

Construction Plans
for
**Out Parcel
Mass Grading Plans**
City of Orlando, FL

LESS AND EXCEPT THEREFROM, THAT PORTION OF INTERNATIONAL DRIVE EXTENSION AS DESCRIBED IN THAT CERTAIN WARRANTY DEED FROM THACKERAY CORPORATION TO THE CITY OF ORLANDO, IN WARRANTY DEED DATED AUGUST 30, 1983, RECORDED MARCH 12, 1985M IN OFFICIAL RECORDS BOOK 3616, PAGE 1420, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH EAST CORNER OF SECTION 30, TOWNSHIP 23 SOUTH, RANGE 29 EAST, ORANGE COUNTY, FLORIDA; THENCE SOUTH 00°13'18" EAST ALONG THE EAST LINE OF SAID NORTH EAST 1/4, A DISTANCE OF 1308.14 FEET TO A POINT AT THE NORTH EAST CORNER OF BLOCK 6, TANGELO PARK SECTION FIVE AS RECORDED IN PLAT BOOK Y, PAGE 61, OF THE OFFICIAL RECORDS OF ORANGE COUNTY, FLORIDA; THENCE LEAVING THE EAST LINE OF SAID NORTH EAST 1/4, NORTH 89°42'06" WEST ALONG THE NORTHERLY LINE OF SAID BLOCK 6, A DISTANCE OF 135.05 FEET TO THE NORTHWEST CORNER OF SAID BLOCK 6, SAID POINT ALSO BEING ON THE EASTERLY RIGHT-OF-WAY LINE OF POMELO DRIVE AS RECORDED ON THE PLAT OF SAID TANGELO PARK SECTION FIVE; THENCE LEAVING THE NORTHERLY LINE OF SAID BLOCK 6, NORTH 00°07'50" WEST ALONG THE EASTERLY RIGHT-OF-WAY LINE OF SAID POMELO DRIVE A DISTANCE OF 30.00 FEET TO ITS INTERSECTION WITH THE NORTHERLY RIGHT-OF-WAY LINE OF VANGUARD STREET AS RECORDED ON THE PLAT OF SAID TANGELO PARK SECTION FIVE; THENCE LEAVING THE EASTERLY RIGHT-OF-WAY LINE OF SAID POMELO DRIVE, SOUTH 89°52'10" WEST ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF VANGUARD STREET A DISTANCE OF 1344.60 FEET TO A POINT; THENCE CONTINUING ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID VANGUARD STREET, SOUTH 89°55'18" WEST A DISTANCE OF 1174.60 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 30, SAID POINT ALSO BEING THE NORTHWEST CORNER OF SAID TANGELO PARK SECTION FIVE; THENCE LEAVING THE NORTHERLY LINE OF SAID VANGUARD STREET, NORTH 00°09'49" WEST ALONG THE WEST LINE OF SAID NORTH EAST 1/4, A DISTANCE OF 791.55 FEET TO ITS INTERSECTION WITH THE EASTERLY RIGHT-OF-WAY LINE ON INTERNATIONAL DRIVE AS RECORDED IN OFFICIAL RECORDS BOOK 3616, PAGE 1420, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE LEAVING THE WEST LINE OF SAID NORTH EAST 1/4 ALONG A NON-TANGENT CURVE TO THE LEFT, ALSO BEING ALONG THE EASTERLY RIGHT-OF-WAY LINE OF SAID INTERNATIONAL DRIVE, AN ARC DISTANCE OF 279.31 FEET (SAID CURVE HAVING A RADIUS OF 662.53 FEET, A DELTA OF 24°09'16" AND A CHORD BEARING AND DISTANCE OF NORTH 11°54'49" EAST, 277.24 FEET) TO A POINT; THENCE CONTINUING ALONG THE EASTERLY RIGHT-OF-WAY LINE OF SAID INTERNATIONAL DRIVE, NORTH 00°05'18" WEST, A DISTANCE OF 160.84 FEET TO A POINT ON THE NORTH LINE OF SAID NORTH EAST 1/4; THENCE LEAVING THE EASTERLY RIGHT-OF-WAY LINE OF SAID INTERNATIONAL DRIVE, SOUTH 89°55'22" EAST, ALONG THE NORTHERLY LINE OF SAID NORTH EAST CORNER A DISTANCE OF 2594.93 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT THAT PORTION CONVEYED TO THE CITY OF ORLANDO BY THAT WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 10665, PAGE 606, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

LESS AND EXCEPT THAT PORTION TO BE PROVIDED:

THE ABOVE DESCRIBED TRACT OF LAND CONTAINS 2,955,246 SQUARE FEET, OR 67.84 ACRES MORE OR LESS.

Consultants

Civil Engineer:
Poulos & Bennett, LLC
2602 E. Livingston St.
Orlando, FL 32803
407.487.2594

Environmental:
Modica & Associates
302 Mohawk Rd.
Clermont, FL 34715
352.394.2000

Surveyor:
Allen & Company, Inc.
16 East Plant St.
Winter Garden, FL 34787
407.654.5355

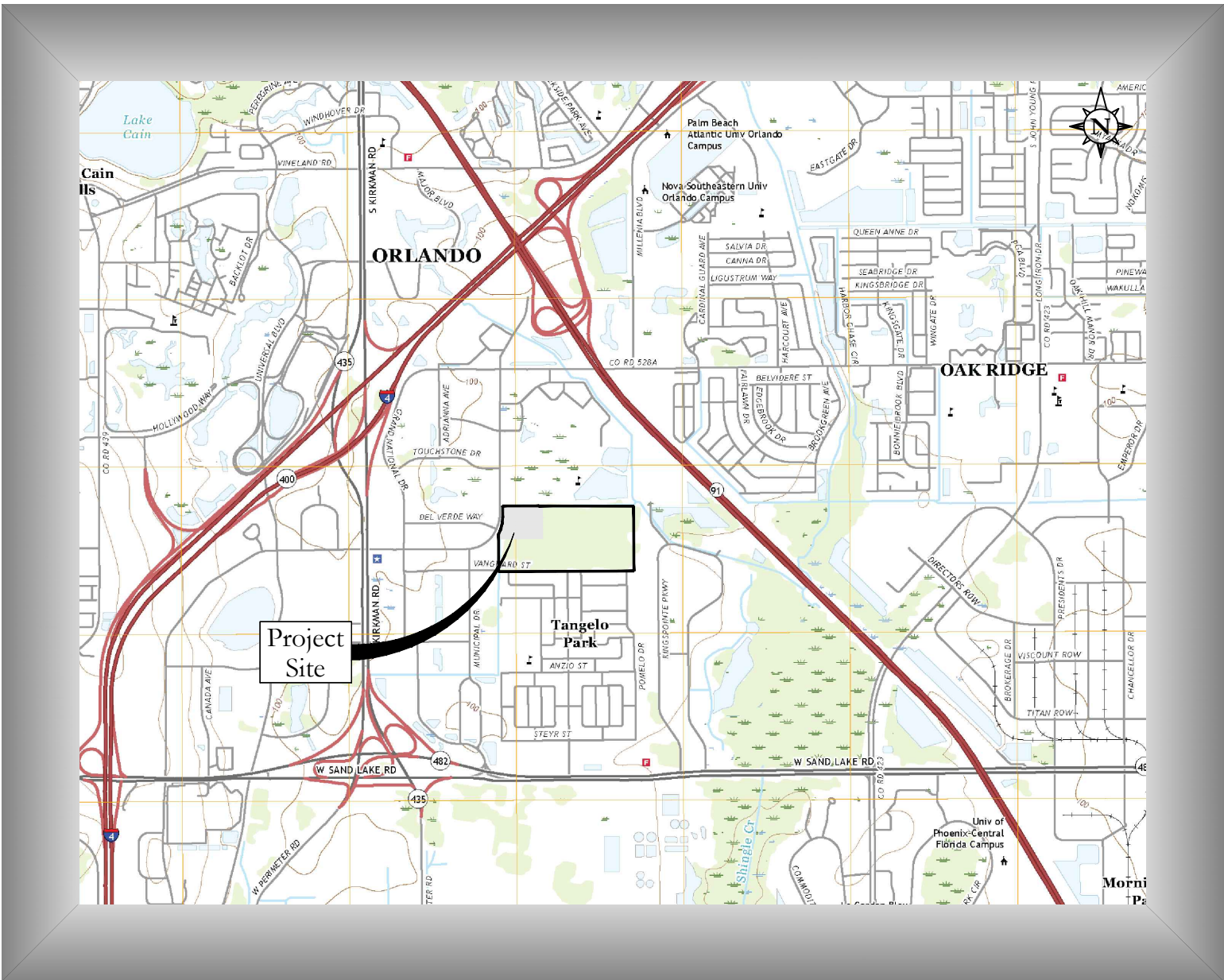
Landscape Architect:
Michael Redd & Associates
2655 North Ocean Drive, Suite 400
Singer Island, FL 33404
561.863.2500

Geotechnical Engineer:
Faulkner Engineering Services, Inc.
2374 Causeway Drive
Tampa, FL 33619
813.621.8168

Utility Providers

Water:
Orlando Utilities Commission
100 W. Anderson St.
Orlando, FL 32801
407.423.9018

Wastewater:
Orange County Utilities
9150 Curry Ford Rd.
Orlando, FL 32825
407.836.5515



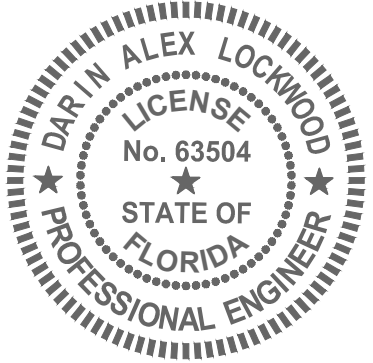
Vicinity Map

Scale: 1" = 3,000'

Parcel Id. No.:
30-23-29-0000-00-005

| Sheet Index | | Subm./Rev. | | | | | | |
|----------------------------------|---------------------------------|--------------------|---|---|---|---|---|---|
| Sheet Id. | Sheet Title | - | 1 | 2 | 3 | 4 | 5 | 6 |
| C0.00 | Cover Sheet | ■ | | | | | | |
| C0.01 | Construction Notes | ■ | | | | | | |
| C0.10 | Erosion Control Plan | ■ | | | | | | |
| C1.00 | Master Site Plan | ■ | | | | | | |
| C3.00 | Typical Road Sections & Details | ■ | | | | | | |
| C4.00 | Grading & Drainage Plan | ■ | | | | | | |
| C4.05 | Grading Sections & Details | ■ | | | | | | |
| C4.10 | CMP Culvert Details | ■ | | | | | | |
| C6.00 | Plan & Profile | ■ | | | | | | |
| <u>Survey Reference Drawings</u> | | | | | | | | |
| 1 | Topography Survey | ■ | | | | | | |
| | | | | | | | | |
| <u>Date</u> | | <u>Description</u> | | | | | | |
| - | 3/29/2012 | Submit to SFWMD | | | | | | |

This item has been electronically signed and sealed by Darin Alex Lockwood on the date adjacent to the seal using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.



DARIN ALEX LOCKWOOD
P.E. NO. 0063504



2602 E. Livingston St., Orlando, FL 32803
Tel. 407.487.2594 www.poulosandbennett.com
Eng. Bus. No. 28567
P&B Job No.: 19-060

NOTE:
CONSTRUCTION PLANS WERE PREPARED IN ACCORDANCE WITH THE LATEST MANUAL OF UNIFORM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS, FDOT GREEN BOOK, CITY OF ORLANDO, AND ORANGE COUNTY REGULATIONS AND SPECIFICATIONS.

GENERAL NOTES:

- IT IS BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND ARE IN HAND AT THE JOB SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL ABIDE BY ALL CONDITIONS CONTAINED THEREIN. PERMITS INCLUDED (BUT NOT NECESSARILY LIMITED TO) ARE:
 - WATER MANAGEMENT DISTRICT CONSUMPTIVE USE (WATER USE) FOR CONSTRUCTION DETERAING (CUP)
 - WATER MANAGEMENT DISTRICT ENVIRONMENTAL RESOURCE PERMIT (ERP) OR LETTER MODIFICATION
 - FDEP WATER DISTRIBUTION
 - LOCAL RIGHT OF WAY USE
 - LOCAL UNDERGROUND UTILITIES
 - FOOT DRAINAGE CONNECTION OR EXCEPTION
 - FDEP & EPA NPDES STORMWATER
 - CITY OF ORLANDO
 - ORLANDO UTILITIES COMMISSIONERS
 - ORANGE COUNTY UTILITIES
- CONTRACTOR IS ADVISED THAT THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REQUIRES THAT OPERATORS FILE A NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT PRIOR TO BEGINNING WORK. IT IS CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN SAME. A COPY SHALL BE SENT TO OWNER.
- FLORIDA LAW (F.S. 553.851) PROTECTION OF UNDERGROUND PIPELINES MANDATES THAT "NO EXCAVATOR SHALL COMMENCE OR PERFORM ANY EXCAVATION IN ANY PUBLIC OR PRIVATE STREET, ALLEY, RIGHT-OF-WAY DEDICATED TO THE PUBLIC USE, OR GAS UTILITY EASEMENT WITHOUT FIRST OBTAINING INFORMATION CONCERNING THE POSSIBLE LOCATION OF GAS PIPELINES IN THE AREA OF THE PROPOSED EXCAVATION." THIS INCLUDES ANY OPERATION UTILIZING HAND TOOLS OR POWER TOOLS WHICH MOVES OR REMOVES ANY STRUCTURE, EARTH, ROCK, OR OTHER MASS OF MATERIAL BY SUCH METHODS AS DIGGING, BACKFILLING, DEMOLITION, GRADING, DITCHING, DRILLING, BORING AND CABLE PLOWING. THE EXCAVATOR MUST NOTIFY THE GAS UTILITY A MINIMUM OF 48 HOURS AND A MAXIMUM OF 5 DAYS PRIOR TO EXCAVATING (EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS).
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROJECT SITE DURING CONSTRUCTION, TO PREVENT TRESPASSING OF UNAUTHORIZED PEDESTRIANS AND/OR VEHICLES IN ALL WORK AREAS. THE CONTRACTOR SHALL POST SIGNS, CONSTRUCT BARRIERS OR IMPLEMENT OTHER METHODS NECESSARY TO CONTROL ACCESS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR TRESPASSING ON THE CONSTRUCTION SITE OR DAMAGES TO ANY WORK RELATED THERETO.
- CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS; INCLUDING BUT NOT LIMITED TO WATER, SEWER, POWER, TELEPHONE, GAS AND CABLE TV COMPANIES.
- PRIOR TO COMMENCEMENT, CONTRACTOR SHALL PROVIDE POULOS & BENNETT WITH CONSTRUCTION SCHEDULE(S) FOR VARIOUS SITE WORK ELEMENTS SO THAT PERIODIC SITE VISITS MAY BE COORDINATED TO ENSURE TIMELY CERTIFICATION OF COMPLETION TO AGENCIES AND AVOID DELAYS IN ISSUANCE OF CERTIFICATES OF OCCUPANCY/COMPLETION.
- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE LATEST STANDARDS OF ALL APPLICABLE AGENCIES.
- ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED AT ALL AREAS OF CONNECTION AND ALL AREAS OF CONFLICT AS SHOWN ON THE EXISTING CONDITIONS PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD RE-VERIFICATION OF SIZE AND LOCATION OF ALL EXISTING UTILITIES AND RELATED CONSTRUCTION PRIOR TO COMMENCEMENT OF WORK. SHOULD THE CONTRACTOR OBSERVE ANY DEVIATIONS FROM WHAT IS SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SAID PRIOR TO COMMENCEMENT OF WORK. ANY WORK THAT MUST BE REDONE DUE TO FAILURE OF CONTRACTOR TO NOTIFY THE ENGINEER OF DEVIATIONS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS SOLE EXPENSE.
- ANY DIFFERING SITE CONDITION(S) FROM THAT WHICH IS REPRESENTED HEREON, WHETHER ABOVE, ON, OR BELOW THE SURFACE OF THE GROUND, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND OWNER IN WRITING. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO DIFFERING SITE CONDITIONS WILL BE ALLOWED IF CONTRACTOR FAILS TO PROVIDE THE REQUIRED WRITTEN NOTIFICATION OF SUCH CONDITIONS FOR REVIEW BY THE ENGINEER AND OWNER.
- CONTRACTOR SHALL PROTECT AREAS ADJACENT TO PROJECT AREA AND ALL ADJACENT PROPERTIES FROM DAMAGE BY SEDIMENTATION OR OTHER POTENTIAL CONSTRUCTION RELATED CAUSES.
- ALL EXISTING UTILITIES AT POINTS OF CONNECTION AND CONFLICT SHOWN ON THE CONSTRUCTION PLANS HAVE BEEN FIELD VERIFIED BY THE SURVEYOR. PRIOR TO ANY CONSTRUCTION WITHIN RIGHTS-OF-WAY OR EASEMENTS KNOWN TO CONTAIN UNDERGROUND UTILITIES, THE CONTRACTOR SHALL RE-VERIFY LOCATIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
- THE CONTRACTOR SHALL INSTALL, AS PART OF THE INFRASTRUCTURE AND PRIOR TO CERTIFICATE OF COMPLETION, DROP CURBS AND/OR HANDICAP RAMP AT ALL INTERSECTIONS OF SIDEWALK WITH THE PROPOSED PAVEMENT TO MEET STATE OF FLORIDA ACCESSIBILITY CODE AND FEDERAL A.D.A. SPECIFICATIONS.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING FDEP GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED SITE ACTIVITY IN ACCORDANCE OF FLORIDA ADMINISTRATIVE CODE 62-621.300 (2), 62-620, AND FLORIDA STATUTES CHAPTER 403.
- DURING CONSTRUCTION, WHEN COMBUSTIBLES ARE BROUGHT ON TO THE SITE, ACCESS ROADS AND A SUITABLE TEMPORARY OR PERMANENT SUPPLY OF WATER ACCEPTABLE TO THE FIRE DEPARTMENT SHALL BE PROVIDED AND MAINTAINED IN ACCORDANCE WITH CHAPTER 16, NFPA 1 2009 EDITION (FFPC 2010 EDITION).
- ALL RECOMMENDATIONS AND REQUIREMENTS OF INSPECTION PERSONNEL OTHER THAN OWNER'S REPRESENTATIVE(S) SHALL BE REPORTED TO ENGINEER/OWNER PRIOR TO IMPLEMENTATION. COMPENSATION WILL NOT BE ALLOWED FOR WORK WHICH IS NOT AUTHORIZED BY ENGINEER/OWNER.
- ALL WORK SHALL BE OPEN TO AND SUBJECT TO INSPECTION BY AUTHORIZED PERSONNEL OF THE CITY, COUNTY, OWNER, INVOLVED UTILITY COMPANIES, PROJECT ENGINEER AND REGULATORY AGENCIES.
- CONTRACTOR SHALL STAKE ALL IMPROVEMENTS USING THE ROAD CENTERLINE GEOMETRY AND BUILDING COORDINATES PROVIDED IN THESE PLANS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO ENSURE ADEQUATE POSITIONING, BOTH HORIZONTAL AND VERTICAL, INCLUDING MINIMUM BUILDING SETBACKS PRIOR TO THE INSTALLATION OF ANY IMPROVEMENT.
- NO EXISTING MATERIAL SHALL BE USED IN NEW CONSTRUCTION UNLESS APPROVED DURING THE SHOP DRAWING APPROVAL PROCESS, OR AS APPROVED IN WRITING BY THE ENGINEER.
- ALL FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN INDICES ARE HEREBY INCORPORATED AS PLAN REFERENCES HEREIN. CONTRACTOR IS RESPONSIBLE FOR OBTAINING COMPLETE COPIES OF ALL APPLICABLE INDEX DRAWINGS AND CONSTRUCTING ALL WORKS IN CONFORMANCE WITH THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, LATEST EDITION.
- ALL SIGNAGE, PAVEMENT MARKING AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", LATEST EDITION.
- ALL HANDICAPPED PARKING SPACES SHALL BE DESIGNATED BY APPROPRIATE PAVEMENT MARKINGS AND SIGN.
- BLUE REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED OPPOSITE FIRE HYDRANTS IN THE CENTER OF THE NEAREST TRAVEL LANE TO MARK THEIR LOCATIONS.
- REGULATORY SIGNS (STOP, ETC.) SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING IMPROVEMENTS.
- ALL EXCESS FILL MATERIAL WILL BE HAULED OFFSITE.

AS-BUILT NOTES:

- THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF RECORD DRAWINGS TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. RECORD DRAWINGS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT ACCEPTANCE SHALL COMPLY WITH MUNICIPALITY REQUIREMENTS AND THE FOLLOWING REQUIREMENTS:
 - THE VERTICAL AND HORIZONTAL DATUMS USED SHALL BE CLEARED STATED ON THE DRAWINGS.
 - DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.
 - DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, POTABLE WATER AND WASTEWATER PIPING, AND RELATED APPURTENANCES. ALL CHANGES TO PIPING LOCATION INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL, CLASS, ETC.
 - DRAWINGS SHALL CLEARLY INDICATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN POTABLE WATER MAIN AND STORM DRAINAGE/SANITARY SEWER/RECLAIMED WATER MAINS AT POINTS OF CROSSING IN ACCORDANCE WITH THE MORE STRINGENT OF FDEP CRITERIA OR UTILITY PROVIDER REGULATIONS.
 - DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON ORIGINAL CONTRACT DRAWINGS, BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN.
 - LOCATION OF ALL INLETS, MANHOLES, HYDRANTS, VALVES, AND VALVE BOXES SHALL BE SHOWN AND REFERENCED FROM AT LEAST TWO (PREFERABLY THREE) PERMANENT POINTS OR BY STATE PLANE COORDINATES.
 - DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE FIELD VERIFIED AND THE INVERTS, AND GRADE ELEVATIONS OF ALL INLETS AND MANHOLES SHALL BE SHOWN.
 - CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY FOR POND GRADING. AS-BUILT POND CONTOURS SHALL BE PROVIDED AT TOP OF BANK, POND BOTTOM, AND ALL GRADE BREAKS AND ELEVATIONS SPECIED ON THE PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-GRADING POND SLOPES THAT ARE STEEPER THAN REQUIRED PER PLAN TO A DEPTH OF 2 FT BELOW THE SEASONAL LOW WATER TABLE (SLWT).
 - EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY REGISTERED SURVEYOR WITH A NOTE READING "THESE AS-BUILT DRAWINGS ACCURATELY DEPIC THE ACTUAL IMPROVEMENTS AS CONSTRUCTED".
 - WHERE THE POTABLE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCEMAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE CONSTRUCTED ELEVATIONS, ALONG WITH PHOTOGRAPHS OF EACH CROSSING, IN SUCH A WAY THAT THE VERTICAL SEPARATION BETWEEN THE WATER MAIN AND OTHER UTILITIES MAY BE VERIFIED BY THE ENGINEER. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
 - WHERE THE POTABLE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCEMAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE LOCATIONS OF PIPE JOINTS IN SUCH A MANNER AS TO DEMONSTRATE THE PIPE IS CENTERED AT ALL THE CROSSING. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
 - WHERE UPGRADED PIPE MATERIALS ARE SHOWN IN THE PLANS OR ARE DIRECTED IN THE FIELD BY THE ENGINEER, IN LIEU OF PROVIDING THE VERTICAL SEPARATIONS REQUIRED BY FDEP, THE LENGTH, LOCATIONS, FITTINGS, ETC. FOR UPGRADED PIPE SHALL BE SHOWN ON THE (AS-BUILT DRAWINGS) (RECORD DRAWINGS OR PHOTOS).
- CERTIFIED AS-BUILT DRAWINGS SHALL BE PROVIDED TO THE ENGINEER PRIOR TO BACTERIOLOGICAL TESTING. FAILURE TO PROVIDE ACCURATE DRAWINGS MAY RESULT IN EXPIRED TEST RESULTS AND REQUIRE ADDITIONAL TESTING AT THE CONTRACTOR'S EXPENSE.

- IN THE CITY OF ORLANDO, COMPLETE AS-BUILTS AND ASSET TABLES SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL. AS-BUILTS SHALL BE PREPARED IN ACCORDANCE WITH CHAPTER 6 OF THE ENGINEERING STANDARDS MANUAL (5TH EDITION) AND PROVIDE GPS COORDINATES FOR SANITARY STRUCTURES. PAY APPLICATIONS REQUESTING PAYMENT BEYOND 80% OF CONTRACT AMOUNT, PER SYSTEM, MAY BE HELD AT THE DISCRETION OF THE OWNER UNTIL THE AS-BUILTS AND ASSET TABLES ARE DEEMED COMPLETE BY THE ENGINEER.
- AS-BUILT DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH POULOS & BENNETT CAD STANDARDS.
- POTABLE WATER CROSSINGS- POULOS & BENNETT REQUIRES THAT AT LEAST TEN PERCENT (10%) OF THE POTABLE WATER CROSSINGS AND INSTALLATIONS, REFERENCE IN PARAGRAPH 1.J. ABOVE, BE FIELD VERIFIED BY POULOS & BENNETT STAFF. THE 10% TO BE FIELD VERIFIED WILL BE IDENTIFIED BY POULOS & BENNETT PRIOR TO CONSTRUCTION AND PROVIDED TO THE SITE CONTRACTOR.
- CONTRACTOR SHALL PROVIDE A RECORDING OF THE VIDEO INSPECTION OF THE PRIVATE GRAVITY SEWER SYSTEM ON DVD TO THE CITY OF ORLANDO WASTEWATER DIVISION FOR REVIEW PRIOR TO FINAL ACCEPTANCE.

DEMOLITION NOTES:

- CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND DISPOSING ALL WASTE MATERIALS CONSISTENT WITH ALL RULES AND REGULATIONS APPLICABLE TO THE SPECIFIC MATERIAL FOUND.
- ANY MATERIALS CLAIMED AS SALVAGE BY OWNER EITHER IN THE FIELD OR IN THE DRAWINGS SHALL BE STOCKPILED FOR OWNER'S REMOVAL.
- CONTRACTOR SHALL BE KNOWLEDGEABLE OF THE CONSTRUCTION DOCUMENTS AND BE RESPONSIBLE FOR PROTECTING ANY EXISTING FACILITY SO DESIGNATED OR DESIGNATED TO BE UTILIZED IN THE WORK.
- CONTRACTOR SHALL REMOVE ALL FOUNDATIONS, CONCRETE SLABS AND UNDERGROUND STRUCTURES, EXISTING ON THE SITE AT THE TIME OF BIDDING UNLESS OTHERWISE DIRECTED.
- CONTRACTOR SHALL COORDINATE WITH APPLICABLE UTILITY COMPANIES AND BE RESPONSIBLE FOR THE TERMINATION, CAPTING-OFF AND REMOVAL OF ALL UNDERGROUND AND ABOVE-GROUND UTILITY SERVICES EXISTING AT THE TIME OF BIDDING UNLESS DIRECTED TO BID OTHERWISE.

EARTHWORK NOTES:

- GEOTECHNICAL SERVICES HAVE BEEN PROVIDED AS REFERENCED BELOW. GEOTECHNICAL RECOMMENDATIONS ARE NOT THE RESPONSIBILITY OF POULOS & BENNETT. POULOS & BENNETT HAS RELIED ON THE BELOW REFERENCED GEOTECHNICAL REPORT(S) IN PREPARATION OF THE DRAWINGS. ANY CONFLICT BETWEEN INFORMATION WITHIN THE REPORT AND THESE DRAWINGS SHALL BE REPORTED TO ENGINEER/OWNER. POULOS & BENNETT ASSUMES NO RESPONSIBILITY FOR THE CORRECTNESS, COMPLETENESS OR ACCURACY OF GEOTECHNICAL INFORMATION.
- GEOTECHNICAL ENGINEER: FAULKNER ENGINEERING SERVICES, INC.
REPORT NO.(S): 19-4296
DATE: 7/11/10, REVISED 6/26/20
- EARTHWORK TO BE DONE IN ACCORDANCE WITH THE ABOVE REFERENCED GEOTECHNICAL ENGINEERING EVALUATION REPORT.

PAVING AND DRAINAGE NOTES:

- CONTRACTOR SHALL INSTRUCT THE GEOTECHNICAL TESTING LABORATORY PROVIDING CONSTRUCTION TESTING TO PROVIDE POULOS & BENNETT WITH TESTING RESULTS AS THEY ARE GENERATED. CONTRACTOR SHALL MAINTAIN THE RESPONSIBILITY OF CONSTRUCTING THE PROJECT IN STRICT ACCORDANCE WITH THE PROJECT PLANS, SPECIFICATIONS AND REQUIREMENTS. RECEIPT OF COPIES OF GEOTECHNICAL REPORTS BY POULOS & BENNETT IN NO WAY OBLIGATES POULOS & BENNETT TO ANY REVIEW, COMMENTS OR ACTIONS REGARDING THE WORK.
- ALL SIGNAGE, PAVEMENT MARKING AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH FDOT "DESIGN STANDARDS" AND FEDERAL HIGHWAY ADMINISTRATION (FHWA) "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITIONS.
- REGULATORY SIGNS (STOP, ETC.) SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING AND DRAINAGE IMPROVEMENTS.
- CONTRACTOR SHALL NOT COMPACT, STABILIZE, OR CONSTRUCT BASE COURSE WITHIN LANDSCAPE ISLANDS, TRACTS OR MEDIANS WHERE SUCH TREATMENT DOES OCCUR, IT SHALL BE REMOVED AND REPLACED WITH SUITABLE PLANTING SOILS ACCEPTABLE TO THE LANDSCAPE ARCHITECT.
- SITE GRADING, PAVING AND DRAINAGE MATERIALS, AND CONSTRUCTION ACTIVITIES SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND TO CITY OF ORLANDO ESM STANDARD SPECIFICATIONS; LATEST EDITIONS.
- MINIMUM LONGITUDINAL SLOPE OF CURB SHALL BE 0.24%.
- CONTRACTOR IS RESPONSIBLE FOR GRADING ALL PAVEMENTS TO DRAIN POSITIVELY. INTERSECTIONS SHALL BE TRANSITIONED TO PROVIDE A SMOOTH DRIVING SURFACE WHILE MAINTAINING POSITIVE DRAINAGE. SHOULD AREAS OF POOR DRAINAGE BE OBSERVED, CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PLACEMENT OF CURBS OR PAVEMENT COURSES, SO THAT RECOMMENDATIONS FOR CORRECTION MAY BE MADE.
- PAVEMENT GRADES OVER HANDICAPPED PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION EXCEPT AT RAMP. (NOTE: RAMP LENGTHS MAY EXCEED 6 FEET.)
- PROPOSED AND EXISTING SIDEWALKS SHALL BE RAMPED FLUSH WITH PAVEMENT. RAMP SHALL NOT EXCEED SLOPES OF 12 HORIZONTAL TO 1 VERTICAL. (NOTE: RAMP LENGTHS REQUIRED MAY EXCEED 6 FT.)
- SIDEWALK RAMP SHALL INCLUDE DETECTABLE WARNINGS THAT ARE TEXTURED IN CONFORMANCE WITH FDOT STANDARDS EXCEPT WHERE LOCAL CODES DICTATE OTHERWISE. CONTRACTOR SHALL COORDINATE WITH LOCAL AUTHORITY FOR PRE-POUR INSPECTION PRIOR TO ANY SIDEWALK AND/OR RAMP CONCRETE POURS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THAT ALL RAMP TEXTURED SURFACES AND SIDEWALK LONGITUDINAL AND CROSS SLOPES ARE IN CONFORMANCE WITH LOCAL, STATE, AND FEDERAL A.D.A. AND FAIR HOUSING ACT STANDARDS.
- ALL DISTURBED FDOT, CITY AND COUNTY RIGHTS OF WAY SHALL BE RESTORED TO EXISTING OR BETTER CONDITION. SOD SHALL BE PLACED FROM EDGE OF PAVEMENT TO THE TOE OF BANK AND ALL AREAS SHALL MATCH OR EXCEED PRE-CONSTRUCTION CONDITIONS.
- ALL OFF-SITE DISTURBED AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION, OR BETTER.
- ENGINEER RESERVES THE RIGHT TO WITHHOLD AUTHORIZATION FOR PAYMENT FOR ANY ROADWORK WHICH HAS NOT BEEN TESTED BY A FLORIDA-REGISTERED GEOTECHNICAL ENGINEER AND REPORTED TO CONFORM TO PROJECT SPECIFICATIONS.

HAUL ROUTE NOTES:

- CONTRACTOR SHALL PREPARE AND SUBMIT A HAUL ROUTE PLAN TO THE CITY OF ORLANDO CHIEF ENGINEERING INSPECTOR FOR APPROVAL PRIOR TO BEGINNING FILL OPERATIONS.
 - CHIEF ENGINEERING INSPECTOR: MS. OLIVIA BOYKIN (407) 246-3223
- THE HAUL ROUTE PLAN MUST BE PREPARED IN ACCORDANCE WITH THE LATEST STANDARDS OF THE CITY OF ORLANDO AND ALL OTHER APPLICABLE AGENCIES.

RECLAIMED WATER NOTES:

- ALL RECLAIMED WATER PIPES SHALL BE INSTALLED USING WATER PIPE CRITERIA. MAINS SHALL BE CLASS 52 DIP IF 24"-30" OF COVER IS PROVIDED AND CLASS 51 IF 30"-36" COVER IS PROVIDED.
- PROVIDE 6" MINIMUM SEPARATION BETWEEN RECLAIMED WATER AND STORM PIPES AND A MINIMUM OF 3' OF COVER OVER THE RECLAIMED WATER MAIN. RECLAIMED WATER WHEN LESS THAN 3' OF COVER IS ACHIEVED SHALL BE D.I.P. COVER LESS THAN 3' IS ONLY ALLOWED AT SPECIFIC CROSSINGS. APPROVED BY O.C.U.) PROVIDE MANHOLES, JOINTS AND FITTINGS AS NECESSARY FOR THE VERTICAL TRANSITIONS.
- EXCEPT FOR PVC PIPE, MAXIMUM DEFLECTIONS AT PIPE JOINTS, FITTINGS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL NOT EXCEED 75% OF THE PIPE MANUFACTURER'S RECOMMENDATION. A MINIMUM VERTICAL CLEARANCE OF 18" SHALL BE MAINTAINED. WHERE 18" CLEARANCE IS NOT POSSIBLE, WATER AND RECLAIMED WATER WILL BE UPGRADED TO D.I.P.
- MARK LATERALS WITH 6" HIGH PIECE OF 2" X 4" PLANK PAINTED PURPLE, AND AN R IMPRESSED IN THE CURB.
- CASINGS WILL BE PROVIDED FOR SERVICES LOCATED UNDER LANDSCAPE MEDIANS.
- ALL PVC RECLAIMED WATER PIPE SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS, MARKED WITH THE SEAL OF APPROVAL OF THE NATIONAL SANITATION FOUNDATION (NSF) AND BE PURPLE IN COLOR.
- ALL DUCTILE IRON RECLAIMED WATER MAINS SHALL BE MARKED WITH A CONTINUOUS STRIPE LOCATED WITHIN THE TOP 90 DEGREES OF THE PIPE. SAID STRIPE SHALL BE A MINIMUM 2 INCHES IN WIDTH AND SHALL BE PURPLE IN COLOR. BACKFILL SHALL NOT BE PLACED FOR 30 MINUTES FOLLOWING PAINT APPLICATION.
- ALL NON-METALLIC RECLAIMED WATER MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 10 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC RECLAIMED WATER MAINS SHALL BE SOLID, PANTONE PURPLE COLOR.
- HYDROSTATIC TESTING OF THE RECLAIMED WATER DISTRIBUTION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE AWWA STANDARDS. HYDROSTATIC TESTING TO BE DONE IN ACCORDANCE WITH AWWA C-600 FOR DUCTILE IRON PIPE AND M23 FOR PVC PIPE. DISINFECTING TO BE DONE IN ACCORDANCE WITH AWWA C-651.

POTABLE WATER NOTES:

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH AWWA STANDARDS AND IN ACCORDANCE WITH ORLANDO UTILITIES COMMISSION REGULATIONS.
- PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS.
- DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER.
- ALL GATE VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED CAST BRONZE EXTENSIONS WHERE NEEDED.
- ALL PUBLIC WATER SYSTEM COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL COME INTO CONTACT WITH DRINKING WATER WILL U CONFORM TO NSF INTERNATIONAL STANDARD 61 AND WILL BE MARKED WITH THE NSF SEAL OF APPROVAL.
- ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED IN ACCORDANCE WITH SUB PARAGRAPH 62-555.320(2)(b)3, F.A.C. USING BLUE AS A PREDOMINANT COLOR. ALL DUCTILE IRON WATER MAINS SHALL BE MARKED WITH A CONTINUOUS STRIPE LOCATED WITHIN THE TOP 90 DEGREES OF THE PIPE. SAID STRIPE SHALL BE A MINIMUM 2 INCHES IN WIDTH AND SHALL BE BLUE IN COLOR. BACKFILL SHALL NOT BE PLACED FOR 30 MINUTES FOLLOWING PAINT APPLICATION. FOR PIPE WITH AN INTERNAL DIAMETER OF 24" OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES A LONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.
- ALL NON-METALLIC WATER MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 10 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC WATER MAINS SHALL BE A SOLID BLUE COLOR. ALL LETTERING SHALL APPEAR LEGIBLY ON PIPE AND SHALL RUN THE ENTIRE LENGTH OF THE PIPE. LETTERING SHALL READ AS IS ACCEPTABLE FOR THE INTENDED USE.
- HYDROSTATIC TESTING AND THE DISINFECTION OF THE WATER DISTRIBUTION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE AWWA STANDARDS. HYDROSTATIC TESTING TO BE DONE IN ACCORDANCE WITH AWWA C-600 FOR DUCTILE IRON PIPE AND C-605 FOR PVC PIPE. DISINFECTING AND BACTERIOLOGICAL EVALUATION TO BE DONE IN ACCORDANCE WITH AWWA C-651 AND RULE 62-555.340 F.A.C.
- MARK SERVICES WITH 6" HIGH PIECE OF 2" X 4" PLANK PAINTED BLUE WITH LOT NUMBER CLEARLY MARKED AND A "W" IMPRESSED IN THE CURB. IT IS THE INTENT THAT EVERY LOT IS CONSISTENT WITH A WATER SERVICE, THEREFORE IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL A WATER SERVICE TO EACH LOT.
- PIPE MATERIALS:
 - ALL PIPE, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT SHALL CONFORM TO APPLICABLE AWWA STANDARDS AND SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900, LATEST EDITION. PVC SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900. THE PVC SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 P.S.I. AND SHALL HAVE A DIMENSION RATIO (DR) OF 18. PIPE SHALL BE THE SAME O.D. AS DUCTILE IRON PIPE.
 - DUCTILE IRON - SHALL CONFORM TO ANSI/AWWA C150/C151. A MINIMUM OF CLASS 50 PIPE SHALL BE SUPPLIED.
 - DUCTILE IRON JOINT - SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.
 - SERVICES - SHALL BE IN ACCORDANCE WITH AWWA C901/C800 STANDARDS FOR POLYETHYLENE TUBING, CLASS 160.
- WATER MAIN CONNECTION SHALL BE MADE UNDER THE SUPERVISION OF ORLANDO UTILITIES COMMISSION. ALL VALVES SHALL BE OPERATED BY ORLANDO UTILITIES COMMISSION PERSONNEL ONLY. WATERMAINS ARE TO BE DISINFECTED PER ANSI/AWWA C651-92 AND ORLANDO UTILITIES COMMISSION REGULATIONS.
- VERTICAL SEPARATION BETWEEN UNDERGROUND POTABLE WATER MAINS AND SANITARY OR STORM, SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES:
 - NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
 - NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
 - AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSING, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART II OF CHAPTER 62-610, F.A.C.
- HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS:
 - NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
 - NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING, OR PROPOSED VACUUM-TYPE SANITARY SEWER.
 - NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
 - NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.005(2), F.S., AND RULE 6A6-6.02, F.A.C.
- A MINIMUM OF 3 FEET OF COVER SHALL BE MAINTAINED OVER WATERMAINS, UNLESS OTHERWISE NOTED.
- ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL CONTAIN NO MORE 8.0% LEAD, AND ANY SOLDER OR FLUX USED IN THIS PROJECT SHALL CONTAIN NO MORE THAN 0.2% LEAD.
- NEW OR ALTERED DEAD-END WATER MAINS INCLUDED IN THIS PROJECT SHALL BE PROVIDED WITH A FIRE OR FLUSHING HYDRANT OR BLOW-OFF FOR FLUSHING PURPOSES.
- NEW OR ALTERED FIRE HYDRANT LEADS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 6" AND SHALL INCLUDE AN AUXILIARY VALVE.
- IF AGGRESSIVE SOIL CONDITIONS ARE FOUND DURING CONSTRUCTION, WATER MAINS SHALL BE PROTECTED THROUGH THE USE OF CORROSION RESISTANT MATERIALS, THROUGH ENCASEMENT OF THE WATER MAINS IN POLYETHYLENE, OR THROUGH PROVISION OF CATHODIC PROTECTION.
- A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT; BACKFILL MATERIAL WILL BE TAMPED IN LAYERS AROUND UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE; AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF A LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT.

11. WATER MAIN CONNECTION SHALL BE MADE UNDER THE SUPERVISION OF ORLANDO UTILITIES COMMISSION. ALL VALVES SHALL BE OPERATED BY ORLANDO UTILITIES COMMISSION PERSONNEL ONLY. WATERMAINS ARE TO BE DISINFECTED PER ANSI/AWWA C651-92 AND ORLANDO UTILITIES COMMISSION REGULATIONS.

12. VERTICAL SEPARATION BETWEEN UNDERGROUND POTABLE WATER MAINS AND SANITARY OR STORM, SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES:

- NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSING, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART II OF CHAPTER 62-610, F.A.C.

13. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS:

- NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING, OR PROPOSED VACUUM-TYPE SANITARY SEWER.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.005(2), F.S., AND RULE 6A6-6.02, F.A.C.

14. A MINIMUM OF 3 FEET OF COVER SHALL BE MAINTAINED OVER WATERMAINS, UNLESS OTHERWISE NOTED.

15. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL CONTAIN NO MORE 8.0% LEAD, AND ANY SOLDER OR FLUX USED IN THIS PROJECT SHALL CONTAIN NO MORE THAN 0.2% LEAD.

16. NEW OR ALTERED DEAD-END WATER MAINS INCLUDED IN THIS PROJECT SHALL BE PROVIDED WITH A FIRE OR FLUSHING HYDRANT OR BLOW-OFF FOR FLUSHING PURPOSES.

17. NEW OR ALTERED FIRE HYDRANT LEADS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 6" AND SHALL INCLUDE AN AUXILIARY VALVE.

18. IF AGGRESSIVE SOIL CONDITIONS ARE FOUND DURING CONSTRUCTION, WATER MAINS SHALL BE PROTECTED THROUGH THE USE OF CORROSION RESISTANT MATERIALS, THROUGH ENCASEMENT OF THE WATER MAINS IN POLYETHYLENE, OR THROUGH PROVISION OF CATHODIC PROTECTION.

19. A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT; BACKFILL MATERIAL WILL BE TAMPED IN LAYERS AROUND UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE; AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF A LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT.

SURVEY AND GEOMETRY:

1. BOUNDARY, TOPOGRAPHY, AND CONTOURS BASED ON THE FOLLOWING:

SURVEYOR: ALLAN & COMPANY
16 EAST PLANT STREET
WINTER GARDEN, FL 34787
(407) 654-5355

2. FOR BENCHMARKS CONTACT ALLAN & COMPANY SURVEYING AND MAPPING, 16 EAST PLANT STREET OWINTER GARDEN, FL 34787, (407) 654-5355

3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SURVEY MONUMENTATION, DISTURBED MONUMENTATION SHALL BE RESTORED BY A FLORIDA-LICENSED LAND SURVEYOR SELECTED BY THE OWNER AT THE CONTRACTOR'S EXPENSE.

FIRE HYDRANT NOTES:

- IF FIRE HYDRANT COLOR CODING SHALL BE IN ACCORDANCE WITH THE CITY OF ORLANDO ENGINEERING STANDARD MANUAL (ESM) AND NFPA 291
- THE BARREL OF A PUBLIC HYDRANT SHALL BE SILVER, AND THE BARREL OF A PRIVATE HYDRANT SHALL BE CHROME YELLOW.
- THE TOP AND CAPS OF THE HYDRANTS SHALL BE PAINTED ACCORDING TO THE AVAILABLE FIRE FLOW AS FOLLOWS:
HYDRANTS FOLLOWING 1500 GPM OR GREATER: LIGHT BLUE.
HYDRANTS FOLLOWING 1000 - 1499 GPM: GREEN.
HYDRANTS FOLLOWING 500 - 999 GPM: ORANGE.
HYDRANTS FOLLOWING 499 GPM OR LESS: RED.
- HYDRANTS WILL BE REPAINTED AS NECESSARY TO READILY IDENTIFY THE GPM FLOW CODING COLOR.
- FLOW AND COLOR WILL BE BASED ON ACTUAL FLOW TEST WITNESSED BY THE FIRE INSPECTOR.
- THE ABOVE COLORS APPLY TO THE HYDRANTS BARREL ONLY. THE BONNET COLORS ARE TO BE IN ACCORDANCE WITH NFPA REQUIREMENTS BASED ON THE FOLLOWING HYDRANT GPM FLOW CAPABILITIES, (1) 155 OR GREATER, LIGHT BLUE, (2) 1000-1499, GREEN, (3) 500-999, ORANGE, (4) LESS THAN 500, RED.

SANITARY SEWER NOTES:

- ALL MATERIALS AND CONSTRUCTION SHALL BE IN COMPLIANCE WITH ORANGE COUNTY MANUAL OF STANDARD SPECIFICATIONS FOR WASTEWATER AND WATERMAIN CONSTRUCTION.
- ALL MANHOLES SHALL HAVE A MINIMUM DIAMETER OF 48 INCHES AND A MINIMUM ACCESS DIAMETER OF 22 INCHES.
- PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN MANHOLE CENTERLINE.
- ALL SANITARY SEWER LATERALS SHALL BE 6 INCH DIAMETER PVC. LATERALS SHALL END WITH A CLEAN OUT AT RIGHT-OF-WAY LINE.
- INVERTS OF SANITARY SEWER LATERALS AT THEIR CONNECTION TO SANITARY MANHOLES SHALL BE NO MORE THAN ONE (1) FOOT ABOVE THE MANHOLE INVERT.
- PRIOR TO PAVING, CONTRACTOR SHALL VERIFY THE AS-BUILT SANITARY SEWER PIPE SLOPES. MINIMUM AS BUILT FOR 8" PVC SEWER LINE SLOPE WILL BE 0.32%. ANY LINE NOT MEETING MINIMUM SLOPE WILL BE RELAID BY CONTRACTOR TO MEET THE MINIMUM SLOPE REQUIREMENT AT NO ADDITIONAL COST.
- MARK LATERALS WITH 6" HIGH PIECE OF 2" X 4" PLANK PAINTED ORANGE W/ LOT NUMBER CLEARLY MARKED AND A 'S' IMPRESSED IN THE CURB.
- LEAKAGE TESTS ARE SPECIFIED REQUIRING THAT:
 - THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM.
 - EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET.
 - AIR TESTS, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-828 FOR CLAY PIPE, ASTM C924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE, AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES. AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MANHOLES, CONFORMS TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244.
- DESIGN REQUIRES:
 - MANHOLE ULT HOLES AND GRADE ADJUSTMENT RINGS BE SEALED WITH WATER-TIGHT CONNECTION OR OTHER APPROPRIATE MATERIAL.
 - INLET AND OUTLET PIPES BE JOINED TO THE MANHOLE WITH A GASKETED FLEXIBLE MORTAR-TIGHT CONNECTION OR ANOTHER WATER-TIGHT CONNECTION ARRANGEMENT THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL.
 - WATER-TIGHT MANHOLE COVERS BE USED WHEREVER THE MANHOLE TOPS MAY BE FLOODED BY STREET RUNOFF OF HIGH WATER.
- MINIMUM SEPARATION BETWEEN POTABLE WATER LINES AND SANITARY HAZARDOUS (SANITARY SEWER, FORCE MAIN, STORM SEWER, REUSE WATER) SHALL BE MAINTAINED. A HORIZONTAL CLEARANCE OF TEN (10) FEET IN PARALLEL INSTALLATION AND 12 INCHES VERTICALLY AT CROSSINGS. SHOULD A VERTICAL SEPARATION OF LESS THAN THAT STIPULATED BE REQUIRED, THE WATER LINE SHALL BE CONSTRUCTED TO 20 FEET OF PRESSURE TIGHT JOINT DUCTILE IRON PIPE. IF THE REQUIRED 10 FT. HORIZONTAL CLEARANCE CANNOT BE MAINTAINED, THE SEWER MAIN SHALL BE PLACED IN A D.I.P. SLEEVE OR ENCASED IN CONCRETE IN ACCORDANCE WITH FDEP SPECIFICATIONS.
- PVC GRAVITY SEWER PIPE SHALL MEET ASTM D3034, SDR35.
- ALL SANITARY SEWER PIPE SHALL BE COLORED GREEN.
- FIBERGLASS LINE ALL MANHOLES WHICH RECEIVE DISCHARGE FROM A FORCEMAIN.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING SERVICES AT EACH LOT. SERVICES SHALL HAVE 3' MIN. AND 4' MAX. COVER AT LOT CLEAN OUT.

PUMP STATION NOTES:

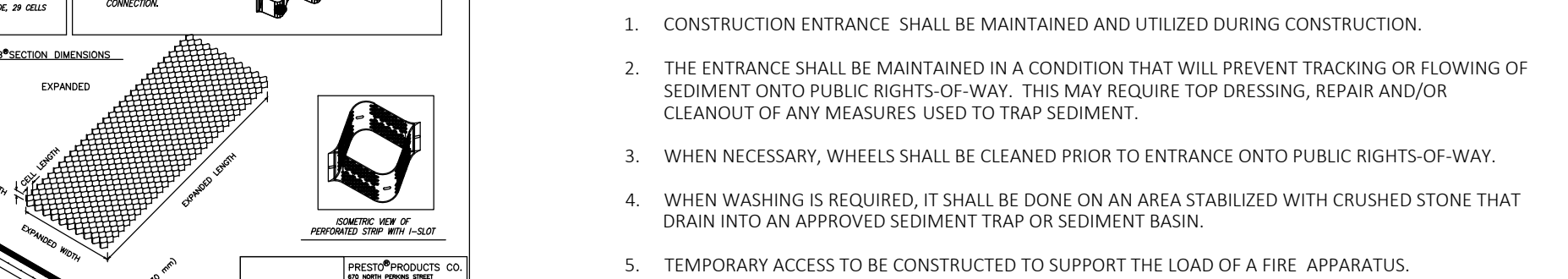
8. A DETAILED DESCRIPTION OF ALL CONTROLS, BEST MANAGEMENT PRACTICES (BMP'S) AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE FOR EACH ACTIVITY IDENTIFIED IN THE INTENDED SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES SECTION.
*SEE ADDITIONAL EROSION CONTROL NOTES.

1. DESCRIBE THE NATURE OF CONSTRUCTION ACTIVITY.
*MULTI-FAMILY RESIDENTIAL, STRUCTURAL FILL, INSTALLATION OF UTILITIES AND DRAINAGE USING CONVENTIONAL CONSTRUCTION TECHNIQUES AND BEST MANAGEMENT PRACTICES.
2. DESCRIBE THE INTENDED SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES.
*CLEAR AND GRUB, SPREAD AND COMPACT FILL, INSTALL DRAINAGE & UTILITIES, CONSTRUCT PARKING LOT, AND MULTI-FAMILY APARTMENTS.
3. TOTAL AREA OF THE SITE IS APPROXIMATELY 44.92 ACRES.
4. TOTAL PROJECT AREA OF THE SITE TO BE DISTURBED IS 118.37 ACRES
5. EXISTING DATA DESCRIBING THE SOIL OR QUALITY OF ANY STORM WATER DISCHARGE FROM THE SITE.
*CONTRACTOR TO REFER TO THE GEOTECHNICAL REPORT FOR ONSITE SOIL.
*STORM WATER THAT DISCHARGES FROM THE SITE SHALL BE MONITORED FOR TURBIDITY.
6. ESTIMATE THE DRAINAGE AREA SIZE FOR EACH DISCHARGE POINT.
*THE DRAINAGE AREAS AT THE DISCHARGE POINTS ARE SHOWN ON THE PLAN.
7. LATITUDE AND LONGITUDE OF EACH DISCHARGE POINT AND IDENTIFY THE RECEIVING WATER FOR MS4 FOR EACH DISCHARGE POINT.
*THE LATITUDE AND LONGITUDE AT THE DISCHARGE POINT:
DISCHARGE POINT NO. 1: LATITUDE: 28°23'34.09"N, LONGITUDE: 81°14'20.78"W.
8. A DETAILED DESCRIPTION OF ALL CONTROLS, BEST MANAGEMENT PRACTICES (BMP'S) AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE FOR EACH ACTIVITY IDENTIFIED IN THE INTENDED SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES SECTION.
*SEE ADDITIONAL EROSION CONTROL NOTES.

CONTRACTOR SHALL PREPARE AND SUBMIT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION THE "NOTICE OF INTENT" AND "NOTICE OF TERMINATION" FOR "STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES," PER FLORIDA ADMINISTRATIVE CODE 62-621.300(4) IN ACCORDANCE WITH FDEP REQUIREMENTS. THE CONTRACTOR SHALL PREPARE AND SUBMIT WITH THE APPLICATION, AN APPROVED "STORMWATER POLLUTION PREVENTION PLAN" AND PERFORM/CERTIFY ALL INSPECTIONS AND RETAIN ALL INSPECTION REPORTS AND DOCUMENTATION ON FILE AS REQUIRED FOR FDEP REVIEW. ALL FEES SHALL BE PAID BY THE CONTRACTOR, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PENALTIES OR FINES FDEP MAY LEVY FOR FAILURE TO COMPLY WITH THE PERMITTING REQUIREMENTS.

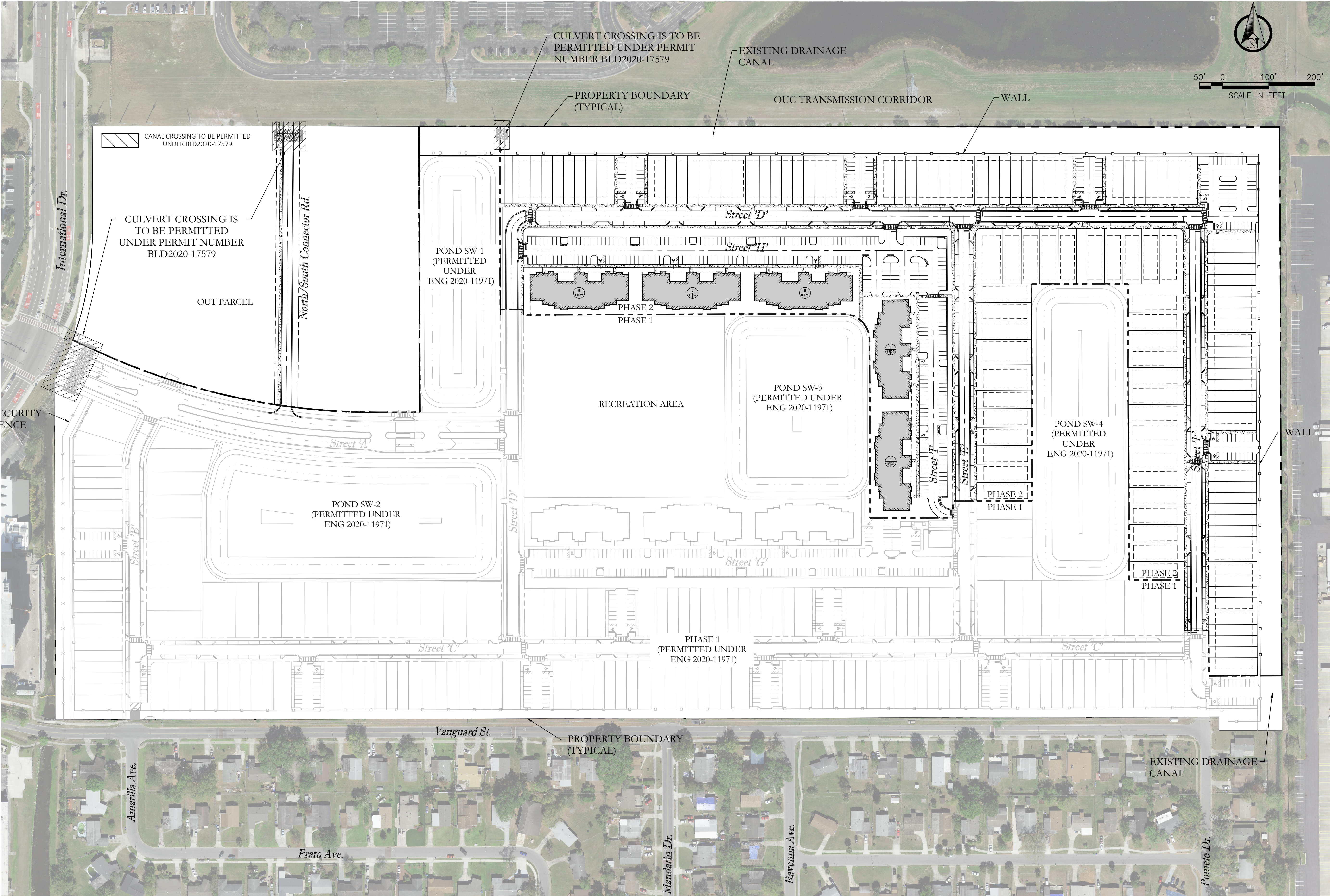
- POSTURE NOTES
1. CONSTRUCTION ACTIVITY PERTAINS TO CONSTRUCTION OF A COMMERCIAL PARCELS AND MULTI-FAMILY RESIDENTIAL AT LATITUDE 28°28'28.17"N LONGITUDE 81°14'36.71"W
2. EXISTING ON-SITE SLOITS CONSIST OF NO. 3, "SMYRNA-SMYRNA WET", NO. 34, "POMELLO FINE SAND", NO. 42, "SANIBEL MUCK", NO. 44, "SMYRNA-SMYRNA WET" AND NO. 54 "ZOLO FINE SAND" PER WEB SOIL SURVEY, ORANGE COUNTY, FLORIDA, BY THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE WITH ESTIMATED NORMAL SEASONAL HIGH GROUNDWATER LEVEL TO BE ENCOUNTERED BETWEEN DEPTHS OF 2.5-15 FEET BELOW THE EXISTING GROUND SURFACE PER GEOTECHNICAL REPORT BY ECS FLORIDA,LLC ECS PROJECT NO. 24-4923-C, OCTOBER 20, 2018.
3. ALL PROPOSED INLETS/OUTFALLS, ONCE INSTALLED, SHALL BE PROTECTED FROM EROSION AND SEDIMENT RUNOFF USING PROPERLY INSTALLED FILTER FABRICS. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED SHALL BE STABILIZED WITH SOD. SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF THE SITE. A DOUBLE ROW OF SILT FENCE, REINFORCED WITH FIELD FENCING, SHALL BE PLACED AROUND VEGETATIVE BARRIERS AND WETLAND AREAS. ALL AREAS DISTURBED MORE THAN 7 DAYS SHALL BE STABILIZED WITH GRASS OR OTHER APPROPRIATE TEMPORARY VEGETATION APPLIED AT MANUFACTURER'S RECOMMENDATION.
4. THE TEMPORARY AND PERMANENT STABILIZATION PRACTICES INCLUDE SODDING ALL DISTURBED AREAS FOR STABILIZATION.
5. SILT FENCE AND INLET/OUTLET PROTECTION SHALL BE INSTALLED PER BEST MANAGEMENT PRACTICES, SEE SECTION 8.
6. CONTROL DETAILS OF POTENTIAL POLLUTANTS AS FOLLOWS:
- 7.1. WASTE DISPOSAL - ALL CONSTRUCTION MATERIALS AND DEBRIS WILL BE PLACED IN DUMPSITE AND HAULED OFF SITE TO A LANDFILL OR OTHER DISPOSAL SITE. NO MATERIALS SHALL BE BURIED ON SITE.
- 7.2. PROPER APPLICATION RATES OF ALL FERTILIZERS, HERBICIDES AND PESTICIDES AT CONSTRUCTION SITE - FLORIDA FRIENDLY FERTILIZERS AND PESTICIDES WILL BE USED AT A MINIMUM AND IN ACCORDANCE WITH MANUFACTURER'S SUGGESTED APPLICATION RATES. THE FERTILIZERS AND PESTICIDES WILL BE STORED IN A COVERED SHED.
- 7.3. STORAGE, APPLICATION, GENERATION AND MIGRATION OF ALL TOXIC SUBSTANCES - ALL PAINTS AND OTHER CHEMICALS WILL BE STORED IN A LOCKED COVERED SHED.
- 7.4. OTHER - PORT-O-LETS WILL BE PLACED AWAY FROM STORM SEWER SYSTEMS, STORM INLETS, SURFACE WATER AND WETLANDS. NO VEHICLE MAINTENANCE SHALL BE CONDUCTED ON-SITE. A WASHDOWN AREA SHALL BE DESIGNED AND AT ALL TIMES THERE WILL NOT BE PLACED IN ANY AREA ALLOWING FOR DISCHARGE OF POLLUTED RUNOFF. A SMALL VEGETATED BERM SHALL BE LOCATED AROUND THE WASHDOWN AREA.
- 7.5. MAINTENANCE FOR ALL STRUCTURAL AND NON-STRUCTURAL CONTROLS SHALL BE AS FOLLOWS:
- 7.1. SILT FENCE SHALL BE INSPECTED AT LEAST WEEKLY. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- 7.2. MAINTENANCE SHALL BE PERFORMED ON THE ROCK ENTRANCE WHEN ANY VOID SPACES ARE FULL OF SEDIMENTS.
- 7.3. INLETS/OUTLETS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAIN EVENT AND ANY REQUIRED REPAIRS TO THE FILTER FABRIC ON INLETS AND SILT FENCE SHALL BE PERFORMED IMMEDIATELY.
- 7.4. BARE AREAS OF THE SITE THAT WERE PREVIOUSLY SEEDED SHALL BE RE-SEEDED PER MANUFACTURER'S INSTRUCTIONS.
- 7.5. MULCH AND SOD THAT HAS BEEN WASHED OUT SHALL BE REPLACED IMMEDIATELY.
- 7.6. MAINTAIN ALL OTHER AREAS OF THE SITE WITH PROPER CONTROLS AS NECESSARY.
- 7.7. QUALIFIED PERSONNEL WILL INSPECT ALL POINTS OF DISCHARGES, ALL DISTURBED AREAS OF CONSTRUCTION NOT STABILIZED, CONSTRUCTION AREAS, INGRESS/EGRESS AND ALL BMPs DAILY AND WITHIN 24 HOURS OF A RAINFALL EVENT THAT IS 0.5 INCHES OR GREATER. WHERE SITES HAVE BEEN FINALLY STABILIZED, SAID INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE A MONTH UNTIL NOTICE OF TERMINATION IS FILED.

1. CONTRACTOR SHALL PRE-WATER SITE AND ALL WORK WILL BE PHASED TO REDUCE THE AMOUNT OF DISTURBED SURFACE AREA AT ANY ONE TIME ACTIVE OPERATIONS.
- 1.1. WATER TO BE APPLIED TO DRY AREAS DURING LEVELING, GRADING, TRENCHING, AND EARTHMOVING ACTIVITIES.
- 1.2. WATER TO BE APPLIED TO WIND DISTURBED SURFACE AREAS TO FORM A VISIBLE CRUST.
- 1.3. VEHICULAR ACCESS TO BE RESTRICTED AND WATER OR DUST SUPPRESSANTS TO BE APPLIED AND MAINTAINED AT ALL UN-VEGETATED AREAS.
2. CONTRACTOR SHALL PREVENT DUST FROM WIND EVENTS.
- 2.1. WATER TO BE APPLIED TO VEHICULAR TRAFFIC AND EQUIPMENT STORAGE AREAS.
- 2.2. WATER APPLICATION EQUIPMENT WILL APPLY WATER TO CONTROL FUGITIVE DUST DURING WIND EVENTS, UNLESS UNSAFE TO DO SO.
- 2.3. OUTDOOR CONSTRUCTION ACTIVITIES THAT DISTURB THE SOIL TO BE CEASE WHENEVER VISIBLE DUST EMISSIONS CANNOT BE EFFECTIVELY CONTROLLED.
3. CONTRACTOR SHALL HANDLE BULK MATERIAL.
- 3.1. WATER TO BE APPLIED WHEN HANDLING BULK MATERIALS.
- 3.2. WATER TO BE APPLIED TO STORAGE PILES.
- 3.3. VEHICLE SPEED TO BE LIMITED ON THE WORK SITE.
- 3.4. ALL HAUL TRUCKS TO BE LOADED SUCH THAT THE FREEBOARD IS NOT LESS THAN SIX INCHES WHEN TRANSPORT USING A CHUTE OR CONVEYOR.
4. CONTRACTOR SHALL DO DAILY CLEANUPS:
- 4.1. MINIMUM CLEANUP FREQUENCY TO BE DONE AT THE END OF THE WORK DAY AND REMOVED IMMEDIATELY IF CARRYOUT AND TRACK OUT EXTENDS BEYOND 50 FEET.
- 4.2. CLEAN UP METHODS:
 - 4.2.1. MANUALLY SWEEPING AND PICKING UP.
 - 4.2.2. MECHANICAL SWEEPING WITH A ROTARY BRUSH OR BROOM ACCOMPANIED BY WATER SPRAYER ON BROOM.



N.T.S.

Z:\2019\19-060 LENNAR - INTERNATIONAL DRIVE\CAD\FINAL\CITY\SFWM\WMD OUTPARCEL\19060-WSP



Key Map:

Consultant:

| | | |
|-----------------------|-----------|--------------|
| NO. | DATE | DESCRIPTIONS |
| SUBMISSIONS/REVISIONS | | |
| VERTICAL DATUM: | NAVD 88 | |
| JOB NO.: | 19-060 | |
| DESIGNED BY: | DM | |
| DRAWN BY: | DM | |
| CHECKED BY: | DAL | |
| APPROVED BY: | DAL | |
| SCALE IN FEET: | 1" = 100' | |

Project Name:
**OUTPARCEL
MASS GRADING
PLAN**

Jurisdiction:

SFWM

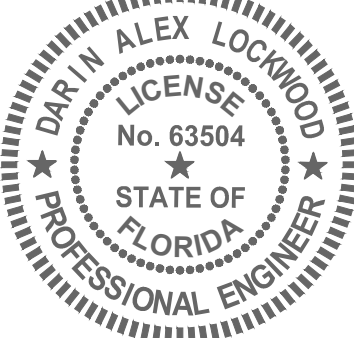
Sheet Title:

**MASTER SITE
PLAN**

Sheet No.:

C1.00

Seal:



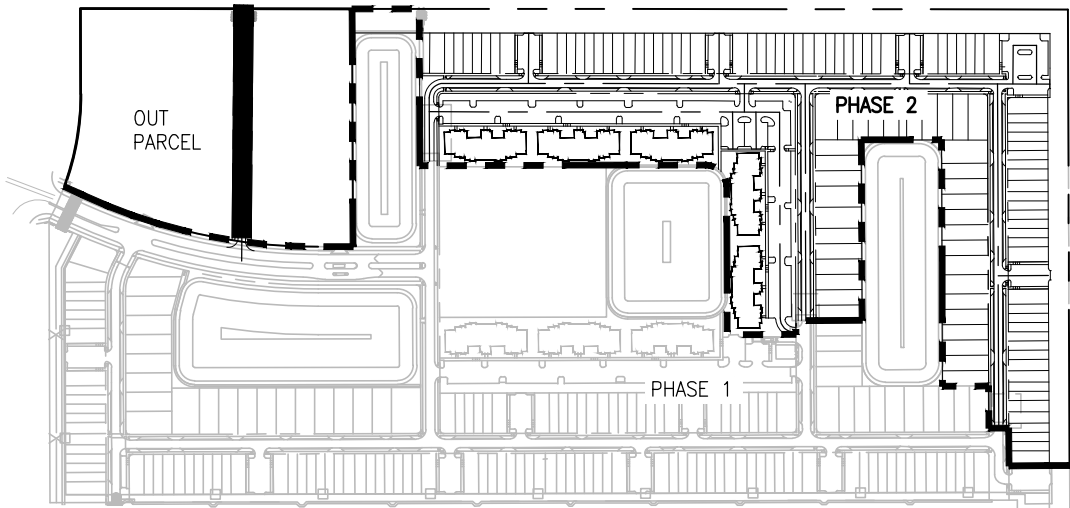
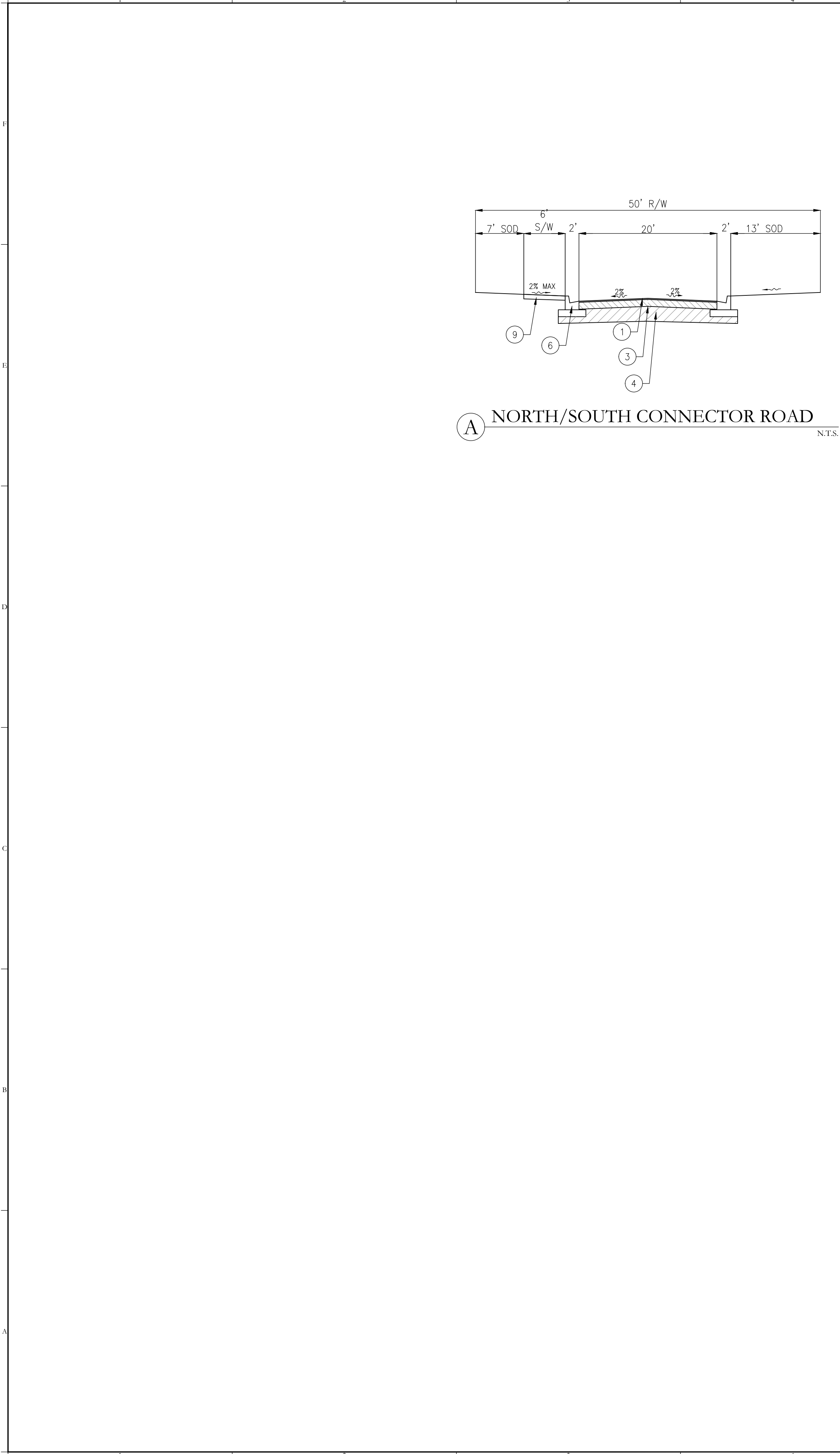
DARRIN ALEX LOCKWOOD
P.E. NO. 066504
DATE: June 24, 2021

This item has been electronically signed and sealed by Darrin Alex Lockwood on the date adjacent to the seal using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

POULOS & BENNETT

Poulos & Bennett, LLC
2602 E. Livingston St., Orlando, FL 32803
Tel. 407.487.2594 www.poulosandbennett.com
Eng. Bus. No. 28567

Z:\2019\19-060 LENNAR - INTERNATIONAL DRIVE\CAD\FINAL\CITY(SFWMD)\MID OUTPARCEL\19060-TPS



- LEGEND:
- 1. 1.5" (IN.) TYPE SP 9.5 ASPHALTIC (SECTION 334 FDOT) COMPACTED TO AT LEAST 95% OF THE MAXIMUM LABORATORY MARSHALL.
 - 2. 10" (IN.) LIMEROCK (SECTION 911, FDOT) HAVING A MINIMUM LBR AOF 100 AND COMPACTED TO AT LEAST 98% OF ITS MODIFIED PROCTOR MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT 2% OF THE OPTIMUM MOISTURE CONTENT (ASTM D1557).
 - 3. 6" (IN.) LIMEROCK (SECTION 911, FDOT) HAVING A MINIMUM LBR AOF 100 AND COMPACTED TO AT LEAST 98% OF ITS MODIFIED PROCTOR MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT 2% OF THE OPTIMUM MOISTURE CONTENT (ASTM D1557).
 - 4. 12" (IN.) A MINIMUM LBR OF 40 AND COMPACTED TO AT LEAST 95% OF THEMODIFIED PROCTOR MAXIMUM DRY DENSITY WITH MOISTURE CONTENT WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT (ASTM D1557). THE TOP 6" SHALL BE STABILIZED TO A MINIMUM FLORIDA BEARING VALUE OF 50 UNDER CURB AND LIMEROCK BASE.
 - 5. TYPE 'A' CONC. CURB PER FDOT STANDARD PLANS INDEX 520-001
 - 6. TYPE 'F' CONC. CURB PER FDOT STANDARD PLANS INDEX 520-001
 - 7. TYPE "D" CONC. CURB PER FDOT STANDARD PLANS INDEX 520-001
 - 8. MIAMI CURB PER FDOT STANDARD PLANS INDEX 520-001
 - 9. 4" (IN.) CONCRETE @ MIN 3000 PSI
 - 10. 4" (IN.) MONOLITHIC SIDEWALK @ MIN 3000 PSI

SOURCE: GEOTECHNICAL REPORT FES NO. 19-4296 PREPARED BY FAULKNER, DATED DECEMBER 01, 2020, AND CITY OF ORLANDO SPECIFICATIONS

Key Map:

Consultant:

| | | |
|-----------------------|------------|-----------------|
| NO. | DATE | DESCRIPTIONS |
| 1 | 03/29/2021 | SUBMIT TO SFWMD |
| SUBMISSIONS/REVISIONS | | |
| VERTICAL DATUM: | | NAVD 88 |
| JOB NO.: | | 19-060 |
| DESIGNED BY: | | DM |
| DRAWN BY: | | DM |
| CHECKED BY: | | DAL |
| APPROVED BY: | | DAL |
| SCALE IN FEET: | | N.T.S. |

Project Name:

OUTPARCEL MASS GRADING PLAN

Jurisdiction:

SFWMD

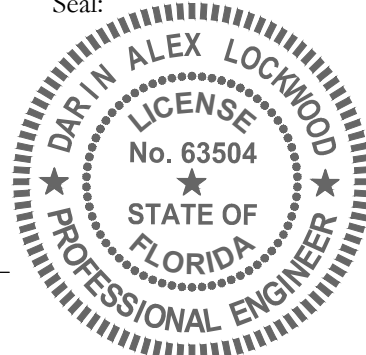
Sheet Title:

TYPICAL SECTIONS & DETAILS

Sheet No.:

C3.00

Seal:



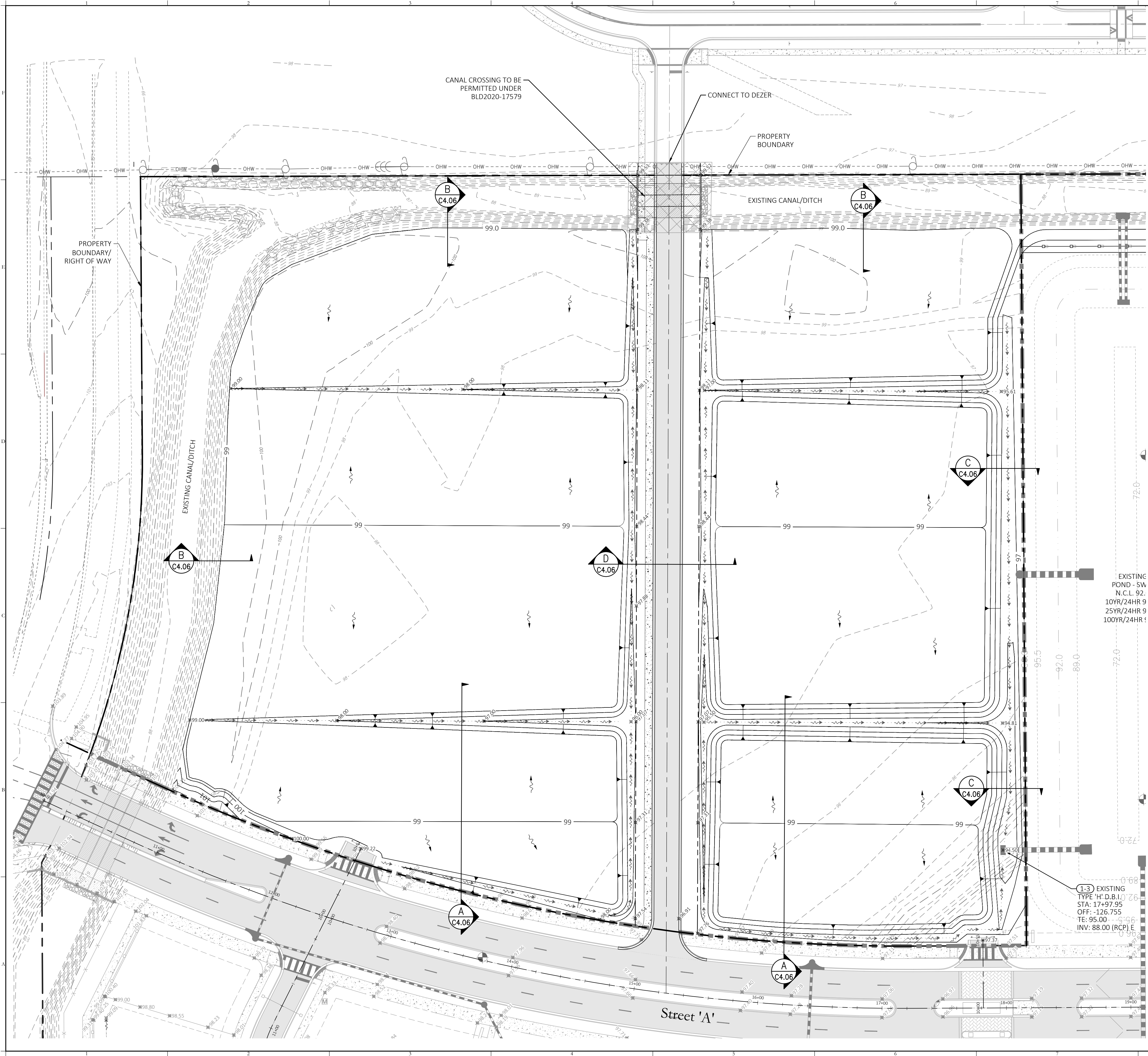
DARIN ALEX LOCKWOOD
P.E. NO. 066504
DATE: June 24, 2021

This item has been electronically signed and sealed by Darin Alex Lockwood on the date adjacent to the seal using a SFA authentication code. Printed copies of this document are not considered signed and sealed and the SFA authentication code must be verified on any electronic copies.



Poulos & Bennett, LLC
2602 E. Livingston St., Orlando, FL 32803
Tel. 407.487.2594 www.poulosandbennett.com
Eng. Bus. No. 28567

Z:\2019\19-060 LENNAR - INTERNATIONAL DRIVE\CAD\FINAL\CITY\SFWM\WMD OUTPARCEL\19060-COP



Legend:

- PROPERTY LINE
- PROPOSED D.B.I. STRUCTURES
- PROPOSED CURB INLET STRUCTURES
- PROPOSED MANHOLE STRUCTURES
- PROPOSED STORMWATER RCP PIPES
- PROPOSED STORMWATER PVC PIPES AND CLEANOUTS
- FLOW ARROW
- EXISTING GRADING CONTOURS
- PROPOSED GRADING CONTOURS
- PROPOSED GRADING SPOTS
- PROPOSED TOP OF CURB
- PROPOSED BOTTOM OF CURB
- GRADING SECTION
- CANAL CROSSING TO BE PERMITTED UNDER BLD2020-1759

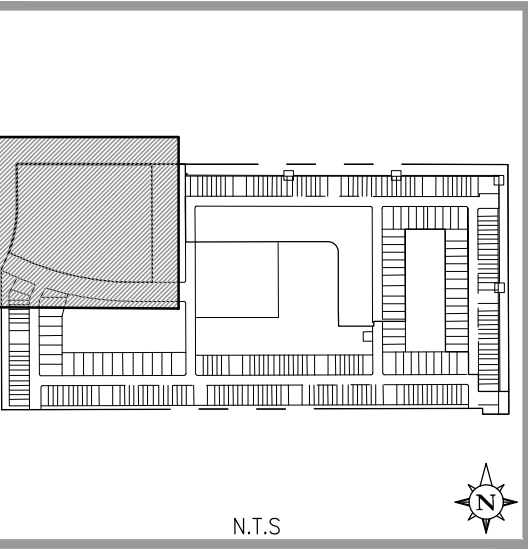
NOTES:

- CONTRACTOR TO COORDINATE THE LOCATION OF THE A/C PADS WITH MEP, ARCHITECTURAL AND LANDSCAPE PLANS TO AVOID CONFLICT WITH STORM SYSTEM.
- ORGANIC SOIL DEPOSIT MUST BE EXCAVATED AND REPLACED WITH CLEAN SAND.

Storm Structure Table

| Structure Number | Structure Type | Top Elev. | Inverts | Northing | Easting |
|------------------|----------------|-----------|------------------------------------|-----------|----------|
| 1-6 | '4' C.I. | 96.86 | 88.48 - 30" (W) 88.48 - 30" (E) | 1501507.5 | 511937.6 |
| 1-7 | '4' C.I. | 96.86 | 88.44 - 30" (W) 88.44 - 30" (E) | 1501507.4 | 511968.0 |
| 1-11 | '4' C.I. | 97.93 | 88.44 - 30" (W) 88.44 - 30" (E) | 1501773.8 | 511970.1 |
| 1-10 | '4' C.I. | 97.93 | 88.48 - 30" (W) 88.48 - 30" (E) | 1501774.0 | 511939.3 |
| 1-8 | 'C' D.B.I. | 96.00 | 88.42 - 30" (W) | 1501507.2 | 511981.7 |
| 1-12 | 'C' D.B.I. | 97.50 | 87.88 - 30" (W) | 1501773.6 | 511983.7 |
| 1-5 | 'C' D.B.I. | 96.50 | 88.50 - 30" (E) | 1501507.7 | 511923.7 |
| 1-9 | 'C' D.B.I. | 97.50 | 88.50 - 30" (E) | 1501774.1 | 511926.3 |

Key Map:



Consultant:

| | |
|-----------------------|----------------|
| 03/29/2021 | SUBMIT TO SFWM |
| NO. DATE: | DESCRIPTIONS: |
| SUBMISSIONS/REVISIONS | |
| VERTICAL DATUM: | NAVD 88 |
| JOB NO.: | 19-060 |
| DESIGNED BY: | DM |
| DRAWN BY: | DM |
| CHECKED BY: | DAL |
| APPROVED BY: | DAL |
| SCALE IN FEET: | 1" = 50' |

OUTPARCEL
MASS GRADING
PLAN

Jurisdiction:

SFWM

Sheet Title:

GRADING &
DRAINAGE PLAN

Sheet No.:

C4.00

Seal:



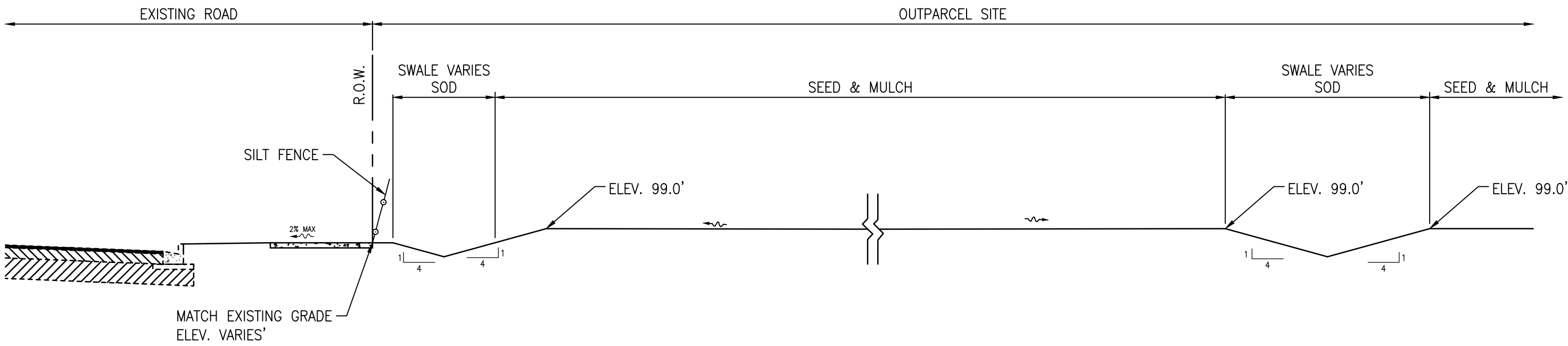
DARRIN ALEX LOCKWOOD
P.E. NO. 066504
DATE: June 24, 2021

This item has been electronically signed and sealed by Darrin Alex Lockwood on the date adjacent to the seal using a SFA authentication code. Printed copies of this document are not considered signed and sealed and the SFA authentication code must be verified on any electronic copies.

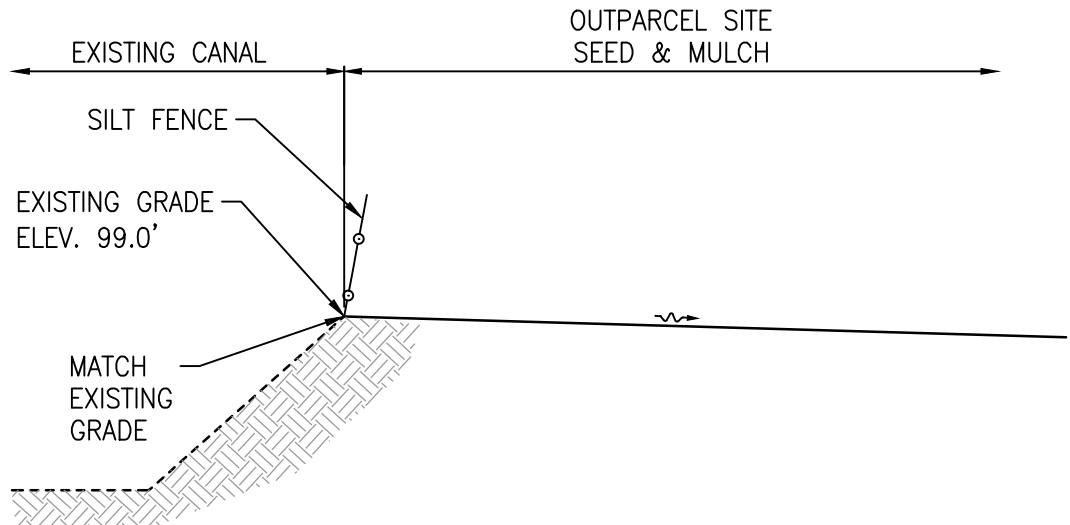


Poulos & Bennett, LLC
2602 E. Livingston St., Orlando, FL 32803
Tel. 407.487.2594 www.poulosandbennett.com
Eng. Bus. No. 28567

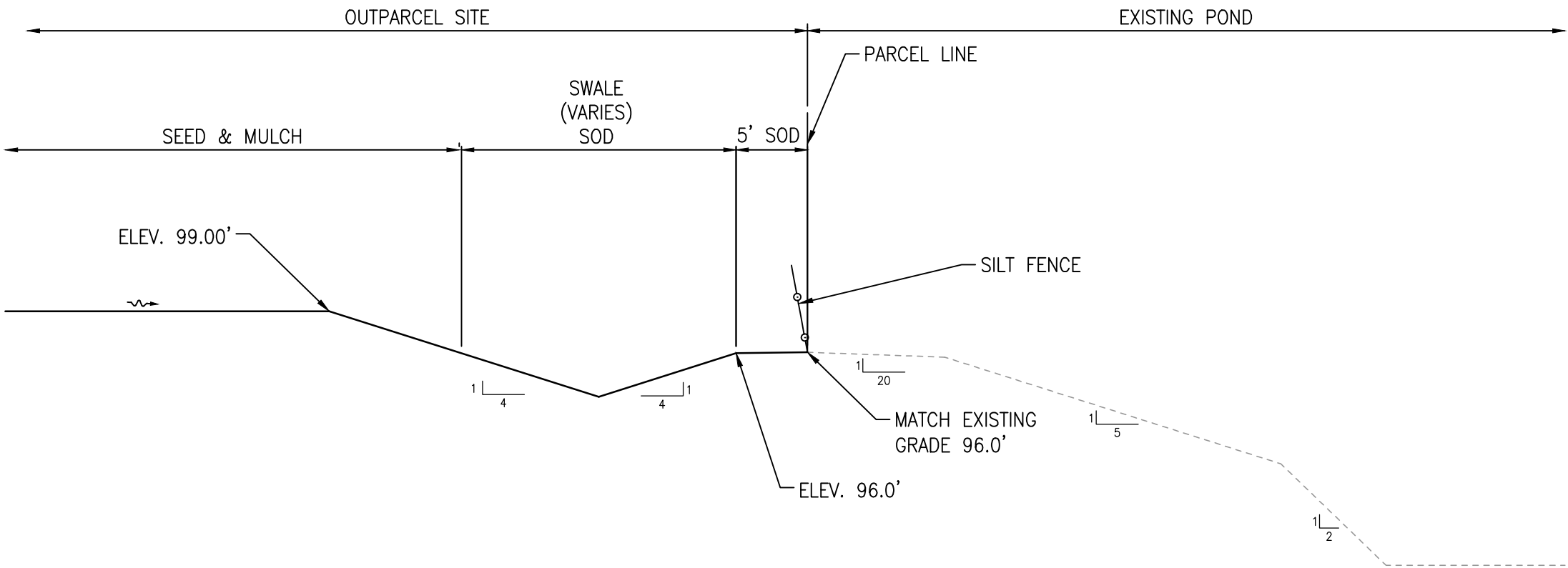
Z:\2019\19-060 LENNAR - INTERNATIONAL DRIVE\CAD\FINAL\CITY\SF\WMD OUTPARCEL\19060-COTLS



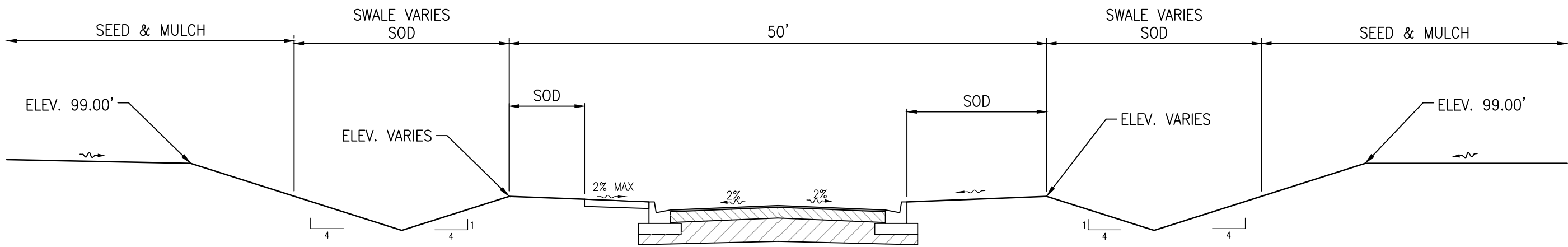
A TYPICAL GRADING SECTION
N.T.S.



B TYPICAL GRADING SECTION
N.T.S.



C TYPICAL POND SECTION
N.T.S.



D TYPICAL GRADING SECTION
N.T.S.

Key Map:

Consultant:

| | | |
|-----------------------|------|--------------|
| NO. | DATE | DESCRIPTIONS |
| SUBMISSIONS/REVISIONS | | |
| VERTICAL DATUM: | | NAVD 88 |
| JOB NO.: | | 19-060 |
| DESIGNED BY: | | DM |
| DRAWN BY: | | DM |
| CHECKED BY: | | DAL |
| APPROVED BY: | | DAL |
| SCALE IN FEET: | | N.T.S. |

Project Name:

**OUTPARCEL
MASS GRADING
PLAN**

Jurisdiction:

SFWMD

Sheet Title:

**GRADING SECTIONS
& DETAILS**

Sheet No.:

C4.05

Seal:

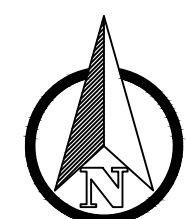


DARIN ALEX LOCKWOOD
P.E. NO. 066504
DATE: June 24, 2021

This item has been electronically signed and sealed by Darin Alex Lockwood on the date adjacent to the seal using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.



Poulos & Bennett, LLC
2602 E. Livingston St., Orlando, FL 32803
Tel. 407.487.2594 www.poulosandbennett.com
Eng. Bus. No. 28567



LEGEND:

1. FILTER FABRIC SHALL BE TYPE D-2. SEE DESIGN STANDARD INDEX 199. SPLICE LENGTH SHALL BE 6".
2. REFER TO FDOT SPECIFICATION 530-2.2.2 FOR CONCRETE RIP RAP.

ATION 53



1" = 20'

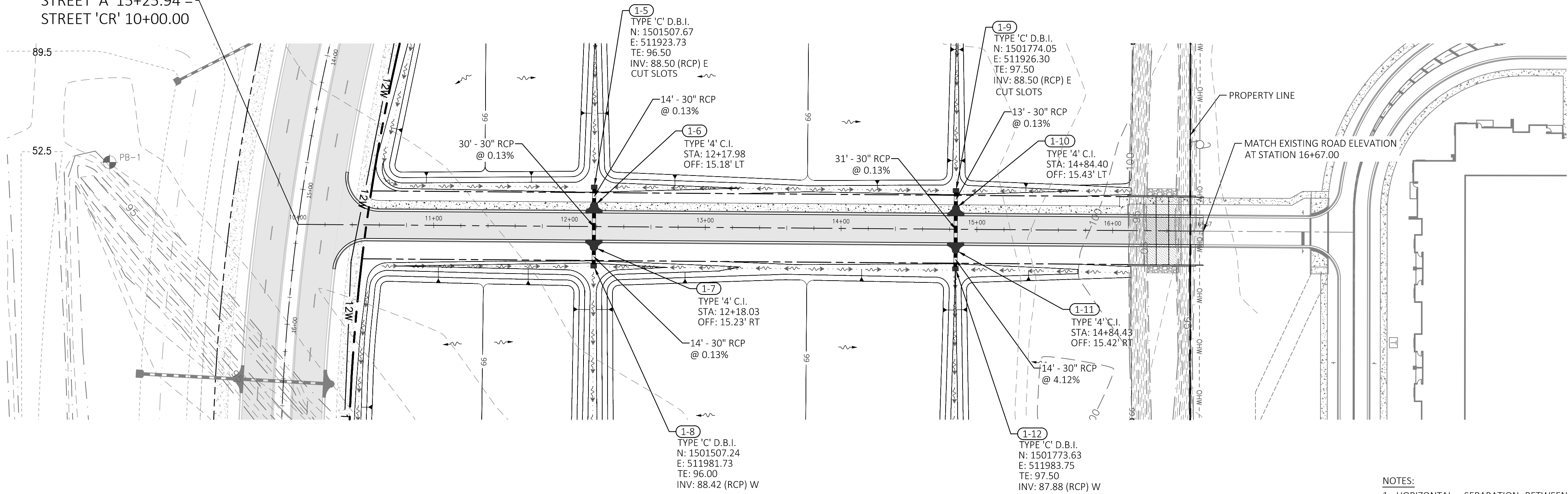


1" = 5'

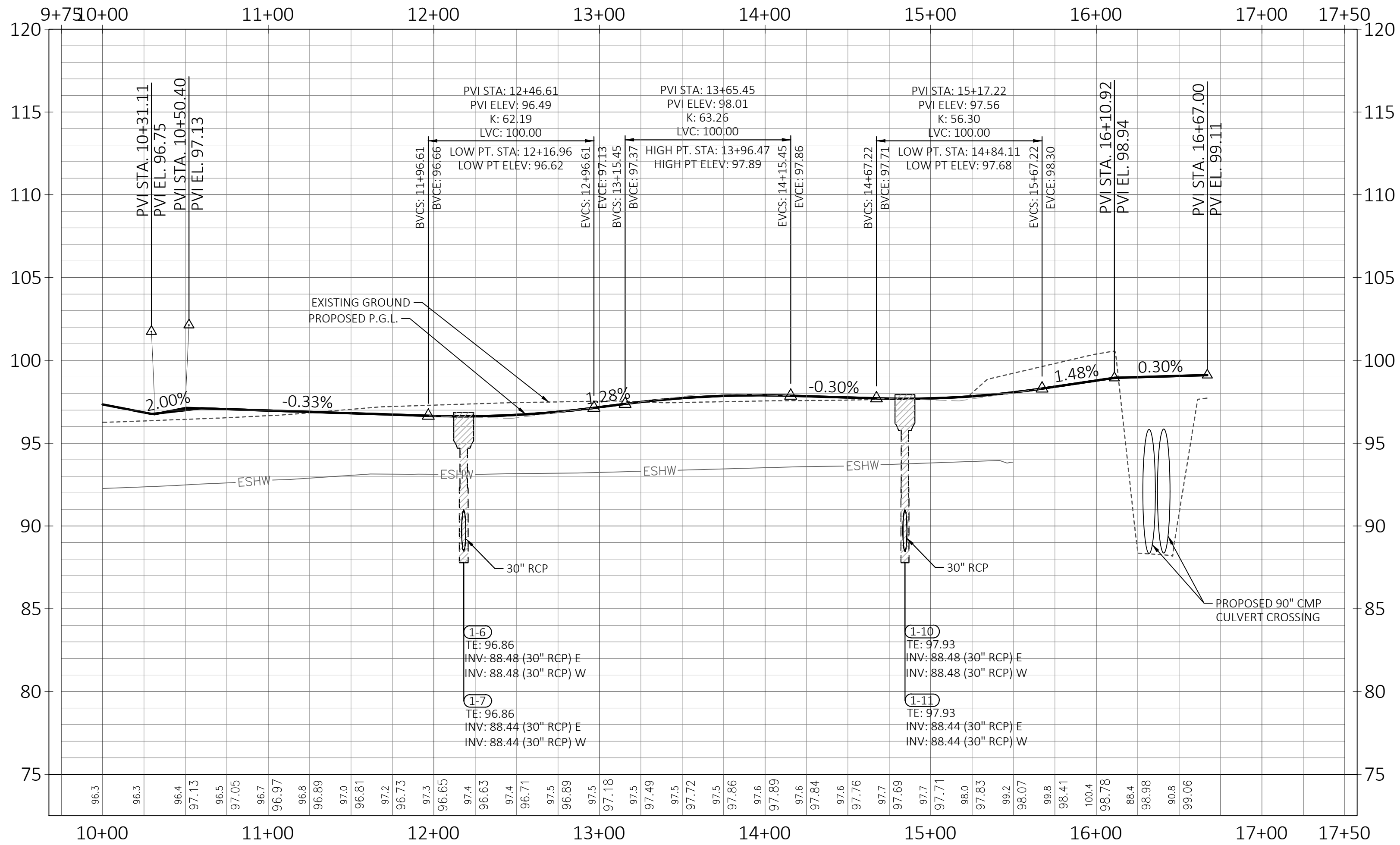
Poulos & Bennett, LLC
2602 E. Livingston St., Orlando, FL 32803
Tel. 407.487.2594 www.poulosandbennett.com
Eng. Bus. No. 28567

Z:\2019\19-060 LENNAR - INTERNATIONAL DRIVE\CAD\FINAL\CITY\SFWM\WMD OUTPARCEL\19-060-CRP

STREET 'A' 15+25.94 =
STREET 'CR' 10+00.00



- NOTES:
- HORIZONTAL SEPARATION BETWEEN WATER MAINS, WASTEWATER MAINS, REUSE MAINS, AND STORM PIPING SHALL BE 36" MINIMUM.
 - DEPTH OF COVER FOR ALL UTILITY MAINS SHALL BE 36-INCHES.
 - PROVIDE 10' UTILITY EASEMENT ALONG ALL PROPOSED RIGHT-OF-WAY.



Key Map:

Consultant:

| | | |
|-----------------------|------------|----------------|
| NO. | DATE | DESCRIPTIONS |
| 1 | 03/29/2021 | SUBMIT TO SFWM |
| SUBMISSIONS/REVISIONS | | |
| VERTICAL DATUM: | NAVD 88 | |
| JOB NO.: | 19-060 | |
| DESIGNED BY: | DM | |
| DRAWN BY: | DM | |
| CHECKED BY: | DAL | |
| APPROVED BY: | DAL | |
| SCALE IN FEET: | 1" = 50' | |

Project Name:

OUTPARCEL MASS GRADING PLAN

Jurisdiction:

SFWM

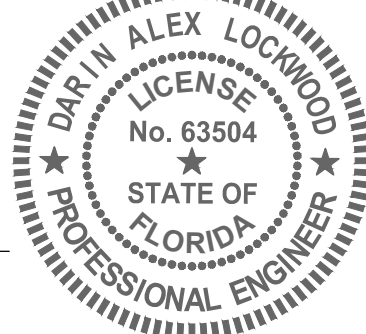
Sheet Title:

CONNECTOR ROAD

Sheet No.:

C6.00

Seal:



This item has been electronically signed and sealed by Darrin Alex Lockwood on the date adjacent to the seal using a SFA authentication code. Printed copies of this document are not considered signed and sealed and the SFA authentication code must be verified on any electronic copies.



Poulos & Bennett, LLC
2602 E. Livingston St., Orlando, FL 32803
Tel. 407.487.2394 www.poulosandbennett.com
Eng. Bus. No. 28567