DEERING PARK NORTH - PHASE 1

CITY OF EDGEWATER, FLORIDA

PREPARED FOR

DEERING PARK 1, LLC

14025 RIVEREDGE DRIVE, SUITE 175
TAMPA, FLORIDA 33637
770-203-9355

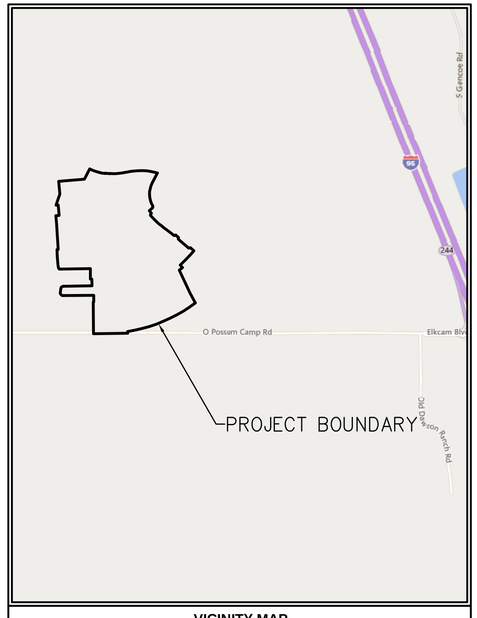
LEGAL DESCRIPTION

A PARCEL OF LAND LYING IN SECTION 1, TOWNSHIP 18 SOUTH, RANGE 33 EAST AND SECTION 6, TOWNSHIP 18 SOUTH, RANGE 34 EAST, CITY OF EDGEWATER, VOLUSIA COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHEAST CORNER OF SAID SECTION 1; THENCE ALONG THE SOUTH BOUNDARY OF SAID SECTION 1, S.89°19'24"W., A DISTANCE OF 612.01 FEET; THENCE DEPARTING SAID SOUTH BOUNDARY, N.00°40'54"W., A DISTANCE OF 570.03 FEET; THENCE N.89°19'06"E., A DISTANCE OF 8.38 FEET; THENCE N.00°40'54"W., A DISTANCE OF 120.00 FEET; THENCE S.89°19'06"W., A DISTANCE OF 549.29 FEET; THENCE NORTHWESTERLY, 86.61 FEET ALONG THE ARC OF A TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 50.00 FEET AND A CENTRAL ANGLE OF 99°14'54" (CHORD BEARING N.41°03'27"W., 76.18 FEET); THENCE NORTHERLY, 66.89 FEET ALONG THE ARC OF A REVERSE CURVE TO THE LEFT HAVING A RADIUS OF 910.00 FEET AND A CENTRAL ANGLE OF 04°12'41" (CHORD BEARING N.06°27'40"E., 66.87 FEET); THENCE NORTHEASTERLY, 74.14 FEET ALONG THE ARC OF A REVERSE CURVE TO THE RIGHT HAVING A RADIUS OF 50.00 FEET AND A CENTRAL ANGLE OF 84°57'47" (CHORD BEARING N.46°50'13"E., 67.54 FEET); THENCE N.89°19'06"E., A DISTANCE OF 528.70 FEET; THENCE N.00°40'47"W., A DISTANCE OF 120.00 FEET; THENCE S.89°19'06"W., A DISTANCE OF 42.14 FEET; THENCE N.00°40'54"W., A DISTANCE OF 190.00 FEET; THENCE S.89°19'06"W., A DISTANCE OF 560.00 FEET; THENCE N.32°42'45"W., A DISTANCE OF 27.87 FEET; THENCE NORTHERLY, 209.34 FEET ALONG THE ARC OF A NON-TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 1340.00 FEET AND A CENTRAL ANGLE OF 08°57'03" (CHORD BEARING N.05°39'29"W., 209.12 FEET); THENCE NORTHERLY, 117.17 FEET ALONG THE ARC OF A REVERSE CURVE TO THE LEFT HAVING A RADIUS OF 9160.00 FEET AND A CENTRAL ANGLE OF 00°43'58" (CHORD BEARING N.01°32'57"W., 117.17 FEET); THENCE N.88°05'04"E., A DISTANCE OF 20.00 FEET; THENCE NORTHERLY, 481.67 FEET ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 9180.00 FEET AND A CENTRAL ANGLE OF 03°00'23" (CHORD BEARING N.03°25'06"W., 481.61 FEET); THENCE N.05°10'10"W., A DISTANCE OF 130.00 FEET; THENCE N.84°52'39"E., A DISTANCE OF 60.96 FEET; THENCE N.05°07'21"W., A DISTANCE OF 190.00 FEET; THENCE S.84°52'39"W., A DISTANCE OF 40.26 FEET; THENCE N.18°20'02"E., A DISTANCE OF 212.52 FEET; THENCE N.05°01'26"W., A DISTANCE OF 226.24 FEET; THENCE N.84°58'34"E., A DISTANCE OF 465.09 FEET; THENCE N.27°16'44"E., A DISTANCE OF 207.37 FEET; THENCE EASTERLY, 172.65 FEET ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 730.00 FEET AND A CENTRAL ANGLE OF 13°33'04" (CHORD BEARING S.69°29'48"E., 172.25 FEET); THENCE EASTERLY, 17.49 FEET ALONG THE ARC OF A REVERSE CURVE TO THE RIGHT HAVING A RADIUS OF 100.00 FEET AND A CENTRAL ANGLE OF 10°01'20" (CHORD BEARING S.71°15'39"E., 17.47 FEET); THENCE EASTERLY, 99.33 FEET ALONG THE ARC OF A REVERSE CURVE TO THE LEFT HAVING A RADIUS OF 179.00 FEET AND A CENTRAL ANGLE OF 31°47'37" (CHORD BEARING S.82°08'48"E., 98.06 FEET); THENCE EASTERLY, 4.90 FEET ALONG THE ARC OF A REVERSE CURVE TO THE RIGHT HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 11°13'33" (CHORD BEARING N.87°34'10"E., 4.89 FEET); THENCE EASTERLY, 0.73 FEET ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 730.00 FEET AND A CENTRAL ANGLE OF 00°03'25" (CHORD BEARING S.85°44'01"E., 0.73 FEET); THENCE S.85°45'44"E., A DISTANCE OF 84.97 FEET; THENCE EASTERLY, 289.64 FEET ALONG THE ARC OF A TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 930.00 FEET AND A CENTRAL ANGLE OF 17°50'39" (CHORD BEARING N.85°18'57"E., 288.47 FEET); THENCE EASTERLY, 570.43 FEET ALONG THE ARC OF A REVERSE CURVE TO THE RIGHT HAVING A RADIUS OF 1100.00 FEET AND A CENTRAL ANGLE OF 29°42'44" (CHORD BEARING S.88°45'01"E., 564.06 FEET); THENCE S.27°25'34"W., A DISTANCE OF 204.79 FEET; THENCE SOUTHERLY, 435.95 FEET ALONG THE ARC OF A TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 430.00 FEET AND A CENTRAL ANGLE OF 58°05'21" (CHORD BEARING S.01°37'06"E., 417.52 FEET); THENCE SOUTHERLY, 34.86 FEET ALONG THE ARC OF A REVERSE CURVE TO THE RIGHT HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 79°54'06" (CHORD BEARING S.09°17'16"W., 32.11 FEET); THENCE S.49°14'19"W., A DISTANCE OF 73.61 FEET; THENCE S.40°45'41"E., A DISTANCE OF 60.00 FEET; THENCE S.49°14'19"W., A DISTANCE OF 17.84 FEET; THENCE SOUTHERLY, 38.40 FEET ALONG THE ARC OF A TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 87°59'59" (CHORD BEARING S.05°14'20"W., 34.73 FEET); THENCE SOUTHEASTERLY, 286.82 FEET ALONG THE ARC OF A COMPOUND CURVE TO THE LEFT HAVING A RADIUS OF 960.00 FEET AND A CENTRAL ANGLE OF 17°07'06" (CHORD BEARING S.47°19'12"E., 285.75 FEET); THENCE SOUTHEASTERLY, 260.64 FEET ALONG THE ARC OF A REVERSE CURVE TO THE RIGHT HAVING A RADIUS OF 2330.00 FEET AND A CENTRAL ANGLE OF 06°24'34" (CHORD BEARING S.52°40'28"E., 260.51 FEET); THENCE EASTERLY, 24.91 FEET ALONG THE ARC OF A REVERSE CURVE TO THE LEFT HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 57°05'50" (CHORD BEARING S.78°01'06"E., 23.90 FEET); THENCE S.48°45'37"E., A DISTANCE OF 69.63 FEET; THENCE SOUTHEASTERLY, 21.91 FEET ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 50°12'29" (CHORD BEARING S.23°39'23"E., 21.21 FEET); THENCE S.48°45'37"E., A DISTANCE OF 345.00 FEET; THENCE S.41°14'23"W., A DISTANCE OF 87.10 FEET; THENCE SOUTHWESTERLY, 242.85 FEET ALONG THE ARC OF A TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 2065.00 FEET AND A CENTRAL ANGLE OF 06°44'17" (CHORD BEARING S.44°36'31"W., 242.71 FEET); THENCE S.42°01'21"E., A DISTANCE OF 60.00 FEET; THENCE SOUTHWESTERLY, 74.24 FEET ALONG THE ARC OF A NON-TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 2125.00 FEET AND A CENTRAL ANGLE OF 02°00'06" (CHORD BEARING S.48°58'42"W., 74.23 FEET); THENCE S.23°11'49"E., A DISTANCE OF 72.33 FEET; THENCE SOUTHEASTERLY, 382.57 FEET ALONG THE ARC OF A TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 4617.00 FEET AND A CENTRAL ANGLE OF 04°14'51" (CHORD BEARING S.25°34'14"E., 382.46 FEET); THENCE S.27°56'40"E., A DISTANCE OF 200.30 FEET; THENCE SOUTHWESTERLY, 1336.19 FEET ALONG THE ARC OF A NON-TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 2765.00 FEET AND A CENTRAL ANGLE OF 27°41'17" (CHORD BEARING S.67°06'18"W., 1323.22 FEET); THENCE S.00°24'02"E., A DISTANCE OF 29.36 FEET TO THE **POINT OF BEGINNING.**

CONTAINING 118.282 ACRES, MORE OR LESS.

DEVELOPER:	DEERING PARK 1, LLC 14025 RIVEREDGE DRIVE, SUITE 175 TAMPA, FLORIDA 33637 770-203-9355
SURVEYOR: (TOPO)	MARK DOWST & ASSOCIATES, INC. 536 NORTH HALIFAX AVENUE DAYTONA BEACH, FLORIDA 32118 (386) 258-7999
SURVEYOR: (BOUNDARY)	GEOPOINT SURVEYING, INC.. 528 NORTHLAKE BLVD. SUITE 1040 ALTAMONTE SPRINGS, FLORIDA 32701 (321) 270-0440
LANDSCAPE ARCHITECT:	ML+H MARQUIS LATIMER + HALBACK, INC. 34 CORDOVA STREET, SUITE A ST. AUGUSTINE, FL 32084 (904) 825-6747
ENGINEER:	ENGLAND, THIMS & MILLER, INC. 1411 EDGEWATER DRIVE, SUITE 200 ROAD ORLANDO, FL 32804 (407) 536-5379



VICINITY MAP

ENGLAND-THIMS & MILLER | Trusted Advisors, Creating Community.

1411 Edgewater Drive, Suite 200
Orlando, FL 32084
(407) 536-5379
CA - 00002584 LC - 0000316

NOTE:
IF YOU DIG IN FLORIDA, YOU ARE REQUIRED TO CALL SUNSHINE STATE ONE-CALL OF FLORIDA, INC. 1-800-432-4770 FOR LOCATES. IT'S THE LAW.

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5	3C	MASTER SITE PLAN – PHASE 1 & 2 BLOCK AGREAGES	
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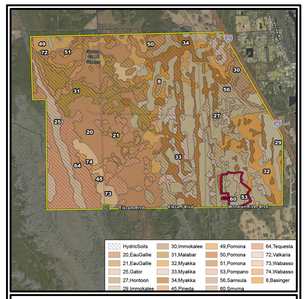

SOILS MAP
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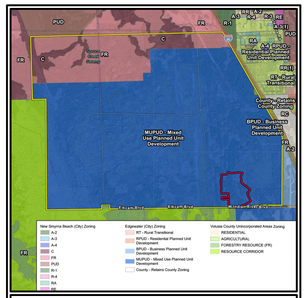

ZONING MAP
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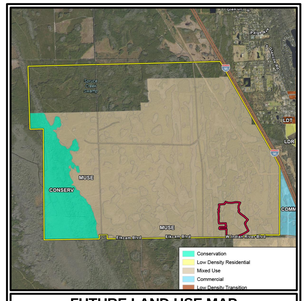

FUTURE LAND USE MAP
N.T.S.

UTILITY SERVICE PROVIDERS

POTABLE & RECLAIMED WATER:	CITY OF EDGEWATER 104 NORTH RIVERSIDE EDGEWATER, FLORIDA 32132 (386) 424-2400
SANITARY SEWER:	CITY OF EDGEWATER 104 NORTH RIVERSIDE EDGEWATER, FLORIDA 32132 (386) 424-2400
TELEPHONE:	AT&T CONTACT: KIRBY SPENCER (386) 281-6957
ELECTRIC:	FLORIDA POWER & LIGHT 700 UNIVERSE BOULEVARD JUNO BEACH, FLORIDA 33408 (321) 453-2489
GAS:	FLORIDA PUBLIC UTILITIES CO. CONTACT: COLIN DUNN (386) 785-4554

VERTICAL DATUM USED FOR THIS PROJECT: NAVD88

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

14775 Old St. Augustine Rd.
Jacksonville, Florida 32258
(904) 642-8990
www.etmlrc.com
REG: 00002584 LC-0000316

ETM ENGLAND-THIMS & MILLER | Trusted Advisors, Creating Community.

COVER SHEET

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
1

PLOTTED: November 18, 2025 – 4:20 PM, BY: Emma Thompson

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GENERAL SITE NOTES:

1. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER. ALL SAFETY RULES AND GUIDELINES OF O.S.H.A. SHALL BE FOLLOWED. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ANY INJURIES TO HIS EMPLOYEES, AND FOR ANY DAMAGE TO PRIVATE PROPERTY OR PERSONS DURING THE COURSE OF THIS PROJECT. ALL COSTS ASSOCIATED WITH COMPLYING WITH OSHA REGULATIONS AND THE FLORIDA TRENCH SAFETY ACT MUST BE INCLUDED IN THE CONTRACTORS BID.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO PREPARING THE BID FOR THE PURPOSE OF FAMILIARIZING HIMSELF WITH THE NATURE AND THE EXTENT OF THE WORK AND LOCAL CONDITIONS, EITHER SURFACE OR SUB-SURFACE, WHICH MAY AFFECT THE WORK TO BE PERFORMED, AND THE EQUIPMENT, LABOR AND MATERIALS REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THE CONSTRUCTION CONTRACT. THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA (811) FOR UTILITY LOCATES IN ACCORDANCE WITH STATE LAW PRIOR TO EXCAVATING. THE CONTRACTOR IS ALSO URGED TO TAKE COLOR PHOTOGRAPHS ALONG THE ROUTE OF OR WITHIN THE PROJECT TO RECORD EXISTING CONDITIONS PRIOR TO CONSTRUCTION, AND TO AID IN RESOLVING POSSIBLE FUTURE ISSUES THAT MAY OCCUR DUE TO THE CONSTRUCTION OF THE PROJECT.

3. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING STRUCTURES, IMPROVEMENTS, UTILITIES, PROPERTY LINES, AND CONFIRM ALL PROPOSED DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION OR ORDERING ANY MATERIALS.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF SOD AND/OR GRASS PER PRESIDING JURISDICTIONAL STANDARDS AND MEETING THE NPDES FINAL STABILIZATION REQUIREMENTS.

5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EITHER CONDUCT ANY FIELD EXPLORATION OR ACQUIRE ANY GEOTECHNICAL ASSISTANCE REQUIRED TO ESTIMATE THE AMOUNT OF UNSUITABLE MATERIAL THAT WILL REQUIRE REMOVAL AND/OR TO ESTIMATE THE AMOUNT OF OFF SITE BORROW THAT WILL BE REQUIRED. FAILURE OF THE CONTRACTOR TO IDENTIFY/QUANTIFY THE AMOUNT OF UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED DURING THE BID PROCESS WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THE CONSTRUCTION CONTRACT.

6. ALL MATERIALS AND WORKMANSHIP ARE TO BE WARRANTED BY THE CONTRACTOR TO THE DEVELOPER FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY THE OWNER.

7. THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND IMPROVEMENTS SHOWN ON THE DRAWINGS IS BASED ON LIMITED INFORMATION AND MAY NOT HAVE BEEN FIELD VERIFIED. THE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY RESPECTIVE UTILITY OWNERS AND FIELD VERIFY LOCATIONS OF EXISTING UTILITIES AND OTHER IMPROVEMENTS PRIOR TO COMMENCING ANY CONSTRUCTION. IF THE LOCATIONS SHOWN ARE CONTRARY TO THE ACTUAL LOCATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF THE DISCREPANCY. THIS DISCREPANCY SHOULD BE RESOLVED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN AREAS NEAR EXISTING UTILITIES AND IMPROVEMENTS AND SHALL BE RESPONSIBLE FOR AND SHALL REPAIR OR PAY FOR ALL DAMAGE MADE TO EXISTING UTILITIES OR OTHER IMPROVEMENTS. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL GRADES, INVERTS AND TYPE OF MATERIAL OF EXISTING UTILITIES TO WHICH HE SHALL CONNECT, AND NOTIFY THE OWNER AND ENGINEER OF RECORD OF ANY DISCREPANCIES.

8. UNLESS DIRECTED OTHERWISE BY THE OWNER OR THE ENGINEER OF RECORD, THE CONTRACTOR WILL CONTRACT WITH AN INDEPENDENT TESTING LABORATORY TO PERFORM MATERIAL TESTING AND SOIL TESTING IN ACCORDANCE WITH PRESIDING JURISDICTIONAL REQUIREMENTS.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSURANCE REQUIRED FOR THE PROJECT, INCLUDING CITY OF EDGEWATER RIGHT-OF-WAY PERMITS FOR WORK WITHIN PUBLIC RIGHT-OF-WAY OR EASEMENT. CONTRACTOR IS RESPONSIBLE FOR CONTROL OF SEDIMENTATION AND RUNOFF RESULTING FROM RAINFALL EVENTS DURING THE CONSTRUCTION OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH REGULATORY PERMITS ISSUED FOR THE PROJECT.

10. THE CONTRACTOR SHALL COORDINATE THE WORK WITHIN CITY OF EDGEWATER, CITY OR STATE RIGHT-OF-WAY WITH THE APPROPRIATE AGENCIES FOR MAINTENANCE OF TRAFFIC AND METHOD OF CONSTRUCTION & REPAIR.

11. IF DEWATERING CAPACITY REQUIRES A CONSUMPTIVE USE PERMIT (C.U.P.) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE PERMIT THROUGH THE WATER MANAGEMENT DISTRICT IN WHICH THIS PROJECT IS LOCATED IN. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND THE ENGINEER OF RECORD FOR APPROVAL OF ALL DEWATERING OPERATIONS PRIOR TO COMMENCEMENT.

12. CITY OF EDGEWATER STANDARD DETAILS ARE TO BE COMPLIED WITH WHEN NOT SPECIFIED SPECIFICALLY ON THESE DESIGN PLANS.

GENERAL SITE NOTES:

12. PRIOR TO ANY DISCHARGE OF GROUND WATER (DEWATERING) FROM CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT TO WATERS OF THE STATE (INCLUDING, BUT NOT LIMITED TO, WETLANDS, SWALES AND MUNICIPAL STORM SEWERS), THE CONTRACTOR SHALL TEST THE EFFLUENT (WATER TO BE DISCHARGED) IN ACCORDANCE WITH RULE 62-621.300(2), F.A.C. IF THE TEST RESULTS ON THE EFFLUENT ARE BELOW THE SCREENING VALUES OF RULE 62-621.300(2), F.A.C., THE CONTRACTOR SHALL SUBMIT A SUMMARY OF THE PROPOSED CONSTRUCTION ACTIVITY AND THE TEST RESULTS TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DISTRICT OFFICE, WITHIN ONE (1) WEEK AFTER DISCHARGE BEGINS. THE CONTRACTOR SHALL CONTINUE TO SAMPLE THE EFFLUENT AS REQUIRED THROUGHOUT THE PROJECT AND COMPLY WITH ALL CONDITIONS OF RULE 62-621.300(2), F.A.C. IF THE GROUND WATER EXCEEDS THE SCREENING VALUES OF RULE 62-621.300(2), F.A.C., THE CONTRACTOR SHALL COMPLY WITH OTHER APPLICABLE RULES AND REGULATIONS PRIOR TO DISCHARGE OF THE EFFLUENT (GROUND WATER) TO SURFACE WATERS OF THE STATE.

13. ALL AREAS SHOWN TO BE FILLED SHALL BE CLEARED AND GRUBBED IN ACCORDANCE WITH CITY OF JACKSONVILLE STANDARDS AND SHALL BE FILLED WITH CLEAN STRUCTURAL FILL COMPACTED AND TESTED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT.

14. CLEARING AND GRUBBING REQUIRED FOR ALL ROADWAY, UTILITIES, DITCHES, BERMS, RIGHTS-OF-WAYS AND EASEMENTS (INCLUDING ELECTRIC EASEMENTS) ARE INCLUDED IN THIS PROJECT.

15 ALL ACCESS EASEMENTS ARE TO BE STABILIZED AND DRIVABLE.

16. ALL DEBRIS SHALL BE CONTAINED IN ONE OR MORE DUMPSTER WHICH ARE REQUIRED TO BE ONSITE DURING ALL PHASES OF CONSTRUCTION, BEING EMPTIED AT AN APPROPRIATELY PERMITTED LANDFILL AND RETURNED TO THE SITE AS OFTEN AS NEEDED TO AVOID SPILLS AND CONTAMINATION.

17. BURNING OF TREES, BRUSH AND OTHER MATERIAL SHALL BE APPROVED, PERMITTED AND COORDINATED WITH CITY OF JACKSONVILLE FIRE MARSHAL AND ALL OTHER PERMITTING AUTHORITIES BY THE CONTRACTOR.

18. UNSUITABLE MATERIALS UNDER UTILITY OR STORM PIPE, STRUCTURES, PAVEMENT, BUILDING PADS, OR HARDSCAPE ELEMENTS SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL, PROPERLY COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

19. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL SURVEY AND PROPERTY MONUMENTS. IF A MONUMENT IS DISTURBED, THE CONTRACTOR SHALL CONTRACT WITH THE SURVEYOR OF RECORD FOR REINSTALLATION OF THE MONUMENT.

20. ALL UNDERGROUND UTILITIES TO BE INSTALLED UNDER PAVEMENT MUST BE INSTALLED PRIOR TO PREPARATION OF SUBGRADE FOR PAVEMENT.

21. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION WITH ALL OTHER CONTRACTORS. IN THE EVENT OF ANY CONFLICT WHATSOEVER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.

22. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL MATERIALS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASE OR CONSTRUCTION OF ANY UTILITY OR STORM PIPE OR STRUCTURE.

23. AUGER BORINGS PROVIDED BY UNIVERSAL ENGINEERING SERVICES, DATED: JUNE 13,2023.

24. FLOOD ZONE BASED UPON FEMA INSURANCE RATE MAPS PANEL NOS. 12127C0700J, DATED: SEPTEMBER 29, 2017,

25. FOR SEDIMENT AND EROSION CONTROL PLANS, DETAILS AND NOTES REFER TO DRAWINGS 17-20 CONTRACTOR TO COORDINATE WITH AUTHORITY FOR INSPECTIONS PRIOR TO CLEARING OPERATIONS.

26. ELEVATIONS ARE BASED ON NAVD88.

27. TOPOGRAPHIC INFORMATION BASED ON SURVEY PROVIDED BY 10/17/2024, DATED: MARK DOWST & ASSOCIATES, INC.

28. BOUNDARY INFORMATION BASED ON SURVEY PROVIDED BY , DATED: GEO POINT SURVEYING, INC.

29. ALL WORK AND MATERIALS SHALL BE IN COMPLETE ACCORDANCE WITH ALL RELATIVE SECTIONS OF "CITY STANDARD SPECIFICATIONS FOR CITY OF JACKSONVILLE, FLORIDA", (LATEST REVISION) AND ALL CURRENT CITY STANDARD DETAILS. THE WORK SHALL ALSO BE PERFORMED AND TESTED IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL INVESTIGATION REPORT PROVIDED BY UNIVERSAL ENGINEERING SERVICES, DATED: JUNE 13,2023, IF MORE STRINGENT THAN CITY REQUIREMENTS.

30. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE CIVIL ENGINEER TO DETERMINE IF THIS PROJECT IS WITHIN THE CITY'S JURISDICTION FOR INSPECTION. IF SO THEN, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE CITY FOR PRE-CONSTRUCTION MEETING AND INSPECTIONS.

31. FOR BOUNDARY, ROADWAY AND LOT GEOMETRY INFORMATION SEE PLAT.

32. PROJECT LOCATION: CITY OF EDGEWATER, FLORIDA.

33. THESE PLANS WERE GENERATED UTILIZING AUTOCAD CIVIL 3D 2022.

PAVING AND DRAINAGE NOTES:

1. ALL DRAINAGE STRUCTURES WITHIN PAVEMENT/CONCRETE AREAS TO HAVE TRAFFIC BEARING GRATES, UNLESS OTHERWISE SPECIFIED.

2. ALL DRAINAGE PIPE JOINTS ARE TO BE FILTER FABRIC WRAPPED.

3. ALL INVERTS IN DRAINAGE STRUCTURES TO BE PRECAST OR BRICK WITH LAYER OF MORTAR BETWEEN EACH LAYER OF BRICK, OR REDDI-MIX CONCRETE WITH #57 STONE.

4. ALL PIPE LENGTHS ARE SCALED DIMENSIONS. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED TO CONFORM WITH THE CITY OF EDGEWATER (HAVING JURISDICTION) REQUIREMENTS AND SHALL BE CONSTRUCTED TO CONFORM WITH CURBING, PROPERTY LINES AND LOW POINTS AS SHOWN ON THE PLANS.

5. CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEAN AND FUNCTIONING PROPERLY AT TIME OF ACCEPTANCE.

6. "AS-BUILT" DRAWINGS - DRAINAGE AS-BUILTS PROVIDED TO CITY OF EDGEWATER (HAVING JURISDICTION) AND THE WATER MANAGEMENT DISTRICT (HAVING JURISDICTION) ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR. THEREFORE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION, FIELD LOCATIONS, CERTIFICATION AND SUBMITTAL OF "AS-BUILT" DRAWINGS IN ACCORDANCE WITH THE CURRENT CITY OF EDGEWATER (HAVING JURISDICTION) STANDARDS AND SPECIFICATIONS AND THE WMD (HAVING JURISDICTION) REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROCESS THE AS-BUILT DRAWINGS FOR APPROVAL CITY OF EDGEWATER (HAVING JURISDICTION). IN ADDITION TO THE DRAINAGE SYSTEM THE "AS-BUILTS" SHALL SHOW THE ELEVATIONS AND LOCATION OF THE TOP OF BANK, WATER LEVEL, ANY POINTS OF CHANGE IN SLOPE, TOE OF SLOPE AND POND BOTTOM AT 100' MAXIMUM INTERVALS ALONG POND BANK FOR ALL POND CONSTRUCTION. ALL DIMENSIONS AND ELEVATIONS ON THE CONTROL STRUCTURE DETAILS SHALL BE SHOWN ON AS-BUILT DRAWINGS. ADDITIONAL INFORMATION MAY BE REQUIRED ACCORDING TO THE JURISDICTION HAVING AUTHORITY; CONTRACTOR/SURVEYOR SHALL VERIFY ALL PROPER AS-BUILT INFORMATION IS PROVIDED. ALL DEVIATIONS FROM PLANS SHALL BE CLEARLY INDICATED ON THE AS-BUILT DRAWINGS AND THE ENGINEER OF RECORD SHALL BE NOTIFIED.

7. THE CONTRACTOR SHALL PROVIDE ACCESSIBLE CURB RAMPS AT ALL SIDEWALK AND CURB CONNECTIONS. RAMPS SHALL MEET ALL APPLICABLE ADA REQUIREMENTS.

8. FOR SPECIAL PAVING AND DRAINAGE DETAILS SEE THE APPROPRIATE SHEETS WITH THIS PLAN SET (REFER TO THE COVER SHEET FOR PAGE NAME AND NUMBER). CONTRACTOR SHALL REFER THE CITY OF EDGEWATER (HAVING JURISDICTION) FOR ALL STANDARD DETAILS AND SPECIFICATIONS, LATEST REVISION.

9. ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING SILT FENCE, COIR BALES. AND FILTER FABRIC INSIDE DRAINAGE STRUCTURES SHALL BE REMOVED PRIOR TO FINAL INSPECTION, UNLESS OTHERWISE DIRECTED BY THE OWNER OR THE ENGINEER OF RECORD.

10. PAVEMENT MARKINGS SHOULD BE PLACED AS SHOWN ON THE PLANS AND DETAIL SHEETS.

11. ANY REQUIRED TEMPORARY MARKINGS MUST BE IN PLACE BEFORE OPENING LANES OF TRAFFIC. PAY ITEMS FOR TEMPORARY PAVEMENT MARKINGS ARE TO BE INCLUDED IN THE TABULATION OF QUANTITIES.

12. THE REMOVAL OF EXISTING PAVEMENT MARKINGS WILL BE CONSIDERED AN INCIDENTAL ITEM WITH NO ADDITIONAL COMPENSATION PROVIDED.

13. ALL PERMANENT PAVEMENT MARKINGS IN RIGHT-OF-WAY SHALL BE EXTRUDED THERMOPLASTIC AND MEET THE CURRENT CITY OF EDGEWATER (HAVING JURISDICTION) SPECIFICATIONS AND/OR FDOT STANDARD SPECIFICATIONS, LATEST EDITION.

14. THERMOPLASTIC PAVEMENT MARKINGS ARE TO BE PLACED NO SOONER THAN 30 CALENDAR DAYS AFTER THE COMPLETION OF THE FINAL PAVEMENT LAYER, UNLESS OTHERWISE REQUIRED BY THE CITY OF EDGEWATER (HAVING JURISDICTION).

15. A BITUMINOUS REFLECTIVE PAVEMENT MARKER (RPM) ADHESIVE MEETING CURRENT CITY OF EDGEWATER (HAVING JURISDICTION) AND/OR FDOT SPECIFICATIONS SHALL BE USED ON ASPHALT ROADWAYS.

16. THE CONTRACTOR SHALL USE CLASS-B REFLECTIVE PAVEMENT MARKERS (RPM'S) INSTALLED TO MEET THE CURRENT CITY OF EDGEWATER (HAVING JURISDICTION) SPECIFICATIONS AND/OR FDOT STANDARD SPECIFICATIONS.

17. REFLECTIVE PAVEMENT MARKERS THAT DO NOT CONFLICT WITH PERMANENT (THERMOPLASTIC) MARKINGS SHALL BE PLACED ON ALL FINAL ASPHALTIC CONCRETE SURFACES IMMEDIATELY AFTER THE TEMPORARY PERMANENT STRIPING IS IN PLACE.

18. PAVEMENT MARKINGS REMOVAL;
   - 18.a. PAINT BLACKOUT METHOD OF PAVEMENT MARKINGS REMOVAL IS NOT ACCEPTED.
   - 18.b. GRINDING OR HYDRO BLAST METHODS SHALL BE USED ON WEATHERED ASPHALT SURFACES.
   - 18.c. REMOVAL ON NEW ASPHALT SURFACES SHALL BE BY HYDRO BLAST METHOD ONLY.

19. 48 HOURS PRIOR TO INSTALLING ANY PAVEMENT MARKINGS ON ANY CITY OF EDGEWATER ROADWAY OR STREET, THE CONTRACTOR SHALL CONTACT THE CITY OF EDGEWATER (HAVING JURISDICTION) INSPECTOR.

WATER, REUSE, & SEWER REQUIREMENTS

1. ALL WATER, REUSE WATER, SANITARY SEWER AND STORM SEWER CONSTRUCTION SHALL BE ACCOMPLISHED BY AN UNDERGROUND UTILITY CONTRACTOR, LICENSED UNDER THE PROVISIONS OF CHAPTER 489 FLORIDA STATUTES. THE CONTRACTOR SHALL FURNISH A COPY OF THE CURRENT LICENSE AND QUALIFIERS TO THE DESIGN ENGINEER PRIOR TO START OF CONSTRUCTION. ALL WATER, REUSE WATER AND SEWER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF EDGEWATER (HAVING JURISDICTION) STANDARDS, DETAILS AND MATERIALS MANUAL(S) (LATEST REVISIONS) UNLESS MORE STRINGENT STANDARDS ARE SPECIFIED.

2. FIRE PROTECTION MAINS (IF APPLICABLE TO THIS PROJECT) SHALL BE C-900 PVC DR18 PIPE AND SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA REQUIREMENTS BY A FLORIDA LICENSED CONTRACTOR QUALIFIED TO INSTALL FIRE PROTECTION MAINS. LOCAL PERMITTING AND INSPECTION OF FIRE PROTECTION SYSTEM INSTALLATION, FLUSHING AND TESTING IS REQUIRED. CONTRACTOR IS RESPONSIBLE FOR LOCAL PERMIT, NOTICE, AND COMPLIANCE WITH PERMIT.

3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER (AND THE CITY OF EDGEWATER (HAVING JURISDICTION) IF REQUIRED) ON ALL STRUCTURES AND MATERIALS, FOR REVIEW AND APPROVAL PRIOR TO PURCHASE OR FABRICATION OF ANY UTILITY PIPE OR STRUCTURE.

4. UNSUITABLE MATERIALS UNDER UTILITY PIPES AND STRUCTURES SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL, PROPERLY COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

5. MECHANICALLY RESTRAINED JOINTS ARE REQUIRED ON PRESSURE MAINS AT VALVES, FITTINGS AND DEAD ENDS IN ACCORDANCE WITH THE CITY OF EDGEWATER (HAVING JURISDICTION) STANDARDS.

6. CONTRACTOR SHALL FURNISH AND INSTALL LOCATE WIRING ON ALL PVC WATER MAINS, REUSE MAINS, FORCE MAINS, POLYETHYLENE AND PVC WATER SERVICES. INSTALLATION SHALL BE IN ACCORDANCE WITH THE CITY OF EDGEWATER (HAVING JURISDICTION) STANDARDS, DETAILS AND MATERIAL MANUAL(S), LATEST EDITION.

7. ALL POINTS OF CONNECTION FOR WATER, REUSE WATER AND SEWER MUST BE IN ACCORDANCE WITH THE AVAILABILITY RESPONSE FROM THE CITY OF EDGEWATER (HAVING JURISDICTION).

8. F.D.E.P. PERMITS SUBMITTED THROUGH THE DEPARTMENT FOR PROCESSING SHALL BE IN CONFORMANCE WITH BOTH THE DESIGN PLANS AND THE WATER AND SEWER AVAILABILITY RESPONSE. ANY MINOR OR MAJOR DEVIATIONS BETWEEN THE PRELIMINARY DESIGN AND FINAL DESIGN SUBMITTAL SHALL REQUIRE REVISED F.D.E.P. PERMITS REFLECTING THESE CHANGES.

9. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE CITY OF EDGEWATER (HAVING JURISDICTION) PERSONNEL TO SCHEDULE THIS CONFERENCE AND NOTIFY THE DEVELOPER/OWNER AND THE ENGINEER OF RECORD.

10. A UNDERGROUND UTILITY PERMIT (OR SIMILAR) MAY BE REQUIRED FROM THE CITY OF EDGEWATER (HAVING JURISDICTION) PRIOR TO COMMENCEMENT OF ANY UTILITY CONSTRUCTION. ANY CONSTRUCTION OF UTILITY IMPROVEMENTS PRIOR TO RECEIVING SAID PERMIT MAY BE SUBJECT TO ADDITIONAL PERMIT FEES/FINES AND AN ISSUING OF A STOP WORK ORDER.

11. THE CONTRACTOR SHALL MINIMIZE SERVICE INTERRUPTIONS AND MAINTAIN ANY EXISTING WATER AND SEWER SERVICE TO MEET THE SYSTEM DEMANDS AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF AFFECTED CUSTOMERS AND UTILITY A MINIMUM OF 48 HOURS IN ADVANCE OF ANY INTERRUPTION OF SERVICE.

12. CONTRACTOR SHALL OBTAIN A COPY OF THE F.D.E.P. OR CITY OF EDGEWATER (HAVING JURISDICTION) WATER AND SEWER PERMITS FROM THE ENGINEER PRIOR TO START OF CONSTRUCTION AND MUST COMPLY WITH ALL CONDITIONS OF PERMIT(S).

13. ALL ELECTRICAL CONDUIT WORK SHALL BE COMPLETED PRIOR TO THE PRESSURE TESTING OF WATER MAINS, REUSE MAINS AND SEWAGE FORCE MAINS. ALL PRESSURE TESTING AND PUMP TESTING SHALL BE WITNESSED BY THE ENGINEER OF RECORD (OR A REPRESENTATIVE AUTHORIZED BY THE ENGINEER). THE CITY OF EDGEWATER (HAVING JURISDICTION) SHALL BE NOTIFIED OF SAID PRESSURE TESTS AND SHALL WITNESS THESE TESTS AT THEIR OWN DISCRETION.

WATER AND REUSE MAINS

14. UNLESS OTHERWISE INDICATED, ALL WATER MAINS AND REUSE MAINS WILL BE PVC DR18, C-900/C-905 (AS APPROPRIATE) PIPE. ALL 2" MAINS SHALL BE HDPE CTS SDR 11, C-906.

15. WATER MAINS AND REUSE MAINS SHALL HAVE A MINIMUM OF 36" COVER FROM FINISHED GRADE UNLESS OTHERWISE SHOWN. ADDITIONAL COVER MAY BE REQUIRED FOR VALVE INSTALLATION CLEARANCE FOR PIPE GREATER THAN 8 INCHES IN DIAMETER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT INSTALLED PIPING UNTIL FINAL ACCEPTANCE BY F.D.E.P AND THE CITY OF EDGEWATER (HAVING JURISDICTION).

16. ALL WATER MAINS AND REUSE MAINS SHALL BE FLUSHED IN ACCORDANCE WITH, AND UNDER THE DIRECTION OF THE CITY OF EDGEWATER (HAVING JURISDICTION).

17. HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER MAINS AND REUSE MAINS AND HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER MAINS AND REUSE MAINS TO OTHER UTILITIES SHALL BE IN ACCORDANCE WITH THE CITY OF EDGEWATER (HAVING JURISDICTION) AND F.D.E.P. REQUIREMENTS.

18. ALL GATE VALVES SHALL BE CITY OF EDGEWATER (HAVING JURISDICTION) STANDARD. VALVES SHALL BE MECHANICAL JOINT, CAST IRON, BRONZE FITTED WITH RESILIENT SEAT. ALL VALVES SHALL OPEN BY TURNING TO THE LEFT. VALVES SHALL BE RATED AT 200 PSI WORKING PRESSURE AND 400 PSI TEST PRESSURE.

19. ALL NEW AND / OR RELOCATED WATER MAIN AND REUSE MAIN PIPE AND FITTINGS SHALL NOT CONTAIN MORE THAN EIGHT PERCENT LEAD, AND ALL PACKING AND JOINT MATERIALS USED IN THE JOINTS SHALL CONFORM WITH ALL APPLICABLE AWWA STANDARDS. ALL NEW AND / OR RELOCATED SERVICES AND PLUMBING SHALL CONTAIN NO MORE THAN EIGHT PERCENT LEAD AND ALL SOLDERS AND FLUX SHALL CONTAIN NO MORE THAN 0.2 PERCENT LEAD.

WATER, REUSE, & SEWER REQUIREMENTS

21. ALL FIRE HYDRANTS SHALL BE STANDARD PER THE CITY OF EDGEWATER (HAVING JURISDICTION). FIRE HYDRANTS LOCATED WITHIN CITY OF EDGEWATER (HAVING JURISDICTION) RIGHT OF WAYS OR EASEMENTS SHALL BE PAINTED IN ACCORDANCE WITH LOCAL REQUIREMENTS PER THE CITY OF EDGEWATER (HAVING JURISDICTION).

22. ALL FIRE HYDRANTS (PUBLIC OR CITY OF EDGEWATER OWNED) SHALL BE TAGGED AND NUMBERED PER THE CITY OF EDGEWATER (HAVING JURISDICTION) REQUIREMENTS. CONTRACTOR TO COORDINATE WITH THE APPROPRIATE PERSONNEL OF THE CITY OF EDGEWATER (HAVING JURISDICTION) FOR REQUIRED INFORMATION.

23. ALL NEW FIRE HYDRANT INSTALLATIONS, PUBLIC AND PRIVATE, SHALL HAVE A BLUE F.D.O.T. TYPE REFLECTIVE PAVEMENT MARKER INSTALLED IN THE CENTER OF THE TRAFFIC LANE NEAREST THE NEW FIRE HYDRANT.

24. ALL WATER MAINS SHALL BE BACTERIOLOGICAL AND PRESSURE TESTED AT 150 PSI FOR 2 HOURS IN ACCORDANCE WITH AWWA STANDARDS AND CITY OF EDGEWATER STANDARD REQUIREMENTS. NO CONNECTION TO THE EXISTING POTABLE WATER SYSTEM SHALL BE ALLOWED UNTIL ALL PROPOSED WATER LINES HAVE BEEN PRESSURE TESTED, DISINFECTED, AND CLEARED FOR SERVICE. THE ENGINEER MUST BE NOTIFIED 48 HOURS PRIOR TO PERFORMING THE PRESSURE TEST. DISINFECTION SHALL BE IN ACCORDANCE WITH AWWA-C-651. REUSE MAINS REQUIRE PRESSURE TEST ONLY.

25. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF EDGEWATER (HAVING JURISDICTION) CROSS CONNECTION CONTROL PROGRAM. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER.

26. THE WATER TAPS DEPICTED ON THESE DESIGN PLANS SHALL BE CONSTRUCTED AS FOLLOWS: ALL POTABLE, REUSE, AND IRRIGATION WATER TAPS, FIRE LINE SERVICES AND FIRE HYDRANT INSTALLATIONS SHALL BE PERFORMED BY A LICENSED MASTER PLUMBER OR UNDERGROUND UTILITY CONTRACTOR UNDER THE FOLLOWING CONDITIONS:
1.) THE TAPS ARE TO BE SCHEDULED 48 HOURS IN ADVANCE WITH CITY OF EDGEWATER.
2.) TAPS REQUIRING METER INSTALLATIONS OF SIZE 2" AND BELOW MUST INCLUDE THE SERVICE PIPE, METER BOX, AND CORP. STOP SIZED READY TO ACCEPT THE METER INSTALLATION BY CITY OF EDGEWATER FORCES.
3.) CITY OF EDGEWATER FORCES WILL INSTALL THE METER UPON APPLICATION AND PAYMENT BY LICENSED MASTER PLUMBER OR UTILITY CONTRACTOR AT CITY OF EDGEWATER WATER AND SEWER, 515 N. LAURA ST., 1ST FLOOR.
4.) ALL TAPS REQUIRING METER INSTALLATIONS OF SIZE 3" AND ABOVE SHALL TERMINATE SIZED READY FOR VAULT, METER AND BYPASS INSTALLATION. VAULT FURNISHED BY CONTRACTOR. INSTALLATION BY CITY OF EDGEWATER FORCES. SPECIAL ESTIMATE REQUIRED.

27. WATER METERS SHALL NOT BE LOCATED WITHIN PAVEMENT, CURB AND GUTTER OR DRIVEWAYS.

28. IF SOLVENT CONTAMINATION IS FOUND IN THE PIPE TRENCH, WORK SHALL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH APPROVAL OF THE PERMITTING AGENCY, DUCTILE IRON PIPE, FITTINGS AND SOLVENT RESISTANT GASKET MATERIAL SUCH AS FLUOROCARBON SHALL BE USED IN THE CONTAMINATED AREA. THE DUCTILE PIPE SHALL EXTEND AT LEAST 100 FEET BEYOND ANY SOLVENT NOTED. ANY CONTAMINATED SOIL THAT IS EXCAVATED SHALL BE PLACED ON AN IMPERMEABLE MAT AND COVERED WITH A WATERPROOF COVERING. THE PROPER AUTHORITIES WILL BE NOTIFIED AND THE CONTAMINATED SOIL HELD FOR PROPER DISPOSAL.

SEWER

29. ALL SEWER MAINS, SERVICES, AND FITTINGS SHALL BE PVC (ASTM-3034) SDR 26 UNLESS OTHERWISE INDICATED. FORCE MAINS SHALL BE PVC DR 18 PIPE UNLESS OTHERWISE INDICATED. FORCE MAINS SHALL BE PRESSURE TESTED THE SAME AS WATER AND REUSE MAINS.

30. SANITARY SEWER SERVICES SHALL BE 4" PVC WITH A MINIMUM SLOPE OF 0.02 FEET PER FOOT AND SHALL BE TERMINATED AT THE RIGHT-OF-WAY LINE WITH A DEPTH OF 30" TO 60" UNLESS OTHERWISE DETAILED OR RESTRICTED DUE TO DEPTH OF SEWER MAIN. EACH RESIDENTIAL UNIT SHALL BE SERVED BY A SINGLE SEWER LATERAL TO THE CITY'S SEWER GRAVITY MAIN. FORCE MAINS SHALL HAVE A MINIMUM COVER OF 30 INCHES IN UNPAVED AREAS AND 36 INCHES IN PAVED AREAS UNLESS OTHERWISE INDICATED. SEE FORCE MAIN PROFILE SHEET(S).

31. SEWER LINES AND FORCE MAINS ARE DESIGNED TO FINISHED GRADES AND SHALL BE PROTECTED UNTIL WORK IS COMPLETED AND ACCEPTED BY F.D.E.P AND CITY OF EDGEWATER.

32. PRIOR TO THE PLACEMENT OF THE LIMEROCK BASE COURSE, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER A SCHEDULE OF INVERT ELEVATIONS OF ALL SANITARY MANHOLES. THIS SCHEDULE SHALL BE PROVIDED BY THE REGISTERED LAND SURVEYOR SUBMITTING THE "AS-BUILT" DRAWINGS FOR THIS PROJECT.

33. THE CONTRACTOR SHALL INSTALL ANY ADDITIONAL AIR RELEASE VALVES AT CHANGES IN ELEVATION OF 2 FT. DUE TO ACTUAL FIELD CONDITIONS OR CONFLICTS NOT IDENTIFIED ON THESE DESIGN PLANS.

34. TELEVISION INSPECTION SHALL BE REQUIRED ON ALL GRAVITY SEWER MAINS. INSPECTION SHALL BE RECORDED ON VIDEO TAPE OR DVD. ALL LINES ARE TO BE CLEANED AND FLUSHED PRIOR TO INSPECTION. A FULL WRITTEN REPORT AS TO THE CONDITION OF THE PIPE WITH PERTINENT DATA SUCH AS DISTANCE BETWEEN MANHOLES, LOCATION OF SERVICES, ETC. SHALL BE SUBMITTED TO THE OWNER AND ENGINEER PRIOR TO ACCEPTANCE AND ONE COPY OF THE VIDEO INSPECTION SHALL BE SUBMITTED TO THE CITY OF EDGEWATER. ALL DEFECTIVE AREAS AND ITEMS SHALL BE REPLACED OR REPAIRED PRIOR TO FINAL ACCEPTANCE. ALL REPAIRED SECTIONS MUST BE REINSPECTED PRIOR TO ACCEPTANCE. THE MAXIMUM DEFLECTION SHALL NOT EXCEED 7.5% OF THE NOMINAL DIAMETER IN ACCORDANCE WITH CITY OF EDGEWATER STANDARDS. INFILTRATION AND/OR EXFILTRATION TESTING OF GRAVITY SEWERS MAY BE REQUIRED IF DEEMED NECESSARY BY THE ENGINEER. THE MAXIMUM ALLOWABLE INFILTRATION-EXFILTRATION RATE WILL BE 50 GALLONS PER INCH DIAMETER PER MILE PER DAY.

PAVING AND DRAINAGE LEGEND

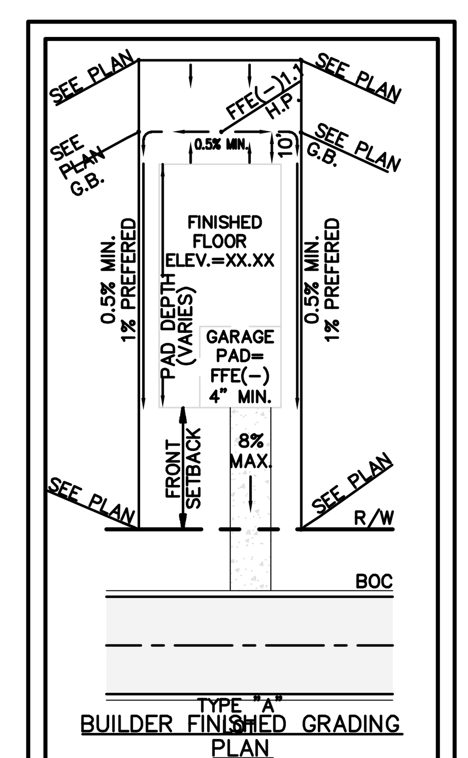
EXISTING / PROPOSED

- 25.5 — SPOT ELEVATION
- 10 — CONTOURS
- S 45°34'23" E — BOUNDARY
- DRAINAGE DIVIDE
- ST — STORM SEWER AND SIZE
- ST — STORM SEWER INLET
- ST — STORM SEWER MANHOLE
- ST — MITERED END SECTION
- DRAINAGE FLOW ARROWS
- DITCH FLOW ARROWS
- S-10 — STRUCTURE NUMBERS
- 1.8 AC.± — DRAINAGE AREA
- A1 — SOIL BORING LOCATION
- UD — UNDERDRAIN
- CONCRETE SIDEWALK
- CONCRETE CURB AND GUTTER
- JURISDICTIONAL WETLANDS
- SILT FENCE
- HAY BALES

WATER AND SEWER LEGEND

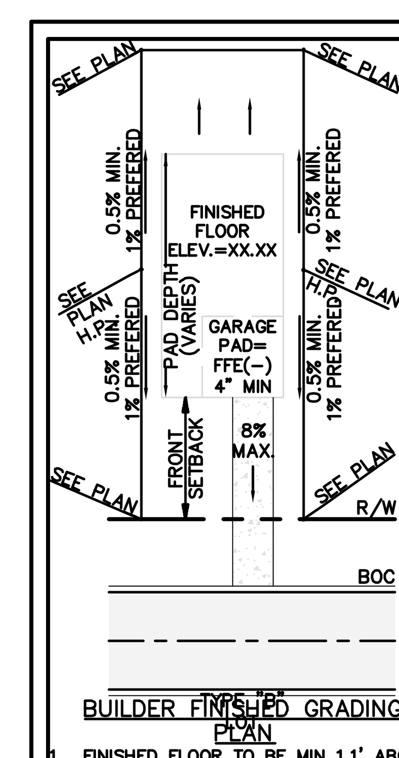
EXISTING / PROPOSED

- SAN 8" — SANITARY SEWER LINE
- SAN 8" — SANITARY SEWER SERVICE
- SAN 8" — SANITARY SEWER MANHOLE
- CLEANOUT
- FM 4" — FORCE MAIN
- W 8" — WATER MAIN
- RW 8" — REUSE WATER MAIN
- FP 8" — FIRE PROTECTION MAIN
- W 8" — FIRE HYDRANT
- W 2" — FLUSHING HYDRANT
- W 8" — GATE VALVE
- W 8" — REDUCER
- W 8" — TEE
- W 8" — BEND
- W 2" — WATER METER
- W 8" — BACKFLOW PREVENTER



BUILDER FINISHED GRADING PLAN

1. HIGH POINT BEHIND PAD MAY SHIFT LEFT OR RIGHT DEPENDING ON GRADING ACROSS LOT.



BUILDER FINISHED GRADING PLAN

1. FINISHED FLOOR TO BE MIN 1.1' ABOVE H.P. ON HIGHER SIDE.
2. H.P. MAY BE SHIFTED TO FRONT OF PAD.

NEIGHBORHOOD GRADING LEGEND

- N.G. — NATURAL GRADE
- 25.1 — PROPOSED SPOT ELEVATION
- 25.5 — EXISTING SPOT ELEVATION
- 10 — EXISTING TOPOGRAPHY
- 61 — LOT NUMBER
- S 45°34'23" E — SUBDIVISION BOUNDARY
- DRAINAGE FLOW ARROWS
- DITCH FLOW ARROWS

NEIGHBORHOOD DRAINAGE & GRADING NOTES

1. (F.F. EL. = 11.8 TYPE "B") FINISHED FLOOR ELEVATION AND APPROXIMATE BUILDING LOCATION AND LETTER DENOTES LOT TYPE GRADING
2. ALL PROPOSED LOT CORNERS SHALL BE AS FOLLOWS:
   - A. BACK CORNER LOT ELEVATIONS ARE AT NATURAL GROUND UNLESS OTHERWISE NOTED OR WHERE FILLING IS REQUIRED TO OBTAIN 1% SLOPE.
3. "A OR B" DENOTES STD. LOT TYPE GRADING. EXACT LOCATION OF SWALES SHALL BE DETERMINED WHEN THE SIZE AND LOCATION OF BUILDING IS SET (BY OTHERS)
4. 25.1 PROPOSED GRADE AT LOT CORNERS
5. FINISHED FLOOR ELEVATIONS GIVEN ON PLAN ARE MINIMUM. EXACT ELEVATION SHALL BE DETERMINED WHEN THE SIZE AND LOCATION OF BUILDING IS SET (BY OTHERS).
6. CONTRACTOR TO REMOVE UNSUITABLE MATERIAL UNDER HOUSE PADS IN ACCORDANCE WITH PROJECT GEOTECHNICAL REPORT
7. GRADE BREAK HIGHPOINT SHALL NOT BE MORE FORWARD THAN THE BUILDING CORNER OF THE STRUCTURE FACING THE STREET ON EITHER SIDE. IF THE HIGHPOINT IS AT THE FRONT OF THE BUILDING PAD AND THE SUBSEQUENT VERTICAL BUILDING CORNERS ARE SET BEHIND THIS LOCATION, LOT REGRADING WILL BE REQUIRED BY THE VERTICAL BUILDING CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM THE STRUCTURE

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 80867

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

ETM | Trusted Advisors, Creating Community.
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REG-00002584 LC-0000316

GENERAL NOTES

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
2

PLOTTED: November 18, 2025 – 3:16 PM, BY: Emma Thompson
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PHASE 1 & 2 LOT MIX

LOT SIZES	PHASE 1 NEIGHBORHOOD GENERAL	PHASE 1 NEIGHBORHOOD CENTER	PHASE 1 TOWN SQUARE	PHASE 2 NEIGHBORHOOD GENERAL	TOTAL	
24' LOTS	0	0	73	0	73	14%
34' LOTS	0	25	0	0	25	5%
* 40' LOTS	55	0	0	56	111	22%
45' LOTS	0	38	0	0	38	7%
50' LOTS	103	0	0	74	177	34%
60' LOTS	53	0	0	39	92	18%
TOTAL	211	63	73	169		
GRAND TOTAL			347	169	516 TOTAL	

* NO MORE THEN 25% OF THE DEERING PARK HOMES HALL BE LOCATED ON 40FT LOTS

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
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ENGLAND-THIMS & MILLER

MASTER SITE PLAN - PHASES 1 & 2

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
3A

PLOTTED: November 18, 2025 – 3:17 PM, BY: Emma Thompson

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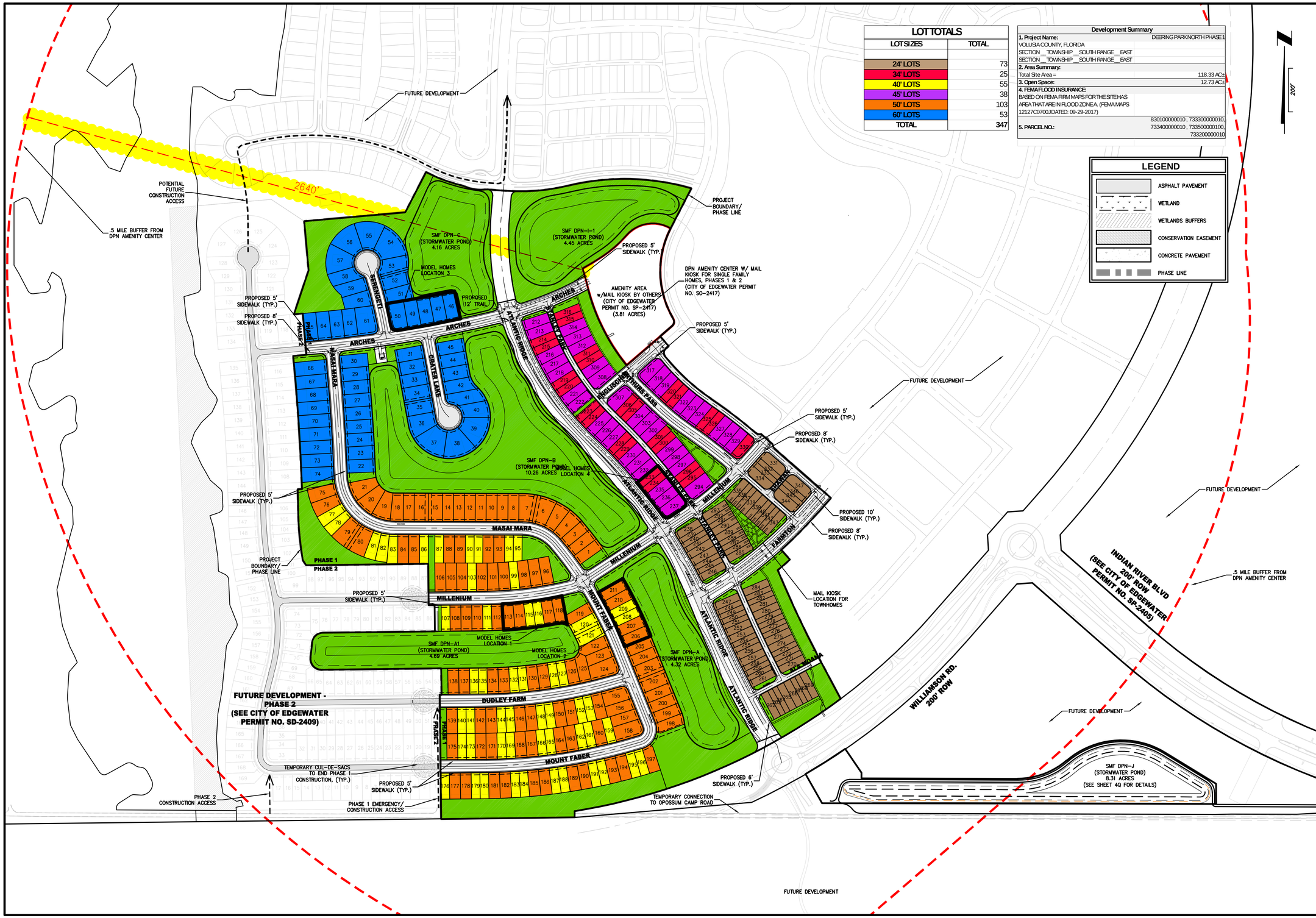

LOT TOTALS

LOT SIZES	TOTAL
24' LOTS	73
34' LOTS	25
40' LOTS	55
45' LOTS	38
50' LOTS	103
60' LOTS	53
TOTAL	347

Development Summary

1. Project Name: DEERING PARK NORTH PHASE 1
VOLUSIA COUNTY, FLORIDA
SECTION __ TOWNSHIP __ SOUTH RANGE __ EAST
SECTION __ TOWNSHIP __ SOUTH RANGE __ EAST

2. Area Summary:
Total Site Area = 118.33 AC±

3. Open Space: 12.73 AC±

4. FEMA FLOOD INSURANCE:
BASED ON FEMA FIRM MAPS FOR THE SITE HAS AREA THAT ARE IN FLOOD ZONE A. (FEMA MAPS 12127C0700J DATED: 09-29-2017)

5. PARCEL NO.: 830100000010, 733300000010, 733400000010, 733500000100, 733200000010

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
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MASTER SITE PLAN

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
3B

PLOTTED: November 18, 2025 – 3:17 PM, BY: Emma Thompson

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PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

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MASTER SITE PLAN - PHASE 1 & 2 BLOCK ACREAGES

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
3C

PLOTTED: November 18, 2025 – 3:17 PM, BY: Emma Thompson

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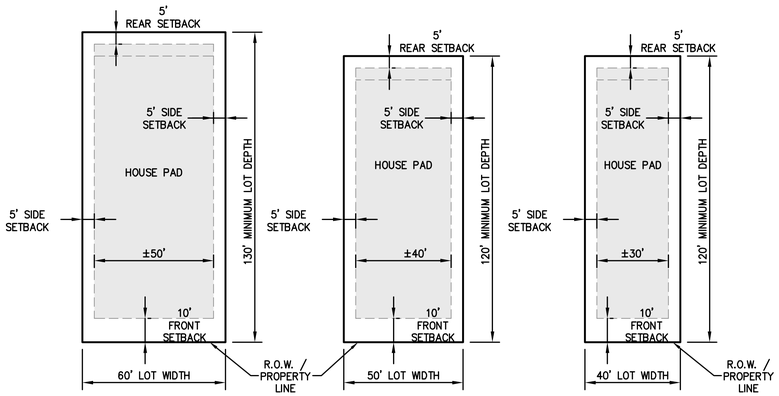
NEIGHBORHOOD GENERAL

LOT SETBACK DIAGRAMS

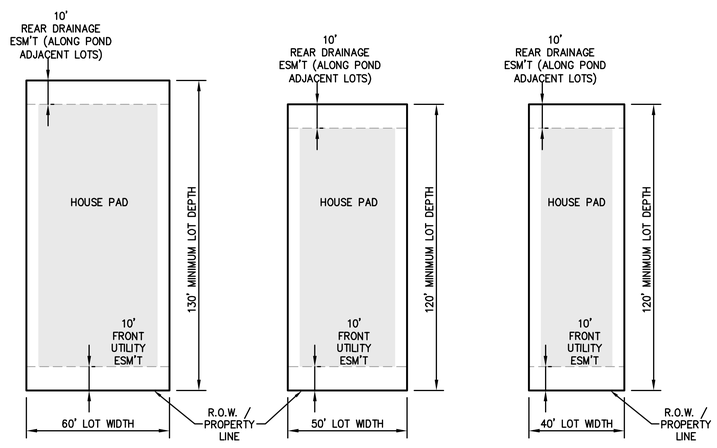


60' LOTS
NOT TO SCALE

50' LOTS
NOT TO SCALE

40' LOTS
NOT TO SCALE

LOT EASEMENT DIAGRAMS



60' LOTS
NOT TO SCALE

50' LOTS
NOT TO SCALE

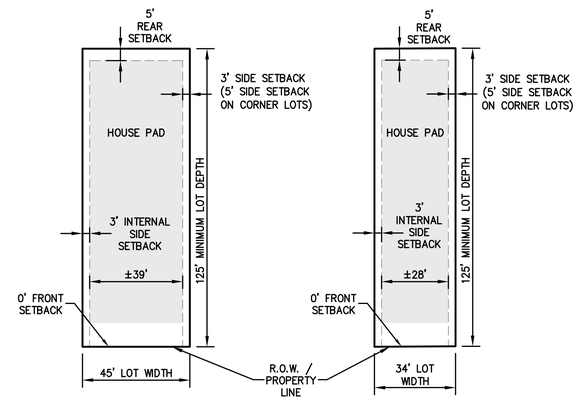
40' LOTS
NOT TO SCALE

NOTE

MAXIMUM BUILDING COVERAGE IS 70%.
NO POOL OR PATIO SHALL BE WITHIN 5' BUILDING SETBACK.

NEIGHBORHOOD CENTER

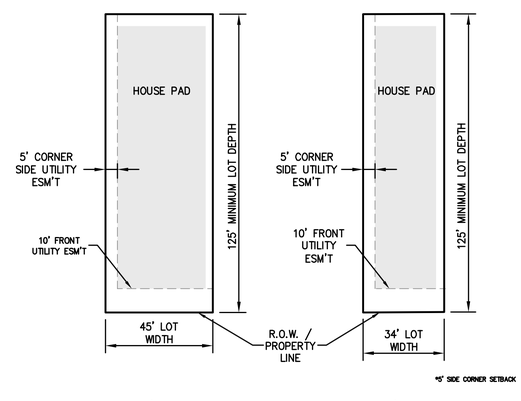
LOT SETBACK DIAGRAMS



45' LOTS
NOT TO SCALE

34' LOTS
NOT TO SCALE

LOT EASEMENT DIAGRAMS



45' LOTS
NOT TO SCALE

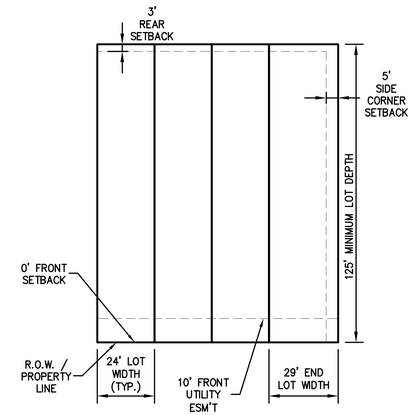
34' LOTS
NOT TO SCALE

NOTE

MAXIMUM BUILDING COVERAGE IS 80%.
NO POOL OR PATIO SHALL BE WITHIN 5' BUILDING SETBACK.

TOWN SQUARE

LOT DIAGRAMS



24' TOWNHOUSE LOTS
NOT TO SCALE

NOTE

MAXIMUM BUILDING COVERAGE IS 80%.
NO POOL OR PATIO SHALL BE WITHIN 5' BUILDING SETBACK.

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 69967

REVISIONS:

ETM NO. 22-213-03
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TYPICAL LOT DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
3D

PLOTTED: November 18, 2025 – 3:18 PM, BY: Emma Thompson

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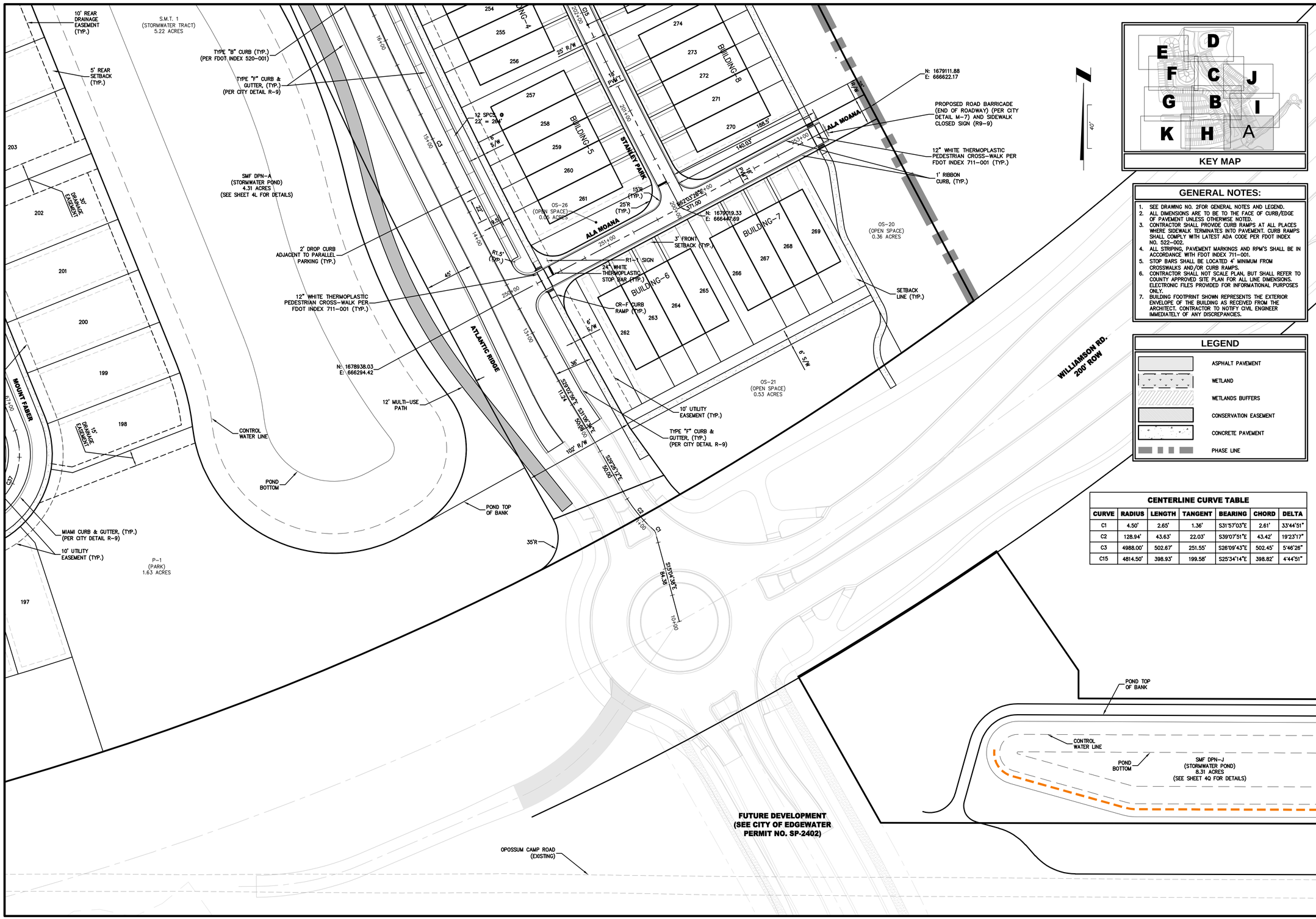

KEY MAP

GENERAL NOTES:

1. SEE DRAWING NO. 2FOR GENERAL NOTES AND LEGEND.
2. ALL DIMENSIONS ARE TO BE TO THE FACE OF CURB/EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL PROVIDE CURB RAMPS AT ALL PLACES WHERE SIDEWALK TERMINATES INTO PAVEMENT. CURB RAMPS SHALL COMPLY WITH LATEST ADA CODE PER FDOT INDEX NO. 522-002.
4. ALL STRIPING, PAVEMENT MARKINGS AND RPM'S SHALL BE IN ACCORDANCE WITH FDOT INDEX 711-001.
5. STOP BARS SHALL BE LOCATED 4' MINIMUM FROM CROSSWALKS AND/OR CURB RAMPS.
6. CONTRACTOR SHALL NOT SCALE PLAN, BUT SHALL REFER TO COUNTY APPROVED SITE PLAN FOR ALL LINE DIMENSIONS. ELECTRONIC FILES PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
7. BUILDING FOOTPRINT SHOWN REPRESENTS THE EXTERIOR ENVELOPE OF THE BUILDING AS RECEIVED FROM THE ARCHITECT. CONTRACTOR TO NOTIFY CIVIL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE

CENTERLINE CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C1	4.50'	2.65'	1.36'	S31°57'03"E	2.61'	33°44'51"
C2	128.94'	43.63'	22.03'	S39°07'51"E	43.42'	19°23'17"
C3	4988.00'	502.67'	251.55'	S26°09'43"E	502.45'	5°46'26"
C15	4814.50'	398.93'	199.58'	S25°34'14"E	398.82'	4°44'51"

PLANS PREPARED UNDER THE DIRECTION OF:

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P.E. NUMBER: 89967

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REVISIONS:

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SITE GEOMETRY PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER

4A

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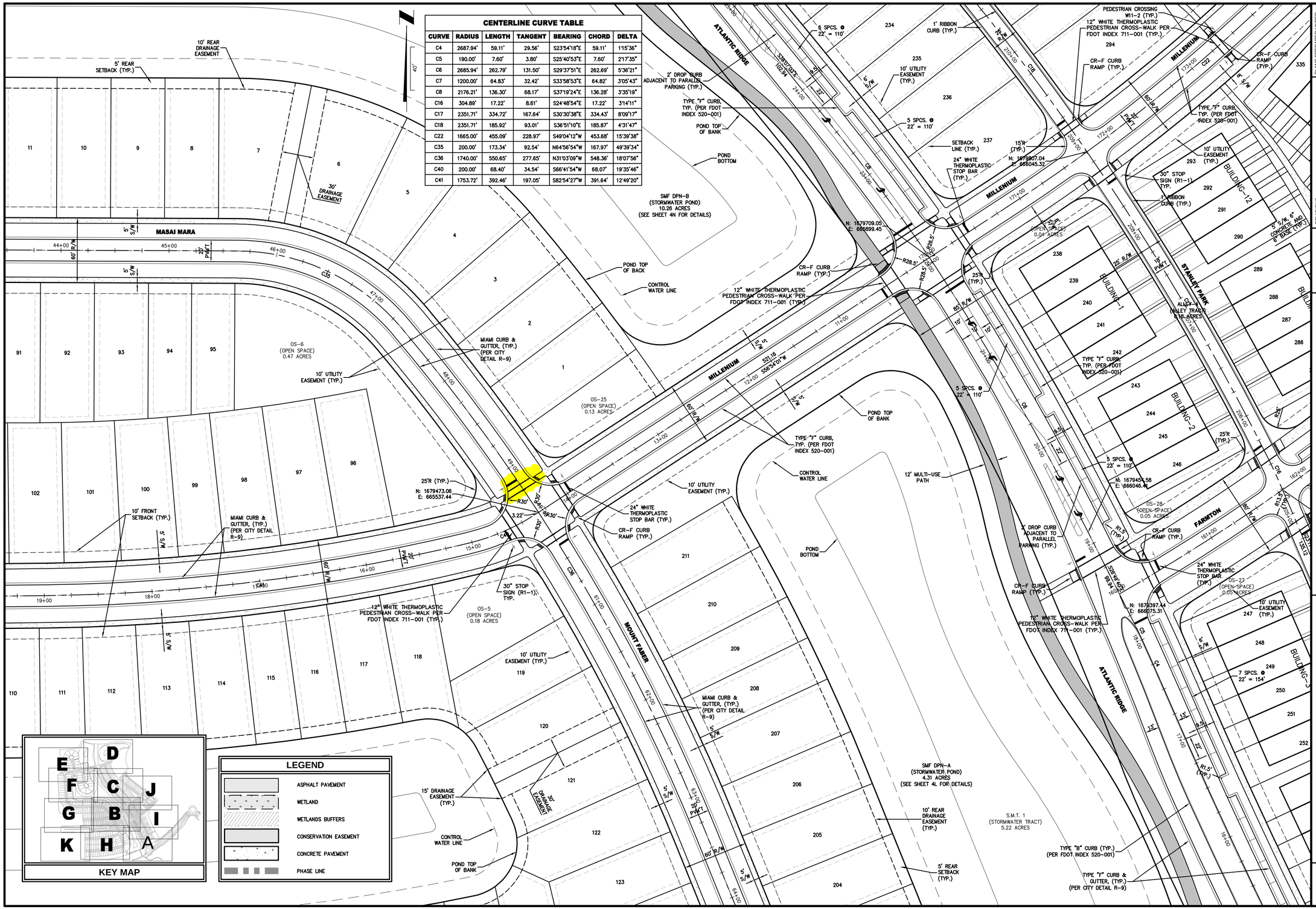
CENTERLINE CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C4	2687.94'	59.11'	29.56'	S23°54'18"E	59.11'	1°15'36"
C5	190.00'	7.60'	3.80'	S25°40'53"E	7.60'	2°17'35"
C6	2685.94'	262.79'	131.50'	S29°37'51"E	262.69'	5°36'21"
C7	1200.00'	64.83'	32.42'	S33°58'53"E	64.82'	3°05'43"
C8	2176.21'	136.30'	68.17'	S37°19'24"E	136.28'	3°35'19"
C16	304.89'	17.22'	8.61'	S24°48'54"E	17.22'	3°14'11"
C17	2351.71'	334.72'	167.64'	S30°30'38"E	334.43'	8°09'17"
C18	2351.71'	185.92'	93.01'	S36°51'10"E	185.87'	4°31'47"
C22	1665.00'	455.09'	228.97'	S49°04'12"W	453.68'	15°39'38"
C35	200.00'	173.34'	92.54'	N64°56'54"W	167.97'	49°39'34"
C36	1740.00'	550.65'	277.65'	N31°03'09"W	548.36'	18°07'56"
C40	200.00'	68.40'	34.54'	S66°41'54"W	68.07'	19°35'46"
C41	1753.72'	392.46'	197.05'	S82°54'27"W	391.64'	12°49'20"



KEY MAP

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
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SITE GEOMETRY PLAN

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
4B

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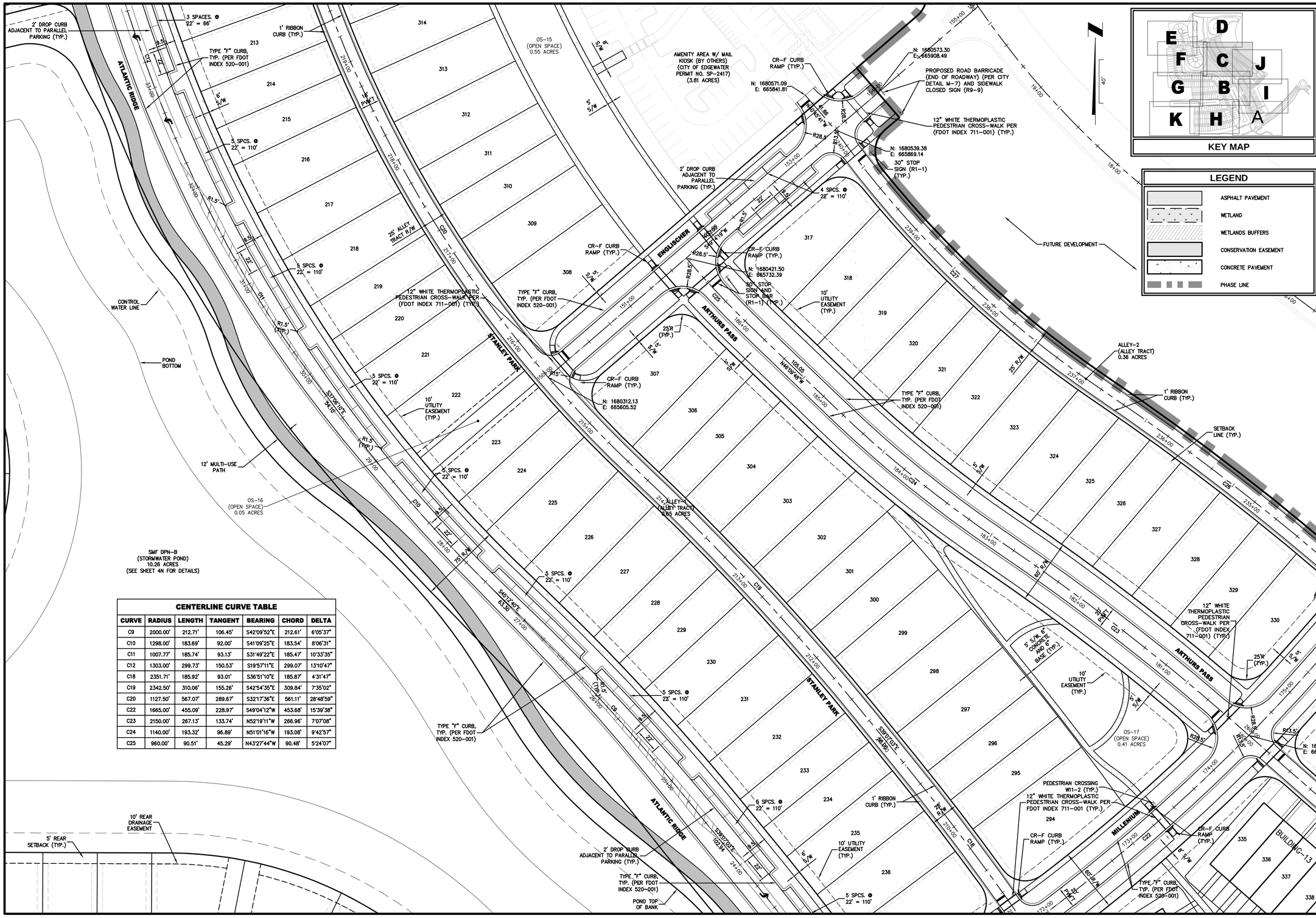

CENTERLINE CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C9	2000.00'	212.71'	106.45'	S42°09'52"E	212.61'	6°05'37"
C10	1298.00'	183.69'	92.00'	S41°09'25"E	183.54'	8°06'31"
C11	1007.77'	185.74'	93.13'	S31°49'22"E	185.47'	10°33'35"
C12	1303.00'	299.73'	150.53'	S19°57'11"E	299.07'	13°10'47"
C18	2351.71'	185.92'	93.01'	S36°51'10"E	185.87'	4°31'47"
C19	2342.50'	310.06'	155.26'	S42°54'35"E	309.84'	7°35'02"
C20	1127.50'	567.07'	289.67'	S32°17'36"E	561.11'	28°48'59"
C22	1665.00'	455.09'	228.97'	S49°04'12"W	453.68'	15°39'38"
C23	2150.00'	267.13'	133.74'	N52°19'11"W	266.96'	7°07'08"
C24	1140.00'	193.32'	96.89'	N51°01'16"W	193.08'	9°42'57"
C25	960.00'	90.51'	45.29'	N43°27'44"W	90.48'	5°24'07"

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

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SITE GEOMETRY PLAN

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER

4C

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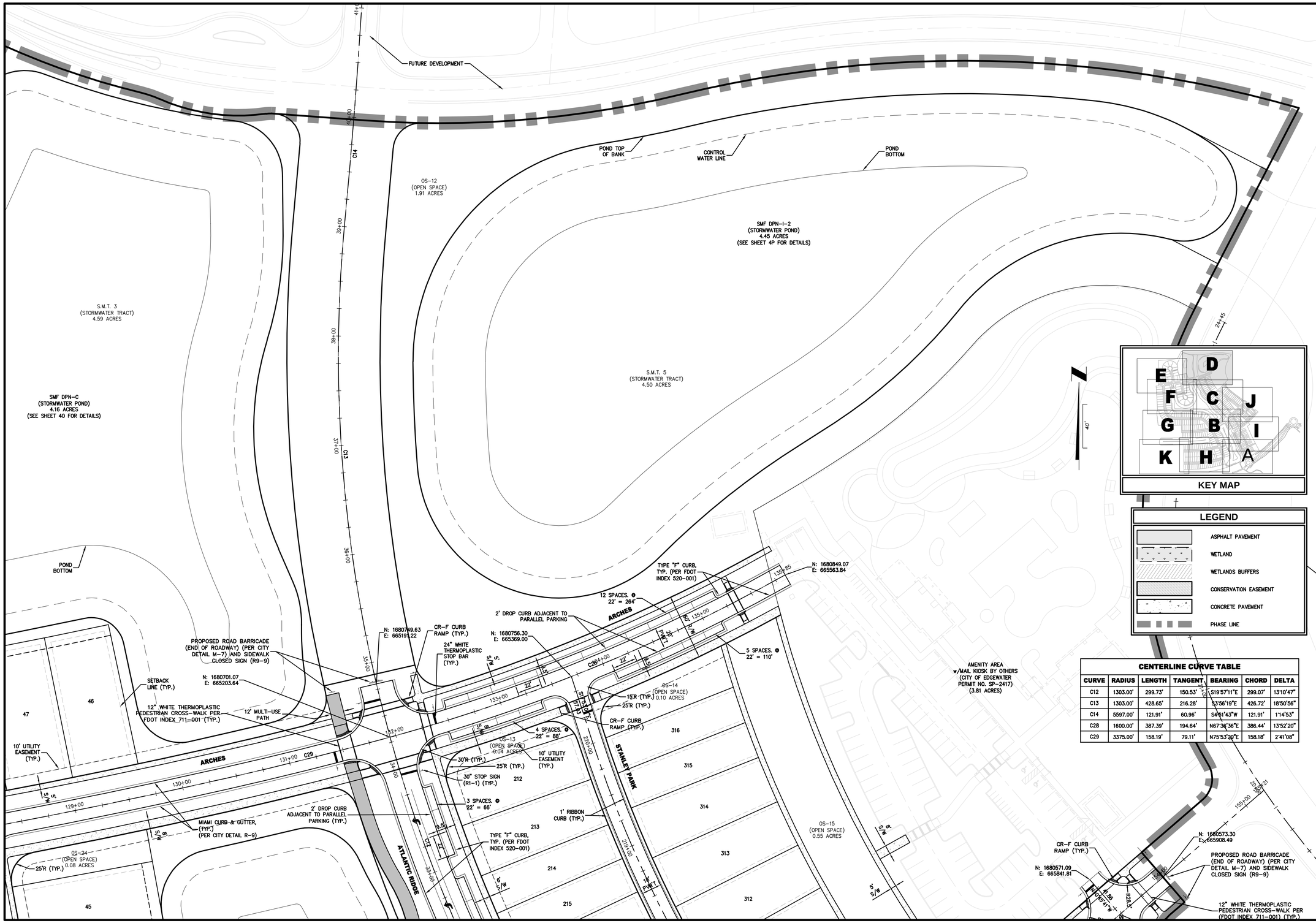

KEY MAP

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE

CENTERLINE CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C12	1303.00'	299.73'	150.53'	S19°57'11"E	299.07'	13°10'47"
C13	1303.00'	428.65'	216.28'	S3°56'19"E	426.72'	18°50'56"
C14	5597.00'	121.91'	60.96'	S4°01'43"W	121.91'	1°14'53"
C28	1600.00'	387.39'	194.64'	N67°36'36"E	386.44'	13°52'20"
C29	3375.00'	158.19'	79.11'	N75°53'20"E	158.18'	2°41'08"

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 80967

REVISIONS:

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SITE GEOMETRY PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
4D

PLOTTED: November 18, 2025 – 3:19 PM, BY: Emma Thompson

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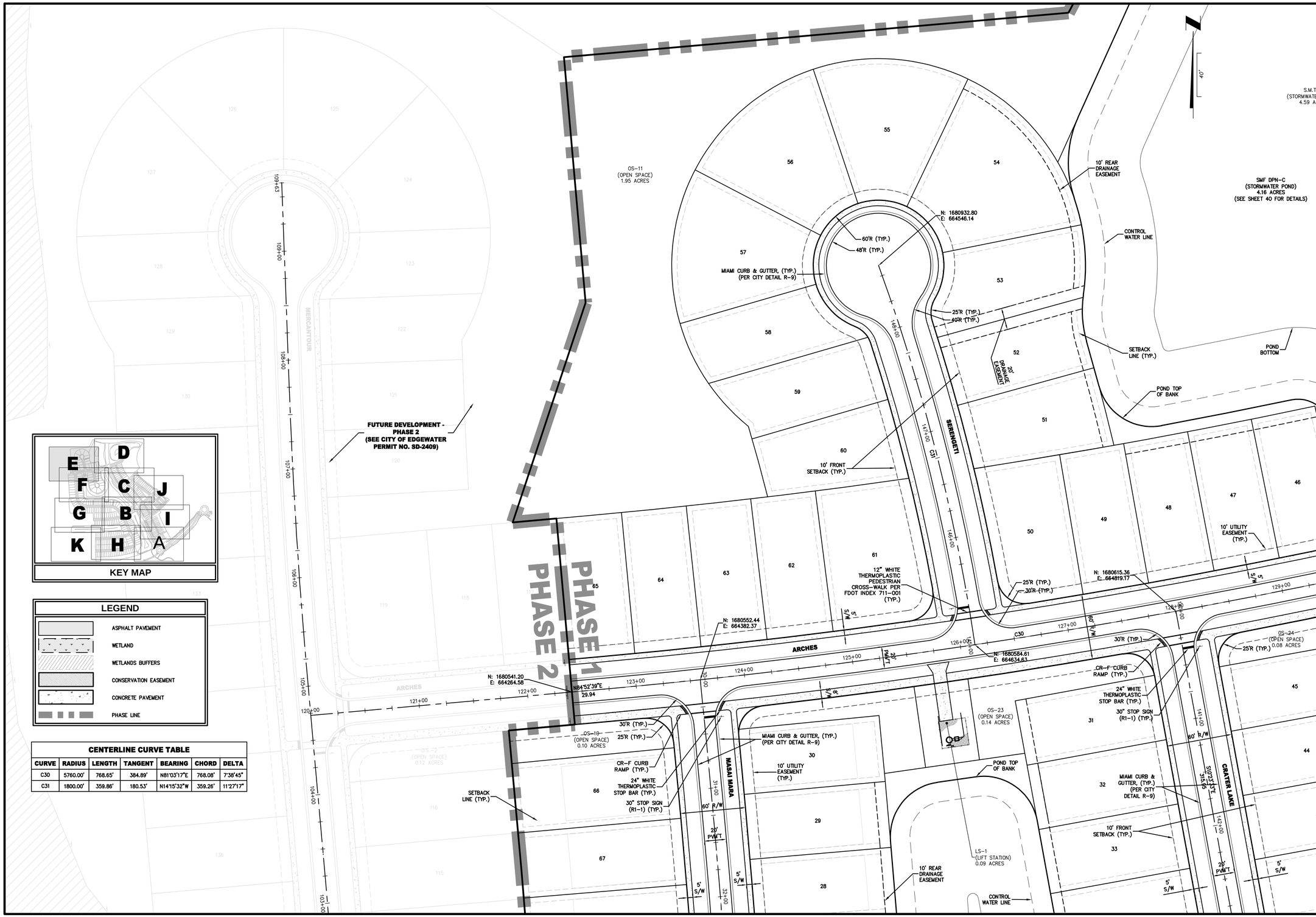

CENTERLINE CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C30	5760.00'	768.65'	384.89'	N81°03'17"E	768.06'	7°38'45"
C31	1800.00'	359.86'	180.53'	N14°15'32"W	359.26'	11°27'17"

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SITE GEOMETRY PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
4E

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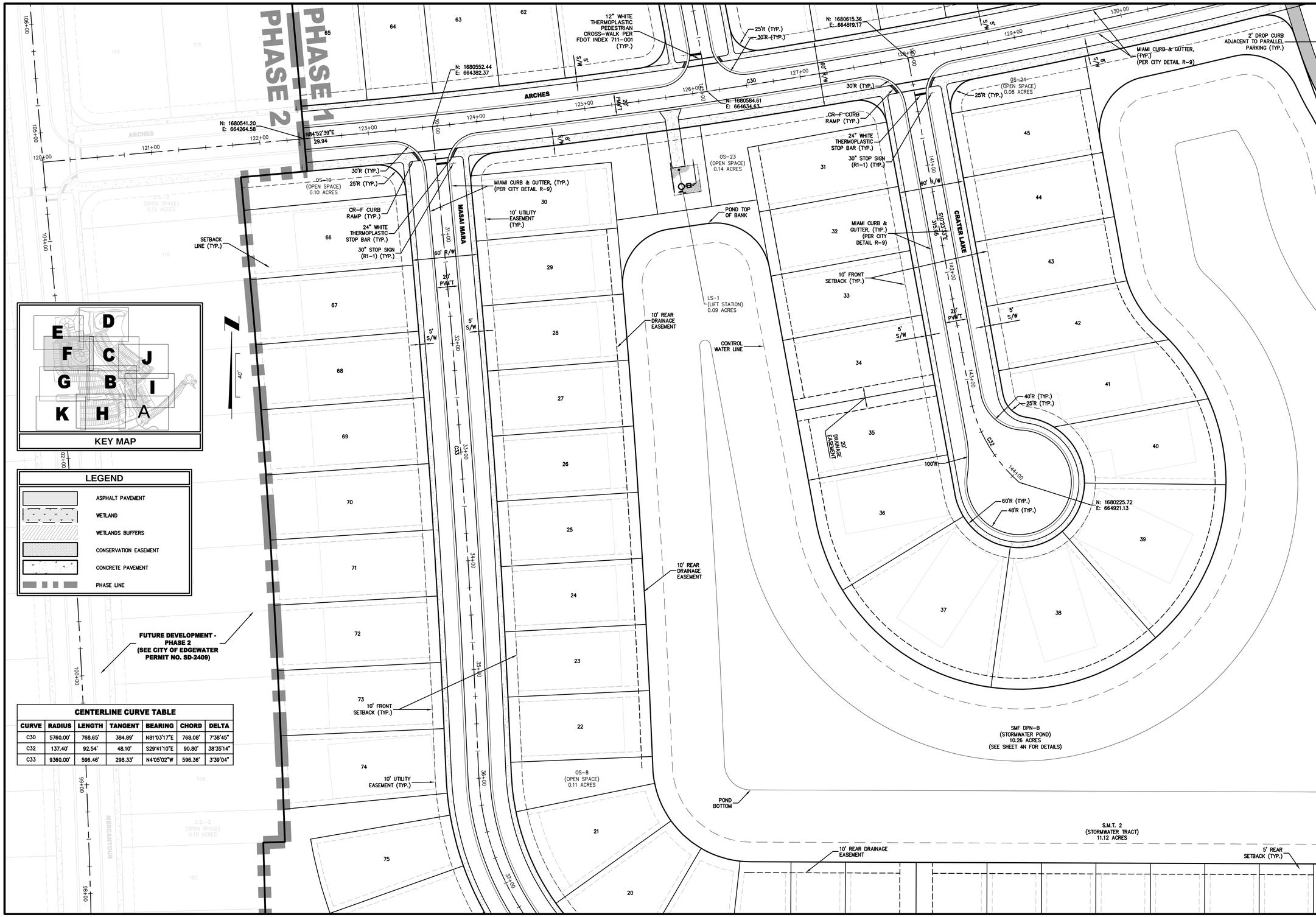

CENTERLINE CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C30	5760.00'	768.65'	384.89'	N81°03'17"E	768.08'	7°38'45"
C32	137.40'	92.54'	48.10'	S29°41'10"E	90.80'	38°35'14"
C33	9360.00'	596.46'	298.33'	N4°05'02"W	596.36'	3°39'04"

PLANS PREPARED UNDER THE DIRECTION OF:

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SITE GEOMETRY PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
4F

PLOTTED: November 18, 2025 – 3:19 PM, BY: Emma Thompson

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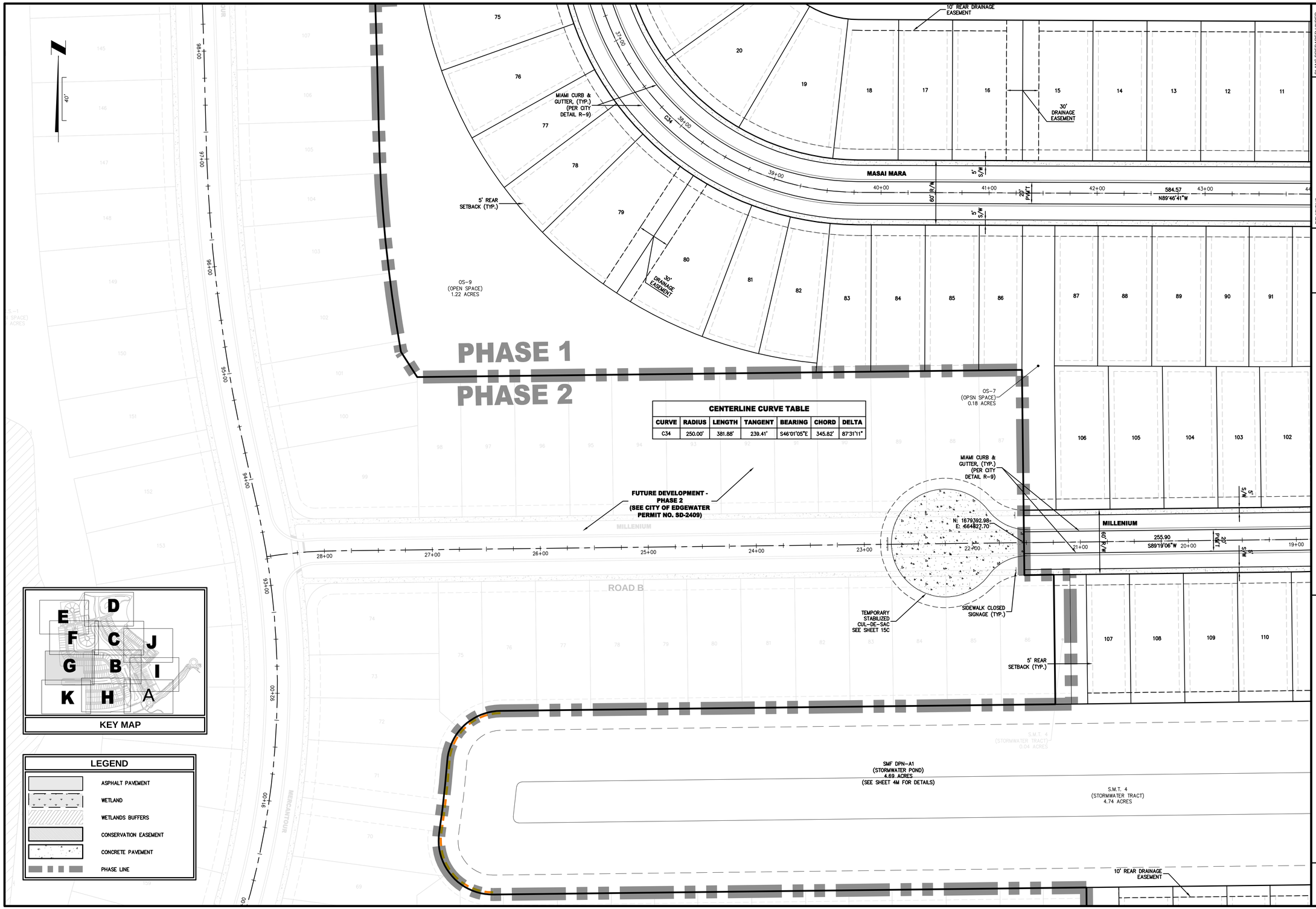

CENTERLINE CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C34	250.00'	381.88'	239.41'	S46°01'05"E	345.82'	87°31'11"

PLANS PREPARED UNDER THE DIRECTION OF:

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SITE GEOMETRY PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

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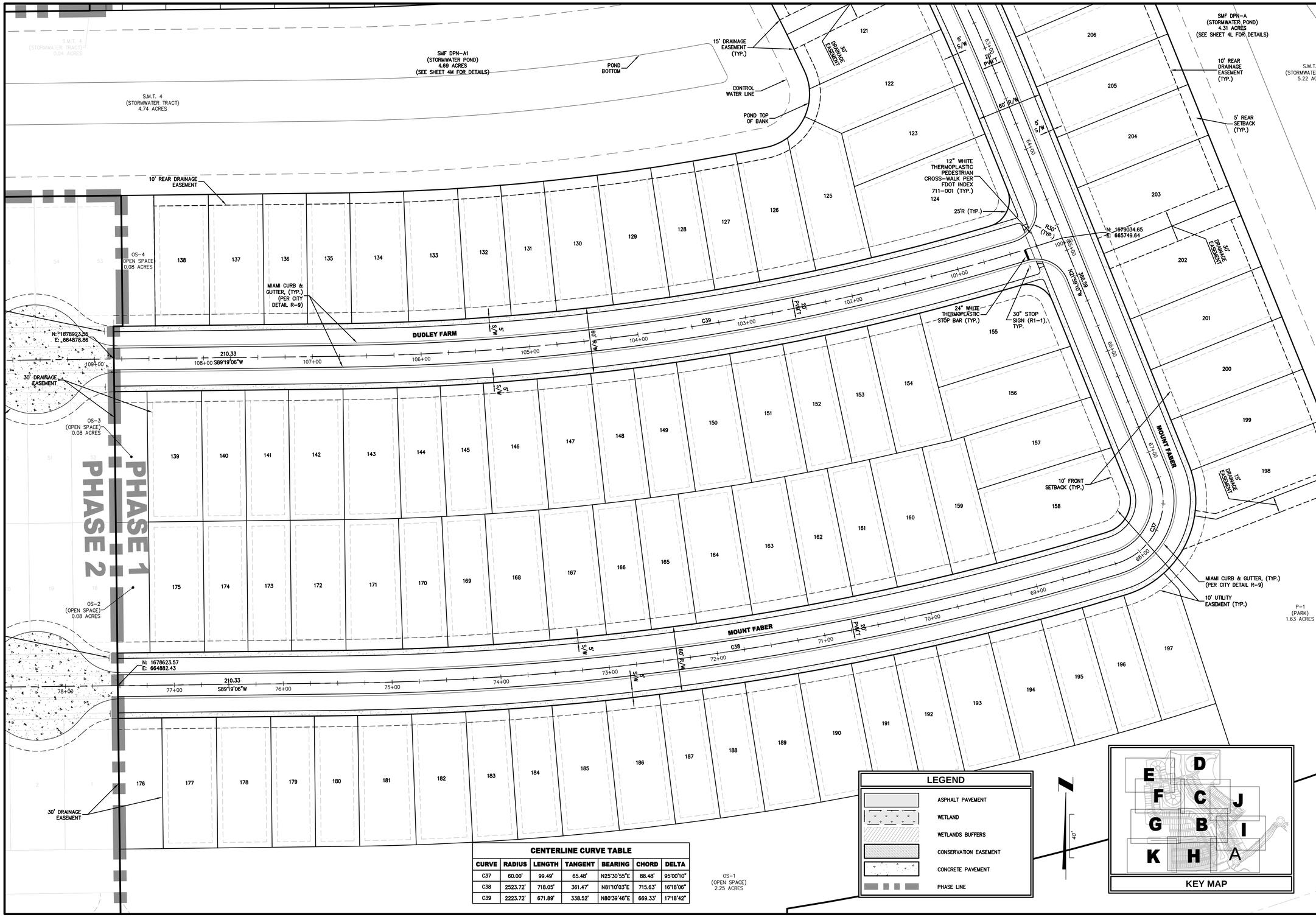

CENTERLINE CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C37	60.00'	99.49'	65.48'	N25°30'55"E	88.48'	95°00'10"
C38	2523.72'	718.05'	361.47'	N81°10'03"E	715.63'	16°18'06"
C39	2223.72'	671.89'	338.52'	N80°39'46"E	669.33'	17°18'42"

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SITE GEOMETRY PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
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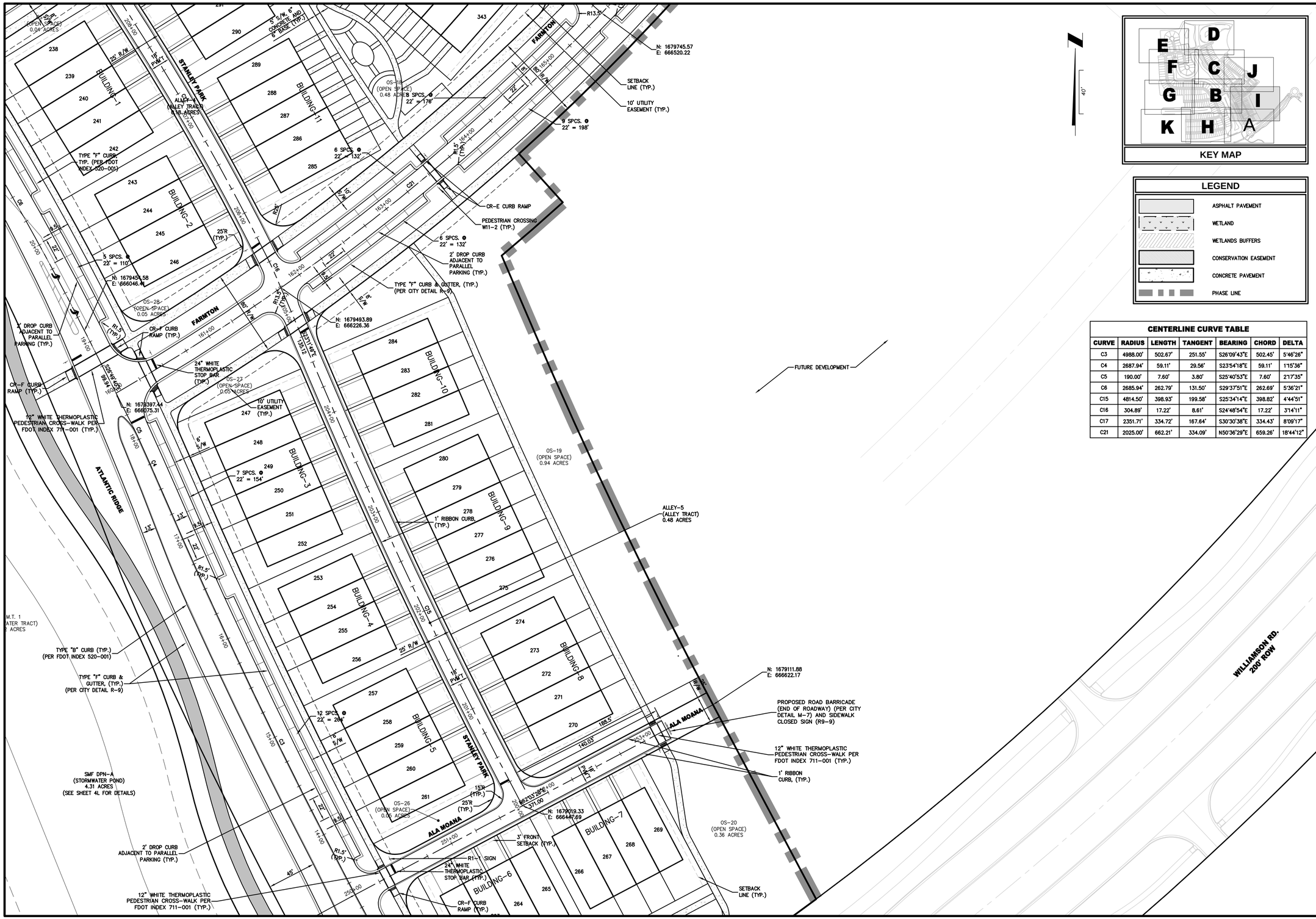

KEY MAP

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE

CENTERLINE CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C3	4988.00'	502.67'	251.55'	S26°09'43"E	502.45'	5°46'26"
C4	2887.94'	59.11'	29.56'	S23°54'18"E	59.11'	1°15'36"
C5	190.00'	7.60'	3.80'	S25°40'53"E	7.60'	2°17'35"
C6	2685.94'	262.79'	131.50'	S29°37'51"E	262.69'	5°36'21"
C15	4814.50'	398.93'	199.58'	S25°34'14"E	398.82'	4°44'51"
C16	304.89'	17.22'	8.61'	S24°48'54"E	17.22'	3°14'11"
C17	2351.71'	334.72'	167.64'	S30°30'38"E	334.43'	8°09'17"
C21	2025.00'	662.21'	334.09'	N50°36'29"E	659.26'	18°44'12"

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DEERING PARK 1, LLC

DRAWING NUMBER
4I

PLOTTED: November 18, 2025 – 3:19 PM, BY: Emma Thompson

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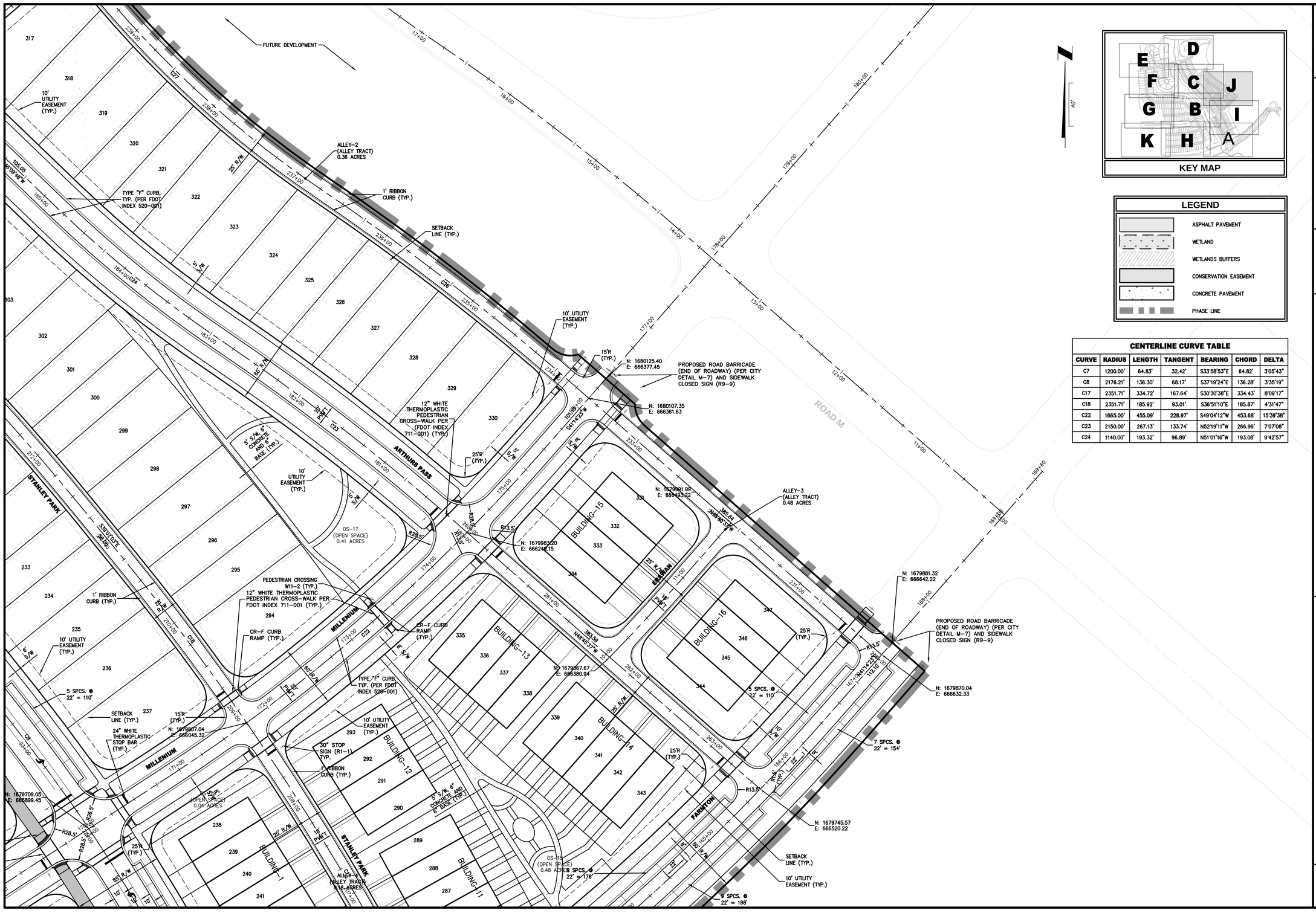

CENTERLINE CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C7	1200.00'	64.83'	32.42'	S33°58'53"E	64.82'	3°05'43"
C8	2176.21'	136.30'	68.17'	S37°19'24"E	136.28'	3°35'19"
C17	2351.71'	334.72'	167.64'	S30°30'38"E	334.43'	8°09'17"
C18	2351.71'	185.92'	93.01'	S36°51'10"E	185.87'	4°31'47"
C22	1665.00'	455.09'	228.97'	S49°04'12"W	453.68'	15°39'38"
C23	2150.00'	267.13'	133.74'	N52°19'11"W	266.96'	7°07'08"
C24	1140.00'	193.32'	96.89'	N51°01'16"W	193.08'	9°42'57"

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

1411 Edgewater Drive, Ste. 200
Orlando, Florida 32804
(407) 536-5379
www.etmlrc.com
REG-00002584 LC-0000316

Trusted Advisors, Creating Community.
ETM ENGLAND-THIMS & MILLER

SITE GEOMETRY PLAN

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
4J

PLOTTED: November 18, 2025 – 3:19 PM, BY: Emma Thompson

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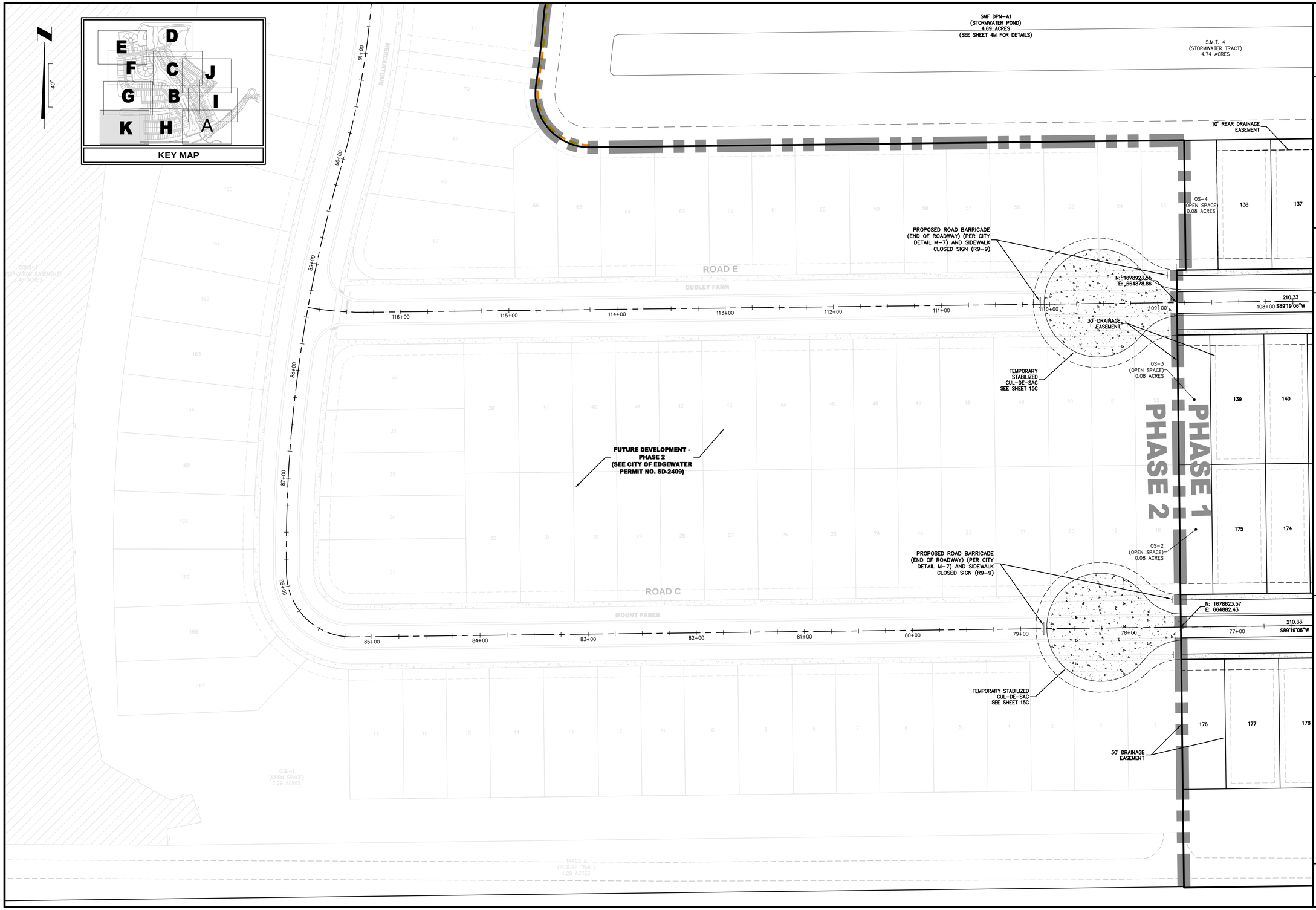

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 80967

REVISIONS:

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ETM
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SITE GEOMETRY PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
4K

PLOTTED: November 18, 2025 – 3:19 PM, BY: Emma Thompson

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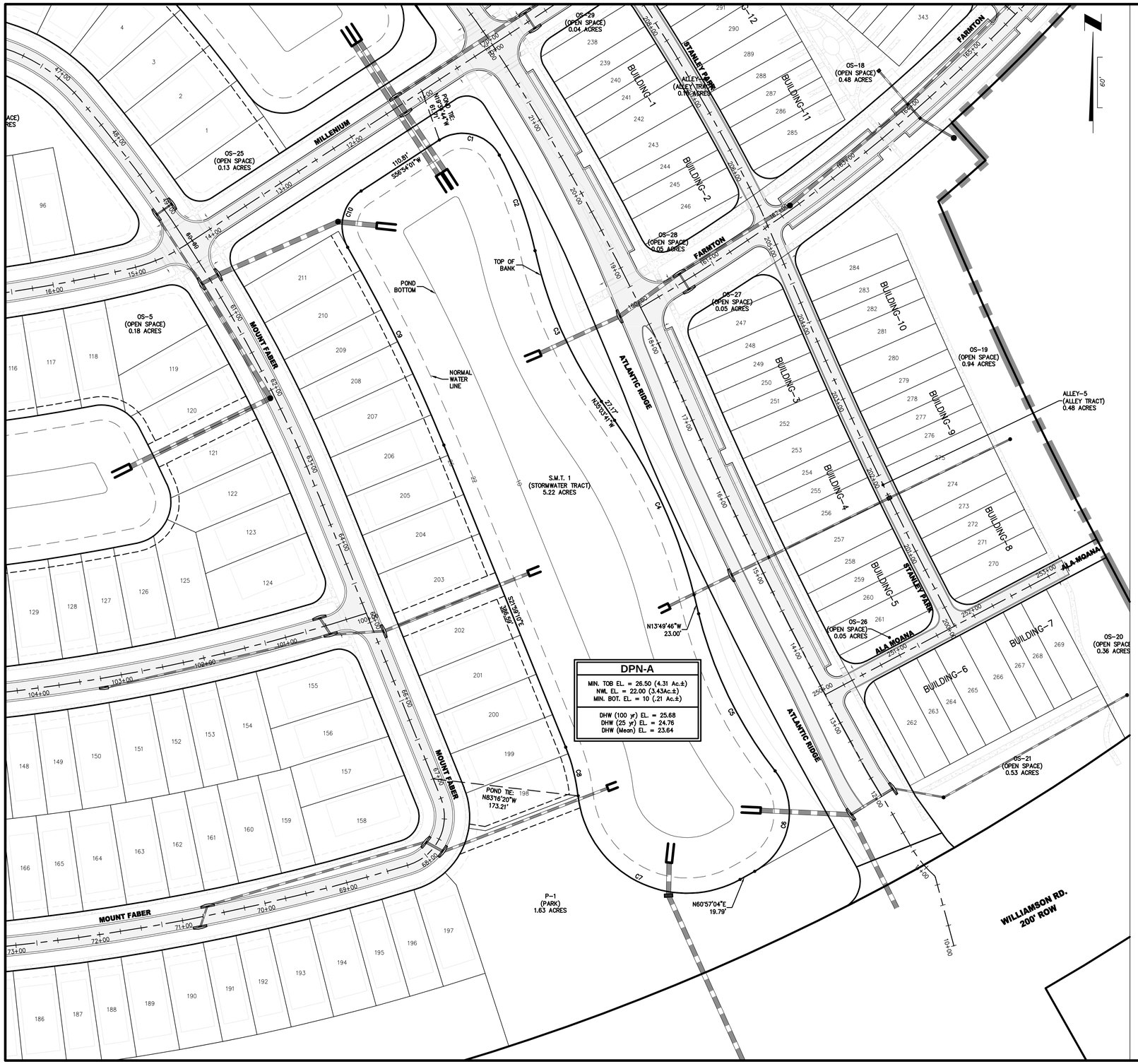


NOTES:

NOTES:

1. SIDES SLOPES SHALL NOT BE STEEPER THAN 4:1 TO DEPTH SHOWN ABOVE (PER SJRWMD REQUIREMENTS). CONTRACTOR SHALL VERIFY SLOPES AND VOLUME ON RECORD DRAWINGS AT SPOTS SHOWN ABOVE AND AT 100' MAXIMUM INTERVALS AND AT ALL TURN POINTS.
2. CONTRACTOR SHALL FILL EMBANKMENTS (BERMS) THAT ARE ABOVE EXISTING GRADE IN LIFTS NOT EXCEEDING 8" IN THICKNESS. SURFACE OF FILL SHALL BE SCARIFIED BETWEEN SUCCESSIVE LIFTS TO PROVIDE BOND AND PRECLUDE SEEPAGE PATHS OR SLICK INTERFACES. FILL SOILS SHALL CONSIST OF CLAYEY FINE SANDS (SC) WITH A MIN. 15 PERCENT OF FINES PASSING THE NO. 200 SIEVE. EMBANKMENT SHALL BE COMPACTED TO 98% OF MODIFIED PROCTOR MAX. DRY DENSITY. WITH 2%± OF OPTIMUM MOISTURE CONTENT. CONTRACTOR SHALL PROVIDE DENSITY TEST ALONG POND EMBANKMENTS AT 200' INTERVALS.
3. CONTRACTOR MAY DISPOSE OF UNSUITABLE MATERIAL IN BOTTOM OF STORM WATER MANAGEMENT FACILITY PROVIDED THAT ALL UNSUITABLE MATERIAL DISPOSED OF IS COVERED WITH A MINIMUM OF 24" OF CLEAN FILL; HOWEVER, CONTRACTOR SHALL NOT DISPOSE OF UNSUITABLE MATERIAL IN SIDE SLOPES OR BERMS, FINAL DEPTH SHALL BE AS SHOWN ON PERMITTED CONSTRUCTION PLANS.
4. NO MOWED OR CUT VEGETATIVE MATERIAL SHALL BE DEPOSITED OR REMAIN IN THE LOW MAINTENANCE ZONE OR DEPOSITED IN THE WATER. CARE SHOULD BE TAKEN TO PREVENT THE OVER-SPRAY OF AQUATIC WEED PRODUCTS INTO THE LOW MAINTENANCE ZONE.

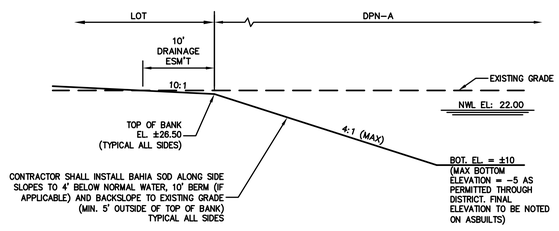
LEGEND

ASPHALT PAVEMENT

CONCRETE PAVEMENT

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C1	50.00'	82.51'	54.13'	N75°49'34"W	73.46'	94°32'50"
C2	432.00'	121.38'	61.09'	N20°30'11"W	120.98'	16°05'55"
C3	499.00'	196.89'	99.74'	N23°45'27"W	195.62'	22°36'27"
C4	618.00'	229.01'	115.83'	N24°26'43"W	227.70'	21°13'55"
C5	495.00'	208.99'	106.08'	N25°55'29"W	207.44'	24°11'26"
C6	80.00'	138.19'	93.62'	N11°27'56"E	121.64'	98°58'16"
C7	130.00'	255.60'	195.11'	S62°43'25"E	216.37'	112°39'01"
C8	220.00'	59.85'	30.11'	S14°11'33"E	59.67'	15°35'15"
C9	1900.00'	261.30'	130.86'	S25°55'34"E	261.09'	7°52'47"
C10	50.00'	75.72'	47.25'	S13°31'02"W	68.69'	86°45'58"



DPN-A STORMWATER MANAGEMENT FACILITY TYPICAL SECTION

N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

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ENGLAND-THIMS & MILLER

POND GEOMETRY PLAN - DPN-A

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
4L

PLOTTED: November 18, 2025 – 3:20 PM, BY: Emma Thompson

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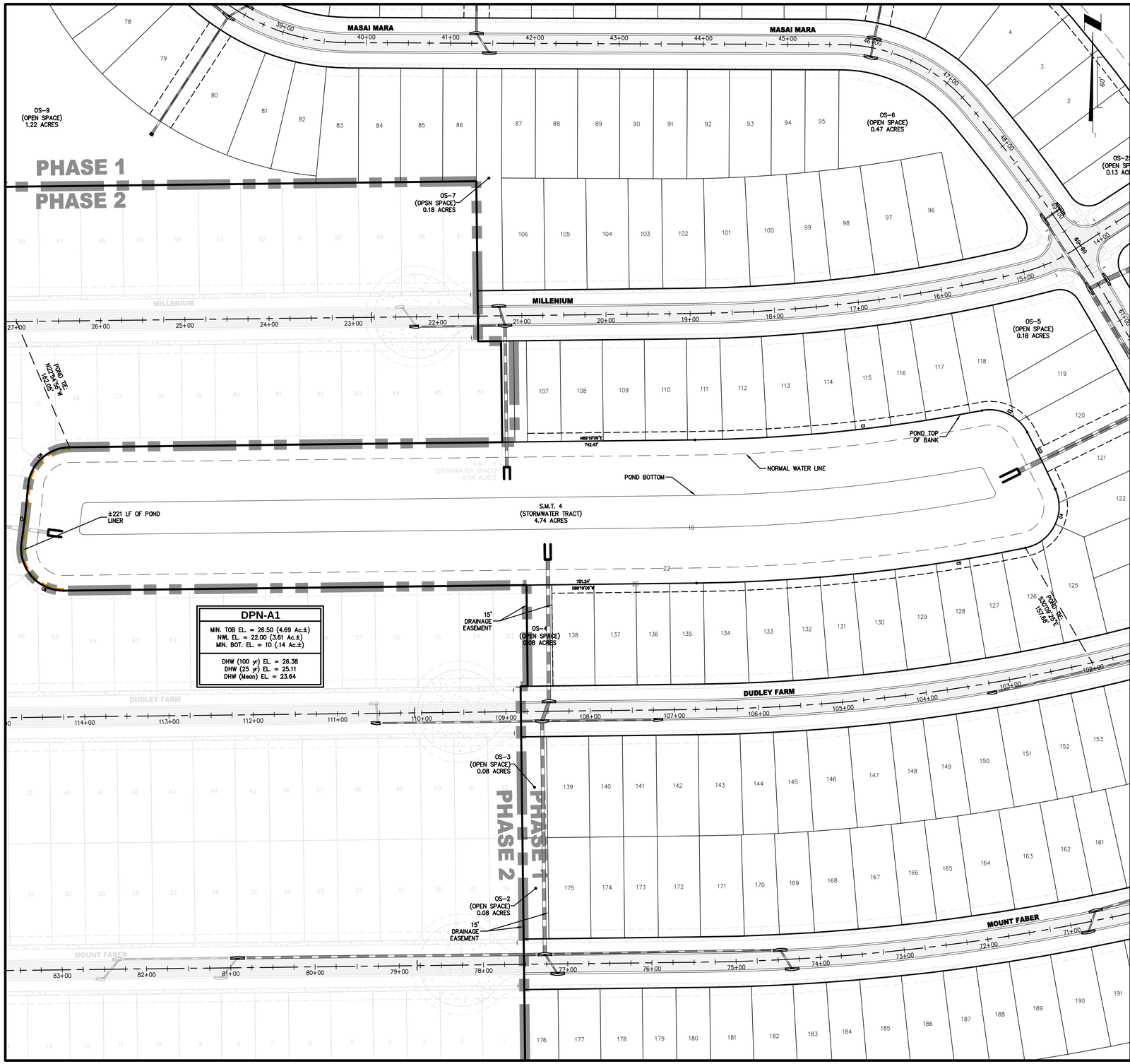


NOTES:

NOTES:

1. SIDES SLOPES SHALL NOT BE STEEPER THAN 4:1 TO DEPTH SHOWN ABOVE (PER SJRWMD REQUIREMENTS). CONTRACTOR SHALL VERIFY SLOPES AND VOLUME ON RECORD DRAWINGS AT SPOTS SHOWN ABOVE AND AT 100' MAXIMUM INTERVALS AND AT ALL TURN POINTS.
2. CONTRACTOR SHALL FILL EMBANKMENTS (BERMS) THAT ARE ABOVE EXISTING GRADE IN LIFTS NOT EXCEEDING 8" IN THICKNESS. SURFACE OF FILL SHALL BE SCARIFIED BETWEEN SUCCESSIVE LIFTS TO PROVIDE BOND AND PRECLUDE SEEPAGE PATHS OR SLICK INTERFACES. FILL SOILS SHALL CONSIST OF CLAYEY FINE SANDS (Sc) WITH A MIN. 15 PERCENT OF FINES PASSING THE NO. 200 SIEVE. EMBANKMENT SHALL BE COMPACTED TO 98% OF MODIFIED PROCTOR MAX. DRY DENSITY. WITH 2%± OF OPTIMUM MOISTURE CONTENT. CONTRACTOR SHALL PROVIDE DENSITY TEST ALONG POND EMBANKMENTS AT 200' INTERVALS.
3. CONTRACTOR MAY DISPOSE OF UNSUITABLE MATERIAL IN BOTTOM OF STORM WATER MANAGEMENT FACILITY PROVIDED THAT ALL UNSUITABLE MATERIAL DISPOSED OF IS COVERED WITH A MINIMUM OF 24" OF CLEAN FILL; HOWEVER, CONTRACTOR SHALL NOT DISPOSE OF UNSUITABLE MATERIAL IN SIDE SLOPES OR BERMS, FINAL DEPTH SHALL BE AS SHOWN ON PERMITTED CONSTRUCTION PLANS.
4. NO MOWED OR CUT VEGETATIVE MATERIAL SHALL BE DEPOSITED OR REMAIN IN THE LOW MAINTENANCE ZONE OR DEPOSITED IN THE WATER. CARE SHOULD BE TAKEN TO PREVENT THE OVER-SPRAY OF AQUATIC WEED PRODUCTS INTO THE LOW MAINTENANCE ZONE.

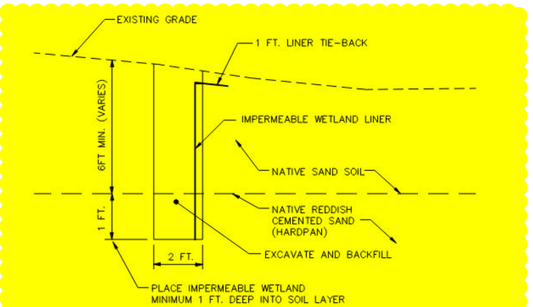
LEGEND

ASPHALT PAVEMENT

CONCRETE PAVEMENT

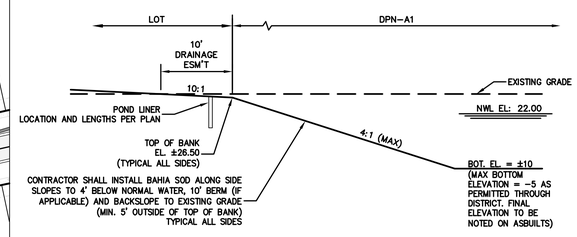
CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C1	1903.72'	342.97'	171.95'	N84°09'27"E	342.50'	10°19'20"
C2	50.00'	64.05'	37.27'	S64°18'16"E	59.76'	73°23'55"
C3	1580.00'	74.83'	37.42'	S26°14'54"E	74.83'	2°42'50"
C4	50.00'	90.19'	63.25'	S26°46'58"W	78.45'	103°20'54"
C5	2073.72'	393.12'	197.15'	S83°53'16"W	392.53'	10°51'42"
C6	50.00'	86.61'	58.80'	N41°03'27"W	76.18'	99°14'54"
C7	910.00'	66.89'	33.46'	N6°27'40"E	66.87'	4°12'41"
C8	50.00'	74.14'	45.79'	N46°50'13"E	67.54'	84°57'47"



WETLAND LINER DETAIL

NOTE: THE BOTTOM OF THE LINER SHALL BE A MINIMUM 6FT BELOW EXISTING GRADE OR A MINIMUM 1FT INTO THE NATIVE REDDISH CEMENTED SAND (HARDPAN), WHICHEVER IS DEEPER.



DPN-A1 STORMWATER MANAGEMENT FACILITY TYPICAL SECTION

N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
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POND GEOMETRY PLAN - DPN-A1

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
4M

PLOTTED: November 18, 2025 – 3:21 PM, BY: Emma Thompson

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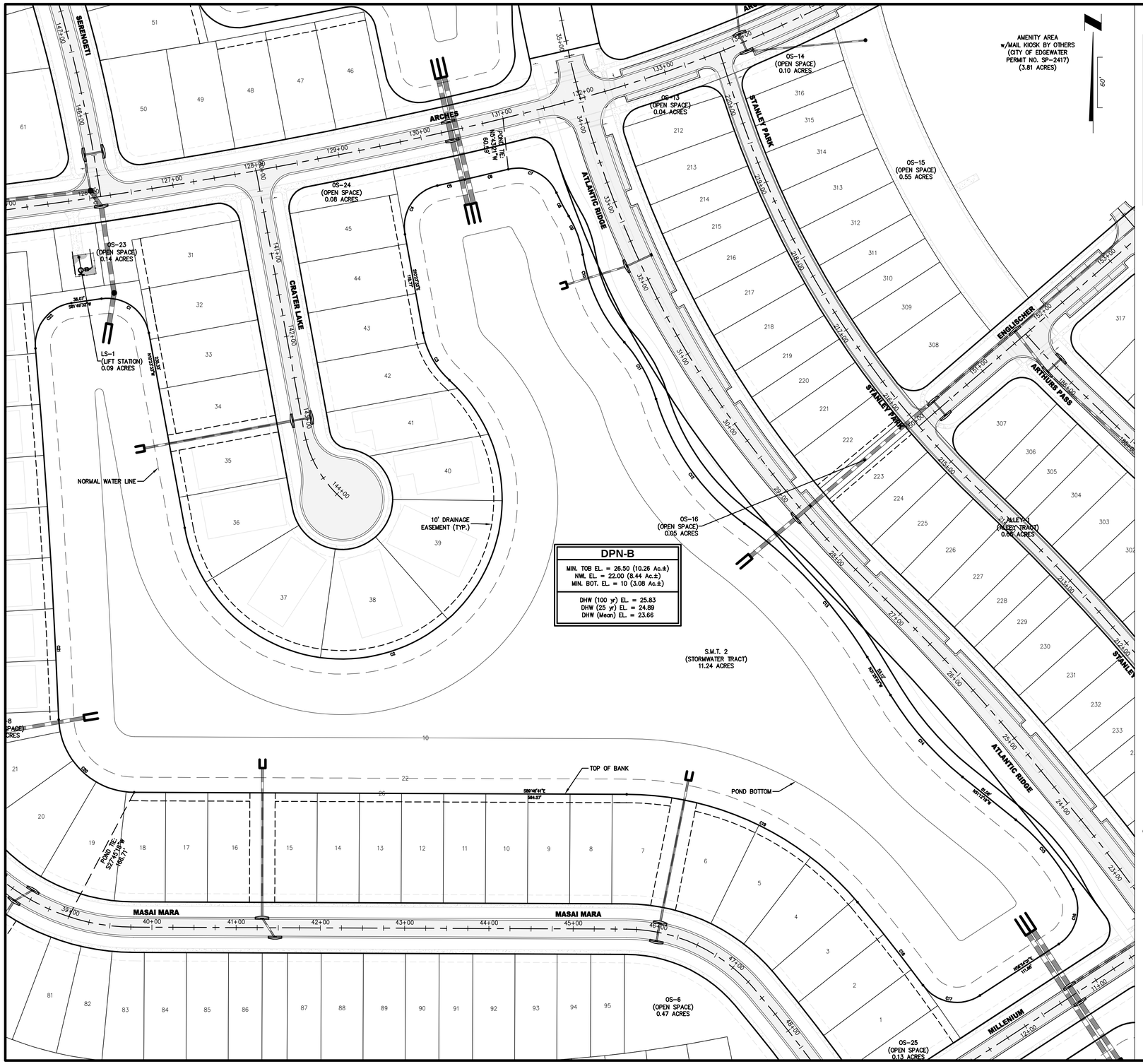

DPN-B

MIN. TOB EL. = 26.50 (10.26 Ac.±)
NWL EL. = 22.00 (8.44 Ac.±)
MIN. BOT. EL. = 10 (3.08 Ac.±)
DHW (100 yr) EL. = 25.83
DHW (25 yr) EL. = 24.89
DHW (Mean) EL. = 23.66

NOTES:

NOTES:

1. SIDES SLOPES SHALL NOT BE STEEPER THAN 4:1 TO DEPTH SHOWN ABOVE (PER SJRWMD REQUIREMENTS). CONTRACTOR SHALL VERIFY SLOPES AND VOLUME ON RECORD DRAWINGS AT SPOTS SHOWN ABOVE AND AT 100' MAXIMUM INTERVALS AND AT ALL TURN POINTS.
2. CONTRACTOR SHALL FILL EMBANKMENTS (BERMS) THAT ARE ABOVE EXISTING GRADE IN LIFTS NOT EXCEEDING 8" IN THICKNESS. SURFACE OF FILL SHALL BE SCARIFIED BETWEEN SUCCESSIVE LIFTS TO PROVIDE BOND AND PRECLUDE SEEPAGE PATHS OR SLICK INTERFACES. FILL SOILS SHALL CONSIST OF CLAYEY FINE SANDS (SC) WITH A MIN. 15 PERCENT OF FINES PASSING THE NO. 200 SIEVE. EMBANKMENT SHALL BE COMPACTED TO 98% OF MODIFIED PROCTOR MAX. DRY DENSITY. WITH 2%± OF OPTIMUM MOISTURE CONTENT. CONTRACTOR SHALL PROVIDE DENSITY TEST ALONG POND EMBANKMENTS AT 200' INTERVALS.
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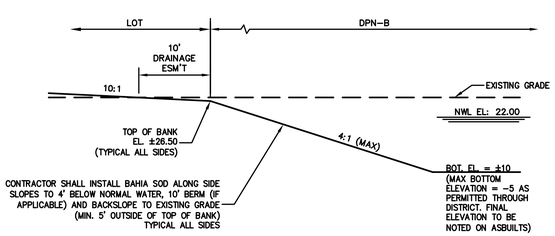
LEGEND

ASPHALT PAVEMENT

CONCRETE PAVEMENT

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C1	50.00'	76.60'	48.10'	N54°17'01"W	69.33'	87°46'55"
C2	190.00'	721.34'	559.34'	S60°50'45"W	359.81'	217°31'25"
C3	100.00'	65.49'	33.97'	S29°09'16"E	64.33'	37°31'25"
C4	50.00'	76.75'	48.24'	S33°34'56"W	69.43'	87°56'59"
C5	5820.00'	33.07'	16.53'	S77°23'40"W	33.07'	0°19'32"
C6	3435.00'	53.19'	26.59'	S76°47'17"W	53.19'	0°53'14"
C7	50.00'	68.99'	41.26'	N64°07'42"W	63.64'	79°03'15"
C8	278.00'	31.39'	15.71'	N27°50'09"W	31.37'	6°28'08"
C9	127.00'	48.88'	24.75'	N20°02'41"W	48.58'	22°03'05"
C10	205.00'	116.86'	60.06'	N25°20'57"W	115.28'	32°39'37"
C11	178.00'	77.64'	39.45'	N29°10'59"W	77.03'	24°59'33"
C12	284.00'	184.63'	95.71'	N35°18'38"W	181.39'	37°14'53"
C13	551.00'	216.54'	109.69'	N42°40'34"W	215.15'	22°31'02"
C14	376.00'	129.86'	65.58'	N41°18'41"W	129.21'	19°47'16"
C15	263.00'	107.68'	54.60'	N39°28'35"W	106.93'	23°27'28"
C16	50.00'	73.87'	45.53'	N14°34'35"E	67.33'	84°38'52"
C17	50.00'	75.72'	47.25'	S79°43'00"E	68.69'	86°45'58"
C18	1900.00'	125.51'	62.78'	S38°13'34"E	125.49'	3°47'06"
C19	360.00'	312.02'	166.57'	S64°56'54"E	302.34'	49°39'34"
C20	90.00'	137.48'	86.19'	S46°01'05"E	124.49'	87°31'11"
C21	9520.00'	441.49'	220.78'	S3°35'12"E	441.45'	2°39'25"
C22	50.00'	75.70'	47.23'	S38°27'18"W	68.67'	86°44'27"



DPN-B STORMWATER MANAGEMENT FACILITY TYPICAL SECTION

N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
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ETM
ENGLAND-THIMS & MILLER

POND GEOMETRY PLAN - DPN-B

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
4N

PLOTTED: November 18, 2025 – 3:22 PM, BY: Emma Thompson

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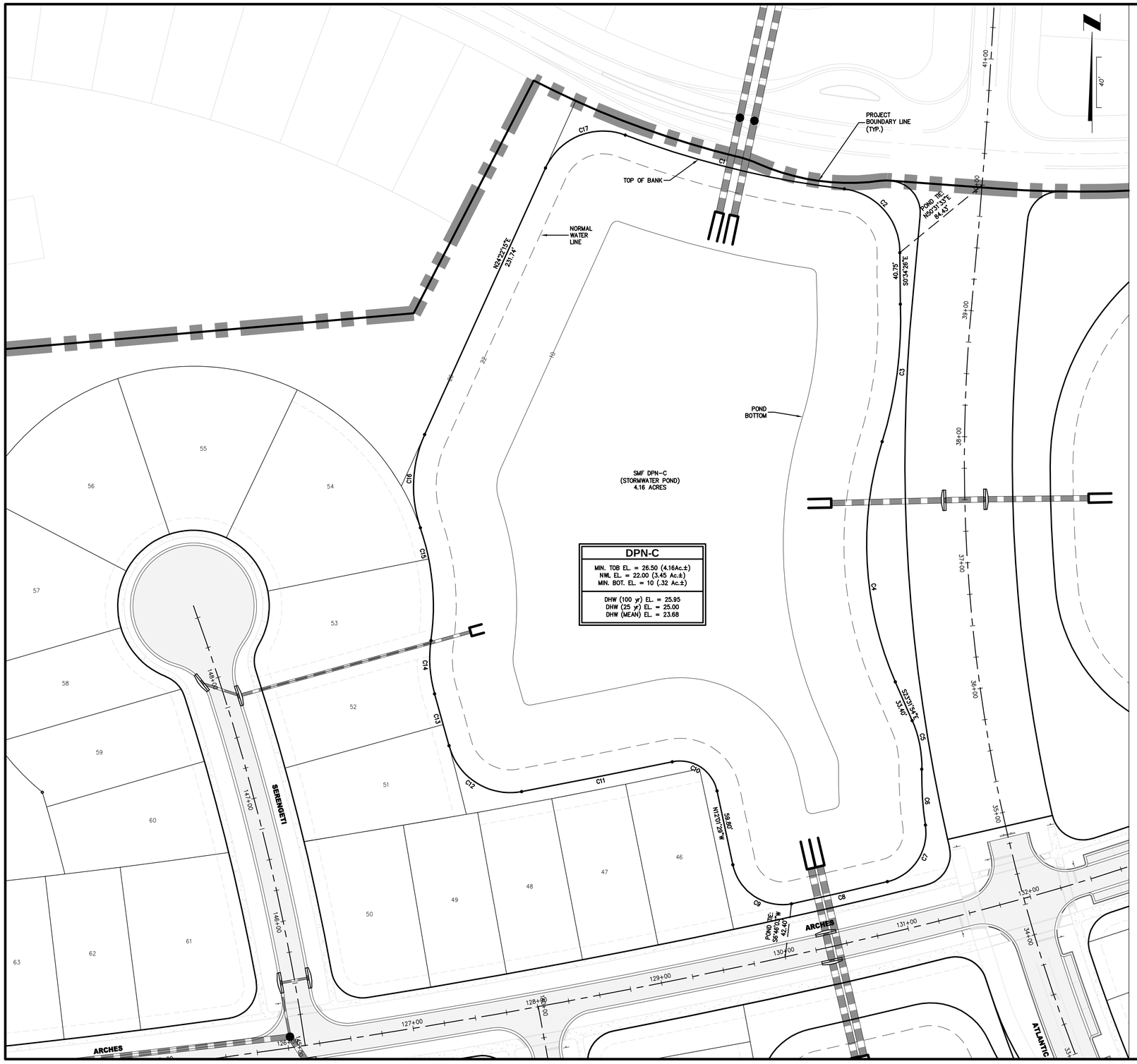

DPN-C
MIN. TOB EL. = 26.50 (4.16Ac.±) NWL EL. = 22.00 (3.45 Ac.±) MIN. BOT. EL. = 10 (.32 Ac.±)
DHW (100 yr) EL. = 25.95 DHW (25 yr) EL. = 25.00 DHW (MEAN) EL. = 23.68

NOTES:

NOTES:

1. SIDES SLOPES SHALL NOT BE STEEPER THAN 4:1 TO DEPTH SHOWN ABOVE (PER SJRWMD REQUIREMENTS). CONTRACTOR SHALL VERIFY SLOPES AND VOLUME ON RECORD DRAWINGS AT SPOTS SHOWN ABOVE AND AT 100' MAXIMUM INTERVALS AND AT ALL TURN POINTS.
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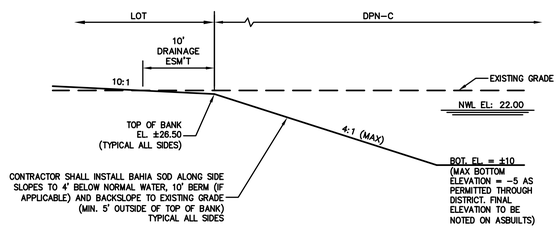
LEGEND

ASPHALT PAVEMENT

CONCRETE PAVEMENT

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C1	740.00'	179.04'	89.96'	S76°11'21"E	178.61'	13°51'46"
C2	50.00'	73.42'	45.12'	S41°03'23"E	67.00'	84°07'44"
C3	326.00'	110.45'	55.76'	S7°33'02"W	109.93'	19°24'45"
C4	273.50'	194.70'	101.68'	S3°08'15"E	190.62'	40°47'18"
C5	92.00'	39.66'	20.14'	S11°10'55"E	39.35'	24°41'58"
C6	260.00'	44.36'	22.23'	S3°43'11"E	44.30'	9°46'29"
C7	40.00'	59.29'	36.61'	S33°51'32"W	54.01'	84°55'55"
C8	3335.00'	77.98'	38.99'	S76°59'41"W	77.97'	1°20'23"
C9	40.00'	61.86'	39.04'	N56°19'45"W	55.88'	88°36'31"
C10	30.00'	47.02'	29.89'	N56°55'22"W	42.35'	89°47'46"
C11	5590.00'	121.56'	60.78'	S78°48'08"W	121.56'	1°14'46"
C12	50.00'	74.75'	46.35'	N57°44'44"W	67.98'	85°39'31"
C13	1960.00'	42.67'	21.33'	N15°32'24"W	42.67'	1°14'50"
C14	100.00'	42.66'	21.66'	N3°56'29"W	42.34'	24°26'41"
C15	190.00'	793.33'	334.22'	S68°39'48"W	330.35'	239°14'07"
C16	100.00'	75.76'	39.80'	N2°39'58"E	73.96'	43°24'34"
C17	50.00'	75.37'	46.93'	N67°33'23"E	68.44'	86°22'17"



DPN-C STORMWATER MANAGEMENT FACILITY TYPICAL SECTION

N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

1411 Edgewater Drive, Ste. 200
Orlando, Florida 32804
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www.etminc.com
REG-00002584 LC-0000316

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ETM ENGLAND-THIMS & MILLER

POND GEOMETRY PLAN - DPN-C

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
40

PLOTTED: November 18, 2025 – 3:22 PM, BY: Emma Thompson

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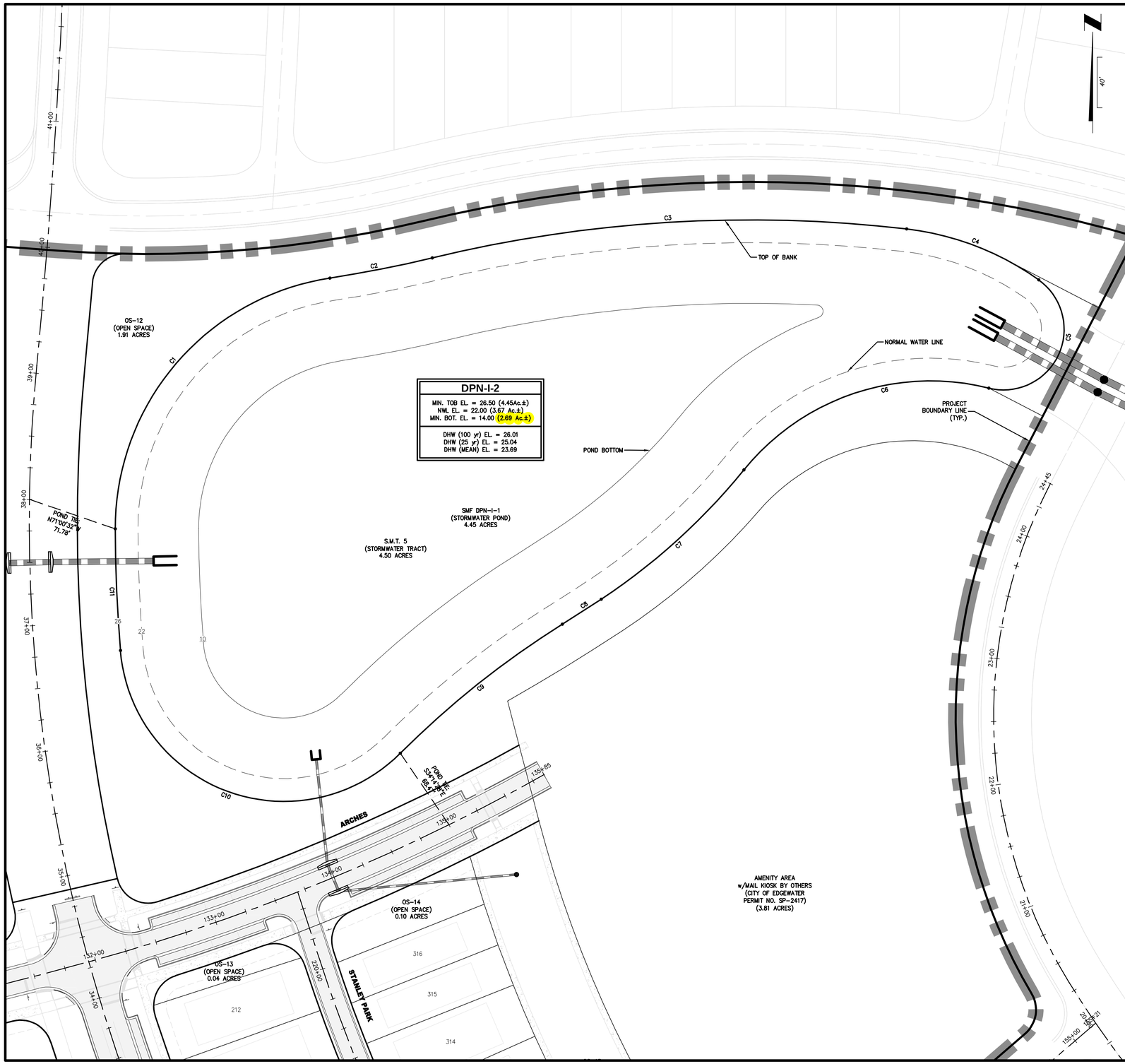

NOTES:

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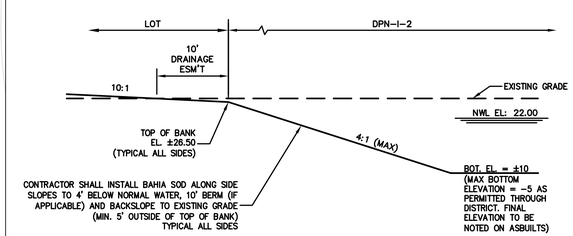
1. SIDES SLOPES SHALL NOT BE STEEPER THAN 4:1 TO DEPTH SHOWN ABOVE (PER SJRWMD REQUIREMENTS). CONTRACTOR SHALL VERIFY SLOPES AND VOLUME ON RECORD DRAWINGS AT SPOTS SHOWN ABOVE AND AT 100' MAXIMUM INTERVALS AND AT ALL TURN POINTS.
2. CONTRACTOR SHALL FILL EMBANKMENTS (BERMS) THAT ARE ABOVE EXISTING GRADE IN LIFTS NOT EXCEEDING 8" IN THICKNESS. SURFACE OF FILL SHALL BE SCARIFIED BETWEEN SUCCESSIVE LIFTS TO PROVIDE BOND AND PRECLUDE SEEPAGE PATHS OR SLICK INTERFACES. FILL SOILS SHALL CONSIST OF CLAYEY FINE SANDS (Sc) WITH A MIN. 15 PERCENT OF FINES PASSING THE NO. 200 SIEVE. EMBANKMENT SHALL BE COMPACTED TO 98% OF MODIFIED PROCTOR MAX. DRY DENSITY. WITH 2%± OF OPTIMUM MOISTURE CONTENT. CONTRACTOR SHALL PROVIDE DENSITY TEST ALONG POND EMBANKMENTS AT 200' INTERVALS.
3. CONTRACTOR MAY DISPOSE OF UNSUITABLE MATERIAL IN BOTTOM OF STORM WATER MANAGEMENT FACILITY PROVIDED THAT ALL UNSUITABLE MATERIAL DISPOSED OF IS COVERED WITH A MINIMUM OF 24" OF CLEAN FILL; HOWEVER, CONTRACTOR SHALL NOT DISPOSE OF UNSUITABLE MATERIAL IN SIDE SLOPES OR BERMS, FINAL DEPTH SHALL BE AS SHOWN ON PERMITTED CONSTRUCTION PLANS.
4. NO MOWED OR CUT VEGETATIVE MATERIAL SHALL BE DEPOSITED OR REMAIN IN THE LOW MAINTENANCE ZONE OR DEPOSITED IN THE WATER. CARE SHOULD BE TAKEN TO PREVENT THE OVER-SPRAY OF AQUATIC WEED PRODUCTS INTO THE LOW MAINTENANCE ZONE.

LEGEND

- ASPHALT PAVEMENT
- CONCRETE PAVEMENT

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C1	200.00'	284.65'	172.48'	S40°33'21"W	261.23'	81°32'51"
C2	960.00'	82.70'	41.38'	S78°51'42"W	82.68'	4°56'09"
C3	1070.00'	378.02'	191.00'	S86°30'53"W	376.06'	20°14'32"
C4	225.00'	113.29'	57.87'	N68°56'25"W	112.09'	28°50'52"
C5	48.00'	132.86'	253.90'	N24°46'42"E	94.33'	158°35'21"
C6	190.00'	215.68'	121.14'	N71°33'11"E	204.28'	65°02'23"
C7	500.00'	153.10'	77.15'	N47°48'18"E	152.50'	17°32'38"
C8	1505.00'	36.55'	18.28'	N57°16'22"E	36.55'	1°23'29"
C9	725.00'	164.28'	82.49'	N51°28'38"E	163.93'	12°58'58"
C10	130.00'	295.70'	280.86'	S69°51'06"E	235.95'	130°19'29"
C11	1235.00'	96.38'	48.22'	S2°27'13"E	96.36'	4°28'18"



DPN-A STORMWATER MANAGEMENT FACILITY TYPICAL SECTION

N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
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DESIGNED BY: S.A.W.
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ENGLAND-THIMS & MILLER

POND GEOMETRY PLAN - DPN-I-1

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER

4P

PLOTTED: November 18, 2025 – 3:23 PM, BY: Emma Thompson

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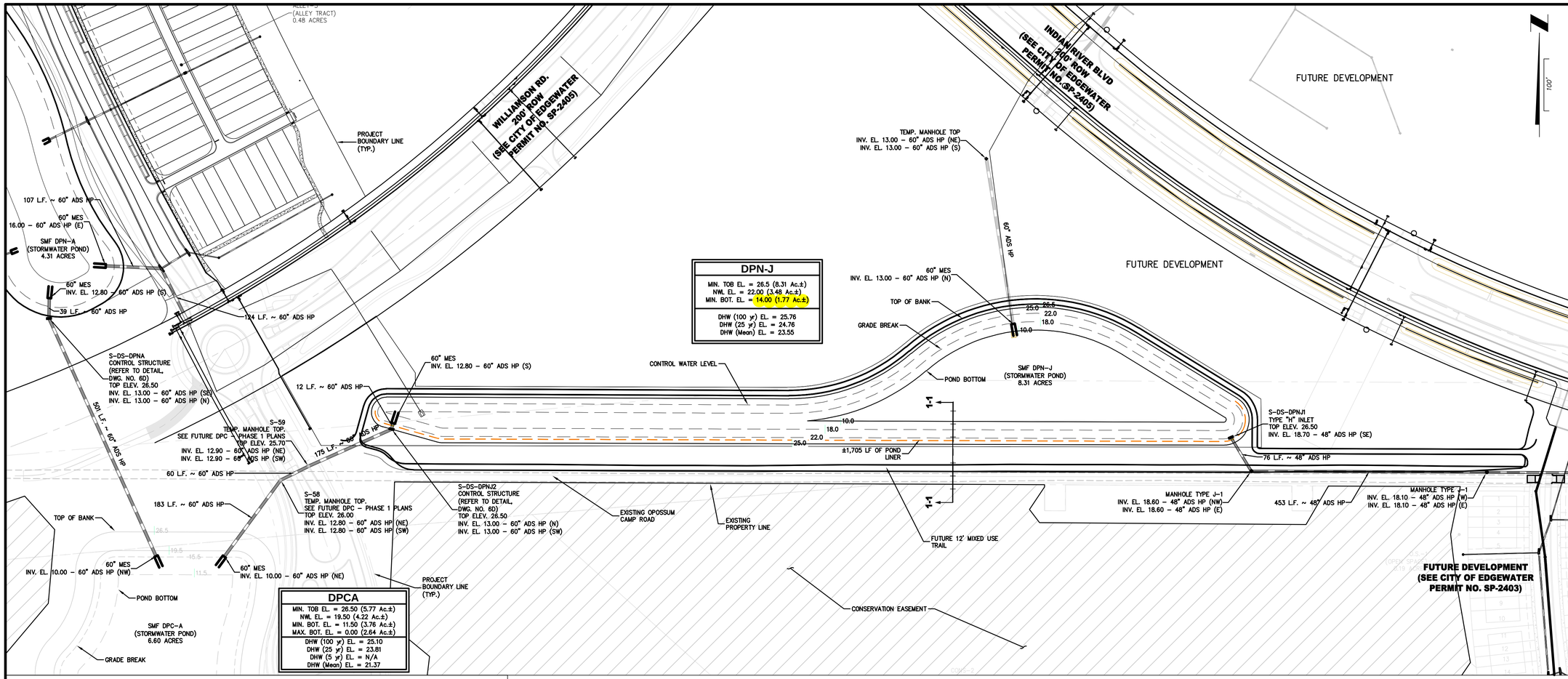
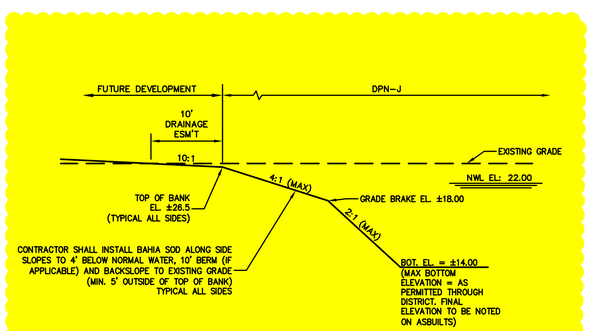
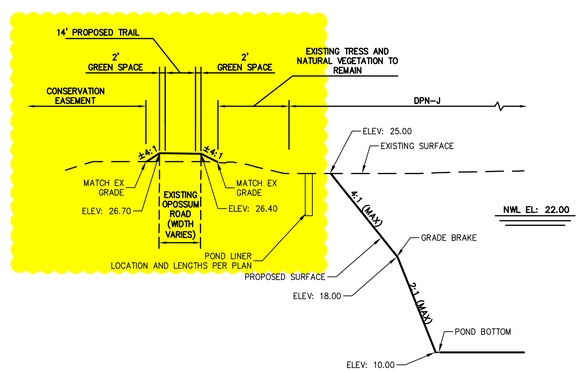




DPN-J STORMWATER MANAGEMENT FACILITY TYPICAL SECTION

N.T.S.



1-1

DPN-J STORMWATER MANAGEMENT FACILITY SECTION
THROUGH PROPOSED TRAIL SECTION

NOTES:

NOTES:

1. SIDES SLOPES SHALL NOT BE STEEPER THAN 4:1 TO DEPTH SHOWN ABOVE (PER SJRWMD REQUIREMENTS). CONTRACTOR SHALL VERIFY SLOPES AND VOLUME ON RECORD DRAWINGS AT SPOTS SHOWN ABOVE AND AT 100' MAXIMUM INTERVALS AND AT ALL TURN POINTS.
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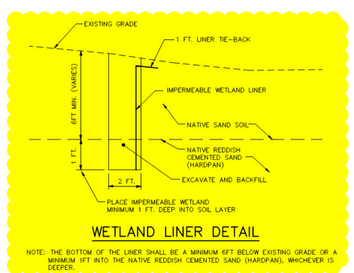

WETLAND LINER DETAIL

NOTE: THE BOTTOM OF THE LINER SHALL BE A MINIMUM 6FT BELOW EXISTING GRADE OR A MINIMUM 1FT INTO THE NATIVE REDDISH CEMENTED SAND (HARDPAN), WHICHEVER IS DEEPER.

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

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ENGLAND-THIMS & MILLER

POND GEOMETRY PLAN - DPN-J

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
4Q

PLOTTED: November 18, 2025 – 3:25 PM, BY: Emma Thompson

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LOT DIMENSION PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
5A

PLOTTED: November 18, 2025 – 3:25 PM, BY: Emma Thompson

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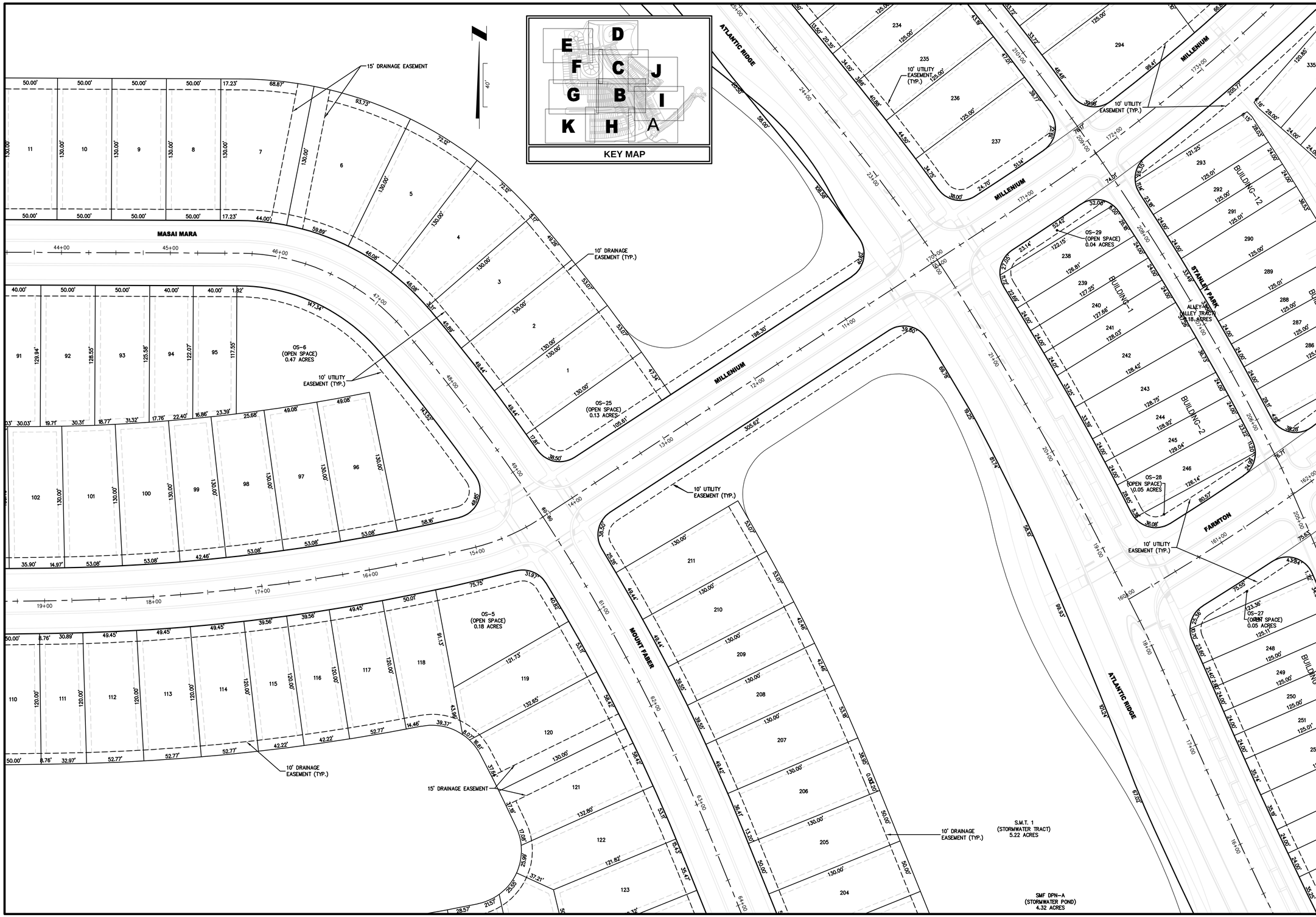

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LOT DIMENSION PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER

5B

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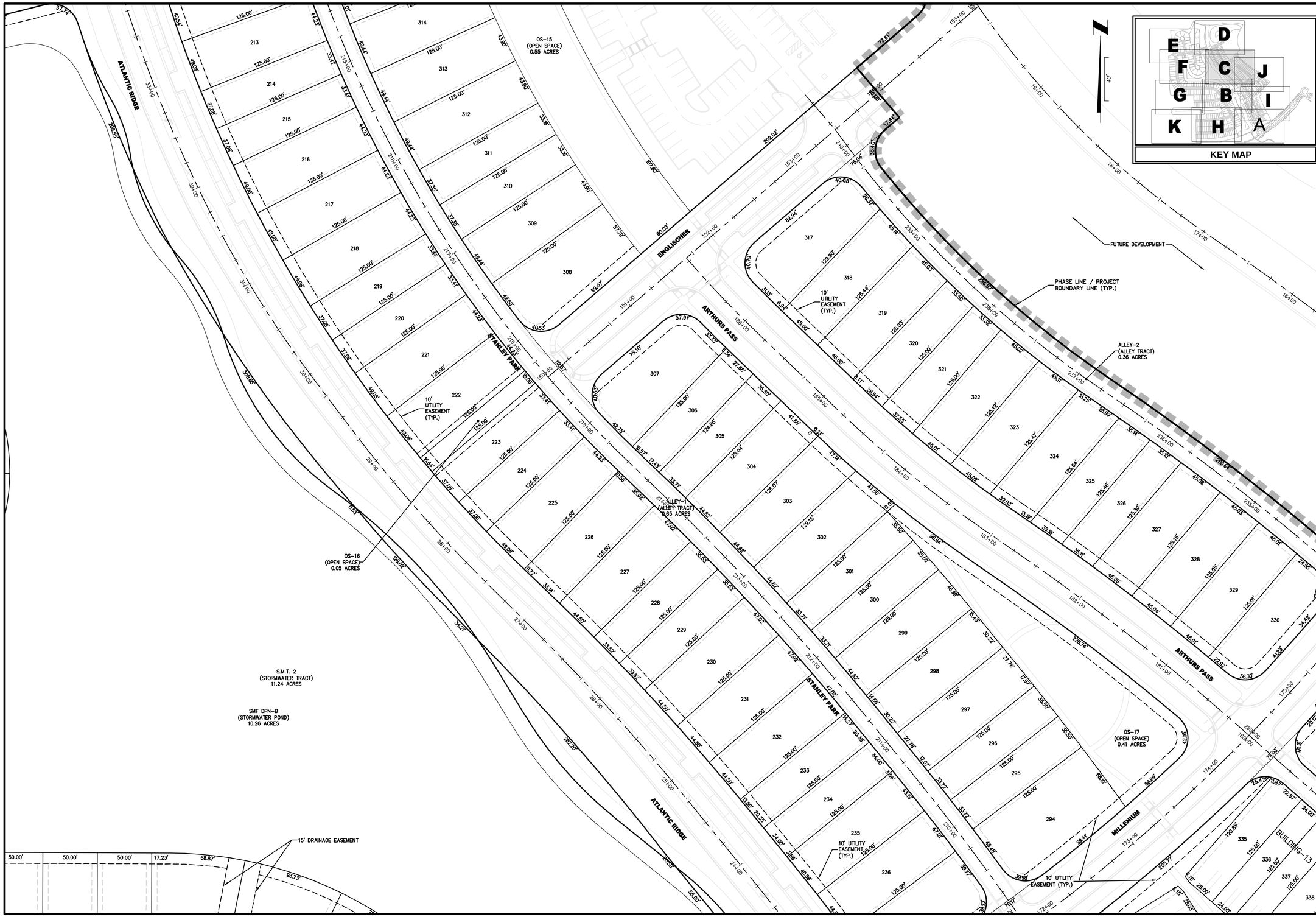

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DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER

5C

PLOTTED: November 18, 2025 – 3:25 PM, BY: Emma Thompson

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LOT DIMENSION PLAN

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER

5D

PLOTTED: November 18, 2025 – 3:25 PM, BY: Emma Thompson

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CHRISTOPHER WARSHAW, P.E.
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LOT DIMENSION PLAN

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER

5E

PLOTTED: November 18, 2025 – 3:26 PM, BY: Emma Thompson

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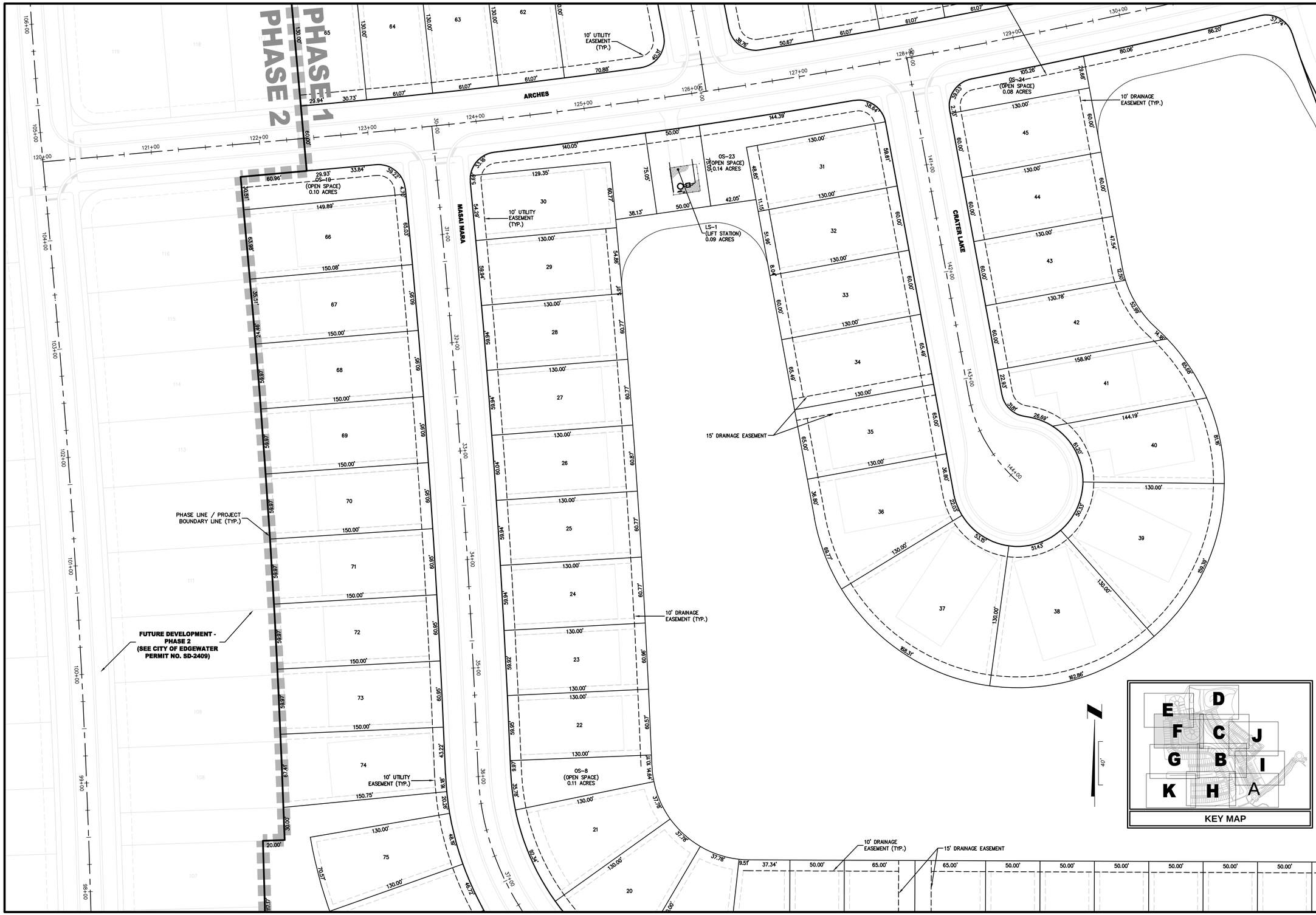

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LOT DIMENSION PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER

5F

PLOTTED: November 18, 2025 – 3:26 PM, BY: Emma Thompson

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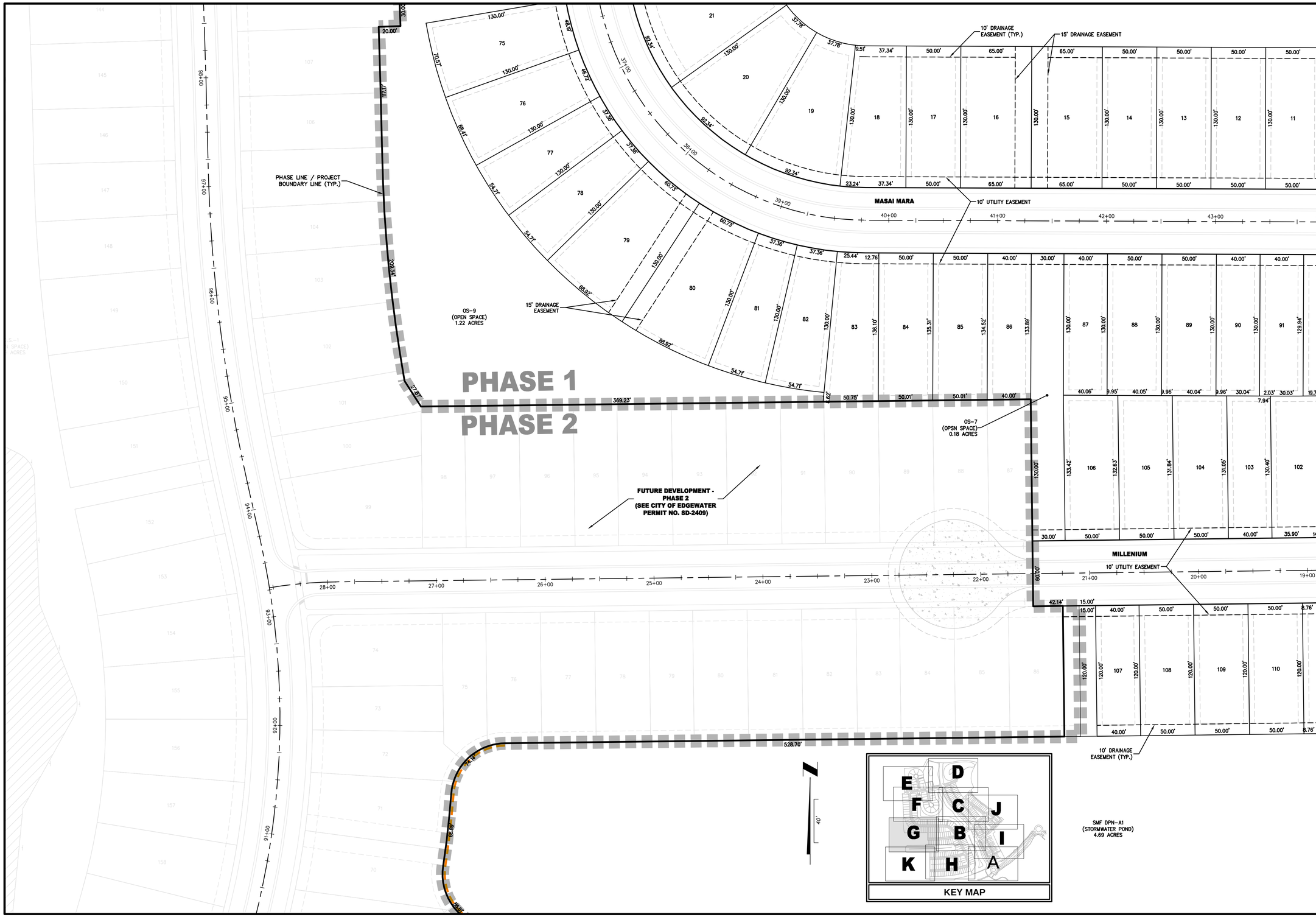

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DRAWING NUMBER
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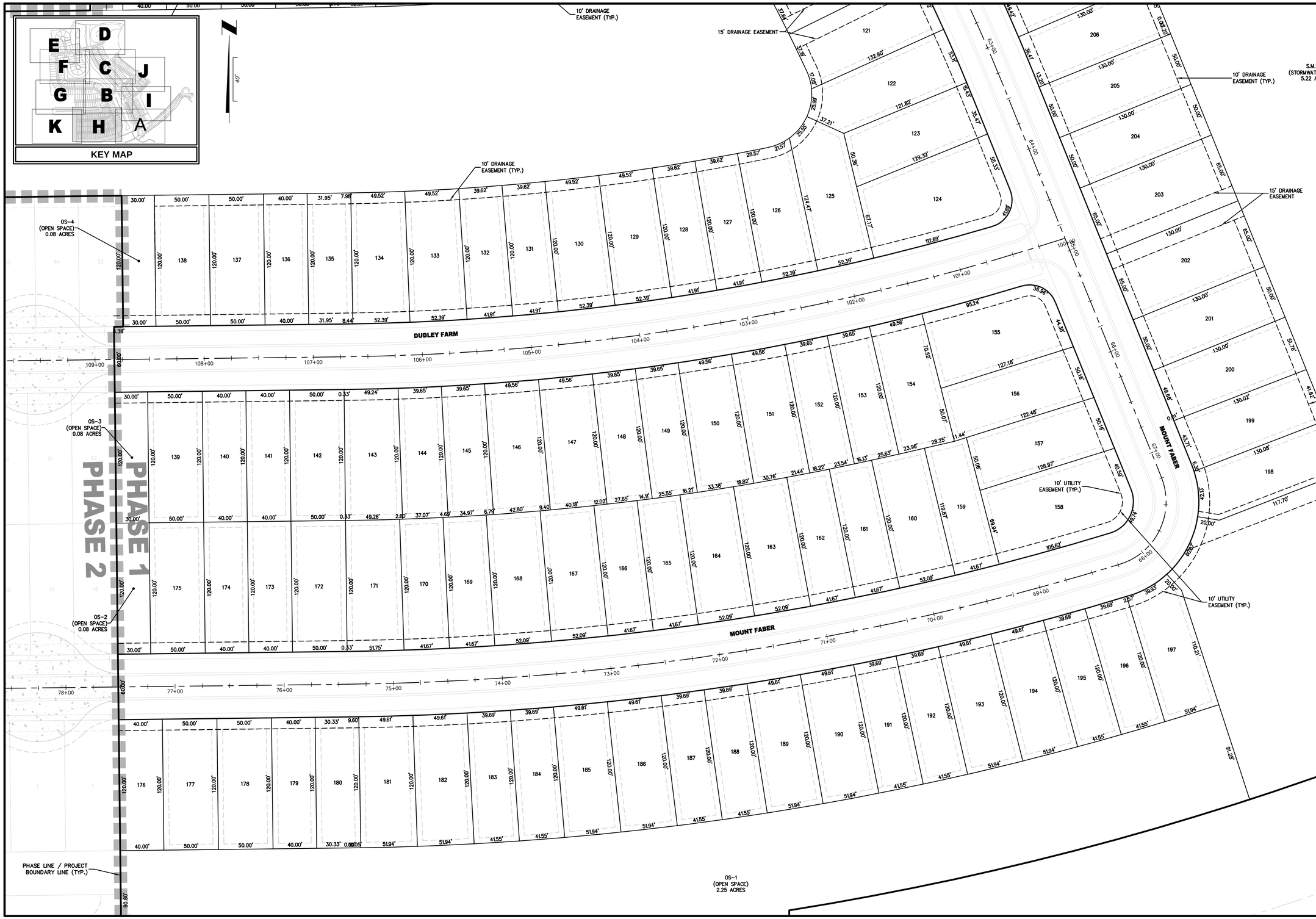

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FOR
DEERING PARK 1, LLC

DRAWING NUMBER

5H

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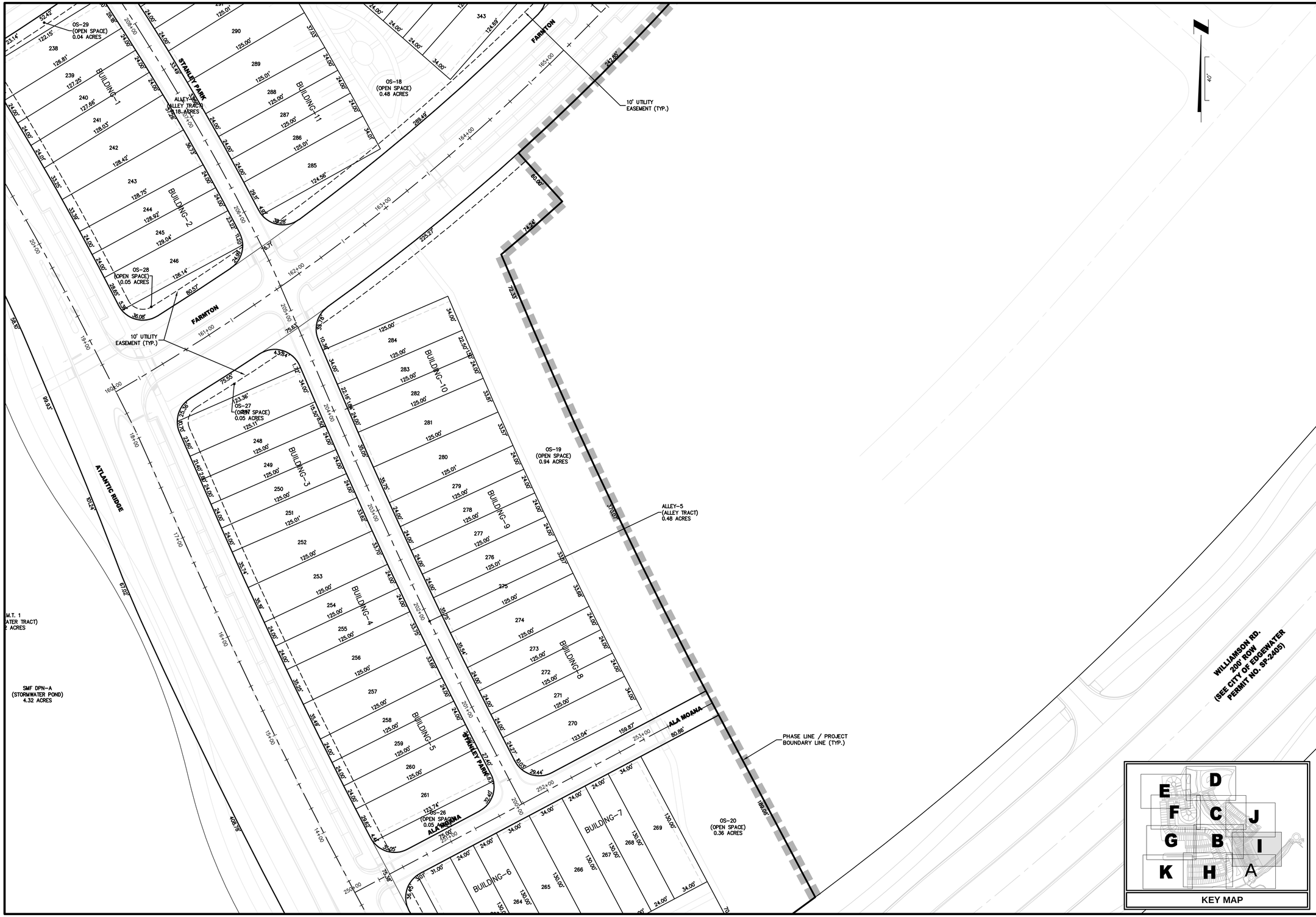

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DRAWING NUMBER

5I

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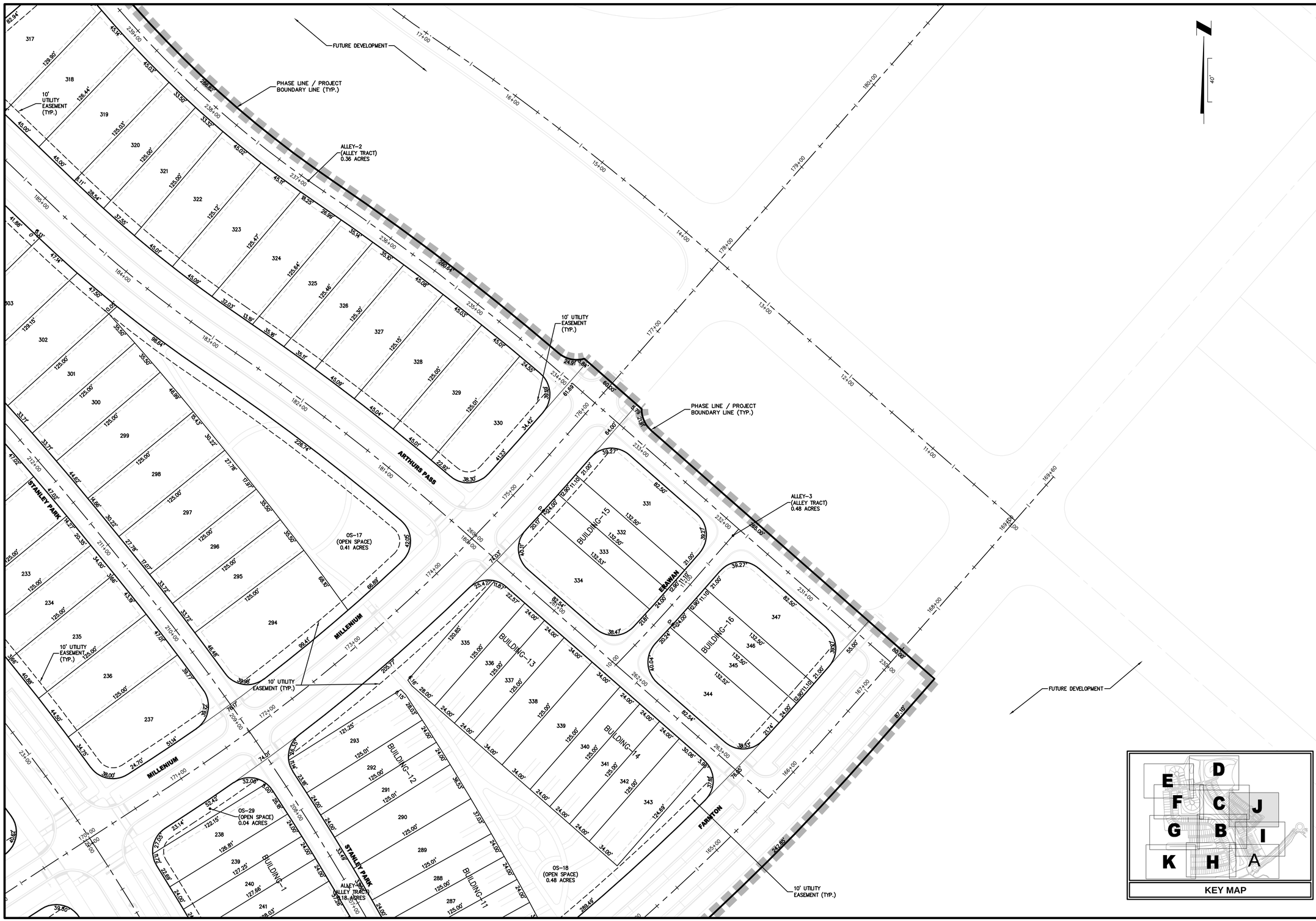

KEY MAP

PLANS PREPARED UNDER THE DIRECTION OF:

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SMF DPN-A1
(STORMWATER POND)
4.69 ACRES

549.29'

OS-4
(OPEN SPACE)
0.08 ACRES

OS-3
(OPEN SPACE)
0.08 ACRES

OS-2
(OPEN SPACE)
0.08 ACRES

PHASE 1

PHASE 2

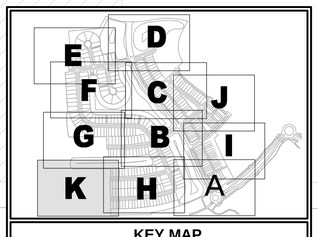
FUTURE DEVELOPMENT - PHASE 2
(SEE CITY OF EDGEWATER PERMIT NO. SD-2409)

PHASE LINE / PROJECT BOUNDARY LINE (TYP.)

O.S.-1
(OPEN SPACE)
7.29 ACRES

CONS.-1
(CONSERVATION EASEMENT)
8.46 ACRES

Lot	Width	Depth
137	50.00'	120.00'
138	50.00'	120.00'
139	50.00'	120.00'
140	40.00'	120.00'
174	40.00'	120.00'
175	50.00'	120.00'
176	40.00'	120.00'
177	50.00'	120.00'
178	50.00'	120.00'



KEY MAP

40'

PLANS PREPARED UNDER THE DIRECTION OF:
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P.E. NUMBER: 89967

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DRAWING NUMBER
5K

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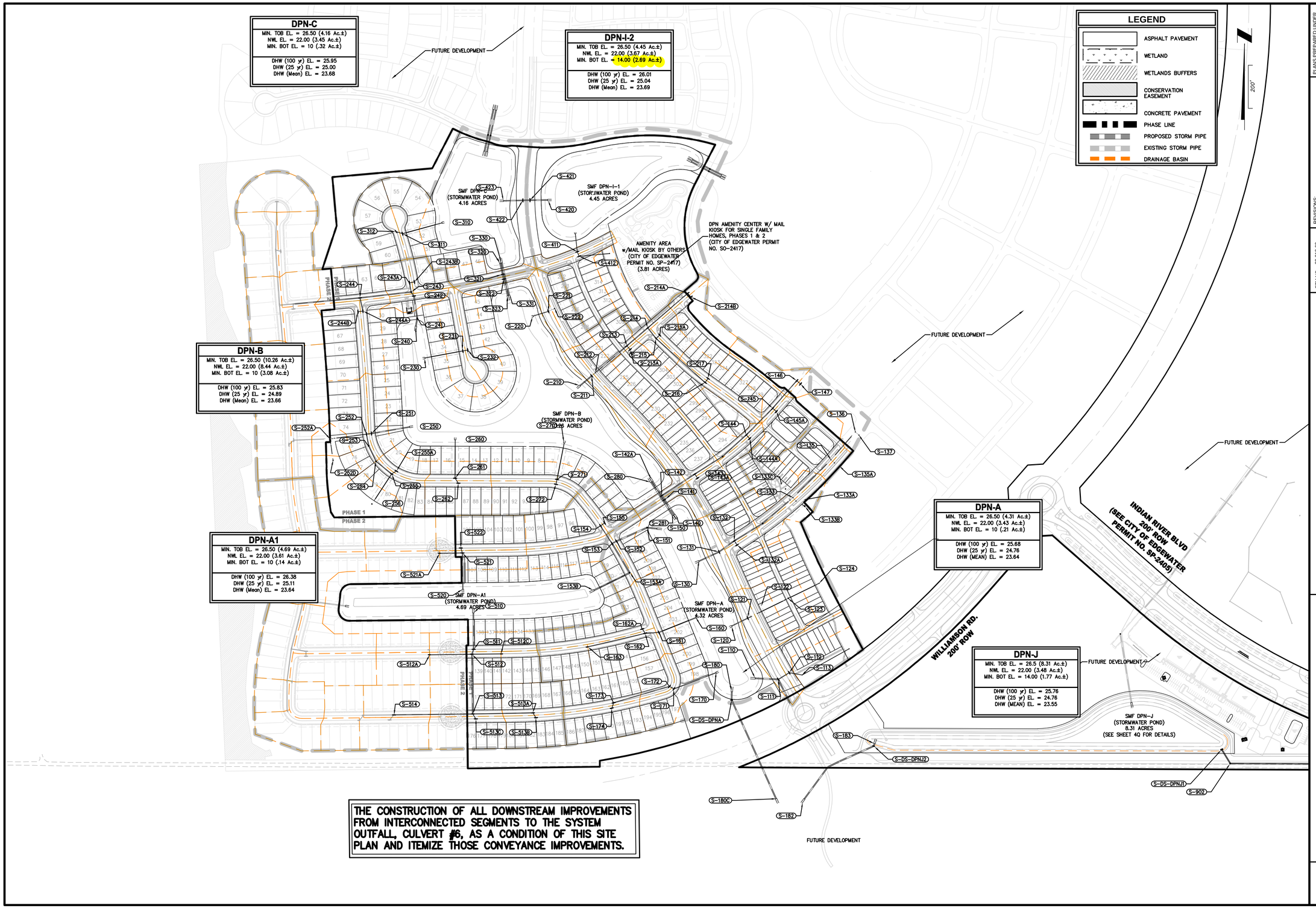

THE CONSTRUCTION OF ALL DOWNSTREAM IMPROVEMENTS FROM INTERCONNECTED SEGMENTS TO THE SYSTEM OUTFALL, CULVERT #6, AS A CONDITION OF THIS SITE PLAN AND ITEMIZE THOSE CONVEYANCE IMPROVEMENTS.

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

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MASTER DRAINAGE PLAN

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
6

PLOTTED: November 18, 2025 – 3:27 PM, BY: Emma Thompson

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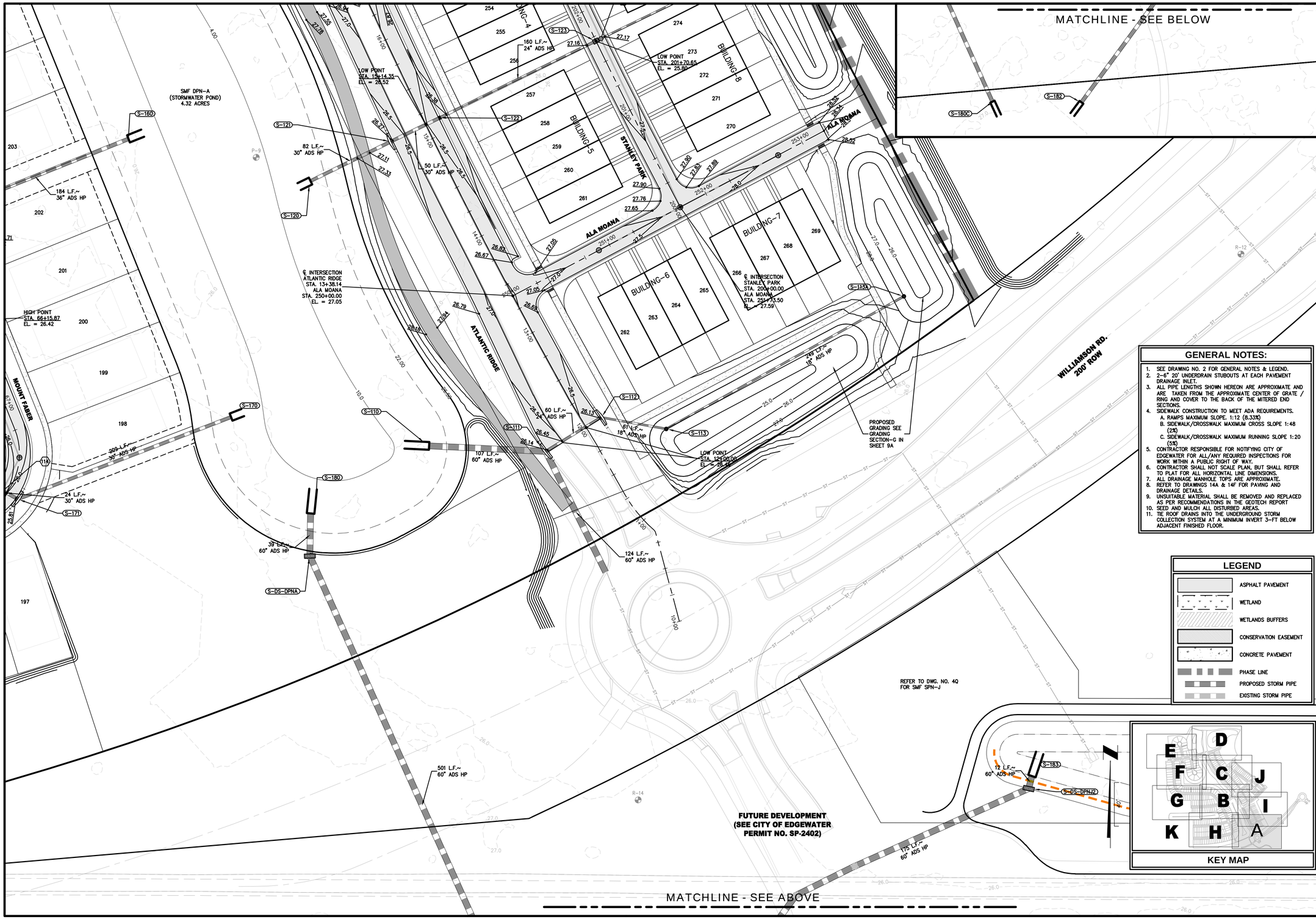

GENERAL NOTES:

1. SEE DRAWING NO. 2 FOR GENERAL NOTES & LEGEND.
2. 2–6" 20' UNDERDRAIN STUBOUTS AT EACH PAVEMENT DRAINAGE INLET.
3. ALL PIPE LENGTHS SHOWN HEREON ARE APPROXIMATE AND ARE TAKEN FROM THE APPROXIMATE CENTER OF GRATE / RING AND COVER TO THE BACK OF THE MITERED END SECTIONS.
4. SIDEWALK CONSTRUCTION TO MEET ADA REQUIREMENTS.
   A. RAMPS MAXIMUM SLOPE. 1:12 (8.33%)
   B. SIDEWALK/CROSSWALK MAXIMUM CROSS SLOPE 1:48 (2%)
   C. SIDEWALK/CROSSWALK MAXIMUM RUNNING SLOPE 1:20 (5%)
5. CONTRACTOR RESPONSIBLE FOR NOTIFYING CITY OF EDGEWATER FOR ALL/ANY REQUIRED INSPECTIONS FOR WORK WITHIN A PUBLIC RIGHT OF WAY.
6. CONTRACTOR SHALL NOT SCALE PLAN, BUT SHALL REFER TO PLAT FOR ALL HORIZONTAL LINE DIMENSIONS.
7. ALL DRAINAGE MANHOLE TOPS ARE APPROXIMATE.
8. REFER TO DRAWINGS 14A & 14F FOR PAVING AND DRAINAGE DETAILS.
9. UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED AS PER RECOMMENDATIONS IN THE GEOTECH REPORT
10. SEED AND MULCH ALL DISTURBED AREAS.
11. TIE ROOF DRAINS INTO THE UNDERGROUND STORM COLLECTION SYSTEM AT A MINIMUM INVERT 3–FT BELOW ADJACENT FINISHED FLOOR.

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE
- PROPOSED STORM PIPE
- EXISTING STORM PIPE

PLANS PREPARED UNDER THE DIRECTION OF:

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE:	Issue Date

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PAVING AND DRAINAGE PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER

7A

PLOTTED: November 18, 2025 – 3:33 PM, BY: Emma Thompson

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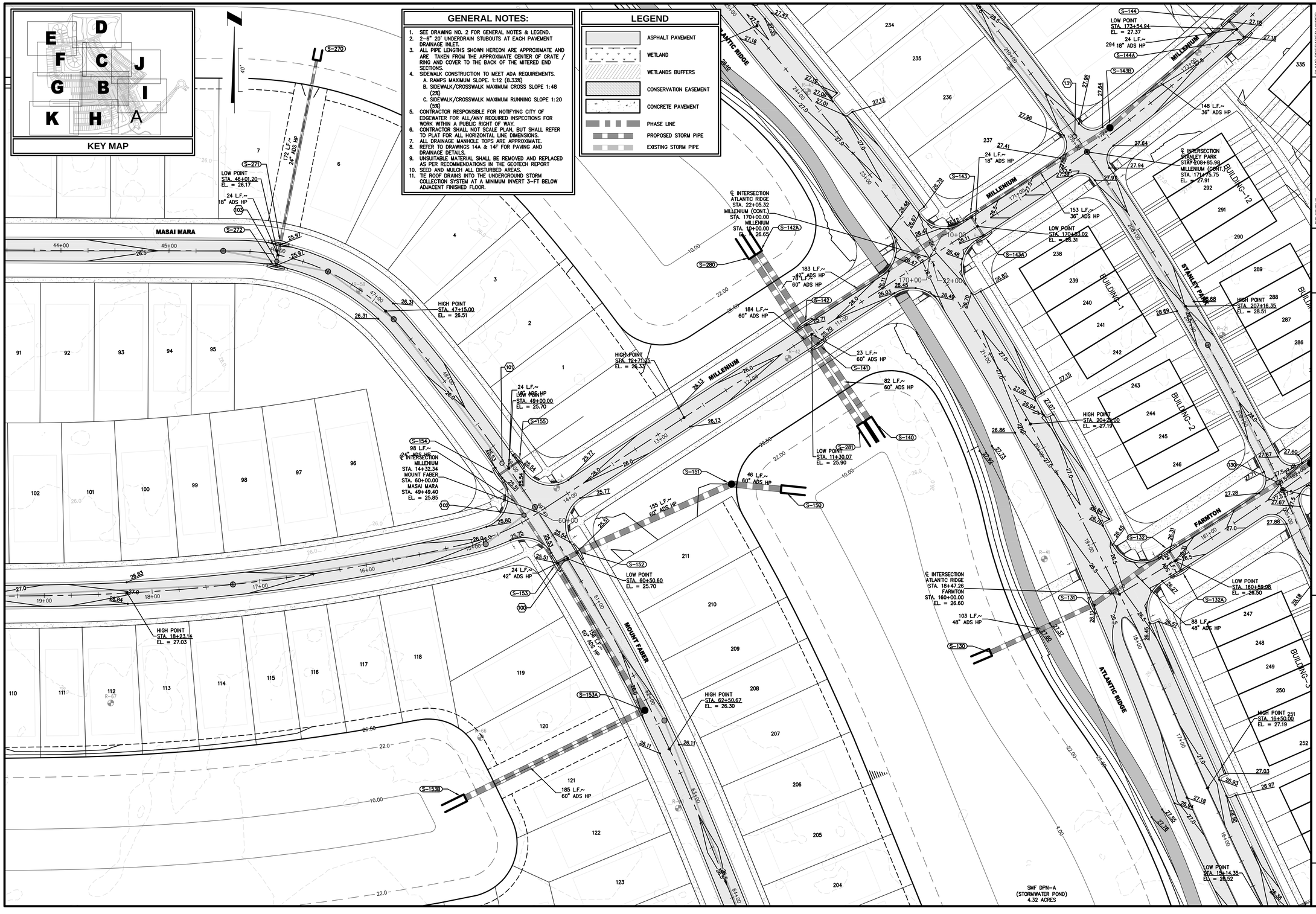

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- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE
- PROPOSED STORM PIPE
- EXISTING STORM PIPE

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

PLOTTED: November 18, 2025 – 3:34 PM, BY: Emma Thompson

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
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PAVING AND DRAINAGE PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
7B

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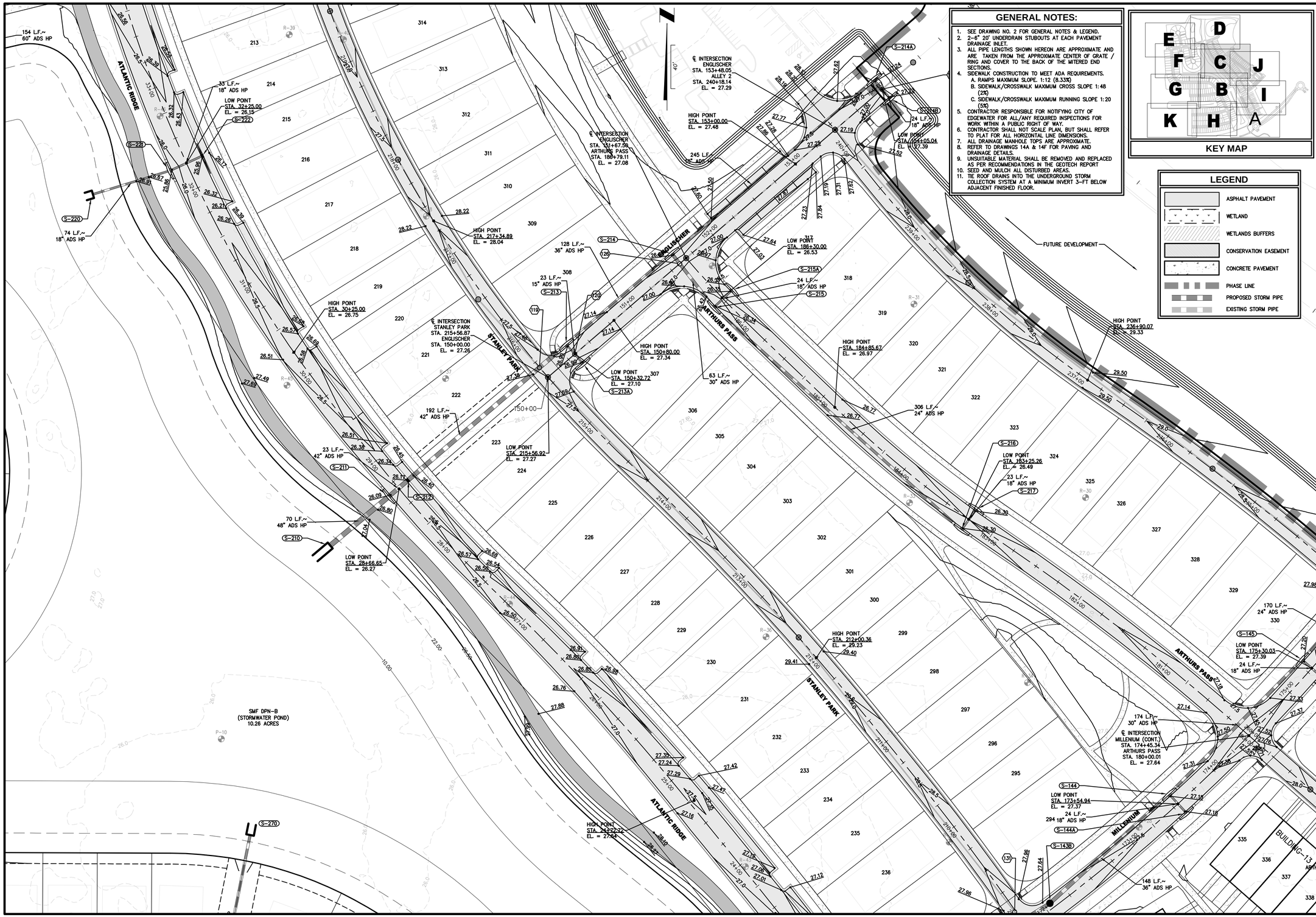

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KEY MAP

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE
- PROPOSED STORM PIPE
- EXISTING STORM PIPE

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

PLOTTED: November 18, 2025 – 3:35 PM, BY: Emma Thompson

REVISIONS:

ETM NO. 22-213-03	
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DESIGNED BY:	S.A.W.
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PAVING AND DRAINAGE PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
7C

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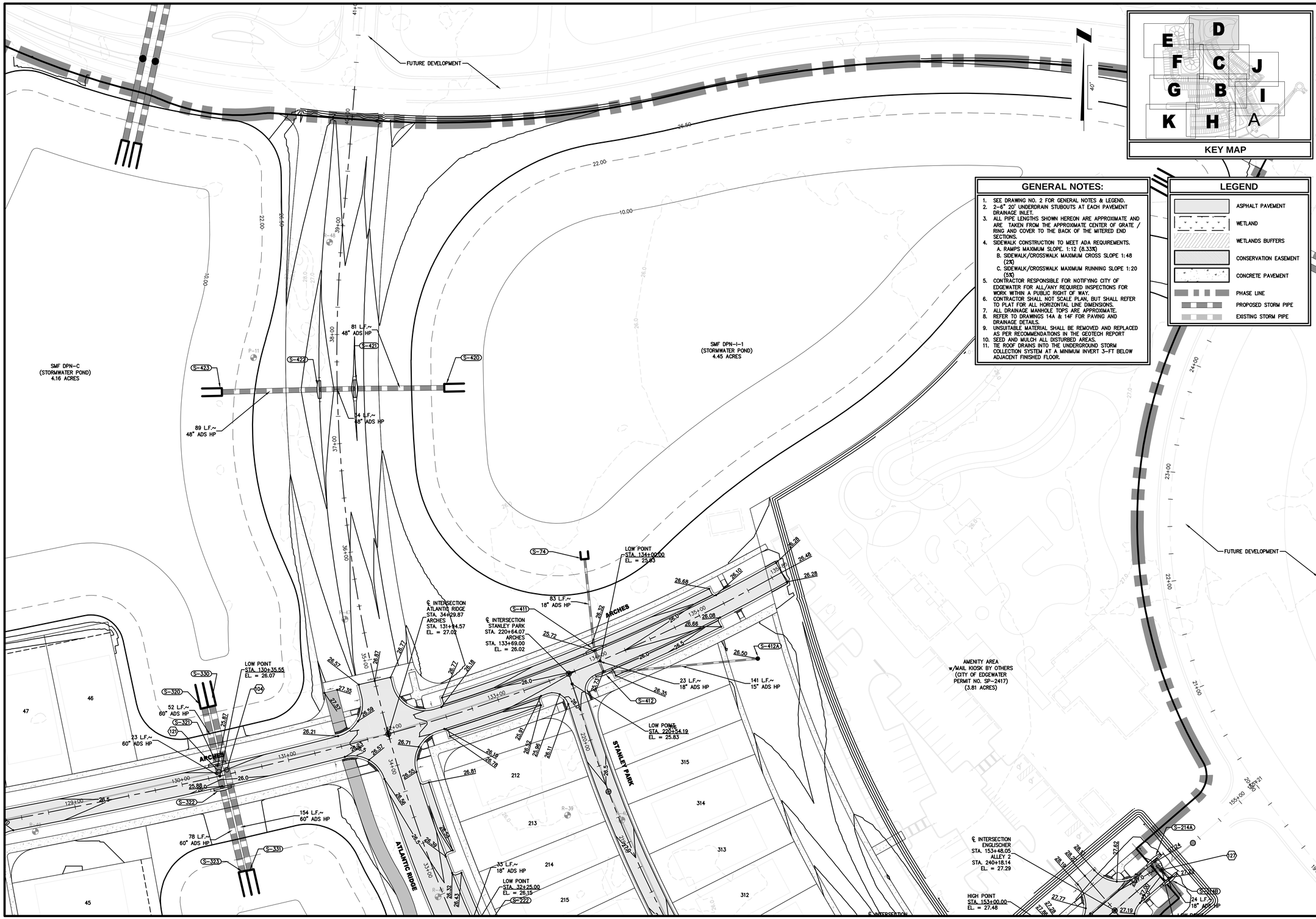

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- WETLAND
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- CONCRETE PAVEMENT
- PHASE LINE
- PROPOSED STORM PIPE
- EXISTING STORM PIPE

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
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PAVING AND DRAINAGE PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
7D

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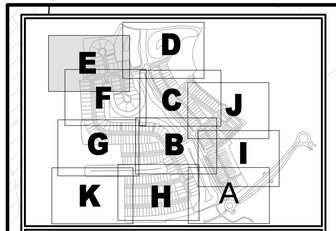

KEY MAP

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE
- PROPOSED STORM PIPE
- EXISTING STORM PIPE

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PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
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PAVING AND DRAINAGE PLAN

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
7E

PLOTTED: November 18, 2025 – 3:37 PM, BY: Emma Thompson

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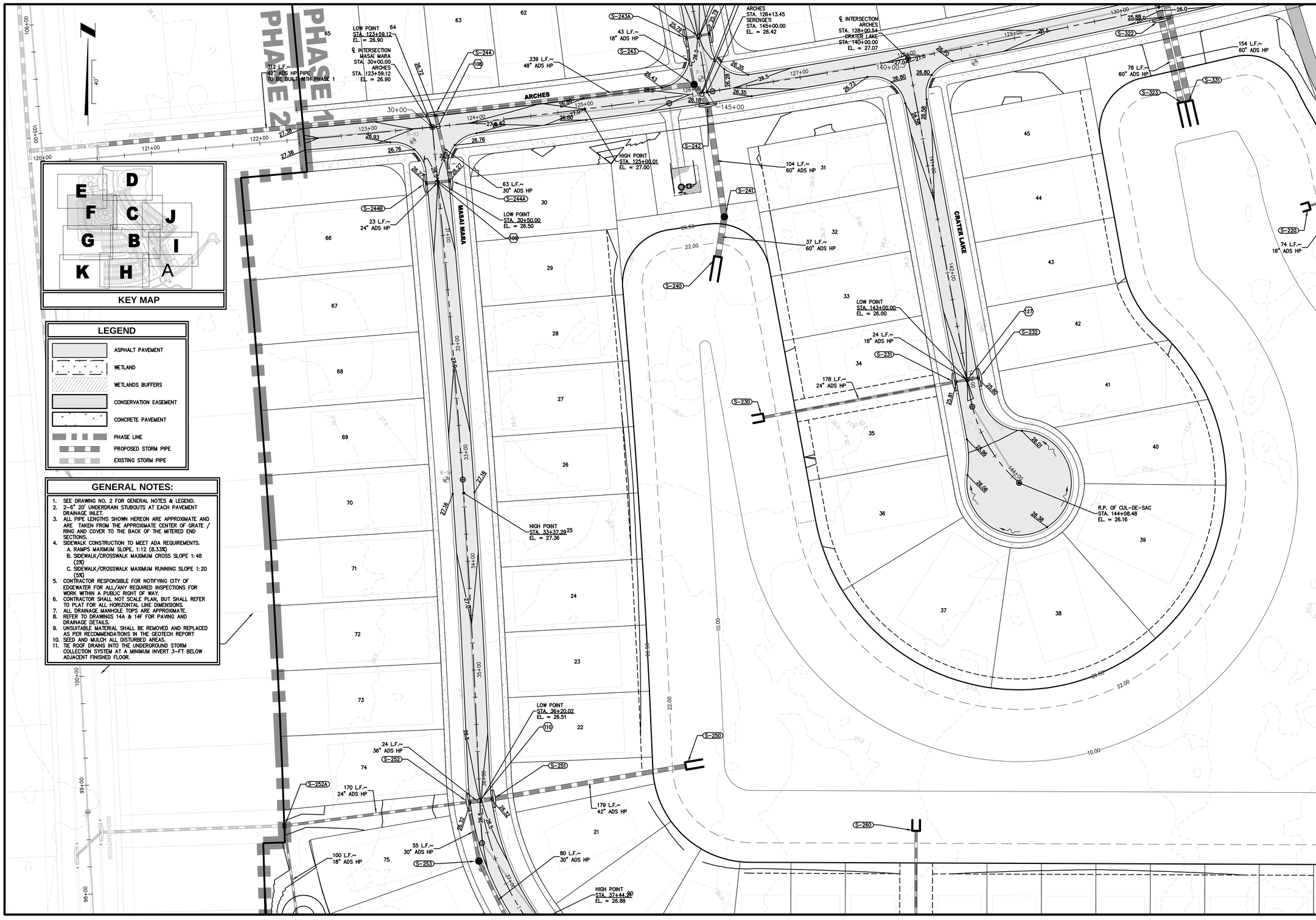

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PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
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PAVING AND DRAINAGE PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
7F

PLOTTED: November 18, 2025 – 3:38 PM, BY: Emma Thompson

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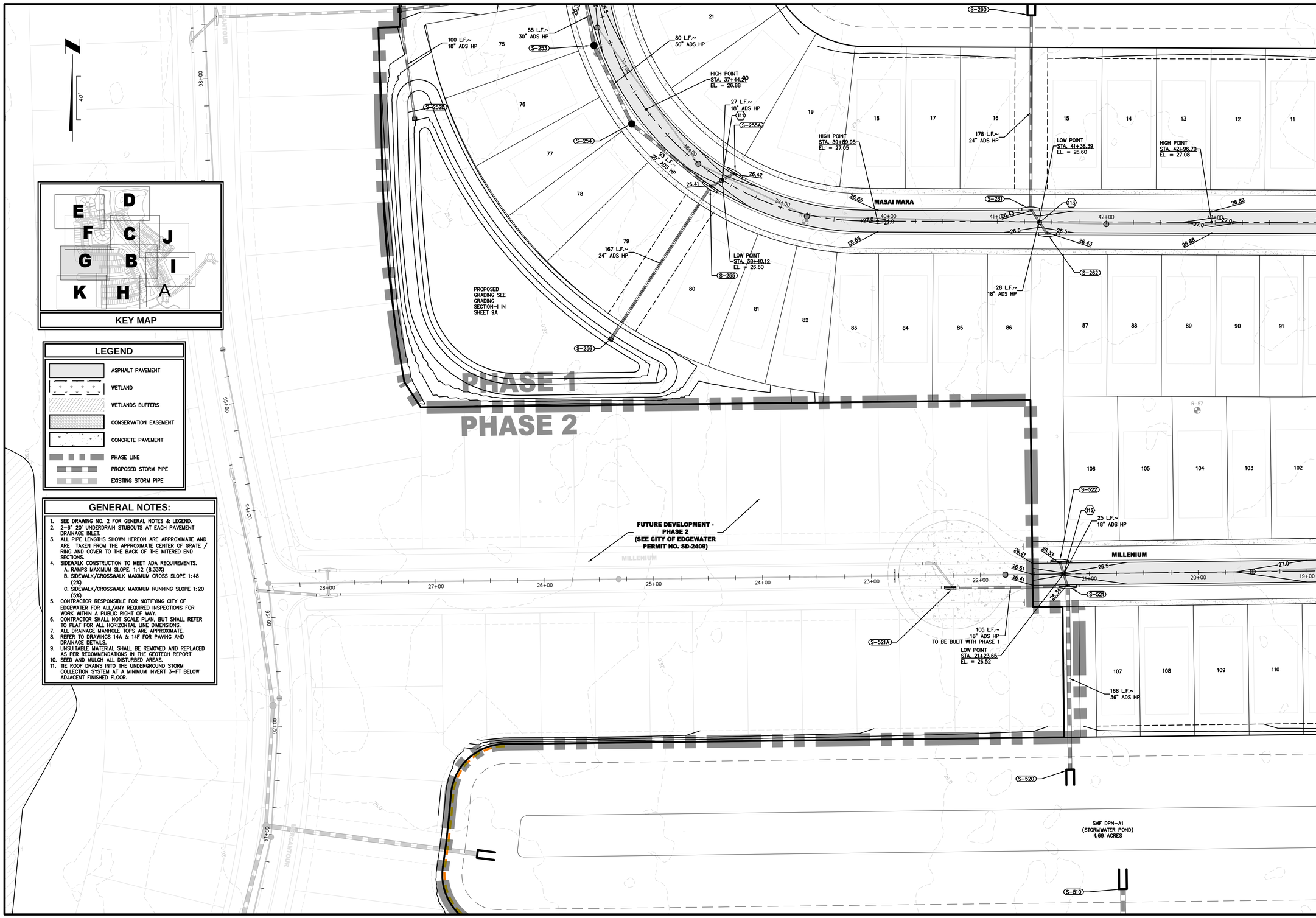

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PAVING AND DRAINAGE PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
7G

PLOTTED: November 18, 2025 – 3:39 PM, BY: Emma Thompson

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LEGEND

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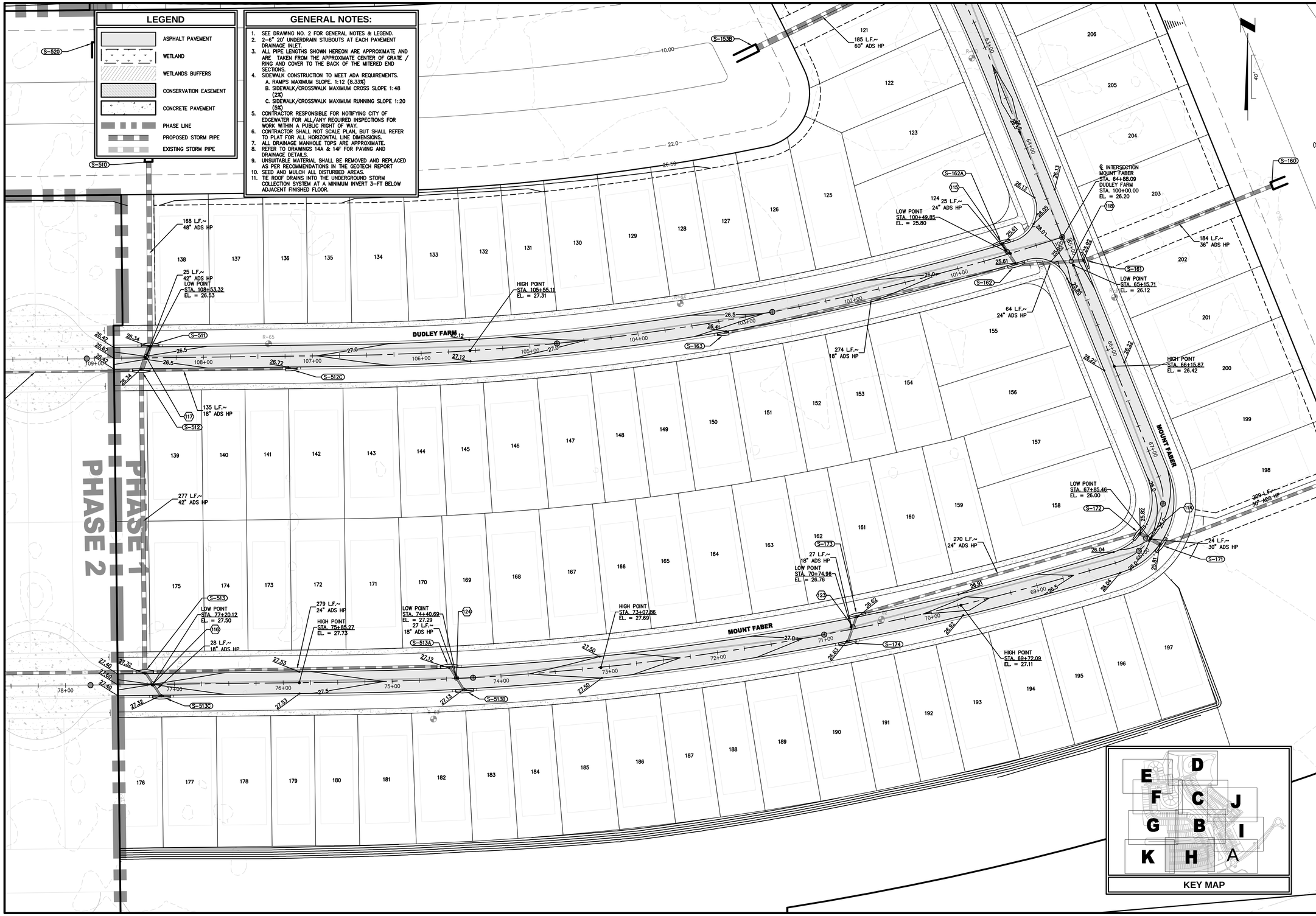

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

PLOTTED: November 18, 2025 – 3:40 PM, BY: Emma Thompson

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
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PAVING AND DRAINAGE PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
7H

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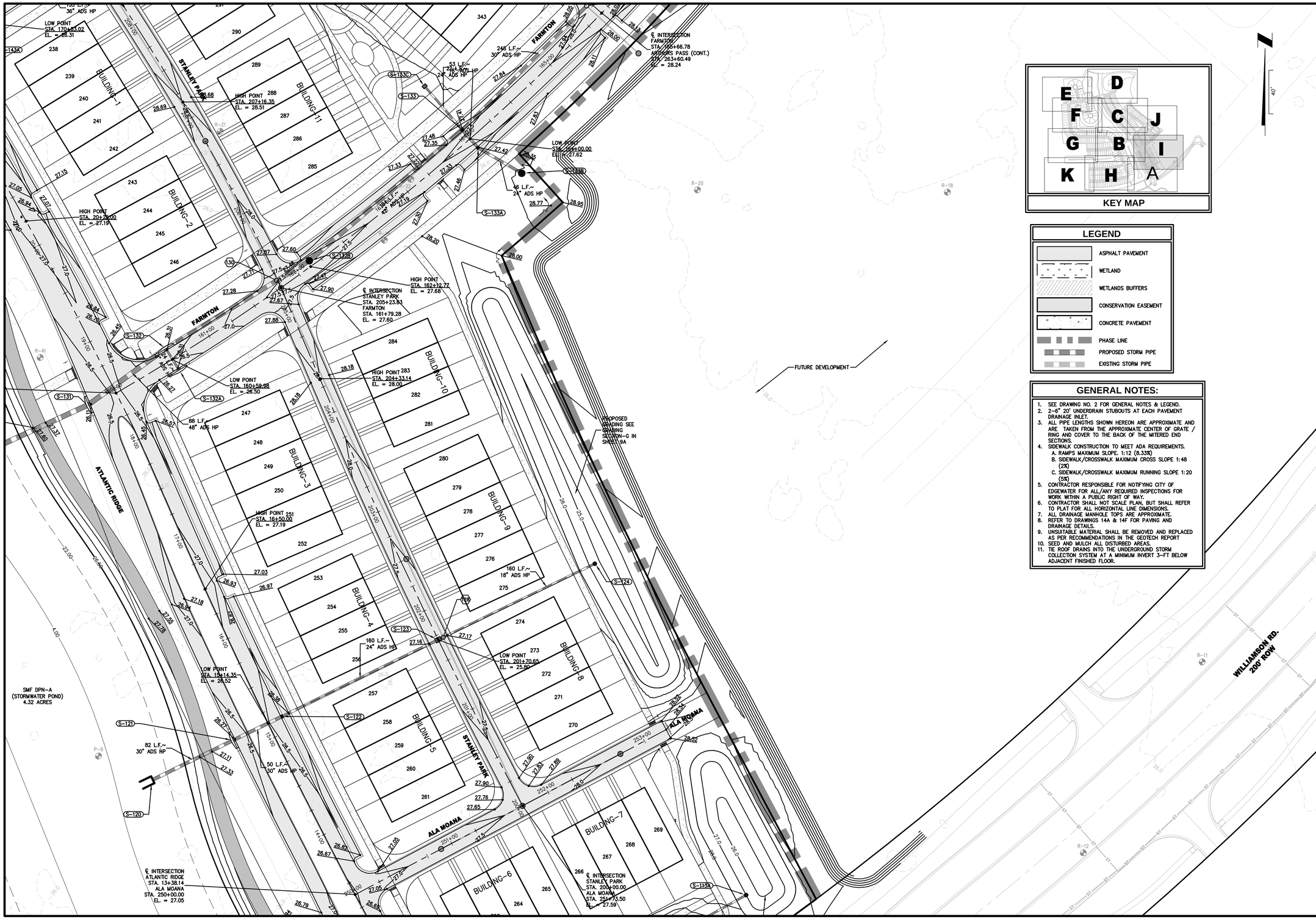

KEY MAP

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
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DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE:	Issue Date

1411 Edgewater Drive, Ste. 200
Orlando, Florida 32804
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ENGLAND-THIMS & MILLER

PAVING AND DRAINAGE PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
7I

PLOTTED: November 18, 2025 – 3:41 PM, BY: Emma Thompson

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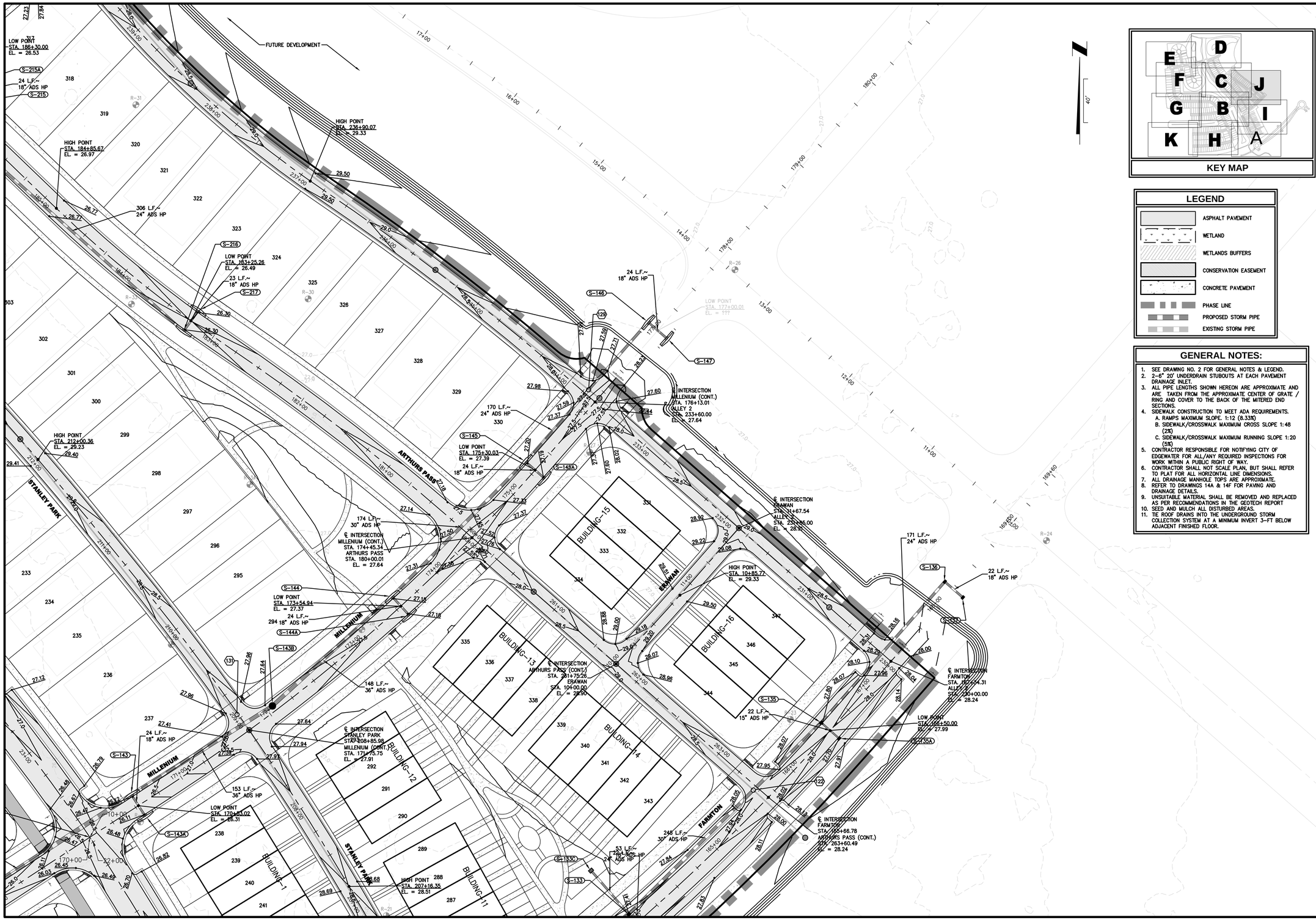

KEY MAP

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE
- PROPOSED STORM PIPE
- EXISTING STORM PIPE

GENERAL NOTES:

1. SEE DRAWING NO. 2 FOR GENERAL NOTES & LEGEND.
2. 2-6" 20' UNDERDRAIN STUBOUTS AT EACH PAVEMENT DRAINAGE INLET.
3. ALL PIPE LENGTHS SHOWN HEREON ARE APPROXIMATE AND ARE TAKEN FROM THE APPROXIMATE CENTER OF GRATE / RING AND COVER TO THE BACK OF THE MITERED END SECTIONS.
4. SIDEWALK CONSTRUCTION TO MEET ADA REQUIREMENTS.
   A. RAMPS MAXIMUM SLOPE. 1:12 (8.33%)
   B. SIDEWALK/CROSSWALK MAXIMUM CROSS SLOPE 1:48 (2%)
   C. SIDEWALK/CROSSWALK MAXIMUM RUNNING SLOPE 1:20 (5%)
5. CONTRACTOR RESPONSIBLE FOR NOTIFYING CITY OF EDGEWATER FOR ALL/ANY REQUIRED INSPECTIONS FOR WORK WITHIN A PUBLIC RIGHT OF WAY.
6. CONTRACTOR SHALL NOT SCALE PLAN, BUT SHALL REFER TO PLAT FOR ALL HORIZONTAL LINE DIMENSIONS.
7. ALL DRAINAGE MANHOLE TOPS ARE APPROXIMATE.
8. REFER TO DRAWINGS 14A & 14F FOR PAVING AND DRAINAGE DETAILS.
9. UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED AS PER RECOMMENDATIONS IN THE GEOTECH REPORT
10. SEED AND MULCH ALL DISTURBED AREAS.
11. TIE ROOF DRAINS INTO THE UNDERGROUND STORM COLLECTION SYSTEM AT A MINIMUM INVERT 3-FT BELOW ADJACENT FINISHED FLOOR.

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
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PAVING AND DRAINAGE PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
7J

PLOTTED: November 18, 2025 – 3:42 PM, BY: Emma Thompson

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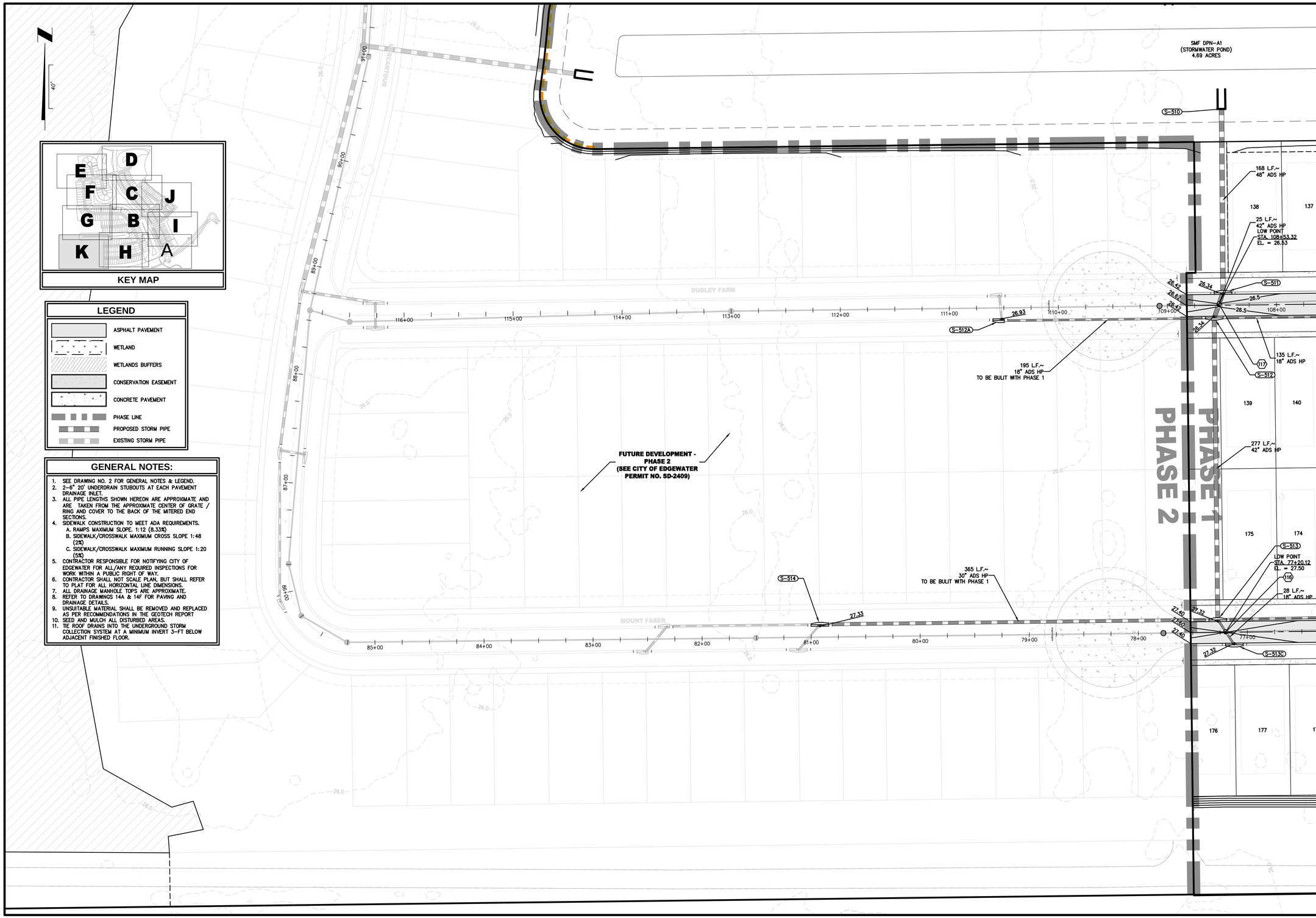

KEY MAP

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
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- PROPOSED STORM PIPE
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GENERAL NOTES:

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10. SEED AND MULCH ALL DISTURBED AREAS.
11. TIE ROOF DRAINS INTO THE UNDERGROUND STORM COLLECTION SYSTEM AT A MINIMUM INVERT 3–FT BELOW ADJACENT FINISHED FLOOR.

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 80967

REVISIONS:

ETM NO.	22-213-03
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PAVING AND DRAINAGE PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER

7K

PLOTTED: November 18, 2025 – 3:43 PM, BY: Emma Thompson

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DRAINAGE STRUCTURE TABLE

STR. NO.	STRUCTURE TYPE	TOP/ GRATE EL.	INVERT EL.
58	TEMP. MANHOLE TOP. SEE FUTURE DPC – PHASE 1 PLANS	26.00	12.80 (NE) 12.80 (SW)
59	TEMP. MANHOLE TOP. SEE FUTURE DPC – PHASE 1 PLANS	25.70	12.90 (NE) 12.90 (SW)
60	60" MES		12.50 (N)
61	60" MES		12.50 (S)
62	MANHOLE TYPE J-1	19.07	13.00 (S) 13.00 (N)
63	60" MES		12.50 (N)
64	60" MES		12.50 (S)
66	MANHOLE TYPE J-1	0.00	13.00 (S) 13.00 (N)
67	60" MES		12.50 (SE)
68	60" MES		12.50 (NW)
69	MANHOLE TYPE J-1	0.00	13.00 (NW) 13.00 (SE)
70	60" MES		12.50 (SE)
71	60" MES		12.50 (NW)
73	MANHOLE TYPE J-1	0.00	13.00 (NW) 13.00 (SE)
74	18" MES		18.50 (S)
110	60" MES		16.00 (E)
111	FDOT TYPE 6	26.92	20.50 (NE) 16.00 (SE) 20.50 (W)
112	FDOT TYPE 6	27.01	21.30 (E) 20.80 (SW)
113	YARD DRAIN	26.00	21.50 (NE) 21.50 (W)
113A	YARD DRAIN	27.00	22.00 (SW)
120	30" MES		15.30 (NE)
121	FDOT TYPE 6	27.05	19.90 (NE) 15.90 (SW)
122	VALLEY GUTTER INLET	26.17	20.70 (NE) 20.20 (SW)
123	TYPE "E" INLET	26.99	21.50 (NE) 21.00 (SW)
124	ADS YARD DRAIN	26.00	22.00 (SW)
130	48" MES		14.10 (NE)
131	FDOT TYPE 6	26.88	19.10 (NE) 15.10 (SW)
132	FDOT TYPE 6	26.78	19.80 (NE) 21.30 (SE) 19.40 (SW)
132A	FDOT TYPE 6	26.78	21.60 (NW)
132B	MANHOLE TYPE J-1	24.57	20.00 (NE) 20.00 (SW)

DRAINAGE STRUCTURE TABLE

STR. NO.	STRUCTURE TYPE	TOP/ GRATE EL.	INVERT EL.
133	VALLEY GUTTER INLET	27.33	21.20 (NE) 23.00 (SE) 21.60 (NW) 20.20 (SW)
133A	VALLEY GUTTER INLET	27.34	23.20 (SE) 23.20 (NW)
133B	MANHOLE TYPE J-1	28.52	23.60 (NW)
133C	TYPE "C" INLET	28.53	21.90 (SE)
135	VALLEY GUTTER INLET	27.70	21.60 (NE) 22.40 (SE) 21.50 (SW)
135A	VALLEY GUTTER INLET	27.70	22.70 (NW)
136	VALLEY GUTTER INLET	24.03	22.40 (SE) 21.90 (SW)
137	VALLEY GUTTER INLET	24.33	22.70 (NW)
140	60" MES		12.50 (NW)
141	FDOT TYPE 6	26.55	13.00 (SE) 13.00 (NW)
142	FDOT TYPE 6	26.55	19.70 (NE) 13.00 (SE) 13.00 (NW)
142A	60" MES		12.00 (SE)
143	FDOT TYPE 6	26.96	20.50 (NE) 22.00 (SE) 20.00 (SW)
143A	FDOT TYPE 6	26.96	21.70 (NW)
143B	MANHOLE TYPE J-1	24.76	20.70 (NE) 20.70 (SW)
144	FDOT TYPE 6	28.02	21.40 (NE) 23.00 (SE) 20.90 (SW)
144A	FDOT TYPE 6	28.02	23.30 (NW)
145	FDOT TYPE 6	28.04	23.00 (SE) 22.20 (NE) 21.70 (SW)
145A	FDOT TYPE 6	28.04	23.30 (NW)
146	FDOT TYPE 6	28.32	23.00 (SE) 22.50 (SW)
147	FDOT TYPE 6	28.32	23.30 (NW)
150	60" MES		10.60 (W)
151	MANHOLE TYPE J-1	26.39	10.70 (SW) 10.70 (E)
152	FDOT TYPE 6	26.03	21.80 (SW) 10.80 (NE)
153	FDOT TYPE 6	25.89	10.80 (SE) 18.20 (NW) 21.90 (NE)
153A	MANHOLE TYPE J-1	26.07	10.90 (NW) 16.30 (SW)
153B	60" MES		15.50 (NE)
154	FDOT TYPE 6	25.89	21.80 (NE) 18.40 (SE)
155	FDOT TYPE 6	25.87	21.90 (SW)
160	36" MES		14.70 (W)

DRAINAGE STRUCTURE TABLE

STR. NO.	STRUCTURE TYPE	TOP/ GRATE EL.	INVERT EL.
161	FDOT TYPE 6	26.29	20.70 (W) 15.70 (E)
162	FDOT TYPE 6	25.98	21.60 (NW) 21.70 (W) 21.20 (E)
162A	FDOT TYPE 6	25.99	21.90 (SE)
163	FDOT TYPE 5 (R)	26.78	22.70 (E)
170	30" MES		15.00 (W)
171	FDOT TYPE 6	26.19	21.50 (NW) 17.50 (E)
172	FDOT TYPE 6	26.18	22.10 (W) 21.60 (SE)
173	FDOT TYPE 6	26.99	23.00 (S) 22.50 (E)
174	FDOT TYPE 6	27.00	23.30 (N)
180	60" MES		12.80 (S)
180C	60" MES		10.00 (NW)
182	60" MES		10.00 (NE)
183	60" MES		12.80 (S)
210	48" MES		14.25 (NE)
211	FDOT TYPE 6	26.87	18.90 (NE) 17.75 (SW)
212	VALLEY GUTTER INLET	26.17	19.10 (NE) 19.10 (SW)
213	FDOT TYPE 6	27.75	19.80 (NE) 22.70 (SE) 19.30 (SW)
213A	FDOT TYPE 6	27.75	23.00 (NW)
214	FDOT TYPE 6	27.75	21.80 (NE) 20.50 (SE) 20.00 (SW)
214A	FDOT TYPE 6	28.01	22.70 (SE) 22.20 (SW)
214B	FDOT TYPE 6	28.01	23.00 (NW)
215	FDOT TYPE 6	27.19	21.20 (SE) 22.10 (NE) 20.70 (NW)
215A	FDOT TYPE 6	27.19	22.40 (SW)
216	FDOT TYPE 6	27.14	22.10 (NE) 21.60 (NW)
217	FDOT TYPE 6	27.14	22.40 (SW)
220	18" MES		15.85 (E)
221	FDOT TYPE 6	26.64	20.70 (NE) 17.20 (W)
222	VALLEY GUTTER INLET	25.96	21.00 (SW)
230	24" MES		15.80 (E)
231	CURB INLET – SINGLE	26.30	21.90 (E) 16.40 (W)

DRAINAGE STRUCTURE TABLE

STR. NO.	STRUCTURE TYPE	TOP/ GRATE EL.	INVERT EL.
232	FDOT TYPE 6	26.17	22.20 (W)
240	60" MES		12.70 (N)
241	MANHOLE TYPE J-1	26.81	17.30 (N) 13.00 (S)
242	FDOT TYPE 6	26.59	18.60 (NW) 17.60 (S)
243	MANHOLE TYPE J-1	26.30	18.90 (W) 21.00 (N) 18.90 (SE)
243A	FDOT TYPE 6	26.20	21.20 (E) 21.20 (S)
243B	FDOT TYPE 6	26.20	21.50 (W)
244	FDOT TYPE 6	27.08	20.80 (S) 19.70 (W) 19.20 (E)
244A	FDOT TYPE 6	26.67	21.50 (W) 21.00 (N)
244B	FDOT TYPE 6	26.67	21.80 (E)
250	42" MES		14.20 (W)
251	FDOT TYPE 6	26.69	18.70 (W) 14.50 (E)
252	FDOT TYPE 6	26.69	20.00 (W) 19.50 (S) 19.00 (E)
252A	TYPE "C" INLET	27.83	22.20 (S) 22.00 (W) 22.00 (E)
252D	TYPE "C" INLET	26.50	22.50 (N)
253	MANHOLE TYPE J-1	26.70	19.90 (SE) 19.90 (N)
254	MANHOLE TYPE J-1	26.97	20.20 (SE) 20.20 (NW)
255	FDOT TYPE 6	26.79	21.00 (SW) 21.60 (NE) 20.50 (NW)
255A	FDOT TYPE 6	26.79	21.90 (SW)
256	TYPE "C" INLET	26.50	21.50 (NE)
260	24" MES		15.80 (S)
261	FDOT TYPE 6	26.80	21.40 (SE) 20.90 (N)
262	FDOT TYPE 6	26.80	21.90 (NW)
270	24" MES		15.80 (S)
271	FDOT TYPE 6	26.34	21.00 (S) 20.50 (N)
272	FDOT TYPE 6	26.34	21.50 (N)
280	60" MES		13.00 (SE)
281	60" MES		12.00 (NW)
310	24" MES		15.80 (W)
311	FDOT TYPE 6	26.30	21.70 (W) 18.70 (E)

DRAINAGE STRUCTURE TABLE

STR. NO.	STRUCTURE TYPE	TOP/ GRATE EL.	INVERT EL.
312	FDOT TYPE 6	26.55	21.90 (E)
320	60" MES		13.00 (S)
321	FDOT TYPE 6	26.24	13.00 (N) 13.00 (S)
322	FDOT TYPE 6	26.24	13.00 (N) 13.00 (S)
323	60" MES		13.00 (N)
330	60" MES		13.00 (S)
331	60" MES		13.00 (N)
411	FDOT TYPE 6	26.47	21.90 (SE) 19.00 (N)
412	FDOT TYPE 6	26.58	22.00 (E) 22.00 (NW)
412A	YARD DRAIN	26.50	22.50 (W)
420	48" MES		13.00 (W)
421	TEMP. MANHOLE TOP.	25.93	14.00 (E) 14.00 (W)
422	TEMP. MANHOLE TOP	26.18	14.00 (E) 14.00 (W)
423	48" MES		13.00 (E)
510	48" MES		13.70 (S)
511	FDOT TYPE 6	26.71	17.30 (S) 15.80 (N)
512	FDOT TYPE 6	26.71	17.70 (S) 18.00 (W) 19.60 (E) 17.60 (N)
512A	FDOT TYPE 5 (R) TO BE BUILT WITH PHASE 1	27.30	18.50 (N) 18.50 (E)
512C	FDOT TYPE 5 (L)	27.09	19.90 (W)
513	FDOT TYPE 6	27.69	19.50 (SE) 19.50 (E) 19.05 (W) 18.00 (N)
513A	FDOT TYPE 6	27.49	19.50 (SE) 20.00 (W)
513B	FDOT TYPE 6	27.49	19.70 (NW)
513C	FDOT TYPE 6	27.70	20.90 (NW)
514	FDOT TYPE 6 TO BE BUILT WITH PHASE 1	27.70	20.40 (W) 23.90 (SW) 19.40 (E)
520	36" MES		15.20 (N)
521	FDOT TYPE 6	26.71	19.10 (N) 22.50 (W) 17.20 (S)
521A	FDOT TYPE 5 (R) TO BE BUILT WITH PHASE 1	27.01	22.70 (NW) 22.70 (E)
522	FDOT TYPE 6	26.71	19.40 (S)
DS-DPNA	CONTROL STRUCTURE (REFER TO DETAIL, DWG. NO. 6D)	26.50	13.00 (SE) 13.00 (N)
DS-DPNJ2	CONTROL STRUCTURE (REFER TO DETAIL, DWG. NO. 6D)	26.50	13.00 (N) 13.00 (SW)

DRAINAGE STRUCTURE TABLE

STR. NO.	STRUCTURE TYPE	TOP/ GRATE EL.	INVERT EL.
21	60" MES		60" ADS HP – 13.00 (N)
100	TEMP. MANHOLE TOP	27.00	60" ADS HP – 13.00 (NE) 60" ADS HP – 13.00 (S)

PIPE CROSSINGS TABLE

COUNTER	HIGHER PIPE	LOWER PIPE	SEPARATION
100	42 INCH HP STORM PP IWE: 21.60	8.0 INCH PVC PIPE CE: 16.32	5.25
101	18 INCH HP STORM PP IWE: 21.71	8.0 INCH PVC PIPE CE: 15.82	5.86
102	24 INCH HP STORM PP IWE: 18.16	8.0 INCH PVC PIPE CE: 17.23	0.90
103	18 INCH HP STORM PP IWE: 21.25	8.0 INCH PVC PIPE CE: 14.43	6.79
104	60 INCH HP STORM PP IWE: 12.73	8.0 INCH PVC PIPE CE: 10.02	2.68
105	18 INCH HP STORM PP IWE: 21.68	8.0 INCH PVC PIPE CE: 21.12	0.53
106	18 INCH HP STORM PP IWE: 21.24	8.0 INCH PVC PIPE CE: 20.06	1.15
107	48 INCH HP STORM PP IWE: 18.51	8.0 INCH PVC PIPE CE: 7.92	10.56
108	30 INCH HP STORM PP IWE: 20.64	8.0 INCH PVC PIPE CE: 7.30	13.31
109	24 INCH HP STORM PP IWE: 21.51	8.0 INCH PVC PIPE CE: 7.63	13.85
110	36 INCH HP STORM PP IWE: 18.64	8.0 INCH PVC PIPE CE: 10.00	8.61
111	18 INCH HP STORM PP IWE: 21.67	8.0 INCH PVC PIPE CE: 11.10	10.54
112	8.0 INCH PVC PIPE IWE: 21.49	18 INCH HP STORM PP CE: 20.75	0.61
113	18 INCH HP STORM PP IWE: 21.54	8.0 INCH PVC PIPE CE: 12.38	9.13
114	30 INCH HP STORM PP IWE: 21.37	8.0 INCH PVC PIPE CE: 19.55	1.79
115	24 INCH HP STORM PP IWE: 21.63	8.0 INCH PVC PIPE CE: 19.24	2.36
116	8.0 INCH PVC PIPE IWE: 22.69	18 INCH HP STORM PP CE: 21.68	1.08
117	8.0 INCH PVC PIPE IWE: 21.95	42 INCH HP STORM PP CE: 20.90	0.79
118	24 INCH HP STORM PP IWE: 20.65	8.0 INCH PVC PIPE CE: 18.37	2.25
119	42 INCH HP STORM PP IWE: 19.01	8.0 INCH PVC PIPE CE: 13.81	5.17
120	15 INCH HP STORM PP IWE: 22.74	8.0 INCH PVC PIPE CE: 14.08	8.63
121	60 INCH HP STORM PP IWE: 12.73	8.0 INCH PVC PIPE CE: 9.99	2.71
122	30 INCH HP STORM PP IWE: 21.19	8.0 INCH PVC PIPE CE: 20.73	0.43
123	18 INCH HP STORM PP IWE: 23.00	8.0 INCH PVC PIPE CE: 20.80	2.17
124	8.0 INCH PVC PIPE IWE: 21.77	18 INCH HP STORM PP CE: 21.10	0.54
125	18 INCH HP STORM PP IWE: 21.93	8.0 INCH PVC PIPE CE: 21.43	0.47
126	30 INCH HP STORM PP IWE: 20.34	8.0 INCH PVC PIPE CE: 14.59	5.72
127	18 INCH HP STORM PP IWE: 22.72	8.0 INCH PVC PIPE CE: 15.56	7.13
128	18 INCH HP STORM PP IWE: 21.39	8.0 INCH PVC PIPE CE: 20.71	0.65
129	24 INCH HP STORM PP IWE: 22.20	8.0 INCH PVC PIPE CE: 18.33	3.84
130	42 INCH HP STORM PP IWE: 19.70	8.0 INCH PVC PIPE CE: 19.07	0.60
131	36 INCH HP STORM PP IWE: 20.44	8.0 INCH PVC PIPE CE: 17.42	2.99

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 80967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
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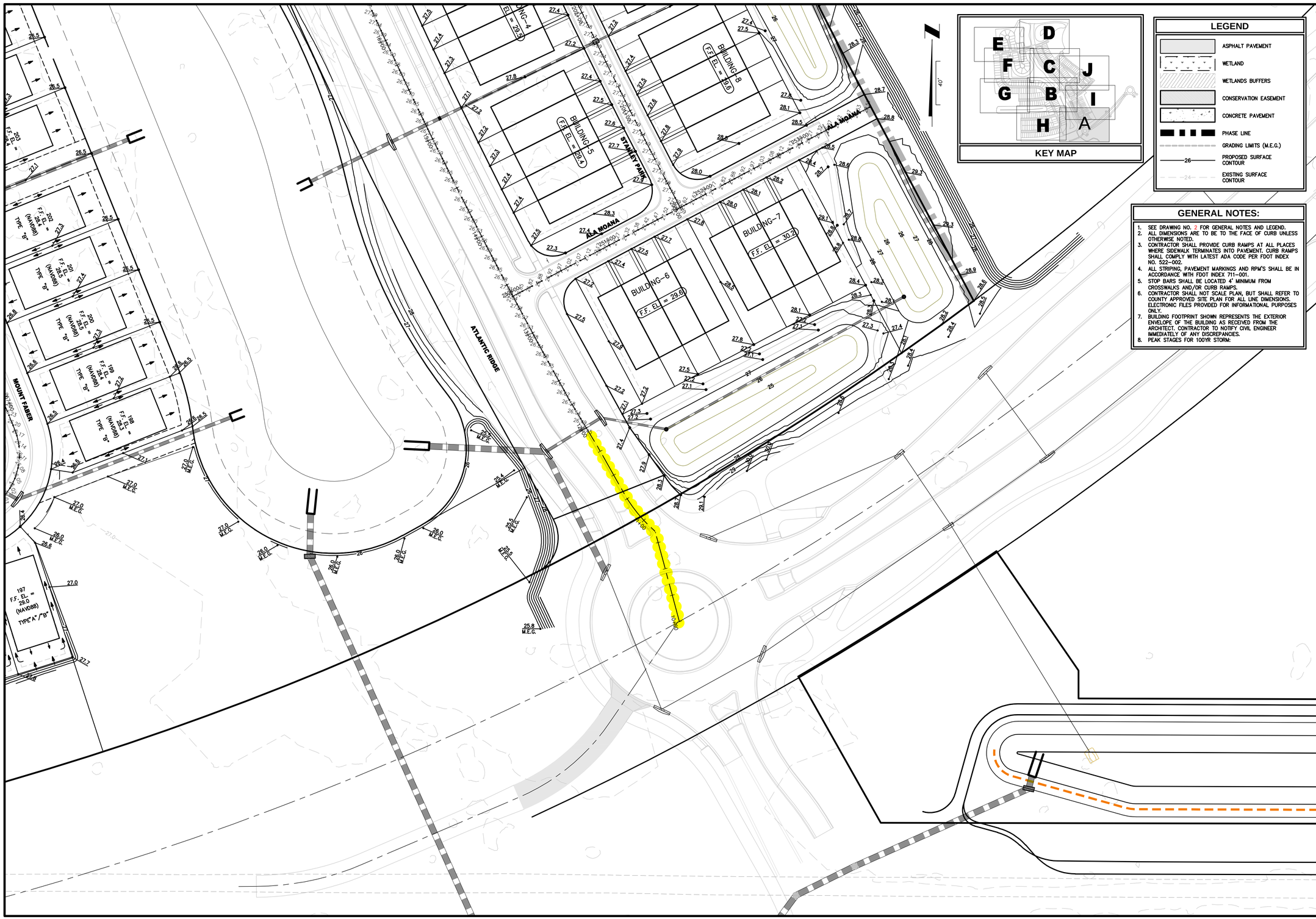
DRAINAGE STRUCTURE TABLES

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
7L

PLOTTED: November 18, 2025 – 3:44 PM, BY: Emma Thompson

n:\2022\22-213\22-213-03\LandDev\Design\Plots\22-213-03-PD.dwg



KEY MAP

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE
- GRADING LIMITS (M.E.G.)
- 26 — PROPOSED SURFACE CONTOUR
- 24 — EXISTING SURFACE CONTOUR

GENERAL NOTES:

1. SEE DRAWING NO. 2 FOR GENERAL NOTES AND LEGEND.
2. ALL DIMENSIONS ARE TO BE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL PROVIDE CURB RAMPS AT ALL PLACES WHERE SIDEWALK TERMINATES INTO PAVEMENT. CURB RAMPS SHALL COMPLY WITH LATEST ADA CODE PER FDOT INDEX NO. 522-002.
4. ALL STRIPING, PAVEMENT MARKINGS AND RPM'S SHALL BE IN ACCORDANCE WITH FDOT INDEX 711-001.
5. STOP BARS SHALL BE LOCATED 4' MINIMUM FROM CROSSWALKS AND/OR CURB RAMPS.
6. CONTRACTOR SHALL NOT SCALE PLAN, BUT SHALL REFER TO COUNTY APPROVED SITE PLAN FOR ALL LINE DIMENSIONS. ELECTRONIC FILES PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
7. BUILDING FOOTPRINT SHOWN REPRESENTS THE EXTERIOR ENVELOPE OF THE BUILDING AS RECEIVED FROM THE ARCHITECT. CONTRACTOR TO NOTIFY CIVIL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
8. PEAK STAGES FOR 100YR STORM:

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
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NEIGHBORHOOD GRADING PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
8A

PLOTTED: November 18, 2025 – 3:46 PM, BY: Emma Thompson

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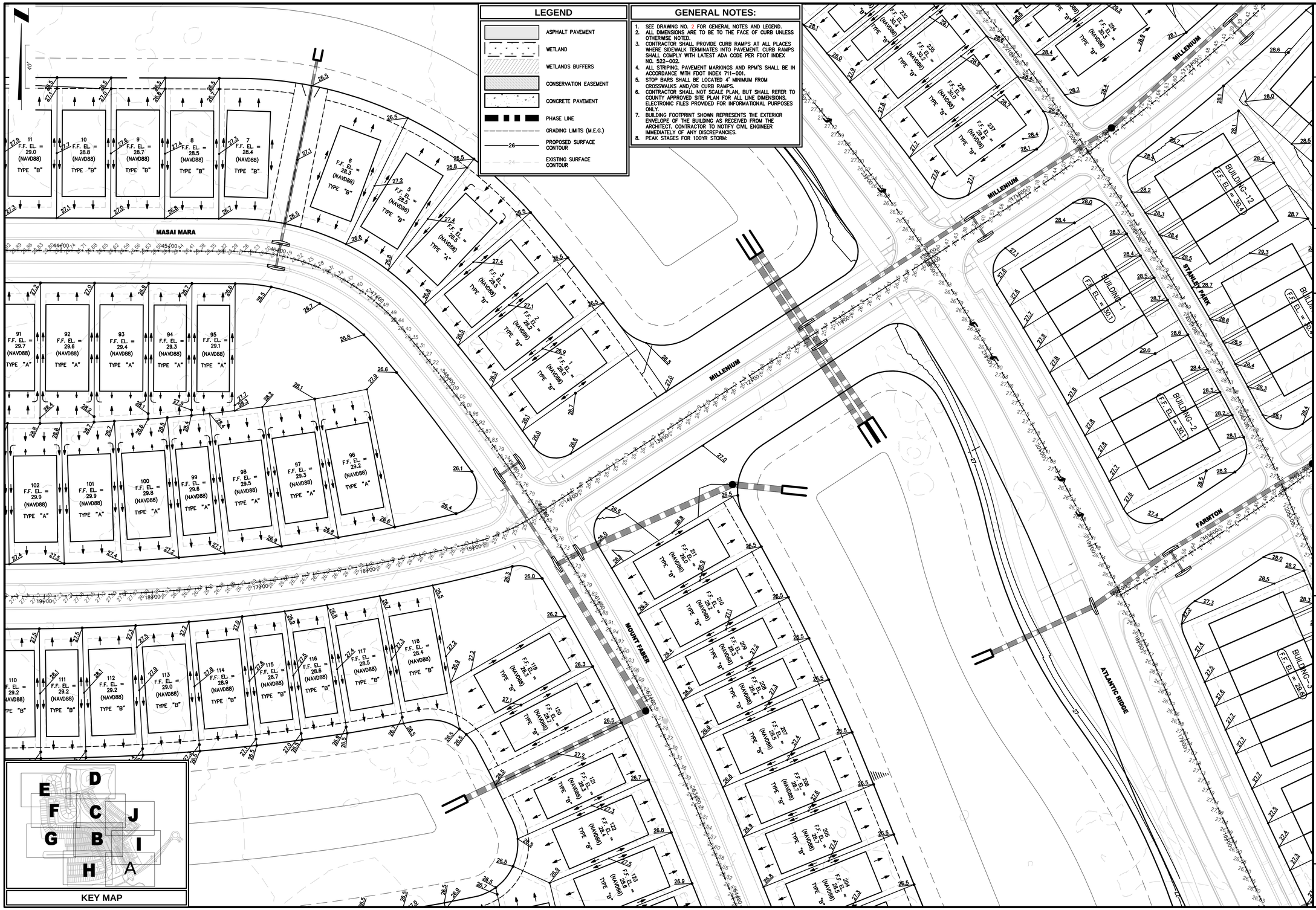
LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE
- GRADING LIMITS (M.E.G.)
- 26 — PROPOSED SURFACE CONTOUR
- 24 — EXISTING SURFACE CONTOUR

GENERAL NOTES:

1. SEE DRAWING NO. 2 FOR GENERAL NOTES AND LEGEND.
2. ALL DIMENSIONS ARE TO BE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL PROVIDE CURB RAMPS AT ALL PLACES WHERE SIDEWALK TERMINATES INTO PAVEMENT. CURB RAMPS SHALL COMPLY WITH LATEST ADA CODE PER FDOT INDEX NO. 522-002.
4. ALL STRIPING, PAVEMENT MARKINGS AND RPM'S SHALL BE IN ACCORDANCE WITH FDOT INDEX 711-001.
5. STOP BARS SHALL BE LOCATED 4' MINIMUM FROM CROSSWALKS AND/OR CURB RAMPS.
6. CONTRACTOR SHALL NOT SCALE PLAN, BUT SHALL REFER TO COUNTY APPROVED SITE PLAN FOR ALL LINE DIMENSIONS. ELECTRONIC FILES PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
7. BUILDING FOOTPRINT SHOWN REPRESENTS THE EXTERIOR ENVELOPE OF THE BUILDING AS RECEIVED FROM THE ARCHITECT. CONTRACTOR TO NOTIFY CIVIL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
8. PEAK STAGES FOR 100YR STORM:



PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

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NEIGHBORHOOD GRADING PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
8B

PLOTTED: November 18, 2025 – 3:47 PM, BY: Emma Thompson

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LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE
- GRADING LIMITS (M.E.G.)
- 26 — PROPOSED SURFACE CONTOUR
- 24 — EXISTING SURFACE CONTOUR

KEY MAP

GENERAL NOTES:

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8. PEAK STAGES FOR 100YR STORM:

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
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NEIGHBORHOOD GRADING PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
8C

PLOTTED: November 18, 2025 – 3:48 PM, BY: Emma Thompson

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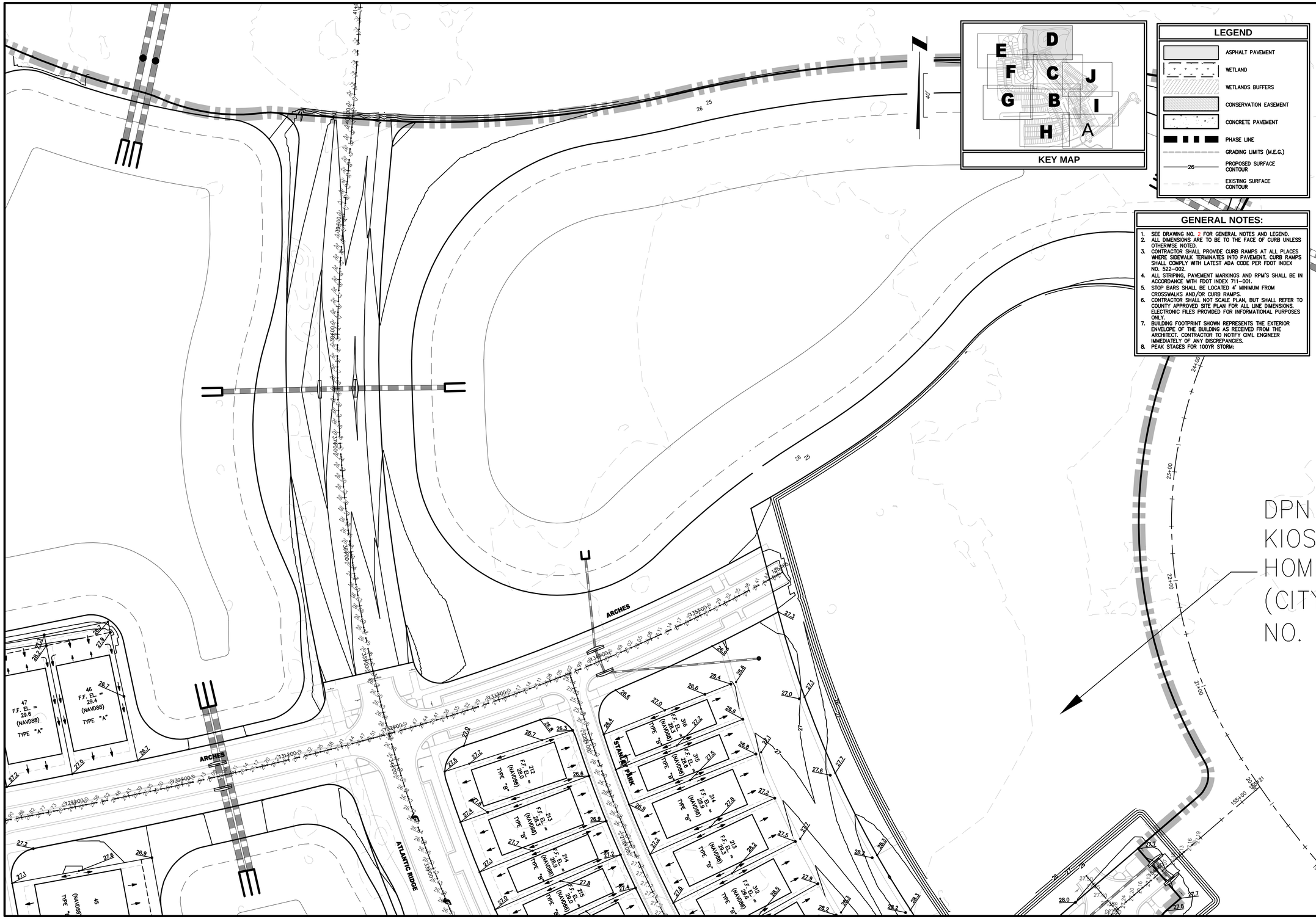

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

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NEIGHBORHOOD GRADING PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
8D

PLOTTED: November 18, 2025 – 3:48 PM, BY: Emma Thompson

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PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

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NEIGHBORHOOD GRADING PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
8E

PLOTTED: November 18, 2025 – 3:49 PM, BY: Emma Thompson

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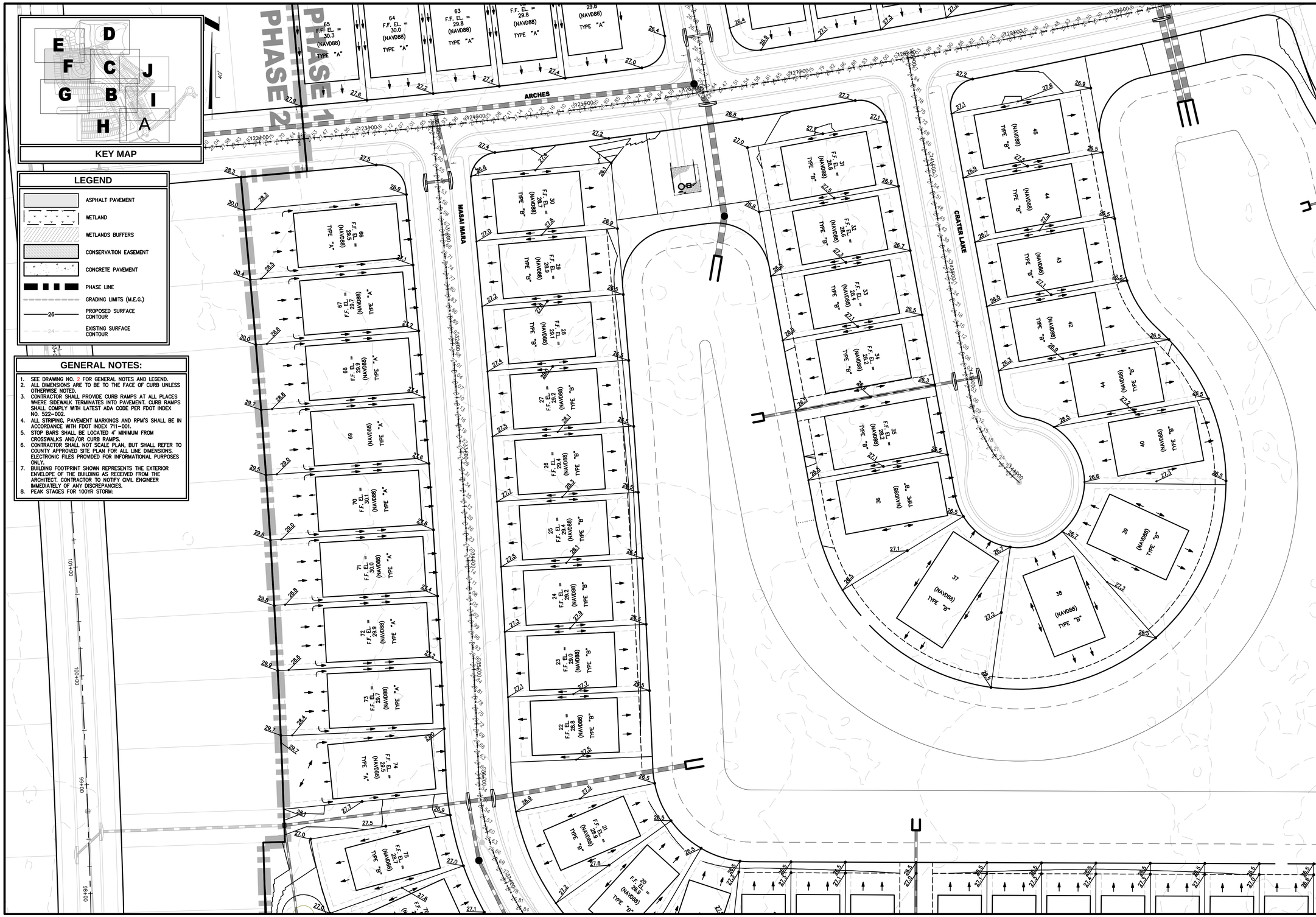

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE
- GRADING LIMITS (M.E.G.)
- 26 — PROPOSED SURFACE CONTOUR
- 24 — EXISTING SURFACE CONTOUR

GENERAL NOTES:

1. SEE DRAWING NO. 2 FOR GENERAL NOTES AND LEGEND.
2. ALL DIMENSIONS ARE TO BE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL PROVIDE CURB RAMPS AT ALL PLACES WHERE SIDEWALK TERMINATES INTO PAVEMENT. CURB RAMPS SHALL COMPLY WITH LATEST ADA CODE PER FDOT INDEX NO. 522-002.
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8. PEAK STAGES FOR 100YR STORM:

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
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NEIGHBORHOOD GRADING PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
8F

PLOTTED: November 18, 2025 – 3:49 PM, BY: Emma Thompson

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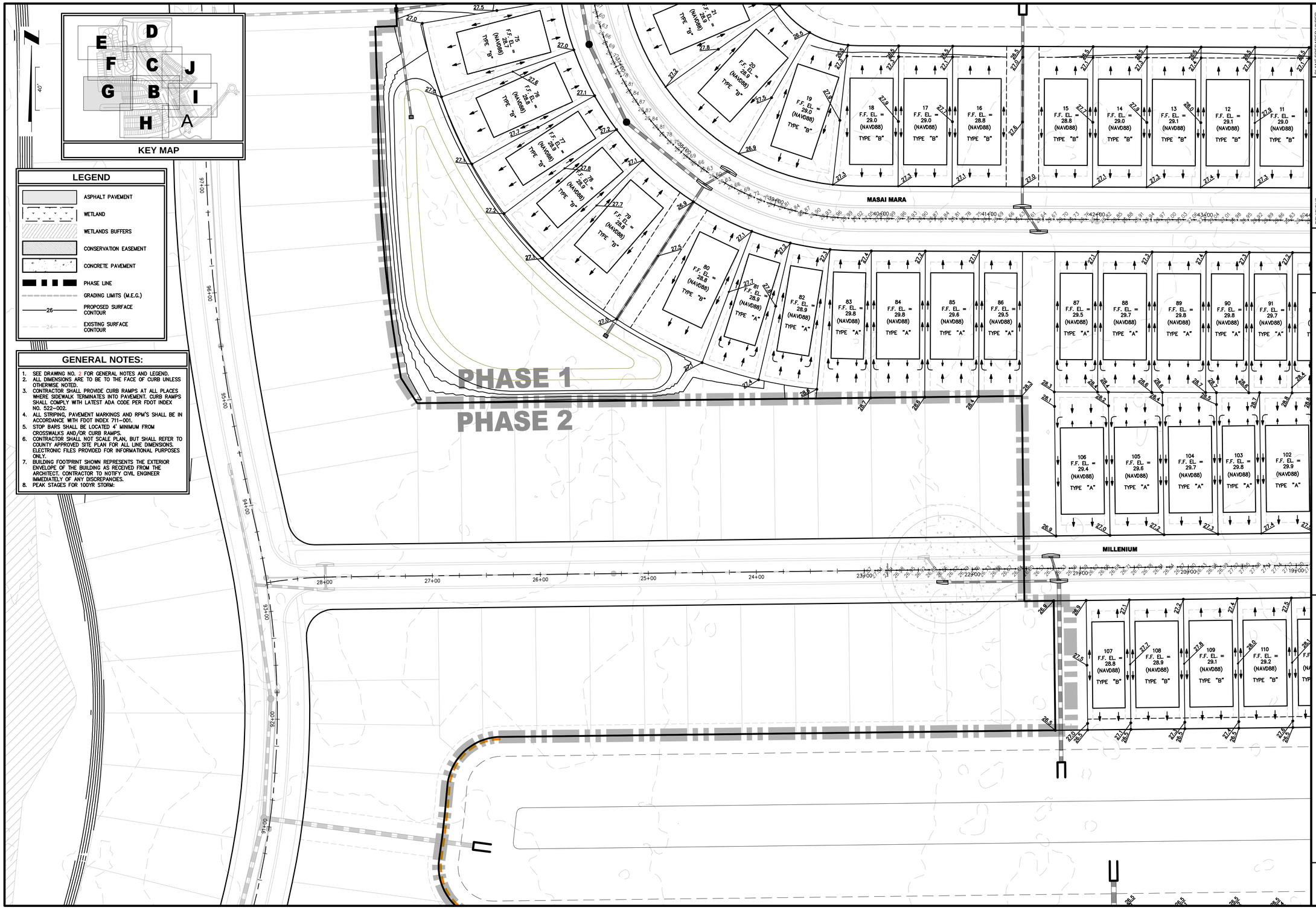

LEGEND

- ASPHALT PAVEMENT
- WETLAND
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PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

PLOTTED: November 18, 2025 – 3:50 PM, BY: Emma Thompson

ETM NO. 22-213-03
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NEIGHBORHOOD GRADING PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
8G

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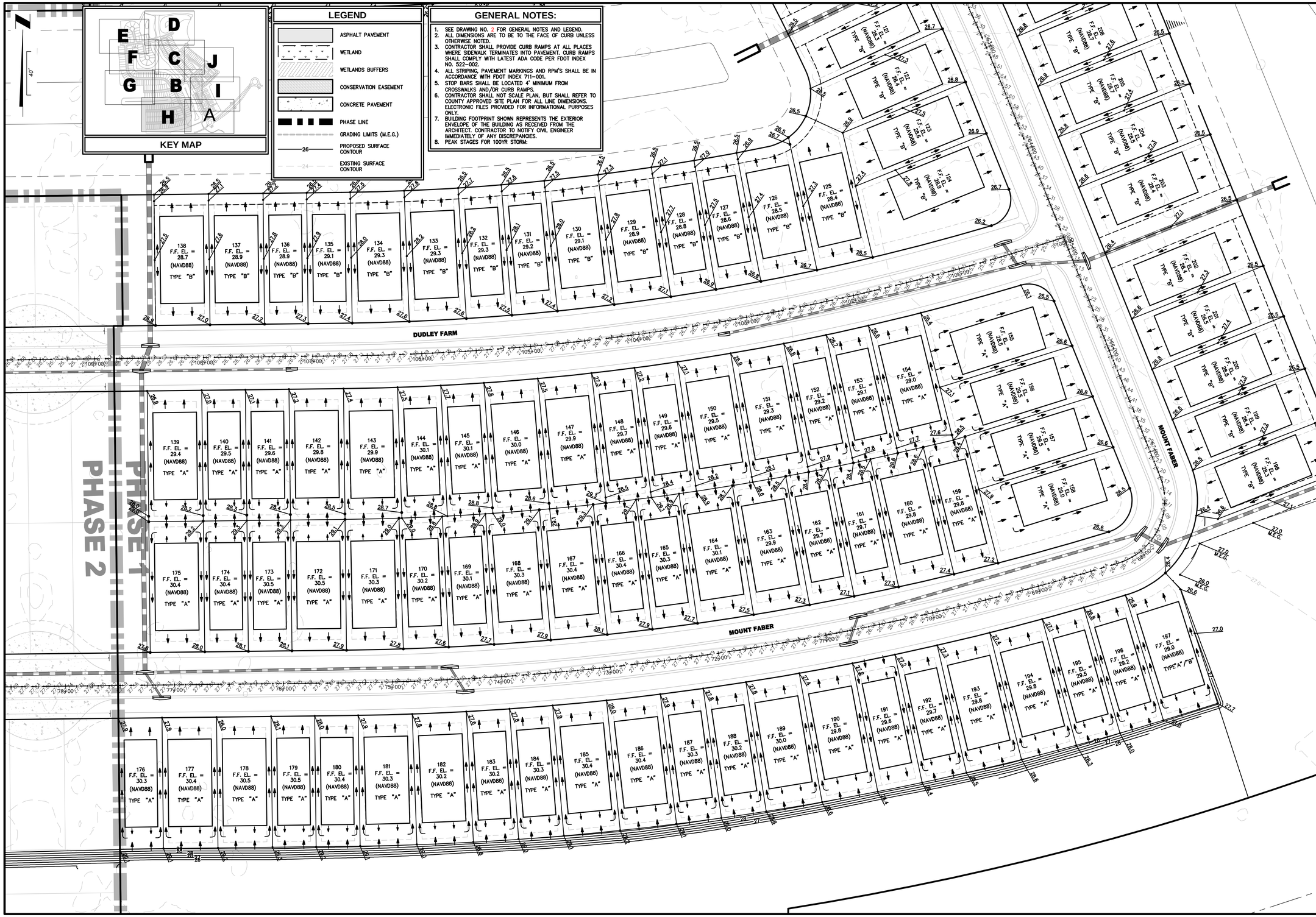

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

PLOTTED: November 18, 2025 – 3:50 PM, BY: Emma Thompson

REVISIONS:

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NEIGHBORHOOD GRADING PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
8H

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KEY MAP

LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT
- PHASE LINE
- GRADING LIMITS (M.E.G.)
- 26 — PROPOSED SURFACE CONTOUR
- 24 — EXISTING SURFACE CONTOUR

40'

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PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
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REVISIONS:

ETM NO.	22-213-03
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NEIGHBORHOOD GRADING PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
8I

PLOTTED: November 18, 2025 – 3:51 PM, BY: Emma Thompson

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LEGEND

- ASPHALT PAVEMENT
- WETLAND
- WETLANDS BUFFERS
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PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
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NEIGHBORHOOD GRADING PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
8J

PLOTTED: November 18, 2025 – 3:52 PM, BY: Emma Thompson

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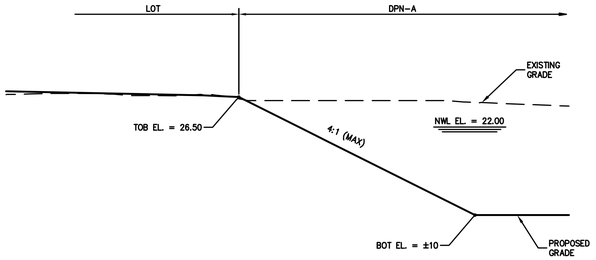

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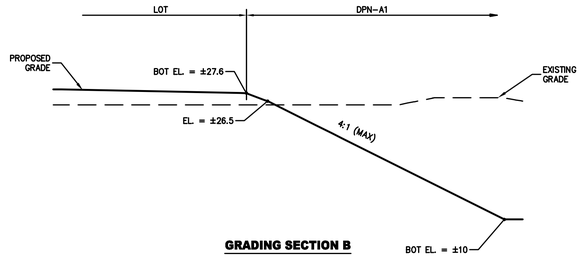

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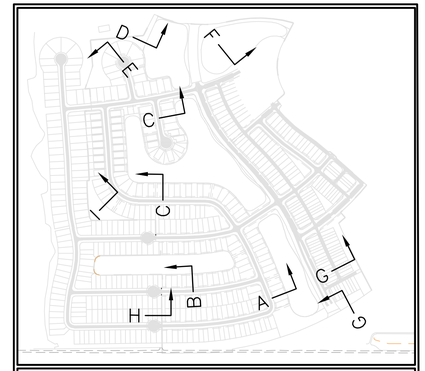
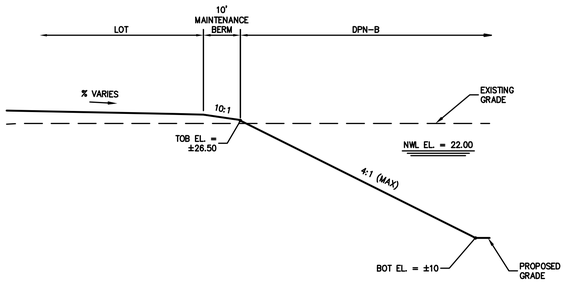


KEY MAP



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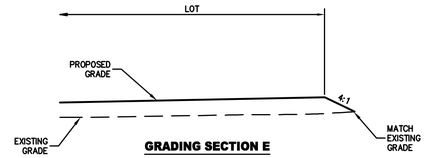

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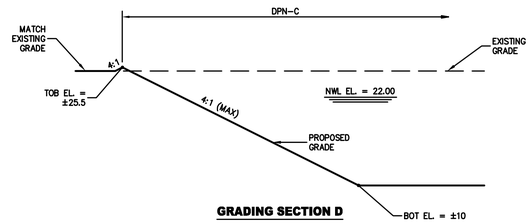

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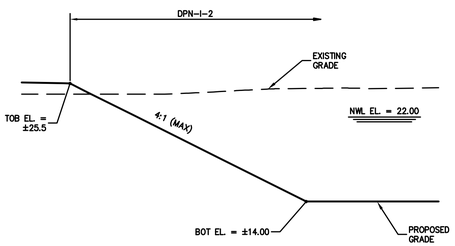

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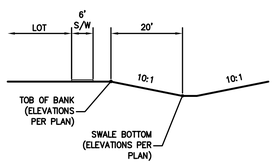

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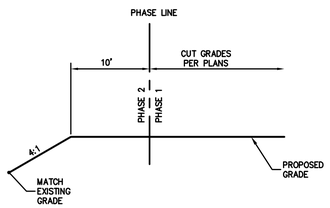

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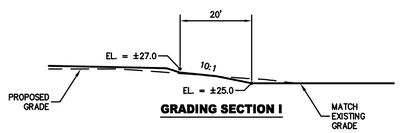

GRADING SECTION I

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE:	Issue Date

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TYPICAL GRADING SECTIONS

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
9A

PLOTTED: November 18, 2025 – 3:54 PM, BY: Emma Thompson

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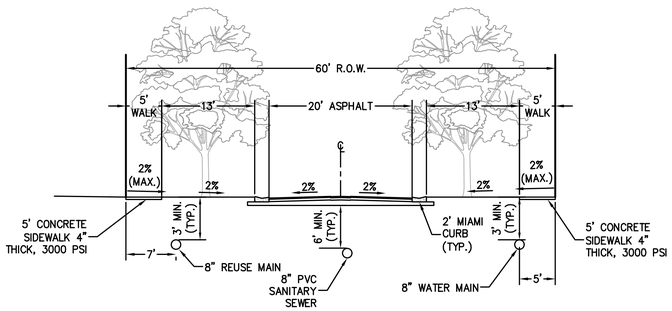
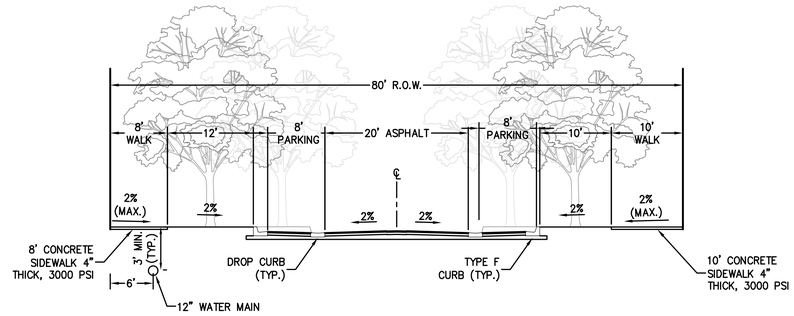


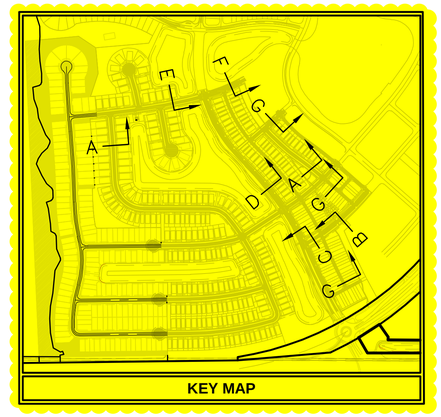
A – 60' R/W TYPICAL NEIGHBORHOOD STREET

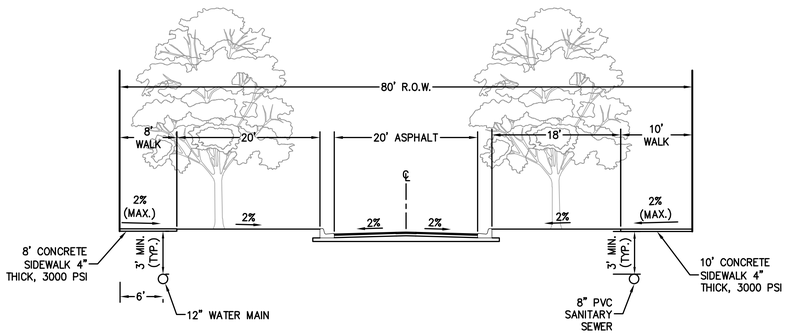
N.T.S.



B – 80' R/W NEIGHBORHOOD STREET

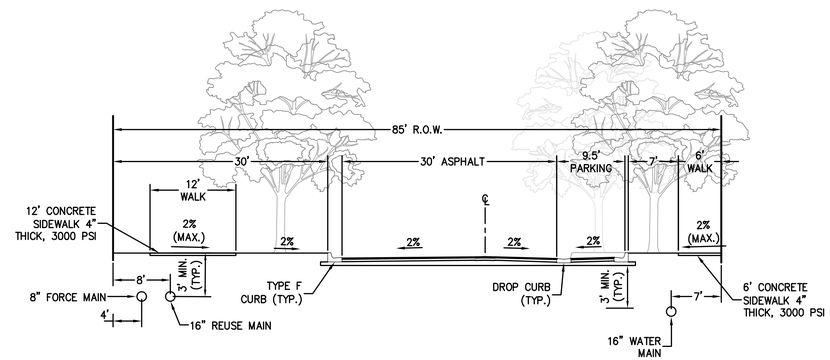
N.T.S.





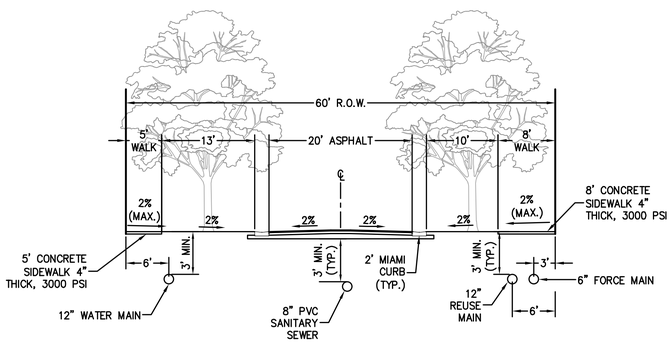
C – NEIGHBORHOOD ENTRANCE STREET

N.T.S.



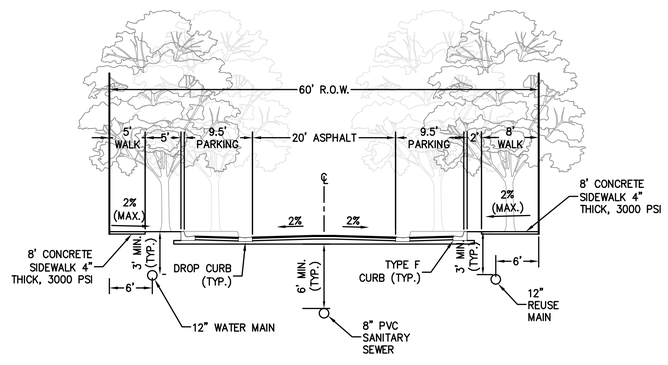
D – NEIGHBORHOOD ENTRANCE STREET

N.T.S.



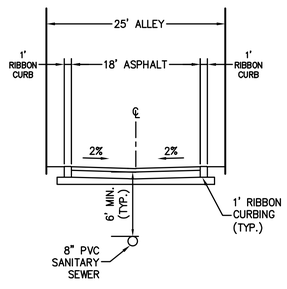
E – TYPICAL NEIGHBORHOOD STREET

N.T.S.



F – TYPICAL NEIGHBORHOOD STREET

N.T.S.



G – 25' ALLEY

N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE:	Issue Date

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ETM
ENGLAND-THIMS & MILLER

TYPICAL ROADWAY SECTIONS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER

9B

PLOTTED: November 18, 2025 – 3:55 PM, BY: Emma Thompson

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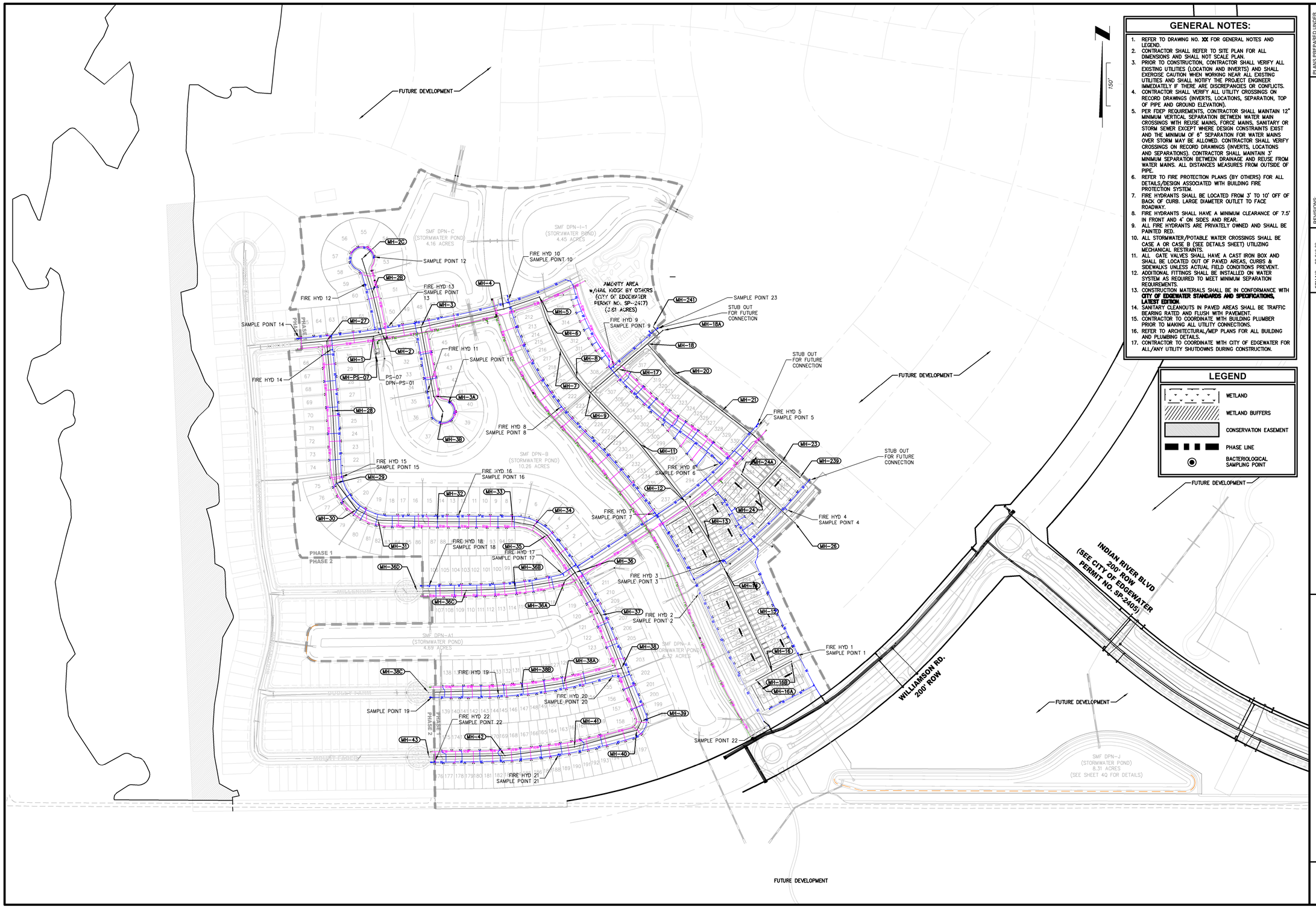

GENERAL NOTES:

1. REFER TO DRAWING NO. **XX** FOR GENERAL NOTES AND LEGEND.
2. CONTRACTOR SHALL REFER TO SITE PLAN FOR ALL DIMENSIONS AND SHALL NOT SCALE PLAN.
3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES (LOCATION AND INVERTS) AND SHALL EXERCISE CAUTION WHEN WORKING NEAR ALL EXISTING UTILITIES AND SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY IF THERE ARE DISCREPANCIES OR CONFLICTS.
4. CONTRACTOR SHALL VERIFY ALL UTILITY CROSSINGS ON RECORD DRAWINGS (INVERTS, LOCATIONS, SEPARATION, TOP OF PIPE AND GROUND ELEVATION).
5. PER FDEP REQUIREMENTS, CONTRACTOR SHALL MAINTAIN 12" MINIMUM VERTICAL SEPARATION BETWEEN WATER MAIN CROSSINGS WITH REUSE MAINS, FORCE MAINS, SANITARY OR STORM SEWER EXCEPT WHERE DESIGN CONSTRAINTS EXIST AND THE MINIMUM OF 6" SEPARATION FOR WATER MAINS OVER STORM MAY BE ALLOWED. CONTRACTOR SHALL VERIFY CROSSINGS ON RECORD DRAWINGS (INVERTS, LOCATIONS AND SEPARATIONS). CONTRACTOR SHALL MAINTAIN 3' MINIMUM SEPARATION BETWEEN DRAINAGE AND REUSE FROM WATER MAINS. ALL DISTANCES MEASURES FROM OUTSIDE OF PIPE.
6. REFER TO FIRE PROTECTION PLANS (BY OTHERS) FOR ALL DETAILS/DESIGN ASSOCIATED WITH BUILDING FIRE PROTECTION SYSTEM.
7. FIRE HYDRANTS SHALL BE LOCATED FROM 3' TO 10' OFF OF BACK OF CURB. LARGE DIAMETER OUTLET TO FACE ROADWAY.
8. FIRE HYDRANTS SHALL HAVE A MINIMUM CLEARANCE OF 7.5' IN FRONT AND 4' ON SIDES AND REAR.
9. ALL FIRE HYDRANTS ARE PRIVATELY OWNED AND SHALL BE PAINTED RED.
10. ALL STORMWATER/POTABLE WATER CROSSINGS SHALL BE CASE A OR CASE B (SEE DETAILS SHEET) UTILIZING MECHANICAL RESTRAINTS.
11. ALL GATE VALVES SHALL HAVE A CAST IRON BOX AND SHALL BE LOCATED OUT OF PAVED AREAS, CURBS & SIDEWALKS UNLESS ACTUAL FIELD CONDITIONS PREVENT.
12. ADDITIONAL FITTINGS SHALL BE INSTALLED ON WATER SYSTEM AS REQUIRED TO MEET MINIMUM SEPARATION REQUIREMENTS.
13. CONSTRUCTION MATERIALS SHALL BE IN CONFORMANCE WITH **CITY OF EDGEWATER STANDARDS AND SPECIFICATIONS, LATEST EDITION.**
14. SANITARY CLEANOUTS IN PAVED AREAS SHALL BE TRAFFIC BEARING RATED AND FLUSH WITH PAVEMENT.
15. CONTRACTOR TO COORDINATE WITH BUILDING PLUMBER PRIOR TO MAKING ALL UTILITY CONNECTIONS.
16. REFER TO ARCHITECTURAL/MEP PLANS FOR ALL BUILDING AND PLUMBING DETAILS.
17. CONTRACTOR TO COORDINATE WITH CITY OF EDGEWATER FOR ALL/ANY UTILITY SHUTDOWNS DURING CONSTRUCTION.

LEGEND

- WETLAND
- WETLAND BUFFERS
- CONSERVATION EASEMENT
- PHASE LINE
- BACTERIOLOGICAL SAMPLING POINT

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 80867

PLOTTED: November 25, 2025 – 4:34 PM, BY: Jesse Zovotsky

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
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ETM ENGLAND-THIMS & MILLER

MASTER UTILITY PLAN

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
10

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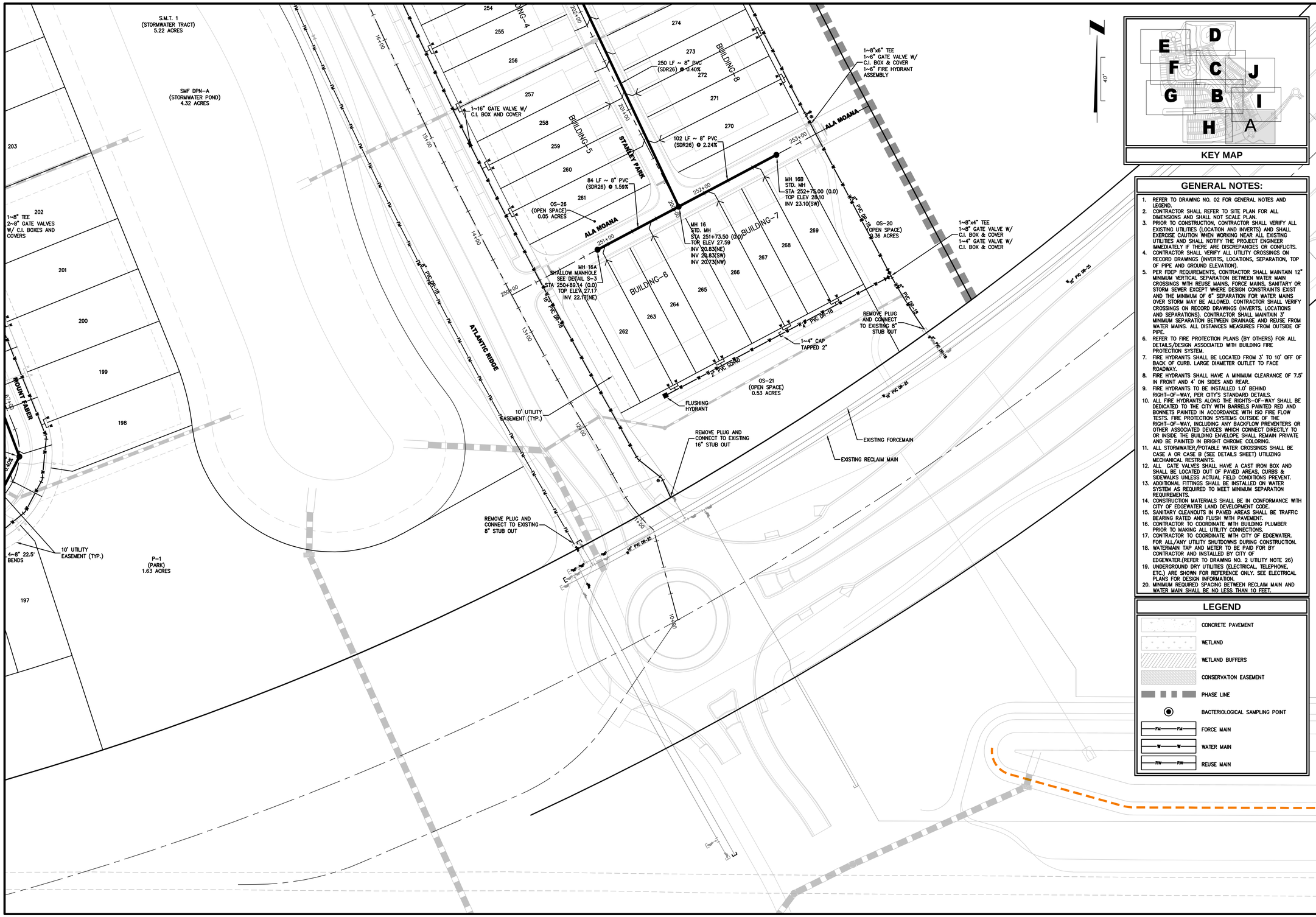

KEY MAP

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10. ALL FIRE HYDRANTS ALONG THE RIGHTS-OF-WAY SHALL BE DEDICATED TO THE CITY WITH BARRELS PAINTED RED AND BONNETS PAINTED IN ACCORDANCE WITH ISO FIRE FLOW TESTS. FIRE PROTECTION SYSTEMS OUTSIDE OF THE RIGHT-OF-WAY, INCLUDING ANY BACKFLOW PREVENTERS OR OTHER ASSOCIATED DEVICES WHICH CONNECT DIRECTLY TO OR INSIDE THE BUILDING ENVELOPE SHALL REMAIN PRIVATE AND BE PAINTED IN BRIGHT CHROME COLORING.
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20. MINIMUM REQUIRED SPACING BETWEEN RECLAIM MAIN AND WATER MAIN SHALL BE NO LESS THAN 10 FEET.

LEGEND

- CONCRETE PAVEMENT
- WETLAND
- WETLAND BUFFERS
- CONSERVATION EASEMENT
- PHASE LINE
- BACTERIOLOGICAL SAMPLING POINT
- FM — FM — FORCE MAIN
- W — W — WATER MAIN
- RW — RW — REUSE MAIN

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
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WATER AND SEWER PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
11A

PLOTTED: November 18, 2025 – 3:56 PM, BY: Emma Thompson

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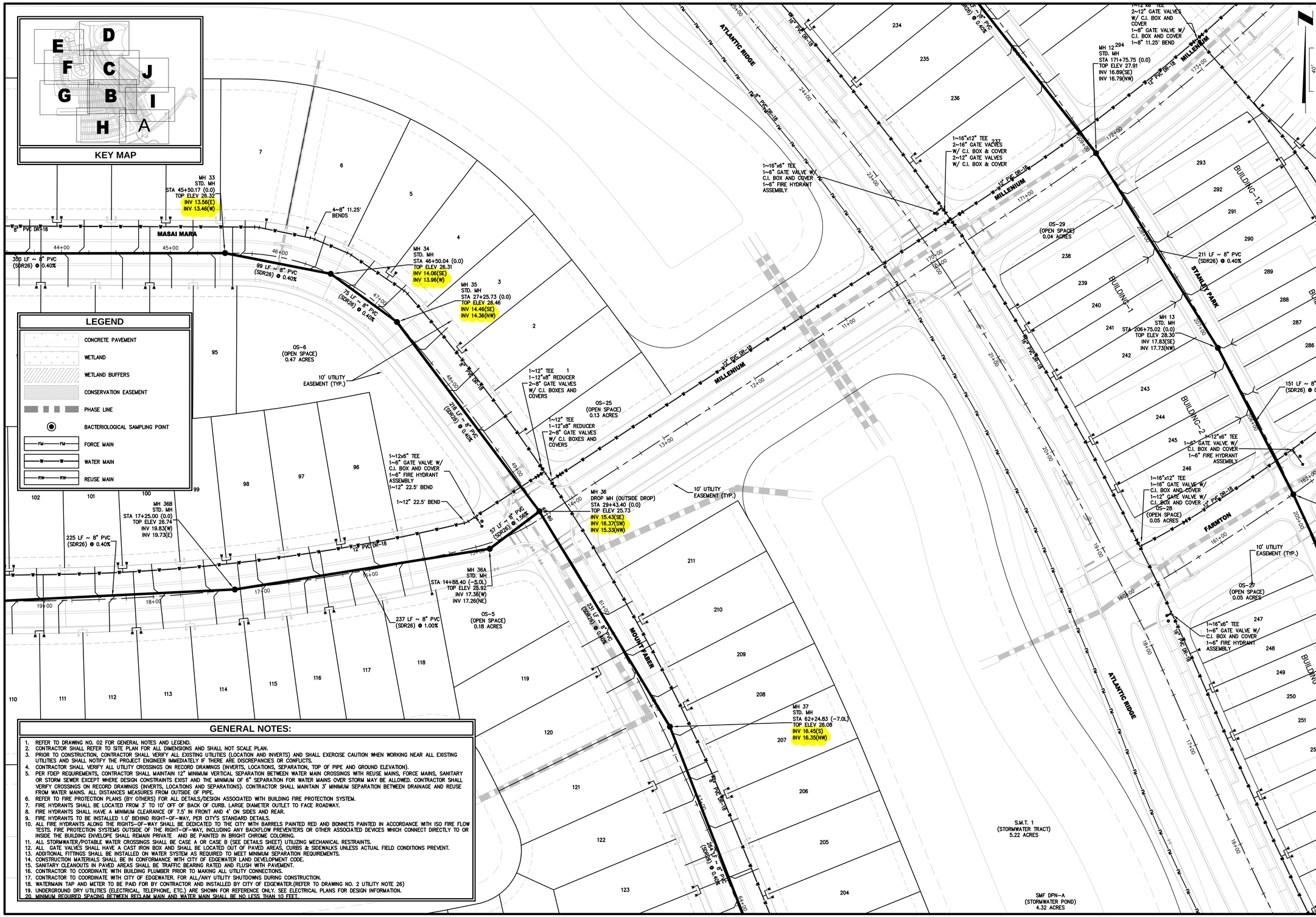

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PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE:	Issue Date

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WATER AND SEWER PLAN

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
11B

PLOTTED: November 18, 2025 – 3:57 PM, BY: Emma Thompson

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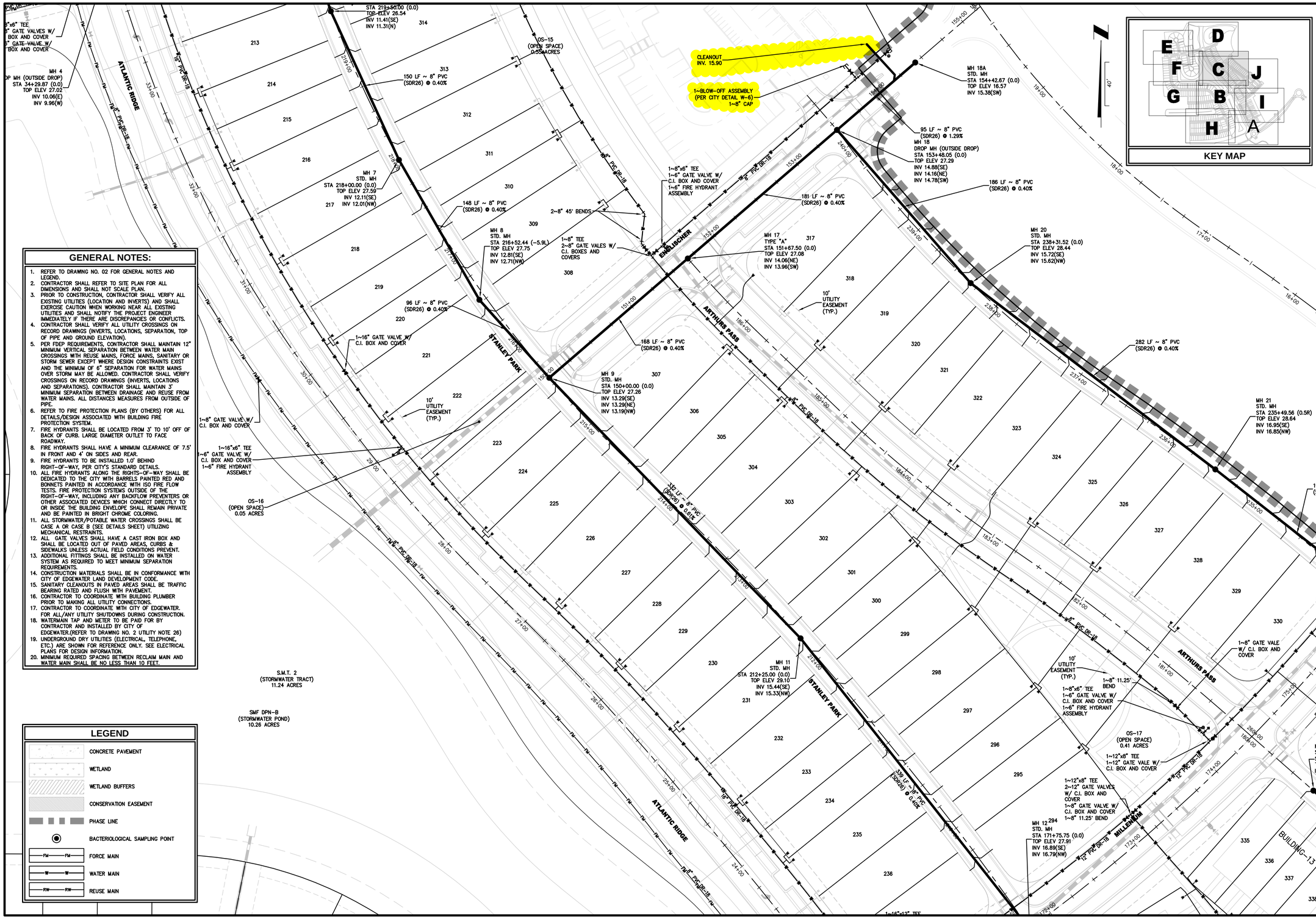

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PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
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WATER AND SEWER PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
11C

PLOTTED: November 18, 2025 – 3:57 PM, BY: Emma Thompson

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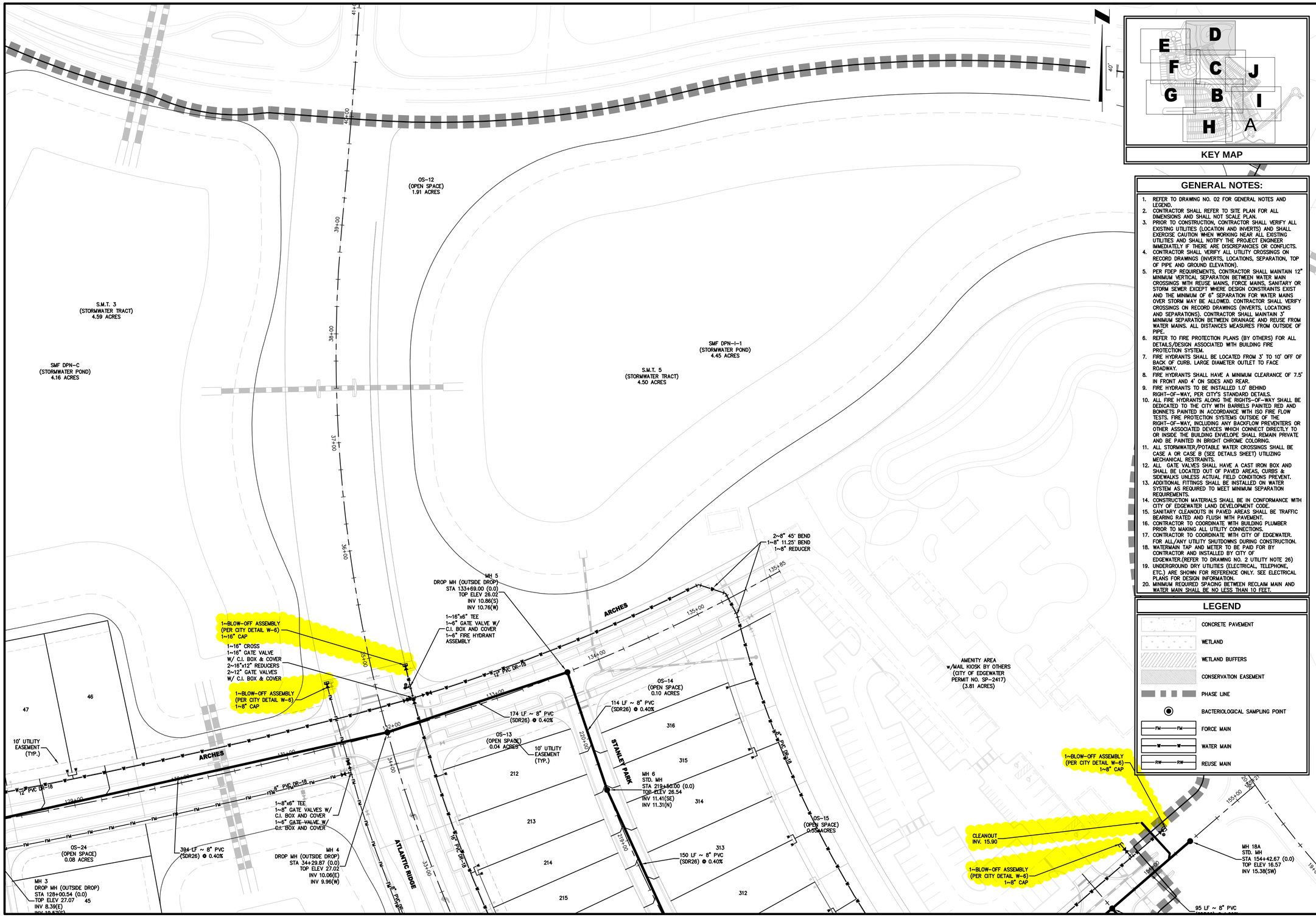

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PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

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ETM
ENGLAND-THIMS & MILLER

WATER AND SEWER PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
11D

PLOTTED: November 18, 2025 – 3:57 PM, BY: Emma Thompson

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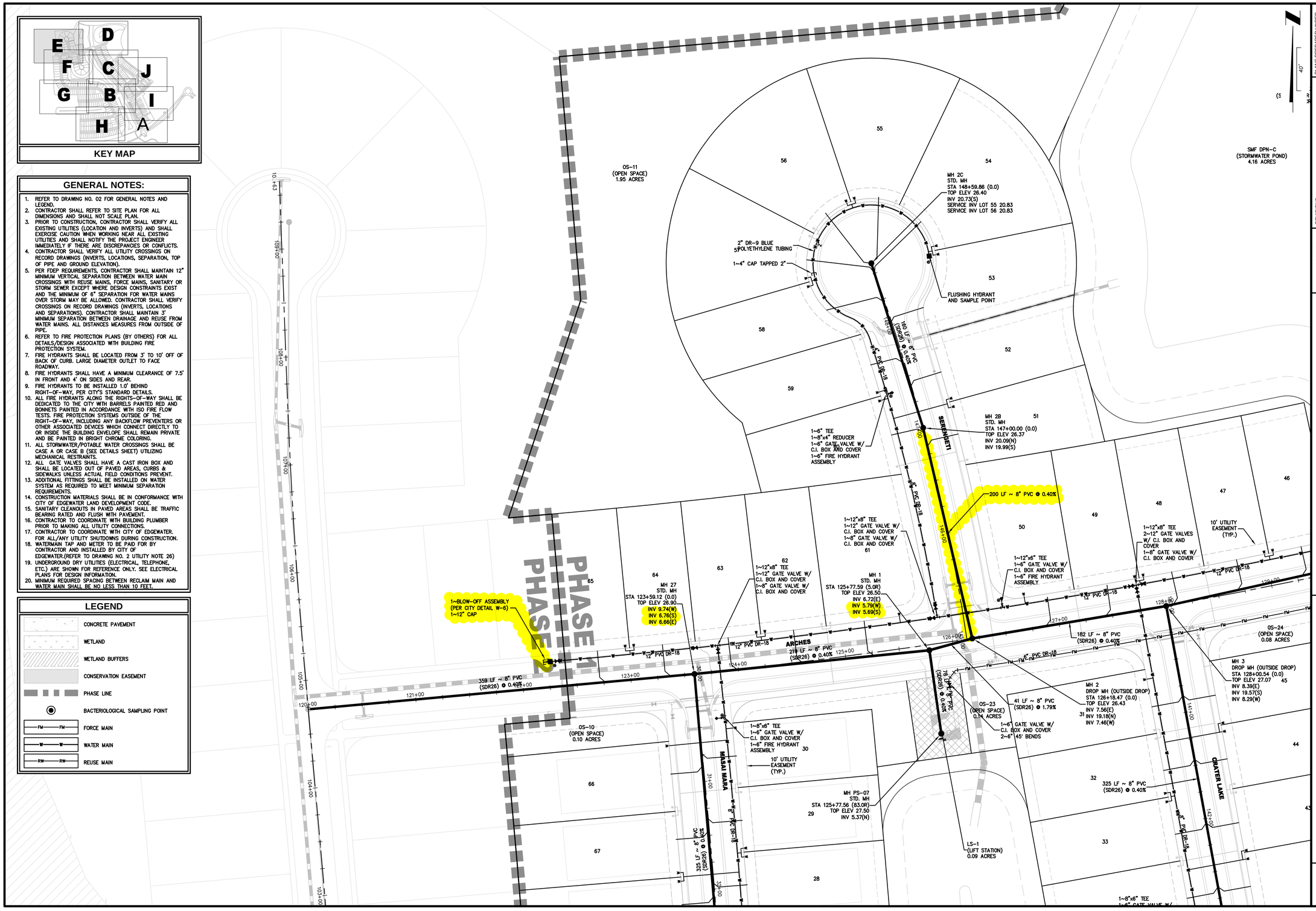

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LEGEND

- CONCRETE PAVEMENT
- WETLAND
- WETLAND BUFFERS
- CONSERVATION EASEMENT
- PHASE LINE
- BACTERIOLOGICAL SAMPLING POINT
- FM — FM — FORCE MAIN
- W — W — WATER MAIN
- RW — RW — REUSE MAIN

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
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DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
11E

PLOTTED: November 18, 2025 – 3:57 PM, BY: Emma Thompson

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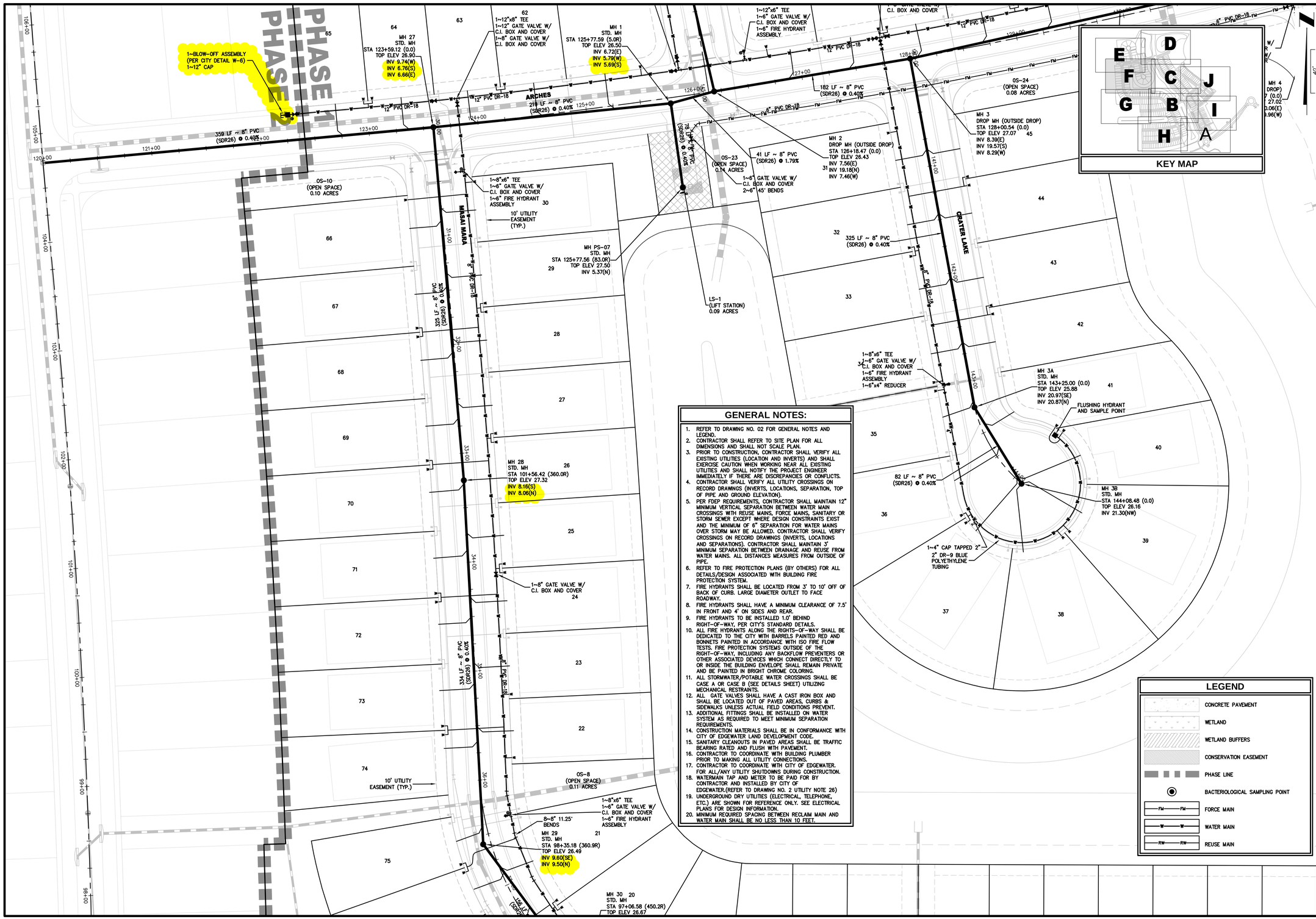

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P.E. NUMBER: 89967

REVISIONS:

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DRAWING NUMBER
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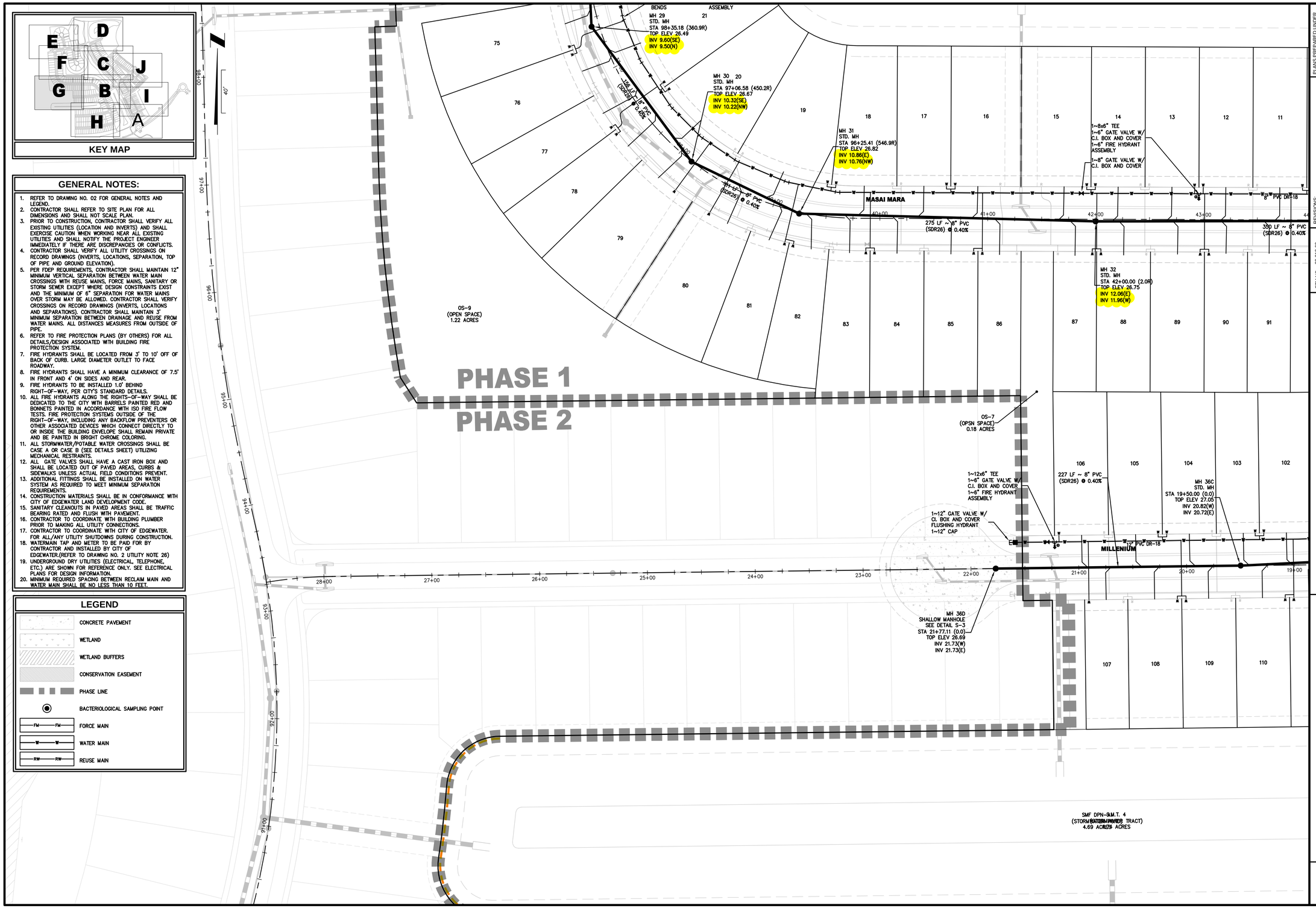

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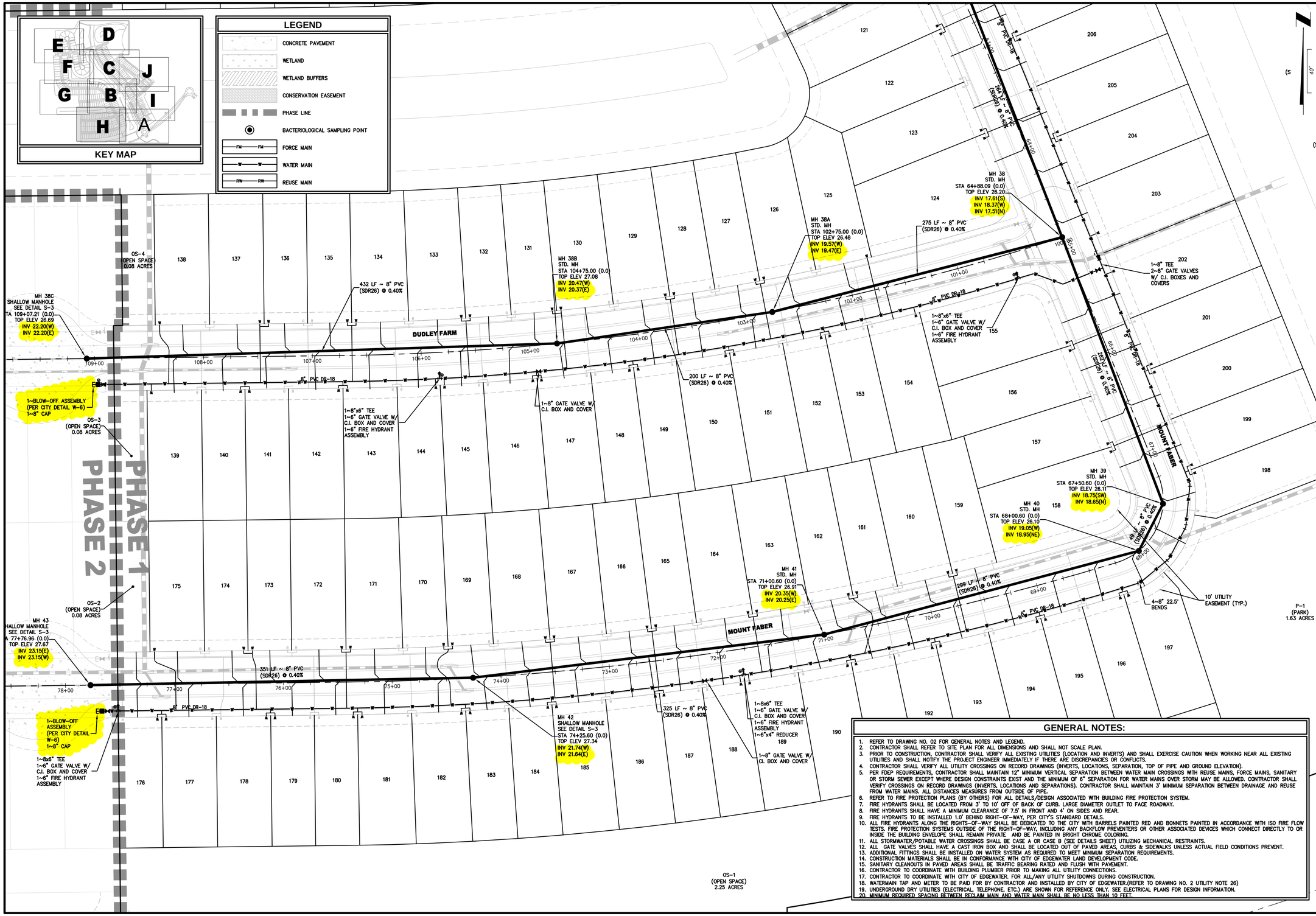

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P.E. NUMBER: 89967

REVISIONS:

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WATER AND SEWER PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
11H

PLOTTED: November 18, 2025 – 3:58 PM, BY: Emma Thompson

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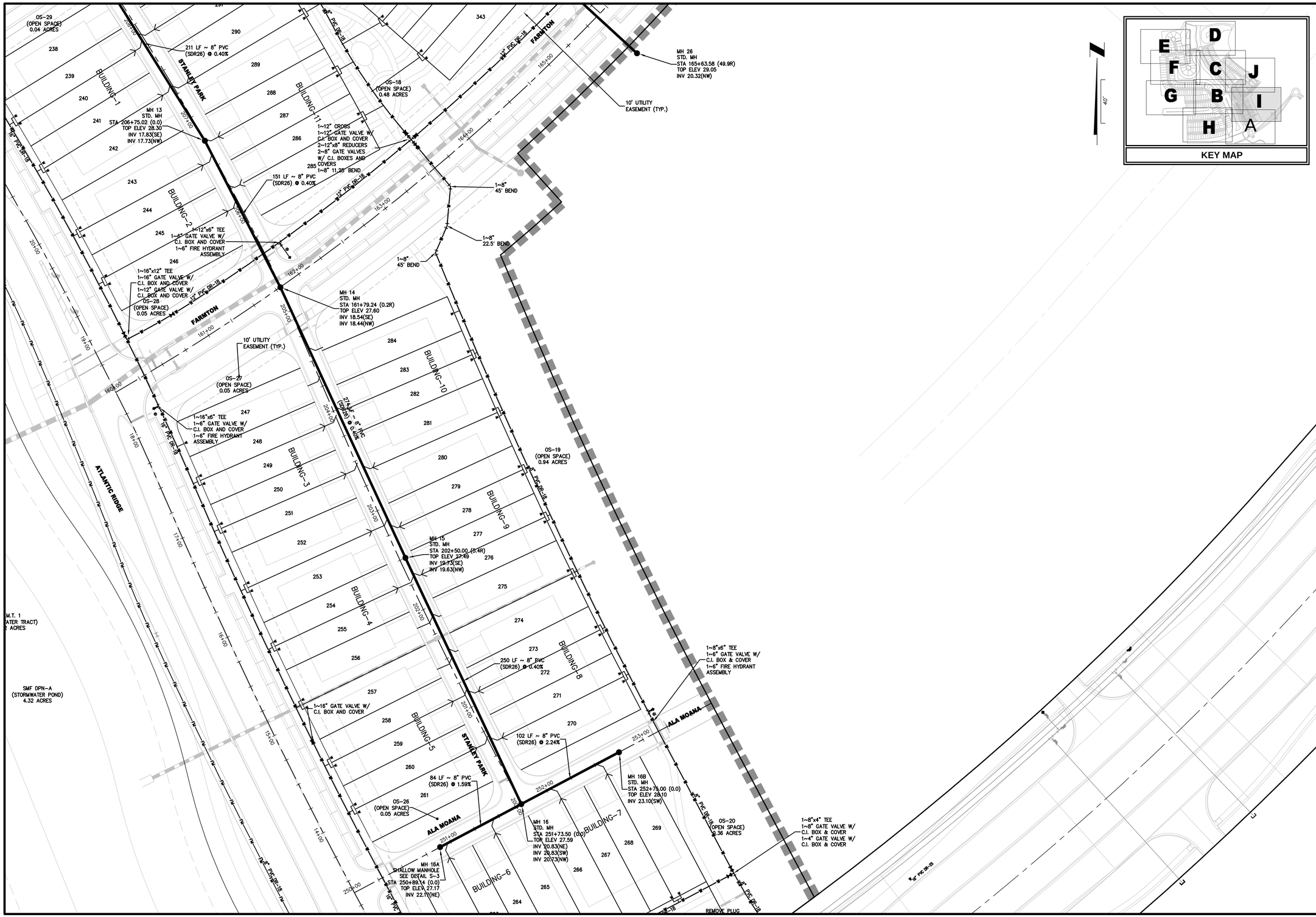

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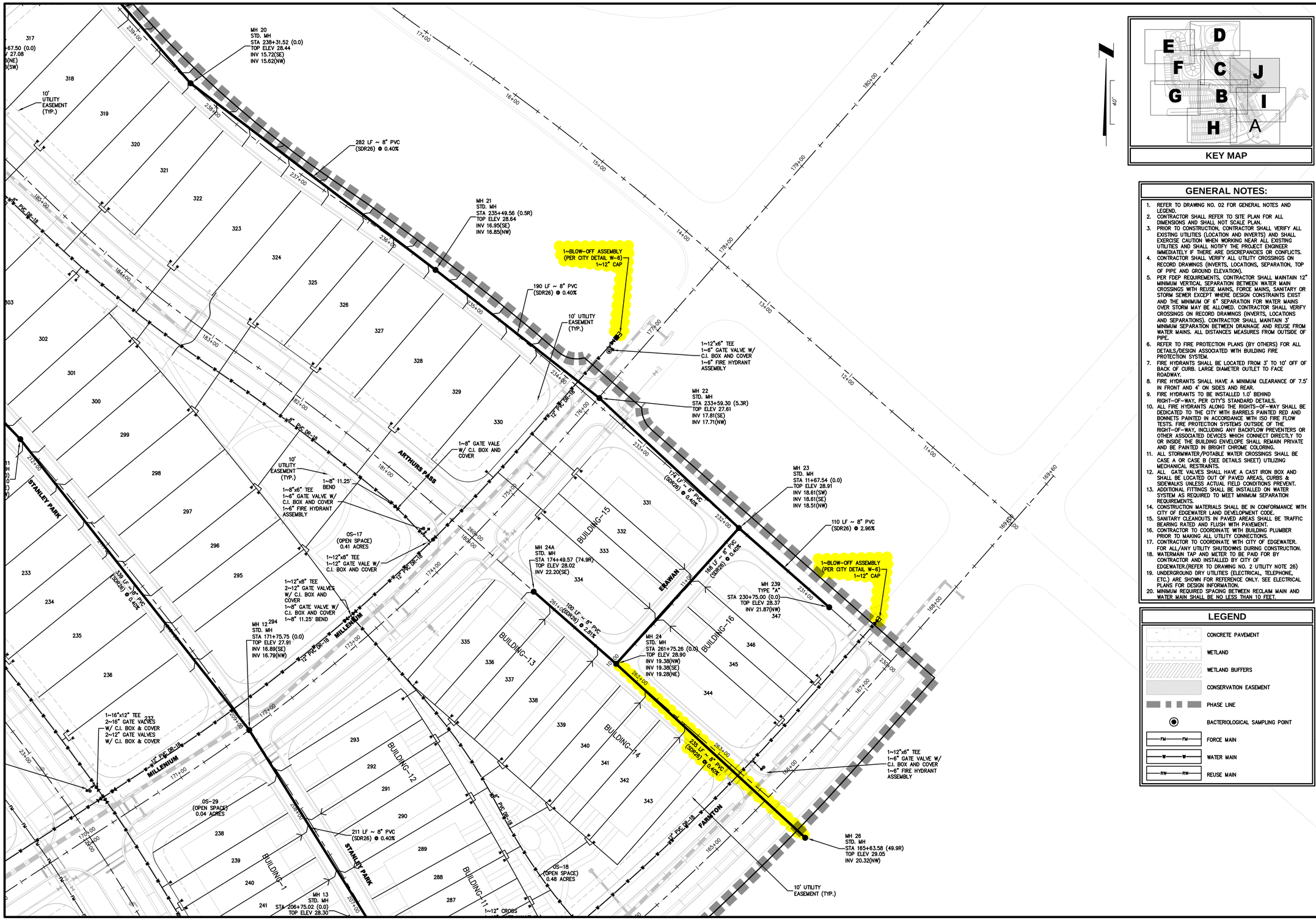

KEY MAP

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REUSE PLAN

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DRAWING NUMBER
12A

PLOTTED: November 18, 2025 – 3:59 PM, BY: Emma Thompson

n:\2022\22-213\22-213-03\Landdev\Design\Plots\22-213-03-REUSE.dwg

1~4" STUBS OUT
1~4" METER
1~4" GATE VALVE
SEE IRRIGATION PLANS
FOR CONTINUATION

1~16"x12" CROSS
2~12" GATE VALVES
W/ C.I. BOX & COVER
2~16" GATE VALVES
W/ C.I. BOX & COVER

4~8" 11.25°
BENDS

1~12"X4" TEE
1~4" STUBS OUT
1~4" METER
1~4" GATE VALVE
SEE IRRIGATION PLANS
FOR CONTINUATION

1~12"x8" CROSS
2~8" GATE VALVES W/
C.I. BOXES AND COVERS
1~12" GATE VALVE W/
C.I. BOX AND COVER
1~12" 22.5° BEND

1~16" GATE VALVE W/
C.I. BOX AND COVER

OS-6
(OPEN SPACE)
0.47 ACRES

OS-25
(OPEN SPACE)
0.13 ACRES

OS-5
(OPEN SPACE)
0.18 ACRES

OS-29
(OPEN SPACE)
0.04 ACRES

OS-28
(OPEN SPACE)
0.05 ACRES

OS-27
(OPEN SPACE)
0.05 ACRES

S.M.T. 1
(STORMWATER TRACT)
5.22 ACRES

SMF DPN-A
(STORMWATER POND)
4.32 ACRES

BUILDING-1
BUILDING-2
BUILDING-3
BUILDING-12

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REUSE PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
12B

PLOTTED: November 18, 2025 – 3:59 PM, BY: Emma Thompson

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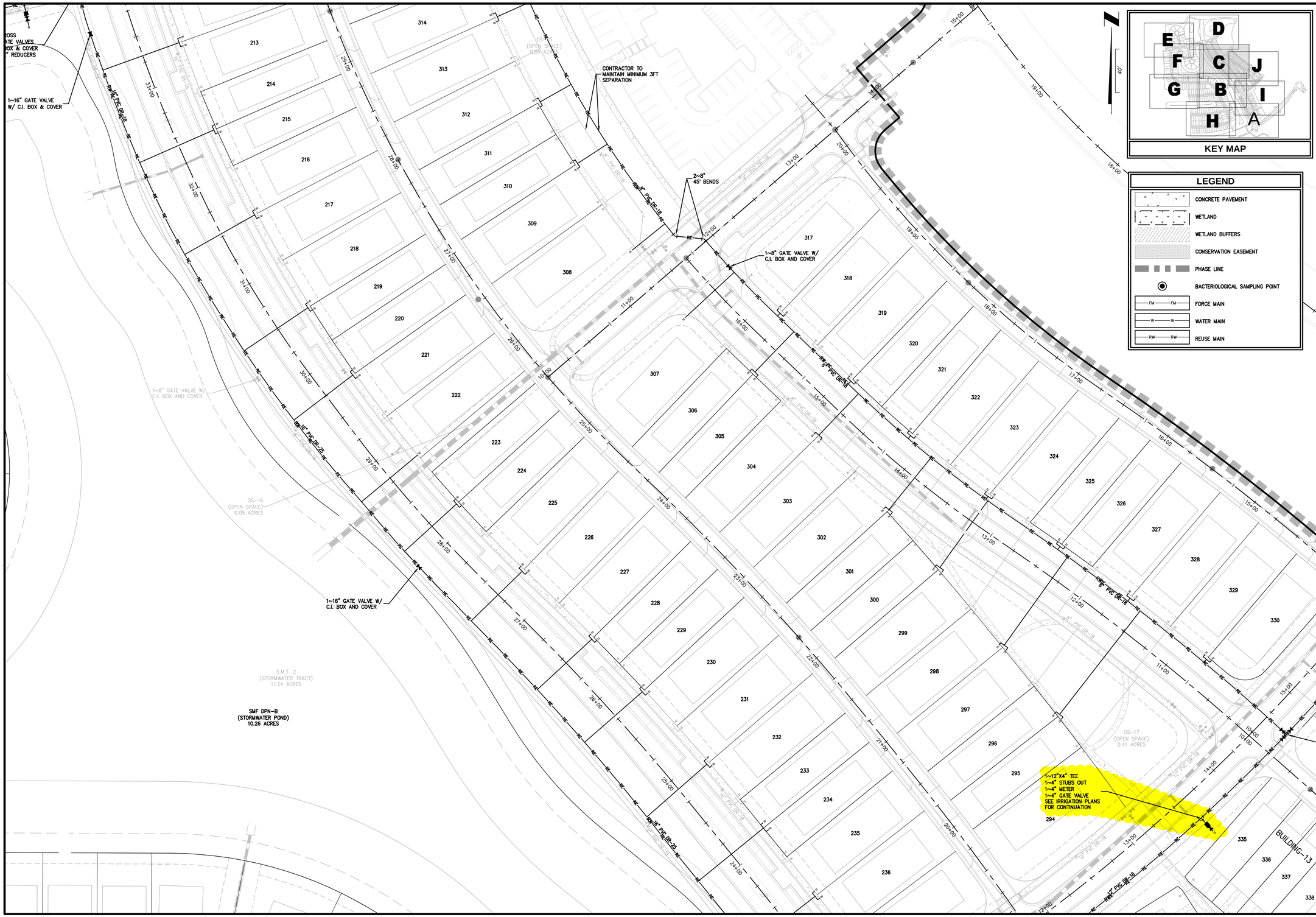

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE:	Issue Date

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REUSE PLAN

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
12C

PLOTTED: November 18, 2025 – 3:59 PM, BY: Emma Thompson

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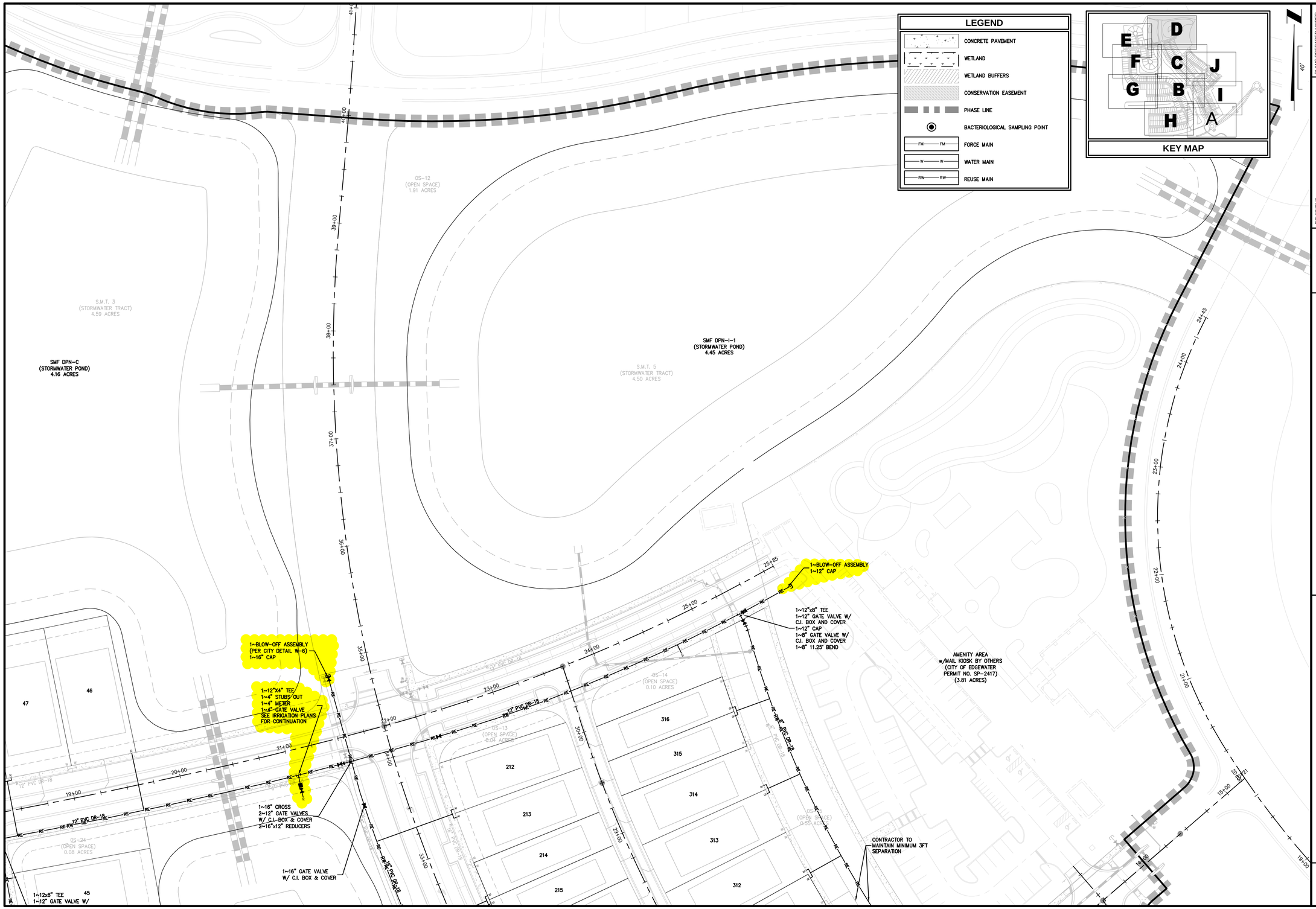

PLANS PREPARED UNDER
THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER:
89967

REVISIONS:

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REUSE PLAN

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FOR
DEERING PARK 1, LLC

DRAWING NUMBER
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P.E. NUMBER: 80967

REVISIONS:

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FOR
DEERING PARK 1, LLC

DRAWING NUMBER
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PLOTTED: November 18, 2025 – 3:59 PM, BY: Emma Thompson

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PHASE 1
PHASE 2

ARCHES

MERCANTOUR

1~BLOW-OFF ASSEMBLY
(PER CITY DETAIL W-6)
1~12" CAP

1~12"x8" TEE
1~12" GATE VALV W/
C.I. BOX AND COVER
1~8" GATE VALV W/
C.I. BOX AND COVER

1~12" TEE
2~12" GATE VALVES
W/ C.I. BOX AND
COVER

1~12x6" TEE
1~12" GATE VALVE W/
C.I. BOX AND COVER
1~6" GATE VALVE W/
C.I. BOX AND COVER

1~12x8" TEE
1~12" GATE VALVE W/
C.I. BOX AND COVER
1~8" GATE VALVE W/
C.I. BOX AND COVER

1~16" CROSS
2~12" GATE VALVES
W/ C.I. BOX & COVER
2~16"x12" REDUCERS

1~16" GATE VALVE
W/ C.I. BOX & COVER

1~8" CAP TAPPED 2"

2" DR-9 BLUE
POLYETHYLENE TUBING

8~8" 11.25° BENDS

12" PVC DR-18

8" PVC DR-18

OS-10
(OPEN SPACE)
0.10 ACRES

OS-23
(OPEN SPACE)
0.08 ACRES

OS-24
(OPEN SPACE)
0.08 ACRES

OS-8
(OPEN SPACE)
0.11 ACRES

LS-1
(LIFT STATION)
0.09 ACRES

LEGEND

- CONCRETE PAVEMENT
- WETLAND
- WETLAND BUFFERS
- CONSERVATION EASEMENT
- PHASE LINE
- BACTERIOLOGICAL SAMPLING POINT
- FM — FORCE MAIN
- W — WATER MAIN
- RW — REUSE MAIN

KEY MAP

PLANS PREPARED UNDER
THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 80967

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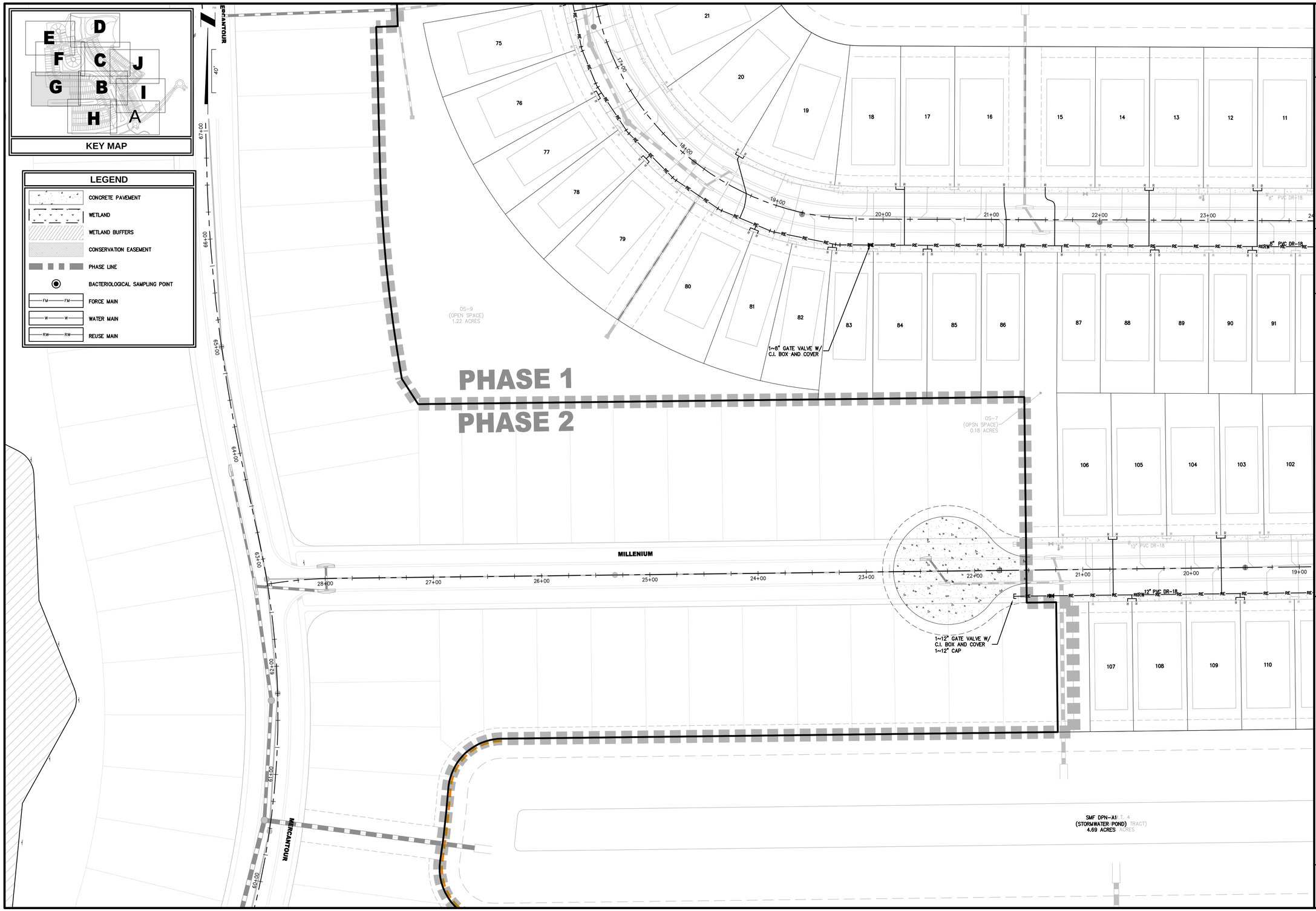

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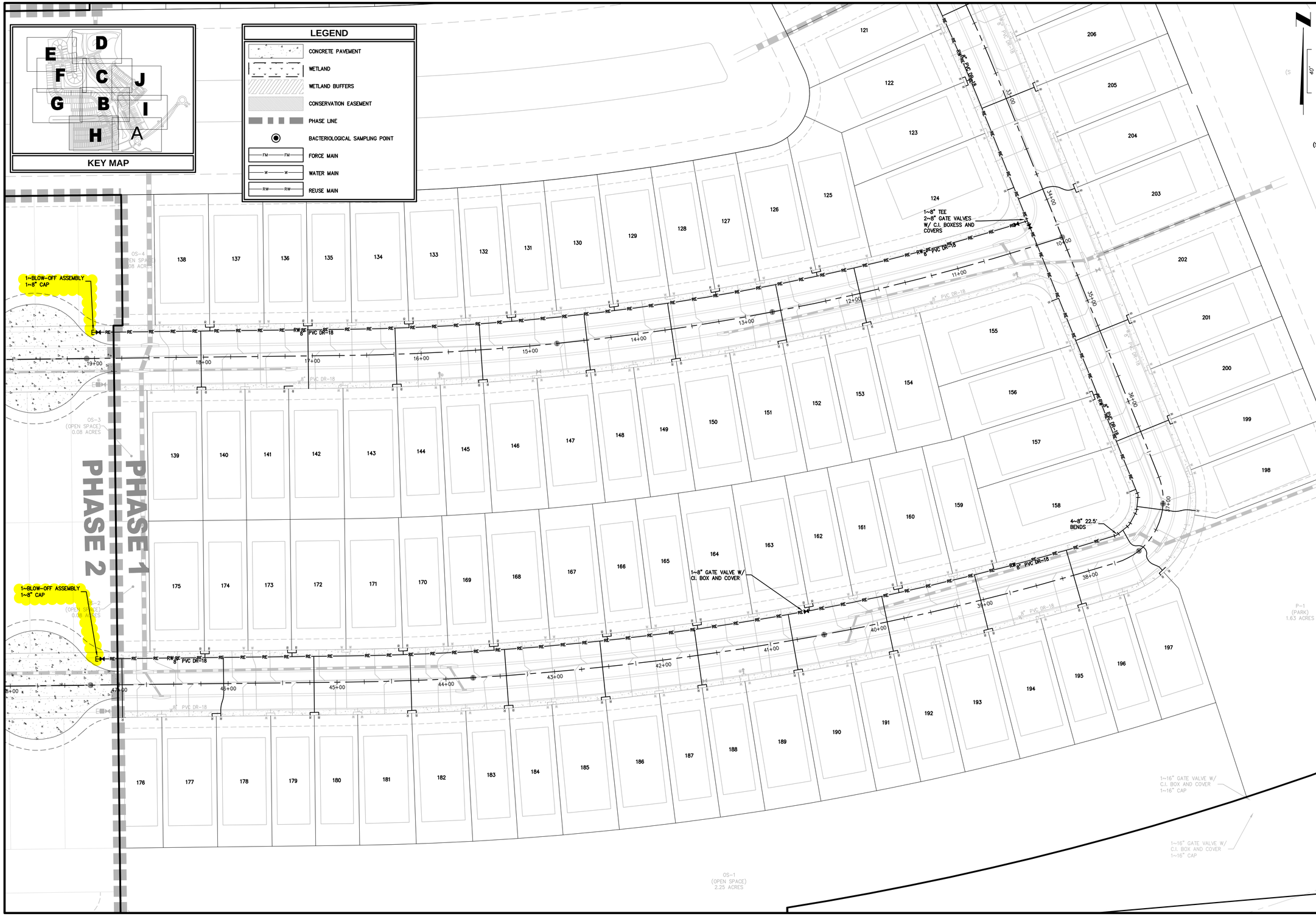

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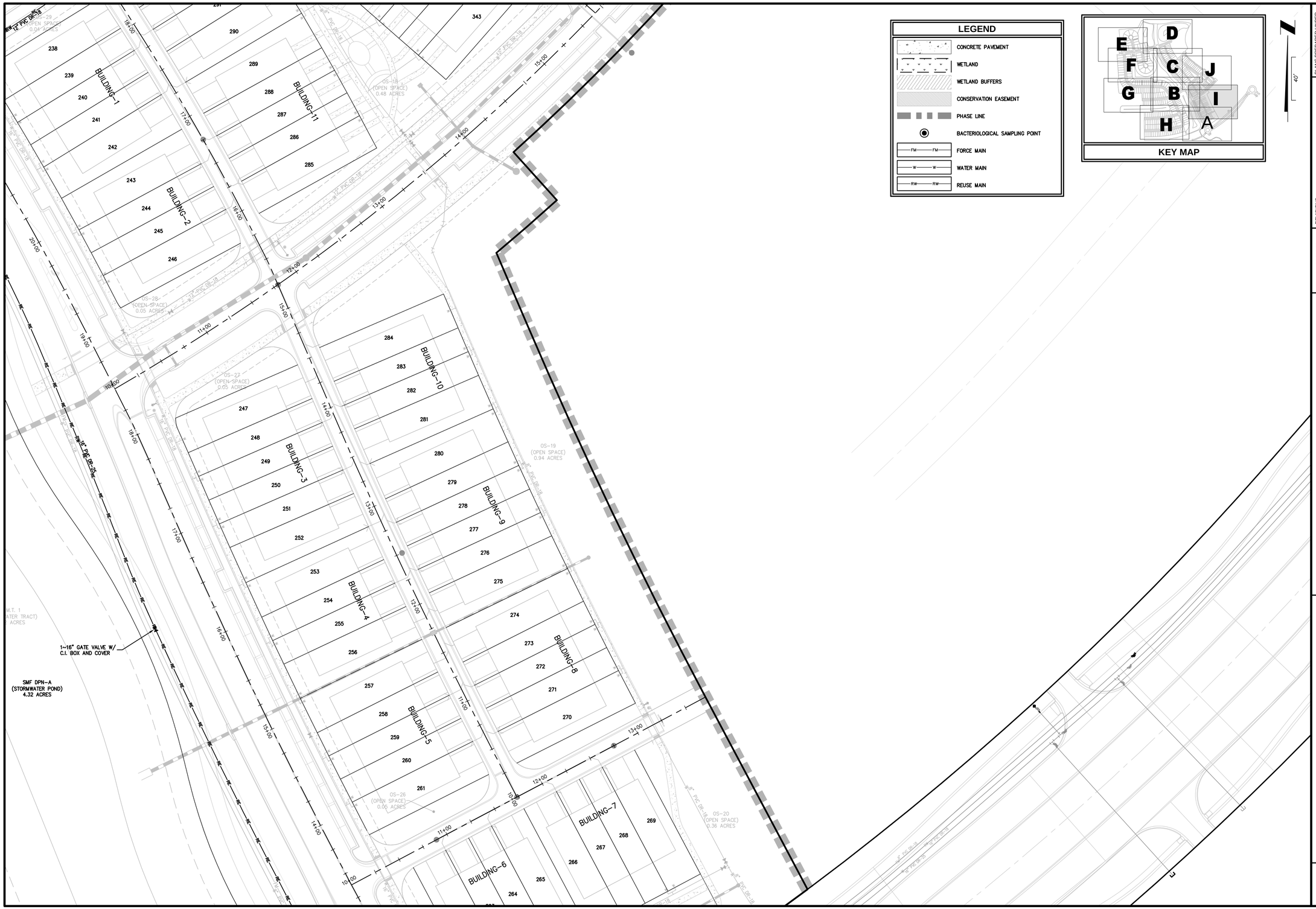

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DRAWING NUMBER
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PLOTTED: November 18, 2025 – 3:59 PM, BY: Emma Thompson

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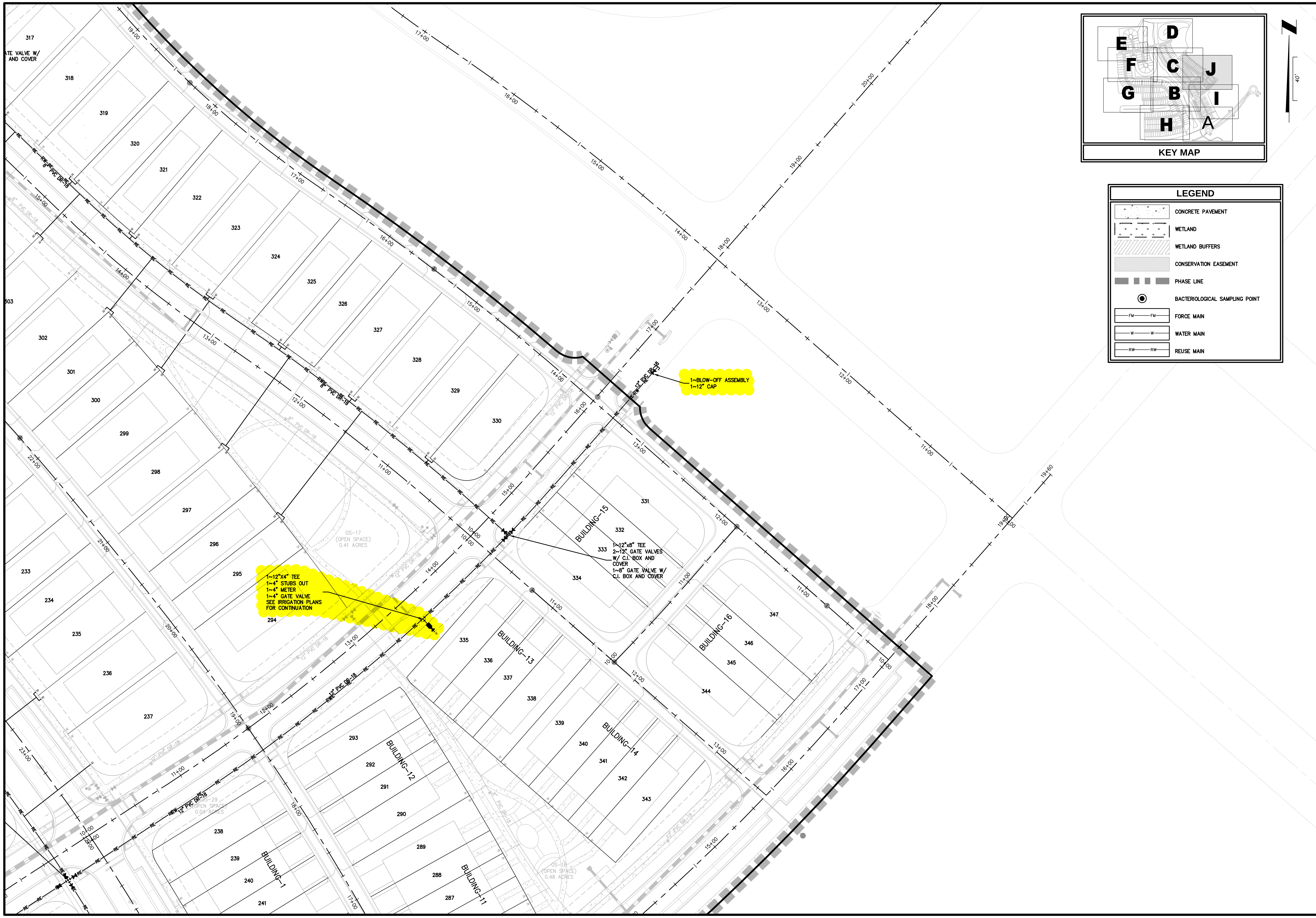

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P.E. NUMBER: 80867

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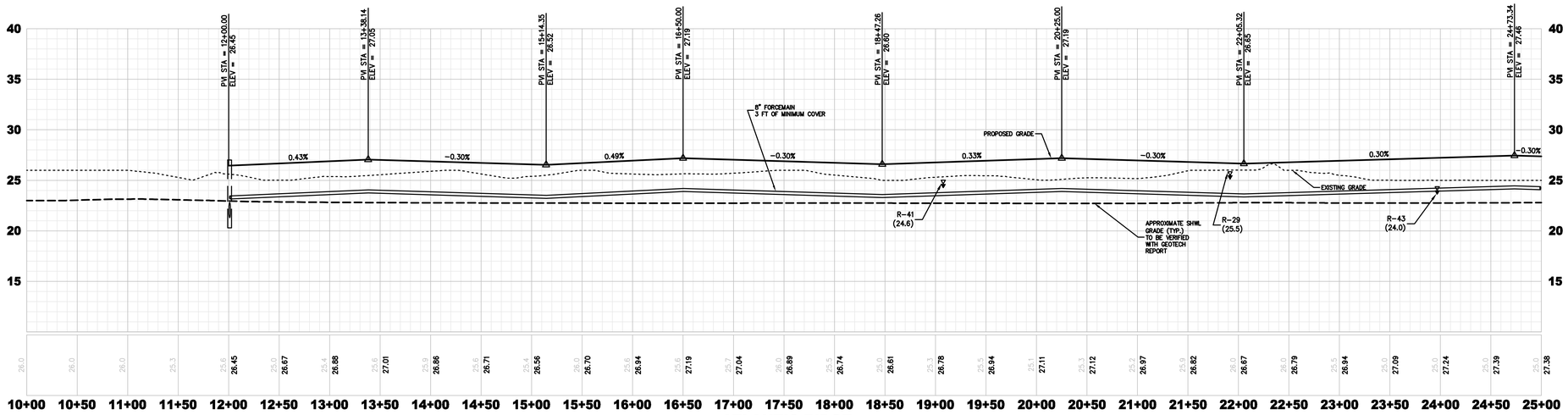

ATLANTIC RIDGE

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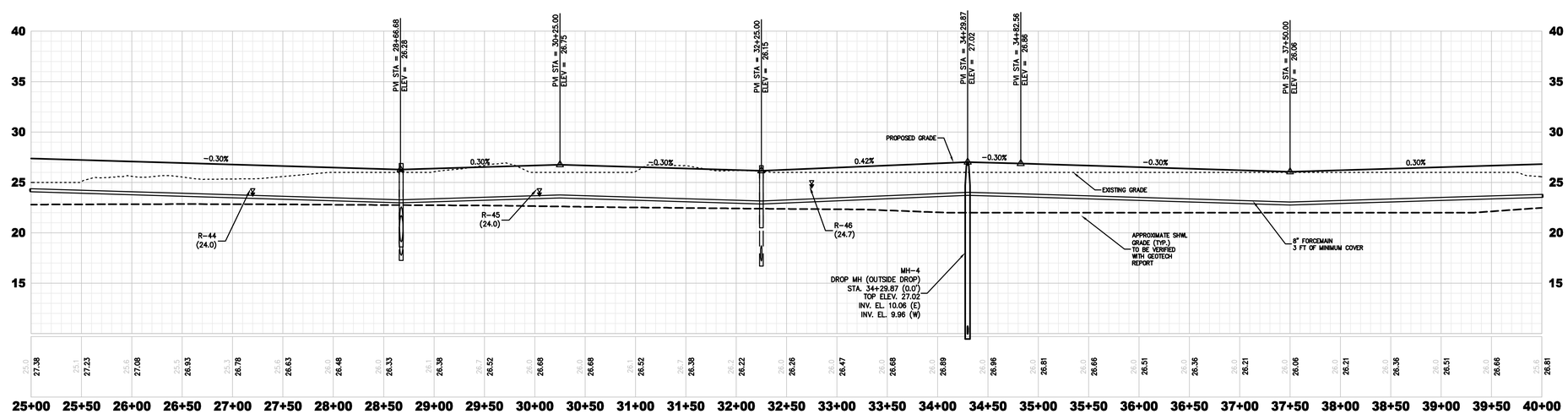

ATLANTIC RIDGE

(25+00.00−40+00.00)

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ROADWAY PROFILES

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
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PLOTTED: November 18, 2025 – 4:00 PM, BY: Emma Thompson

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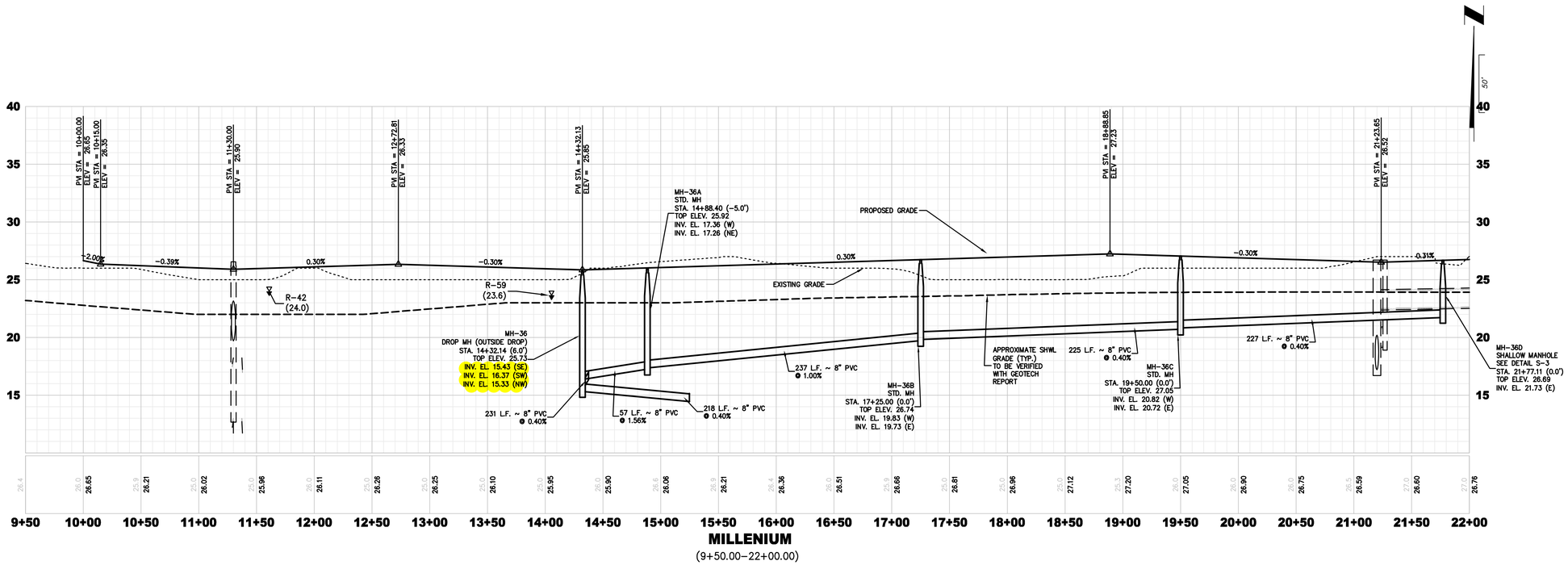

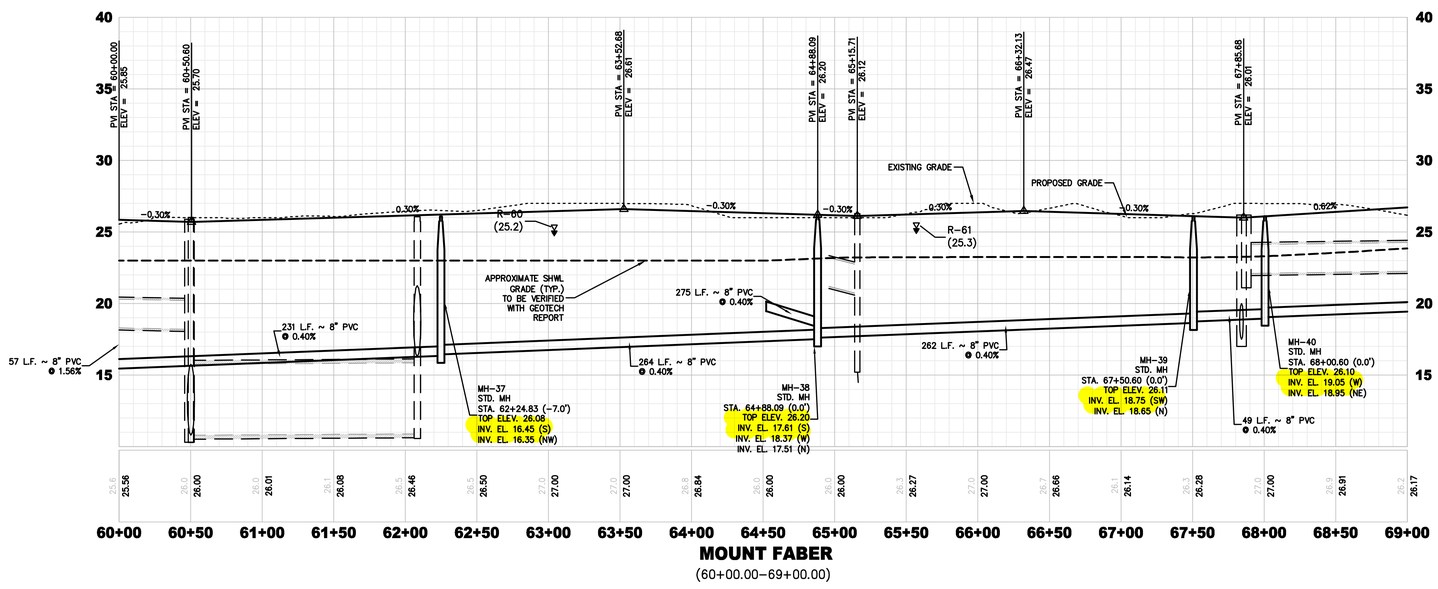

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P.E. NUMBER: 80967

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ROADWAY PROFILES

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
13B

PLOTTED: November 18, 2025 – 4:00 PM, BY: Emma Thompson

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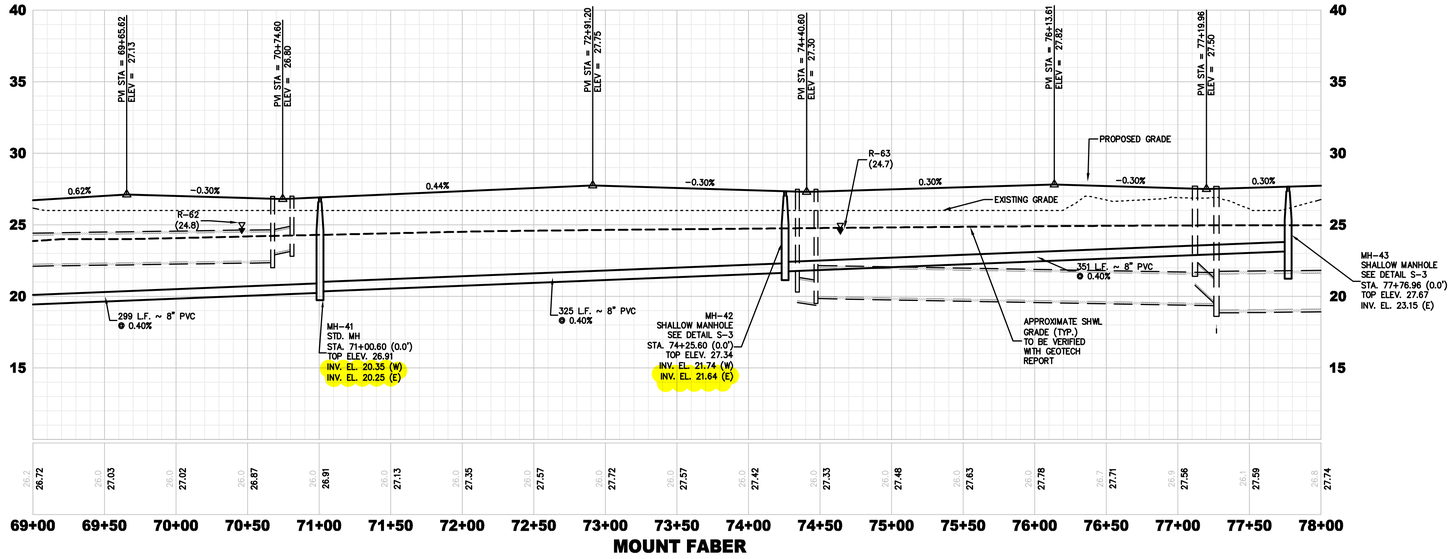

MOUNT FABER

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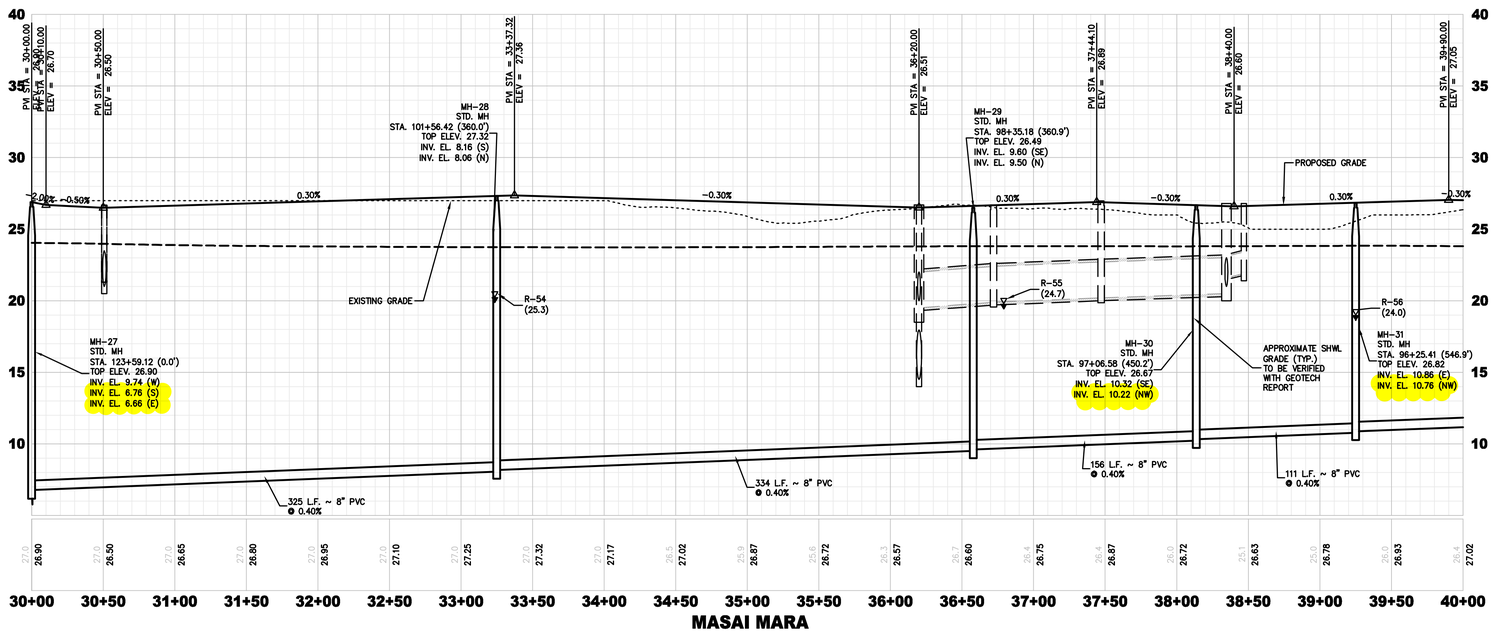

MASAI MARA

(30+00.00–40+00.00)

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ROADWAY PROFILES

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
13C

PLOTTED: November 18, 2025 – 4:00 PM, BY: Emma Thompson

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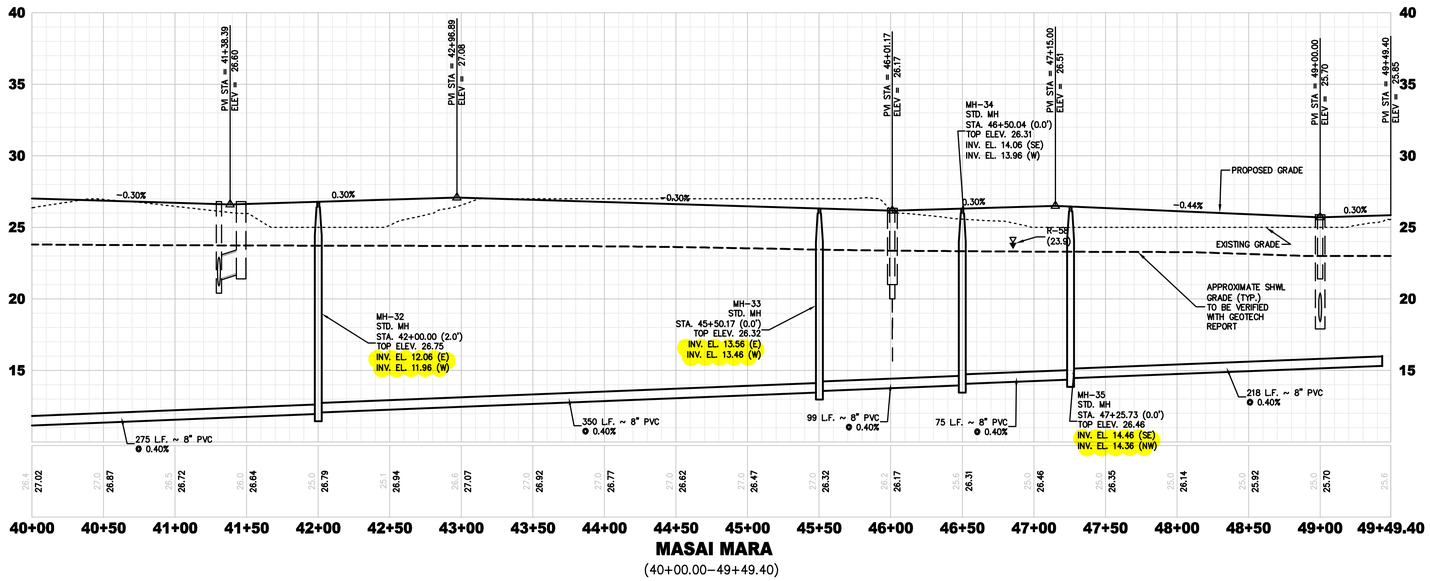

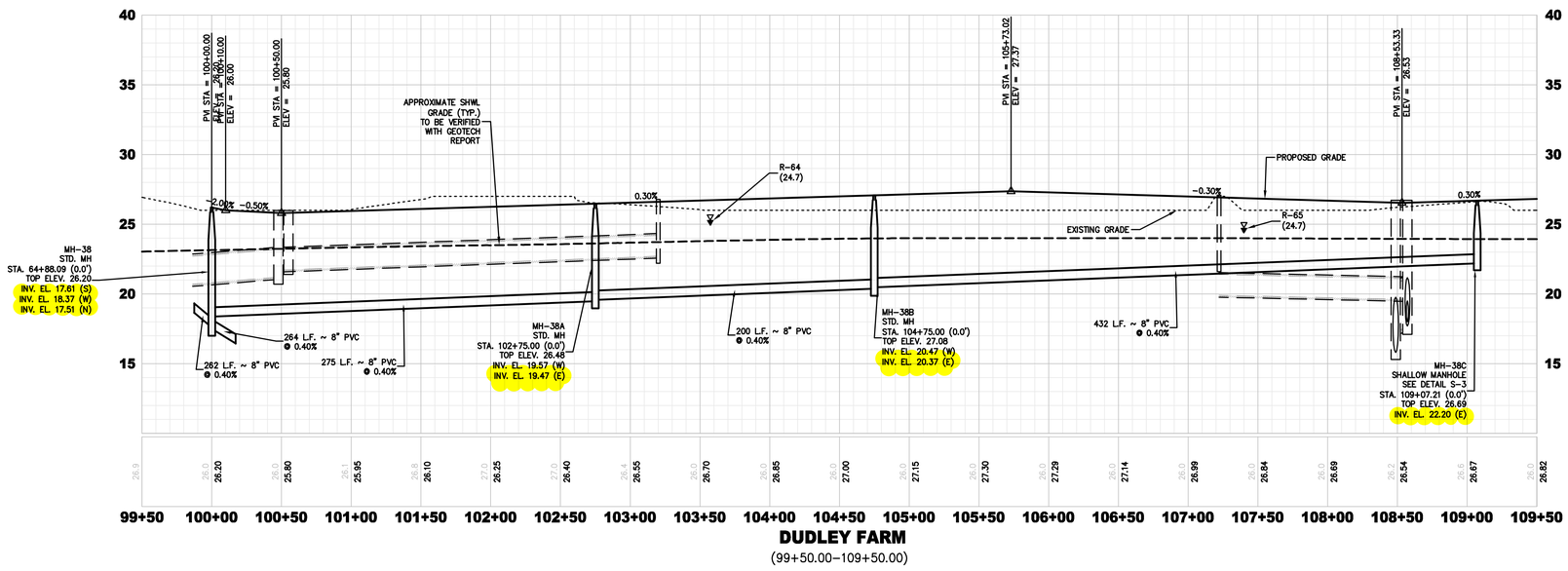

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ROADWAY PROFILES

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
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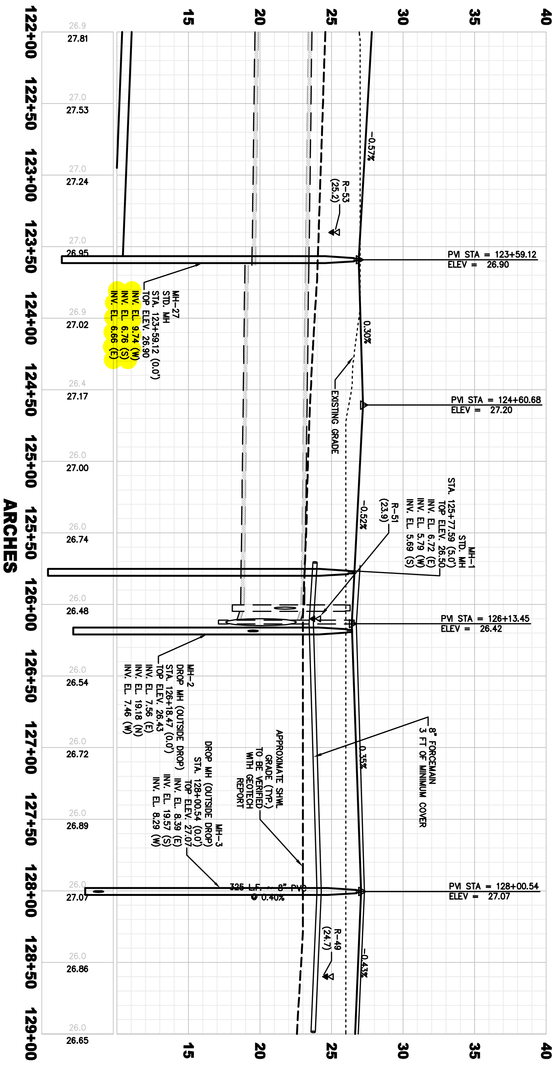

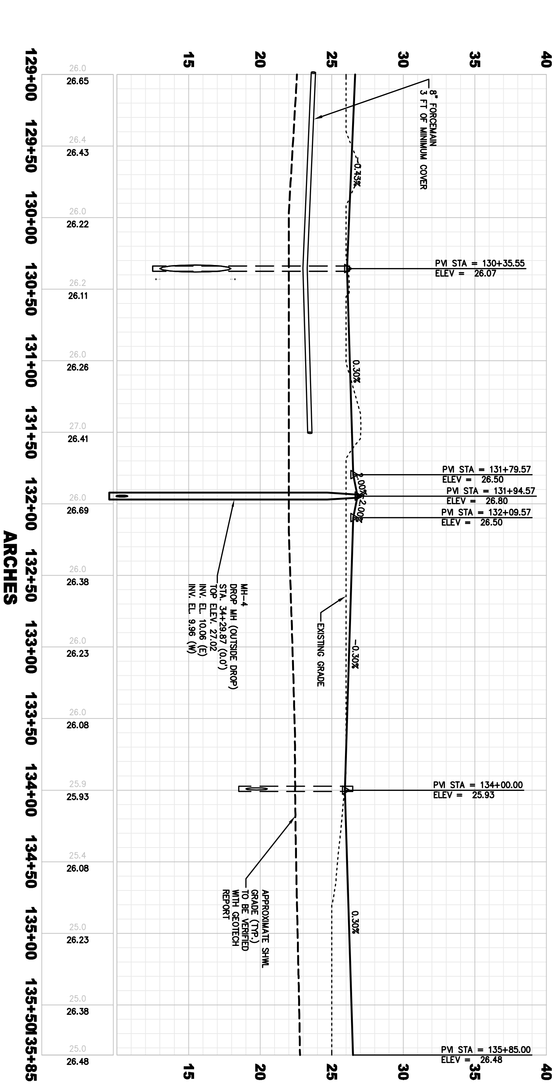

ROADWAY PROFILES

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
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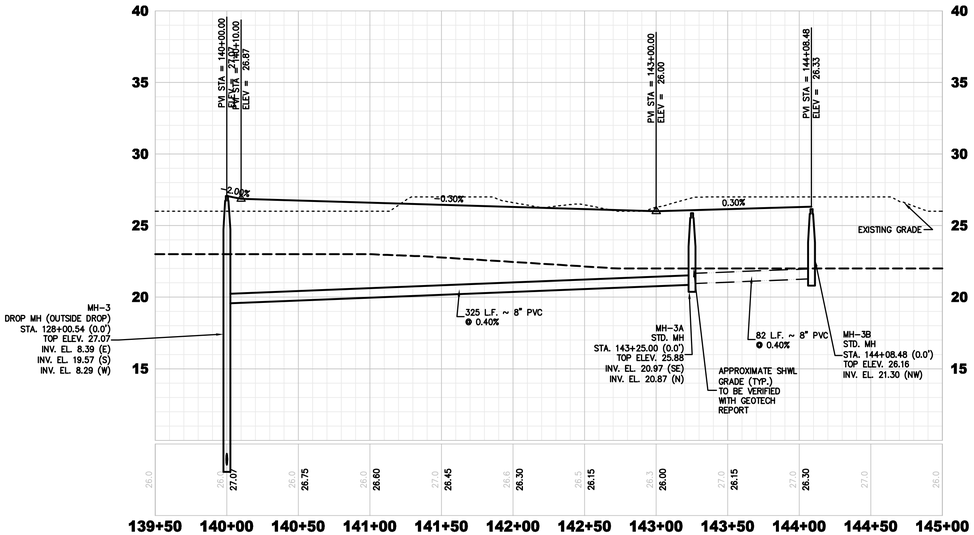
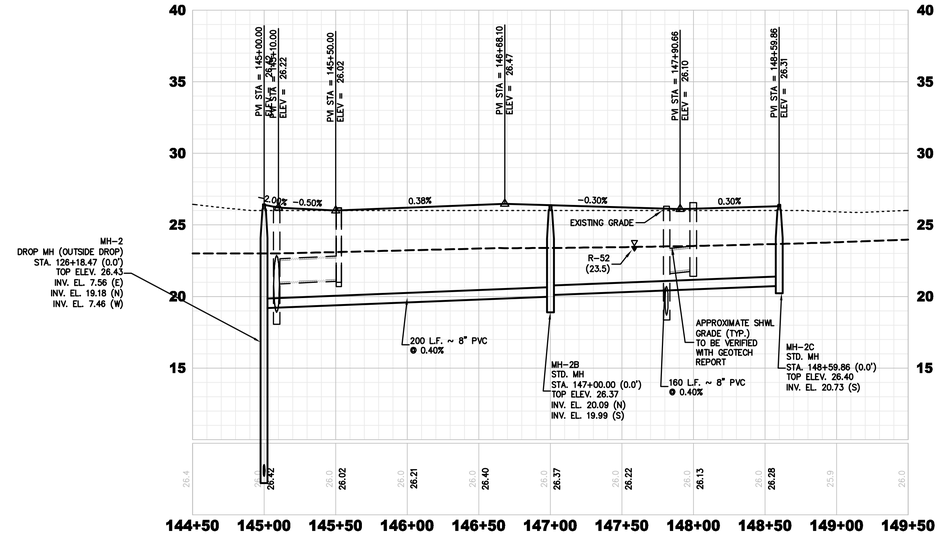


CRATER LAKE
(139+50.00–145+00.00)



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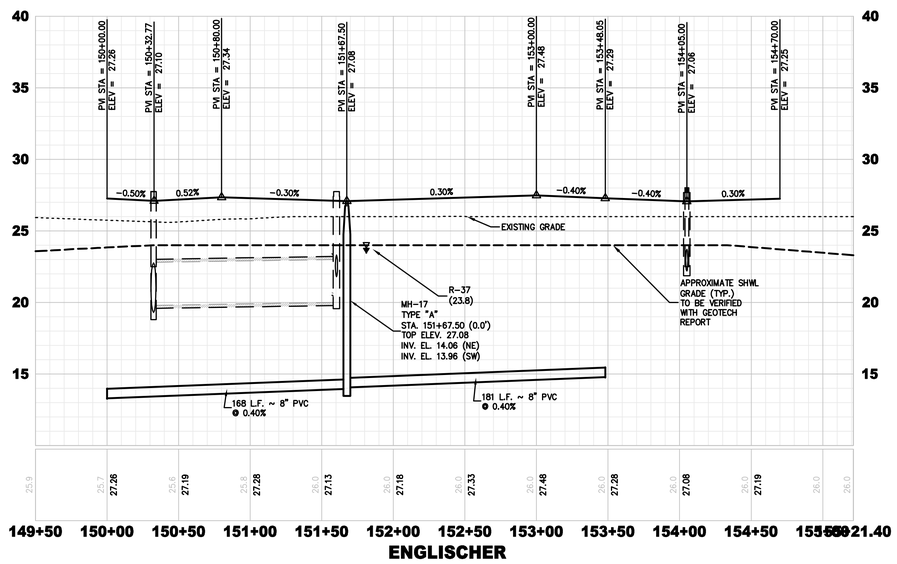

ENGLISCHER
(149+50.00–155+21.40)

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ROADWAY PROFILES

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DRAWING NUMBER
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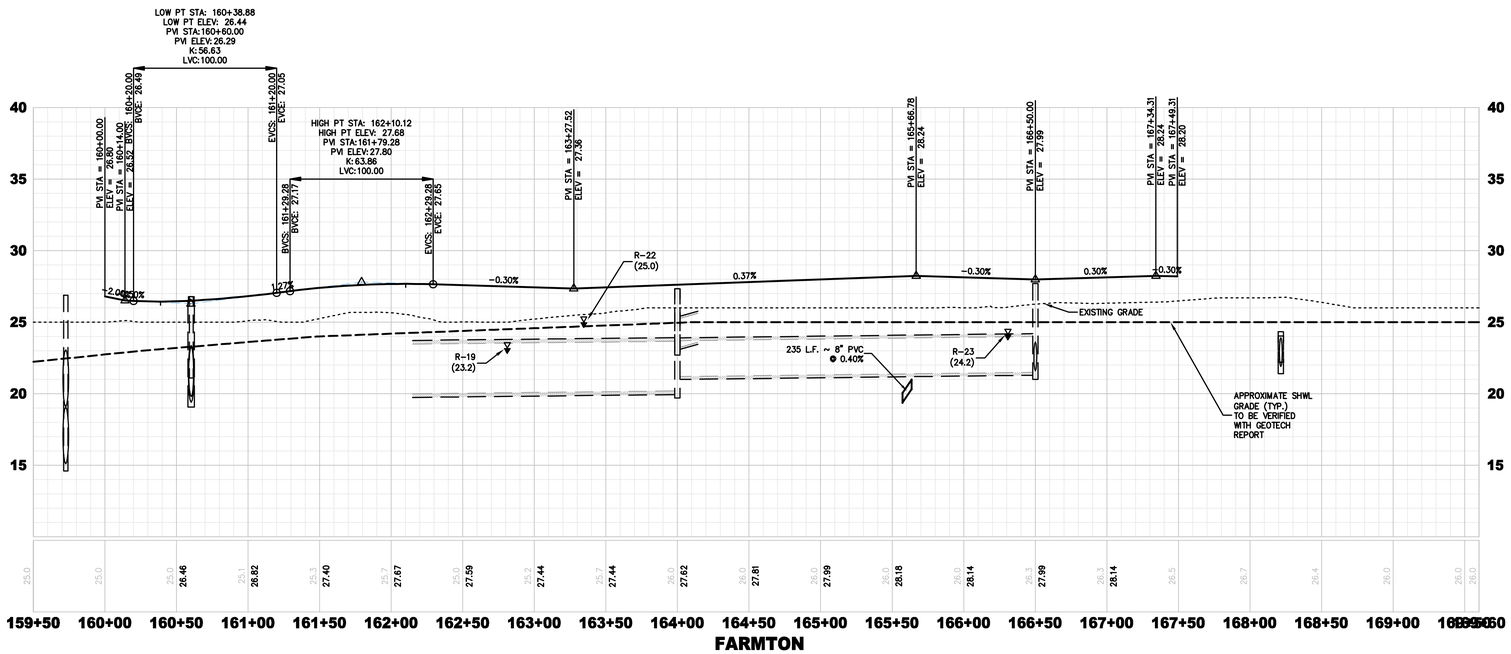

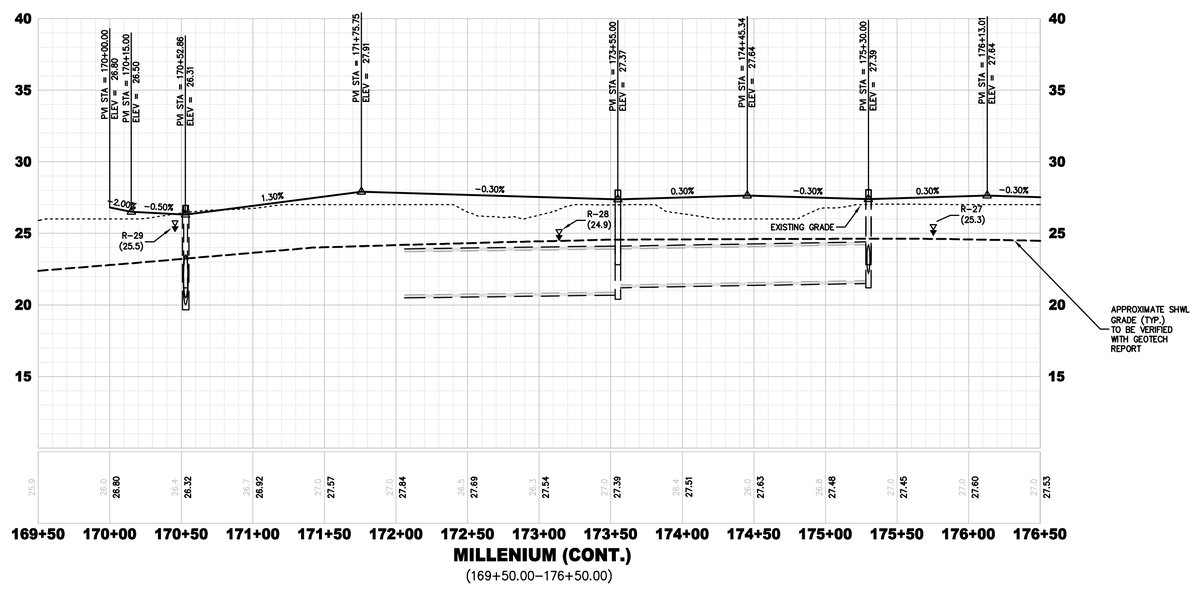

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ROADWAY PROFILES

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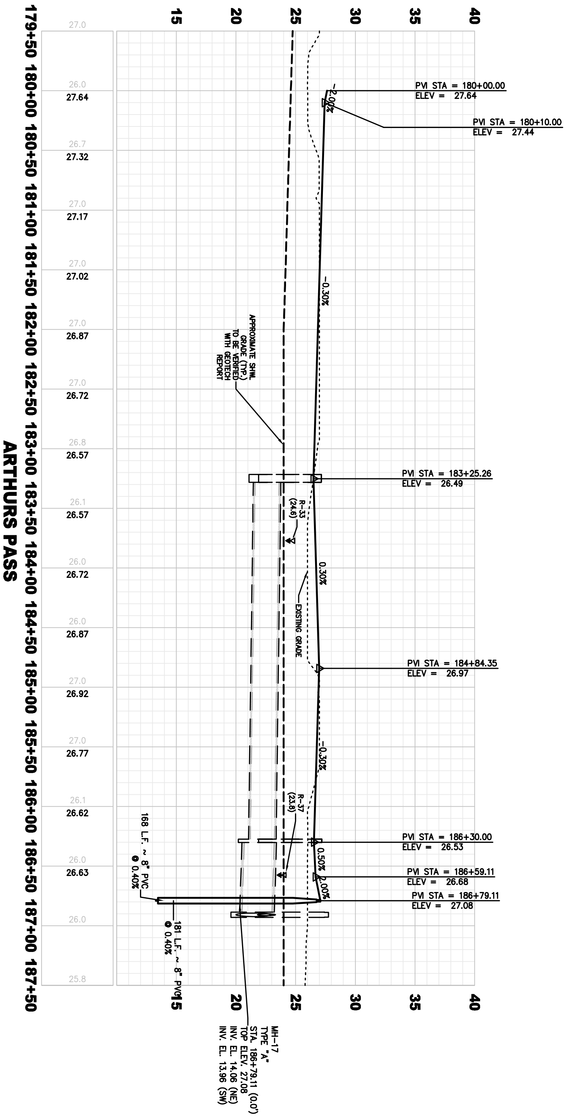


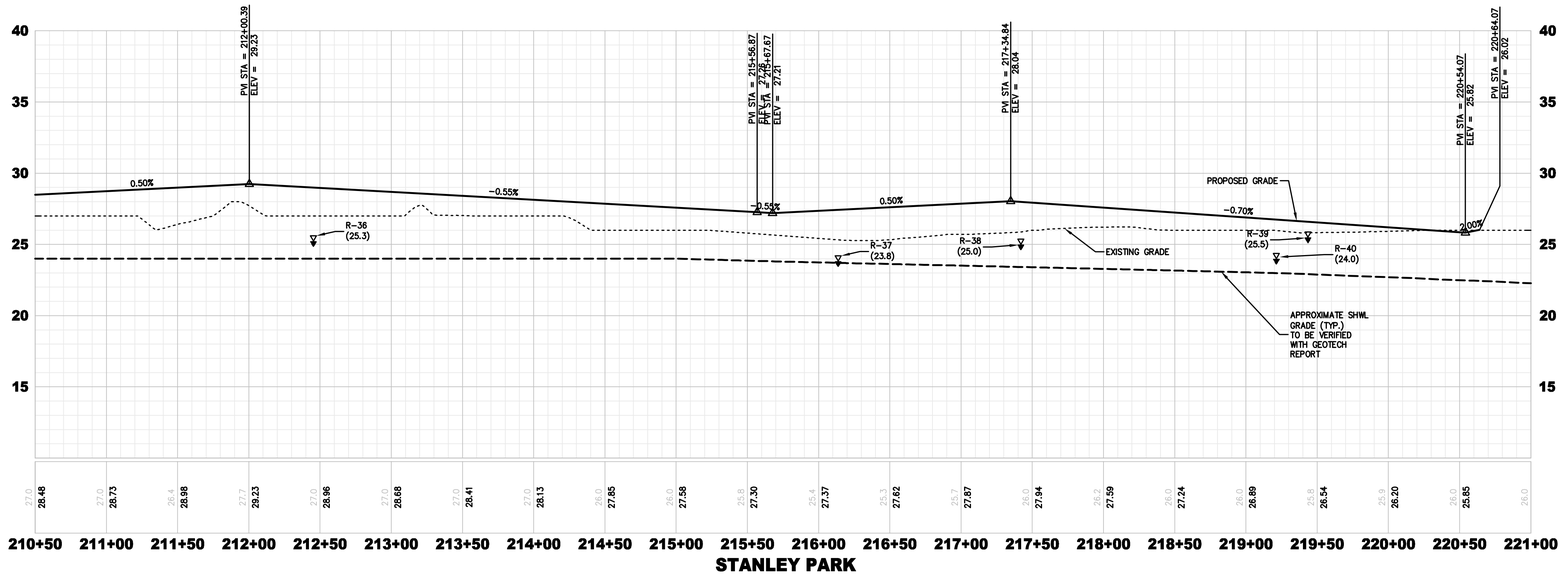
ARTHURS PASS
(179+50.00–187+50.00)

DRAWING NUMBER 13H	**ROADWAY PROFILES** **DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC**	ETM ENGLAND-THIMS & MILLER	Trusted Advisors, Creating Community.	1411 Edgewater Drive, Ste. 200 Orlando, Florida 32804 (407) 536-5379 www.etminc.com REG-00002584 LC-0000316	ETM NO. 22-213-03 DRAWN BY: D.G.S. DESIGNED BY: S.A.W. CHECKED BY: DATE: Issue Date	REVISIONS:

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 80867

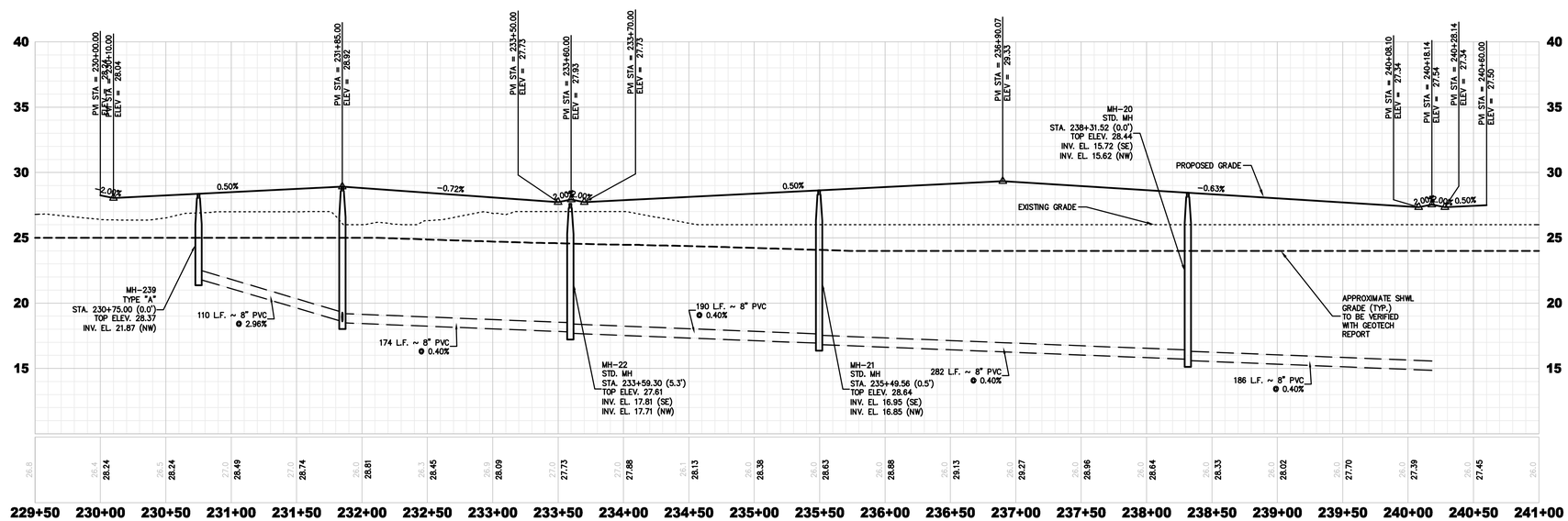
n:\2022\22-213\22-213-03\LandDev\Design\Plots\22-213-03-PRO.dwg

PLOTTED: November 18, 2025 – 4:01 PM, BY: Emma Thompson



STANLEY PARK

(210+50.00–221+00.00)



ALLEY 2

(229+50.00–241+00.00)

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE:	Issue Date

1411 Edgewater Drive, Ste. 200
Orlando, Florida 32804
(407) 536-5379
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ETM | ENGLAND-THIMS & MILLER

ALLEY PROFILES

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER

13I

PLOTTED: November 18, 2025 – 4:01 PM, BY: Emma Thompson

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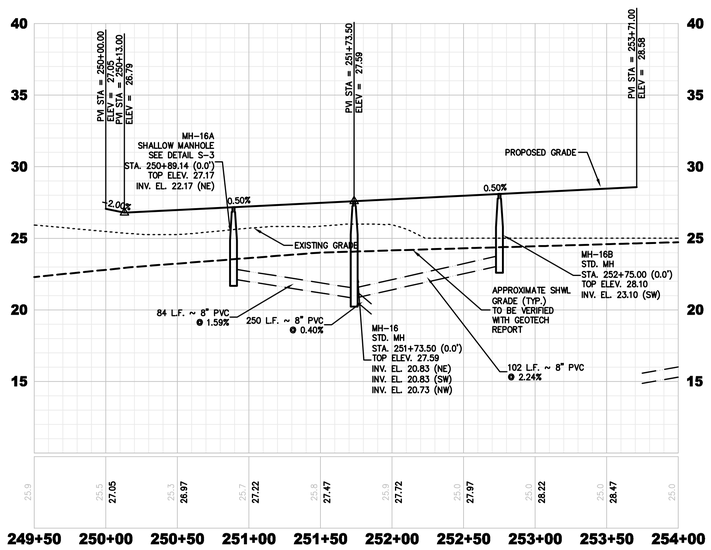
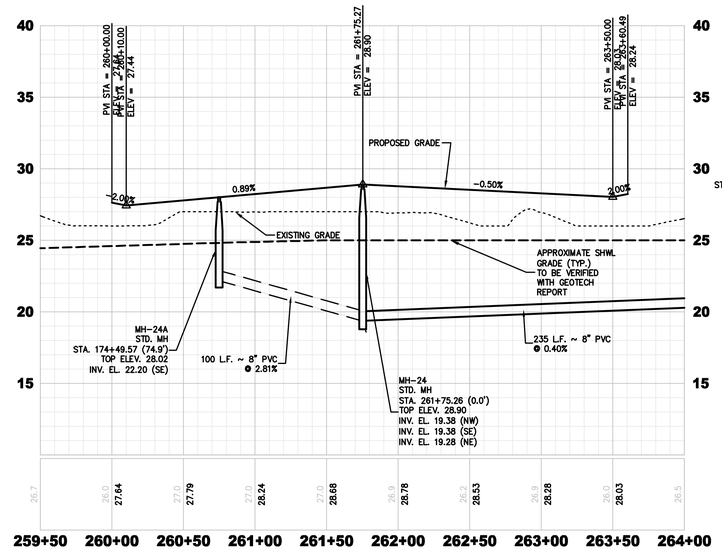


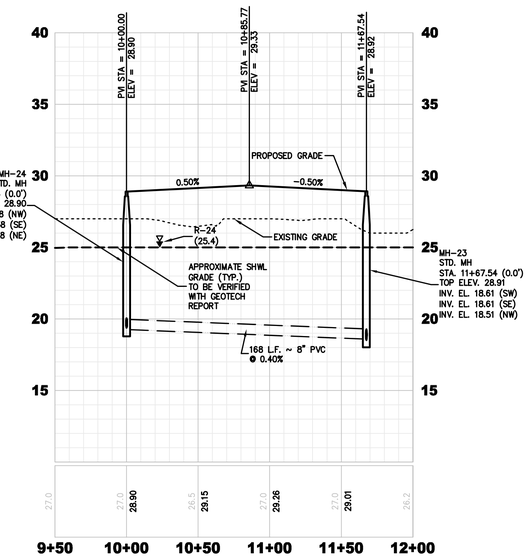
ALA MOANA

(249+50.00–254+00.00)



ARTHURS PASS (CONT.)

(259+50.00–264+00.00)



ERAWAN

(9+50.00–12+00.00)

H. SCALE: 1" = XX'
V. SCALE: 1" = XX'

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

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DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
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ALLEY PROFILES

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
13J

PLOTTED: November 18, 2025 – 4:01 PM, BY: Emma Thompson

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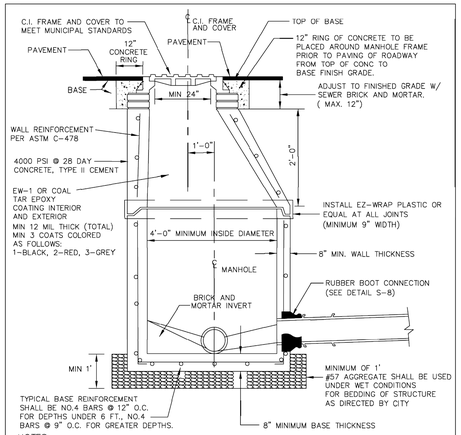


NOTES:

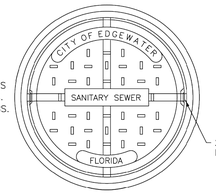
1. ON TRANSITIONS BETWEEN LARGER DIAMETER AND SMALLER SEWER COLLECTORS, OUTVERTS OF SEWERS SHALL BE MATCHED.
2. NON-PENETRATING PICK-HOLES IN ALL CONCRETE SECTIONS.
3. USE FARBERTITE BITUMASTIC SEALER BETWEEN SECTIONS OF MANHOLES.
4. 0.1' - DROP ACROSS MANHOLE TYP.
5. ALL MANHOLE TROUGHS AND BENCHES 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

USF No. 117-BL-ORS
FRAME WT = 85 LBS.
COVER WT = 125 LBS.



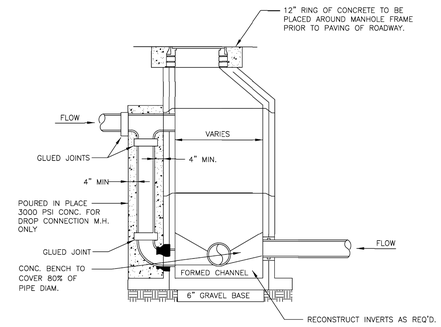
NOTES:

1. CEMENT USED IN PRECAST CONCRETE MIX SHALL BE TYPE II, ACID RESISTANT AND SULFIDE RESISTANT CONCRETE.
2. MORTAR TO CONTAIN "HYDRATITE", OR APPROVED EQUAL, TO PREVENT SHRINKAGE.
3. SUB-GRADE BENEATH MANHOLES SHALL BE UNDISTURBED GRANULAR UNSATURATED SOIL. No. 57 AGGREGATE STONE SHALL BE USED IN WET CONDITIONS AND/OR WHERE UNSUITABLE MATERIAL IS ENCOUNTERED.
4. ALL SEWER LINES SHALL BE VIDEOTAPED WITH "PAN AND TILT" CAMERA AND COPIES OF VIDEOS SUPPLIED TO THE ENVIRONMENTAL SERVICES DEPT. THE CITY MAY REQUIRE ADDITIONAL VIDEO TAPING, VIDEO TAPING OF LATERALS, AND/OR INFILTRATION/EXFILTRATION TESTS IF DEFECTS ARE APPARENT OR WORKMANSHIP IS QUESTIONABLE.
5. UNLESS DETAILED PLANS SHOW OTHERWISE, ALL MANHOLE RING AND COVER CASTINGS IN PAVED AREAS ARE TO BE ADJUSTED TO FINAL GRADE, SEALED AND SECURED IN PLACE WITH A CONCRETE COLLAR AFTER THE ROAD BASE IS PLACED AND JUST PRIOR TO PLACEMENT OF ASHPALT WEARING SURFACE.
6. CONTRACTOR SHALL PROVIDE THICKER MANHOLE WALLS AND BASES AS REQUIRED TO PREVENT FLOTATION BASED ON HISTORIC HIGH GROUND WATER TABLE ELEVATIONS AS DETERMINED USING ACCEPTED ENGINEERING PRACTICES AND/OR APPROVED BY ENVIRONMENTAL SERVICES DEPT.
7. CONCRETE COLLAR AROUND MANHOLE FRAME IS REQUIRED IN PAVED AREAS ONLY.
8. SHOP DRAWINGS FOR ALL STRUCTURES SHALL BE SUBMITTED TO AND APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION WITH TWO COPIES FORWARDED BY THE DESIGN ENGINEER TO THE CITY.
9. TWO (2) COATS OF BITUMASTIC COATING INSIDE: 16 MIL
10. ONE (1) COAT OF BITUMASTIC COATING OUTSIDE: 8 MIL
11. FRAME AND COVER TO BE USF #117-BL-ORS .
12. NO BUG HOLES OR HONEYCOMB WILL BE ACCEPTED.
13. ENDS OF SECTION SHALL FIT FLUSH TOGETHER
14. SEDIMENTATION BOWLS REQUIRED FOR ALL NEW MANHOLES AND REHABILITATION STRUCTURES. RAINGUARD OR APPROVED EQUAL.

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
SANITARY SEWER COVER & GENERAL NOTES

FILE NAME: EW_S2.DWG
DETAIL REF: S-2



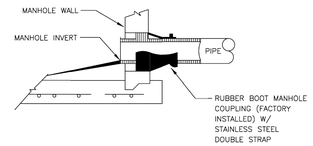
FOR SPECIAL CONDITIONS ONLY
(I.E. RETROFIT CONSTRUCTION)

SEE DETAIL S-1 FOR ADDITIONAL INFORMATION

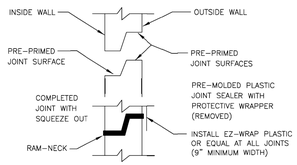
EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
OUTSIDE DROP MANHOLE DETAIL

FILE NAME: EW_S6.DWG
DETAIL REF: S-6



MANHOLE PIPE CONNECTION DETAIL
FOR NEW CONNECTIONS IN EXISTING MANHOLES



PRECAST JOINT CONNECTION

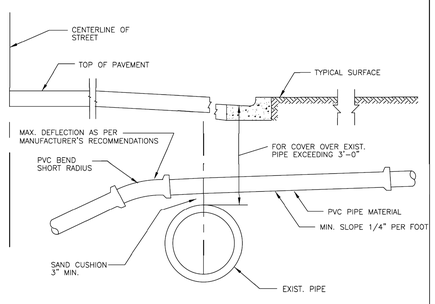
NOTES:

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



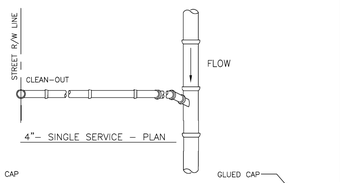
ALTERNATE GRADIENT FOR HOUSE SERVICE SEWERS AT CONFLICTS WITH EXISTING STORM SEWERS & OTHER EXISTING CONDUITS

APPROVED PIPE MATERIALS-PVC (SDR 26)

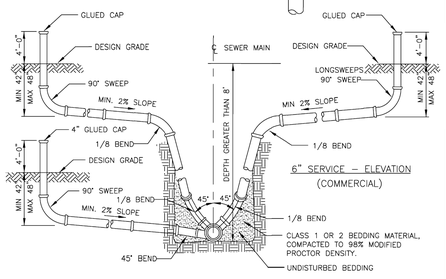
EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
SEWER LINE UTILITY CROSSING DETAIL

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



4"- SINGLE SERVICE - PLAN



4" - 6" SINGLE SERVICE - ELEVATION

NOTES:

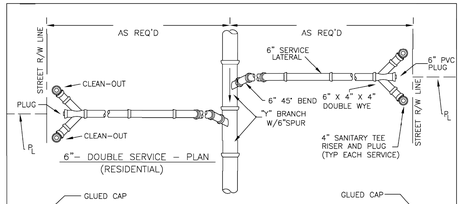
1. USE OF STYRENE MATERIAL WILL NOT BE PERMITTED.
2. ALL JOINTS TO BE RUBBER GASKET (NO GLUED FITTINGS) TYPICAL.
3. USE ALL HARCO SDR-26 FITTINGS OR CITY APPROVED EQUAL.

4" - RESIDENTIAL
6" - COMMERCIAL

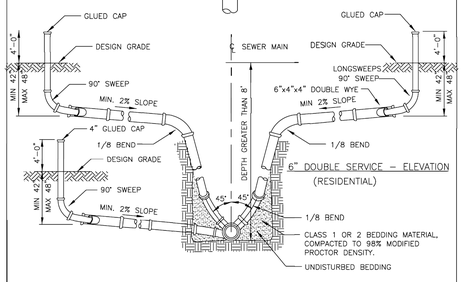
EDGEWATER 2023-01-25

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

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



6"- DOUBLE SERVICE - PLAN
(RESIDENTIAL)

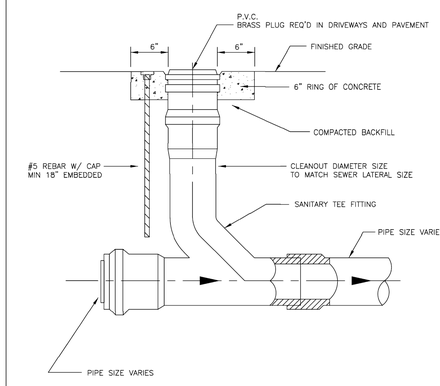


NOTE: SINGLE LATERALS SHALL BE INSTALLED ON ALL NEW RESIDENTIAL AND COMMERCIAL SEWER SYSTEMS. USE OF THIS DETAIL SHALL ONLY BE BY EXPRESS WRITTEN CONSENT OF THE TECHNICAL REVIEW COMMITTEE (TRC) AND INTENDED FOR RETROFIT APPLICATIONS ONLY.

EDGEWATER 2024-07-20

STANDARD CONSTRUCTION DETAIL
SEWER LATERAL DETAIL
(DOUBLE 6" RESIDENTIAL)

FILE NAME: EW_S11.DWG
DETAIL REF: S-11



EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
CLEANOUT DETAIL

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

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

Trusted Advisors, Creating Community.
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CA- 00002584 LC-0000316
ETM ENGLAND-THIMS & MILLER

WATER & SEWER DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
14A

PLOTTED: November 18, 2025 - 4:02 PM, BY: Emma Thompson

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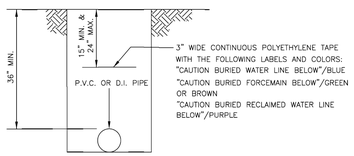
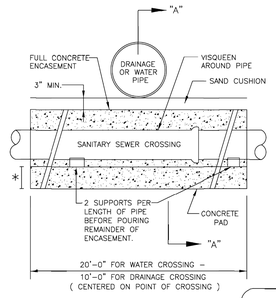


"TERRA TAPE D" or SIMILAR

EDGEWATER 2023-01-25

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

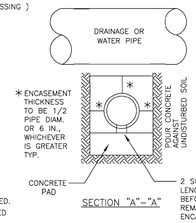
FILE NAME: EW_S13.DWG
DETAIL REF: S-13



ELEVATION

NOTES:

1. ALL CONCRETE SHALL BE 3000 PSI MINIMUM 28 DAYS STRENGTH.
2. WATER MAIN SHALL BE LOCATED ABOVE OR BELOW ENCASEMENT AS SHOWN ON PLANS OR DETERMINED IN THE FIELD, USE ENCASEMENT WHERE VERTICAL CLEARANCE WATER MAIN AND SEWER MAIN IS LESS THAN 12 INCHES.
3. NO DUCTILE IRON SEWER PIPE IS PERMITTED.
4. ENCASEMENT OF A.C. PIPE IS NOT ALLOWED REPLACE AFFECTED SECTIONS WITH PVC



SECTION "A"-"A"

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
SEWER CONDUIT CROSSING

FILE NAME: EW_S14.DWG
DETAIL REF: S-14

SANITARY SEWER DESIGN AND CONSTRUCTION NOTES

1. THE CITY'S ENVIRONMENTAL SERVICES DEPT. (424-2400 X4007) SHALL BE GIVEN A MINIMUM OF 2 BUSINESS DAYS 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 2024-07-20

STANDARD CONSTRUCTION DETAIL
SANITARY SEWER DESIGN AND
CONSTRUCTION NOTES

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

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.
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 CITY. IN ADDITION, THE CITY MAY REQUIRE LINERS 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 6" AND GREATER IN DIAMETER AND PRIMARY TRANSMISSION MAINS LOCATED ON COLLECTOR AND ARTERIAL ROADWAYS. LAUNCHING AND EXTRACTION POINTS SHALL BE DETERMINED BY THE CONTRACTOR.

EDGEWATER 2024-07-20

STANDARD CONSTRUCTION DETAIL
SANITARY SEWER DESIGN AND
CONSTRUCTION NOTES

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

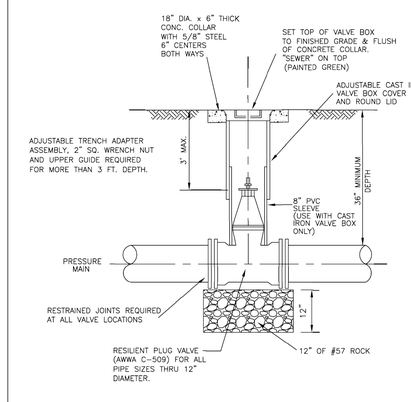
SANITARY SEWER DESIGN AND CONSTRUCTION NOTES (CONTD.)

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, REMEDIAL 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



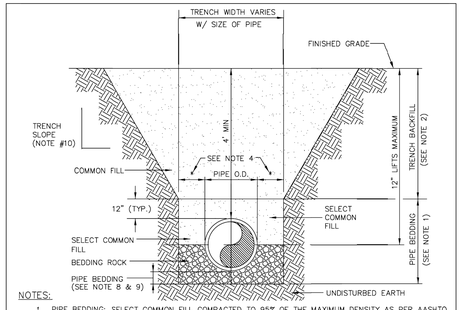
NOTE:

1. ROD OR BOLT TO TEE WHERE APPLICABLE.

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
SANITARY SEWER FORCE MAIN VALVE & VALVE BOX

FILE NAME: EW_S27.DWG
DETAIL REF: S-27



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

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

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WATER & SEWER DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
14B

PLOTTED: November 18, 2025 - 4:03 PM, BY: Emma Thompson

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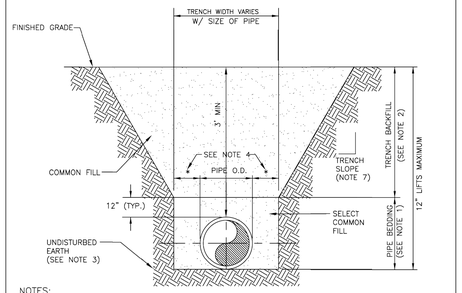


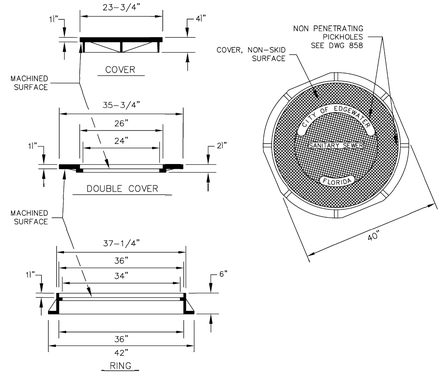
NOTES:

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



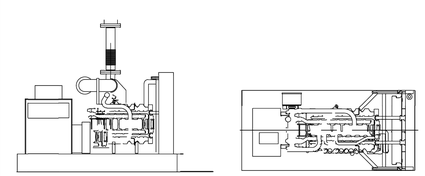
NOTES:

1. U.S. FOUNDRY 666 RING & CR-ORS & XB-ORS COVERS
2. COVER WT.: 212 LBS. APP. (185 LBS. ACTUAL)
3. DOUBLE COVER WT.: 215 LBS. APP.
4. RING WT.: 225 LBS. APP.
5. MATERIAL: ASTM-A48 CLASS 30B GRAY IRON

EDGEWATER 2023-01-25

STANDARD CONSTRUCTION DETAIL
SANITARY SEWER DOUBLE MANHOLE COVER

FILE NAME: EW_S30.DWG
DETAIL REF: S-30



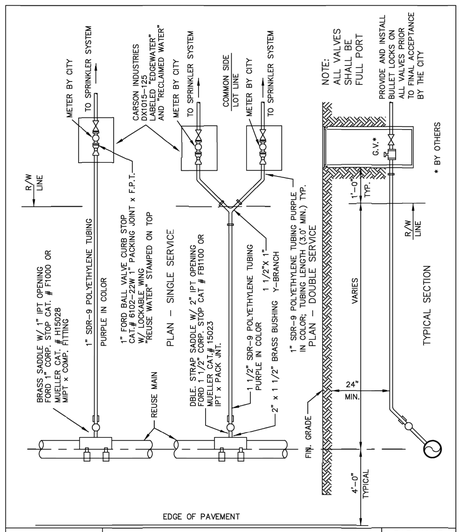
NOTES:

1. ANY LIFT STATION WILL BE SUPPORTED BY A PERMANENTLY INSTALLED DIESEL DRIVEN BYPASS PUMP AS MANUFACTURED BY ATLAS COPCO, UNLESS IF DETERMINED INFEASIBLE BY THE CITY ENGINEER IN WHICH CASE A PERMANENTLY INSTALLED STANDBY GENERATOR SHALL BE PROVIDED.
2. GENERATOR SHALL BE MANUFACTURED BY OLYMPIAN OR OTHER CITY APPROVED EQUAL.
3. AN AUTOMATIC TRANSFER SWITCH WILL BE INSTALLED BETWEEN THE GENERATOR AND THE ELECTRIC PANEL.
4. THE GENERATOR SHALL BE RATED AT THE MAXIMUM STATION AMPERAGE PLUS 25 PERCENT.
5. THE GENERATOR SHALL BE MOUNTED ON A 28 DAY, 3,000 p.s.i., SIX INCH (6") THICK, SLAB WITH A MINIMUM TWO FOOT (2') SKIRT ON ALL FOUR SIDES.
6. THE GENERATOR SHALL HAVE ON SITE FUEL STORAGE SUFFICIENT TO RUN THE GENERATOR FOR A MINIMUM OF 24 HOURS.
7. THE GENERATOR SHALL BE ENCLOSED BY A NEMA RATED WATERPROOF ENCLOSURE AND BE SOUND ATTENUATED.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR A MANUFACTURER'S START UP WITH THE CITY IN ATTENDANCE.

EDGEWATER 2024-07-20

STANDARD CONSTRUCTION DETAIL
EMERGENCY BACKUP PUMP OR GENERATOR

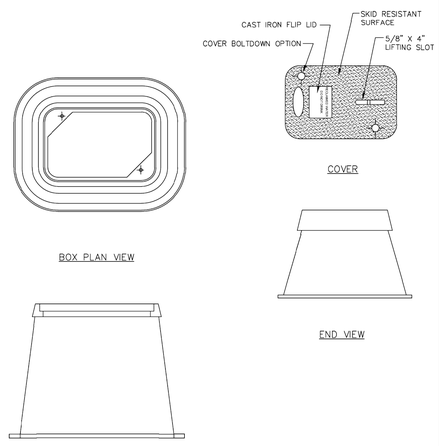
FILE NAME: EW_S31.DWG
DETAIL REF: S-31



EDGEWATER

STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER SERVICE:
IRRIGATION (SPRINKLER) CONNECTION

FILE NAME: EW_RW1.DWG
DETAIL REF: RW-1



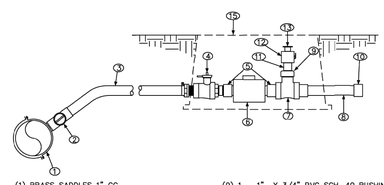
NOTES:

1. ALL BOXES AND COVERS TO BE PURPLE.

EDGEWATER

STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER SERVICE:
SINGLE SERVICE
METER BOX

FILE NAME: EW_RW2.DWG
DETAIL REF: RW-2



(1) BRASS SADDLES 1" CC
(2) 1" CORP STOP CC FORD
(3) 1" PURPLE H.D.P.E. PIPE
(4) 1" P.J. x 3/4" BALL VALVE x 3/4" METER COUPLING. FORD #B43-342W.
(5) 3/4" METER COUPLING x 3/4" M.I.P. 1 7/16" LAY LENGTH. FORD #C38-23-1.437
(6) METER (BY CITY)
(7) 1 - 1" PVC THREADED TEE SCH. 80
(8) 1- 1" X 8" PVC SCH. 80 THREADED BOTH ENDS
(9) 1 - 1" X 3/4" PVC SCH. 40 BUSHING
(10) 1 - 1" PVC SCH. 40 THREADED CAP
(11) 1 - 3/4" CLOSE NIPPLE
(12) 1 - 3/4" BRASS BALL VALVE WITH BRASS HANDLE
(13) 1 - 3/4" QUICK DISCONNECT HOSE FITTING
(14) 1 - WILKINS D.C. #950 XLT
(15) 1 - PURPLE POLY PLASTIC BOX

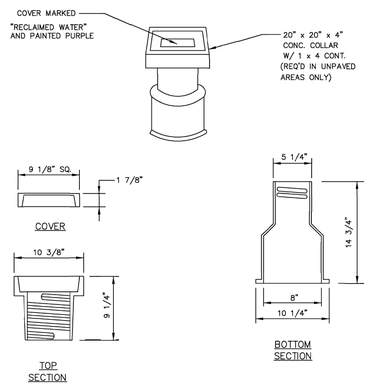
NOTES:

1. ALL VALVES TO BE "FULL PORT". THIS UNIT IS TO BE PREASSEMBLED AND HYDROSTATICALLY TESTED TO 100 PSI. ALL MALE THREADS ARE TO BE COVERED AS REQUIRED WITH 3/4" DOMESTIC TEFLON TAPE AND A THREAD SEALING COMPOUND TO BE REMOVED PRIOR TO SHIPMENT.
2. ALL EXPOSED MALE THREADS TO BE PROTECTED BY PLASTIC CAPS PRIOR TO SHIPMENT.
3. ALL POLYETHYLENE TUBING SHALL BE PURPLE.
4. TYPICALLY THIS DEVICE TO BE INSTALLED BY CITY FORCES.

EDGEWATER

STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER SERVICE:
SPRINKLER/ " HOSE BIBB " ASSEMBLY

FILE NAME: EW_RW3.DWG
DETAIL REF: RW-3



NOTE:

1. RECLAIMED MAIN VALVE BOX AND COVER SHALL BE ADJUSTABLE SCREW TYPE.

EDGEWATER

STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER MAIN
VALVE BOX

FILE NAME: EW_RW4.DWG
DETAIL REF: RW-4

RECLAIMED WATER DESIGN AND CONSTRUCTION NOTES

1. THE CITY'S PUBLIC UTILITIES DEPARTMENT (424-2460) SHALL BE GIVEN A MINIMUM OF 48 HOURS ADVANCE NOTICE (NOT INCLUDING HOLIDAYS OR WEEKENDS) PRIOR TO BEGINNING ANY RECLAIMED WATER SYSTEM CONSTRUCTION.
2. DEWATERING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW RECLAIMED WATER MAIN BEING LAID.
3. ALL RECLAIMED WATER MAINS SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
4. TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE CITY WITH A MINIMUM COMPACTION OF 95% IN UNPAVED AREAS AND 98% IN PAVED AREAS IN ACCORDANCE WITH AASHTO T-180.
5. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 1 FOOT ABOVE THE PIPE AND AT 1 FOOT VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET
6. 3" METALLIZED PIPE LOCATION TAPE SHALL BE LOCATED BETWEEN 15" AND 24" BELOW FINISHED GRADE OR AS SPECIFIED BY MANUFACTURER FOR ALL PVC LINES. IN ADDITION TO 12 GUAGE TRACING WIRE MARKER TAPE SHALL BE PROVIDED ON ALL DIP PIPE ALSO.
7. ALL SINGLE RESIDENTIAL WATER SERVICES SHALL BE 1" AND DOUBLE RESIDENTIAL SERVICES SHALL BE 1 1/2". SERVICES SHALL BE CTS 3408 HIGH DENSITY POLYETHYLENE TUBING RATED FOR A MINIMUM OF 200 PSI WITH SDR 9 (CTS). THE TUBING SHALL HAVE A VIRGIN HIGH DENSITY POLYETHYLENE CENTER FOR WHICH THE MANUFACTURER SHALL FURNISH A CERTIFICATE OF PURITY. THE TUBING SHALL BE LAVENDER IN COLOR AND SHALL HAVE THE WORDS "RECLAIMED WATER" PERMANENTLY PRINTED ON THE OUTSIDE. THE TUBING SHALL HAVE U.V. PROTECTION AND SHALL NOT BE AFFECTED BY DIRECT SUNLIGHT. THE TUBING SHALL COMPLY WITH OR EXCEED THE APPLICABLE STANDARDS OF A.S.D.M. D1248, D3350, D2239, D2737, N.S.F.-14 AND A.W.W.A. C901 AND SHALL COME WITH A LIFETIME WARRANTY. APPROVED SIZES: 3/4", 1", 1-1/2" AND 2" DIAMETERS. ACCEPTABLE MANUFACTURERS: ENDOT ENDOCORE RWT OR APPROVED EQUAL
8. ALL WATER SERVICE ENDINGS SHALL BE SECURED BY WIRE TO 2"X 4" PRESSURE TREATED STAKES, APPROXIMATELY 2' ABOVE GRADE, WITH "U" BRANCHES AT THE GROUND LEVEL, OR MAY BE PLACED IN RECLAIMED WATER METER BOXES AS SUPPLIED BY THE CITY AT THE TIME OF FINAL SUBDIVISION INSPECTION.
9. RECLAIMED WATER VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND AT MAXIMUM SPACINGS OF 1000 FEET.
10. AT ALL RECLAIMED WATER MAIN TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL LEGS EXCEPT ONE.
11. APPROVED WATER VALVE TYPES ARE THE FOLLOWING:
    A. STANDARD GATE VALVES LESS THAN 24" DIAMETER (AWWA C-500) OR RESILIENT SEAT GATE VALVES (AWWA C-509)
    B. BUTTERFLY VALVES GREATER THAN 24" (AWWA C 504)
    C. TAPPING VALVES WITH MECHANICAL OR STAINLESS STEEL TAPPING SLEEVE.
12. ALL RECLAIMED WATER VALVES SHALL BE ADJUSTED TO FINISH GRADE AND THE CAPS SHALL BE PAINTED LAVENDER OR PURPLE TO MAKE THEM PLAINLY DISTINGUISHABLE.
13. AS STANDARD PRACTICE RECLAIMED WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF THE CURB ON THE OPPOSITE SIDE OF THE POTABLE WATER LINES OR AS APPROVED BY THE CITY.
14. ALL RECLAIMED WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES. IN SPECIAL CASES WHERE IT IS IMPOSSIBLE OR INAPPROPRIATE TO PROVIDE ADEQUATE COVER, DUCTILE IRON PRESSURE CLASS 350 OR CONCRETE ENCASEMENT MAY BE USED AS APPROVED BY THE CITY.
15. ALL MAINS INSTALLED REQUIRE 12 GUAGE TRACING WIRE FOR LOCATING.

EDGEWATER

STANDARD CONSTRUCTION DETAIL
RECLAIMED WATER DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_RW5.DWG
DETAIL REF: RW-5

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03	
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE: Issue Date	

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ENGLAND-THIMS & MILLER

WATER & SEWER DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
14C

PLOTTED: November 18, 2025 – 4:04 PM, BY: Emma Thompson

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RECLAIMED WATER DESIGN AND CONSTRUCTION NOTES (CONTD.)

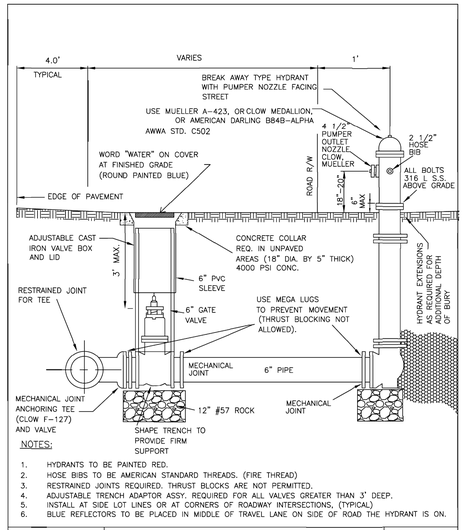
15. ALL PROPOSED RECLAIMED WATER MAINS SHALL BE FLUSHED, DISINFECTED PRESSURE TESTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE WHEN APPROPRIATE IN ACCORDANCE WITH LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE WITH CITY PERSONNEL AT THE WASTEWATER PLANT 48 HOURS PRIOR TO BEGINNING A FULL-DIAMETER FLUSH OF THE MAINS PRIOR TO THE COMMENCEMENT OF PRESSURE TESTING.
16. THE CONTRACTOR SHALL BE REQUIRED TO PIG ALL RECLAIMED MAINS IN EXCESS OF 8" IN DIAMETER AND PRIMARY DISTRIBUTION MAINS LOCATED ON COLLECTOR AND ARTERIAL ROADWAYS. LAUNCHING AND EXTRACTION POINTS SHALL BE DETERMINED BY THE CONTRACTOR.
17. RECLAIMED WATER MAINS SHALL BE PVC AWWA CLASS C-900 OR C-905, CL 150 (COLOR PANTONE PURPLE) OR DIP PRESSURE CLASS 350, STANDARD CEMENT LINED UNLESS APPROVED OTHERWISE BY THE CITY.
18. ALL RECLAIMED WATER MAINS SHALL USE A THRUST RESTRAINED JOINT METHOD IN COMPLIANCE WITH THE DUCTILE IRON PIPE RESEARCH ASSOCIATION (DIPRA) GUIDELINES. IN THE EVENT THAT PVC FITTINGS ARE SPECIFIED, THE RESTRAINED JOINT SHALL BE MODIFIED IN ACCORDANCE WITH THE RECOMMENDED ADDITIONAL RESTRAINED LENGTH REQUIRED FOR PIPE WRAPPED WITH POLYETHYLENE. IN NO INSTANCE SHALL THRUST BLOCKS BE PERMITTED.
19. MEGALUGS, BOLTLESS RESTRAINED JOINTS, OR GRIPPER GASKETS SHALL BE USED ON ALL RESTRAINED JOINT INSTALLATIONS. MINIMUM DEPTH OF BURY ON PIPES NOT MEETING REQUIRED COVER REQUIREMENTS SHALL FOLLOW THE MOST RECENT DIPRA THRUST RESTRAINT DESIGN GUIDELINES.
20. GRIPPER RING GASKETS BY ROMAC MAY BE USED AS APPROPRIATE FOR RESTRAINING PRESSURE PIPE TO FITTINGS, VALVES, ETC.
21. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO INSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION OR CITY OF EDGEWATER PUBLIC UTILITIES AND "AS-BUILTS" ARE PROVIDED TO THE CITY, PRIOR TO ANY USE OF THIS SYSTEM.
22. ALL RECLAIMED WATER MAINS AND SERVICE LINES SHALL BE READILY DISTINGUISHABLE BY THEIR PURPLE COLOR OR TAPE MARKINGS. DUCTILE IRON PIPE SHALL BE WRAPPED WITH PURPLE POLYETHYLENE.
23. ALL RECLAIMED WATER SERVICES SHALL BE MARKED ALONG THE OUTSIDE EDGE OF CURB WITH AN "L" OR BY METAL TABS SET INTO PAVEMENT. VALVES AND BLOW-OFFS FOR RECLAIM WATER MAINS SHALL BE MARKED BY AN "X" SET INTO THE PAVEMENT.
24. ALL DIP PIPE SHALL HAVE 2" YELLOW STRIPES PAINTED AT 2 O'CLOCK, 6 O'CLOCK, AND 10 O'CLOCK FOR THE FULL LENGTH OF PIPE. YELLOW TRAFFIC STRIPING PAINT SHALL BE USED WITH RECLAIMED WATER CLEARLY STENCILED WITH PAINT AT TWO LOCATIONS PER STRIPE OR SIX PER PIPE.
25. RECLAIM WATER SERVICES SHALL BE NORMALLY DOUBLE 1 1/2" SERVICES LOCATED AT SIDE LOT LINES ALTERNATING WITH POTABLE WATER SERVICE LOCATIONS. IN INSTANCES WHERE RECLAIM WATER SERVICES NEED TO BE OFFSET, 1" SINGLE SERVICES SHALL BE SPECIFIED THESE SERVICES MAY BE OFFSET FROM THE LOT LINE A MAXIMUM DISTANCE OF 2.0'.
26. MAXIMUM OBTAINABLE SEPARATION OF PUBLIC RECLAIMED WATER MAINS, STORMWATER MAINS, AND SANITARY SEWER MAINS SHALL BE MAINTAINED. A MINIMUM HORIZONTAL SEPARATION OF FIVE (5) FEET (CENTER TO CENTER) OR THREE (3) FEET (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN RECLAIMED WATER MAINS AND SEWAGE MAINS. WHERE RECLAIMED WATER AND SANITARY SEWAGE MAINS CROSS WITH LESS THAN EIGHTEEN (18) INCHES VERTICAL CLEARANCE, THE SANITARY SEWAGE MAIN SHALL BE TWENTY (20) FEET OF EITHER CONCRETE ENCASED PVC PIPE OR ENCASED IN A WATERTIGHT CARRIER PIPE, CENTERED ON THE POINT OF CROSSING

EDGEWATER	STANDARD CONSTRUCTION DETAIL RECLAIMED WATER DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_RW6.DWG DETAIL REF: RW-6

RECLAIMED WATER DESIGN AND CONSTRUCTION NOTES (CONTD.)

27. MAXIMUM OBTAINABLE SEPARATION OF PUBLIC ACCESS RECLAIMED WATER MAINS AND POTABLE WATER MAINS SHALL BE MAINTAINED. A MINIMUM HORIZONTAL SEPARATION OF FIVE (5) FEET (CENTER TO CENTER) OR THREE (3) FEET (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN RECLAIMED WATER MAINS AND POTABLE WATER MAINS. WHERE RECLAIMED WATER AND POTABLE WATER MAINS CROSS WITH LESS THAN EIGHTEEN (18) INCHES VERTICAL CLEARANCE, THE RECLAIMED WATER MAIN SHALL BE TWENTY (20) FEET OF EITHER DUCTILE IRON PIPE OR ENCASED IN A WATERTIGHT CARRIER PIPE, CENTER ON THE POINT OF CROSSING.
28. ALL RECLAIMED WATER HOSE BIBBS, HAND-OPERATED CONNECTIONS AND OUTLETS SHALL BE CONTAINED IN UNDERGROUND SERVICE VAULTS AND SHALL BE APPROPRIATELY TAGGED OR LABELED TO WARN THE PUBLIC AND EMPLOYEES THAT THE WATER IS NOT INTENDED FOR DRINKING. ALL PIPING, VALVES, AND OUTLETS SHALL BE COLOR-CODED, OR OTHERWISE MARKED, TO DIFFERENTIATE RECLAIMED WATER FROM POTABLE OR OTHER WATER.
29. VAULTS FOR HOSE BIBBS AND OUTLETS SHALL BE LOCKED OR REQUIRE A SPECIAL TOOL FOR OPERATION OF HOSE BIBBS AND OUTLETS.
30. THE REUSE MAIN SHALL NOT BE PLACED IN SERVICE UNTIL A SATISFACTORY 150 PSI PRESSURE TEST AND A PASSING BACTERIOLOGICAL TEST IS PERFORMED AND RESULTS ARE FORWARDED TO THE CITY.
31. A 75 FOOT SETBACK DISTANCE SHALL BE PROVIDED FROM PUBLIC ACCESS REUSE WETTED AREAS TO ANY PUBLIC AND ANY PRIVATE POTABLE WATER SUPPLY WELLS.
32. LOW TRAJECTORY NOZZLES ARE REQUIRED WITHIN 100 FEET OF PUBLIC EATING, DRINKING OR BATHING FACILITIES.
33. ALL TAPPING OF MAINS SHALL BE SUPERVISED BY THE CITY SCHEDULING OF THESE CONNECTIONS SHALL REQUIRE A MINIMUM 48 HOUR NOTIFICATION (MEASURED ON NORMAL WORK DAYS) DIRECTED TO THE CITY'S DESIGNATED SITE INSPECTOR. SUBSEQUENTLY, THE CONNECTION SHALL BE SCHEDULED TO COMMENCE BETWEEN 7:00 A.M. AND NOON ON THE APPROPRIATE DAY.
34. WITH RESPECT TO TIE-IN CONNECTIONS, THE CITY RESERVES THE RIGHT TO REQUIRE CONNECTIONS TO BE PERFORMED DURING PERIODS OF LOW FLOW IN ORDER TO MINIMIZE MINIMIZE DISRUPTION TO EXISTING CUSTOMERS.
35. ALL WORK PERFORMED UPON RECLAIMED WATER FACILITIES OWNED OR PROPOSED TO BE OWNED BY THE CITY SHALL BE CONSTRUCTED BY AN UNDERGROUND UTILITY OR GENERAL CONTRACTOR LICENSED IN THE STATE OF FLORIDA AND REGISTERED WITH THE CITY.
36. FOR CONSTRUCTION PURPOSES, THE PLANS SHALL DIMENSION THE PROPOSED LOCATIONS OF ALL RECLAIMED WATER MAINS MEASURED FROM THE BACK OF CURB (OR EDGE OF PAVEMENT IF NO CURB EXISTS).
37. ALL H.D.P.E. PIPE RECLAIMED WATER MAINS SHALL BE S.D.R.11 UNLESS SPECIFICALLY NOTED OTHERWISE. THE HDPE PIPE SHALL BE SIZED TO MATCH THE EXTERNAL DIAMETER OF THE PVC OR DIP PIPE TO WHICH IT IS ATTACHED.
38. 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.

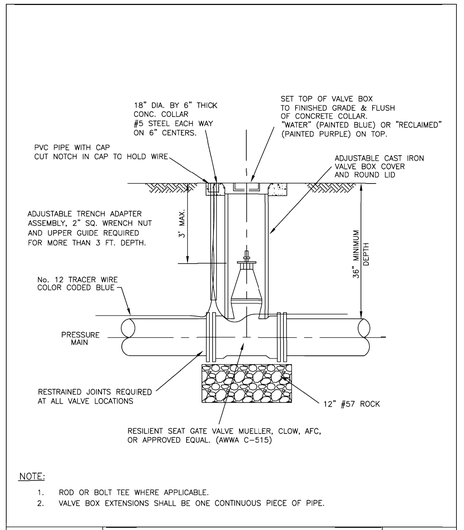
EDGEWATER	STANDARD CONSTRUCTION DETAIL RECLAIMED WATER DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_RW7.DWG DETAIL REF: RW-7



NOTES:

1. HYDRANTS TO BE PAINTED RED.
2. HOSE BIBS TO BE AMERICAN STANDARD THREADS. (FIRE THREAD)
3. RESTRAINED JOINTS REQUIRED. THRUST BLOCKS ARE NOT PERMITTED.
4. ADJUSTABLE TRENCH ADAPTOR ASSY. REQUIRED FOR ALL VALVES GREATER THAN 3' DEEP.
5. INSTALL AT SIDE LOT LINES OR AT CORNERS OF ROADWAY INTERSECTIONS, (TYPICAL)
6. BLUE REFLECTORS TO BE PLACED IN MIDDLE OF TRAVEL LANE ON SIDE OF ROAD THE HYDRANT IS ON.

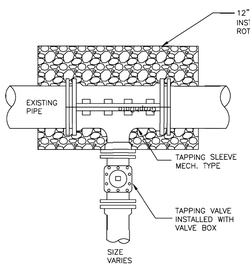
EDGEWATER 2017-10-24	STANDARD CONSTRUCTION DETAIL FIRE HYDRANT ASSEMBLY	FILE NAME: EW_W1.DWG DETAIL REF: W-1



NOTE:

1. ROD OR BOLT TEE WHERE APPLICABLE.
2. VALVE BOX EXTENSIONS SHALL BE ONE CONTINUOUS PIECE OF PIPE.

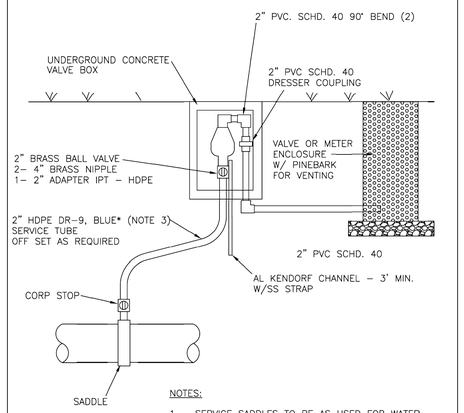
EDGEWATER 2017-10-24	STANDARD CONSTRUCTION DETAIL POTABLE WATER AND/OR RECLAIMED WATER VALVE AND VALVE BOX (2" - 16" VALVE SIZES)	FILE NAME: EW_W2.DWG DETAIL REF: W-2



NOTES:

1. TAPPING SLEEVES SHALL BE ALL STAINLESS STEEL i.e. ROMAC INDUSTRIES, INC. MODEL SST.
2. INSTALL REQUIRED RESTRAINED JOINTS. IN NO INSTANCE SHALL THRUST BLOCK BE PERMITTED.
3. ALL TAPPING OF MAINS SHALL BE SUPERVISED BY THE CITY 48 HRS ADVANCE NOTICE PROVIDED.
4. TAPPING ASSEMBLY TO BE TESTED AT 150 p.s.i. FOR 10 MINUTES PRIOR TO PERFORMING TAP.

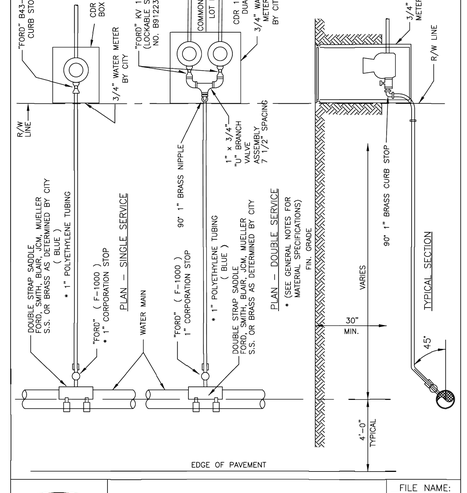
EDGEWATER 2011-06-30	STANDARD CONSTRUCTION DETAIL TAPPING VALVE AND SLEEVE	FILE NAME: EW_W3.DWG DETAIL REF: W-3



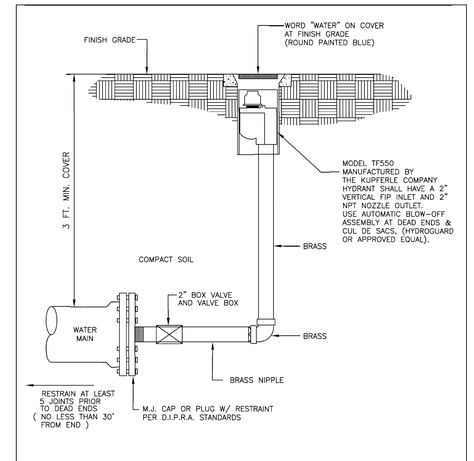
NOTES:

1 - SERVICE SADDLES TO BE AS USED FOR WATER SERVICES
2 - USE FOR SEWER OR RECLAIMED WATER ALSO
3 - GREEN FOR SEWER AND PURPLE FOR RECLAIMED.

EDGEWATER 2011-06-30	STANDARD CONSTRUCTION DETAIL AIR / VACUUM RELEASE VALVE PIT	FILE NAME: EW_W4.DWG DETAIL REF: W-4



EDGEWATER 2017-10-24	STANDARD CONSTRUCTION DETAIL WATER LATERAL SERVICE (3/4" - 2" SIZES)	FILE NAME: EW_W5.DWG DETAIL REF: W-5



NOTES:

1. NO GALVANIZED FITTINGS PERMITTED.

EDGEWATER 2011-06-30	STANDARD CONSTRUCTION DETAIL POTABLE WATER BLOW-OFF ASSEMBLY	FILE NAME: EW_W6.DWG DETAIL REF: W-6

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

PLOTTED: November 18, 2025 – 4:05 PM, BY: Emma Thompson

REVISIONS:

ETM NO. 22-213-03	
DRAWN BY: D.G.S.	
DESIGNED BY: S.A.W.	
CHECKED BY:	
DATE: Issue Date	

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WATER & SEWER DETAILS

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
14D

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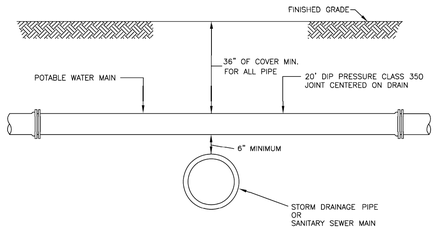


NOTE:

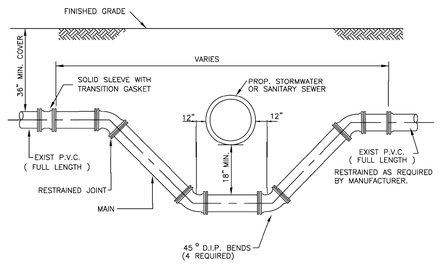
1. CONCRETE ENCASEMENT OF A SANITARY SEWER MAIN IS AN ALTERNATIVE METHOD OF ADDRESSING A CONFLICT WHEN 18" VERTICAL SEPARATION DISTANCE CANNOT BE MAINTAINED. IN SUCH INSTANCES, THE MINIMUM PIPE VERTICAL SEPARATION SHALL BE 6".

EDGEWATER 2011-06-30

STANDARD CONSTRUCTION DETAIL
STORM DRAINAGE PIPE
OR SANITARY SEWER MAIN CONFLICT

FILE NAME: EW_W14.DWG
DETAIL REF: W-14

CONCRETE ENCASEMENT OF SANITARY SEWER IS AN ALTERNATIVE METHOD OF ADDRESSING A CONFLICT WHEN UNABLE TO MAINTAIN 18" VERTICAL SEPARATION DISTANCE. IN SUCH INSTANCES, THE MINIMUM PIPE VERTICAL SEPARATION SHALL BE 6".



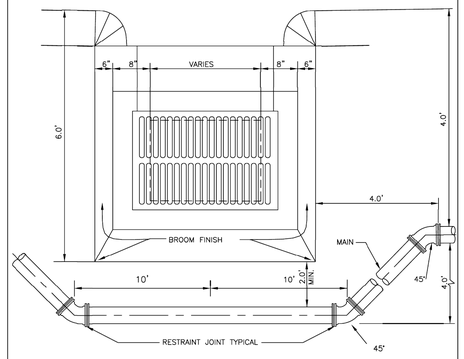
NOTES:

1. LOWERING OF EXISTING WATER MAIN & FORCE MAIN BY DEFLECTION METHOD ACCEPTABLE IF EXISTING FIELD CONDITIONS PERMIT.
2. LENGTH OF SECTION BASED ON MINIMUM LENGTH AS DETERMINED BY DIPRA RESTRAINED JOINT MANUAL.
3. INSTALL RESTRAINED JOINTS, AS REQUIRED, FROM DEFLECTION POINT IN BOTH DIRECTIONS.

EDGEWATER 2011-06-30

STANDARD CONSTRUCTION DETAIL
STORM DRAINAGE PIPE
OR SANITARY SEWER MAIN CONFLICT

FILE NAME: EW_W15.DWG
DETAIL REF: W-15



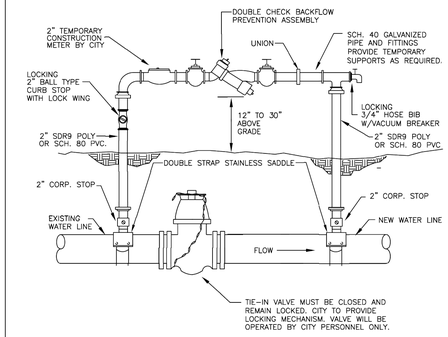
NOTES:

1. MAIN MAY PASS OVER STORM LINE IF 36" OF COVER IS PROVIDED OVER WATER MAIN OR RECLAIMED WATER LINE AND ADEQUATE CLEARANCE IS PROVIDED FROM THE STORM SEWER PIPE.
2. PIPE SHALL BE DEFLECTED AROUND DRAINAGE INLET IN ACCORDANCE WITH THE RESTRAINED JOINT GUIDELINES OF THE DIPRA AND ADAPTED TO PVC PIPE AS NECESSARY.

EDGEWATER 2011-06-30

STANDARD CONSTRUCTION DETAIL
MAIN INSTALLATION BETWEEN
DRAINAGE INLET AND SIDEWALK

FILE NAME: EW_W16.DWG
DETAIL REF: W-16



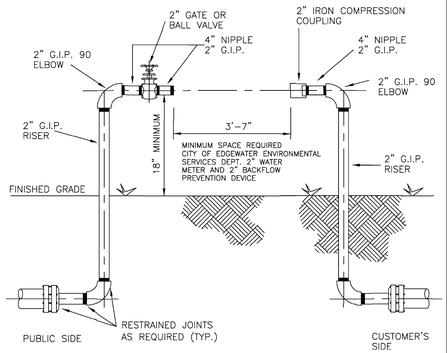
NOTES:

1. PROVIDE SUPPORT AND/OR PROTECTIVE MEASURES TO PREVENT ABOVE GROUND PIPE BEING BROKEN.

EDGEWATER 2011-06-30

STANDARD CONSTRUCTION DETAIL
TEMPORARY JUMPER CONNECTION

FILE NAME: EW_W20.DWG
DETAIL REF: W-20



NOTE:

1. PROVIDE SUPPORT OR PROTECTIVE POSTS.

EDGEWATER 2011-06-30

STANDARD CONSTRUCTION DETAIL
CONTRACTORS' INSTALLATION REQUIREMENTS
FOR A 2" TEMPORARY METER

FILE NAME: EW_W21.DWG
DETAIL REF: W-21

POTABLE WATER DESIGN AND CONSTRUCTION NOTES

1. THE CITY'S PUBLIC UTILITIES DEPARTMENT (424-2460) SHALL BE GIVEN A MINIMUM OF 48 HOURS ADVANCE NOTICE (NOT INCLUDING HOLIDAYS OR WEEKENDS) PRIOR TO BEGINNING ANY POTABLE WATER SYSTEM CONSTRUCTION.
2. DEWATERING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW WATER MAIN BEING LAID
3. ALL WATER MAINS SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
4. TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE CITY WITH A MINIMUM COMPACTION OF 98% IN PAVED AREAS AND 95% IN UNPAVED AREAS IN ACCORDANCE WITH AASHTO T-180.
5. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 1 FOOT ABOVE THE PIPE AND AT 1 FOOT VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET.
6. 3" METALLIZED PIPE LOCATION TAPE SHALL BE LOCATED BETWEEN 15" AND 24" BELOW FINISHED GRADE OR AS SPECIFIED BY MANUFACTURER FOR ALL PVC LINES. MARKER TAPE SHALL BE USED ON ALL DUCTILE IRON PIPE, AND 12 GUAGE TRACING WIRE AS WELL.
7. ALL SINGLE RESIDENTIAL WATER SERVICES SHALL BE 3/4", DOUBLE RESIDENTIAL SERVICES SHALL BE 1", AND COMMERCIAL SERVICES 1-1/2" OR 2". POLYETHYLENE TUBING SHALL BE USED, IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS: POLYETHYLENE TUBING SHALL BE CTS 3408 HIGH DENSITY TUBING, BLUE IN COLOR, AND RATED FOR A MINIMUM OF 200 P.S.I. WITH SDR OF 9 (CTS). THE TUBING SHALL HAVE A VIRGIN HIGH DENSITY POLYETHYLENE CENTER FOR WHICH THE MANUFACTURER SHALL FURNISH A CERTIFICATE OF PURITY. THE TUBING SHALL HAVE UV PROTECTION AND SHALL NOT BE AFFECTED BY DIRECT SUNLIGHT. THE TUBING SHALL COMPLY WITH OR EXCEED THE APPLICABLE STANDARDS OF A.S.T.M. D1248, D3350, D2239, D2737, N.S.F. 14 AND A.W.W.A. C901 AND SHALL COME WITH A LIFETIME WARRANTY.

   ACCEPTABLE MANUFACTURERS: ENDOT ENDO PURE OR APPROVED EQUAL
8. ALL WATER SERVICE ENDINGS SHALL BE MARKED WITH A 2" X 4" LUMBER (PRESSURE TREATED) EXTENDING 4 FEET ABOVE GRADE, WITH WATER SERVICES SECURED 12" MAXIMUM ABOVE THE GROUND AND ANY "U" BRANCHES FOR DOUBLE SERVICES SHALL BE AT GROUND LEVEL. ALL SERVICES SHALL BE LOCKED.
9. WATER VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND AT MAXIMUM SPACINGS OF 750 FEET.
10. AT ALL WATER MAIN TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL LEGS EXCEPT ONE.
11. APPROVED WATER VALVE TYPES ARE THE FOLLOWING:
    A. RESILIENT SEAT GATE VALVES 24" DIAMETER AND SMALLER (AWWA C-509)
    B. BUTTERFLY VALVES GREATER THAN 24" (AWWA C-504)
    C. TAPPING VALVES WITH MECHANICAL TAPPING SLEEVE.
12. ALL WATER VALVES SHALL BE ADJUSTED TO FINISHED GRADE WITH CONCRETE COLLARS AND THE CAPS PAINTED BLUE TO MAKE THEM PLAINLY VISIBLE.
13. UPON FINAL ACCEPTANCE OF NEW WATER SYSTEMS, WATER VALVES SHALL BE COMPLETELY OPENED BY PUBLIC UTILITIES PERSONNEL. AT NO TIME SHALL CONTRACTOR OPERATE ANY EXISTING VALVES.
14. TYPICALLY, A MINIMUM OF ONE FIRE HYDRANT SHALL BE LOCATED AT EVERY INTERSECTION. OTHER FIRE HYDRANTS SHALL BE LOCATED SO AS TO PRODUCE A MAXIMUM 375 FEET HOSE LAY ALONG THE STREET FOR ALL RESIDENTIAL BUILDINGS.

EDGEWATER 2011-06-30

STANDARD CONSTRUCTION DETAIL
POTABLE WATER DESIGN AND
CONSTRUCTION NOTES

FILE NAME: EW_W22.DWG
DETAIL REF: W-22

POTABLE WATER DESIGN AND CONSTRUCTION NOTES (CONTD.)

15. ALL FIRE HYDRANTS SHALL BE CONSTRUCTED TO MAKE THEM EASILY ACCESSIBLE TO FIRE PERSONNEL IN CASE OF A FIRE. THE PRIMARY HYDRANT PORT SHOULD ALWAYS FACE THE STREET.
16. AS STANDARD PRACTICE, WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF CURB OR AS APPROVED BY THE CITY.
17. ALL WATER MAINS SHALL BE NSF-APPROVED FOR POTABLE WATER USE, AND SHALL HAVE A MINIMUM COVER OF 36 INCHES.
18. ALL PROPOSED WATER MAINS SHALL BE FLUSHED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS.
19. WATER MAINS SHALL BE C-900 PVC OR C-905 CL 150 (COLOR"BLUE") OR D.I.P. PRESSURE CLASS 350 STANDARD CEMENT LINED UNLESS OTHERWISE APPROVED BY THE CITY.
20. 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 DEPARTMENT OF HEALTH AND AS-BUILTS ARE PROVIDED TO THE CITY PRIOR TO ANY USE OF THIS SYSTEM .
21. WATER DISTRIBUTION SYSTEM SHALL BE DESIGNED TO COMPLY WITH THE CITY'S FIRE (WATER) FLOW CODE.
22. IN AREAS WHERE RECLAIMED WATER IS NOT AVAILABLE THE CONTRACTOR SHALL BE REQUIRED TO (UPON SATISFACTORY COMPLETION OF THE PRESSURE TEST) TRANSFER THE WATER FROM THE POTABLE WATER LINES TO THE RECLAIMED WATER LINES FOR UTILIZATION IN THEIR PRESSURE TEST.
23. IN AREAS WHERE RECLAIMED WATER IS AVAILABLE, RECLAIMED WATER WILL BE UTILIZED IN THE PRESSURE TESTING OF NEW RECLAIMED WATER LINES.
24. ALL POTABLE WATER MAINS SHALL USE A THRUST RESTRAINT JOINT METHOD IN COMPLIANCE WITH THE DUCTILE IRON PIPE RESEARCH ASSOCIATION (DIPRA) GUIDELINES. IN THE EVENT THAT PVC FITTINGS ARE SPECIFIED, THE RESTRAINT SHALL BE MODIFIED IN ACCORDANCE WITH THE RECOMMENDED ADDITIONAL RESTRAINT LENGTH REQUIRED FOR PIPE WRAPPED WITH POLYETHYLENE.
25. MEGALUGS, BOLTLESS RESTRAINED JOINTS, GRIPPER GASKETS, OR STAR GRIPS SHALL BE USED ON ALL RESTRAINED JOINT INSTALLATIONS. MINIMUM DEPTH OF BURY ON PIPES NOT MEETING REQUIRED COVER REQUIREMENTS SHALL FOLLOW THE MOST RECENT DIPRA THRUST RESTRAINT DESIGN GUIDELINES.
26. GRIPPER RING GASKETS BY ROMAC AND OR STAR AU-GRIP MAY BE USED AS APPROPRIATE FOR RESTRAINING PRESSURE PIPE TO FITTINGS, VALVES, ETC.
27. WATER SYSTEMS SHALL BE PRESSURE TESTED AT 150 PSI STATIC PRESSURE FOR A PERIOD OF 4 HOURS PER AWWA STANDARDS.
28. ALL WATER SERVICES SHALL BE MARKED WITH AN "/\" SAW CUT INTO THE CURB AND METAL TABS SET INTO THE PAVEMENT.
29. ALL WATER VALVES SHALL BE MARKED WITH AN "X" SAW CUT INTO THE CURB AND METAL TABS SET INTO THE PAVEMENT. BLOW-OFFS SHALL BE MARKED SIMILARLY, AS WELL.
30. WATER SERVICES SHALL BE NORMALLY DOUBLE 1" SERVICES LOCATED AT SIDE LOT LINES. IN INSTANCES WHERE SERVICES NEED TO BE OFFSET, 3/4" SINGLE SERVICES SHALL BE SPECIFIED. THESE SERVICES MAY BE OFFSET A MAXIMUM OF 2.0' FROM SIDE LOT LINES.
31. ALL TAPPING OF MAINS SHALL BE SUPERVISED BY THE CITY SCHEDULING OF THESE CONNECTIONS SHALL REQUIRE A MINIMUM 48 HOUR NOTIFICATION (MEASURED ON NORMAL WORK DAYS) DIRECTED TO THE CITY'S DESIGNATED SITE INSPECTOR. THE CONNECTION SHALL BE SCHEDULED TO COMMENCE BETWEEN 8:00 A.M. AND NOON ON THE APPROPRIATE DAY.

EDGEWATER 2011-06-30

STANDARD CONSTRUCTION DETAIL
POTABLE WATER DESIGN AND
CONSTRUCTION NOTES

FILE NAME: EW_W23.DWG
DETAIL REF: W-23

POTABLE WATER DESIGN AND CONSTRUCTION NOTES (CONTD.)

32. ALL PROPOSED POTABLE WATER MAINS SHALL BE FLUSHED, DISINFECTED, PRESSURE TESTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE WHEN APPROPRIATE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE WITH CITY PERSONNEL AT THE WATER TREATMENT PLANT AT LEAST 48 HOURS PRIOR TO BEGINNING FLUSH OF THE MAINS PRIOR TO THE COMMENCEMENT OF PRESSURE TESTING.
33. THE CONTRACTOR SHALL BE REQUIRED TO PIG ALL POTABLE MAINS IN EXCESS OF 8" IN DIAMETER AND PRIMARY DISTRIBUTION MAINS LOCATED ON COLLECTOR AND ARTERIAL ROADWAYS. LAUNCHING AND EXTRACTION POINTS SHALL BE DETERMINED BY THE CONTRACTOR.
34. WITH RESPECT TO TIE-IN CONNECTIONS , 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.
35. ALL WORK PERFORMED UPON POTABLE WATER FACILITIES OWNED OR PROPOSED TO BE OWNED BY THE CITY SHALL BE CONSTRUCTED BY AN UNDERGROUND UTILITY CONTRACTOR OR GENERAL CONTRACTOR LICENSED IN THE STATE OF FLORIDA AND REGISTERED WITH THE CITY.
36. FOR CONSTRUCTION PURPOSES, THE PLANS SHALL DIMENSION THE PROPOSED LOCATIONS OF ALL WATER MAINS MEASURED FROM THE BACK OF CURB (OR EDGE OF PAVEMENT, IF NO CURB IS USED).
37. POTABLE WATER SYSTEM EXTENSIONS MAY NOT BE USED PRIOR TO FINAL TESTING, CLEARANCE AND ACCEPTANCE BY THE CITY OF EDGEWATER. THIS INCLUDES CONSTRUCTION WATER REQUIRED FOR SEWER LINE CLEANING OR RELATED USES.
38. ALL H.D.P.E. PIPE UTILIZED FOR WATER, FORCE MAIN AND/OR RECLAIMED WATER MAIN EXTENSIONS SHALL BE S.D.R. 11 UNLESS SPECIFICALLY NOTED OTHERWISE. THE HDPE PIPE SHALL BE SIZED TO MATCH THE EXTERNAL DIAMETER OF THE PVC OR DIP PIPE TO WHICH IT IS ATTACHED.
39. 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.
40. ALL VALVES 2" AND LARGER SHALL BE STANDARD 2" BOX VALVES (CORP STOPS ARE NOT ACCEPTABLE).
41. WHERE POTABLE WATER AND SANITARY SEWER MAINS CROSS WITH LESS THAN EIGHTEEN (18) INCHES OF VERTICAL CLEARANCE OR WHERE THE SEWER MAIN IS ABOVE THE WATER MAIN, THE SEWER MAIN SHALL BE ENCASED WITH CONCRETE OR ENCLOSED IN A WATER TIGHT CARRIER PIPE, OR UPGRADED TO DUCTILE IRON PIPE OR PRESSURE RATED PVC PIPE (MEETING THE AWWA C-900 OR C905 SPECIFICATION) FOR A MINIMUM LENGTH OF (20) FEET, CENTERED ON THE POINT OF CROSSING. A MINIMUM HORIZONTAL SEPARATION OF (10) TEN FEET (EDGE TO EDGE) BETWEEN POTABLE WATER MAINS AND SEWER MAINS SHALL BE MAINTAINED WHEN AT ALL POSSIBLE. WHEN THE 10-FOOT HORIZONTAL SEPARATION CANNOT BE MAINTAINED THE WATER MAIN SHALL BE INSTALLED IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF AT LEAST 18" ABOVE THE SEWAGE MAIN. ALTERNATIVELY, THE SEWER MAIN SHALL BE ENCASED WITH CONCRETE OR ENCLOSED IN A WATER TIGHT CARRIER PIPE, OR UPGRADED TO DUCTILE IRON PIPE OR PRESSURE RATED PVC PIPE (MEETING THE AWWA C-900 OR C-905 SPECIFICATION) AND PRESSURE TESTED.

EDGEWATER 2011-06-30

STANDARD CONSTRUCTION DETAIL
POTABLE WATER DESIGN AND
CONSTRUCTION NOTES

FILE NAME: EW_W24.DWG
DETAIL REF: W-24

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03	
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE: Issue Date	

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WATER & SEWER DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
14E

PLOTTED: November 18, 2025 - 4:06 PM, BY: Emma Thompson

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TECHNICAL SPECIFICATIONS FOR MECHANICAL JOINT
DUCTILE IRON PIPE FITTINGS

ALL MECHANICAL JOINT DUCTILE IRON PIPE FITTINGS SHALL BE IN ACCORDANCE WITH ACCEPTABLE STANDARDS AND COMPLY WITH THE FOLLOWING SPECIFICATIONS:

MATERIAL:

A.S.T.M. A536 MINIMUM GRADE 70-50-5 IN ACCORDANCE WITH A.W.W.A. C153 (A.N.S.I. A21.53)

PRESSURE:

CLASS 350 IN ACCORDANCE WITH A.W.W.A. C153 (A.N.S.I. A21.53) 350 PSI WATER WORKING PRESSURE.

TESTING:

IN ACCORDANCE WITH A.W.W.A. C153 (ANSI A21.53). THREE TIMES WATER WORKING PRESSURE (350 PSI). BODY CAPABLE OF WITHSTANDING HYDROSTATIC TEST OF 1050 PSI.

FLOW:

I.D. EQUAL TO I.D. OF CLASS 50/51 DUCTILE IRON PIPE, THUS ALLOWING THE FULL FLOW FEATURE.

LAYING LENGTH:

SHORT BODY (COMPACT)

CEMENT LINING:

IN ACCORDANCE WITH A.W.W.A. C104 (A.N.S.I. A21.4)

MECHANICAL JOINTS:

IN ACCORDANCE WITH A.N.S.I./A.W.W.A. C111/A21.11

GASKETS:

SBR IN ACCORDANCE WITH A.W.W.A. C111 A.N.S.I. A21.11

TEE HEAD BOLTS:

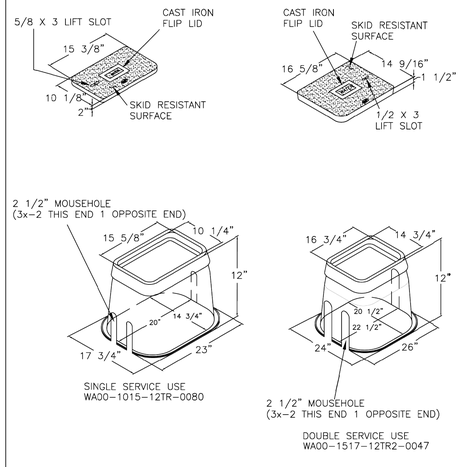
COR-TEN IN ACCORDANCE WITH A.W.W.A. C111 (A.N.S.I. A21.11)

ACCEPTABLE MANUFACTURERS:
TYLER, CLOW, GRIFFIN, U.S. PIPE, UNION FOUNDRY, AMERICAN CAST IRON OR APPROVED EQUAL

EDGEWATER
2011-06-30

STANDARD CONSTRUCTION DETAIL
TECHNICAL SPECIFICATIONS FOR
MECHANICAL JOINT
DUCTILE IRON PIPE FITTINGS

FILE NAME: EW_W25.DWG
DETAIL REF: W-25



EDGEWATER
2011-06-30

STANDARD CONSTRUCTION DETAIL
VALVE BOX
SINGLE AND DOUBLE SERVICE

FILE NAME: EW_W26.DWG
DETAIL REF: W-26

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

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CA- 00002584 LC-0000316

WATER & SEWER DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
14F

PLOTTED: November 18, 2025 – 4:07 PM, BY: Emma Thompson

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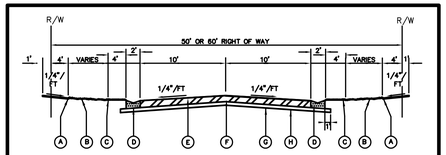


(A) 4'-0" WIDE CONCRETE SIDEWALK
4" THICK, 3000 P.S.I.
6" THICK AT DRIVEWAY
3" MINIMUM ABOVE TOP OF CURB

(B) SOD or SEED AND MULCH PER F.D.O.T. STANDARD SPECIFICATION SECTION 570 OR 575, AS APPLICABLE.

(C) 4' WIDE AREA WITH MAXIMUM SLOPE OF 1" PER 4 FT.

(D) CONCRETE MIAMI CURB, 3000 P.S.I. (SEE DETAIL R-9)

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

(F) BASE:
6" SOIL CEMENT BASE FOR RESIDENTIAL MINIMUM BEARING STRENGTH OF 350 P.S.I. SHALL BE OBTAINED WITHIN 7 DAYS COMPACTED TO 98% DENSITY BASED ON 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) FOR RESIDENTIAL COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.

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

(H) SUBGRADE:
12" SUBGRADE COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST WITH MINIMUM LBR 40.

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 CITY APPROVED 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
50' or 60' R/W ROAD SECTION

FILE NAME: EW_R1.DWG
DETAIL REF: R-1

ROAD CLASSIFICATION	DESIGN SPEED (MPH)	LANE WIDTH (LW)	RIGHT OF WAY WIDTH	MIN. HORIZ. RADIUS C.L.	MIN. VERT. CURVE	MIN. LONG. GRADE (%)	MIN. INT. SPACE
LOCAL / COLLECTOR UP TO 400 VPD	15	10	50	50'	75'	0.3	150'
	20	10	50	95'	125'	0.3	200'
UP TO 1000 VPD	25	11	50	180'	165'	0.3	250'
	20	11	50	95'	125'	0.3	200'
UP TO 5000 VPD	25	11	60	180'	165'	0.3	250'
	30	12	80	300'	200'	0.3	330'
	35	12	80	375'	225'	0.5	660'
	40	12	80	450'	275'	0.5	660'
ARTERIAL UP TO 7500 VPD	35	5 LANES (3)		375'	225'	0.5	660'
	40			450'	275'	0.5	660'
OVER 7500 VPD	40			450'	275'	0.5	660'

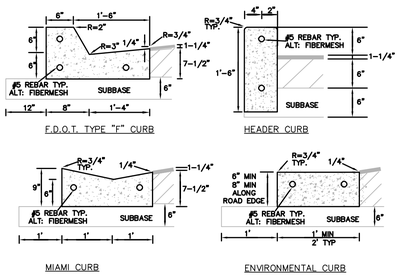
NOTES:
1. ALL ROADWAY DESIGN SHALL MEET THE MINIMUM REQUIREMENTS OF THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS (LATEST EDITION), AS PUBLISHED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION.
2. PAVEMENT WIDTHS FOR INDUSTRIAL AND COMMERCIAL ROADS SHALL BE INCREASED BY A MINIMUM OF ONE (1) FOOT.
3. AS A RULE, ALL INTERSECTIONS SHALL BE DESIGNED AT 90 DEGREE ANGLES. DEVIATION FROM THIS SHALL BE CONSIDERED STRICTLY ON A CASE BY CASE BASIS. IN THE EVENT THAT ANY DEVIATION IS PERMITTED, THEN IN NO CASE SHALL INTERSECTION ANGLES BE LESS THAN 75 DEGREES FOR INTERSECTIONS WITH ARTERIAL ROADWAYS EXCEPT ON LOCAL AND COLLECTOR ROADWAYS WHICH SHALL NOT BE LESS THAN 60 DEGREES. INTERSECTIONS WITH COUNTY AND STATE ROADS SHALL BE 90 DEGREES.
4. ALL INTERSECTIONS AND ACCESS POINTS SHALL HAVE ADEQUATE LINE OF SIGHT BASED ON AN EYE LEVEL OF 3.5' ABOVE THE GROUND AND AN OBJECT 3.0' ABOVE THE LOWEST ROADWAY. FOR PURPOSES OF THIS STANDARD, THE EYE LEVEL SHALL BE MEASURED 8' IN BACK OF THE STOP BAR AT ENTRANCES. THE FOLLOWING SIGHT DISTANCES SHALL BE PROVIDED:
5. TRAFFIC ANALYSIS IS REQUIRED FOR ANY NEW DEVELOPMENT PROJECT THAT MAY PRODUCE 500 OR MORE NEW AVERAGE DAILY TRIPS.

DESIGN SPEED (MPH)	20	25	30	35	40	45	50	55
SIGHT DISTANCE (FT) (MINIMUM)	200	250	300	350	400	450	500	550

LEGEND:
C.L. CENTER-LINE
INT. INTERSECTION
LONG. LONGITUDINAL

STANDARD CONSTRUCTION DETAIL
ROADWAY GEOMETRY

FILE NAME: EW_R6.DWG
DETAIL REF: R-6

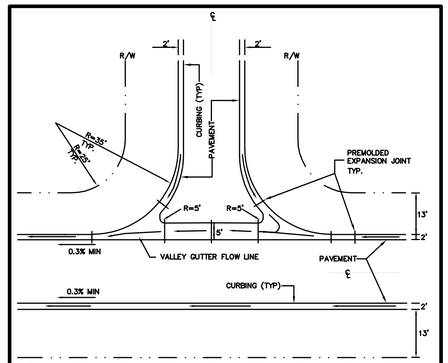


NOTES:
1. ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE REINFORCED W/ #5 REBAR OR FIBERMESH
2. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 500', CONSTRUCTION JOINT REQUIRED EVERY 10' MAXIMUM (4" MINIMUM).
3. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED AT EACH SIDE OF ALL STORM INLET STRUCTURES 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

2016-03-21

STANDARD CONSTRUCTION DETAIL
STANDARD CURB CONSTRUCTION

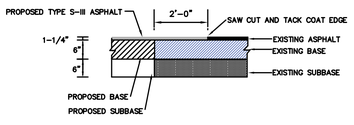
FILE NAME: EW_R9.DWG
DETAIL REF: R-9



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

STANDARD CONSTRUCTION DETAIL
ROADWAY INTERSECTION VALLEY GUTTER

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



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
0.25- 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 ITS 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.

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.

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 EVALUATE 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.

STANDARD CONSTRUCTION DETAIL
ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES

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

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

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PAVING AND DRAINAGE DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
15A

PLOTTED: November 18, 2025 – 4:07 PM, BY: Emma Thompson

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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.

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.

STANDARD CONSTRUCTION DETAIL
ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES

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

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

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 (USE 50 % SCARIFIED SEED)	50%
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.

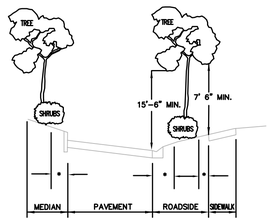
MULCH USED SHALL BE STRAW OR HAY CONSISTING OF OATS, RYE, OR WHEAT STRAW, OR OF PANGOLA, PEANUT, COASTAL BERMUDA, OR BAHIA GRASS HAY. MULCH SHALL BE FREE FROM UNDESIRABLE WEED AND OTHER UNDESIRABLE GRASS.

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



ROADWAY CLEAR ZONES (*)					
	DESIGN SPEED (MPH)				
TYPE FACILITY	25 & BELOW	30	35	40	45+
DISTANCE FROM EDGE OF PAVEMENT	6'	6' LOCAL 10' COLLECTOR 14' ARTERIAL	6' LOCAL 10' COLLECTOR 14' ARTERIAL	10' COLLECTOR 14' ARTERIAL	F.D.O.T. STANDARD
DISTANCE FROM SIDEWALK	1.5	1.5	1.5	1.5	F.D.O.T. STANDARD

* SEE NOTES ON SHEET R-21B *

STANDARD CONSTRUCTION DETAIL
ROADWAY AND MISCELLANEOUS LANDSCAPING DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_R21A.DWG
DETAIL REF: R-21A

ROADWAY AND MISCELLANEOUS LANDSCAPING
DESIGN AND CONSTRUCTION NOTES (CONTD.)

NOTES:

1. THE CLEAR ZONE MAY BE REDUCED ON A CASE BY CASE BASIS IF THE MINIMUM OFFSET CANNOT BE REASONABLY OBTAINED OR IF A NON-MOUNTABLE CURBE TYPE IS INSTALLED.

2. TREES IN EXCESS OF 12" CALIPER AT MATURITY AND MULTI-TRUNKED PALMS SHALL BE SET BACK TO TWICE THE MINIMUM CLEAR ZONE (2 X *).

3. WHERE PAVEMENT WIDENING IN ACCORDANCE WITH FDOT STANDARDS IS NOT PROVIDED IN HORIZONTAL CURVES, ADDITIONAL CLEAR ZONE SHALL BE PROVIDED EQUAL TO THE REQUIRED PAVEMENT WIDENING.

4. CLEAR ZONES ON CURBED ROADS SHALL BE MEASURED FROM THE FACE OF CURB OR FROM THE EDGE OF THE THROUGH LANE ON RURAL ROADS. CURBED STREETS ARE FOR HIGH BACK CURBS ONLY.

5. SHRUBS ADJACENT TO SIDEWALKS AND WITHIN INTERSECTION SIGHT TRIANGLES CANNOT EXCEED 24" ABOVE THE LOWEST ADJACENT ROADWAY GRADE. ALL OTHER SHRUBS MUST BE LESS THAN OR EQUAL TO 30 INCHES IN HEIGHT.

6. INSTALLATION OF LANDSCAPING IN PUBLIC RIGHTS-OF-WAY REQUIRES EXECUTION OF A "USE AGREEMENT" BETWEEN THE DEVELOPER AND THE CITY. FOR INSTANCES WHERE THE STREETS AND PRIVATE AND PUBLIC UTILITY EASEMENTS ARE PROVIDED, THE DEVELOPER MAY BE REQUIRED TO OBTAIN A RELEASE FROM THE FRANCHISE UTILITIES IN ORDER TO INSTALL THE LANDSCAPING IMPROVEMENTS.

7. LANDSCAPING 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.

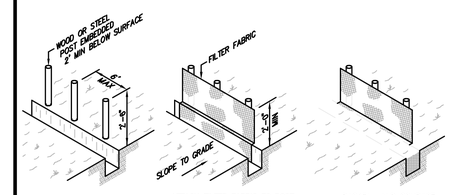
8. SHRUBS, UNDERSTORY, TREES AND PALMS SHALL BE ALLOWED IN THE RIGHT-OF-WAY WITH EXISTING AND PROPOSED UTILITIES. SHADE TREES, ESPECIALLY THOSE WITH AGGRESSIVE ROOT SYSTEMS, WILL REQUIRE SPECIFIC CITY APPROVAL.

9. SHADE TREES MUST NOT BE PLANTED UNDER OR DIRECTLY ADJACENT TO OVERHEAD UTILITIES THAT WOULD REQUIRE EXCESSIVE PRUNING TO AVOID THE UTILITY LINES.

10. TREES WITH AGRESSIVE ROOT SYSTEMS SHALL REQUIRE SOME FORM OF ROOT GUIDING SYSTEM TO PREVENT THE UPHEAVAL OF ADJACENT ROADWAY PAVEMENT AND/OR SIDEWALKS.

STANDARD CONSTRUCTION DETAIL
ROADWAY AND MISCELLANEOUS LANDSCAPING DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_R21B.DWG
DETAIL REF: R-21B



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

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

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PAVING AND DRAINAGE DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
15B

PLOTTED: November 18, 2025 - 4:07 PM, BY: Emma Thompson

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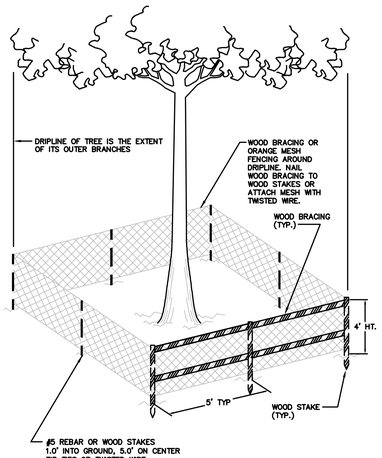
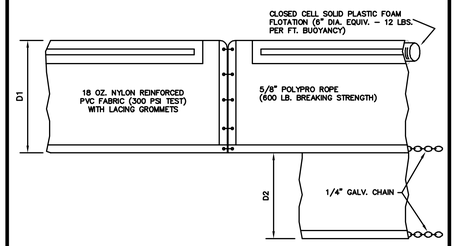


NOTE: BARBED WIRE FENCING IS NOT PERMISSIBLE

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

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

	IN CITY RIGHT-OF-WAY:		ON RESIDENTIAL PRIVATE PROPERTY (SINGLE FAMILY OR DUPLEX)
	TRANSVERSE (FROM ROAD TO PROPERTY)	LONGITUDINAL (E.G. IMPROVING A SHELL ROAD)	
DRIVEWAY WIDTH:	9' MIN – 24' MAX (CUMULATIVE)	18' MIN – 50% R/W MAX	6' MIN
TURN-OUT GEOMETRY:	≤ 30 MPH: MAX 10' TOTAL WIDER THAN DRIVEWAY 35-45 MPH: R=25' MIN (SEE NOTE 5) >45 MPH: FDOT STANDARD	≤30-45 MPH: R=25' MIN (SEE NOTE 5) >45 MPH: FDOT STANDARD	N/A
ALLOWABLE MATERIALS:	ASPHALT (PER DETAIL R-1, ITEMS E, F, & G) CONCRETE (PER DETAIL R-19) THE FOLLOWING ARE BY WRITTEN CONSENT ONLY: PAVERS (OR SIMILAR) TURFBLOCK (OR SIMILAR) THE FOLLOWING ARE NOT ALLOWED: GRANULAR MATERIALS PAVED WHEELPATHS	ASPHALT (PER DETAIL R-1, ITEMS E, F, & G) CONCRETE (PER DETAIL R-19) THE FOLLOWING ARE BY WRITTEN CONSENT ONLY: PAVERS (OR SIMILAR) TURFBLOCK (OR SIMILAR) IMPROVED GRANULAR MAT'LS PAVED WHEELPATHS	ASPHALT (PER DETAIL R-1, ITEMS E, F, & G) CONCRETE (PER DETAIL R-19) PAVERS (OR SIMILAR) TURFBLOCK (OR SIMILAR) IMPROVED GRANULAR MAT'LS PAVED WHEELPATHS

NOTES:

1. PAVERS, GRAVEL, MILLINGS AND OTHER IMPROVED GRANULAR OR NON-UNIFORM SURFACES ARE ONLY ALLOWED IN LIMITED APPLICATIONS WITHIN THE CITY RIGHT-OF-WAY BY WRITTEN CONSENT OF THE TECHNICAL REVIEW COMMITTEE. SUCH SURFACES ARE NOT CONSIDERED EQUAL TO HARDSCAPE PAVING (I.E. CONCRETE OR ASPHALT). PROPERTY OWNERS WISHING TO INSTALL SUCH SURFACE ADJACENT TO THEIR PROPERTY SHALL EXECUTE A HOLD HARMLESS AGREEMENT INDEMNIFYING THE CITY AGAINST THE MAINTENANCE, REPAIR, AND/OR REPLACEMENT OF SIMILAR SURFACE.

2. FOR ASPHALT PAVEMENT, REFER TO ITEMS E, F, & G OF DETAIL R-1.
   FOR CONCRETE PAVEMENT, REFER TO DETAIL R-19. CAN BE MIN 4" THICK ON RESIDENTIAL PROPERTY WITH REINFORCEMENT.
   (THE LATEST VERSION OF FDOT SPECIFICATIONS SHALL BE ACCEPTED IN LIEU OF THE ABOVE.)
   FOR ALL OTHER SURFACES:
   12" SUBBASE COMPACTED TO 98% MAX DENSITY MODIFIED PROCTOR ASSHTO T-180 MIN LBR=40

3. FOR IMPROVED GRANULAR SURFACE (E.G. ANY GRANULAR SURFACE OTHER THAN SHELL OR DIRT):
   - CONSTRUCT CURBING ALONG ALL EDGES. SEE DETAIL R-9 FOR CURB OPTIONS AND SPECIFICATIONS.
   - FINISHED THICKNESS OF IMPROVED GRANULAR MATERIAL TO BE MIN 6". CAN BE MIN 4" THICK ON RESIDENTIAL PROPERTY.
   - COMPACT GRANULAR MATERIAL VIA ROLLER OR PLATE. MILLINGS MUST BE ROLLED.

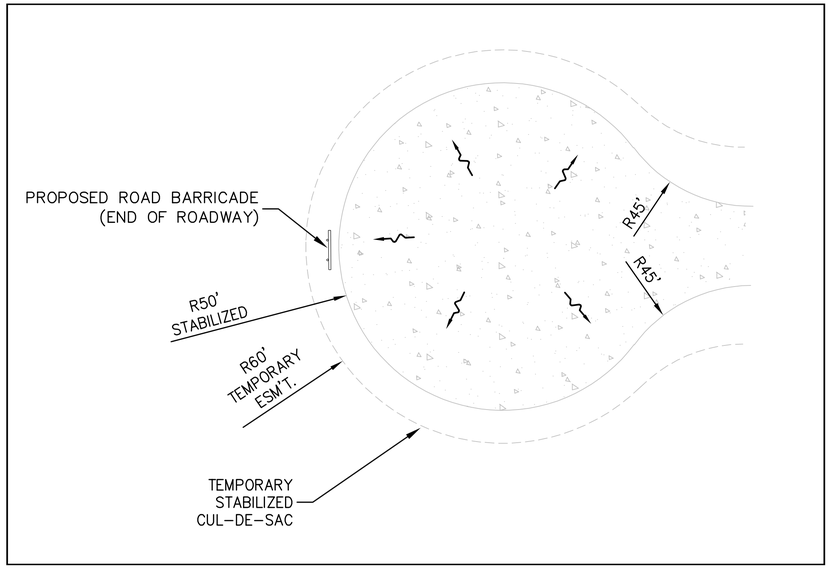
4. PAVERS, MILLINGS, AND OTHER SIMILAR SURFACES SHALL INCORPORATE A CROSS-SLOPE OF 1/4"/FT DIRECTED TO THE NEAREST ADJACENT STORMWATER FEATURE (EXISTING OR PLANNED).

5. MINIMUM TURN-OUT RADIUS MAY BE INCREASED DUE TO ANTICIPATED TRAFFIC VOLUMES AT DISCRETION OF TECHNICAL REVIEW COMMITTEE.

2016-03-17

STANDARD CONSTRUCTION DETAIL
DRIVEWAY DETAIL – RESIDENTIAL

FILE NAME: EW_R27.DWG
DETAIL REF: R-27



PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE: Issue Date	

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PAVING AND DRAINAGE DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
15C

PLOTTED: November 18, 2025 – 4:07 PM, BY: Emma Thompson

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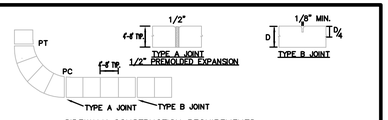
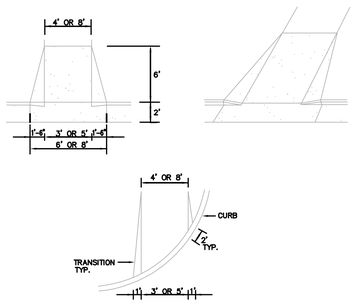


SIDEWALK CONSTRUCTION REQUIREMENTS

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.

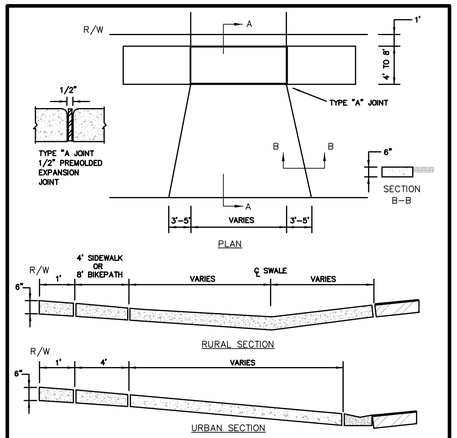
	STANDARD CONSTRUCTION DETAIL SIDEWALK CONSTRUCTION REQUIREMENTS	FILE NAME: EW_M2.DWG DETAIL REF: M-2



NOTES:

1. RAMP LOCATIONS ARE TO BE COORDINATED WITH AND IN COMFORMANCE 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 DISABLITIES ACT.

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

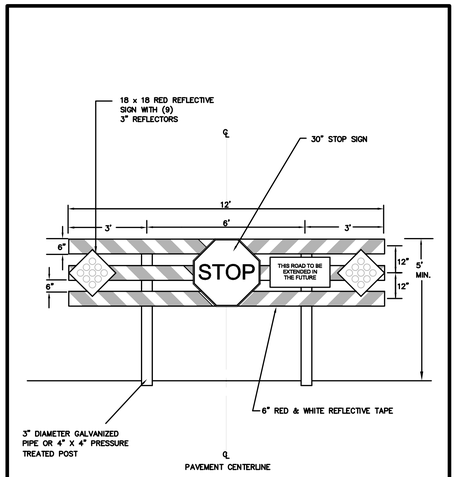


(SECTION A-A)

NOTES:

1. DRIVEWAY APRON BASE TO BE COMPACTED AND TESTED TO 98% DENSITY WITH MINIMUM L.B.R. 40 BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
2. CONCRETE DRIVEWAY APRON TO BE 28 DAY, 3000 P.S.I.
3. DRIVEWAY WIDTHS OF 14' OR MORE SHALL HAVE A CONTROL JOINT LENGTH-WISE.

	STANDARD CONSTRUCTION DETAIL DRIVEWAY APRON	FILE NAME: EW_M4.DWG DETAIL REF: M-4



	STANDARD CONSTRUCTION DETAIL ROAD BARRICADE	FILE NAME: EW_M7.DWG DETAIL REF: M-7

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

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.

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

STREET AND WALKWAY LIGHTS

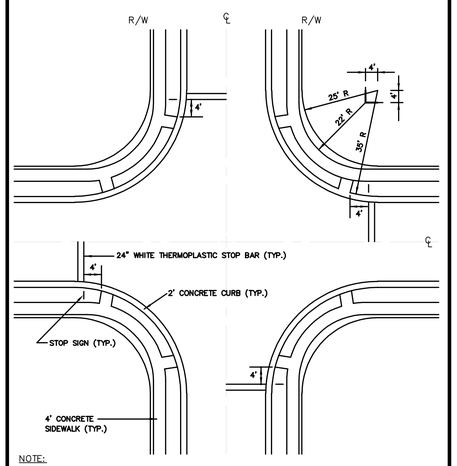
WALKWAY LIGHTS: (HEIGHT: 10 TO 20 FEET)

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 / 3610-T) OR COLONIAL (4620TF-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.)

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



NOTE:

1. REFER TO DETAIL SHEET M-2 FOR SIDEWALK CONSTRUCTION SPECIFICATIONS.
2. REFER TO DETAIL SHEET M-3 FOR SIDEWALK & BIKEPATH RAMP SPECIFICATIONS.

	STANDARD CONSTRUCTION DETAIL SIDEWALK CONSTRUCTION AT INTERSECTIONS	FILE NAME: EW_M18.DWG DETAIL REF: M-18

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 80967

PLOTTED: November 18, 2025 – 4:07 PM, BY: Emma Thompson

REVISIONS:

ETM NO. 22-213-03	
DRAWN BY: D.G.S.	
DESIGNED BY: S.A.W.	
CHECKED BY:	
DATE: Issue Date	

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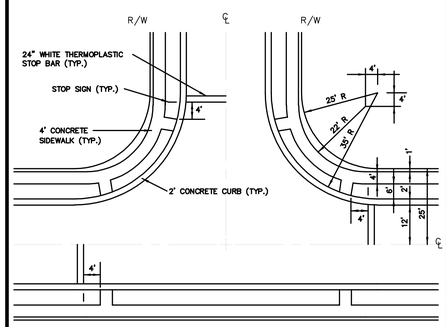
PAVING AND DRAINAGE DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
15D

n:\2022\22-213\22-213-03\Landdev\Design\Plots\22-213-03-PDDETS.dwg



NOTE:

1. REFER TO DETAIL SHEET M-2 FOR SIDEWALK CONSTRUCTION SPECIFICATIONS.
2. REFER TO DETAIL SHEET M-3 FOR SIDEWALK & BIKEPATH RAMP SPECIFICATIONS.

STANDARD CONSTRUCTION DETAIL
SIDEWALK CONSTRUCTION AT INTERSECTIONS

FILE NAME: EW_M19.DWG
DETAIL REF: M-19

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 MAY 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 CENTER. 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, AS MEASURED FROM HIGH WATER MARK. DEEPER MAXIMUM DEPTHS MAY BE APPROVED BY THE CITY ENGINEER.

2024-07-20

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 4:1 (HORIZONTAL:VERTICAL). THIS LIMIT SHALL BE APPLIED TO ALL AREAS EXCEPT STORMWATER CONVEYANCE AND TREATMENT SYSTEMS WHICH MAY HAVE A MAXIMUM SLOPE OF 4:1. PERMANENTLY WETTED SOILS 2FT BELOW THE WATER NORMAL WATER TABLE MAY BE SLOPED NO STEEPER THAN 2:1 (H:V).
10. ALL DEVELOPMENT SHALL CONTINUE TO ACCOMMODATE EXISTING OFFSITE CONTRIBUTING FLOW AND PASS SUCH QUANTITY TO AN APPROPRIATE DOWNSTREAM PUBLIC CONVEYANCE WITH NO INCREASE IN UPSTREAM STAGE DURING ALL DESIGN STORM EVENTS. ALL FILL SLOPES IN PROXIMITY TO PROPERTY BOUNDARIES SHALL INCLUDE AN INTERCEPTING SWALE AT THE TOE OF SLOPE.
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. SWALES 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.

2024-07-20

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.
26. ALL STRUCTURES SHALL BE GRADED TO HAVE POSITIVE RUNOFF PATTERNS TOWARD A STORMWATER COLLECTION AND MANAGEMENT SYSTEM. ALL NEW BUILDING SHALL BE TYPE "A" OR TYPE "B" GRADING. TYPES "C" & "D" GRADING SHALL ONLY BE APPROVED FOR RETROFITS. SEE DETAIL ST-14 FOR TYPICAL LOT GRADING.

2024-07-20

STANDARD CONSTRUCTION DETAIL
STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_ST6.DWG
DETAIL REF: ST-6

CANAL AND WATERWAY DESIGN AND CONSTRUCTION NOTES

1. CANALS AND WATERWAYS SHALL BE AVOIDED EXCEPT WHEN APPROVED AND DEEMED BY THE CITY TO BE UNAVOIDABLE OR NECESSARY, WHEREIN LITERAL ENFORCEMENT OF THIS CHAPTER WOULD DEPRIVE THE DEVELOPER OF THE REASONABLE USE OF HIS LAND.
2. IN THE EVENT OF SUCH APPROVAL, THE CANALS OR WATERWAYS SHALL HAVE A MINIMUM OF TWENTY FEET (20') ADDITIONAL WIDTH ON EACH BANK MEASURED FROM THE TOP OF BANK AND LOCATED ALONG THE ENTIRE LENGTH OF THE CANAL FOR MAINTENANCE.
3. SUCH CANALS SHALL BE A MAXIMUM OF FORTY FEET (40') IN WIDTH PLUS REQUIRED MAINTENANCE AREAS.
4. CANALS SHALL HAVE A MINIMUM BOTTOM WIDTH OF THREE FEET (3') AND MAXIMUM PERMISSIBLE SIDE SLOPES OF 4:1 (HORIZONTAL: VERTICAL). SHARPER SLOPES MAY BE CONSIDERED BELOW THE NORMAL WATER LEVEL PROVIDING THAT ADDITIONAL BANK STABILIZATION MEASURES ARE INSTALLED BASED UPON THE RECOMMENDATIONS OF A CERTIFIED GEOTECHNICAL ENGINEER. CANAL BANKS SHALL BE SODDED.
5. WATERWAYS AFFECTED BY TIDAL ACTION SHALL HAVE A MINIMUM DEPTH OF NINE FEET (9') BELOW SEA LEVEL REFERENCING THE NATIONAL GEODETIC VERTICAL DATUM (N.G.V.D.). THESE WATERWAYS SHALL BE SEPARATED FROM FRESH WATER BY SALINITY DAMS WITH SPILLWAY ELEVATIONS AS APPROVED BY THE CITY.
6. TWENTY FEET (20') WIDE DRAINAGE/MAINTENANCE EASEMENTS SHALL BE REQUIRED IN ORDER TO PROVIDE FOR THE NORMAL MAINTENANCE OF THESE WATER BODIES. THESE EASEMENTS SHALL BE ESTABLISHED BY THE CITY BASED ON EXISTING AND FUTURE CONDITIONS AS WELL AS THE TYPES OF MAINTENANCE EQUIPMENT AVAILABLE.

STANDARD CONSTRUCTION DETAIL
CANAL AND WATERWAY DESIGN AND CONSTRUCTION NOTES

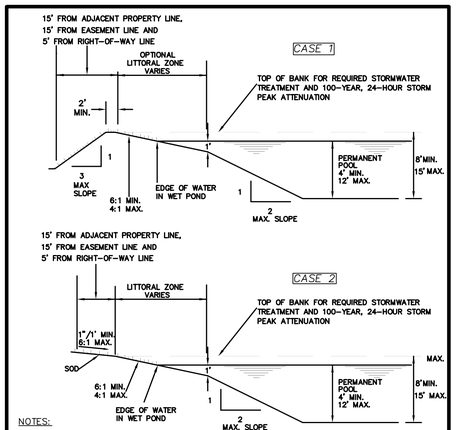
FILE NAME: EW_ST7.DWG
DETAIL REF: ST-7

BRIDGE DESIGN AND CONSTRUCTION NOTES

1. BRIDGES SHALL BE CONSTRUCTED WITH HEADER CURB ON BOTH SIDES RUNNING ITS COMPLETE LENGTH.
2. STANDARD 4'-WIDE SIDEWALKS SHALL BE PROVIDED ON BOTH SIDES AS FAR AWAY AS POSSIBLE FROM THE ROADWAY, BUT AT NO TIME CLOSER THAN TWO (2) FEET FROM THE EDGE OF THE FUTURE ROADWAY.
3. APPROACH GUARDRAILS OR FENCES SHALL BE PROVIDED WHERE REQUIRED FOR SAFETY BY THE CITY.
4. BRIDGE GEOMETRY, BRIDGE DESIGN, AND LOADING SHALL CONFORM TO THE DESIGN CRITERIA OF THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
5. PRIOR TO ACTUAL DESIGN OF THE BRIDGE, THE APPLICANT SHALL SUBMIT DESIGN LOAD CRITERIA TO THE CITY FOR APPROVAL.

STANDARD CONSTRUCTION DETAIL
BRIDGE DESIGN AND CONSTRUCTION NOTES

FILE NAME: EW_ST8.DWG
DETAIL REF: ST-8



NOTES:

1. SOD IS TO BE PLACED TO EDGE OF WATER.
2. A PLANTED LITTORAL ZONE IS NOT PERMISSIBLE FOR SLOPES EXCEEDING 6:1.
3. AS AN OPTION TO A LITTORAL ZONE, THE DESIGNER CAN EITHER:
   A) PROVIDE AN ADDITIONAL 50% OF THE PERMANENT POOL VOLUME, AS REQUIRED, OR
   B) PROVIDE PRETREATMENT OF THE STORMWATER PRIOR TO ENTERING THE WET DETENTION POND.
4. CASE 1 BERM SHALL REQUIRE THE INSTALLATION OF LIMITING SOILS OR OTHER MATERIALS TO REDUCE LATERAL TRANSMISSIVITY.

STANDARD CONSTRUCTION DETAIL
WET RETENTION POND
PLACEMENT BY R/W AND EASEMENT LINES

FILE NAME: EW_ST10.DWG
DETAIL REF: ST-10

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

PLOTTED: November 18, 2025 – 4:07 PM, BY: Emma Thompson

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
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PAVING AND DRAINAGE DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
15E

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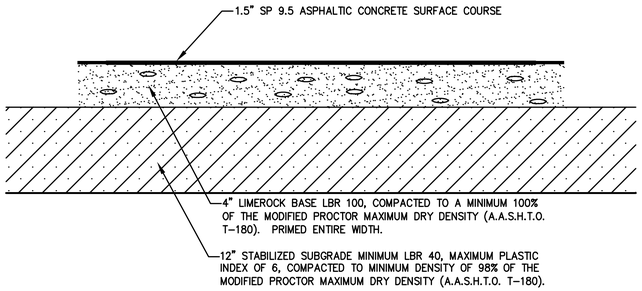
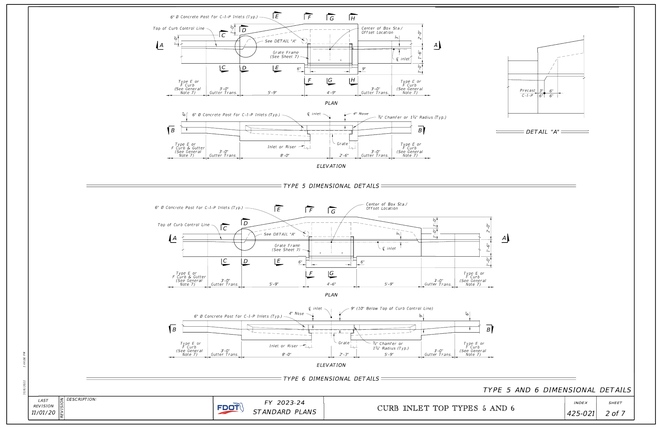
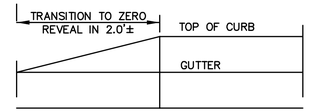


12' MULTI-USE PATH PAVEMENT SECTION

N.T.S.

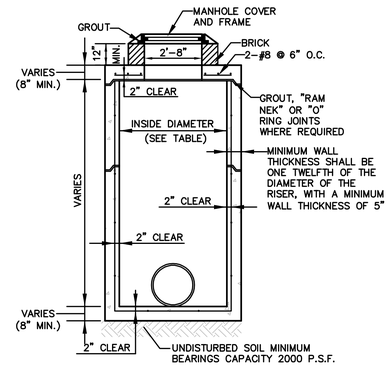




SECTION

CURB TRANSITION DETAIL

N.T.S.

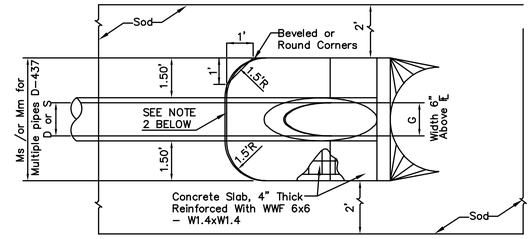


INSIDE DIAMETER TABLE						
J-1	J-1A	J-1B	J-1C	J-1D	J-1E	J-1F
4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"

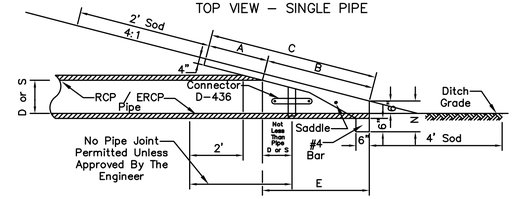
NOTES:
1. CONCRETE DESIGN STRENGTH 4,000 PSI.
2. PRECAST IN ACCORDANCE WITH LATEST EDITIONS OF ASTM C 478.
3. PIPES SHALL BE FLUSH WITH INSIDE WALL.
4. IN PAVED AREAS FRAME AND GRATE MUST MATCH FINAL ASPHALT AND CROSS-SLOPE.
5. RING AND COVER SHALL BE TRAFFIC BEARING

STORM SEWER J-1 MANHOLE

N.T.S.



TOP VIEW – SINGLE PIPE



SECTION

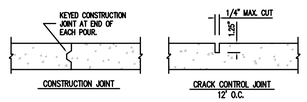
* Slope:
4:1 Miter To Springline Of Pipe For Pipes 18" & Smaller
2:1 Miter For Pipes 24" & Larger, For RCP.

DIMENSIONS FOR RCP									
D	X	A	B	C	E	F	G	Ms	N
15"	2.58'	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.63'	1.19'
18"	2.83'	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.92'	1.21'
24"	3.42'	2.53'	7.18'	9.71'	7.03'	11'	1.73'	5.50'	1.25'
30"	4.25'	2.70'	9.25'	11.95'	9.03'	13'	2.00'	6.08'	1.29'
36"	5.08'	2.87'	11.31'	14.18'	11.03'	15'	2.24'	6.67'	1.33'
42"	6.00'	3.05'	13.37'	16.42'	13.03'	17'	2.45'	7.25'	1.38'
48"	6.75'	3.22'	15.43'	18.65'	15.03'	19'	2.63'	7.83'	1.42'
54"	7.67'	3.39'	17.49'	20.88'	17.03'	21'	2.83'	8.42'	1.46'
60"	8.50'	3.56'	19.55'	23.11'	19.03'	23'	3.00'	9.00'	1.50'

NOTES:
1. MITERED END SECTION SHALL MATCH SIDE SLOPE OF LAKE BANK.
2. PIPE LENGTH SHOWN ON PLANS ARE FROM BACK OF MITERED END SECTION TO CENTER OF STRUCTURE

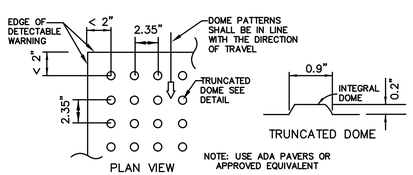
MITERED END SECTION - TYPE B

N.T.S.



CONCRETE JOINT DETAIL

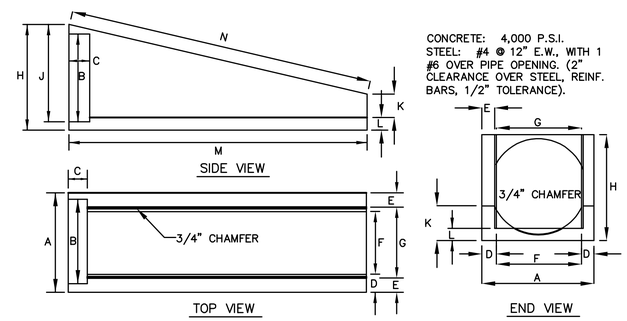
N.T.S.



ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24" FROM THE BACK OF CURB

CURB RAMP DETECTABLE WARNING

N.T.S.



CONCRETE: 4,000 P.S.I.
STEEL: #4 @ 12" E.W., WITH 1 #6 OVER PIPE OPENING. (2" CLEARANCE OVER STEEL, REINF. BARS, 1/2" TOLERANCE).

RCP/CMP	A	B	C	D	E	F	G	H	J	K	L	M	N
15" – 18"	2'-7"	2'-1"	6"	6"	6 3/4"	1'-6"	1'-7"	2'-10"	2'-4"	8"	6"	6'-10"	7'-0"
24"	2'-11"	2'-8"	6"	5"	4 1/2"	1'-11"	2'-0"	3'-6"	3'-1"	7 1/2"	5"	10'-0"	10'-3 1/2"
30"	3'-6"	3'-2"	6"	6"	5 1/2"	2'-5"	2'-6 1/2"	3'-9"	3'-5"	7"	5"	11'-5"	11'-8 1/4"
36"	4'-1"	3'-10"	6"	7"	5 1/2"	2'-9"	3'-0"	4'-6"	4'-0"	6"	6"	14'-0"	14'-4 1/2"

NOTES:
1. MITERED END SECTION SHALL MATCH SIDE SLOPE OF LAKE BANK.
2. PIPE LENGTH SHOWN ON PLANS ARE FROM BACK OF MITERED END SECTION TO CENTER OF STRUCTURE

STANDARD MITERED END SECTION

N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

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REG-00002584 LC-0000316

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ETM
ENGLAND-THIMS & MILLER

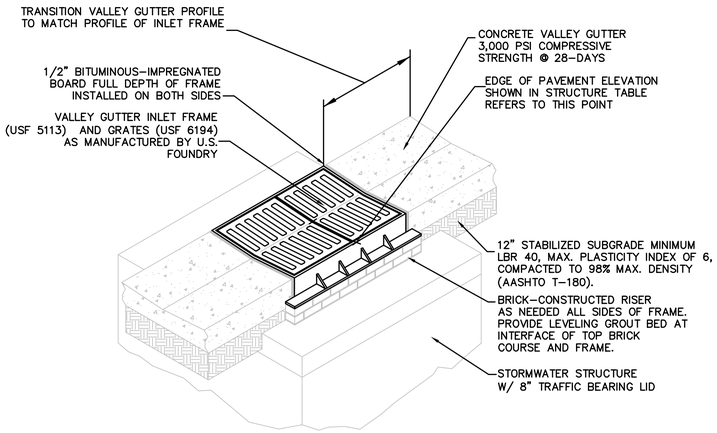
PAVING AND DRAINAGE DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
15F

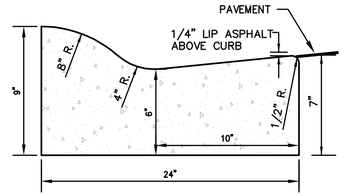
PLOTTED: November 18, 2025 – 4:07 PM, BY: Emma Thompson

n:\2022\22-213\22-213-03\LandDev\Design\Plots\22-213-03-PDDETS.dwg



VALLEY GUTTER INLET FOUNDING DETAIL

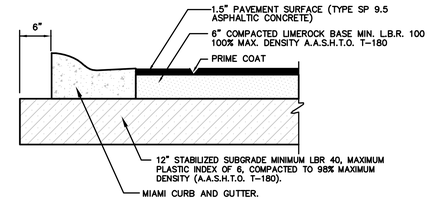
N.T.S.



MIAMI TYPE CURB AND GUTTER

N.T.S.

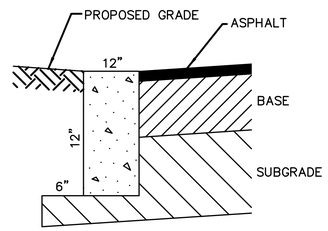
CURB AND CURB & GUTTER NOTES:
1. MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE LATEST FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. CONCRETE SHALL BE CLASS 1 CONCRETE WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI UNLESS OTHERWISE APPROVED BY THE ENGINEER OF RECORD.
3. WHEN USED ON THE HIGH SIDE OF ROADWAY SECTIONS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. WHERE THIS CONDITION IS ENCOUNTERED, THE FRONT FACE VERTICAL DIMENSION SHALL REMAIN AS SHOWN FOR NORMAL SECTIONS SHOWN HEREON.



NOTES:
1. ALL DISTURBED AREAS TO BE SEEDED AND MULCHED
2. SOIL ANALYSIS MAY INDICATE THE NEED FOR THICKER BASE COURSES THAN THOSE HEREIN. THE PAVEMENT THICKNESS SHOWN HEREIN ARE NOT INTENDED TO BE ABSOLUTE, BUT ARE PRELIMINARY CRITERIA AND MAY BE MODIFIED TO ACCOMMODATE THE BEARING CAPACITY OF VARIOUS SUBGRADES.
3. ALL ASPHALTIC CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 331 AND/OR 333, FDOT STANDARD SPECIFICATIONS, LATEST EDITION.

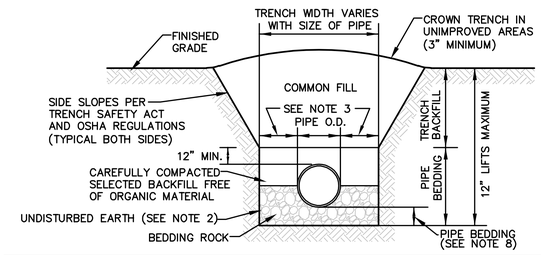
TYPICAL PAVEMENT SECTION

N.T.S.



RIBBON CURB

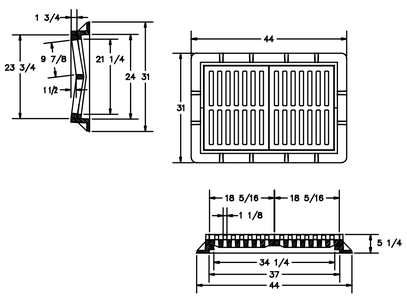
N.T.S.

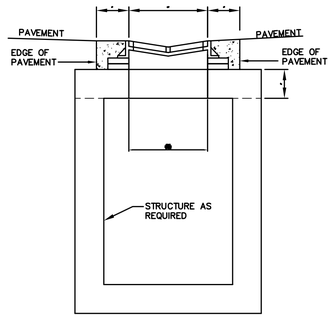


NOTES:
1. TRENCH AND PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% MAX. DENSITY (AASHTO T–180).
2. USE TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE COUNTY.
3. 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
4. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
5. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
6. REFER TO MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES SURFACE RESTORATION WITHIN COUNTY RIGHT–OF–WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT–OF–WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. THE COUNTY SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.

TYPE A BEDDING AND TRENCH DETAIL

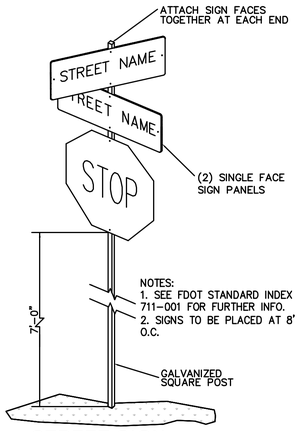
N.T.S.





SINGLE VALLEY GUTTER INLET DETAIL

N.T.S.



STREET SIGN

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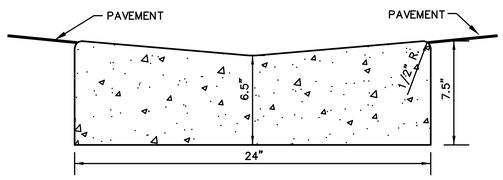
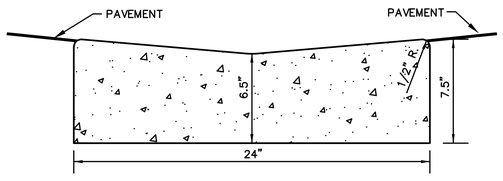


CURB AND CURB & GUTTER NOTES:
1. MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE LATEST FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. CONCRETE SHALL BE CLASS 1 CONCRETE WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI UNLESS OTHERWISE APPROVED BY THE ENGINEER OF RECORD.
3. 1/4" CRACK CONTROL JOINTS TO BE CUT AT 10' O.C.
4. 1/2" EXPANSION JOINTS TO BE AT 50' O.C. (MAX.)

DROP CURB

N.T.S.



CURB AND CURB & GUTTER NOTES:
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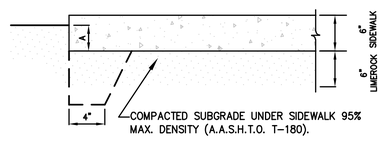
3. 1/4" CRACK CONTROL JOINTS TO BE CUT AT 10' O.C.
4. 1/2" EXPANSION JOINTS TO BE AT 50' O.C. (MAX.)

CONCRETE VALLEY GUTTER

N.T.S.



AT GRADE

NOTES:
1. CONSTRUCT STRAIGHT JOINTS WITH FACE PERPENDICULAR TO SURFACE OF CONCRETE. TRAVERSE JOINTS SHALL BE AT RIGHT ANGLES TO CENTERLINE UNLESS OTHERWISE INDICATED ON PLANS.
2. PROVIDE EXPANSION JOINTS AT 100' INTERVAL MAXIMUM SPACING ON CENTER.
3. PROVIDE EXPANSION JOINTS FILLER FOR JOINTS ABUTTING CURBS, CATCH BASINS, MANHOLES, INLETS STRUCTURES, WALKS AND OTHER FIXED OBJECTS UNLESS OTHERWISE INDICATED ON PLANS.
4. EXTEND JOINTS FILLER FULL WIDTH AND DEPTH OF JOINT, AND 1/2" BELOW FINISHED SURFACE. PLACE SEALANT OVER JOINT FILLER PER MANUFACTURERS RECOMMENDATIONS.
5. USE PREMOLDED ASPHALT–IMPREGNATED FIBERBOARD, 1/2" THICK CONFORMING TO ASTM D1751. CONTRACTION JOINT SHALL BE SAW CUT (1/4" WIDE BY 1" DEEP).
6. FINISHED SURFACE FOR CONCRETE SIDEWALK SHALL BE GRAY CONCRETE WITH LIGHT BROOM FINISH PERPENDICULAR TO LINE OF TRAFFIC (UNLESS OTHERWISE INDICATED ON PLANS).
7. PROVIDE CRACK CONTROL JOINTS @ (SAME AS WIDTH) O.C.
8. PROVIDE 16" STRIP SOD ADJACENT TO ALL EDGES OF SIDEWALK, CURB AND PAVEMENT AREAS.
9. CONCRETE COMPRESSION STRENGTH 3000 P.S.I. @ 28 DAYS UNLESS OTHERWISE APPROVED BY ENGINEER OF RECORD.
10. SIDEWALK TO BE CONSTRUCTED WITH SLOPES COMPLYING TO WITH LATEST ADA CODE AND FDOT INDEX 522–001. SIDEWALK MAX. VERTICAL SLOPE OF 5.0% AND MAX CROSS SLOPE OF 2.0%.

CONCRETE WALK

N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

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Orlando, Florida 32804
(407) 536-5379
www.etminc.com
REG-00002584 LC-0000316

Trusted Advisors, Creating Community.
ETM
ENGLAND-THIMS & MILLER

PAVING AND DRAINAGE DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
15G

PLOTTED: November 18, 2025 – 4:07 PM, BY: Emma Thompson

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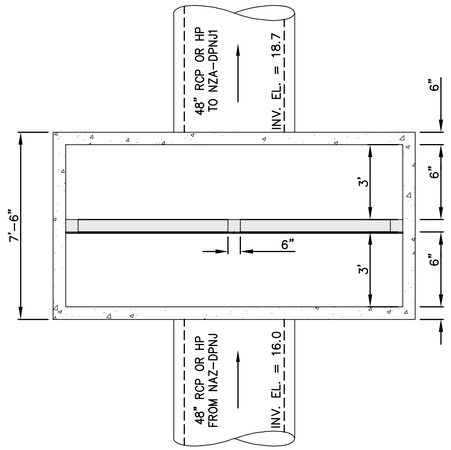
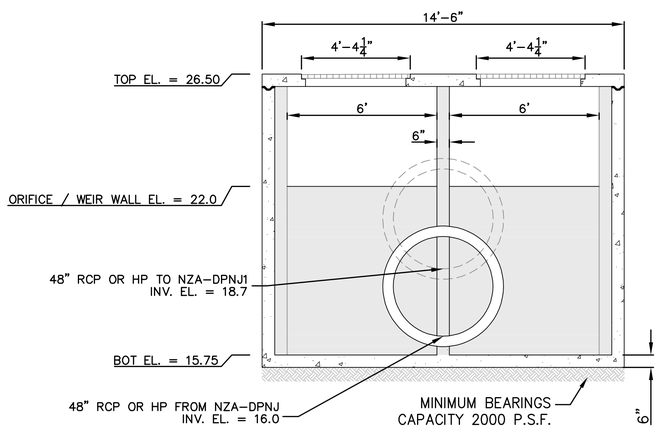


PLAN VIEW
N.T.S



FRONT VIEW
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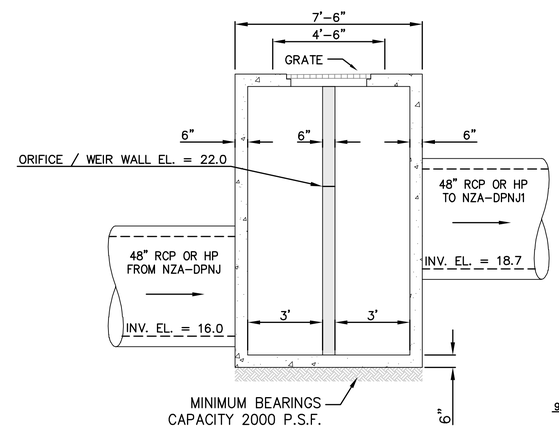
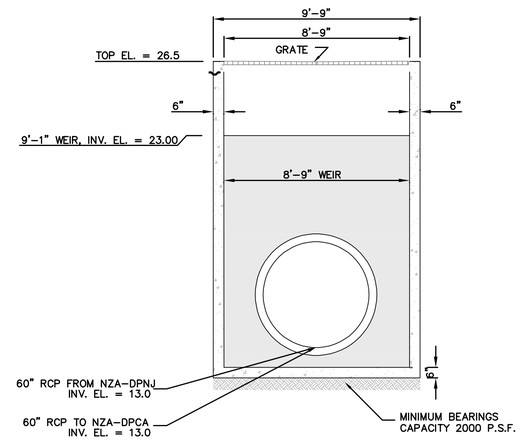


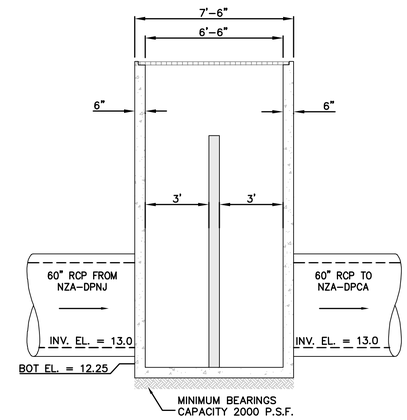
SIDE VIEW
N.T.S

CONTROL STRUCTURE DS-DPNJ1
MODIFIED TYPE H (4-GRATE INLET)

N.T.S.



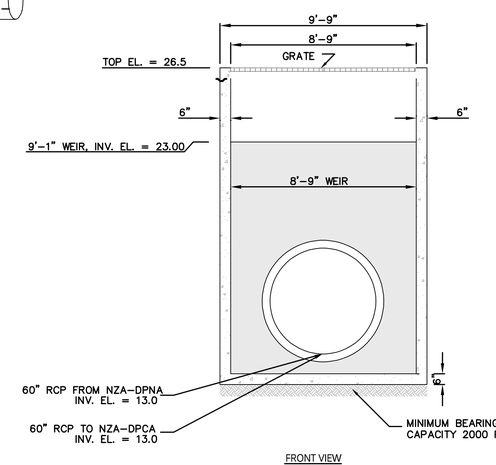
FRONT VIEW



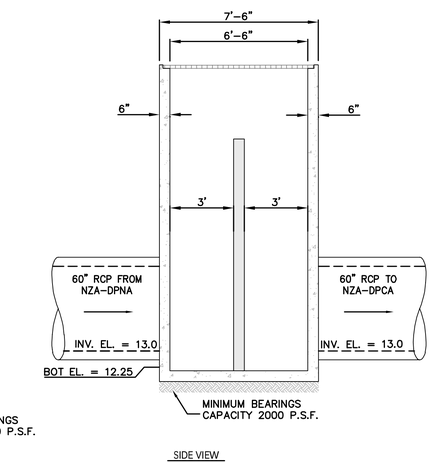
SIDE VIEW

CONTROL STRUCTURE DS-DPNJ2
MODIFIED TYPE-H (4-GRATE INLET)

NTS



FRONT VIEW



SIDE VIEW

CONTROL STRUCTURE DS-DPNA
MODIFIED TYPE-H (4-GRATE INLET)

NTS

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE:	Issue Date

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CONTROL STRUCTURE DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
15H

PLOTTED: November 18, 2025 – 4:07 PM, BY: Emma Thompson

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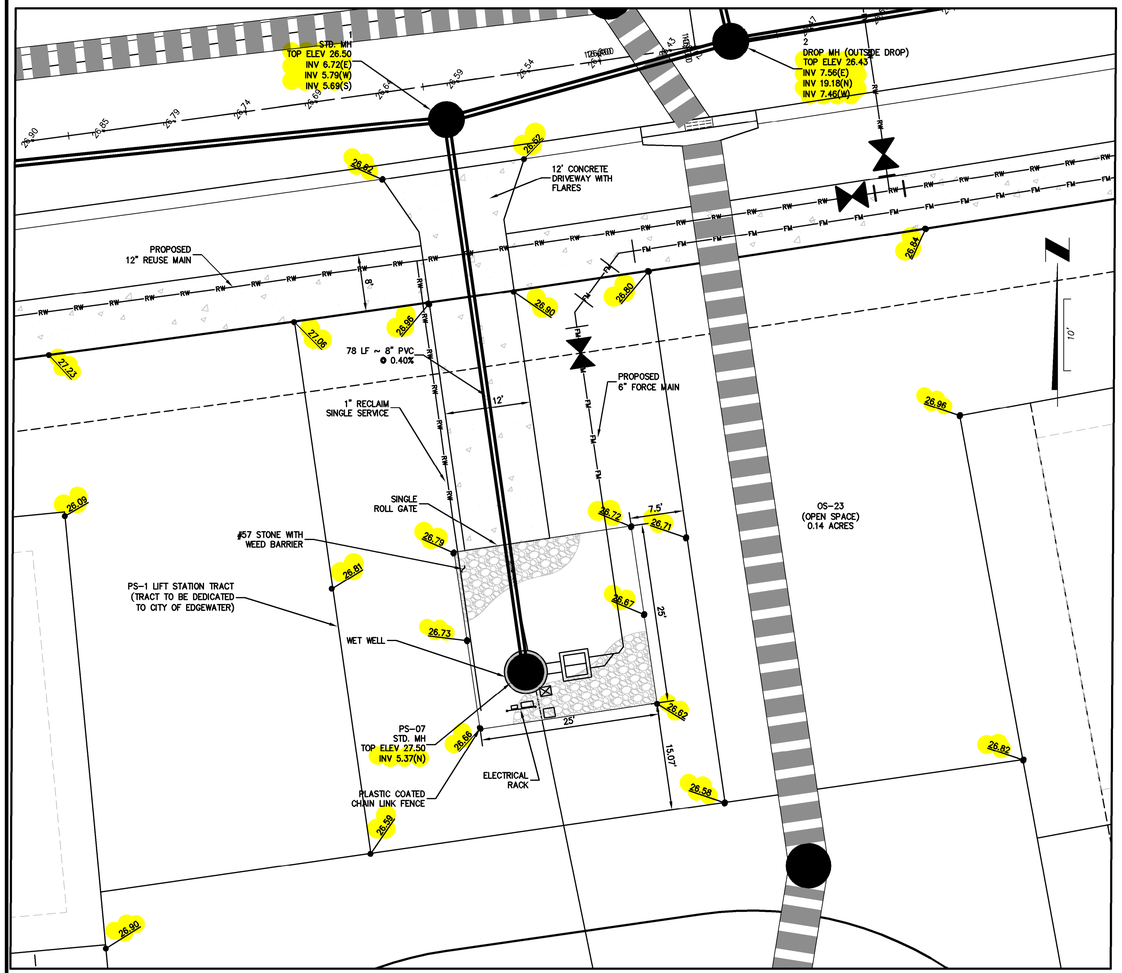
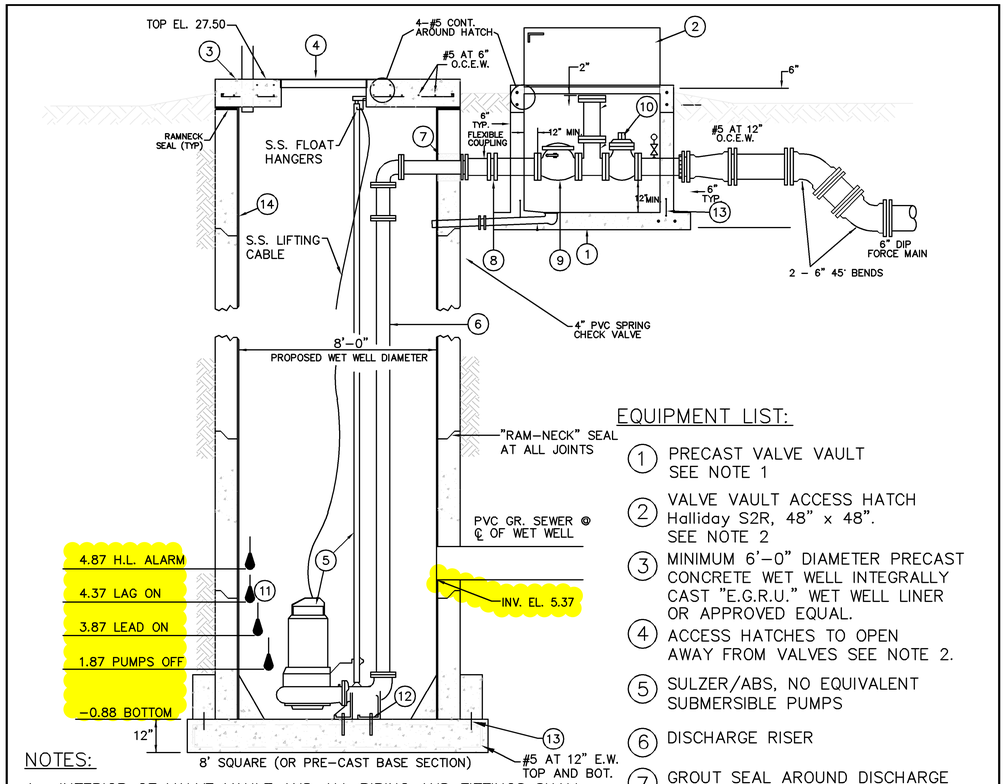


PS-07 LIFT STATION SITE PLAN

SCALE: 1"=10'

Pump Manufacturer	Wilo/Emu		Sulzer		Sulzer		KSB		Myers	
Pump Model			XFP 86E CB2 60 Hz							
Pump Discharge			4"							
Impellar ID			DN80							
Impeller Diameter			5 - 3/16"							
Horsepower			10.73							
RPM			3520							
Voltage			460							
Phase			3							
Full Load Amps			13.3							
Operating Points	Flow, GPM	Head, Ft	Flow, GPM	Head, Ft	Flow, GPM	Head, Ft	Flow, GPM	Head, Ft	Flow, GPM	Head, Ft
Manifold			218	66.88						
Runout			293	40.95						



NOTES:

1. INTERIOR OF VALVE VAULT AND ALL PIPING AND FITTINGS SHALL BE DELIVERED WITH A FACTORY APPLIED EPOXY FINISH.
2. COORDINATE WET WELL ACCESS HATCH LOCATION WITH PUMP MOUNTING LOCATIONS. HATCH TYPE HALLIDAY S1R/S2R PROVIDE LOCKING POST TYPE MECHANISM AND SAFETY GRATING ON ALL ACCESS HATCHES. ALL HATCHES TO BE 300 P.S.F. LOAD RATED.
3. SEE SPECIFICATIONS FOR APPROVED VALVE TYPES AND MANUFACTURERS.
4. SOD ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES OUTSIDE OF FENCED AREA.
5. SULZER/ABS, NO EQUIVALENT PUMPS TO BE FURNISHED WITH DISCHARGE CONNECTION COUPLING, STAINLESS STEEL SLIDERAIL SYSTEM, SEAL FAILURE AND THERMAL OVERLOAD INDICATORS.
6. ALL PIPES, INVERTS AND HATCHES TO BE THE SIZE AND KIND SPECIFIED ON THE SET OF APPROVED CONSTRUCTION PLANS.
7. ALL HARDWARE INSIDE WETWELL SHALL BE 316SS.
8. ALL PRESSURE PIPING TO BE RESTRAINED W/MEGALUG FITTINGS OR EQUAL.

EQUIPMENT LIST:

1. PRECAST VALVE VAULT SEE NOTE 1
2. VALVE VAULT ACCESS HATCH Halliday S2R, 48" x 48". SEE NOTE 2
3. MINIMUM 6'-0" DIAMETER PRECAST CONCRETE WET WELL INTEGRALLY CAST "E.G.R.U." WET WELL LINER OR APPROVED EQUAL.
4. ACCESS HATCHES TO OPEN AWAY FROM VALVES SEE NOTE 2.
5. SULZER/ABS, NO EQUIVALENT SUBMERSIBLE PUMPS
6. DISCHARGE RISER
7. GROUT SEAL AROUND DISCHARGE LINES WITH NON-SHRINK GROUT
8. FLEXIBLE COUPLEING APPROVED BY THE CITY ENGINEER
9. FL. x FL. CHECK VALVE
10. FL. x FL. PLUG VALVE W/ VALVE WRENCH
11. 4 FLOATS FOR PUMP CONTROL COORDINATE ELEV. WITH CITY
12. ANCHOR PUMP TO WET WELL FLOOR
13. 6" PVC WATER STOP
14. "E.G.R.U" LINER JOINTS TO BE FIELD WELDED

City of EDGEWATER Inc. 1991

2023-01-25

STANDARD CONSTRUCTION DETAIL
LIFT STATION WET WELL
SECTION
(SUBMERSIBLE)

FILE NAME: EW_S17.DWG

DETAIL REF: S-17

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 60967

REVISIONS:

ETM NO.	22-213-03
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE:	Issue Date

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LIFT STATION PLAN AND DETAIL

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
16A

PLOTTED: November 19, 2025 – 12:13 PM, BY: Dhruv Patel

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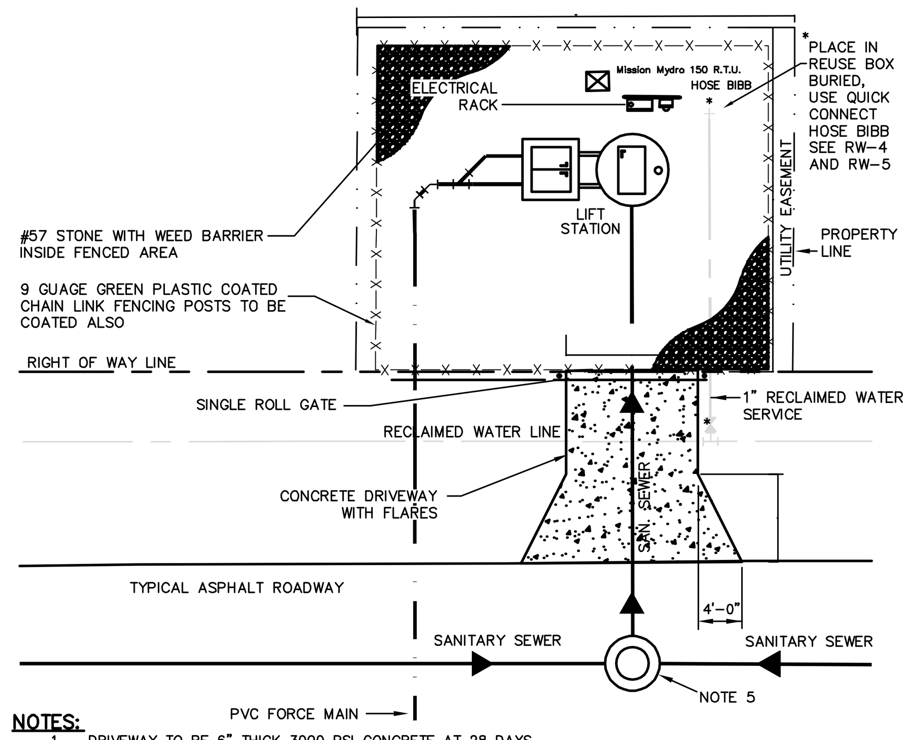


NOTES:

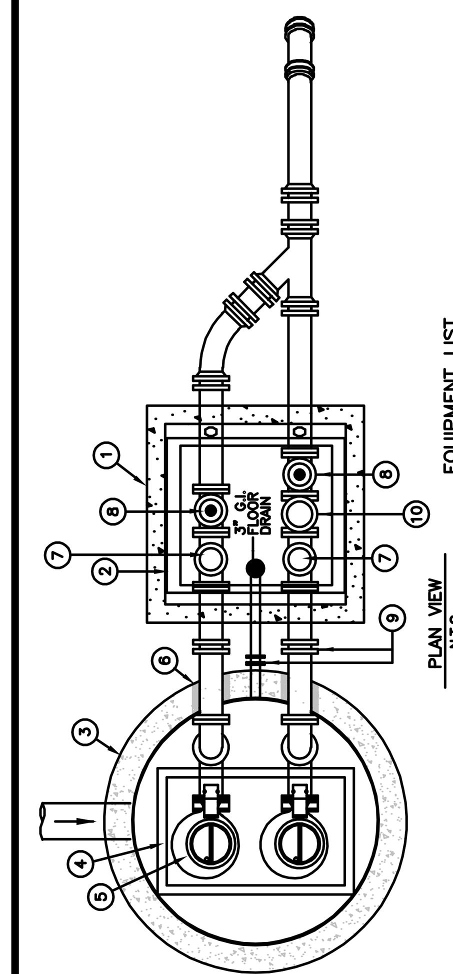
1. DRIVEWAY TO BE 6" THICK 3000 PSI CONCRETE AT 28 DAYS WITH 6x6 10/10 W.W. MESH. BASE TO BE COMPACTED AND TESTED TO 98% DENSITY WITH MINIMUM L.B.R. 40 BASED ON A.A.S.H.T.O. T-180 MODIFIED PROCTOR TEST.
2. IF RECLAIMED WATER IS UNAVAILABLE FOR LIFT STATION WATER SERVICE, CONTRACTOR SHALL USE POTABLE WATER.
3. REFER TO APPROPRIATE STANDARD CONSTRUCTION DETAIL FOR EMERGENCY PUMP CONNECTION/PLUG VALVE DETAIL AND LIFT STATION WATER SERVICE DETAIL
4. FENCE MAY BE RELOCATED INTERNALLY WITHIN SITE TO CREATE A 25' X 25' SITE IF LANDSCAPING MATERIALS ARE INSTALLED AROUND THE PERIMETER.
5. MANHOLE TO BE LINED, "AGRU" OR APPROVED EQUAL.
6. LANDSCAPING SHALL CONSIST OF #57 WHITE ROCK. BUSHES, ACCEPTABLE TO THE CITY, SHALL BE PLACED AS A VISUAL BUFFER TO ANY RESIDENTIAL AREAS ADJACENT TO THE LIFT STATION.
7. INSIDE FENCE AREA, STOP DRIVEWAY AT FENCE LINE AND ADD FOUR INCHES OF #57 STONE ON INSIDE OF FENCE AREA WITH WEED BARRIER UNDERNEATH. OUTSIDE OF FENCE AREA TO BE SODDED.
8. FENCING SHALL BE 6' HIGH WITH SINGLE ROLL GATE. NOT SWING GATE.
9. EQUIP WITH AN EMERGENCY POWER PERMANENTLY INSTALLED DIESEL DRIVEN BYPASS PUMP MANUFACTURED BY ATLAS COPCO.

* IF RECLAIMED SVC. IS UNAVAILABLE, USE DETAIL #S-16 FOR WATER SERVICE

2023-01-25

STANDARD CONSTRUCTION DETAIL
TYPICAL LIFT STATION SITE PLAN

FILE NAME: EW_S15.DWG
DETAIL REF: S-15



EQUIPMENT LIST

1. PRECAST VALVE VAULT SEE NOTE 1
2. VALVE VAULT ACCESS HATCH U.S. FOUNDRY APD300 48x48, SEE NOTE 2
3. 6'-0" DIAMETER PRECAST CONCRETE WET WELL INTEGRALLY CAST "E.G.R.U" WET WELL LINER
4. WET WELL ACCESS HATCHES, SEE NOTE 2
5. FLGYT OR ABS SUBMERSIBLE PUMPS.
6. GROUT SEAL AROUND DISCHARGE LINES WITH NON-SHRINK GROUT
7. FL. x FL. CHECK VALVE
8. FL. x FL. 1/4 TURN PLUG VALVE W/ VALVE WRENCH
9. M.J. X M.J. SLEEVE W/ MEGALUG RESTRAINT
10. EMERGENCY PUMP CONNECTION

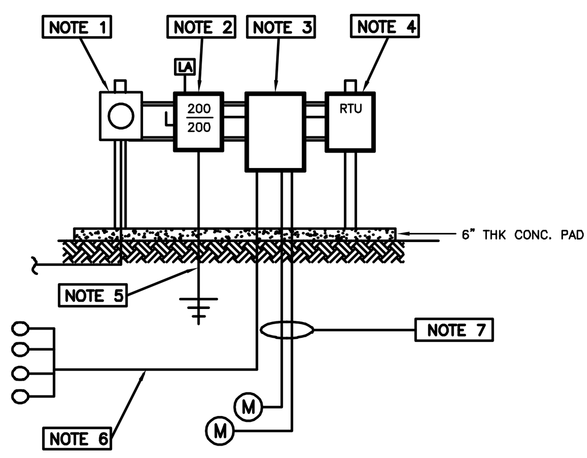
NOTES:

1. SANDBLAST AND PAINT INTERIOR OF VALVE VAULT PRE-COAT EPOXY FROM MANUFACTURER OR 2 COATS – 15 MILS TOTAL OF APPROVED COATING.
2. COORDINATE WET WELL ACCESS HATCH LOCATION WITH PUMP MOUNTING LOCATIONS. PROVIDE HASP TYPE LOCKING MECHANISM ON ALL ACCESS HATCHES. ALL HATCHES TO BE 300 P.S.F. LOAD RATED.
3. SEE SPECIFICATIONS FOR APPROVED VALVE TYPES AND MANUFACTURERS.
4. PUMPS TO BE FURNISHED WITH HIGH PRESSURE DISCHARGE COUPLING, STAINLESS STEEL SLIDERAIL SYSTEM, SEAL FAILURE AND THERMAL OVERLOAD INDICATORS.
5. ALL PIPES, INVERTS AND HATCHES TO BE THE SIZE AND KIND SPECIFIED ON THE SET OF APPROVED CONSTRUCTION PLANS.
6. ALL HARDWARE INSIDE WETWELL TO BE 316 STAINLESS STEEL.
7. ALL PRESSURE PIPING TO BE RESTRAINED W/MEGALUG FITTINGS OR EQUAL.
8. PRESSURE GUAGE TO BE INSTALLED ON DISCHARGE SIDE OF PLUG VALVE, OPPOSITE SIDE OF BYPASS. USE DIAPHRAGM STYLE GUAGE ASSEMBLY.

2023-01-25

STANDARD CONSTRUCTION DETAIL
LIFT STATION
PLAN VIEW
(SUBMERSIBLE)

FILE NAME: EW_S18.DWG
DETAIL REF: S-18



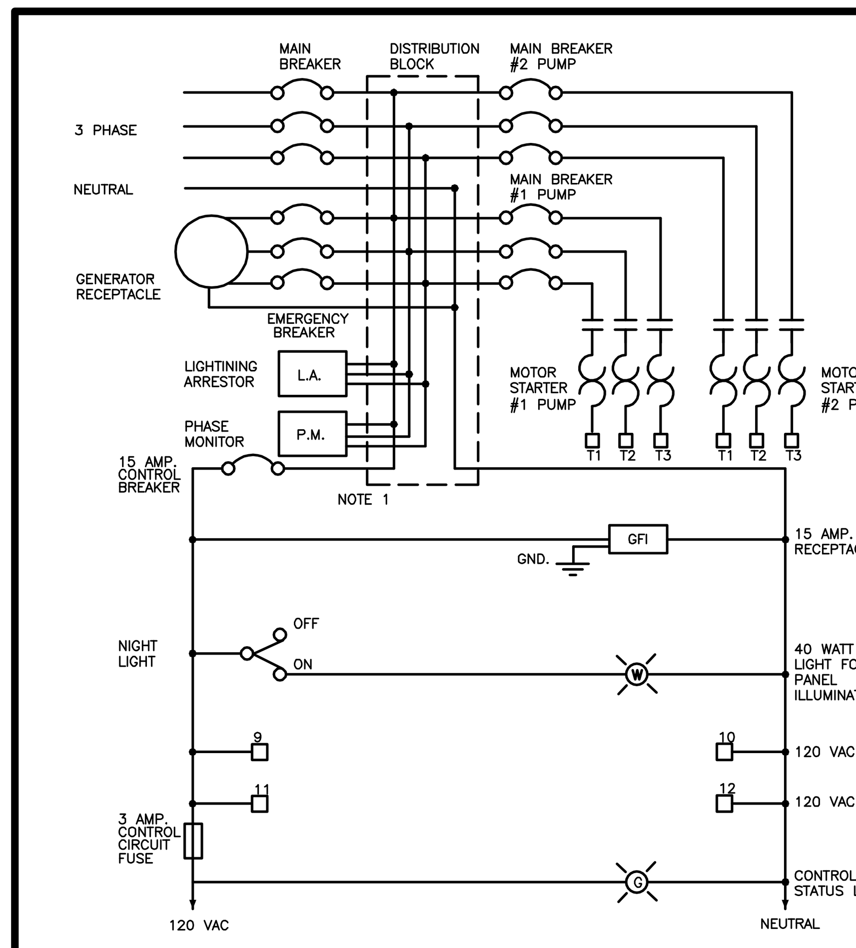
NOTES:

1. FPL APPROVED METER CAN WITH BYPASS
2. ELECTRICAL DISCONNECT SIZED TO STATION
3. ELECTRICAL PANEL FOR A SUBMERSABLE STATION OR MANUAL TRANSFER SWITCH FOR A WETWELL MOUNTED STATION.
4. RTU 24X24X9
5. #4 SOLID GROUND WIRE CONNECTED TO 3 8-FOOT GROUND RODS SPACED 10 FEET APART
6. 2 INCH SCH.80 PVC WITH 4 FLOAT SWITCHES
7. 2 INCH SCH.80 PVC WITH 1 PUMP LEAD IN EACH CONDUIT.
8. ALL CONDUITS CONNECTING THE WETWELL TO AN ELECTRICAL APPLIANCE WILL BE PROTECTED BY SEAL OFFS
9. ELECTRICAL PANEL WILL BE BUILT WITH 2 EXTRA 120V POWER POINTS
10. REQUIREMENTS FOR THE ELECTRICAL PANEL COMPONENTS ARE NOTED IN S-21, S-22A, AND S-22B
11. ALL WIRING COMPONENTS AND STRUCTURES WILL BE IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE
12. ALL ELECTRICAL APPLIANCED WILL BE NEMA RATED 316 STAINLESS STEEL
13. GENERATOR RECEPTICAL WILL BE A HUBBEL 4100B9W 4PIN 100 AMP WITH WEATHERPROOF CAP
14. TELEMETRY AND LEVEL CONTROL DEVICES WILL BE MISSION MYDRO 150
15. PROVIDE 3IN. ALUMINUM PIPES OR 6in X 6in CEMENT POST AND 1/3 CUBIC YARD OF CEMENT TO SUPPORT EQUIPMENT RACK ASSEMBLY. EQUIPMENT RACK ASSEMBLY TO INCLUDE 1 1/2in STAINLESS STEEL KINDORF CHANNEL USING STAINLESS STEEL HARDWARE. (U-BOLTS, BOLTS, ETC)
16. CONTRACTOR WILL BE REQUIRED TO APPLY FOR ALL APPLICABLE PERMITS
17. LIGHTENING ARRESTOR – SQUARE D. NO. SDSA 3650 TO BE INSTALLED IN PANEL
18. ALL LIFT STATIONS WITH ALARM LIGHT AND AUDIBLE ALARM TO BE INSTALLED ON ELECTRICAL PANEL

2023-01-25

STANDARD CONSTRUCTION DETAIL
PACKAGED LIFT STATION
ELECTRICAL EQUIPMENT RACK

FILE NAME: EW_S22.DWG
DETAIL REF: S-22

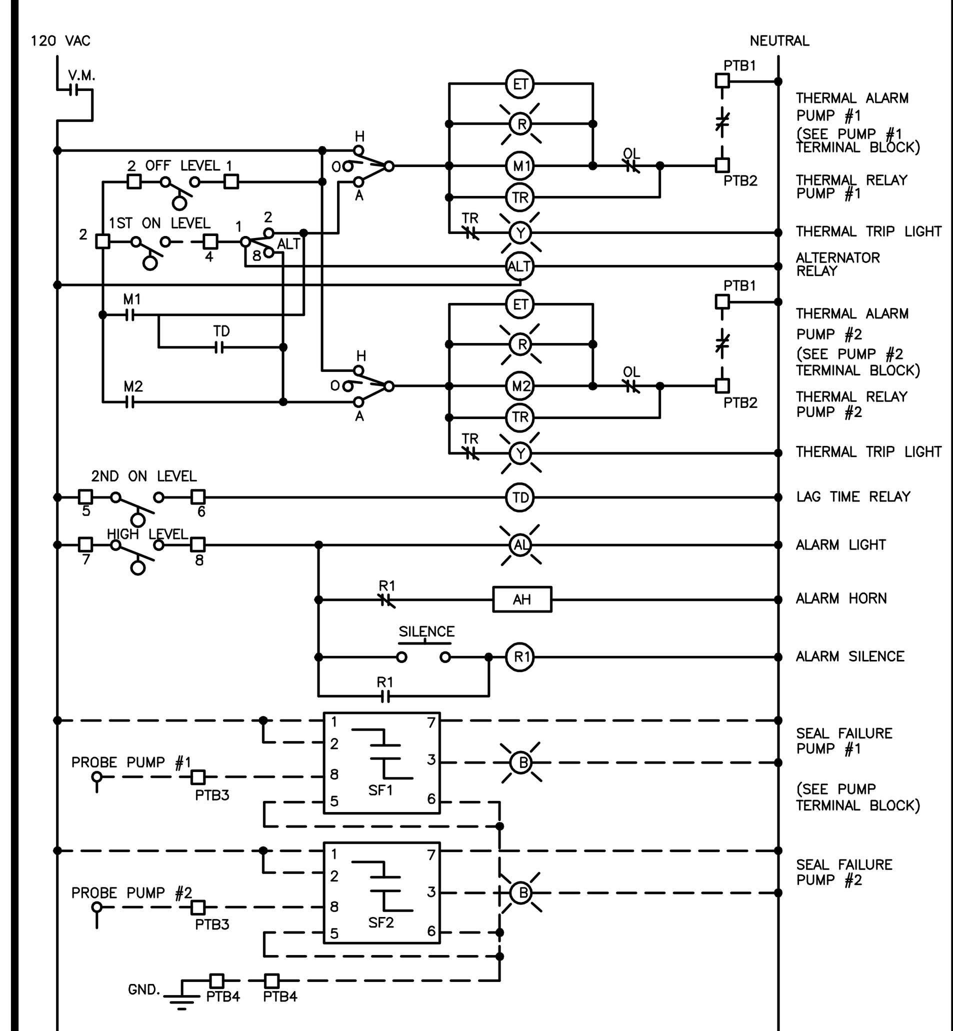


NOTE 1 – FOR 277/480 VOLT PANELS STEP DOWN TRANSFORMER FOR 120 VOLT CONTROL VOLTAGE WILL BE REQUIRED.

2023-01-25

STANDARD CONSTRUCTION DETAIL
PACKAGED LIFT STATION
ELECTRICAL PANEL SCHEMATIC

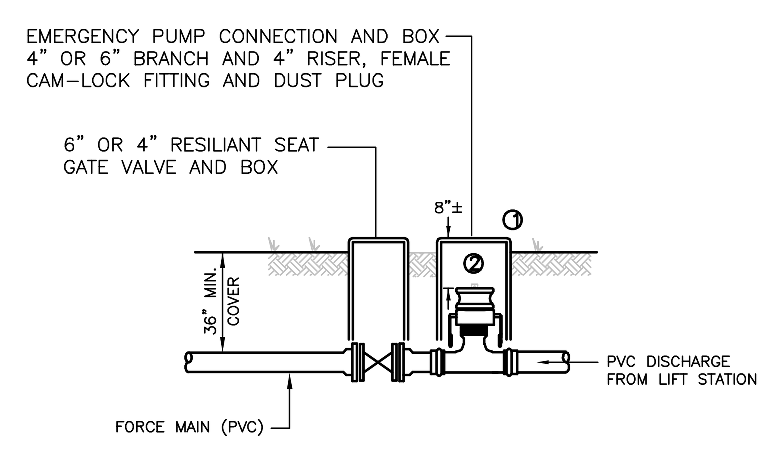
FILE NAME: EW_S22A.DWG
DETAIL REF: S-22A



2023-01-25

STANDARD CONSTRUCTION DETAIL
PACKAGED LIFT STATION
ELECTRICAL PANEL SCHEMATIC

FILE NAME: EW_S22B.DWG
DETAIL REF: S-22B



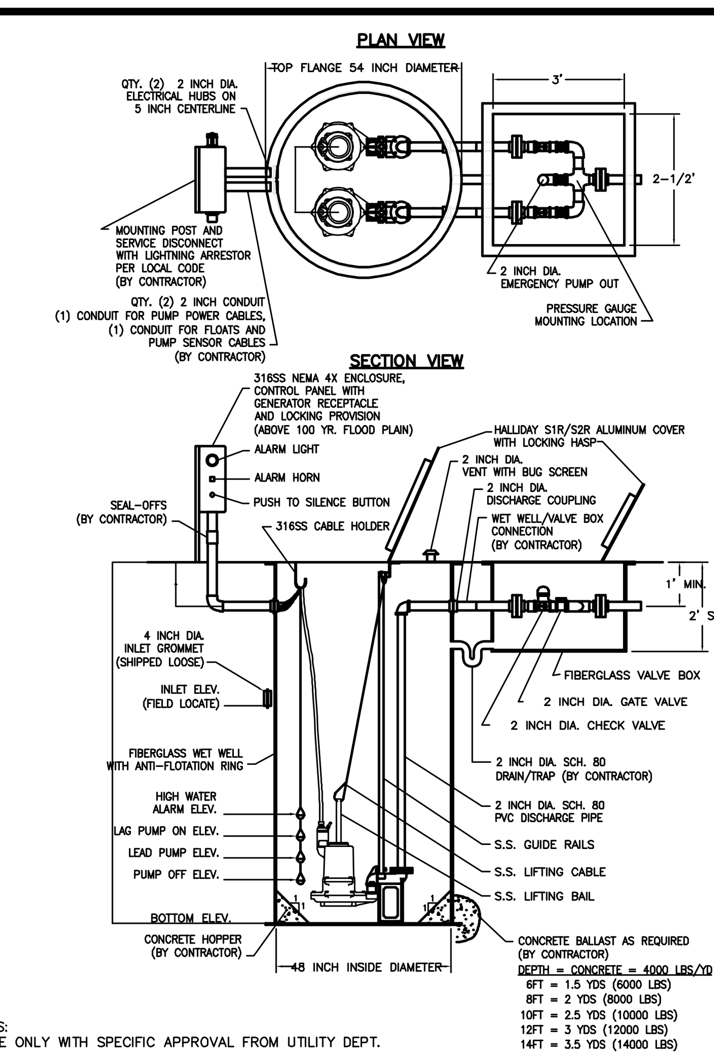
NOTES:

1. PUMP CONNECTION BOX IS CDR #WB001527-12. SOLID 15" X 27" COVER WITH "SEWER" IMPRINTED ON LID.
2. CAM-LOK PIPE FITTING IS 4" MIPX MALE CAMLOCK WITH FEMALE DUST PLUG.

2023-01-25

STANDARD CONSTRUCTION DETAIL
LIFT STATION
EMERGENCY PUMP CONNECTION

FILE NAME: EW_S20A.DWG
DETAIL REF: S-20A



NOTES:
1. USE ONLY WITH SPECIFIC APPROVAL FROM UTILITY DEPT.
2. PRESSURE AND FLOW CONDITIONS TO BE DETERMINED BY DESIGN ENGINEER.

2023-01-25

STANDARD CONSTRUCTION DETAIL
UNITARY SEWAGE PUMP STATION

FILE NAME: EW_S22C.DWG
DETAIL REF: S-22C

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 80867

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

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Trusted Advisors, Creating Community.

ENGLAND-THIMS & MILLER

LIFT STATION DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
16B

PLOTTED: November 18, 2025 – 4:08 PM, BY: Emma Thompson
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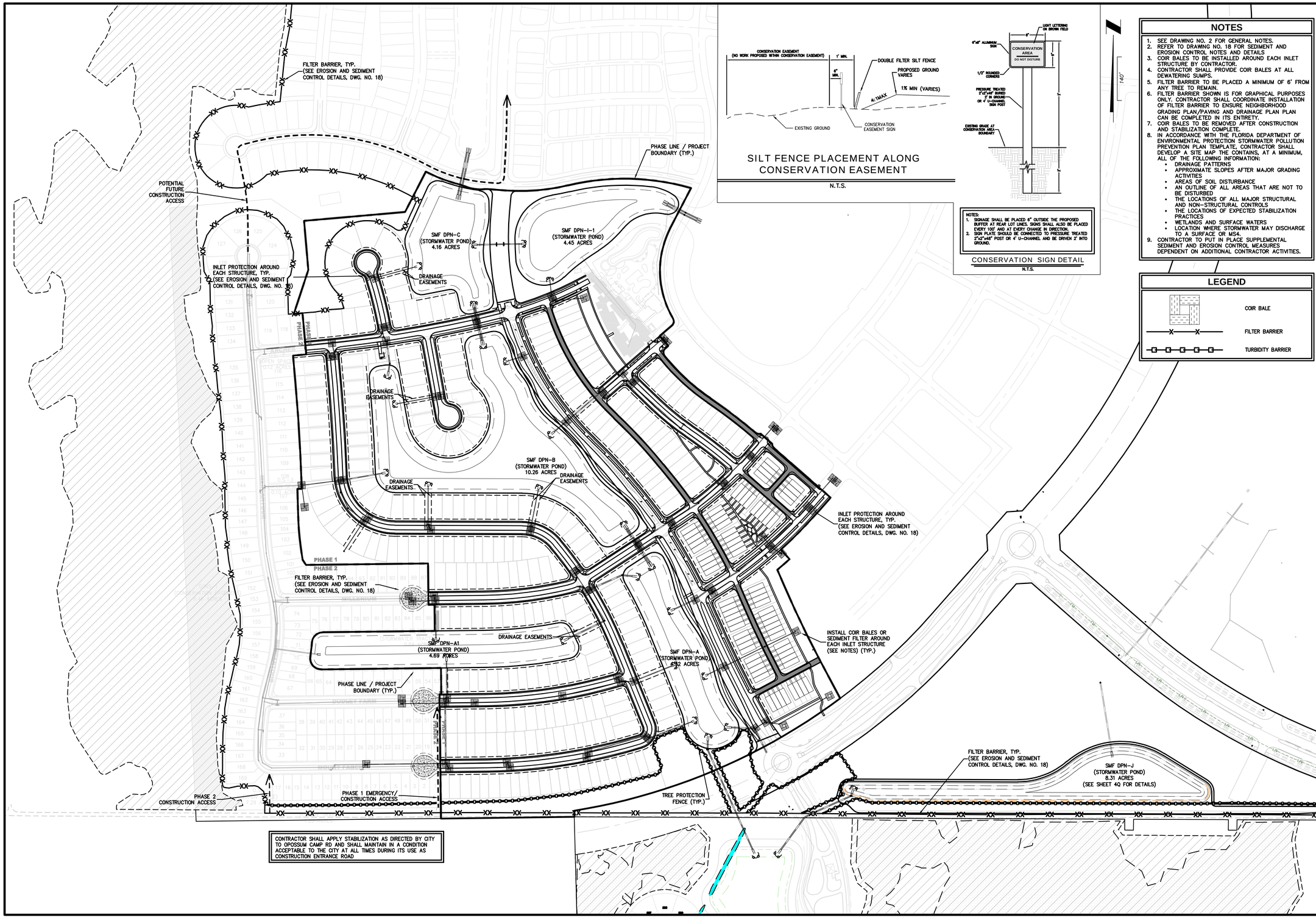

CONTRACTOR SHALL APPLY STABILIZATION AS DIRECTED BY CITY TO OPOSSUM CAMP RD AND SHALL MAINTAIN IN A CONDITION ACCEPTABLE TO THE CITY AT ALL TIMES DURING ITS USE AS CONSTRUCTION ENTRANCE ROAD

SILT FENCE PLACEMENT ALONG CONSERVATION EASEMENT

N.T.S.

NOTES:
1. SIGNAGE SHALL BE PLACED 6" OUTSIDE THE PROPOSED BUFFER AT REAR LOT LINES. SIGNS SHALL ALSO BE PLACED EVERY 100' AND AT EVERY CHANGE IN DIRECTION.
2. SIGN PLATE SHOULD BE CONNECTED TO PRESSURE TREATED 2"x2"x48" POST OR 4' U-CHANNEL AND BE DRIVEN 2' INTO GROUND.

CONSERVATION SIGN DETAIL

N.T.S.

NOTES

1. SEE DRAWING NO. 2 FOR GENERAL NOTES.
2. REFER TO DRAWING NO. 18 FOR SEDIMENT AND EROSION CONTROL NOTES AND DETAILS
3. COIR BALES TO BE INSTALLED AROUND EACH INLET STRUCTURE BY CONTRACTOR.
4. CONTRACTOR SHALL PROVIDE COIR BALES AT ALL DEWATERING SUMPS.
5. FILTER BARRIER TO BE PLACED A MINIMUM OF 6' FROM ANY TREE TO REMAIN.
6. FILTER BARRIER SHOWN IS FOR GRAPHICAL PURPOSES ONLY. CONTRACTOR SHALL COORDINATE INSTALLATION OF FILTER BARRIER TO ENSURE NEIGHBORHOOD GRADING PLAN/PAVING AND DRAINAGE PLAN PLAN CAN BE COMPLETED IN ITS ENTIRETY.
7. COIR BALES TO BE REMOVED AFTER CONSTRUCTION AND STABILIZATION COMPLETE.
8. IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STORMWATER POLLUTION PREVENTION PLAN TEMPLATE, CONTRACTOR SHALL DEVELOP A SITE MAP THE CONTAINS, AT A MINIMUM, ALL OF THE FOLLOWING INFORMATION:
   - DRAINAGE PATTERNS
   - APPROXIMATE SLOPES AFTER MAJOR GRADING ACTIVITIES
   - AREAS OF SOIL DISTURBANCE
   - AN OUTLINE OF ALL AREAS THAT ARE NOT TO BE DISTURBED
   - THE LOCATIONS OF ALL MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS
   - THE LOCATIONS OF EXPECTED STABILIZATION PRACTICES
   - WETLANDS AND SURFACE WATERS
   - LOCATION WHERE STORMWATER MAY DISCHARGE TO A SURFACE OR MS4.
9. CONTRACTOR TO PUT IN PLACE SUPPLEMENTAL SEDIMENT AND EROSION CONTROL MEASURES DEPENDENT ON ADDITIONAL CONTRACTOR ACTIVITIES.

LEGEND

- COIR BALE
- FILTER BARRIER
- TURBIDITY BARRIER

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 80867

PLOTTED: November 18, 2025 – 4:09 PM, BY: Emma Thompson

REVISIONS:

ETM NO. 22-213-03	
DRAWN BY:	D.G.S.
DESIGNED BY:	S.A.W.
CHECKED BY:	
DATE: Issue Date	

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EROSION AND SEDIMENT CONTROL PLAN

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

DRAWING NUMBER
17

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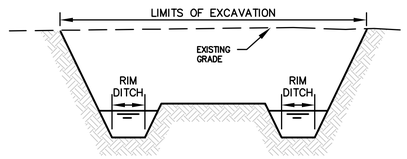
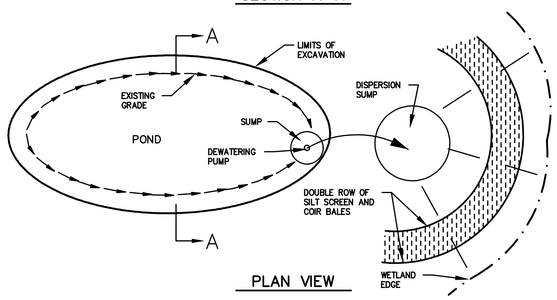
SEDIMENT AND EROSION CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
3. ADDITIONAL PROTECTION – ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.
4. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
5. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS REQUIRED, THE STRIPS SHALL BE OVERLAPPED.
6. FDOT NO. 1 COARSE AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED ON SEDIMENT FILTER DETAIL (SEE DETAIL THIS SHEET). THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
7. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.
8. BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.
9. BALES SHALL BE PLACED LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
10. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
11. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
12. LOOSE COIR SHOULD BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.
13. COIR BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
14. CLOSE ATTENTION SHALL BE GIVEN TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
15. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
16. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. IT MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
17. ANY SEDIMENT DEPOSITS REMAINING IN PLACE, AFTER THE COIR BALE OR FILTER BARRIERS, AND OR SILT FENCES ARE NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
18. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
19. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED IMMEDIATELY.
20. STRUCTURES SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS REQUIRED.
21. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
22. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT RULES AND REGULATIONS.
23. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL – A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (F.D.E.P.) CHAPTER 6.
24. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAILS (THIS SHEET) FOR TYPICAL CONSTRUCTION.
25. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
26. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
27. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
28. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED AND MULCHED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED. CONTRACTOR SHALL USE ADDITIONAL MEASURES TO STABILIZE DISTURBED AREAS THROUGH COMPACTION, SILT SCREENS, COIR BALES, AND GRASSING. ALL FILL SLOPES 3:1 OR STEEPER TO RECEIVE STAKED SOLID SOD.
29. ALL DEWATERING, EROSION, AND SEDIMENT CONTROL SHALL REMAIN IN PLACE UNTIL AFTER COMPLETION OF CONSTRUCTION, AND REMOVED ONLY WHEN AREAS HAVE BEEN STABILIZED.
30. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
31. THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER MANAGEMENT DISTRICT INQUIRIES, RELATIVE TO COMPLIANCE OF SJRWMD FOR EROSION AND SEDIMENTATION CONTROL. THE COST OF THIS COMPLIANCE SHALL BE PART OF THE CONTRACT.
32. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS AND PRESERVATION EASEMENTS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION.
33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF SOD AND/OR GRASS PER THE CONTRACT DOCUMENTS AND MEETING THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, XXXXXXXX AND NPDES FINAL STABILIZATION REQUIREMENTS.
34. THESE PLANS INCLUDING THE POLLUTION PREVENTION PLAN INDICATE THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES REQUIRED FOR THIS PROJECT. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL – A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (F.D.E.P.) CHAPTER 6. CONTRACTOR SHALL PROVIDE EROSION PROTECTION AND TURBIDITY CONTROL AS REQUIRED TO INSURE CONFORMANCE TO STATE AND FEDERAL WATER QUALITY STANDARDS AND MAY NEED TO INSTALL ADDITIONAL CONTROLS TO CONFORM TO AGENCIES REQUIREMENTS. IF A WATER QUALITY VIOLATION OCCURS, THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ALL DAMAGE AND ALL COSTS WHICH MAY RESULT INCLUDING LEGAL FEES, CONSULTANT FEES, CONSTRUCTION COSTS, AND FINES.
35. 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR WILL SUBMIT A "NOTICE OF INTENT" TO THE EPA IN ACCORDANCE WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM RULES AND REGULATIONS. (FOR ANY CONSTRUCTION NOT COVERED BY THE OWNER'S "NOTICE OF INTENT" PERMIT)



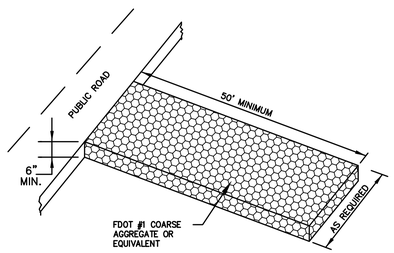
SECTION A–A



PLAN VIEW

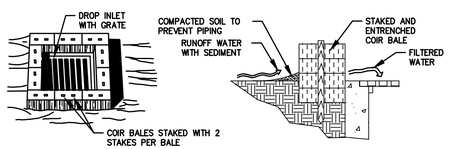
TEMPORARY DEWATERING DETAIL

N.T.S.



STABILIZED CONSTRUCTION ENTRANCE

N.T.S.

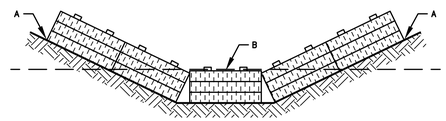


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 cfs) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

COIR BALE DROP INLET SEDIMENT FILTER

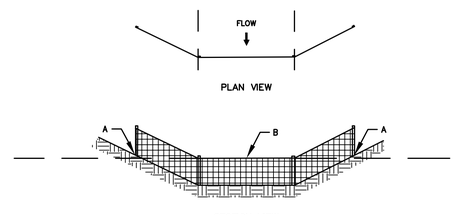
N.T.S.



POINTS A SHOULD BE HIGHER THAN POINT B

PROPER PLACEMENT OF COIR BALE IN A DRAINAGE WAY

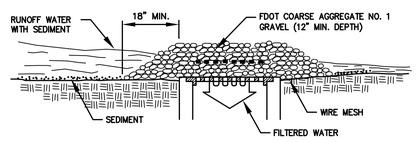
N.T.S.



POINTS A SHOULD BE HIGHER THAN POINT B

PROPER PLACEMENT OF A FILTER BARRIER IN DRAINAGE WAY

N.T.S.

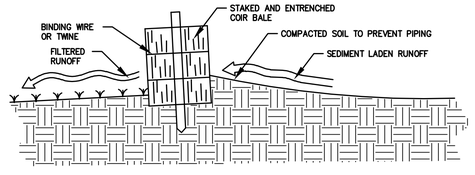


SPECIFIC APPLICATION

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

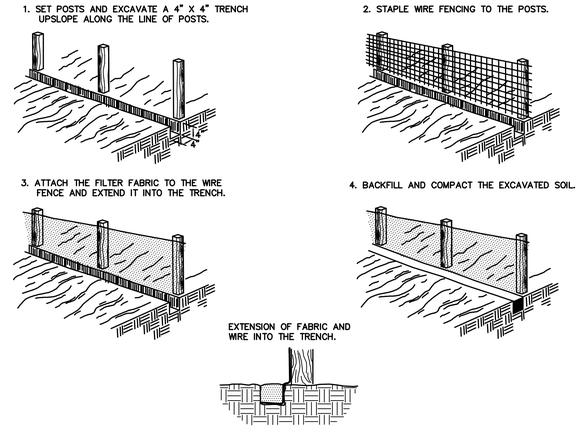
GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER

N.T.S.



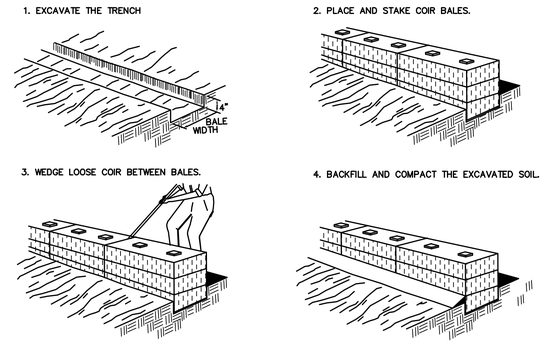
CROSS-SECTION OF A PROPERLY INSTALLED COIR BALE

N.T.S.



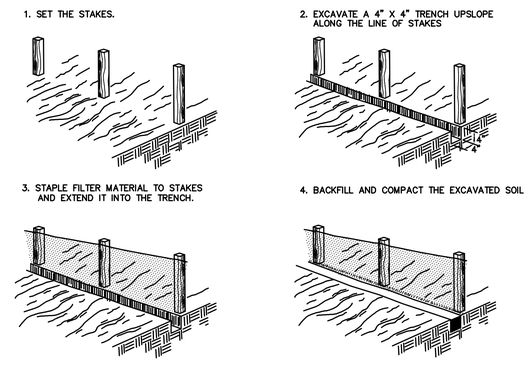
CONSTRUCTION OF SILT FENCE

N.T.S.



CONSTRUCTION OF A COIR BALE BARRIER

N.T.S.



CONSTRUCTION OF A FILTER BARRIER

N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03	
DRAWN BY: D.G.S.	
DESIGNED BY: S.A.W.	
CHECKED BY:	
DATE: Issue Date	

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EROSION AND SEDIMENT CONTROL DETAILS

DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
18

PLOTTED: November 18, 2025 – 4:09 PM, BY: Emma Thompson

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OWNER'S REQUIREMENTS

SITE DESCRIPTION

PROJECT NAME AND LOCATION:
DEERING PARK NORTH – PHASE 1
CITY OF EDGEWATER, FLORIDA

OWNER/DEVELOPER NAME AND ADDRESS:

DEERING PARK 1, LLC
14025 RIVEREDGE DRIVE, SUITE 175
TAMPA, FLORIDA 33637
770-203-9355

DESCRIPTION:

THIS PROJECT WILL CONSIST OF:

CONSTRUCTION OF A SINGLE FAMILY RESIDENTIAL DEVELOPMENT, WHICH WILL INVOLVE CLEARING, GRADING, EXCAVATION OF STORMWATER MANAGEMENT FACILITIES, INSTALLATION OF UNDERGROUND UTILITIES, CONSTRUCTION OF ROADWAYS AND OTHER ASSOCIATED CONSTRUCTION ACTIVITIES.

SOIL DISTURBING ACTIVITIES WILL INCLUDE:
CLEARING AND GRUBBING; INSTALLING A STABILIZED CONSTRUCTION ENTRANCE, PERIMETER, AND OTHER EROSION AND SEDIMENT CONTROLS; GRADING; EXCAVATION FOR THE SEDIMENTATION POND, STORM SEWER, UTILITIES, AND BUILDING FOUNDATION; CONSTRUCTION OF CURB AND GUTTER, ROAD, AND PARKING AREAS; AND PREPARATION FOR FINAL PLANTING AND SEEDING.

GENERALIZED RUNOFF CURVE NUMBERS (REFER TO DRAINAGE CALCULATIONS FOR ACTUAL CURVE NUMBER FOR EACH BASIN)

1. PRE-CONSTRUCTION = 79±
2. DURING CONSTRUCTION = 85±
3. POST-CONSTRUCTION = 90.5±

SOILS:
* SEE GEOTECHNICAL REPORT FOR SOILS DATA

SITE MAPS:
* SEE ATTACHED DWG. Nos. 7A-7J FOR POST DEVELOPMENT GRADES, AREAS OF SOILS, DISTURBANCE, LOCATION OF SURFACE WATERS, WETLANDS, PROTECTED AREAS, MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS AND STORM WATER DISCHARGE POINTS.

* SEE ATTACHED DWG. No. 17 FOR LOCATION OF TEMPORARY STABILIZATION PRACTICES, AND TURBIDITY BARRIERS

SITE AREA:
1. TOTAL AREA OF SITE = 118 AC±
2. TOTAL AREA TO BE DISTURBED = 118 AC±

NAME OF RECEIVING WATERS: LITTLE COW CREEK

CONTROLS

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN OFF. DWG. No. 17 AND 18 HAVE BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS AS PER PLAN AS WELL AS ENSURING THE PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS. REFER TO "CONTRACTORS REQUIREMENTS" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.

AREAS WHICH ARE NOT DEVELOPED BUT WILL BE REGRADED SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE.

REFER TO " CONTRACTORS REQUIREMENTS" FOR THE TIMING OF CONTROL/MEASURES.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

IN AN EFFORT TO ENSURE COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS REGARDING EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED.

D.E.P. DREDGE/FILL PERMIT # _____
C.O.E. DREDGE/FILL PERMIT # _____
S.J.R.W.M.D. M.S.S.W. PERMIT # _____

POLLUTION PREVENTION PLAN CERTIFICATION

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

SIGNED: _____

TITLE: _____
CORPORATE OFFICER, GENERAL PARTNER, PROPRIETOR, EXECUTIVE OFFICER, OR RANKING ELECTED OFFICIAL

DATE: _____

GENERAL

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS. DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

SEQUENCE OF MAJOR ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AND COIR BALES AS REQUIRED
3. CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN
4. CONSTRUCT SEDIMENTATION BASIN
5. CONTINUE CLEARING AND GRUBBING
6. STOCK PILE TOP SOIL IF REQUIRED
7. PERFORM PRELIMINARY GRADING ON SITE AS REQUIRED
8. STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS PRACTICABLE
9. INSTALL UTILITIES, STORM SEWER, CURBS & GUTTER.
10. APPLY BASE TO PARKING AREAS
11. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING
12. COMPLETE FINAL PAVING
13. REMOVE ACCUMULATED SEDIMENT FROM BASINS
14. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/SOD AS REQUIRED

NOTE: VERTICAL CONSTRUCTION OF THE BUILDING WILL BE TAKING PLACE DURING ALL THE SEQUENCE STEPS LISTED ABOVE

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND COIR BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE PAVING AND DRAINAGE PLANS (DRAWING NO. 5A-5I)

CONTROLS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE SEDIMENT AND EROSION CONTROL PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED , MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE SEDIMENT AND EROSION CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED,TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL PLAN AND AS REQUIRED TO MEET THE SEDIMENT AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.

EROSION AND SEDIMENT CONTROLS
STABILIZATION PRACTICES

1. COIR BALE BARRIER: COIR BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
   C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.
   D. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF COIR BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE AGAINST WASHOUT.
2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
3. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.
4. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE.
5. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.
6. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES. THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.

CONTRACTOR'S REQUIREMENTS

7. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT -LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.

8. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 7 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING.

9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.

10. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER.

11. TEMPORARY REGRASSING : IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.

12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.

13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.

14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

STRUCTURAL PRACTICES

1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY.

2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP IS USUALLY INSTALLED IN AN DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA WITH THE FOLLOWING LIMITATIONS:
   A. THE SEDIMENT TRAP MAY BE CONSTRUCTED EITHER INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION DIKE.

3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE VELOCITY OF FLOW AT DESIGN CAPACITY OF THE OUTLET WILL EXCEED THE PERMISSIBLE VELOCITY OF THE RECEIVING CHANNEL OR AREA.

4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME, THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE. THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE DISPOSAL

WASTE MATERIALS
ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS,WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

Concrete	Fertilizers	Wood
Asphalt	Petroleum Based Products	Masonry Blocks
Tar	Cleaning Solvents	Roofing Materials
Detergents	Paints	Metal Studs

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

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

GOOD HOUSEKEEPING

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

* AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.

* ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

* PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.

* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.

* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.

* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL

INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.50 INCHES OR GREATER.

* ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

* BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.

* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB.

* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.

* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM SHALL BE COMPLETED BY THE INSPECTOR
  THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS.
  THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED.
  THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.

* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE. SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON-STORM WATER DISCHARGES

* IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

* WATER FROM WATER LINE FLUSHING

* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

CONTRACTOR'S CERTIFICATION

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

DEWATERING

PRIOR TO ANY DISCHARGE OF GROUND WATER (DEWATERING) FROM CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT TO WATERS OF THE STATE (INCLUDING, BUT NOT LIMITED TO, WETLANDS, SWALES AND MUNICIPAL STORM SEWERS), THE CONTRACTOR SHALL TEST THE EFFLUENT (WATER TO BE DISCHARGED) IN ACCORDANCE WITH RULE 62-621.300(2), F.A.C. IF THE TEST RESULTS ON THE EFFLUENT ARE BELOW THE SCREENING VALUES OF RULE 62-621.300(2), F.A.C., THE CONTRACTOR SHALL SUBMIT A SUMMARY OF THE PROPOSED CONSTRUCTION ACTIVITY AND THE TEST RESULTS TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DISTRICT OFFICE, WITHIN ONE (1) WEEK AFTER DISCHARGE BEGINS. THE CONTRACTOR SHALL CONTINUE TO SAMPLE THE EFFLUENT AS REQUIRED THROUGHOUT THE PROJECT AND COMPLY WITH ALL CONDITIONS OF RULE 62-621.300(2), F.A.C. IF THE GROUND WATER EXCEEDS THE SCREENING VALUES OF RULE 62-621.300(2), F.A.C., THE CONTRACTOR SHALL COMPLY WITH OTHER APPLICABLE RULES AND REGULATIONS PRIOR TO DISCHARGE OF THE EFFLUENT (GROUND WATER) TO SURFACE WATERS OF THE STATE.

SIGNATURE	BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS	RESPONSIBLE FOR/DUTIES
		GENERAL CONTRACTOR
		SUB-CONTRACTOR
		SUB-CONTRACTOR
		SUB-CONTRACTOR
		SUB-CONTRACTOR

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E.
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-03
DRAWN BY: D.G.S.
DESIGNED BY: S.A.W.
CHECKED BY:
DATE: Issue Date

1411 Edgewater Drive, Ste. 200
Orlando, Florida 32804
(407) 536-5379
www.etminc.com
REG-00002584 LC-0000316

ETM
Trusted Advisors, Creating Community.
ENGLAND-THIMS & MILLER

STORMWATER POLLUTION PREVENTION PLAN
DEERING PARK NORTH - PHASE 1
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
19

PLOTTED: November 18, 2025 – 4:09 PM, BY: Emma Thompson

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DEERING PARK NORTH - PHASE 1

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

THIS IS THE CONTRACTORS CERTIFICATION REQUIRED BY THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES), STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SITES OVER 5 ACRES. THIS CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.50 INCHES

INSPECTOR: _____

INSPECTOR'S QUALIFICATIONS:

_____

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL _____ INCHES

STABILIZATION MEASURES

INSPECTION AREA (DESCRIPTION OF LOCATION)	DATE SINCE LAST DISTURBED	DATE OF NEXT DISTURBANCE	STABILIZED ? (YES/NO)	STABILIZED WITH	CONDITION

STABILIZATION REQUIRED:

_____

TO BE PERFORMED BY: _____ ON OR BEFORE _____

DEERING PARK NORTH - PHASE 1

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

STRUCTURAL CONTROLS

DATE: _____

EARTH DIKES/SWALES

DIKE OR SWALE	FROM	TO	IS DIKE/SWALE STABILIZED ?	IS THERE EVIDENCE OF WASHOUT OR OVERTOPPING

MAINTENANCE REQUIRED FOR EARTH DIKE/SWALE:

_____

TO BE PERFORMED BY: _____ ON OR BEFORE _____

CATCH BASIN/CURB INLET/OUTFALL TURBIDITY CONTROLS

STRUCTURE/ OUTFALL	ARE TURBIDITY CONTROLS IN PLACE	ANY EVIDENCE OF CLOGGING/WASHOUT OR BYPASSING ?	ARE TURBIDITY CONTROLS IN NEED OF REPLACING	DOES SILT NEED TO BE REMOVED FROM AROUND CONTROL

MAINTENANCE REQUIRED FOR CATCH BASIN/CURB INLETS/OUTFALLS TURBIDITY CONTROLS:

_____

TO BE PERFORMED BY: _____ ON OR BEFORE _____

DEERING PARK NORTH - PHASE 1

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

SEDIMENT BASIN

DEPTH OF SEDIMENT IN BASIN	DEPTH OF SEDIMENT SIDE BASIN	ANY EVIDENCE OF OVERTOPPING OF THE EMBANKMENT ?	CONDITION OF OUTFALL FROM SEDIMENT BASIN

MAINTENANCE REQUIRED FOR SEDIMENT BASIN:

_____

TO BE PERFORMED BY: _____ ON OR BEFORE _____

OTHER CONTROLS

STABILIZED CONSTRUCTION ENTRANCE

DOES MUCH SEDIMENT GET TRACKED ON TO ROAD ?	IS THE GRAVEL CLEAN OR IS IT FILLED WITH SEDIMENT?	DOES ALL TRAFFIC USE THE STABILIZED ENTRANCE TO LEAVE THE SITE ?	IS THE CULVERT BENEATH THE ENTRANCE WORKING? (IF APPLICABLE)

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCE:

_____

TO BE PERFORMED BY: _____ ON OR BEFORE _____

DEERING PARK NORTH - PHASE 1

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:

_____

REASONS FOR CHANGES:

_____

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

SIGNATURE: _____

DATE: _____

DRAWING NUMBER
20

STORMWATER POLLUTION PREVENTION PLAN - CONTRACTORS CERTIFICATION

DEERING PARK NORTH - PHASE 1 FOR DEERING PARK 1, LLC

ETM
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