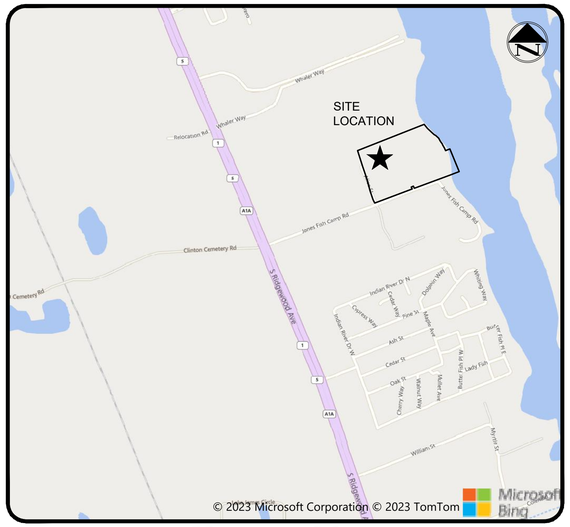
Construction Plans
For
Edgewater River Oaks Marina Phase 1

Section 38, Township 18 South, Range 35 East
City Of Edgewater, Florida





Vicinity Map

N.T.S.

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PROPERTY DESCRIPTION

Legal Description Provided By: Sliger & Associates, Inc.

Description:

A PORTION OF LOT 28, ALL OF LOTS 31, 32, A PORTION OF LOTS 35 AND 36,THE PLAT OF RIVERFRONT ESTATES UNIT NO. 2, AS RECORDED IN MAP BOOK 19, PAGE 31, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA AND A PORTION OF THE SOUTH 100 FEET OF LOT 6, THE PLAT OF RIVERFRONT ESTATES AS RECORDED IN MAP BOOK 19, PAGE 18, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY FLORIDA. AND THE SOUTH 330 FEET OF LOT 22, ASSESSOR'S SUBDIVISION OF THE C.E. MCHARDY GRANT, SECTION 50 AND 51, TOWNSHIP 18 SOUTH, RANGE 34 EAST, AND SECTION 37 AND 38, TOWNSHIP 18 SOUTH, RANGE 35 EAST, RECORDED IN MAP BOOK 3, PAGE 153, PUBLIC RECORDS VOLUSIA COUNTY, FLORIDA LYING EAST OF AND CONTIGUOUS WITH THAT CERTAIN ANNEXED PROPERTY DESCRIBED OFFICIAL RECORDS BOOK 5610, PAGE 1591, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF LOT 6, PLAT OF RIVERFRONT ESTATES, AS RECORDED IN MAP BOOK 19, PAGE 18, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN N23°00'28"W ALONG THE WESTERLY LINE OF SAID LOT 6 ALSO BEING THE EASTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1 (200' R/W) A DISTANCE OF 100.21 FEET; THENCE DEPART SAID WESTERLY LINE N68°36'30"E ALONG THE NORTHERLY LINE OF THE SOUTH 100 FEET OF SAID LOT 6, A DISTANCE OF 1550.98 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE ALONG THE SAID NORTHERLY LINE N68°36'30"E, A DISTANCE OF 950.00 FEET TO THE MEAN HIGH WATER LINE OF THE INDIAN RIVER, THENCE ALONG THE SAID MEAN HIGH WATER LINE THE FOLLOWING ELEVEN COURSES, S28°11'26"E, 3.24 FEET; THENCE S60°06'51"E, 66.82 FEET; THENCE S45°37'41"E, 66.70 FEET; THENCE S48°30'34"E, 50.57 FEET; THENCE S62°36'48"E, 28.25; THENCE S46°54'54"E, 51.67 FEET; THENCE S27°34'56"E, 47.56 FEET; THENCE S35°08'42"E, 42.90 FEET; THENCE S15°49'21"E, 15.38 FEET; THENCE S31°23'17"E, 42.61 FEET; THENCE 23°23'41"E, 39.91 FEET TO THE NORTHERLY LINE OF RIVER COLONY AS RECORDED IN MAP BOOK 55, PAGE 39, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, ALSO BEING THE NORTHERLY LINE OF ANNEXED PROPERTY DESCRIBED OFFICIAL RECORDS BOOK 5610, PAGE 1591, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE DEPART SAID MEAN HIGH WATER LINE ALONG SAID NORTHERLY LINE AND THE EASTERLY EXTENSION THEREOF N69°10'20"E, 61.26 FEET TO THE EASTERLY LINE OF LOT 22, ASSESSOR'S SUBDIVISION OF THE C.E. MCHARDY GRANT, RECORDED IN MAP BOOK 3, PAGE 153, SAID PUBLIC RECORDS; THENCE ALONG SAID EASTERLY LINE S22°19'33"E, 325.19 FEET TO THE SOUTHERLY LINE OF SAID LOT 22; THENCE ALONG SAID SOUTHERLY LINE S69°37'39"W, 129.13 FEET TO THE SOUTHERLY LINE OF AFORESAID RIVER COLONY; THENCE ALONG SAID SOUTHERLY LINE S69°37'39"W, 504.33 FEET TO THE EASTERLY LINE OF TRACT D, RIVER COLONY, MAP BOOK 19, PAGE 18, SAID PUBLIC RECORDS; THENCE ALONG SAID EASTERLY LINE N22°58'23"W, 30.06 FEET TO THE NORTHERLY LINE OF SAID TRACT D; THENCE ALONG SAID NORTHERLY LINE S69°37'39"W, 30.06 FEET TO THE TO THE WESTERLY LINE OF AFORESAID RIVER COLONY; THENCE ALONG SAID WESTERLY LINE S22°58'23"E, 30.06 FEET TO THE SOUTHERLY LINE OF LOT 32, PLAT OF RIVERFRONT ESTATES UNIT NO. 2, AS RECORDED IN MAP BOOK 19, PAGE 31, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, ALSO BEING THE NORTHERLY RIGHT OF WAY LINE OF JONES FISH CAMP ROAD (PLATTED THOMAS STREET) (60' R/W); THENCE ALONG THE SOUTHERLY LINE OF SAID LOTS 32, 31 AND 28 AND THE SAID NORTHERLY RIGHT OF WAY LINE S69°37'39"W, 528.61 FEET TO THE CENTER OF AN EXIST DITCH; THENCE DEPART SAID NORTHERLY RIGHT OF WAY LINE ALONG THE CENTER OF SAID DITCH THE FOLLOWING FIVE COURSES, THENCE N29°04'41"W, 48.78 FEET; THENCE N17°57'04"W, 116.71 FEET; THENCE N15°36'53"W, 170.49 FEET; THENCE N18°30'32"W, 175.51 FEET; THENCE N17°59'27"W, 221.51 FEET TO THE POINT OF BEGINNING.

CONTAINING 819,068 SQ. FT. OR 18.803 ACRES MORE OR LESS.

VOLUSIA COUNTY UTILITY NOTE:
VOLUSIA COUNTY WATER RESOURCES AND UTILITIES IS THE RETAIL SUPPLIER OF POTABLE WATER AND SANITARY SEWER SERVICE TO THE DEVELOPMENT. ALL UTILITY CONSTRUCTION INTENDED TO BE TRANSFERRED FOR PUBLIC OWNERSHIP, OPERATION, AND MAINTENANCE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF VCWRU. ANY REFERENCES TO THE CITY OF EDGEWATER AS THE UTILITY SUPPLIER CONTAINED HEREIN SHALL BE DEEMED AS OBSOLETE.

VERTICAL DATUM INFORMATION

ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND ARE RELATIVE TO THE NATIONAL GEODETIC SURVEY BENCHMARK N-211 HAVING A PUBLISHED ELEVATION OF 12.11 FEET (NAVD 88)

Project Team Members:

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Site Data Table

Project Location	Volusia County, Florida
Total Project Area	18.80 Ac.±
Present Zoning	RPUD
Future Land Designation	COMMERCIAL
PID #	853711000065 853818000030 853810000282 853818000020 853810000310 853818000001 853810000320 853818000002 853810000350 853818000060 853818000003 853818000070 853818000004 853818000080 853818000050 853818000090 853818000010 853818000100 853818000040 853801000220
Flood Zone	"A", "AE", & "X" Firm Panel No. 12127C0715J Dated: 9-29-2017

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CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

REV 03 <<> 03/19/26

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

NICHOLAS ALEXANDER PEET
LICENSE NO. 92061 6/30/26 STATE OF FLORIDA
PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

T:\Projects\199-05 – Phase 1 of the Marina Development\Drawings\199-05-01 Construction Plans\Current Plans\199050501 (c-CVR.dwg
03/20/2026 - 9:45:48 PM PLOTTED BY: Hess Sandal

GENERAL UTILITY NOTES

1.) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN FROM THE ENGINEER OR OWNER A COPY OF ALL PERTINENT PERMITS RELATED TO THIS PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT ALL CONSTRUCTION ACTIVITIES ARE IN COMPLIANCE WITH THE CONDITIONS OF ALL PERMITS AND APPROVALS.

2.) STABILIZATION OF ALL DISTURBED AREAS BY SOD, TO BE MAINTAINED UNTIL ESTABLISHMENT. SEED & MULCH IS PERMITTED AS TEMPORARY STABILIZATION BMP FOR DISTURBED AREAS NOT YET BUILT TO FINAL GRADE.

3.) FLORIDA LAW (F.S. 556) UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT MANDATES THAT EXCAVATORS/CONTRACTORS SHALL CONTACT SUNSHINE 811 (FKA: SUNSHINE STATE ONE-CALL OF FLORIDA) BY CALLING 800-432-4770 OR 811 AT LEAST 2 FULL BUSINESS DAYS PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION TO ALLOW MEMBER OPERATORS AN OPPORTUNITY TO IDENTIFY AND MARK THEIR UNDERGROUND FACILITIES AND APPROPRIATELY RESPOND TO THE POSITIVE RESPONSE SYSTEM.

4.) ALL UTILITY SYSTEM DESIGN MATERIALS AND WORKMANSHIP SHALL COMPLY WITH VOLUSIA COUNTY WATER RESOURCES & UTILITIES (VCWRU) STANDARDS AND DETAILS FOR THE DESIGN AND CONSTRUCTION OF WATER , WASTEWATER, AND RECLAIMED WATER FACILITIES SPECIFICATIONS. 3

5.) CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL ROAD CROSSING OR UTILITY PERMITS.

6.) THE FIELD-SURVEYED OR REPORTED LOCATIONS OF ALL EXISTING UNDERGROUND AND ABOVE-GROUND UTILITIES KNOWN TO EXIST AT THE TIME OF PLANS PRODUCTION HAVE BEEN DEPICTED HEREON, HOWEVER CONFLICTS BETWEEN EXISTING AND PROPOSED UTILITIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.

7.) CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF EXISTING WATER AND SEWER LINES PRIOR TO BEGINNING CONSTRUCTION.

8.) THE LOCATIONS AND ELEVATION OF ALL SERVICE LINES ARE TO BE DETERMINED IN THE FIELD BY OWNER AND/OR CONTRACTOR PRIOR TO CONSTRUCTION OF SAME.

9.) FIRE HYDRANT, GATE VALVE AND BLOW-OFF VALVE ASSEMBLIES SHALL CONSIST OF ALL PIPE, VALVES, TEES, FITTINGS, AND ANY AND ALL OTHER APPURTENANCES COMPRISING A COMPLETE, WORKING UNIT.

10.) ALL FIRE HYDRANTS SHALL BE FLOW TESTED AND COLOR CODED BASED ON FLOW RESULTS IN ACCORDANCE WITH APPROPRIATE UTILITY PROVIDER SPECIFICATIONS. RESULTS SHALL BE SUBMITTED TO CITY OF EDGEWATER FIRE RESCUE AND CITY OF EDGEWATER UTILITIES.

11.) ALL DUCTILE IRON (DIP) POTABLE WATER MAIN PIPING SHALL BE IN ACCORDANCE WITH ANSI/AWWA C150/A21.50 AND MANUFACTURED TO ANSI/AWWA C151/A21.51, AND SUPPLIED WITH RUBBER GASKET PUSH-ON JOINTS IN ACCORDANCE WITH ANSI/AWWA C111/A21.11. PIPE SHALL BE SUPPLIED WITH MINIMUM PRESSURE CLASS 350.

12.) ALL PVC WATER MAIN PIPE SHALL CONFORM TO THE REQUIREMENTS FOUND IN AWWA STANDARD, LATEST EDITION AT THE TIME OF PLAN APPROVAL AND BE AS FOLLOWS: WATER MAINS 3" AND LESS IN DIAMETER SHALL MEET THE REQUIREMENT OF AWWA C-901/906; PVC PIPES 4"-24" IN DIAMETER SHALL MEET THE REQUIREMENT OF AWWA C-900.

13.) ALL WATER MAIN PIPE AND FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(B)3, FLORIDA ADMINISTRATIVE CODES, USING BLUE AS THE PREDOMINANT COLOR.

14.) REUSE WATER MAINS, VALVES, AND SERVICES SHALL INCLUDE THE FOLLOWING TO AVOID CONFUSION WITH POTABLE SYSTEM:
   a. ALL PVC REUSE PIPING SHALL BE PURPLE PIGMENTED OR MARKED.
   b. ALL PVC REUSE PIPE SHALL CONFORM TO THE REQUIREMENTS FOUND IN AWWA STANDARD, LATEST EDITION AT THE TIME OF PLAN APPROVAL AND BE AS FOLLOWS: 4" AND LARGER SHALL MEET THE REQUIREMENT OF AWWA C-900 STANDARDS.
   c. ALL DUCTILE IRON (DIP) REUSE PIPING SHALL BE IN ACCORDANCE WITH ANSI/AWWA C150/A21.50 AND MANUFACTURED TO ANSI/AWWA C151/A21.51, AND SUPPLIED WITH RUBBER GASKET PUSH-ON JOINTS IN ACCORDANCE WITH ANSI/AWWA C111/A21.11. PIPE SHALL BE SUPPLIED WITH MINIMUM PRESSURE CLASS 250.
   d. SQUARE TOP VALVE BOXES FOR ISOLATION VALVES IN SYSTEM, WITH COVERS MARKED "RECLAIMED."
   e. PURPLE STRIPE ON CURB TO IDENTIFY REUSE WATER SERVICES.
   f. ONE INCH SERVICES FOR REUSE WATER SERVICES.
   g. PURPLE MAGNETIC LOCATING TAPE, STATING "REUSE MAIN BURIED BELOW" OVER ALL REUSE WATER MAINS (18 INCHES BELOW GRADE).
   h. RECLAIMED WATER SERVICE ON OPPOSITE LOT LINE FROM POTABLE SERVICE.

15.) ALL ASPECTS OF REUSE WATER SYSTEM MUST COMPLY WITH CHAPTER 62-610, F.A.C., LATEST EDITION.

16.) ALL 8" SANITARY SEWER PIPE SHALL BE CONSTRUCTED AT A 0.40% MINIMUM SLOPE UNLESS OTHERWISE NOTED.

17.) SANITARY SEWER MAINS WITH INVERT ELEVATIONS FROM 0-18 FEET BELOW FINISHED GRADE SHALL BE CONSTRUCTED OF SDR-26 PVC PIPE. SANITARY SEWER MAINS WITH INVERT ELEVATIONS GREATER THAN 18 FEET BELOW FINISHED GRADE SHALL BE CONSTRUCTED OF C-900 DR 18 PVC PIPE.

18.) FORCE MAINS SHALL BE CONSTRUCTED OF C-900 DR 18 PVC PIGMENTED GREEN.

19.) ADJUSTING MANHOLE TOPS TO MATCH GRADE AND SLOPE OF THE FINISH PAVING SHALL BE INCLUDED IN THE RESPECTIVE CONTRACT UNIT PRICE FOR MANHOLES, PAYMENT OF WHICH WILL CONSTITUTE FULL COMPENSATION FOR THE CONSTRUCTION AND COMPLETION OF THE MANHOLE, AND NO ADDITIONAL PAYMENT WILL BE ALLOWED OR MADE FOR ADJUSTING MANHOLE TOPS.

20.) BENDS SHALL BE INSTALLED IN FORCE MAIN, WATER MAIN OR REUSE MAIN TO AVOID UNFORESEEN CONFLICTS IN EXISTING OR PROPOSED STRUCTURES.

21.) THE JOINT DEFLECTION METHOD SHALL BE USED WHERE PRACTICAL IN LIEU OF INSTALLING BENDS. THE MAXIMUM ALLOWED DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURER'S RECOMMENDATIONS.

22.) ALL VALVE BOX ASSEMBLIES LOCATED WITHIN ROADWAYS OR PARKING AREAS SHALL BE PROTECTED FROM TRUCK TRAFFIC BY USE OF 6" THICK REINFORCED CONCRETE PADS POURED AROUND VALVE BOXES (SEE DETAIL).

23.) CONNECTIONS INTO EXISTING APPROPRIATE UTILITY PROVIDER-OWNED SYSTEMS SHALL BE VIA WET TAP. WET TAPS SHALL BE PERFORMED BY A COMPANY APPROVED BY THECITY OF EDGEWATER FOR AND AT THE EXPENSE OF THE CONTRACTOR. MATERIAL FOR WET TAPS LARGER THAN 2" SHALL BE PROVIDED AND INSTALLED BY THE PROJECT CONTRACTOR. EXCAVATION, BACKFILL AND SURFACE RESTORATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

24.) GATE VALVES INSTALLED FOR PHASING SHALL BE RESTRAINED PER CURRENT APPROPRIATE UTILITY PROVIDER STANDARDS.

25.) OFF-ROAD UTILITY EASEMENTS SHALL BE "STABILIZED" FOR ACCESS BY MAINTENANCE VEHICLES.

26.) STUB-OUT LINES ON THE WATER MAIN, FORCE MAIN, AND REUSE MAIN SHALL HAVE RESTRAINED JOINTS FROM THE MAIN LINE TO THE STUB-OUT. 2

27.) MAXIMUM DEPTH OF COVER NOT TO EXCEED 60" UNLESS OTHERWISE SPECIFICALLY NOTED AND APPROVED IN WRITING BY VCWRU (EXCEPT FOR DIRECTIONALLY DRILLED MAINS).

28.) MAINTAIN 5' MINIMUM HORIZONTAL SEPARATION, OUTSIDE OF PIPE TO OUTSIDE OF PIPE, BETWEEN REUSE MAINS AND WATER MAINS OR FORCE MAINS.

29.) ALL WATER MAINS SHALL BE DEFLECTED VERTICALLY WHERE CROSSING STORM SEWER PIPE TO OBTAIN A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE STORM SEWER. JOINTS SHALL BE LOCATED SUCH THAT THE DISTANCE FROM THE STORM SEWER AND WATER MAIN JOINT IS AS FAR AS PRACTICAL.

30.) WATER MAINS SHOULD BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED STORM SEWER.

31.) AT NO TIME SHOULD VERTICAL CLEARANCE BETWEEN FORCE MAIN OR GRAVITY SEWER AND WATER MAIN BE LESS THAN 18" AT CROSSING OF SAME.

32.) AT NO TIME SHOULD HORIZONTAL CLEARANCE BETWEEN FORCE MAIN OR GRAVITY SEWER AND WATER MAIN BE LESS THAN 10' WHEN SAME ARE PARALLELING EACH OTHER.

33.) SANITARY SEWERS, FORCE AND REUSE MAINS AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS. SANITARY SEWERS, FORCE AND REUSE MAINS AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE.

34.) WHEN SANITARY SEWERS, FORCE AND REUSE MAINS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT THE CROSSING.

35.) WHERE THERE IS NO ALTERNATIVE TO SEWER AND REUSE PIPES CROSSING OVER A WATER MAIN, THE CRITERIA FOR MINIMUM SEPARATION OF 18 INCHES BETWEEN LINES AND 10 FEET BETWEEN JOINTS SHALL BE REQUIRED.

36.) ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER AND REUSE PIPES JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).

37.) WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP AND THE CROSSING SHALL BE ARRANGED TO MEET THE REQUIREMENTS ABOVE.

38.) A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED IN PARALLEL INSTALLATIONS BETWEEN ANY TYPE OF SEWER (INCLUDING DRAINAGE INLETS) AND WATER MAIN WHENEVER POSSIBLE. A MINIMUM 5-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED IN PARALLEL INSTALLATION BETWEEN REUSE WATER MAINS AND WATER MAINS, AND BETWEEN REUSE WATER MAINS AND SANITARY SEWERS WHENEVER POSSIBLE.

39.) IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION BETWEEN ANY TYPE OF PARALLEL SEWER AND WATER MAIN, OR A 5-FOOT SEPARATION BETWEEN REUSE MAIN AND WATER MAIN, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER, REUSE MAIN, OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

40.) WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES OR A HORIZONTAL DISTANCE OF 10 FEET IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER, REUSE MAIN OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN THE SIZE PROPOSED) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD BE ABOVE THE SEWER, REUSE MAIN, OR FORCE MAIN. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER, REUSE MAIN, OR FORCE MAIN (STAGGERED JOINTS).

41.) ALL SUBSURFACE CONSTRUCTION SHALL COMPLY WITH THE "TRENCH SAFETY ACT." THE CONTRACTOR SHALL ENSURE THAT THE METHOD OF TRENCH PROTECTION AND CONSTRUCTION IS IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS.

42.) THE APPROPRIATE UTILITY PROVIDER SHALL NOT OWN OR MAINTAIN WATER AND SEWER LINES OR FACILITIES ON-SITE.

43.) SANITARY SEWER MANHOLES CONSTRUCTED IN UNPAVED AREAS SHALL BE STABILIZED WITH 6" THICK COMPACTED LIME ROCK (LBR 100) FOR A TEN FOOT RADIUS.

44.) THE CONTRACTOR SHALL INSTALL MECHANICAL PLUGS IN THE GRAVITY SEWER SYSTEM AT THE LOCATIONS INDICATED ON THE CONSTRUCTION PLANS. THE SANITARY SEWER PLUGS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION BY THE CONTRACTOR AND SHALL REMAIN IN PLACE UNTIL THE SYSTEM HAS BEEN CLEANED, INSPECTED AND APPROVED BY THE APPROPRIATE UTILITY PROVIDER. WHEN THE SYSTEM HAS BEEN APPROVED THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE PLUGS.

45.) GROUNDWATER PROTECTION: NO WELLHEADS WILL BE LOCATED ON SITE. NO WELLHEADS ARE LOCATED WITHIN 100 FT. OF SITE.

46.) THE APPROPRIATE UTILITY PROVIDER SHALL NOT OWN OR MAINTAIN ONSITE WATERLINES, SEWER LINES, OR FACILITIES.

GEOTECHNICAL NOTES

1.) SHOULD ANY NOTICEABLE SOIL SLUMPING OR SINKHOLE FORMATION BECOME EVIDENT, THE APPLICANT/DEVELOPER SHALL IMMEDIATELY NOTIFY THE COUNTY, AND SJRWMD, AND ADOPT ONE OR MORE OF THE FOLLOWING PROCEDURES AS DETERMINED TO BE APPROPRIATE BY THE COUNTY AND SJRWMD:

a. IF THE SLUMPING OR SINKHOLE FORMATION BECOMES EVIDENT BEFORE OR DURING CONSTRUCTION ACTIVITIES, STOP ALL WORK (EXCEPT FOR MITIGATION ACTIVITIES) IN THE AFFECTED AREA AND REMAIN STOPPED UNTIL THE COUNTY AND SJRWMD APPROVE RESUMING CONSTRUCTION ACTIVITIES.
b. TAKE IMMEDIATE MEASURES TO ENSURE NO SURFACE WATER DRAINS INTO THE AFFECTED AREAS.
c. VISUALLY INSPECT THE AFFECTED AREA.
d. EXCAVATE AND BACKFILL OR GROUT AS REQUIRED TO FILL THE AFFECTED AREA AND PREVENT FURTHER SUBSIDENCE
e. USE SOIL REINFORCEMENT MATERIALS IN THE BACKFILLING OPERATION, WHEN APPROPRIATE.
f. IF THE AFFECTED AREA IS IN THE VICINITY OF A WATER-RETENTION AREA, MAINTAIN A MINIMUM DISTANCE OF TWO FEET FROM THE BOTTOM OF THE RETENTION POND TO THE SURFACE OF THE LIME-ROCK OR KARST CONNECTION.
g. IF THE AFFECTED AREA IS IN THE VICINITY OF A WATER-RETENTION AREA AND THE ABOVE METHODS DO NOT STABILIZE THE COLLAPSE, RELOCATE THE RETENTION AREA.

2.) DISCHARGE OF STORM-WATER INTO DEPRESSIONS WITH DIRECT OR DEMONSTRATED HYDROLOGIC CONNECTION TO THE FLORIDA AQUIFER SHALL BE PROHIBITED.

SAFETY NOTES

1.) DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE ENVISIONG PUBLIC AND THE SAFETY OF HIS PERSONNEL.

2.) LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.

3.) CONTRACTOR SHALL PROVIDE AND MAINTAIN ITS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH ITS HEALTH & SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUBCONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUBCONTRACTORS AND SUBCONTRACTORS' EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT TO BE PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS.

4.) ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART P. ADDITIONALLY, ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE FLORIDA TRENCH SAFETY ACT.

5.) THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS" SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKERS FROM HAZARDS WITHIN THE PROJECT LIMITS.

6.) ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.

7.) IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT OR ENFORCE SAFETY REGULATIONS.

8.) THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND PER FLORIDA LAW (F.S. 556) UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT MANDATES THAT EXCAVATORS/CONTRACTORS SHALL CONTACT SUNSHINE 811 (FKA: SUNSHINE STATE ONE-CALL OF FLORIDA) BY CALLING 800-432-4770 OR 811 AT LEAST 2 FULL BUSINESS DAYS PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION TO ALLOW MEMBER OPERATORS AN OPPORTUNITY TO IDENTIFY AND MARK THEIR UNDERGROUND FACILITIES AND APPROPRIATELY RESPOND TO THE POSITIVE RESPONSE SYSTEM.

9.) THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE CONSTRUCTION ACTIVITIES BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT.

10.) ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO BASE AND PAVEMENT CONSTRUCTION.

SITE PLAN AND COORDINATE GEOMETRY NOTES

1.) TOPOGRAPHIC INFORMATION SHOWN IS BASED ON A SURVEY CONDUCTED BY SLIGER & ASSOCIATES, INC. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

2.) ALL POINTS AND MONUMENTS SHALL BE SURVEYED UPON MOBILIZATION TO VERIFY THEIR ACCURACY. ANY DISCREPANCIES DISCOVERED MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING.

3.) MONUMENTS AND OTHER SURVEY CONTROL POINTS SHALL BE PROTECTED FROM DAMAGE AND DISTURBANCE. IF ANY CONTROL POINTS ARE DAMAGED OR DISTURBED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND REPLACE THE CONTROL POINTS TO THEIR ORIGINAL LOCATION AT THEIR OWN EXPENSE.

4.) LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OR PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION.

5.) UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE OWNERS ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION CERTIFIED BY A REGISTERED LAND SURVEYOR. CITY OF EDGEWATER'S "AS-BUILT" INFORMATION SHALL INCLUDE INVERT ELEVATIONS, LOCATION OF FITTINGS, LOCATION OF STRUCTURES FOR ALL UTILITIES INSTALLED, NO ENGINEER'S CERTIFICATIONS, FOR FINALIZATION PURPOSES, WILL BE MADE UNTIL THIS INFORMATION IS RECEIVED AND APPROVED BY THE ENGINEER.

CLEARING / DEMOLITION NOTES

1.) PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN AS INDICATED ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREE SHOWN TO REMAIN SHALL BE REMOVED WITHOUT THE APPROVAL OF CITY OF EDGEWATER AND OR THE OWNER.

2.) THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE NECESSARY FOR CONSTRUCTION. STABILIZATION OF ALL DISTURBED AREAS BY SOD, TO BE MAINTAINED UNTIL ESTABLISHMENT. SEED & MULCH IS PERMITTED AS TEMPORARY STABILIZATION BMP FOR DISTURBED AREAS NOT YET BUILT TO FINAL GRADE.

3.) REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE IF REQUIRED, PROVIDED THAT THE MATERIAL IS DEEMED SUITABLE FOR CONSTRUCTION BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO BE EITHER STOCKPILED ON THE SITE AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING EXCESS EARTHWORK FROM THE SITE.

OWNER INSTRUCTIONS FOR MAINTENANCE AND INSPECTION OF STORMWATER FACILITIES

1.) THE ENTIRE STORMWATER SYSTEM SHOULD BE INSPECTED ON AT LEAST A SEMI-ANNUAL BASIS. THIS SHOULD INCLUDE A VISUAL INSPECTION OF THE POND, POND BANKS, BLEED-DOWN ORIFICES, OTHER CONTROL STRUCTURES, AND DISCHARGE PIPES. THESE SHOULD BE KEPT FREE OF DEBRIS AND CLEANED ON A FREQUENCY AS REQUIRED TO KEEP THEM FUNCTIONAL, AS DESIGNED. MOWING/CLEARING AROUND THE STRUCTURES MAY BE REQUIRED TO PREVENT VEGETATION FROM CLOGGING THEM.

2.) WETLAND PLANTS IF INTENTIONALLY INSTALLED, SHOULD BE MONITORED AND MAINTAINED AS REQUIRED ON THE APPROVED CONSTRUCTION PLANS. AREAS OF LITTORAL SHELVING, WHICH ARE REQUIRED TO BE VEGETATED BUT NOT INTENTIONALLY PLANTED, SHOULD NOT BE CLEARED OF THE WETLAND PLANTS THESE AREAS SHOULD HAVE AS HIGH A PLANT COVERAGE AS POSSIBLE, FOR MAXIMUM WATER FILTRATION.

3.) SEDIMENT SUMPS, IF DESIGNED AND INSTALLED, SHOULD HAVE SEDIMENT REMOVED AS NECESSARY TO ALLOW THEM TO EFFICIENTLY REMOVE SUSPENDED PARTICLES. THEY SHOULD BE RE-DUG TO THE ORIGINAL DESIGN SPECIFICATIONS, IF SILTED IN.

4.) FOR PERCOLATION TREATMENT PONDS/SWALES, THE OWNER OF THE FACILITY SHALL INSPECT THE POND BOTTOM PERIODICALLY AFTER HEAVY RAINFALL EVENTS TO CHECK FOR PERSISTENT PONDING OR STANDING OF WATER. ALL LARGE DEBRIS SHALL BE REMOVED AND DISPOSED OF ELSEWHERE. IF PROLONGED PONDING PERSISTS, I.E., IN EXCESS OF 72 HOURS, THE OWNER SHALL RAKE OR SCARIFY THE SURFACE. IF REQUIRED, THE SOIL IN THE AREA OF PONDING SHALL BE REMOVED AND REPLACED WITH CLEAN SANDY, NON-COHESIVE SOIL.

5.) PLEASE CHECK THE CONSTRUCTION PLANS TO SEE IF WRITTEN REPORTS ON MONITORING OR PLANT SURVIVAL RATES ARE REQUIRED TO BE SENT TO ANY REVIEWING AGENCIES. WRITTEN NOTES SHOULD ALWAYS BE KEPT WHICH DESCRIBE MAINTENANCE ACTIVITIES UNDERTAKEN DURING EACH INSPECTION.

6.) SPECIFIC CONDITIONS OF ALL PERMITS MAY REQUIRE ADDITIONAL MAINTENANCE ACTIVITIES ABOVE AND BEYOND THOSE OUTLINED ABOVE. PLEASE BE AWARE OF ALL PERMIT CONDITIONS AS ISSUED BY REGULATORY AGENCIES TO ENSURE PERMIT COMPLIANCE.

STANDARD FIRE PROTECTION NOTES

1.) FIRE HYDRANTS MUST BE IN INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.

2.) PER NATIONAL FIRE PROTECTION ASSOCIATION, NFPA 1: 16.4.3.1.3: WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED AND IN SERVICE PRIOR TO CONSTRUCTION WORK.

3.) PER NFPA-1, 18.3.4.1: CLEARANCES OF 7 ½ FEET IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT WITH A 4 FOOT CLEARANCE TO THE REAR MUST BE MAINTAINED AT ALL TIMES.

4.) GATED ENTRIES REQUIRE A DUAL KNOX KEY OVERRIDE SWITCH FOR EMERGENCY ACCESS.

5.) A CLICK2ENTER RADIO CONTROL SYSTEM IS REQUIRED FOR ALL GATES.

6.) RESIDENCES WILL BE SAFEGUARDED BY A FIRE SPRINKLER SYSTEM AS OUTLINED IN THE FLORIDA FIRE PREVENTION CODE.

CONSTRUCTION STANDARDS AND SPECIFICATIONS

1.) MAINTENANCE OF TRAFFIC SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND IN ACCORDANCE WITH STATE OF FLORIDA D.O.T. STANDARD INDEX 102-600.

2.) ALL PAVEMENT STRIPING AND TRAFFIC FLOW ARROWS SHALL BE THERMOPLASTIC COMPOUND, MEETING THE REQUIREMENTS OF AASHTO M 249-79 (1986) AND BE INSTALLED IN SUBSTANTIAL COMPLIANCE WITH F.D.O.T. STANDARD FOR ROAD AND BRIDGE CONSTRUCTION 1991, SECTION 711 WITH RPMS PER FDOT #17352

3.) ALL WORK PERFORMED WITHIN THE RIGHT OF WAY SHALL CONFORM TO:
   a. FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2004), (AKA: STANDARD SPECS).
   b. FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND OPERATIONS ON THE STATE HIGHWAYS SYSTEM, JAN., 2004, (AKA: STANDARD INDEX). COMPLIANCE WITH ALL APPLICABLE INDICES IS REQUIRED.
   c. FDOT ROADWAY PLANS PREPARATION MANUAL VOLUME 1, CHAPTERS 2 AND 25 (2004).
   d. FDOT FLEXIBLE PAVEMENT DESIGN MANUAL FOR NEW CONSTRUCTION AND PAVEMENT REHABILITATION, JANUARY 2002
   e. ALL TRAFFIC STRIPES AND MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC. THE PERMITTEE SHALL FURNISH THE FDOT WITH THE MANUFACTURE'S CERTIFICATION THAT THE THERMOPLASTIC IS "LEAD-FREE".

4.) PROPOSED PAVEMENT MARKINGS TO MEET AND MATCH EXISTING PAVEMENT MARKINGS.

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

THE CITY OF EDGEWATER DEVELOPMENT REVIEW – STANDARD SITE PLAN NOTES

1.) ALL UTILITY CONSTRUCTION SHALL COMPLY WITH THE APPROPRIATE UTILITY PROVIDER STANDARDS AND SPECIFICATIONS.

CITY OF EDGEWATER UTILITIES - RANDY COSLOW (386)424-2400 EXT: 4007

2.) ALL ON-SITE WATER AND SEWER FACILITIES SHALL BE OWNED AND MAINTAINED BY THE OWNER/ DEVELOPER.

3.) INSTALLATION OF FUEL STORAGE TANKS REQUIRES REVIEW AND APPROVAL BY THE FIRE MARSHAL AND THE ISSUANCE OF A SEPARATE BUILDING PERMIT. APPROVAL OF THE SITE PLAN DOES NOT CONSTITUTE APPROVAL OF THE LOCATION OF THE FUEL TANKS.

4.) ALL PROPOSED SIGNS MUST BE APPLIED FOR, APPROVED, AND PERMITTED ON AN INDIVIDUAL BASIS APART FROM ANY ULTIMATELY APPROVED SITE PLAN. APPROVAL OF THIS SITE PLAN DOES NOT CONSTITUTE APPROVAL OF ANY SIGNAGE.

5.) HANDICAP PARKING SPACES WILL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH FLORIDA STATUTE 316, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR OTHER APPLICABLE STANDARDS.

6.) THE ARCHITECT/ENGINEER CERTIFIES THAT THE SITE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT.

7.) ALL ON-SITE PARKING SPACES WILL BE STRIPED AND SIGNED IN ACCORDANCE WITH THE MANUA



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CONSTRUCTION PLAN REVISIONS		
1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

AERIAL SITE PLAN

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

NICHOLAS ALEXANDER PEET
LICENSE
NO. 92061
6/30/26
STATE OF FLORIDA
PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No.	199-05-01
SHEET	C 3.0

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TREE LEGEND

ASH	ASH TREE	OAK	OAK TREE	CL	CELTIS LAEVIGATA: SUGAR BERRY/HACKBERRY TREE		
BAY	BAY TREE	QL	QUERCUS LAURIFOLIA: LAUREL OAK TREE	MG	MAGNOLIA GRANDIFLORA: SOUTHERN MAGNOLIA TREE		
CAM	CAMPHOR TREE	QV	QUERCUS VIRGINIANA: LIVE TREE	ZC	ZANTHOXYLUM CLAVA-HERCULIS: HERCULES' CLUB TREE		
CD	CEDAR TREE	IC	LIEX CASSINE: DAHOON HOLLY TREE	PS	PRUNUS SEROTINA: BLACK CHERRY TREE		
CITRUS	CITRUS TREE	PC	PRUNUS CAROLINIANA: LAUREL CHERRY TREE	DDD	INDICATES THAT THE TREE IS LIKELY DEAD, DISEASED OR DYING		
CL	CHERRY TREE	SP	SABAL PALMETTO: CABAGE PALM TREE	UK	UNKNOWN TREE	MG	MAGNOLIA
OK	OAK TREE	PNP	POND PINE	MP	MAPLE TREE	BY	BAY TREE
SB	SUGARBERRY TREE	PNL	LOBLOLLY PINE TREE	SC	SYCAMORE TREE	EM	ELM TREE
SG	SWEET GUM TREE	PN	SLASH PINE TREE	OK	OAK TREE	CB	CHINABERRY TREE
CB	CHINABERRY TREE	PNS	SAND PINE TREE	SG	SWEET GUM TREE	CY	CYPRESS TREE
ELM	ELM TREE	PNF	LONGLEAF PINE TREE	HK	HICKORY TREE	PM	PALM TREE
HCK	HICKORY TREE	BT	BLACK TUPELO TREE	BH	BIRCH TREE	MU	MULBERRY TREE
MAG	MAGNOLIA	CD	CEDAR TREE	PM	PALM TREE	PN	PINE TREE
MAP	MAPLE TREE						

TREE TYPE — OK24/8 — TREE SIZE (INCHES) DIAMETER AT BREAST HEIGHT — MULTIPLE TRUNKS — TREE SYMBOL

EXISTING SITE DATA:

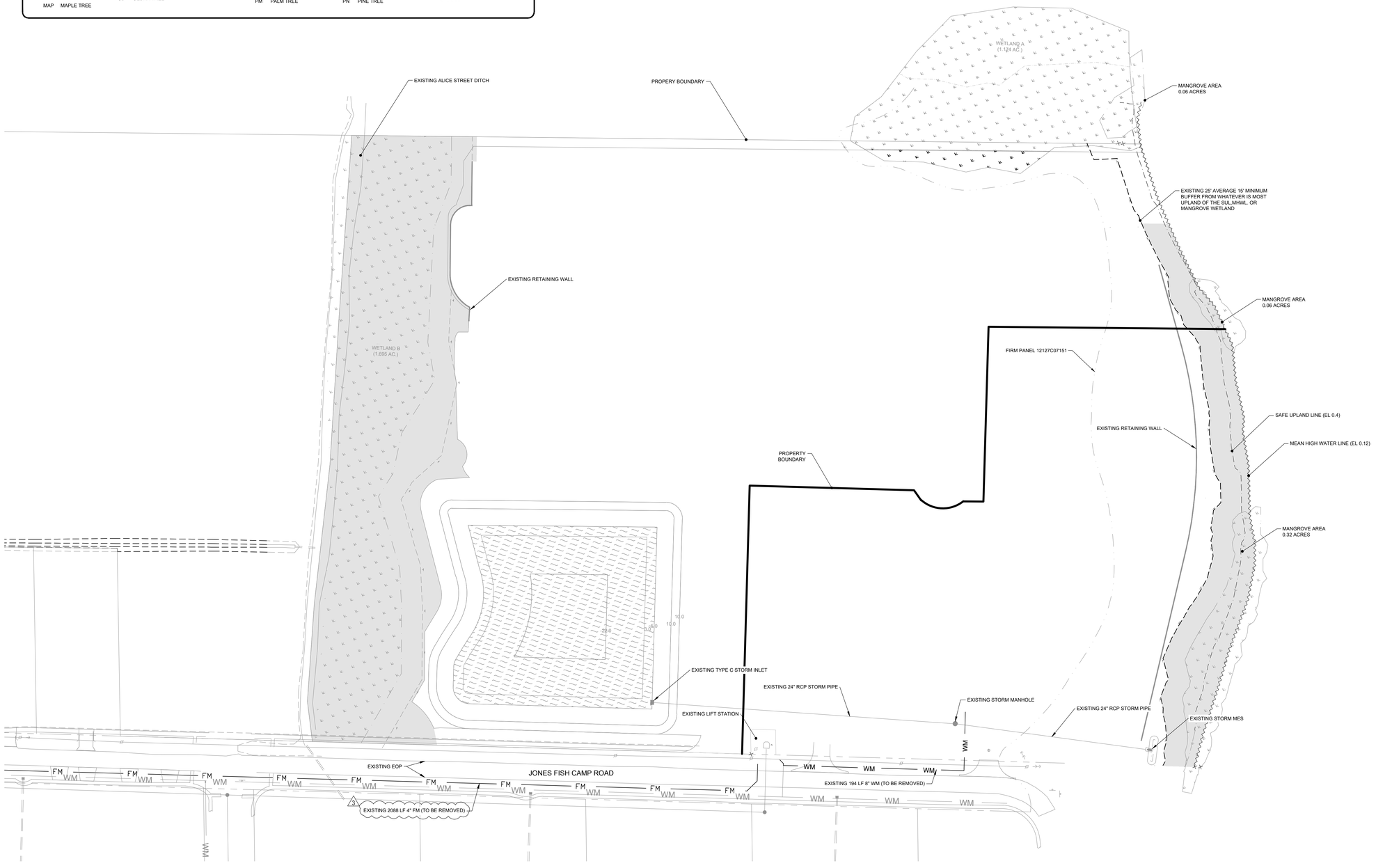
- *WETLAND AREA = 2.859 ACRES*
- *MANGROVE AREA = 0.444 ACRES*

NOTE ALL UPLAND IMPACTS ARE PART OF MASS GRADING PERMIT APP#183840-5.

ALL SHORELINE ACTIVITY, BUFFERS IMPACTS AND SEAGRASS LIMITS ARE SHOWN WITHIN THE MARINA PLANS BY DMC.

LEGEND

- PROJECT BOUNDARY
- EASEMENT LINE
- SILT FENCE
- FEMA FLOODPLAIN LINE
- DEMO AREA
- PN16 — DEMO TREE
- PN18 — SAVE TREE
- SOIL BORING



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EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

EXISTING CONDITIONS AND DEMOLITION

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

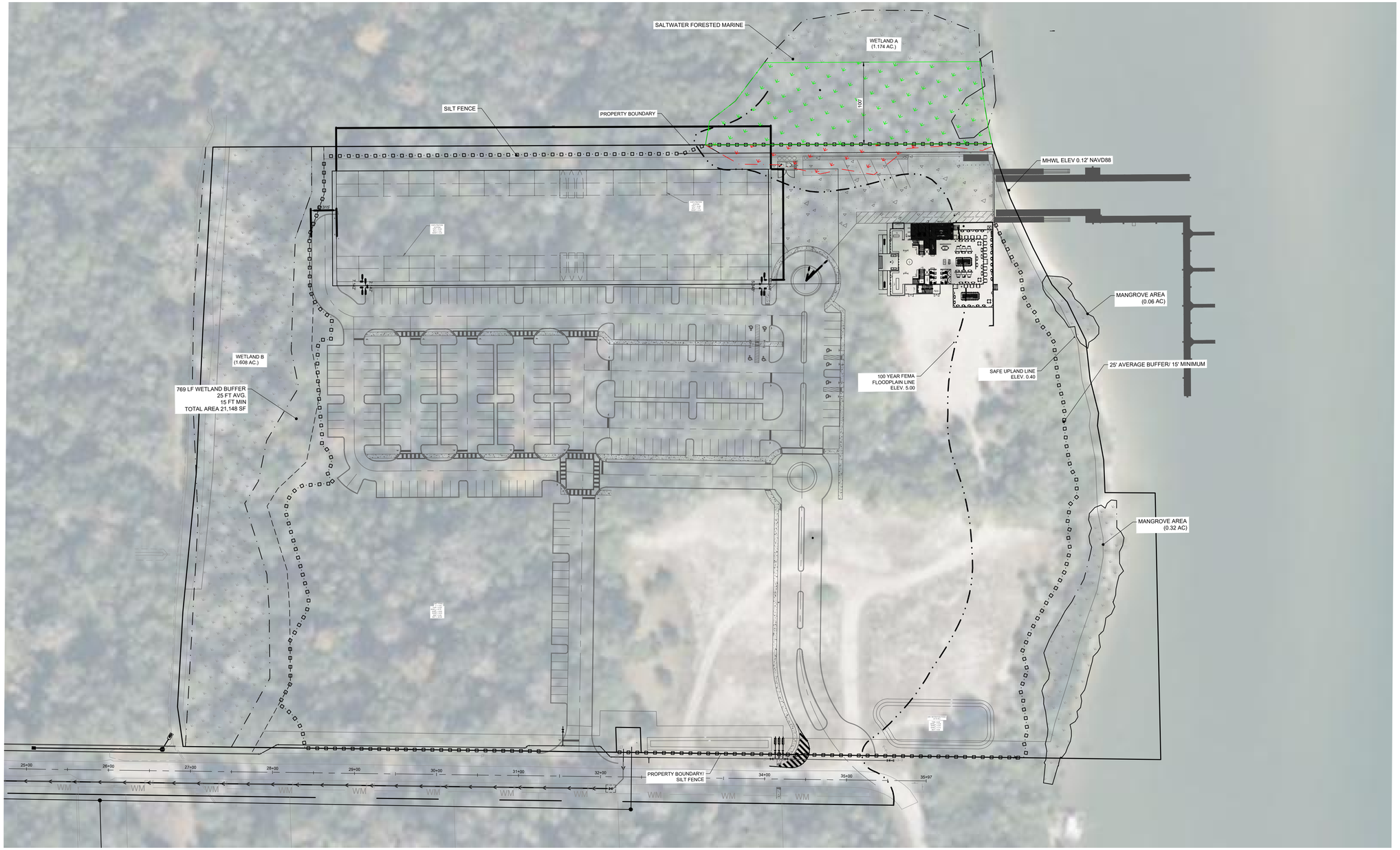
NICHOLAS ALEXANDER PEET LICENSE NO. 92061 6/30/26 STATE OF FLORIDA PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
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REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

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WETLAND/OSW DESIGNATION	WETLAND CATEGORY	TOTAL ACREAGE ON-SITE	TOTAL ACREAGE OFFSITE	DIRECT IMPACT ACREAGE	SECONDARY IMPACT ACREAGE
WETLAND A SALTWATER FORESTED MARINE	II	0.155	1.019*	0.155	0.711
WETLAND B FRESHWATER FORESTED	II	1.608	-	-	-

*APPROXIMATE ACREAGE BASED ON EXTRAPOLATED DATA

LEGEND

- SECONDARY IMPACTS
- DIRECT IMPACTS
- UNDISTURBED WETLAND

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EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

WETLAND IMPACT PLAN

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26006638

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PROJECT No. 199-05-01

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Use	Provided	Required (Per Land Development Code Article V Table V-8)
Boat Stack	37	1 Spot Per 2000 sf = 71,550/2000 = 36
Restaurant	126	1 Spot Per 4 Seats (400 SEATS) + 1 Spot Per 2 Employees (52 EMPLOYEES)
Handicap Parking Spaces	8	8
Total Parking Spaces	171	

ALL SPOTS WITHIN THE PHASE 1 DEVELOPMENT ARE PROVIDED FOR PHASE 1 AND ANY FUTURE PHASE MUST WILL NOT HAVE THE ABILITY TO UTILIZE THESE SPOTS TOWARDS ANY FUTURE PARKING COUNT.

LEGEND

- PROPERTY LINE
- DUMPSTER PAD
- PAVERS
- TREE CONSERVATION AREA

SCALE IN FEET: 0, 25, 50, 100

WETLAND A (1.174 AC.)
WETLAND B (1.695 AC.)
30' BUILDING SETBACK
ROLLOUT DUMPSTER PAD
WASHDOWN RECYCLE EQUIPMENT
RECYCLED WASHDOWN AND STAGING AREA
ELECTRICAL HOUSING
FUELING TANK PAD
WETLAND BUFFER / CONSERVATION EASEMENT LIMITS
PROPOSED FDOT DRAINAGE EASEMENT (DRAINAGE RIGHTS ONLY, HOA TO MAINTAIN)
EXTENTS OF WETLAND CONSERVATION EASEMENT
WETLAND BUFFER LIMITS
WETLAND LIMITS
WET POND (1.11 AC)
EASTERN TOP OF BANK OF FDOT DRAINAGE DITCH
TYPE D CURB
5' SIDEWALK
6' THICKENED EDGE SIDEWALK
5' THICKENED EDGE SIDEWALK
25' BUFFER FROM WESTERN MOST OF THE SUL, MHWL OR WETLAND LINES CONSTRUCTION LIMIT
SAFE UPLAND LINE (EL 0.4)
10' BUILDING SETBACK
MEAN HIGH WATER LINE (EL 0.12)
SEE PLANS BY DMC FOR WORK EAST OF MHWL BUFFER
DRY RETENTION POND (0.19 AC)
20' LANDSCAPE BUFFER
OFFSITE ROADWAY IMPROVEMENTS UNDER SEPARATE PERMIT

SITE DATA TABLE

PROJECT AREA (PHASE 1)	12.42 AC
OPEN SPACE	6.53 AC
BUILDING (BOAT STACK) SF	71,550 SF
BUILDING (RESTURANT, OFFICE, STORE) SF	14,400 SF
BUILDING HEIGHT	53' 7"
BOAT SLIPS	338 DRY SLIPS, 10 WET SLIPS

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EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

MASTER SITE PLAN

Engineering Business Certificate of Authorization No. 32771
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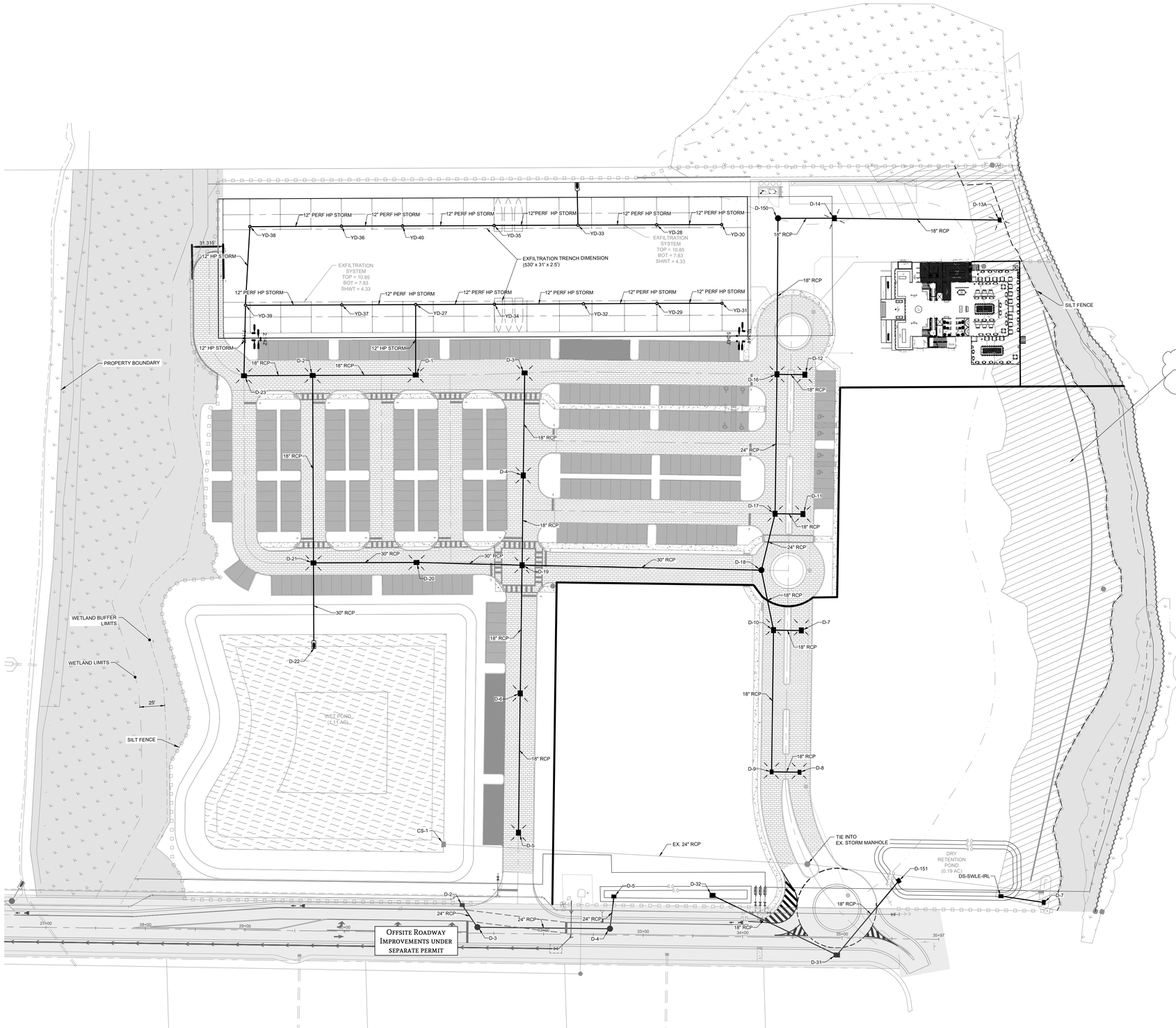
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LEGEND

- EXISTING CONTOUR
- SILT FENCE
- MITERED END SECTION
- MANHOLE
- GRATE INLET/CONTROL STRUCTURE

FEMA FLOODPLAIN IMPACT

THE FEMA FLOODPLAIN IS ELEVATION 5.0 PER FEMA FIRM PANELXXX DATED XXX.

THE FLOODPLAIN ONSITE IS BEING IMPACTED FROM ELEVATION 5.0 TO THE NWL AT THE LOCATION OF THE BOAT STACK DROP.

THE VOLUME OF IMPACT IS MEASURED WHEREVER THERE IS FILL FROM THE SURVEYED ELEVATION OF 5.0 TO THE NWL.

THE IMPACT VOLUME HAS BEEN MEASURED TO BE 3641 CY.

FLOODPLAIN IMPACT AREA (3641 CY)

0 25 50 100
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EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

MASTER DRAINAGE PLAN

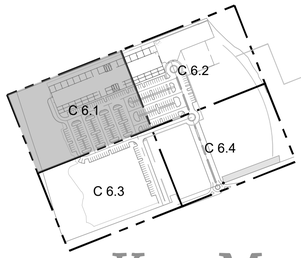
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PROJECT No.	199-05-01
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KEY MAP

LEGEND

- PROPERTY LINE
- RIGHT OF WAY LINE
- 35 EXISTING CONTOUR
- SILT FENCE
- 80.60 FINISHED GRADE
- 80.60 GB FINISHED GRADE AT GRADE BREAK
- 80.60 HP FINISHED GRADE AT HIGH POINT
- MANHOLE
- GRATE INLET/CONTROL STRUCTURE

SILT FENCE

31.315'

EX. RETAINING WALL

PROPERTY LINE

WETLAND BUFFER LIMITS

WETLAND LIMITS

WETLAND B
(1.695 AC.)

25'

ADS NYOPLAST YARD DRAIN TO BE USED AS CLEANOUTS FOR THE TRENCH SYSTEM. SEE SHEET C10.4 FOR ROOF DRAIN, YARD DRAIN DETAILS. ROOF DRAINS TO DOWN ON THE INTERIOR OF THE BUILDING INTO THE TRENCH.

YD-38 YARD DRAIN
TOP EL. 10.60
INV E = 8.33
INV S = 8.33

92 LF 12" PERF. PIPE @ 0.00%

YD-36 YARD DRAIN
TOP EL. 10.85
INV W = 8.33
INV E = 8.33

61 LF 12" PERF. PIPE @ 0.00%

YD-40 YARD DRAIN
TOP EL. 10.85
INV W = 8.33
INV E = 8.33

B - 1
SHWE = 4.3

92 LF 12" PERF. PIPE @ 0.00%

YD-35 YARD DRAIN
TOP EL. 10.85
INV W = 8.33
INV E = 8.33

84 LF 12" PERF. PIPE @ 0.00%

YD-33 YARD DRAIN
TOP EL. 10.85
INV W = 8.33
INV E = 8.33
INV N = 9.60

D-30 MES
INV S= 8.76

79 LF 18" HP STORM @ 12.31%

79 L

79 LF 12" HP STORM @ 0.00%

BOAT STORAGE
71550 SF
F.F.E. 10.85

EXFILTRATION SYSTEM
TOP = 10.85
BOT = 7.83
SHWT = 4.33

YD-39 YARD DRAIN
TOP EL. 10.49
INV N = 8.33
INV E = 8.33
INV S = 9.60

YD-37 YARD DRAIN
TOP EL. 10.85
INV W = 8.33
INV E = 8.33

YD-27 YARD DRAIN
TOP EL. 10.85
INV W = 8.33
INV E = 8.33
INV S = 9.60

YD-34 YARD DRAIN
TOP EL. 10.85
INV W = 8.33
INV E = 8.33

YD-32 YARD DRAIN
TOP EL. 10.85
INV W = 8.33
INV E = 8.33

97 LF 12" PERF. PIPE @ 0.00%

74 LF 12" PERF. PIPE @ 0.00%

79 LF 12" PERF. PIPE @ 0.00%

90 LF 12" PERF. PIPE @ 0.00%

7.14%

2.14%

71 LF 12" HP STORM @ 6.49%

71 LF 12" HP STORM @ 6.50%

D-2 TYPE D GTI P-BOTTOM
TOP EL. 9.33
INV E = 4.73
INV W = 4.71
INV S = 4.71

D-1 TYPE D GTI P-BOTTOM
TOP EL. 9.39
INV N = 5.00
INV W = 4.89

D-3 TYPE D GTI P-BOTTOM
TOP EL. 9.36
INV S = 4.86

104 LF 18" RCP @ 0.15%

69 LF 18" RCP @ 0.14%

D-23 TYPE D GTI P-BOTTOM
TOP EL. 9.31
INV N = 5.00
INV E = 4.81

188 LF 18" RCP @ 0.15%

103 LF 18" RCP @ 0.16%

D-4 TYPE D GTI P-BOTTOM
TOP EL. 9.16
INV N = 4.70
INV S = 4.66

90 LF 18" RCP @ 0.16%

SEE SHEET C 6.2

SEE SHEET C 6.3

LF 30" RCP @ 0.08%

106 LF 30" RCP @ 0.08%

D-19 TYPE D GTI J-BOTTOM
TOP EL. 9.01
INV E = 2.19
INV N = 4.52

D-20 TYPE D GTI J-BOTTOM

D-21 TYPE D GTI J-BOTTOM

0 10 20 40
SCALE IN FEET

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LEVELUP CONSULTING, LLC
505 E. JACKSON STREET
SUITE 200
TAMPA, FLORIDA 33602
OFFICE: 813-375-0616
WWW.LEVELUPFLORIDA.COM

CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

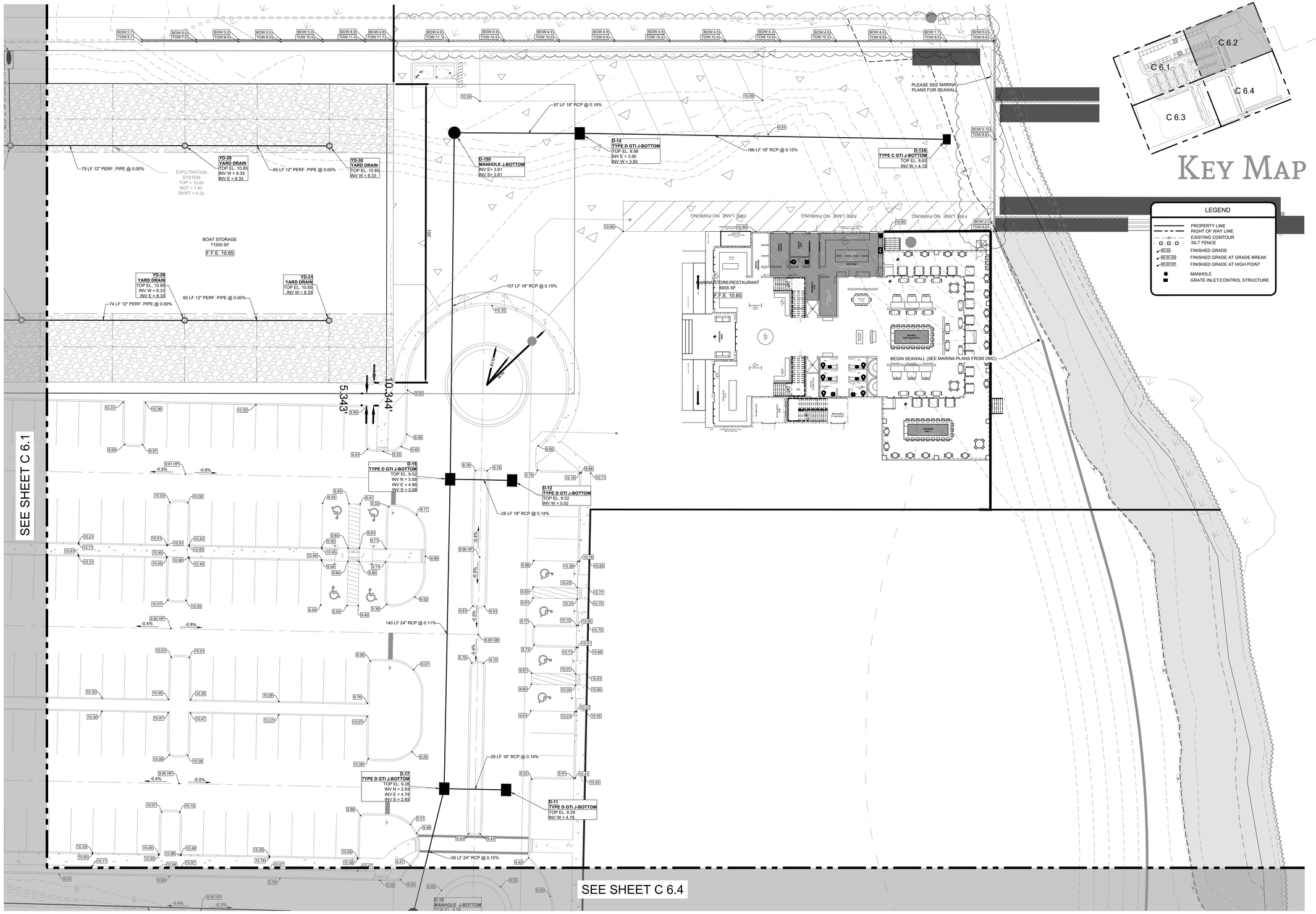
PAVING, GRADING, AND DRAINAGE PLAN

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

NICHOLAS ALEXANDER PEET LICENSE NO. 92061 6/30/26 STATE OF FLORIDA PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No.	199-05-01
SHEET	C 6.1



KEY MAP

LEGEND

- PROPERTY LINE
- RIGHT OF WAY LINE
- EXISTING CONTOUR
- SILT FENCE
- FINISHED GRADE
- FINISHED GRADE AT GRADE BREAK
- FINISHED GRADE AT HIGH POINT
- MANHOLE
- GRATE INLET/CONTROL STRUCTURE

0 10 20 40
SCALE IN FEET

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EDGEWATER RIVER OAKS MARINA

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PROJECT No. 199-05-01

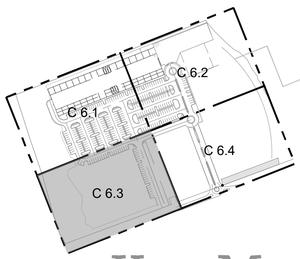
SHEET C 6.2

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3/26/2026 1:55:47 PM PLOTTED BY: Hoss Jamalian

SEE SHEET C 6.1

LEGEND

- PROPERTY LINE
- RIGHT OF WAY LINE
- EXISTING CONTOUR
- SILT FENCE
- FINISHED GRADE
- FINISHED GRADE AT GRADE BREAK
- FINISHED GRADE AT HIGH POINT
- MANHOLE
- GRATE INLET/CONTROL STRUCTURE



KEY MAP

WETLAND BUFFER LIMITS

WETLAND LIMITS

25'

103 LF 30" RCP @ 0.08%

D-21
TYPE D GTI J-BOTTOM
TOP EL. 9.15
INV E = 2.03
INV N = 4.42
INV S = 2.03

D-20
TYPE D GTI J-BOTTOM
TOP EL. 9.28
INV E = 2.11
INV W = 2.11

106 LF 30" RCP @ 0.08%

D-19
TYPE D GTI J-BOTTOM
TOP EL. 9.01
INV E = 2.19
INV N = 4.52
INV S = 4.35
INV W = 2.19

86 LF 30" RCP @ 0.08%

D-22
MES
INV N= 1.96

129 LF 18" RCP @ 0.15%

D-6
TYPE D GTI P-BOTTOM
TOP EL. 9.04
INV S = 4.73
INV N = 4.54

140 LF 18" RCP @ 0.15%

D-5
TYPE D GTI P-BOTTOM
TOP EL. 9.44
INV N = 4.94

EX - 2

EX - 4

EX. 24" RCP

WET POND
(1.11 AC.)
TOB = 10.00
DHW_{25} = 9.72
DHW_{50} = 8.62
DHW_{25} = 8.03
NWL = 9.00
BOT = -22.00

CS-1
TYPE C GTI
TOP EL. 9.80
INV E = 5.00

NOTE: SEE CONTROL STRUCTURE DETAILS ON SHEET C 10.3

D-2
TYPE C GTI J-BOTTOM
TOP EL. 8.12
INV SE = 3.62

27 LF 24" RCP @ 0.15%

D-3
MANHOLE J-BOTTOM
TOP EL. 8.06
INV NW = 3.58
INV E = 3.08

133 LF 24" RCP @ 0.11%

OFFSITE ROADWAY IMPROVEMENTS UNDER SEPARATE PERMIT

SEE SHEET C 6.4

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0 10 20 40
SCALE IN FEET

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EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

PAVING, GRADING, AND DRAINAGE PLAN

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NICHOLAS ALEXANDER PEET
LICENSE
NO. 92061
6/30/26
STATE OF FLORIDA
PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

SHEET C 6.3

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03/20/26 1:53:58 PM PLOTTED BY: Heidi Jarvis

SEE SHEET C 6.2

SEE SHEET C 6.3

58 LF 24" RCP @ 0.10%

241 LF 30" RCP @ 0.07%

61 LF 18" RCP @ 0.16%

28 LF 18" RCP @ 0.14%

142 LF 18" RCP @ 0.15%

28 LF 18" RCP @ 0.14%

33 LF 24" RCP @ 0.06%

138 LF 18" RCP @ 0.14%

97 LF 18" RCP @

97 LF 18" RCP @ 0.51%

43 LF 18" RCP @ 2.30%

EX - 1

EX - 3

EX - 4

EX - 5

D-18
MANHOLE J-BOTTOM
TOP EL. 9.58
INV N = 2.87
INV SE = 4.51
INV W = 2.37

D-7
TYPE D GTI J-BOTTOM
TOP EL. 9.35
INV W = 4.85

D-10
TYPE D GTI J-BOTTOM
TOP EL. 9.35
INV S = 4.61
INV E = 4.81
INV NW = 4.61

D-9
TYPE C GTI J-BOTTOM
TOP EL. 9.32
INV E = 4.82
INV N = 4.82

D-8
TYPE C GTI J-BOTTOM
TOP EL. 9.32
INV W = 4.86

D-5
TYPE C DBI J-BOTTOM
TOP EL. 5.00
INV S = -1.05

D-32
TYPE D DBI P-BOTTOM
TOP EL. 5.00
INV E = 0.20

D-4
MANHOLE J-BOTTOM
TOP EL. 7.82
INV W = 2.93
INV N = -1.03

D-31
TYPE E GTI J-BOTTOM
TOP EL. 5.00
INV W = 0.00
INV N = 0.00

D-151
TYPE C DBI P-BOTTOM
TOP EL. 4.00
INV S = -0.50

DS-RETIRL
TYPE C DBI P-BOTTOM
TOP EL. 4.93
INV E = 0.00

D-7
TYPE C GTI P-BOTTOM
TOP EL. 2.00
INV W = -1.00

EX. 24" RCP

EX. STORM MANHOLE

DRY RETENTION POND
(0.19 AC)
TOB = 6.00
DHW_{100} = 5.34
DHW_{25} = 5.24
DHW_{3} = 5.15
BOT = 4.00

PLACE 2.5" WEIGHT PIPE GRATES OVER WES PER FDOT 430-022 SPECIFICATIONS WITH GRATES MAXIMUM 8 INCHES APART. 2.5" WEIGHT PIPE GRATES ARE A MAXIMUM 8 INCHES APART TO COMPLY WITH LOCAL MANATEE PROTECTION GUIDELINES FOR STRUCTURES NEAR THE MHWL

OFFSITE ROADWAY IMPROVEMENTS UNDER SEPARATE PERMIT

ROUNDABOUT DRAINAGE DETAIL SEE ABOVE

ROUNDABOUT DRAINAGE
AT A 1:20 SCALE

LEGEND

- PROPERTY LINE
- RIGHT OF WAY LINE
- 35 EXISTING CONTOUR
- SILT FENCE
- 80.00 FINISHED GRADE
- 80.00 GB FINISHED GRADE AT GRADE BREAK
- 80.00 HP FINISHED GRADE AT HIGH POINT
- MANHOLE
- GRATE INLET/CONTROL STRUCTURE

0 10 20 40
SCALE IN FEET

KEY MAP

C 6.1
C 6.2
C 6.3
C 6.4

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EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

PAVING, GRADING, AND DRAINAGE PLAN

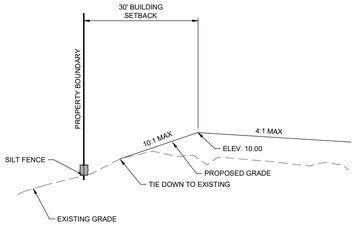
Engineering Business Certificate of Authorization No. 32771
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NICHOLAS ALEXANDER PEET LICENSE NO. 92061 6/30/26 STATE OF FLORIDA PROFESSIONAL ENGINEER

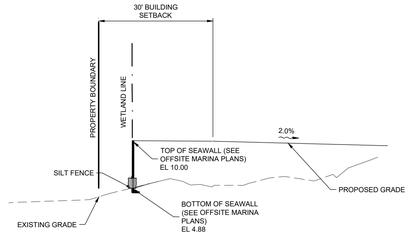
NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No.	199-05-01
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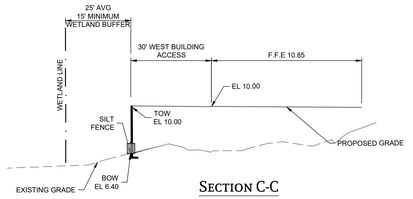
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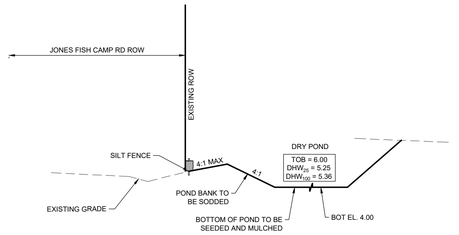
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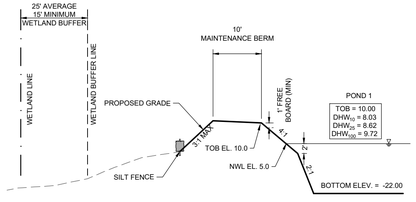
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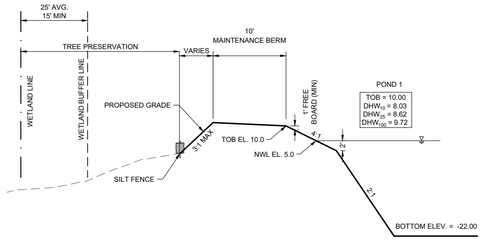
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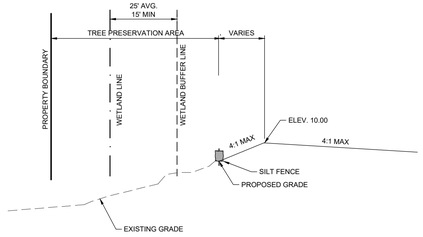
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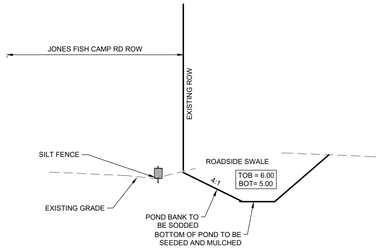
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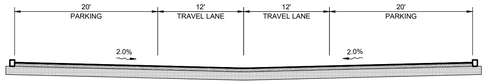
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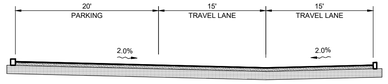
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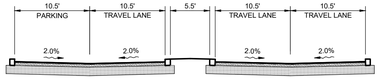
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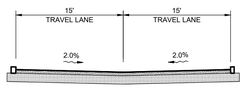
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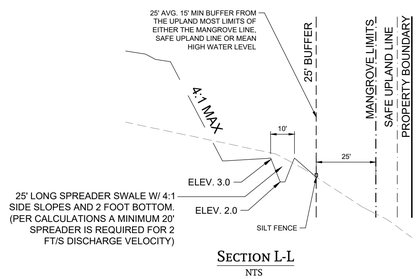
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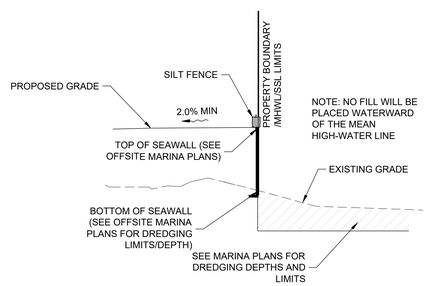
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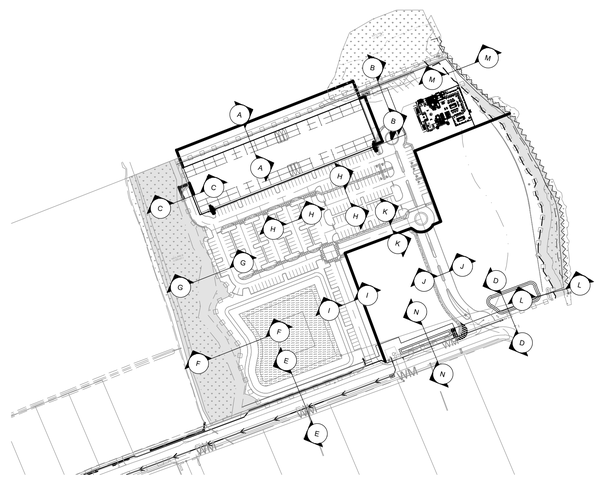
SECTION K-K
NTS



SECTION L-L
NTS



SECTION M-M



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EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

CROSS SECTIONS

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

NICHOLAS ALEXANDER PEET LICENSE NO. 92061 6/30/26 STATE OF FLORIDA PROFESSIONAL ENGINEER

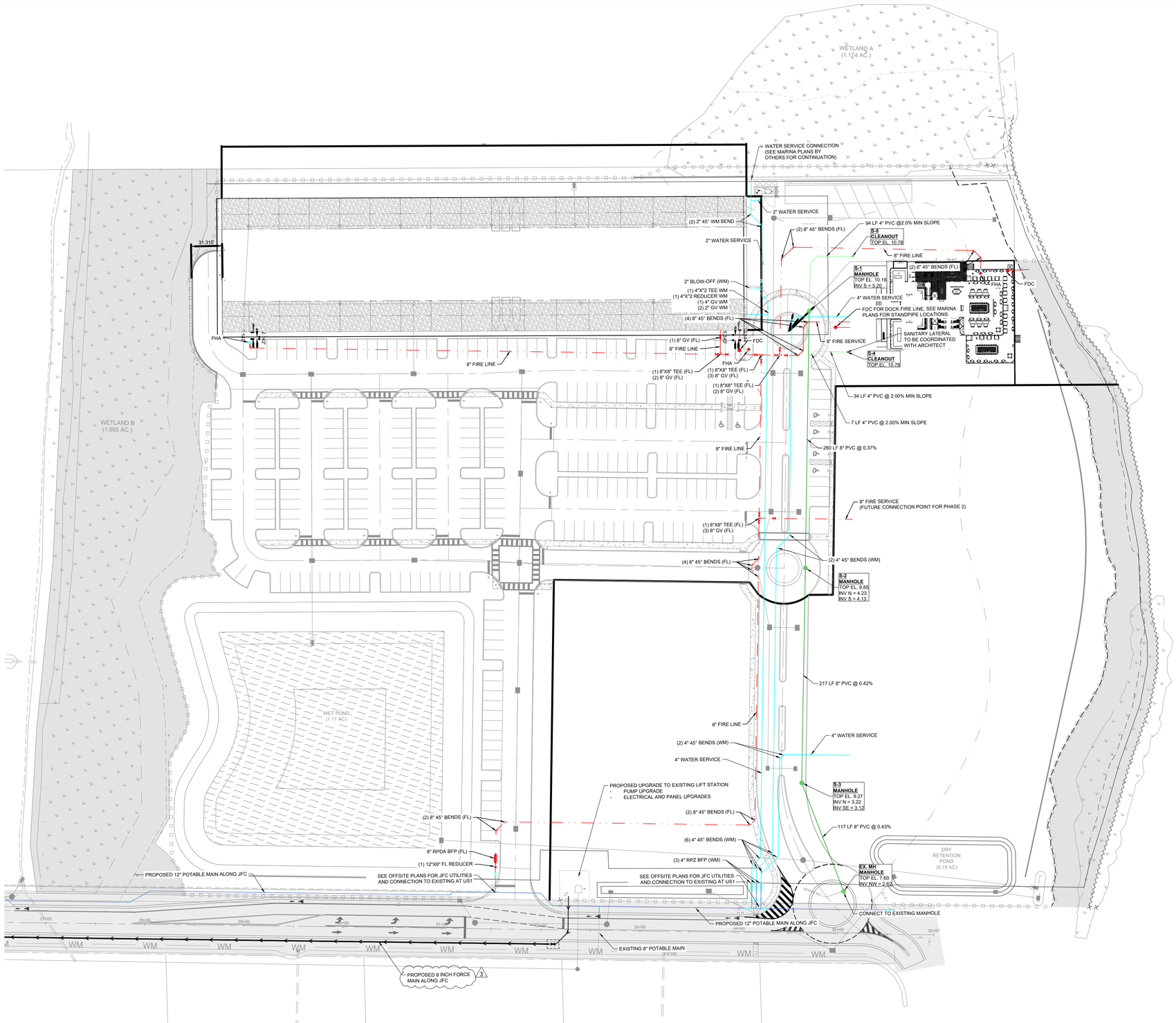
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FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

SHEET C 7.0

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OFFSITE UTILITY IMPROVEMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH STANDARDS OF VOLUSIA COUNTY WATER RESOURCES & UTILITIES AS PART OF ROADWAY IMPROVEMENTS



0 25 50 100
SCALE IN FEET

CONSTRUCTION PLAN REVISIONS

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EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

MASTER UTILITY PLAN

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

NICHOLAS ALEXANDER PEET
LICENSE
NO. 92061
6/30/26
STATE OF FLORIDA
PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

SHEET C 8.0

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Signage / Hatch Legend

1	STREET A DRIVE D3 STREET B DRIVE D3 STOP R1-1 36"	2 FL DOT FTP-21-06 18"x18" PARKING BY DISABLED PERMIT ONLY FL DOT FTP-21-06 18"x12" FINE $### ### FL DOT FTP-22-06 12"x6" NOTE: SEE SHEET C 9.1 FOR DETAIL
3	W2-6 ROUNDABOUT W16-12aP	

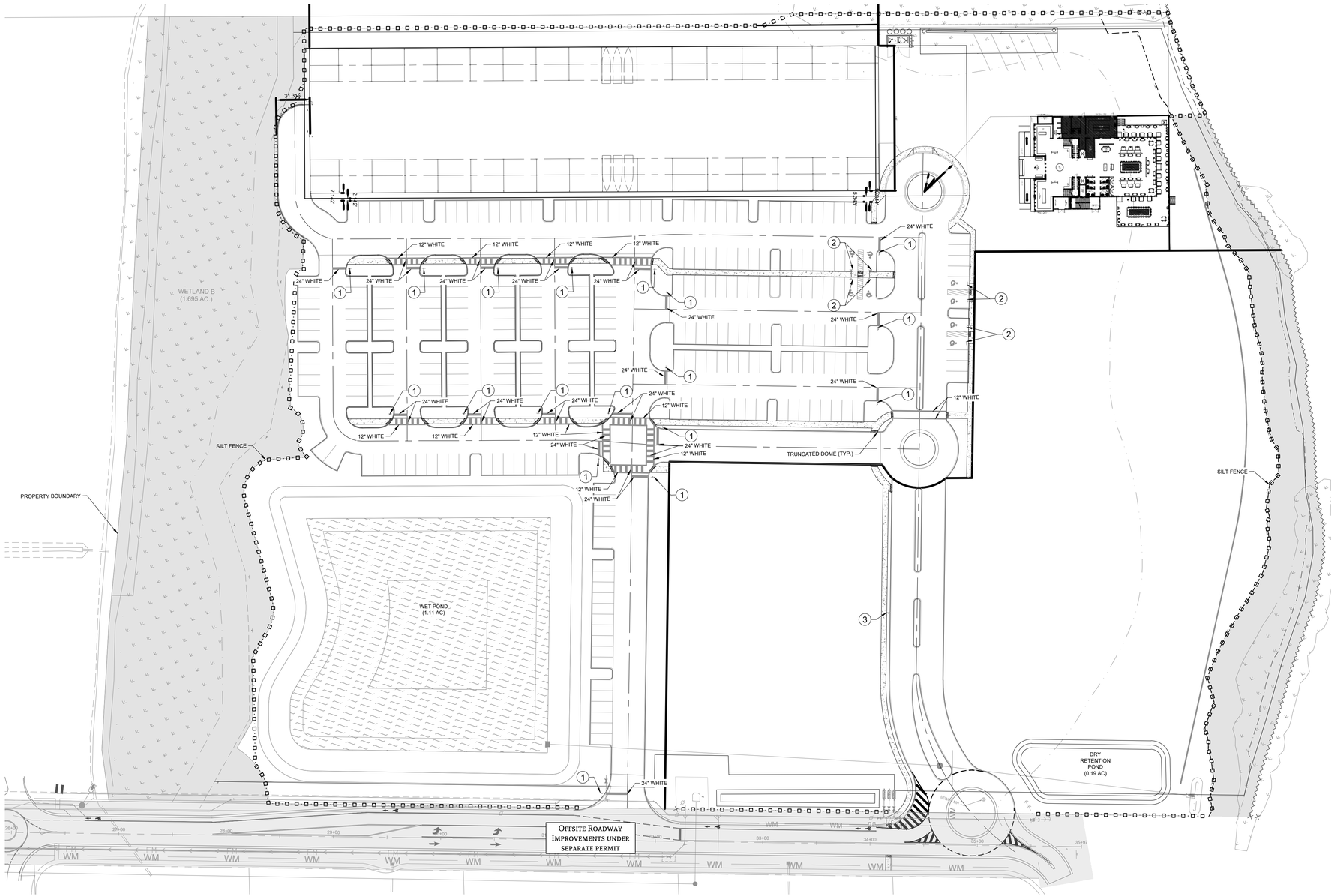
NOTE: DETAILS REFERENCED
M.U.T.C.D. & F.D.O.T. DESIGN STANDARDS

F.D.O.T. DESIGN STANDARDS
INDEX # 102-660 - SIDEWALK CLOSURE
INDEX # 522-002 - DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS
INDEX # 700-010 - SINGLE COLUMN GROUND SIGNS
INDEX # 711-001 - PAVEMENT MARKINGS
INDEX # 700-109 - TRAFFIC CONTROLS FOR STREET TERMINATIONS
INDEX # 706-001 - TYPICAL PLACEMENT OF REFLECTIVE PAVEMENT MARKERS

M.U.T.C.D.
SECTION 2B.05 - STOP SIGN (R1-1)
SECTION 2C.58 - ADVANCE STREET NAME PLAQUE
SECTION 2D.38 - STREET NAME SIGN (D3-1)
SECTION 2B.39 - PARKING, STANDING, AND STOPPING SIGNS (R8-1)

LEGEND
- RIGHT OF WAY LINE
- EASEMENT LINE
- LA BUFFER
- WETLAND LINE
- WETLAND SETBACK LINE
- SILT FENCE
- FEMA LINE

NOTE: ALL AFFECTED SIDEWALKS, RAMPS, AND CROSSWALKS, WILL BE BUILT AND INSPECTED TO MEET CURRENT ADA REQUIREMENTS.



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CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

SIGNAGE AND PAVEMENT MARKING PLAN

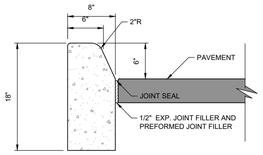
Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

NICHOLAS ALEXANDER PEET LICENSE NO. 92061 6/30/26 STATE OF FLORIDA PROFESSIONAL ENGINEER

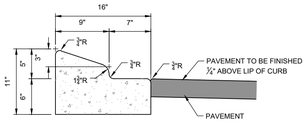
NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No.	199-05-01
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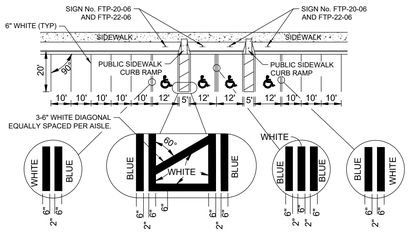
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TYPE "D" CURB



TYPE "A" CURB



HANDICAP PARKING SPACE DETAIL

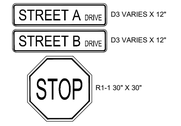
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NOTE:
SITE ACCESSIBILITY HAS BEEN DESIGNED TO COMPLY WITH THE 6TH EDITION 2017 FLORIDA BUILDING CODE FOR ACCESSIBILITY AND THE 2017 FDOT STANDARDS.



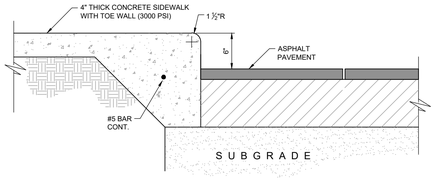
HANDICAPPED PARKING SIGNAGE DETAIL

SCALE: N.T.S.



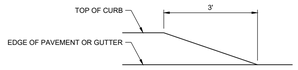
STOP SIGN AND ROAD NAME SIGNAGE DETAIL

SCALE: N.T.S.



RAISED SIDEWALK DETAIL

SCALE: N.T.S.



3' CURB TRANSITION

GENERAL PAVEMENT DESIGN/MATERIAL NOTES:

1. PAVEMENT DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF MOUNT DORA LAND DEVELOPMENT CODE.
2. SECOND LIFT OF ASPHALT (TYPE SP-12.5) TO BE COMPLETED AFTER HOME CONSTRUCTION IS COMPLETE.
3. 12" STABILIZED SUB GRADE MIN. LBR 40, COMPACTED TO 98% MOD. PROCTOR MAX. DRY DENSITY (ASTM D-1557)
4. WHEN NO CURB IS PROPOSED CRUSHED CONCRETE BASE TO EXTEND 6" BEYOND EDGE OF PAVEMENT.
5. ALL UNDERGROUND UTILITIES MUST BE INSTALLED PRIOR TO PREPARATION OF SUBGRADE FOR PAVEMENT.
6. ALL SIDEWALKS SHALL COMPLY WITH ADA REQUIREMENTS.
7. 6" CRUSHED CONCRETE MAY BE USED AS AN ALTERNATIVE BASE. THEN THE BASE SHALL BE COMPACTED BY ROLLING WITH A COMBINATION OF STEEL WHEEL AND RUBBER TIRED ROLLERS UNTIL AN AVERAGE DENSITY OF 98 PERCENT OF THE MAXIMUM DENSITY OBTAINABLE UNDER AASHTO METHOD T-180 IS REACHED. THE BASE SHALL HAVE AN AVERAGE LBR OF NOT LESS THAN 150.

PAVEMENT DESIGN

LAYER TYPE	STRUCTURAL COEFFICIENT	PROPOSED THICKNESS (IN)	SN
TYPE SP-12.5 ASPHALTIC CONCRETE	0.44	1.50	0.66
LIMEROCK BASE (LBR 100)	0.18	6.00	1.08
COMPACTED SUBGRADE (LBR 40 / 98% MOD. PROCTOR)	0.04	12.00	0.48
TOTAL PROPOSED SN			2.22

TYPICAL ROAD PAVING SECTION

SCALE: N.T.S.

NOTES:
COMPACTOR ENCLOSURE REQUIREMENTS

THE SCREENING ENCLOSURE WILL BE A MINIMUM OF 6' IN HEIGHT AND MADE COMPATIBLE WITH THE MATERIALS ON THE FRONT BUILDING WALL OF THE MAIN BUILDING.

1. THE OPENING DOORS WILL BE SOLID AND HAVE LOCKING PINS TO HOLD THEM OPEN DURING SERVICE. THE OPENING INTERIOR DOOR WIDTH WILL MATCH THE WIDTH OF THE INTERIOR WIDTH OF THE ENCLOSURE. IF DOOR HARDWARE IS INSTALLED ON THE INTERIOR OF THE ENCLOSURE WALL, THEN THE ENCLOSURE WILL BE ENLARGED TO ACCOMMODATE THE DIFFERENCE.
2. SAFETY BOLLARDS WILL BE INSTALLED INSIDE, WITHIN THE REAR 2', OF THE COMPACTOR ENCLOSURE.
3. A GRADE LEVEL CONCRETE SLAB AT A MINIMUM 6" THICK/4,000 POUNDS PER SQUARE INCH WILL BE PLACED FOR THE COMPACTOR TO BE SET ON.
4. THE COMPACTOR WILL BE LOCATED ON GRADE OR WITHIN THE BUILDING AT GRADE LEVEL. A 26' VERTICAL CLEARANCE WILL BE PROVIDED OVER THE COMPACTOR, OVER THE SERVICE VEHICLE AT THE POINT OF COLLECTION AND AT THE DOOR OPENING TO ALLOW ADEQUATE SPACE FOR PICK UP AND DROP OFF.

OR

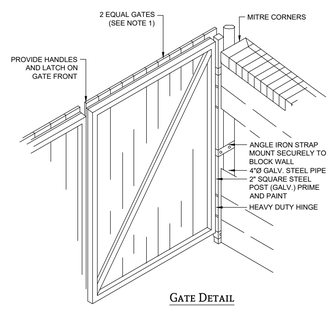
THE COMPACTOR WILL BE LOCATED WITHIN THE BUILDING SET ON A 46" (3'10") HIGH DOCK/PLATFORM WITH A WINCH SYSTEM INSTALLED. A 16' VERTICAL CLEARANCE WILL BE PROVIDED OVER THE COMPACTOR, OVER THE SERVICE VEHICLE AT THE POINT OF COLLECTION AND AT THE DOOR OPENING TO ALLOW ADEQUATE SPACE FOR PICK UP AND DROP OFF.

5. ALL SOLID WASTE VEHICLE DRIVE AISLES AND SOLID WASTE VEHICLE MANEUVERING AREAS (OUTSIDE OF THE COLLECTION AREAS) SHALL PROVIDE A MINIMUM 16' CLEARANCE FROM FINISHED GRADE LEVEL TO LOWEST PART OF OVERHEAD STRUCTURE/TREE CANOPY/DRIVE THRU CANOPY.
6. ALL SOLID WASTE VEHICLE DRIVE AISLES AND SOLID WASTE VEHICLE MANEUVERING AREAS SHALL BE CONSTRUCTED TO CURRENT STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

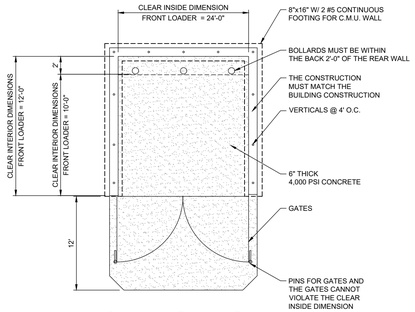
DUMPSTER SCREENING ENCLOSURE REQUIREMENTS

THE SCREENING ENCLOSURE WILL BE A MINIMUM OF 6' IN HEIGHT AND MADE COMPATIBLE WITH THE MATERIALS ON THE FRONT BUILDING WALL OF THE MAIN BUILDING. (NO CHAIN LINK FENCING)(PVC OR CONCRETE BLOCK IS RECOMMENDED)

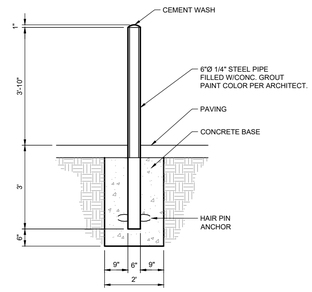
1. THE OPENING DOORS WILL BE SOLID AND HAVE LOCKING PINS TO HOLD THEM OPEN DURING SERVICE. THE OPENING INTERIOR DOOR WIDTH WILL MATCH THE WIDTH OF THE INTERIOR WIDTH OF THE ENCLOSURE. IF DOOR HARDWARE IS INSTALLED ON THE INTERIOR OF THE ENCLOSURE WALL, THEN THE ENCLOSURE WILL BE ENLARGED TO ACCOMMODATE THE DIFFERENCE.
2. SAFETY BOLLARDS WILL BE INSTALLED INSIDE, WITHIN THE REAR 2', OF ALL DUMPSTER ENCLOSURES.
3. A GRADE LEVEL CONCRETE SLAB AT A MINIMUM 6" THICK/4,000 POUNDS PER SQUARE INCH WILL BE PLACED FOR THE DUMPSTER TO BE SET ON. (SAME DIMENSIONS OF THE ENCLOSURE INTERIOR)
4. A 21' VERTICAL CLEARANCE WILL BE PROVIDED OVER THE DUMPSTER AND OVER THE SERVICE VEHICLE AT THE POINT OF COLLECTION.
5. ALL SOLID WASTE VEHICLE DRIVE AISLES AND SOLID WASTE VEHICLE MANEUVERING AREAS (OUTSIDE OF THE COLLECTION AREAS) SHALL PROVIDE A MINIMUM 16' CLEARANCE FROM FINISHED GRADE LEVEL TO LOWEST PART OF OVERHEAD STRUCTURE/TREE CANOPY/UTILITY WIRES/DRIVE THRU CANOPIES.
6. ALL SOLID WASTE VEHICLE DRIVE AISLES AND SOLID WASTE VEHICLE MANEUVERING AREAS SHALL BE CONSTRUCTED TO CURRENT STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.



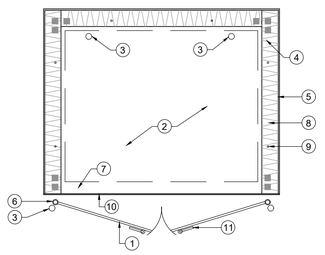
GATE DETAIL



COMPACTOR / DUMPSTER PLAN



BOLLARD DETAIL



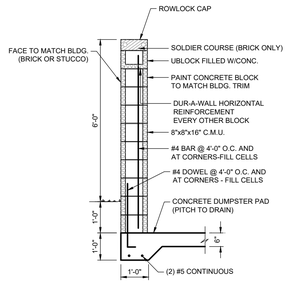
PLAN DETAIL

NOTES:

1. GATE (MATERIAL PER LOCAL JURISDICTION) (PRIME & PAINT TO MATCH BLDG. AS APPLICABLE) EACH GATE SHALL HAVE A HANDLE & AN OPEN & CLOSURE DEVICE (TO BE PAINTED) UNDERCUT GATE TO CLEAR CURB TO OPEN (TYP.)
2. 6" CONC. SLAB W/FIBERMESH REINF. ON 6 MIL VAPOR BARRIER ON COMPACTED FILL APPLY 2 COATS OF "CLEAR BOND" CONCRETE SEALER ON CONC. APRON. SEE CONC. SPEC.'S
3. 6" Ø STEEL BOLLARD PIPE (FILLED W/CONC. GROUT) SET IN 24" Ø x 42" DEEP CONC. FOOTING PRIMED & PAINTED PER ARCH
4. #5 W/6" BEND INTO U-BLOCK STEEL & DOWEL INTO BELL FOOTING W/6" BEND (10 REQUIRED) FILL CELL BLOCKS W/3000 P.S.I. CONCRETE
5. FACE TO MATCH BUILDING (BRICK OR STUCCO)
6. GATES FASTENED TO 4" Ø BUMPER POST W/HEAVY-DUTY INDUSTRIAL HINGES
7. 12" x 12" BELL FOOTING W/ #4 TOP & BOTTOM (TYP.)
8. 8" CONC. BLOCK WALL (TYP.)
9. #5 @ 4'-0" O.C. (TYP.)
10. E.J.
11. STEEL DROP LOCKING PIN W/HOLES IN PAVEMENT AT OPEN & CLOSED POSITION (TYP.)

COMPACTOR / DUMPSTER ENCLOSURE DETAIL

SCALE: N.T.S.



WALL SECTION

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CONSTRUCTION PLAN REVISIONS

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3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

SIGNAGE AND PAVMENT MARKING DETAILS

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000838

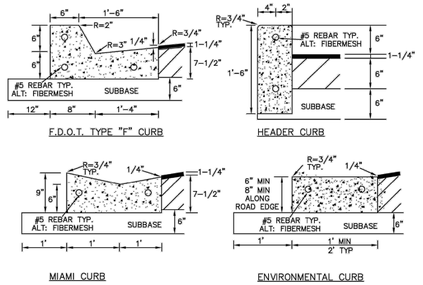
NICHOLAS ALEXANDER PEET
LICENSE
NO. 92061
6/30/26
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

SHEET C 9.1

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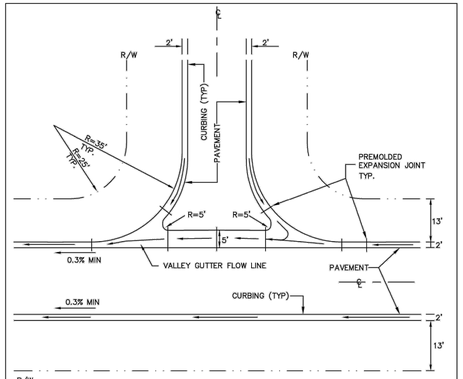
NOTES:

1. ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE REINFORCED W/ #5 REBAR OR FIBERMESH
2. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 500', CONSTRUCTION JOINT REQUIRED EVERY 10' MAXIMUM (4' MINIMUM).
3. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED AT EACH SIDE OF ALL STORM INLET STRUCTURES AND AT ALL RADIUS POINTS.
4. 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST AND SHALL BE STABILIZED TO A MINIMUM L.B.R. 40.
5. EXPANSION JOINT MATERIAL MUST COVER THE ENTIRE CROSS SECTION OF CURB.
6. IN NO INSTANCE SHALL EXTRUDED CURBS (DEFINED AS HEADER-TYPE CURBS INSTALLED DIRECTLY ON TOP OF PAVEMENT) BE PERMITTED.
7. ALL ASPHALT AND/OR PAVER DRIVEWAY APRONS LOCATED IN PUBLIC RIGHT-OF-WAY, SHALL INCLUDE CURBING

EDGEWATER
2016-03-21

STANDARD CONSTRUCTION DETAIL
STANDARD CURB CONSTRUCTION

FILE NAME: EW_R9.DWG
DETAIL REF: R-9



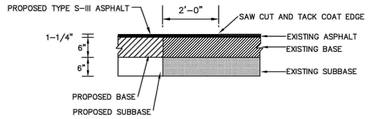
NOTES:

1. VALLEY GUTTER TO HAVE A STANDARD MINIMUM LONGITUDINAL SLOPE OF 0.30%
2. VALLEY GUTTER TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE
3. 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY WITH MINIMUM L.B.R. 40 BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
4. VALLEY GUTTERS ARE REQUIRED WHEN STORMWATER CROSSES THE INTERSECTION OF ROADWAYS AND DRIVEWAY CONNECTIONS.
5. REFER TO F.D.O.T. STANDARD INDEX No. 300

EDGEWATER

STANDARD CONSTRUCTION DETAIL
ROADWAY INTERSECTION VALLEY GUTTER

FILE NAME: EW_R10.DWG
DETAIL REF: R-10



EDGEWATER

STANDARD CONSTRUCTION DETAIL
PAVEMENT BUTT JOINT

FILE NAME: EW_R11.DWG
DETAIL REF: R-11

ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES

ALL MATERIALS AND INSTALLATION METHODS USED FOR LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS FOR SUBDIVISIONS AND SITE PLANS SHALL BE IN CONFORMANCE WITH THE CITY, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION).

1. ALL RIGHT-OF-WAY OTHER THAN ROADWAY AREAS SHALL BE SODDED. ALL SLOPES STEEPER THAN 6:1 SHALL REQUIRE SODDING. THE CITY RESERVES THE RIGHT TO REQUIRE SODDING IN SPECIAL AREAS WHERE EROSION IS A CONCERN.
2. THE FOLLOWING WILL BE THE STANDARD PROTECTION FOR DITCHES UNLESS DRAINAGE CALCULATIONS INDICATE OTHERWISE:

SWALE PROFILE GRADES	PROTECTION REQUIRED
0.2%- 1.0%	GRASSING AND MULCHING
1.0%-4.0%	SODDING
4.0% AND GREATER	DITCH PAVING

3. THE PAVEMENT, BASE, AND SUBBASE THICKNESS PRESENTED ON DETAILS REPRESENTS THE MINIMUM REQUIREMENTS FOR LOCAL PUBLIC STREETS AND PRIVATE PARKING LOTS. THE CITY RESERVES THE RIGHT AT IT'S DISCRETION TO INCREASE THESE REQUIREMENTS FOR COLLECTOR AND ARTERIAL ROADWAYS AND PRIVATE PARKING LOTS SUBJECTED TO HEAVY VEHICULAR COMMERCIAL TRAFFIC.
4. THE DEVELOPER SHALL PROVIDE AT THEIR OWN EXPENSE A CERTIFIED SOILS ENGINEERING LABORATORY TO PERFORM ALL FIELD AND LABORATORY TESTING REQUIRED TO VERIFY THAT THE CONSTRUCTION IS IN COMPLIANCE WITH THE CITY'S MINIMUM STANDARDS. IT IS THE RESPONSIBILITY OF THE DEVELOPER TO ENSURE THAT COPIES OF ALL TEST REPORTS ARE PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR PRIOR TO THE PROJECT FINAL INSPECTION IN ORDER TO ALLOW PROJECT ACCEPTANCE BY THE CITY.
5. THE LIMITS OF STABILIZED SUBBASE SHALL EXTEND TO A DEPTH OF SIX INCHES (6") BELOW THE BOTTOM OF THE BASE AND OUTWARD TO TWELVE INCHES (12") BEYOND THE CURB.
6. THE STABILIZING MATERIAL, IF REQUIRED, SHOULD BE A HIGH BEARING VALUE SOIL, SAND-CLAY, LIMEROCK, RECYCLED CONCRETE, SHELL, OR OTHER MATERIAL AS APPROVED BY THE CITY'S DESIGNATED SITE INSPECTOR AND A LICENSED SOILS ENGINEER.
7. THE SUBBASE SHALL BE STABILIZED NOT LESS THAN FORTY (40) POUNDS LIMEROCK BEARING RATIO (LBR) TO A 6" MINIMUM DEPTH. A COMPACTION OF NO LESS THAN NINETY-EIGHT (98 %) PERCENT DENSITY BASED ON AASHTO T-180 SHALL BE REQUIRED.
8. FOR ROADWAYS, TESTS FOR SUBBASE BEARING CAPACITY AND COMPACTION SHALL BE DONE AT A MINIMUM OF EVERY 300 FEET AND SHALL BE STAGGERED TO THE LEFT, RIGHT, AND AT CENTER LINE OF THE ROADWAY. FOR SITE PLANS, TEST SHALL BE PERFORMED FOR EVERY 600 SQUARE YARDS OF STABILIZED AREA, OR PORTIONS THEREOF.
9. BASES FOR ALL STREETS SHALL HAVE A MINIMUM SIX INCH (6") DEPTH. SOIL CEMENT BASES SHALL HAVE A STRENGTH OF 350 POUNDS PER SQUARE INCH AT 7 DAYS COMPACTED TO 98% DENSITY PER AASHTO T-99 STANDARD PROCTOR TEST IN CONFORMANCE WITH SECTION 270 OF STANDARD F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION). RECYCLED CONCRETE OR LIMEROCK BASES SHALL BE COMPACTED TO 98% MAXIMUM DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
9. ROADWAY DEFINITIONS
   a. ARTERIALS: PROVIDE REGIONAL MOBILITY VIA BOTH UNINTERRUPTED FLOW AND INTERRUPTED FLOW SEGMENTS. ARTERIALS PROVIDE MOBILITY AROUND AND THROUGH URBAN AND COMMUNITY CORES, AND ACCOMMODATE RELATIVELY LONG TRIP LENGTHS AS OPPOSED TO PROVIDING ACCESS TO ADJACENT PROPERTIES. ARTERIAL ROADS ARE U.S. #1 AND S.R. #442.
   b. COLLECTORS: PROVIDE FOR MOVEMENT BETWEEN LOCAL STREETS AND THE ARTERIAL NETWORK. COLLECTORS SERVE RESIDENTIAL, COMMERCIAL AND INDUSTRIAL AREAS.
   c. LOCAL ROADS: PROVIDE DIRECT ACCESS TO ABUTTING PROPERTIES. LOCAL ROADS ACCOMMODATE TRAFFIC ORIGINATING IN OR TRAVELING TO PROPERTIES WITHIN A NEIGHBORHOOD, COMMERCIAL OR INDUSTRIAL DEVELOPMENT. LOCAL ROADS ARE NOT CONSIDERED PART OF THE MAJOR THOROUGHFARE SYSTEM.

EDGEWATER

STANDARD CONSTRUCTION DETAIL
ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_R12.DWG
DETAIL REF: R-12

ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONTD.)

10. SOIL CEMENT AND RECYCLED CONCRETE MIX DESIGNS SHALL BE SUBMITTED BY A LICENSED SOILS ENGINEER TO THE CITY'S DESIGNATED SITE INSPECTOR PRIOR TO THE START OF SUBBASE PREPARATION. ALL MIX DESIGNS SHALL BE SUBJECT TO THE APPROVAL OF THE CITY.
11. CEMENT DELIVERY TICKETS SHALL BE PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR AT THE TIME OF PLACEMENT. IF THE INSPECTOR IS NOT ON SITE THROUGHOUT THE ENTIRE INSTALLATION, ACCUMULATED DELIVERY TICKETS CAN BE PROVIDED TO THE INSPECTOR BY THE CONTRACTOR ON THE FOLLOWING DAY.
12. TESTING OF THE IN-PLACE BASE SHALL BE DONE AT INTERVALS EQUIVALENT TO SUBGRADE TESTING AND SHALL CONSIST OF, AS A MINIMUM, A MOISTURE CONTENT AND COMPACTION TEST.
13. PORTLAND CEMENT CONCRETE, LIMEROCK, RECYCLED CONCRETE, OR FULL DEPTH ASPHALT PAVEMENT MAY BE USED IN PLACE OF SOIL CEMENT BASE. ALL BASE AND ROADWAY DESIGNS SHALL BE SUBJECT TO THE APPROVAL OF THE CITY.
14. SOIL CEMENT BASE MATERIAL CONSTRUCTION SHALL BE CONTINUOUSLY SUPERVISED BY A SOILS TESTING LABORATORY AT THE DEVELOPER'S EXPENSE. THE TESTING LABORATORY SHALL PROVIDE AN ON-SITE TECHNICIAN CERTIFIED IN THE INSTALLATION OF SOIL CEMENT WITH THE CERTIFICATION RECOGNIZED BY F.D.O.T.
15. SOIL CEMENT PAVEMENT BASES WITH THE CURE COAT APPLIED SHALL BE ALLOWED TO CURE A MINIMUM OF SEVEN (7) DAYS UNDER NO TRAFFIC PRIOR TO PLACING ANY ASPHALT SURFACE. (TEST REPORTS ARE REQUIRED TO BE DELIVERED TO THE CITY'S DESIGNATED SITE INSPECTOR PRIOR TO TRAFFIC USAGE.)
16. RECYCLED CONCRETE CAN BE USED AS AN ALTERNATIVE BASE MATERIAL PROVIDED THE MATERIAL IS A MINIMUM OF 60% CARBONATE OF CALCIUM AND MAGNESIUM. THE MATERIAL SHALL BE LIMITED TO MAXIMUM OF 3% OF WATER SENSITIVE CLAY MATERIAL. LIQUID LIMIT SHALL NOT EXCEED 35 AND BE NON-PLASTIC, AND THE PLASTICITY INDEX SHALL NOT EXCEED 10. THE MATERIAL SHALL NOT CONTAIN ORGANIC MATERIAL, CHERTY OR OTHER EXTREMELY HARD PIECES, LUMPS, BALLS OR POCKETS OF SAND SIZE MATERIAL OF A QUANTITY AS TO BE DETRIMENTAL TO THE PROPER BONDING, FINISHING, OR STRENGTH OF THE RECYCLED CONCRETE BASE. FOR BASE APPLICATIONS, AT LEAST 97 % (BY WEIGHT) OF THE MATERIAL SHALL PASS A 1" SIEVE AND FOR SUBBASE APPLICATIONS, AT LEAST 97 % (BY WEIGHT) OF THE MATERIAL SHALL PASS A 1-1/2" SIEVE. FOR BOTH APPLICATIONS, THE MATERIAL SHALL BE GRADED UNIFORMLY DOWN TO DUST AND THE MINIMUM LBR VALUES ARE TO BE NOT LESS THAN 130. COARSE AGGREGATE USED IN THE RECYCLED CONCRETE SHALL HAVE A MAXIMUM LOSS OF 45 % PER LOS ANGELES ABRASION TEST. ALL MATERIALS SHALL BE WELL GRADED IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN SECTION 204, F.D.O.T., STANDARD SPEC. FOR ROAD AND BRIDGE CONSTRUCTION., (LATEST EDITION).
17. RECYCLED CONCRETE OR LIMEROCK FOR BASE OR SUBBASE APPLICATIONS SHALL BE ALLOWED ON CITY ROADWAYS ONLY WHERE THE LOWEST ELEVATION OF THE ROADWAY SUBBASE IS A MINIMUM OF 6" ABOVE THE SEASONAL HIGH GROUNDWATER TABLE AS CERTIFIED BY A FLORIDA LICENSED PROFESSIONAL SOILS ENGINEER AND SUBSEQUENTLY APPROVED FOR BY THE CITY. IN AREAS NOT MEETING THESE STANDARDS A SOIL CEMENT BASE WILL BE REQUIRED. ALL CRUSHING OF RECYCLED CONCRETE SHALL BE DONE PRIOR TO THE MATERIAL BEING PLACED IN THE ROADWAY. TESTING SHALL HAVE THE SAME REQUIREMENTS AND BE PERFORMED AT THE SAME LOCATION AND INTERVALS AS REQUIRED FOR LIMEROCK.

EDGEWATER

STANDARD CONSTRUCTION DETAIL
ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_R13.DWG
DETAIL REF: R-13

ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONTD.)

18. DESIGN MIXES AND PRODUCT GRADATION INFORMATION FOR ALL MATERIALS TO BE INSTALLED AS PART OF THE LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS SHALL BE SUBMITTED TO THE CITY'S DESIGNATED SITE INSPECTOR FOR ACCEPTANCE BY THE CITY. THE INFORMATION SHALL BE SUBMITTED NO LESS THAN THREE (3) WORKING DAYS PRIOR TO ANY CONSTRUCTION. SUBMITTALS SHALL INCLUDE, BUT NOT BE LIMITED TO, INFORMATION TO JUNLUAT THE MATERIALS PROPOSED FOR INSTALLATION AS SUBBASE, BASE, AND PAVEMENT FOR ALL ROADWAY AND PARKING AREA SURFACES AS WELL AS SIMILAR INFORMATION FOR ALL OTHER CONCRETE SIDEWALKS, CURBING, AND COMPARABLE STRUCTURES AND APPLICATIONS.
19. PRIOR TO PLACEMENT FLORIDA STATE CERTIFIED BATCH PLANTS MUST CERTIFY TO THE CITY'S RESIDENT PROJECT INSPECTOR THAT THE ASPHALT DELIVERED TO THE SITE IS IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
20. EXTRACTION AND GRADATION TESTS ON ASPHALT MIXES SHALL BE PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR FOR EVERY 2500 SQUARE YARDS OF ASPHALT, OR PART THEREOF, TO ENSURE THAT DESIGN MIXES MEET THE CITY STANDARD SPECIFICATIONS.
21. FIELD TESTING OF THE ASPHALT PAVEMENT SHALL BE DONE AT INTERVALS EQUIVALENT TO SUBGRADE TESTING AND SHALL CONSIST OF, AS A MINIMUM, A COMPACTION TEST. ASPHALT PAVEMENT SHALL BE COMPACTED TO 98% DENSITY PER FM 1-T238 (METHOD B), NUCLEAR DENSITY TEST, "BACKSCATTER METHOD".
22. IN ADDITION TO THE FIELD DENSITY TESTS NOTED, THE CITY RESERVES THE RIGHT TO REQUIRE CORE SAMPLES OF PAVEMENT SECTIONS EXTRACTED AND TESTED BY A CERTIFIED SOILS ENGINEERING LABORATORY AT THE DEVELOPER'S EXPENSE. THE CITY'S DESIGNATED SITE INSPECTOR SHALL DESIGNATE THE LOCATIONS OF THE TEST CORE LOCATIONS.
23. THE ROADWAY CROWN SHALL HAVE A STANDARD ONE QUARTER INCH (1/4") PER FOOT SLOPE.
24. ALL ROADWAYS WITH CURB AND GUTTER SECTIONS SHALL HAVE AS A STANDARD A MINIMUM LONGITUDINAL SLOPE OF 0.30%. THE ROADWAY CENTERLINE SHALL BE CLEARLY MARKED ON THE DESIGN PLANS. AT A MINIMUM, DESIGN ROADWAY CENTERLINE ELEVATIONS SHALL BE NOTED AT ALL GRADE CHANGES AND AT 100' INTERVALS ALONG THE ROADWAY PROFILE ON BOTH THE DESIGN PLANS AND AS-BUILT DRAWINGS.
25. THE FINISHED PAVEMENT EDGE SHALL BE WITHIN ONE QUARTER INCH (1/4") ABOVE THE ADJACENT CONCRETE CURB FOR CURBS COLLECTING AND CONVEYING STORMWATER.
26. CONCRETE CURBS SHALL BE PROVIDED ON BOTH SIDES OF ALL STREETS AND ALL CONCRETE CURBS SHALL BE CONSTRUCTED WITH 3000 P.S.I. CONCRETE AT 28 DAYS.

EDGEWATER

STANDARD CONSTRUCTION DETAIL
ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_R14.DWG
DETAIL REF: R-14

ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONTD.)

27. CONCRETE CURBING, SIDEWALKS, PAVEMENT AND SIMILAR CONCRETE AREAS SHALL BE SAW CUT WITHIN 4 TO 18 HOURS OF PLACEMENT. SAW CUTS SHALL BE 1/4" IN WIDTH TO A DEPTH OF 1/4 OF THE TOTAL DEPTH OF CONCRETE OR 1-1/2", WHICHEVER IS LESS. SAW CUTS SHALL BE LOCATED AT INTERVALS OF TEN FEET (10') WITH EXPANSION JOINTS AT STREET INTERSECTIONS, RADIUS POINTS, STRUCTURES, AND ALONG CURVES AT SIXTY FEET (60') INTERVALS. ALL EXPANSION JOINT MATERIAL IS REQUIRED TO BE INSTALLED THROUGH THE ENTIRE DEPTH OF THE CONCRETE CURB. FOR LINEAL SECTIONS OF CURBS, EXPANSION JOINTS SHALL BE LOCATED AT A MAXIMUM SPACING OF FIVE-HUNDRED FEET (500') AND SHALL BE 1/2" IN WIDTH.
28. AN "X" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF WATER DISTRIBUTION SYSTEM VALVE.
29. A "V" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL SEWER SERVICES.
30. A "L" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL RECLAIMED WATER SERVICES.
31. A " A" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL POTABLE WATER SERVICES.
32. BLUE REFLECTORS SHALL BE PLACED IN THE MIDDLE OF THE DRIVING LANE ON THE SIDE OF THE ROADWAY AND IN FRONT OF WHERE FIRE HYDRANTS ARE LOCATED.
33. THREE (3) CONCRETE CYLINDERS SHALL BE TAKEN AND TESTED (1 IN 14 DAYS AND 1 IN 28 DAYS) FOR EVERY SEVENTY-FIVE (75) CUBIC YARDS OF CONCRETE OR LESS PLACED. TEST RESULTS SHALL THEN BE PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR AS THEY BECOME AVAILABLE.
34. A CONCRETE SLUMP TEST SHALL BE REQUIRED WITHIN THE FIRST 30 CUBIC YARDS OF CONCRETE. THEREAFTER, SLUMP TESTS SHALL BE REQUIRED FOR EVERY THIRTY (30) CUBIC YARDS OF CONCRETE, OR FRACTION THEREOF, WITH COPIES OF THE RESULTS PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR. THE SLUMP TEST SHALL MEET THE REQUIRED MIX DESIGN ON EACH LOAD DELIVERED.
35. THE DEVELOPER SHALL PROVIDE ALL REQUIRED PAVEMENT MARKINGS ON ALL ROADWAYS PER CITY, COUNTY, AND STATE REQUIREMENTS. CENTERLINE STRIPES SHALL BE PROVIDED ON EXTENSIONS OF CITY COLLECTOR OR ARTERIAL ROADS, COUNTY ROADS, STATE HIGHWAYS, AND ALONG LOCAL STREETS IN THE VICINITY OF THEIR INTERSECTION WITH THE ABOVE MENTIONED ROADWAYS.
36. A FDOT APPROVED STOP SIGN AND A 24"-WIDE WHITE THERMOPLASTIC STOP BAR ARE REQUIRED AT ALL ROADWAY INTERSECTIONS.
37. ALL TRAFFIC CONTROL DEVICES PLACED AT INTERSECTIONS, PRIVATE STREETS, PUBLIC STREETS, COUNTY ROADS, AND STATE HIGHWAYS WITHIN THE CITY LIMITS SHALL BE INSTALLED ACCORDING TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. THE MAINTENANCE-OF-TRAFFIC (MOT) INSTALLATION AND SUBSEQUENT OPERATION SHALL BE OVERSEEN BY A CONTRACTOR CERTIFIED BY THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION, OR EQUIVALENT CERTIFICATION RECOGNIZED BY FDOT.

EDGEWATER

STANDARD CONSTRUCTION DETAIL
ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_R15.DWG
DETAIL REF: R-15

ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONTD.)

38. THE DEVELOPER IS RESPONSIBLE FOR PAYING FEES FOR TRAFFIC CONTROL DEVICES TO THE CITY FOR INSTALLATION. STREET SIGNS AND STOP SIGNS SHALL BE PLACED AT ALL INTERSECTIONS, INCLUDING BUT NOT LIMITED TO PRIVATE STREETS, PUBLIC STREETS, COUNTY ROADS, AND STATE HIGHWAYS WITHIN THE CITY LIMITS.
39. THE DEVELOPER IS RESPONSIBLE FOR PAYING FEES FOR ALL STREET LIGHTS PRIOR TO ACCEPTANCE OF THE PROJECT BY THE CITY.
40. FOUR FOOT (4') WIDE SIDEWALKS SHALL BE PROVIDED ON BOTH SIDES OF ALL RESIDENTIAL STREETS. (SEE DETAIL, INDEXES M-2 AND M-3)
41. BIKE PATHS SHALL BE CONSTRUCTED AT A MINIMUM OF SIX-FOOT WIDTH, PREFERABLY EIGHT-FOOT WIDTH AS DIRECTED BY THE CITY IN ACCORDANCE WITH THE BICYCLE AND PEDESTRIAN TRAIL MASTER PLAN.
42. STANDARD TURNING RADII FOR INTERSECTIONS:

RESIDENTIAL STREETS WITH STATE & COUNTY ROADWAYS OR MAJOR THOROUGHFARES WITHIN THE CITY	35-50 FT.
ENTRANCES TO COMMERCIAL SITES OFF OF CITY STREETS	35 FT.
INTERSECTIONS INTERIOR IN SUBDIVISIONS	35 FT.

SHOULD VOLUSIA COUNTY OR THE FLORIDA DEPARTMENT OF TRANSPORTATION (F.D.O.T.) DETERMINE THAT LARGER RADII ARE WARRANTED WITHIN THEIR RIGHT-OF-WAY, THE LARGER RADII SHALL PREVAIL.

43. CONSTRUCTION METHODS AND DESIGN FOR CONCRETE PAVEMENT SHALL CONFORM TO FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
44. ALL CONTRACTORS THAT ARE PERFORMING THE CONSTRUCTION OF LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS (INCLUDING WATER MAINS, SANITARY SEWER MAINS, RECLAIMED WATER MAINS, STORM WATER PIPES AND INLETS, ROADWAYS, AND PARKING FACILITIES) SHALL BE CERTIFIED WITH THE STATE OF FLORIDA BOARD OF PROFESSIONAL REGULATIONS (BPR) FOR THE TYPE OF WORK THAT THEY PERFORM.
45. ALL CONTRACTORS THAT ARE PERFORMING THE CONSTRUCTION WORK OF LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS SHALL BE LICENSED BY THE STATE OF FLORIDA AND REGISTERED WITH THE CITY. THE LICENSE AND REGISTRATION SHALL PERTAIN DIRECTLY TO THE TYPE OF WORK BEING PERFORMED.
46. EXCEPT AS PROVIDED IN THE LAND DEVELOPMENT CODE, ALL ELECTRIC, TELEPHONE, TELEVISION LINES AND SIMILAR UTILITIES ARE REQUIRED TO BE INSTALLED UNDERGROUND AT THE EXPENSE OF THE OWNER, DEVELOPER, AND BUILDER.

EDGEWATER

STANDARD CONSTRUCTION DETAIL
ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_R16.DWG
DETAIL REF: R-16

LEVELUP CONSULTING, LLC
LVLUP
505 E. JACKSON STREET
SUITE 200
TAMPA, FLORIDA 33602
OFFICE: 813-375-0616
WWW.LEVELUPFLORIDA.COM

CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA
CLIENT: INDIAN RIVER SHORES, LLC
CONSTRUCTION DETAILS

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26006638

NICHOLAS ALEXANDER PEET LICENSE NO. 92061 6/30/26 STATE OF FLORIDA PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01
SHEET C 10.0

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ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONTD.)

47. UTILITY DEPTH:
    - A. HIGH VOLTAGE UTILITIES SUCH AS POWER (FEEDER, SERVICE, AND DROPS) SHALL BE BURIED A MINIMUM OF 30 INCHES IN DEPTH.
    - B. LOW VOLTAGE UTILITIES SUCH AS PHONE AND CABLE TV SHALL BE BURIED A MINIMUM OF 24 INCHES IN DEPTH FOR FEEDER AND SERVICES. SERVICE DROPS SHALL BE BURIED A MINIMUM OF 18 INCHES IN DEPTH.
    - C. IN NO INSTANCE SHALL THE DEPTH OF COVER BE LESS THAN 30" FROM FINISHED GRADE TO THE TOP OF PIPE FOR POTABLE WATER MAINS, SANITARY SEWER MAINS, AND RECLAIMED WATER MAINS. HOWEVER, IN THE EVENT THAT THIS CONDITION CANNOT BE MET DUE TO UNANTICIPATED CONFLICTS DURING THE CONSTRUCTION PROCESS, DUCTILE IRON PRESSURE CLASS 350 OR CONCRETE ENCASEMENT MAY BE USED AS APPROVED BY THE CITY PUBLIC UTILITIES DEPARTMENT.
48. LANDSCAPE PLANS SHALL CLEARLY DEPICT THE DESIGN LOCATION OF PLANTINGS RELATIVE TO THE LOCATION OF UNDERGROUND AND OVERHEAD PUBLIC UTILITIES AND STORMWATER INFRASTRUCTURE IN ORDER TO EVALUATE POTENTIAL CONFLICTS.

STANDARD CONSTRUCTION DETAIL ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_R17.DWG DETAIL REF: R-17

TECHNICAL SPECIFICATIONS FOR SITE PLANS AND SUBDIVISIONS TESTING

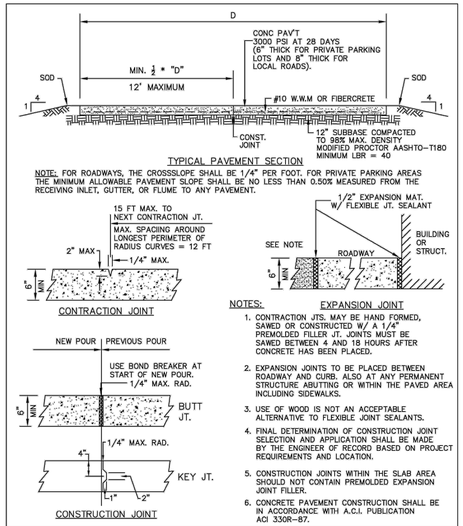
A. MATERIALS

THE INSPECTION AND TESTING OF MATERIALS AND FINISHED ARTICLES TO BE INCORPORATED IN THE WORK SHALL BE MADE BY BUREAUS, LABORATORIES, OR AGENCIES APPROVED BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL SUBMIT SUCH SAMPLES, OR SUCH SPECIAL OR TEST PIECES OF MATERIALS AS THE ENGINEER OF RECORD MAY REQUIRE. THE CONTRACTOR SHALL NOT INCORPORATE ANY MATERIAL OR FINISHED ARTICLE INTO THE WORK UNTIL THE RESULTS OF THE INSPECTIONS OR TESTS ARE KNOWN AND THE CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER OF RECORD THAT THE MATERIAL OR FINISHED ARTICLE IS ACCEPTED. ALL MATERIALS MUST BE OF THE SPECIFIED QUALITY AND BE EQUAL TO THE APPROVED SAMPLE IF A SAMPLE HAS BEEN SUBMITTED. CERTIFIED COPIES OF ALL TESTS MADE SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AS WELL AS TO THE CITY'S DESIGNATED SITE INSPECTOR. THE CITY'S DESIGNATED SITE INSPECTOR MUST RECEIVE COPIES OF ALL TESTING REPORTS AND CERTIFICATES PRIOR TO THE ENGINEER OF RECORD REQUESTING A FINAL PROJECT INSPECTION FROM THE CITY.

B. LABORATORY CONTROL AND CERTIFICATES

1. SPECIFICATIONS . SAMPLING, TESTING, AND LABORATORY METHODS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE AASHTO OR ASTM. WHERE AASHTO OR ASTM SPECIFICATIONS ARE USED, THE REFERENCE SHALL BE CONSTRUED TO BE THE MOST RECENT STANDARD SPECIFICATIONS OR TENTATIVE SPECIFICATIONS OF THE AASHTO OR ASTM IN FORCE ON THE DATE OF THE TEST.
2. TEST & CERTIFICATES. THE CONTRACTOR SHALL ENGAGE AN APPROVED TESTING LABORATORY TO PROVIDE THE FOLLOWING TESTS AND CERTIFICATIONS SIGNED BY A REGISTERED ENGINEER OF THE STATE OF FLORIDA. ALL TECHNICIANS PERFORMING THE TESTS SHALL BE STATE CERTIFIED FOR THE TESTING PERFORMED. ADDITIONAL TESTS THAT MAY BE REQUIRED BY EITHER THE ENGINEER OF RECORD OR THE CITY SHALL ALSO BE PROVIDED BY THE CONTRACTOR, AND THE FOLLOWING SHALL NOT BE TAKEN AS A COMPLETE AND EXHAUSTIVE LIST OF THE CONTRACTOR'S TESTING RESPONSIBILITIES.
    - A. SOIL ANALYSIS FOR STRUCTURAL FILL MATERIAL PRIOR TO INSTALLATION.
    - B. PROCTOR DENSITIES, MOISTURE CONTENT, COMPACTED FIELD DENSITIES, AND ATTERBERG LIMITS.
    - C. SOIL CEMENT MIX DESIGNS AND COMPRESSIVE STRENGTH TESTS (FOR SOIL CEMENT ROAD BASE ONLY).
    - D. SUPERVISION OF ALL SOIL CEMENT BASE CONSTRUCTION.
    - E. ANALYSIS OF RECYCLED CONCRETE BASE MATERIAL PRIOR TO INSTALLATION.
    - F. ASPHALT MIX DESIGN, BITUMEN CONTENT, SIEVE ANALYSIS, HUBBARD FIELD STABILITY TESTS, NUCLEAR DENSITY TESTS (BACKSCATTER METHOD), AND ANALYSIS OF CORE SAMPLES.
    - G. CONCRETE MIX DESIGNS FOR ALL APPLICATIONS INCLUDING PAVEMENT, CAST-IN-PLACE STRUCTURES, CURBING, GUTTERS, SIDEWALKS, BIKE PATHS, APRONS AND DRIVEWAYS.
    - H. COMPRESSIVE TEST CYLINDERS AND SLUMP TESTS FOR ALL APPLICATIONS OF CONCRETE, INCLUDING PAVEMENT, CAST-IN-PLACE STRUCTURES, CURBING, GUTTERS, SIDEWALKS, BIKE PATHS, APRONS, AND DRIVEWAYS.
    - I. CHLORINE RESIDUAL AND BACTERIOLOGICAL TESTING OF WATER MAINS.
    - J. PRESSURIZED LEAK TESTING OF WATER MAINS, FORCE MAINS, AND RECLAIMED WATER MAINS.

STANDARD CONSTRUCTION DETAIL TECHNICAL SPECIFICATIONS FOR SITE PLANS AND SUBDIVISIONS TESTING	FILE NAME: EW_R18.DWG DETAIL REF: R-18



TYPICAL PAVEMENT SECTION

NOTE: FOR ROADWAYS, THE CROSSSLOPE SHALL BE 1/4" PER FOOT. FOR PRIVATE PARKING AREAS THE MINIMUM ALLOWABLE PAVEMENT SLOPE SHALL BE NO LESS THAN 0.50% MEASURED FROM THE RECEIVING INLET, GUTTER, OR FLUME TO ANY PAVEMENT.

CONTRACTION JOINT

CONSTRUCTION JOINT

NOTES: EXPANSION JOINT

1. CONTRACTION JTS. MAY BE HAND FORMED, SAWED OR CONSTRUCTED W/ A 1/4" PREMOLDED FILLER JT. JOINTS MUST BE SAWED BETWEEN 4 AND 18 HOURS AFTER CONCRETE HAS BEEN PLACED.
2. EXPANSION JOINTS TO BE PLACED BETWEEN ROADWAY AND CURB. ALSO AT ANY PERMANENT STRUCTURE ABUTTING OR WITHIN THE PAVED AREA INCLUDING SIDEWALKS.
3. USE OF WOOD IS NOT AN ACCEPTABLE ALTERNATIVE TO FLEXIBLE JOINT SEALANTS.
4. FINAL DETERMINATION OF CONSTRUCTION JOINT SELECTION AND APPLICATION SHALL BE MADE BY THE ENGINEER OF RECORD BASED ON PROJECT REQUIREMENTS AND LOCATION.
5. CONSTRUCTION JOINTS WITHIN THE SLAB AREA SHOULD NOT CONTAIN PREMOLDED EXPANSION JOINT FILLER.
6. CONCRETE PAVEMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH A.C.I. PUBLICATION ACI 330R-87.

STANDARD CONSTRUCTION DETAIL CONCRETE PAVEMENT DETAILS	FILE NAME: EW_R19.DWG DETAIL REF: R-19

SUBDIVISION TECHNICAL SPECIFICATIONS: SODDING, SEEDING AND MULCHING

A. SCOPE OF WORK THE WORK IN THIS SECTION CONSISTS OF FURNISHING AND COMPLETELY INSTALLING SOD, OR SEED AND MULCH OVER THE LIMITS CALLED FOR ON THE CONSTRUCTION DRAWINGS. AT A MINIMUM, ALL WORK SHALL MEET THE MINIMUM SPECIFICATIONS OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, AS OUTLINED IN SECTIONS 570 (GRASSING BY SEEDING) AND 575 (SODDING). IN ADDITION, ALL WORK SHALL MEET THE MINIMUM REQUIREMENTS OF THE CITY.

B. MATERIALS GRASS SEED SHALL BE A MIXTURE OF:

PENSACOLA BAHIA	50%
(USE 50 % SCARIFIED SEED)	
HULLED BERMUDA	25%
BROWN TOP MILLET	25%

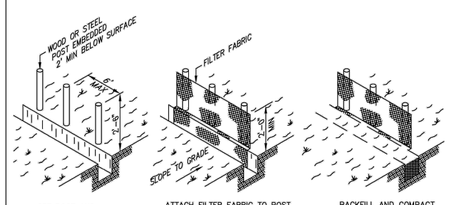
IN THE FALL AND WINTER MONTHS, AND WITH THE APPROVAL OF THE CITY, ANNUAL RYE GRASS SHALL BE SUBSTITUTED IN EQUAL AMOUNTS FOR THE BROWN TOP MILLET. SEED SHALL BE PRE-MIXED BY A SEED COMPANY TO THE PERCENTAGES DESCRIBED ABOVE, WITH CERTIFICATION FROM THE SUPPLIER PROVIDED TO THE CITY'S DESIGNATED PROJECT LANDSCAPE INSPECTOR PRIOR TO USE.

MULCH USED SHALL BE STRAW OR HAY CONSISTING OF OATS, RYE, OR WHEAT STRAW, OR OF PANGOLA, PEANUT, COASTAL BERMUDA, OR BAHIA GRASS HAY. MULCH SHALL BE FREE FROM UNDESIRABLE WEED AND OTHER UNDESIRABLE GRASS.

C. METHODS. GRASSING SHALL BE DONE IMMEDIATELY UPON COMPLETION OF THE FINE GRADING OPERATION. HOWEVER, NO SEEDING SHALL BE DONE WHEN THE GROUND IS FROZEN OR UNDULY WET. THE RATE OF SPREAD FOR THE SEED MATERIAL SHALL BE ONE HUNDRED AND THIRTY (130) POUNDS PER ACRE.

APPROXIMATELY ONE INCH (1"), LOOSE THICKNESS, OF MULCH MATERIAL SHALL BE APPLIED UNIFORMLY OVER THE SEEDED AREAS (APPROXIMATELY ONE AND ONE-HALF (1-1/2) BALES PER 1000 SQUARE FEET). THE MULCH MATERIAL SHALL BE CUT INTO THE SOIL WITH A DISC HARROW OR OTHERWISE ANCHORED DOWN. UNDER PROPER CIRCUMSTANCES, CONTRACTOR MAY REQUEST OPTION TO INSTALL HYDRO-SEEDING SUBJECT TO THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT AND THE CITY

STANDARD CONSTRUCTION DETAIL SUBDIVISION TECHNICAL SPECIFICATIONS: SODDING, SEEDING AND MULCHING	FILE NAME: EW_R20.DWG DETAIL REF: R-20

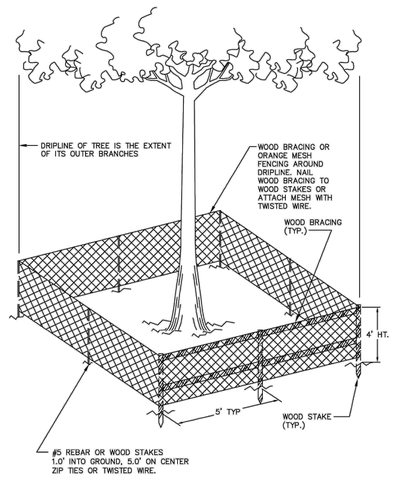


SILT FENCE DETAIL
F.D.O.T. INDEX NO. 102

NOTES:

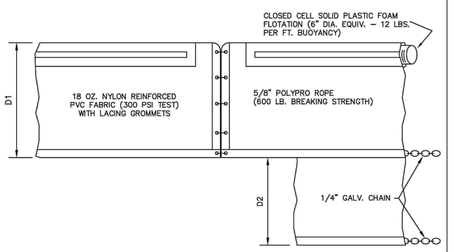
1. MATERIALS, CONSTRUCTION METHODS AND MAINTENANCE SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND DESIGN STANDARDS CURRENT EDITION.
2. CONTRACTOR SHALL PROVIDE SILT FENCES AND HAY BALES AT ALL STORMWATER DISCHARGE POINTS FOR EROSION CONTROL AND SEDIMENT CONTROL DURING CONST.
3. CONTRACTOR SHALL ROUGH GRADE STORM-WATER SWALES AND RETENTION AREAS PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS.
4. CONTRACTOR SHALL MEET ALL PERMIT CONDITIONS AS ESTABLISHED BY THE CITY AND ALL OTHER APPLICABLE AGENCIES, INCLUDING BUT NOT LIMITED TO COUNTY, FDOT, AND THE SJRWMD.

STANDARD CONSTRUCTION DETAIL SILT FENCE TURBIDITY BARRIER	FILE NAME: EW_R22.DWG DETAIL REF: R-22



NOTE: BARBED WIRE FENCING IS NOT PERMISSIBLE

STANDARD CONSTRUCTION DETAIL TREE PROTECTION BARRICADE	FILE NAME: EW_R23.DWG DETAIL REF: R-23



FLOATING TURBIDITY BARRIER
F.D.O.T. INDEX NO. 103

D1 - 5 FT. STD. SINGLE PANEL FOR DEPTHS 5 FT. OR LESS

D2 - 5 FT. STD. ADDITIONAL PANEL FOR DEPTHS GREATER THAN 5 FT.

CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FT.
TWO PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FT.

STANDARD CONSTRUCTION DETAIL FLOATING TURBIDITY BARRIER	FILE NAME: EW_R24.DWG DETAIL REF: R-24

CONTRACTOR REQUIREMENTS FOR SITE CLEARING, GRADING, AND EROSION CONTROL DESIGN AND CONSTRUCTION NOTES

THE FOLLOWING MEASURES REPRESENT MINIMUM STANDARDS TO BE ADHERED TO BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION OF A PROJECT. THE CITY RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO BE EMPLOYED WHEN WARRANTED BY EXTREME CONDITIONS AND/OR THE FAILURE OF THE CONTRACTOR TO EMPLOY THE APPROPRIATE EROSION CONTROL BEST MANAGEMENT PRACTICES. FAILURE TO COMPLY WITH THESE PROVISIONS SHALL RESULT IN THE ISSUANCE OF A "STOP WORK ORDER".

1. NO DISTURBANCE OF PROPOSED CONSERVATION EASEMENTS, NATURAL BUFFERS, OR WATER BODIES IS PERMITTED. THE CONTRACTOR SHALL LOCATE THESE AREAS ON SITE AND BARRICADE THEM TO AVOID ANY UNAUTHORIZED CLEARING. BARRICADES AND OTHER PROTECTIVE FENCING ARE TO BE LOCATED AT THE DRIP LINE OF EXISTING NATIVE TREES OR AT THE EDGE OF THE NATIVE UNDER-STORY HABITAT, WHICHEVER IS NEAREST TO THE CONSTRUCTION ACTIVITY.
2. SPECIMEN AND HISTORIC TREES, CONSERVATION EASEMENTS, NATURAL VEGETATION BUFFERS, AND SIMILAR AREAS MUST BE PROTECTED BY BARRICADES OR FENCING PRIOR TO CLEARING. BARRICADES ARE TO BE SET AT THE DRIP LINE OF THE TREES AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. BARBED WIRE IS NOT PERMITTED AS A PROTECTIVE BARRIER.
3. WHERE A CHANGE OF GRADE OCCURS AT THE DRIP LINE OF A SPECIMEN TREE, SILT FENCES WILL BE REQUIRED DURING CONSTRUCTION AND RETAINING WALLS MUST BE INSTALLED PRIOR TO FINAL ACCEPTANCE BY THE CITY.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION BARRICADES AND EROSION CONTROL STRUCTURES AND MEASURES IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK, INCLUDING PRELIMINARY GRUBBING. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCES, HAY BALES, SILT FENCES, AND FLOATING TURBIDITY BARRIERS. FURTHER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE ENTIRE PROJECT. MAINTENANCE SHALL INCLUDE PERIODIC INSPECTION AND REMOVAL OF DEBRIS ABUTTING EROSION CONTROL DEVICES.
5. PRIOR TO THE INSTALLATION OF ANY FILL MATERIALS ON SUBJECT SITE, SILT FENCES SHALL BE INSTALLED (1) ALONG SUBJECT SITE BOUNDARY AND PROPERTY LINES, (2) AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS, (3) ADJACENT TO NATURAL LANDSCAPE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES, AND (5) AT ANY ADDITIONAL AREAS THAT THE CITY DEEMS NECESSARY TO BE PROTECTED FROM POTENTIAL EROSION IMPACTS DURING CONSTRUCTION. THESE CONDITIONS SHALL APPLY IN ALL INSTANCES WHERE FILL MATERIAL IS BEING INSTALLED WITHIN 25 FEET OF ANY OF THE AFOREMENTIONED LOCATIONS. WHILE THESE ITEMS REPRESENT THE MINIMUM REQUIREMENTS, THE CITY RESERVES THE RIGHT TO IMPOSE ADDITIONAL PROTECTIVE MEASURES, AS DETERMINED DURING ACTUAL SITE VISITS CONDUCTED AS PART OF THE STANDARD REVIEW OF THE SITE-SPECIFIC CLEARING PERMIT APPLICATION AND THROUGHOUT PROJECT CONSTRUCTION.
6. WHERE FILL MATERIAL IS INTENDED TO BE INSTALLED ADJACENT TO EXISTING VEGETATION WHICH IS INTENDED TO REMAIN NATURAL, THE CONTRACTOR MAY INSTALL SILT FENCING AS A TREE PROTECTION MEASURE, IN LIEU OF INSTALLING EITHER WOOD BRACING OR ORANGE MESH FENCING. THIS PRACTICE IS ENCOURAGED BY THE CITY. IF THE SILT FENCE FAILS TO PROVIDE ADEQUATE PROTECTION FROM IMPACT DUE TO CONSTRUCTION, THEN ADDITIONAL CONSTRUCTION FENCING OR WOOD BRACING SHALL BE REQUIRED.
7. AT A MINIMUM, THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS. SUFFICIENT GRASS COVERAGE IS TO BE ESTABLISHED WITHIN THIRTY DAYS. - DISTURBED AREAS IN CITY RIGHT-OF-WAYS OR CITY PROPERTY SHALL BE SODDED.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGH SCHEDULING, TO MINIMIZE THE DISTURBANCE OF SITE AREAS THAT HAVE BEEN BROUGHT TO THEIR PROPOSED FINAL GRADE. WITHIN TWENTY DAYS OF BRINGING A SUBJECT AREA TO ITS FINAL GRADE, THE CONTRACTOR SHALL INSTALL SEED AND MULCH OR SOD, AS REQUIRED.

STANDARD CONSTRUCTION DETAIL CONTRACTOR REQUIREMENTS FOR SITE CLEARING, GRADING, AND EROSION CONTROL DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_R25.DWG DETAIL REF: R-25

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CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

CONSTRUCTION DETAILS

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26006638

NICHOLAS ALEXANDER PEET
LICENSE NO. 92061
6/30/26
STATE OF FLORIDA
PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

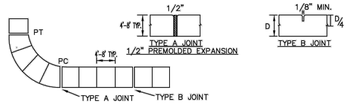
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CONTRACTOR REQUIREMENTS FOR SITE CLEARING, GRADING, AND EROSION CONTROL DESIGN AND CONSTRUCTION NOTES (CONTD.)

9. FOR INDIVIDUAL CONSTRUCTION PROJECTS INVOLVING MULTIPLE PHASES, UPON COMPLETION OF EACH PHASE OF THE PROJECT, SEEDING AND MULCHING AND OR/ SODDING IS TO BE PERFORMED PRIOR TO COMMENCING THE NEXT PHASE OF CONSTRUCTION.
10. ONCE AN AREA IS SEEDED OR SODDED, IT MUST BE MAINTAINED BY THE CONTRACTOR TO ALLOW THE GRASS TO BECOME ESTABLISHED.
11. ANY BURNING OF CLEARED MATERIALS MUST BE INSPECTED AND PERMITTED ON A DAILY BASIS. CONTACT THE CITY FIRE MARSHALL AT 424-2412 PRIOR TO EACH DAY OF DESIRED BURNING.
12. ABSOLUTELY NO BURYING OF CLEARED MATERIALS IS PERMITTED.
13. THE REMOVAL OF ALL VEGETATION AND TOPSOIL ON THE FUTURE ROADWAY, PARKING AND BUILDING LOT AREAS IS REQUIRED TO BE COMPLETED PRIOR TO THE PLACEMENT OF FILL ON THOSE AREAS. THE TOPSOIL MAY BE TEMPORARILY STOCKPILED AND USED AS TOPSOIL OVER OVER PROPOSED GREEN AREAS SUCH AS PLANT BEDS, SODDED AREAS, AND WHERE TREES ARE TO BE INSTALLED OR RELOCATED.
14. A SIGNED, DATED, AND SEALED LETTER FROM A SOILS ENGINEER OR THE ENGINEER OF RECORD CERTIFYING THAT THE AREAS TO BE FILLED HAVE BEEN STRIPPED OF ORGANIC MATERIALS, MUST BE SUBMITTED TO THE CITY PRIOR TO FILLING.
15. FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY (98% FOR PAVED AREAS AND 95% FOR BUILDING PADS AND ALL OTHER AREAS AS PER AASHTO T-180).
16. DURING SUBDIVISION DEVELOPMENT WHEN FUTURE BUILDING LOTS ARE FILLED AS PART OF THE OVERALL SUBDIVISION IMPROVEMENTS, COMPACTION TEST REPORTS MUST BE PERFORMED ON THE BUILDING LOTS AT 300 FOOT INTERVALS. THESE TESTS ARE TO BE PERFORMED IN ONE-FOOT VERTICAL INCREMENTS. THE RESULTS OF THESE TESTS ARE TO BE SUBMITTED TO THE CITY UPON COMPLETION OF THE TESTS.
17. IF ANY MUCK MATERIAL IS DISCOVERED, IT SHALL BE REQUIRED TO BE REMOVED AND REPLACED WITH A SUITABLE MATERIAL THAT IS PROPERLY BACKFILLED, COMPACTED AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
18. STOCKPILING IS NOT GENERALLY PERMITTED BY THE CITY. WHEN ALLOWED, STOCKPILES SHALL NOT EXCEED SIX FEET IN HEIGHT MEASURED FROM THE ORIGINAL GRADE. AT A MINIMUM, STOCK PILES THAT WILL REMAIN IN PLACE IN EXCESS OF TWENTY DAYS SHOULD BE SEEDED AND MULCHED IMMEDIATELY UPON PLACEMENT OF THE FINAL LIFT.
19. SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES. ADEQUATE WATERING METHODS SHOULD BE EMPLOYED TO ALLOW DAILY COVERAGE OF THE ENTIRE LIMITS OF ALL AREAS THAT DO NOT HAVE AN ESTABLISHED VEGETATIVE COVER. METHODS TO BE EMPLOYED INCLUDE, BUT ARE NOT LIMITED TO, WATER TRUCKS, PERMANENT IRRIGATION SYSTEMS, TEMPORARY SPRINKLER SYSTEMS OPERATED BY PUMPING UNITS CONNECTED TO WET RETENTION PONDS, WATER CANNONS, TEMPORARY IRRIGATION SYSTEMS MOUNTED ATOP STOCKPILE AREAS, AND OTHER METHODS AS DEEMED NECESSARY BY THE CITY.
20. ALL FILL MATERIALS LOCATED BENEATH STRUCTURES AND PAVEMENT SHALL CONSIST OF CLEAN GRANULAR SAND FREE FROM ORGANICS AND SIMILAR MATERIAL THAT COULD DECOMPOSE.
21. ALL FILL TO BE PLACED IN LANDSCAPED AREAS SHALL HAVE A Ph RANGE BETWEEN 5.5 AND 7.5, BE ORGANIC IN NATURE, FREE OF ROCKS AND DEBRIS, OR MATCH NATIVE EXISTING SOILS.

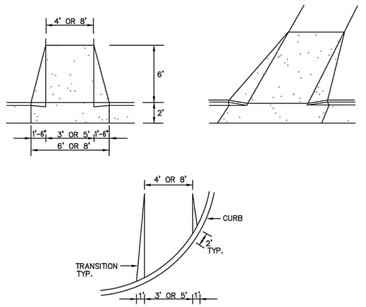
STANDARD CONSTRUCTION DETAIL CONTRACTOR REQUIREMENTS FOR SITE CLEARING, GRADING, AND EROSION CONTROL DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_R26.DWG DETAIL REF: R-26



SIDEWALK CONSTRUCTION REQUIREMENTS

1. SIDEWALKS, BIKEPATHS, RAMPS, AND DRIVEWAY APRONS SHALL BE CONSTRUCTED OF PLAIN PORTLAND CEMENT CONCRETE WITH A MAXIMUM SLUMP OF 3 INCHES, A MINIMUM DEVELOPED COMPRESSIVE STRENGTH OF 2500 P.S.I. IN 28 DAYS, AND A MINIMUM UNIFORM THICKNESS OF 4 INCHES WHERE INTENDED SOLELY FOR PEDESTRIAN TRAFFIC, AND 6 INCHES THICK WHERE MOTOR VEHICLES ARE LIKELY TO CROSS.
2. SIDEWALKS AND BIKEPATHS SHALL BE PLACED PARALLEL TO, AND ONE FOOT WITHIN THE RIGHT-OF-WAY LINE EXCEPT THAT THE CITY MAY APPROVE DEVIATIONS TO SAVE SPECIMEN TREES PROVIDED THAT THE SIDEWALK REMAINS WITHIN THE RIGHT-OF-WAY OR AN APPROVED SIDEWALK EASEMENT ABUTTING THE RIGHT OF WAY. SIDEWALKS AND BIKE PATHS SHOULD BE LOCATED AT LEAST 4 FEET FROM THE EDGE OF THE STREET PAVEMENT UNLESS OTHERWISE APPROVED BY THE CITY.
3. THE TOP OF THE CONCRETE SHALL BE AT AN ELEVATION NO LOWER THAN THE CROWN OF THE ADJACENT ROADWAY, AND NO HIGHER THAN 6 INCHES ABOVE THE CROWN UNLESS APPROVED BY THE CITY TO MAKE A MORE NATURAL TRANSITION WITH THE ADJACENT LAND.
4. ISOLATION JOINTS (TYPE A JOINTS) SHALL BE INSTALLED SO END PRODUCT IS FLUSH WITH EXISTING AND NEW CONCRETE AS TO PREVENT TRIP HAZARDS . TO SEPARATE PEDESTRIAN SECTIONS FROM SECTIONS WHICH WILL ENCOUNTER VEHICLE TRAFFIC, TO SEPARATE FRESH PLACEMENT FROM CONCRETE WHICH HAS SET FOR MORE THAN 60 MINUTES, AND NO FARTHER APART THAN 100 FEET IN SIDEWALKS AND BIKEPATHS. JOINT MATERIAL SHALL BE AS SPECIFIED IN F.D.O.T. STANDARDS AND SPECIFICATIONS AND SHALL BE RUBBER, PLASTIC OR OTHER APPROVED NON-BIODEGRADABLE ELASTOMERIC MATERIAL. WOOD AND DECCA-DRAIN' STYLE POOL DRAINS ARE STRICTLY PROHIBITED.
5. CONTROL JOINTS (TYPE B JOINTS) SHALL BE TOOLED INTO THE FRESH CONCRETE TO A DEPTH EQUAL TO 1/4 THE SLAB THICKNESS AND SPACED APART A DISTANCE EQUAL TO THE WIDTH OF THE SLAB OR 5 FEET WHICHEVER IS GREATEST.
6. THE SLAB SURFACE SHALL BE BROOM FINISHED TO BE SLIP RESISTANT, AND SHALL MATCH AS CLOSELY AS POSSIBLE THE FINISH OF EXISTING ADJACENT SLABS AND ALL EDGES SHALL BE TOOLED TO ELIMINATE SHARP CORNERS.
7. THE BEARING SUBSURFACE SHALL HAVE ALL ORGANIC, LOOSE, AND DELETERIOUS MATTER REMOVED, AND THE REMAINING CLEAN SOIL SHALL BE SMOOTH, SOUND, AND SOLID. ANY FILL MATERIAL SHALL BE COMPACTED WITH A VIBRATORY OR IMPACT COMPACTION MACHINE IN MAXIMUM 12 INCH LIFTS OR COMPACTED WITH A HAND TAMPER IN MAXIMUM 4 INCH LIFTS THE CITY SHALL REQUIRE A COMPACTION TEST FOR EACH LIFT IF THE TOTAL FILLED SECTION IS MORE THAN 12 INCHES DEEP OR IF THE SUBSURFACE HAS BEEN DISTURBED MORE THAN 12 INCHES DEEP. WHERE SUCH TEST IS REQUIRED, THE RESULTS SHALL SHOW A MINIMUM PROCTOR FIELD DENSITY OF 95 PERCENT.
8. ALL CONCRETE WORK IN THE RIGHT-OF-WAY SHALL BE INSPECTED BY THE CITY AFTER THE SUBSOIL IS PREPARED AND THE FORMS ARE SET, BUT BEFORE THE CONCRETE PLACEMENT BEGINS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE FINISHED SLAB FROM ALL DAMAGE AND VANDALISM UNTIL THE CITY ACCEPTS OR APPROVES THE SLAB, AFTER WHICH TIME THE OWNER OF THE ABUTTING LAND SHALL BE RESPONSIBLE FOR THE SLAB IN ACCORDANCE WITH THE CITY CODE. ANY SLAB SECTION DAMAGED OR VANDALIZED PRIOR TO ACCEPTANCE OR APPROVAL SHALL BE CUT OUT BETWEEN JOINTS AND REPLACED. REPAIRS ARE NOT ACCEPTABLE.
10. SIDEWALKS LOCATED WITHIN THE RIGHT-OF-WAY SHALL NOT BE TINTED, STAINED, COLORED, OR COATED.
11. ALL FORMS SHALL BE REMOVED PRIOR TO ACCEPTANCE OR APPROVAL AND THE DISTURBED GROUND SHALL BE BACKFILLED, REGRADED, AND SODDED SO THAT THE WEAR SURFACE OF THE CONCRETE IS REASONABLY FLUSH WITH THE ADJACENT GRADE.

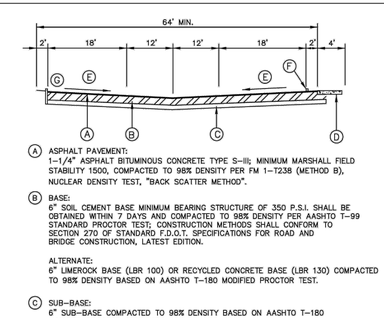
STANDARD CONSTRUCTION DETAIL SIDEWALK CONSTRUCTION REQUIREMENTS	FILE NAME: EW_M2.DWG DETAIL REF: M-2



NOTES:

1. RAMP LOCATIONS ARE TO BE COORDINATED WITH AND IN CONFORMANCE WITH CROSSWALK MARKING DETAILS SHOWN IN THE PLANS.
2. CURBED RAMPS SHALL HAVE FLARED SIDES WITH A MAXIMUM SLOPE OF 12:1.
3. RAMPS SHALL HAVE A TACTLIKE SURFACE, TEXTURED TO A DEPTH NOT EXCEEDING 1/8".
4. RAMPS ARE TO BE CONSTRUCTED AT ALL LOCATIONS SHOWN IN THE PLANS EVEN WHEN A SIDEWALK IS NOT CONSTRUCTED CONCURRENTLY.
5. NO CURB TRANSITION IS NEEDED FOR MIAMI CURBS.
6. ALL RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX NO. 304 AND HANDICAPPED ACCESSIBILITY REQUIREMENTS IN ACCORDANCE WITH THE AMERICAN DISABILITIES ACT.

STANDARD CONSTRUCTION DETAIL SIDEWALK AND BIKEPATH RAMP	FILE NAME: EW_M3.DWG DETAIL REF: M-3



(A) ASPHALT PAVEMENT:
1-1/4" ASPHALT BITUMINOUS CONCRETE TYPE S-1½ MINIMUM MARSHALL FIELD STABILITY 1500, COMPACTED TO 98% DENSITY PER FM 1-T238 (METHOD B), NUCLEAR DENSITY TEST, "BACK SCATTER METHOD".

(B) BASE:
6" SOIL CEMENT BASE MINIMUM BEARING STRUCTURE OF 350 P.S.I. SHALL BE OBTAINED WITHIN 7 DAYS AND COMPACTED TO 98% DENSITY PER AASHTO T-99 STANDARD PROCTOR TEST; CONSTRUCTION METHODS SHALL CONFORM TO SECTION 270 OF STANDARD F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

ALTERNATE:
6" LIMEROCK BASE (LBR 100) OR RECYCLED CONCRETE BASE (LBR 130) COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.

(C) SUB-BASE:
6" SUB-BASE COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST WITH MINIMUM LBR 40.

(D) 4'-0" WIDE, 4" THICK, CONCRETE SIDEWALK, 3000 P.S.I.

(E) THE MINIMUM ALLOWABLE PARKING LOT PAVEMENT SLOPE FOR ASPHALT SHALL BE NO LESS THAN 0.75% MEASURED FROM THE RECEIVING INLET OR FLUME TO ANY PAVEMENT. (NOTE THAT THE MINIMUM SLOPE MAY BE REDUCED TO 0.50% FOR CONCRETE PAVEMENT.)

(F) CONCRETE WHEEL STOP.

(G) 6" HEADER CURB WITH 1'-6" OF SODDED OVERHANG

NOTES:

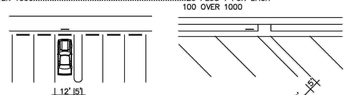
1. ALL MATERIALS ARE TO BE APPROVED BY THE CITY'S DESIGNATED SITE INSPECTOR AND THE DEVELOPER'S LICENSED SOILS ENGINEER PRIOR TO PLACEMENT.
2. A REPRESENTATIVE OF A CERTIFIED SOIL LABORATORY SHALL BE PRESENT DURING ALL CONSTRUCTION PHASES UTILIZING A SOIL CEMENT BASE. THE REPRESENTATIVE SHALL BE CERTIFIED BY F.D.O.T. IN THE INSTALLATION OF SOIL CEMENT.

STANDARD CONSTRUCTION DETAIL PRIVATE PARKING LOT	FILE NAME: EW_M5.DWG DETAIL REF: M-5

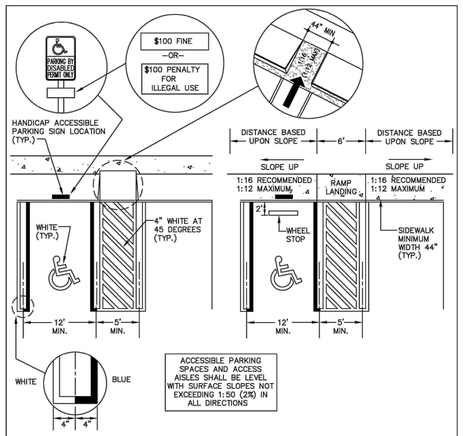
HANDICAP ACCESSIBLE PARKING SPACES SHALL BE PROVIDED IN ACCORDANCE WITH CURRENT FLORIDA STATUTES, INCLUDING THE FOLLOWING DETAILS:

1. ANY COMMERCIAL REAL ESTATE PROPERTY OWNER OFFERING PARKING FOR THE GENERAL PUBLIC SHALL PROVIDE SPECIALLY DESIGNED AND MARKED MOTOR VEHICLE PARKING SPACES FOR THE EXCLUSIVE USE OF PHYSICALLY DISABLED PERSONS WHO HAVE BEEN ISSUED PARKING PERMITS PURSUANT TO STATE LAW.
2. DIAGONAL OR PERPENDICULAR PARKING SPACES SHALL BE A MINIMUM OF 12 FEET WIDE (SEE FIGURE 1).
3. PARALLEL PARKING SPACES SHALL BE LOCATED EITHER AT THE BEGINNING OR END OF A BLOCK OR ADJACENT TO ALLEY ENTRANCES (SEE FIGURE 2). CURBS ADJACENT TO SUCH SPACES SHALL BE OF A HEIGHT WHICH WILL NOT INTERFERE WITH THE OPENING AND CLOSING OF MOTOR VEHICLE DOORS.
4. EACH SUCH PARKING SPACE SHALL BE CONSPICUOUSLY OUTLINED IN BLUE PAINT AND SHALL BE POSTED AND MAINTAINED WITH A PERMANENT, ABOVE-GRADE SIGN BEARING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND THE CAPTION PARKING BY DISABLED PERMIT ONLY, AND AN ADDITIONAL SIGN STATING THE PENALTY FOR ILLEGAL USE OF THE SPACE (SEE FIGURE 2). SUCH SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. ALL HANDICAP ACCESSIBLE PARKING MUST BE SIGNED AND MARKED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION.
5. ALL SPACES SHALL HAVE A SIXTY INCH (60") WIDE ADJACENT ACCESS AISLE (SEE FIGURE 2). PARKING ACCESS AISLES SHALL BE PART OF THE ACCESSIBLE ROUTE TO THE BUILDING OR FACILITY ENTRANCE. TWO ACCESSIBLE PARKING SPACES MAY SHARE A COMMON ACCESS AISLE. PARKED VEHICLE OVERHANGS SHALL NOT REDUCE THE CLEAR WIDTH OF AN ACCESSIBLE CIRCULATION ROUTE.
6. ALL SPACES SHALL HAVE AN ACCESSIBLE CURB-RAMP OR CURB-CUT TO ALLOW ACCESS TO THE BUILDING SERVED. IT SHALL BE LOCATED SO THAT USERS WILL NOT BE COMPELLED TO WHEEL BEHIND PARKED VEHICLES.
7. THE MINIMUM NUMBER OF SUCH PARKING SPACES SHALL COMPLY WITH THE FOLLOWING TABLE:

TOTAL PARKING IN LOT	REQUIRED NUMBER OF ACCESSIBLE SPACES
UP TO 25	1
26 TO 50	2
51 TO 75	3
76 TO 100	4
101 TO 150	5
151 TO 200	6
201 TO 300	7
301 TO 400	8
401 TO 500	9
501 TO 1000	2% OF TOTAL
OVER 1000	20 PLUS 1 FOR EACH 100 OVER 1000



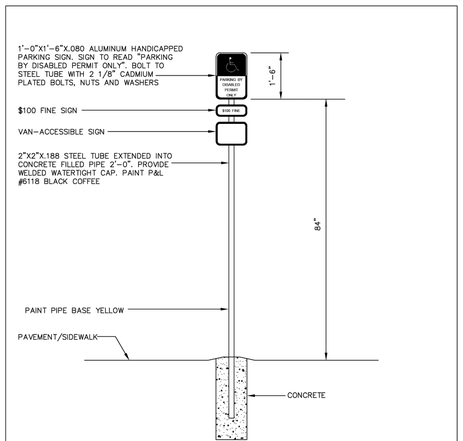
STANDARD CONSTRUCTION DETAIL HANDICAP ACCESSIBLE PARKING SPACES	FILE NAME: EW_M8.DWG DETAIL REF: M-8



NOTE:

1. WHEN HEADER CURB IS USED IN LIEU OF WHEEL STOPS, SIDEWALK ABUTTING CURB MUST BE WIDENED BY 18" SO THAT THE TOTAL SIDEWALK WIDTH IS 62", ALLOWING FOR 44" MINIMUM CLEAR ACCESSIBLE ROUTE.
2. FOR COMPLETE DETAIL OF HANDICAPPED SIGN, REFER TO DETAIL M-10.

STANDARD CONSTRUCTION DETAIL HANDICAP ACCESSIBLE PARKING SPACES	FILE NAME: EW_M9.DWG DETAIL REF: M-9



NOTE:

1. HANDICAPPED PARKING SIGN SHALL CONFORM WITH CURRENT STATE AND LOCAL AND FEDERAL CODES AND REGULATIONS.
2. ALL SIGNS SHALL BE DESIGNED TO WITHSTAND 100 M.P.H. WINDLOAD.

STANDARD CONSTRUCTION DETAIL HANDICAP SIGN	FILE NAME: EW_M10.DWG DETAIL REF: M-10

REQUIREMENTS FOR AS-BUILT DRAWINGS

IN ORDER TO ENSURE THAT NEW SUBDIVISIONS AND SITE PLANS ARE CONSTRUCTED SUBSTANTIALLY IN ACCORDANCE WITH CITY REGULATIONS AND THE APPROVED DRAWINGS, THE FOLLOWING INFORMATION IS REQUIRED ON ALL SUBDIVISION AS-BUILT DRAWINGS.

1. PAVEMENT AND CURB WIDTHS SHALL BE VERIFIED AND DIMENSIONED FOR EACH STREET AT EACH BLOCK. (FOR SUBDIVISIONS) AND AS APPROPRIATE TO CONFIRM PAVING LIMITS (ON SITE PLANS).
2. ALL RADII AT INTERSECTIONS SHALL BE VERIFIED AND DIMENSIONED. THIS INFORMATION IS TO BE CLEARLY INDICATED ON THE AS-BUILT.
3. ROADWAY ELEVATIONS SHALL BE RECORDED AT ALL GRADE CHANGES, 100' INTERVALS ALONG ROADWAY, AND OTHER INTERVALS AS NEEDED ALONG ALL STREETS. STREET CENTERLINE AND CURB INVERT ELEVATIONS SHALL BE RECORDED AS NOTED. THE AS-BUILT CENTERLINE PROFILE OF ALL STREETS SHALL ALSO BE SHOWN ON THE PLAN AND PROFILE SO IT MAY BE COMPARED TO THE DESIGN PROFILE GRADE LINES. IN THE EVENT THAT THE AS-BUILT CENTERLINE LONGITUDINAL GRADE DOES NOT MEET THE CITY MINIMUM STANDARDS, ADDITIONAL LONGITUDINAL GRADES OF THE ADJACENT CURBING AND SIMILAR ROADWAY CROSS-SECTION SURVEYS TO VERIFY THE CORRECT CROSS SLOPE, SHALL BE REQUIRED TO VERIFY THAT THE SYSTEM WILL FUNCTION AS ORIGINALLY DESIGNED.
4. STORM DRAINAGE STRUCTURES SHALL BE LOCATED AND / OR DIMENSIONED FROM CENTERLINES OR LOT LINES AS APPROPRIATE.
5. STORM DRAINAGE PIPE INVERT AND INLET ELEVATIONS SHALL BE RECORDED AND CLEARLY DENOTED AS AS-BUILT INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND AS-BUILT INFORMATION WRITTEN NEXT TO IT.
6. STORM DRAINAGE PIPE MATERIAL, LENGTH, AND SIZE SHALL BE MEASURED AND / OR VERIFIED. THIS INFORMATION IS TO BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION .
7. ALL APPLICABLE TOPOGRAPHIC INFORMATION PERTINENT TO THE ON-SITE DRAINAGE SYSTEM, SUCH AS DITCHES, SWALES, LAKES, CANALS, ETC. THAT ARE DEEMED NECESSARY BY THE CITY TO VERIFY THE FUNCTIONAL PERFORMANCE OF THE STORMWATER SYSTEM, SHALL BE NOTED. NORMALLY, RECORDING ELEVATIONS EVERY 100 FEET AT THE TOP OF BANK AND TOE OF SLOPE WILL BE REQUIRED. MEASUREMENTS SHALL BE TAKEN AND RECORDED IN ORDER TO ACCURATELY TIE DOWN THESE FEATURES TO THE ROADWAY CENTERLINES AND TO PLAT LINES. WHENEVER POSSIBLE, CONTOUR LINES SHALL BE UTILIZED TO GRAPHICALLY DESCRIBE THESE TOPOGRAPHIC FEATURES .
8. RETENTION AREAS SHALL HAVE THEIR TOP-OF BANK AND BOTTOM ELEVATIONS RECORDED. ACTUAL MEASUREMENTS SHALL BE TAKEN AND DIMENSIONS RECORDED OF THE SIZE OF ALL RETENTION AREAS. MEASUREMENTS SHALL BE DONE FROM TOP-OF-BANK TO TOP-OF-BANK WITH SIDE SLOPES INDICATED. SEPARATE CALCULATIONS SHALL BE SUBMITTED TO INDICATE REQUIRED AND PROVIDED RETENTION VOLUMES.
9. ACTUAL MATERIALS USED AND ELEVATIONS AND DIMENSIONS OF OVERFLOW WEIR STRUCTURES AND SKIMMERS SHALL BE NOTED ON THE AS-BUILT.
10. STORM DRAINAGE SWALE CENTERLINES SHALL BE LOCATED AND ELEVATIONS OF FLOW LINE AND TOP OF BANK SHALL BE RECORDED EVERY 100 FEET. SIDE SLOPES SHALL ALSO BE INDICATED.
11. SANITARY SEWER MANHOLES SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. ALL RIM AND INVERT ELEVATIONS SHALL BE VERIFIED AND RECORDED. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND AS-BUILT INFORMATION WRITTEN NEXT TO IT.
12. FOR SUBDIVISIONS, PROPOSED DESIGN FINISHED FLOOR ELEVATIONS SHALL APPEAR ON ALL SUBDIVISION LOTS ON THE APPROPRIATE PLAN AND PROFILE SHEET AS WELL AS ON THE MASTER DRAINAGE PLAN.

STANDARD CONSTRUCTION DETAIL REQUIREMENTS FOR AS-BUILT DRAWINGS	FILE NAME: EW_M11.DWG DETAIL REF: M-11

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CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA
CLIENT: INDIAN RIVER SHORES, LLC
CONSTRUCTION DETAILS

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26006638

NICHOLAS ALEXANDER PEET LICENSE NO. 92061 6/30/26 STATE OF FLORIDA PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

SHEET C 10.2

T:\Projects\199-05 - Phase 1 of the Marina Development\Drawings\199-05-01 Construction Plans\Current Plans\199005010.0-CD.dwg
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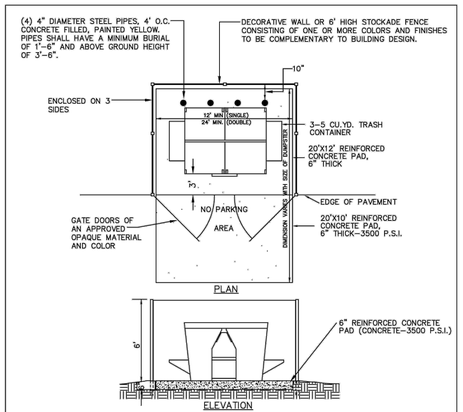
REQUIREMENTS FOR AS–BUILT DRAWINGS (CONTD.)

13. SANITARY SEWER LINE LENGTHS, SIZES, MATERIAL ETC., SHALL BE VERIFIED AND RECORDED. THIS INFORMATION IS TO BE CLEARLY INDICATED AS BEING AS–BUILT INFORMATION.
14. SEWER LATERALS SHALL BE VERIFIED AND RECORDED AT THEIR CLEAN–OUT LOCATIONS. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TOWARDS UPSTREAM MANHOLES.
15. LIFT STATIONS AND FORCE MAINS SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. FORCE MAIN DEPTH AND LOCATION INCLUDING VALVES WILL BE PROVIDED AND TIED TO PERMANENT ABOVE GRADE FEATURES. DIMENSIONAL AND ELEVATION INFORMATION INDICATED ON THE APPROVED PLAN SHALL BE VERIFIED AND RECORDED. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS–BUILT INFORMATION. BURIED ELECTRICAL SERVICE LINE SHALL BE CLEARLY DIMENSIONED, LOCATED, AND LABELED.
16. CURB CUTS OR METAL TABS, USED TO MARK SEWER LATERALS, WATER SERVICES AND WATER VALVES, SHALL BE VERIFIED FOR PRESENCE AND ACCURACY OF LOCATION.
17. POTABLE AND RECLAIMED WATER MAIN LINES SHALL BE DIMENSIONED OFF THE BACK OF CURB, OR EDGE OF PAVEMENT IF NO CURB IS PRESENT. WATER MAIN LINE MATERIAL SIZE, LENGTH AND DEPTH PLACED SHALL ALSO BE NOTED. LOCATIONS OF VALVES SHALL BE TIED TO PERMANENT ABOVE GRADE FEATURES. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS–BUILT INFORMATION.
18. POTABLE AND RECLAIMED WATER VALVES, TEES, BENDS, ALL SERVICES, AND FIRE HYDRANTS SHALL BE LOCATED BY TYING THEM TO SANITARY SEWER MANHOLES. SIMILARLY, FORCE MAIN VALVES, TEES, AND BENDS SHALL BE LOCATED IN THE SAME MANNER. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TO UPSTREAM MANHOLES.
19. FOR PERPENDICULAR CROSSINGS OF STORMWATER, SANITARY SEWER, POTABLE WATER, OR RECLAIMED WATER, THE AS–BUILT PLANS SHALL CLEARLY INDICATE WHICH UTILITIES ARE LOCATED OVER OR UNDER OTHER UTILITIES, AS NECESSARY.
20. ANY SPECIAL FEATURES SUCH AS, CONCRETE FLUMES, LAKE BANKS, WALLS, FENCING, ETC., WHICH WERE A PART OF THE APPROVED CONSTRUCTION DRAWINGS SHOULD ALSO BE LOCATED AND DIMENSIONED.
21. IF AN APPROVED SUBDIVISION PLAT OR SITE PLAN SHOWS A CONSERVATION EASEMENT, THE PROJECT SURVEYOR SHOULD PROVIDE THE EXACT LOCATION OF THE SPECIMEN TREE(S) FROM THE RIGHT–OF–WAY OR PROPERTY LINES AND PROPOSED EASEMENT BOUNDARIES ON THE AS–BUILT DRAWING. THE AS–BUILT LOCATION OF THESE TREES WILL HELP VERIFY THE SUFFICIENCY OF THE CONSERVATION EASEMENT PRIOR TO PLAT RECORDING OR CERTIFICATE OF OCCUPANCY.
22. WHEN STORMWATER, POTABLE WATER, RECLAIMED WATER, OR SANITARY SEWER IMPROVEMENTS ARE ARE LOCATED WITHIN AN EASEMENT, THE AS–BUILT DRAWING SHALL ACCURATELY DEPICT THE LOCATION OF THE EASEMENT ITSELF AS WELL AS THE EXACT LOCATION OF THE IMPROVEMENTS WITHIN THE EASEMENT. THIS IS REQUIRED IN ORDER TO VERIFY THAT THE IMPROVEMENTS HAVE BEEN PROPERLY LOCATED AND TO ENSURE THAT FUTURE SUBSURFACE EXCAVATION TO PERFORM REMEDIAL REPAIR CAN BE ACCOMPLISHED WITHOUT DISTURBANCE BEYOND THE EASEMENT.

NOTE:

1. REFERENCES TO WATER SHALL MEAN BOTH POTABLE AND RECLAIMED WATER.

EDGEWATER	STANDARD CONSTRUCTION DETAIL REQUIREMENTS FOR AS–BUILT DRAWINGS	FILE NAME: EW_M12.DWG DETAIL REF: M–12



NOTES:

1. MAXIMUM ANGLE OF CONTAINER PAD TO DIRECTION OF AISLE TO BE 30°
2. AREA TO BE FREE OF OVERHEAD LINES AND WIRES.
3. DUMPSTER PAD TO BE 12' MIN. (SINGLE) 24' MIN (DOUBLE) FOR DUMPSTER RECYCLING.
4. APPLICANT TO PROVIDE A SIDE ELEVATION TO DEMONSTRATE COLOR, MATERIAL, AND DESIGN CONSISTENCY WITH THE PRINCIPAL BUILDING.

EDGEWATER	STANDARD CONSTRUCTION DETAIL DUMPSTER PAD	FILE NAME: EW_M13.DWG DETAIL REF: M–13

STREET AND WALKWAY LIGHTS

WALKWAY LIGHTS: (HEIGHT: 10 TO 20 FEET)

1. WALKWAY LIGHTING SHALL BE PROVIDED IN ALL PUBLIC PARKING AND WALKWAY AREAS. LIGHT STYLES AND SPACING SHALL BE DETERMINED BY THE COMMUNITY DEVELOPMENT DEPT. AT THE SAME TIME OF SITE PLAN REVIEW.
2. UNLESS SPECIFIED OTHERWISE, THE WALKWAY LIGHTS SHALL BE ANY OF THE THREE (3) STYLES DETAILED HEREIN OR THE FOLLOWING: STERNBERG GEORGETOWN (0650 / 4408–DFP), WILLIAMSBURG (9405–TF / 3810–T) OR COLONIAL (4620T–LF). ALL CITY MAINTAINED WALKWAY LIGHTS ARE TO BE FLORIDA POWER AND LIGHT (FPL) SUPPLIED LIGHTS, UTILIZING 150 WATT HPS.
4. SPACING SHALL BE A MAXIMUM OF 100 FEET ON CENTER.

STREET LIGHTS: (HEIGHT: 20+ FEET)

1. ALL CITY MAINTAINED STREET LIGHTS ARE TO BE FPL SUPPLIED STREET LIGHTS.
2. PRIVATELY MAINTAINED STREET LIGHTS SHALL BE: GARDCO LIGHTING EH / 26" / 1 / 3 / 150 HPS / 240 / BRA / PC (NOTE: POLE SHALL BE CONCRETE AVAILABLE THROUGH F.P.L. AND SPACED AT INTERVALS OF 300 TO 400 FEET.)

EDGEWATER	STANDARD CONSTRUCTION DETAIL STREET AND WALKWAY LIGHTS	FILE NAME: EW_M14.DWG DETAIL REF: M–14

STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES

ALL MATERIALS AND INSTALLATION METHODS USED FOR LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS FOR SUBDIVISIONS AND SITE PLANS SHALL BE IN CONFORMANCE WITH THE CITY, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION).

1. ALL STORM SEWERS AND CULVERTS LOCATED IN ROADWAY RIGHTS–OF–WAY AND ROADWAY EASEMENTS SHALL BE A MINIMUM OF CLASS III REINFORCED CONCRETE PIPE. PRIVATE SITES AND AREAS OUTSIDE OF ROADWAY EASEMENTS AND R.O.W., PIPE MAY BE MADE OF ALTERNATE MATERIALS INCLUDING:
   A. SMOOTH INNER WALL HIGH DENSITY POLYETHYLENE (HDPE) IN ACCORDANCE WITH AASHTO M–294, AASHTO MP7, ASTM D3350 AND ASTM D2412 FOR SIZES UP TO 42" IN DIAMETER OR
   B. PVC IN ACCORDANCE WITH THE PROVISION NOTED IN THE "SEWER DETAILS" OF THESE SPECIFICATIONS.
2. ALL STORM SEWER PIPE JOINTS LOCATED IN ROADWAY RIGHTS–OF–WAY AND ROADWAY EASEMENTS SHALL BE ENTIRELY WRAPPED WITH FILTER FABRIC WITH A MINIMUM WIDTH OF 24" AND A MINIMUM OF 24" OVERLAP SECURED WITH PLASTIC OR STAINLESS BANDS. GASKETS ARE NOT PERMITTED AS AN EQUIVALENT SUBSTITUTE FOR MEETING THIS REQUIREMENT. THIS PRACTICE IS REQUIRED ON PRIVATE SITES ADDITIONALLY, ALL JOINTS SHALL BE RUBBER GASKETED FOR BOTH ROUND AND ELLIPTICAL PIPE.
3. DEPTH OF COVER MEASURED TO THE TOP OF PIPE (NOT INCLUDING THE BELL JOINT) SHALL BE A MINIMUM OF 1 FOOT. DEVIATION FROM THIS REQUIREMENT MAY BE ALLOWED BY INCREASING THE PIPE'S STRUCTURAL CAPACITY. THIS DEVIATION MUST BE SPECIFIED ON THE PLANS APPROVED FOR CONSTRUCTION AND SUBSEQUENTLY REFLECTED ON THE SHOP DRAWINGS AND AS–BUILT PLANS.
4. ALL STORM DRAINAGE PIPES LOCATED IN ROADWAY RIGHTS–OF–WAY AND ROADWAY EASEMENTS SHALL BE A MINIMUM OF TWELVE INCH (12") DIAMETER OR EQUIVALENT AND BE DESIGNED FOR A MINIMUM OF A TWENTY–FIVE (25) YEAR STORM OF TWENTY–FOUR (24) HOUR DURATION. STORM DRAINAGE PIPES SMALLER THAN 12" ARE PERMITTED ON PRIVATE SITE PLANS PROVIDING THAT MAINTENANCE SHALL BE PERFORMED BY THE OWNER.
5. STORM INLETS, MANHOLES, AND CATCH BASINS SHALL BE EITHER POURED IN PLACE OR PRECAST REINFORCED CONCRETE. STRUCTURES SHALL BE REQUIRED AT EACH CHANGE OF PIPE SIZE OR CHANGE IN PIPE DIRECTION. ALL STRUCTURES SHALL BE IN COMPLIANCE WITH ASTM C–478 AND SHALL HAVE 8" THICK WALLS. 6" THICK WALLS MAY BE PERMITTED PROVIDING THAT THE PLANS SPECIFY INCREASED REINFORCEMENT IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 201 IN ADDITION, THIS REQUIREMENT MUST BE REFLECTED ON BOTH THE SHOP DRAWING AND AS–BUILT PLANS. NOTE: INLET APRONS REQUIRE EXPANSION JOINTS AROUND THE STRUCTURE AS DICTATED BY THE CITY.
6. STORM INLETS SHALL BE SPACED IN SUCH A MANNER AS TO ACCEPT ONE HUNDRED (100) PERCENT OF THE DESIGN STORM RUNOFF WITHOUT IMPEDING THE FLOW OF TRAFFIC. FOR ROADWAY SECTIONS WITH DESIGN SPEEDS OF 45 MPH AND LESS AND WITHOUT FULL WIDTH SHOULDERS, SPREAD RESULTING FROM A RAINFALL INTENSITY OF FOUR INCHES (4 ") PER HOUR SHALL NOT EXCEED ONE–HALF OF THE TRAVEL LANE ADJACENT TO THE GUTTER. FOR SITE PLANS, INLET SPACING SHALL BE DESIGNED TO ACCEPT ONE HUNDRED (100) PERCENT OF THE RUNOFF FROM A RAINFALL INTENSITY OF FOUR INCHES (4 ") PER HOUR WITHOUT RESULTING IN PONDING OF WATER AROUND THE INLET.
7. LAKE DEPTHS SHALL BE EIGHT FEET (8') MINIMUM TO TWELVE FEET (12') MAXIMUM, MEASURED FROM HIGH WATER MARK.

EDGEWATER	STANDARD CONSTRUCTION DETAIL STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_ST4.DWG DETAIL REF: ST–4

STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES (CONTD.)

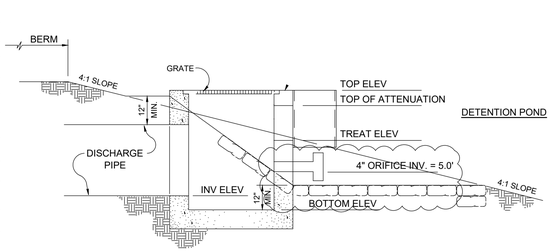
8. FOR CONNECTIONS BETWEEN INLETS WITH PIPING 15" IN DIAMETER AND LARGER, THE MAXIMUM DISTANCES BETWEEN INLETS AND / OR CLEAN–OUT JUNCTION BOXES SHALL BE 300 FEET. CULVERTS SHALL BE SLOPED TO MAINTAIN A MINIMUM SELF–CLEANING VELOCITY OF 3 FEET PER SECOND USING A MANNING'S 'n' OF 0.012. SPACING FOR CLEAN–OUTS AND INLETS FOR SMALLER PIPING SHALL BE REDUCED AND EVALUATED ON A CASE BY CASE BASIS.
9. THE MAXIMUM PERMISSIBLE SLOPE OF ANY NEW SITE GRADING IS 3:1 (HORIZONTAL:VERTICAL). THIS LIMIT SHALL BE APPLIED TO ALL AREAS EXCEPT STORMWATER CONVEYANCE AND TREATMENT SYSTEMS WHICH HAVE A MAXIMUM SLOPE OF 4:1 (EXCEPT BELOW THE WATER TABLE WHERE SHARPER SLOPES ARE PERMISSIBLE.)
10. ALL SWALES AND DITCHES SHALL HAVE A MAXIMUM PERMITTED SIDE SLOPE NOT GREATER THAN 4 TO 1 AT A MINIMUM. THE MAXIMUM PERMITTED BACKSLOPE, SHALL BE 3:1, PROVIDED THAT A 2' WIDE BERM IS INSTALLED. DESIGN CENTERLINE AND TOP–OF–BANK ELEVATIONS SHALL BE NOTED AT INTERVALS OF 100'.
11. SWALES THAT ARE NORMALLY DRY AND INTENDED FOR CONVEYANCE OF STORMWATER RUNOFF AND ARE NOT INTENDED FOR RETENTION SHALL HAVE A MINIMUM DRAINAGE MAINTENANCE EASEMENT WIDTH MEASURING 15 FEET. SWALED AREAS INTENDED FOR RETENTION SHALL PROVIDE APPROPRIATE EASEMENT AREAS FOR ACCESS AND MAINTENANCE MEASURED UPLAND FROM THE TOP OF BANK. AT A MINIMUM, THE SAID EASEMENT SHALL MEASURE 10' FEET IN WIDTH FROM THE TOP OF THE SWALE.
12. PIPED STORMWATER SYSTEMS SHALL HAVE A MINIMUM DRAINAGE MAINTENANCE EASEMENT WIDTH OF 20 FEET, AND MAY BE INCREASED DEPENDING UPON THE SIZE AND DEPTH OF PIPE.
13. NORMAL ROADSIDE SWALES ARE PERMITTED TO BE CONSTRUCTED TO A MAXIMUM DEPTH OF 18" BELOW THE OUTSIDE EDGE OF PAVEMENT OR CONCRETE CURB.
14. CONCRETE EROSION CONTROL MUST BE PROVIDED WHERE SWALES OR CULVERTS INTERCEPT DRAINAGE DITCHES.
15. WHEN A LAKE IS INCORPORATED WITHIN A SUBDIVISION AND IS ABUTTED BY LOTS, SUCH ABUTTING LOT LINES SHALL BE EXTENDED INTO THE LAKE PROPORTIONATELY ENCOMPASSING ALL OF THE LAKE AREA.
16. LAKE INFLOW AND OUTLET STRUCTURES SHALL GENERALLY BE CONSTRUCTED WITH REINFORCED CONCRETE AND SHALL BE SUBJECT TO THE APPROVAL OF THE CITY. SKIMMERS FOR WET PONDS SHALL BE CONSTRUCTED SUCH THAT THE BOTTOM EXTENDS 6" BELOW THE NORMAL WATER LEVEL AND 6" ABOVE THE OVERFLOW. FOR DRY PONDS, THE SKIMMER BOTTOM SHALL BE SET 6" BELOW THE LOWEST OVERFLOW ELEVATION AND 6" ABOVE THE HIGHEST POINT OF OVERFLOW. ALL SKIMMERS SHALL BE CONSTRUCTED OF MINIMUM 1/4" THICK ALUMINUM OR FIBERGLASS ADEQUATELY SUPPORTED TO PREVENT DEFLECTION.

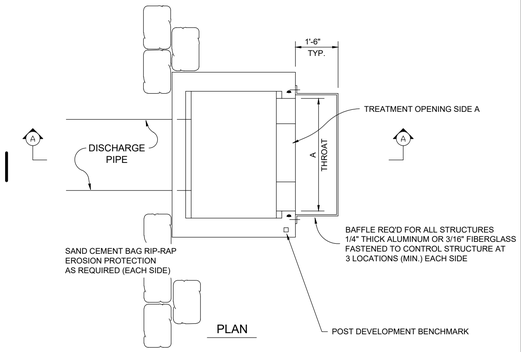
EDGEWATER	STANDARD CONSTRUCTION DETAIL STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_ST5.DWG DETAIL REF: ST–5

STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES (CONTD.)

17. EROSION AND SEDIMENT CONTROL PLANS AS APPROVED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SHALL BE EMPLOYED AT ALL TIMES. AT A MINIMUM, BEST MANAGEMENT PRACTICES (BMP's) SHALL BE UTILIZED.
18. THE CITY MAY REQUEST THAT THE DEVELOPER SUBMIT A REPORT BY A QUALIFIED HYDROLOGIST ON THE IMPACT THE LAKE WILL HAVE ON NEIGHBORING WATER TABLE ELEVATIONS BOTH DURING CONSTRUCTION AND AFTER LAKE COMPLETION. THE CITY MAY REQUIRE GROUNDWATER MONITORING DURING THE LAKE EXCAVATION.
19. ADEQUATE MAINTENANCE EASEMENTS OR RIGHTS–OF–WAY AS APPROVED BY THE CITY SHALL BE PROVIDED AROUND THE ENTIRE PERIMETER OF ALL LAKES AND ASSOCIATED OUTFALLS DISCHARGING INTO AND OUT OF LAKES. APPLICABLE CROSS SECTIONS SHALL BE INCLUDED ON ALL FINAL DEVELOPMENT PLANS.
20. DEVELOPMENT PLANS FOR ALL STORMWATER MANAGEMENT SYSTEMS SHALL CONTAIN POP–OFF DATA (OVERFLOW), BOTTOM ELEVATION, NORMAL WATER LEVELS, MEAN ANNUAL SEASONAL HIGH WATER TABLE ELEVATION, TREATMENT VOLUME AND CORRESPONDING ELEVATION, 100 YEAR HIGH WATER LEVELS, AND THE DESIGN TAILWATER ELEVATION (IF APPLICABLE).
21. IN GENERAL, ALL RETENTION / DETENTION SITES MUST BE CONSTRUCTED ON ALL PROJECTS PRIOR TO ANY ROAD, PARKING LOT, OR BUILDING CONSTRUCTION COMMENCING OR AS CURRENT PERMIT CONDITIONS DICTATE. SEWER AND WATER MAINS MAY BE INSTALLED PRIOR TO RETENTION/DETENTION SITE CONSTRUCTION IF DEWATERING IS NOT REQUIRED.
22. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ANY AND ALL DEWATERING PERMITS THAT MAY BE REQUIRED.
23. WHEN CULVERTS ARE INSTALLED TO MAINTAIN THE FLOW OF EXISTING DRAINAGE WAYS WHERE NEWLY PROPOSED ROADS WOULD OTHERWISE SEVER THE DRAINAGE WAY, THEN CULVERTS CROSSING RIGHTS–OF–WAY SHALL EXTEND FROM RIGHT–OF–WAY LINE TO RIGHT–OF–WAY LINE UNDER THE ROADWAY. CULVERTS SHALL BE DESIGNED TO ACCOMODATE THE FLOW FROM THE 100 YEAR – 24 HOUR STORM EVENT WITHOUT FLOODING ADJACENT PROPERTY OR SURCHARGING THE SAID ROADWAY.
24. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW AND MAINTAIN A COPY OF THE SJRWMD PERMIT AND/ OR NPDES CONSTRUCTION PERMIT AT THE CONSTRUCTION SITE, AND ABIDE BY ALL CONDITIONS OF THE PERMIT.
25. LANDSCAPE PLANS SHALL CLEARLY DEPICT THE DESIGN LOCATION OF PLANTINGS RELATIVE TO THE LOCATION OF PUBLIC UTILITIES AND STORMWATER INFRASTRUCTURE IN ORDER TO EVALUATE POTENTIAL CONFLICTS.

EDGEWATER	STANDARD CONSTRUCTION DETAIL STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_ST6.DWG DETAIL REF: ST–6





CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTING CONTROL STRUCTURES

CONTROL STRUCTURE DATA						
MODIFIED ATTENUATION AND TREATMENT CONTROLS						
STR. NO.	FDOT BOX TYPE	OPENING TYPE	25 YR TRTMENT/ATTN. OPENING			TOP EL.
			WIDTH	EL.(FT.)	HEIGHT	(FT.)
CS-1	TYPE C	SIDE A	12"	8.0	12"	9.8

STRUCTURE WILL HAVE A 4.0" CIRCULAR ORIFICE @ NWL TO RECOVER THE DESIGN STORM IN 14 DAYS.

TYPICAL CONTROL STRUCTURE
MODIFIED

LEVELUP CONSULTING, LLC
LVLUP
505 E. JACKSON STREET
SUITE 200
TAMPA, FLORIDA 33602
OFFICE: 813-375-0616
WWW.LEVELUPFLORIDA.COM

CONSTRUCTION PLAN REVISIONS

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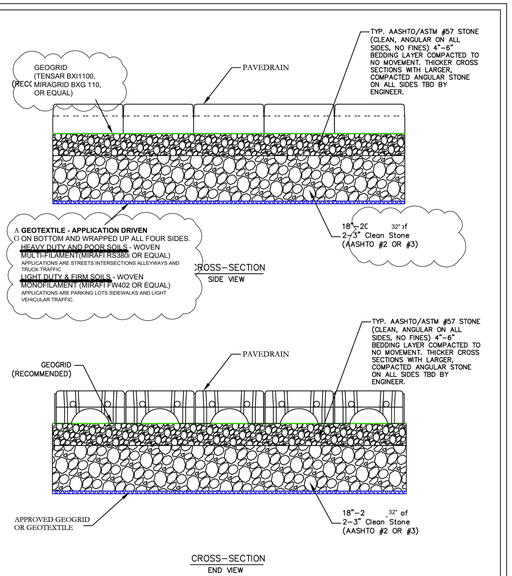
NICHOLAS ALEXANDER PEET LICENSE NO. 92061 6/30/26 STATE OF FLORIDA PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

SHEET C 10.3

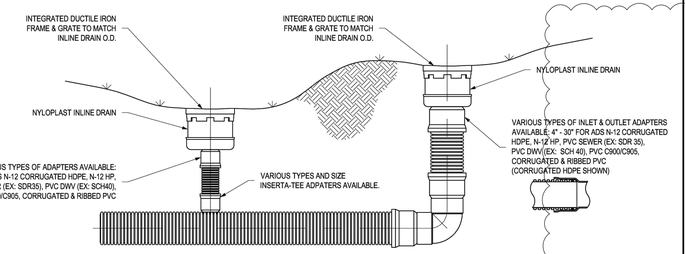
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PAVEDRAIN
STANDARD DETAIL
CROSS-SECTIONS
SCALE: N.T.S.

PAVE DRAIN
STORMWATER DRAIN SYSTEMS
PH: (888) 575-5339
WWW.PAVEDRAIN.COM
Email: info@pavedrain.com

NYLOPLAST INLINE DRAIN SYSTEM USING INSERTA-TEE CONNECTION



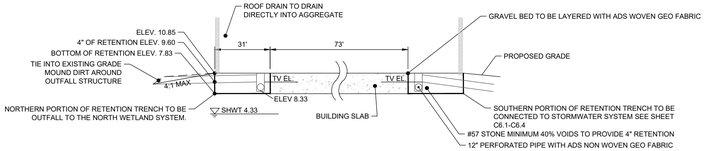
1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
4 - DIMENSIONS ARE FOR REFERENCE ONLY. ACTUAL DIMENSIONS MAY VARY.
5 - DIMENSIONS ARE IN INCHES
6 - SEE DRAWING NO. 7001-110-275 FOR ADS N-12 & HANCOR DUAL WALL BELL INFORMATION & DRAWING NO. 7001-110-364 FOR N-12 HP BELL INFORMATION.
7 - INSERTA-TEE ADAPTERS CREATE WATER TIGHT JOINT BETWEEN ADAPTER AND MAINLINE PIPE.

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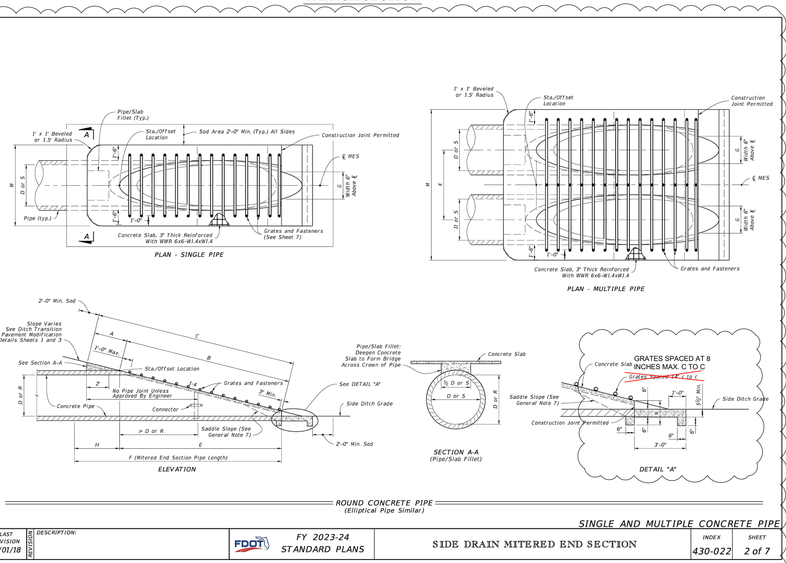
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DATE	02-07-17		
APPD BY	NMH	PROJECT NO./NAME	
DATE	02-07-17		
DWG SIZE	A	SCALE 1:20	SHEET 1 OF 1

Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
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FAX (770) 932-2490
www.nyloplast-us.com

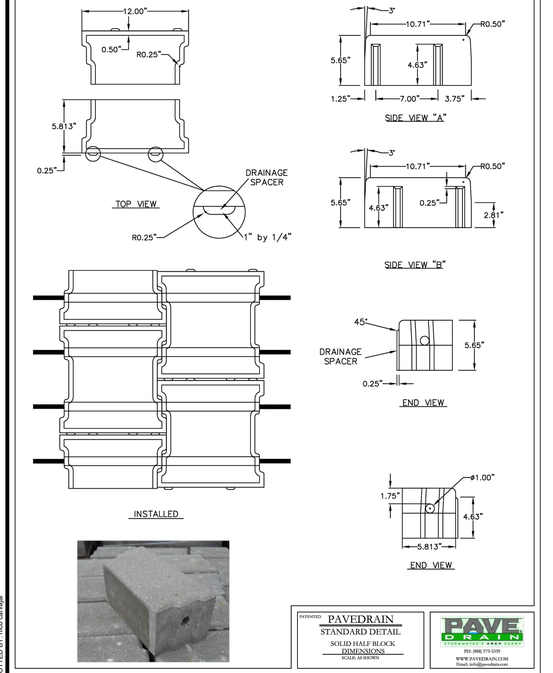
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DWG NO. 7003-110-116 REV A



TYPICAL EXFILTRATION TRENCH SECTION

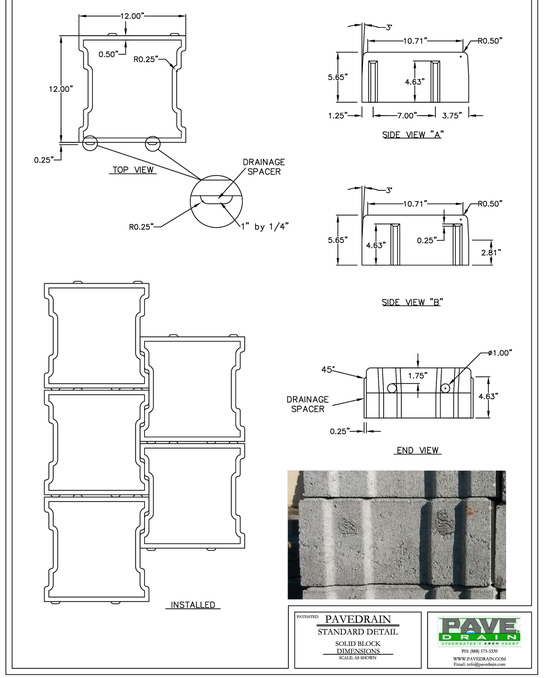


LAST REVISION 11/01/18	DESCRIPTION:	FY 2023-24 STANDARD PLANS	SIDE DRAIN MITERED END SECTION	INDEX 430-022	SHEET 2 of 7



PATENTED PAVEDRAIN
STANDARD DETAIL
SOLID HALF BLOCK DIMENSIONS
SCALE: AS SHOWN

PAVE DRAIN
STORMWATER DRAIN SYSTEMS
PH: (888) 575-5339
WWW.PAVEDRAIN.COM
Email: info@pavedrain.com



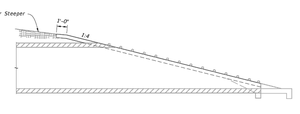
PATENTED PAVEDRAIN
STANDARD DETAIL
SOLID BLOCK DIMENSIONS
SCALE: AS SHOWN

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Email: info@pavedrain.com

SINGLE AND MULTIPLE CONCRETE PIPE DIMENSIONS AND QUANTITIES

Shape	Dia. or Span	Rise	Span	X	A	B	C	E	F	G	H	H Single Pipe	H Double Pipe	H Triple Pipe	H Quad. Pipe	N	GRATE SIZES 9" CONC. SLAB (CY) STANDARD WEIGHT PIPE	EXTRA STRONG PIPE	Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe	SODDING (SY) Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe
Round Concrete	12"	—	—	2'-7"	2'-2"	4.09'	6.38'	4.03'	8"	1'-2"	4.0'	4.83'	7.41'	9.99'	12.57'	18"			0.76	1.16	1.54	1.95	6	10	15	19
	18"	—	—	3'-10"	2'-9"	5.13'	6.48'	5.03'	9"	1'-4"	4.0'	4.92'	7.73'	10.54'	13.42'	21"			0.85	1.28	1.71	2.17	9	10	12	13
	24"	—	—	5'-1"	3'-5"	6.25'	11.50'	6.03'	10"	1'-6"	4.0'	5.08'	8.05'	11.02'	14.00'	24"			0.93	1.40	1.88	2.37	9	10	12	13
	30"	—	—	6'-3"	3'-10"	6.25'	11.50'	9.03'	11"	1'-8"	4.0'	5.08'	10.58'	14.58'	18.83'	29"	25"	3"	1.03	1.98	2.74	3.50	12	14	15	17
	36"	—	—	7'-7"	4'-7"	11.33'	14.18'	11.03'	13"	1'-10"	4.0'	5.67'	11.70'	16.83'	21.92'	33"	25"	3"	1.40	2.38	3.33	4.24	13	15	17	20
	42"	—	—	8'-9"	5'-0"	13.33'	14.42'	13.03'	15"	2'-0"	4.0'	6.25'	13.05'	19.33'	25.25'	38"	25"	3"	1.60	2.83	4.04	5.26	14	15	18	22
	48"	—	—	9'-9"	5'-7"	15.63'	18.65'	15.03'	17"	2'-2"	4.0'	6.83'	14.58'	21.33'	28.08'	42"	25"	3"	1.81	3.26	4.70	6.14	15	18	21	25
	54"	—	—	11'-0"	6'-3"	17.69'	20.88'	17.03'	21'	2'-4"	4.0'	8.42'	16.08'	23.75'	31.42'	46"	25"	3"	2.03	3.78	5.54	7.28	17	20	23	27
	60"	—	—	12'-2"	6'-10"	19.55'	23.11'	18.03'	23"	2'-6"	4.0'	9.00'	17.50'	26.00'	34.50'	50"	25"	3"	2.28	4.26	6.43	8.50	18	22	25	29
Elliptical Concrete	14"	19"	23"	3'-2"	2'-8"	5.09'	8.49'	5.03'	9"	1'-5"	2.5'	4.59'	7.17'	10.08'	13.42'	21"			0.68	1.04	1.41	1.77	8	9	11	13
	15"	20"	24"	3'-4"	2'-11"	5.33'	8.59'	5.30'	9"	1'-5"	2.5'	4.59'	7.17'	10.08'	13.00'	21"			0.69	1.06	1.43	1.80	8	9	11	13
	18"	24"	30"	4'-4"	3'-4"	6.19'	9.70'	6.30'	10"	1'-8"	3.0'	5.38'	10.04'	14.04'	18.08'	27"			0.85	1.19	1.69	2.05	9	10	12	13
	23"	30"	38"	5'-4"	4'-1"	7.75'	9.97'	7.53'	10"	1'-10"	3.0'	6.19'	11.58'	16.79'	21.79'	31"	25"	3"	1.18	1.95	2.74	3.53	11	13	15	18
	29"	45"	5'-11"	6'-7"	5'-0"	9.90'	11.95'	9.70'	12"	2'-1"	3.0'	7.50'	13.42'	19.33'	25.25'	38"	25"	3"	1.41	2.42	3.44	4.45	12	15	18	20
	34"	53"	7'-0"	7'-10"	5'-11"	11.84'	13.84'	10.36'	13"	2'-3"	3.0'	8.25'	15.25'	22.25'	29.25'	42"	25"	3"	1.63	2.92	4.22	5.52	13	15	20	23
	38"	60"	7'-10"	8'-7"	6'-7"	13.17'	15.38'	11.70'	15"	2'-5"	3.0'	8.92'	16.75'	24.58'	32.42'	46"	25"	3"	1.83	3.36	4.89	6.41	14	18	21	25
	43"	68"	8'-11"	9'-6"	7'-5"	14.84'	17.27'	13.36'	17"	2'-8"	3.0'	9.67'	18.58'	27.50'	36.42'	50"	25"	3"	2.09	3.93	5.80	7.65	16	20	23	27
	48"	76"	9'-11"	10'-5"	8'-3"	16.50'	19.07'	15.03'	19"	2'-11"	4.0'	10.42'	20.33'	30.25'	40.17'	54"	25"	HSS 9"x6"	2.37	4.54	6.73	8.93	17	21	26	30
	53"	83"	10'-9"	11'-4"	9'-0"	17.97'	20.76'	16.36'	20"	3'-2"	4.0'	11.08'	21.50'	32.42'	43.67'	58"	25"	HSS 9"x6"	2.61	5.09	7.56	10.03	18	23	27	32
	58"	91"	11'-8"	12'-3"	9'-8"	19.43'	22.45'	18.36'	22"	3'-5"	4.0'	11.83'	23.50'	35.17'	46.83'	62"	25"	HSS 9"x6"	2.91	5.77	8.64	11.50	19	24	29	35

⌀6.42 ⌀8.29 Dimensions permitted to allow use of 8' standard pipe lengths.
⌀10.40 ⌀10.30 Dimensions permitted to allow use of 12' standard pipe lengths.



PERMISSIBLE PAVEMENT MODIFICATION

CONCRETE PIPE DIMENSIONS AND QUANTITIES AND PERMISSIBLE PAVEMENT MODIFICATION

LAST REVISION 11/01/19	DESCRIPTION:	FY 2023-24 STANDARD PLANS	SIDE DRAIN MITERED END SECTION	INDEX 430-022	SHEET 3 of 7

LEVELUP CONSULTING, LLC
505 E. JACKSON STREET
SUITE 200
TAMPA, FLORIDA 33602
OFFICE: 813-375-0616
WWW.LEVELUPFLORIDA.COM

CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA
CLIENT: INDIAN RIVER SHORES, LLC
CONSTRUCTION DETAILS

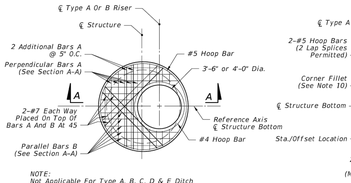
Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

NICHOLAS ALEXANDER PEET
LICENSE NO. 92061
6/30/26
STATE OF FLORIDA
PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

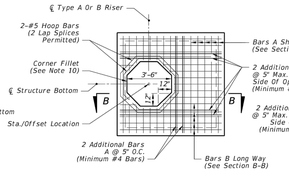
PROJECT No. 199-05-01
SHEET C 10.4

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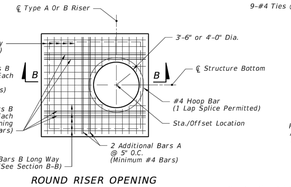


NOTE:
Not Applicable For Type A, B, C, D & E Ditch Bottom Inlets Or Type S & V Gutter Inlets. See Indexes 425-040, 425-050, 425-051, and 425-052.

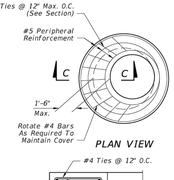
TOP SLAB REINFORCING STEEL DIAGRAM (ALTERNATE A)



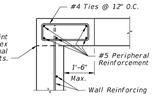
SQUARE OPENING WITH CORNER FILLETS TOP SLAB REINFORCING STEEL DIAGRAM (ALTERNATE B)



ROUND RISER OPENING

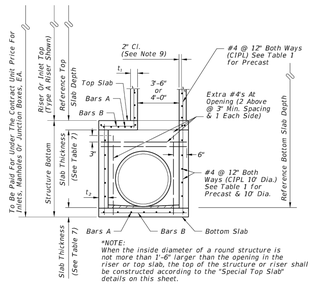


PLAN VIEW



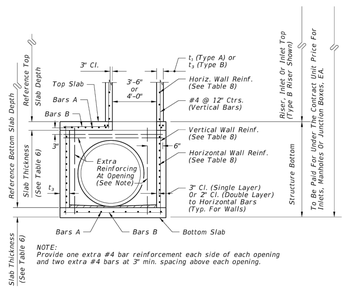
SECTION C-C

SPECIAL TOP SLAB*



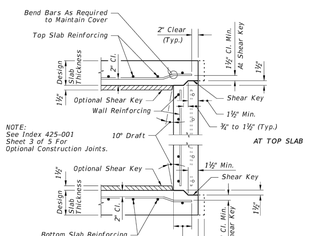
*NOTE:
When the inside diameter of a round structure is not more than 1'-6" larger than the opening in the riser or top slab, the top of the structure or riser shall be constructed according to the "Special Top Slab" details on this sheet.

SECTION A-A (ALTERNATE A)



*NOTE:
Provide one extra #4 bar reinforcement each side of each opening and two extra #4 bars at 3" min. spacing above each opening.

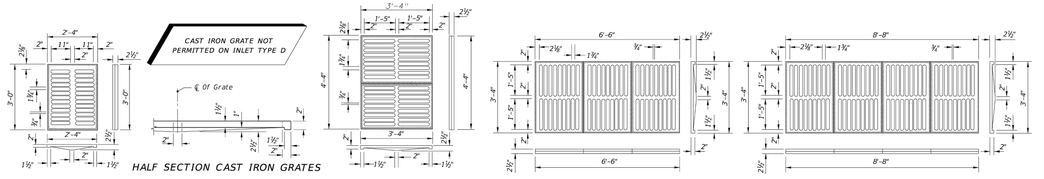
SECTION B-B (ALTERNATE B)



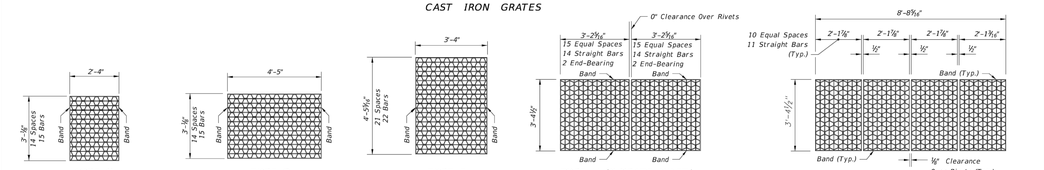
NOTE:
See Index 425-001 Sheet 3 of 5 For Optional Construction Joints.

TYPICAL SLAB TO WALL DETAILS FOR PRECAST STRUCTURES

LAST REVISION 11/01/19	REVISION	DESCRIPTION:	FDOT FY 2020-21 STANDARD PLANS	STRUCTURE BOTTOMS TYPE J AND P	INDEX 425-010	SHEET 1 of 5



CAST IRON GRATES



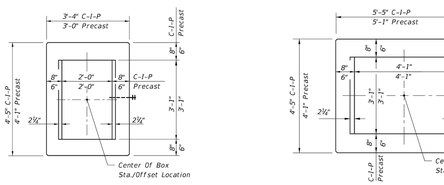
STEEL GRATES

NOTE: Steel Grates Are Required On Inlets With Traversable Slots And On Inlets where Bicycle Traffic Is Anticipated.

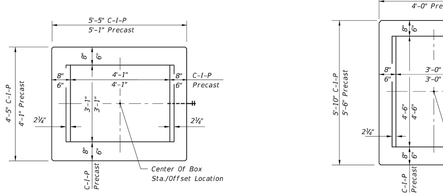
GENERAL NOTES

1. These inlets are suitable for bicycle traffic and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to any heavy wheel loads. These inlets may be placed in areas subject to occasional pedestrian traffic such as landscaped areas and pavement areas where pedestrians can walk around the inlet.
2. Inlets subject to minimal debris should be constructed without slots. Where debris is a problem inlets should be constructed with slots. Slotted inlets located within roadway clear zones and areas subject to pedestrians shall have traversable slots. The traversable slot modification is not adaptable to Inlet Type H. Slots may be constructed at either or both ends as shown on plans. Traversable slots shall not be used in areas subject to occasional bicycle traffic.
3. Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when Alternate G grate is specified in the plans, either the steel grate, hot dip galvanized after fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.
4. Recommended maximum pipe sizes shown are for concrete pipe. Size for other types of pipe must be checked for fit.
5. All exposed edges and corners shall be 3/8" chamfer or tooled to ½" radius.
6. Concrete inlet pavement to be used on inlets without slots and inlets with non-traversable slots only when called for in the plans; but required on all traversable slot inlets. Cost to be included in contract unit price for inlets. Quantities shown are for information only.
7. Traversable slots constructed in existing inlets shall be paid for as inlets partial. For conversion work and method of payment see 'TRAVERSABLE SLOT INLETS (PARTIAL) FOR EXISTING INLETS'.
8. Sodding to be used on all inlets not located in paved areas and paid for under contract unit price for Performance Turf, SY.
9. For supplementary details see Index 425-001.
10. All reinforcing is Grade 60 bars with 2" min. cover unless otherwise noted. Bars to be cut or bent for ½" clearance around pipe opening. Provide one additional #4 bar above and at each side of pipe opening.

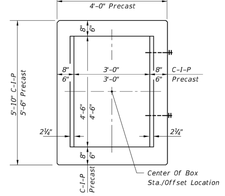
LAST REVISION 11/01/17	REVISION	DESCRIPTION:	FDOT FY 2020-21 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E AND H	INDEX 425-052	SHEET 3 of 7



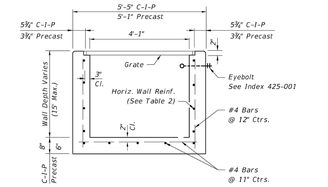
PLAN



PLAN

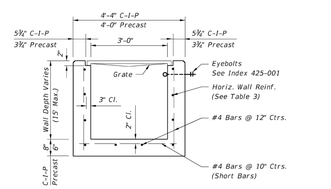


PLAN



SECTION

SECTION



SECTION

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)

WALL DEPTH	SCHEDULE	AREA (in²/ft.)	MAX. SPACING BARS	MAX. SPACING WWR
0'-15'	A12	0.20	12"	8"

TYPE C

Recommended Maximum Pipe Size:

2'-0" Wall - 18" Pipe
3'-1" Wall - 24" Pipe (18" where an 18" pipe enters a 2'-0" wall)

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 2)

WALL DEPTH	SCHEDULE	AREA (in²/ft.)	MAX. SPACING BARS	MAX. SPACING WWR
0'-6"	A12	0.20	12"	8"
6'-10"	A6	0.20	6"	5"
10'-13'	A4	0.20	4"	3"
10'-15'	B5.5	0.24	5½"	5"

TYPE D

Recommended Maximum Pipe Size:

3'-1" Wall - 24" Pipe
4'-1" Wall - 36" Pipe

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 3)

WALL DEPTH	SCHEDULE	AREA (in²/ft.)	MAX. SPACING BARS	MAX. SPACING WWR
0'-5'	A12	0.20	12"	8"
0'-7.5'	A6	0.20	6"	5"
7.5'-10'	B5.5	0.24	5½"	5"
10'-15'	C6.5	0.37	6½"	6"

TYPE E

Recommended Maximum Pipe Size:

3'-0" Wall - 24" Pipe
4'-6" Wall - 36" Pipe

LAST REVISION 11/01/17	REVISION	DESCRIPTION:	FDOT FY 2020-21 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E AND H	INDEX 425-052	SHEET 1 of 7

TABLE 1

SINGLE AND MULTIPLE CONCRETE PIPE DIMENSIONS AND QUANTITIES

	Dia. D	Rise R	Span S	X	A	B	C	E	F	G	H	M Single Pipe	M Double Pipe	M Triple Pipe	M Quad. Pipe	N	5½" CONC. SLAB (CY) (See General Note 3) Single Pipe	5½" CONC. SLAB (CY) Double Pipe	5½" CONC. SLAB (CY) Triple Pipe	5½" CONC. SLAB (CY) Quad. Pipe	3" CONC. SLAB (CY) (See General Note 3) Single Pipe	3" CONC. SLAB (CY) Double Pipe	3" CONC. SLAB (CY) Triple Pipe	3" CONC. SLAB (CY) Quad. Pipe	SODDING (SY) Single Pipe	SODDING (SY) Double Pipe	SODDING (SY) Triple Pipe	SODDING (SY) Quad. Pipe
Round Concrete Pipe 1:2 Slope	15"	—	—	2'-7"	1.92	2.18	4.10	2.06	5'	1.22'	2.9'	4.63'	7.27'	9.79'	12.37'	119'	0.38	0.58	0.77	0.96	0.27	0.41	0.54	0.67	21	24	27	30
	18"	—	—	2'-10"	1.97'	2.74	4.71'	2.56'	6'	1.41'	3.4'	4.92'	7.75'	10.58'	13.42'	121'	0.44	0.65	0.87	1.09	0.31	0.45	0.60	0.75	22	25	28	31
	24"	—	—	3'-5"	2.06'	3.85	5.91'	3.56'	7'	1.73'	3.4'	5.50'	8.92'	12.33'	15.75'	125'	0.54	0.83	112	1.42	0.39	0.59	0.79	1.00	24	28	32	35
	30"	—	—	4'-3"	2.15'	4.95	7.10	4.56'	8'	2.00'	3.4'	6.08'	10.33'	14.58'	18.83'	129'	0.66	1.09	1.50	1.91	0.46	0.76	1.04	1.32	26	31	35	40
	36"	—	—	5'-1"	2.25'	6.08	8.33'	5.56'	9'	2.24'	3.4'	6.67'	11.75'	16.83'	21.92'	133'	0.81	1.38	1.95	2.51	0.55	0.94	1.33	1.71	28	34	39	45
	42"	—	—	6'-0"	2.34'	7.21	9.55'	6.56'	10'	2.45'	3.4'	7.25'	13.25'	19.25'	25.25'	138'	0.97	1.70	2.45	3.19	0.66	1.15	1.66	2.15	30	37	43	50
	48"	—	—	6'-9"	2.43'	8.33'	10.76'	7.56'	11'	2.65'	3.4'	7.83'	14.58'	21.33'	28.08'	142'	113	2.04	2.93	3.84	0.76	1.37	1.96	2.57	32	39	47	54
	60"	—	—	7'-8"	2.52'	9.44'	11.96'	8.56'	12'	2.83'	3.4'	8.42'	16.08'	23.75'	31.42'	146'	1.31	2.44	3.58	4.72	0.87	1.62	2.38	3.14	34	42	51	59
	60"	—	—	8'-6"	2.62'	10.56'	13.18'	9.56'	14'	3.00'	4.4'	9.00'	17.50'	26.00'	34.50'	150'	1.51	2.89	4.28	5.68	0.99	1.90	2.81	3.73	36	45	55	64
	66"	—	—	9'-2"	2.71'	11.68'	14.39'	10.56'	15'	3.18'	4.4'	9.58'	18.75'	27.92'	37.08'	154'	1.68	3.25	4.84	6.43	111	2.15	3.21	4.27	38	48	58	68
	72"	—	—	10'-0"	2.80'	12.80'	15.60'	11.56'	16'	3.35'	4.4'	10.16'	20.16'	30.16'	40.16'	158'	1.89	3.74	5.59	7.45	1.24	2.46	3.68	4.90	40	51	62	73
Round Concrete Pipe 1:4 Slope	15"	—	—	2'-7"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.0'	4.63'	7.27'	9.79'	12.37'	119'	0.57	0.87	115	1.44	0.40	0.61	0.80	1.00	23	26	29	32
	18"	—	—	2'-10"	2.36'	5.12'	7.40'	5.03'	9'	1.41'	4.0'	4.92'	7.75'	10.58'	13.42'	121'	0.66	0.99	1.31	1.65	0.47	0.69	0.91	114	25	28	31	35
	24"	—	—	3'-5"	2.53'	7.18' △	9.71'	7.03' △	11'	1.73'	4.0'	5.50'	8.92'	12.33'	15.75'	125'	0.85	1.30	175	2.20	0.60	0.90	1.21	1.52	28	32	36	40
	30"	—	—	4'-3"	2.71'	9.25'	11.95'	9.03'	13'	2.00'	4.0'	6.08'	10.33'	14.58'	18.83'	129'	1.10	1.74	2.39	3.05	0.76	1.19	1.63	2.07	31	36	41	46
	36"	—	—	5'-1"	2.87'	11.31' ◇	14.18'	11.03' ◇	15'	2.24'	4.0'	6.67'	11.75'	16.83'	21.92'	133'	1.32	2.21	3.08	3.96	0.89	1.48	2.05	2.63	34	40	46	52
	42"	—	—	6'-0"	3.05'	13.33'	16.42'	13.03'	17'	2.45'	4.0'	7.25'	13.25'	19.25'	25.25'	138'	1.58	2.76	3.91	5.09	1.05	1.82	2.57	3.34	38	44	51	58
	48"	—	—	6'-9"	3.22'	15.43'	18.65'	15.03'	19'	2.65'	4.0'	7.83'	14.58'	21.33'	28.08'	142'	1.85	3.30	4.73	6.31	1.23	2.15	3.07	4.00	41	48	56	63
	54"	—	—	7'-8"	3.39'	17.49'	20.88'	17.03'	21'	2.83'	4.0'	8.42'	16.08'	23.75'	31.42'	146'	2.14	3.95	5.77	7.58	1.39	2.55	3.72	4.88	44	52	61	69
	60"	—	—	8'-6"	3.56'	19.55'	23.11'	19.03'	23'	3.00'	4.0'	9.00'	17.50'	26.00'	34.50'	150'	2.45	4.66	6.87	9.07	1.59	3.02	4.44	5.86	47	56	66	75
	66"	—	—	9'-2"	3.73'	21.62'	25.35'	21.03'	25'	3.18'	4.0'	9.58'	18.75'	27.92'	37.08'	154'	2.88	5.54	8.18	10.84	1.91	3.66	5.40	7.15	49	59	69	80
	72"	—	—	10'-0"	3.91'	23.68'	27.59'	23.03'	27'	3.35'	4.0'	10.16'	20.16'	30.16'	40.16'	158'	3.54	6.61	9.87	13.13	2.12	4.18	6.24	8.30	52	63	74	85
Elliptical Concrete Pipe 1:2 Slope	—	12"	18"	2'-10"	1.97"	1.62"	3.59'	1.56'	4'	1.50'	2.4'	4.92'	7.75'	10.58'	13.42'	121'	0.30	0.49	0.67	0.85	0.19	0.33	0.45	0.57	21	24	27	30
	—	14"	23"	3'-4"	2.01'	1.99"	4.00'	1.89"	5'	1.90'	3.1'	5.38'	8.71'	12.04'	15.38'	123'	0.37	0.59	0.81	1.02	0.25	0.40	0.55	0.69	22	26	29	33
	—	19"	30"	4'-0"	2.11'	2.92"	5.03'	2.73'	6'	2.37'	3.3'	6.04'	10.04'	14.04'	18.04'	127'	0.50	0.80	1.09	1.39	0.34	0.55	0.75	0.95	24	28	33	37
	—	24"	38"	5'-0"	2.20'	3.85'	6.05'	3.56'	7'	2.85'	3.4'	6.79'	11.79'	16.79'	21.79'	131'	0.62	1.03	1.45	1.86	0.43	0.71	1.00	1.28	26	31	37	42
	—	29"	45"	5'-11"	2.34'	4.79'	7.13'	4.39'	8'	3.29'	3.6'	7.50'	13.42'	19.33'	25.25'	138'	0.75	1.30	1.84	2.39	0.52	0.90	1.27	1.65	28	34	41	47
	—	34"	53"	7'-0"	2.43'	5.72'	8.15'	5.23'	9'	3.57'	3.8'	8.25'	15.25'	22.25'	29.25'	142'	0.90	1.61	2.32	3.03	0.62	1.11	1.60	2.09	30	37	45	53
	—	38"	60"	7'-10"	2.52'	6.46'	8.98'	5.89'	9'	3.95'	3.1'	8.92'	16.75'	24.58'	32.42'	146'	1.03	1.89	2.74	3.60	0.70	1.29	1.87	2.46	31	40	49	57
	—	43"	68"	8'-11"	2.62'	7.39'	10.01'	6.73'	10'	4.28'	3.3'	9.67'	18.58'	27.50'	36.42'	150'	1.19	2.26	3.33	4.40	0.81	1.54	2.26	2.99	33	43	53	63
	—	48"	76"	9'-11"	2.71'	8.33'	11.04'	7.56'	11'	4.59'	3.4'	10.42'	20.33'	30.25'	40.17'	154'	1.38	2.65	3.93	5.21	0.93	1.79	2.66	3.53	35	46	57	68
	—	53"	83"	10'-11"	2.80'	9.26'	12.08'	8.39'	12'	4.77'	3.3'	11.08'	21.75'	32.42'	43.08'	158'	1.55	3.03	4.50	5.96	1.04	2.04	3.03	4.02	37	49	61	73
	—	58"	91"	11'-8"	2.90'	10.19'	13.09'	9.23'	13'	5.01'	3.8'	11.83'	23.50'	35.17'	46.83'	163'	1.75	3.47	5.20	6.93	117	2.33	3.49	4.66	39	52	65	78
Elliptical Concrete Pipe 1:4 Slope	—	12"	18"	2'-10"	2.36'	3.06'	5.42'	3.03'	5'	1.50'	2.0'	4.92'	7.75'	10.58'	13.42'	121'	0.45	0.68	0.92	114	0.30	0.45	0.61	0.76	23	26	29	32
	—	14"	23"	3'-4"	2.44'	3.75'	6.19'	3.70'	6'	1.90'	2.3'	5.38'	8.71'	12.04'	15.38'	123'	0.53	0.83	113	1.42	0.36	0.56	0.76	0.95	24	28	32	35
	—	19"	30"	4'-0"	2.62'	5.47'	8.09'	5.36'	8'	2.37'	2.6'	6.04'	10.04'	14.04'	18.04'	127'	0.74	115	1.57	1.98	0.51	0.79	1.08	1.36	27	32	36	40
	—	24"	38"	5'-0"	2.79'	7.18'	9.97'	7.03'	10'	2.85'	3.0'	6.79'	11.79'	16.79'	21.79'	131'	0.97	1.57	2.18	2.81	0.68	110	1.53	1.96	30	36	41	47
	—	29"	45"	5'-11"	3.05'	8.90'	11.95'	8.70'	12'	3.29'	3.3'	7.50'	13.42'	19.33'	25.25'	138'	1.22	2.07	2.92	3.77	0.86	1.45	2.04	2.63	33	40	46	53
	—	34"	53"	7'-0"	3.22'	10.62'	13.84'	10.36'	13'	3.57'	2.6'	8.25'	15.25'	22.25'	29.25'	142'	1.48	2.62	3.77	4.92	1.02	1.81	2.60	3.39	36	44	52	59
	—	38"	60"	7'-10"	3.39'	11.99'	15.38'	11.70'	15'	3.95'	3.3'	8.92'	16.75'	24.58'	32.42'	146'	172	3.12	4.53	5.92	118	2.14	3.10	4.05	38	47	56	65
	—	43"	68"	8'-11"	3.56'	13.71'	17.22'	13.36'	17'	4.28'	3.6'	9.67'	18.58'	27.50'	36.42'	150'	2.02	3.78	5.56	7.32	1.38	2.58	3.79	4.99	41	51	61	71
	—	48"	76"	9'-11"	3.73'	15.43'	19.16'	15.03'	19'	4.59'	4.0'	10.42'	20.33'	30.25'	40.17'	154'	2.34	4.49	6.64	8.79	1.59	3.05	4.51	5.97	44	55	66	77
	—	53"	83"	10'-8"	3.91'	17.15'	21.06'	16.70'	20'	4.77'	3.3'	11.08'	21.75'	32.42'	43.08'	158'	2.66	5.17	7.66	10.16	1.80	3.50	5.19	6.88	47	59	71	83
	—	58"	91"	11'-8"	4.08'	18.87'	22.95'	18.36'	22'	5.01'	3.6'	11.83'	23.50'	35.17'	46.83'	163'	3.02	5.98	8.95	11.90	2.04	4.04	6.05	8.05	50	63	76	89

B △ 6.4' E △ 6.25' Dimensions permitted to allow use of 8' standard pipe lengths.

◇ 10.40' ◇ 10.10' Dimensions permitted to allow use of 12' standard pipe lengths.

CONCRETE PIPE DIMENSIONS AND QUANTITIES

LAST REVISION 11/01/19	REVISION	DESCRIPTION:	FDOT FY 2020-21 STANDARD PLANS	CROSS DRAIN MITERED END SECTION	INDEX 430-021	SHEET 3 of 6

LEVELUP CONSULTING, LLC
505 E. JACKSON STREET
SUITE 200
TAMPA, FLORIDA 33602
OFFICE: 813-375-0616
WWW.LEVELUPFLORIDA.COM

CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

CONSTRUCTION DETAILS

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

NICHOLAS ALEXANDER PEET
LICENSE NO. 92061
6/30/26
STATE OF FLORIDA
PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

SHEET C 10.5

10/29/2019 8:10:17 AM

T:\Projects\199-05 – Phase 1 of the Marina Development\Drawings\199-05-01 Construction Plans\Current Plans\199050501 0-CD.dwg
10/30/2025 2:54:05 PM PLOTTED BY Heidi Jarnagin

GENERAL NOTES:

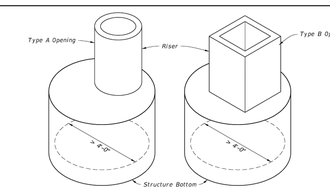
1. Work this Index with Specification 425 and Index 425-001.
2. Type P standard structure bottoms are 4'-0"diameter and smaller (Alt. A) and 3'-6" square (Alt. B) . Larger standard structure bottoms are designated Type J. Risers are permitted for all structures.
3. Walls of circular structures (Alt. A) constructed in place may be of brick or reinforced concrete. Construct precast and rectangular structures (Alt. B) with reinforced concrete only.
4. Wall thickness and reinforcement are for either reinforced cast-in-place or precast concrete units except that precast circular units may be furnished with walls in accordance with ASTM C478 (See Table 1).
5. Top and bottom slab thickness and reinforcement are for precast and cast-in-place construction. Use Class II concrete, except when Class IV concrete is shown in the Plans.
6. Alt. A or Alt. B structure bottoms may be used in conjunction with curb inlet tops Types 1, 2, 3, 4, 5, 6, 9, and 10, and any manhole or junction box. Alt. B structure bottoms may be used in conjunction with curb inlet Types 7 & 8, or any ditch bottom inlet.
7. Rectangular structures may be rotated as directed by the Engineer in order to facilitate connections between the structure walls and pipes.
8. Use straight embedment reinforcement in top and bottom slabs ,except when ACI hooks are specifically required.
9. Construct corner fillets as shown for rectangular structures used with circular risers and inlet throats, and when used on skew with rectangular risers, inlets, and inlet throats. Construct fillets in the top slab of the Alt. A structure bottoms when used with the Type B risers. Reinforce each fillet with two #5 bars.
10. Units larger than specified standards may be substituted at the contractor's option when these units will not cause or increase the severity of utility conflicts. Furnish such larger units at no additional cost to the Department. Larger Alt. A units cannot replace Alt. B units without approval of the Engineer. This Note applies to this Index only.

REINFORCEMENT NOTES:

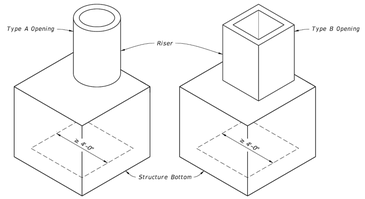
1. Locate wall reinforcement in rectangular structures as shown in the WALL REINFORCEMENT SPLICE DETAILS in Index 425-001.
2. Provide a minimum 2"clear cover for all reinforcement unless otherwise noted and except for 36"diameter ASTM C478 units.
3. Additional bars used to restrain hole formers for precast structures with grouted pipe connections may be left flush with the hole surface.
4. Cut or bend reinforcement at pipe openings to maintain cover.
5. Remove exposed ends of reinforcing at precast pipe openings and grouted joints to 1" below the concrete surface and seal with a Type F Epoxy meeting the requirements of Specification 926.
6. Equivalent area smooth or deformed welded wire reinforcement may be substituted in accordance with Index 425-001.

TABLE OF CONTENTS:

Sheet	Description
1	General Notes and Contents
2	Dimensional and Reinforcing Details
3	Tables 1, 2, 3, and 4
4	Tables 5 and 6

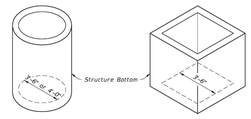


ALTERNATE A



ALTERNATE B

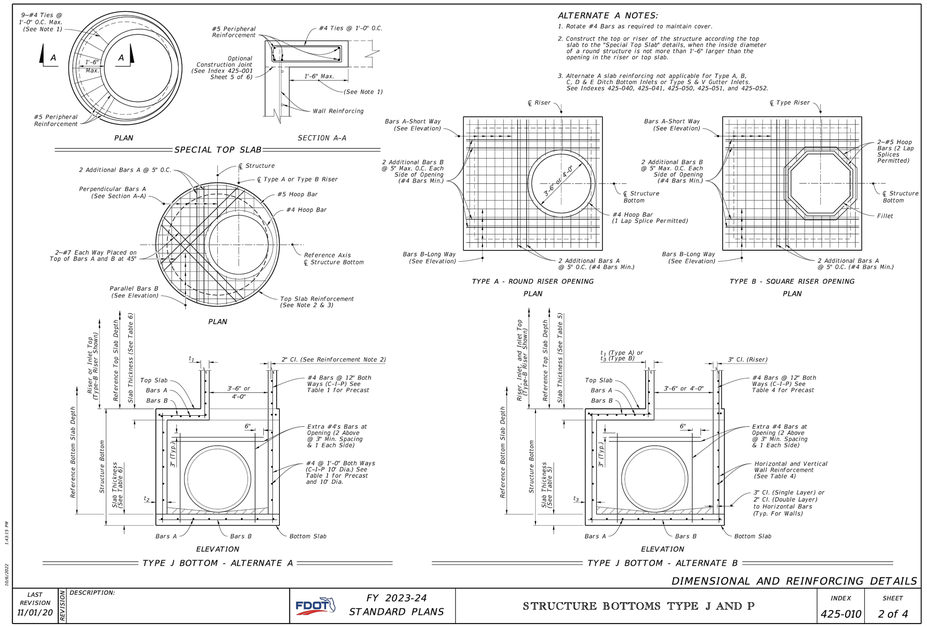
TYPE J



ALTERNATE A ALTERNATE B

TYPE P

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	STRUCTURE BOTTOMS TYPE J AND P	INDEX 425-010	SHEET 1 of 4



LAST REVISION 11/01/20	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	STRUCTURE BOTTOMS TYPE J AND P	INDEX 425-010	SHEET 2 of 4

TABLE 1 - ALTERNATE A - STRUCTURES

TYPE	STRUCTURE/RISER DIAMETER (ft)	CAST-IN-PLACE ITEMS CLASS II CONCRETE			PRECAST ITEMS				
					CLASS II CONCRETE			ASTM C478	
		RISER (in.)	BOTTOM (in.)	A_s (in^2/ft.)	RISER (in.)	BOTTOM (in.)	A_s (in^2/ft.)	(in.)	A_s*** (in^2/ft.)
P	3'-6"	6	8	0.20	6	8	0.20	4**	0.105
P	4'-0"	6	8	0.20	6	8	0.20	5**	0.120
J	3'-0"	-	8	0.20	-	8	0.20	6**	0.150
J	6'-0"	-	8	0.20	-	8	0.20	6	0.180
J	7'-0"	-	8	0.20	-	8	0.20	7	0.210
J	8'-0"	-	8	0.20	-	8	0.20	8	0.240
J	10'-0"	-	10	0.40##	-	10	0.40##	10	0.300
J	12'-0"	-	10	0.40##	-	12	0.40##	12	0.360

t_1 and t_2- Wall Thickness.

A_s- Vertical and horizontal areas of reinforcement.

##Provide 0.20 sq. in?/ft. at each face, 12" max. bar spacing.

**Modified minimum wall thickness.

***Min. total circumferential reinforcement for continuous steel hoops:

A_s = 0.40 sq. in. for riser section height equal or less than 2'-0" (2 hoop min.)

A_s = 0.60 sq. in. for riser section height more than 2'-0" up to 4'-0" (3 hoop min.)

Areas of reinforcing for precast items are based on Grade 60 reinforcing.

No reduction in the area of reinforcement is allowed for welded wire fabric in Table 1.

Area of vertical reinforcing may be reduced in accordance with ASTM C478.

TABLE 2 - ALTERNATE B SQUARE AND RECTANGULAR STRUCTURES

TYPE	WALL LENGTH (FT)	MAX. DEPTH (FT)	WALL THICKNESS (t_w)	
			C-I-P (in.)	PRECAST (in.)
			6 Riser 8 Bottom	
P	≤ 3'-6"	40	8	6
J	4'-0"	40	8	6
J	5'-0"	22	-	6
J	6'-0"	15	-	6
J	5'-0"to9'-0"	40	8	8
J	10'-0"	26	8	8
J	10'-0"to12'-0"	40	10	9
J	16'-0"	35	-	9
J	16'-0"	40	10	10
J	20'-0"	25	-	9
J	20'-0"	30	10	10

See Table 4 for Reinforcing Schedule.

TABLE 3 - REINFORCING SCHEDULE

SCHEDULE	GRADE 60 BARS OR 65 KSI & 70 KSI WELDED WIRE REINFORCING			
	GRADE 60 AREA (in^2/ft)	MAXIMUM SPACING		
		GR. 60 BARS (in.)	WWR EQUIV. AREA	
			65 KSI (in.)	70 KSI (in.)
A12	0.20	12	8	8
A6	0.20	6	5	4½
B10	0.24	10	8	7½
B5.5	0.24	5½	5	4
C6.5	0.37	6½	6	5
C3.5	0.37	3½	3	2½
D7	0.53	7	6	5
D4.5	0.53	4½	4	3½
E5	0.73	5	4	4
E3	0.73	3	3	3
F5	1.06	5	4	4
F3.5	1.06	3½	3	3
G5	1.45	5	4	4
G3.5	1.45	3½	3	3
H4	1.75	4	3	3

TABLE 4 - WALL DESIGNS - RECTANGULAR STRUCTURES

VERTICAL REINFORCING		HORIZONTAL REINFORCING		WALL THICKNESS
WALL DEPTH	SCHEDULE	WALL DEPTH	SCHEDULE	
SIZE: 3'-6" & RISER				
≥1.17' - 40'	A12	≥1.17' < 10'	B10	6"/8"
		10' < 18'	B5.5	6"/8"
		18' < 29'	C6.5	6"/8"
		29' - 40'	C3.5	6"/8"
SIZE: 4'-0"				
≥1.17' - 40'	A12	≥1.17' < 6'	B10	6"/8"
		6' < 10'	B5.5	6"/8"
		10' < 20'	C6.5	6"/8"
		20' < 28'	C3.5	6"/8"
		28' - 40'	D4.5	6"/8"
SIZE: 5'-0"				
≥1.17' - 40'	A12	≥1.17' < 5'	B5.5	6"/8"
		5' < 9'	C6.5	6"/8"
		9' < 15'	C3.5	6"/8"
		15' < 22'	D4.5	6"/8"
		22' - 40'	E3	8"
SIZE: 6'-0"				
≥1.17' < 26'	A12	≥1.17' < 9'	C3.5	6"/8"
		9' < 15'	D4.5	6"/8"
		15' < 26'	E3	8"
	Inside/Outside		Inside/Outside	
26' - 40'	A12 / A12	26' - 40'	D7 / D7	8"
SIZE: 7'-0"				
	Inside/Outside		Inside/Outside	
≥1.17' < 25'	A12 / A12	≥1.17' < 7'	B10 / B10	8"
26' - 40'	B10 / B10	7' < 10'	B5.5 / B5.5	8"
		10' < 20'	C6.5 / C6.5	8"
		20' < 30'	D7 / D7	8"
		30' - 40'	E5 / E5	8"
SIZE: 8'-0"				
	Inside/Outside		Inside/Outside	
≥1.17' < 20'	A12 / A12	≥1.17' < 8'	B5.5 / B5.5	8"
20' - 40'	C6.5 / C6.5	8' < 13'	C6.5 / C6.5	8"
		13' < 22'	D7 / D7	8"
		22' < 31'	E5 / E5	8"
		31' - 40'	F5 / F5	8"
SIZE: 9'-0"				
	Inside/Outside		Inside/Outside	
≥1.17' < 12'	A12 / A12	≥1.17' < 8'	C6.5 / C6.5	8"
12' < 28'	C6.5 / C6.5	8' < 15'	D7 / D7	8"
28' - 40'	D7 / D7	15' < 23'	E5 / E5	8"
		23' - 40'	F5 / F5	8"
SIZE: 10'-0"				
	Inside/Outside		Inside/Outside	
≥1.17' < 10'	B10 / B10	≥1.17' < 10'	D7 / D7	8"
10' < 21'	C6.5 / C6.5	10' < 17'	E5 / E5	8"
21' < 26'	D7 / D7	17' < 26'	F5 / F5	8"
26' - 40'	C6.5 / C6.5	26' - 40'	F5 / F5	10"

VERTICAL REINFORCING		HORIZONTAL REINFORCING		WALL THICKNESS
WALL DEPTH	SCHEDULE	WALL DEPTH	SCHEDULE	
SIZE: 10'-0" (Precast Only)				
	Inside/Outside		Inside/Outside	
26' - 40'	D7 / D7	26' - 40'	F5 / F5	9"
SIZE: 12'-0"				
	Inside/Outside		Inside/Outside	
≥1.17' < 14'	B10 / B10	≥1.17' < 10'	C6.5 / C6.5	10"
14' < 25'	C6.5 / C6.5	10' < 17'	D7 / D7	10"
25' - 40'	D7 / D7	17' < 24'	E5 / E5	10"
		24' - 40'	F5 / F5	10"
SIZE: 12'-0" (Precast Only)				
	Inside/Outside		Inside/Outside	
≥1.17' < 12'	B10 / B10	≥1.17' < 10'	D7 / D7	9"
12' < 24'	C6.5 / C6.5	10' < 17'	D4.5 / D4.5	9"
24' - 40'	D7 / D7	17' < 23'	E5 / E5	9"
		23' < 32'	F5 / F5	9"
		32' - 40'	G5 / G5	9"
SIZE: 16'-0"				
	Inside/Outside		Inside/Outside	
≥1.17' < 11'	C6.5 / C6.5	≥1.17' < 13'	D7 / D7	10"
11' < 20'	D7 / D7	13' < 20'	E5 / E5	10"
20' < 28'	E5 / E5	20' < 28'	F5 / F5	10"
28' - 40'	F5 / F5	28' - 40'	G5 / G5	10"
SIZE: 16'-0" (Precast Only)				
	Inside/Outside		Inside/Outside	
≥1.17' < 10'	C6.5 / C6.5	≥1.17' < 9'	D7 / D7	9"
10' < 18'	D7 / D7	9' < 13'	D4.5 / D4.5	9"
18' < 25'	E5 / E5	13' < 19'	E5 / E5	9"
25' - 35'	F5 / F5	19' < 27'	F5 / F5	9"
		27' - 35'	G5 / G5	9"
SIZE: 20'-0"				
	Inside/Outside		Inside/Outside	
≥1.17' < 10'	C6.5 / C6.5	≥1.17' < 8'	D7 / D7	10"
10' < 17'	D7 / D7	8' < 12'	E5 / E5	10"
17' - 30'	E5 / E5	12' < 20'	F5 / F5	10"
		20' - 30'	G5 / G5	10"
SIZE: 20'-0" (Precast Only)				
	Inside/Outside		Inside/Outside	
≥1.17' < 8'	C6.5 / C6.5	≥1.17' < 8'	D4.5 / D4.5	9"
8' < 13'	D7 / D7	8' < 12'	E5 / E5	9"
13' - 25'	E5 / E5	12' < 19'	F5 / F5	9"
		19' - 25'	G5 / G5	9"

TABLE 4 NOTES:

1. Wall depth is measured to the top of the bottom slab for boxes and to the top of the intermediate slab for risers.
2. Wall height is the distance between top of lower slab to bottom of upper slab. Maximum wall height is 12' for wall lengths exceeding 5', or 10' for wall lengths exceeding 12'.
3. Wall lengths exceeding 6'-0" require two layers of reinforcing (See Table 4) with 2" of cover from the horizontal bars to the inside and outside faces for each layer.
4. Wall lengths exceeding the dimensions or depths shown in Table 4, or 12'-0" diameter require a special design.
5. Wall thickness and reinforcing for rectangular structures is based on the longer wall length.

TABLES 1, 2, 3, AND 4

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	STRUCTURE BOTTOMS TYPE J AND P	INDEX 425-010	SHEET 3 of 4

TABLE 5 - SLAB DESIGNS - SQUARE AND RECTANGULAR STRUCTURES
(ALL SLABS 8" THICK EXCEPT AS NOTED - REINFORCING PARALLEL TO SHORT WAY AND LONG WAY)

SHORT-WAY		LONG-WAY	
SLAB DEPTH	SCHEDULE (Bars A)	SLAB DEPTH	SCHEDULE (Bars B)
SIZE: 3'-6" x UNLIMITED			
≥0.5' < 8'	B10	≥0.5' < 24'	B10
8' < 13'	B5.5	24'-40'	B5.5
13' < 31'	C6.5		
31'-40'	D7		
SIZE: 4' x UNLIMITED			
≥0.5' < 7'	B5.5	≥0.5' < 19'	B10
7' < 19'	C6.5	19' < 29'	B5.5
19' < 31'	D7	29'-40'	C6.5
31'-40'	E5		
SIZE: 5' x 5'			
≥0.5' < 3'	C6.5	≥0.5' < 3'	C6.5
3' < 7'	B5.5	3' < 13'	C6.5
7' < 22'	C6.5	13' < 22'	D7
22' < 29'	D7	22' < 29'	D4.5
29'-40'	E5	29'-40'	E5
SIZE: 5' x 6'			
≥0.5' < 12'	C6.5	≥0.5' < 3'	C6.5
12' < 26'	D7	3' < 9'	B5.5
26'-40'	E5	9' < 23'	C3.5
		23' < 33'	D4.5
		33'-40'	E5
SIZE: 5' x 7'			
≥0.5' < 10'	C6.5	≥0.5' < 10'	B5.5
10' < 20'	D7	10' < 31'	C3.5
20' < 34'	E5	31'-40'	D4.5
34'-40'	F5		
SIZE: 5' x 8'			
≥0.5' < 7'	C6.5	≥0.5' < 8'	B10
7' < 13'	D7	8' < 17'	B5.5
13' < 24'	E5	17' < 25'	C6.5
24'-40'	F5	25'-40'	C3.5
SIZE: 5' x 9			
≥0.5' < 8'	C6.5	≥0.5' < 14'	B10
8' < 14'	D7	14' < 24'	B5.5
14' < 25'	E5	24' < 34'	C6.5
25'-40'	F5	34'-40'	C3.5
SIZE: 5' x UNLIMITED			
≥0.5' < 8'	C6.5	≥0.5' < 14'	B10
8' < 14'	D7	14' < 34'	B5.5
14' < 25'	E5	24' < 34'	C6.5
25'-40'	F5	34'-40'	C3.5

SHORT-WAY		LONG-WAY	
SLAB DEPTH	SCHEDULE (Bars A)	SLAB DEPTH	SCHEDULE (Bars B)
SIZE: 6' x 6'			
≥0.5' < 13'	C6.5	≥0.5' < 10'	C3.5
13' < 23'	D7	10' < 18'	D4.5
23'-40'	E5	18' < 27'	E5
		27' < 33'	E3
		33'-40'	F5
SIZE: 6' x 7'			
≥0.5' < 8'	C6.5	≥0.5' < 8'	C6.5
8' < 16'	D7	8' < 12'	C3.5
16' < 28'	E5	12' < 21'	D4.5
28'-40'	F5	21' < 28'	E5
		28' < 35'	E3
		35'-40'	F5
SIZE: 6' x 8'			
≥0.5' < 6'	C6.5	≥0.5' < 6'	B5.5
6' < 13'	D7	6' < 11'	C6.5
13' < 22'	E5	11' < 17'	C3.5
22' < 35'	F5	17' < 22'	D4.5
35'-40'	G5	22' < 32'	E3
		32'-40'	E3
SIZE: 6' x 9'			
≥0.5' < 8'	D7	≥0.5' < 8'	B5.5
8' < 14'	E5	8' < 14'	C6.5
14' < 24'	F5	14' < 21'	C3.5
24'-34'	G5	21' < 25'	D4.5
		25'-34'	E3
SIZE: 6' x UNLIMITED			
≥0.5' < 8'	D7	≥0.5' < 8'	B5.5
8' < 14'	E5	8' < 14'	C6.5
14' < 24'	F5	14' < 21'	C3.5
24'-34'	G5	21' < 25'	D4.5
		25'-34'	E5
SIZE: 7' x 7'			
≥0.5' < 8'	C6.5	≥0.5' < 4'	C6.5
8' < 19'	D7	4' < 7'	C3.5
19' < 26'	E5	7' < 11'	D4.5
26'-40'	F5	11' < 22'	E3
		22' < 32'	F3.5
		32'-40'	G3.5
SIZE: 7' x 8'			
≥0.5' < 5'	C6.5	≥0.5' < 5'	C6.5
5' < 11'	D7	5' < 8'	C3.5
11' < 19'	E5	8' < 13'	D4.5
19' < 30'	F5	13' < 22'	E3
30'-40'	G5	22' < 30'	F3.5
		30'-40'	G3.5
SIZE: 7' x 9'			
≥0.5' < 9'	D7	≥0.5' < 7'	C6.5
9' < 15'	E5	7' < 10'	C3.5
15' < 25'	F5	10' < 14'	D4.5
25' - 34'	G5	14' < 21'	E5
		21' < 29'	F5
		29'-34'	F3.5

SHORT-WAY		LONG-WAY	
SLAB DEPTH	SCHEDULE (Bars A)	SLAB DEPTH	SCHEDULE (Bars B)
SIZE: 8' x 8'			
≥0.5' < 10'	D7	≥0.5' < 9'	D4.5
10' < 19'	E5	9' < 13'	E5
19'-30'	F5	13' < 18'	F5
		18' < 23'	F3.5
		23'-30'	G3.5
SIZE: 8' x 9'			
≥0.5' < 8'	D7	≥0.5' < 7'	D7
8' < 14'	E5	7' < 9'	D4.5
14' < 23'	F5	9' < 15'	E3
23'-31'	G3.5	15' < 20'	F5
		20' < 23'	F3.5
		23'-31'	G3.5
SIZE: 9' x 9'			
≥0.5' < 8'	D7	≥0.5' < 7'	D4
8' < 14'	E5	7' < 10'	E5
14' < 22'	F5	10' < 17'	F3.5
		17' < 22'	G3.5
SIZE: 9'x9'x10" SLAB THICKNESS			
22' < 36'	F5	22' < 31'	F3.5
36'-40'	G5	31'-40'	G3.5
SIZE: 10'x10'x10" SLAB THICKNESS			
≥0.5' < 7'	C6.5	0.5' < 6'	C6.5
7' < 10'	D7	6' < 9'	D4.5
10' < 18'	E5	9' < 15'	E5
18' < 27'	F5	15' < 22'	F5
27'-32'	G5	22'-32'	G3.5
SIZE: 12'x12'x12" SLAB THICKNESS			
≥0.5' < 10'	D7	≥0.5' < 8'	D7
10' < 16'	E5	8' < 14'	E5
16' < 25'	F5	14' < 22'	F5
25'-33'	G5	22' < 30'	G5
		30'-33'	H4

SLAB AND WALL DESIGN TABLE NOTES

1. Size is the inside dimension(s) of a structure.
2. Slab reinforcement is appropriate for top, intermediate, and bottom slabs.
3. Bottom Slabs for precast 3'-6" x 3'-6" rectangular structures at 15' depth or less, may be 6" thick.
4. Slab depth is measured from finished grade to top of slab.
5. Reinforcing schedules with larger areas of steel may be substituted for schedules with smaller bar or wire spacing, except that Schedule B10 may not be substituted for Schedule A6. See Index 425-001 for allowable bar spacing adjustments when larger areas of reinforcing are substituted.

TABLE 6 - SLAB DESIGNS ROUND STRUCTURES

SLAB DEPTH	SLAB THICKNESS	REINF. (2-WAY) SCHEDULE
SIZE: 3'-6" DIAMETER		
2'-15'	6" Precast	C6.5
0.5' < 30'	8"	A6
30'-40'	8"	B5.5
SIZE: 4'-0" DIAMETER		
≥0.5' < 19'	8"	A6
19' < 30'	8"	B5.5
30'-40'	8"	C6.5
SIZE: 5'-0" DIAMETER		
≥0.5' < 15'	8"	B5.5
15' < 26'	8"	C6.5
26' < 35'	8"	D4.5
35'-40'	8"	D4.5
SIZE: 6'-0" DIAMETER		
≥0.5' < 9'	8"	B5.5
9' < 15'	8"	C6.5
15' < 22'	8"	C3.5
22' < 30'	8"	D4.5
30'-40'	8"	E5
SIZE: 7'-0" DIAMETER		
≥0.5' < 8'	8"	C3.5
8' < 16'	8"	D4.5
16' < 23'	8"	E5
23' < 27'	8"	E3
27'-40'	8"	F3.5
SIZE: 8'-0" DIAMETER		
≥0.5' < 10'	8"	D4.5
10' < 16'	8"	E5
16' < 19'	8"	E3
19' < 29'	8"	F3.5
29'-40'	10"	F5
SIZE: 10'-0" DIAMETER		
≥0.5' < 12'	10"	D4.5
12' < 20'	10"	E5
20' < 28'	10"	F5
28'-40'	10"	G3.5
SIZE: 12'-0" DIAMETER		
≥0.5' < 8'	10"	D4.5
8' < 13'	10"	E5
13' < 18'	10"	F5
18' < 26'	10"	G3.5
26'-40'	12"	G3.5

TABLES 5 AND 6

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	STRUCTURE BOTTOMS TYPE J AND P	INDEX 425-010	SHEET 4 of 4

LEVELUP CONSULTING, LLC
505 E. JACKSON STREET
SUITE 200
TAMPA, FLORIDA 33602
OFFICE: 813-375-0616
WWW.LEVELUPFLORIDA.COM

CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

CONSTRUCTION DETAILS

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

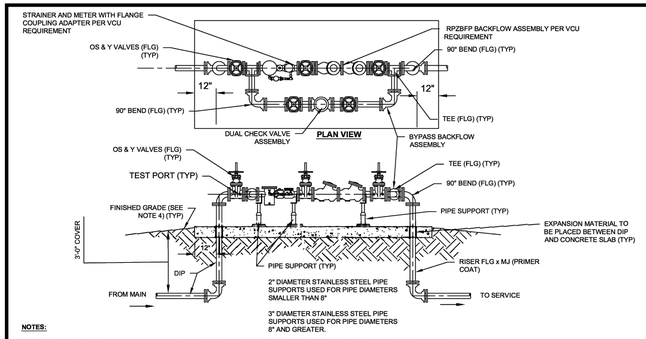
NICHOLAS ALEXANDER PEET
L LICENSE
NO. 92061
6/30/26
STATE OF FLORIDA
PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

SHEET C 10.6

T:\Projects\199-05 – Phase 1 of the Marina Development\Drawings\199-05-01 Construction Plans\Current Plans\199050501G-0-CD.dwg
03/09/2026 2:54:15 PM PLOTTED BY: Heidi Jarnagin

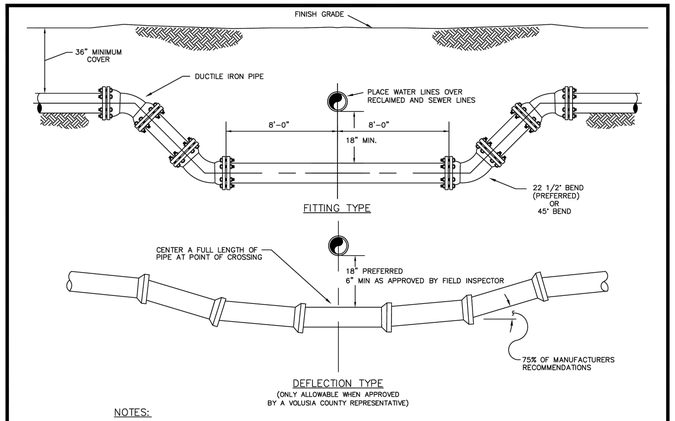


NOTES:

1. THE CONTRACTOR SHALL CONTACT THE UTILITIES INSPECTOR FOR EXACT METER ASSEMBLY LENGTH AND HEIGHT REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL PIPE, FITTINGS, METER ASSEMBLY AND APPURTENANCES. ALL ABOVE GROUND PIPE SHALL BE FLANGED DUCTILE IRON, PRIMER COATED ONLY.
2. ALL FLANGES: PIPE, VALVES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH VCU'S LIST OF MATERIAL AND APPROVED MANUFACTURES.
3. FINISH GRADE AROUND METER ASSEMBLY SLAB SHALL ENSURE A SAFE WORK ENVIRONMENT. GRADING SLOPE DROP OFF SHALL NOT EXCEED 6-IN WITHIN 5-FT OF SLAB.
4. SENSUS OMNI METER WITH RADIO READ CAPABILITY
5. F-2 STRAINER REQUIRED FOR FIRE FLOW
6. PIPE SUPPORT TO BE BOLTED TO THE FLANGE. PIPE SUPPORTS APPLY TO ENTIRE ABOVE-GROUND ASSEMBLY, INCLUDING THE MAIN AND BYPASS PIPING.
7. FOR RECLAIMED WTER METERS, BYPASS AND BACKFLOW PREVENTER NOT REQUIRED.
8. BOLLARDS REQUIRED AT DISCRETION OF VOLUSIA COUNTY.

4" AND LARGER MASTER METER ASSEMBLY WITH ABOVE-GROUND BYPASS

VOL. UTL. STD. N.T.S. UPDATED JANUARY 2025 (FIG. 2315)



NOTES:

1. ABOVE METHODS ARE TO BE USED WHEN INSUFFICIENT COVER EXISTS TO ALLOW PRESSURE PIPE TO CROSS
2. ABOVE CONFLICT PIPE WITH 6" MIN. VERTICAL SEPARATION & MAINTAIN 36" COVER TO FINISHED GRADE.
3. FITTINGS SHALL BE RESTRAINED JOINT MEGALUGS.
4. DO NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION, WHEN APPROVED BY A VOLUSIA COUNTY REPRESENTATIVE.
5. SEE TYPICAL PIPE CROSSING DETAIL.

PIPE CONFLICT DETAIL

VOL. UTL. STD. UPDATED APRIL 2025 (FIG 1014)

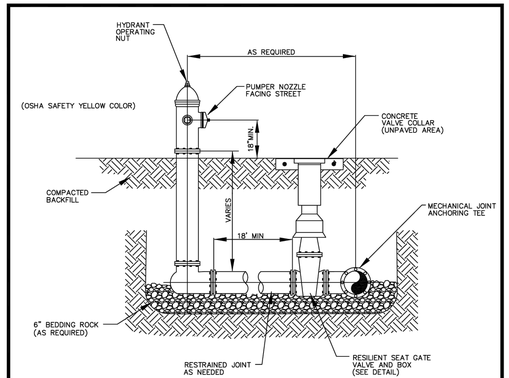
LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED
STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER (2)	WATER MAIN — 3 FT MINIMUM	WATER MAIN — 12 INCHES IS THE MINIMUM, EXCEPT FOR GRAVITY SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 3 FT. MINIMUM — WATER MAIN
VACUUM SANITARY SEWER	WATER MAIN — 10 FT PREFERRED 3 FT MINIMUM	WATER MAIN — 12 INCHES IS PREFERRED 6 INCHES IS THE MINIMUM	ALTERNATE 3 FT. MINIMUM — WATER MAIN
GRAVITY OR PRESSURE SANITARY SEWER SANITARY SEWER FORCE MAIN, RECLAIMED WATER (4)	WATER MAIN — 10 FT PREFERRED 6 FT MINIMUM (3)	WATER MAIN — 12 INCHES IS THE MINIMUM, EXCEPT FOR GRAVITY SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 6 FT. MINIMUM — WATER MAIN
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10 FT MINIMUM		

1. WATER MAIN SHOULD CROSS ABOVE OTHER PIPE, WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
2. RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
3. 3 FT. FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
4. RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

WATER MAIN SEPARATION DETAIL

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NOTES:

1. FIRE HYDRANT TO BE LOCATED 5' TO 10' FROM EDGE OF PAVEMENT.
2. VALVE BOX SHALL BE SCREW TYPE ADJUSTABLE AND COVER SHALL BE MARKED: WATER.
3. FIRE HYDRANTS CANNOT BE LOCATED WITHIN THE RADIUS OF STREET CORNERS.
4. ABOVE GROUND OBSTRUCTIONS MAY BE LOCATED NO CLOSER THAN 3' FROM FIRE HYDRANTS.
5. FIRE HYDRANT SHALL BE SUPPLIED WITHOUT WEEP HOLE, OR WITH A PERMANENTLY PLUGGED WEEP HOLE.
6. FIRE HYDRANT SHALL COMPLY VOLUSIA COUNTY SPECIFICATIONS, APPENDIX A, LIST OF APPROVED MANUFACTURERS AND MATERIALS.
7. ALL FIRE HYDRANT PIPING SHALL BE RESTRAINED BY MEGA-LUGS.
8. LOCATE WIRE AND LOCATE TAPE SHALL BE INSTALLED ON ALL PIPES.
9. A BLUE REFLECTOR SHALL BE INSTALLED ON THE PAVEMENT ADJACENT TO THE FIRE HYDRANT.

FIRE HYDRANT ASSEMBLY DETAIL

N.T.S.

VOL. UTL. STD. UPDATED APRIL 2025 (FIG. 2306)

SINGLE SET, METER SET FOR 5/8", 3/4" AND 1" METERS

SINGLE SERVICE SET (WATER AND RECLAIM)

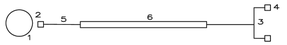


NO POLYTUBING UNDER ROAD ALLOWED WITHOUT 2" CASING

1. 1" TAPPING SADDLE CC THREAD, EPOXY COATED WITH STAINLESS STEEL STRA.
2. 1" CORPORATION STOP FORD FB1000-4-G (1" BALLVALVE, INLET, OUTLET) MUELLER EQUAL.
3. 1" CURB STOP, FORD B43-342W-NL (3/4" VALVE, 1" INLET PE END PACK JOINT-CTS, MUELLER EQUAL (THIS IS FOR 5/8" AND 3/4" METER SET). IF 1" METER SET USE FORD CURB STOP B41-344W-NL.
4. 1" 200 PSI, SDR 9 ENDOT ENOPURE BLUE WATER SERVICE TUBING (POTABLE), PURPLE (RECLAIMED) WITH TRACER WIRE AND SNAKE BITE CONNECTORS.
5. 2" PVC SCHEDULE 40, CASING PIPE WHITE, IF INSTALLATION UNDER ROAD (PAVED OR DIRT).

DOUBLE SET OR DUAL SET

METER SET FOR 5/8" AND 3/4" METERS (WATER ONLY)

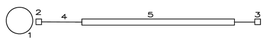


NO POLYTUBING UNDER ROAD ALLOWED WITHOUT 2" CASING

1. 1" TAPPING SADDLE CC THREAD, EPOXY COATED WITH STAINLESS STEEL STRAP.
2. 1" CORPORATION STOP FORD FB1000-4-G (1" BALLVALVE, INLET, OUTLET) MUELLER EQUAL.
3. 1" X 3/4" U BRANCH PACK JOINT-CTS FORD U46-43-NL 7.5 OR MUELLER H1460.
4. 3/4" CURB STOP, FORD B13-332W-NL OR MUELLER EQUAL.
5. 1" 200 PSI, SDR 9 ENDOT ENOPURE BLUE WATER SERVICE TUBING (POTABLE), PURPLE (RECLAIMED) WITH TRACER WIRE AND SNAKE BITE CONNECTORS.
6. 2" PVC SCHEDULE 40, CASING PIPE WHITE, IF INSTALLATION UNDER ROAD (PAVED OR DIRT).

2" WATER SERVICE CONNECTION FOR 1 1/2" AND 2" METER SETS

(WATER AND RECLAIM)

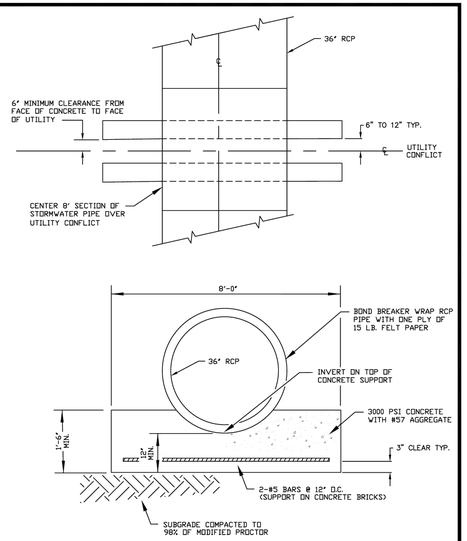


NO POLYTUBING UNDER ROAD ALLOWED WITHOUT 4" CASING

1. 2" TAPPING SADDLE CC THREAD, EPOXY COATED WITH STAINLESS STEEL STRAP,
2. 2" CORPORATION STOP FORD FB1101-7-G (2" BALLVALVE X IPT X CTS) MUELLER EQUAL..
3. 2" CURB STOP, BF43-777W-NL (2" VALVE, 2" CTS X 2" FLANGE) FLANGE WILL FIT 1 1/2" OR 2" FLANGE WATER METER.
4. 2" 200 PSI, SDR 9 ENDOT ENOPURE BLUE WATER SERVICE TUBING (POTABLE), PURPLE (RECLAIMED) WITH TRACER WIRE AND SNAKE BITE CONNECTORS.
5. 4" PVC SCHEDULE 40, CASING PIPE WHITE, IF INSTALLATION UNDER ROAD (PAVED OR DIRT).

WATER & RECLAIMED SERVICE DETAIL

VOL. UTL. STD. UPDATED APRIL 2025 (FIG. 1011)



NOTES:

1. MAINTAIN MINIMUM VERTICAL CLEARANCE FROM BOTTOM OF STORM PIPE TO TO TOP OF UTILITY CONFLICT PIPE.

UTILITY CONFLICT RCP DETAIL

N.T.S.

VOL. UTL. STD. UPDATED APRIL 2025

SEPARATION REQUIREMENTS:

1. A MINIMUM HORIZONTAL SEPARATION OF TEN (10) FEET OUTSIDE SHALL BE MAINTAINED BETWEEN WATER MAINS AND SANITARY GRAVITY SEWER OR STORM SEWER LINES. (SEE DETAIL"A")
2. A MINIMUM HORIZONTAL SEPARATION OF THREE (3) FEET OUTSIDE TO OUTSIDE SHALL BE MAINTAINED BETWEEN WATER MAINS AND RECLAIMED WATER LINES CARRYING UNRESTRICTED PUBLIC ACCESS REUSE WATER OR WELL SUPPLY MAINS.
3. THERE SHALL BE AT LEAST A TEN (10) FOOT SEPARATION BETWEEN NEW WATER MAINS AND NEW SANITARY SEWER FORCE MAINS WITHOUT EXCEPTION. FIELD PROBLEMS SHALL BE REPORTED TO THE ENGINEER. SPECIAL SOLUTIONS MUST BE ACCEPTED BY D.E.P. PRIOR TO IMPLEMENTATION.
4. A MINIMUM VERTICAL SEPARTION OF EIGHTEEN (18) INCHES OUTSIDE TO OUTSIDE SHALL BE MAINTAINED BETWEEN WATER MAIN AND THE HAZARD LINES (I.E. SANITARY GRAVITY SEWER, STORM SEWER OR RECLAIMED WATER LINES). ONE FULL LENGTH OF PIPE SHALL BE CENTERED AT THE POINTOF CROSSING FOR BOTH PIPES.
5. THERE SHALL BE AN EIGHTEEN (18) INCH VERTICAL SEPARATION BETWEEN NEW WATER MAINS AND NEW SANITARY SEWER FORCE MAINS AT CROSSING WITHOUT EXCEPTION. WHERE IT IS NOT POSSIBLE TO MAINTAIN THE REQUIRED SEPARATION, CONFLICTS WITH EXISTING LINES SHALL BE REPORTED TO THE ENGINEER, SPECIAL SOLUTIONS MUST BE ACCEPTED BY D.E.P. PRIOR TO IMPLEMENTATION, AT PIPE CROSSINGS,THE PIPES SHALL BE SITUATED SUCH THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM EACH OTHER.
6. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY SEWER MANHOLE OR STORM SEWER STRUCTURE.

SOLUTIONS TO SEPARATION CONFLICTS

1. IN AREAS WHERE IT IS NOT PRACTICAL TO MAINTAIN THE REQUIRED SEPARATION: THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SANITARY GRAVITY SEWER, STORM SEWER OR RECLAIMED WATER LINE AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE OTHER LINE. (SEE DETAIL"B")
2. IF THE MINIMUM ALLOWABLE (10') HORIZONTAL SEPARATION OR 18" VERTICAL IN A SEPARATE TRENCH CANNOT BE MAINTAINED, UPGRADE THE WATER MAIN TO DUCTILE IRON IF THE OTHER LINE IS A STORM SEWER OR AN EXISTING SANITARY GRAVITY SEWER.
3. IF THE NON-CONFORMING LINE IS A NEW GRAVITY SANITARY SEWER, AND 10' HORIZONTAL SEPARATION OR 18" VERTICAL SEPARATION IN A SEPARATE TRENCH CANNOT BE MAINTAINED, THEN:
   - A. PLACE THE HAZARD LINE WITHIN A CONCRETE SEALED PVC SDR 35 CARRIER PIPE. (SEE DETAIL"C")
   - B. ENCASE THE HAZARD PIPE IN CONCRETE ENCASEMENT. DETAIL THIS SHEET
   - C. UPGRADE THE NEW GRAVITY SANITARY SEWER TO AWWA C-900, D.R. 18 PVC AND HYDROSTATICALLY TEST IT TO 150 PSI. AT PIPE CROSSINGS, THE PIPES SHALL BE SITUATED SUCH THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM EACH OTHER.
4. IF THE HAZARD LINE IS A RECLAIMED WATER LINE AND THE ABOVE SEPARATION REQUIREMENTS ARE NOT MET, UPGRADE THE RECLAIMED WATER LINE MATERIAL TO DUCTILE IRON OR ENCASED PIPE IN CONCRETE.
5. WHEN THERE IS LESS THAN 18" OF VERTICAL CLEARANCE BETWEEN THE WATER MAIN AND STORM SEWER, AT THE POINT OF CROSSING. (SEE DETAIL"D")
6. WHEN THE WATER MAIN CROSSES BELOW THE HAZARD LINE, THE WATER MAIN SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18" FROM THE HAZARD LINE. ONE FULL LENGTH OF PIPE SHALL BE CENTERED AT THE POINT OF CROSSING (FOR BOTH PIPES WHEN CROSSING SANITARY SEWER). (SEE DETAIL"E")
7. SPECIAL STRUCTURAL SUPPORT OR CONCRETE SADDLES MAY BE NECESSARY AT THE CROSSING LOCATION.
8. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE CROSSING HAZARD. RECEIVE SPECIFIC APPROVAL BY D.E.P. PRIOR TO IMPLEMENTATION.

WATER MAIN SEPARATION NOTES

VOL. UTL. STD. UPDATED APRIL 2025 (FIG. 2311)

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CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA
CLIENT: INDIAN RIVER SHORES, LLC
WATER DETAILS

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

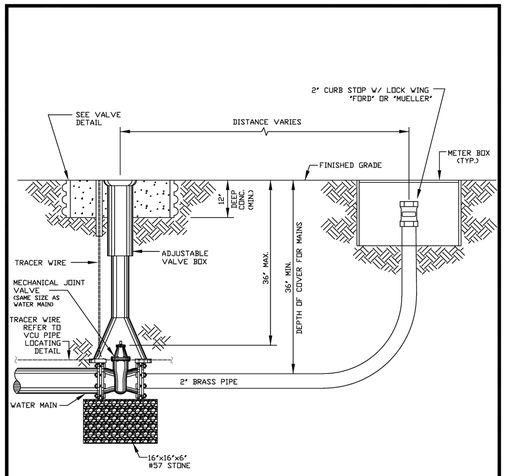
NICHOLAS ALEXANDER PEET — LICENSE NO. 92061 — 6/30/26 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

SHEET C 11.0

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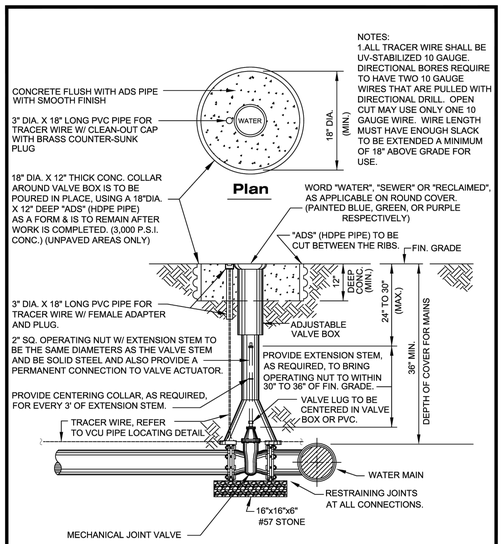


NOTES: 1. ALL CURB STOPS TO HAVE LOCK WINGS

BLOW-OFF DETAIL

NTS

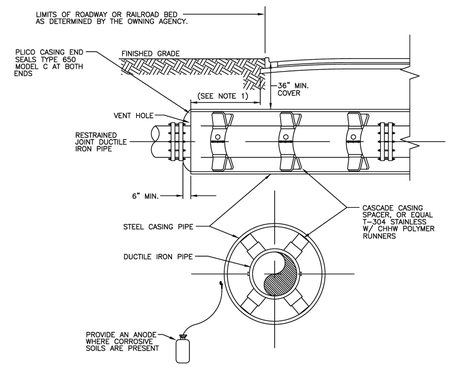
VOL. UTL. STD. UPDATED APRIL 2025 (FIG. 2313)



NOTES:
1.ALL TRACER WIRE SHALL BE UV-STABILIZED 10 GAUGE. DIRECTIONAL BORES REQUIRE TO HAVE TWO 10 GAUGE WIRES THAT ARE PULLED WITH DIRECTIONAL DRILL. OPEN CUT MAY USE ONLY ONE 10 GAUGE WIRE. WIRE LENGTH MUST HAVE ENOUGH SLACK TO BE EXTENDED A MINIMUM OF 18" ABOVE GRADE FOR USE.

VALVE AND BOX DETAIL

VOL. UTL. STD. UPDATED APRIL 2025 (FIG. 2307)

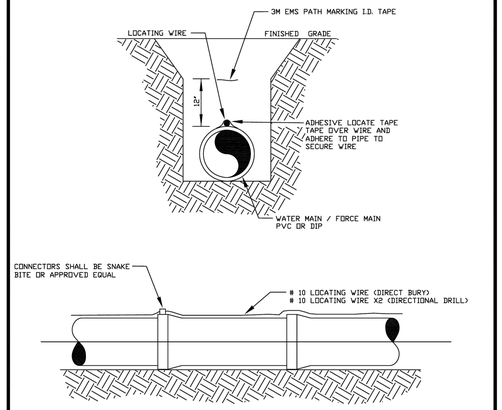


NOTES:

1. DEPTH OF COVER AND CASING EXTENSION BEYOND PAVEMENT OR R/R TRACKS SHALL BE AS REQUIRED BY THE REGULATORY AUTHORITY. ON COUNTY ROADS WHERE PRACTICAL CASING SHALL EXTEND 8' BEYOND EDGE OF PAVEMENT AND SHALL NOT BE LESS THAN 6' BEYOND EDGE OF PAVEMENT IN ANY CASE.
2. CASING SPACERS AND END SEALS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
3. STEEL CASING PIPE MATERIAL, SIZE AND COATINGS SHALL BE AS REQUIRED BY F.D.O.T.
4. LOCATE WIRE AND LOCATE TAPE (TWO TYPES) SHALL BE ON ALL PARTS.

BORE AND JACK CASING INSTALLATION DETAIL

VOL. UTL. STD. UPDATED APRIL 2025 (FIG. 1008)



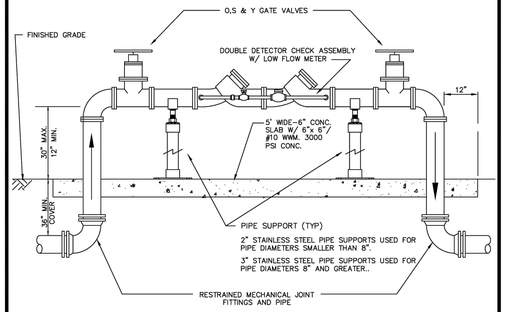
NOTES:

1. ALL PIPE SHALL REQUIRE INSULATED METALLIC SOLID LOCATING WIRE CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE CENTERLINE OF PIPE.
2. 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 (SEE GATE VALVE AND BOX DETAIL, FIGURE 2307).
3. ADHESIVE I.D. TAPE AS NECESSARY TO HOLD WIRE DIRECTLY ON THE TOP OF THE PIPE.
4. LOCATE WIRE AND LOCATE TAPE (TWO TYPES) SHALL BE ON ALL PIPES.
5. DIRECTIONAL DRILL INSTALLATION SHALL USE TWO SEPARATE COPPER CLAD SOLID STEEL WIRES, 10 GAUGE.
6. CONNECTIONS SHALL BE SNAKE BITE CONNECTORS, OR APPROVED EQUAL
7. REFER TO VOLUSIA COUNTY ELECTRONIC BALL DETAIL

PIPE LOCATING DETAIL

N.T.S.

VOL. UTL. STD. UPDATED APRIL 2025 (FIG. 1005)



NOTES:
1. ALL PIPE & FITTINGS ABOVE GRADE SHALL BE FLANGED
2. ALL PIPING, FITTINGS AND SUPPORTS TO BE PAINTED. COLOR TO BE SELECTED BY COUNTY.
3. DOUBLE DETECTOR CHECK ASSEMBLY SHALL HAVE A FUSED EPOXY COATED CAST IRON BODY.
4. ASSEMBLY SHALL BE EQUIPPED WITH A LOW FLOW METERING DEVICE TO DETECT LEAKS.

DOUBLE DETECTOR CHECK ASSEMBLY

FOR FIRE PROTECTION ONLY

VOL. UTL. STD. UPDATED APRIL 2025 (FIG. 2309)

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EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

WATER DETAILS

Engineering Business Certificate of Authorization No. 32771
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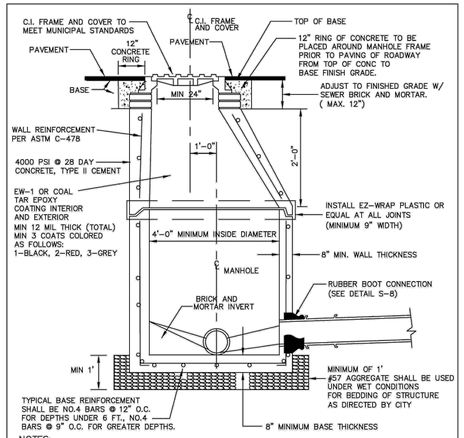
NICHOLAS ALEXANDER PEET LICENSE NO. 92061 6/30/26 STATE OF FLORIDA PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

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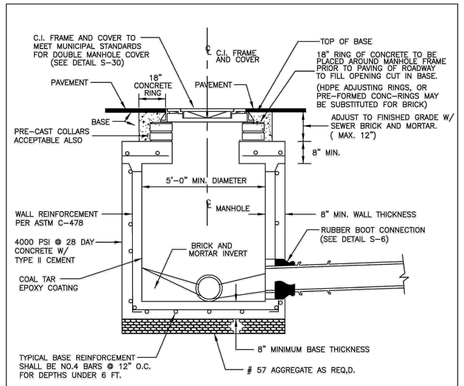
NOTES:

1. ON TRANSITIONS BETWEEN LARGER DIAMETER AND SMALLER SEWER COLLECTORS, OUTVERTS OF SEWERS SHALL BE MATCHED.
2. NON-PENETRATING PICK-HOLES IN ALL CONCRETE SECTIONS.
3. USE FARBERTITE BITUMASTIC SEALER BETWEEN SECTIONS OF MANHOLES.
4. 0.1' – DROP ACROSS MANHOLE TYP.
5. ALL MANHOLE TROUGHS AND BENCHES ARE TO BE EPOXY PAINTED BEFORE FINAL INSPECTION.
6. LAST MANHOLE UPSTREAM OF A LIFT STATION MUST BE LINED W/ SPECTRA SHIELD OR EQUAL.

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
STANDARD MANHOLE DETAIL

FILE NAME: EW_S1.DWG
DETAIL REF: S-1



SECTION – SHALLOW MANHOLE
USE FOR MANHOLES OF 5'-0" OR LESS IN DEPTH

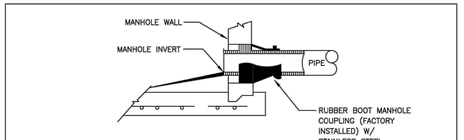
NOTES:

1. INSTALL EZ-WRAP PLASTIC OR EQUAL AT ALL JOINTS (MINIMUM 9" WIDTH).
2. NON-PENETRATING PICK-HOLES IN ALL CONCRETE SECTIONS.
3. USE FARBERTITE BITUMASTIC SEALER BETWEEN SECTIONS OF MANHOLE.

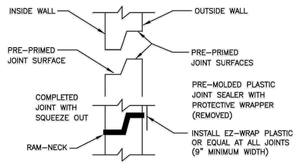
EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
SHALLOW MANHOLE

FILE NAME: EW_S3.DWG
DETAIL REF: S-3



MANHOLE PIPE CONNECTION DETAIL
FOR NEW CONNECTIONS IN EXISTING MANHOLES



PRECAST JOINT CONNECTION

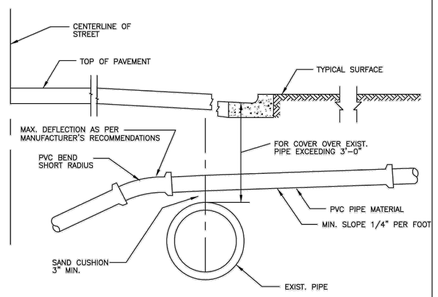
NOTES:

1. ALL NEW CONNECTIONS TO EXISTING SANITARY SEWER MANHOLES SHALL UTILIZE A CORING METHOD AND THE IN-FIELD INSTALLATION OF A RUBBER BOOT INTO THE MANHOLE.

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
RUBBER BOOT AND PRECAST JOINT CONNECTION DETAIL

FILE NAME: EW_S8.DWG
DETAIL REF: S-8



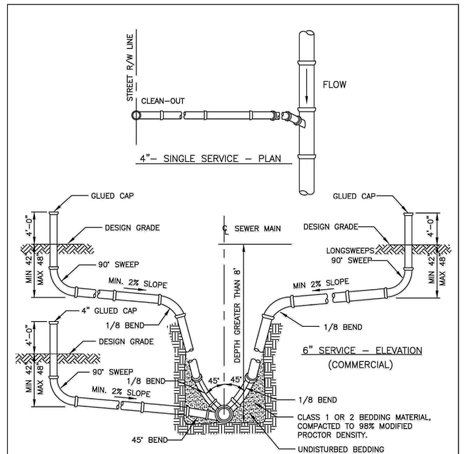
ALTERNATE GRADIENT FOR HOUSE SERVICE SEWERS AT CONFLICTS WITH EXISTING STORM SEWERS & OTHER EXISTING CONDUITS

APPROVED PIPE MATERIALS–PVC (SDR 26)

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
SEWER LINE UTILITY CROSSING DETAIL

FILE NAME: EW_S9.DWG
DETAIL REF: S-9



6" SERVICE – ELEVATION (COMMERCIAL)

4" – 6" SINGLE SERVICE – ELEVATION

NOTES:

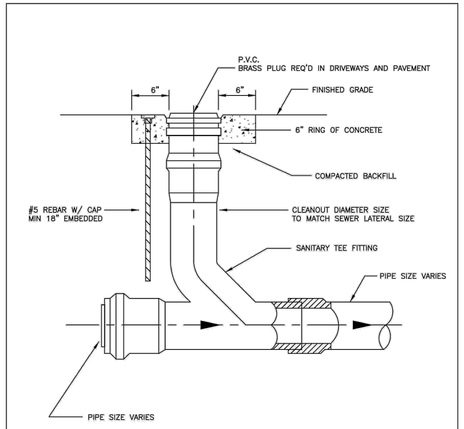
1. USE OF STYRENE MATERIAL WILL NOT BE PERMITTED.
2. ALL JOINTS TO BE RUBBER GASKET (NO GLUED FITTINGS) TYPICAL.
3. USE ALL HARCO SDR-26 FITTINGS OR CITY APPROVED EQUAL.

4" – RESIDENTIAL
6" – COMMERCIAL

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
SEWER LATERAL DETAIL
(SINGLE 4" RESIDENTIAL)
(SINGLE 6" COMMERCIAL)

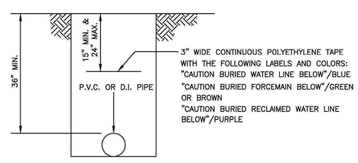
FILE NAME: EW_S10.DWG
DETAIL REF: S-10



EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
CLEANOUT DETAIL

FILE NAME: EW_S12.DWG
DETAIL REF: S-12



"TERRA TAPE D" or SIMILAR

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
LOCATOR TAPE INSTALLATION FOR
SEWER, WATER AND RECLAIMED WATER PIPELINES

FILE NAME: EW_S13.DWG
DETAIL REF: S-13

SANITARY SEWER DESIGN AND CONSTRUCTION NOTES

1. THE CITY'S ENVIRONMENTAL SERVICES DEPT. (424-2476) SHALL BE GIVEN A MINIMUM OF 48 HOURS ADVANCE NOTICE (NOT INCLUDING HOLIDAYS OR WEEKENDS) PRIOR TO BEGINNING ANY SANITARY SEWER CONSTRUCTION.
2. ALL GRAVITY SANITARY SEWER MAIN LINES SHALL BE 8" DIAMETER MINIMUM. COMMERCIAL SERVICE LATERALS WITH MULTIPLE CONNECTIONS SHALL BE GREEN 6" DIA. OR LARGER. ALL SINGLE FAMILY RESIDENTIAL SERVICE LATERALS SHALL BE 4" – SINGLE SERVICES.
3. ALL GRAVITY SANITARY SEWER LINES SHALL BE GREEN PVC SDR 26, ASTM D-3034. IN PLACES WHERE A MINIMUM COVER OF 4.0' CANNOT BE MAINTAINED, AWWA C-900 OR C-905 GREEN PVC DR-25, CLASS 100 OR CONCRETE ENCASEMENT SHALL BE USED. WATER LINES, RECLAIMED LINES, AND STORM DRAINAGE CROSSINGS SHALL ALSO FOLLOW THE CONCRETE ENCASEMENT REQUIREMENT PER THESE STANDARDS AND AS PER REGULATORY REQUIREMENTS.
4. MINIMUM GRAVITY SANITARY SEWER SLOPES ARE AS FOLLOWS:
   8" PIPE 0.40%
   10" PIPE 0.30%
   12" PIPE 0.22%
5. GRAVITY SANITARY SEWER LINES SHALL BE INSTALLED WHENEVER POSSIBLE UNDER PAVED AREAS WITHIN PUBLIC RIGHTS-OF-WAY. UTILITY EASEMENTS SHALL BE PROVIDED WHENEVER PUBLICLY-OWNED SEWER LINES ARE CONSTRUCTED OUTSIDE OF A PUBLIC RIGHT-OF-WAY.
6. GRAVITY SANITARY SEWER LINE CONSTRUCTION SHALL BE ACCOMPLISHED BY THE USE OF A LASER INSTRUMENT UNLESS ANOTHER METHOD IS PREVIOUSLY APPROVED BY THE CITY.
7. THE CONTRACTOR SHALL AT ALL TIMES, DURING PIPE LAYING OPERATIONS, DEWATER THE GROUND SUFFICIENTLY TO KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6" BELOW THE PIPE BEING LAID WITHIN THE AREA OF THE TRENCH.
8. ALL PIPES SHALL BE LAID ON A FIRM FOUNDATION. SOFT OR SPONGY BEDDING FOR PIPES IS NOT ACCEPTABLE. ANY UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH A DRY, COMPACTED, GRANULAR MATERIAL SATISFACTORY TO THE CITY.
9. ON ALL EXCAVATION AND BACKFILLING THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING AND BRACING IN ORDER TO PROVIDE FOR THE SAFETY OF WORKMEN, AS WELL AS REPRESENTATIVES OF THE CITY, THE DESIGN ENGINEER, AND THE DEVELOPER.
10. ALL TRENCHES SHALL BE BACKFILLED WITH ACCEPTABLE MATERIAL AND COMPACTED TO THE SPECIFIED MINIMUM COMPACTION (95% IN UNPAVED AREAS AND 98% IN PAVED AREAS) OF THE OPTIMUM DENSITY OF THAT MATERIAL BASED ON THE AASHTO T-180 MODIFIED PROCTOR TEST.
11. THE CONTRACTOR SHALL EMPLOY AN INDEPENDENT TESTING LABORATORY AT HIS OWN EXPENSE TO INSURE THAT COMPACTION OF ALL FILL MATERIAL IS COMPLETED PROPERLY. TESTS SHALL BE DONE ONE FOOT ABOVE THE PIPE AND THEN AT ONE FOOT VERTICAL INTERVALS UNTIL FINAL GRADE IS REACHED. TESTING SHALL BE COMPLETED AND TEST DOCUMENTS SUBMITTED TO THE CITY AT A MINIMUM FREQUENCY OF ONE SET OF TESTS BETWEEN EACH MANHOLE AND ONE ADDITIONAL SET OF TESTS AT EVERY MANHOLE. IDENTIFICATION OF TEST LOCATIONS SHALL BE CLEARLY INDICATED ON TEST REPORTS. TEST RESULTS SHALL BE FORWARDED PROMPTLY TO THE CITY'S DESIGNATED SITE INSPECTOR.
12. THE CONTRACTOR SHALL INSTALL A METALLIZED FOIL LOCATOR TAPE, OR SIMILAR DEVICE AS MAY BE APPROVED BY THE CITY FOR THE FULL LENGTH OF ALL PVC SEWAGE FORCE MAINS. THIS PIPE LOCATOR AID SHALL BE INSTALLED BETWEEN 15" AND 24" BELOW FINISHED GRADE OR AS DIRECTED BY THE MANUFACTURER. TAPE SHALL BE COLOR CODED GREEN FOR SANITARY SEWER AND FORCE MAIN. INSTALL 12 GUAGE TRACING WIRE IN TRENCH.

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
SANITARY SEWER DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_S23.DWG
DETAIL REF: S-23

LEVELUP CONSULTING, LLC
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EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

SANITARY SEWER DETAILS

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REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

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SANITARY SEWER DESIGN AND CONSTRUCTION NOTES: (CONTD.)

13. ALL TESTING REQUIRED BY THE CITY SHALL BE PAID FOR BY THE CONTRACTOR / DEVELOPER.
14. ALL LOCAL COLLECTION SANITARY SEWER MANHOLES SHALL BE PRECAST WITH A MINIMUM INSIDE DIAMETER OF 4 FEET.
15. STANDARD MANHOLES SHALL BE LOCATED AT INTERVALS NOT EXCEEDING 400 FEET.
16. ALL SEWER FITTINGS TO BE "HARCO" OR CITY APPROVED EQUAL.
17. MANHOLE RIMS SHALL MATCH FLUSH WITH THE FINISH GRADE ELEVATION IN PAVED AREAS AND A MINIMUM OF 0.2 FEET AND MAXIMUM OF 0.5 FEET ABOVE GRADE GENERALLY IN UNPAVED AREAS.
18. THE CONTRACTOR SHALL CONSTRUCT SANITARY SEWER MANHOLES IN SUCH A WAY THAT SEWER LINES DO NOT INTERSECT SEALED JOINTS BETWEEN SECTIONS OF THE MANHOLE.
19. RUBBER BOOTS AND STAINLESS STEEL BANDS SHALL BE UTILIZED IN THE CONNECTION OF THE SEWER MAIN TO THE MANHOLES (SEE STANDARD MANHOLE AND BOOT DETAIL).
20. INDIVIDUAL SANITARY SERVICE CONNECTORS ON NEW CONSTRUCTION SHALL NOT BE CONNECTED DIRECTLY INTO MANHOLES, AND MUST CONNECT TO SEWER MAIN LINES BY USE OF WYE CONNECTIONS, UNLESS OTHERWISE BE APPROVED BY THE CITY.
21. FOR SINGLE FAMILY HOMES, SINGLE OR DOUBLE FOUR INCH SEWER SERVICES LATERALS SHALL BE CONSTRUCTED SINGLES AT EACH LOT OR UNIT AND LOCATED ON THE DOWNSTREAM SIDE OF THE LOT CENTER LINE. DOUBLES LOCATED ON THE LOT LINES THESE SERVICES SHALL BE EXTENDED 4 FEET ABOVE GROUND AT THE PROPERTY LINE WITH A PVC RISER AND PLUG BEING EASILY VISIBLE FROM THE ROAD. RUBBER SEAL FITTINGS SHALL BE USED ON ALL LINES. NO GLUED JOINTS ARE PERMITTED ON LATERALS, INCLUDING DOUBLES.
22. FOR MULTI-FAMILY AND COMMERCIAL SITES, SIX INCH MINIMUM SEWER SERVICES AND CLEANOUTS SHALL BE PROVIDED AS APPROVED BY THE CITY.
23. SANITARY SEWER LIFT STATIONS AND FORCE MAINS, SIZE, MATERIAL, AND DESIGNS SHALL BE APPROVED BY THE CITY. LIFT STATIONS SHALL BE CONSTRUCTED WITH A MINIMUM WET WELL INTERIOR DIAMETER OF 6 FEET. FORCE MAINS SHALL BE A MINIMUM 6 INCH DIAMETER.
24. IT SHALL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER TO PREPARE AND SUBMIT FLOTATION CALCULATIONS TO SIZE THE BASE OF THE WET WELL, AND ANY MANHOLES AS DEEMED NECESSARY BY THE CITY.
25. SANITARY SEWER DROP MANHOLES SHALL ONLY BE USED UNDER SPECIAL CONDITIONS AS APPROVED BY THE CITY. DROPS LESS THAN 2.0' SHALL NOT BE ALLOWED.
26. ALL SANITARY SEWER MANHOLE COVERS SHALL HAVE THE WORDS "EDGEWATER, FLORIDA SANITARY SEWER" CAST INTO THEM.
27. ALL SANITARY SEWER FORCE MAINS, SHALL BE PVC AWWA C-900, OR C-905 (COLOR "GREEN") (PRESSURE FITTINGS, PRESSURE CLASS 150 OR 250 EPOXY LINED DIP. THE FORCE MAIN MINIMUM DEPTH OF COVER SHALL BE 36".
28. ALL SANITARY SEWER FORCE MAINS SHALL USE A THRUST RESTRAINT JOINT METHOD IN COMPLIANCE WITH THE DUCTILE IRON PIPE RESEARCH ASSOCIATION GUIDELINES MODIFIED TO ACCOMMODATE PVC PIPE BY FOLLOWING THE RECOMMENDED INCREASE IN RESTRAINT LENGTH CORRESPONDING TO THE INSTALLATION OF POLYETHYLENE WRAP. IN NO INSTANCE SHALL THRUST BLOCKS BE PERMITTED.

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
SANITARY SEWER DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_S24.DWG
DETAIL REF: S-24

SANITARY SEWER DESIGN AND CONSTRUCTION NOTES (CONTD.)

29. SANITARY SEWER MANHOLES WHICH HAVE SEWER FORCE MAINS DISCHARGING DIRECTLY INTO THEM SHALL BE FIBERGLASS OR POLY-ETHYLENE LINED. RETRO-FITTING OF MANHOLES WITH LINERS SHALL BE REQUIRED WHEN NEW CONNECTIONS SUCH AS THIS ARE MADE. FIBERGLASS SHALL BE A MINIMUM 1/2" THICKNESS UNLESS APPROVED OTHERWISE BY THE CITY. OTHER TYPES OF LINING METHODS AND MATERIALS MAY BE CONSIDERED ON A CASE BY CASE BASIS. UNDER SPECIAL CIRCUMSTANCES WHERE HYDROGEN SULFIDE IS A MAJOR CONCERN MANHOLES UPSTREAM AND/OR DOWNSTREAM OF THE FORCE MAIN TIE-IN OR WET WELL MAY ALSO BE REQUIRED TO HAVE LININGS INSTALLED.
30. THE CITY RESERVES THE RIGHT TO REQUIRE THE DEVELOPER TO PERFORM VACUUM TESTING OF ALL SANITARY MANHOLES, AIR TEST SEWER MAINS, AND REQUIRES THAT ALL SANITARY SEWER MAIN LINES BE TELEVISED PRIOR TO FINAL ACCEPTANCE. LATERALS SHALL BE TELEVISED UPON DEMAND BY THE CITY PRIOR TO FINAL ACCEPTANCE WHEN IT IS SUSPECTED THAT A PROBLEM EXISTS.
31. ALL SEWER MAINS, PRIOR TO ACCEPTANCE BY THE CITY AND PRIOR TO ANY FINAL PAVING OPERATIONS, SHALL BE CLEANED FLUSHED AND TELEVISED USING A "PAN AND TILT" CAMERA BY A CITY APPROVED CONTRACTOR. THE VIDEO SHALL BE NON-STOP WITH AUDIO DESCRIBING WHAT IS BEING REVIEWED. WRITTEN VIDEO LOGS DESCRIBING THE CONDITION OF THE LINES SHALL ACCOMPANY THE TAPE SUBMISSION TO THE CITY PRIOR TO COMMENCING ANY INSTALLATION OF ASPHALT OR CONCRETE PAVEMENT. RE-TAPING MAY BE REQUIRED BY THE CITY IF ADDITIONAL CLEARING OR CORRECTIVE ACTIONS ARE NECESSARY.
32. ALL MANHOLES WITH FORCE MAIN CONNECTIONS SHALL BE OUTFITTED WITH EGRU LINERS OR OTHER TYPES OF LINERS APPROVED BY THE VITY. IN ADDITION, THE CITY MAY REQUIRE LINES TO BE INSTALLED IN AREAS WHERE THE ENVIRONMENTAL SERVICES DEPARTMENT BELIEVES THE NEED IS JUSTIFIED.
33. ALL SEWER LINES WHICH ARE CONSTRUCTED OUTSIDE OF PUBLIC RIGHTS-OF-WAY WITHIN SIDE YARDS, BACKYARDS, AND OTHER POORLY ACCESSIBLE AREAS SHALL BE CONSTRUCTED OF C-900 PVC. ABSOLUTELY NO USE OF PLASTIC STYRENE FITTINGS SHALL BE ALLOWED.
34. SEWER LATERAL LOCATIONS SHALL BE MARKED ALONG THE OUTSIDE OF THE CURB WITH A SAW CUT "V", OR BY A METAL TAB SET INTO THE PAVEMENT.
35. CONTEC A-2000 PVC PIPE SHALL NOT BE ALLOWED FOR USE.
36. EZ-WRAP PLASTIC, AS MANUFACTURED BY PRESS SEAL GASKET CORPORATION, SHALL BE USED ON THE OUTSIDE OF ALL MANHOLE AND WETWELL JOINTS. APPLY ONE LAYER OF 9" WRAP CENTERED ON EACH JOINT. A CITY INSPECTOR SHALL PERSONALLY INSPECT ALL JOINT SEALS PRIOR TO BACKFILLING OPERATIONS.
37. ALL PROPOSED SEWER FORCE MAINS SHALL BE FLUSHED, PRESSURE TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIROMENTAL PROTECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE WITH CITY PERSONNEL AT THE ENVIRONMENTAL SERVICES DEPARTMENT (AS APPROPRIATE) AT LEAST 24 HOURS PRIOR TO BEGINNING A FULL-DIAMETER FLUSH OF THE MAINS PRIOR TO THE COMMENCEMENT OF PRESSURE TESTING (SUBJECT TO AVAILABILITY).
38. THE CITY MAY REQUIRE THE CONTRACTOR TO PIG FORCE MAINS IN EXCESS OF 6" IN DIAMETER AND PRIMARY TRANSMISSION MAINS LOCATED ON COLLECTOR AND ARTERIAL ROADWAYS. LAUNCHING AND EXTRACTION POINTS SHALL BE DETERMINED BY THE CONTRACTOR.

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
SANITARY SEWER DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_S25.DWG
DETAIL REF: S-25

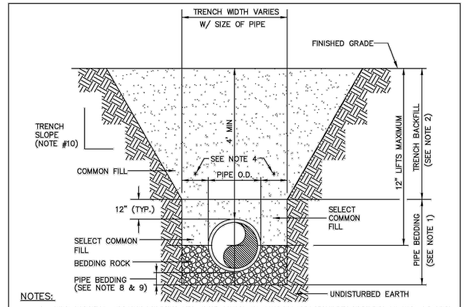
SANITARY SEWER DESIGN AND CONSTRUCTION NOTES (CONTD.)

39. ANY TIE INTO AN EXISTING MANHOLE WILL BE COORDINATED WITH THE CITY, AND ALL CONFINED SPACE HAZARDS AND PROCEDURES WILL BE FOLLOWED.
40. ANY TIE INTO AN EXISTING SYSTEM WILL BE SWEPT IN THE DIRECTION OF FLOW.
41. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL OSHA, DOT, OR ANY OTHER RULES & REGULATIONS THAT MAY APPLY.
42. AS A GENERAL RULE, THE NUMBER OF JOINTS SHALL BE LIMITED WHENEVER POSSIBLE. IN SPECIAL CASES WHERE A POINT REPAIR TO AN 8"TO 12" PVC SEWER MAIN IS REQUIRED, THE PROPER RIGID WRAP AROUND SLEEVE SUCH AS A JCM-210 OVERSIZED DUCTILE IRON COUPLING OR AN APPROVED EQUAL MAY BE ALLOWED BY SPECIAL APPROVAL BY THE CITY.
43. ALL IN-LINE SANITARY SEWER FORCE MAIN VALVES SHALL BE RESILIENT SEAT (AWWA C-509) VALVES FEATURING A LINED DUCTILE IRON BODY.
44. ALL TAPPING OF MAINS AND CORING OF MANHOLES SHALL BE COORDINATED WITH THE CITY BY AN APPROVED CONTRACTOR AND BILLED IN ACCORDANCE WITH THE ADOPTED FEE RESOLUTION. SCHEDULING OF THESE CONNECTIONS SHALL REQUIRE A MINIMUM 48 HOUR NOTIFICATION (MEASURED ON NORMAL WORK DAYS) DIRECTED TO THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE THE WORK DIRECTLY WITH THE ENVIRONMENTAL SERVICE DEPARTMENT. SUBSEQUENTLY, THE CONNECTION SHALL BE SCHEDULED TO COMMENCE ON THE APPROPRIATE DAY AND TIME ESTABLISHED BY CITY.
45. WITH RESPECT TO TIE-IN CONNECTIONS AND CORING OPERATIONS, THE CITY RESERVES THE RIGHT TO REQUIRE CONNECTIONS TO BE PERFORMED DURING PERIODS OF LOW FLOW (MIDNIGHT TO 6:00 A.M.) IN ORDER TO MINIMIZE SERVICE DISRUPTION TO EXISTING CUSTOMERS.
46. ALL WORK PERFORMED UPON SANITARY SEWER FACILITIES OWNED OR PROPOSED TO BE OWNED BY THE CITY SHALL BE CONSTRUCTED BY A LICENSED UNDERGROUND UTILITY CONTRACTOR, OR LICENSED GENERAL CONTRACTOR, WHO IS LICENSED IN THE STATE OF FLORIDA AND REGISTERED WITH THE CITY.
47. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AS-BUILTS ARE PROVIDED TO THE CITY PRIOR TO ANY USE OF THE SYSTEM.
48. FOR CONSTRUCTION PURPOSES, THE PLANS SHALL DIMENSION THE LOCATION, OF ALL FORCE MAINS MEASURED FROM THE BACK OF CURB (OR EDGE OF PAVEMENT, IF NO CURBING EXISTS.)
49. ALL HDPE PIPE INSTALLED FOR SEWAGE FORCE MAINS SHALL BE SDR 11 UNLESS SPECIFICALLY NOTED OTHERWISE. THE HDPE PIPE SHALL BE SIZED TO MATCH THE EXTERNAL DIAMETER OF THE PVC OR DIP TO WHICH IT IS ATTACHED.
50. LANDSCAPE PLANS SHALL CLEARLY DEPICT THE DESIGN LOCATION OF PLANTINGS RELATIVE TO THE LOCATION OF PUBLIC UTILITIES AND STORMWATER INFRASTRUCTURE IN ORDER TO EVALUATE POTENTIAL CONFLICTS.
51. ALL UTILITY INSTALLATIONS ARE SUBJECT TO REVIEW AND APPEAL BY THE CITY OF EDGEWATER. ALL STRUCTURES AND EQUIPMENT SUPPLIED AND/ OR INSTALLED SHALL MEET QUALITY AND PERFORMANCE STANDARDS PRIOR TO ACCEPTANCE. SUBSTANDARD INSTALLATIONS MAY BE REJECTED, REMEMBER MEASURES ARE SUBJECT TO CITY APPROVAL.

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
SANITARY SEWER DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_S26.DWG
DETAIL REF: S-26



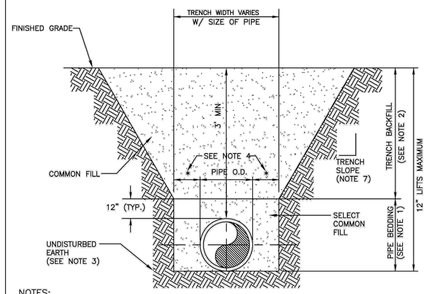
NOTES:

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. (98% DENSITY REQUIRED UNDER PAVEMENT, DRIVEWAYS AND STRUCTURES.)
3. USE TYPE "A" BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE 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 FLOW.
7. REFER TO SECTION 32.5 OF THE MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS.
8. GRAVITY SEWERS SHALL UTILIZE TYPE "A" BEDDING, WHERE UNSUITABLE MATERIAL EXISTS. 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. CITY SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
10. REFER TO OSHA REQMTS. FOR SLOPING, SHEETING AND BRACING IN EXCAVATIONS.

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
TYPE "A" BEDDING AND TRENCH DETAIL
(SPECIAL GRAVITY SEWER INSTALLATIONS)

FILE NAME: EW_S28.DWG
DETAIL REF: S-28



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, (98% DENSITY REQUIRED UNDER DRIVEWAYS, PAVEMENT AND STRUCTURES).
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.
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 FLOW.
7. REFER TO OSHA REQUIREMENTS FOR SLOPING, SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
TYPE "B" BEDDING AND TRENCH DETAIL
(TYPICAL FOR WATER, SEWER, FORCE MAIN, STORM DRAIN AND RECLAIMED WATER MAIN INSTALLATIONS)

FILE NAME: EW_S29.DWG
DETAIL REF: S-29

LEVELUP CONSULTING, LLC
LVLUP
505 E. JACKSON STREET
SUITE 200
TAMPA, FLORIDA 33602
OFFICE: 813-375-0616
WWW.LEVELUPFLORIDA.COM

CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

SANITARY SEWER DETAILS

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26006638

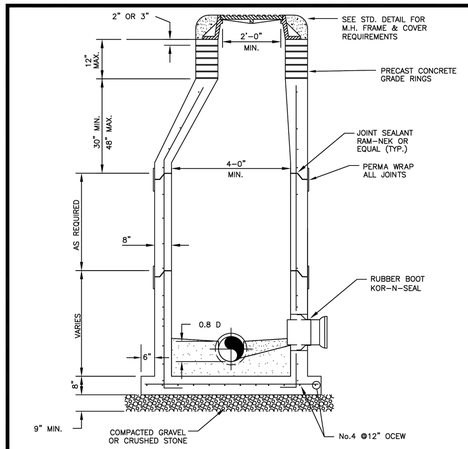
NICHOLAS ALEXANDER PEET LICENSE NO. 92061 6/30/26 STATE OF FLORIDA PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

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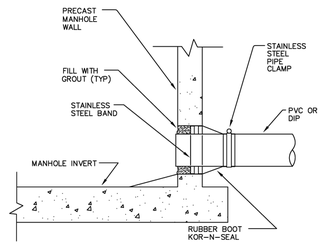


NOTES

1. PRECAST CONCRETE TYPE 2 4000 P.S.I.
2. "RAM-NEK OR EQUAL AT ALL RISER JOINTS(1/2" THICK W/WIDTH AT LEAST 1/2 THE WALL THICKNESS) W/GROUT INSIDE AND OUTSIDE.
3. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
4. FLOW CHANNELS SHALL BE FIELD CONSTRUCTED TO DIRECT FLOW STREAM.
5. LIFT HOLES ARE NOT PERMITTED FURNISH LIFTING CABLES.
6. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
7. RUBBER BOOT MUST BE USED WITH ALL PIPE CONNECTIONS.
8. MANHOLES SHALL BE COATED INSIDE AND OUT WITH TWO COATS OF CS-55 WATER BASED CONCRETE COATING, MIN. 8 MILS PER COAT.
9. MANHOLES RECEIVING FLOW FROM SEWAGE FORCE MAINS SHALL BE ARMOROCK OR APPOVED EQUAL. MANHOLES LOCATED WITHIN 100 FEET OF A SEWER LIFT STATION SHALL BE ARMOROCK OR APPROVED EQUAL.

STANDARD MANHOLE DETAIL

VOL. UTL. STD. UPDATED FEBRUARY 2026 (FIG. 2001)



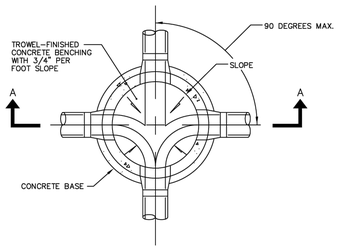
STANDARD PRECAST MANHOLE PIPE CONNECTION

NOTES:

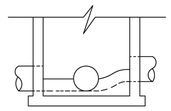
1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. AN INSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 18" OR MORE ABOVE THE MANHOLE INVERT.

MANHOLE CONNECTION DETAILS

VOL. UTL. STD. UPDATED FEBRUARY 2026 (FIG. 2002)



PLAN VIEW



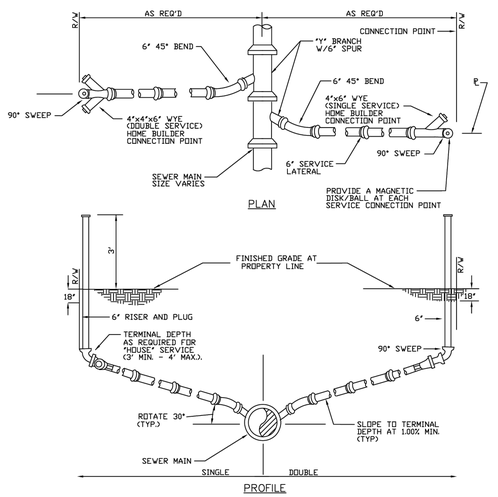
SECTION

NOTES

1. FLOW CHANNELS SHALL HAVE A MINIMUM SLOPE OF 0.40 FEET PER 100 FEET. NO STANDING WATER WILL BE PERMISSABLE.
2. ALL INVERT CHANNELS SHALL BE CONSTRUCTED TO OBTAIN A SMOOTH FLOW WITHOUT OBSTRUCTIONS.
3. SERVICE LATERALS SHALL NOT ENTER MANHOLES UNLESS SPECIFIED ON PLANS AND THEN MUST BE CONNECTED AS MAINS.
4. BRICK AND CONCRETE SHALL BE USED FOR FLOW CHANNEL BUILD UP.
5. SIDE OF FLOW CHANNEL SHALL BE AT LEAST HALF OF PIPE HEIGHT AT ALL POINTS.
6. PROPERLY SHAPED SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS TO PROVIDE FOR SMOOTH FLOWS.
7. LATERAL PIES SHALL NOT ENTER THE MANHOLE AT ANGLES GREATER THAN 90 DEGREES TO THE FLOW LINE.

MANHOLE FLOW CHANNEL DETAIL

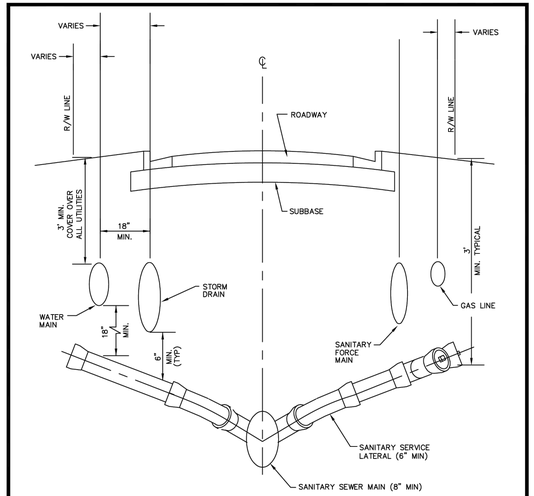
VOL. UTL. STD. UPDATED FEBRUARY 2026 (FIG. 2006)



NOTES:
1. HOME BUILDING SHALL INSTALL A CLEANOUT TO THEIR CONNECTION POINT.
2. LOCATE SINGLE LATERAL AS CLOSE TO LOT AS POSSIBLE, 25' MAXIMUM.
3. INVERT OF SERVICE LATERAL SHALL NOT PROTRUDE INTO SEWER MAIN.

SANITARY SERVICE LATERAL DETAIL

VOL. UTL. STD. UPDATED FEBRUARY 2026 (FIG. 2007)

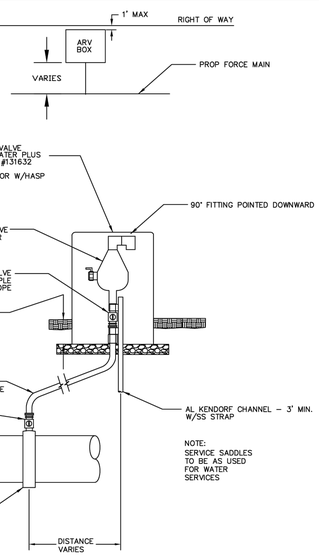


NOTES

1. STORM DRAIN MAY BE LOCATED ON EITHER SIDE OF ROAD.
2. SANITARY SEWER SERVICES ARE TO BE LAID OVER OR UNDER STORM DRAINS AS REQUIRED.
3. SANITARY SERVICE LATERAL SHALL HAVE A MINIMUM SLOPE OF 1.0%.
4. SANITARY SERVICE LATERALS TO BE A MINIMUM OF 6" DIA.
5. 18" SEPARATION SHALL BE MAINTAINED BETWEEN ALL PIPES WHEN POSSIBLE.

TYPICAL UNDERGROUND UTILITIES LOCATION

VOL. UTL. STD. UPDATED FEBRUARY 2026 (FIG. 2008)



SANITARY FORCE MAIN AIR AND VACUUM RELEASE VALVE

ARI D-025 OR EQUAL

NTS

VOL. UTL. STD. UPDATED FEBRUARY 2026 (FIG. 2104)

LEVELUP CONSULTING, LLC
505 E. JACKSON STREET
SUITE 200
TAMPA, FLORIDA 33602
OFFICE: 813-375-0616
WWW.LEVELUPFLORIDA.COM

CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

SANITARY SEWER DETAILS

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

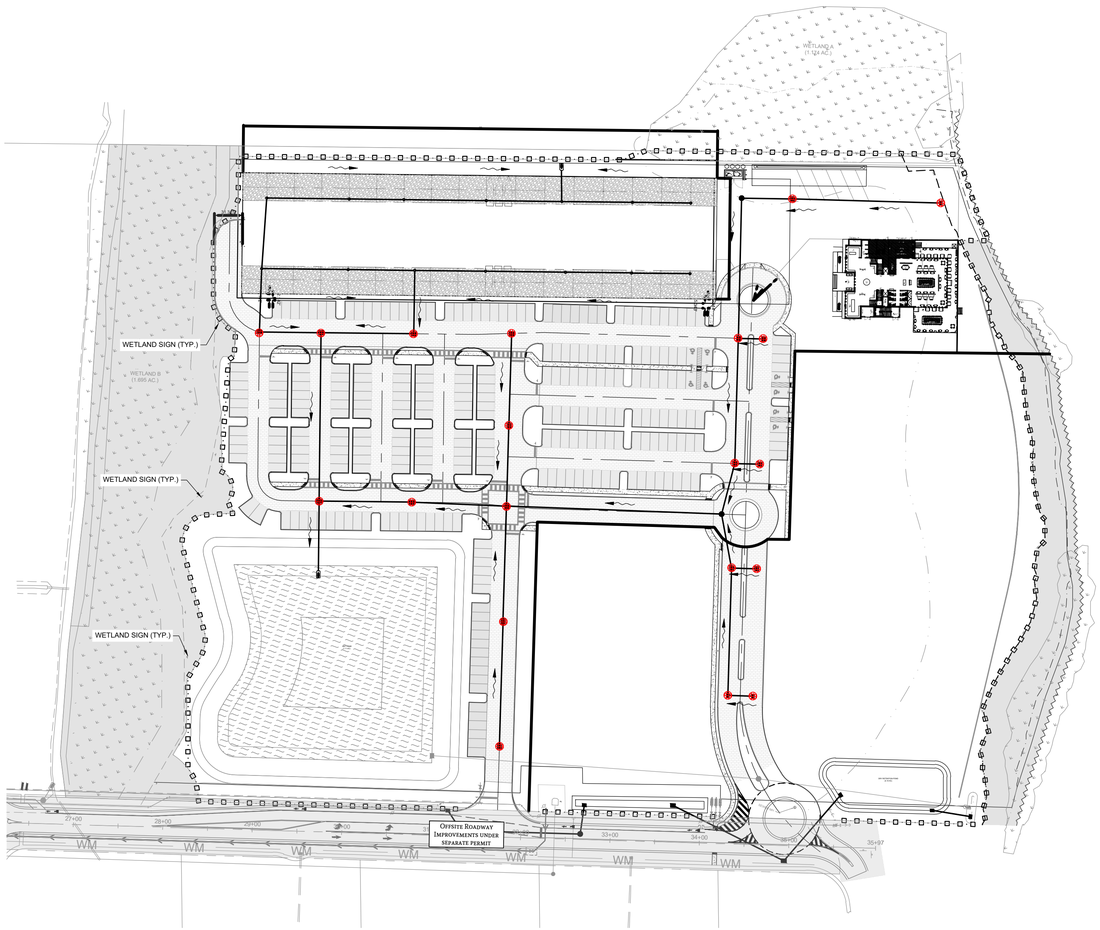
NICHOLAS ALEXANDER PEET
LICENSE NO. 92061
6/30/26
STATE OF FLORIDA
PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

SHEET C 12.2

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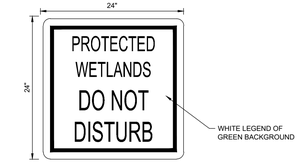
LEGEND

- PROPERTY LINE
- RIGHT OF WAY LINE
- EASEMENT LINE
- EXISTING CONTOUR
- SILT FENCE
- MITERED END SECTION
- MANHOLE
- GRATE INLET/CONTROL STRUCTURE
- YARD DRAIN
- INLET PROTECTION

GENERAL NATURAL RESOURCE NOTES

1. IMPACTS TO STATE AND FEDERALLY PROTECTED SPECIES AS LISTED IN THE MOST CURRENT VERSION OF "FLORIDA'S ENDANGERED SPECIES, THREATENED SPECIES AND SPECIES OF SPECIAL CONCERN: OFFICIAL LISTS" PREPARED BY THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) ARE NOT AUTHORIZED BY THIS PERMIT. THESE SPECIES MAY INCLUDE, BUT ARE NOT LIMITED TO, FLORIDA SCRUB JAY, AMERICAN BALD EAGLE, SHERMAN'S FOX SQUIRREL, BURROWING OWL, GOPHER TORTOISE , GOPHER FROG, AND EASTERN INDIGO SNAKE. PROTECTION EXTENDS TO THE NESTS, BURROWS AND HABITAT UTILIZED BY THESE SPECIES, IF A LISTED SPECIES (OR ITS EVIDENCE, SUCH AS BURROWS, NESTS, SCAT, TRACKS) THAT WAS NOT ADDRESSED IN THIS PERMIT IS OBSERVED PRIOR TO OR DURING CONSTRUCTION, ALL CLEARING AND EARTHMOVING ON-SITE SHALL CEASE. THE PERMITTEE SHALL CONSULT WITH THE FWC REGIONAL OFFICE AND/OR THE U.S. FISH AND WILDLIFE SERVICE REGIONAL OFFICE REGARDING NECESSARY PROTECTION MEASURES AND PROVIDE EVIDENCE OF SUCH CONSULTATION TO RESOURCE PROTECTION SERVICES PRIOR TO RESUMING WORK.

2. IF ANY TYPE A FILL (CLEAN EARTHEN MATERIAL) IS TO BE HAULED OFF-SITE, AN EARTHMOVING PERMIT OR LETTER OF EXEMPTION IS REQUIRED FROM RESOURCE PROTECTION SERVICES. IF ANY TYPE A FILL HAULED OFF-SITE IS TO BE STOCKPILED OR FILLED UPON PRIVATE PROPERTIES WITHIN THE AREAS OF THE CITY OF EDGEWATER, THE RECEIVING PROPERTY(S) SHALL POSSESS AUTHORIZATION IN THE FORM OF AN EARTHMOVING PERMIT, A WRITTEN EARTHMOVING EXEMPTION, A BUILDING PERMIT, OR CONSTRUCTION PLAN APPROVAL PRIOR TO RECEIVING SAID FILL. NO TYPE B (CONCRETE, BROKEN ASPHALT, ROCKS), TYPE C (VEGETATIVE LAND CLEARING DEBRIS), OR TYPE D (GARBAGE, REFUSE, WOOD, METAL, PLASTIC, ETC.) FILL MAY BE BURIED WITHIN OR OUTSIDE APPROVED CONSTRUCTION LIMITS. TYPE D FILL MUST BE DISPOSED AT AN APPROVED LANDFILL OR RECYCLING FACILITY. TYPE B, C, AND D FILLS GENERATED ON-SITE SHALL NOT BE STOCKPILED ON-SITE FOR GREATER THAN SIX MONTHS. TYPE B, C, AND D FILLS SHALL NOT BE HAULED TO THE SITE FROM OFF-SITE SOURCES. FOR INFORMATION ABOUT EARTHMOVING PERMITS OR EXEMPTIONS, CONTACT CITY OF EDGEWATER. IF FILL MATERIAL IS TO BE STOCKPILED WITHIN THE APPROVED CONSTRUCTION LIMITS, THE PROJECT ENGINEER MUST PROVIDE DETAILED DRAWINGS TO LAND DEVELOPMENT SERVICES FOR REVIEW AND APPROVAL.



1.) SIGN TO BE MOUNTED ON 4X4 PT POST MIN. 3' ABOVE GRADE W. MIN. 2' OF POST EXTENDING BELOW GRADE.

2.) SIGNS TO BE PROVIDED ALONG EDGE OF AND FACING AWAY FROM PRESERVED AREA AT MAX. 300' SPACING.

WETLAND PRESERVATION SIGN

NOT TO SCALE

BEST MANAGEMENT PRACTICES GUIDELINES

1.) INSTALL EROSION CONTROL DEVICES AROUND THE PROJECT BOUNDARY AND AS NEEDED TO PREVENT SOIL FROM LEAVING THE SITE.

2.) EROSION CONTROL DEVICES WILL BE BUILT TO PREVENT SOIL FROM LEAVING THE SITE AND SHALL BE INSTALLED PRIOR TO ANY SITE GRUBBING AND/OR DEMOLITION.

3.) STABILIZE ALL PERIMETER BERMS AND SLOPES TO PROTECT AGAINST EROSION.

4.) WRAP INLET GRATES WITH FILTER FABRIC UNTIL THE DRAINAGE AREA DRAINING TO EACH INLET IS STABILIZED WITH EITHER PAVEMENT OR SOD.

5.) MAINTAIN SILT FENCE, FILTER FABRIC, AND ALL OTHER EROSION CONTROL DEVICES UNTIL STABILIZATION IS ESTABLISHED TO PREVENT SOIL FROM LEAVING THE SITE.

6.) INSTALL ALL EROSION CONTROL DEVICES AS PER F.D.O.T. STANDARDS, LATEST EDITION.

7.) IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, STABILIZE THE EFFECTIVE AREA BY USING WETTING OR OTHER ACCEPTABLE METHODS.

8.) REMOVE ALL SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SILTATION CONTROL DEVICE.

9.) REMOVE SILTATION ACCUMULATIONS IN ANY DRAINAGE PIPE AFFECTED BY CONSTRUCTION ACTIVITIES ON THE SITE PRIOR TO COMPLETION OF CONSTRUCTION.

10.) MAINTAIN ALL BERM ELEVATIONS DURING CONSTRUCTION.

11.) LOCATION OF EROSION CONTROL DEVICES MAY BE ADJUSTED DUE TO FIELD CONDITIONS.

12.) THE CONTRACTOR SHALL BE RESPONSIBLE TO SAFELY STORE EQUIPMENT, FUEL, OIL, AND OTHER HAZARDOUS DEVICES IN A MANNER TO PREVENT GREASE, OILS, FUEL, AND OTHER HAZARDOUS SUBSTANCES FROM CONTAMINATING THE STORMWATER MANAGEMENT AND COLLECTION.

13.) SILT FENCE SHOWN ON THESE PLANS SHALL BE INSTALLED ALONG THE JURISDICTIONAL LINE. IF THERE IS A BUFFER IMPACT, ALL SILT FENCE SHALL BE INSTALLED AT THE TOE OF SLOPE AS SHOWN ON THESE PLANS. NO SILT FENCE SHALL BE INSTALLED IN PRESERVED WETLANDS EXCEPT AS PROTECTION AROUND TEMPORARY IMPACTS.

14.) ALL LAKES SHALL BE SOD FROM CONTROL ELEVATION TO 2' BACK OF LAKE CONTROL LINE (TOP OF BANK).

15.) SOD A 2' WIDE STRIP BEHIND ALL CURBING AND EDGE OF PAVEMENT WHERE CURB IS NOT PRESENT.

16.) SOD AROUND ALL INLETS, JUNCTION BOXES, ETC. AND GRASS ALL SWALES.

17.) TO PROTECT OPERATOR / RESPONSIBLE AUTHORITY SHALL BERESPONSIBLE FOR THE ROUTINE INSPECTION, MAINTENANCE, REPAIR AND REMOVAL OF BMP DEVICES IN ACCORDANCE WITH CURRENT RULES AND REGULATIONS OF THE CITY OF EDGEWATER, SJRWMD AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT PROGRAM.

18.) SOIL TRACKING PREVENTION DEVICES TO BE LOCATED AS SHOWN ON PLANS AT ROADWAYS THAT CONNECT TO THE PROJECT.

19.) AT ALL TIMES DURING CONSTRUCTION, PROPER MEASURES MUST BE TAKEN TO PROTECT THE SURFACE WATER MANAGEMENT SYSTEM. ALL ROADWAY INLETS THAT RECEIVE SURFACE WATER RUN-OFF FROM CONSTRUCTION AREAS MUST BE PROTECTED FROM SILT AND OTHER MATERIALS PER THE DETAILS ON SHEET ######

20.) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM:

- a.) NPDES CONSTRUCTION GENERIC PERMIT COVERAGE SHALL BE OBTAINED AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION COMMENCEMENT.
- b.) A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE POSTED AT THE SITE IN ACCORDANCE WITH CITY OF EDGEWATER CODE.
- c.) A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE PROVIDED TO WATER RESOURCES IN ACCORDANCE WITH CITY OF EDGEWATER CODE.
- d.) THE SWPPP SHALL BE CERTIFIED AND A COPY OF THE CERTIFIED DOCUMENT SHALL BE SUBMITTED TO WATER RESOURCES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION IN ACCORDANCE WITH CITY OF EDGEWATER CODE.
- e.) A COPY OF THE SWPPP AND COPIES OF THE INSPECTION AND MAINTENANCE RECORDS SHALL BE MAINTAINED AT THE PROJECT SITE, AND SHALL BE READILY AVAILABLE TO CITY OR STATE INSPECTORS PER CITY OF EDGEWATER CODE.

21.) THE DISCHARGE OF GROUNDWATER PRODUCED THROUGH DEWATERING, TO SURFACE WATERS, OR TO ANY PORTION OF THE MS4 WILL REQUIRE SEPARATE PERMITTING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP). PERMIT(S) SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF DEWATERING.

22.) DEWATERING DISCHARGES SHALL BE DIRECTED TO ONSITE WET DETENTION LAKES UNLESS OTHERWISE APPROVED BY S.J.R.W.M.D.

23.) EROSION AND SEDIMENTATION CONTROL BMPS IN ADDITION TO THOSE PRESENTED ON THE PLANS AND OUTLINED IN THE EROSION AND SEDIMENTATION CONTROL PLAN (ECP) OR STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTIES OR ROADWAYS, OFFSITE STORMWATER CONVEYANCES, OR OFFSITE RECEIVING WATERS. BMPS SHALL BE DESIGNED, INSTALLED AND MAINTAINED BY THE SITE OPERATOR TO ENSURE THAT OFF SITE SURFACE WATER QUALITY REMAINS CONSISTENT WITH STATE AND LOCAL REGULATIONS. THE OPERATOR IS THE ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND HAS AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE.

24.) OFF SITE SURFACE WATER DISCHARGES WITH TURBIDITY IN EXCESS OF 29 NEPHELOMETRIC TURBIDITY UNITS (NTUS) ABOVE BACKGROUND LEVEL SHALL BE IMMEDIATELY CORRECTED. SUCH INCIDENTS SHALL BE REPORTED TO CITY OF EDGEWATER EPC WITHIN 24 HOURS OF THE OCCURRENCE. THE REPORT SHALL INCLUDE THE CAUSE OF THE DISCHARGE AND CORRECTIVE ACTIONS TAKEN.

25.) THE OPERATOR SHALL ENSURE THAT ADJACENT PROPERTIES ARE NOT IMPACTED BY WIND EROSION, OR EMISSIONS OF UNCONFINED PARTICULATE MATTER IN ACCORDANCE WITH RULE (62-296.320(4)(c)1, F.A.C., BY TAKING APPROPRIATE MEASURES TO STABILIZE AFFECTED AREAS.

26.) FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORMWATER DRAINS OR WATERBODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS SHALL BE CONTAINED, CLEANED UP, AND IMMEDIATELY REPORTED TO CITY OF EDGEWATER. SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.

27.) IF CONTAMINATED SOIL OR AND/OR GROUNDWATER IS DISCOVERED DURING DEVELOPMENT OF THE SITE, ALL ACTIVITY IN THE VICINITY OF THE CONTAMINATION SHALL IMMEDIATELY CEASE, AND CITY OF EDGEWATER SHALL BE CONTACTED AT.

28) PRIOR TO THE START OF CLEARING AND GRUBBING, OR ANY SOIL DISTURBANCE, CITY OF EDGEWATER REVIEW STAFF SHALL BE CONTACTED FOR A SOIL EROSION AND SEDIMENT CONTROL PRE-INSPECTION MEETING.

29) NOTE TO SILT FENCE INSTALLER: TO FACILITATE "EFFECTIVE" PRESERVATION OF TREES (THOSE WITH DRIP LINES DEPICTED ON PLAN) SILT FENCE SHALL NOT BE TRENCHED IN WITHIN DRIP LINES OF TREES WHERE AVOIDABLE. IF UNAVOIDABLE THEN INSTALL SILT FENCE AT GRADE (NO TRENCHING) IN THESE LOCATIONS.

LEVELUP CONSULTING, LLC
505 E. JACKSON STREET
SUITE 200
TAMPA, FLORIDA 33602
OFFICE: 813-375-0616
WWW.LEVELUPFLORIDA.COM

0 40 80 160
SCALE IN FEET

CONSTRUCTION PLAN REVISIONS

1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

BEST MANAGEMENT PRACTICES PLAN

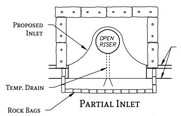
Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

NICHOLAS ALEXANDER PEET LICENSE NO. 92061 6/30/26 STATE OF FLORIDA PROFESSIONAL ENGINEER

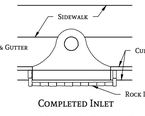
NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No.	199-05-01
SHEET	C 13.0

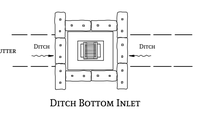
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03/20/26 2:07:25 PM PLOTTED BY: Hoo Sandal



Partial Inlet

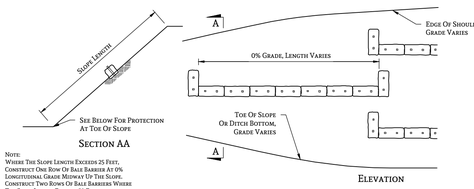


Completed Inlet



Ditch Bottom Inlet

Protection Around Inlets Or Similar Structures

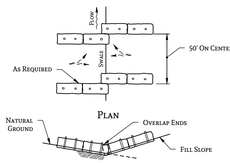


Section AA

Elevation

Note:
Where The Slope Length Exceeds 25 Feet, Construct One Row Of Bale Barrier At 0% Longitudinal Grade Midway Up The Slope. Construct Two Rows Of Bale Barriers Where The Slope Length Exceeds 50 Feet.

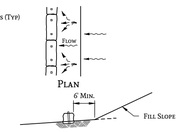
Along Fill Slope



Plan

Elevation

To Be Used Where The Natural Ground Slopes T Ward The Toe Of Slope



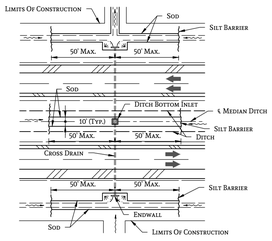
Plan

Elevation

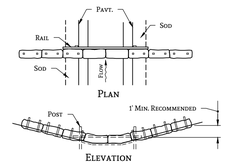
To Be Used Where The Natural Ground Slopes Away From The Toe Of Slope

At Toe Of Slope

Barriers For Fill Slopes



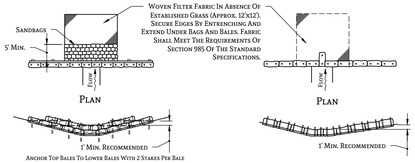
Ditch Installations At Drainage Structures



Plan

Elevation

Synthetic Bales Or Bale Type Barriers For Paved Ditches



Plan

Plan

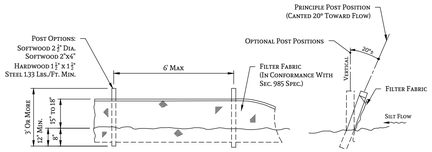
Elevation Type II

Elevation Type I

Synthetic Bales Or Bale Type Barriers For Unpaved Ditches

Notes For Synthetic Bales Of Bale Type Bariers

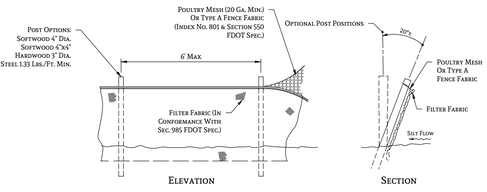
1. Type I And II Synthetic Barrier Should Be Spaced In Accordance With Chart 1, Sheet 1
2. Bales Shall Be Trenched 3" To 4" And Anchored With 2-1" X 2" (or 1" Dia.) X 4' Wood Stakes. Stakes Of Other Material Or Shape Providing Equivalent Strength May Be Used If Approved By The Engineer. Stakes Other Than Wood Shall Be Removed Upon Completion Of The Project.
3. Rails And Posts Shall E 2" X 4" Wood. Other Material Providing Equivalent Strength May Be Used If Approved By The Engineer.
4. Adjacent Bales Shall Be Butted Firmly Together.
5. Where Used In Conjunction With Silt Fence, Bales Shall Be Placed On The Upstream Side Of The Fence.
6. Bales To Be Paid For Under Contract Unit Price For Synthetic Bales. Lf. The Unit Price Shall Include The Cost Of Filter Fabric For Type I And Ii Barriers. Sandbags Shall Be Paid For Under The Unit Price For Sandbagging, CY. Rock Bags To Be Paid For Under The Contract Unit Price For Rock Bags, EA.



Elevation

Section

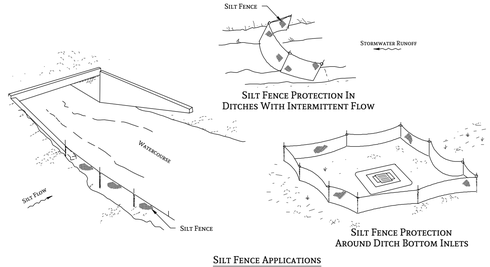
Type III Silt Fence



Elevation

Section

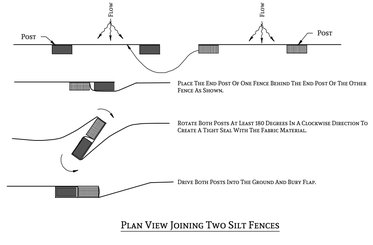
Type IV Silt Fence



Silt Fence Protection In Ditches With Intermittent Flow

Silt Fence Protection Around Ditch Bottom Inlets

Silt Fence Applications



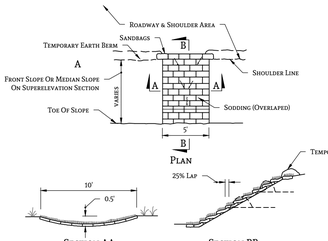
Plan View Joining Two Silt Fences

Notes For Silt Fences

1. Type III Silt Fence To Used At Most Locations. Where Used In Ditches, The Spacing For Type Iiisilt Fence Shall Be In Accordance With Chart 1, Sheet 1.
2. Type IV Silt Fence To Be Used Where Large Sediment Loads Are Anticipated. Suggested Use Is Where Fill Slope Is 1:2 Or Steeper And Length Of Slope Exceeds 25 Feet. Avoid Use Where The Detained Water May Back Into Travel Lanes Or Off The Right Of Way.
3. Do Not Construct Silt Fences Across Permanent Flowing Watercourses. Silt Fences Are To Be Upland Locations And Turbidity Barriers Used At Permanent Bodies Of Water.
4. Where Used As Slope Protection, Silt Fence Is To Be Constructed On 0% Longitudinal Grade To Avoid Channelizing Runoff Along The Length Of The Fence.
5. Silt Fence To Be Paid For Under The Contract Unit Price For Staked Silt Fence, (Lf)

Temporary Erosion And Sediment Control

N.T.S.



Plan

Section AA

Section BB

Sod Flume (Sodding Overlapped)

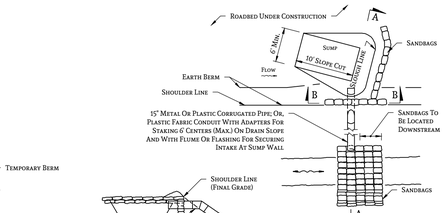


Sod Flume (Sodding Overplayed) (To Be Installed As Filled Construction Progressed As Directed By The Engineer.

Temporary Slope Drains (Estimate At 400' Spacing On Grades 1% Or Greater, Final Spacing To Be As Directed By The Engineer.) Slope Drains To Be Replaced By Permanent Overlapped Sod Flume After Final Shoulder Grade Is Established.

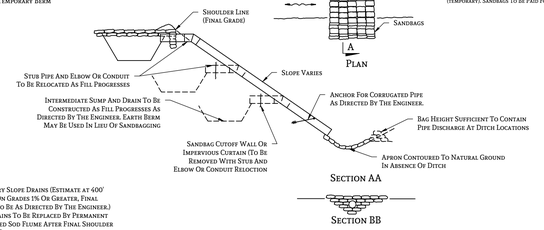
Elevation

Slope Drain Application



Plan

Note:
Slope Drain Pipe To Be Paid For As Slope Drains (Temporary) Lf. Based On Linear Feet Of Pipe Or Conduit Installed. Payment To Be Made For One Installation Per Site. Include One Stub And Elbow Or One Intake Flume Or Flashing. Sump Construction And Maintenance And Curtains To Be Included In Cost For Slope Drains (Temporary). Sandbags To Be Paid For As Sandbagging Cy.



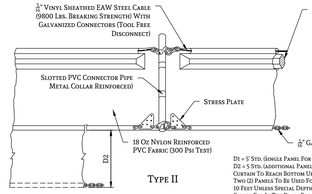
Section AA

Section BB

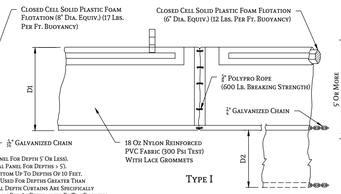
Temporary Slope Drain

Temporary Slope Drain And Sod Flume

N.T.S.



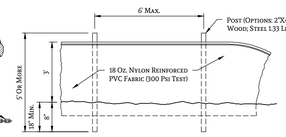
Type II



Type I

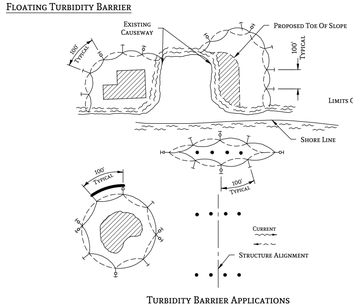
D1 = 5' Std. (Single Panel For Depth 5' Or Less).
D2 = 5 Std. (additional Panel For Depths > 5).
Curtain To Reach Bottom Up To Depths Of 10 Feet.
Two (2) Panels To Be Used For Depths Greater Than 10 Feet Unless Special Depth Curtains Are Specifically Called For In The Plans For As Determined By The Engineer.

Notice:
Components Of Types I And II May Be Similar Or Identical To Proprietary Designs. Any Infringement On The Proprietary Rights Of The Designer Shall Be The Sole Responsibility Of The User. Substitutions For Types I And Types II Shall Be As Approved By The Engineer.

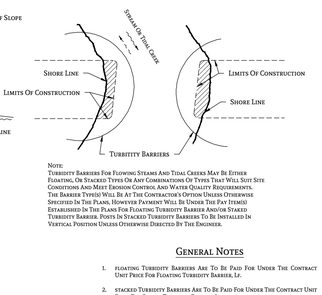


Staked Turbidity Barrier

Floating Turbidity Barrier



Turbidity Barrier Applications



Note:
Turbidity Barriers For Flowing Steams And Tidal Creeks May Be Either Floating, Or Staked Types Or Any Combinations Of Types That Will Suit Site Conditions And Meet Erosion Control And Water Quality Requirements. The Barrier Type(s) Will Be At The Contractor's Option Unless Otherwise Specified In The Plans, However Payment Will Be Under The Pay Item(s) Established In The Plans For Floating Turbidity Barrier And/or Staked Turbidity Barrier. Posts In Staked Turbidity Barriers To Be Installed In Vertical Position Unless Otherwise Directed By The Engineer.

Legend	
	Pile Locations
	Dredge Or Fill Area
	Mooring Buoy W/ Anchor
	Anchor
	Barrier Movement Due To Current Action

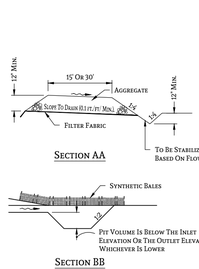
Note:
1. Turbidity Barriers Are To Be Used In All Permanent Bodies Of Water Regardless Of Water Depth.
2. Number And Spacing Anchors Dependent On Current Velocities.
3. Deployment Of Barrier Around Pile Locations May Vary To Accommodate Construction Operations.
4. Navigation May Be Require Segmenting Barrier During Construction Operations.
5. For Additional Information See Section 104 Of The Standard Specifications.

General Notes

1. floating Turbidity Barriers Are To Be Paid For Under The Contract Unit Price For Floating Turbidity Barrier, Lf.
2. staked Turbidity Barriers Are To Be Paid For Under The Contract Unit Price For Staked Turbidity Barrier, Lf.

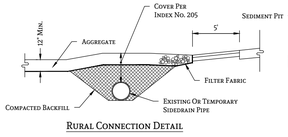
Turbidity Barriers

N.T.S.

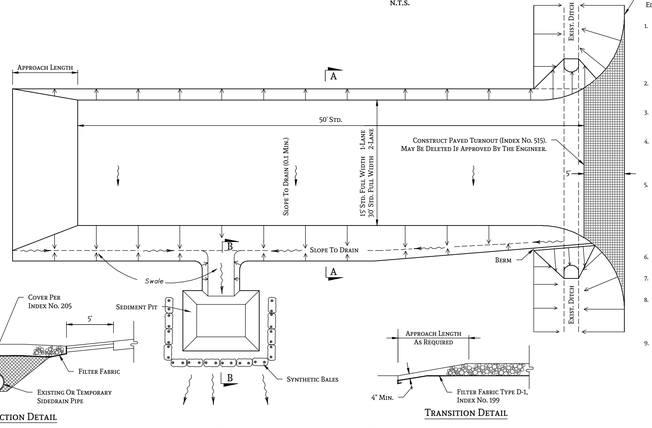


Section AA

Section BB



Rural Connection Detail



Transition Detail

Soil Tracking Prevention Device - Type A

N.T.S.

General Notes

1. A Soil Tracking Prevention Device (STPD(shall be constructed atlocations designated by the engineer for points of egress from unstabilized areas of the project to public roads where off-site tracking of mud could occur. Traffic from unstabilized areas of the construction project shall be directed thro a STPD. Barriers, flagging, or other positive means shall be used as required to limit and direct vehicular egress across the STPD.
2. The Contractor may propose an alternative technique to minimize off-site tracking of sediment. The alternative must be reviewed and approved by the Engineer prior to its use.
3. All materials spilled, dropped, or tracked onto public roads (including the STPD aggregate and construction mud) shall be removed daily, or more frequently if so directed by the Engineer.
4. Aggregates shall be as described in Section 901 excluding 901-2.3. Aggregates shall be FDOT size #1. If this size is not available, the next available smaller size aggregate may be substituted with the approval of the Engineer. Sizes containing excessive small aggregate will track off the project and are unsuitable.
5. The sediment pit should provide a retention volume of 3600 cubic feetcare of surface area draining to the pit. When the STPD is isolated from other drainage areas, the following pit volumes will satisfy this requirement: 15' X 50'=100 ft. 3 30' X 50'=200 ft. 3 As an option to the sediment pit, the width of the swale bottom can be increased to obtain the volume. When the sediment pit or swale volume has been reduced to one half, it shall be cleaned. When a swale is used, synthetic bales or silt fence shall be placed along the entire length.
6. The swale ditch draining the STPD shall have a 0.02% minimum and a 1.0% maximum grade along the STPD and to the sediment pit.
7. Mitered end sections are not required when the sidedrain pipe satisfies the clear zone requirements.
8. The STPD shall be maintained in a condition that will allow it to perform its function. To prevent off-site tracking, the STPD shall be rinsed daily when in use) to move accumulated mud downward into the stone. Additional stabilization of the vehicular route leading to the STPD may be required to limit the mud tracked.
9. A STPD shall be paid for under the contract unit price for Soil Tracking Prevention Device, Ea. The unit price shall constitute full compensation for construction, maintenance, replacement of materials, removal, and restoration of the area utilized for the STPD; including but not limited to excavation, grading, temporary pipe (including MES when required), filter fabric, aggregate, paved turnout (including asphalt and base construction), ditch stabilization, approach route stabilization, sediment removal and disposal, water, rinsing and cleaning of the STPD and cleaning of public roads, grassing and sod. Synthetic Bale or Bale Type Barrier shall be paid for under the contract unit price for Synthetic Bales, Lf. Silt fence shall be paid for under the contract unit price for Staked Silt Fence, Lf.
10. The nominal size of a standard STPD is 15' x 50' unless otherwise shown in the plans. If the volume of entering and existing vehicles warrant, a 30' width STPD may be used if approved by the Engineer. When a double width (30') STPD is used, the pay quantity shall be 2 for each location.

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Suite 200
Tampa, Florida 33602
Office: 813-375-0616
www.levelupflorida.com

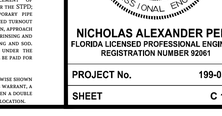
CONSTRUCTION PLAN REVISIONS		
1	08/29/25	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
2	02/10/26	REVISED PLANS PER COUNTY AND CLIENT COMMENTS
3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

BEST MANAGEMENT PRACTICES DETAILS

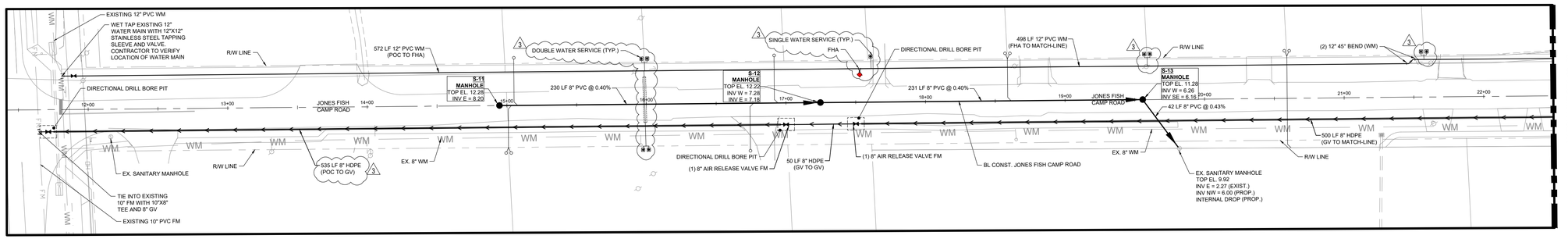
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Florida Certificate of Authorization No. LC26000638

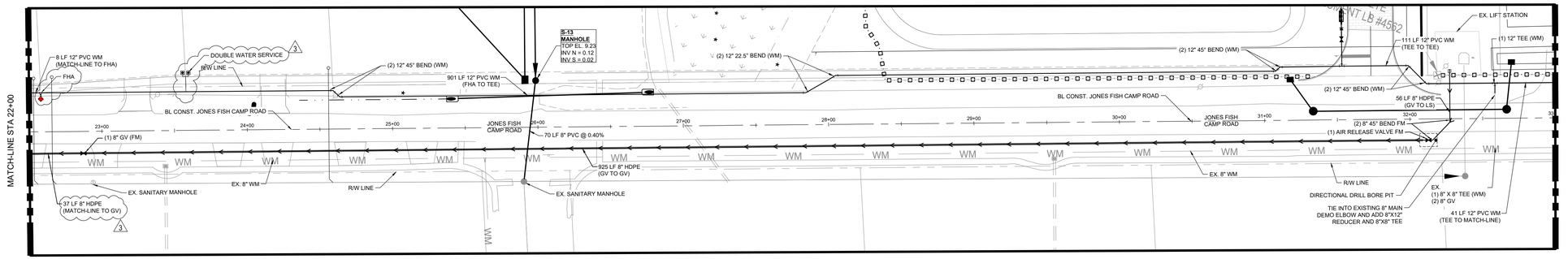


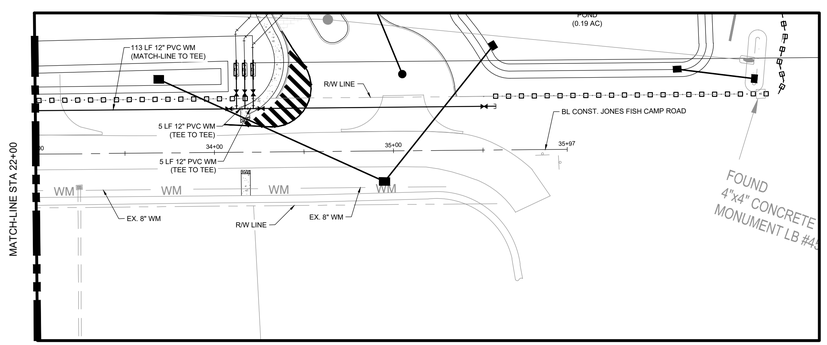
NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No.	199-05-01
SHEET	C 13.1

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

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CONSTRUCTION PLAN REVISIONS		
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EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

OFFSITE UTILITY PLAN

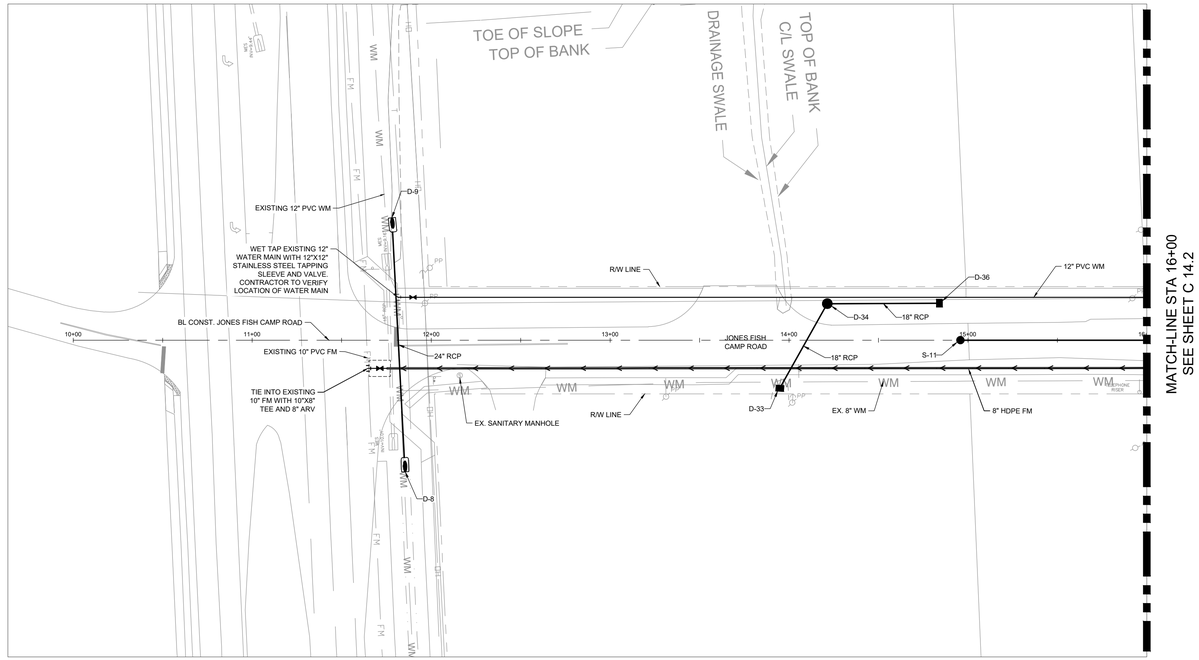
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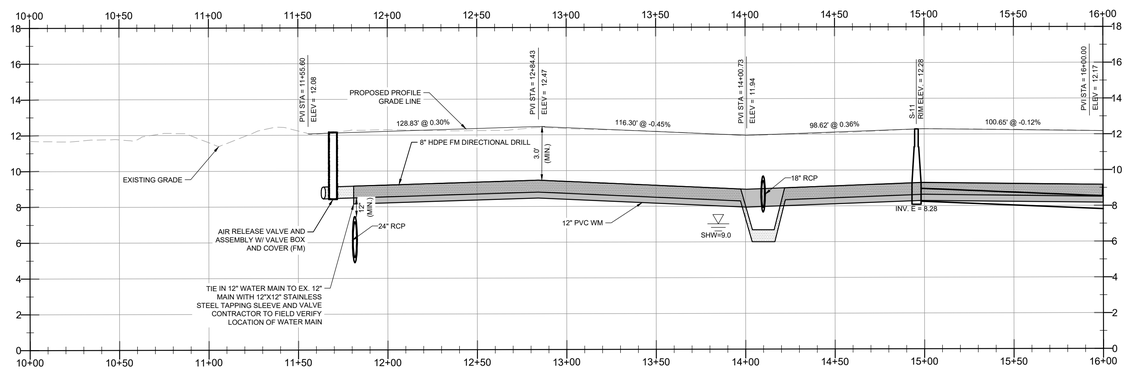
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FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No.	**199-05-01**
SHEET	**C 14.0**

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PROFILE SCALE:
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 4'



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CONSTRUCTION PLAN REVISIONS

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3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

PLAN AND PROFILE - JFC

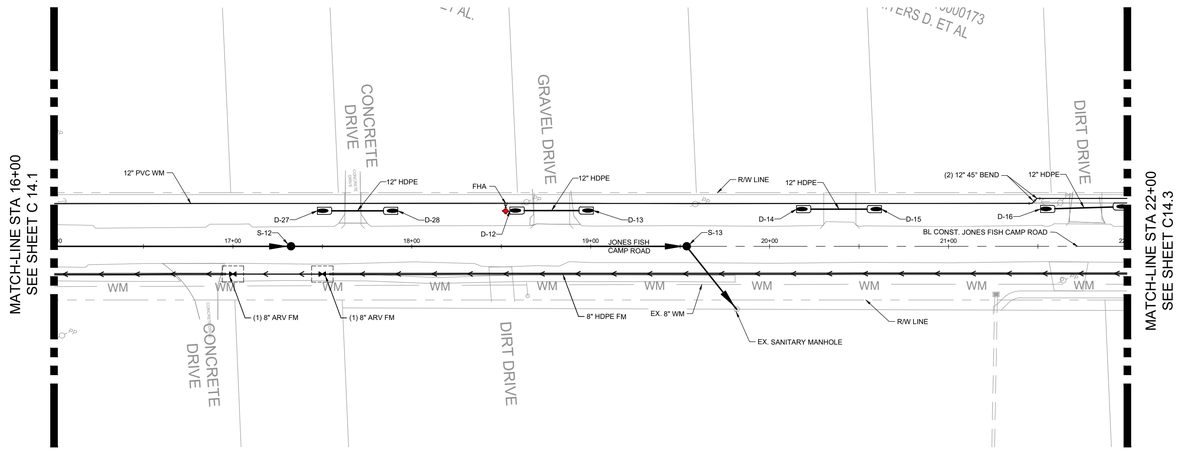
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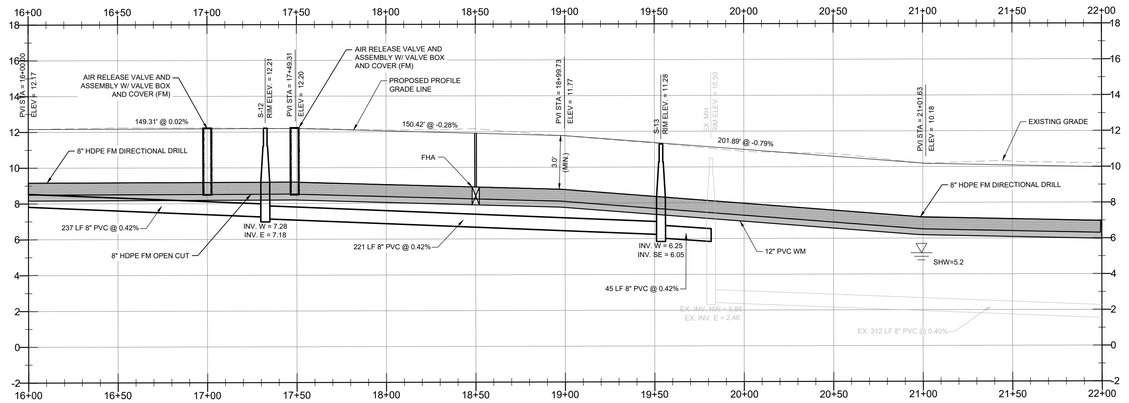
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REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

SHEET C 14.1



PROFILE SCALE:
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 4'



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CONSTRUCTION PLAN REVISIONS

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3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

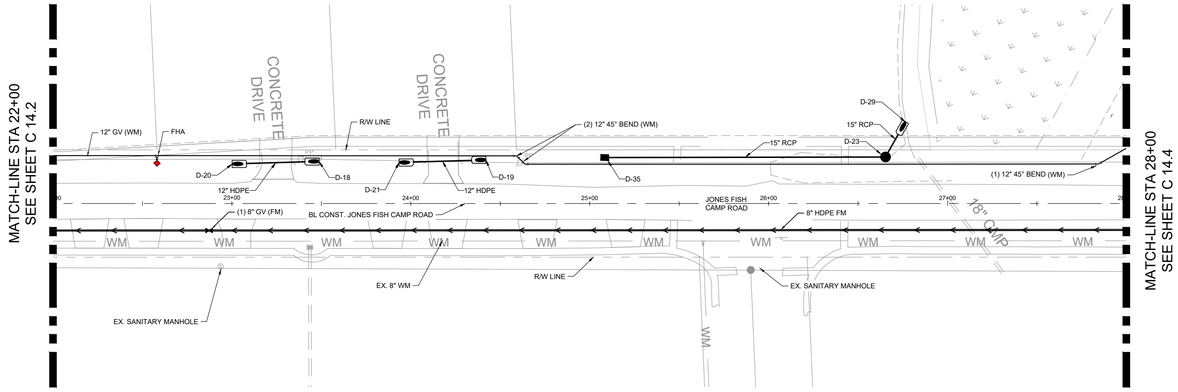
PLAN AND PROFILE - JFC

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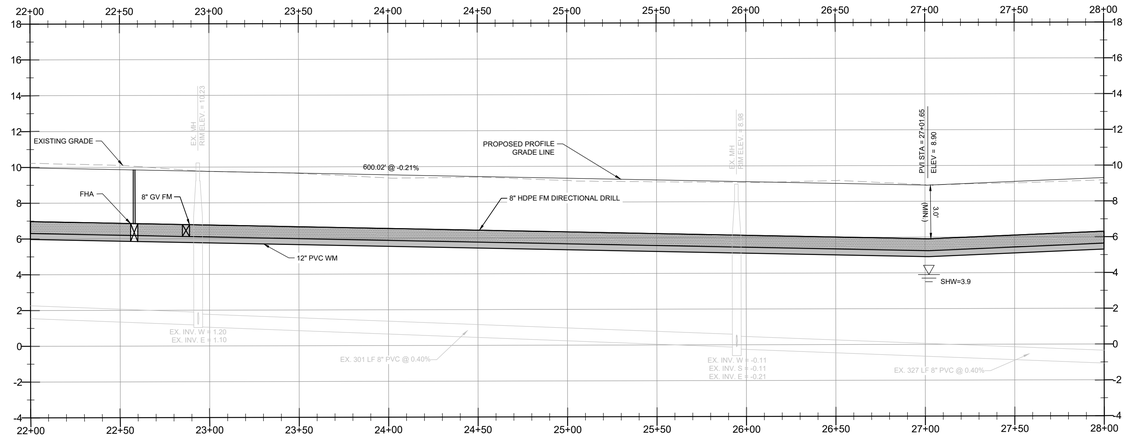
NICHOLAS ALEXANDER PEET
LICENSE
NO. 92061
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STATE OF FLORIDA
PROFESSIONAL ENGINEER

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REGISTRATION NUMBER 92061

PROJECT No.	**199-05-01**
SHEET	**C 14.2**



PROFILE SCALE:
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VERTICAL: 1" = 4'



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EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

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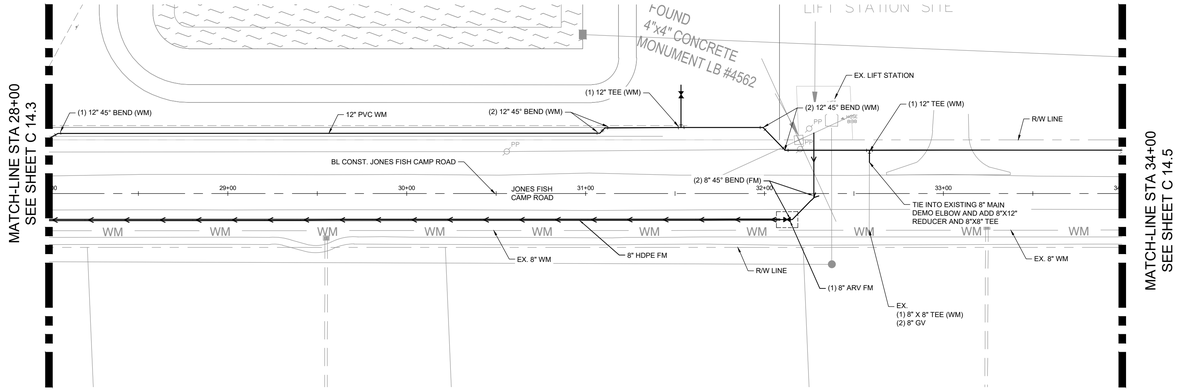
NICHOLAS ALEXANDER PEET LICENSE NO. 92061 6/30/26 STATE OF FLORIDA PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

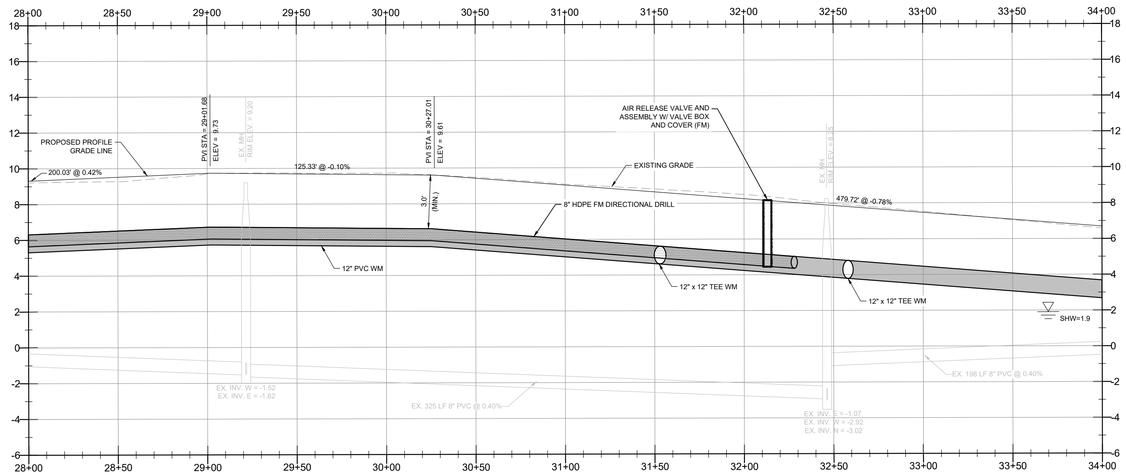
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PROFILE SCALE:
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VERTICAL: 1" = 4'



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CONSTRUCTION PLAN REVISIONS

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EDGEWATER RIVER OAKS MARINA

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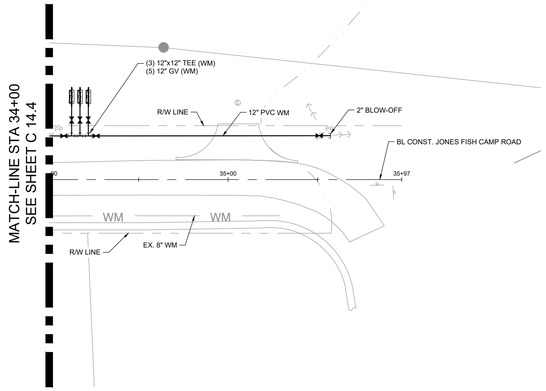
NICHOLAS ALEXANDER PEET
LICENSE
NO. 92061
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STATE OF
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PROFESSIONAL ENGINEER

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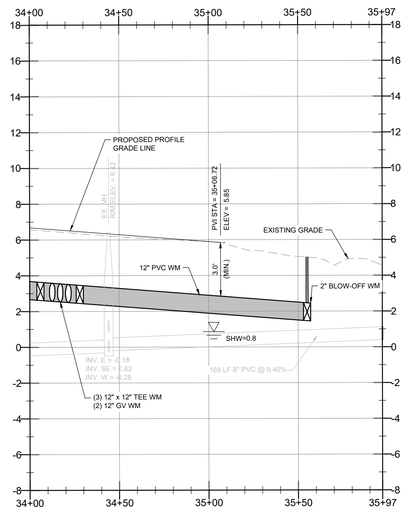
PROJECT No. 199-05-01

SHEET C 14.4

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PROFILE SCALE:
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 4'



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CONSTRUCTION PLAN REVISIONS

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3	03/19/26	REVISED PLANS PER COUNTY AND CITY COMMENTS

EDGEWATER RIVER OAKS MARINA

CLIENT: INDIAN RIVER SHORES, LLC

PLAN AND PROFILE - JFC

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

NICHOLAS ALEXANDER PEET
LICENSE
NO. 92061
6/30/26
STATE OF FLORIDA
PROFESSIONAL ENGINEER

NICHOLAS ALEXANDER PEET
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 92061

PROJECT No. 199-05-01

SHEET C 14.5

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TREE REMOVAL NOTES:

1. TREE REMOVAL/REPLACEMENT AND LANDSCAPING WILL BE IN ACCORDANCE WITH SECTION(S) 21-55.03 OF CITY OF EDGEWATER LDC.

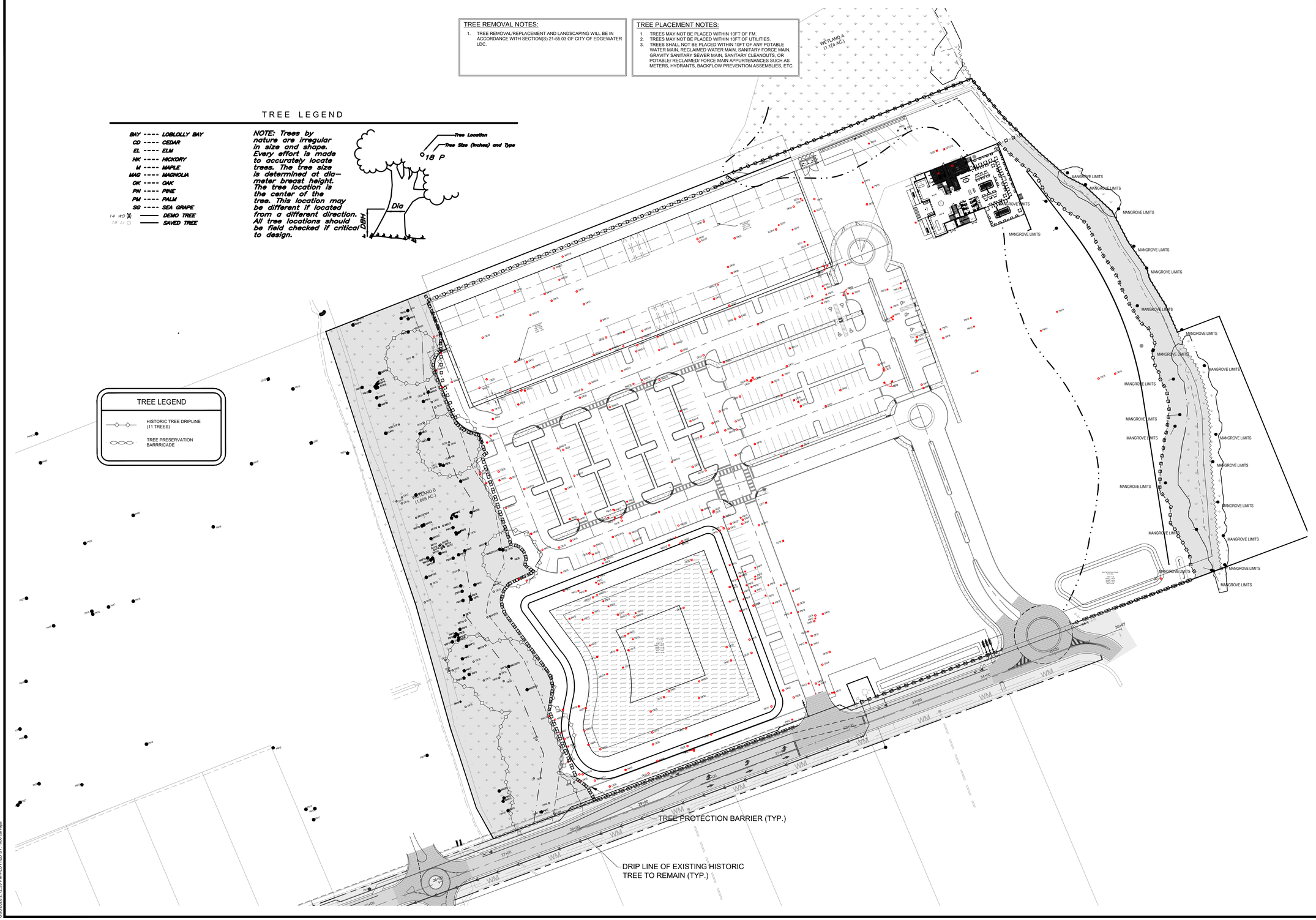
TREE PLACEMENT NOTES:

1. TREES MAY NOT BE PLACED WITHIN 10FT OF FM.
2. TREES MAY NOT BE PLACED WITHIN 10FT OF UTILITIES.
3. TREES SHALL NOT BE PLACED WITHIN 10FT OF ANY POTABLE WATER MAIN, RECLAIMED WATER MAIN, SANITARY FORCE MAIN, GRAVITY SANITARY SEWER MAIN, SANITARY CLEANOUTS, OR POTABLE/ RECLAIMED/ FORCE MAIN APPURTENANCES SUCH AS METERS, HYDRANTS, BACKFLOW PREVENTION ASSEMBLIES, ETC.

TREE LEGEND

BAY ---- LOBLOLLY BAY
CD ---- CEDAR
EL ---- ELM
HK ---- HICKORY
M ---- MAPLE
MAG ---- MAGNOLIA
OK ---- OAK
PN ---- PINE
PM ---- PALM
SG ---- SEA GRAPE
14 WO ---- DEMO TREE
19 LI ---- SAVED TREE

NOTE: Trees by nature are irregular in size and shape. Every effort is made to accurately locate trees. The tree size is determined at dia-meter breast height. The tree location is the center of the tree. This location may be different if located from a different direction. All tree locations should be field checked if critical to design.



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0 30 60 120
SCALE IN FEET

CONSTRUCTION PLAN REVISIONS

EDGEWATER RIVER OAKS MARINA PHASE 1

CLIENT: INDIAN RIVER SHORES, LLC

TREE PROTECTION PLAN

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000538

REGISTERED LANDSCAPE ARCHITECT
BRIDGER E. DEMARS
LA 6667420
STATE OF FLORIDA

BRIDGER E. DEMARS
REGISTERED LANDSCAPE ARCHITECT
REGISTRATION NUMBER 6667420

PROJECT No.	199-05-02L
SHEET	L 1.0

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BUFFER NOTES:

1. ROADWAY BUFFERS SHALL NOT BE LOCATED IN POTENTIAL FUTURE RIGHT OF WAY RESERVATION SETBACKS. ALL BUFFERS SHALL BE EXCLUSIVE OF ANY RIGHT-OF-WAY OR FUTURE DEDICATIONS.
2. BUFFER REQUIREMENTS MAY BE MET BY TREE PRESERVATION AREAS.

10' WIDE GREENBELT BUFFER (350 LF)

REQUIRED: 2 CANOPY TREE EVERY 100FT (MIN 2.5" CAL.)
3 UNDERSTORY TREES EVERY 100FT (MIN 2.5" CAL.)
20 SHRUBS EVERY 100FT (MIN 18" HEIGHT)
6' FENCE

70 | Serenoa repens 'Cinerea'
Silver Saw Palmetto

4 | Magnolia grandiflora `D.D. Blanchard'
D.D. Blanchard Southern Magnolia

3 | Quercus virginiana
Southern Live Oak

11 | Lagerstroemia indica
Crape Myrtle

37 | Quercus virginiana
Southern Live Oak

22 | Lagerstroemia indica
Crape Myrtle

VEHICLE USE AREAS (OVER 1,000 SF)

REQUIRED: 360 SQUARE FEET OF PLANTING AREA
CANOPY TREE - 4 PER 20 PARKING SPACES
SHRUBS - 20 PER 20 PARKING SPACES
NO MORE THAN 10 CONSECUTIVE PARKING SPACES SHALL BE ALLOWED WITHOUT AN INTERIOR LANDSCAPE ISLAND IN VEHICLE USE AREAS PER LDC SECTION 701.3.A.4

VEHICLE USE AREAS LANDSCAPING

REQUIRED: MAX 10 PARKING SPACES BEFORE A 10' PLANTING ISLAND

30' VISIBILITY TRIANGLE (TYP.)

2 | Quercus virginiana
Southern Live Oak

3 | Lagerstroemia indica
Crape Myrtle

30 | Viburnum obovatum
Walter`s Viburnum

2 | Magnolia grandiflora `D.D. Blanchard'
D.D. Blanchard Southern Magnolia

29 | Hamelia patens' Compacta'
Dwarf Fire Bush

9 | Lagerstroemia indica
Crape Myrtle

4 | Quercus virginiana
Southern Live Oak

39 | Hamelia patens' Compacta'
Dwarf Fire Bush

47 | Viburnum obovatum
Walter`s Viburnum

3 | Magnolia grandiflora `D.D. Blanchard'
D.D. Blanchard Southern Magnolia

49 | Taxodium distichum
Bald Cypress

4 | Magnolia grandiflora `D.D. Blanchard'
D.D. Blanchard Southern Magnolia

9 | Lagerstroemia indica
Crape Myrtle

6 | Quercus virginiana
Southern Live Oak

52 | Viburnum obovatum
Walter`s Viburnum

45 | Hamelia patens' Compacta'
Dwarf Fire Bush

OFF-SITE TREE PLANTING AREA WITHIN RIGHT-OF-WAY ADJACENT TO JONES FISHCAMP ROAD FOR TREE DEFICIT FROM EDGEWATER MARINA PHASE 1 SITE CLEARING

20' WIDE GREENBELT BUFFER (670 LF)

REQUIRED: 3 CANOPY TREE EVERY 100FT (MIN 2.5" CAL.)
3 UNDERSTORY TREES EVERY 100FT (MIN 2.5" CAL.)
30 SHRUBS EVERY 100FT (MIN 18" HEIGHT)
7' WIDE STRIP OF SOD
6' FENCE

JONES FISH CAMP RD
INTERSECTION LIMIT OF CLEAR SIGHT

OFF-SITE TREE PLANTING AREA WITHIN RIGHT-OF-WAY ADJACENT TO JONES FISHCAMP ROAD FOR TREE DEFICIT FROM EDGEWATER MARINA PHASE 1 SITE CLEARING

SIGHT DISTANCE CALCULATIONS		
JONES FISH CAMP RD		
DESIGN SPEED (V) (MPH)	TIME GAP (tg) (SEC)	ISD (FT)
35	11.5	591.675
POSTED SPEED = 30MPH		
ISD= 1.47*V*tg		
FLORIDA GREENBOOK SECTION C.9.b.4		

SCALE IN FEET: 0 30 60 120

CONSTRUCTION PLAN REVISIONS

EDGEWATER RIVER OAKS MARINA PHASE 1

CLIENT: INDIAN RIVER SHORES, LLC

LANDSCAPE PLAN

LEVELUP CONSULTING, LLC
505 E. JACKSON STREET
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TAMPA, FLORIDA 33602
OFFICE: 813-375-0616
WWW.LEVELUPFLORIDA.COM

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

REGISTERED LANDSCAPE ARCHITECT BRIDGER E. DEMARS LA 6667420 STATE OF FLORIDA

BRIDGER E. DEMARS
REGISTERED LANDSCAPE ARCHITECT
REGISTRATION NUMBER 6667420

PROJECT No.	199-05-02L
SHEET	L 3.0

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IRRIGATION LEGEND

SYMBOL	DESCRIPTION
	DRIP/MICRO IRRIGATION

PROPOSED IRRIGATION WELL LOCATION

MANGROVE LIMITS

0 30 60 120
SCALE IN FEET

CONSTRUCTION PLAN REVISIONS

EDGEWATER RIVER OAKS MARINA PHASE 1

CLIENT: INDIAN RIVER SHORES, LLC

LANDSCAPE PLAN

LEVELUP CONSULTING, LLC
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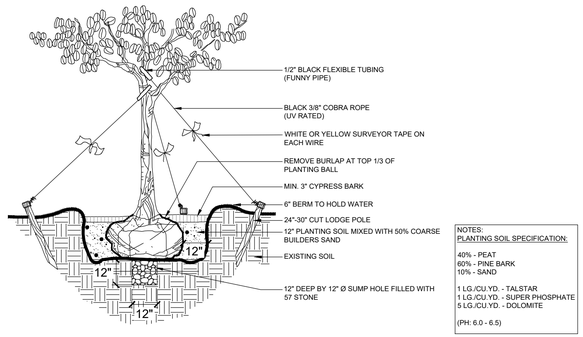
Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

REGISTERED LANDSCAPE ARCHITECT BRIDGER E. DEMARS LA 6667420 STATE OF FLORIDA

BRIDGER E. DEMARS
REGISTERED LANDSCAPE ARCHITECT
REGISTRATION NUMBER 6667420

PROJECT No.	199-05-02L
SHEET	L 4.0

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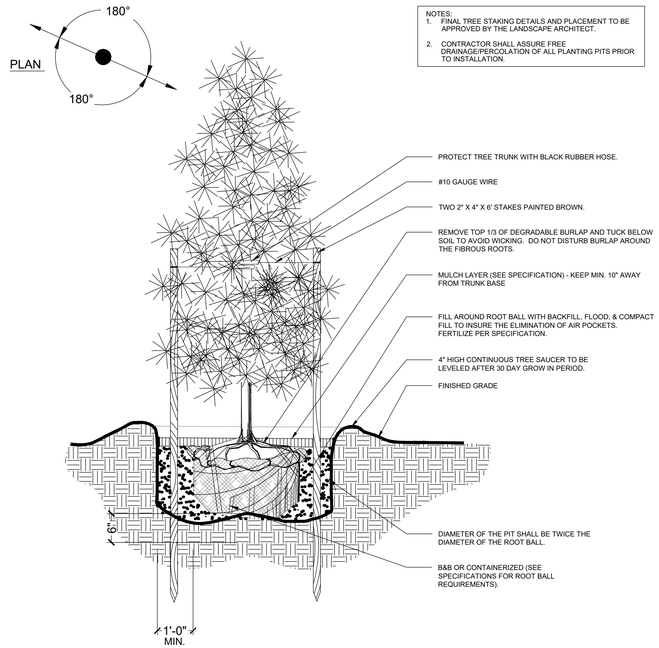
NOTES:
PLANTING SOIL SPECIFICATION:

40% - PEAT
60% - PINE BARK
10% - SAND

1 LG./CU.YD. - TALSTAR
1 LG./CU.YD. - SUPER PHOSPHATE
5 LG./CU.YD. - DOLOMITE

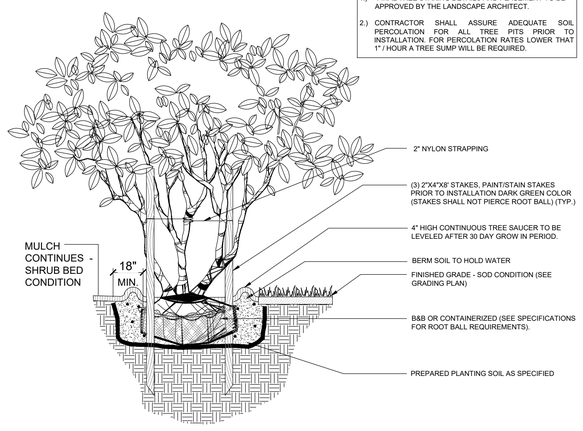
(PH: 6.0 - 6.5)

D MAGNOLIA TREE
SCALE: N.T.S.



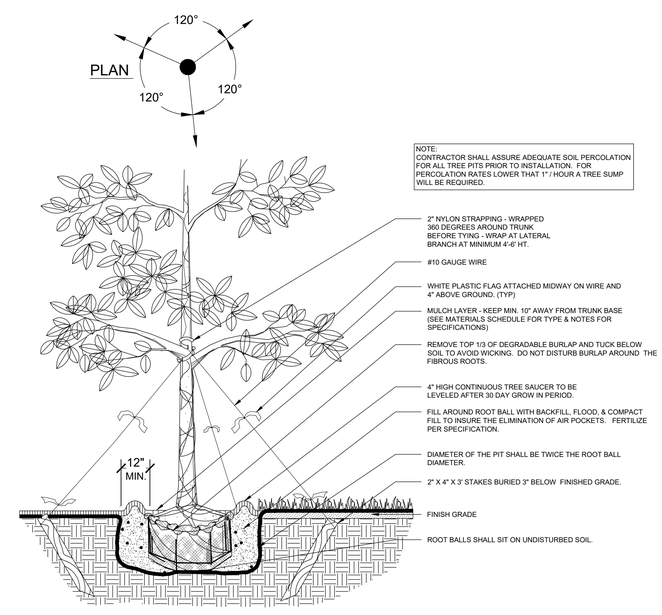
NOTES:
1. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY THE LANDSCAPE ARCHITECT.
2. CONTRACTOR SHALL ASSURE FREE DRAINAGE/PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

E SMALL TREE INSTALLATION
SCALE: N.T.S.



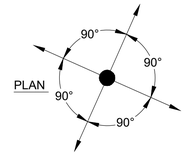
NOTES:
1.) FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY THE LANDSCAPE ARCHITECT.
2.) CONTRACTOR SHALL ASSURE ADEQUATE SOIL PERCOLATION FOR ALL TREE PITS PRIOR TO INSTALLATION. FOR PERCOLATION RATES LOWER THAT 1" / HOUR A TREE SUMP WILL BE REQUIRED.

A MULTI-TRUNK TREE INSTALLATION & STAKING
SCALE: N.T.S.

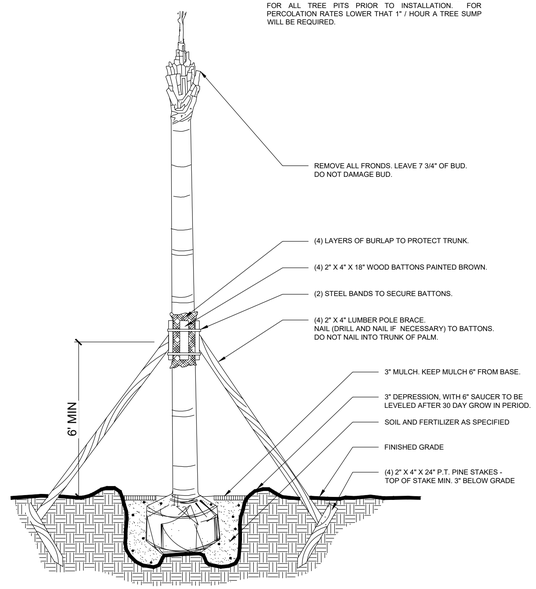


NOTE:
CONTRACTOR SHALL ASSURE ADEQUATE SOIL PERCOLATION FOR ALL TREE PITS PRIOR TO INSTALLATION. FOR PERCOLATION RATES LOWER THAT 1" / HOUR A TREE SUMP WILL BE REQUIRED.

B LARGE TREE INSTALLATION & STAKING
SCALE: N.T.S.



NOTE:
CONTRACTOR SHALL ASSURE ADEQUATE SOIL PERCOLATION FOR ALL TREE PITS PRIOR TO INSTALLATION. FOR PERCOLATION RATES LOWER THAT 1" / HOUR A TREE SUMP WILL BE REQUIRED.



C CABBAGE PALM INSTALLATION
SCALE: N.T.S.

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NOT TO SCALE

CONSTRUCTION PLAN REVISIONS

EDGEWATER RIVER OAKS MARINA PHASE 1
CLIENT: INDIAN RIVER SHORES, LLC
LANDSCAPE DETAILS

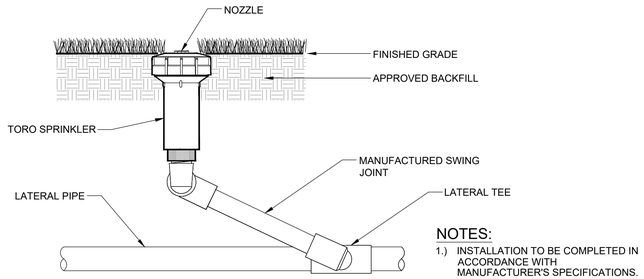
Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

REGISTERED LANDSCAPE ARCHITECT BRIDGER E. DEMARS LA 6667420 STATE OF FLORIDA

BRIDGER E. DEMARS
REGISTERED LANDSCAPE ARCHITECT
REGISTRATION NUMBER 6667420

PROJECT No.	**199-05-02L**
SHEET	**L 5.0**

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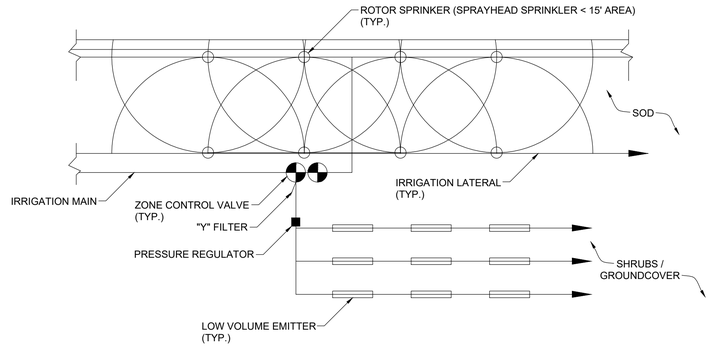


NOTES:

1.) INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

2.) INSTALL SPRINKLER AT FINISHED GRADE.

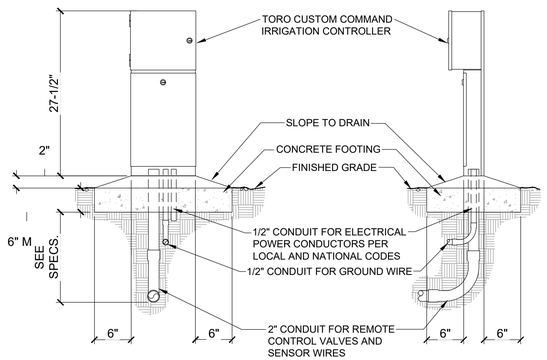
C FIXED-SPRAY SPRINKLER (TOTO 570Z SHOWN)
SCALE: N.T.S.



D TYPICAL IRRIGATION DETAIL
SCALE: N.T.S.

CITY OF EDGEWATER IRRIGATION NOTES:

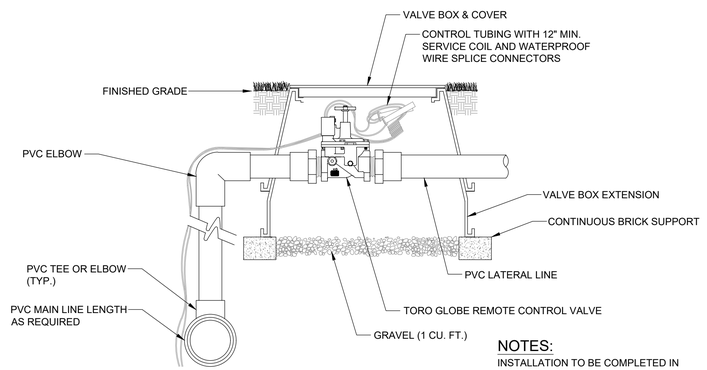
1. All landscape irrigation systems shall be low-volume irrigation systems. A low-volume irrigation system is designed to provide no more than the minimum amount of water required by any specific landscape material to ensure survival of that material. Such a system utilizes a combination of sprinkler mechanisms and zones to accommodate the individual irrigation requirements of each type of landscape material, including trees, shrubs, ornamentals and turf areas.
2. All underground irrigation systems shall be regulated by an automatic timer or controller.
3. The design of the system shall include sprinkler heads and devices appropriate for the landscape material to be irrigated.
4. Low-trajectory heads or low-volume water distributing devices shall be used to irrigate confined areas in order to prevent overspray onto impervious areas.
5. Irrigation systems shall be designed to place high water demand areas, such as lawns, on separate zones from those areas with reduced water requirements.
6. Automatically controlled irrigation systems shall be operated by an irrigation controller that is capable of irrigating high requirement areas and a different schedule from low water requirement areas, provided that separate zones exist as described in sub[section] 5. above.
7. Irrigation systems shall be designed so that impervious areas are not watered.
8. Moisture sensing devices (i.e., rain check valve) shall be installed to regulate the controller's operation during wet weather.
9. Precipitation rates for each zone shall be calculated and noted on the irrigation plans.
10. The watering schedule recommended by the urban forester shall be noted on the irrigation plans.
11. All irrigation systems using a well shall be outfitted with backflow protection.
12. Irrigation systems will be supplied via groundwater wells permitted through the Florida Department of Health.



NOTE:

INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

A PEDESTAL-MOUNT CONTROLLER (TORO CONTROLLER SHOWN)
SCALE: N.T.S.



NOTES:

INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

B VALVE (TORO 220 SERIES SHOWN)
SCALE: N.T.S.

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NOT TO SCALE

CONSTRUCTION PLAN REVISIONS

EDGEWATER RIVER OAKS MARINA PHASE 1

CLIENT: INDIAN RIVER SHORES, LLC

IRRIGATION DETAILS

Engineering Business Certificate of Authorization No. 32771
Florida Certificate of Authorization No. LC26000638

REGISTERED LANDSCAPE ARCHITECT BRIDGER E. DEMARS LA 6667420 STATE OF FLORIDA

BRIDGER E. DEMARS
REGISTERED LANDSCAPE ARCHITECT
REGISTRATION NUMBER 6667420

PROJECT No.	199-05-02L
SHEET	L 6.0

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PLANT SCHEDULE 1

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER TYPE	HEIGHT	SPECIFICATION	NATIVE
TREES								
	54	Lagerstroemia indica	Crape Myrtle	2.5" Cal.	B&B	8` Ht. Min.	Florida No. 1 or better	No
	13	Magnolia grandiflora `D.D. Blanchard`	D.D. Blanchard Southern Magnolia	2.5" Cal.	B&B	8` Ht. Min.	Florida No. 1 or better	Yes
	52	Quercus virginiana	Southern Live Oak	2.5" Cal.	B&B	10` Ht. Min	Full to Ground, Florida No. 1 or better	Yes
	49	Taxodium distichum	Bald Cypress	2.5" Cal.	B&B	10` Ht. Min	Florida No.1 or better	Yes

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	HEIGHT	NATIVE	SPACING
SHRUBS								
	113	Hamelia patens' Compacta'	Dwarf Fire Bush	3 gal.	Pot	18" Ht. Min	Yes	36" o.c.
	70	Serenoa repens 'Cinerea'	Silver Saw Palmetto	5 gal.	Pot	18" Ht. Min	Yes	60" o.c.
	129	Viburnum obovatum	Walter`s Viburnum	3 gal.	Pot	18" Ht. Min	Yes	36" o.c.
OFF SITE PLANTING AREA								
		3,247 sf APPROVED SHADE TREES PER CITY OF EDGEWATER		2.5" Cal.	B&B	8' Ht. Min.	Florida No. 1 or better	

MISCELLANEOUS

QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATION
TBD	IRRIGATION		100% HEAD TO HEAD IN TURF AREAS, MICRO DRIP EMITTERS FOR ALL PLANTINGS
TBD	PASPALUM NOTATUM	BAHIA SOD	TO BE FIELD VERIFIED BY CONTRACTOR. (AREA IS FOR COMMON SPACE ONLY)
TBD	STENOTAPHRUM SECUNDATUM "FLORATAM"	ST AUGUSTINE SOD	TO BE FIELD VERIFIED BY CONTRACTOR. (AREA IS FOR COMMON SPACE ONLY)
TBD	MULCH	PINE BARK MULCH OR APPROVED EQUAL	MIN. 3" THICK

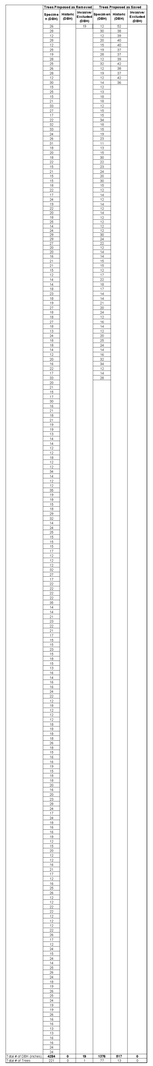
PLANTING NOTES (UTILITY AND METER):

1. THERE SHALL BE 3' MINIMUM CLEARANCE FROM LANDSCAPE PLANTS AND THE EDGE OF THE METER SLAB FOR METERS LESS THAN 3' AND 6' FOR METERS LARGER THAN 3', AND FOR FIRE LINE BACKFLOW PREVENTION ASSEMBLIES.
2. THERE SHALL BE 10' MINIMUM CLEARANCE BETWEEN TREES AND METER ASSEMBLIES, METER ASSEMBLY SLABS, AND FIRE LINE BACKFLOW PREVENTION ASSEMBLIES.
3. THERE MUST BE A CLEARANCE OF 7.5' MINIMUM FROM THE FRONT AND BOTH SIDES, AND 4' TO THE REAR OF ALL FIRE HYDRANTS AND ABOVE GRADE OBSTRUCTIONS INCLUDING POSTS, FENCES, TREES, ETC., PER THE FLORIDA FIRE PREVENTION CODE AND "NFPA 18.3.4.1- HYDRANTS."
4. STREET SIDE OF METER ASSEMBLIES AND FIRE LINE BACKFLOW PREVENTION ASSEMBLIES SHALL REMAIN OPEN AND FREE OF LANDSCAPING.
5. TREES SHALL NOT BE PLANTED OR LOCATED WITHIN 10 FEET OF ANY POTABLE WATER MAIN, RECLAIMED WATER MAIN, SANITARY FORCE MAIN, GRAVITY SANITARY SEWER MAIN, SANITARY CLEANOUTS, OR POTABLE/RECLAIMED/FORCE MAIN APPURTENANCES SUCH AS METERS, HYDRANTS, BACKFLOW PREVENTION ASSEMBLIES, ETC. THAT ARE OWNED AND MAINTAINED BY THE CITY OF EDGEWATER. AN APPROVED ROOT BARRIER SHALL BE USED WHERE TREES ARE PLANTED CLOSER THAN 10 FEET.

NOTE:
GROUPED PLANT SYMBOLS SHOWN ARE REPRESENTATIVE OF GENERAL TREE AND SHRUB REQUIREMENTS. ALL SUBSTITUTIONS MADE TO FOLLOW LOCAL CITY CODE.

TREE PLANTING NOTES:

1. ALL TREES SHALL BE GUARANTEED FOR TWO YEARS FROM DATE OF CITY ACCEPTANCE
2. EACH TREE SHALL RECEIVE SIX "AGRIFORM" 21 GRAM TABLETS PER MANUFACTURER'S DIRECTIONS.
3. FLEXIBILITY SHALL BE GIVEN TO THE PLACEMENT OF STREET TREES TO ACCOMMODATE IMPROVEMENTS SUCH AS DRIVEWAYS, UTILITIES, LIGHTING, ETC
4. STREET TREE SHALL HAVE A MINIMUM CLEARANCE OF 15' FROM STREET LIGHTS, SHALL NOT BE INSTALLED WITHIN 10 FT. OF ANY ABOVE GROUND UTILITY OR WITHIN 30 FT. OF THE FACE OF A STOP SIGN
5. STREET TREE PLANTINGS IN "COMMON TRACTS" TO BE INSTALLED PRIOR TO AS-BUILT INSPECTION
6. TREE PLANTING SHALL INCLUDE ROOT BARRIER PROTECTION TO PREVENT ROOT GROWTH INTO UTILITIES, DRAINAGE, SIDEWALKS AND OTHER PAVED AREAS.
7. APPLY A 3" LAYER OF MULCH LAYER TO ALL PROPOSED TREE, SHRUB, GROUND COVER AND VINE PLANTINGS
8. ALL TRIMMING UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARD INSTITUTE (ANSI) A-300 PRUNING STANDARDS.



TREE REMOVAL MITIGATION TABLE

SITE ACREAGE	18.08	REQUIRED SPECIMEN AND HISTORIC TREES/ ACRE	4
EXISTING SPECIMEN AND HISTORIC TREES/ ACRE	4.97	REPLACEMENT, SPECIMEN, AND HISTORIC TREES/ ACRE	7.25
EXISTING SPECIMEN AND HISTORIC TREES	311	TOTAL TREES REMOVED	221
SPECIMEN TREES REMOVED	221	REPLACEMENT TREES PROVIDED	168
HISTORIC TREES REMOVED	0	REPLACEMENT TREES QUALIFYING TO REPLACE SPECIMENS	168
REMAINING HISTORIC AND SPECIMEN TREES	90	**REPLACEMENT TREE DEFICIT**	**53***

Quantity	Trees	Diameter / 2 (Radius)	Square The Radius	Multiply by PI (3.14159)	Number of Trees Multiplied by Sq Inches Per Tree	"Payment in Lieu of Tree Replacement Payment" Fee Resolution is $5 Per Sq Inch
53*	19.4*	9.7*	94.09*	295.59*	15,666.27*	$78,331.35 *

NOTE: ABOVE IS COUNTING ONLY QUALIFYING SPECIES FOR SPECIMEN REPLACEMENT

NOTE: SPECIMEN AND HISTORIC TREES ARE DEFINED IN EDGEWATER LDC 21-55.06

NOTE: REPLACEMENT TREE DEFICIT TO BE COVERED BY PAYMENT TO CITY OF EDGEWATER

* DEFICIT TO BE DETERMINED ONCE OFF SITE SHADE TREES ARE APPROVED BY CITY OF EDGEWATER

GENERAL NOTES:

1. NO REFERENCE TO ENGINEERING SHOULD BE MADE FROM THIS SHEET. FOR LANDSCAPE REFERENCE ONLY.
2. ANY DEVIATION FROM PLANT QUANTITY, SIZE OR GRADE MAY JEOPARDIZE THE CERTIFICATE OF OCCUPANCY.
3. THE HEALTHY, NEAT, AND ORDERLY APPEARANCE OF ALL REQUIRED LANDSCAPING MATERIALS IS THE CONTINUAL RESPONSIBILITY OF THE PROPERTY OWNER.
4. SLOPES 4:1 OR GREATER SHALL REQUIRE SODDING FOR STABILIZATION.
5. CONTRACTOR SHALL VERIFY ALL FINAL TREE LOCATIONS IN REGARD TO CONFLICTS SUCH AS UTILITIES, DRAINAGE, ETC.
6. ANY AREAS SUBJECT TO EROSION MUST BE ADEQUATELY STABILIZED WITH VEGETATIVE MATERIAL THAT WILL, WITHIN A REASONABLE TIME FRAME, DETER SOIL DISTURBANCE. SODDING, PLUGGING, SPRIGGING OR SEEDING IS ACCEPTABLE FOR STABILIZATION; HOWEVER, SODDING MAY BE REQUIRED IN AREAS OF EROSION-PRONE SOILS OR WHERE SLOPES ARE GREATER THAN 5:1. VEGETATION OTHER THAN GRASS IS ACCEPTABLE UNLESS OTHERWISE SPECIFIED. THE USE OF HAY OR STRAW BALES TO REDUCE SEDIMENT DURING CONSTRUCTION SHALL NOT BE USED. SEE SECTION 353- EROSION AND SEDIMENT CONTROL PLAN.
7. CARE SHALL BE TAKEN WHERE IRRIGATION LINES, HEDGES OR OTHER MATERIALS ARE PROPOSED TO BE INSTALLED WITHIN DRIP LINES OF TREES DESIGNATED TO REMAIN.
8. ALL IRRIGATION SHALL USE THE LOWEST QUALITY WATER AVAILABLE WHICH ADEQUATELY AND SAFELY MEETS THE NEEDS OF THE SYSTEM. STORM WATER REUSE, RECLAIMED WATER USE, GREY WATER IRRIGATION SYSTEMS AND/OR SHALLOW WELLS SHALL BE USED. THE USE OF POTABLE WATER FOR IRRIGATION WILL NOT BE ALLOWED.

TREE REMOVAL NOTES:

1. TREE REMOVAL AND REPLACEMENT INFORMATION IDENTIFIED IN THE SCHEDULE IS BASED ON A GENERAL IDENTIFICATION OF EXISTING TREES IN THE VICINITY OF THE PROPOSED ROADS AND STORMWATER FACILITIES.
2. AT THE TIME OF FSP PERMITTING A REPORT CONDUCTED BY AN ISA CERTIFIED ARBORIST SHALL BE PROVIDED TO IDENTIFY AND ASSESS THE HEALTH AND CONTINUED VIABILITY OF TREES ON SITE. TREES IDENTIFIED TO BE FAILING OR POTENTIALLY HAZARDOUS SHALL NOT BE COUNTED TOWARDS FINAL TREE MITIGATION REQUIREMENTS.
3. A TREE REMOVAL PERMIT SHALL BE REQUIRED FOR TREES OF SIX INCHES (6") DBH (DIAMETER AT BREAST HEIGHT MEASURED 4 ½ FEET FROM BASE OF TREE) OR LARGER ON ALL PROPERTY WITHIN THE CITY LIMITS. TREES SHALL BE DEFINED BY SECTION 21-20.02. TREES TO BE REMOVED IN THIS CATEGORY WILL BE REQUIRED TO BE REPLACED IF THERE ARE AN INSUFFICIENT NUMBER OF TREES LEFT ON THE LOT.
4. REPLACEMENT TREES SHALL BE A MINIMUM OF 2 ½ INCHES IN DIAMETER MEASURED 6 INCHES ABOVE THE SOIL LINE OR 10 FEET IN HEIGHT ABOVE THE SOIL LINE. AN APPLICATION FOR THE PERMIT IS AVAILABLE IN THE DEVELOPMENT SERVICES DEPARTMENT. FIFTY-PERCENT (50%) OF REPLACEMENT TREES SHALL BE SPECIMEN TREES AS IDENTIFIED IN SECTION 21-55-06.
4. EXISTING, HEALTHY SABAL PALMS MAY BE RELOCATED ON THE SUBJECT SITE AND SHALL NOT COUNT TOWARD REPLACEMENT REQUIREMENTS IF SAVED.

GENERAL LANDSCAPE NOTES:

1. ALL PLANT MATERIAL TO BE FLORIDA GRADE # 1 OR BETTER, AS DEFINED IN "GRADES AND STANDARDS FOR NURSERY PLANTS", STATE OF FLORIDA DEPT. OF AGRICULTURE.
2. ALL SIZES SHOWN FOR PLANT MATERIAL ON THE PLAN ARE TO BE CONSIDERED MINIMUM. ALL PLANT MATERIAL MUST MEET OR EXCEED THESE MINIMUM REQUIREMENTS FOR BOTH HEIGHT AND SPREAD. ANY OTHER REQUIREMENTS FOR SPECIFIC SHAPE OR EFFECT AS NOTED ON THE PLAN SHALL ALSO BE REQUIRED FOR ACCEPTANCE. ALL TREES TO BE SINGLE TRUNKED, UNLESS OTHERWISE NOTED ON PLANS.
3. MINIMUM THREE-INCH (3") THICK LAYER OF MULCH SHALL BE PLACED AROUND ALL NEW PLANT MATERIAL AND BARE GROUND THAT WILL NOT BE COVERED BY EXISTING VEGETATION, SOD, GRAVEL, PAVEMENT OR ANY OTHER GROUND COVER TREATMENT.
4. ALL TREES TO BE HEALTHY, FULL SPECIMEN TYPES. ALL PALMS TO BE SUN GROWN.
5. ALL PLANTING BED AREAS TO HAVE 6" OF DARK, FRIABLE TOP SOIL OR BED MIXED CHURNED INTO EXISTING SOIL.
6. NEW PLANT MATERIAL TO BE INSTALLED WILL BE FIELD ADJUSTED TO ACCOMMODATE EXISTING PLANT MATERIAL SUCH AS OVERHEAD CANOPY TREES, UNDERSTORY TREES AND SHRUBS OR GROUND COVER. THIS WILL INSURE EXISTING PLANT MATERIAL TO REMAIN IN ITS NATURAL STATE. THEREFORE, NO EXISTING PLANT MATERIAL WILL BE ALTERED BY REMOVING, CUTTING TRIMMING OR DESTROYING IN ORDER TO INSTALL NEW PLANT MATERIAL.
7. ALL TREE STAKING TO BE DONE USING ARBOR TAPE AND THE DUCKBILL ANCHOR SYSTEM.
8. ALL LANDSCAPED AREAS TO BE IRRIGATED WITH A FULLY AUTOMATED IRRIGATION SYSTEM.
9. ALL TREES SHALL BE LOCATED AT LEAST SIX FEET AWAY FROM THE FLOWLINE OF PERIMETER PROPERTY SWALES AND PROPOSED STORMWATER INLETS.

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CONSTRUCTION PLAN REVISIONS

EDGEWATER RIVER OAKS MARINA PHASE 1

CLIENT: INDIAN RIVER SHORES, LLC

GENERAL LANDSCAPE NOTES

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