AND GEOMETRY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Ercle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:05 December 16, 2022 09:26:18am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-301 PAVING AND GEOMETRY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FOR CONTINUATION REFER TO SHEET C-304

FOR CONTINUATION REFER TO SHEET C-302

FOR CONTINUATION REFER TO SHEET C-306

FOR CONTINUATION REFER TO SHEET C-307

FOR CONTINUATION REFER TO SHEET C-308

STORM STAGING AREA

SITE LIGHTING AND LOCATIONS BY OTHERS

SLIDING GATE (DESIGNED BY OTHERS)

N 452097.13
E 2550492.76

ENVIRONMENTAL SHED

N 452077.04
E 2550470.48

N 452067.42
E 2550519.55

40'

30'

N 452047.33
E 2550497.27

7' HIGH CHAIN LINK FENCING WITH 1' HIGH "V" SHAPED BRACKET CONTAINING 6-STRANDS BARB WIRE

ACCESS CARD READER

STRIPED PARKING ISLAND

N 451765.45
E 2550335.30

N 451764.45
E 2550363.57

R30

60'

15'

MEDIAN CURB

8.5'

50'

40'

6'

FUTURE RADIO TOWER (DESIGN AND INSTALL BY OTHERS)

N 452285.45
E 2550715.11

ACCESS DRIVE THROUGH WETLANDS

10'

24'

N 452296.41
E 2550763.10

25' AVG 15' MIN UPLAND BUFFER

COUNTY WETLAND BUFFER

N 452205.96
E 2550743.40

9'

20'

N 452157.40
E 2550691.26

BOLLARD (TYP)

BLDG E
HEIGHT 25'-0"
7,327 SF
F.F.E = 158.00
ISC STORES WAREHOUSE

N 452130.72
E 2550813.49

CURB AND GUTTER

N 452082.15
E 2550761.36

7' HIGH CHAIN LINK FENCING WITH 1' HIGH "V" SHAPED BRACKET CONTAINING 6-STRANDS BARB WIRE

SLIDING GATE

MATERIAL STORAGE YARD

150'

STORM STAGING AREA

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EOP	EDGE OF PAVMENT
FOC	FACE OF CURB
	ADA ROUTE
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	STABILIZED PERVIOUS PARKING
	UPLAND BUFFER

NOTES:

1. ALL RADII MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

KEY MAP — NOT TO SCALE

C-301	C-302	C-303
C-304	C-305	C-306
	C-307	C-308

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

PAVING AND GEOMETRY PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA

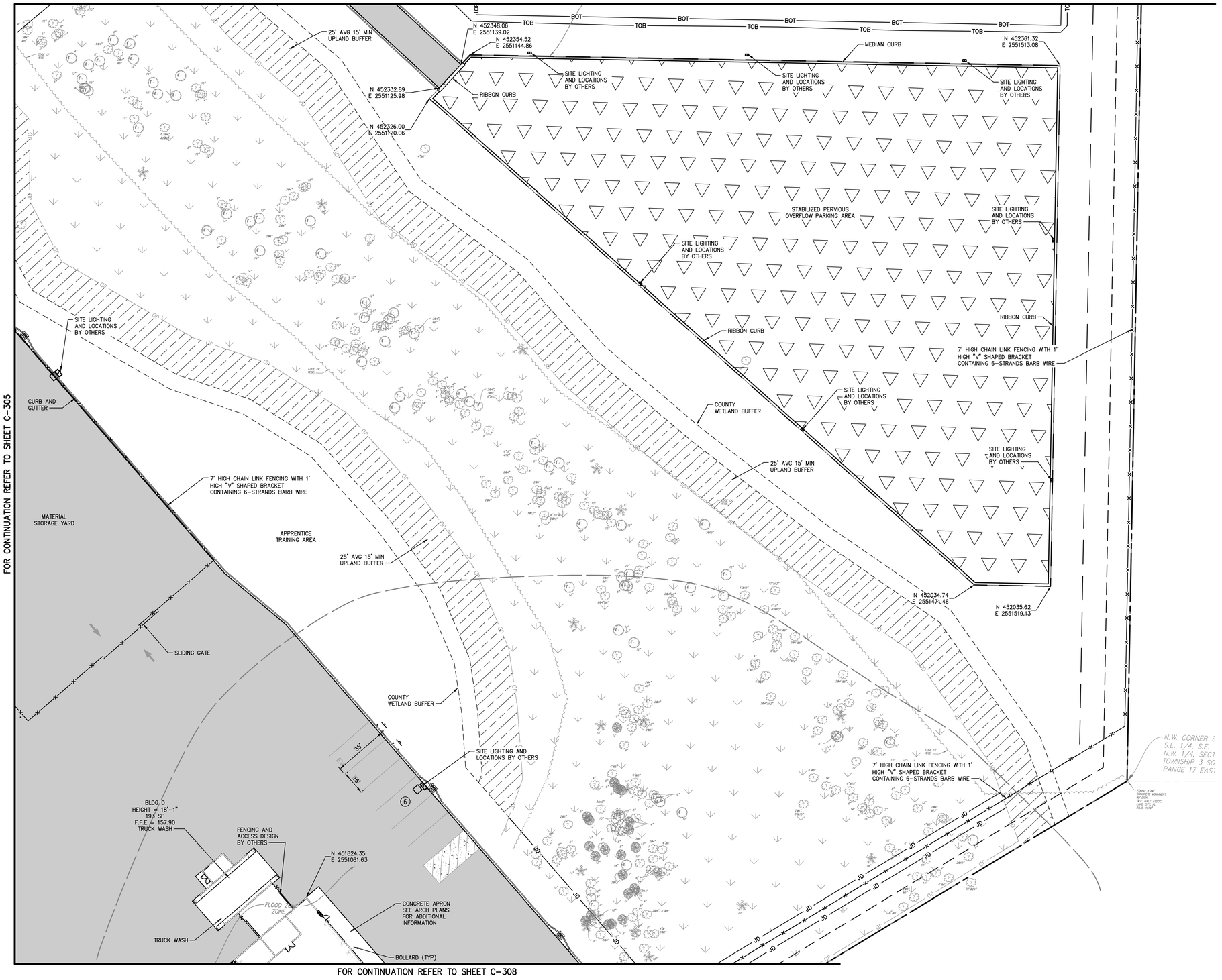
COLUMBIA COUNTY

SHEET NUMBER
C-305

FOR CONTINUATION REFER TO SHEET C-303

FOR CONTINUATION REFER TO SHEET C-305

FOR CONTINUATION REFER TO SHEET C-308



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EOP	EDGE OF PAVMENT
FOC	FACE OF CURB
	ADA ROUTE
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	STABILIZED PERVIOUS PARKING
	UPLAND BUFFER

NOTES:

1. ALL RADII MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

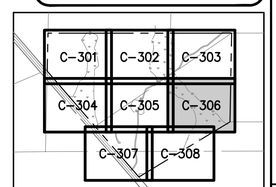
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
045687000	DECEMBER 2022	AS SHOWN	----	----	----

PAVING AND GEOMETRY PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-306

Plotted By: Eryle.Grace Sheet Set: FPL — COLUMBIA COUNTY Layout: 06 December 16, 2022 09:26:25am K:\JAX_Civil\045687000 — FPL Columbia County\Civil\Plan Sheets\C-301 PAVING AND GEOMETRY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FOR CONTINUATION REFER TO SHEET C-304

FOR CONTINUATION REFER TO SHEET C-305

FOR CONTINUATION REFER TO SHEET C-308

SITE LIGHTING AND LOCATIONS BY OTHERS

ACCESS CARD READER

AUTOMATIC SLIDING GATE (DESIGNED BY OTHERS)

7' HIGH CHAIN LINK FENCING WITH 1' HIGH "V" SHAPED BRACKET CONTAINING 6-STRANDS BARB WIRE

BLDG G
HEIGHT = 9'-7"
260 SF
F.F.E = 164.00
IT HUT

N 451765.45
E 2550335.30

R20'

STRIPED PARKING ISLAND

SITE LIGHTING AND LOCATIONS BY OTHERS

SEE DETAIL A ON SHEET C-307

SEE DETAIL B ON SHEET C-308

FLOOD ZONE ZONE X

SITE LIGHTING AND LOCATIONS BY OTHERS

STRIPED PARKING ISLAND

AUTOMATIC SLIDING GATE (DESIGNED BY OTHERS)

7' HIGH CHAIN LINK FENCING WITH 1' HIGH "V" SHAPED BRACKET CONTAINING 6-STRANDS BARB WIRE

N 451331.25
E 2550549.33

N 451321.38
E 2550548.98

N 451296.75
E 2550571.92

PROPERTY LINE

COUNTY LANDSCAPE BUFFER

N 451265.74
E 2550543.64

FOUND 4"X4" CONCRETE MONUMENT W/ DISK "NCC VALE ASSOC. R.L.S. 1516" FOR EXTENSION OF EASTERLY LINE (0.7' WEST) (SOUTH 0.4') (WEST 0.8')

NW VALDOSTA ROAD (CR-254A)

N 451368.98
E 2550447.19

CONC. MITERED END W/ S.E. 18" C.M.P. INV. EL. = 162.27'

CONC. MITERED END W/ N.W. 18" C.M.P. INV. EL. = 162.14'

CONCRETE HITCH

FOUND 4"X4" CONCRETE MONUMENT W/ DISK "NCC VALE ASSOC. R.L.S. 1516"

N 451764.45
E 2550363.57

N 451731.52
E 2550394.24

N 451726.10
E 2550399.29

N 451732.02
E 2550380.10

N 451749.59
E 2550363.75

N 451722.52
E 2550400.63

N 451701.93
E 2550374.20

N 451656.64
E 2550452.32

N 451659.88
E 2550460.98

N 451620.45
E 2550473.79

N 451648.72
E 2550452.04

N 451649.04
E 2550443.05

N 451695.61
E 2550399.67

N 451658.35
E 2550434.37

N 451636.07
E 2550435.55

N 451691.70
E 2550363.23

N 451623.80
E 2550422.38

N 451717.66
E 2550329.48

N 451708.28
E 2550354.62

N 451717.91
E 2550322.41

N 451728.89
E 2550312.19

N 451677.79
E 2550336.55

N 451670.72
E 2550336.30

N 451631.21
E 2550373.11

N 451616.83
E 2550379.68

N 451616.74
E 2550422.13

N 451605.76
E 2550432.35

N 451678.29
E 2550322.42

N 451664.66
E 2550307.79

N 451650.27
E 2550314.35

N 451610.76
E 2550351.16

N 451603.19
E 2550365.04

N 451554.93
E 2550396.34

N 451560.84
E 2550362.13

N 451658.31
E 2550267.23

N 451651.25
E 2550266.98

N 451561.09
E 2550355.06

N 451549.87
E 2550372.35

N 451538.57
E 2550378.78

N 451673.68
E 2550252.92

N 451531.50
E 2550378.53

N 451521.28
E 2550367.55

N 451641.02
E 2550256.01

N 451548.83
E 2550341.89

30' FLAG POLE W/ 2 UP LIGHTS. DESIGN AND INSTALL BY OTHERS

SITE LIGHTING AND LOCATIONS BY OTHERS

SITE LIGHTING AND LOCATIONS BY OTHERS

SCALE 0 20 FEET

NORTH

DETAIL A

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EOP	EDGE OF PAVMENT
FOC	FACE OF CURB
	ADA ROUTE
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	STABILIZED PERVIOUS PARKING
	UPLAND BUFFER

NOTES:

1. ALL RADII MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

KEY MAP — NOT TO SCALE

C-301 C-302 C-303
C-304 C-305 C-306
C-307 C-308

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ____
DRAWN BY: ____
CHECKED BY: ____

PAVING AND GEOMETRY PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-307

Plotted By: Engle, Grace Sheet Set: FPL – COLUMBIA COUNTY Layout: 07 December 16, 2022 09:26:35am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-301 PAVING AND GEOMETRY PLAN.dwg

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FOR CONTINUATION REFER TO SHEET C-305

FOR CONTINUATION REFER TO SHEET C-306

FOR CONTINUATION REFER TO SHEET C-307

STORM STAGING AREA

200'

6,000 GALLON MIXED FUEL SYSTEM

FENCING AND ACCESS DESIGN BY OTHERS

BLDG B
HEIGHT = 10'-0"
450 SF
F.F.E. = 160.50
TRUCK STOCK

SITE LIGHTING AND LOCATIONS BY OTHERS

STRIPED PARKING ISLAND

TRUCK WASH

FLOOD ZONE

CONCRETE APRON SEE ARCH PLANS FOR ADDITIONAL INFORMATION

BOLLARD (TYP)

BLDG C
HEIGHT = 27'-0"
4,800 SF
F.F.E = 158.00
FLEET GARAGE

N 451783.45
E 2551017.73

N 451765.81
E 2551116.16

SITE LIGHTING AND LOCATIONS BY OTHERS

CONCRETE APRON SEE ARCH PLANS FOR ADDITIONAL INFORMATION

N 451724.91
E 2551072.26

BOLLARD (TYP)

DIALECTRIC TEST AREA AND SHED

N 451753.90
E 2551268.46

EAST-WEST CENTER OF SECTION LINE, SECTION 18, TOWNSHIP 3 SOUTH, RANGE 17 EAST

7' HIGH CHAIN LINK FENCING WITH 1' HIGH "V" SHAPED BRACKET CONTAINING 6-STRANDS BARB WIRE

PROPERTY LINE

COUNTY LANDSCAPE BUFFER

15'

N 451540.82
E 2550571.88

N 451533.76
E 2550571.63

N 451532.05
E 2550569.80

N 451483.17
E 2550601.66

N 451463.93
E 2550615.49

DUMPSTER ENCLOSURE

N 451459.50
E 2550619.62

N 451453.71
E 2550604.51

451475.40
E 2550601.39

OUTDOOR MECHANICAL

N 451466.88
E 2550592.24

N 451434.10
E 2550619.49

ACCESS CARD READER

BLDG A
HEIGHT = 17'-4"
13,090 SF
F.F.E = 164.50
SERVICE CENTER
OFFICE BUILDING

TRANSFORMER PAD

N 451394.93
E 2550577.44

N 451396.13
E 2550544.26

N 451395.88
E 2550551.33

N 451449.41
E 2550508.29

N 451391.49
E 2550515.78

N 451379.77
E 2550526.70

N 451372.71
E 2550526.45

VISITOR PARKING AREA

N 451460.54
E 2550424.12

N 451391.74
E 2550508.71

N 451370.66
E 2550524.25

N 451381.52
E 2550497.74

N 451334.48
E 2550544.20

N 451365.53
E 2550518.74

N 451481.76
E 2550404.36

SITE LIGHTING AND LOCATIONS BY OTHERS

DETAIL B

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

0 20
SCALE FEET

LEGEND:

EOP	EDGE OF PAVMENT
FOC	FACE OF CURB
	ADA ROUTE
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	STABILIZED PERVIOUS PARKING
	UPLAND BUFFER

NOTES:

1. ALL RADII MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

C-301 C-302 C-303
C-304 C-305 C-306
C-307 C-308

KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

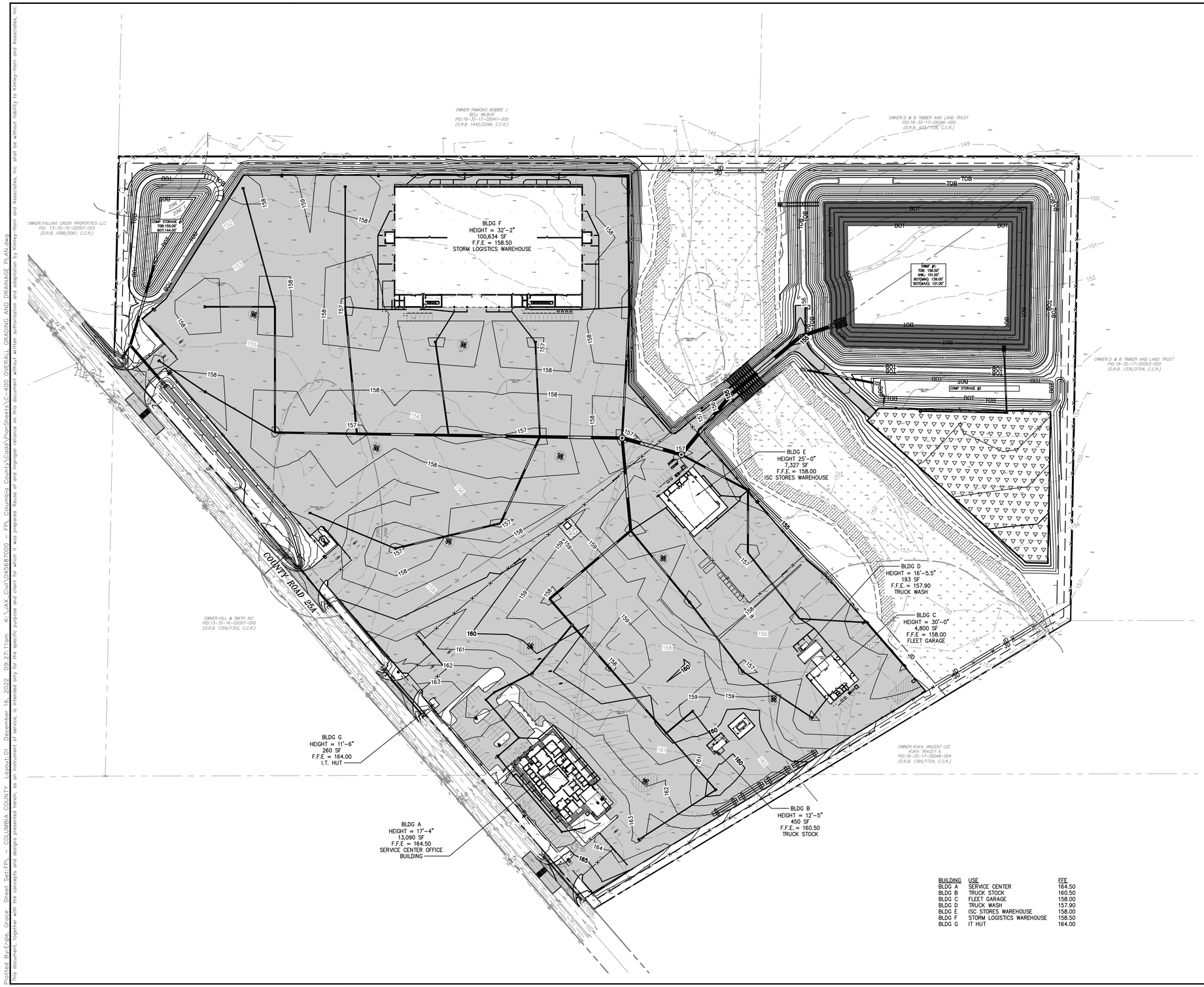
PAVING AND GEOMETRY PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-308

Plotted By:Engle, Grace Sheet Set:FPL - COLUMBIA COUNTY Layout:08 December 16, 2022 09:26:44am K:\JAX_Civil\045687000 - FPL Columbia County\Cadd\PlanSheets\C-301 PAVING AND GEOMETRY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



BUILDING	USE	FFE
BLDG A	SERVICE CENTER	164.50
BLDG B	TRUCK STOCK	160.50
BLDG C	FLEET GARAGE	158.00
BLDG D	TRUCK WASH	157.90
BLDG E	ISC STORES WAREHOUSE	158.00
BLDG F	STORM LOGISTICS WAREHOUSE	158.50
BLDG G	IT HUT	164.00

NORTH

GRAPHIC SCALE IN FEET
0 50 100 200

LEGEND:

EP	EDGE OF PAVMENT
TC	TOP OF CURB
	ADA ROUTE
	PROPOSED YARD DRAIN
	PROPOSED INLET
D	PROPOSED MANHOLE
	PROPOSED STORM DRAIN PIPE
	EXISTING STORM DRAIN PIPE
4	PROPOSED CONTOUR
4	EXISTING CONTOUR
	PROPOSED FLOW DIRECTION
2.75	PROPOSED GRADE
x 28.62	EXISTING GRADE

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. SIDEWALKS SHALL NOT EXCEED 1.95% CROSS SLOPE AND 4.95% LONGITUDINAL SLOPE.
3. CONTRACTOR SHALL NOTE THAT ANY PART OF AN ACCESSIBLE ROUTE CONSTRUCTED WITH A SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND MUST INCLUDE HANDRAILS IN COMPLIANCE WITH 2012 FLORIDA BUILDING CODE SECTION 405.
4. SPOT ELEVATIONS ARE AT EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. STAKE SOD ON ALL SLOPES GREATER THAN 4:1.

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

CONTRACTOR SHALL INSTALL GRADE-STAKES TO CONFIRM ADA COMPLIANCE FOR ALL ACCESSIBLE ROUTES AND PARKING FACILITIES WITHIN THE PROJECT. ADA COMPLIANCE SHALL BE DETERMINED BY THE FLORIDA BUILDING CODE (LATEST EDITION) FOR ACCESSIBILITY. AFTER REVIEW OF THE GRADE-STAKES, CONTRACTOR SHALL SCHEDULE A PRE-POUR/PRE-PAVE MEETING WITH ENGINEER AND OWNER'S REPRESENTATIVE TO CONFIRM ADA COMPLIANCE OR TO IDENTIFY ANY AREAS NOT MEETING ADA CRITERIA. ANY CONCRETE OR PAVEMENT PLACED THAT EXCEEDS ADA CRITERIA FOR SLOPE, RAMPS, LANDINGS, AND ADA DIMENSIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FL 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: -----
DRAWN BY: -----
CHECKED BY: -----

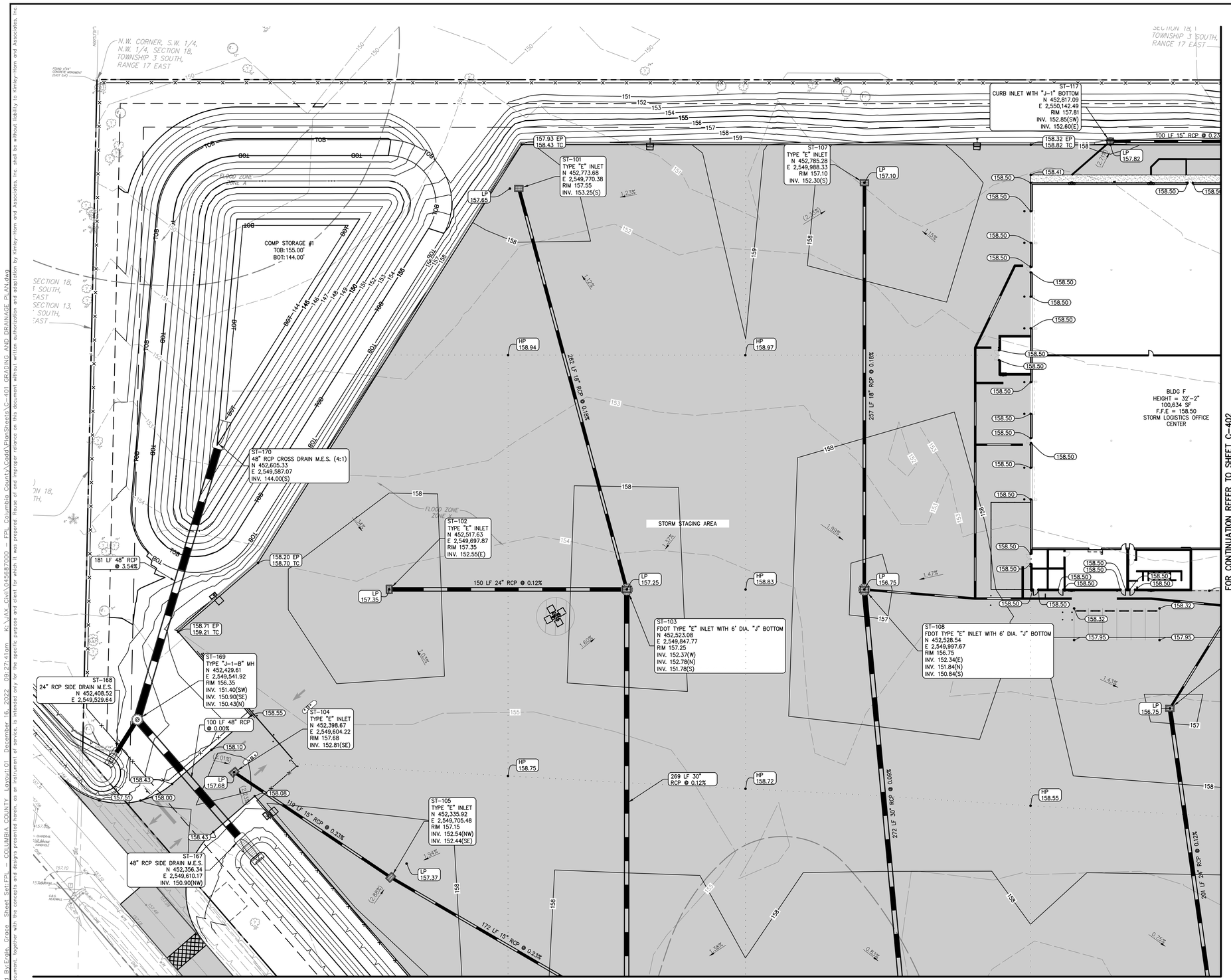
OVERALL GRADING AND DRAINAGE PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-400

Plotted By:Ergin Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 09:27:11am K:\JAX_Civil\045687000 – FPL Columbia County\Civil\Cad\PlanSheets\C-400 OVERALL GRADING AND DRAINAGE PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EP	EDGE OF PAVMENT
TC	TOP OF CURB
	ADA ROUTE
	PROPOSED YARD DRAIN
	PROPOSED INLET
D	PROPOSED MANHOLE
	PROPOSED STORM DRAIN PIPE
	EXISTING STORM DRAIN PIPE
4	PROPOSED CONTOUR
4	EXISTING CONTOUR
	PROPOSED FLOW DIRECTION
2.75	PROPOSED GRADE
35.62	EXISTING GRADE

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. SIDEWALKS SHALL NOT EXCEED 1.95% CROSS SLOPE AND 4.95% LONGITUDINAL SLOPE.
3. CONTRACTOR SHALL NOTE THAT ANY PART OF AN ACCESSIBLE ROUTE CONSTRUCTED WITH A SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND MUST INCLUDE HANDRAILS IN COMPLIANCE WITH 2012 FLORIDA BUILDING CODE SECTION 405.
4. SPOT ELEVATIONS ARE AT EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. STAKE SOD ON ALL SLOPES GREATER THAN 4:1.

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

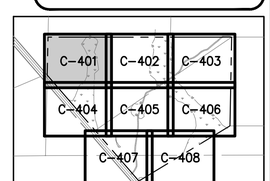
THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

CONTRACTOR SHALL INSTALL GRADE-STAKES TO CONFIRM ADA COMPLIANCE FOR ALL ACCESSIBLE ROUTES AND PARKING FACILITIES WITHIN THE PROJECT. ADA COMPLIANCE SHALL BE DETERMINED BY THE FLORIDA BUILDING CODE (LATEST EDITION) FOR ACCESSIBILITY. AFTER REVIEW OF THE GRADE-STAKES, CONTRACTOR SHALL SCHEDULE A PRE-POUR/PRE-PAVE MEETING WITH ENGINEER AND OWNER'S REPRESENTATIVE TO CONFIRM ADA COMPLIANCE OR TO IDENTIFY ANY AREAS NOT MEETING ADA CRITERIA. ANY CONCRETE OR PAVEMENT PLACED THAT EXCEEDS ADA CRITERIA FOR SLOPE, RAMPS, LANDINGS, AND ADA DIMENSIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	____
DRAWN BY:	____
CHECKED BY:	____

GRADING AND DRAINAGE PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY

COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-401

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 09:27:41am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C–401 GRADING AND DRAINAGE PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Erale, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:02 December 16, 2022 09:27:50am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-401 GRADING AND DRAINAGE PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

SECTION 18, TOWNSHIP 3 SOUTH, RANGE 17 EAST

ST-118
CURB INLET WITH "J-1" BOTTOM
N 452,820.74
E 2,550,242.89
RIM 157.81
INV. 152.37(W)
INV. 154.50(S)
INV. 152.27(E)

ST-119
CURB INLET WITH "J-1" BOTTOM
N 452,824.38
E 2,550,343.28
RIM 157.81
INV. 152.04(W)
INV. 154.50(S)
INV. 151.79(E)

ST-120
CURB INLET WITH "J-1" BOTTOM
N 452,828.05
E 2,550,443.67
RIM 157.81
INV. 151.57(W)
INV. 154.50(S)
INV. 151.07(E)

ST-121
TYPE "E" INLET
N 452,828.41
E 2,550,590.50
RIM 156.79
INV. 150.89(W)
INV. 150.39(S)

100 LF 15" RCP @ 0.23%
100 LF 15" RCP @ 0.23%
100 LF 18" RCP @ 0.22%
147 LF 24" RCP @ 0.15%
278 LF 30" RCP @ 0.09%
281 LF 36" RCP @ 0.07%
201 LF 24" RCP @ 0.12%
203 LF 24" RCP @ 0.12%
193 LF 72" RCP @ 0.14%
167 LF 72" RCP @ 0.14%
(11) 55 LF 24" RCP @ 0.54%

LP 157.82
LP 157.81
LP 157.81
LP 157.96
LP 156.79
LP 156.75
LP 156.75
LP 154.80
HP 158.44
HP 158.42
HP 155.23

156.75 EP
157.25 TC
158.31 EP
158.81 TC
158.40 EP
158.90 TC

COUNTY WETLAND BUFFER
25' AVG 15' MIN UPLAND BUFFER

BLDG F
HEIGHT = 32'-2"
100,634 SF
F.F.E = 158.50
STORM LOGISTICS OFFICE CENTER

CONDENSATE CONNECTION
SEE MEP PLANS FOR ADDITIONAL INFORMATION

PARCEL A
PORTION OF SECTION 18, TOWNSHIP 3 SOUTH, RANGE 17 EAST
(O.R.B. 1050/1234, C.C.R.)
OWNER:RFD LAND LLC
PID:18-3S-17-09048-000

STORM STAGING AREA

FLOOD ZONE ZONE X

FLOOD ZONE ZONE A

ST-110
TYPE "E" INLET
N 452,460.60
E 2,550,193.23
RIM 156.75
INV. 152.45(NE)
INV. 151.45(S)

ST-112
TYPE "E" INLET
N 452,468.36
E 2,550,406.50
RIM 156.75
INV. 152.45(NW)
INV. 151.45(S)

ST-122
CURB INLET WITH "J-1-A" BOTTOM
N 452,550.61
E 2,550,604.77
RIM 156.75
INV. 151.64(W)
INV. 150.14(N)
INV. 149.64(S)

ST-172
24" RCP CROSS DRAIN M.E.S. (2:1)
N 452,401.19
E 2,550,820.29
RIM 150.75
INV. 148.50(SE)

ST-151
FDOT TYPE "C" INLET WITH 8' DIA. "J" BOTTOM
N 452,371.77
E 2,550,828.78
RIM 154.80
INV. 145.75(SW)
INV. 141.50(NE)

ST-171
24" RCP CROSS DRAIN M.E.S. (2:1)
N 452,360.27
E 2,550,857.18
RIM 151.05
INV. 148.80(NW)

ST-111
FDOT TYPE "E" INLET WITH 8' DIA. "J" BOTTOM
N 452,262.40
E 2,550,228.57

ST-123
FDOT TYPE "E" INLET WITH 10' DIA. "J" BOTTOM
N 452,270.08
E 2,550,599.31

FDOT TYPE "C" INLET WITH 8' DIA. "J"
N 45
E 2,55
RIM
INV. 14
INV.

FOR CONTINUATION REFER TO SHEET C-401

FOR CONTINUATION REFER TO SHEET C-403

FOR CONTINUATION REFER TO SHEET C-405

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EP	EDGE OF PAVMENT
TC	TOP OF CURB
	ADA ROUTE
	PROPOSED YARD DRAIN
	PROPOSED INLET
D	PROPOSED MANHOLE
	PROPOSED STORM DRAIN PIPE
	EXISTING STORM DRAIN PIPE
4	PROPOSED CONTOUR
4	EXISTING CONTOUR
	PROPOSED FLOW DIRECTION
2.75	PROPOSED GRADE
26.62	EXISTING GRADE

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. SIDEWALKS SHALL NOT EXCEED 1.95% CROSS SLOPE AND 4.95% LONGITUDINAL SLOPE.
3. CONTRACTOR SHALL NOTE THAT ANY PART OF AN ACCESSIBLE ROUTE CONSTRUCTED WITH A SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND MUST INCLUDE HANDRAILS IN COMPLIANCE WITH 2012 FLORIDA BUILDING CODE SECTION 405.
4. SPOT ELEVATIONS ARE AT EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. STAKE SOD ON ALL SLOPES GREATER THAN 4:1.

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

CONTRACTOR SHALL INSTALL GRADE-STAKES TO CONFIRM ADA COMPLIANCE FOR ALL ACCESSIBLE ROUTES AND PARKING FACILITIES WITHIN THE PROJECT. ADA COMPLIANCE SHALL BE DETERMINED BY THE FLORIDA BUILDING CODE (LATEST EDITION) FOR ACCESSIBILITY. AFTER REVIEW OF THE GRADE-STAKES, CONTRACTOR SHALL SCHEDULE A PRE-POUR/PRE-PAVE MEETING WITH ENGINEER AND OWNER'S REPRESENTATIVE TO CONFIRM ADA COMPLIANCE OR TO IDENTIFY ANY AREAS NOT MEETING ADA CRITERIA. ANY CONCRETE OR PAVEMENT PLACED THAT EXCEEDS ADA CRITERIA FOR SLOPE, RAMPS, LANDINGS, AND ADA DIMENSIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

C-401	C-402	C-403
C-404	C-405	C-406
	C-407	C-408

KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GATEWAY PARK WAY, SUITE 2350
JACKSONVILLE, FL 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ——
DRAWN BY: ——
CHECKED BY: ——

GRADING AND DRAINAGE PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-402

Plotted By:Eryle Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:03 December 16, 2022 09:27:58am K:\Jax_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-401 GRADING AND DRAINAGE PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FOR CONTINUATION REFER TO SHEET C-402

N.E. CORNER S.W. 1/4, N.W. 1/4 SECTION 18, TOWNSHIP 3 SOUTH, RANGE 17 EAST

SECTION 18, TOWNSHIP 3 SOUTH, RANGE 17 EAST

S.E. 1/4, N.W. TOWNSHIP 3 SO RANGE 17 EAS

25' AVG 15' MIN UPLAND BUFFER

EMERGENCY SPILLWAY
TOP: 156.50
BOT: 156.00

114' BOT WIDTH

CONTROL STRUCTURE CS-01
SEE DETAIL ON SHEET C-804

RIPRAP

COUNTY WETLAND BUFFER

SWMF #1
TOB:156.50'
MAX STAGE(100YR-08HR):155.21'
NWL:151.00'
BOT(MIN):139.00'
BOT(MAX):121.00'

ST-153
72" RCP CROSS DRAIN M.E.S. (2:1)
N 452,524.23
E 2,551,034.37
INV. 141.04(W)

ST-152
TYPE "C" INLET WITH 8' DIA. "J" BOTTOM
N 452,501.25
E 2,550,972.39
RIM 154.80
INV. 141.23(SW)
INV. 141.13(E)

68 LF 72" RCP @ 0.14%

193 LF 72" RCP @ 0.14%

ST-154
36" RCP CROSS DRAIN M.E.S. (4:1)
N 452,429.95
E 2,550,986.72
INV. 151.90(E)

149 LF 36" RCP @ 0.07%

ST-157
36" RCP CROSS DRAIN M.E.S. (4:1)
N 452,407.18
E 2,551,134.19
INV. 152.00(W)

120 LF 24" RCP @ 0.83%

ST-160
24" U-TYPE ENDWALL (4:1)
N 452,474.41
E 2,551,409.06
INV. 147.00(S)

ST-158
TYPE "E" INLET
N 452,350.94
E 2,551,234.44
RIM 156.96
INV. 152.71(E)

ST-159
TYPE "E" INLET
N 452,354.33
E 2,551,418.56
RIM 157.01
INV. 151.79(W)
INV. 148.00(N)

COMP STORAGE AREA #2

FLOOD ZONE ZONE X

EAST LINE W 1/, SE 1/4, N.W. 1, SECTION 18, TOWNSHIP 3 SOU RANGE 17 EAST

FOR CONTINUATION REFER TO SHEET C-406

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EP	EDGE OF PAVMENT
TC	TOP OF CURB
	ADA ROUTE
	PROPOSED YARD DRAIN
	PROPOSED INLET
D	PROPOSED MANHOLE
	PROPOSED STORM DRAIN PIPE
	EXISTING STORM DRAIN PIPE
4	PROPOSED CONTOUR
4	EXISTING CONTOUR
	PROPOSED FLOW DIRECTION
2.75	PROPOSED GRADE
26.62	EXISTING GRADE

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. SIDEWALKS SHALL NOT EXCEED 1.95% CROSS SLOPE AND 4.95% LONGITUDINAL SLOPE.
3. CONTRACTOR SHALL NOTE THAT ANY PART OF AN ACCESSIBLE ROUTE CONSTRUCTED WITH A SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND MUST INCLUDE HANDRAILS IN COMPLIANCE WITH 2012 FLORIDA BUILDING CODE SECTION 405.
4. SPOT ELEVATIONS ARE AT EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. STAKE SOD ON ALL SLOPES GREATER THAN 4:1.

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

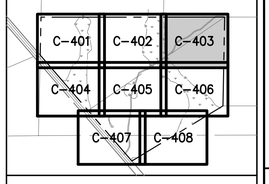
CONTRACTOR SHALL INSTALL GRADE-STAKES TO CONFIRM ADA COMPLIANCE FOR ALL ACCESSIBLE ROUTES AND PARKING FACILITIES WITHIN THE PROJECT. ADA COMPLIANCE SHALL BE DETERMINED BY THE FLORIDA BUILDING CODE (LATEST EDITION) FOR ACCESSIBILITY. AFTER REVIEW OF THE GRADE-STAKES, CONTRACTOR SHALL SCHEDULE A PRE-POUR/PRE-PAVE MEETING WITH ENGINEER AND OWNER'S REPRESENTATIVE TO CONFIRM ADA COMPLIANCE OR TO IDENTIFY ANY AREAS NOT MEETING ADA CRITERIA. ANY CONCRETE OR PAVEMENT PLACED THAT EXCEEDS ADA CRITERIA FOR SLOPE, RAMPS, LANDINGS, AND ADA DIMENSIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

KEY MAP



NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

GRADING AND DRAINAGE PLAN

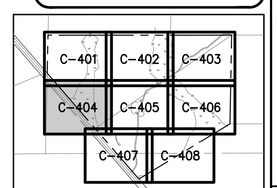
COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-403

FOR CONTINUATION REFER TO SHEET C-401





KEY MAP NOT TO SCALE

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EP	EDGE OF PAVMENT
TC	TOP OF CURB
	ADA ROUTE
	PROPOSED YARD DRAIN
	PROPOSED INLET
D	PROPOSED MANHOLE
	PROPOSED STORM DRAIN PIPE
	EXISTING STORM DRAIN PIPE
4	PROPOSED CONTOUR
4	EXISTING CONTOUR
	PROPOSED FLOW DIRECTION
2.75	PROPOSED GRADE
26.62	EXISTING GRADE

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. SIDEWALKS SHALL NOT EXCEED 1.95% CROSS SLOPE AND 4.95% LONGITUDINAL SLOPE.
3. CONTRACTOR SHALL NOTE THAT ANY PART OF AN ACCESSIBLE ROUTE CONSTRUCTED WITH A SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND MUST INCLUDE HANDRAILS IN COMPLIANCE WITH 2012 FLORIDA BUILDING CODE SECTION 405.
4. SPOT ELEVATIONS ARE AT EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. STAKE SOD ON ALL SLOPES GREATER THAN 4:1.

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

CONTRACTOR SHALL INSTALL GRADE-STAKES TO CONFIRM ADA COMPLIANCE FOR ALL ACCESSIBLE ROUTES AND PARKING FACILITIES WITHIN THE PROJECT. ADA COMPLIANCE SHALL BE DETERMINED BY THE FLORIDA BUILDING CODE (LATEST EDITION) FOR ACCESSIBILITY. AFTER REVIEW OF THE GRADE-STAKES, CONTRACTOR SHALL SCHEDULE A PRE-POUR/PRE-PAVE MEETING WITH ENGINEER AND OWNER'S REPRESENTATIVE TO CONFIRM ADA COMPLIANCE OR TO IDENTIFY ANY AREAS NOT MEETING ADA CRITERIA. ANY CONCRETE OR PAVEMENT PLACED THAT EXCEEDS ADA CRITERIA FOR SLOPE, RAMPS, LANDINGS, AND ADA DIMENSIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ____
DRAWN BY: ____
CHECKED BY: ____

GRADING AND DRAINAGE PLAN
COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-404

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:04 December 16, 2022 09:28:06am K:\JAX_Civil\045687000 – FPL Columbia County\Civil\Plot\Sheets\C-401 GRADING AND DRAINAGE PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FOR CONTINUATION REFER TO SHEET C-402

FOR CONTINUATION REFER TO SHEET C-404

FOR CONTINUATION REFER TO SHEET C-406

FOR CONTINUATION REFER TO SHEET C-407

FOR CONTINUATION REFER TO SHEET C-408

ST-111
FDOT TYPE "E" INLET WITH 8' DIA. "J" BOTTOM
N 452,262.40
E 2,550,228.57
RIM 156.75
INV. 151.21(IN)
INV. 148.96(IN)
INV. 148.46(OUT)

ST-116
FDOT TYPE "E" INLET WITH 8' DIA. "J" BOTTOM
N 452,266.36
E 2,550,423.65
RIM 156.75
INV. 148.32(IN)
INV. 151.21(IN)
INV. 150.58(IN)
INV. 147.82(OUT)

ST-115
FDOT TYPE "E" INLET WITH 7' DIA. "J" BOTTOM
N 452,078.46
E 2,550,346.39
RIM 156.75
INV. 151.25(W)
INV. 150.74(N)

ST-123
FDOT TYPE "E" INLET WITH 10' DIA. "J" BOTTOM
N 452,270.08
E 2,550,599.31
RIM 156.75
INV. 148.09(S)
INV. 147.66(W)
INV. 149.45(N)
INV. 146.45(E)

ST-123
FDOT TYPE "E" INLET WITH 10' DIA. "J" BOTTOM
N 452,270.08
E 2,550,599.31
RIM 156.75
INV. 148.09(IN)
INV. 147.66(IN)
INV. 149.45(IN)
INV. 146.45(OUT)

ST-149
FDOT TYPE "E" INLET WITH 12' DIA. "J" BOTTOM
N 452,239.44
E 2,550,727.16
RIM 156.75
INV. 146.29(IN)
INV. 148.98(IN)
INV. 154.38(IN)
INV. 145.98(OUT)

ST-143
FDOT TYPE "E" INLET WITH 8' DIA. "J" BOTTOM
N 452,072.90
E 2,550,625.05
RIM 156.75
INV. 153.64(IN)
INV. 150.63(IN)
INV. 151.25(IN)
INV. 148.25(OUT)

ST-138
FDOT TYPE "E" INLET WITH 7' DIA. "J" BOTTOM
N 451,920.85
E 2,550,457.06
RIM 157.74
INV. 151.50(IN)
INV. 151.00(OUT)

ST-137
TYPE "J-1-B" MH
N 451,867.01
E 2,550,507.19
RIM 159.57
INV. 151.75(SE)
INV. 152.65(SW)
INV. 151.65(NW)

ST-136
TYPE "E" INLET
N 451,760.65
E 2,550,425.70
RIM 160.81
INV. 156.58(IN)
INV. 152.81(OUT)

ST-111
24" RCP CROSS DRAIN M.E.S. (2:1)
N 452,360.27
E 2,550,857.18
RIM 151.05
INV. 148.80(NW)

ST-148
CURB INLET WITH "J-1-
N 452,168.44
E 2,550,872.29
RIM 156.08
INV. 153.00(SW)
INV. 149.59(S)
INV. 149.09(NW)

ST-142
TYPE "E" INLET
N 451,924.51
E 2,550,756.45
RIM 156.75
INV. 151.95(SE)
INV. 151.45(NW)

ST-141
TYPE "E" INLET
N 451,781.00
E 2,550,875.25
RIM 156.75
INV. 152.68(SE)
INV. 152.21(NW)

ST-128

176 LF 60" RCP @ 0.09%
131 LF 72" RCP @ 0.12%
167 LF 72" RCP @ 0.14%
203 LF 36" RCP @ 0.08%
232 LF 30" RCP @ 0.11%
229 LF 42" RCP @ 0.16%
199 LF 54" RCP @ 0.08%
74 LF 36" RCP @ 0.20%
123 LF 36" RCP @ 0.11%
134 LF 24" RCP @ 0.12%
198 LF 30" RCP @ 0.10%
162 LF 36" RCP @ 0.07%
134 LF 30" RCP @ 0.09%
179 LF 24" RCP @ 0.12%
186 LF 24" RCP @ 0.14%

STORM STAGING AREA

BLDG E
HEIGHT 25'-0"
7,327 SF
F.F.E = 158.00
ISC STORES WAREHOUSE

MATERIAL STORAGE YARD

25' AVG 15' MIN UPLAND BUFFER

COUNTY WETLAND BUFFER

CONDENSATE CONNECTION SEE MEP PLANS FOR ADDITIONAL INFORMATION

PARCEL B
PORTION OF SECTION 18, TOWNSHIP 3 SOUTH, RANGE 17 EAST
(O.R.B. 1050/173A, C.O.A.)
OWNER: RYD LAND LLC
PID: 18-3S-17-05048-003

LP 156.75
LP 156.08
LP 154.80
HP 157.63
HP 157.41
HP 158.72
HP 158.43
HP 160.45
HP 159.47
HP 157.98
HP 158.01
HP 160.08
LP 157.74
LP 157.82

157.58 EP
158.08 TC
157.59 EP
158.09 TC
157.69 EP
158.19 TC
157.49 EP
157.99 TC
157.78 EP
158.28 TC
157.77 EP
158.27 TC
162.05 EP
162.55 TC
161.66 EP
162.16 TC

158.30
158.92
159.10
158.97
159.13

(2.24%)
(2.10%)
1.09%
1.08%
1.24%
0.95%

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EP	EDGE OF PAVMENT
TC	TOP OF CURB
	ADA ROUTE
	PROPOSED YARD DRAIN
	PROPOSED INLET
D	PROPOSED MANHOLE
	PROPOSED STORM DRAIN PIPE
	EXISTING STORM DRAIN PIPE
4	PROPOSED CONTOUR
4	EXISTING CONTOUR
	PROPOSED FLOW DIRECTION
2.75	PROPOSED GRADE
36.62	EXISTING GRADE

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. SIDEWALKS SHALL NOT EXCEED 1.95% CROSS SLOPE AND 4.95% LONGITUDINAL SLOPE.
3. CONTRACTOR SHALL NOTE THAT ANY PART OF AN ACCESSIBLE ROUTE CONSTRUCTED WITH A SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND MUST INCLUDE HANDRAILS IN COMPLIANCE WITH 2012 FLORIDA BUILDING CODE SECTION 405.
4. SPOT ELEVATIONS ARE AT EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. STAKE SOD ON ALL SLOPES GREATER THAN 4:1.

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

CONTRACTOR SHALL INSTALL GRADE-STAKES TO CONFIRM ADA COMPLIANCE FOR ALL ACCESSIBLE ROUTES AND PARKING FACILITIES WITHIN THE PROJECT. ADA COMPLIANCE SHALL BE DETERMINED BY THE FLORIDA BUILDING CODE (LATEST EDITION) FOR ACCESSIBILITY. AFTER REVIEW OF THE GRADE-STAKES, CONTRACTOR SHALL SCHEDULE A PRE-POUR/PRE-PAVE MEETING WITH ENGINEER AND OWNER'S REPRESENTATIVE TO CONFIRM ADA COMPLIANCE OR TO IDENTIFY ANY AREAS NOT MEETING ADA CRITERIA. ANY CONCRETE OR PAVEMENT PLACED THAT EXCEEDS ADA CRITERIA FOR SLOPE, RAMPS, LANDINGS, AND ADA DIMENSIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

C-401 C-402 C-403
C-404 C-405 C-406
C-407 C-408

KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---

GRADING AND DRAINAGE PLAN
COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-405

Plotted By:Erale, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:05 December 16, 2022 09:28:17am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-401 GRADING AND DRAINAGE PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FOR CONTINUATION REFER TO SHEET C-403

FOR CONTINUATION REFER TO SHEET C-405

FOR CONTINUATION REFER TO SHEET C-408

25' AVG 15' MIN UPLAND BUFFER

ST-158
TYPE "E" INLET
N 452,350.94
E 2,551,234.44
RIM 156.96
INV. 152.71(E)

184 LF 24" RCP @ 0.50%

LP 157.01

ST-159
TYPE "E" INLET
N 452,354.33
E 2,551,418.56
RIM 157.01
INV. 151.79(W)
INV. 148.00(N)

157.92

157.98

LP 156.96

STABILIZED PERVIOUS OVERFLOW PARKING

COUNTY WETLAND BUFFER

ST-148
CURB INLET WITH "J-1-B" BOTTOM
N 452,168.44
E 2,550,872.29
RIM 156.08
INV. 153.00(SW)
INV. 149.59(S)
INV. 149.09(NW)

134 LF 30" RCP @ 0.09%

MATERIAL STORAGE YARD

LP 156.75

ST-147
FDOT TYPE "E" INLET WITH 6' DIA. "J" BOTTOM
N 452,034.83
E 2,550,876.95
RIM 156.75
INV. 150.21(N)
INV. 149.71(OUT)

HP 158.02

179 LF 24" RCP @ 0.12%

ST-146
FDOT TYPE "E" INLET WITH 6' DIA. "J" BOTTOM
N 451,898.17
E 2,550,992.77
RIM 156.75
INV. 154.00(IN)
INV. 150.93(IN)
INV. 150.43(OUT)

HP 158.01

LP 156.75

145 LF 18" RCP @ 0.18%

157.06 EP
157.56 TC

157.40

ST-145
STANDARD CURB INLET
N 451,895.23
E 2,551,137.73
RIM 156.10
INV. 151.44(SE)
INV. 151.19(W)

LP 156.10

156.28 EP
156.78 TC

156.43 EP
156.93 TC

156.58 EP
157.08 TC

122 LF 15" RCP @ 0.23%

156.85

156.94

157.03

ST-144
STANDARD CURB INLET
N 451,806.08
E 2,551,220.77
RIM 155.85
INV. 151.72(NW)

LP 155.86

157.90

157.90

157.90

157.95

158.00

157.90

157.95

BLDG D
HEIGHT = 16'-5.5"
193 SF
F.F.E.= 157.90
TRUCK WASH

FLOOD ZONE

BLDG C
HEIGHT = 30'-0"
4,800 SF
F.F.E = 158.00
FLEET GARAGE

ST-141
TYPE "E" INLET
N 451,781.00
E 2,550,875.25
RIM 156.75
INV. 152.68(SE)
INV. 152.21(NW)

1.09%

1.22%

1.38%

2.55%

N.W. CORNER S
S.E. 1/4, S.E.
N.W. 1/4, SECT
TOWNSHIP 3 SO
RANGE 17 EAST

FOUND 4"x4" CONCRETE MONUMENT 6" DISC "R.C. HALE ASSOC. LAKE CITY, FL. R.L.S. 1916"

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EP	EDGE OF PAVEMENT
TC	TOP OF CURB
	ADA ROUTE
	PROPOSED YARD DRAIN
	PROPOSED INLET
D	PROPOSED MANHOLE
	PROPOSED STORM DRAIN PIPE
	EXISTING STORM DRAIN PIPE
4	PROPOSED CONTOUR
4	EXISTING CONTOUR
	PROPOSED FLOW DIRECTION
2.75	PROPOSED GRADE
26.62	EXISTING GRADE

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. SIDEWALKS SHALL NOT EXCEED 1.95% CROSS SLOPE AND 4.95% LONGITUDINAL SLOPE.
3. CONTRACTOR SHALL NOTE THAT ANY PART OF AN ACCESSIBLE ROUTE CONSTRUCTED WITH A SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND MUST INCLUDE HANDRAILS IN COMPLIANCE WITH 2012 FLORIDA BUILDING CODE SECTION 405.
4. SPOT ELEVATIONS ARE AT EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. STAKE SOD ON ALL SLOPES GREATER THAN 4:1.

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

CONTRACTOR SHALL INSTALL GRADE-STAKES TO CONFIRM ADA COMPLIANCE FOR ALL ACCESSIBLE ROUTES AND PARKING FACILITIES WITHIN THE PROJECT. ADA COMPLIANCE SHALL BE DETERMINED BY THE FLORIDA BUILDING CODE (LATEST EDITION) FOR ACCESSIBILITY. AFTER REVIEW OF THE GRADE-STAKES, CONTRACTOR SHALL SCHEDULE A PRE-POUR/PRE-PAVE MEETING WITH ENGINEER AND OWNER'S REPRESENTATIVE TO CONFIRM ADA COMPLIANCE OR TO IDENTIFY ANY AREAS NOT MEETING ADA CRITERIA. ANY CONCRETE OR PAVEMENT PLACED THAT EXCEEDS ADA CRITERIA FOR SLOPE, RAMPS, LANDINGS, AND ADA DIMENSIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

KEY MAP — NOT TO SCALE

C-401	C-402	C-403
C-404	C-405	C-406
C-407	C-408	

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

GRADING AND DRAINAGE PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY

COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-406

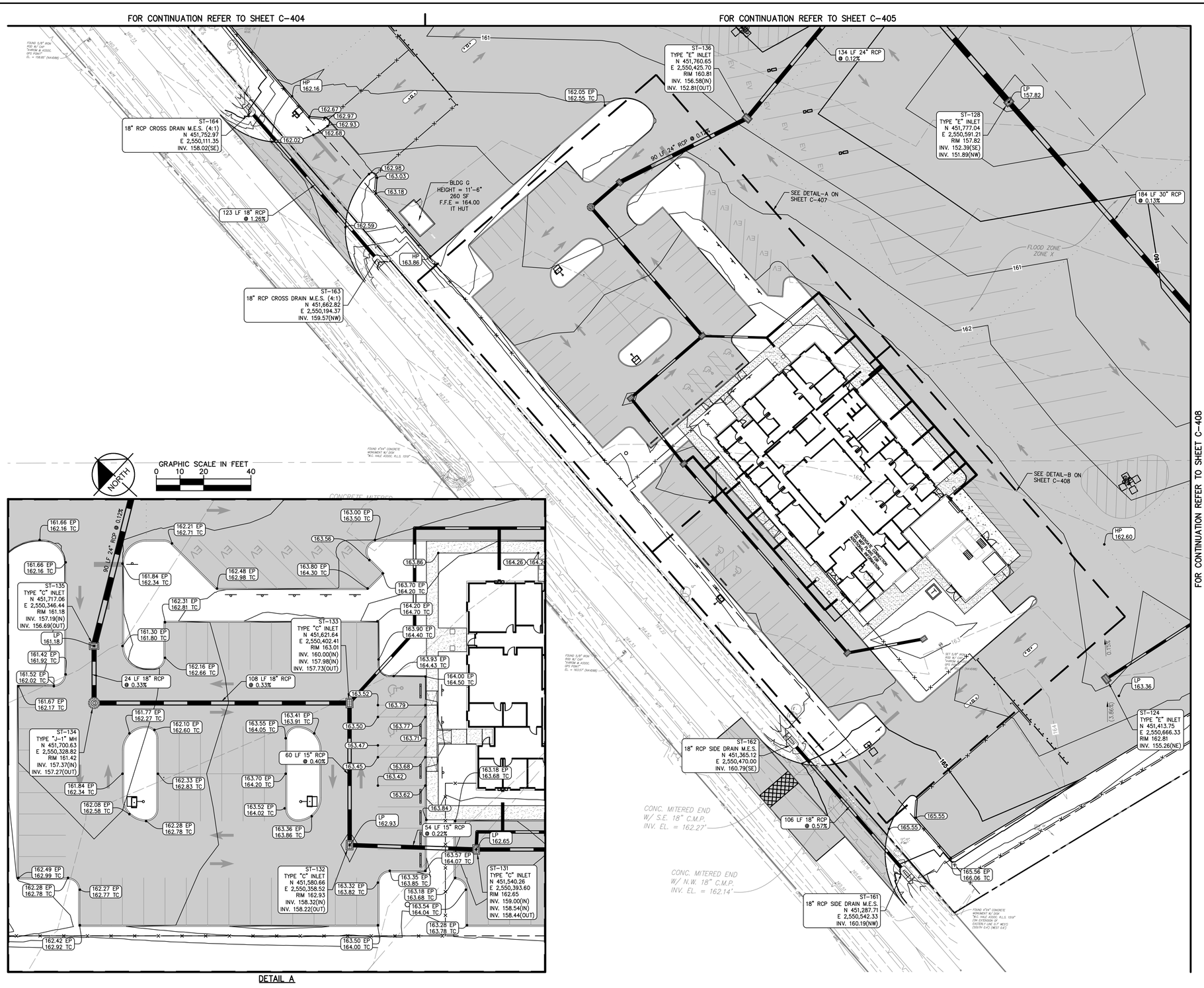
Plotted By:Erole, Grone Sheet Set:FPL – COLUMBIA COUNTY Layout:06 December 16, 2022 09:28:25am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-401 GRADING AND DRAINAGE PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Erole, Grone Sheet Set:FPL – COLUMBIA COUNTY Layout:07 December 16, 2022 09:28:38am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-401 GRADING AND DRAINAGE PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

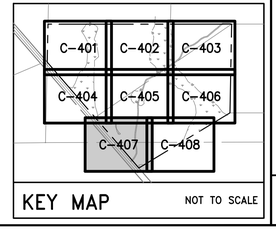
FOR CONTINUATION REFER TO SHEET C-404

FOR CONTINUATION REFER TO SHEET C-405

FOR CONTINUATION REFER TO SHEET C-408



DETAIL A



KEY MAP NOT TO SCALE

NORTH

GRAPHIC SCALE IN FEET
0 ## ## ##

LEGEND:

EP	EDGE OF PAVMENT
TC	TOP OF CURB
	ADA ROUTE
	PROPOSED YARD DRAIN
	PROPOSED INLET
D	PROPOSED MANHOLE
	PROPOSED STORM DRAIN PIPE
	EXISTING STORM DRAIN PIPE
4	PROPOSED CONTOUR
4	EXISTING CONTOUR
	PROPOSED FLOW DIRECTION
2.75	PROPOSED GRADE
25.62	EXISTING GRADE

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. SIDEWALKS SHALL NOT EXCEED 1.95% CROSS SLOPE AND 4.95% LONGITUDINAL SLOPE.
3. CONTRACTOR SHALL NOTE THAT ANY PART OF AN ACCESSIBLE ROUTE CONSTRUCTED WITH A SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND MUST INCLUDE HANDRAILS IN COMPLIANCE WITH 2012 FLORIDA BUILDING CODE SECTION 405.
4. SPOT ELEVATIONS ARE AT EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. STAKE SOD ON ALL SLOPES GREATER THAN 4:1.

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

CONTRACTOR SHALL INSTALL GRADE-STAKES TO CONFIRM ADA COMPLIANCE FOR ALL ACCESSIBLE ROUTES AND PARKING FACILITIES WITHIN THE PROJECT. ADA COMPLIANCE SHALL BE DETERMINED BY THE FLORIDA BUILDING CODE (LATEST EDITION) FOR ACCESSIBILITY. AFTER REVIEW OF THE GRADE-STAKES, CONTRACTOR SHALL SCHEDULE A PRE-POUR/PRE-PAVE MEETING WITH ENGINEER AND OWNER'S REPRESENTATIVE TO CONFIRM ADA COMPLIANCE OR TO IDENTIFY ANY AREAS NOT MEETING ADA CRITERIA. ANY CONCRETE OR PAVEMENT PLACED THAT EXCEEDS ADA CRITERIA FOR SLOPE, RAMPS, LANDINGS, AND ADA DIMENSIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

GRADING AND DRAINAGE PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-407

FOR CONTINUATION REFER TO SHEET C-405

FOR CONTINUATION REFER TO SHEET C-406

FOR CONTINUATION REFER TO SHEET C-407

ST-141
TYPE "E" INLET
N 451,781.00
E 2,550,875.25
RIM 156.75
INV. 152.68(SE)
INV. 152.21(NW)

BLDG D
HEIGHT = 16'-5.5"
193 SF
F.F.E = 157.90
TRUCK WASH

BLDG C
HEIGHT = 30'-0"
4,800 SF
F.F.E = 158.00
FLEET GARAGE

FLOOD ZONE

ST-144
STANDARD CURB INLET
N 451,806.08
E 2,551,220.77
RIM 155.85
INV. 151.72(NW)

184 LF 30" RCP @ 0.13%

178 LF 18" RCP @ 0.18%

ST-126
TYPE "E" INLET
N 451,692.31
E 2,550,771.11
RIM 158.52
INV. 155.50(SE)
INV. 153.22(SW)

73 LF 24" RCP @ 0.12%

ST-127
TYPE "J-1-A" MH
N 451,643.21
E 2,550,716.94
RIM 159.90
INV. 153.67(IN)
INV. 153.13(IN)
INV. 152.63(OUT)

POLE STORAGE AND STAGING AREA

ST-140
TYPE "E" INLET
N 451,687.45
E 2,551,027.01
RIM 156.83
INV. 152.53(NE)
INV. 153.00(NW)

BLDG B
HEIGHT = 12'-5"
450 SF
F.F.E = 160.50
TRUCK STOCK

ST-125
TYPE "E" INLET
N 451,526.10
E 2,550,826.96
RIM 159.22
INV. 154.81(SW)
INV. 154.56(NW)

196 LF 15" RCP @ 0.23%

ST-124
TYPE "E" INLET
N 451,413.75
E 2,550,666.33
RIM 162.81
INV. 155.26(NE)

EAST-WEST CENTER OF SECTION LINE, SECTION 18, TOWNSHIP 3 SOUTH, RANGE 17 EAST

BLDG A
HEIGHT = 17'-4"
13,090 SF
F.F.E = 164.50
SERVICE CENTER
OFFICE BUILDING

CONDENSATE CONNECTION
SEE MEP PLANS FOR
ADDITIONAL INFORMATION

159 LF 15" RCP @ 0.23%

ST-130
TYPE "C" INLET
N 451,424.17
E 2,550,501.74
RIM 163.27
INV. 159.01(IN)
INV. 158.91(OUT)

ST-129
TYPE "C" INLET
N 451,434.86
E 2,550,549.68
RIM 163.67
INV. 159.12(OUT)

49 LF 15" RCP @ 0.22%

DETAIL B

GRAPHIC SCALE IN FEET
0 10 20 40

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND:

EP	EDGE OF PAVMENT
TC	TOP OF CURB
	ADA ROUTE
	PROPOSED YARD DRAIN
	PROPOSED INLET
D	PROPOSED MANHOLE
	PROPOSED STORM DRAIN PIPE
	EXISTING STORM DRAIN PIPE
4	PROPOSED CONTOUR
4	EXISTING CONTOUR
	PROPOSED FLOW DIRECTION
2.75	PROPOSED GRADE
35.62	EXISTING GRADE

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-103
2. SIDEWALKS SHALL NOT EXCEED 1.95% CROSS SLOPE AND 4.95% LONGITUDINAL SLOPE.
3. CONTRACTOR SHALL NOTE THAT ANY PART OF AN ACCESSIBLE ROUTE CONSTRUCTED WITH A SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND MUST INCLUDE HANDRAILS IN COMPLIANCE WITH 2012 FLORIDA BUILDING CODE SECTION 405.
4. SPOT ELEVATIONS ARE AT EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. STAKE SOD ON ALL SLOPES GREATER THAN 4:1.

PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

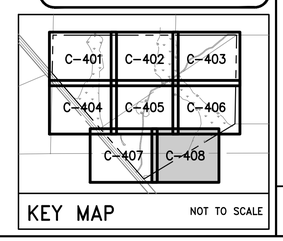
THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

CONTRACTOR SHALL INSTALL GRADE-STAKES TO CONFIRM ADA COMPLIANCE FOR ALL ACCESSIBLE ROUTES AND PARKING FACILITIES WITHIN THE PROJECT. ADA COMPLIANCE SHALL BE DETERMINED BY THE FLORIDA BUILDING CODE (LATEST EDITION) FOR ACCESSIBILITY. AFTER REVIEW OF THE GRADE-STAKES, CONTRACTOR SHALL SCHEDULE A PRE-POUR/PRE-PAVE MEETING WITH ENGINEER AND OWNER'S REPRESENTATIVE TO CONFIRM ADA COMPLIANCE OR TO IDENTIFY ANY AREAS NOT MEETING ADA CRITERIA. ANY CONCRETE OR PAVEMENT PLACED THAT EXCEEDS ADA CRITERIA FOR SLOPE, RAMPS, LANDINGS, AND ADA DIMENSIONS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

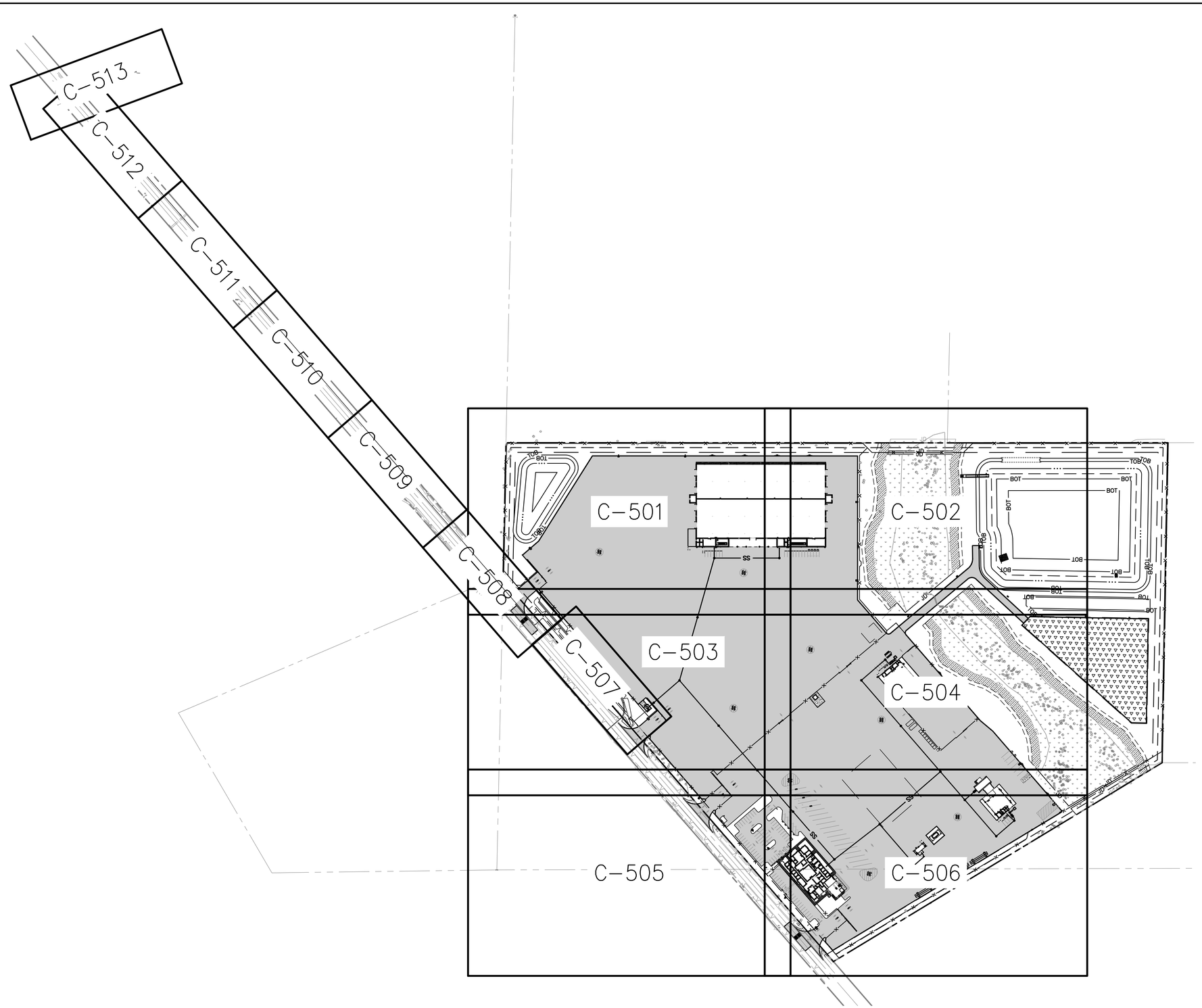
GRADING AND DRAINAGE PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-408

Plotted By:Erole, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:08 December 16, 2022 09:28:50am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-401 GRADING AND DRAINAGE PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

GRAPHIC SCALE IN FEET
0 75 150 300

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
3. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4. FOR FLOW TEST DATA REFER TO SHEET C-004

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN

PROJECT DATUM: NAVD '88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000	DATE DECEMBER 2022	SCALE: AS SHOWN	
		DESIGNED BY: ____	
		DRAWN BY: ____	
		CHECKED BY: ____	

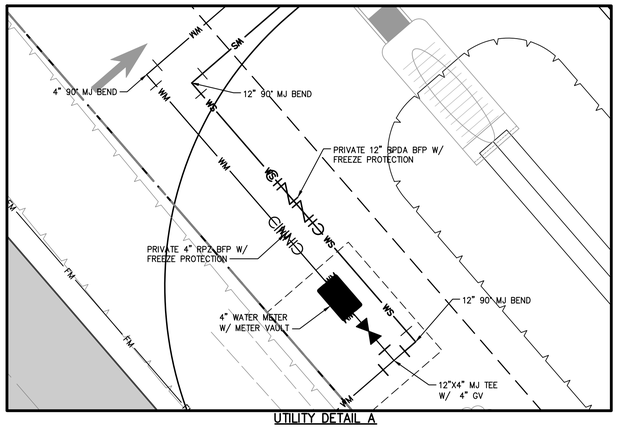
OVERALL UTILITY PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR:
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-500

Plotted By: Eagle, Grace Sheet Set: FPL – COLUMBIA COUNTY Layout: 01 December 16, 2022 09:28:16am K:\JAX_Civil\045687000 – FPL Columbia County\Civil\Cad\PlanSheets\C-500 OVERALL UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



UTILITY DETAIL A

NORTH

0 10

SCALE FEET

NORTH

GRAPHIC SCALE IN FEET

0 20 40 80

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
3. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4. FOR FLOW TEST DATA REFER TO SHEET C-004

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

PROJECT DATUM: NAVD'88

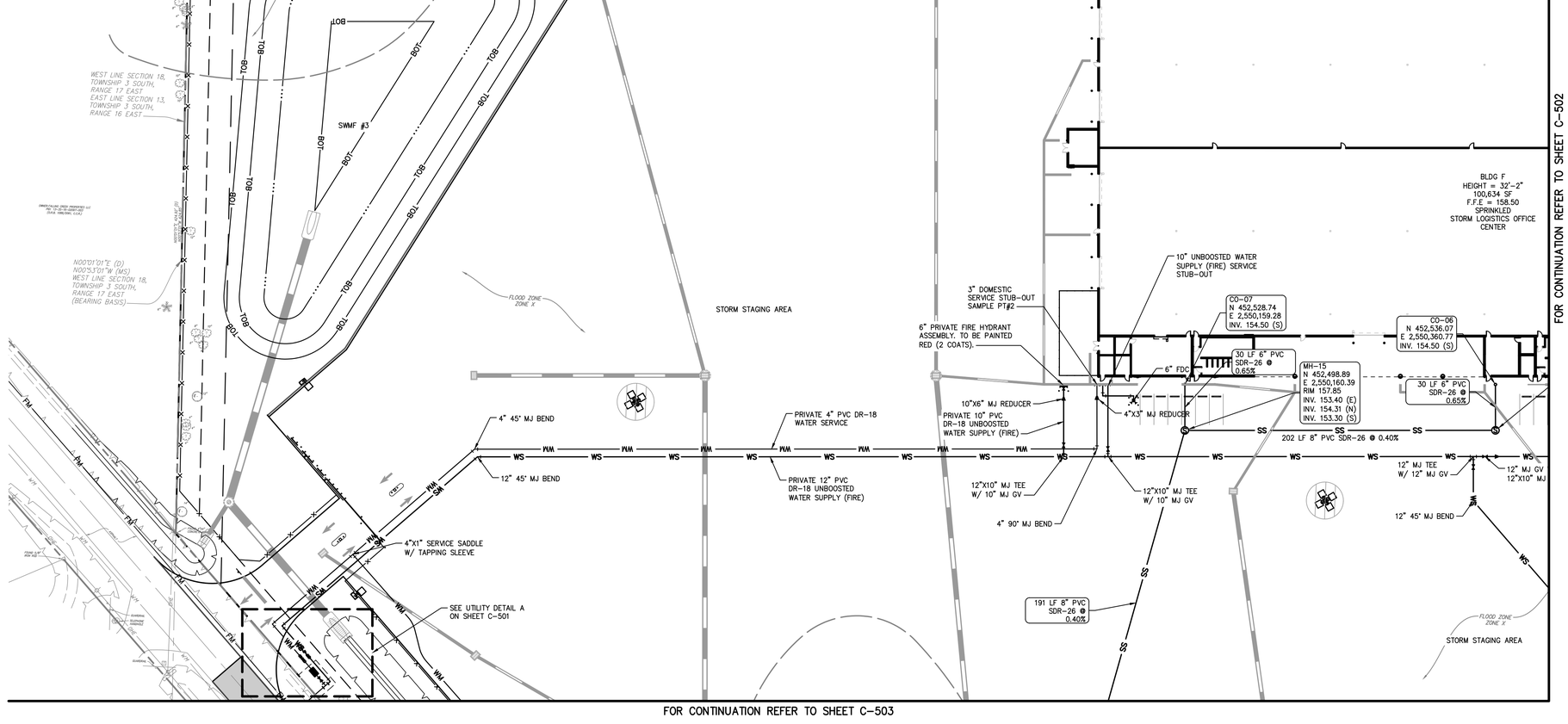
THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

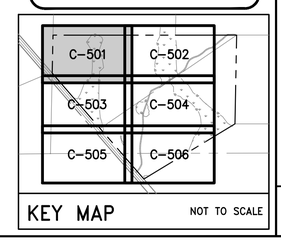
Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

FOR CONTINUATION REFER TO SHEET C-502

FOR CONTINUATION REFER TO SHEET C-503





KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FL 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL

REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ——
DRAWN BY: ——
CHECKED BY: ——

UTILITY PLAN

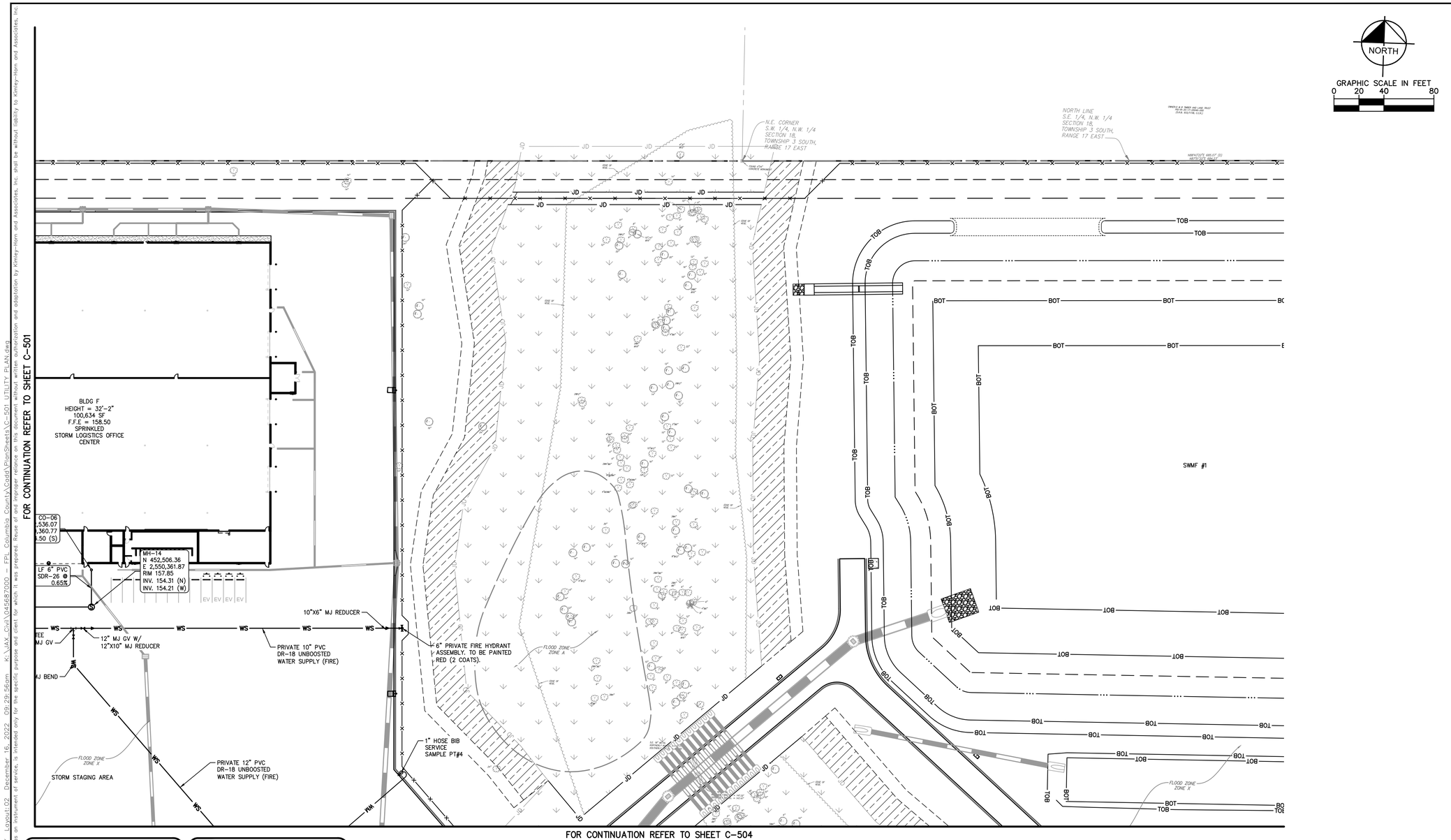
COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR FLORIDA POWER & LIGHT COMPANY

COLUMBIA COUNTY FLORIDA

SHEET NUMBER C-501

Plotted By:Eagle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 09:29:46am K:\JAX_Civil\045687000 – FPL Columbia County\Civil\Plan Sheets\C-501 UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



PROJECT DATUM: NAVD'88

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

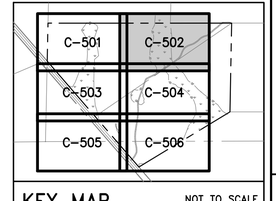
ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
3. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4. FOR FLOW TEST DATA REFER TO SHEET C-004

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

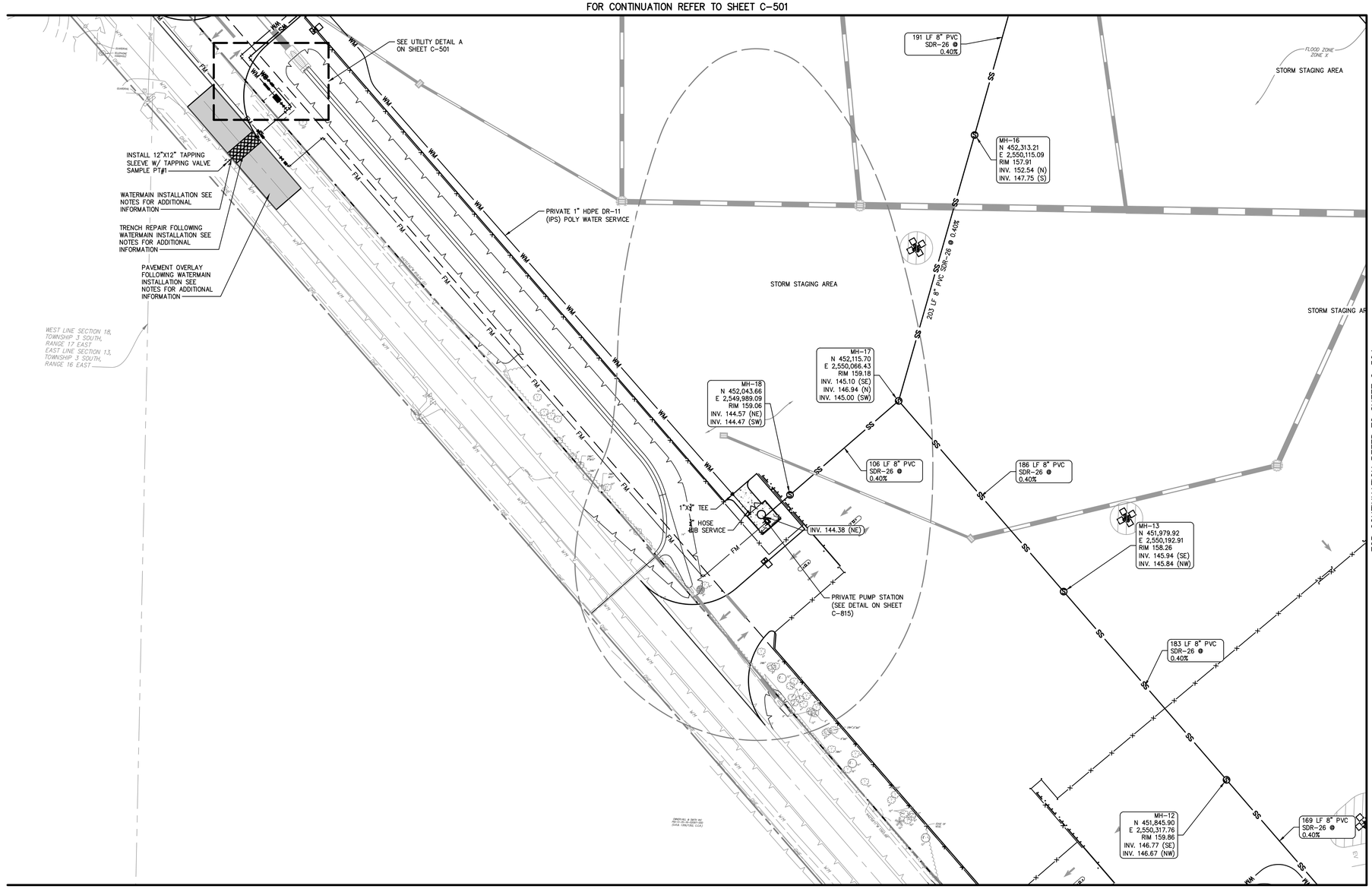
KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ----
DRAWN BY: ----
CHECKED BY: ----

UTILITY PLAN
COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR:
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-502

Plotted By:Ergle, Grace Sheet Set:FPL - COLUMBIA COUNTY Layout:02 December 16, 2022 09:29:56am K:\JAX_Civil\045687000 - FPL Columbia County\Civil\Plan Sheets\C-501 UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FOR CONTINUATION REFER TO SHEET C-501



FOR CONTINUATION REFER TO SHEET C-505

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

PROJECT DATUM: NAVD'88

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

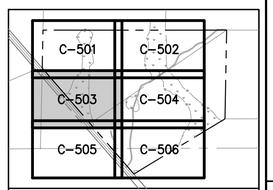
ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
3. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4. FOR FLOW TEST DATA REFER TO SHEET C-004
5. SEE SHEET C-802 FOR TRENCH REPAIR DETAIL. TRENCH REPAIR WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONSIST OF STABILIZED SUBGRADE COMPACTED TO 98% MODIFIED PROCTOR MAXIMUM DRY DENSITY PER ASTM D-1557 (MIN. LBR 40), MINIMUM 12" LIMEROCK THICKNESS COMPACTED TO 98% MODIFIED PROCTOR MAXIMUM DRY DENSITY PER ASTM D-1557, 2" OF ASPHALTIC CONCRETE WITH MINIMUM STABILITY OF 1500 LBS COMPACTED TO 95% OF THE MAXIMUM LABORATORY DENSITY (INSTALLED IN 2 - 1" LIFTS) PER COLUMBIA COUNTY PUBLIC WORKS.
6. PAVEMENT OVERLAY TO CONSIST OF MILLING AND RESURFACING OF A SINGLE 1.25" LIFT OF ASPHALTIC CONCRETE WITH A MINIMUM OF STABILITY OF 1500 LBS COMPACTED TO 95% OF THE MAXIMUM LABORATORY DENSITY PER COLUMBIA COUNTY PUBLIC WORKS. PAVEMENT.
7. LENGTH OF TRENCH REPAIR AND PAVEMENT OVERLAY TO BE 100 FEET IN TOTAL LENGTH, CENTERED ON THE WATERMAIN INSTALLATION.
8. WATERMAIN INSTALLATION TO BE INSTALLED VIA OPEN CUTTING OF THE ROAD. PAVMENT REPAIR TO BE PER THE REQUIREMETNS SET FORTH BY COLUMBIA COUNTY PUBLIC WORKS AS SHOWN IN NOTES 5, 6, AND 7. HORIZONTAL DIRECTIONAL DRILLING OF WATERMAIN MAY BE UTILIZED IN LIEU OF OPEN CUTTIN GOF THE ROADWAY. IF HORIZONTAL DIRECTIONAL DRILLING (HDD) IS REQUESTED BY THE CONTRACTOR, NOTICE TO BE ISSUED TO FLORIDA POWER AND LIGHT COMPANY AND THE ENGINEER OF RECORD IMMEDIATELY. IF HDD OF THE WATERMAIN INSTALLATION IS REQUESTED BY THE CONTRACTOR, THE CONTRACTOR SHALL PROVIDE A LISTING OF THE MATERIALS PROPOSED, DEVIATIONS IN WATERMAIN ROUTING, EQUIPMENT AND MATERIAL STAGING AREAS, AND MEANS AND METHODS OF INSTALLATION FOR REVIEW AND APPROVAL BY THE ENGINEER OF RECORD, FLORIDA POWER AND LIGHT COMPANY, AND ALL AUTHOITIES HAVING JURISDICTION.
9. COLUMBIA COUNTY PUBLIC WORKS AND ENGINEERING DEPARTMENT SHALL BE NOTIFIED AT LEAST 10 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WITHIN THE COUNTY RIGHT-OF-WAY.
10. MAINTENANCE OF TRAFFIC SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR DURING WATERMAIN INSTALLATION ACTIVITIES AND PAVEMENT REPAIR AS SET FORTH BY THE FDOT STANDARD PLANS AND SPECIFICATIONS (FY 2022-2033). ONE TRAVEL LANE SHALL REMAIN OPEN AT ALL TIMES.

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

UTILITY PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

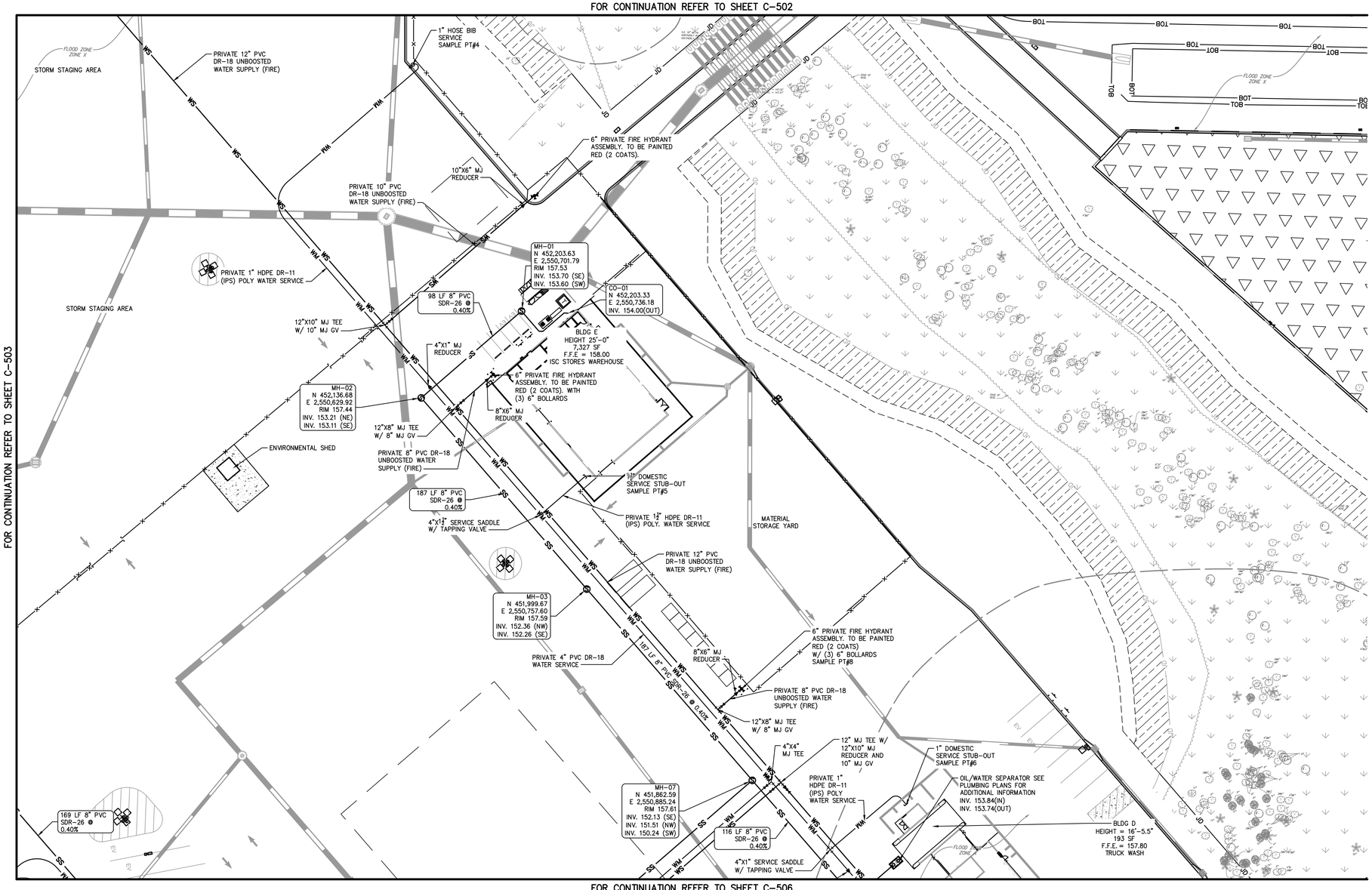
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-503

Plotted By:Eryle.Grace Sheet Set:FPL - COLUMBIA COUNTY Layout:03 December 16, 2022 09:30:06am K:\JAX_Civil\045687000 - FPL Columbia County\Cadd\PlanSheets\C-501 UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FOR CONTINUATION REFER TO SHEET C-502

FOR CONTINUATION REFER TO SHEET C-503



FOR CONTINUATION REFER TO SHEET C-506

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

PROJECT DATUM: NAVD'88

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

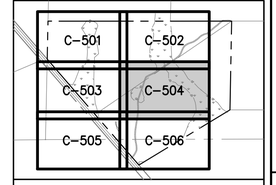
ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
3. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4. FOR FLOW TEST DATA REFER TO SHEET C-004

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---

UTILITY PLAN

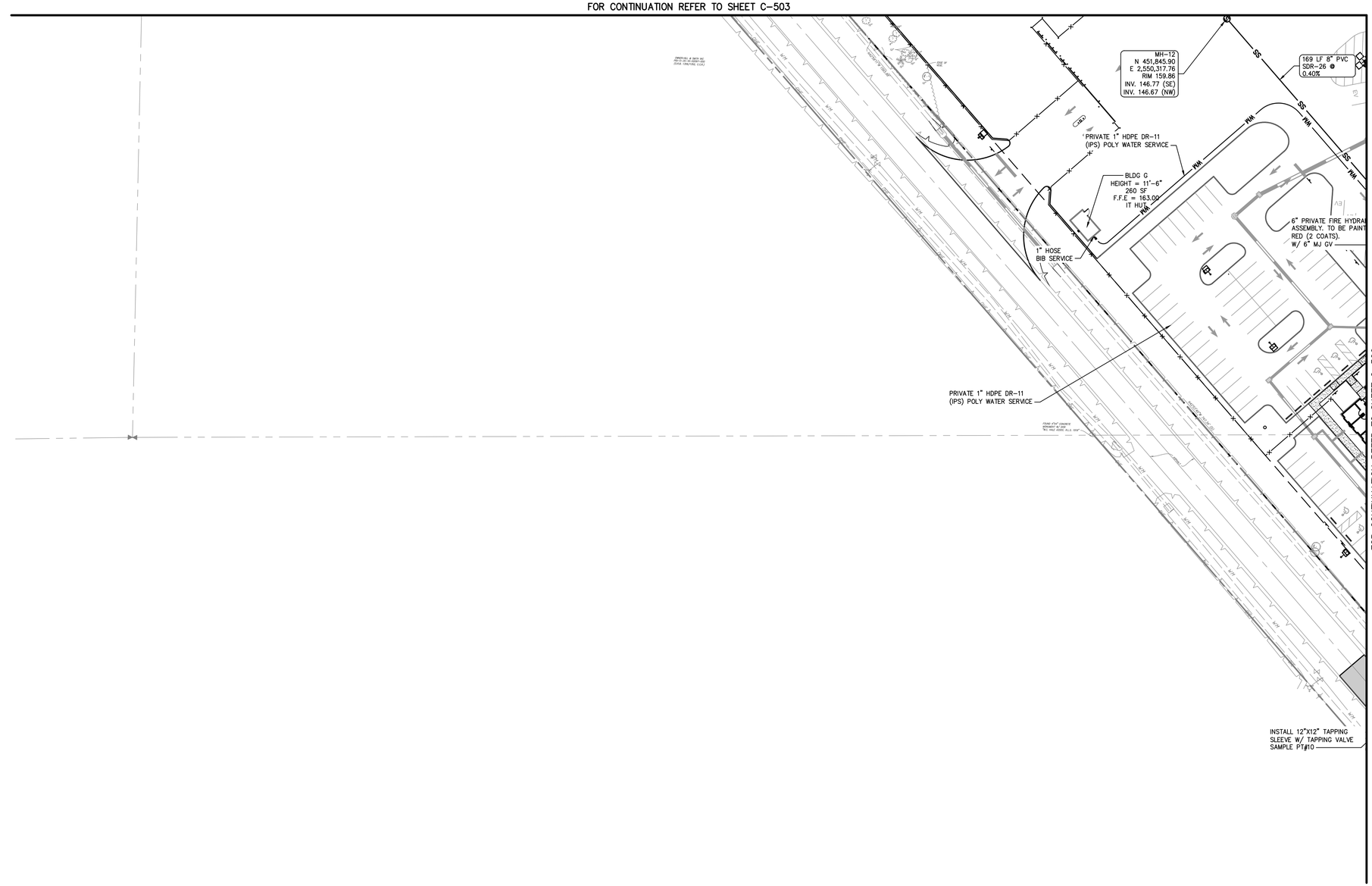
COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-504

Plotted By:Erole, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:04 December 16, 2022 09:30:16am K:\JAX_Civil\045687000 – FPL Columbia County\Civil\PlanSheets\C-501 UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Erole, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:05 December 16, 2022 09:30:25am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-501 UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FOR CONTINUATION REFER TO SHEET C-503



FOR CONTINUATION REFER TO SHEET C-506

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

PROJECT DATUM: NAVD'88

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

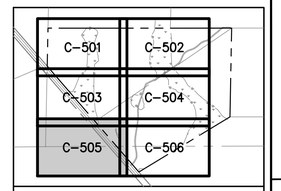
ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
3. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4. FOR FLOW TEST DATA REFER TO SHEET C-004

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000	DATE DECEMBER 2022
SCALE: AS SHOWN	
DESIGNED BY: ----	DRAWN BY: ----
CHECKED BY: ----	

UTILITY PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-505

FOR CONTINUATION REFER TO SHEET C-504

FOR CONTINUATION REFER TO SHEET C-505

169 LF 8" PVC SDR-26 @ 0.40%

MH-11
N 451,721.94
E 2,550,433.23
RIM 161.62
INV. 147.55 (SE)
INV. 147.45 (NW)

PRIVATE 1" HDPE DR-11 (IPS) POLY WATER SERVICE

6" PRIVATE FIRE HYDRANT ASSEMBLY. TO BE PAINTED RED (2 COATS). W/ 6" MJ GV

6" 90° MJ BEND

10"X6" MJ REDUCER

PRIVATE 10" PVC DR-18 UNBOOSTED WATER SUPPLY (FIRE)

196 LF 8" PVC SDR-26 @ 0.40%

MH-10
N 451,578.65
E 2,550,566.71
INV. 159.85(IN)
INV. 148.43(IN)
INV. 148.33(OUT)

4"X1" MJ REDUCER

CO-05
N 451,556.04
E 2,550,542.44
INV. 160.00 (NE)

BLDG A
HEIGHT = 17'-4"
13,090 SF
F.F.E = 164.50
SPRINKLED
SERVICE CENTER
OFFICE BUILDING

33 LF 6" PVC SDR-26 @ 0.45%

8" UNBOOSTED WATER SUPPLY (FIRE) SERVICE STUB-OUT

24" DOMESTIC SERVICE STUB-OUT SAMPLE PT#9

4" UNBOOSTED WATER SUPPLY (FIRE) SERVICE STUB-OUT

OUTDOOR MECHANICAL

(2) 8" 45° MJ BENDS

4" FDC

8" MJ GV

12"X8" MJ TEE

INSTALL 12"X12" TAPPING SLEEVE W/ TAPPING VALVE SAMPLE PT#10

4"X4" MJ TEE

12" MJ TEE W/ 12"X10" MJ REDUCER

12" 90° MJ BEND

4" 90° MJ BEND

PRIVATE 4" PVC DR-18 WATER SERVICE

PRIVATE 12" PVC DR-18 UNBOOSTED WATER SUPPLY (FIRE)

4"X2" SERVICE SADDLE W/ TAPPING VALVE

SEE UTILITY DETAIL B ON SHEET C-506

TRENCH REPAIR FOLLOWING WATERMAIN INSTALLATION SEE NOTES FOR ADDITIONAL INFORMATION

WATERMAIN INSTALLATION SEE NOTES FOR ADDITIONAL INFORMATION

PAVEMENT OVERLAY FOLLOWING WATERMAIN INSTALLATION SEE NOTES FOR ADDITIONAL INFORMATION

4"X2" SERVICE SADDLE W/ TAPPING VALVE

MH-09
N 451,692.68
E 2,550,702.89
RIM 159.71
INV. 150.41 (SE)
INV. 149.24 (NE)
INV. 149.14 (SW)

PRIVATE 4" PVC DR-18 WATER SERVICE

12"X10" MJ TEE W/ 10" MJ GV

249 LF 8" PVC SDR-26 @ 0.40%

178 LF 8" PVC SDR-26 @ 0.40%

PRIVATE 10" PVC DR-18 UNBOOSTED WATER SUPPLY (FIRE)

166 LF 8" PVC SDR-26 @ 0.40%

10"X6" MJ REDUCER

6,000 GALLON MIXED FUEL SYSTEM

6" PRIVATE FIRE HYDRANT ASSEMBLY. TO BE PAINTED RED (2 COATS). W/ (3) 6" BOLLARDS

BLDG B
HEIGHT = 12'-5"
450 SF
F.F.E. = 160.50
TRUCK STOCK

CO-04
N 451,609.40
E 2,550,835.42
INV. 156.00(OUT)

PRIVATE 3/4" HDPE DR-11 (IPS) POLY WATER SERVICE

3/4" DOMESTIC SERVICE STUB-OUT SAMPLE PT #8

35 LF 6" PVC SDR-26 @ 0.65%

MH-08
N 451,570.90
E 2,550,816.30
RIM 160.18
INV. 155.66 (NE)
INV. 151.08 (NW)

MH-07
N 451,862.59
E 2,550,885.24
RIM 157.61
INV. 152.13 (SE)
INV. 151.51 (NW)
INV. 150.24 (SW)

116 LF 8" PVC SDR-26 @ 0.40%

4"X1" SERVICE SADDLE W/ TAPPING VALVE

PRIVATE 1" HDPE DR-11 (IPS) POLY WATER SERVICE

OIL/WATER SEPARATOR SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION
INV. 153.84(IN)
INV. 153.74(OUT)

BLDG D
HEIGHT = 16'-5.5"
193 SF
F.F.E. = 157.80
TRUCK WASH

FLOOD ZONE ZONE X

4"X2" MJ REDUCER

MH-06
N 451,777.93
E 2,550,964.10
RIM 157.46
INV. 153.54 (NE)
INV. 152.69 (SE)
INV. 152.59 (NW)

35 LF 8" PVC SDR-26 @ 1.04%

BLDG C
HEIGHT = 30'-0"
4,800 SF
F.F.E. = 158.00
FLEET GARAGE

2" DOMESTIC SERVICE STUB-OUT SAMPLE PT#7

CO-02
N 451,745.75
E 2,551,101.96
INV. 154.00(OUT)

OIL/WATER SEPARATOR SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION
INV. 153.90(IN)
INV. 153.90(OUT)

149 LF 8" PVC SDR-26 @ 0.40%

CO-03
N 451,739.78
E 2,551,095.55
INV. 154.00(OUT)

PRIVATE 10" PVC DR-18 UNBOOSTED WATER SUPPLY (FIRE)

10"X6" MJ REDUCER

PRIVATE 2" HDPE DR-11 (IPS) POLY WATER SERVICE

6" 90° MJ BEND

32 LF 6" PVC SDR-26 @ 0.65%

6" PRIVATE FIRE HYDRANT ASSEMBLY. TO BE PAINTED RED (2 COATS). W/ (3) 6" BOLLARDS

MH-04
N 451,719.33
E 2,551,119.74
INV. 153.78(IN)
INV. 153.79(IN)
INV. 153.68(OUT)

MH-05
N 451,668.93
E 2,551,065.64
INV. 153.38(IN)
INV. 153.28(OUT)

74 LF 8" PVC SDR-26 @ 0.40%

EAST-WEST CENTER OF SECTION LINE, SECTION 18, TOWNSHIP 3 SOUTH, RANGE 17 EAST

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

PRIVATE 12" RPDA BFP W/ FREEZE PROTECTION

6" PRIVATE FIRE HYDRANT ASSEMBLY. TO BE PAINTED RED (2 COATS).

12"X6" MJ TEE W/ 6" GV

12"X4" MJ

PRIVATE 4" RPZ BFP W/ FREEZE PROTECTION

4" WATER METER W/ METER VAULT

4" MJ GV

4" 90° MJ BEND

CINNI

NORTH

0 10
SCALE FEET

UTILITY DETAIL B

PROJECT DATUM: NAVD'88

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
3. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4. FOR FLOW TEST DATA REFER TO SHEET C-004
5. SEE SHEET C-802 FOR TRENCH REPAIR DETAIL. TRENCH REPAIR WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONSIST OF STABILIZED SUBGRADE COMPACTED TO 98% MODIFIED PROCTOR MAXIMUM DRY DENSITY PER ASTM D-1557 (MIN. LBR 40), MINIMUM 12" LIMEROCK THICKNESS COMPACTED TO 98% MODIFIED PROCTOR MAXIMUM DRY DENSITY PER ASTM D-1557, 2" OF ASPHALTIC CONCRETE WITH MINIMUM STABILITY OF 1500 LBS COMPACTED TO 95% OF THE MAXIMUM LABORATORY DENSITY (INSTALLED IN 2 – 1" LIFTS) PER COLUMBIA COUNTY PUBLIC WORKS.
6. PAVEMENT OVERLAY TO CONSIST OF MILLING AND RESURFACING OF A SINGLE 1.25" LIFT OF ASPHALTIC CONCRETE WITH A MINIMUM OF STABILITY OF 1500 LBS COMPACTED TO 95% OF THE MAXIMUM LABORATORY DENSITY PER COLUMBIA COUNTY PUBLIC WORKS. PAVEMENT.
7. LENGTH OF TRENCH REPAIR AND PAVEMENT OVERLAY TO BE 100 FEET IN TOTAL LENGTH, CENTERED ON THE WATERMAIN INSTALLATION.
8. WATERMAIN INSTALLATION TO BE INSTALLED VIA OPEN CUTTING OF THE ROAD. PAVMENT REPAIR TO BE PER THE REQUIREMETNS SET FORTH BY COLUMBIA COUNTY PUBLIC WORKS AS SHOWN IN NOTES 5, 6, AND 7. HORIZONTAL DIRECTIONAL DRILLING OF WATERMAIN MAY BE UTILIZED IN LIEU OF OPEN CUTTIN GOF THE ROADWAY. IF HORIZONTAL DIRECTIONAL DRILLING (HDD) IS REQUESTED BY THE CONTRACTOR, NOTICE TO BE ISSUED TO FLORIDA POWER AND LIGHT COMPANY AND THE ENGINEER OF RECORD IMMEDIATELY. IF HDD OF THE WATERMAIN INSTALLATION IS REQUESTED BY THE CONTRACTOR, THE CONTRACTOR SHALL PROVIDE A LISTING OF THE MATERIALS PROPOSED, DEVIATIONS IN WATERMAIN ROUTING, EQUIPMENT AND MATERIAL STAGING AREAS, AND MEANS AND METHODS OF INSTALLATION FOR REVIEW AND APPROVAL BY THE ENGINEER OF RECORD, FLORIDA POWER AND LIGHT COMPANY, AND ALL AUTHOITIES HAVING JURISDICTION.
9. COLUMBIA COUNTY PUBLIC WORKS AND ENGINEERING DEPARTMENT SHALL BE NOTIFIED AT LEAST 10 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WITHIN THE COUNTY RIGHT-OF-WAY.
10. MAINTENANCE OF TRAFFIC SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR DURING WATERMAIN INSTALLATION ACTIVITIES AND PAVEMENT REPAIR AS SET FORTH BY THE FDOT STANDARD PLANS AND SPECIFICATIONS (FY 2022-2033). ONE TRAVEL LANE SHALL REMAIN OPEN AT ALL TIMES.

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN

C-501 C-502 C-503 C-504 C-505 C-506

KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---

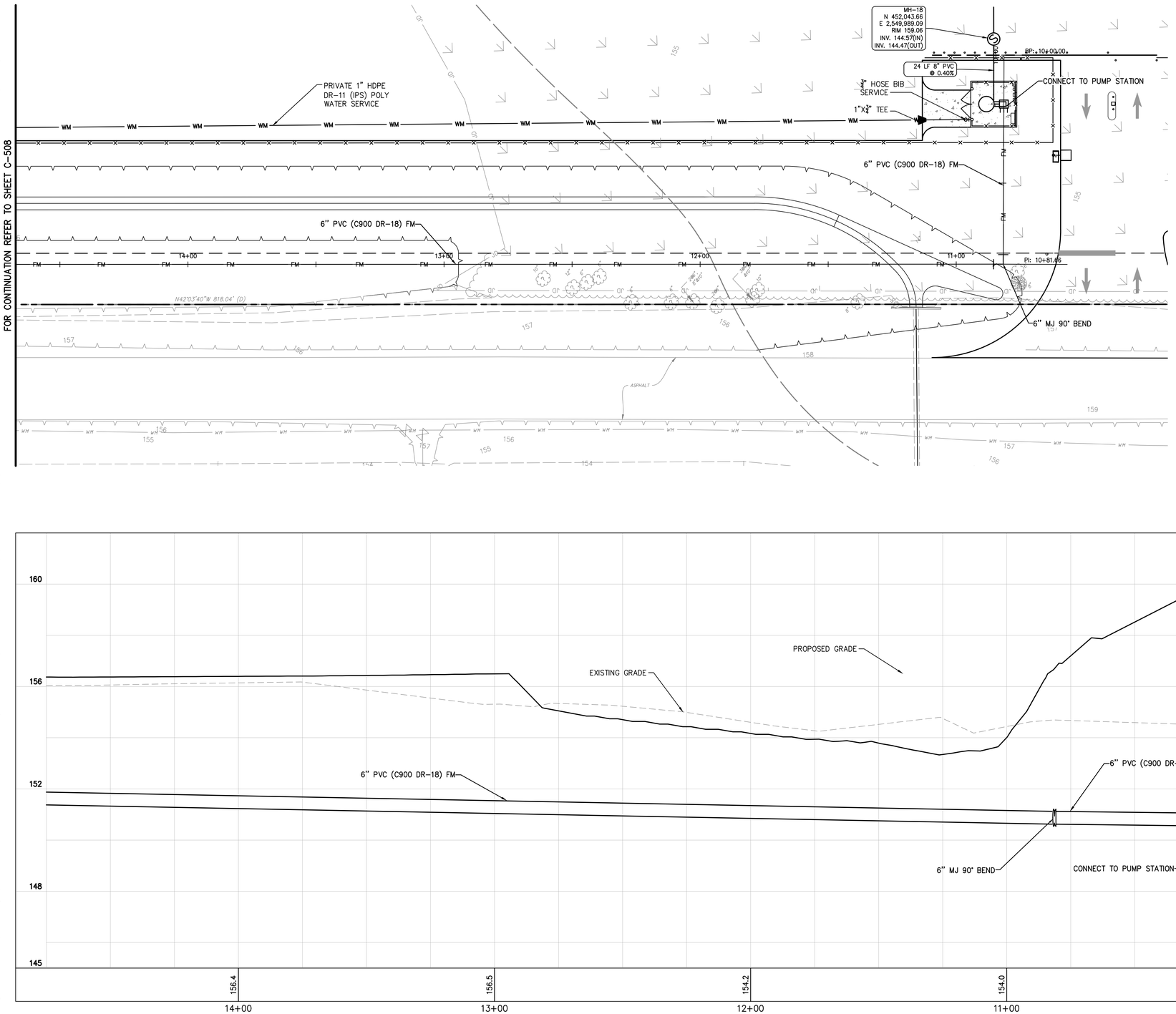
UTILITY PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-506

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:06 December 16, 2022 09:30:37am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-501 UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



GRAPHIC SCALE IN FEET
0 10 20 40

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
1. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO BEGINNING CONSTRUCTION.
2. FOR FLOW TEST DATA REFER TO SHEET C-004

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN

SCALE: HORIZ.: 0 — 20'
VERT.: 0 — 2'

PROJECT DATUM: NAVD '88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

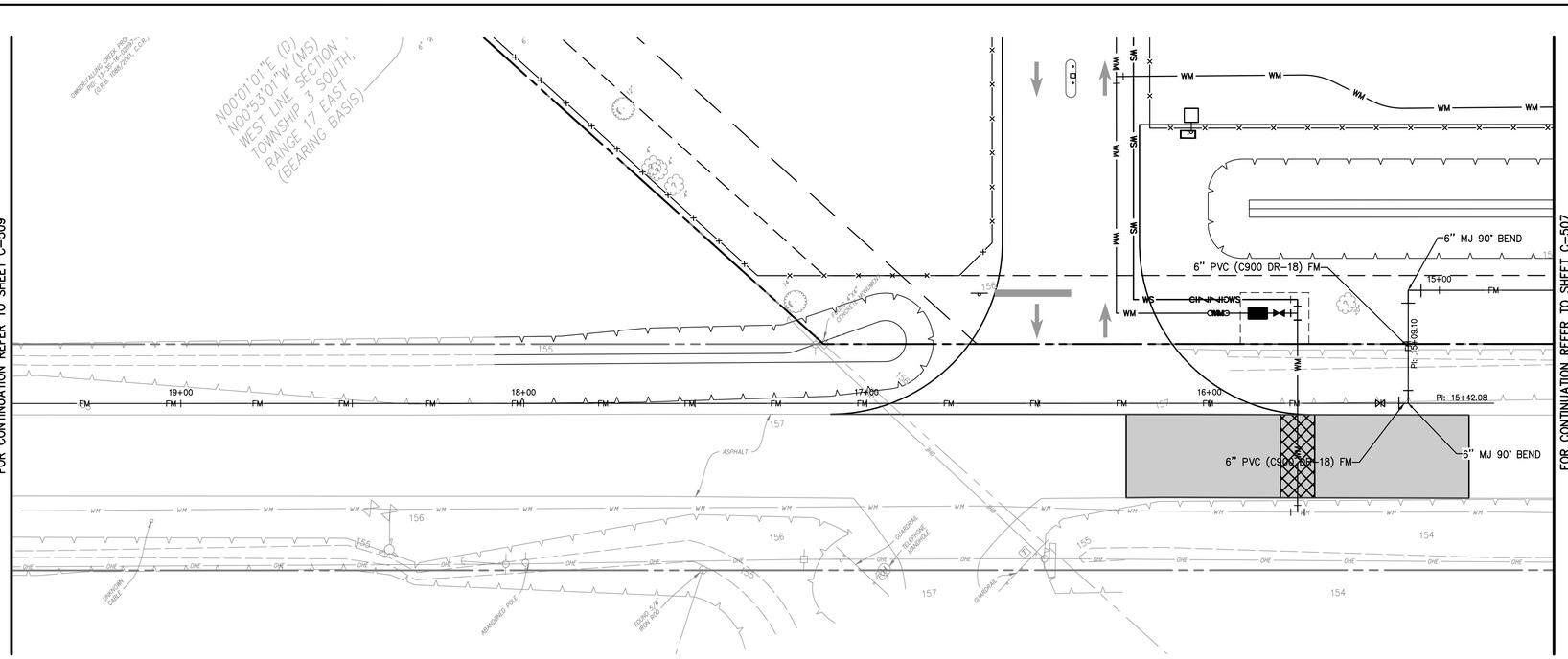
OFF-SITE UTILITY PLAN

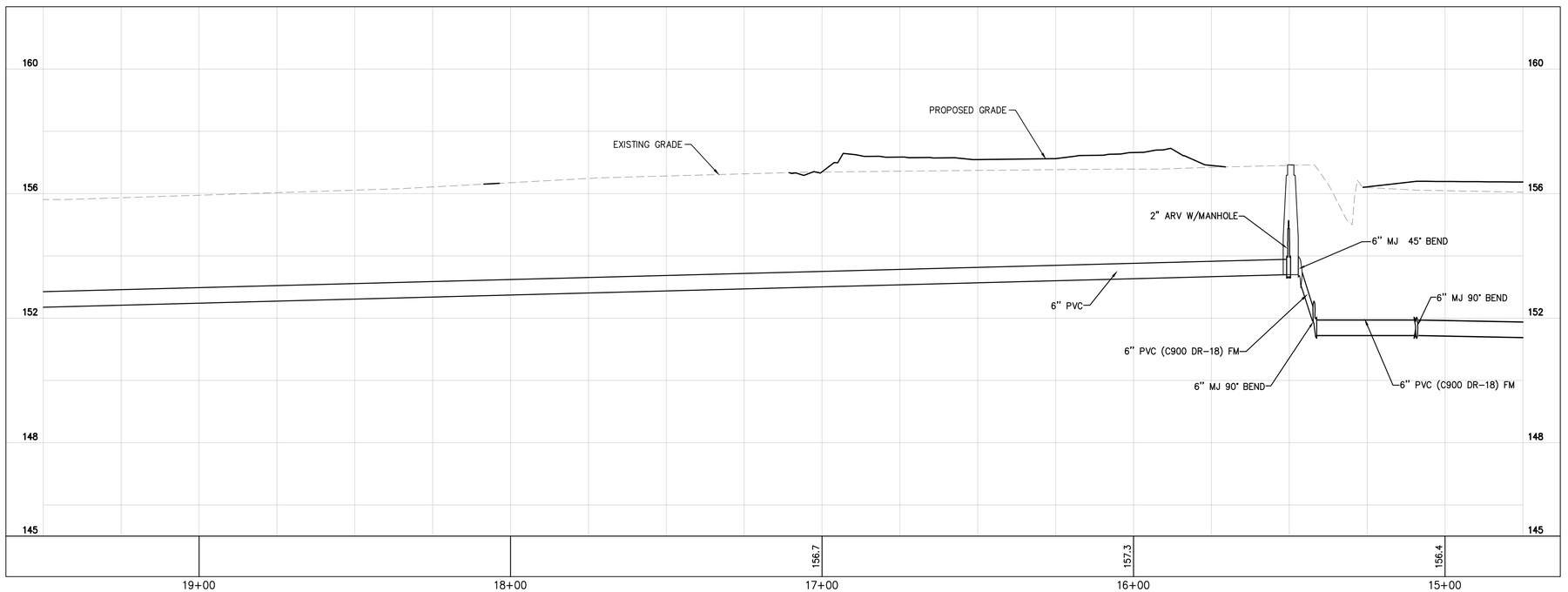
COLUMBIA STORM PROCESSING AND SERVICE CENTER

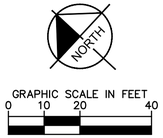
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-507

Plotted By:Erale, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 08:41:28am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-507 OFF-SITE UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.







NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
1. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO BEGINNING CONSTRUCTION.
2. FOR FLOW TEST DATA REFER TO SHEET C-004

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN

SCALE: HORIZ.: 0 20'; VERT.: 0 2'

PROJECT DATUM: NAVD '88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

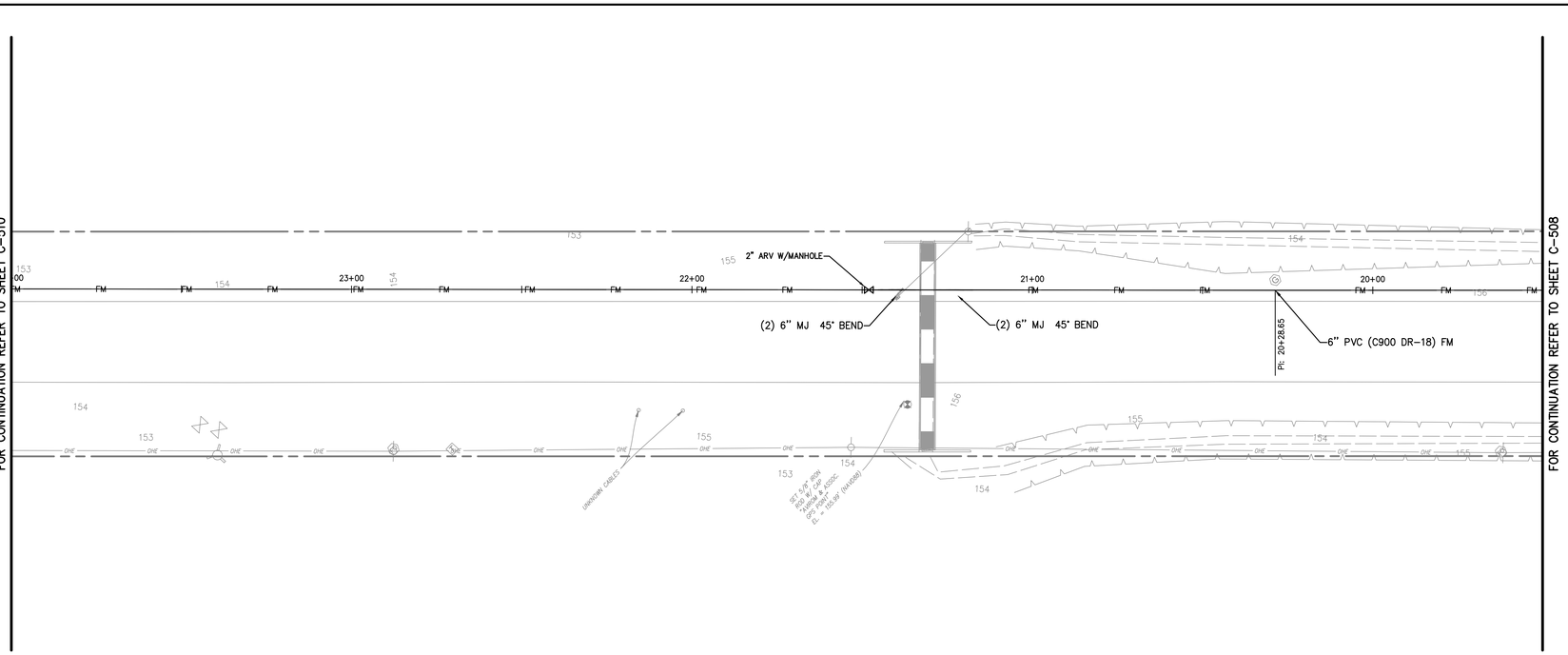
OFF-SITE UTILITY PLAN

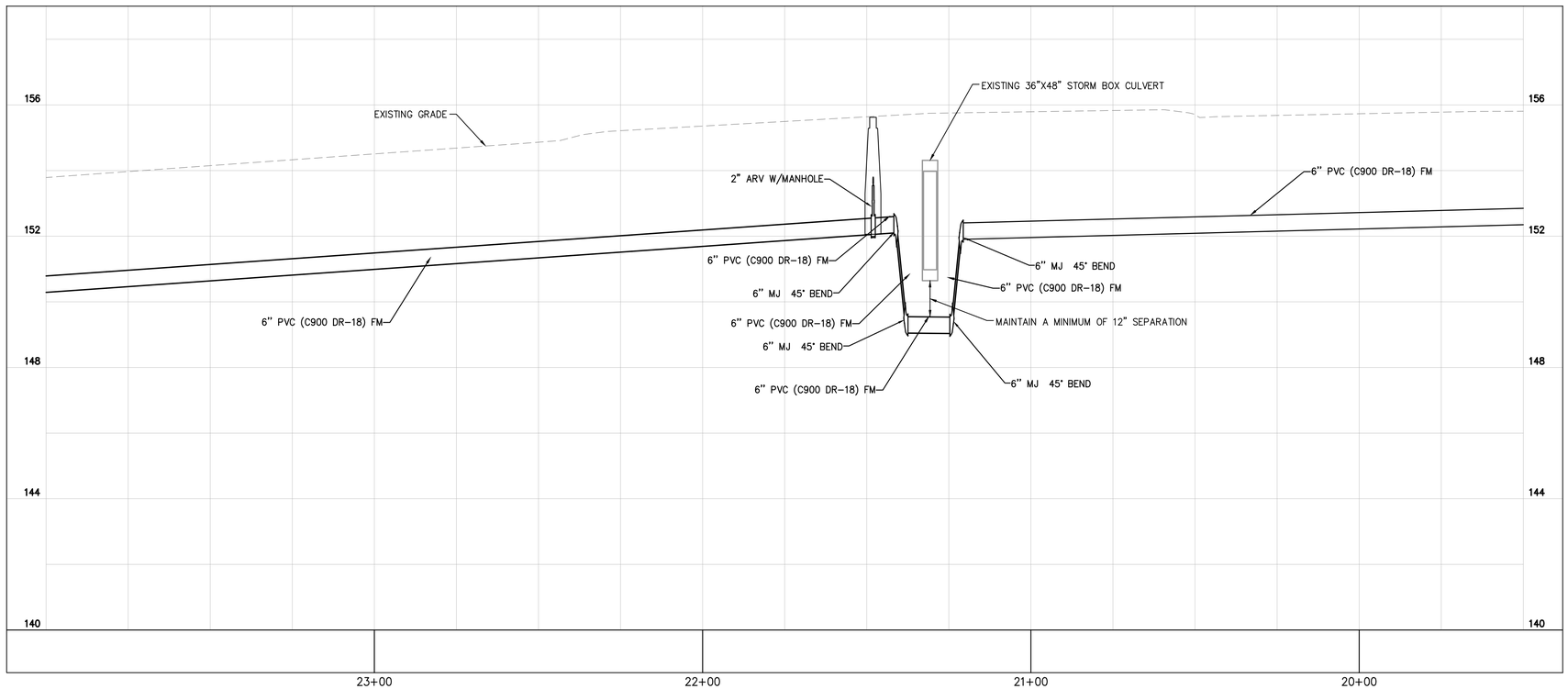
COLUMBIA STORM PROCESSING AND SERVICE CENTER

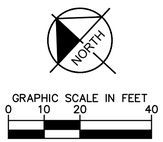
PREPARED FOR:
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-508

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:02 December 16, 2022 08:41:35am K:\J&X Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-507 OFF-SITE UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.







GRAPHIC SCALE IN FEET
0 10 20 40

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
1. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO BEGINNING CONSTRUCTION.
2. FOR FLOW TEST DATA REFER TO SHEET C-004

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN

SCALE: HORIZ.: 0 20'
VERT.: 0 2'

PROJECT DATUM: NAVD '88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	____
DRAWN BY:	____
CHECKED BY:	____

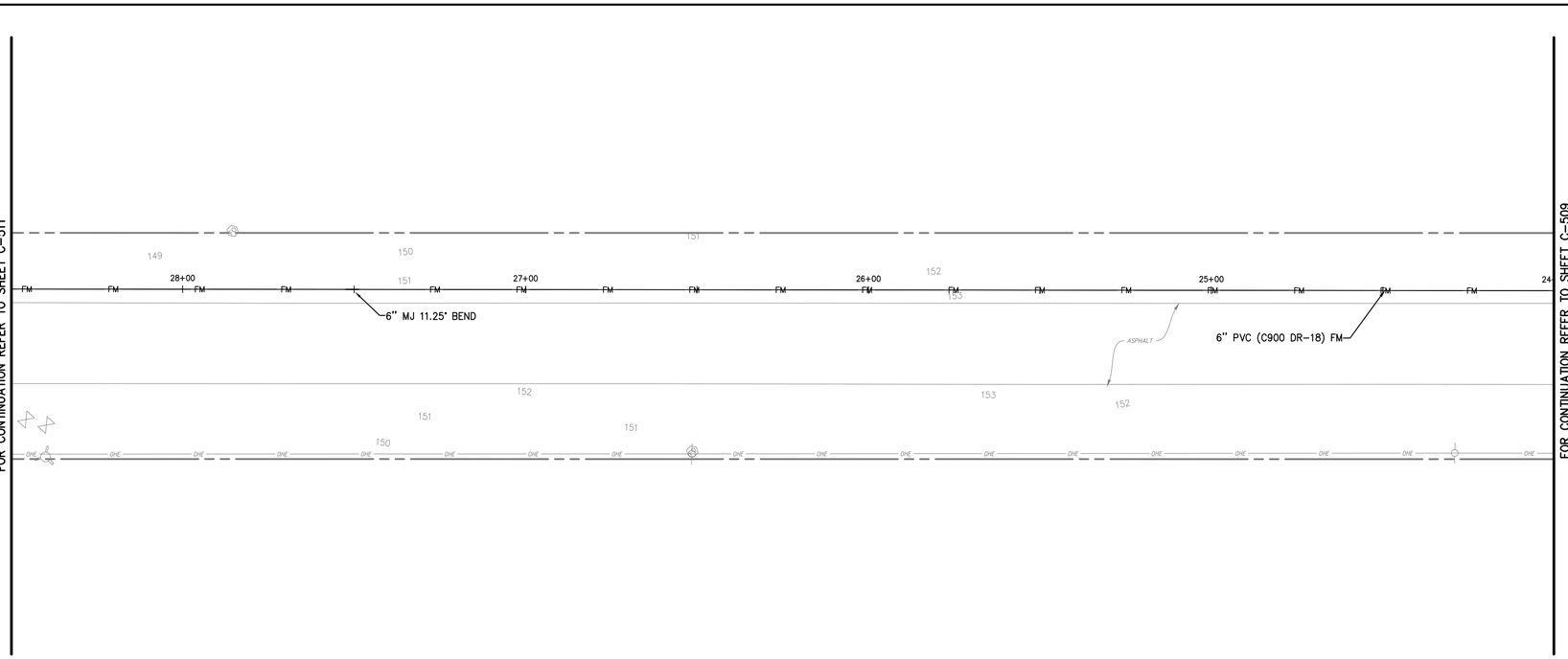
OFF-SITE UTILITY PLAN

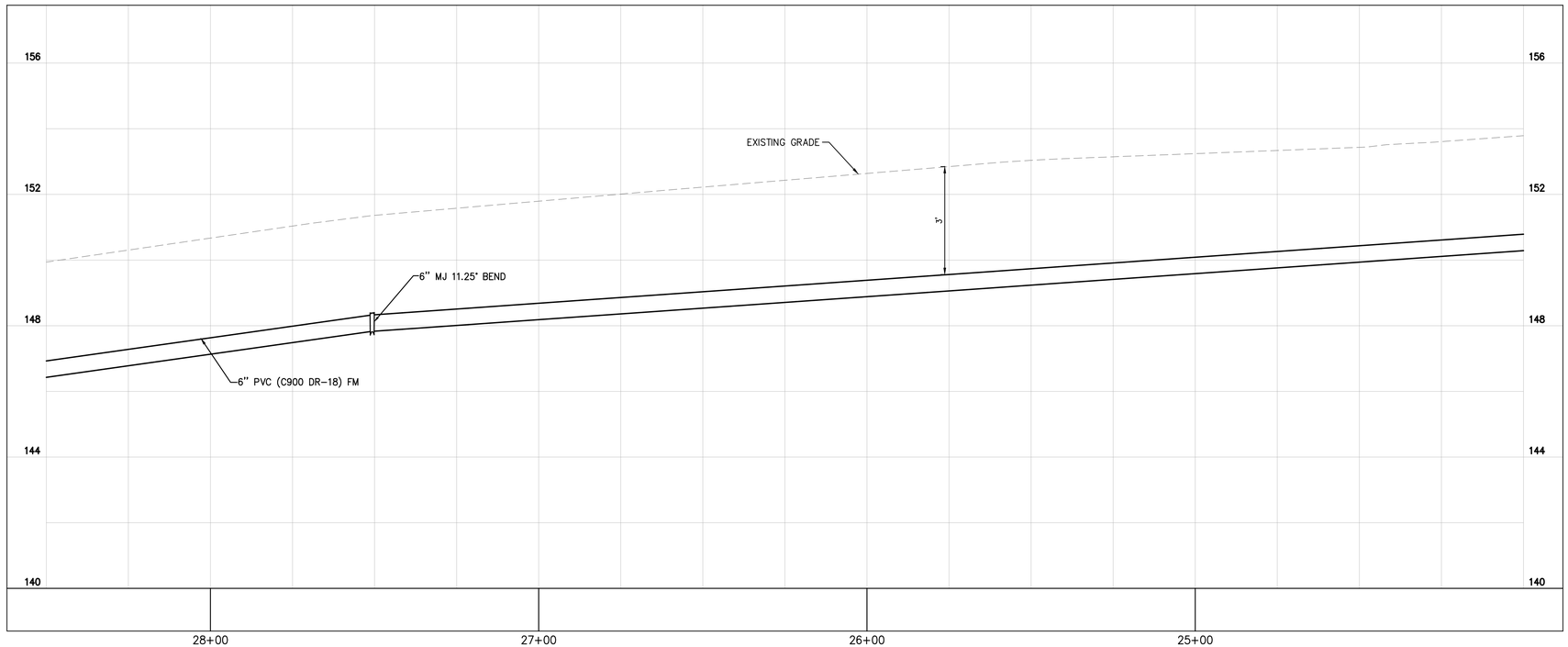
COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-509

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:03 December 16, 2022 08:41:42am K:\J&X Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-507 OFF-SITE UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.







GRAPHIC SCALE IN FEET
0 10 20 40

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
1. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO BEGINNING CONSTRUCTION.
2. FOR FLOW TEST DATA REFER TO SHEET C-004

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN

SCALE: HORIZ.: 0 20'
VERT.: 0 2'

PROJECT DATUM: NAVD '88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ____
DRAWN BY: ____
CHECKED BY: ____

OFF-SITE UTILITY PLAN

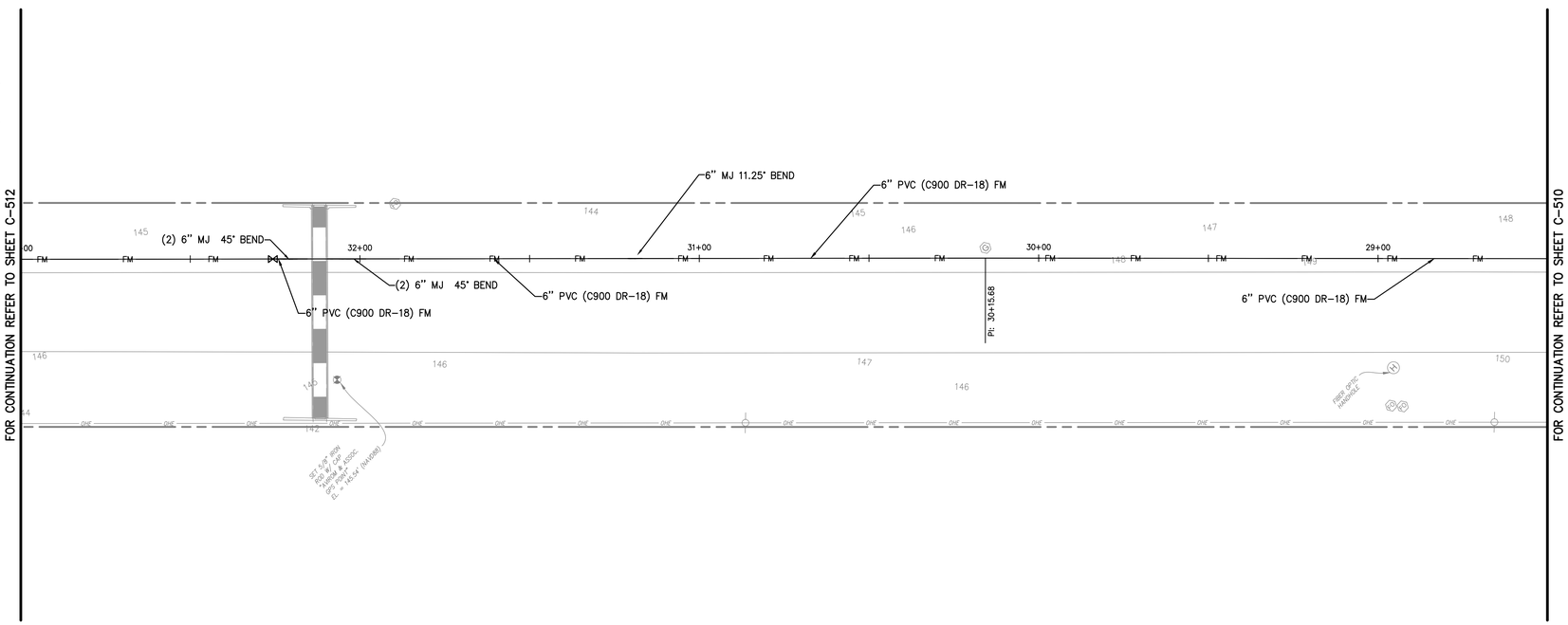
COLUMBIA STORM PROCESSING AND SERVICE CENTER

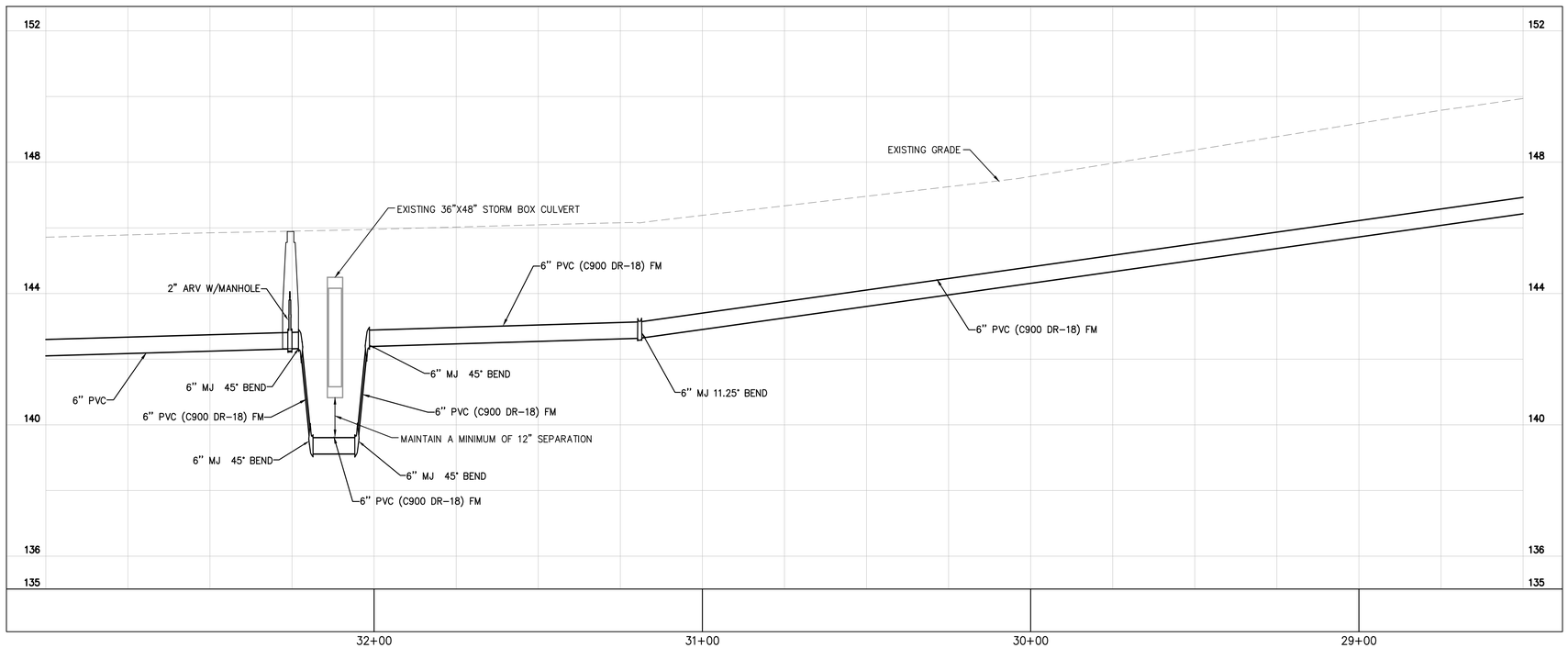
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY

COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-510

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:04 December 16, 2022 08:41:43am K:\J&X Civil\045687000 – FPL Columbia County\Cad\PlanSheets\C-507 OFF-SITE UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.







GRAPHIC SCALE IN FEET
0 10 20 40

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
1. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO BEGINNING CONSTRUCTION.
2. FOR FLOW TEST DATA REFER TO SHEET C-004

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN

SCALE: HORIZ.: 0 20'
VERT.: 0 2'

PROJECT DATUM: NAVD '88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PKWY WEST, SUITE 2350
JACKSONVILLE, FL 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ____
DRAWN BY: ____
CHECKED BY: ____

OFF-SITE UTILITY PLAN

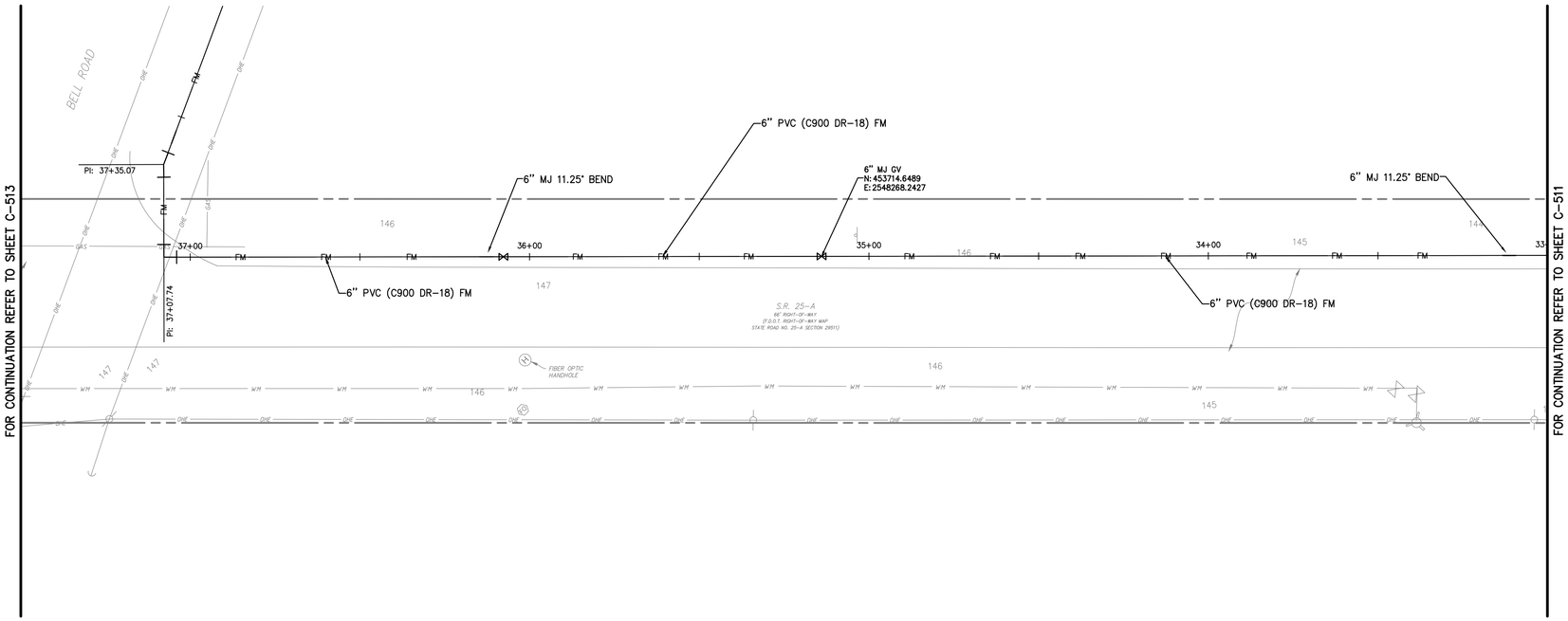
COLUMBIA STORM PROCESSING AND SERVICE CENTER

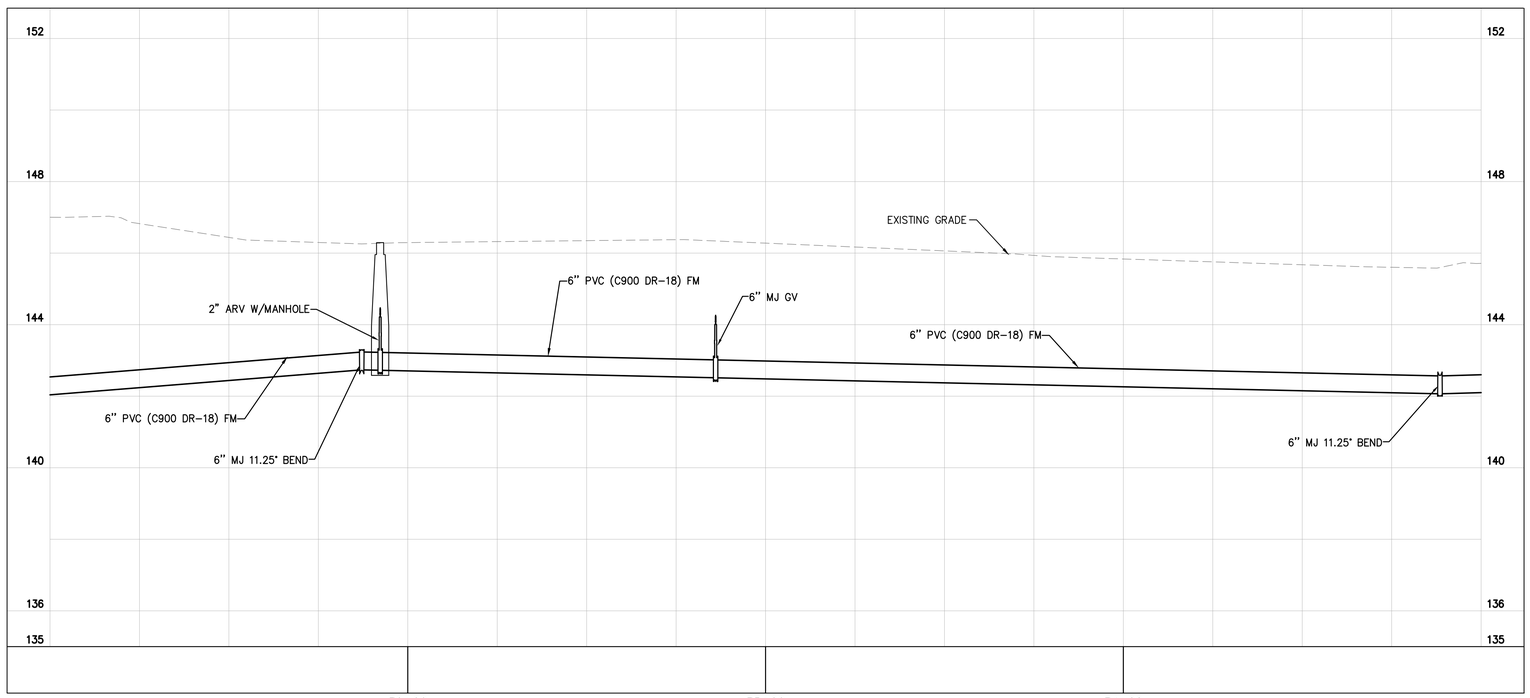
PREPARED FOR:
FLORIDA POWER & LIGHT COMPANY
FLORIDA

COLUMBIA COUNTY

SHEET NUMBER
C-511

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:05 December 16, 2022 08:41:55am K:\J&X Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-507 OFF-SITE UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.







GRAPHIC SCALE IN FEET
0 10 20 40

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
1. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO BEGINNING CONSTRUCTION.
2. FOR FLOW TEST DATA REFER TO SHEET C-004

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN

SCALE: HORIZ.: 0 20'
VERT.: 0 2'

PROJECT DATUM: NAVD '88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ____
DRAWN BY: ____
CHECKED BY: ____

OFF-SITE UTILITY PLAN

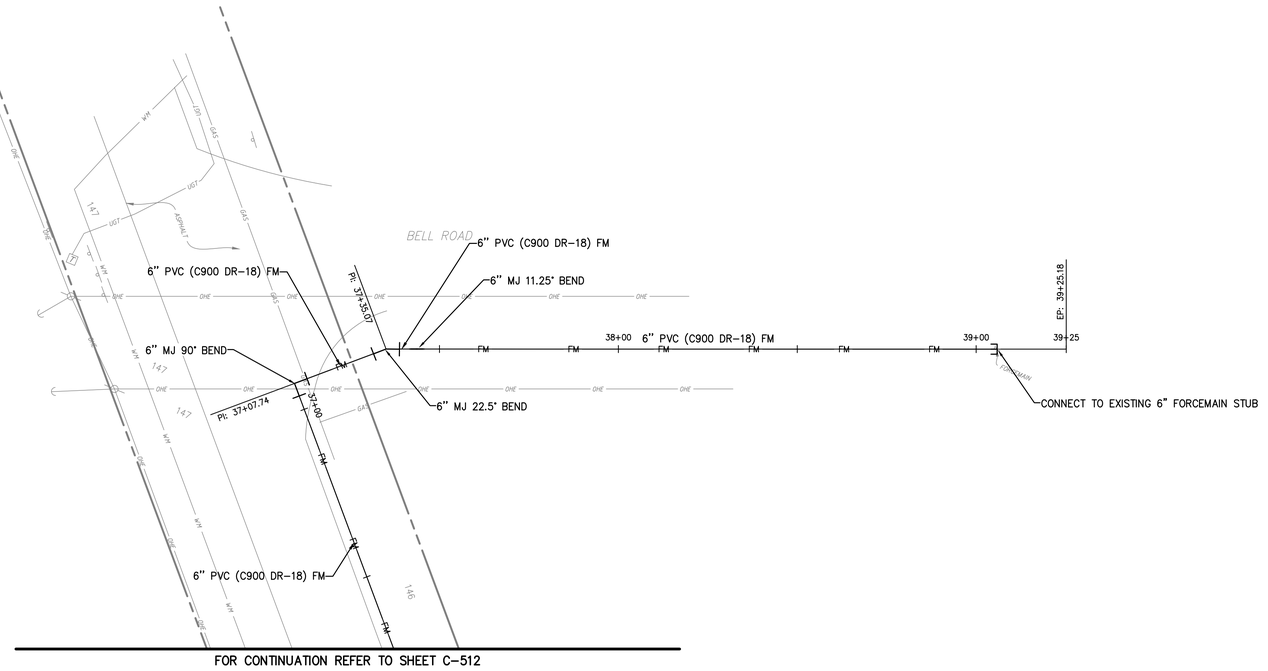
COLUMBIA STORM PROCESSING AND SERVICE CENTER

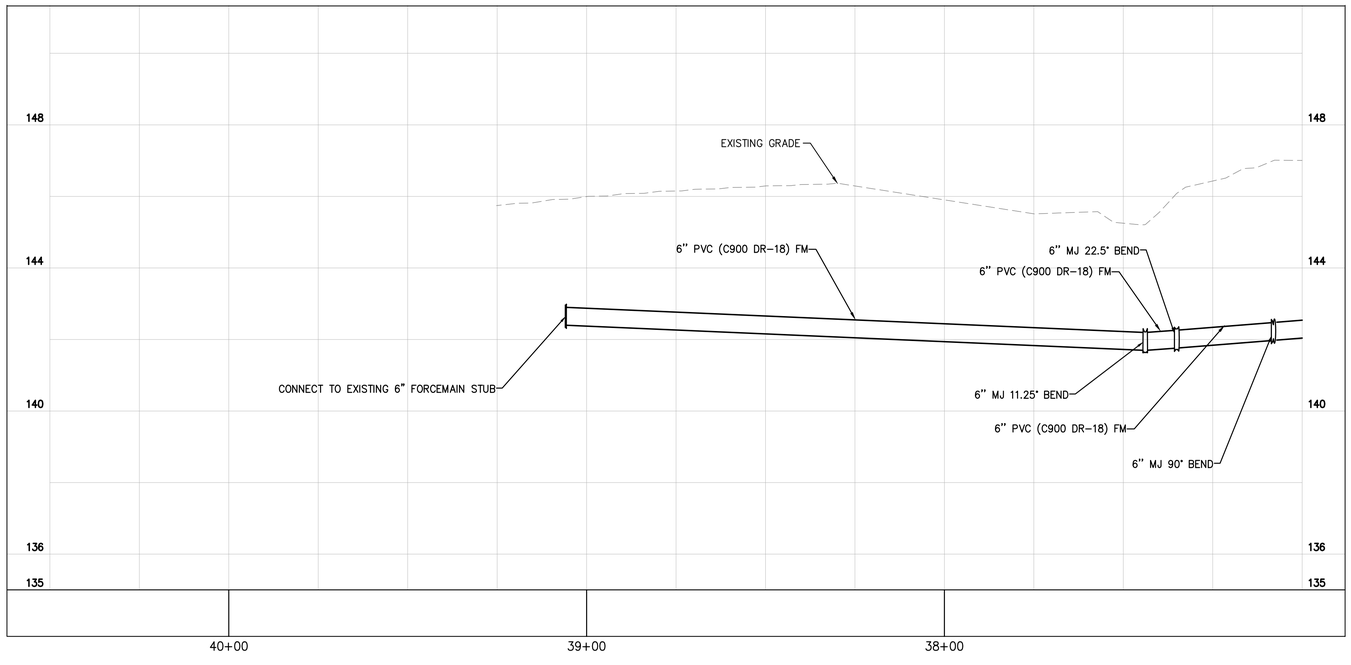
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY

COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-512

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:06 December 16, 2022 08:42:01am K:\J&X Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-507 OFF-SITE UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.







GRAPHIC SCALE IN FEET
0 10 20 40

NOTES:

1. FOR PROJECT BENCHMARKS REFER TO SHEET C-101
2. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF LAKE CITY UTILITY SPECIFICATIONS. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER. BACKFLOW PREVENTORS ON FIRE LINES OR COMBINATION FIRE/POTABLE MAINS SHALL HAVE FREEZE PROTECTION.
1. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO BEGINNING CONSTRUCTION.
2. FOR FLOW TEST DATA REFER TO SHEET C-004

LEGEND:

FM	EXISTING FORCEMAIN
WM	EXISTING WATER MAIN
FO	EXISTING BURIED FIBER OPTIC
FS	EXISTING FIRE SUPPLY LINE
WM	PROPOSED WATER MAIN
W	PROPOSED WATER LINE
BWS	PROPOSED BOOSTED WATER SUPPLY MAIN (FIRE)
WS	PROPOSED WATER SUPPLY MAIN (FIRE)
RU	PROPOSED RECLAIMED WATER MAIN
SS	PROPOSED GRAVITY SANITARY SEWER
FM	PROPOSED FORCEMAIN

SCALE: HORIZ.: 0 20'
VERT.: 0 2'

PROJECT DATUM: NAVD '88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

ALL PRIVATE WATER SUPPLY PIPING ASSOCIATED WITH FIRE PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-24 (LATEST EDITION) AND CONTRACTOR SHALL HOLD A CONTRACTOR V, FIRE PROTECTION LICENSE WITH THE STATE OF FLORIDA.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

ANY PROPRIETARY, VENDOR PROVIDED EQUIPMENT, COMPONENTS, OR SYSTEMS SUPPLIED, INSTALLED, OR ASSEMBLED AS A PART OF THIS PROJECT, INCLUDING ANY CONTRACTOR ALTERNATIVE PRODUCTS TO THOSE SPECIFIED IN THE PLANS AND SPECIFICATIONS, SHALL BE PROVIDED WITH; 1) A MANUFACTURER'S WARRANTY AND 2) LETTERS FROM THE VENDOR, SUPPLIER, AND INSTALLER CERTIFYING THAT THE EQUIPMENT, COMPONENTS, OR SYSTEMS WERE INSTALLED IN ACCORDANCE WITH THE INTENT AND PERFORMANCE REQUIREMENTS AS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---

OFF-SITE UTILITY PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

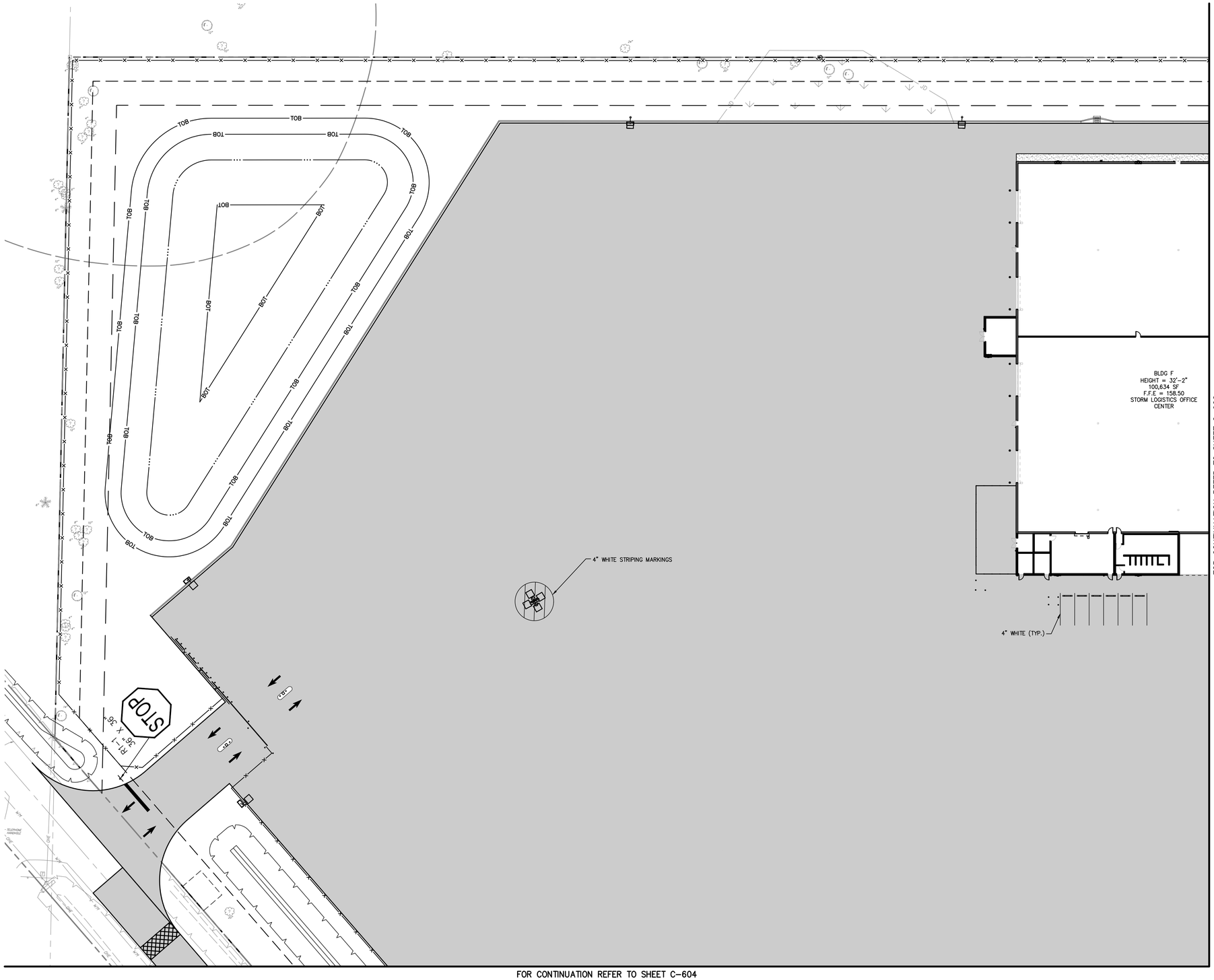
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA

COLUMBIA COUNTY

SHEET NUMBER
C-513

Plotted By:Erole, Grace Sheet Set:FPL - COLUMBIA COUNTY Layout:07 December 16, 2022 08:42:06am K:\JAX_Civil\045687000 - FPL Columbia County\Cadd\PlanSheets\C-507 OFF-SITE UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 08:42:22am K:\JAX_Civil\045687000 – FPL Columbia County\Civil\PlanSheets\C-600 SIGNAGE AND MARKING PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

NOTES:

1. ALL PARKING STALLS, STOP BARS, CROSSWALKS, AND OTHER PAVEMENT MARKINGS, UNLESS EXPLICITLY STATED, SHALL BE STANDARD PAINT, MEETING OR EXCEEDING FDOT SPECIFICATIONS SECTION 971-1 AND 971-3
2. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

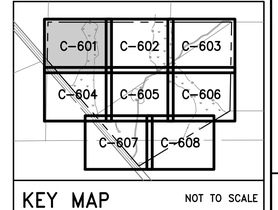
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

SIGNAGE AND MARKING PLAN

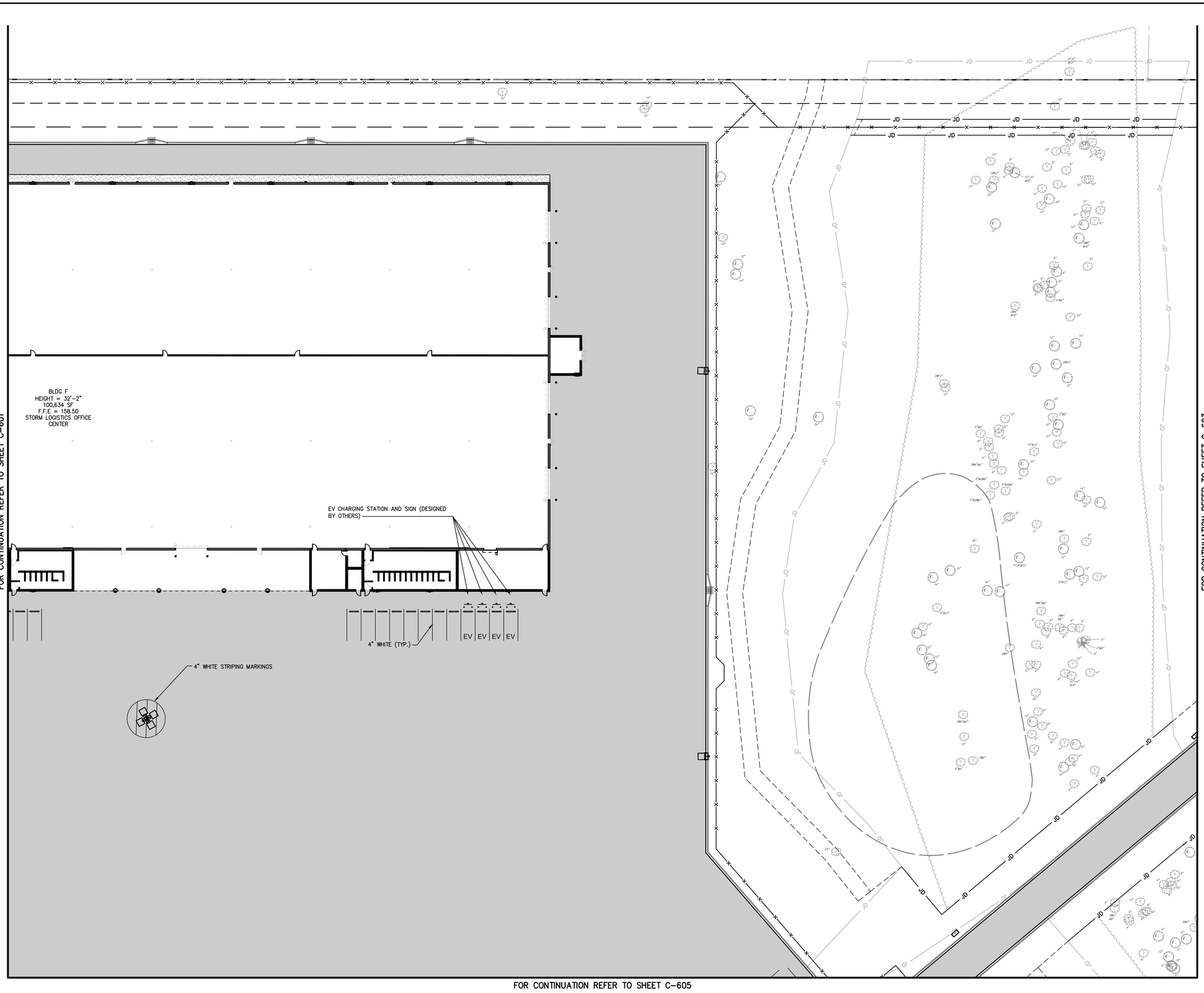
COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY

COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-601

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:02 December 16, 2022 08:42:29am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-600 SIGNAGE AND MARKING PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

NOTES:

1. ALL PARKING STALLS, STOP BARS, CROSSWALKS, AND OTHER PAVEMENT MARKINGS, UNLESS EXPLICITLY STATED, SHALL BE STANDARD PAINT, MEETING OR EXCEEDING FDOT SPECIFICATIONS SECTION 971-1 AND 971-3

2. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

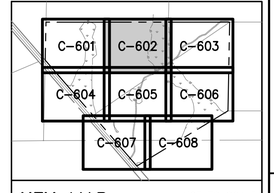
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

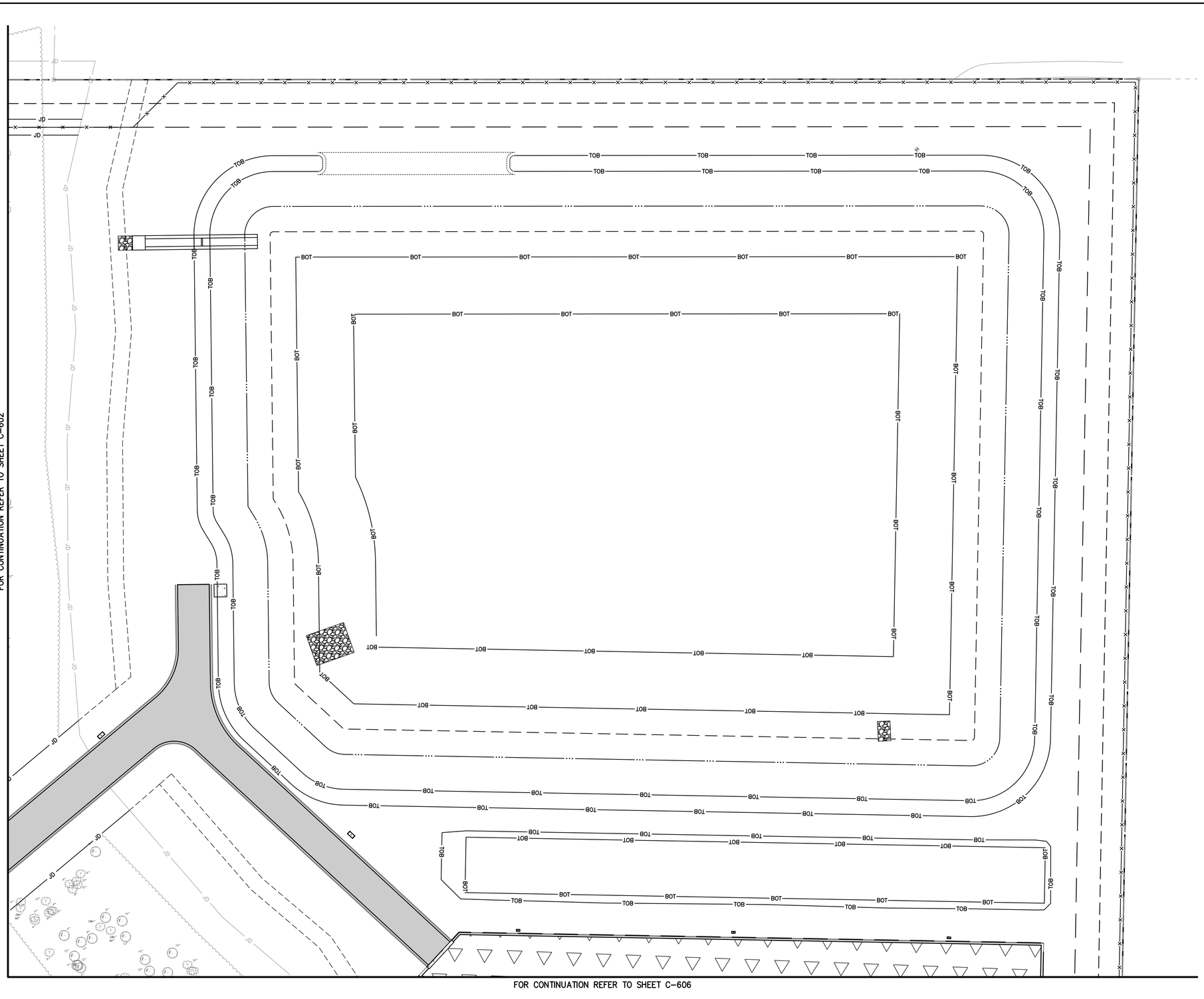
KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---

SIGNAGE AND MARKING PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-602

Plotted By:Erale Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:03 December 16, 2022 08:42:36am K:\JAX_Civil\045687000 – FPL Columbia County\Design\Civil\Plan Sheets\C-600 SIGNAGE AND MARKING PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

NOTES:

1. ALL PARKING STALLS, STOP BARS, CROSSWALKS, AND OTHER PAVEMENT MARKINGS, UNLESS EXPLICITLY STATED, SHALL BE STANDARD PAINT, MEETING OR EXCEEDING FDOT SPECIFICATIONS SECTION 971-1 AND 971-3

2. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

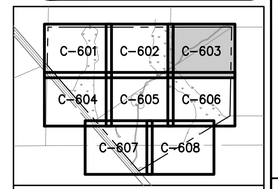
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

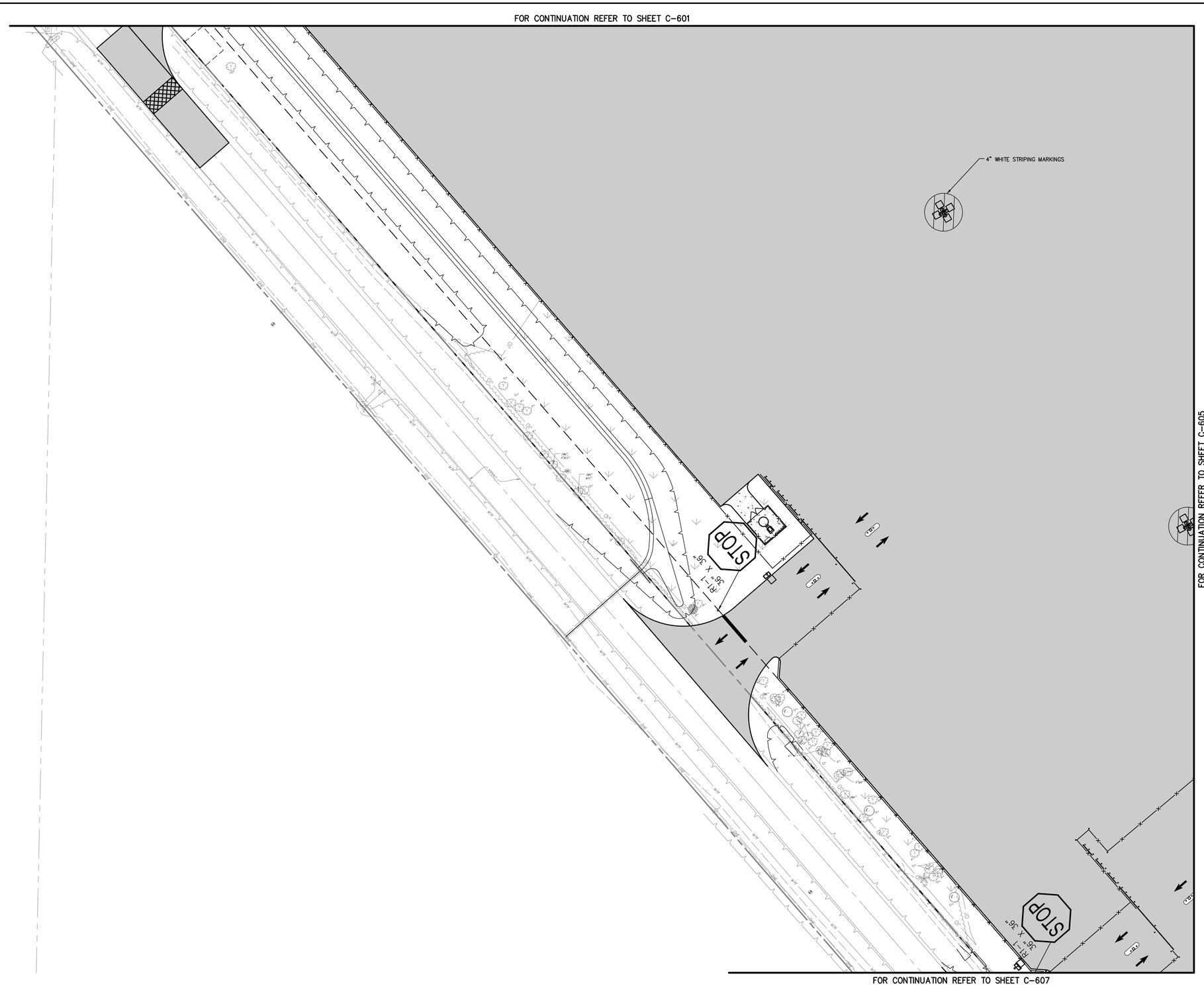
SIGNAGE AND MARKING PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY

COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-603



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

NOTES:

1. ALL PARKING STALLS, STOP BARS, CROSSWALKS, AND OTHER PAVEMENT MARKINGS, UNLESS EXPLICITLY STATED, SHALL BE STANDARD PAINT, MEETING OR EXCEEDING FDOT SPECIFICATIONS SECTION 971-1 AND 971-3
2. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

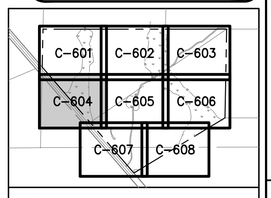
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

SIGNAGE AND MARKING PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR:
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-604

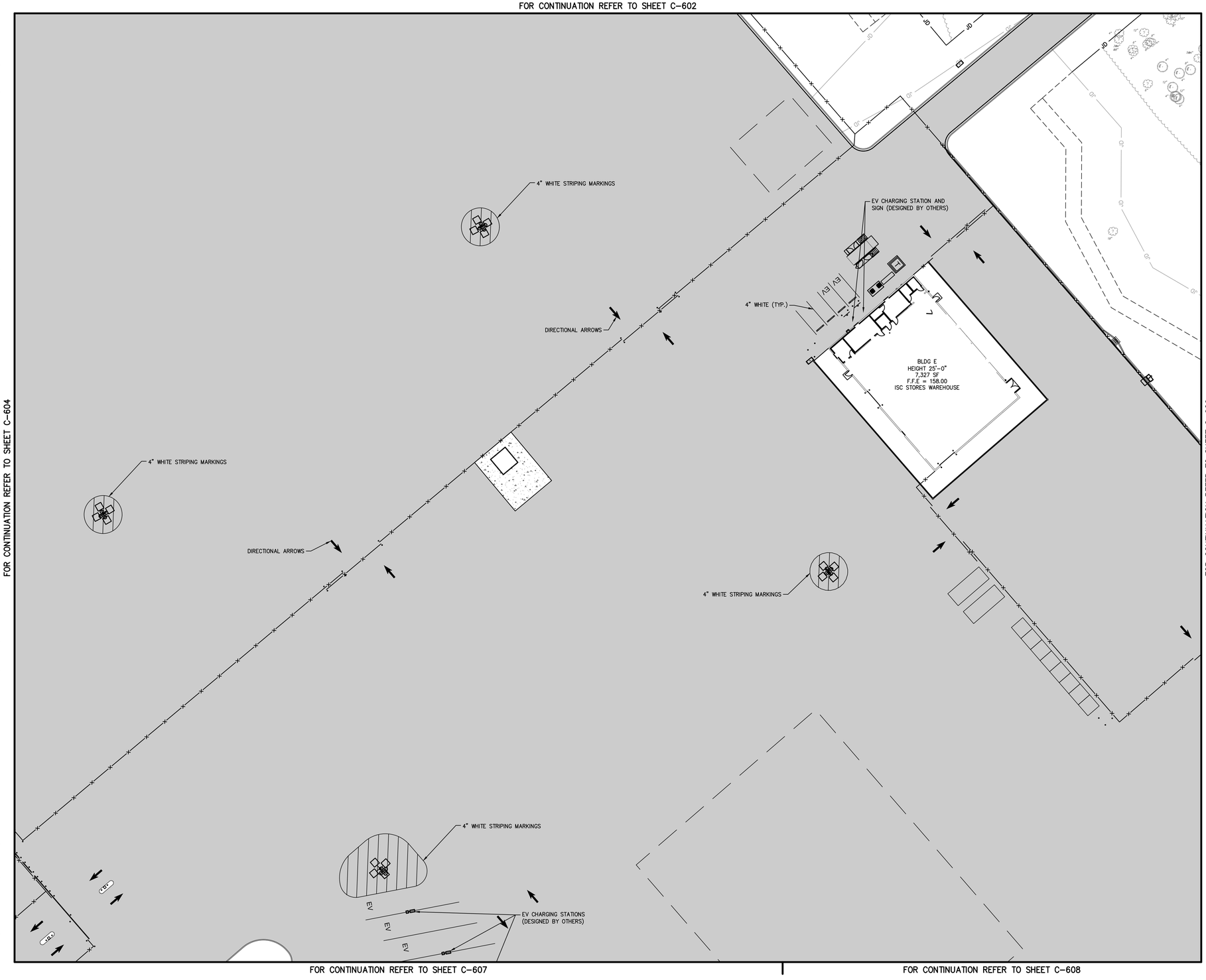
Plotted By:Eagle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:04 December 16, 2022 08:42:44am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-600 SIGNAGE AND MARKING PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Eryle Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:05 December 16, 2022 08:42:50pm K:\Jax_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-600 SIGNAGE AND MARKING PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FOR CONTINUATION REFER TO SHEET C-602

FOR CONTINUATION REFER TO SHEET C-604

FOR CONTINUATION REFER TO SHEET C-606



FOR CONTINUATION REFER TO SHEET C-607

FOR CONTINUATION REFER TO SHEET C-608

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

NOTES:

1. ALL PARKING STALLS, STOP BARS, CROSSWALKS, AND OTHER PAVEMENT MARKINGS, UNLESS EXPLICITLY STATED, SHALL BE STANDARD PAINT, MEETING OR EXCEEDING FDOT SPECIFICATIONS SECTION 971-1 AND 971-3
2. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

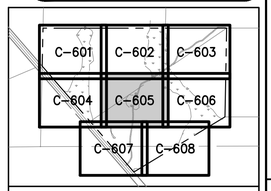
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
045687000	DECEMBER 2022	AS SHOWN	----	----	----

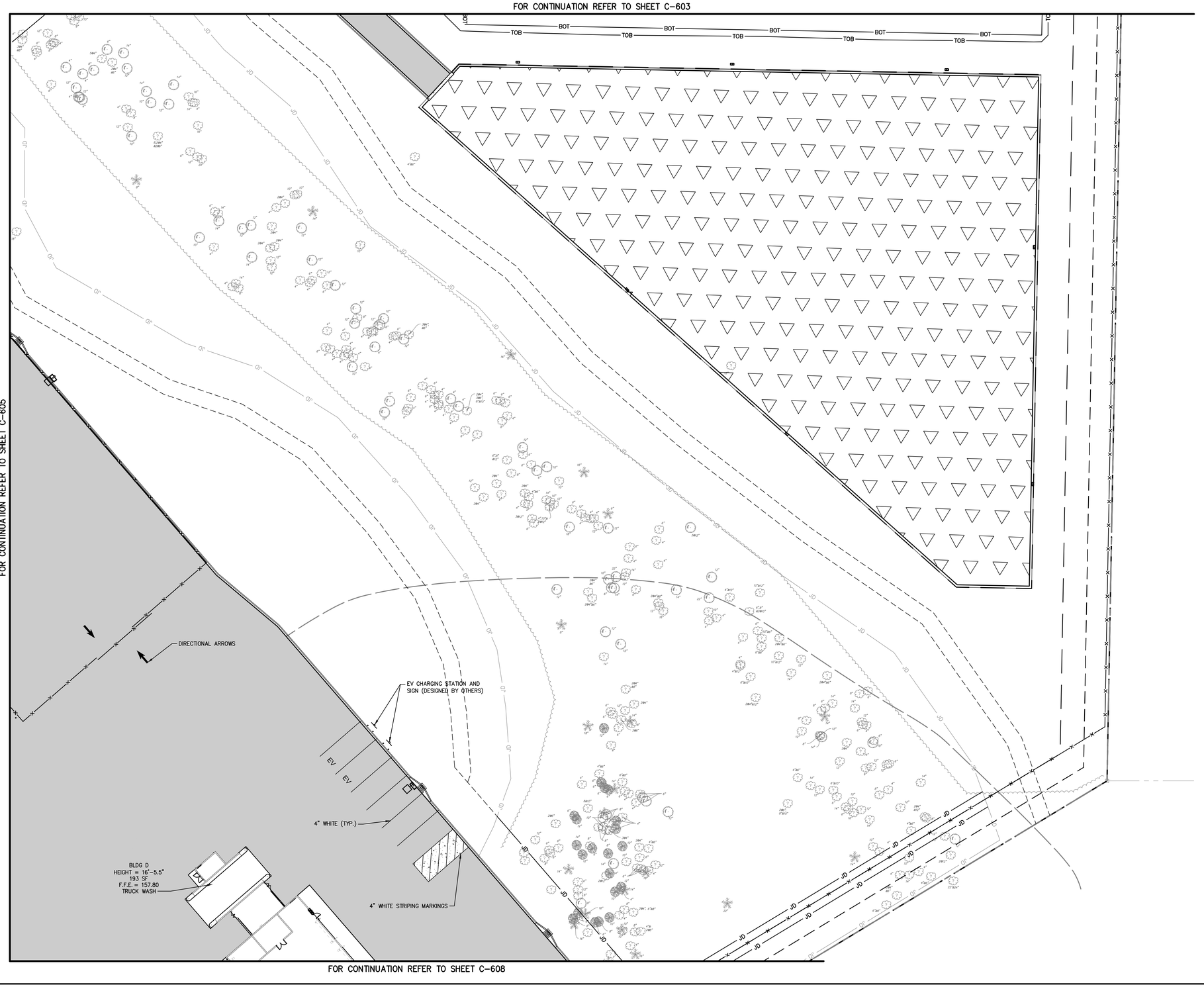
SIGNAGE AND MARKING PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-605

Plotted By:Erole, Grone Sheet Set:FPL – COLUMBIA COUNTY Layout:06 December 16, 2022 08:42:58am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-600 SIGNAGE AND MARKING PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

NOTES:

1. ALL PARKING STALLS, STOP BARS, CROSSWALKS, AND OTHER PAVEMENT MARKINGS, UNLESS EXPLICITLY STATED, SHALL BE STANDARD PAINT, MEETING OR EXCEEDING FDOT SPECIFICATIONS SECTION 971-1 AND 971-3
2. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

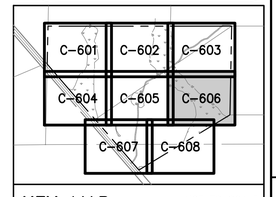
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	DATE	SCALE: AS SHOWN	DESIGNED BY: ----	DRAWN BY: ----	CHECKED BY: ----
045687000	DECEMBER 2022				

SIGNAGE AND MARKING PLAN

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-606

FOR CONTINUATION REFER TO SHEET C-604

FOR CONTINUATION REFER TO SHEET C-605

FOR CONTINUATION REFER TO SHEET C-608



GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

NOTES:

1. ALL PARKING STALLS, STOP BARS, CROSSWALKS, AND OTHER PAVEMENT MARKINGS, UNLESS EXPLICITLY STATED, SHALL BE STANDARD PAINT, MEETING OR EXCEEDING FDOT SPECIFICATIONS SECTION 971-1 AND 971-3

2. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

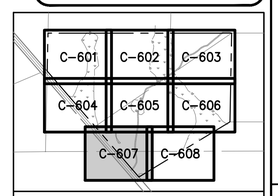
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
045687000	DECEMBER 2022	AS SHOWN	----	----	----

SIGNAGE AND MARKING PLAN

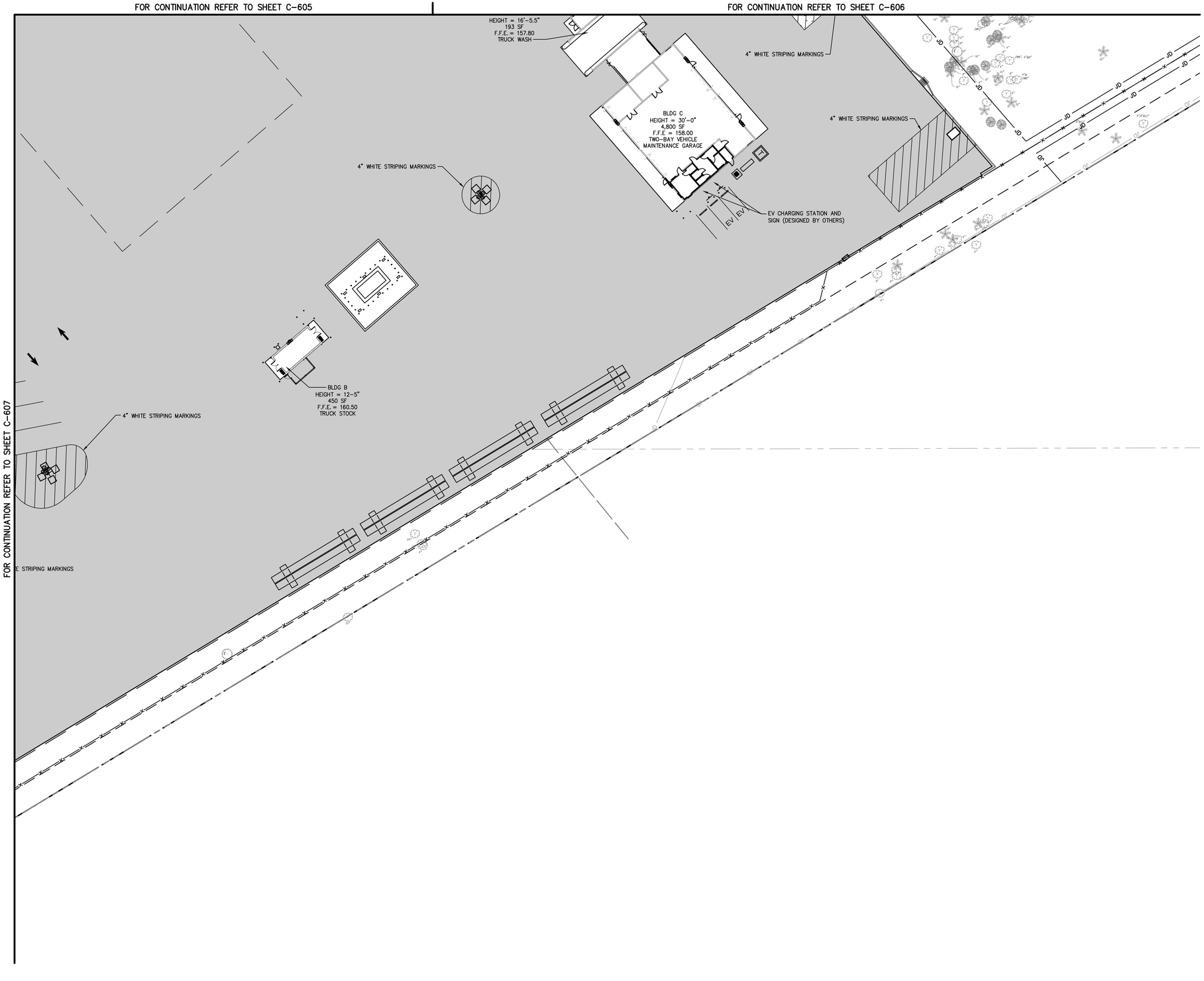
COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-607

Plotted By:Ergle, Grace Sheet Set:FPL — COLUMBIA COUNTY Layout:07 December 16, 2022 08:43:05am K:\JAX_Civil\045687000 — FPL Columbia County\Cadd\PlanSheets\C-600 SIGNAGE AND MARKING PLAN.dwg

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

NOTES:

1. ALL PARKING STALLS, STOP BARS, CROSSWALKS, AND OTHER PAVEMENT MARKINGS, UNLESS EXPLICITLY STATED, SHALL BE STANDARD PAINT, MEETING OR EXCEEDING FDOT SPECIFICATIONS SECTION 971-1 AND 971-3

2. FOR PROJECT BENCHMARKS REFER TO SHEET C-103

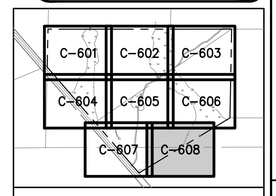
PROJECT DATUM: NAVD'88

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE ALL COSTS AND METHODS FOR ALL PROJECT RELATED DEWATERING FOR THE DURATION OF CONSTRUCTION.

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com



KEY MAP NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---

SIGNAGE AND MARKING PLAN

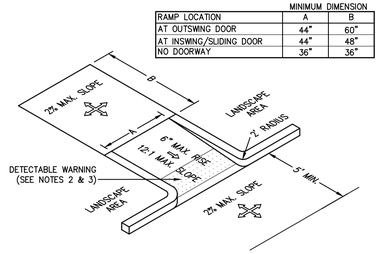
COLUMBIA STORM PROCESSING AND SERVICE CENTER

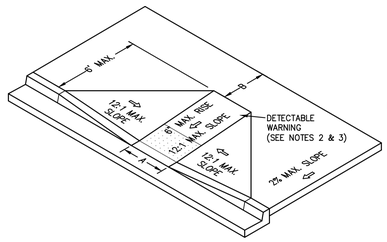
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

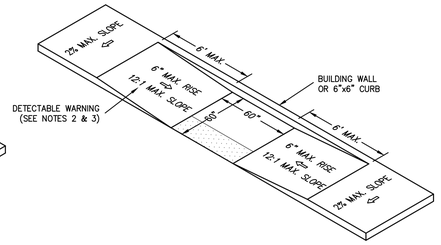
SHEET NUMBER
C-608

Plotted By:Erale, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:08 December 16, 2022 08:43:13am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-600 SIGNAGE AND MARKING PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

RAMP LOCATION	MINIMUM DIMENSION A	MINIMUM DIMENSION B
AT OUTSWING DOOR	44"	60"
AT INSWING/SLIDING DOOR	44"	48"
NO DOORWAY	36"	36"







NOTES:

1. ALL CURB CUT ACCESSIBLE RAMPS AND DETECTABLE WARNING SURFACES SHALL BE INSTALLED BY THE SITE CONTRACTOR.
2. CURB RAMPS SUBJECT TO DEPARTMENT OF TRANSPORTATION REGULATION 49 CFR 37.21 SHALL HAVE A DETECTABLE WARNING COMPLYING WITH THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION, LATEST EDITION. THE DETECTABLE WARNING SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP (EXCLUSIVE OF FLARED SIDES) AND SHALL EXTEND A MINIMUM OF 24" DEEP (MEASURED FROM THE BACK OF CURB ON THE RAMP SURFACE).
3. ALL DETECTABLE WARNING SURFACES FOR SIDEWALKS AT CURB CUT HANDICAP RAMP SHALL BE A COUNTY APPROVED YELLOW COLORED COMPOSITE MATERIAL ANCHORED IN THE CONCRETE SIDEWALK RAMP. ANCHORED COMPOSITE WARNING AREA INSERTS ARE TO BE COLORED "SAFETY YELLOW", ARE TO BE SET INTO THE CONCRETE AND ARE TO BE FLUSH WITH CONCRETE SURFACE ALONG ALL FOUR SIDES. DESIGN DIMENSIONS OF DETECTABLE WARNING AREA SHALL CONFORM TO FDOT STANDARD PLANS INDEX 522-002, CODE OF FEDERAL REGULATIONS PART 36, AND CITY OF JACKSONVILLE STANDARDS.

ACCESSIBLE RAMPS
NOT TO SCALE

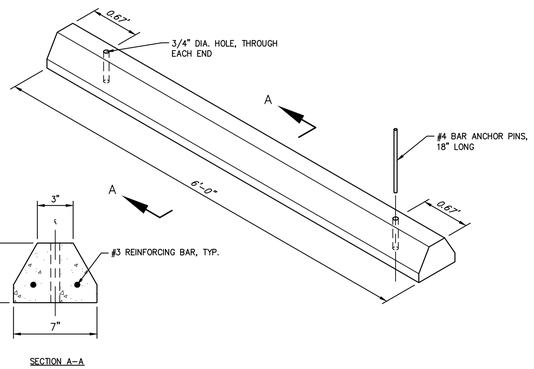
ACCESSIBILITY NOTES:

1. ALL ACCESSIBLE COMPONENTS CONSTRUCTED AS PART OF THESE PLANS SHALL COMPLY WITH CHAPTER 11 OF THE FLORIDA BUILDING CODE.
2. ACCESSIBLE ROUTE TO ACCESSIBLE SPACES, BUILDING ENTRANCES, AND PUBLIC STREETS SHALL NOT EXCEED 4.9% RUNNING SLOPE AND 1.9% CROSS SLOPE.
3. CHANGE IN ELEVATION WITHIN THE ACCESSIBLE ROUTE IS NOT TO EXCEED ½" WITHOUT A CURB RAMP.
4. UNLESS OTHERWISE SHOWN ON THE PLANS, THE MINIMUM CLEAR ROUTE SHALL BE 36" WIDE WITH A 60"x60" PASSING SPACE EVERY 200 FEET.
5. ACCESSIBLE ROUTES THROUGH PLANTERS SHALL BE LEVEL WITH THE SURROUNDING PAVEMENT OR PROVIDE CURB RAMPS AT EACH END WITH A MINIMUM 48" LEVEL LANDING IN BETWEEN.
6. THE ACCESSIBLE ROUTE IN FRONT OF PULL-IN PARKING SHALL BE A MINIMUM OF 44" WIDE AND NOT REDUCED BY VEHICLE OVERHANGS, CURBING, SIGN POSTS, OR OTHER OBSTRUCTIONS.
7. SPECIAL RAMP RULES APPLY FOR ANY RISE GREATER THAN 6" INCLUDING BUT NOT LIMITED TO RESTRICTION ON SLOPE, TOTAL RISE BETWEEN LANDINGS, AND USE OF HANDRAILS, PER F.B.C 11-4.8.
8. PUBLIC SIDEWALK CURB RAMPS CONSTRUCTED WITHIN A PUBLIC RIGHT-OF-WAY, IN ABSENCE OF LOCAL ROADWAY GUIDELINES, SHALL MEET THE REQUIREMENTS OF F.D.O.T INDEX 304.
9. ADA CURB RAMP MAX. 6" RISE OVER 6' (8.33%). LANDINGS AT TOP OF CURB RAMPS SHALL BE NO LESS THAN 36" LONG AND LESS THAN 2% SLOPE.



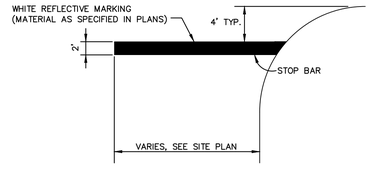
WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED.
MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

STOP SIGN
NOT TO SCALE



SECTION A-A

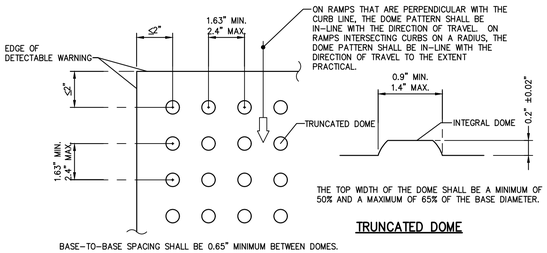
WHEEL STOP DETAIL
NOT TO SCALE



WITHOUT CROSSWALK

WITH CROSSWALK

STOP BAR DETAIL
NOT TO SCALE



THE TOP WIDTH OF THE DOME SHALL BE A MINIMUM OF 50% AND A MAXIMUM OF 65% OF THE BASE DIAMETER.

BASE-TO-BASE SPACING SHALL BE 0.65" MINIMUM BETWEEN DOMES.

TRUNCATED DOME

PLAN VIEW

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

ACCEPTABLE PRODUCTS:

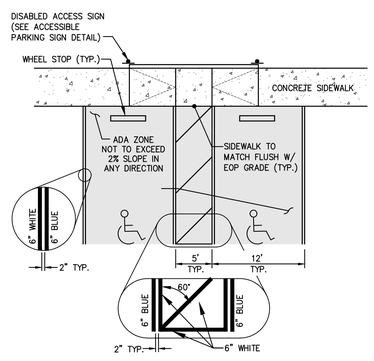
CAST IN PLACE COMPOSITE TACTILE

ADA SOLUTIONS, INC.
6789 PHILLIPS INDUSTRIAL BLVD.
JACKSONVILLE, FL 32256
PHONE: 904-268-7511
TOLL FREE: 800-729-3849
FAX: 904-268-3133

ARMORCAST PRODUCTS COMPANY
13230 SATICOY STREET
NORTH HOLLYWOOD, CA 91605
PHONE: 818-982-3600
FAX: 818-982-7742

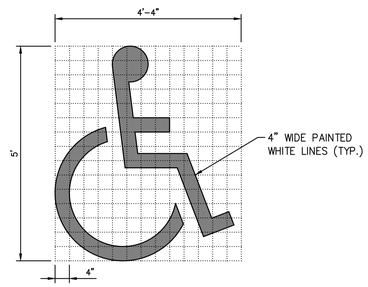
DETECTABLE WARNING SYSTEMS
8081 PHILIPS HIGHWAY #22
JACKSONVILLE, FL 32256
PHONE: 866-999-7452

DETECTABLE WARNING DETAIL
NOT TO SCALE

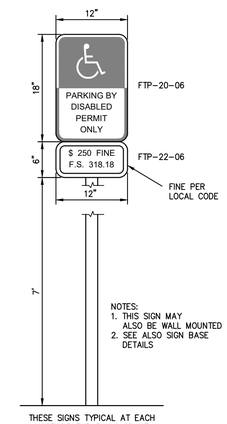


(REFER TO FDOT STANDARD PLANS INDEX 711-001)

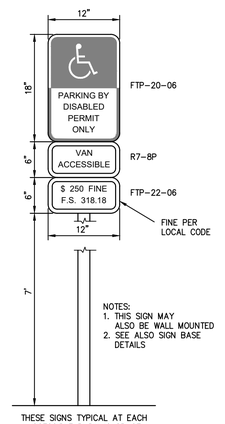
ADA PARKING DETAIL
NOT TO SCALE



HANDICAPPED PARKING SYMBOL DETAIL
NOT TO SCALE



ACCESSIBLE PARKING SIGN DETAIL
NOT TO SCALE



VAN ACCESSIBLE PARKING SIGN DETAIL
NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000	DATE DECEMBER 2022	SCALE: AS SHOWN	DESIGNED BY: ----	DRAWN BY: ----	CHECKED BY: ----

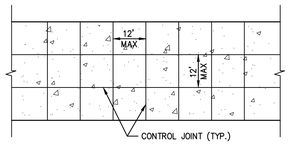
SITE DETAILS

COLUMBIA STORM PROCESSING AND SERVICE CENTER

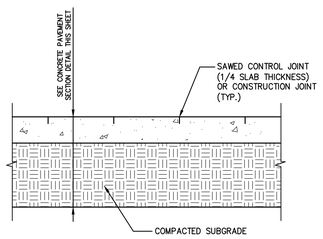
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-801

Plotted By:Erole, Grace Sheet Set:EPL - COLUMBIA COUNTY Layout:01 December 16, 2022 08:43:25am K:\JAX_Civil\045687000 - FPL Columbia County\Cadd\PlanSheets\C-801 SITE DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



PLAN



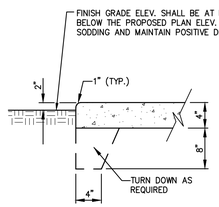
SECTION

NOTES:

1. LONGITUDINAL AND TRANSVERSE JOINTS SHALL BE SAWED AS INDICATED.
2. THE JOINT SEAL MANUFACTURER'S SPECIFICATIONS SHALL BE COMPATIBLE WITH THE JOINT CONFIGURATION. PROVIDE TYPICAL DETAILS FOR CONSTRUCTION AND EXPANSION JOINTS.
3. FOR ALL JOINTS THE BACKER ROD MATERIAL SHALL BE COMPATIBLE WITH THE COLD POURED SEALANT AND SLIGHTLY OVERSIZED TO PREVENT MOVEMENT DURING THE JOINT SEALANT OPERATION.
4. THE WIDTH OF ALL JOINTS SHALL BE CORRECTED FOR 68 DEGREE (F).
5. EXPANSION JOINTS SHALL BE USED AT ALL LOCATIONS WHERE PAVEMENT ABUTS A PERMANENT STRUCTURE.
6. DOWELS AND TIE BARS FOR CONSTRUCTION JOINTS SHALL BE CAST IN PLACE.

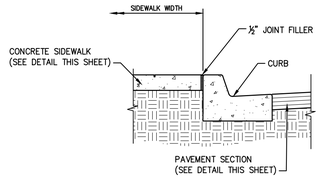
CONCRETE JOINTING AND REINFORCING DETAIL

NOT TO SCALE



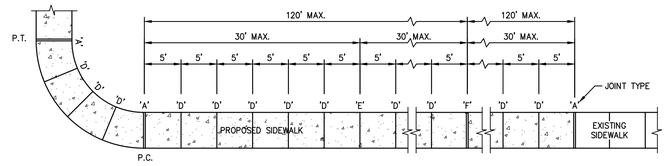
SIDEWALK AT GRADE DETAIL

NOT TO SCALE

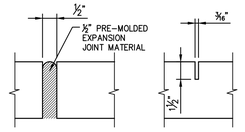


CURB AT SIDEWALK DETAIL

NOT TO SCALE

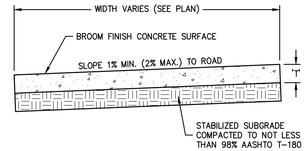


PLAN



SIDEWALK JOINTS

TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
'A'	½" EXPANSION JOINT (PREFORMED JOINT FILLER) BETWEEN SIDEWALK AND DRIVEWAYS, SIDEWALK INTERSECTIONS, AND ALL OTHER FIXED OBJECTS (E.G. DRAINAGE INLETS AND UTILITY POLES
'D'	⅜" SAW CUT JOINTS. 1½" DEEP (WITHIN 96 HOURS) MAX. 5' CENTERS
'E'	⅜" SAW CUT JOINTS. 1½" DEEP (WITHIN 12 HOURS) MAX. 30' CENTERS JOINT(S) REQUIRED WHEN LENGTH EXCEEDS 30'
'F'	½" EXPANSION JOINT WHEN RUN OF SIDEWALK EXCEEDS 120'. INTERMEDIATE LOCATIONS WHEN CALLED FOR IN THE PLANS OR AT LOCATIONS AS DIRECTED BY THE ENGINEER



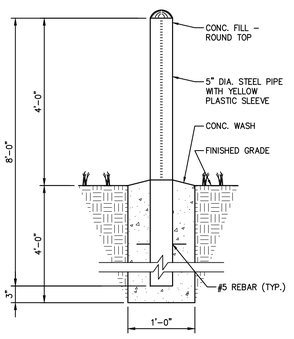
STANDARD CROSS SECTION

TABLE OF SIDEWALK THICKNESS	
LOCATION	"T"
PEDESTRIAN ONLY AREAS	4"
DRIVEWAYS AND OTHER TRAFFIC AREAS	6"

NOTE:
ALL SIDEWALK STREET CROSSINGS MUST MEET THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT (ADA) COMPLIANCE GUIDE. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.

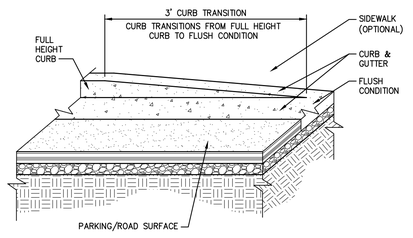
CONCRETE SIDEWALK

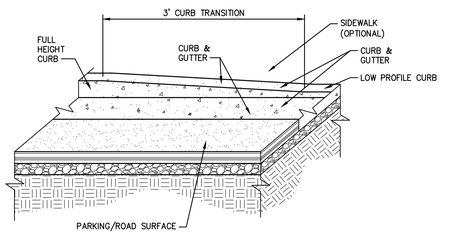
NOT TO SCALE



BOLLARD DETAIL

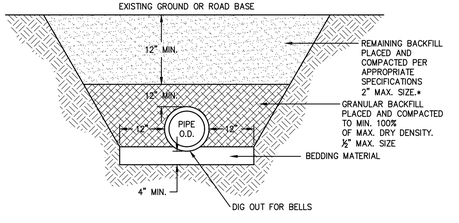
NOT TO SCALE





CURB TRANSITION DETAILS

NOT TO SCALE



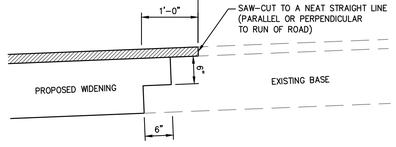
NOTES:

1. BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL (2" MAX SIZE). UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCK SHALL BE REMOVED.
2. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
3. THE PIPE SHALL BE PLACED IN A DRY TRENCH.
4. BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGER ROCK, MUCK AND DEBRIS.
5. ALL WORK SHALL CONFORM TO STATE OF FLORIDA TRENCH SAFETY ACT.

* COMPACT TO 98%OF AASHTO T-180 MAXIMUM DRY DENSITY UNDER EXISTING AND PROPOSED PAVEMENT AREAS. COMPACT TO 95% ON ALL OTHER AREAS UNLESS OTHERWISE NOTED..

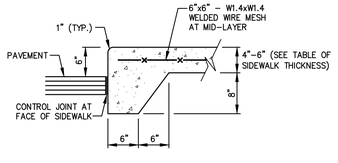
TRENCH WITHOUT EXFILTRATION

NOT TO SCALE



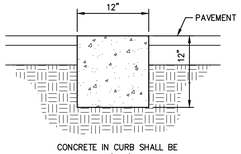
SAW-CUT DETAIL

NOT TO SCALE



MONOLITHIC CURB DETAIL

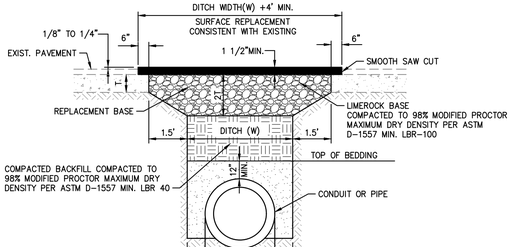
NOT TO SCALE



CONCRETE IN CURB SHALL BE 3000 P.S.I. (MIN.) 28 DAYS.

RIBBON CURB DETAIL

NOT TO SCALE

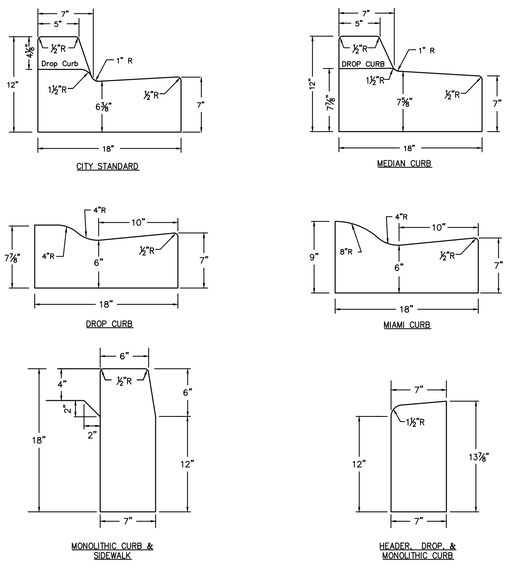


NOTES:

1. METHOD AND MATERIALS OF REPAIR SUBJECT TO CITY OF JACKSONVILLE CONSTRUCTION REQUIREMENTS FOR NEW PAVEMENT. TYPE OF ASPHALT CONCRETE SHALL BE THE SAME AS EXISTING ROAD.
2. IN SOME CASES PORTLAND CEMENT CONCRETE MAY BE CONSIDERED OR REQUIRED BY CITY ENGINEER FOR SURFACE REPLACEMENT.

PAVEMENT REPAIR DETAIL

NOT TO SCALE



CONCRETE QUANTITES:

CITY STANDARD CURB	.0368889 CU. YD./LIN. FT.
STANDARD DROP CURB	.0322222 CU. YD./LIN. FT.
MEDIAN CURB	.0411111 CU. YD./LIN. FT.
MIAMI CURB	.0329630 CU. YD./LIN. FT.
HEADER CURB	.0314815 CU. YD./LIN. FT.
HEADER DROP CURB	.0244444 CU. YD./LIN. FT.

CITY STANDARD CURB DETAILS

NOT TO SCALE

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FL 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000	DATE DECEMBER 2022
SCALE: AS SHOWN	
DESIGNED BY: ----	DRAWN BY: ----
CHECKED BY: ----	

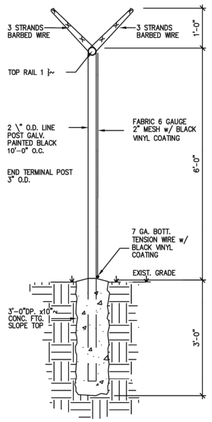
SITE DETAILS

COLUMBIA STORM PROCESSING AND SERVICE CENTER

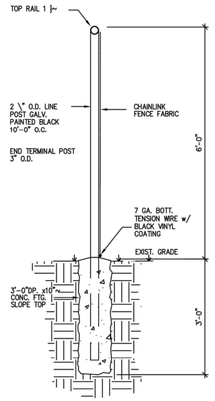
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-802

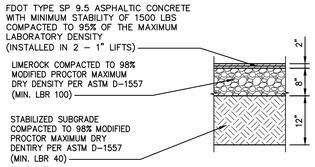
Plotted By:Erole, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:02 December 16, 2022 08:43:28am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-801 SITE DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



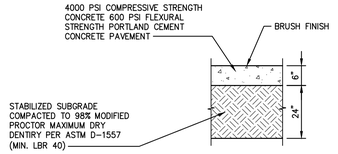
FENCE DETAIL C
NOT TO SCALE



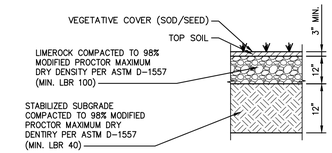
FENCE DETAIL B
NOT TO SCALE



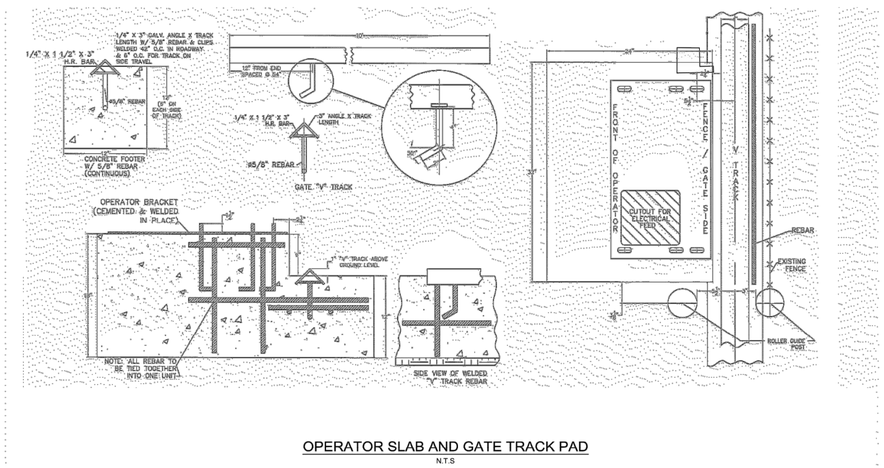
ASPHALT PAVEMENT SECTION
NOT TO SCALE



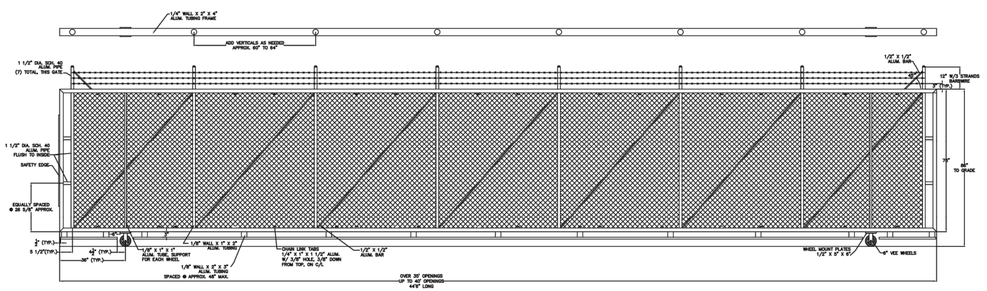
CONCRETE PAVEMENT SECTION
NOT TO SCALE



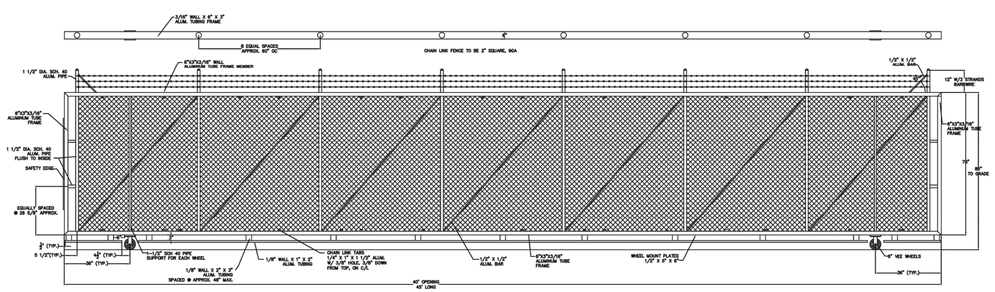
STABILIZED PERVIOUS PARKING SECTION
NOT TO SCALE



OPERATOR SLAB AND GATE TRACK PAD
N.T.S



GATE DETAIL - 35' TO 40' OPENING
N.T.S



GATE DETAIL - 40' TO 45' OPENING
N.T.S

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

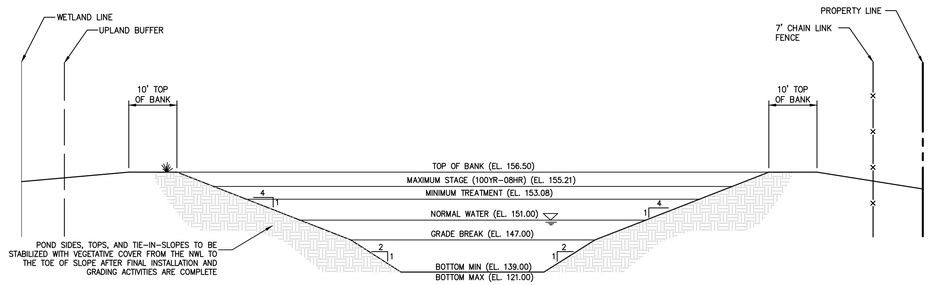
KHA PROJECT 045687000	DATE DECEMBER 2022
SCALE: AS SHOWN	
DESIGNED BY: ----	
DRAWN BY: ----	CHECKED BY: ----

SITE DETAILS

COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

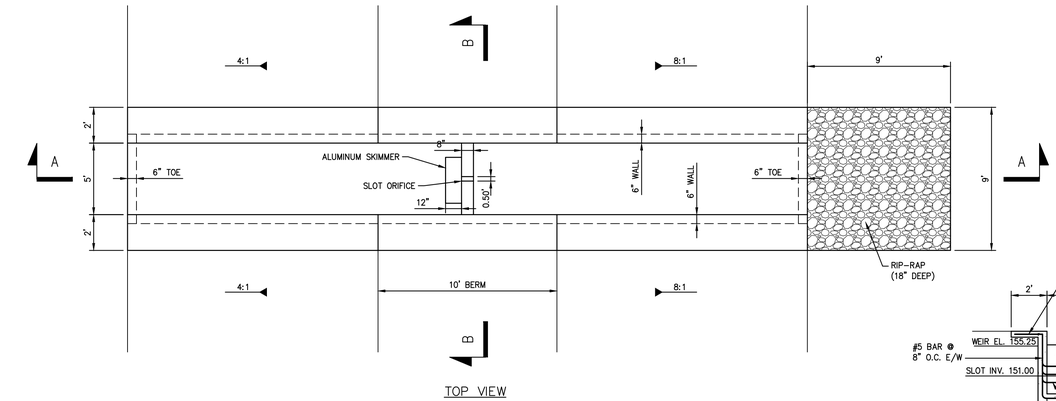
SHEET NUMBER
C-803

Plotted By:Erole, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:03 December 16, 2022 08:43:39am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-801 SITE DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

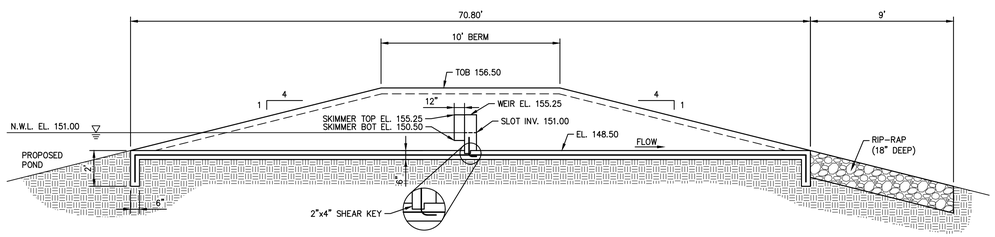


POST POND CROSS SECTION

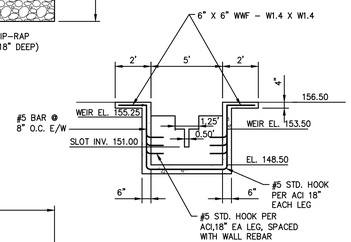
NOT TO SCALE



TOP VIEW



SECTION A-A

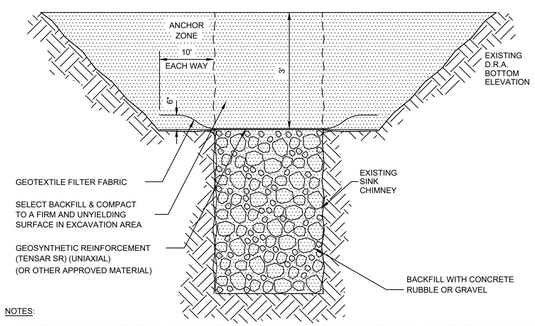


SECTION B-B

FDOT CLASS 1 CONCRETE

OUTFALL STRUCTURE - CS-01

NOT TO SCALE



NOTES:

1. IF LIMESTONE IS ENCOUNTERED OR A SINKHOLE OR SOLUTION PIPE FORMS DURING CONSTRUCTION, CONSTRUCTION OF THE BASIN MUST BE HALTED AND THE PROJECT GEOTECHNICAL ENGINEER MUST BE NOTIFIED IMMEDIATELY.
2. THE SINKHOLE OR SOLUTION PIPE MUST BE REPAIRED WITHIN 10 DAYS OF THE DISCOVERY USING A DISTRICT APPROVED METHOD.
3. THE STORMWATER SYSTEM MUST BE INSPECTED MONTHLY FOR THE OCCURRENCE OF SINKHOLES OR SOLUTION PIPES.

TYPICAL SINK CHIMNEY REPAIR DETAIL

N.T.S.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000	DATE DECEMBER 2022
SCALE: AS SHOWN	
DESIGNED BY: ---	DRAWN BY: ---
CHECKED BY: ---	

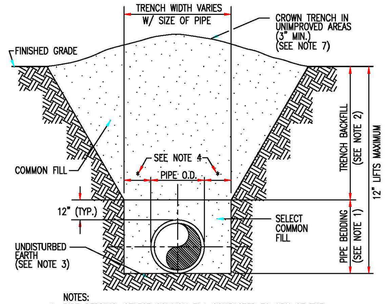
DRAINAGE DETAILS

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-804

Plotted By:Eryle_Grone Sheet Set:FPL - COLUMBIA COUNTY Layout:01 December 16, 2022 08:43:49am K:\JAX_Civil\045687000 - FPL Columbia County\Cadd\PlanSheets\C-804 DRAINAGE DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



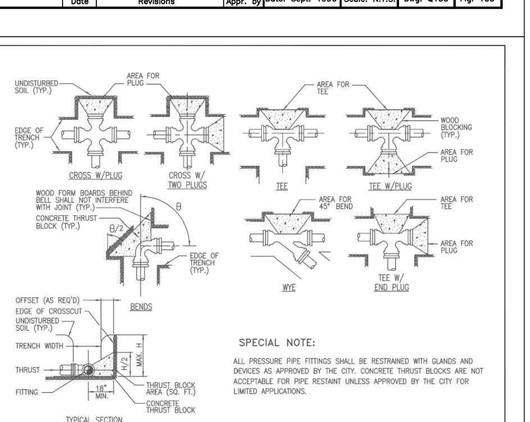
NOTES:
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE CITY OF LAKE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY OR COUNTY RIGHT-OF-WAY SHALL COMPLY WITH THE APPLICABLE REGULATIONS.

Date	Revisions	Appr. by

CITY OF LAKE CITY

TYPE B BEDDING AND TRENCHING DETAIL

Date: Sept. 1996 | Scale: N.T.S. | Dwg: Q100 | Fig: 100



SPECIAL NOTE:

ALL PRESSURE PIPE FITTINGS SHALL BE RESTRAINED WITH GLANDS AND DEVICES AS APPROVED BY THE CITY. CONCRETE THRUST BLOCKS ARE NOT ACCEPTABLE FOR PIPE RESTAINT UNLESS APPROVED BY THE CITY FOR LIMITED APPLICATIONS.

SCHEDULE FOR THRUST BLOCK AREAS *

PIPE SIZE (INCHES)	90 BEND (SQ FT)	45 BEND (SQ FT)	22-1/2 BEND (SQ FT)	11-1/4 BEND (SQ FT)	TEE & PLUG (SQ FT)	DESIGN PRESS (PSI)
4						
6						
8						
10						
12						

NOTE: THRUST BLOCK AREAS TO BE COMPUTED ON BASIS OF _____ (1,500 MIN) LBS. PER SQ. FT. SOIL RESTRAINT SEE NOTE 5 BEARING.

* TO BE COMPLETED BY ENGINEER.

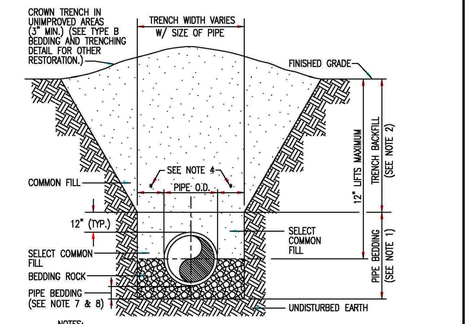
NOTES:
1. THRUST BLOCK BEARING AREAS SHALL BE POURED AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND TO UNDISTURBED MATERIAL.
2. EXTEND THRUST BLOCK FULL LENGTH OF FITTINGS. JOINTS SHALL NOT BE COVERED BY THRUST BLOCKS. FITTINGS SHALL BE PROTECTED BY POLYETHYLENE FILM (8 MIL) PRIOR TO PLACING CONCRETE THRUST BLOCK.
3. ROUGH BLOCKING FORMS SHALL BE USED ALONG SIDES OF THRUST BLOCKS, AS REQUIRED.
4. THRUST BLOCKS SHALL BE USED IN COMBINATION, AS REQUIRED, TO SUIT THE SPECIFIC FITTING ARRANGEMENT.
5. ALTERNATE DESIGNED RESTRAINING SYSTEMS SHALL BE PROVIDED WHERE STANDARD THRUST BLOCKING IS NOT SUITABLE AND/OR SOIL RESISTANCE BEARING IS LESS THAN 1500 PSF.
6. ALL WOOD BLOCKING SHALL BE PRESSURE TREATED WITH PRESERVATIVE.

Date	Revisions	Appr. by

CITY OF LAKE CITY

THRUST BLOCK DETAIL

Date: FEB. 2010 | Scale: N.T.S. | Dwg: Q103 | Fig: 103



NOTES:
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. USE TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY OF LAKE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 32.5 OF THE MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS.
8. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING, IF REQUIRED BY THE COUNTY. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15", AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
9. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. APPLICABLE GOVERNING AGENCY SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.

Date	Revisions	Appr. by

CITY OF LAKE CITY

TYPE A BEDDING AND TRENCHING DETAIL

Date: Sept. 1996 | Scale: N.T.S. | Dwg: Q101 | Fig: 101

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S). *

	PIPE SIZE							
	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND									
45° BEND									
22-1/2° BEND									
11-1/4° BEND									
PLUG OR BRANCH OF TEE									

NOTES:
1. FITTINGS SHALL BE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
4. RESTRAINTS MUST BE INSTALLED BEFORE AND AFTER ALL INLINE VALVES AND DIRECTION CHANGES.
5. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, WITH THE FOLLOWING ASSUMPTIONS:
   WORKING PRESSURE: P.S.I.*
   SOIL DESIGNATION: _____ *
   LAYING CONDITIONS: _____ *
6. FOR PIPE ENCASED IN POLYETHYLENE, USE VALUES GIVEN IN PARENTHESES OR INCREASE THE GIVEN VALUE BY A FACTOR OF 1.5.

* TO BE COMPLETED BY THE ENGINEER.

Date	Revisions	Appr. by

CITY OF LAKE CITY

RESTRAINED PIPE DETAIL

Date: Sept. 1996 | Scale: N.T.S. | Dwg: Q104 | Fig: 104

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000	DATE DECEMBER 2022	SCALE: AS SHOWN	DESIGNED BY: ____	DRAWN BY: ____	CHECKED BY: ____

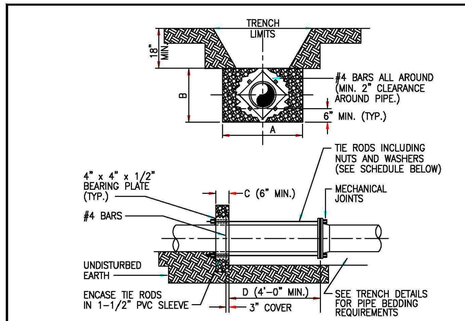
UTILITY DETAILS

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR:
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
C-809

Plotted By:Erale, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:01 December 16, 2022 08:44:02am K:\JAX_Civil\045687000 – FPL Columbia County\Utility Details\Columbia County\Cad\PlanSheets\C-809 UTILITY DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



SCHEDULE OF DIMENSIONS AND MATERIALS *

PIPE SIZE (INCHES)	DIMENSIONS				TIE RODS REQ'D	
	A	B	C	D	DIA.	NO.

NOTE: THRUST BLOCK AREAS TO BE COMPUTED ON BASIS OF _____ LBS. PER SQ. FT. SOIL RESTRAINT BEARING. (1,500 MIN) SEE NOTE 5

* TO BE COMPLETED BY ENGINEER.

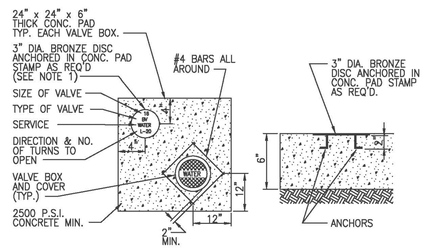
NOTES:
1. ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
2. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 2500 PSI.
3. BEDDING, BACKFILL, AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
5. NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
6. DESIGN PRESSURE:_____ P.S.I.*

Date	Revisions	Appr. by

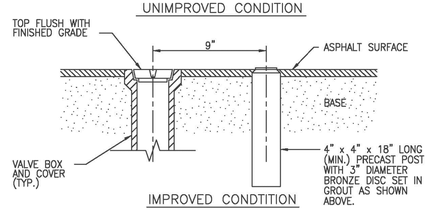
CITY OF LAKE CITY

WATER MAIN THRUST COLLAR DETAIL

Date: Sept. 1996 | Scale: N.T.S. | Dwg: Q105 | Fig: 105



UNIMPROVED CONDITION



IMPROVED CONDTITION

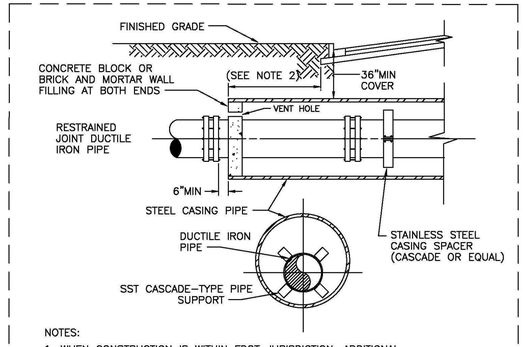
NOTES:
1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES.

Date	Revisions	Appr. by

CITY OF LAKE CITY

VALVE COLLAR DETAIL

Date: Sept. 1996 | Scale: N.T.S. | Dwg: Q107 | Fig: 107



NOTES:
1. WHEN CONSTRUCTION IS WITHIN FDOT JURISDICTION, ADDITIONAL REQUIREMENTS OF THE UTILITY ACCOMODATION MANUAL SHALL BE MET.
2. CASING SHALL BE OF SUFFICIENT LENGTH TO EXTEND UNDER ALL PAVEMENTS AND IN NO CASE SHALL THE END OF THE CASING BE CLOSER THAN EIGHT (8) FEET FROM THE PAVEMENT EDGE INCLUDING PAVED SHOULDERS PLUS ADDITIONAL LENGTH AS NECESSARY TO EXTEND TO THE EXCAVATED SLOPES OF THE JACKING AND RECEIVING PITS.
3. CONTRACTOR SHALL MAINTAIN A MINIMUM OF A 2:1 SLOPE (ANY STEEPER AND PIT MUST BE SHEETED AND SHORED) BEGINNING EIGHT (8) FEET FROM EDGE OF PAVEMENT.
4. THE CONTRACTOR SHALL PROVIDE A 4-INCH DIP CASING VENT AS SHOWN ON THE DRAWINGS FOR RAILWAY CROSSINGS, IN LIEU OF VENT HOLE AS SHOWN ABOVE.

UTILITY CROSSING, BORE AND JACK

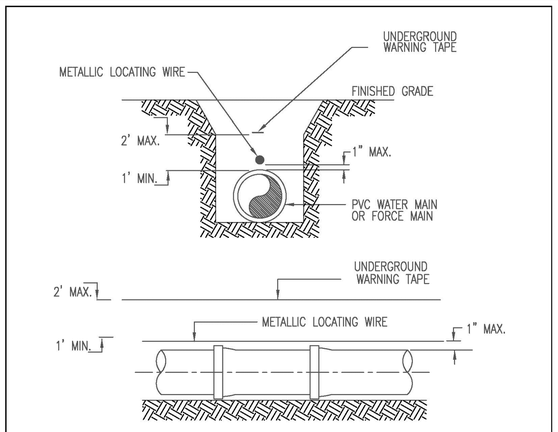
DETAIL
NTS

Date	Revisions	Appr. by

CITY OF LAKE CITY

BORING AND JACKING DETAIL

Date: Sept. 1996 | Scale: N.T.S. | Dwg: Q106 | Fig: 106



NOTES:
1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (14 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE. LOCATING WIRE SHALL TERMINATE AT THE TOP OF EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION. USE DUCT TAPE AS NECESSARY TO HOLD WIRE DIRECTLY ON THE TOP OF THE PIPE.
2. PROPERLY COLOR CODED UNDERGROUND WARNING TAPE SHALL BE PLACED AT A MIMIMUM OF 1 FOOT ABOVE THE PIPE AND NO GREATER THAN 2 FEET ABOVE THE PIPE, FOR THE PURPOSE OF IDENTIFYING THE LOCATION OF UNDERGROUND UTILITY LINES.

Date	Revisions	Appr. by

CITY OF LAKE CITY

PVC PIPE LOCATING WIRE DETAIL

Date: FEB. 2010 | Scale: N.T.S. | Dwg: Q108 | Fig: 108

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ----
DRAWN BY: ----
CHECKED BY: ----

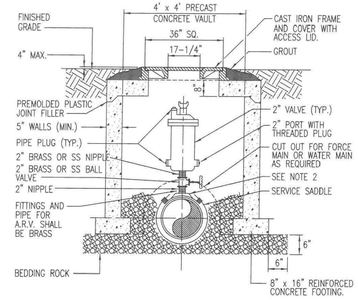
UTILITY DETAILS

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR:
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

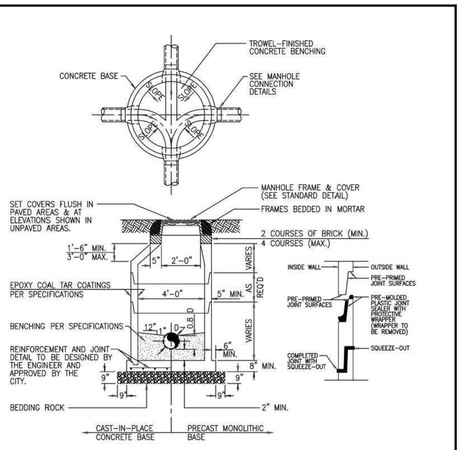
SHEET NUMBER
C-810

Plotted By:Ergle, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:02 December 16, 2022 08:44:05am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-809 UTILITY DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



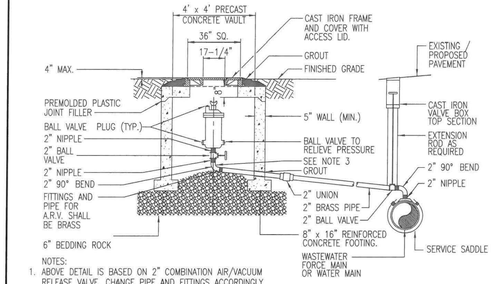
NOTES:
1. ABOVE DETAIL IS BASED ON 2" COMBINATION AIR/VACUUM RELEASE VALVE. CHANGE PIPE AND FITTINGS ACCORDINGLY FOR OTHER VALVE SIZES AND TYPES. VALVE SIZES TO BE DETERMINED BY THE ENGINEER AND APPROVED BY THE CITY PRIOR TO INSTALLATION.
2. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.

			CITY OF LAKE CITY		
			AIR OR COMBINATION AIR/VACUUM RELEASE VALVE DETAIL		
9/9/17	REVISED - K. HACHT	B. SCOTT			
Date	Revisions	Appr. by	Date: MARCH 2017	Scale: N.T.S.	Dwg: Q109	Fig: 109



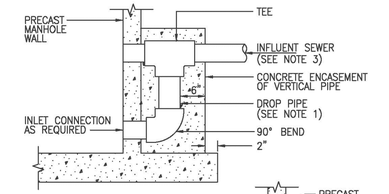
NOTES:
1. MANHOLE SHOWN IS FOR SEWER SIZE 8" THRU 24", SEE UTILITIES STANDARDS HANDBOOK FOR MANHOLE DIAMETER FOR SEWERS LARGER THAN 24".
2. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAILS.
3. APPROVED CONCENTRIC CONE DESIGN MAY BE USED AS AN ALTERNATIVE.

			CITY OF LAKE CITY		
			PRECAST MANHOLE DETAIL		
Date	Revisions	Appr. by	Date: Sept. 1996	Scale: N.T.S.	Dwg: Q200	Fig: 200

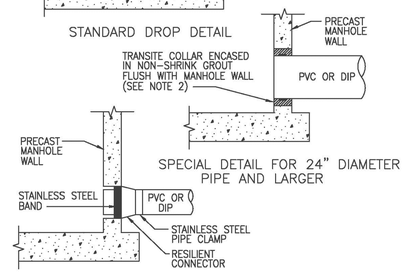


NOTES:
1. ABOVE DETAIL IS BASED ON 2" COMBINATION AIR/VACUUM RELEASE VALVE. CHANGE PIPE AND FITTINGS ACCORDINGLY FOR OTHER VALVE SIZES AND TYPES. VALVE SIZES TO BE DETERMINED BY THE ENGINEER AND APPROVED BY THE CITY PRIOR TO INSTALLATION.
2. VALVE SHALL BE SUPPORTED TO VAULT WALL.
3. THE MINIMUM DIMENSION FROM ELBOW INVERT TO FINISHED GRADE SHALL BE 4.0 FEET.

			CITY OF LAKE CITY		
			OFFSET AIR OR COMBINATION AIR/VACUUM VACUUM RELEASE VALVE DETAIL		
9/9/17	REVISED - K. HACHT	B. SCOTT			
Date	Revisions	Appr. by	Date: MARCH 2017	Scale: N.T.S.	Dwg: Q110	Fig: 110



STANDARD DROP DETAIL



SPECIAL DETAIL FOR 24" DIAMETER PIPE AND LARGER

STANDARD PRECAST MANHOLE PIPE CONNECTION

NOTES:
1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. THE CITY MAY APPROVE ALTERNATE WATER TIGHT CONNECTION DETAILS FOR CONNECTION OF 24" DIAMETER PIPES AND LARGER.
3. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 2' OR MORE ABOVE THE MANHOLE INVERT.

			CITY OF LAKE CITY		
			MANHOLE CONNECTION DETAILS		
Date	Revisions	Appr. by	Date: Sept. 1996	Scale: N.T.S.	Dwg: Q201	Fig: 201

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DECEMBER 2022
SCALE:	AS SHOWN
DESIGNED BY:	----
DRAWN BY:	----
CHECKED BY:	----

UTILITY DETAILS

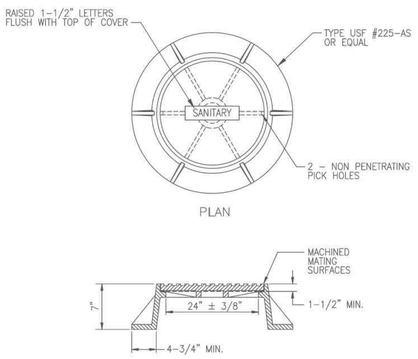
COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY

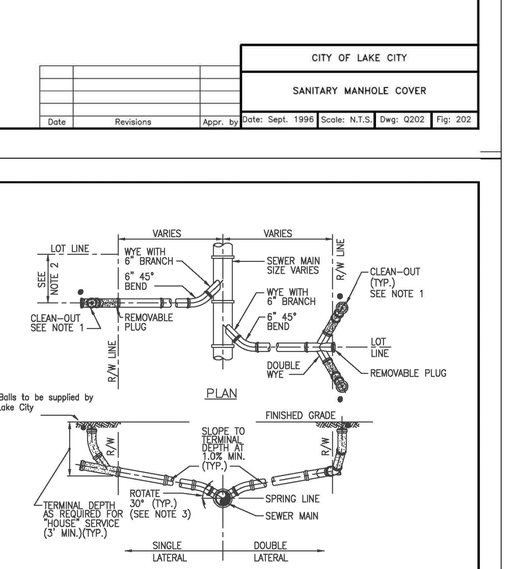
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-811

Plotted By:Ergie Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:03 December 16, 2022 08:44:10am K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-809 UTILITY DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

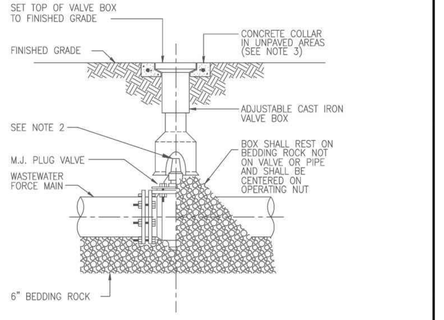


			CITY OF LAKE CITY			
			SANITARY MANHOLE COVER			
Date	Revisions	Appr. by	Date: Sept. 1996	Scale: N.T.S.	Dwg: Q202	Fig: 202



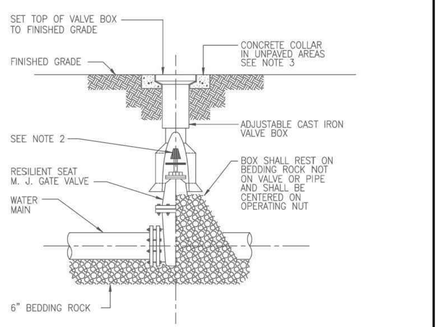
NOTES:
1. CLEAN-OUT (SHOWN SHADED) SHALL BE INSTALLED BY THE BUILDER IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE, 25' MAXIMUM.
3. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
4. SERVICE LATERALS SHALL HAVE A MINIMUM 18" OF COVER BETWEEN R/W TIE-IN AND BUILDING.
5. INDENT CURB WITH 'S' AT EACH SEWER SERVICE LOCATION.

			CITY OF LAKE CITY			
			SANITARY SERVICE DETAIL			
Date	Revisions	Appr. by	Date: Sept. 1996	Scale: N.T.S.	Dwg: Q204	Fig: 204



NOTES:
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.
3. VALVE COLLAR SHALL BE 18"X18"X6" CONCRETE COLLAR W/4 - #4 BARS.

			CITY OF LAKE CITY			
			PLUG VALVE AND BOX DETAIL			
Date	Revisions	Appr. by	Date: Sept. 1996	Scale: N.T.S.	Dwg: Q203	Fig: 203



NOTES:
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.
3. VALVE COLLAR SHALL BE 18"X18"X6" CONCRETE COLLAR W/4 - #4 BARS.

			CITY OF LAKE CITY			
			GATE VALVE AND BOX DETAIL			
Date	Revisions	Appr. by	Date: Sept. 1996	Scale: N.T.S.	Dwg: Q400	Fig: 400

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000	DATE DECEMBER 2022	SCALE: AS SHOWN	DESIGNED BY: ----	DRAWN BY: ----	CHECKED BY: ----

UTILITY DETAILS

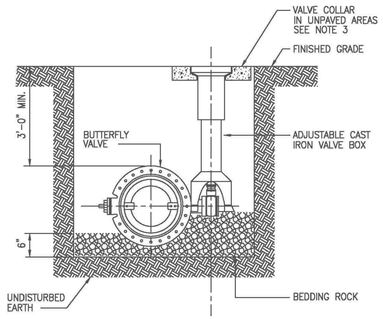
COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA

COLUMBIA COUNTY

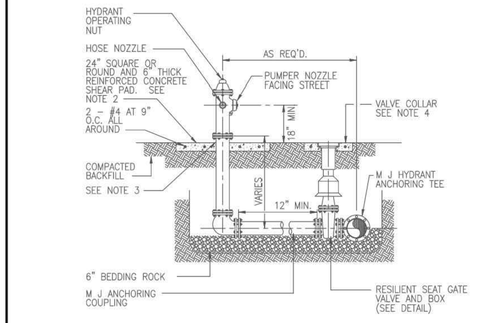
SHEET NUMBER
C-812

Plotted By:Ergle, Grace Sheet Set:FPL - COLUMBIA COUNTY Layout:04 December 16, 2022 08:44:12am K:\JAX_Civil\045687000 - FPL Columbia County\Construction\Civil\Cadd\PlanSheets\C-809 UTILITY DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



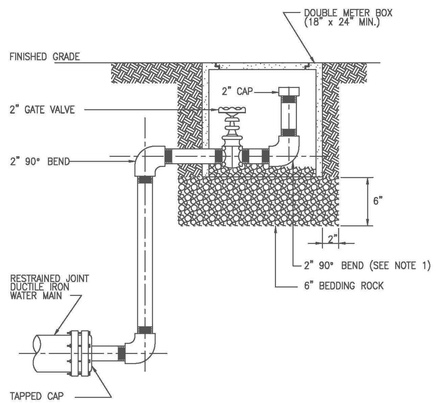
NOTES:
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. ALL WATER SHUT-OFF VALVES SIXTEEN (16) INCHES AND LARGER SHALL BE BUTTERFLY VALVES.
3. VALVE COLLAR SHALL BE 18"X18"X6" CONCRETE COLLAR W/4 - #4 BARS.

Date	Revisions	Appr. by	CITY OF LAKE CITY			
			BUTTERFLY VALVE AND BOX DETAIL			
			Date: Sept. 1996	Scale: N.T.S.	Dwg: Q401	Fig: 401



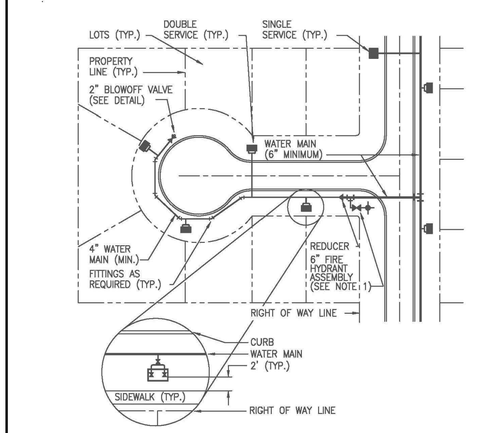
NOTES:
1. FIRE HYDRANT SHALL BE SUPPLIED WITHOUT A WEEP HOLE, OR WITH A PERMANENTLY PLUGGED WEEP HOLE.
2. THE DEVELOPER MAY INSTALL THE SHEAR PAD RECESSED UP TO 4 INCHES BELOW FINISHED GRADE AND SOD THE RECESSED SECTION.
3. CLEARANCE BETWEEN BOTTOM OF BOLTS AND TOP OF SHEAR PAD SHALL BE A 6" MINIMUM.
4. VALVE COLLAR SHALL BE 18"X18"X6" CONCRETE COLLAR W/4 - #4 BARS

Date	Revisions	Appr. by	CITY OF LAKE CITY			
			FIRE HYDRANT ASSEMBLY DETAIL			
			Date: Sept. 1996	Scale: N.T.S.	Dwg: Q402	Fig: 402



NOTES:
1. ALL 2" PIPE AND FITTINGS SHALL BE SCHEDULE 40 GALVANIZED STEEL OR BRASS WITH THREADED (NPT) JOINTS.
2. BEND SHALL BE ROTATED APPROXIMATELY 20° FROM VERTICAL.

Date	Revisions	Appr. by	CITY OF LAKE CITY			
			BLOW OFF VALVE DETAIL			
			Date: Sept. 1996	Scale: N.T.S.	Dwg: Q403	Fig: 403



NOTES:
1. ANCHORING TYPE 90° BEND SHALL ONLY BE USED WHERE RIGHT-OF-WAY CONSTRICTIONS WILL NOT ALLOW INSTALLATION OF A STRAIGHT ASSEMBLY.

Date	Revisions	Appr. by	CITY OF LAKE CITY			
			WATER SERVICE LOCATION DETAIL			
			Date: Sept. 1996	Scale: N.T.S.	Dwg: Q404	Fig: 404

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000	DATE DECEMBER 2022	SCALE: AS SHOWN	DESIGNED BY: ----	DRAWN BY: ----	CHECKED BY: ----

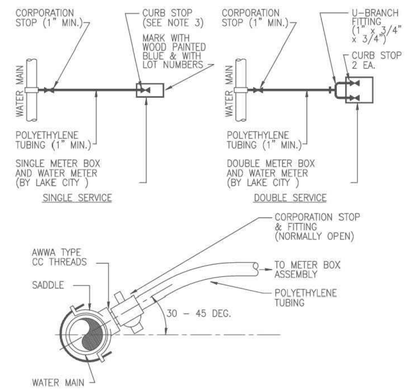
UTILITY DETAILS

COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

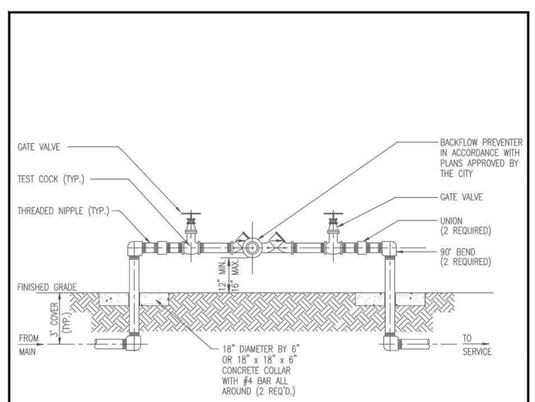
SHEET NUMBER
C-813

Plotted By:Erale, Grace Sheet Set:FPL - COLUMBIA COUNTY Layout:05 December 16, 2022 08:44:17am K:\JAX_Civil\045687000 - FPL Columbia County\Civil\Plan Sheets\C-809 UTILITY DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NOTES:
1. ALL FITTINGS SHALL BE BRASS WITH COMPRESSION/PACK JOINT TYPE CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE AT A CURB STOP(S) WHICH SHALL BE BURIED APPROXIMATELY 3" BELOW FINAL GRADE AND SHALL BE CLEARLY MARKED WITH A 2" X 2" X 18" STAKE WITH THE TOP PAINTED BLUE AND MARKED WITH THE NUMBER OF THE LOT(S) TO BE SERVED.
4. INDENT CURB WITH "W" AT EACH WATER SERVICE LOCATION

Date	Revisions	Appr. by	CITY OF LAKE CITY			
			WATER SERVICE CONNECTION DETAILS			
			Date: Sept. 1996	Scale: N.T.S.	Dwg: Q405	Fig: 405

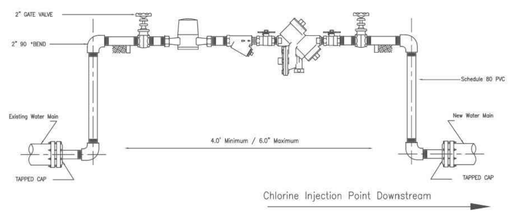


NOTES:
1. ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED SCHEDULE 40 GALVANIZED STEEL OR BRASS.

Date	Revisions	Appr. by	CITY OF LAKE CITY			
			REDUCED PRESSURE BACKFLOW PREVENTER			
			Date: Sept. 1996	Scale: N.T.S.	Dwg: Q501	Fig: 501

Reduced Pressure Backflow Preventer Assembly
(Provided by Contractor)

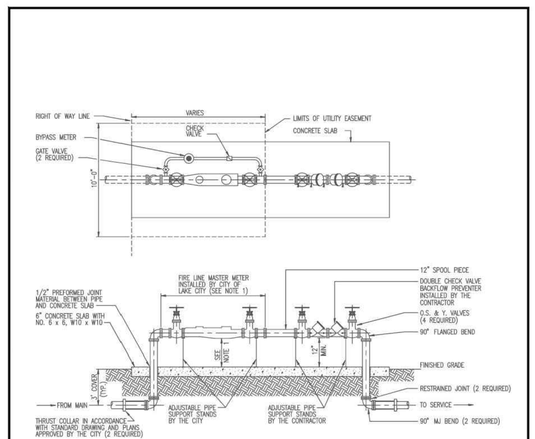
Assembly Must Comply with AWWA M–14 Standards



NOTES:

1. FINAL CONNECTION TO BE WITNESSED BY LAKE CITY UTILITIES INSPECTOR
2. INSTALL JUMPER TAP SYSTEM FOR TEMPORARY METER DOWNSTREAM OF BLIND FLANGE FOR CONSTRUCTION WATER
3. TAPPING SADDLES MAY BE EITHER STAINLESS STEEL OR DUCTILE IRON.
4. JUMPER ASSEMBLY MUST BE MINIMUM OF 18 INCHES ABOVE FINISHED GRADE.
5. BACKFLOW ASSEMBLY REQUIRES INITIAL CERTIFICATION BY CERTIFIED BACKFLOW TESTER.
6. THIS ASSEMBLY SHALL ONLY BE USED IF NO COMBUSTIBLES WILL BE ON SITE. IF COMBUSTIBLES ARE BROUGHT ON SITE, THEN THE TEMPORARY BACKFLOW PREVENTERS AND FIRE PROTECTION METER TIE-IN ASSEMBLY WILL BE USED.
7. THIS ASSEMBLY IS NOT APPROVED TO PROVIDE FIRE PROTECTION WATER TO THE SITE DURING CONSTRUCTION. ASSEMBLY NOT TO BE REMOVED AND SPOOL PIECE INSTALLED FOR FINAL CONNECTION UNTIL AFTER TESTING, BACTERIAL CLEARANCE, FINAL INSPECTION AND CITY ACCEPTANCE.
8. GAP CONFIGURATION TO BE INSTALLED WITHIN 24 HOURS OR LESS AT THE DISCRETION OF THE WATER DISTRIBUTION DEPARTMENT

Date	Revisions	Appr. by	CITY OF LAKE CITY			
			Jumper Connection Detail			
			Date: Feb. 2010	Scale: N.T.S.	Dwg: Q501A	Fig: 501A



NOTES:
1. THE CONTRACTOR SHALL CONTACT THE INSPECTOR FOR EXACT ASSEMBLY LENGTH AND HEIGHT ABOVE THE SLAB REQUIRED FOR THE FIRE LINE MASTER METER TO BE INSTALLED BY THE CITY. ALL OTHER PIPE, FITTINGS AND APPURTENANCES SHALL BE INSTALLED BY THE CONTRACTOR.
2. ALL ABOVE GROUND PIPE SHALL BE FLANGED DUCTILE IRON.

Date	Revisions	Appr. by	CITY OF LAKE CITY			
			FIRE LINE MASTER METER ASSEMBLY			
			Date: Sept. 1996	Scale: N.T.S.	Dwg: Q502	Fig: 502

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DECEMBER 2022
SCALE: AS SHOWN
DESIGNED BY: ——
DRAWN BY: ——
CHECKED BY: ——

UTILITY DETAILS

COLUMBIA STORM PROCESSING AND SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
C-814

Plotted By:Erin Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:06 December 16, 2022 08:44:19am K:\JAX_Civil\045687000 – FPL Columbia County\Civil\Cadd\PlanSheets\C–809 UTILITY DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

DESIGN CONDITIONS

MODEL	4VH100MA-23	H.P.	10
IMPELLER	8.50" GRINDER	VOLTS/PHASE	460/3
DISCHARGE	6"	SPEED	1750 RPM
GPM	248	TDH	62

PUMP

THE PUMP SHALL HAVE AN INTEGRALLY BUILT IN GRINDER UNIT AND SUBMERSIBLE TYPE MOTOR. THE PUMP SHALL BE SUSPENDED IN THE BASIN BY TWO (2) QUICK DISCONNECT LIFT OUT MOUNTING ASSEMBLY. SOLIDS SHALL BE FED IN AN UPFLOW DIRECTION TO THE GRINDER MECHANISM WITH NO OBSTRUCTIONS BELOW THE GRINDER INLET.
THE GRINDER UNIT SHALL BE CAPABLE OF CUTTING SOLID MATERIAL FOUND IN NORMAL DOMESTIC SEWAGE, INCLUDING REASONABLE AMOUNTS OF FOREIGN OBJECTS, SUCH AS WOOD PLASTIC, GLASS, RUBBER, SANITARY NAPKINS, DISPOSABLE DIAPERS AND PANTY HOSE INTO A FINE SLURRY THAT WILL PASS FREELY THROUGH THE PUMP, SERVICE LINE AND FORCE MAIN.

MOTOR

THE PUMP MOTOR SHALL BE OF THE SUBMERSIBLE TYPE RATED FOR 2 HORSEPOWER AT 3450 RPM. MOTOR SHALL BE SINGLE PHASE, 230/208 VOLT, 60 HERTZ. / THREE PHASE MOTORS SHALL BE 208, 230 OR 460 VOLT, 60 HERTZ. SINGLE PHASE MOTORS SHALL BE OF THE CAPACITOR-START- CAPACITOR RUN TYPE FOR HIGH STARTING TORQUE. THE STATOR WINDING SHALL BE THE OPEN TYPE WITH CLASS A INSULATION RATED FOR 105° C MAXIMUM OPERATING TEMPERATURE. THE WINDING HOUSING WILL BE FILLED WITH CLEAN DIELECTRIC OIL THAT WILL LUBRICATE BEARINGS, SEALS AND TRANSFER HEAT FROM THE WINDINGS TO THE OUTER SHELL. THE MOTOR STATOR IS TO BE PRESSED INTO THE MOTOR HOUSING FOR OPTIMUM CONCENTRICITY AND ALIGNMENT, AND MAXIMUM HEAT TRANSFER. THE MOTOR SHALL BE CAPABLE OF OPERATING OVER FULL RANGE OF PERFORMANCE CURVE WITHOUT OVERLOADING MOTOR AND CAUSING ANY OBJECTIONAL NOISE OR VIBRATION. THE MOTOR SHALL HAVE TWO BEARINGS TO SUPPORT THE ROTOR; AN UPPER BALL BEARING TO ACCOMMODATE THRUST LOADS AND A LOWER BALL BEARING TO TAKE RADIAL LOADS. BALL BEARINGS SHALL BE DESIGNED FOR A LB-10 LIFE (50,000 HOURS). A HEAT SENSOR THERMOSTAT AND OVERLOAD SHALL BE ATTACHED TO THE TOP END OF THE MOTOR WINDINGS AND SHALL STOP THE MOTOR IF THE MOTOR WINDING TEMPERATURE REACHES 200° F. THE HIGH TEMPERATURE SHUTOFF WILL CAUSE THE PUMP TO CEASE OPERATION, SHOULD A CONTROL FAILURE CAUSE THE PUMP TO RUN IN A DRY WET WELL. THE THERMOSTAT SHALL RESET AUTOMATICALLY WHEN THE MOTOR COOLS TO A SAFE OPERATING TEMPERATURE.

SEAL CHAMBER

THE MOTOR SHALL BE PROTECTED BY TWO (2) ROTARY SHAFT SEALS MOUNTED IN TANDEM WITH AN OIL FILLED CHAMBER SEPARATING THE SEALS. THE SEALS SHALL HAVE CARBON AND CERAMIC SEAL FACES DIAMOND LAPPED TO A TOLERANCE OF ONE LIGHT BAND. METAL PARTS AND SPRINGS FOR SEALS SHALL BE STAINLESS STEEL. AN ELECTRICAL SENSING PROBE SHALL BE MOUNTED IN THE SEAL CHAMBER TO DETECT ANY WATER LEAKAGE PAST THE LOWER SEAL.

GRINDER ASSEMBLY & CONSTRUCTION

THE GRINDER ASSEMBLY SHALL CONSIST OF A ROTATING RADIAL CUTTER AND A STATIONARY SHREDDING RING, AND SHALL BE MOUNTED DIRECTLY BELOW THE VOLUTE PASSAGE. THE ROTATING CUTTER SHALL BE THREADED ONTO THE STAINLESS STEEL SHAFT AND SHALL BE LOCKED WITH A SCREW AND WASHER. THE STATIONARY SHREDDING RING SHALL BE PRESSED ONTO AN IRON HOLDING FLANGE FOR EASY REMOVAL. THE FLANGE SHALL BE PROVIDED WITH TAPPED BACK-OFF HOLES SO THAT SCREWS CAN BE USED TO PUSH THE SHREDDING RING FROM THE HOUSING. BOTH THE RADIAL CUTTER AND SHREDDING RING SHALL BE REMOVABLE FROM THE OUTSIDE WITHOUT DISMANTLING PUMP. GRINDER ASSEMBLY SHALL BE OF SUCH CONSTRUCTION THAT NO CLEARANCE ADJUSTMENTS ARE REQUIRED WHEN ASSEMBLING. ALL GRINDING OF SOLIDS SHALL BE FROM THE ACTION OF THE RADIAL CUTTER AGAINST THE SHREDDING RING. THE RADIAL CUTTER AND SHREDDING RING SHALL BE OF #440 STAINLESS STEEL HARDENED TO 58-60 ROCKWELL C.

PUMP IMPELLER

THE PUMP IMPELLER SHALL BE OF THE RECESSED TYPE TO PROVIDE AN OPEN UNOBSTRUCTED PASSAGE THROUGH THE VOLUTE FOR THE GROUND SOLIDS. THE IMPELLER SHALL BE CONSTRUCTED OF STAINLESS STEEL AND SHALL HAVE PUMP OUT VANES ON THE BACK SIDE OF THE IMPELLER TO KEEP SOLIDS FROM LOWER SEAL AND REDUCE PRESSURE AT THE SEAL FACES. IMPELLER SHALL BE THREADED ONTO THE STAINLESS STEEL SHAFT.

PUMP & MOTOR CASTINGS

ALL IRON CASTING SHALL BE OF HIGH TENSILE CAST IRON AND SHALL BE PROPERLY CLEANED, PRE-TREATED WITH CHROMIC RINSE, AND PAINTED WITH A HIGH QUALITY ENAMEL PAINT. ALL PUMP COMPONENTS THAT ARE NOT CAST IRON OR STAINLESS STEEL SHALL BE GALVANIZED OR PAINTED WITH BAKED-ON EPOXY. ALL FASTENERS SHALL BE #302 STAINLESS STEEL.

VALVE BOX

SHALL BE CPC MODEL VB3242 FIBERGLASS VALVE BOX WITH U.S. FOUNDRY APS-150 ALUMINUM VALVE BOX COVER. VALVE BOX SHALL BE PRE-PLUMBED USING ALL SCHEDULE 80 PVC PIPING AND FITTINGS, AND SHALL INCLUDE TWO (2), 2" SCHEDULE 80 PVC FLANGED BALL CHECK VALVES, AND THREE (3), 2" SCHEDULE 80 PVC FLANGED GATE VALVES. (ONE (1) 2" GATE VALVE IS SUPPLIED AS AN EMERGENCY PUMP-OUT). PVC PIPING IN VALVE BOX, AND WET WELL SHALL BE CONNECTED AND HELD IN PLACE BY CPC MODEL 32 RESILIENT MOUNT SEALING SYSTEM TO COMPENSATE FOR POSSIBLE UNEVEN SETTLING OF BASIN OR VALVE BOX. SYSTEM SHALL BE PRESSURE TESTED AT 150 P.S.I. PRIOR TO SHIPMENT.

ALUMINUM HATCH COVERS

SHALL BE FABRICATED FROM 1/4" ALUMINUM DIAMOND PLATE AND BUILT TO WITHSTAND A LOAD OF 150 LB. P.S.F. AND SHALL BE MANUFACTURED BY U.S. FOUNDRY, HALLIDAY, OR EQUAL. STAINLESS STEEL BOLTS, NUTS AND HINGES - LOCKING STAPLE.

FLOATS

SHALL BE ANCHOR SCIENTIFIC S30N0 ROTO-FLOATS OR EQUAL.

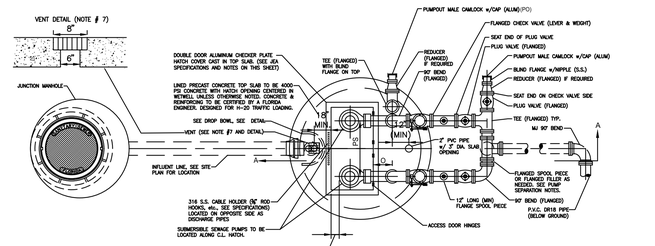
ACCESSORIES

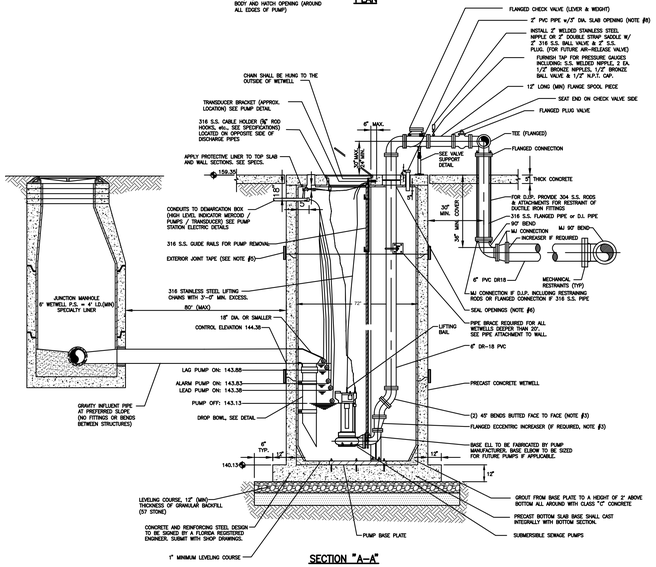
-- STAINLESS STEEL CABLE RACK
-- STAINLESS STEEL LIFT CABLES

ANTI-FLOATATION

CONCRETE IS RECOMMENDED TO PREVENT FLOATATION OF THE FIBERGLASS BASIN. THE FOLLOWING LISTS THE MIN. CUBIC FEET REQUIRED PER FOOT OF BASIN DEPTH.

BASIN DIAMETER	CUBIC FEET OF CONCRETE REQUIRED PER FOOT OF BASIN DEPTH
24"	2
30"	3.5
36"	5
48"	8.5
60"	12





SECTION "A–A"

WETWELL SECTION

NOT TO SCALE

CELLULAR BASED PUMP STATION MONITORING SYSTEM (TELEMETRY):

SHALL BE CAPABLE OF AUTOMATICALLY GENERATING REPORTS OF ESSENTIAL INFORMATION INCLUDING THE FOLLOWING:

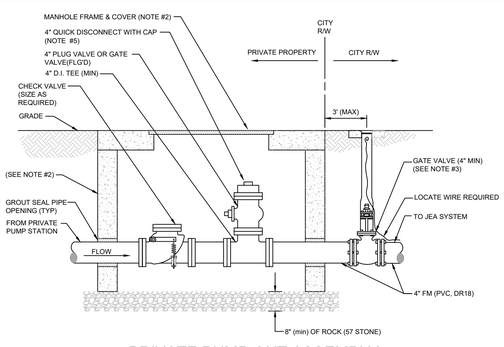
1. HAVE A BATTERY BACK-UP WITH A MINIMUM OF TWO HOURS RESERVE AND ABLE TO REMAIN FUNCTIONING IN THE EVENT OF ELECTRICAL SERVICE FAILURE.
2. HAVE GPS LOCATION CAPABILITY FOR MAPPING PURPOSES.
3. REPORT LOSS/RESTORE OF UTILITY POWER.
4. REPORT PUMP 1 FAILURE.
5. REPORT PUMP 2 FAILURE.
6. REPORT PUMP 1 SEAL FAILURE.
7. REPORT PUMP 2 SEAL FAILURE.
8. REPORT WETWELL HIGH LEVEL ALARM.
9. REPORT PHASE-UNDER VOLTAGE ALARM.
10. REPORT CONTROL POWER STATUS.
11. REPORT REAL TIME ALERT NOTIFICATIONS VIA TEXT AND EMAIL.
12. PROVIDE/REPORT REAL TIME UPDATES.
13. AT A MINIMUM, CAPABLE TO NOTIFY BY CALL OR TEXT MESSAGE THE:
    -THE PUMP STATION OWNER,
    -ANY PROPERTY MANAGE, AND
    -THE CONTRACTED PUMP STATION OPERATOR
14. MUST BE PRIVATELY OWNED BY THE PUMP STATION OWNER, NOT RENTED OR LEASED.

PRIVATE PUMP STATION NOTES :

1. PRECAST CONCRETE WETWELL SHALL MEET A.S.T.M. C-478 STANDARD, ENTIRE INSIDE SURFACE OF WETWELL & TOP SLAB SHALL BE LINED WITH APPROVED LINER PER JEA SPECIFICATION 446. LINER INSTALLER MUST BE CERTIFIED BY LINER MANUFACTURER. SUBMIT CERTIFICATION WITH SHOP DRAWING SUBMITTAL. SEE SPECIFICATIONS. THE EXCAVATED HOLE SHALL BE DRY (DE-WATERED) DURING THE WET WELL INSTALLATION. (SEE WET WELL DIMENSIONS TABLE).
2. CONTRACTOR TO HAVE STANDARD PENETRATION SOIL BORING PRIOR TO INSTALLATION. TAKEN AT WETWELL LOCATION, SHALL BE SUBMITTED PRIOR TO DESIGN SUBMITTAL. SOIL BORING SHALL BE A MINIMUM OF 15' DEEPER THAN WETWELL BOTTOM OR UNTIL SUITABLE SOIL IS LOCATED UP TO A MAXIMUM OF 25' NELOW WET WELL BOTTOM.
3. ALL EXTERIOR JOINTS OF PRECAST CONCRETE WET WELLS SHALL BE SEALED WITH A 12" WIDE RUBBERIZED ASPHALT MEMBRANE TAPE. (SEE JEA SPEC).
4. THE VOID AREAS BETWEEN TOP SLAB AND FORCE MAIN PIPE SHALL BE SEALED WITH EUCOLASTIC BY EUCLID CITEM CO. OR APPROVED EQUAL SEAL. ALL OTHER OPENINGS IN CONCRETE TOP WITH NON-SHRINK GROUT, EXCEPT AS DESCRIBED IN NOTE #5. PROVIDE INSECT SCREEN SECURED TO TOP.
5. PROVIDE HOLE IN TOP AND INSERT 8" X 8" ALUMINUM GRATE VENT CONSTRUCTED OF 1 ¾" WIDE X ¾" THICK PLATE. PROVIDE 6" X 6" OPENING THROUGH CONCRETE TOP.
6. PROVIDE 2" PIPE (PVC, SCH. 80) THROUGH CONCRETE TOP WITH CAPPED TOP AND OPEN END BOTTOM. SEAL AROUND CONCRETE TOP WITH NON-SHRINK GROUT. IN THE FUTURE, THIS PIPE WILL BE UTILIZED FOR THE CONSTRUCTION OF THE AIR-RELEASE VALVE PIPING.
7. SITE GRADE IS 6" (MIN) BELOW TOP ELEVATION OF PUMP STATION SLAB.
8. IN SILTS, CLAY OR HIGHLY ORGANIC SOILS (FINE-GRADED SOILS INCLUDING SOIL GROUPS ML, CL, OL, MH, CH, OH, AND PT) THE SOILS SHALL BE OVER-EXCAVATED AN ADDITIONAL 12" (AT A MIN.) AND BACKFILL WITH GRANULAR BACKFILL (57 STONE).
9. FIBERGLASS WETWELL MAY BE SUBSTITUTED FOR A CONCRETE WETWELL WITH SUFFICIENT DOCUMENTATION THAT WETWELL CAN WITHSTAND ALL EARTH LOADS, HOOP STRESS AND BUOYANCY FORCES AT THE REQUIRED DEPTH OF THE WETWELL AT THIS LOCATION.

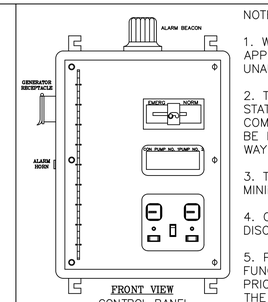
PRIVATE PUMP OUT ASSEMBLY NOTES :

1. SEWER PUMP-OUT BOX SHALL BE CONSTRUCTED ON PRIVATE PROPERTY AND LOCATED AT THE R/W LINE. THE PREFERRED CONSTRUCTION LAYOUT IS SHOWN ABOVE.
2. ASSEMBLY TO BE ENCLOSED WITHIN A 48"x48" (MIN) PRECAST CONCRETE BOX WITH OPEN BOTTOM W/H-20 TRAFFIC LOADING COVER OR TYPE "C" MANHOLE OPEN BOTTOM WITH FRAME AND COVER (NON-JEA LOGO TYPE COVER).
3. A JEA APPROVED GATE VALVE (4" MIN) SHALL BE PROVIDED AT THE R/W LINE FOR ALL FORCE MAIN PIPING WHICH EXCEEDS 15' LINEAR FEET WITHIN THE CITY R/W AREA. THE GATE VALVE AT THE R/W LINE IS NOT REQUIRED WHERE THE CONNECTION (CONNECTION AT JEA MAIN) IS LOCATED ON THE SAME SIDE OF THE STREET AS THE PUMP-OUT BOX (SHORT-SIDE SERVICE) AND CONSIST OF 15 LINEAR FEET OR LESS WITHIN THE CITY R/W AREA.
4. NO CONNECTIONS PERMITTED INTO JEA FORCE MAINS WHICH ARE GREATER THAN 12" WITHOUT PRIOR JEA APPROVAL.
5. QUICK DISCONNECT WITH CAP SHALL BE ALUMINUM AND BE POSITIONED DIRECTLY UNDER MANHOLE LID FOR ACCESS.



PRIVATE PUMP OUT ASSEMBLY

JANUARY 2022 PLATE S-46

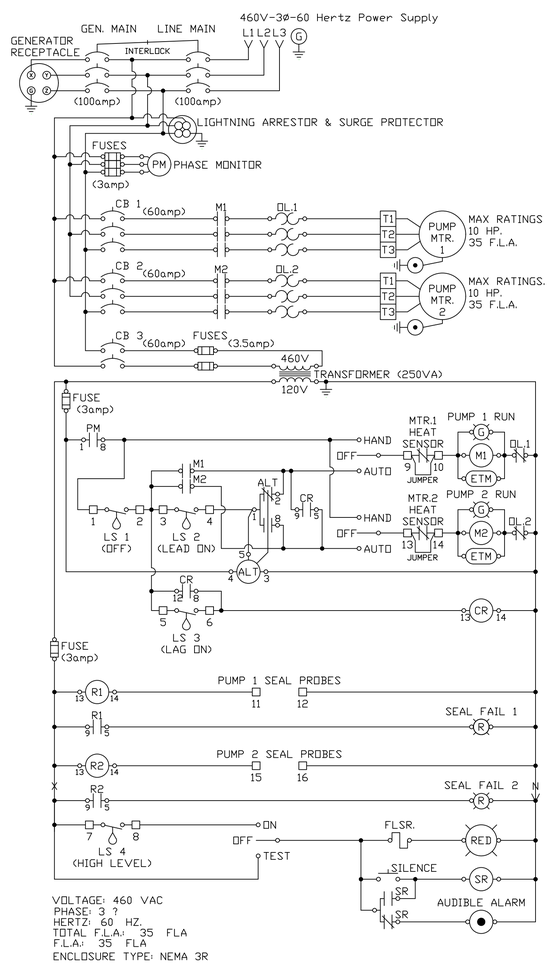


NOTES:

1. WET WELL AND VALVE BOX MUST HAVE LOCKABLE HATCH OR OTHER APPROPRIATE FEATURES TO DISCOURAGE THE ENTRY OF ANIMALS OR UNAUTHORIZED PERSONS.
2. THE OWNER SHALL CONTRACT THE SERVICES OF A CERTIFIED LIFT STATION SERVICE COMPANY TO SERVICE AND MAINTAIN ALL SYSTEM COMPONENTS WITHIN PRIVATE PROPERTY. THE UTILITY COMPANY SHALL BE RESPONSIBLE FOR ALL COMPONENTS WITHIN THE PUBLIC RIGHT OF WAY.
3. THE CERTIFIED LIFT STATION SERVICE COMPANY SHALL HAVE AS A MINIMUM, ONE SPARE PART OF ALL SYSTEM COMPONENTS.
4. CONTRACTOR TO VERIFY ELECTRICAL SERVICE AND REPORT ANY DISCREPANCY FROM PLANS.
5. PUMPS SHALL HAVE CONTROL LOGIC TO ALTERNATE THE LEAD PUMP FUNCTION. LOGIC SHALL ALSO ACTIVATE AN AUDIBLE AND VISIBLE ALARM PRIOR TO ALTERNATION AND TO THE START OF THE LAG PUMP SHOULD THE LEAD PUMP FAIL.
6. AN 4032 FIBERGLASS ENCLOSURE WITH PADLOCK LATCHED COVER PANEL SHALL HAVE PROVISION TO AUTOMATICALLY ALTERNATE THE PUMPS.

EMERGENCY SIGN

AN EMERGENCY SIGN SHALL BE FABRICATED OF DURABLE WEATHER RESISTANT MATERIAL AND INSTALLED AT THE PUMP STATION IN A LOCATION VISIBLE TO THE PUBLIC. SIGN SHALL CONTAIN:
1. 24–HOUR TELEPHONE NUMBER OF OPERATOR.
2. NAME AND ADDRESS OF OPERATOR.
3. NAME AND ADDRESS OF PUMP STATION OWNER.



SCHEMATIC DIAGRAM
230 3PHASE

NOTE:
ELECTRICAL INFORMATION AND WIRE DIAGRAM IS PROVIDED FOR SCHEMATIC PURPOSES ONLY. CONTROL PANEL, FLOATS, ALL WIRING SHALL BE PROVIDED BY CONTRACTOR TO OPERATE A SUBMERSIBLE STYLE WASTEWATER PUMP STATION AS GENERALLY DEPICTED ON THIS DRAWING. ALL ELECTRICAL COMPONENTS SHALL MEET ALL LOCAL AND STATE ELECTRICAL CODES. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASSOCIATED ELECTRICAL PERMITS, INSPECTIONS, AND FEES.

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000	DATE DECEMBER 2022	SCALE: AS SHOWN	DESIGNED BY: ----	DRAWN BY: ----	CHECKED BY: ----

PRIVATE PUMP STATION DETAIL

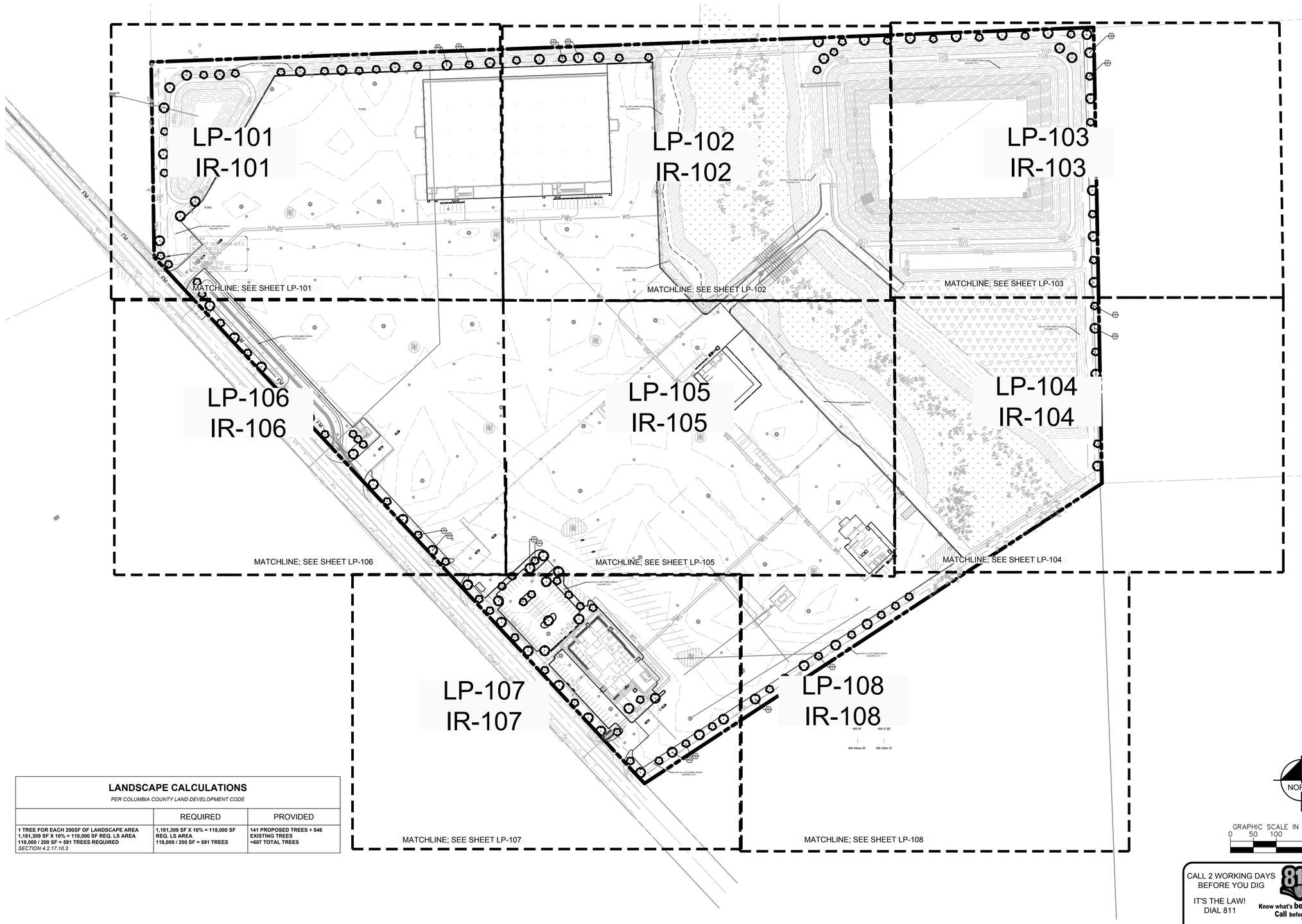
COLUMBIA STORM PROCESSING AND SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY FLORIDA

COLUMBIA COUNTY

SHEET NUMBER
C-815

Plotted By:Eide, Grace Sheet Set:FPL – COLUMBIA COUNTY Layout:C-815 PRIVATE PUMP STATION DETAIL December 16, 2022 08:44:31pm K:\JAX_Civil\045687000 – FPL Columbia County\Cadd\PlanSheets\C-815 PRIVATE PUMP STATION DETAIL.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LANDSCAPE CALCULATIONS

PER COLUMBIA COUNTY LAND DEVELOPMENT CODE

	REQUIRED	PROVIDED
1 TREE FOR EACH 200SF OF LANDSCAPE AREA **1,181,309 SF X 10% = 118,000 SF REQ. LS AREA** **118,000 / 200 SF = 591 TREES REQUIRED** *SECTION 4.2.17.10.3*	**1,181,309 SF X 10% = 118,000 SF REQ. LS AREA** **118,000 / 200 SF = 591 TREES**	**141 PROPOSED TREES + 546 EXISTING TREES** **=687 TOTAL TREES**

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's **below.** **Call** before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

OVERALL PLANTING PLAN

COLUMBIA COUNTY SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
LP-100

Plotted By: Jurney, Matthew Sheet Set: FPL COLUMBIA COUNTY – LP Layout: LP-100 December 16, 2022 09:10:37am K:\JAX_LALP\045687000 – fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Planting Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY – LP Layout:LP-101 December 16, 2022 09:10:45am K:\JAX_LALP\045687000 – fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Planting Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

SOD ALL DISTURBED AREAS (SQUARE CUT)

POND

SOD ALL DISTURBED AREAS (SQUARE CUT)

MATCHLINE; SEE SHEET LP-102

MATCHLINE; SEE SHEET LP-106

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	MIN. CAL	MIN. HEIGHT
	JS	72	JUNIPERUS SILICICOLA	SOUTHERN RED CEDAR	CONT	4" MIN	12' MIN.
	QV	69	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	CONT	4" MIN	12' MIN.

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	MIN. SIZE	SPACING
+	VM	79	VIBURNUM OBOVATUM 'MRS. SCHILLER'S DELIGHT'	MRS. SCHILLERS DELIGHT WALTER'S VIBURNUM	CONT.	18" HT	

LP-101 LP-102 LP-103 LP-104 LP-105 LP-106 LP-107 LP-108

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

PLANTING PLAN

COLUMBIA COUNTY SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
LP-101

Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY – LP Layout:LP-102 December 16, 2022 09:10:54pm K:\JAX_t\ALP\045687000 – fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Planting Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

MATCHLINE; SEE SHEET LP-101

MATCHLINE; SEE SHEET LP-103

MATCHLINE; SEE SHEET LP-105

SOD ALL DISTURBED AREAS (SQUARE CUT)

SOD ALL DISTURBED AREAS (SQUARE CUT)

LP-101 LP-102 LP-103 LP-104 LP-105 LP-106 LP-107 LP-108

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	MIN. CAL	MIN. HEIGHT
	JS	72	JUNIPERUS SILICICOLA	SOUTHERN RED CEDAR	CONT	4" MIN	12` MIN.
	QV	69	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	CONT	4" MIN	12` MIN.
SHRUBS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**ROOT**	**MIN. SIZE**	**SPACING**
	VM	79	VIBURNUM OBOVATUM 'MRS. SCHILLER'S DELIGHT'	MRS. SCHILLERS DELIGHT WALTER'S VIBURNUM	CONT.	18" HT	

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

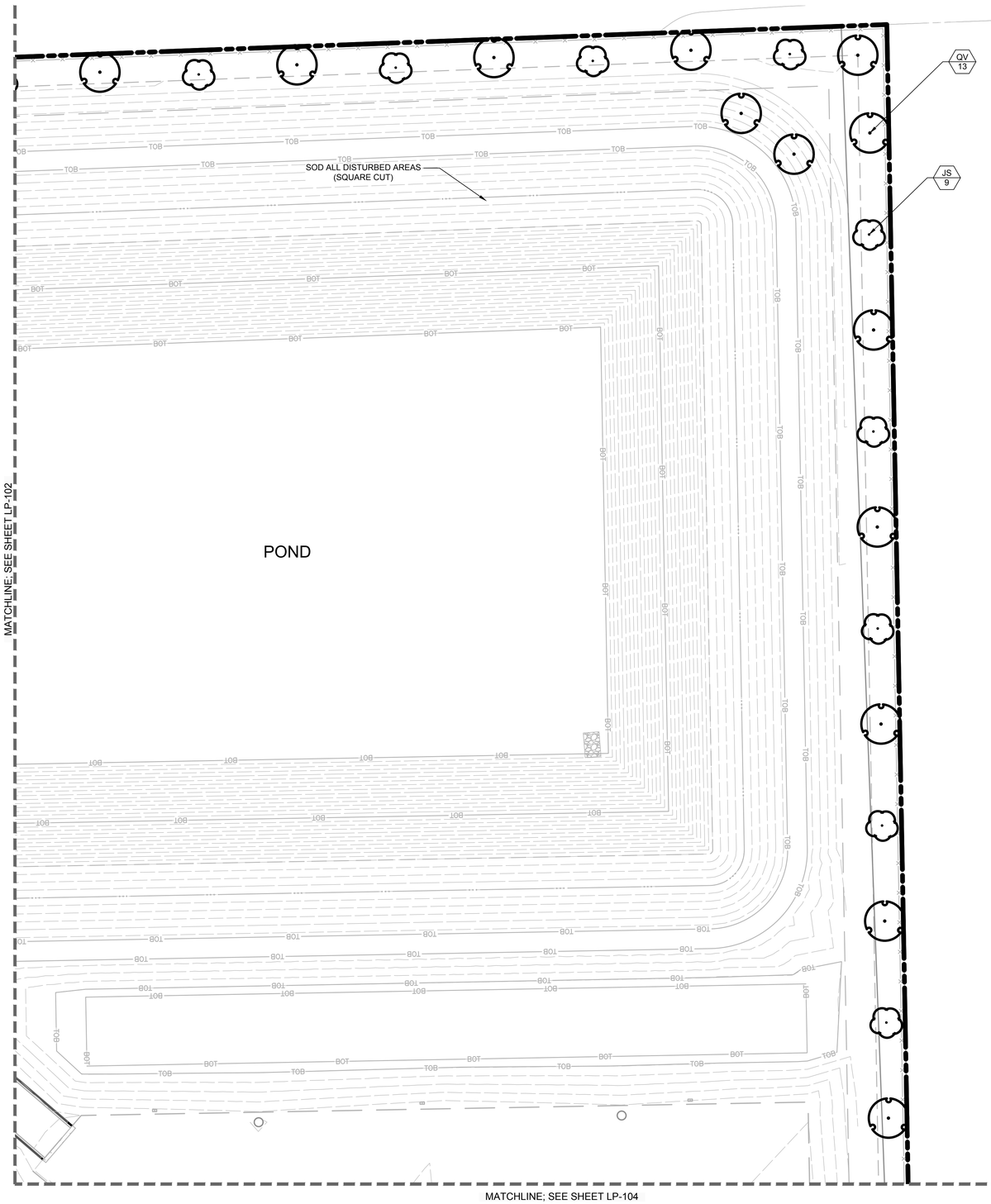
PLANTING PLAN

COLUMBIA COUNTY SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
LP-102

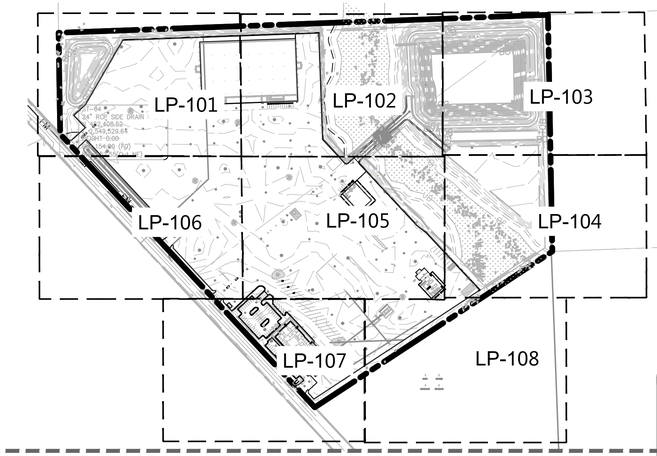
Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY – LP Layout:LP-103 December 16, 2022 09:11:02am K:\JAX_LALP\045687000 – fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Planting Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	MIN. CAL	MIN. HEIGHT
	JS	72	JUNIPERUS SILICICOLA	SOUTHERN RED CEDAR	CONT	4" MIN	12' MIN.
	QV	69	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	CONT	4" MIN	12' MIN.

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	MIN. SIZE	SPACING
+	VM	79	VIBURNUM OBOVATUM 'MRS. SCHILLER'S DELIGHT'	MRS. SCHILLERS DELIGHT WALTER'S VIBURNUM	CONT.	18" HT	



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below, Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

PLANTING PLAN

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
LP-103

MATCHLINE; SEE SHEET LP-101

SOD ALL DISTURBED AREAS (SQUARE CUT)

JS 6

QV 4

MATCHLINE; SEE SHEET LP-105

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	MIN. CAL	MIN. HEIGHT
	JS	72	JUNIPERUS SILICICOLA	SOUTHERN RED CEDAR	CONT	4" MIN	12' MIN.
	QV	69	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	CONT	4" MIN	12' MIN.
SHRUBS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**ROOT**	**MIN. SIZE**	**SPACING**
	VM	79	VIBURNUM OBOVATUM 'MRS. SCHILLER'S DELIGHT'	MRS. SCHILLERS DELIGHT WALTER'S VIBURNUM	CONT.	18" HT	

LP-101 LP-102 LP-103 LP-104 LP-105 LP-106 LP-107 LP-108

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below, Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

MATCHLINE; SEE SHEET LP-107

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DEC 2022
SCALE:	AS SHOWN
DESIGNED BY:	KHA
DRAWN BY:	KNH
CHECKED BY:	MAJ

PLANTING PLAN

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
LP-104

Plotted By: Jurney, Matthew Sheet Set: FPL COLUMBIA COUNTY – LP Layout: LP-104 December 16, 2022 09:11:10am K:\JAX_LALP\045687000 – fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Planting Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By: Jurney, Matthew Sheet Set: FPL COLUMBIA COUNTY – LP Layout: LP-105 December 16, 2022 09:11:19am K:\JAX_LALP\045687000 – fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Planting Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

MATCHLINE; SEE SHEET LP-102

MATCHLINE; SEE SHEET LP-106

MATCHLINE; SEE SHEET LP-104

SOD ALL DISTURBED AREAS (SQUARE CUT)

LP-101 LP-102 LP-103 LP-104 LP-105 LP-106 LP-107 LP-108

QV 3 JS 1

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	MIN. CAL	MIN. HEIGHT
	JS	72	JUNIPERUS SILICICOLA	SOUTHERN RED CEDAR	CONT	4" MIN	12' MIN.
	QV	69	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	CONT	4" MIN	12' MIN.
SHRUBS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**ROOT**	**MIN. SIZE**	**SPACING**
	VM	79	VIBURNUM OBOVATUM 'MRS. SCHILLER'S DELIGHT'	MRS. SCHILLERS DELIGHT WALTER'S VIBURNUM	CONT.	18" HT	

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

MATCHLINE; SEE SHEET LP-107

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

PLANTING PLAN

COLUMBIA COUNTY SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
LP-105

MATCHLINE; SEE SHEET LP-103

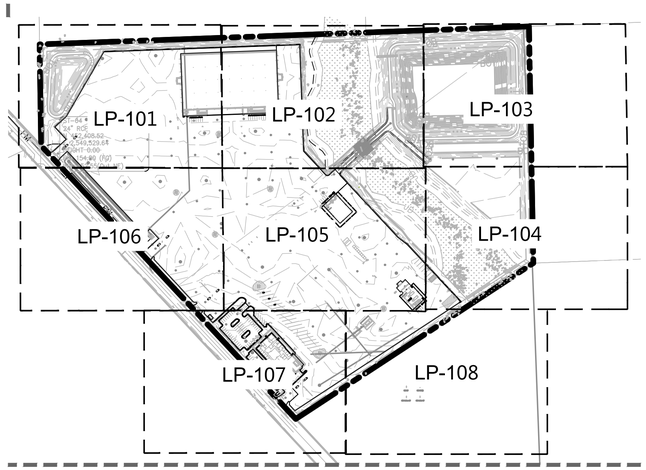
SOD ALL DISTURBED AREAS
(SQUARE CUT)

MATCHLINE; SEE SHEET LP-105

MATCHLINE; SEE SHEET LP-108

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	MIN. CAL	MIN. HEIGHT
	JS	72	JUNIPERUS SILICICOLA	SOUTHERN RED CEDAR	CONT	4" MIN	12' MIN.
	QV	69	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	CONT	4" MIN	12' MIN.
SHRUBS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**ROOT**	**MIN. SIZE**	**SPACING**
	VM	79	VIBURNUM OBOVATUM 'MRS. SCHILLER'S DELIGHT'	MRS. SCHILLERS DELIGHT WALTER'S VIBURNUM	CONT.	18" HT	



JS 10

QV 8

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

PLANTING PLAN

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
LP-106

Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY - LP Layout:LP-106 December 16, 2022 09:11:29am K:\JAX_LA\LP\045687000 - fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Planting Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

MATCHLINE; SEE SHEET LP-105

SOD ALL DISTURBED AREAS
(SQUARE CUT)

JS
19

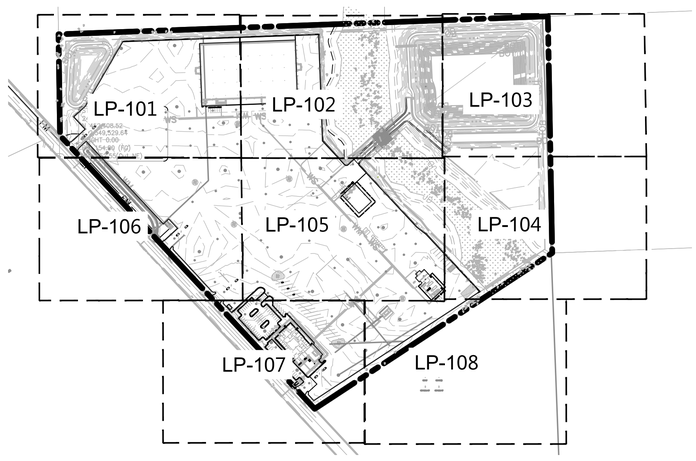
QV
17

SOD ALL DISTURBED AREAS
(SQUARE CUT)

MATCHLINE; SEE SHEET LP-108

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	MIN. CAL	MIN. HEIGHT
	JS	72	JUNIPERUS SILICICOLA	SOUTHERN RED CEDAR	CONT	4" MIN	12' MIN.
	QV	69	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	CONT	4" MIN	12' MIN.
SHRUBS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**ROOT**	**MIN. SIZE**	**SPACING**
+	VM	79	VIBURNUM OBOVATUM 'MRS. SCHILLER'S DELIGHT'	MRS. SCHILLERS DELIGHT WALTER'S VIBURNUM	CONT.	18" HT	



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

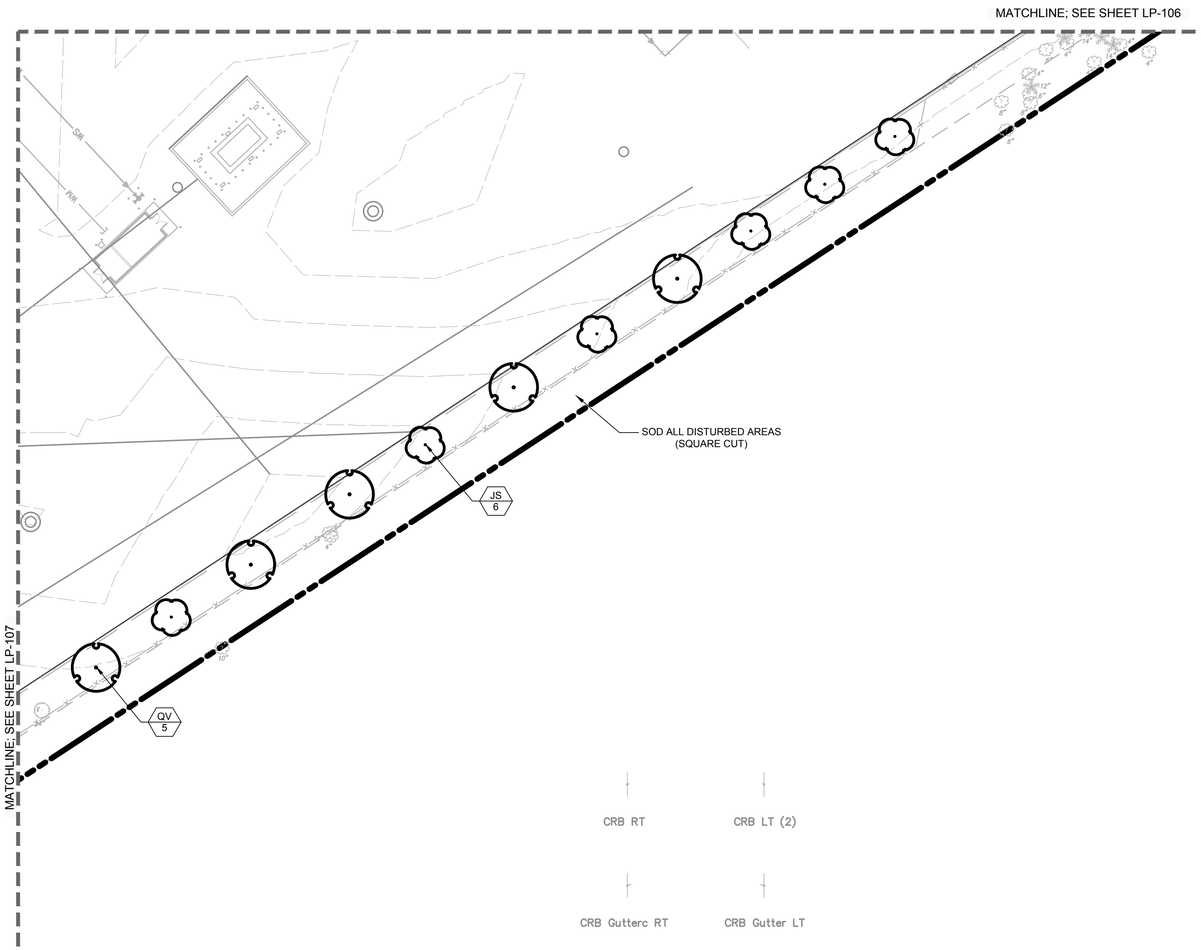
PLANTING PLAN

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
LP-107

Plotted By: Jurney, Matthew Sheet Set: FPL COLUMBIA COUNTY - LP Layout: LP-107 December 16, 2022 09:11:39am K:\JAX_LA\LP\045687000 - fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Planting Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

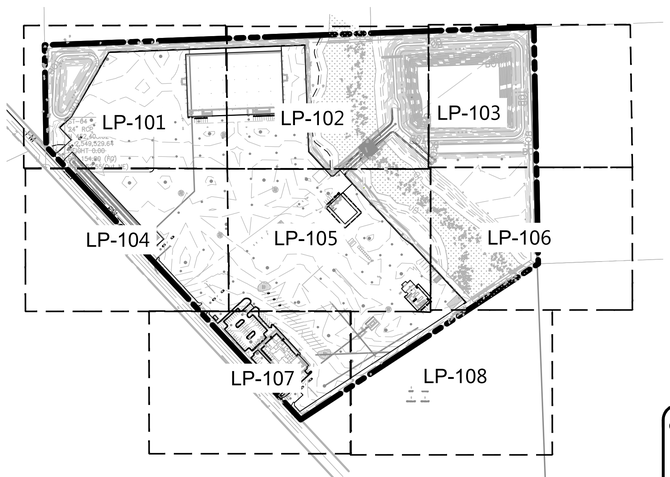
Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY – LP Layout:LP-108 December 16, 2022 09:11:48am K:\JAX_LA\LP\045687000 – fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Planting Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	MIN. CAL	MIN. HEIGHT
	JS	72	JUNIPERUS SILICICOLA	SOUTHERN RED CEDAR	CONT	4" MIN	12' MIN.
	QV	69	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	CONT	4" MIN	12' MIN.

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	MIN. SIZE	SPACING
+	VM	79	VIBURNUM OBOVATUM 'MRS. SCHILLER'S DELIGHT'	MRS. SCHILLERS DELIGHT WALTER'S VIBURNUM	CONT.	18" HT	



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

PLANTING PLAN

COLUMBIA COUNTY SERVICE CENTER

PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
LP-108

TYPICAL PLANTING NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: OBTAINING ALL APPLICABLE PERMITS, FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS SPECIFIED HEREIN.

2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

1. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED AND DESIGNATED TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BMP DEVICES ACCORDING TO ALL REGULATORY AGENCY'S STANDARDS THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.

3. THE CONTRACTOR SHALL SUBMIT A DETAILED PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN UNLESS THE WORK REQUIRES NOTHING MORE THAN A DIRECT APPLICATION OF THE DEPARTMENT OF TRANSPORTATION (DOT) DESIGN STANDARDS IF A DIRECT APPLICATION OF THE STANDARD IS PROPOSED. THE CONTRACTOR SHALL SUBMIT IN WRITING A STATEMENT INDICATING THE STANDARD INDEX AND PAGE NUMBER NO LESS THAN 10 BUSINESS DAYS PRIOR TO START OF CONSTRUCTION. WHEN A DIRECT APPLICATION OF DOT STANDARD IS NOT ACCEPTABLE A PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN SHALL BE PREPARED BY A PROFESSIONAL ENGINEER WHO HAS SUCCESSFULLY COMPLETED ADVANCED TRAINING IN MAINTENANCE OF TRAFFIC, AS DEFINED BY DOT FOR APPROVAL BY THE COUNTY ENGINEER'S REPRESENTATIVE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. THE INFORMATION AND DATA SHOWN WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AT OR CONTIGUOUS TO THE SITE IS APPROXIMATE AND BASED ON INFORMATION FURNISHED BY THE OWNER OF SUCH UNDERGROUND FACILITIES OR ON PHYSICAL APPURTENANCES OBSERVED IN THE FIELD. THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA. THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR; REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA; LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION; THE SAFETY AND PROTECTION THEREOF; REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

5. NOTIFY THE OWNER IMMEDIATE IF ANY DAMAGES OCCUR TO EXISTING TREES.

6. CALL ONE CALL (811) TO LOCATE UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

C. PROTECTION OF EXISTING PLANT MATERIALS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC., THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED ON SITE.

2. SEE TREE MITIGATION PLAN AND NOTES.

D. MATERIALS

1. GENERAL

MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE OWNER. UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SAMPLE SIZE
MULCH	ONE (1) CUBIC FOOT
TOPSOIL MIX	ONE (1) CUBIC FOOT
PLANTS	ONE (1) OF EACH VARIETY* (OR TAGGED IN NURSERY)

*IN SOME INSTANCES AN IMAGE TAKEN OF THE PLANT WITH A MEASURING STICK WILL SUFFICE

2. PLANT MATERIALS

a. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE GRADE NO. 1 OR BETTER AS DETERMINED BY THE APPROPRIATE STATE DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE.

b. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

c. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

1. CONTRACTOR SHALL TEST EXISTING SOIL AND AMEND AS NECESSARY IN ACCORDANCE WITH THE GUIDELINES BELOW:

2. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF TWO PARTS OF TOPSOIL AND ONE PART SAND, AS DESCRIBED BELOW. CONTRACTOR TO SUBMIT SAMPLES AND PH TESTING RESULTS OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

a. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND HAVE A PH BETWEEN 5.5 AND 7.0.

b. CONTRACTOR SHALL COORDINATE ALL EARTHWORK OPERATIONS WITHIN TREE PROTECTION AREAS WITH THE PROJECT ARBORIST PRIOR TO BEGINNING WORK.

c. ALL TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE, FINE LOAMY SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY THAT PRODUCES HEAVY GROWTH.

d. TOPSOIL, PH RANGE OF 5.5 TO 7.0, 3-5 PERCENT ORGANIC MATERIAL, MINIMUM, FREE FROM SUBSOIL, OBJECTIONABLE WEEDS, LITTER, SODS, STIFF CLAY, STONES LARGER THAN ONE INCH IN DIAMETER, STUMPS, ROOTS, TRASH, TOXIC SUBSTANCES OR ANY OTHER MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH.

e. VERIFY AMOUNT STOCKPILED IF ANY, AND SUPPLY ADDITIONAL AS NEEDED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST FOUR INCHES DEEP. DO NOT OBTAIN TOPSOIL FROM BOGS OR MARSHES.

2. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.

F. WATER

1. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC... IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

* WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

* FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

1. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A MINIMUM DEPTH OF THREE (3) INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE). SEE PLAN FOR MULCH SPECIFICATIONS.

2. PROVIDE A THREE (3) INCH MINIMUM LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA WITH PINNED WEED BARRIER FABRIC IN EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT (6' MINIMUM) PLANTED UNDER THIS CONTRACT.

I. DIGGING AND HANDLING

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO THE SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.

2. BALLED AND BURLAPPED (B&B), AND FIELD GROWN (FG) PLANTS SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROUTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS.

3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.

4. PROTECTION OF PALMS; ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.

5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.

2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.

3. ROOT BOUND PLANTS ARE NOT ACCEPTABLE AND WILL BE REJECTED.

4. RPG="ROOTS PLUS GROWER" CONTAINER PRODUCTS SHALL BE USED WHERE SPECIFIED.

K. MATERIALS LIST

1. QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION.

2. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

L. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.

3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.

O. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.

2. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36" OR TO NATIVE SOIL. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE POOR DRAINAGE CONDITION PLANTING DETAIL.

3. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS SPECIFIED HEREIN. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.

4. COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ONSITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

5. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.

6. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACK FILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SOIL MIXTURE SECTION OF THESE SPECIFICATIONS. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. IF POOR DRAINAGE EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.

7. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.

8. FOLLOW PLANTING SPECIFICATIONS IN PLANTING DETAILS

9. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET, ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE. ALL BURLAP, ROPE, WIRES, BASKETS, ETC.., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.

10. TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY CERTIFIED ARBORIST, IN ACCORDANCE WITH ANSI A-300.

11. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOW ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" THE PLANTING SOIL MIXTURE AS SPECIFIED IN SOIL MIXTURE SECTION OF THESE SPECIFICATIONS. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.

12. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO ENSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.

ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK.

P. LAWN SODDING

1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.

2. ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.

3. PREPARE LOOSE BED FOUR (4) INCHES DEEP. RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.

4. SODDING

a. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.

b. THE SOD SHALL BE CERTIFIED TO MEET APPROPRIATE STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.

c. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.

5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

6. LAWN MAINTENANCE

a. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).

b. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING TREE GUY SUPPORTS NECESSARY) TO ENSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR OR UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

S. FINAL INSPECTION AND ACCEPTANCE OF WORK

FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

T. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED (INCLUDING SOD) BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

2. ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.

3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE AND IRRIGATION MAINTENANCE, THE CONTRACTOR SHOULD VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER. CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

NO.	REVISIONS	DATE	BY

Kimley»Horn
© ### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

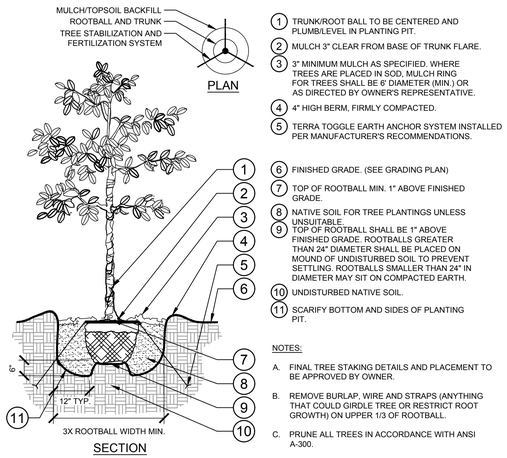
KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

PLANTING PLAN NOTES

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
LP-150

Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY - LP Layout:LP-150 December 16, 2022 09:11:49am K:\JAX_LALP\045687000 - fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Planting Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. MULCH 3" CLEAR FROM BASE OF TRUNK FLARE.
3. 3" MINIMUM MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. 4" HIGH BERM, FIRMLY COMPACTED.
5. TERRA TOGGLE EARTH ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. NATIVE SOIL FOR TREE PLANTINGS UNLESS UNSUITABLE.
9. TOP OF ROOTBALL SHALL BE 1" ABOVE FINISHED GRADE. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.

NOTES:

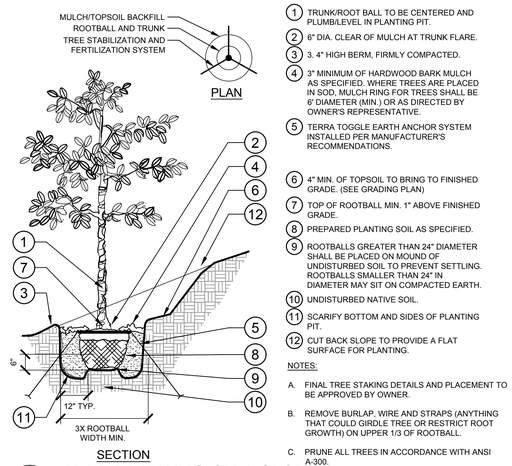
A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

1 TREE PLANTING

L-PL-TYP-01



1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 3. 4" HIGH BERM, FIRMLY COMPACTED.
4. 3" MINIMUM OF HARDWOOD BARK MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
5. TERRA TOGGLE EARTH ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. 4" MIN. OF TOPSOIL TO BRING TO FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.
12. CUT BACK SLOPE TO PROVIDE A FLAT SURFACE FOR PLANTING.

NOTES:

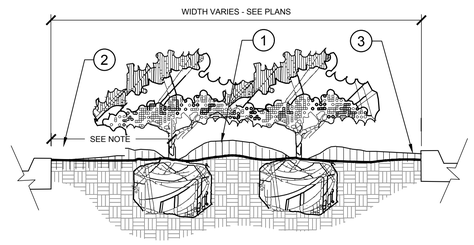
A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

2 TREE PLANTING ON A SLOPE

L-PL-TYP-02



1. CROWN ISLANDS @ 5:1 SLOPES (OR AS SPECIFIED ON THE LANDSCAPE PLANS).
2. CLEAR ZONE: 36" MIN. FROM BACK OF CURB TO CENTER OF NEAREST SHRUB. CLEAR ZONE SHALL CONTAIN 3" CONTINUOUS MULCH OR TURF, SEE PLANS.
3. 2" MIN VERTICAL CLEARANCE, TOP OF CURB TO TOP OF MULCH.

NOTES:

A. EXCAVATE SOIL FOLLOWING THE SHRUB/GROUNDCOVER PLANTING DETAIL AND BACKFILL WITH APPROVED PLANTING MIX.

B. PROTECT AND RETAIN ALL CURBS AND BASE. COMPACTED SUBGRADE TO REMAIN FOR STRUCTURAL SUPPORT OF CURB SYSTEM (TYP).

C. ALL ISLANDS SHALL UTILIZE POOR DRAINAGE DETAIL WHEN PERCOLATION RATES ARE 2" PER HOUR OR LESS.

3 PLANTED PARKING LOT ISLANDS/MEDIANS

NTS L-PL-TYP-04

1. INSTALL CONTINUOUS MULCH BED ADJACENT TO PARKING SPACES AS SHOWN. MULCH SHALL BE MIN. 3" DEEP. NO POP-UP IRRIGATION HEADS SHALL BE LOCATED WITHIN 24" OF A PARKING SPACE ON ANY SIDE.
2. CURB / PARKING LOT EDGE.

4 PARKING SPACE/ CURB PLANTING

NTS L-PL-TYP-07

1. FINISH GRADE (SEE GRADING PLANS).
2. BACKFILL WITH NATIVE SOIL AS SPECIFIED.
3. FILTER CLOTH, MIRAFI 500X OR BETTER.
4. SLOPE BOTTOM TO DRAIN.
5. AUGURED HOLE Ø ±18" PENETRATE THROUGH OCCLUDING LAYER TO WATER TABLE OR TO A DEPTH OF 7' TO ASSURE PROPER PERCOLATION.
6. BACKFILL WITH 1/2" - 3/4" GRAVEL TO REQUIRED DEPTH THROUGH OCCLUDING LAYER TO ASSURE PROPER PERCOLATION.
7. WATER TABLE. (DEPTH VARIES)
8. UNDISTURBED NATIVE SOIL.
9. SET ROOTBALL ON UNDISTURBED STABLE SUBSOIL SO THAT TOP OF ROOT BALL IS 1" ABOVE FINISHED GRADE.

NOTES:

A. THIS DETAIL SHALL BE IMPLEMENTED WHERE PERCOLATION RATES ARE 2" PER HOUR OR LESS.

B. CONTRACTOR TO PERFORM PERCOLATION TEST AS REQUIRED. AND NOTIFY OWNER/LANDSCAPE ARCHITECT.

C. SEE TYPICAL TREE PLANTING DETAIL THIS SHEET FOR PLANT STAKING.

5 POOR DRAINAGE CONDITION

L-PL-TYP-09

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

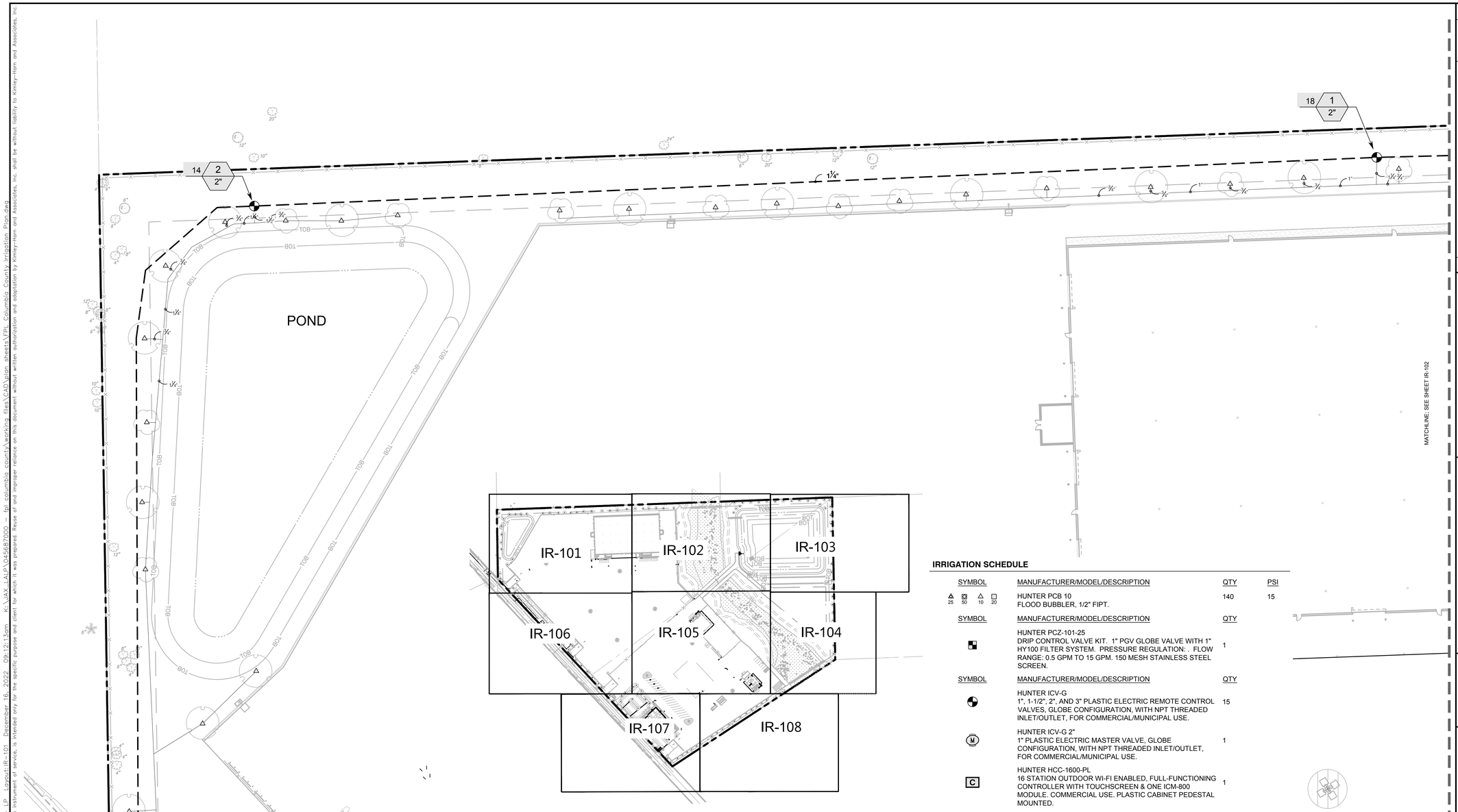
KHA PROJECT	045687000
DATE	DEC 2022
SCALE:	AS SHOWN
DESIGNED BY:	KHA
DRAWN BY:	KNH
CHECKED BY:	MAJ

PLANTING PLAN DETAILS

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
LP-151

Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY - LP Layout:LP-151 December 16, 2022 09:11:49am K:\JAX_LALP\045687000 - fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Planting Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP	RUN TIME	TOTAL WATER
1	HUNTER ICV-G	2"	BUBBLER	18	950.4	30.1	40.8	3.4 in/h	13.24 MIN.	.75 IN.
2	HUNTER ICV-G	2"	BUBBLER	14	1,638	29.1	45.6	3.4 in/h	13.24 MIN.	.75 IN.
3	HUNTER ICV-G	2"	BUBBLER	9	2,396	18.6	30.9	3.4 in/h	13.24 MIN.	.75 IN.
4	HUNTER ICV-G	2"	BUBBLER	11	2,799	19.8	40.8	3.4 in/h	13.24 MIN.	.75 IN.
5	HUNTER ICV-G	2"	BUBBLER	12	3,131	18.1	46.1	3.4 in/h	13.24 MIN.	.75 IN.
6	HUNTER ICV-G	2"	BUBBLER	12.91	3,249	18.1	51.3	0.69 in/h	65.22 MIN.	.75 IN.
7	HUNTER PCZ-101-25	1"	AREA FOR DRIPLINE	6.51	3,302	45.9	56.0	0.71 in/h	63.38 MIN.	.75 IN.
8	HUNTER ICV-G	2"	BUBBLER	13.05	3,472	17.4	54.0	0.61 in/h	73.77 MIN.	.75 IN.
9	HUNTER ICV-G	2"	BUBBLER	9	3,944	18.6	40.2	3.4 in/h	13.24 MIN.	.75 IN.
10	HUNTER ICV-G	2"	BUBBLER	10	4,221	19.7	47.9	3.4 in/h	13.24 MIN.	.75 IN.
11	HUNTER ICV-G	2"	BUBBLER	9	4,924	22.5	50.1	3.4 in/h	13.24 MIN.	.75 IN.
12	HUNTER ICV-G	2"	BUBBLER	4	5,279	17.4	26.0	3.4 in/h	13.24 MIN.	.75 IN.
13	HUNTER ICV-G	2"	BUBBLER	5	5,702	17.7	33.7	3.4 in/h	13.24 MIN.	.75 IN.
14	HUNTER ICV-G	2"	BUBBLER	7	5,754	18.6	48.4	3.4 in/h	13.24 MIN.	.75 IN.
15	HUNTER ICV-G	2"	BUBBLER	6	5,971	20.1	45.1	3.4 in/h	13.24 MIN.	.75 IN.
16	HUNTER ICV-G	2"	BUBBLER	6	6,338	17.0	46.1	3.4 in/h	13.24 MIN.	.75 IN.
	Common Wire				6,586					

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
25 50 10 20	HUNTER PCB 10 FLOOD BUBBLER, 1/2" FIPT.	140	15

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER PCZ-101-25 DRIP CONTROL VALVE KIT. 1" PGV GLOBE VALVE WITH 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: . FLOW RANGE: 0.5 GPM TO 15 GPM. 150 MESH STAINLESS STEEL SCREEN.	1

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	15
M	HUNTER ICV-G 2" 1" PLASTIC ELECTRIC MASTER VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	1
C	HUNTER HCC-1600-PL 16 STATION OUTDOOR WI-FI ENABLED, FULL-FUNCTIONING CONTROLLER WITH TOUCHSCREEN & ONE ICM-800 MODULE. COMMERCIAL USE. PLASTIC CABINET PEDESTAL MOUNTED.	1
RS	HUNTER SOIL-CLIK SOIL SENSOR. THE SOIL-CLIK PROBE USES PROVEN TECHNOLOGY TO MEASURE MOISTURE WITHIN THE ROOT ZONE. WHEN THE PROBE SENSES THAT THE SOIL HAS REACHED ITS DESIRED MOISTURE LEVEL, IT WILL SHUT DOWN IRRIGATION, PREVENTING WATER WASTE.	1
FS	HUNTER HC-100-FLOW 1" FLOW METER FOR USE WITH HYDRAWISE ENABLED CONTROLLER	1
POC	POINT OF CONNECTION POND PUMP	1
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	6,734 L.F.
	IRRIGATION MAINLINE: PVC SCHEDULE 40	6,586 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40	462.0 L.F.

Valve Callout
Valve Number
Valve Flow
Valve Size

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

IRRIGATION PLAN

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
IR-101

Plotted By: Durney, Matthew Sheet Set: FPL COLUMBIA COUNTY - LP Layout: IR-101 December 16, 2022 09:12:13am K:\JAX_LALP\045687000 - fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Irrigation Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

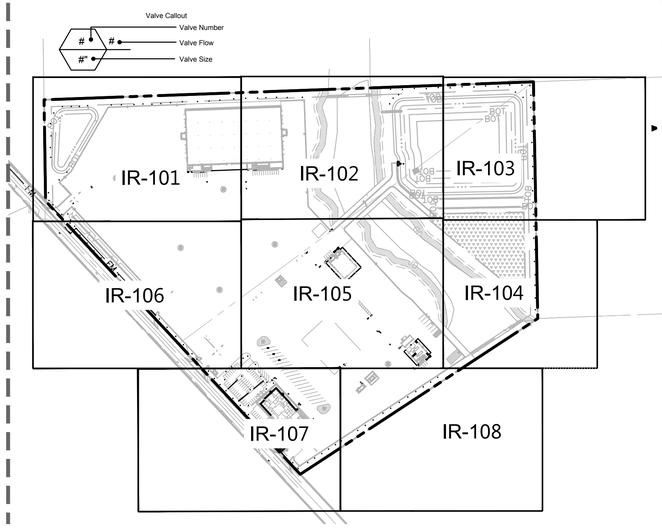
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
25 50 10 20	HUNTER PCB 10 FLOOD BUBBLER, 1/2" FIPT.	140	15

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER PCZ-101-25 DRIP CONTROL VALVE KIT. 1" PGV GLOBE VALVE WITH 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: . FLOW RANGE: 0.5 GPM TO 15 GPM. 150 MESH STAINLESS STEEL SCREEN.	1

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	15
M	HUNTER ICV-G 2" 1" PLASTIC ELECTRIC MASTER VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	1
C	HUNTER HCC-1600-PL 16 STATION OUTDOOR WI-FI ENABLED, FULL-FUNCTIONING CONTROLLER WITH TOUCHSCREEN & ONE ICM-800 MODULE. COMMERCIAL USE. PLASTIC CABINET PEDESTAL MOUNTED.	1
RS	HUNTER SOIL-CLIK SOIL SENSOR. THE SOIL-CLIK PROBE USES PROVEN TECHNOLOGY TO MEASURE MOISTURE WITHIN THE ROOT ZONE. WHEN THE PROBE SENSES THAT THE SOIL HAS REACHED ITS DESIRED MOISTURE LEVEL, IT WILL SHUT DOWN IRRIGATION, PREVENTING WATER WASTE.	1
FS	HUNTER HC-100-FLOW 1" FLOW METER FOR USE WITH HYDRAWISE ENABLED CONTROLLER	1
POC	POINT OF CONNECTION POND PUMP	1
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	6,734 L.F.
	IRRIGATION MAINLINE: PVC SCHEDULE 40	6,586 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40	462.0 L.F.

Valve Callout
- Valve Number
- Valve Flow
- Valve Size



VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP	RUN TIME	TOTAL WATER
1	HUNTER ICV-G	2"	BUBBLER	18	950.4	30.1	40.8	3.4 in/h	13.24 MIN.	.75 IN.
2	HUNTER ICV-G	2"	BUBBLER	14	1,638	29.1	45.6	3.4 in/h	13.24 MIN.	.75 IN.
3	HUNTER ICV-G	2"	BUBBLER	9	2,396	18.6	30.9	3.4 in/h	13.24 MIN.	.75 IN.
4	HUNTER ICV-G	2"	BUBBLER	11	2,799	19.8	40.8	3.4 in/h	13.24 MIN.	.75 IN.
5	HUNTER ICV-G	2"	BUBBLER	12	3,131	18.1	46.1	3.4 in/h	13.24 MIN.	.75 IN.
6	HUNTER ICV-G	2"	BUBBLER	12.91	3,249	18.1	51.3	0.69 in/h	65.22 MIN.	.75 IN.
7	HUNTER PCZ-101-25	1"	AREA FOR DRIPLINE	6.51	3,302	45.9	56.0	0.71 in/h	63.38 MIN.	.75 IN.
8	HUNTER ICV-G	2"	BUBBLER	13.05	3,472	17.4	54.0	0.61 in/h	73.77 MIN.	.75 IN.
9	HUNTER ICV-G	2"	BUBBLER	9	3,944	18.6	40.2	3.4 in/h	13.24 MIN.	.75 IN.
10	HUNTER ICV-G	2"	BUBBLER	10	4,221	19.7	47.9	3.4 in/h	13.24 MIN.	.75 IN.
11	HUNTER ICV-G	2"	BUBBLER	9	4,924	22.5	50.1	3.4 in/h	13.24 MIN.	.75 IN.
12	HUNTER ICV-G	2"	BUBBLER	4	5,279	17.4	26.0	3.4 in/h	13.24 MIN.	.75 IN.
13	HUNTER ICV-G	2"	BUBBLER	5	5,702	17.7	33.7	3.4 in/h	13.24 MIN.	.75 IN.
14	HUNTER ICV-G	2"	BUBBLER	7	5,754	18.6	48.4	3.4 in/h	13.24 MIN.	.75 IN.
15	HUNTER ICV-G	2"	BUBBLER	6	5,971	20.1	45.1	3.4 in/h	13.24 MIN.	.75 IN.
16	HUNTER ICV-G	2"	BUBBLER	6	6,338	17.0	46.1	3.4 in/h	13.24 MIN.	.75 IN.
	Common Wire				6,586					

MATCHLINE; SEE SHEET IR-101
MATCHLINE; SEE SHEET IR-103
MATCHLINE; SEE SHEET IR-105

SOD ALL DISTURBED AREAS (SQUARE CUT)

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

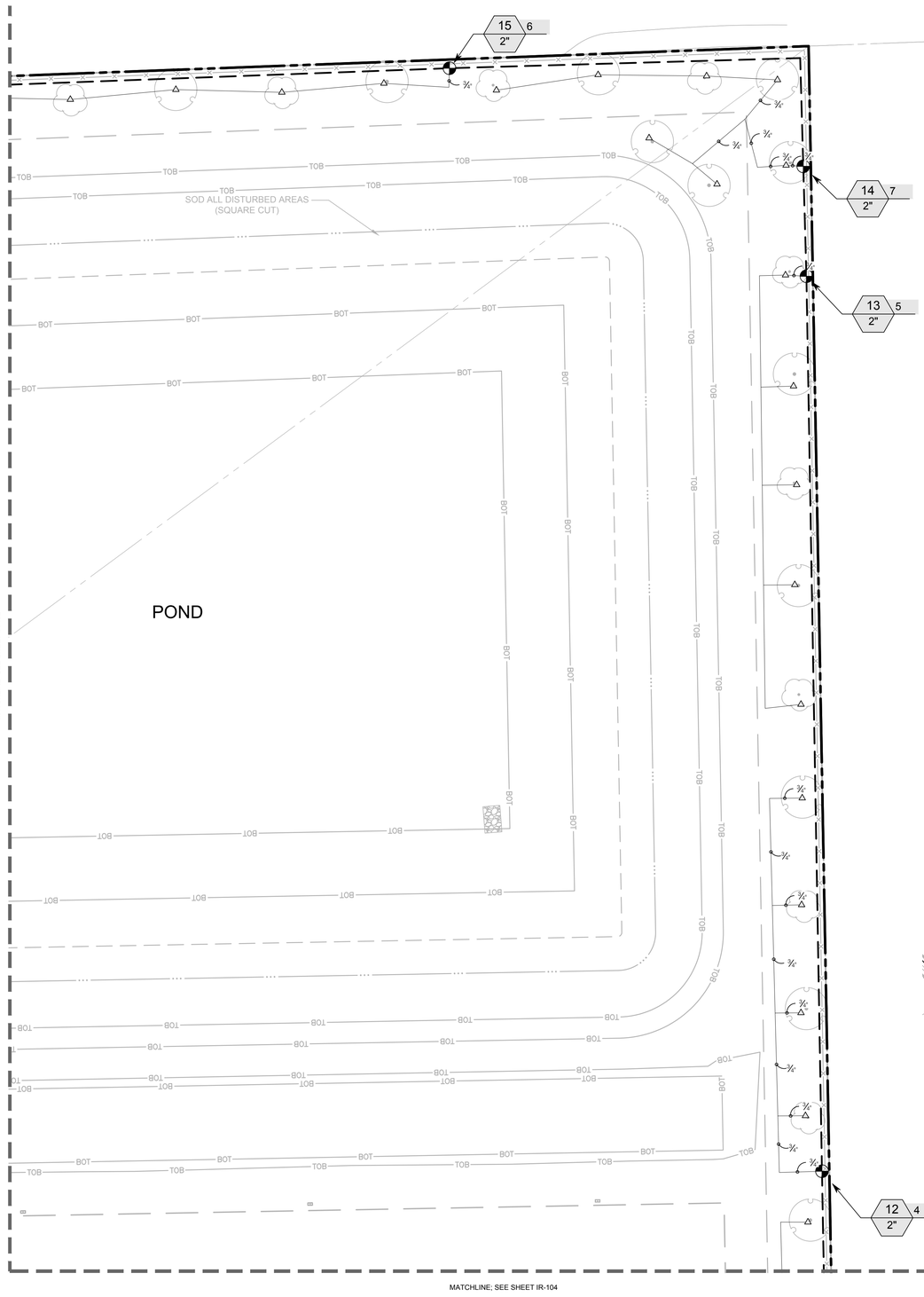
KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

IRRIGATION PLAN

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
IR-102

Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY — LP Layout:IR-102 December 16, 2022 09:12:20am K:\JAX_LALP\045687000 — fpl columbia county\working files\CAD\plan sheets\FPL- Columbia County Irrigation Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP	RUN TIME	TOTAL WATER
1	HUNTER ICV-G	2"	BUBBLER	18	950.4	30.1	40.8	3.4 in/h	13.24 MIN.	.75 IN.
2	HUNTER ICV-G	2"	BUBBLER	14	1,638	29.1	45.6	3.4 in/h	13.24 MIN.	.75 IN.
3	HUNTER ICV-G	2"	BUBBLER	9	2,396	18.6	30.9	3.4 in/h	13.24 MIN.	.75 IN.
4	HUNTER ICV-G	2"	BUBBLER	11	2,799	19.8	40.8	3.4 in/h	13.24 MIN.	.75 IN.
5	HUNTER ICV-G	2"	BUBBLER	12	3,131	18.1	46.1	3.4 in/h	13.24 MIN.	.75 IN.
6	HUNTER ICV-G	2"	BUBBLER	12.91	3,249	18.1	51.3	0.69 in/h	65.22 MIN.	.75 IN.
7	HUNTER PCZ-101-25	1"	AREA FOR DRIPLINE	6.51	3,302	45.9	56.0	0.71 in/h	63.38 MIN.	.75 IN.
8	HUNTER ICV-G	2"	BUBBLER	13.05	3,472	17.4	54.0	0.61 in/h	73.77 MIN.	.75 IN.
9	HUNTER ICV-G	2"	BUBBLER	9	3,944	18.6	40.2	3.4 in/h	13.24 MIN.	.75 IN.
10	HUNTER ICV-G	2"	BUBBLER	10	4,221	19.7	47.9	3.4 in/h	13.24 MIN.	.75 IN.
11	HUNTER ICV-G	2"	BUBBLER	9	4,924	22.5	50.1	3.4 in/h	13.24 MIN.	.75 IN.
12	HUNTER ICV-G	2"	BUBBLER	4	5,279	17.4	26.0	3.4 in/h	13.24 MIN.	.75 IN.
13	HUNTER ICV-G	2"	BUBBLER	5	5,702	17.7	33.7	3.4 in/h	13.24 MIN.	.75 IN.
14	HUNTER ICV-G	2"	BUBBLER	7	5,754	18.6	48.4	3.4 in/h	13.24 MIN.	.75 IN.
15	HUNTER ICV-G	2"	BUBBLER	6	5,971	20.1	45.1	3.4 in/h	13.24 MIN.	.75 IN.
16	HUNTER ICV-G	2"	BUBBLER	6	6,338	17.0	46.1	3.4 in/h	13.24 MIN.	.75 IN.
	Common Wire				6,586					

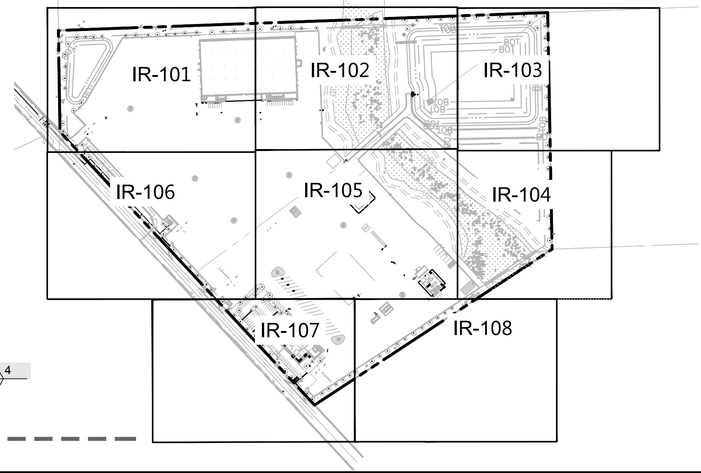
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
25 50 10 20	HUNTER PCB 10 FLOOD BUBBLER, 1/2" FIPT.	140	15

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER PCZ-101-25 DRIP CONTROL VALVE KIT. 1" PGV GLOBE VALVE WITH 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: . FLOW RANGE: 0.5 GPM TO 15 GPM. 150 MESH STAINLESS STEEL SCREEN.	1

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	15
M	HUNTER ICV-G 2" 1" PLASTIC ELECTRIC MASTER VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	1
C	HUNTER HCC-1600-PL 16 STATION OUTDOOR WI-FI ENABLED, FULL-FUNCTIONING CONTROLLER WITH TOUCHSCREEN & ONE ICM-800 MODULE. COMMERCIAL USE. PLASTIC CABINET PEDESTAL MOUNTED.	1
SS	HUNTER SOIL-CLIK SOIL SENSOR. THE SOIL-CLIK PROBE USES PROVEN TECHNOLOGY TO MEASURE MOISTURE WITHIN THE ROOT ZONE. WHEN THE PROBE SENSES THAT THE SOIL HAS REACHED ITS DESIRED MOISTURE LEVEL, IT WILL SHUT DOWN IRRIGATION, PREVENTING WATER WASTE.	1
FS	HUNTER HC-100-FLOW 1" FLOW METER FOR USE WITH HYDRAWISE ENABLED CONTROLLER	1
POC	POINT OF CONNECTION POND PUMP	1
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	6,734 L.F.
	IRRIGATION MAINLINE: PVC SCHEDULE 40	6,586 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40	462.0 L.F.

Valve Callout
- Valve Number
- Valve Flow
- Valve Size



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

IRRIGATION PLAN

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
IR-103

Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY - LP Layout:IR-103 December 16, 2022 09:12:28am K:\JAX_LALP\045687000 - fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Irrigation Plan.dwg
this document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
25 50 10 20	HUNTER PCB 10 FLOOD BUBBLER, 1/2" FIPT.	140	15

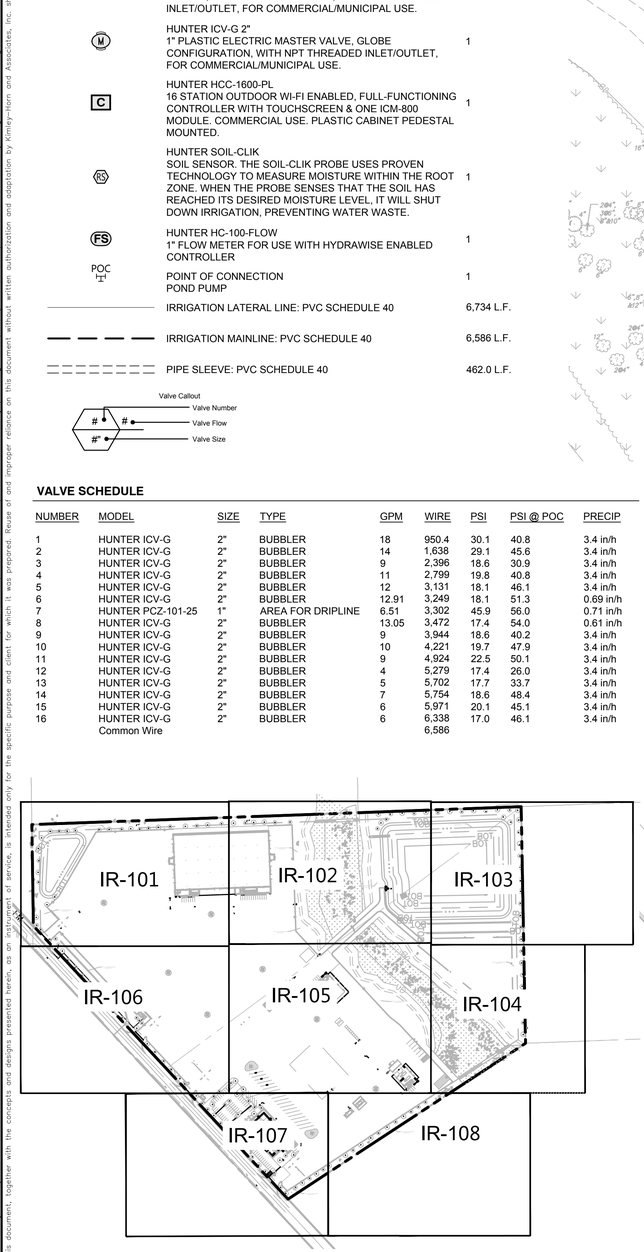
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER PCZ-101-25 DRIP CONTROL VALVE KIT. 1" PGV GLOBE VALVE WITH 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: . FLOW RANGE: 0.5 GPM TO 15 GPM. 150 MESH STAINLESS STEEL SCREEN.	1

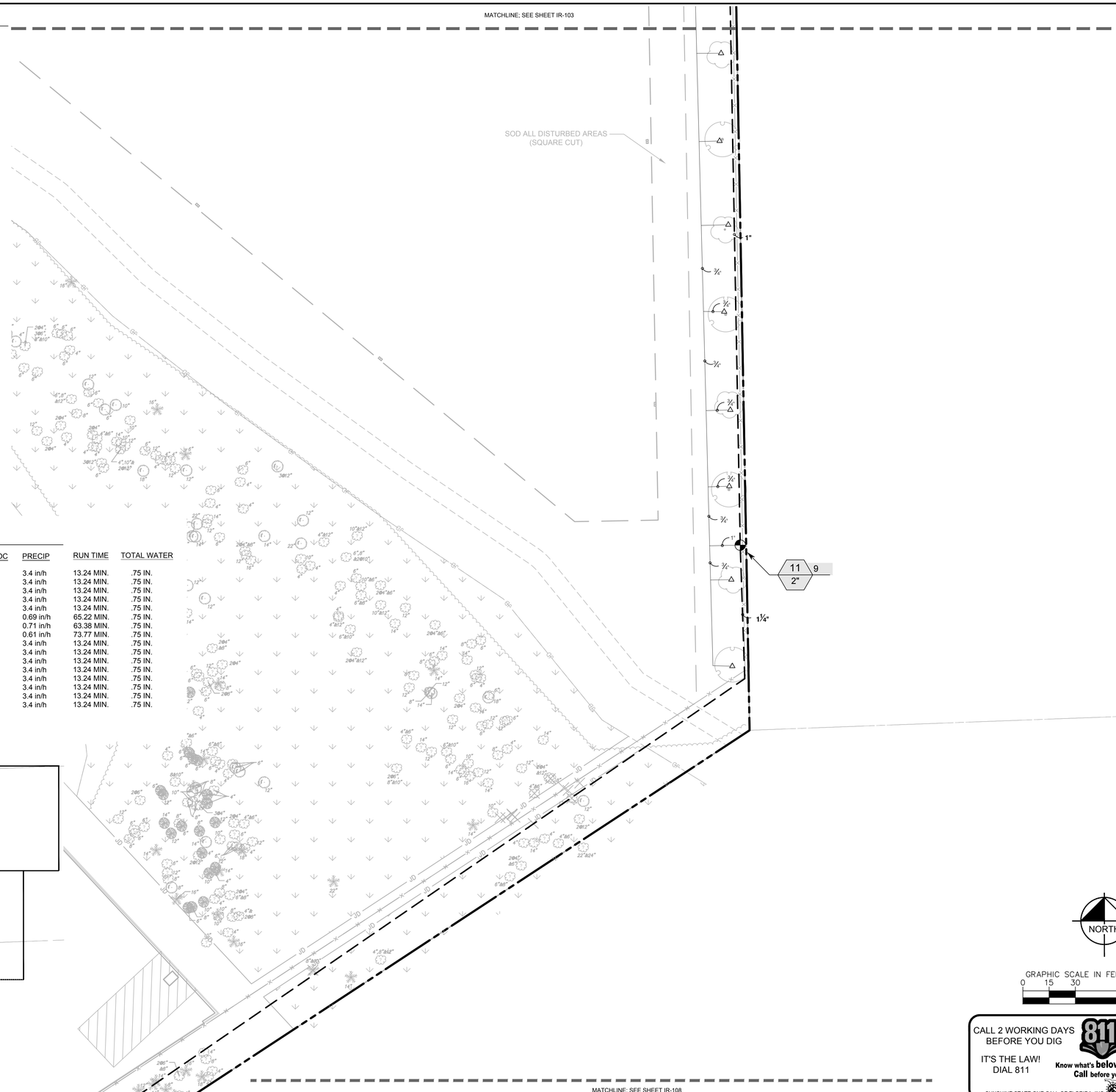
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	15
M	HUNTER ICV-G 2" 1" PLASTIC ELECTRIC MASTER VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	1
C	HUNTER HCC-1600-PL 16 STATION OUTDOOR WI-FI ENABLED, FULL-FUNCTIONING CONTROLLER WITH TOUCHSCREEN & ONE ICM-800 MODULE. COMMERCIAL USE. PLASTIC CABINET PEDESTAL MOUNTED.	1
RS	HUNTER SOIL-CLIK SOIL SENSOR. THE SOIL-CLIK PROBE USES PROVEN TECHNOLOGY TO MEASURE MOISTURE WITHIN THE ROOT ZONE. WHEN THE PROBE SENSES THAT THE SOIL HAS REACHED ITS DESIRED MOISTURE LEVEL, IT WILL SHUT DOWN IRRIGATION, PREVENTING WATER WASTE.	1
FS	HUNTER HC-100-FLOW 1" FLOW METER FOR USE WITH HYDRAWISE ENABLED CONTROLLER	1
POC	POINT OF CONNECTION POND PUMP	1
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	6,734 L.F.
	IRRIGATION MAINLINE: PVC SCHEDULE 40	6,586 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40	462.0 L.F.

Valve Callout
- # — Valve Number
- # — Valve Flow
- #" — Valve Size

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP	RUN TIME	TOTAL WATER
1	HUNTER ICV-G	2"	BUBBLER	18	950.4	30.1	40.8	3.4 in/h	13.24 MIN.	.75 IN.
2	HUNTER ICV-G	2"	BUBBLER	14	1,638	29.1	45.6	3.4 in/h	13.24 MIN.	.75 IN.
3	HUNTER ICV-G	2"	BUBBLER	9	2,396	18.6	30.9	3.4 in/h	13.24 MIN.	.75 IN.
4	HUNTER ICV-G	2"	BUBBLER	11	2,799	19.8	40.8	3.4 in/h	13.24 MIN.	.75 IN.
5	HUNTER ICV-G	2"	BUBBLER	12	3,131	18.1	46.1	3.4 in/h	13.24 MIN.	.75 IN.
6	HUNTER ICV-G	2"	BUBBLER	12.91	3,249	18.1	51.3	0.69 in/h	65.22 MIN.	.75 IN.
7	HUNTER PCZ-101-25	1"	AREA FOR DRIPLINE	6.51	3,302	45.9	56.0	0.71 in/h	63.38 MIN.	.75 IN.
8	HUNTER ICV-G	2"	BUBBLER	13.05	3,472	17.4	54.0	0.61 in/h	73.77 MIN.	.75 IN.
9	HUNTER ICV-G	2"	BUBBLER	9	3,944	18.6	40.2	3.4 in/h	13.24 MIN.	.75 IN.
10	HUNTER ICV-G	2"	BUBBLER	10	4,221	19.7	47.9	3.4 in/h	13.24 MIN.	.75 IN.
11	HUNTER ICV-G	2"	BUBBLER	9	4,924	22.5	50.1	3.4 in/h	13.24 MIN.	.75 IN.
12	HUNTER ICV-G	2"	BUBBLER	4	5,279	17.4	26.0	3.4 in/h	13.24 MIN.	.75 IN.
13	HUNTER ICV-G	2"	BUBBLER	5	5,702	17.7	33.7	3.4 in/h	13.24 MIN.	.75 IN.
14	HUNTER ICV-G	2"	BUBBLER	7	5,754	18.6	48.4	3.4 in/h	13.24 MIN.	.75 IN.
15	HUNTER ICV-G	2"	BUBBLER	6	5,971	20.1	45.1	3.4 in/h	13.24 MIN.	.75 IN.
16	HUNTER ICV-G	2"	BUBBLER	6	6,338	17.0	46.1	3.4 in/h	13.24 MIN.	.75 IN.
	Common Wire				6,586					





NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

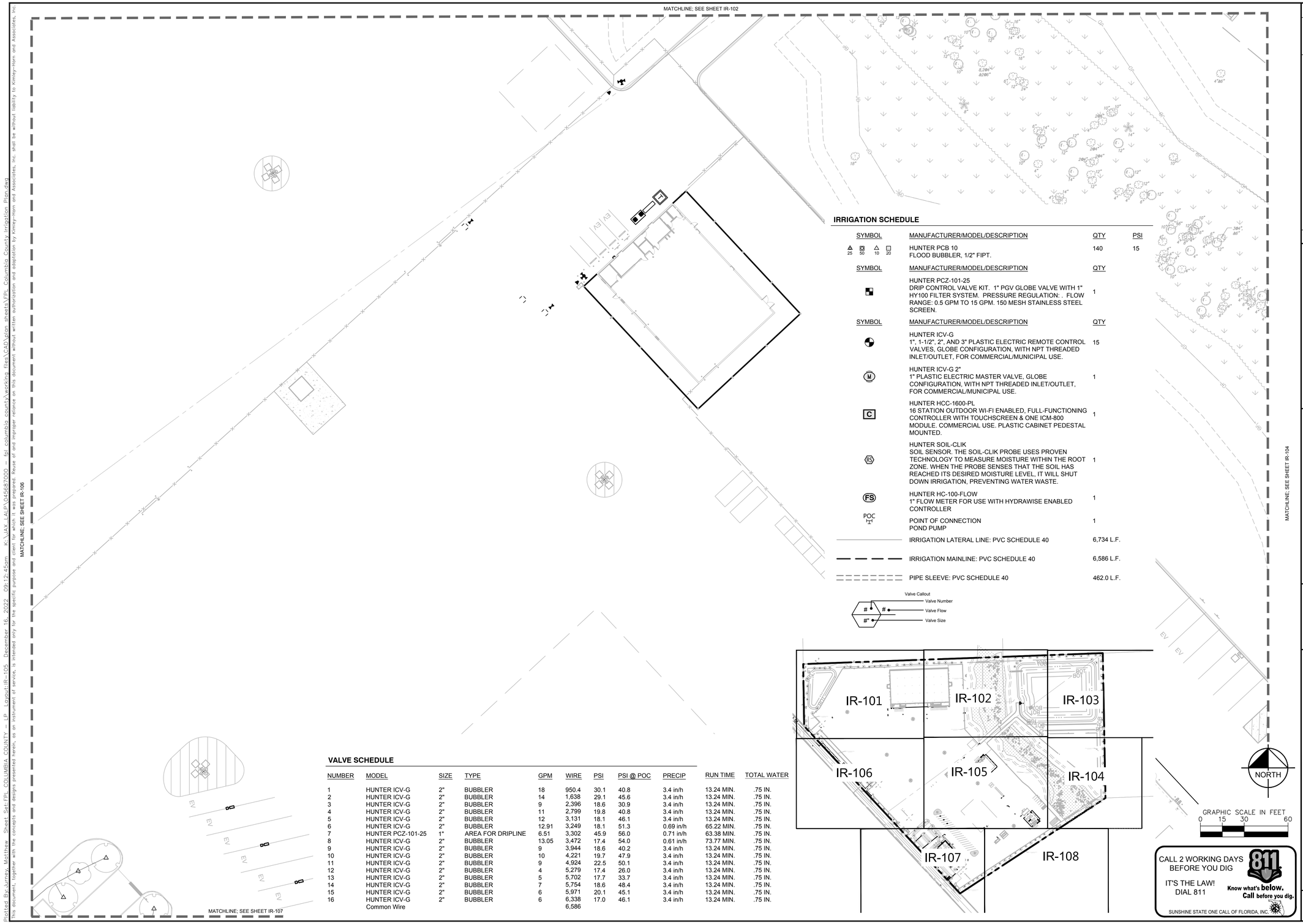
KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

IRRIGATION PLAN

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
IR-104

Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY - LP Layout:IR-104 December 16, 2022 09:12:36am K:\JAX_LALP\045687000 - fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Irrigation Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
25 50 10 20	HUNTER PCB 10 FLOOD BUBBLER, 1/2" FIPT.	140	15

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER PCZ-101-25 DRIP CONTROL VALVE KIT. 1" PGV GLOBE VALVE WITH 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: . FLOW RANGE: 0.5 GPM TO 15 GPM. 150 MESH STAINLESS STEEL SCREEN.	1

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	15
M	HUNTER ICV-G 2" 1" PLASTIC ELECTRIC MASTER VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	1
C	HUNTER HCC-1600-PL 16 STATION OUTDOOR WI-FI ENABLED, FULL-FUNCTIONING CONTROLLER WITH TOUCHSCREEN & ONE ICM-800 MODULE. COMMERCIAL USE. PLASTIC CABINET PEDESTAL MOUNTED.	1
RS	HUNTER SOIL-CLIK SOIL SENSOR. THE SOIL-CLIK PROBE USES PROVEN TECHNOLOGY TO MEASURE MOISTURE WITHIN THE ROOT ZONE. WHEN THE PROBE SENSES THAT THE SOIL HAS REACHED ITS DESIRED MOISTURE LEVEL, IT WILL SHUT DOWN IRRIGATION, PREVENTING WATER WASTE.	1
FS	HUNTER HC-100-FLOW 1" FLOW METER FOR USE WITH HYDRAWISE ENABLED CONTROLLER	1
POC	POINT OF CONNECTION POND PUMP	1
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	6,734 L.F.
	IRRIGATION MAINLINE: PVC SCHEDULE 40	6,586 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40	462.0 L.F.

Valve Callout
- # — Valve Number
- # — Valve Flow
- # — Valve Size

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP	RUN TIME	TOTAL WATER
1	HUNTER ICV-G	2"	BUBBLER	18	950.4	30.1	40.8	3.4 in/h	13.24 MIN.	.75 IN.
2	HUNTER ICV-G	2"	BUBBLER	14	1,638	29.1	45.6	3.4 in/h	13.24 MIN.	.75 IN.
3	HUNTER ICV-G	2"	BUBBLER	9	2,396	18.6	30.9	3.4 in/h	13.24 MIN.	.75 IN.
4	HUNTER ICV-G	2"	BUBBLER	11	2,799	19.8	40.8	3.4 in/h	13.24 MIN.	.75 IN.
5	HUNTER ICV-G	2"	BUBBLER	12	3,131	18.1	46.1	3.4 in/h	13.24 MIN.	.75 IN.
6	HUNTER ICV-G	2"	BUBBLER	12.91	3,249	18.1	51.3	0.69 in/h	65.22 MIN.	.75 IN.
7	HUNTER PCZ-101-25	1"	AREA FOR DRIPLINE	6.51	3,302	45.9	56.0	0.71 in/h	63.38 MIN.	.75 IN.
8	HUNTER ICV-G	2"	BUBBLER	13.05	3,472	17.4	54.0	0.61 in/h	73.77 MIN.	.75 IN.
9	HUNTER ICV-G	2"	BUBBLER	9	3,944	18.6	40.2	3.4 in/h	13.24 MIN.	.75 IN.
10	HUNTER ICV-G	2"	BUBBLER	10	4,221	19.7	47.9	3.4 in/h	13.24 MIN.	.75 IN.
11	HUNTER ICV-G	2"	BUBBLER	9	4,924	22.5	50.1	3.4 in/h	13.24 MIN.	.75 IN.
12	HUNTER ICV-G	2"	BUBBLER	4	5,279	17.4	26.0	3.4 in/h	13.24 MIN.	.75 IN.
13	HUNTER ICV-G	2"	BUBBLER	5	5,702	17.7	33.7	3.4 in/h	13.24 MIN.	.75 IN.
14	HUNTER ICV-G	2"	BUBBLER	7	5,754	18.6	48.4	3.4 in/h	13.24 MIN.	.75 IN.
15	HUNTER ICV-G	2"	BUBBLER	6	5,971	20.1	45.1	3.4 in/h	13.24 MIN.	.75 IN.
16	HUNTER ICV-G	2"	BUBBLER	6	6,338	17.0	46.1	3.4 in/h	13.24 MIN.	.75 IN.
	Common Wire				6,586					

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

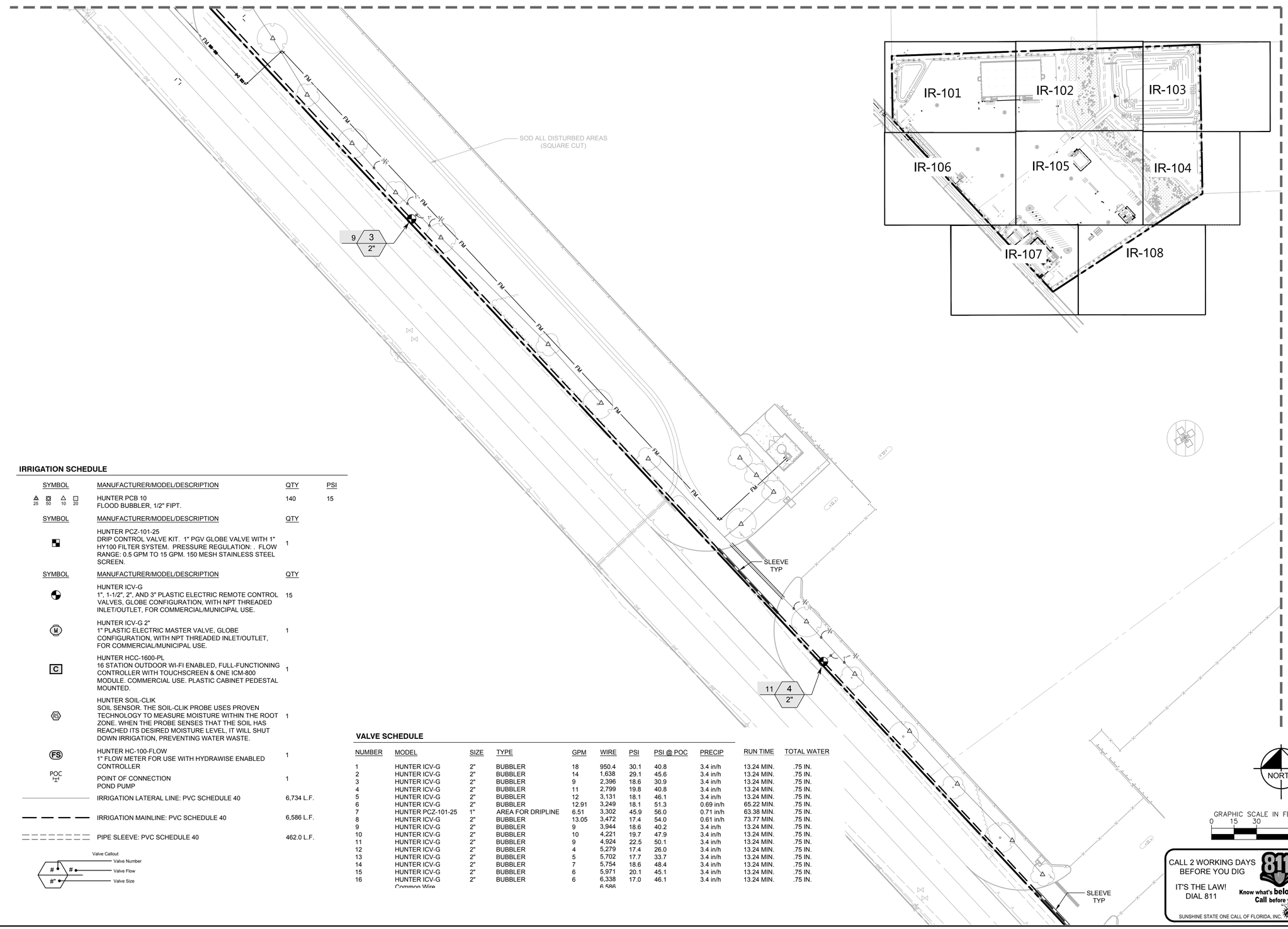
IRRIGATION PLAN

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
IR-105

Plotted By: Jurney, Matthew Sheet Set: FPL COLUMBIA COUNTY – LP Layout: IR-105 December 16, 2022 09:12:45am K:\JAX_LALP\045687000 – fpl columbia county\working files\CAD\plan sheets\FPL- Columbia County Irrigation Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

MATCHLINE; SEE SHEET IR-101



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
25 50 10 20	HUNTER PCB 10 FLOOD BUBBLER, 1/2" FIPT.	140	15

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER PCZ-101-25 DRIP CONTROL VALVE KIT. 1" PGV GLOBE VALVE WITH 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: . FLOW RANGE: 0.5 GPM TO 15 GPM. 150 MESH STAINLESS STEEL SCREEN.	1

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	15
M	HUNTER ICV-G 2" 1" PLASTIC ELECTRIC MASTER VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	1
C	HUNTER HCC-1600-PL 16 STATION OUTDOOR WI-FI ENABLED, FULL-FUNCTIONING CONTROLLER WITH TOUCHSCREEN & ONE ICM-800 MODULE. COMMERCIAL USE. PLASTIC CABINET PEDESTAL MOUNTED.	1
RS	HUNTER SOIL-CLIK SOIL SENSOR. THE SOIL-CLIK PROBE USES PROVEN TECHNOLOGY TO MEASURE MOISTURE WITHIN THE ROOT ZONE. WHEN THE PROBE SENSES THAT THE SOIL HAS REACHED ITS DESIRED MOISTURE LEVEL, IT WILL SHUT DOWN IRRIGATION, PREVENTING WATER WASTE.	1
FS	HUNTER HC-100-FLOW 1" FLOW METER FOR USE WITH HYDRAWISE ENABLED CONTROLLER	1
POC	POINT OF CONNECTION POND PUMP	1
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	6,734 L.F.
	IRRIGATION MAINLINE: PVC SCHEDULE 40	6,586 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40	462.0 L.F.

Valve Callout
Valve Number
Valve Flow
Valve Size

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP	RUN TIME	TOTAL WATER
1	HUNTER ICV-G	2"	BUBBLER	18	950.4	30.1	40.8	3.4 in/h	13.24 MIN.	.75 IN.
2	HUNTER ICV-G	2"	BUBBLER	14	1,638	29.1	45.6	3.4 in/h	13.24 MIN.	.75 IN.
3	HUNTER ICV-G	2"	BUBBLER	9	2,396	18.6	30.9	3.4 in/h	13.24 MIN.	.75 IN.
4	HUNTER ICV-G	2"	BUBBLER	11	2,799	19.8	40.8	3.4 in/h	13.24 MIN.	.75 IN.
5	HUNTER ICV-G	2"	BUBBLER	12	3,131	18.1	46.1	3.4 in/h	13.24 MIN.	.75 IN.
6	HUNTER ICV-G	2"	BUBBLER	12.91	3,249	18.1	51.3	0.69 in/h	65.22 MIN.	.75 IN.
7	HUNTER PCZ-101-25	1"	AREA FOR DRIPLINE	6.51	3,302	45.9	56.0	0.71 in/h	63.38 MIN.	.75 IN.
8	HUNTER ICV-G	2"	BUBBLER	13.05	3,472	17.4	54.0	0.61 in/h	73.77 MIN.	.75 IN.
9	HUNTER ICV-G	2"	BUBBLER	9	3,944	18.6	40.2	3.4 in/h	13.24 MIN.	.75 IN.
10	HUNTER ICV-G	2"	BUBBLER	10	4,221	19.7	47.9	3.4 in/h	13.24 MIN.	.75 IN.
11	HUNTER ICV-G	2"	BUBBLER	9	4,924	22.5	50.1	3.4 in/h	13.24 MIN.	.75 IN.
12	HUNTER ICV-G	2"	BUBBLER	4	5,279	17.4	26.0	3.4 in/h	13.24 MIN.	.75 IN.
13	HUNTER ICV-G	2"	BUBBLER	5	5,702	17.7	33.7	3.4 in/h	13.24 MIN.	.75 IN.
14	HUNTER ICV-G	2"	BUBBLER	7	5,754	18.6	48.4	3.4 in/h	13.24 MIN.	.75 IN.
15	HUNTER ICV-G	2"	BUBBLER	6	5,971	20.1	45.1	3.4 in/h	13.24 MIN.	.75 IN.
16	HUNTER ICV-G	2"	BUBBLER	6	6,338	17.0	46.1	3.4 in/h	13.24 MIN.	.75 IN.
	Common Wire				6,586					

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

IRRIGATION PLAN

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
FLORIDA
COLUMBIA COUNTY

SHEET NUMBER
IR-106

Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY - LP Layout:IR-106 December 16, 2022 09:12:53am K:\JAX_LALP\045687000 - fpl columbia county\working files\CAD\plan sheets\FPL- Columbia County Irrigation Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY – LP Layout:IR-107 December 16, 2022 09:13:00am K:\JAX-LALP\045687000 – fpl columbia county\working files\CAD\plan sheets\FPL- Columbia County Irrigation Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

MATCHLINE; SEE SHEET IR-106

MATCHLINE; SEE SHEET IR-108

SOD ALL DISTURBED AREAS (SQUARE CUT)

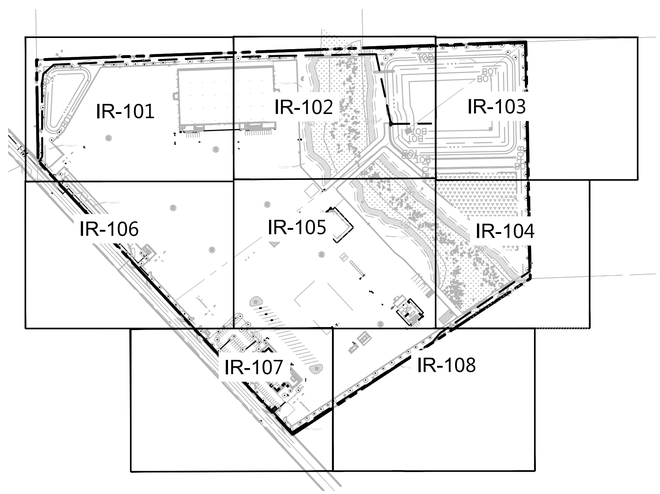
SLEEVE TYP

12 5 2"

12.9 6 2"

6.51 7 1"

13.1 8 2"



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP	RUN TIME	TOTAL WATER
1	HUNTER ICV-G	2"	BUBBLER	18	950.4	30.1	40.8	3.4 in/h	13.24 MIN.	.75 IN.
2	HUNTER ICV-G	2"	BUBBLER	14	1,638	29.1	45.6	3.4 in/h	13.24 MIN.	.75 IN.
3	HUNTER ICV-G	2"	BUBBLER	9	2,396	18.6	30.9	3.4 in/h	13.24 MIN.	.75 IN.
4	HUNTER ICV-G	2"	BUBBLER	11	2,799	19.8	40.8	3.4 in/h	13.24 MIN.	.75 IN.
5	HUNTER ICV-G	2"	BUBBLER	12	3,131	18.1	46.1	3.4 in/h	13.24 MIN.	.75 IN.
6	HUNTER ICV-G	2"	BUBBLER	12.91	3,249	18.1	51.3	0.69 in/h	65.22 MIN.	.75 IN.
7	HUNTER PCZ-101-25	1"	AREA FOR DRIPLINE	6.51	3,302	45.9	56.0	0.71 in/h	63.38 MIN.	.75 IN.
8	HUNTER ICV-G	2"	BUBBLER	13.05	3,472	17.4	54.0	0.61 in/h	73.77 MIN.	.75 IN.
9	HUNTER ICV-G	2"	BUBBLER	9	3,944	18.6	40.2	3.4 in/h	13.24 MIN.	.75 IN.
10	HUNTER ICV-G	2"	BUBBLER	10	4,221	19.7	47.9	3.4 in/h	13.24 MIN.	.75 IN.
11	HUNTER ICV-G	2"	BUBBLER	9	4,924	22.5	50.1	3.4 in/h	13.24 MIN.	.75 IN.
12	HUNTER ICV-G	2"	BUBBLER	4	5,279	17.4	26.0	3.4 in/h	13.24 MIN.	.75 IN.
13	HUNTER ICV-G	2"	BUBBLER	5	5,702	17.7	33.7	3.4 in/h	13.24 MIN.	.75 IN.
14	HUNTER ICV-G	2"	BUBBLER	7	5,754	18.6	48.4	3.4 in/h	13.24 MIN.	.75 IN.
15	HUNTER ICV-G	2"	BUBBLER	6	5,971	20.1	45.1	3.4 in/h	13.24 MIN.	.75 IN.
16	HUNTER ICV-G	2"	BUBBLER	6	6,338	17.0	46.1	3.4 in/h	13.24 MIN.	.75 IN.
	Common Wire				6,586					

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
25 50 10 20	HUNTER PCB 10 FLOOD BUBBLER, 1/2" FIPT.	140	15

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER PCZ-101-25 DRIP CONTROL VALVE KIT. 1" PGV GLOBE VALVE WITH 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: . FLOW RANGE: 0.5 GPM TO 15 GPM. 150 MESH STAINLESS STEEL SCREEN.	1

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	15
M	HUNTER ICV-G 2" 1" PLASTIC ELECTRIC MASTER VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	1
C	HUNTER HCC-1600-PL 16 STATION OUTDOOR WI-FI ENABLED, FULL-FUNCTIONING CONTROLLER WITH TOUCHSCREEN & ONE ICM-800 MODULE. COMMERCIAL USE. PLASTIC CABINET PEDESTAL MOUNTED.	1
RS	HUNTER SOIL-CLIK SOIL SENSOR. THE SOIL-CLIK PROBE USES PROVEN TECHNOLOGY TO MEASURE MOISTURE WITHIN THE ROOT ZONE. WHEN THE PROBE SENSES THAT THE SOIL HAS REACHED ITS DESIRED MOISTURE LEVEL, IT WILL SHUT DOWN IRRIGATION, PREVENTING WATER WASTE.	1
FS	HUNTER HC-100-FLOW 1" FLOW METER FOR USE WITH HYDRAWISE ENABLED CONTROLLER	1
POC	POINT OF CONNECTION POND PUMP	1
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	6,734 L.F.
	IRRIGATION MAINLINE: PVC SCHEDULE 40	6,586 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40	462.0 L.F.

Valve Callout
Valve Number
Valve Flow
Valve Size

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

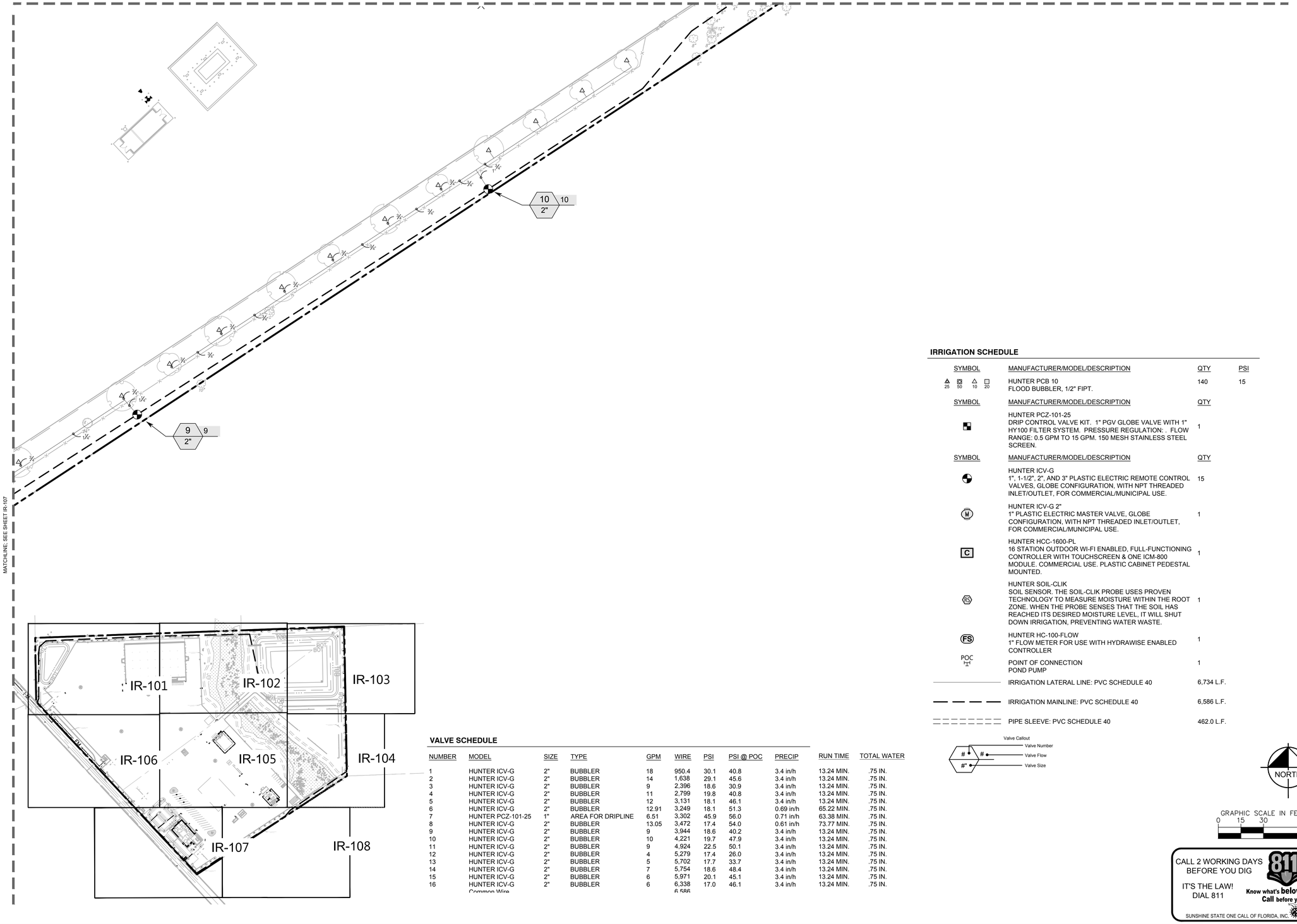
KHA PROJECT	045687000
DATE	DEC 2022
SCALE:	AS SHOWN
DESIGNED BY:	KHA
DRAWN BY:	KNH
CHECKED BY:	MAJ

IRRIGATION PLAN

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
IR-107

MATCHLINE; SEE SHEET IR-104



MATCHLINE; SEE SHEET IR-107

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
25 50 10 20	HUNTER PCB 10 FLOOD BUBBLER, 1/2" FIPT.	140	15

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER PCZ-101-25 DRIP CONTROL VALVE KIT. 1" PGV GLOBE VALVE WITH 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: . FLOW RANGE: 0.5 GPM TO 15 GPM. 150 MESH STAINLESS STEEL SCREEN.	1

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	15
M	HUNTER ICV-G 2" 1" PLASTIC ELECTRIC MASTER VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	1
C	HUNTER HCC-1600-PL 16 STATION OUTDOOR WI-FI ENABLED, FULL-FUNCTIONING CONTROLLER WITH TOUCHSCREEN & ONE ICM-800 MODULE. COMMERCIAL USE. PLASTIC CABINET PEDESTAL MOUNTED.	1
RS	HUNTER SOIL-CLIK SOIL SENSOR. THE SOIL-CLIK PROBE USES PROVEN TECHNOLOGY TO MEASURE MOISTURE WITHIN THE ROOT ZONE. WHEN THE PROBE SENSES THAT THE SOIL HAS REACHED ITS DESIRED MOISTURE LEVEL, IT WILL SHUT DOWN IRRIGATION, PREVENTING WATER WASTE.	1
FS	HUNTER HC-100-FLOW 1" FLOW METER FOR USE WITH HYDRAWISE ENABLED CONTROLLER	1
POC	POINT OF CONNECTION POND PUMP	1
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	6,734 L.F.
	IRRIGATION MAINLINE: PVC SCHEDULE 40	6,586 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40	462.0 L.F.

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP	RUN TIME	TOTAL WATER
1	HUNTER ICV-G	2"	BUBBLER	18	950.4	30.1	40.8	3.4 in/h	13.24 MIN.	.75 IN.
2	HUNTER ICV-G	2"	BUBBLER	14	1,638	29.1	45.6	3.4 in/h	13.24 MIN.	.75 IN.
3	HUNTER ICV-G	2"	BUBBLER	9	2,396	18.6	30.9	3.4 in/h	13.24 MIN.	.75 IN.
4	HUNTER ICV-G	2"	BUBBLER	11	2,799	19.8	40.8	3.4 in/h	13.24 MIN.	.75 IN.
5	HUNTER ICV-G	2"	BUBBLER	12	3,131	18.1	46.1	3.4 in/h	13.24 MIN.	.75 IN.
6	HUNTER ICV-G	2"	BUBBLER	12.91	3,249	18.1	51.3	0.69 in/h	65.22 MIN.	.75 IN.
7	HUNTER PCZ-101-25	1"	AREA FOR DRIPLINE	6.51	3,302	45.9	56.0	0.71 in/h	63.38 MIN.	.75 IN.
8	HUNTER ICV-G	2"	BUBBLER	13.05	3,472	17.4	54.0	0.61 in/h	73.77 MIN.	.75 IN.
9	HUNTER ICV-G	2"	BUBBLER	9	3,944	18.6	40.2	3.4 in/h	13.24 MIN.	.75 IN.
10	HUNTER ICV-G	2"	BUBBLER	10	4,221	19.7	47.9	3.4 in/h	13.24 MIN.	.75 IN.
11	HUNTER ICV-G	2"	BUBBLER	9	4,924	22.5	50.1	3.4 in/h	13.24 MIN.	.75 IN.
12	HUNTER ICV-G	2"	BUBBLER	4	5,279	17.4	26.0	3.4 in/h	13.24 MIN.	.75 IN.
13	HUNTER ICV-G	2"	BUBBLER	5	5,702	17.7	33.7	3.4 in/h	13.24 MIN.	.75 IN.
14	HUNTER ICV-G	2"	BUBBLER	7	5,754	18.6	48.4	3.4 in/h	13.24 MIN.	.75 IN.
15	HUNTER ICV-G	2"	BUBBLER	6	5,971	20.1	45.1	3.4 in/h	13.24 MIN.	.75 IN.
16	HUNTER ICV-G	2"	BUBBLER	6	6,338	17.0	46.1	3.4 in/h	13.24 MIN.	.75 IN.
	Common Wire				6,586					

Valve Callout
Valve Number
Valve Flow
#" Valve Size

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

CALL 2 WORKING DAYS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

No.	REVISIONS	DATE	BY

Kimley»Horn
© ### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

IRRIGATION PLAN

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
IR-108

Plotted By: Jurney, Matthew Sheet Set: FPL COLUMBIA COUNTY – LP Layout: IR-108 December 16, 2022 09:13:07am K:\JAX_x_ALP\045687000 – fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Irrigation Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

TYPICAL IRRIGATION SPECIFICATION AND NOTES

1. THE SYSTEM SHALL BE DESIGNED TO PROVIDE 100% COVERAGE. ANY CHANGES MADE IN THE LAYOUT DUE TO FIELD CONDITIONS SHALL BE IN ACCORDANCE WITH THESE STANDARDS.

2. VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS-CONTRACTOR SHALL FIELD VERIFY.

3. CONTRACTOR TO FIELD VERIFY ALL POINT OF CONNECTION SOURCE INFORMATION INCLUDING PSI AND GPM PRIOR TO CONSTRUCTION.

4. INSTALLATION OF WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS IN SUCH A MANNER AS TO ALLOW FOR A SPEEDY AND ORDERLY COMPLETION OF ALL WORK ON-SITE.

5. IRRIGATION DESIGN IS SCHEMATIC ONLY. FULL AND COMPLETE SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW BY THE OWNER'S REPRESENTATIVE.

6. CONTRACTOR SHALL COORDINATE WITH THE PLANTING PLAN FOR PLANTER BED AND TREE LOCATIONS TO ENSURE ALL PLANT MATERIAL IS COVERED BY 100% HEAD-TO-HEAD IRRIGATION.

7. CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS OF THE FINAL INSTALLATION TO OWNER AT SUBSTANTIAL COMPLETION BEFORE RECEIVING FINAL PAYMENT.

8. IRRIGATION CONTRACTOR TO PROVIDE POWER SUPPLY TO ELECTRIC CONTROLLERS.

9. IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE JURISDICTION.

10. IRRIGATION SYSTEM SHALL NOT BE INSTALLED THROUGH PRESERVED PLANT COMMUNITIES OR WITHIN WETLANDS OR THEIR ASSOCIATED BUFFERS.

11. LOCATE ALL IRRIGATION LINES WITHIN LANDSCAPED AREAS WHENEVER POSSIBLE. ALL LINES UNDER PAVEMENT MUST BE SLEEVED. ALL VALVES SHALL BE LOCATED WITHIN LANDSCAPED AREAS, AS SPECIFIED.

12. MAINLINE SHALL NOT BE LOCATED WITHOUT PRIOR APPROVAL OF THE OWNER'S REPRESENTATIVE.

13. CONTRACTOR TO COORDINATE LOCATION OF ALL METERS AND BACKFLOW ASSEMBLIES WITH PROJECT OWNER.

14. THE IRRIGATION CONTRACTOR SHALL BE DIRECTLY RESPONSIBLE FOR SLEEVING AND DIRECTIONAL BORES.

15. ALL SLEEVES UTILIZED BY THE IRRIGATION CONTRACTOR WHETHER INSTALLED BY HIM OR NOT, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE DEPTH BELOW FINISH GRADE, TO THE NEAREST FOOT OF EACH END OF THE SLEEVE SHALL BE NOTED AT EACH SLEEVE LOCATION ON THE "AS-BUILT" DRAWINGS. ALL SLEEVES ON PLAN FOR WALL PENETRATIONS AND UNDER SIDEWALKS SHALL BE SIZED TWO PIPE SIZES GREATER THAN THE PIPE IT CARRIES.

16. ALL PRESSURIZED MAINLINES AND LATERALS UNDER PAVEMENT SHALL BE WITHIN SLEEVES AS NOTED. WHERE ELECTRIC OR HYDRAULIC VALVE CONTROL LINES PASS THROUGH A SLEEVE WITH OTHER MAIN OR LATERAL LINES THEY SHALL BE CONTAINED WITHIN A SEPARATE, SMALLER CONDUIT.

17. SLEEVES UNDER EXISTING PAVEMENT MUST BE DIRECTIONAL BORE. OPEN CUT IS NOT AN OPTION.

18. NUMBER THE TOP OF ALL VALVE BOX LIDS WITH MINIMUM 1" HEIGHT BLACK LETTERS TO CORRESPOND TO AUTOMATIC AND GATE VALVE DESIGNATIONS. ALL HOSE BIBB VALVE BOXES SHALL BE LABELED IN A SIMILAR MANNER WITH THE DESIGNATION "HB". LETTER OUTSIDE OF TIME CLOCK CABINETS TO CORRESPOND WITH IRRIGATION CLOCK PROGRAM DESIGNATION.

19. THE IRRIGATION CONTRACTOR SHALL INSTALL A COLOR-CODED METAL DETECTABLE MARKING TAPE WHICH CLEARLY NOTES: "CAUTION: IRRIGATION LINE BURIED BELOW." THE TAPE SHALL BE INSTALLED THE FULL LENGTH OF THE IRRIGATION MAINLINE.

20. ALL VALVES, SPLICES WITHIN CONTROL LINES, AND QUICK COUPLERS SHALL BE LOCATED WITHIN NDS VALVE BOXES AS FOLLOWS:

-RECTANGULAR 12"X17" HEAVY DUTY BOX. (PURPLE COVER FOR REUSE TO BE PROVIDED WHERE APPROPRIATE).

21. ALL UNSIZED PIPE SHALL BE 3/4" UNLESS OTHERWISE NOTED ON PLAN. SEE LATERAL PIPE SIZING REQUIREMENTS.

22. EACH TREE AND PALM (AS SHOWN ON THE PLANS) SHALL HAVE A MIN 24 GALLON PER HOUR FLOOD BUBBLER. LOCATE BUBBLER ON THE UPHILL SIDE OF TREES ON ALL SLOPES.

23. ALL IRRIGATION HEADS/DRIP TUBING SHALL BE LOCATED ONE (1) FOOT FROM BACK OF CURB WHEN NEXT TO A ROADWAY. (THIS SHALL NOT INCLUDE PARKING AREAS OR DRIVE AISLES).

24. LOCATE ALL VALVES IN PLANTING BEDS WITH A MINIMUM OF 3'-0" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. PIPE SIZES ON EITHER SIDE OF SECTION VALVES CONNECTING MAINLINE TO SECTION LATERAL SHALL BE ONE (1) PIPE SIZE LARGER THAN VALVE SIZE. WHERE MAINLINES RUN PARALLEL TO PAVEMENT OR CURBING, THE MAINLINE SHALL BE OFFSET 2'-0" FROM THE EDGE OF PAVEMENT OR CURB.

25. IRRIGATION ZONES SHALL BE SEPARATED FOR HIGH AND LOW WATER USE REQUIREMENTS AND OPERATED ON DIFFERENT WATERING CYCLES. BUBBLERS, DRIPLINE, AND SPRAY HEADS SHALL BE SEPARATED ON DIFFERENT VALVES. AT NO TIME SHALL MULTIPLE IRRIGATION HEAD TYPES BE LOCATED ON THE SAME VALVE.

26. ALL DRIP ZONES SHALL BE INSTALLED WITH A FLUSH VALVE AND AIR RELIEF VALVE. IN THE EVENT THAT A DRIP ZONE HAS MORE THAN ONE HIGH OR LOW POINT, MORE THAN ONE AIR RELIEF VALVE OR FLUSH VALVE WILL BE REQUIRED FOR THAT ZONE. DRIPLINE SHALL PROVIDE 0.9 GPH EMITTERS, 18" O.C. WITH 18" LINE SPACING AT A MINIMUM.

27. IRRIGATION CONTRACTOR TO COORDINATE WITH OWNER FOR FINAL CONTROLLER AND RAIN SENSOR LOCATIONS. THE CONTROLLER SHALL BE PLACED IN A LOCKING CABINET IN THE MOST INCONSPICUOUS AREA APPROPRIATE FOR ITS LOCATION. (INDOOR VS. OUTDOOR USE)

28. LOCATE THE AUTOMATIC RAIN SENSOR SHUTOFF DEVICE IN AN AREA THAT IS UNOBSTRUCTED BY TREES, ROOF OVERHANGS, OR ANY OTHER OVERHEAD OBJECT. THE SENSOR SHALL NOT BE PLACED WITHIN THE SPRAY ZONE OF ANY SPRINKLER HEAD, INCLUDING OFF-SITE IRRIGATION. CONTRACTOR SHALL LOCATE SENSOR WITHIN CLOSE PROXIMITY TO THE IRRIGATION CONTROLLER.

29. CONTRACTOR SHALL PERFORM HYDRO-TESTING OF MAIN LINES.

HYDRO-TESTING TO BE PERFORMED AS LISTED:

THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FORTY-EIGHT (48) HOURS IN ADVANCE OF TESTING. PRIOR TO BACKFILLING, CONTRACTOR SHALL FILL PIPING WITH WATER, IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE, TAKING CARE TO PURGE THE AIR FROM IT. A SMALL, HIGH PRESSURE PUMP OR OTHER MEANS OF MAINTAINING A CONTINUOUS WATER SUPPLY SHALL BE CONNECTED TO THE PIPING AND SET SO AS TO MAINTAIN 125 PSI FOR TWO (2) HOURS WITHOUT INTERRUPTION. CONTRACTOR SHALL MAKE ANY NECESSARY CORRECTIONS AND RETEST THE SYSTEM UNTIL THE OWNER'S REPRESENTATIVE IS SATISFIED THAT THE SYSTEM IS REASONABLY SOUND.

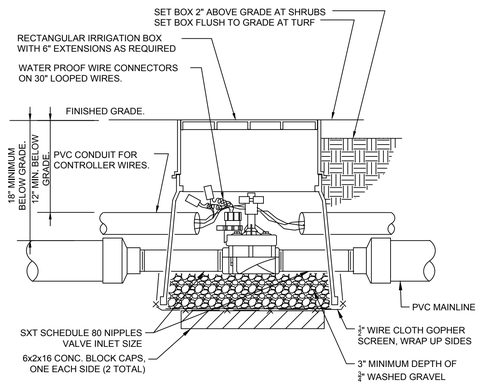
30. ALL WIRING FOR CONNECTION OF THE VALVES TO THE CONTROLLER SHALL FOLLOW MANUFACTURERS SPECIFICATIONS. IF REQUIRED, ALL WIRING FOR A TWO WIRE PATH SHALL BE WITH RED/BLUE TWISTED PAIR 14 AWG. ELECTRIC CONTROL LINES FROM THE DECODER TO THE SOLENOID VALVES SHALL BE TWISTED PAIR 18 AWG. ALL DECODERS SHALL BE GROUNDED EVERY 1,000 L.F. OR EVERY 10 DEVICES. ALL WIRE SHALL BE FURNISHED IN MINIMUM 2,500' REELS AND SPLICING SHALL BE MINIMIZED. BURY SPLICE KIT. ALL 24 VOLT WIRING SHALL BE DONE IN ACCORDANCE WITH EXISTING CODES. SPLICING SHALL BE IN VALVE BOXES OR CONTROLLERS ONLY. IRRIGATION SYSTEM CONTROL SHALL BE TWO WIRE PATH. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S REQUIREMENTS FOR THIS INSTALLATION. TWO WIRE SYSTEM SHALL HAVE 2 -WAY COMMUNICATIONS FIELD PROGRAMMABILITY, STATION SPECIFICATIONS AND INTEGRATED SURGE PROTECTION.

31. ALL CONTROL WIRE SHALL BE INSTALLED IN A 1-1/4" ELECTRICAL CONDUIT.

32. CONTRACTOR TO MINIMIZE IRRIGATION OVERTHROW TO IMPERVIOUS AND NATURAL AREAS THROUGH FIELD ADJUSTMENTS TO INDIVIDUAL HEADS.

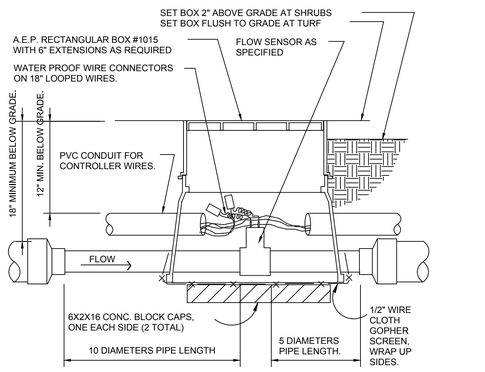
33. ALL UNIMPROVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR.

34. INSTALL ALL BACKFLOW PREVENTION DEVICES AND ALL PIPING BETWEEN THE POINT OF CONNECTION AND THE BACKFLOW PREVENTER AS PER LOCAL CODES. FINAL LOCATION SHALL BE DETERMINED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.



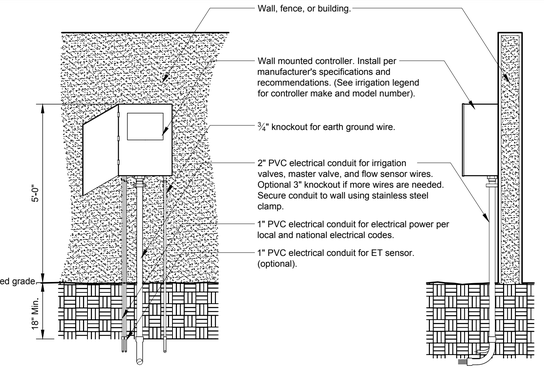
1 MASTER CONTROL VALVE

NTS L-IR-VAL-58



2 FLOW SENSOR ASSEMBLY

NTS L-IR-SEN-01



Notes:
1- Common and controller wire to be bundled using electrical tape at 10'-0" on center.

2- Grounding rods shall be located between 8"- 0" to 12'- 0" away from the controller. Grounding rods shall be ⅝" in diameter x 8' in length. Connect the grounding rod to the controller using 6 gauge bare copper wire or per the manufacturer's specifications.See grounding rod detail.

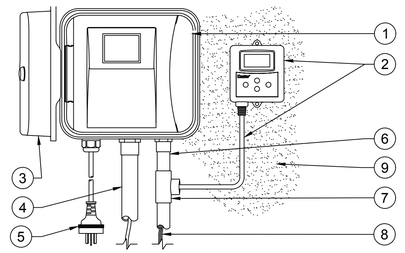
3- ET Station shall be installed no further than 90' away from the controller and a minimum of 15' off of the ground, out from under any overhead obstructions such as, but not limited to, building overhangs, trees, or utilities.

3 WALL MOUNTED CONTROLLER

1/2" = 1'-0"

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

L-IR-EQU-06

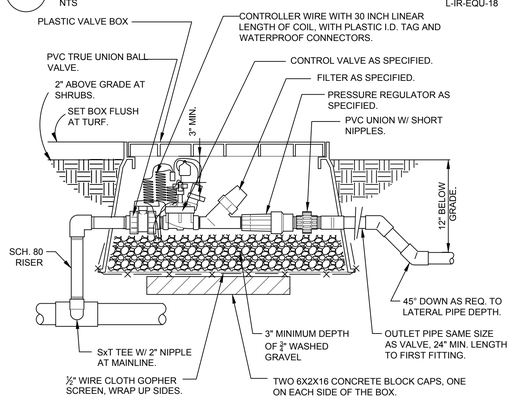


1. IRRIGATION CONTROLLER. MOUNTED PER CONTROLLER SPECIFICATIONS.
2. SOIL-CLIK MODULE AND PROVIDED CABLE
3. PLASTIC CONTROLLER DOOR
4. CONTROLLER WIRE CONDUIT TO PLANTER, SIZE AS REQUIRED.
5. 120 VAC CABLE & PLUG FOR CONNECTION TO GROUNDED 120 VAC POWER RECEPTACLE.
6. SOIL-CLIK WIRE CONDUIT, 3/4"[19MM] SIZE.
7. 3/4"[19MM] TEE FOR SOIL-CLIK SENSOR CABLE
8. TWO (2) WIRE TO PROBE.
9. SURFACE TO MOUNT CONTROLLER PER PLAN

NOTES:
A. COMPLETE INSTALLATION IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. REFER TO PRODUCT INSTALLATION GUIDE PRIOR TO INSTALLATION.
B. CONTROLLER SHOULD ACCEPT 120 VOLTS AC OR 230 VOLTS AC. HARD WIRE OR PLUG INTO A GROUNDED POWER SOURCE.
C. MODEL NUMBER AND SPECIFICATIONS PER PLAN.
D. MOUNTED CONTROLLER LCD SCREEN AT EYE LEVEL WHEN FEASIBLE.

4 SOIL SENSOR

NTS L-IR-EQU-18



5 REMOTE CONTROL VALVE (DRIP)

NTS L-IR-VAL-15

No.	REVISIONS	DATE	BY

Kimley»Horn
© ### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT	045687000
DATE	DEC 2022
SCALE:	AS SHOWN
DESIGNED BY:	KHA
DRAWN BY:	KNH
CHECKED BY:	MAJ

IRRIGATION NOTES AND DETAILS

COLUMBIA COUNTY SERVICE CENTER

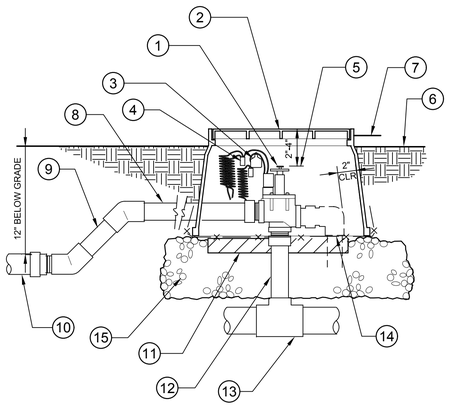
PREPARED FOR

FLORIDA POWER & LIGHT COMPANY

COLUMBIA COUNTY FLORIDA

SHEET NUMBER
IR-150

Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY - LP Layout:IR-150 December 16, 2022 09:13:09am K:\JAX-LALP\045687000 - fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Irrigation Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



REMOTE CONTROL VALVE AS SPECIFIED.

RECTANGULAR VALVE BOX.

PLASTIC I.D. TAG AT EACH VALVE.

WATER PROOF WIRE CONNECTORS ON 30" LOOPED WIRES.

2" MINIMUM, 4" MAXIMUM BELOW TOP OF BOX.

2" ABOVE FINISH GRADE AT SHRUBS.

3/4" ABOVE FINISH GRADE AT LAWN.

OUTLET PIPE SAME SIZE AS VALVE, 24" MINIMUM TO FIRST FITTING.

45 DEGREE DOWN AS REQUIRED TO LATERAL PIPE DEPTH.

INCREASE LATERAL LINE SIZE AS PER IRRIGATION PLAN.

TWO 6X2X16 CONCRETE BLOCK CAPS, ONE EACH SIDE OF THE BOX.

SCHEDULE 80 RISER.

MAIN LINE AS OCCURS.

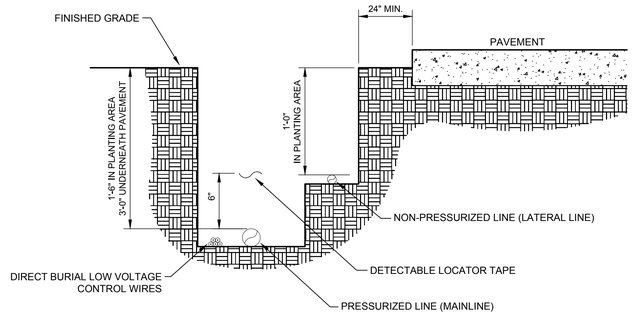
1/2" WIRE CLOTH GOPHER SCREEN, WRAP UP SIDES.

6" THICK LAYER OF PEA GRAVEL BASE.

1 REMOTE CONTROL VALVE (SPRINKLERS/BUBBLERS)

NTS

L-IR-VAL-06



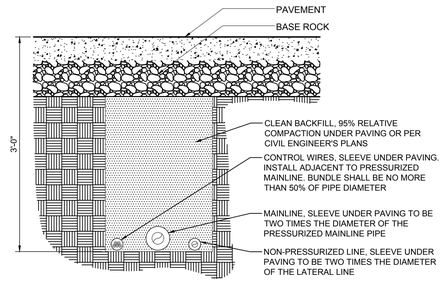
NOTES

1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. SLEEVING IS REQUIRED AS SHOWN ON PLAN.
3. DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

2 IRRIGATION TRENCHING

NTS

L-IR-EQU-10



NOTES

1. SEE IRRIGATION LEGEND FOR MAINLINE SIZE AND TYPE.
2. ALL SLEEVES SHALL BE SCH. 200 PVC PIPE.
3. ALL SLEEVES SHALL EXTEND 12" BEYOND THE EDGE OF PAVEMENT.
4. END OF SLEEVES SHALL BE LOCATED WITH A WOODEN STAKE OR PVC PIPE. LOCATORS SHALL RUN CONTINUOUSLY FROM THE END OF THE SLEEVE TO FINISHED GRADE.

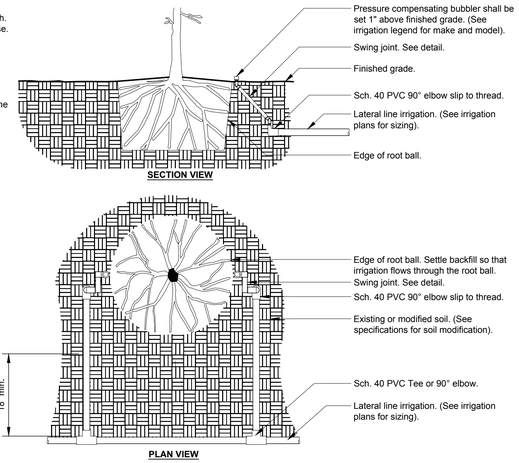
3 TYPICAL IRRIGATION SLEEVING

L-IR-EQU-03

Notes:
1- All irrigation fittings shall be Sch. 40 PVC unless specified otherwise.

2- All threaded connections from Sch. 40 to Sch. 80 PVC shall be made using teflon tape.

3- Contractor shall settle the area around the bubbler and edge of the root ball so that all irrigation flows through the root ball.



4 IRRIGATION BUBBLER (3) W/ LAYOUT

NTS

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

L-IR-BUB-02

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

IRRIGATION DETAILS

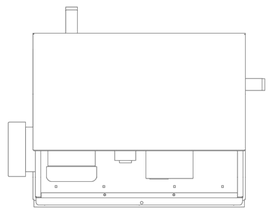
COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
IR-151

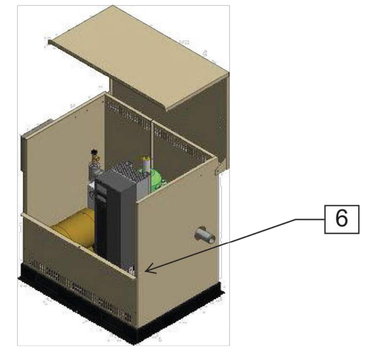
Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY - LP Layout:IR-151 December 16, 2022 09:13:10am K:\JAX_LALP\045687000 - fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Irrigation Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

LEGEND

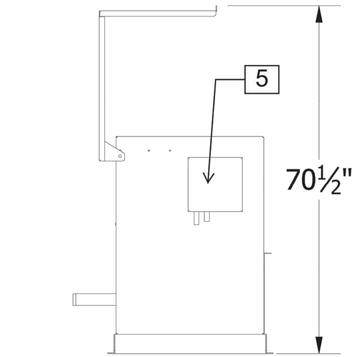
1. 5 HP Pump w/ TEFC Motor
2. 5 HP Variable Frequency Drive
3. F6-12VC-2013D1 Auto Filter, 120 Micron
4. Victaulic 300 MasterSeal Butterfly Valve
5. 208-240V 1PH Load Center with Neutral
6. Tan Aluminum Enclosure
7. Victaulic Style Couplings & Fittings
8. Hunter HCC-1600-PL (not shown)
9. Master Valve and Water Meter (not shown)



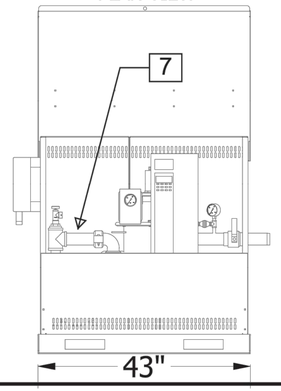
PLAN VIEW



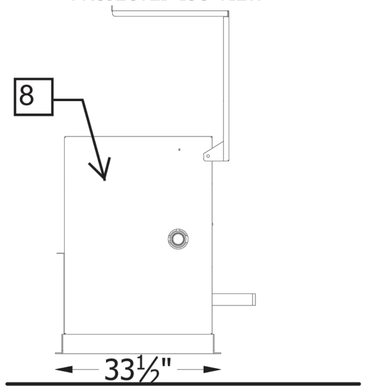
PROJECTED ISO VIEW



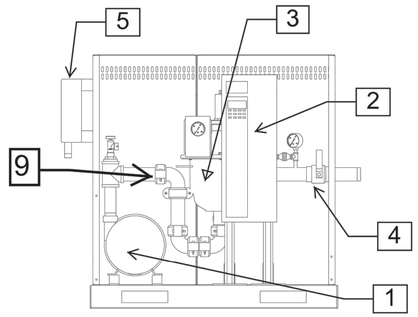
LEFT SIDE VIEW



FRONT ELEVATION VIEW



RIGHT SIDE VIEW



DETAILED FRONT ELEVATION

FPL Columbia Site

NOTES:
THIS IS A CONCEPTUAL DESIGN THAT MAY BE SUBJECT TO MINOR CHANGES DUE TO EQUIPMENT DIMENSIONS.
EQUIPMENT SETBACKS SHOULD BE IN COMPLIANCE BY NEC, LOCAL AND STATE ELECTRICAL CODES.

PROJECT Surface Water Irrigation Pump Station		MOTOR	5 HP	POWER	230V/1PH	DRAWN BY:	JAS
MODEL PIB-5-C-231/F6-12VC-2013D1/ALC-1-125/SCS3HDPE-STATIC/ICM/MF/WM		DISCHARGE SIZE	2" GG	FILTRATION DEGREE	120 Micron	APPROVED BY:	BT
CUSTOMER APPROVAL SIGNATURE	DATE 7/14/2022	SUCTION SIZE	2x3" GG	MISC	Kimley-Horn		

DO NOT SCALE

SiteOne Green Tech

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

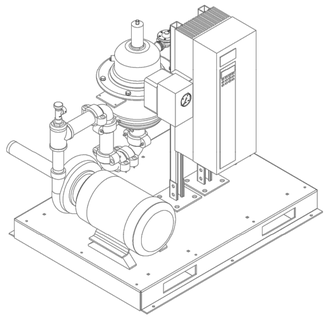
KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

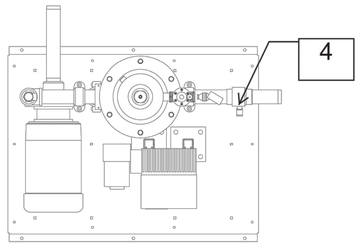
IRRIGATION PUMP DETAILS

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

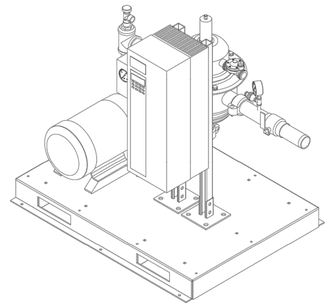
SHEET NUMBER
IR-152

Plotted By: Jurney, Matthew Sheet Set: FPL COLUMBIA COUNTY – LP Layout: IR-152 December 16, 2022 09:13:10am K:\JAX_LALP\045687000 – fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Irrigation Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

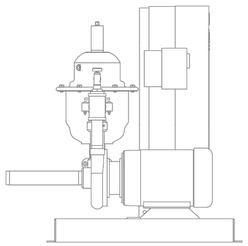




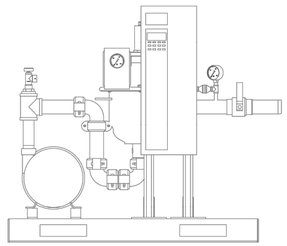
PLAN VIEW



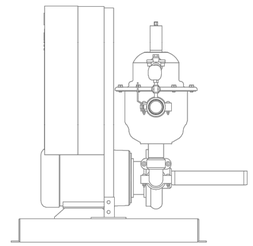
PROJECTED ISO VIEW



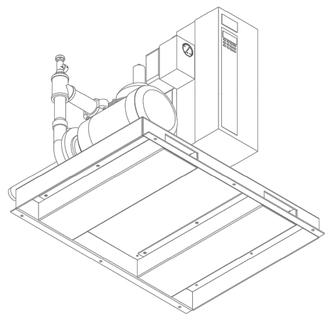
LEFT SIDE VIEW

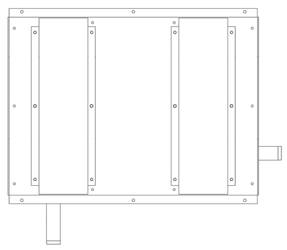


FRONT ELEVATION VIEW

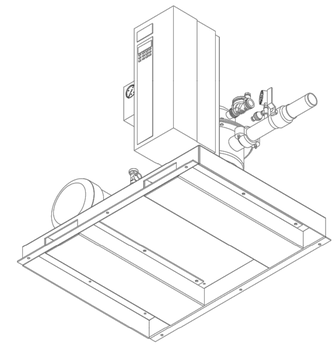


RIGHT SIDE VIEW





DETAILED FRONT ELEVATION



NOTES:
THIS IS A CONCEPTUAL DESIGN THAT MAY BE SUBJECT TO MINOR CHANGES DUE TO EQUIPMENT DIMENSIONS.
EQUIPMENT SETBACKS SHOULD BE IN COMPLIANCE BY NEC, LOCAL AND STATE ELECTRICAL CODES.

PROJECT Surface Water Irrigation Pump Station		MOTOR	5 HP	POWER	230V/1PH	DRAWN BY:	JAS
MODEL PIB-5-C-231/F6-12VC-2013D1/ALC-1-125/SCS3HDPE-STATIC/ICM/MF/WM		DISCHARGE SIZE	2" GG	FILTRATION DEGREE	120 Micron	APPROVED BY:	BT
CUSTOMER APPROVAL SIGNATURE	DATE 7/14/2022	SUCTION SIZE	2x3" GG	MISC	Kimley-Horn		

DO NOT SCALE

SiteOne Green Tech

No.	REVISIONS	DATE	BY

Kimley»Horn

© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000	
DATE	DEC 2022
SCALE:	AS SHOWN
DESIGNED BY:	KHA
DRAWN BY:	KNH
CHECKED BY:	MAJ

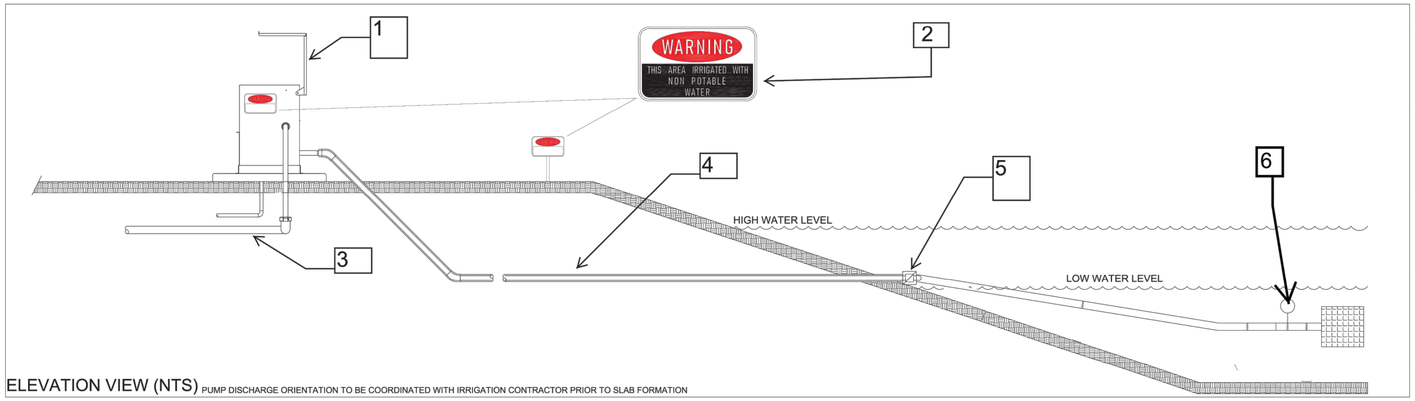
IRRIGATION PUMP DETAILS

COLUMBIA COUNTY SERVICE CENTER

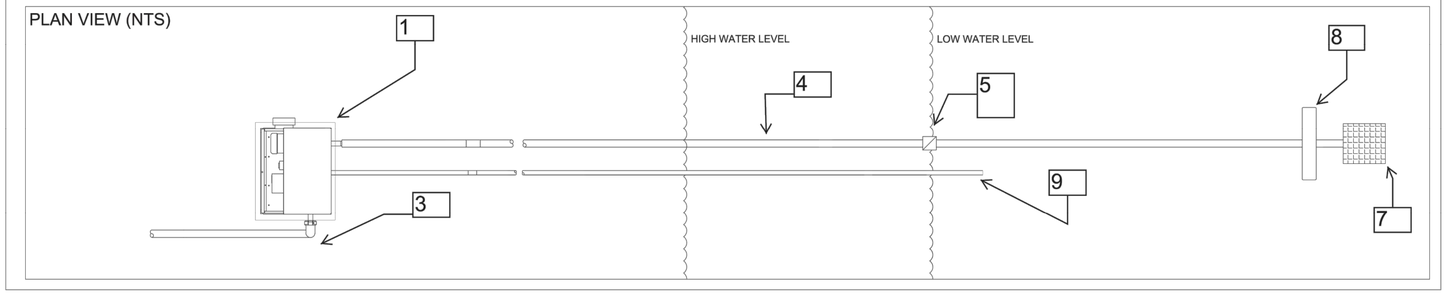
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
IR-153

Plotted By:Jurney, Matthew Sheet Set:FPL COLUMBIA COUNTY - LP Layout:IR-153 December 16, 2022 09:13:14am K:\JAX_LALP\045687000 - fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Irrigation Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



ELEVATION VIEW (NTS) PUMP DISCHARGE ORIENTATION TO BE COORDINATED WITH IRRIGATION CONTRACTOR PRIOR TO SLAB FORMATION



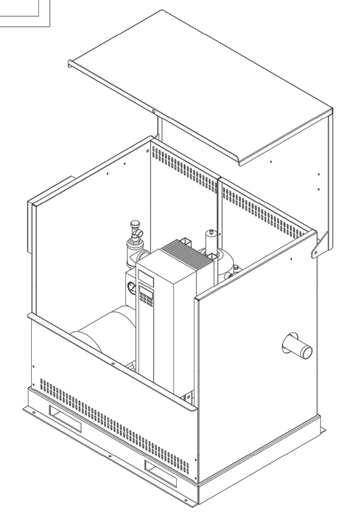
LEGEND

1. See PIB Pump Detail
2. Non-Potable Water Signage
3. 2" Grooved Galv. x 2" Discharge Pipe
4. 3" DR17 HDPE Intake Piping
5. 3" Grooved Swing Check Valve at shoreline
6. 3/8" SS Suspension Cable
7. 4" SS Intake Screen
8. 4" DR17 HDPE Float
9. 2" Flush Return if needed

NOTES:

1. HDPE Float to be attached to intake with 3/8" SS Suspension Cable.

2. All non-metallic piping shall be butt-fusion welded HDPE.



Pond Intake System

PROJECT	MOTOR	5HP	POWER	NA	DRAWN BY:	JAS
MODEL SCS3HDPE-STATIC	DISCHARGE SIZE	2"	FILTRATION DEGREE	.125" Perf.	APPROVED BY:	BWT
CUSTOMER APPROVAL SIGNATURE / DATE	SUCTION SIZE	3" HDPE	MISC	For:		

DO NOT SCALE

SiteOne Green Tech

No.	REVISIONS	DATE	BY

Kimley»Horn
© #### KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

FOR ENGINEER OF RECORD SIGNATURE AND SEAL
REFER TO SIGNATURE SHEET

KHA PROJECT 045687000
DATE DEC 2022
SCALE: AS SHOWN
DESIGNED BY: KHA
DRAWN BY: KNH
CHECKED BY: MAJ

IRRIGATION PUMP DETAILS

COLUMBIA COUNTY SERVICE CENTER
PREPARED FOR
FLORIDA POWER & LIGHT COMPANY
COLUMBIA COUNTY FLORIDA

SHEET NUMBER
IR-154

Plotted By:Durney, Matthew Sheet Set:FPL COLUMBIA COUNTY — LP Layout:IR-154 December 16, 2022 09:13:17am K:\JAX_LALP\045687000 — fpl columbia county\working files\CAD\plan sheets\FPL Columbia County Irrigation Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.