

APOPKA DEVELOPMENT REVIEW COMMITTEE AGENDA

November 13, 2024 9:00 AM

Apopka City Hall Council Chambers

SUBDIVISION:

CONSTRUCTION SITE PLAN

1. CSP-24-7, Crossroads at Kelly Park, Phase 2B - Construction Site Plan (CSP), 1st Submittal
Owner(s): Kelly Park Land Investments LLC
Applicant(s): Poulos and Bennett, LLC - Marc Stehli
Location: South of Ondich Road, West of Effie Road, North of West Kelly Park Road and East of Round Lake Road
Proposed Use: Residential
Project Manager: Jean Sanchez
Presented by: Jean Sanchez, Senior Planner

DISCUSSION

ADJOURNMENT

Individuals with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk at least two (2) working days in advance of the meeting date and time at (407) 703-1704. F.S. 286.0105 If a person decides to appeal any decision or recommendation made by Council with respect to any matter considered at this meeting, he will need record of the proceedings, and that for such purposes he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Any opening invocation that is offered before the official start of the Council meeting shall be the voluntary offering of a private person, to and for the benefit of the Council. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the City Council or the city staff, and the City is not allowed by law to endorse the religious or non-religious beliefs or views of such speaker. Persons in attendance at the City Council meeting are invited to stand during the opening ceremony. However, such invitation shall not be construed as a demand, order, or any other type of command. No person in attendance at the meeting shall be required to participate in any opening invocation that is offered or to participate in the Pledge of Allegiance. You may remain seated within the City Council Chambers or exit the City Council Chambers and return upon completion of the opening invocation and/or Pledge of Allegiance if you do not wish to participate in or witness the opening invocation and/or the recitation of the Pledge of Allegiance.

Crossroads at Kelly Park

Phase 2B

City of Apopka, FL

Utilities Summary:

<u>POTABLE WATER:</u>	<u>RECLAIMED WATER:</u>	<u>SANITARY SEWER:</u>
8" PVC = 764 LF	6" PVC = 3397 LF	8" PVC = 2941 LF
6" PVC = 2810 LF	6" GV = 13	MANHOLE = 12
8" GV = 3		
6" GV = 11		

PROJECT NARRATIVE:
LOCATED IN THE KELLY PARK INTERCHANGE DISTRICT MIXED-USE AND VILLAGE CENTER DISTRICT, THE CROSSROADS AT KELLY PARK PROJECT PROVIDES A MIXTURE OF USES INCLUDING DETACHED SINGLE-FAMILY RESIDENTIAL AND MULTI-FAMILY RESIDENTIAL. THIS CONSTRUCTION SITE PLAN SUBMITTAL PROPOSES CONSTRUCTION OF THE PROJECT'S PHASE 2B RESIDENTIAL DEVELOPMENT CONSISTING OF 90 UNITS AND THE ASSOCIATED UTILITIES AND DRAINAGE FACILITIES NECESSARY TO SUPPORT THE PROJECT DEVELOPMENT.

Phase 2B Legal Description:

A TRACT OF LAND, BEING PROPOSED TRACT FD-2B OF THE PROPOSED PLAT OF CROSSROADS AT KELLY PARK PHASES 1-2, 1-3 AND 2, LYING IN THE NORTHWEST QUARTER OF SECTION 11, TOWNSHIP 20, RANGE 27 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE NORTHWEST QUARTER OF SAID SECTION 11, FOR A POINT OF REFERENCE; THENCE RUN SOUTH 89°30'17" WEST, ALONG THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 11, A DISTANCE OF 506.54 FEET TO THE POINT OF BEGINNING; THENCE RUN SOUTH 89°52'19" EAST, 50.00 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY, THENCE RUN SOUTHEASTERLY, ALONG SAID CURVE, HAVING A RADIUS OF 6000.00 FEET, A CENTRAL ANGLE OF 18°30'00"37", AN ARC LENGTH OF 35.36 FEET, A CHORD BEARING OF SOUTH 45°07'41" EAST, 39.31 FEET TO THE POINT OF TANGENCY OF SAID CURVE TO THE EAST HALF OF THE NORTHWEST QUARTER OF SAID SECTION 11; THENCE DEPARTING SAID SOUTH LINE, RUN NORTH 00°07'41" WEST, ALONG THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF SAID SECTION 11, A DISTANCE OF 789.93 FEET TO THE SOUTHWEST CORNER OF PROPOSED TRACT FD-38, THE FOLLOWING CORNERS: NORTH 89°52'19" EAST, 159.99 FEET TO THE POINT OF CURVATURE OF A NON-TANGENT CURVE CONCAVE WESTERLY; THENCE RUN NORTHEASTERLY, ALONG SAID CURVE, HAVING A RADIUS OF 6000.00 FEET, A CENTRAL ANGLE OF 18°30'00"37", AN ARC LENGTH OF 35.36 FEET, A CHORD BEARING OF SOUTH 45°07'41" EAST, 39.31 FEET TO THE POINT OF TANGENCY OF SAID CURVE TO THE EAST HALF OF THE NORTHWEST QUARTER OF SAID SECTION 11; THENCE DEPARTING SAID SOUTHERLY LINE, RUN SOUTH 00°07'41" EAST, 50.00 FEET; THENCE RUN SOUTH 89°52'19" WEST, 95.01 FEET; THENCE RUN SOUTH 00°07'41" EAST, 65.00 FEET; THENCE RUN NORTH 89°52'19" EAST, 120.00 FEET TO A POINT LYING ON THE PROPOSED WESTERLY RIGHT-OF-WAY LINE OF THE EASTERN LINE OF AFORESAID TRACT FD-28, THE FOLLOWING CORNERS; THENCE RUN SOUTH 00°07'41" EAST, 150.00 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY; THENCE RUN SOUTHEASTERLY, ALONG SAID CURVE HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 90°00'00"37", AN ARC LENGTH OF 39.27, A CHORD LENGTH OF 35.36 FEET, A CHORD BEARING OF SOUTH 45°07'41" EAST, 39.31 FEET TO THE POINT OF TANGENCY OF SAID CURVE TO THE EAST HALF OF THE NORTHWEST QUARTER OF SAID SECTION 11; THENCE DEPARTING SAID CURVE SOUTHWESTERLY, THENCE RUN SOUTHEASTERLY, ALONG SAID NON-TANGENT CURVE HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 90°00'00", AN ARC LENGTH OF 39.27 FEET, A CHORD LENGTH OF 35.36 FEET AND A CHORD BEARING OF SOUTH 45°07'41" EAST, 39.31 FEET TO THE POINT OF TANGENCY OF SAID CURVE TO THE EAST HALF OF THE NORTHWEST QUARTER OF SAID SECTION 11; THENCE DEPARTING SAID CURVE NORTHWESTERLY, THENCE RUN SOUTHWESTERLY, ALONG SAID CURVE HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 99°37'58", AN ARC LENGTH OF 39.21 FEET, A CHORD LENGTH OF 35.24 FEET, AND A CHORD BEARING OF SOUTH 44°41'18" WEST; THENCE RUN SOUTH 89°52'19" WEST, 159.99 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY; THENCE RUN SOUTHWESTERLY, ALONG SAID CURVE HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 99°37'58", AN ARC LENGTH OF 39.21 FEET, A CHORD LENGTH OF 35.24 FEET, AND A CHORD BEARING OF SOUTH 44°41'18" WEST; THENCE RUN SOUTH 89°30'17" EAST, 13.68 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY; THENCE RUN SOUTHEASTERLY, ALONG SAID CURVE HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 90°22'02", AN ARC LENGTH OF 39.43 FEET, A CHORD LENGTH OF 35.47 FEET AND A CHORD BEARING OF SOUTH 44°48'45" WEST; THENCE DEPARTING SAID CURVE, RUN SOUTH 00°07'41" EAST, 159.99 FEET TO THE POINT OF TANGENCY OF SAID CURVE TO THE EAST HALF OF THE NORTHWEST QUARTER OF SAID SECTION 11; THENCE DEPARTING SAID CURVE HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 99°37'58", AN ARC LENGTH OF 39.21 FEET, A CHORD LENGTH OF 35.24 FEET AND A CHORD BEARING OF SOUTH 44°41'18" WEST; THENCE RUN SOUTH 00°29'43" EAST, 50.00 FEET, NON-TANGENT TO SAID CURVE, THENCE RUN SOUTH 89°30'17" EAST, 35.04 FEET; THENCE RUN SOUTH 00°07'41" EAST, 149.91 FEET TO THE POINT OF BEGINNING.

THE ABOVE TRACT OF LAND LIES IN THE CITY OF APOPKA, ORANGE COUNTY, FLORIDA AND CONTAINS 18.752 ACRES MORE OR LESS.

Utility Providers

<u>Electric:</u>	<u>Telephone:</u>
Duke Energy	AT&T
452 E. Crown Point Rd.	1227 S. Division Ave
Winter Garden FL 34787	Orlando, FL 34805
407.629.1010	407.351.7100

<u>CATV:</u>	<u>Gas:</u>
Spectrum Network	Lake Apopka Natural Gas
100 Gordon St.	38 N. Park Avenue
Sanford, FL 32777	Apopka, FL 32703
321.805.3081	407.656.2734

Consultants

Civil Engineer: Poulos & Bennett, LLC 2602 E. Livingston St. Orlando, FL 32803 407.487.2594	Surveyor: PEC Surveying and 2100 Alafaya Trail Oviedo, FL 32765 407.542.4967
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Geotechnical Engineer: Landscape Architect:
Universal Engineering Sciences **Bonnett Design Group, LLC**
 3532 Maggie Boulevard 400 S Orlando Ave Suite 201
 Orlando, FL 32811 Maitland, FL 32751
 407.423.0504 407.622.1588

Telephone:
AT&T
1227 S. Division Ave
Orlando, FL 34805
407.351.7100

Gas:
Lake Apopka Natural Gas
38 N. Park Avenue
Apopka, FL 32703
407.656.2734

Surveyor:
C Surveying and Mapping, LLC
Alafaya Trail
do, FL 32765
42.4967

Landscape Architect: Nett Design Group, LLC 1000 Orlando Ave Suite 201 Orlando, FL 32751 407.22.1588	Transportation: TMC Traffic & Mobility Consultants 3101 Maguire Boulevard, Suite 265 Orlando, FL 32803 407.531.5332
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City of Apopka
748 E. Cleveland St
Apopka, FL 3270
407.703.1731

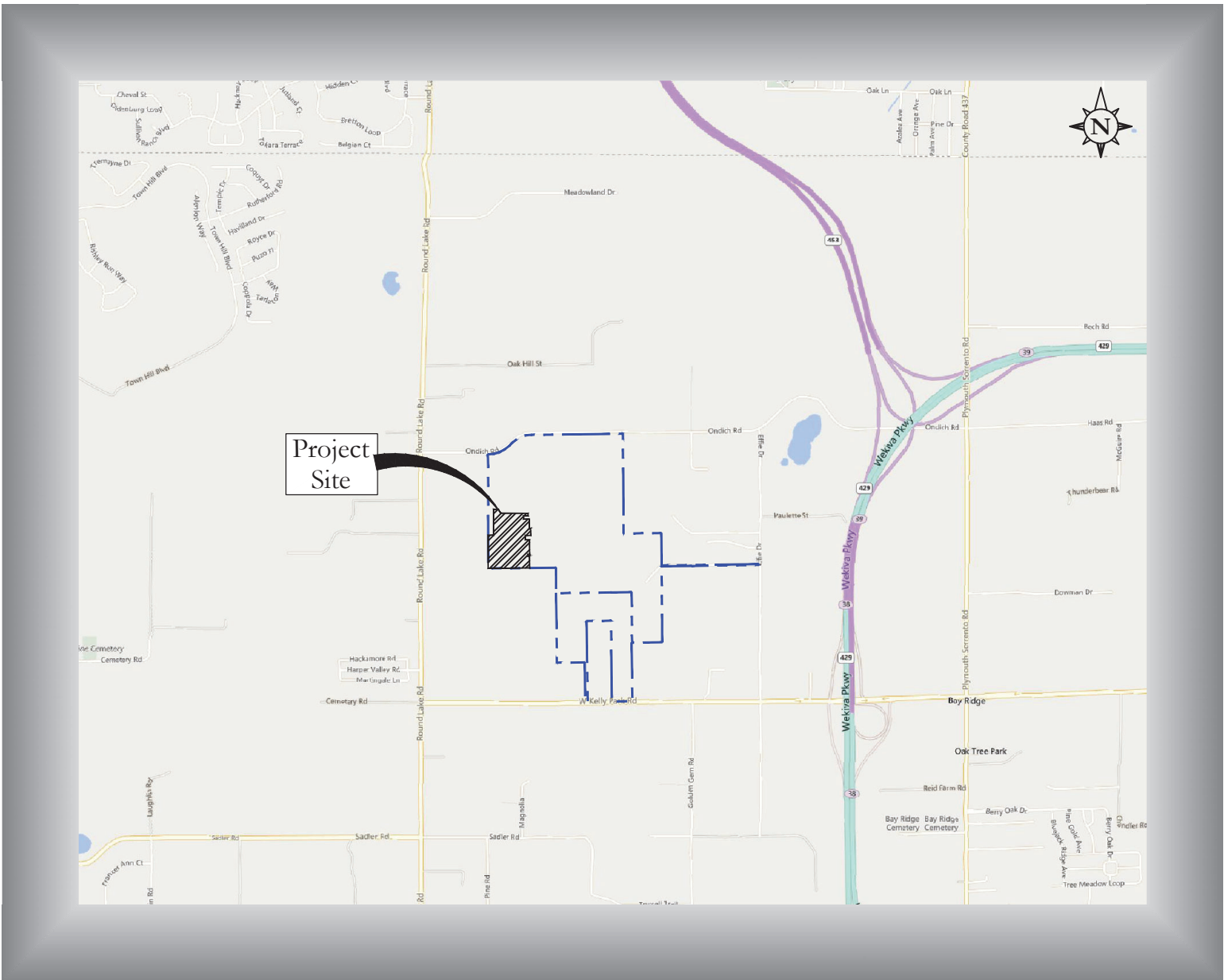
Solid Waste, Fire and Police Protection:
City of Apopka
748 E. Cleveland St
Apopka, FL 3270
407.703.1731

Environmental:
Bio-Tech Consulting Inc.
3025 East South Street
Orlando, FL 32803
407.894.5969

Transportation:
TMC Traffic & Mobility Consultants
 3101 Maguire Boulevard, Suite 265
 Orlando, FL 32803
 407.531.5332

Parcel Id. No.:
11-20-27-1566-06-022

Owner/Applicant:
Kelly Park Land Investments, LLC
121 Snell Isle Blvd NE
St. Petersburg, FL 33704



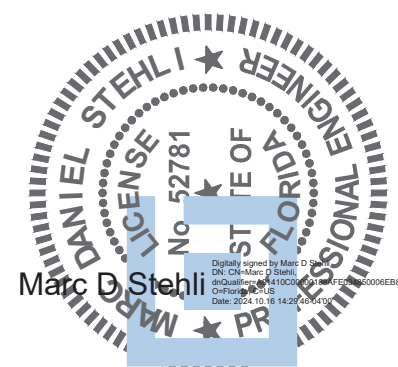
Vicinity Map

Scale: 1" = 3,000'

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C0.01	-	C0.02	Construction Notes		■					
C0.03		Existing Conditions Plan		■						
C1.00		Overall Master Plan		■						
C1.01		Site Data Tables		■						
C1.02		Overall Phasing Plan		■						
C1.10		Erosion Control Plan		■						
C1.11		Erosion Control Details		■						
C2.00		Site Plan		■						
C2.01		Signage, Striping, & Geometry Plan		■						
C3.00		Typical Road Sections		■						
C3.10		Boring Location Map		■						
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C5.00		Wastewater Collection Plan		■						
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C9.10	-	C9.13	Apopka Construction Details		■					
<u>Survey Drawings</u>										
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L000		Cover Sheet		■						
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L401	-	L402	Landscape Plan		■					
L410		Planting Schedule		■						
L411	-	L412	Landscape Details & Notes		■					
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E100		Overall Lighting Plan		■						
E101	-	E102	Lighting Plan		■					
E301		Lighting Cutsheet		■						
<u>Date</u>		<u>Description</u>								
-	10/07/2024	SUBMIT TO CITY OF APOPKA & SJRWMD								

NOTES:

1. 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, AND LOCAL REGULATIONS AND SPECIFICATIONS.
2. IF YOU REQUIRE FURTHER CLARIFICATION OF WHAT THIS DOCUMENT REPRESENTS, PLEASE CONTACT THE ADA COORDINATOR OF CITY OF APOPKA AT 407-703-1700.



This item has been electronically signed and sealed using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

POULOS & BENNETT

2602 E. Livingston St., Orlando, FL 32803
Tel. 407.487.2594 www.poulosandbennett.com
Eng. Bus. No. 28567
P&B Job No.: 21-027

Z:\2021\21-027 GALVIN - KELLY PARK PARCELS\CD\FINAL\CD\PHASE 1-2B\21-027 -PHASE 1-2B-ON

GENERAL NOTES:

- IT WILL 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 DEWATERING (CUP)
 - WATER MANAGEMENT DISTRICT ENVIRONMENTAL RESOURCE PERMIT (ERP) OR M5SW
 - WATER MANAGEMENT DISTRICT WETLAND RESOURCE PERMIT
 - FDEP WATER DISTRIBUTION
 - FDEP SANITARY SEWER COLLECTION AND TRANSMISSION
 - FDEP REUSE
 - LOCAL RIGHT OF WAY USE
 - LOCAL UNDERGROUND UTILITIES
 - FDEP & EPA NPDES STORMWATER
 - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION TORTOISE INCIDENTAL TAKE
- 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 NPDES GENERAL PERMIT PRIOR TO BEGINNING WORK. IN THE STATE OF FLORIDA THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION IS THE PERMITTING AGENCY. IT IS CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN SAME. A COPY SHALL BE SENT TO OWNER.
- FLORIDA LAW (F.S. 556 - THE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT) 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 CONTACT SUNSHINE STATE ONE-CALL OF FLORIDA, INC. PRIOR TO COMMENCEMENT OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS; INCLUDING BUT NOT LIMITED TO WATER, RECLAIMED WATER, SEWER, POWER, TELEPHONE, GAS AND CABLE TV COMPANIES.
- PRIOR TO COMMENCEMENT, CONTRACTOR SHALL PROVIDE POULOS & BENNETT WITH CONSTRUCTION SCHEDULE 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.
- THE LOCATIONS OF EXISTING UTILITIES AND STORM DRAINAGE SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. ENGINEER ASSUMES NO RESPONSIBILITY FOR INACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ARRANGEMENTS FOR FIELD LOCATIONS AND FOR ANY RELOCATIONS OF THE VARIOUS EXISTING UTILITIES WITH THE UTILITY OWNERS, WHICH SHALL BE DONE IN A TIMELY FASHION TO MINIMIZE IMPACT ON THE CONSTRUCTION SCHEDULE. ANY DELAY OR INCONVENIENCE CAUSED THE CONTRACTOR BY THE RELOCATION OF THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.

ANY DIFFERING SITE CONDITIONS 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.
- AS PART OF THE CLEARING AND GRUBBING OPERATION, THE CONTRACTOR IS TO REMOVE ALL FENCING AND/OR EXISTING FACILITIES FROM THE SITE. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING SITE VISIT TO UNDERSTAND THE EXISTING CONDITIONS OF THE SITE. IF REMOVAL OF EXISTING FACILITIES IS NOT INCLUDED IN THE BASE BID, THEN IT SHALL BE SPECIFICALLY IDENTIFIED.
- CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTIES FROM DAMAGE BY SEDIMENTATION OR OTHER POTENTIAL CONSTRUCTION RELATED CAUSES.
- IF AN EAGLE MANAGEMENT PLAN HAS BEEN FILED AND APPROVED BY FLORIDA GAME AND FRESHWATER FISH COMMISSION AND THE U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE, CONTRACTOR SHALL ABIDE BY THE PERMIT.
- MAINTAIN MINIMUM 3' COVER OVER PROPOSED GRAVITY SANITARY, FORCE MAIN, WATER AND REUSE LINES, UNLESS OTHERWISE NOTED.
- CONCRETE SIDEWALKS (AS SPECIFIED BY APPROPRIATE ROADWAY SECTION) ADJACENT TO ALL LOTS TO BE INSTALLED BY HOME BUILDER. SIDEWALKS ADJACENT TO PONDS, PARKS, AND OPEN SPACE, AS SHOWN ON PLANS, ARE TO BE CONSTRUCTED WITH INFRASTRUCTURE. ALL POND ACCESS TRACT SIDEWALK SHALL BE 6" MINIMUM.
- 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.
- ALL RECOMMENDATIONS AND REQUIREMENTS OF INSPECTION PERSONNEL OTHER THAN OWNER'S SHALL BE REPORTED TO ENGINEER/OWNER/OWNERS REPRESENTATIVE PRIOR TO IMPLEMENTATION. COMPENSATION WILL NOT BE ALLOWED FOR WORK WHICH IS NOT AUTHORIZED BY ENGINEER/OWNER.
- CONTRACTOR SHALL BE EXTREMELY CAUTIOUS WHEN WORKING NEAR TREES WHICH ARE TO BE SAVED, WHETHER SHOWN IN THE PLANS OR DESIGNATED IN THE FIELD. CONTRACTOR SHALL BECOME FAMILIAR WITH AND CONFORM WITH ALL TREE PROTECTION/PRESERVATION PROVISIONS OF THE CONTRACT DOCUMENTS AND LOCAL GOVERNMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT AND MITIGATION COSTS FOR ANY TREES REMOVED THAT WERE DESIGNATED TO BE PRESERVED.
- 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 CONFIRM COMPATIBILITY OF PIPE SLOPES AND INVERTS DURING SHOP DRAWING AND MATERIALS ORDERING PHASE OF PROJECT AND ADVISE ENGINEER OF ANY DISCREPANCIES.
- NO USE OF ANY MATERIAL SHALL BE USED IN NEW CONSTRUCTION UNLESS APPROVED DURING THE SHOP DRAWING APPROVAL PROCESS OR AS APPROVED BY ENGINEER/OWNER IN WRITING.
- ALL FOOT 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 FOOT ROADWAY AND TRAFFIC STANDARD PLANS, LATEST EDITION.
- IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO ENSURE ADEQUATE POSITIONING, BOTH HORIZONTAL AND

VERTICAL PRIOR TO THE INSTALLATION OF ANY IMPROVEMENT.

- 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 CONTRACTOR'S SOLE EXPENSE.
- IMMEDIATELY AT ONSET OF CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES CRITICAL TO COMPLETING THE PROJECT (INCLUDING WATER, REUSE, SEWER, POWER, TELEPHONE, GAS, AND CABLE TV) AND SHALL EVALUATE POTENTIAL CONFLICTS. ALL SUCH CONFLICTS SHALL BE REPORTED TO ENGINEER/OWNER IMMEDIATELY UPON DISCOVERY.
- CONTRACTOR SHALL INSTRUCT THE GEOTECHNICAL TESTING LABORATORY PROVIDING CONSTRUCTION TESTING TO PROVIDE POULOS & BENNETT WITH COPIES OF ALL SITE-WORK TEST REPORTS 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.
- DEWATERING IS ANTICIPATED FOR THIS PROJECT. THEREFORE, THE DISCHARGE OF GROUNDWATER FROM DEWATERING OPERATIONS REQUIRES APPROVAL FROM CITY OF APOPKA, FDEP AND THE APPLICABLE WATER MANAGEMENT DISTRICT. THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR OBTAINING ALL DEWATERING PERMITS. IT IS 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.
- WORK SHALL BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT THROUGH THE U.S. DEPARTMENT OF LABOR AND THE FLORIDA TRENCH SAFETY ACT.
- ALL PERSONAL PROPERTY, EXCEPT MAIL BOXES, WITHIN THE RIGHT-OF-WAY THAT IS NOT RELOCATED BY THE PROPERTY OWNER SHALL BE REMOVED BY THE CONTRACTOR AS NECESSARY TO CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE PLANS. MAIL BOXES SHALL BE RELOCATED BY THE CONTRACTOR IN ACCORDANCE WITH FOOT DESIGN STANDARD 532.
- THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND SURVEYS BUT IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO AND PROTECT EXISTING FACILITIES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING UTILITY RELOCATION WITH UTILITY OWNERS AND ENGINEER SHOULD SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS.
- CONTRACTOR IS TO MAINTAIN UNINTERRUPTED ACCESS TO ALL DRIVEWAYS AT ALL TIMES AND IS TO NOTIFY PROPERTY OWNERS FIVE DAYS PRIOR TO STARTING CONSTRUCTION.
- SHOULD AGGRESSIVE SOILS BE ENCOUNTERED CONTRACTOR SHALL NOTIFY ENGINEER FOR REMEDIAL ACTION.
- IMPACTS TO OFFSITE ROADWAYS, IF ANY, WILL NEED TO BE REPAIRED IN ACCORDANCE WITH CITY/COUNTY REQUIREMENTS. IF REQUIRED, CONTRACTOR SHALL OBTAIN SURETY BOND.
- NO EQUIPMENT EXTENDING HIGHER THAN 15 FT. ABOVE EXISTING GRADE SHALL BE USED WITHIN POWER EASEMENTS.
- THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
- ANY WELLS SHOWN HEREON ARE THE WELLS LOCATED TO DATE AND DO NOT NECESSARILY REPRESENT ALL WELLS ON THE PROPERTY. THE ENGINEER SHALL BE NOTIFIED OF ANY WELLS ENCOUNTERED DURING CONSTRUCTION. ALL WELLS NOT DESIGNATED TO REMAIN OR FUNCTION SHALL BE PROPERLY SEALED AND ABANDONED PER APPLICABLE AGENCY REQUIREMENTS.
- VIBRATORY COMPACTION METHODS SHALL NOT BE USED WITHIN ANY EXISTING GAS EASEMENTS.
- ALL LIGHT POLES AND STRUCTURES TO BE LOCATED IN THE FIELD BY SURVEYOR RETAINED BY CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY TRAFFIC EQUIPMENT, INCLUDING BUT NOT LIMITED TO, FIBER, LOOP SENSORS, PULL BOXES, CONDUIT, TRAFFIC SIGNALS AND CABINETS. ANY ITEMS DAMAGED BY THE CONTRACTOR WILL BE RESTORED TO THEIR ORIGINAL CONDITION UNLESS OTHERWISE AGREED UPON BY THE STATE AND/OR LOCAL ENGINEER.
- ALL EXCAVATED AREAS TO BE SEEDED AND/OR SODDED AFTER FINISH GRADING UNLESS OTHERWISE NOTED. ALL NEWLY SEEDED/SODDED AREAS SHALL HAVE A MINIMUM OF 4" OF TOPSOIL. HOLD SOIL DOWN 1" FROM PAVEMENT ELEVATION. CONTRACTOR TO SUPPLY STRAW MULCH WHERE GRASS SEED HAS BEEN PLANTED.
- ALL EXISTING EASEMENTS, RIGHTS-OF-WAY, AND LOT LINES MAY NOT BE SHOWN. REFER TO THE ALTA/NSPS LAND TITLE SURVEY, BOUNDARY SURVEY OR TITLE WORK FOR ASSOCIATED ENCUMBRANCES.
- SURROUNDING DEVELOPMENT AND ELEVATIONS WERE DETERMINED FROM DESIGN DRAWINGS AS LISTED IN THE SURVEYOR SECTION. CONTRACTOR TO FIELD VERIFY ALL ELEVATIONS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER IF DIFFERENT.
- SIGHT LINES SHOWN ON THE PLANS SHALL BE MAINTAINED WITHIN THE TRIANGLES BOTH HORIZONTALLY AND VERTICALLY FROM 30 INCHES TO EIGHT FEET IN HEIGHT. ALL VERTICAL SITE IMPROVEMENTS SHALL BE REMOVED OR KEPT CLEAR FROM TRIANGLES.
- MAINTENANCE OF TRAFFIC DURING CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE APPROVED M.O.T. PLAN ON FILE.
- CONTRACTOR TO MAINTAIN ALL EXISTING SIDEWALKS OPEN DURING CONSTRUCTION, OR A SAFE, ADA COMPLIANT, TEMPORARY APPROVED PEDESTRIAN PATH SHALL BE PROVIDED UNTIL THE SIDEWALK CAN BE REOPENED.
- RETAINING WALLS SHOWN HEREON ARE TO BE DESIGNED BY OTHERS. ENGINEER ASSUMES NO LIABILITY FOR DAMAGE OR FAILURE OF CIVIL IMPROVEMENTS CAUSED BY FAILURE OF WALLS WHETHER DIRECTLY OR INDIRECTLY. ENGINEER RECOMMENDS GEOTECHNICAL CONSULTANT REVIEW. SITE CONDITIONS TO DETERMINE IF A GLOBAL STABILITY ANALYSIS FOR RETAINING WALLS IS APPROPRIATE.
- MANHOLE LIDS, VALVE COVERS AND CLEAN-OUTS LOCATED IN TRAVEL LANES SHALL BE TRAFFIC BEARING RATED.
- PRIOR TO THE START OF LAND DISTURBING ACTIVITIES, WHICH INCLUDES DEMOLITION, EARTHWORK AND/OR CONSTRUCTION, THE DEVELOPER/CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMIT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) A NOTICE OF INTENT (NOI) TO OBTAIN COVERAGE UNDER THE NPDES GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (CGP) PURSUANT TO THE REQUIREMENTS OF 62-621.300(4)(A) F.A.C. A COPY OF THE NOI SHALL BE SUBMITTED TO THE OPERATOR(S) OF THE MS4. COPIES OF THE SWPPP, NOI, AND FDEP ACKNOWLEDGEMENT LETTER ARE TO BE KEPT ON THE PROJECT SITE AND MADE AVAILABLE UPON REQUEST. UPON COMPLETION OF ALL LAND DISTURBING ACTIVITIES AND AFTER FINAL STABILIZATION OF THE SITE IS COMPLETE, THE DEVELOPER/CONTRACT SHALL SUBMIT TO FDEP A NOTICE OF TERMINATION (NOT) TO END THEIR COVERAGE UNDER THE CGP AND PROVIDE A COPY OF THE NOT TO THE OPERATOR(S) OF THE MS4.

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 AS 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 FDEP CRITERIA AND UTILITY PROVIDER REQUIREMENTS.
- DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL INCLUDING CHANGES MADE BY FIELD ORDER OR BY CHANGE ORDER.
- 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. ALL VALVES SHALL BE REFERENCED FROM AT LEAST TWO AND PREFERABLY THREE PERMANENT POINTS OR, BY STATE PLANE COORDINATES OR OTHER UTILITY PROVIDER ACCEPTABLE REFERENCE.
- 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 SPECIFIED ON THE PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-GRADING POND SLOPES THAT ARE STEEPER THAN REQUIRED PER PLAN (HORIZONTAL:VERTICAL) TO A DEPTH OF 2 FT MINIMUM BELOW THE SLOIT.
- 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 THE CONTRACTOR'S SOLE EXPENSE.
- 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 THE CONTRACTOR'S SOLE EXPENSE.
- WHERE UPGRADED PIPE MATERIALS ARE SHOWN IN THE PLANS OR AS DIRECTED IN THE FIELD BY THE ENGINEER OR MUNICIPALITY, THE LENGTH, LOCATIONS, FITTINGS, ETC. FOR UPGRADED PIPE SHALL BE SHOWN ON THE AS-BUILT DRAWINGS, RECORD DRAWINGS OR PHOTOS.
- CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY FOR ALL PARK AND OPEN SPACE TRACTS GRADING. ENGINEER WILL CONFIRM COMPLIANCE WITH AGENCY REQUIREMENTS AND NOTIFY CONTRACTOR IF REMEDIAL ACTION IS NECESSARY.
- COMPLETE CERTIFIED AS-BUILT DRAWINGS SHALL BE PROVIDED TO THE ENGINEER PRIOR TO BACTERIOLOGICAL TESTING. FAILURE TO PROVIDE ACCURATE DRAWINGS MAY RESULT IN EXPEDITED TEST RESULTS AND REQUIRE ADDITIONAL TESTING AT THE CONTRACTOR'S SOLE EXPENSE.
- 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 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.
- IN CITY OF APOPKA COMPLETE AS-BUILTS AND ASSET TABLES, MEETING OCU MANUAL OF STANDARD AND CONSTRUCTION SPECIFICATIONS (DATED APRIL 2011), SHALL BE PROVIDED TO POULOS & BENNETT FOR REVIEW AND APPROVAL. 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 POULOS & BENNETT.
- CONTRACTOR SHALL PROVIDE ELEVATIONS OF THE ADA RAMPS, LANDINGS AND CROSS-WALKS AT SUFFICIENT LOCATIONS TO DETERMINE ADHERANCE TO THE ADA GUIDELINES.

SURVEY AND CONTROL:

- EXISTING TOPOGRAPHY AND CONTOURS BASED ON THE FOLLOWING:

SURVEYOR: PEC SURVEYING AND MAPPING, LLC
DRAWING NO.: MAP OF BOUNDARY AND TOPOGRAPHIC SURVEY
DATED: 03/23/2022

- SURVEYOR'S REFERENCE VERTICAL BENCHMARK:
DESCRIPTION: BENCHMARK NUMBER L708029
LOCATION: ORANGE COUNTY ENGINEERING
ELEVATION: 127.968 FEET (NAVD 1988)
- SITE TEMPORARY VERTICAL BENCHMARK:
DESCRIPTION: BENCHMARK NUMBER L708027
LOCATION: ORANGE COUNTY ENGINEERING
ELEVATION: 145.285 FEET (NAVD 1988)

BENCHMARK LOCATION AND ELEVATION ARE AS REPRESENTED BY SURVEYOR AT THE TIME OF THE SURVEY. CONTRACTOR SHALL VERIFY ITS CORRECTNESS AT TIME OF CONSTRUCTION.

PAVING, DRAINAGE AND GRADING:

- THE CONTRACTOR SHALL INSTALL, AS PART OF THE INFRASTRUCTURE AND PRIOR TO CERTIFICATE OF COMPLETION, DROP CURBS AND HANDICAP RAMPS AT ALL INTERSECTIONS OF SIDEWALK WITH THE PROPOSED PAVEMENT TO MEET STATE OF FLORIDA ACCESSIBILITY CODE AND FEDERAL A.D.A. REQUIREMENTS.
- 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, THE GEOTECHNICAL ENGINEER PROVIDING PROJECT TESTING SHALL MONITOR CONSTRUCTION CONDITIONS AND PROVIDE RECOMMENDATIONS FOR ADDITIONAL ROADWAY UNDERDRAINS AS NEEDED. ENGINEER SHALL BE NOTIFIED OF ANY SUCH RECOMMENDATIONS.
- ALL UPLAND DEVELOPMENT ONSITE AREA, EXCLUDING LANDSCAPE AREAS, SHALL, AT A MINIMUM, BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 TEST METHOD. THIS REQUIREMENT APPLIES TO ALL WORK PREPARED BY THE GENERAL CONTRACTOR AND SUB-CONTRACTORS PERFORMING WORK ONSITE. ENGINEER RESERVES RIGHT TO WITHHOLD PAYMENT FOR ANY AREA THAT DOES NOT MEET DENSITY AS SPECIFIED.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD STAKE AND ROPE OFF CONSERVATION AREA LINES. OWNER RESERVES THE RIGHT TO CHECK THE STAKING AND ROPING AND REQUIRE IT TO BE RELOCATED IF NECESSARY. IT SHALL REMAIN IN PLACE UNTIL ADJACENT CONSTRUCTION IS COMPLETE.
- ALL SIGNAGE, PAVEMENT MARKING AND TRAFFIC CONTROL DEVICES SHALL BE IN

ACCORDANCE WITH FOOT "STANDARD PLANS" AND FHWA "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITIONS.

- REGULATORY SIGNS (STOP, ETC.) SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING AND DRAINAGE IMPROVEMENTS. UNLESS SIGNAGE IS PROVIDED BY THE MUNICIPALITY.
- PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCE BETWEEN CENTERLINES OF DRAINAGE STRUCTURES AND FROM INVERTS OF ENDWALLS AND/OR MITERED END SECTIONS. BIDDERS SHALL ADJUST FOR PIPE LENGTHS WHEN BIDDING MITERED END SECTIONS.
- 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 OWNER'S LANDSCAPE ARCHITECT.
- ALL PAVEMENT RETURN RADI SHALL BE 25' AND MEASURED FROM THE INTERFACE TO THE CONCRETE CURB AND PAVEMENT SURFACE UNLESS OTHERWISE NOTED.
- SITE GRADING, PAVING AND DRAINAGE MATERIALS AND CONSTRUCTION SHALL CONFORM TO FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- STORM DRAINS SHALL BE REINFORCED CONCRETE PIPE, PER ASTM C-76 CLASS III, UNLESS OTHERWISE SPECIFIED. LIFTING HOLES ARE PROHIBITED.
- UNDERDRAIN, IF ANY, SHALL BE HEAVY-DUTY CORRUGATED POLYETHYLENE PIPE WITH FACTORY-INSTALLED FIBER FABRIC AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS (ADS), OR APPROVED EQUAL.
- UNDERDRAIN DISCHARGE PIPE, IF ANY, SHALL BE PVC PER ASTM D3034 SDR 35 WITH ELASTOMERIC JOINTS, NON-PERFORATED.
- YARD DRAINS, IF ANY, SHALL BE NYOPLAST INLINE DRAINS AND DRAIN BASINS AS APPLICABLE WITH CAST IRON GRATES AND WATERTIGHT ADAPTER CONNECTIONS (OR APPROVED EQUAL).
- YARD DRAIN PIPING: PVC CONFORMING TO ASTM D3034, SDR35 SHALL BE USED FOR ALL PIPE RUNS IN WHICH ANY PART LIES UNDER PAVED AREAS. SAID PVC OR HEAVY DUTY CORRUGATED POLYETHYLENE MAY BE USED FOR ALL OTHER RUNS. MATERIAL SELECTION SHALL BE CONSISTENT THROUGHOUT THE PROJECT.
- DITCH BOTTOM AND CONTROL STRUCTURE INLET GRATES SHALL BE SECURED WITH CHAIN AND EYEBOLT.
- FIVE (5) FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS AND MITERED END SECTIONS.
- THE LIMITS OF THE POND TRACTS SHALL BE SODDED FROM TRACT LIMITS TO 2' BELOW NCL. IN THE CASE OF DRY BOTTOM PONDS, THE BOTTOM WILL BE SEEDED AND MULCHED UNLESS OTHERWISE SPECIFIED.
- BLUE REFLECTIVE PAVEMENT MARKERS FOR ALL FIRE HYDRANTS SHALL BE PLACED IN THE CENTER OF THE NEAREST TRAVELED LANE TO MARK THEIR LOCATIONS.
- CONCRETE SIDEWALKS (AS SPECIFIED BY APPROPRIATE ROADWAY SECTION) ADJACENT TO ALL LOTS TO BE INSTALLED BY HOME BUILDER. SIDEWALKS ADJACENT TO PONDS, PARKS, AND OPEN SPACE, AS WELL AS TRACT ACCESS APRONS AS SHOWN ON PLANS, ARE TO BE CONSTRUCTED WITH INFRASTRUCTURE.
- TOP ELEVATIONS OF MANHOLES IN GRASSED AREAS SHALL BE AT MINIMUM 4 INCHES ABOVE FINISH GRADE.
- MINIMUM LONGITUDINAL SLOPE OF CURB SHALL BE 0.30% UNLESS SPECIFIED OTHERWISE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE DOCUMENTATION, FOR ADS STORM PIPE, FROM THE PIPE MANUFACTURER CONFIRMING THAT SUFFICIENT COVER HAS BEEN PROVIDED TO PREVENT FLOTATION. IN THE EVENT THAT ADEQUATE COVER IS NOT PROVIDED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN DESIGN AND CONSTRUCTION SPECIFICATIONS FROM THE MANUFACTURER, FOR THE ADS PIPE ANCHORING SYSTEM. IF ADS STORM PIPE IS USED THEN MITERED END SECTIONS (MES) MAY BE SUBSTITUTED FOR FLARED END SECTIONS (FES) AT PIPE RUN TERMINATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING PROPER TRAFFIC MAINTENANCE AND CONTROLS IN ACCORDANCE WITH REGULATORY STANDARDS. WHERE A TRAFFIC MAINTENANCE PLAN IS REQUIRED, THE CONTRACTOR SHALL HAVE THE PLAN PREPARED BY AN FOOT CERTIFIED DESIGNER AND SUBMIT THE PLAN FOR APPROVAL.
- 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: UNIVERSAL ENGINEERING SCIENCES
REPORT NO(S) : 1919910v2
DATE (S) : MAY 26, 2024
- CONTRACTOR IS RESPONSIBLE FOR GRADING ALL PAVEMENTS TO DRAIN POSITIVELY. INTERSECTIONS SHALL BE TRANSITIONED TO PROVIDE A SMOOTH DRIVING SURFACE WHILE MAINTAINING POSITIVE DRAINAGE. SHALL 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.
- FINISHED FLOOR ELEVATION IS TYPICALLY 8" INCHES ABOVE DESIGN FINISHED GRADE AT OUTSIDE PERIMETER OF BUILDINGS EXCEPT AT ENTRIES AND WHERE OTHERWISE SHOWN.
- 100-YEAR FLOOD ELEVATIONS SHOWN HEREIN ARE DERIVED FROM (FEMA/FLOOD INSURANCE RATE MAP 1209SC005OF OF ORANGE COUNTY FLORIDA, COMMUNITY PANEL #50 OF 750, REVISED 9/25/2009).
- ALL DISTURBED FOOT, CITY AND COUNTY RIGHTS OF WAY SHALL BE RESTORED. SOD SHALL BE PLACED FROM EDGE OF PAVEMENT TO THE TOE OF BANK AND ALL AREAS SHALL MATCH OR EXCEED PRECONSTRUCTION CONDITIONS.
- FINISHED FLOOR ELEVATIONS ARE MINIMUM ELEVATIONS REQUIRED TO SATISFY DRAINAGE AND/OR 100-YEAR FLOODPLAIN REQUIREMENTS. PAD ELEVATIONS, IMMEDIATELY OUTSIDE OF BUILDING WALLS SHALL BE NO MORE THAN 8 INCHES BELOW THE FINISHED FLOOR ELEVATIONS SHOWN.
- ALL OFF-SITE DISTURBED AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION, OR BETTER.
- OVER-EXCAVATION OF RETENTION BASINS SHALL NOT BE ALLOWED UNLESS SPECIFICALLY AUTHORIZED BY ENGINEER/OWNER. SHALL UNAUTHORIZED OVER-EXCAVATION OCCUR, IT SHALL BE BACKFILLED, REGRADED, RESODDED AND/OR RESEEDED AS REQUIRED BY OWNER AT CONTRACTOR'S EXPENSE TO OWNER'S SPECIFICATIONS.
- CONTRACTOR SHALL REMOVE ALL MUCK DEPOSITS IN CONSTRUCTION AREAS AND AREAS TO BE FILLED. SEE GEOTECHNICAL REPORT.
- 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.
- ROAD GRADING AND CONSTRUCTION SHALL INCLUDE BRINGING ANY UTILITY EASEMENTS, AS SHOWN OR NOTED ON THE PLAT OR CONSTRUCTION DRAWINGS, ADJACENT TO THE RIGHT-OF-WAY LINE TO WITHIN 6 INCHES OF FINAL DESIGN GRADE. LOT GRADING REQUIREMENT MAY BE MORE STRINGENT.
- DRAINAGE MANHOLES AND INLETS (NOT INCLUDING CONTROL STRUCTURES) IN THE PLANS ARE IDENTIFIED BY TOP TYPE ONLY. CONTRACTOR SHALL PROVIDE STANDARD DITCH BOTTOM INLET, J OR P STRUCTURE BOTTOMS, SIZED AS REQUIRED TO ACCOMMODATE PIPE SIZES AND ORIENTATIONS SHOWN. SHOP DRAWINGS SHALL BE SUBMITTED WHICH CLEARLY REPRESENT SUCH DATA.
- ANY PROPOSED RETAINING WALLS DESIGN BY OTHERS.

Key Map:

10/07/2024 SUBMIT TO CITY OF APOPKA & SJRWMD

NO. DATE DESCRIPTIONS	
SUBMISSIONS/REVISIONS	
VERTICAL DATUM:	NAVD 88
JOB NO.:	21-027
DESIGNED BY:	KML
DRAWN BY:	EHW
CHECKED BY:	KML
APPROVED BY:	MDS
SCALE IN FEET:	N.T.S.

Project Name:

CROSSROADS AT KELLY PARK - PHASE 2B

Jurisdiction:

CITY of APOPKA, FL

Sheet Title:

CONSTRUCTION NOTES

Sheet No.:

C0.01

Seal:



This item has been electronically signed and sealed using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



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Eng. Bus. No. 28567

Z:\2021\21-027 GALVIN - KELLY PARK PARCELS\CAD\FINAL\UTY\PHASE 1-2B\21-027 -PHASE 1-2B-ON

THE UTILITY NOTES BELOW ARE PROVIDED AS MINIMUM REQUIREMENTS AND ARE NOT INTENDED TO SUPERCEDE LOCAL GOVERNMENT AND AGENCY REQUIREMENTS

POTABLE WATER NOTES:

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH AWWA STANDARDS AND IN ACCORDANCE WITH LOCAL GOVERNMENT STANDARDS.
2. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OR BRANCHES AND MAINS.
3. DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER.
4. ALL GATE VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED CAST BRONZE EXTENSIONS WHERE NEEDED.
5. 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 CONFORM TO NSF INTERNATIONAL STANDARD 61 AND WILL BE MARKED WITH THE NSF SEAL OF APPROVAL.
6. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED IN ACCORDANCE WITH SUB PARAGRAPH 62-555.320(21)(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.
7. 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.
8. 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.
9. 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 CONTRACTOR'S RESPONSIBILITY TO INSTALL A WATER SERVICE TO EACH LOT.
10. PIPE MATERIALS:
PVC - 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. PVC JOINT - SHALL BE IN ACCORDANCE WITH ASTM D3139.
DUCTILE IRON - SHALL CONFORM TO ANS/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.
11. WATER MAIN CONNECTION SHALL BE MADE UNDER THE SUPERVISION OF CITY OF APOPKA. ALL VALVES SHALL BE OPERATED BY LOCAL GOVERNMENT PERSONNEL ONLY. WATER MAINS ARE TO BE DISINFECTED PER ANS/AWWA C651-92 AND LOCAL GOVERNMENT STANDARDS
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.
13. 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 III OF CHAPTER 62-610, F.A.C.
14. 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 381.0065(2), F.S., AND RULE 64F-6.002, F.A.C.
15. A MINIMUM OF 3 FEET OF COVER SHALL BE MAINTAINED OVER WATER MAINS, UNLESS OTHERWISE NOTED.
16. 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.
17. 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.
18. NEW OR ALTERED FIRE HYDRANT LEADS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 6" AND SHALL INCLUDE AN AUXILIARY VALVE.
19. 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

20. 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 MANUFACTURERS' 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.
21. CONTRACTOR SHALL NOT ACTIVATE WATER SERVICE UNTIL THE FDEP HAS CLEARED THE SYSTEM FOR USE AND THE CLEARANCE LETTER HAS BEEN RECEIVED BY THE OWNER.
22. CONTRACTOR SHALL COORDINATE ALL UTILITIES SYSTEMS TEST SCHEDULING TO ALLOW ENGINEER'S ATTENDANCE PROVIDING MINIMUM NOTICE OF FIVE (5) WORKING DAYS. CONTRACTOR'S FAILURE TO PROPERLY NOTIFY ENGINEER MAY RESULT IN RETESTING AT ENGINEER'S OPTION AND AT CONTRACTOR'S EXPENSE.
23. ENGINEER RESERVES THE RIGHT TO WITHHOLD AUTHORIZATION OF PAYMENT FOR ANY PORTION OF THE UTILITIES PIPE WORK WHICH HAS NOT BEEN TESTED (OBSERVED BY ENGINEER) AND REPORTED TO CONFORM TO PROJECT SPECIFICATIONS.
24. SITE CONTRACTOR SHALL COORDINATE AND VERIFY ALL UTILITY SERVICES WITH FINAL ARCHITECTURAL DRAWINGS AND BUILDING CONTRACTOR.
25. CONTRACTOR SHALL VERIFY SIZE AND TYPE OF EXISTING MAIN PRIOR TO ORDERING TAPPING MATERIALS FOR TIE-INS.
26. CONCRETE CURBS SHALL BE CHISELED OR IMPRINTED TO SHOW LOCATIONS OF WATER AND SEWER SERVICE LINES/LATERALS. MARKING SHALL CONFORM WITH LOCAL STANDARDS. WHERE NO STANDARDS EXIST, USE "R" FOR RECLAIMED WATER, "W" FOR WATER, AND "S" FOR SANITARY.
27. FIRE HYDRANTS WHICH ARE GRAPHICALLY SHOWN ON OR NEAR LOT LINES AND NOT OTHERWISE LOCATED BY STATIONING OR DIMENSIONING SHALL BE CENTERED ON THE LOT LINE.

THE UTILITY NOTES BELOW ARE PROVIDED AS MINIMUM REQUIREMENTS AND ARE NOT INTENDED TO SUPERCEDE LOCAL GOVERNMENT AND AGENCY REQUIREMENTS

SANITARY SEWER NOTES:

1. ALL MANHOLES SHALL HAVE A MINIMUM DIAMETER OF 48 INCHES AND A MINIMUM ACCESS DIAMETER OF 22 INCHES.
2. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN MANHOLE CENTERLINE.
3. ALL SANITARY SERVICE LATERALS SHALL BE 6 INCH DIAMETER PVC. LATERALS SHALL END WITH A CLEAN OUT AT RIGHT-OF-WAY LINE.
4. INVERTS OF SANITARY SERVICE LATERALS AT THEIR CONNECTION TO SANITARY MANHOLES SHALL BE NO MORE THAN ONE (1) FOOT ABOVE THE MANHOLE INVERT.
5. PRIOR TO PAVING, CONTRACTOR SHALL VERIFY THE AS-BUILT SANITARY SEWER PIPE SLOPES. MINIMUM SHALL BE IN ACCORDANCE WITH FDEP MINIMUM CRITERIA BUILT FOR 8" PVC SEWER LINE SLOPE WILL BE 0.28%, FOR 12" PVC WILL BE 0.17% AND FOR 15" PVC WILL BE 0.12%. ANY LINE NOT MEETING MINIMUM SLOPE WILL BE RELAYED BY CONTRACTOR TO MEET THE MINIMUM SLOPE REQUIREMENT AT NO ADDITIONAL COST.
6. 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.
7. 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.
8. MANHOLE LIFT HOLES AND GRADE ADJUSTMENT RINGS BE SEALED WITH NON-SHRINKING MORTAR OR OTHER APPROPRIATE MATERIAL.
9. INLET AND OUTLET PIPES BE JOINED TO THE MANHOLE WITH A GASKETED FLEXIBLE WATER-TIGHT CONNECTION OR ANOTHER WATER-TIGHT CONNECTION ARRANGEMENT THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL.
10. WATER-TIGHT MANHOLE COVERS BE USED WHEREVER THE MANHOLE TOPS MAY BE FLOODED BY STREET RUNOFF OF HIGH WATER.
11. MINIMUM SEPARATION BETWEEN POTABLE WATER LINES AND SANITARY HAZARDS (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. SHALL A VERTICAL SEPARATION OF LESS THAN THAT STIPULATED BE REQUIRED, THE WATER LINE SHALL BE CONSTRUCTED OF 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.
12. PVC GRAVITY SEWER PIPE SHALL MEET ASTM D3034, SDR35.
13. ALL SANITARY SEWER PIPE SHALL BE COLORED GREEN.
14. FIBERGLASS LINE ALL MANHOLES WHICH RECEIVE DISCHARGE FROM A FORCEMAIN.
15. CONTRACTOR IS RESPONSIBLE FOR PROVIDING SERVICES AT EACH LOT. SERVICES SHALL HAVE 3" MIN. AND 4" MAX. COVER AT LOT CLEAN OUT.

THE UTILITY NOTES BELOW ARE PROVIDED AS MINIMUM REQUIREMENTS AND ARE NOTE INTENDED TO SUPERCEDE LOCAL GOVERNMENT AND AGENCY REQUIREMENTS

RECLAIMED WATER NOTES:

1. 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.
2. 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 ENGINEER) PROVIDE MECHANICAL JOINTS AND FITTINGS AS NECESSARY FOR THE VERTICAL TRANSITIONS.
3. 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.
4. MARK LATERALS WITH 6" HIGH PIECE OF 2" X 4" PLANK PAINTED PURPLE, AND AN R IMPRESSED IN THE CURB.
5. CASINGS WILL BE PROVIDED FOR SERVICES LOCATED UNDER LANDSCAPE MEDIANS.
6. 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.
7. 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.
8. 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.

9. 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.
10. ALL RECLAIMED WATER HOSE BIBBS, HAND-OPERATED CONNECTIONS AND OUTLETS SHALL BE CONTAINED IN UNDERGROUND SERVICE VALUITS AND SHALL BE APPROPRIATELY TAGGED OR LABELED TO WARN THE PUBLIC AND EMPLOYEES THAT THE WATER IS NOT INTENDED FOR DRINKING. ALL PIPING, PIPELINES, VALVES AND OUTLETS SHALL BE COLOR CODED PANTONE 522C PURPLE AND MARKED PER LOCAL AND STATE CODES TO DIFFERENTIATE RECLAIMED WATER FROM POTABLE OR OTHER WATER.
11. VAULTS FOR RECLAIMED WATER HOSE BIBBS AND OUTLETS SHALL BE LOCKED OR REQUIRE A SPECIAL TOOL FOR OPERATION OF HOSE BIBBS AND OUTLETS.
12. LOW TRAJECTORY NOZZLES ARE REQUIRED WITHIN 100 FEET OF ANY OUTDOOR PUBLIC EATING, DRINKING OR BATHING FACILITIES.
13. A RESIDENTIAL DUAL CHECK VALVE OR OTHER BACKFLOW PREVENTION DEVICE AS SPECIFIED BY THE SEWER/RECLAIMED WATER UTILITY COMPANY IS REQUIRED ON ALL POTABLE WATER LINES AT EACH RESIDENTIAL SITE WHICH IS SERVICED WITH RECLAIMED WATER.
14. SIGNS SHALL BE POSTED IN THE VICINITY OF PUBLIC RECLAIMED WATER RECLAIMED WATER IRRIGATION SYSTEMS, ADVISING THE PUBLIC THAT RECLAIMED WATER IS PRACTICED.
15. BOX COVERS FOR RECLAIMED WATER SYSTEM ELEMENTS (VALVES, METER, BFP'S, ETC.) SHALL, TO THE EXTENT REASONABLE, NOT BE INTERCHANGEABLE WITH BOX COVERS FOR WATER SYSTEM ELEMENTS.
16. RECLAIMED WATER SYSTEMS AND POTABLE WATER SYSTEMS SHALL NOT BE CROSS-CONNECTED. AN AIR GAP OF TWO PIPE DIAMETERS IS REQUIRED BETWEEN SUCH WATERS.
17. THE WETTED EDGE OF AREAS IRRIGATION WITH RECLAIMED WATER SHALL NOT BE CLOSER THAN 75 FEET TO ANY PUBLIC OR PRIVATE POTABLE WATER WELL.
18. NO RECLAIMED WATER TRANSMISSION FACILITY/MAIN SHALL BE WITHIN 75 FEET OF ANY PUBLIC WATER SUPPLY WELL.

DEMOLITION NOTES:

1. CONTRACTOR SHALL REMOVE ALL WASTE MATERIAL FOR DISPOSAL OFF-SITE. DISPOSAL SHALL CONFORM TO ALL APPLICABLE REGULATIONS.
2. EXISTING UNDERGROUND UTILITIES, UNLESS OTHERWISE NOTED, MAY BE CAPPED/PLUGGED AND ABANDONED IN PLACE EXCEPT WITHIN 30 FT. OF BUILDING. CAPPED AND PLUGGED PIPE ENDS SHALL BE ENCASED IN CONCRETE, 6" MINIMUM THICKNESS AROUND PIPE. MANHOLE BASES MAY BE LEFT IN PLACE PROVIDED THAT PIPE OPENINGS ARE PLUGGED AND REMAINING BASES ARE FILLED WITH CONCRETE 6" MINIMUM ABOVE HIGHEST INVERT.
3. ANY MATERIALS CLAIMED AS SALVAGE BY OWNER EITHER IN THE FIELD OR IN THE DRAWINGS SHALL BE STOCKPILED FOR OWNER'S REMOVAL.
4. CONTRACTOR SHALL BE KNOWLEDGEABLE OF THE CONSTRUCTION DOCUMENTS AND BE RESPONSIBLE FOR PROTECTING ANY EXISTING FACILITY SO DESIGNATED OR DESIGNATED TO BE USED IN THE WORK.
5. CONTRACTOR SHALL REMOVE ALL FOUNDATIONS, CONCRETE SLABS, AND UNDERGROUND STRUCTURES EXISTING ON THE SITE AT THE TIME OF BIDDING UNLESS OTHERWISE DIRECTED.
6. CONTRACTOR SHALL COORDINATE WITH APPLICABLE UTILITY COMPANIES AND BE RESPONSIBLE FOR THE TERMINATION, CAPPING-OFF AND REMOVAL OF ALL UNDERGROUND AND ABOVE-GROUND UTILITY SERVICES EXISTING AT THE TIME OF BIDDING UNLESS DIRECTED TO BID OTHERWISE.
7. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND DISPOSING ALL WASTE MATERIALS CONSISTENT WITH ALL RULES AND REGULATIONS APPLICABLE TO THE SPECIFIC MATERIAL FOUND.

ADA NOTES:

1. THE CONTRACTOR SHALL INSTALL, AS PART OF THE INFRASTRUCTURE AND PRIOR TO CERTIFICATE OF COMPLETION, DROP CURBS, STRIPING AND HANDICAP RAMPS AT ALL INTERSECTIONS OF SIDEWALK WITH THE PROPOSED PAVEMENT TO MEET STATE OF FLORIDA ACCESSIBILITY CODE AND FEDERAL A.D.A. SPECIFICATIONS.
2. PAVEMENT GRADES OVER HANDICAPPED PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION EXCEPT AT RAMPS. (NOTE: RAMP LENGTHS MAY EXCEED 6 FEET.)
3. PROPOSED AND EXISTING SIDEWALKS SHALL BE RAMPED FLUSH WITH PAVEMENT. RAMPS SHALL NOT EXCEED SLOPES OF 12 HORIZONTAL TO 1 VERTICAL. (NOTE: RAMP LENGTHS REQUIRED MAY EXCEED 6 FT.)
4. WHERE SIDEWALK RAMPS CONNECT TO MIAMI CURB, THE SLOPE OF THE MIAMI CURB SHALL BE NO STEEPER THAN 1:21 TO CONFORM WITH FLORIDA/FEDERAL REGULATORY REQUIREMENTS. TWO FT. LONG CURB TRANSITIONS SHALL BE USED AT EACH SIDE OF THE RAMP.
5. WHERE RAMPS ARE POURED ADJACENT TO EXISTING MIAMI CURB, THE CURB SHALL BE REMOVED, FOR A DISTANCE EXTENDING TWO FT. BEYOND EACH END OF THE WALK AND RECONSTRUCTED.
6. SIDEWALK RAMPS 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 ADA AND FAIR HOUSING ACT STANDARDS.
7. CONTRACTOR SHALL COORDINATE WITH ENGINEER FOR PRE-POUR INSPECTION PRIOR TO ANY SIDEWALK AND/OR CURB RAMP CONCRETE POURS.
8. ALL MANHOLE, PULL BOX, UTILITY VAULT, VALVE, OR OTHER COVERS LOCATED WITHIN SIDEWALKS AND CROSSWALKS SHALL BE ADA COMPLIANT.

FIRE PROTECTION NOTES:

1. MAINS DESIGNATED AS FIRE PROTECTION SHALL BE INSTALLED BY A FLORIDA LICENSED FIRE PROTECTION CONTRACTOR AND REVIEWED FOR CONFORMANCE BY A LICENSED FIRE PROTECTION ENGINEER.
2. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.
3. IN INSTANCES WHERE THERE ARE NO FIRE HYDRANTS IN CLOSE PROXIMITY TO PROVIDE FIRE PROTECTION, PER THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA-1, 16.4.3.1.3, UNDERGROUND WATER MAINS AND HYDRANTS ARE REQUIRED TO BE PROVIDED SHALL BE INSTALLED, COMPLETED AND IN SERVICE PRIOR TO CONSTRUCTION WORK.
4. PER NFPA-1, 18.3.4.1, DURING CONSTRUCTION, CLEARANCES OF 7.5 FEET IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT WITH A 4-FOOT CLEARANCE TO THE REAR MUST BE PROVIDED AND MAINTAINED AT ALL TIMES.

ADS HDPE GENERAL NOTES:

1. SHOULD CONSTRUCTION PLANS INDICATE ADS PIPE MAY BE USED, ENGINEER SHALL BE NOTIFIED OF SUCH BY CONTRACTOR PRIOR TO MATERIAL ORDERING. ENGINEER SHALL BE PROVIDED WITH SPECIFICATIONS AND INSTALLATION METHODS PRIOR TO INSTALLATION.
2. WHERE ADS PIPE IS USED AS AN ALTERNATE TO REINFORCED CONCRETE PIPE, CONTRACTOR SHALL SUBMIT BIDS TO ENGINEER IN WRITING FOR REVIEW AND APPROVAL OF MATERIAL COST SAVINGS TO OWNER.
3. ADS PIPE SHALL NOT BE USED IN AREAS OF HIGH GROUNDWATER UNLESS PROPER ADS APPROVED METHODS ARE USED TO MITIGATE FOR POTENTIAL FLOTATION AND ALIGNMENT SHIFTS. AN AUTHORIZED ADS REPRESENTATIVE SHALL INSPECT ALL SUCH AREAS.
4. PIPE SHALL MEET ALL GOVERNING LOCAL AUTHORITY REQUIREMENTS AS WELL AS THE FLORIDA DEPARTMENT OF TRANSPORTATION. CONTRACTOR SHALL PROVIDE WRITTEN PROOF OF ACCEPTANCE BY LOCAL GOVERNMENT FOR PIPE USE.

5. ADS PIPE PREVIOUSLY STORED IN OUTDOOR CONDITIONS SHALL BE DISCLOSED TO ENGINEER FOR THIRD PARTY REVIEW OF PIPE PRIOR TO ACCEPTANCE FOR USE.
6. ALL INSTALLED PIPE IS SUBJECT TO MANDREL TESTING PRIOR TO ACCEPTANCE.
7. IN MUNICIPALITIES WHERE ADS PIPE IS NOT ALLOWED IN THE PUBLIC RIGHTS-OF-WAY, THE CONTRACTOR MAY USE ADS PIPE IN PRIVATE, NON-PUBLIC AREAS WITH ENGINEER'S PERMISSION.
8. PIPE 4" TO 48" (WHERE DESIGNATED) SHALL BE ADS HDPE N-12 SMOOTH INTERIOR POLYETHYLENE PIPE. PIPE AND FITTINGS SHALL BE MADE OF VIRGIN PE COMPOUNDS WITH CONFORM WITH THE REQUIREMENTS OF CELL CLASS 324420C AND DEFINED AND DESCRIBED IN ASTM D3350.
9. THE HDPE FITTINGS SHALL NOT REDUCE OR IMPAIR THE OVERALL INTEGRITY OR FUNCTION OF THE PIPE LINE. FITTINGS MAY BE EITHER MOLDED OR FABRICATED. THE FITTINGS MAY BE INSTALLED BY VARIOUS METHODS, SUCH AS SNAP-ON, SCREW-ON, BELL & SPIGOT AND WRAP AROUND. COUPLINGS SHALL PROVIDE SUFFICIENT LONGITUDINAL STRENGTH TO PRESERVE PIPE ALIGNMENT AND PREVENT SEPARATION AT THE JOINTS. ONLY FITTINGS SUPPLIED OR RECOMMENDED BY THE PIPE MANUFACTURER SHALL BE USED. WHERE DESIGNATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER IN THE FIELD, A NEOPRENE OR RUBBER GASKET SHALL BE SUPPLIED.
10. PIPE SHALL BE INSTALLED BY A CONTRACTOR WHO HAS BEEN CERTIFIED BY ADS OR SHALL BE INSTRUCTED BY A CERTIFIED ADS REPRESENTATIVE TO DO SO.
11. A REPRESENTATIVE OF ADS SHALL INSPECT FROM TIME TO TIME THE INSTALLATION OF THE PIPE.
12. HP MANHOLE STRUCTURES WILL NOT BE ALLOWED FOR USE WITHOUT ENGINEERS PRE-AUTHORIZATION.

GENERAL SPECIFICATIONS:

SCOPE

THIS SPECIFICATION DESCRIBES 12- THROUGH 60-INCH (300 TO 1500 MM) ADS HP STORM PIPE FOR USE IN GRAVITY- FLOW STORM DRAINAGE APPLICATIONS.

PIPE REQUIREMENTS

12- THROUGH 30-INCH (300 TO 750 MM) PIPE SHALL HAVE A SMOOTH INTERIOR AND ANNUALR EXTERIOR CORRUGATIONS AND MEET OR EXCEED ASTM F2736 AND AASHTO M330

36- THROUGH 60-INCH (900 TO 1500 MM) PIPE SHALL HAVE A SMOOTH INTERIOR AND ANNUALR EXTERIOR CORRUGATIONS AND MEET OR EXCEED ASTM F2881 AND AASHTO M330

MANNING'S "N" VALUE FOR USE IN DESIGN SHALL BE 0.012

JOINT PERFORMANCE

PIPE SHALL BE JOINED WITH A GASKETED INTEGRAL BELL & SPIGOT JOINT MEETING THE REQUIREMENTS OF ASTM F2736 OR F2881, FOR THE RESPECTIVE DIAMETERS.

12- THROUGH 60-INCH (300 TO 1500 MM) SHALL BE WATERTIGHT ACCORDING TO THE REQUIREMENTS OF ASTM D3212. SPIGOTS SHALL HAVE GASKETS MEETING THE REQUIREMENTS OF ASTM F477. GASKET SHALL BE INSTALLED BY THE PIPE MANUFACTURER AND COVERED WITH A REMOVABLE, PROTECTIVE WRAP. TO ENSURE THE GASKET IS FREE FROM DEBRIS. A JOINT LUBRICANT AVAILABLE FROM THE MANUFACTURER SHALL BE USED ON THE GASKET AND BELL DURING ASSEMBLY.

12- THROUGH 60-INCH (300 TO 1500 MM) DIAMETERS SHALL HAVE A REINFORCED BELL WITH A POLYMER COMPOSITE BAND INSTALLED BY THE MANUFACTURER.

FITTINGS

FITTINGS SHALL CONFORM TO ASTM F2736, ASTM F2881 AND AASHTO M330, FOR THE RESPECTIVE DIAMETERS. BELL & SPIGOT CONNECTIONS SHALL UTILIZE A SPUN-ON, WELDED OR INTEGRAL BELL AND SPIGOT WITH GASKETS MEETING ASTM F477. BELL & SPIGOT FITTINGS JOINT SHALL MEET THE WATERTIGHT JOINT PERFORMANCE REQUIREMENTS OF ASTM D3212.

CORRUGATED COUPLINGS SHALL BE SPLIT COLLAR, ENGAGING AT LEAST 2 FULL CORRUGATIONS.

FIELD PIPE AND JOINT PERFORMANCE

TO ASSURE WATERTIGHTNESS, FIELD PERFORMANCE VERIFICATION MAY BE ACCOMPLISHED BY TESTING IN ACCORDANCE WITH ASTM F1417 OR ASTM F2487. APPROPRIATE SAFETY PRECAUTIONS MUST BE USED WHEN FIELD-TESTING ANY PIPE MATERIAL. CONTACT THE MANUFACTURER FOR RECOMMENDED LEAKAGE RATES.

MATERIAL PROPERTIES

POLYPROPYLENE COMPOUND FOR PIPE AND FITTING PRODUCTION SHALL BE IMPACT MODIFIED COPOLYMER MEETING THE MATERIAL REQUIREMENTS OF ASTM F2736, SECTION 4, ASTM F2881, SECTION 5 AND AASHTO M330, SECTION 6.1, FOR THE RESPECTIVE DIAMETERS.- 14. INSTALLATION:
INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM D2321 AND ADS RECOMMENDED INSTALLATION GUIDELINES. WITH THE EXCEPTION THAT MINIMUM COVER IN TRAFFIC AREAS FOR 12- THROUGH 48-INCH (300 TO 1200 MM) DIAMETERS SHALL BE ONE FOOT. (0.3 M) AND FOR 60-INCH (1500 MM) DIAMETERS, THE MINIMUM COVER SHALL BE 2 FT. (0.6 M) IN SINGLE RUN APPLICATIONS, BACKFILL FOR MINIMUM COVER SITUATIONS SHALL CONSIST OF CLASS 1, CLASS 2 (MINIMUM 90% SPD) OR CLASS 3 (MINIMUM 95%) MATERIAL. MAXIMUM FILL HEIGHTS DEPEND ON EMBEDMENT MATERIAL AND COMPACTION LEVEL; PLEASE REFER TO ADS TECHNICAL INFORMATION. CONTRACTOR TO CONTACT ADS FOR A COPY OF THE LATEST INSTALLATION GUIDELINES.

MASTER UTILITY PLAN CONDITIONS FOR GRAVITY DEPTH VARIANCE

THE FOLLOWING REQUIREMENTS SHALL BE SPECIFIED ON THE CONSTRUCTION PLANS FOR THE PROPOSED PORTION OF GRAVITY SEWER PIPES AND MANHOLES DEEPER THAN 15 FEET:

1. ENTIRE MANHOLE, INCLUDING BASE, BENCHES, WALLS, CONE, AND CHIMNEY, ARE 2MM HDPE LINED
2. MANHOLE WALL THICKNESS FOR 4-FOOT DIAMETER AND FOR 6-FOOT DIAMETER SHALL MEET ASTM 478 REQUIREMENTS FOR DIAMETER,
3. PVC PIPE AND FITTINGS UPGRADED FROM SDR35 TO SDR26 FOR ALL GRAVITY PIPE OVER 15 FT DEEP AND INSTALLED WITH DIPS NOT EXCEEDING 0.75 INCHES
4. THICKNESS OF STONE UNDER THE BASE TO BE INCREASED TO 12-INCH OF 57 STONE WRAPPED IN GEOGRID FOR MANHOLES DEEPER THAN 15 FT.
5. MANHOLES DEEPER THAN 18 FT WILL NOT BE PERMITTED.

SANITARY SEWER ALLEYWAY NOTES

1. GRAVITY MAINS MUST BE PLACED WITHIN THREE FEET OF CENTER OF ALLEY.
2. GRAVITY SERVICE CLEANOUTS WILL BE LOCATED APPROXIMATELY TWO FEET FROM THE EDGE OF PAVEMENT, AND SHALL BE TRAFFIC BEARING. INDIVIDUAL LOT OWNERS WILL OWN AND MAINTAIN THEIR WASTEWATER SERVICE FROM THE CLEANOUT TO THE HOME. ALL OTHER SYSTEM COMPONENTS WILL BE OWNED AND MAINTAINED BY OCU.
3. ALL GRAVITY MAINS SHALL BE 8-INCH DIAMETER AND UPGRADED TO SDR-26 PVC PIPE.

GRAVITY MAINS SHALL HAVE A MAXIMUM OF FIVE FEET OF COVER, UNLESS A 60-FOOT UTILITY EASEMENT CAN BE PROVIDED OVER THE ALLEYWAY.

EMERGENCY WASTEWATER SPILL AND WATER MAIN BREAK PROCEDURES:

1. EXCAVATING CAUTIOUSLY:
 - 1.1. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN THE PROXIMITY OF WASTEWATER FORCE MAINS AND GRAVITY SEWERS FORCE MAIN AND SEWER LOCATIONS SHOWN ON PLANS ARE NOT EXACT OR GUARANTEED. CONTRACTOR IS RESPONSIBLE FOR FILED VERIFYING EXISTING UTILITY LOCATIONS.
2. TELEPHONE NOTIFICATION:
 - 2.1. THE CITY OF APOPKA DISPATCH OPERATOR SHALL BE NOTIFIED IMMEDIATELY IN THE EVENT OF A FORCE MAIN, GRAVITY SEWER OR WATER MAIN BREAK OR DAMAGE AT (407) 703-1731. THE CITY DISPATCH CAN BE REACHED AT (407) 703-1757.
3. REPAIR IMMEDIATELY AL DAMAGE TO CITY OF APOPKA MAINS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. IF THE

REPAIR IS NOT MADE IN A TIMELY MANNER, AS DETERMINED BY THE CITY OF APOPKA UTILITIES INSPECTOR, CITY OF APOPKA MAY PERFORM REPAIRS AND THE CONTRACTOR WILL BE CHARGED FOR REPAIRS.

4. CITY OF APOPKA UTILITIES DEPARTMENT GENERAL TELEPHONE NUMBERS:
 - CITY OF APOPKA UTILITIES CONSTRUCTION INSPECTION SECTION - (407) 703-1718
 - CITY OF APOPKA UTILITIES WASTEWATER DIVISION - (407) 703-1731
 - CITY OF APOPKA UTILITIES WATER DIVISION - (407) 703-1731
 - CITY OF APOPKA UTILITIES ENGINEERING DIVISION - (407) 703-1718
5. ADVANCE NOTIFICATION OF CONSTRUCTION THE CITY OF APOPKA UTILITIES CONSTRUCTION SECTION (407) 703-1731 SHALL BE NOTIFIED AT LEAST SEVEN (7) DAYS PRIOR TO ANY CONSTRUCTION ACTIVITY.
6. ADVANCE NOTIFICATION OF PENDING CONNECTION THE CITY OF APOPKA WATER DIVISION (407) 703-1731 AND CITY OF APOPKA WATER DIVISION (407) 703-1731 SHALL BE NOTIFIED AT LEAST (7) DAYS IN ADVANCE TO SCHEDULE MAIN TIE-INS AND VALVE OPERATIONS
7. OPERATIONS OF CITY OF APOPKA VALVES WATER, WASTEWATER, AND REUSE VALVES ARE TO OPERATED ONLY BY THE CITY OF APOPKA UTILITIES INSPECTOR (407) 703-1731. ALL VALVES BEING INSTALLED ARE TO REMAIN CLOSED DURING CONSTRUCTION.
8. OPERATION OF CITY OF APOPKA PUMP STATION THE CONTRACTOR SHALL COORDINATE ALL PUP OPERATION AND SHUT DOWN CONTROL WITH AN CITY OF APOPKA NULLITIES INSPECTOR (407) 703-1731.

Key Map:

10/07/2024 SUBMIT TO CITY OF APOPKA & SJRWMD

NO. DATE: DESCRIPTIONS: SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD 88
JOB NO.:	21-027
DESIGNED BY:	KML
DRAWN BY:	EHW
CHECKED BY:	KML
APPROVED BY:	MDS
SCALE IN FEET:	N.T.S.

Project Name:

CROSSROADS AT KELLY PARK - PHASE 2B

Jurisdiction:

CITY of APOPKA, FL

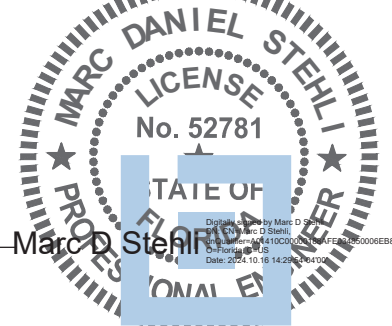
Sheet Title:

CONSTRUCTION NOTES

Sheet No.:

C0.02

Seal:

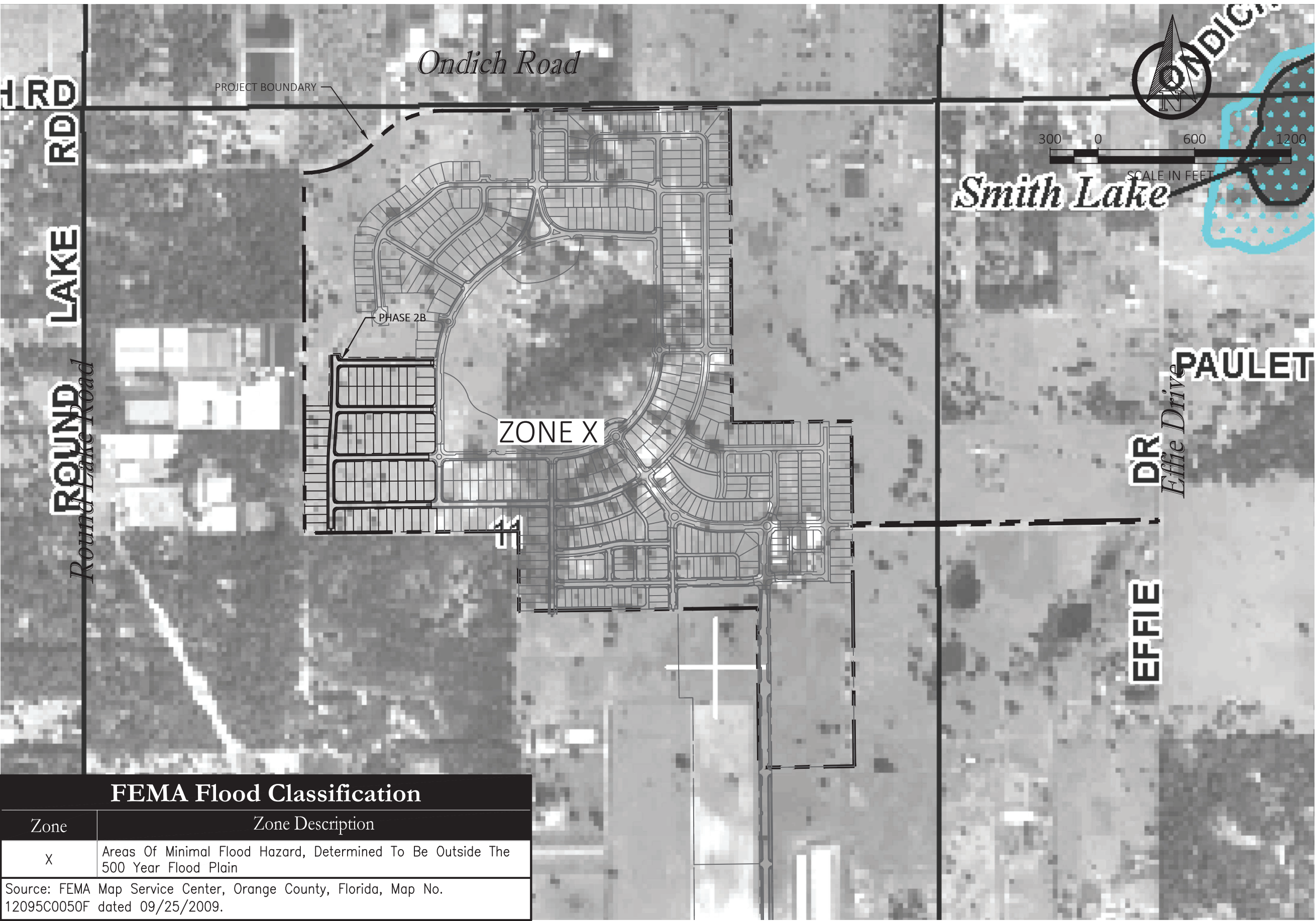


MARC DANIEL STEHL
Lic. No. 065281
DATE: October 7, 2024

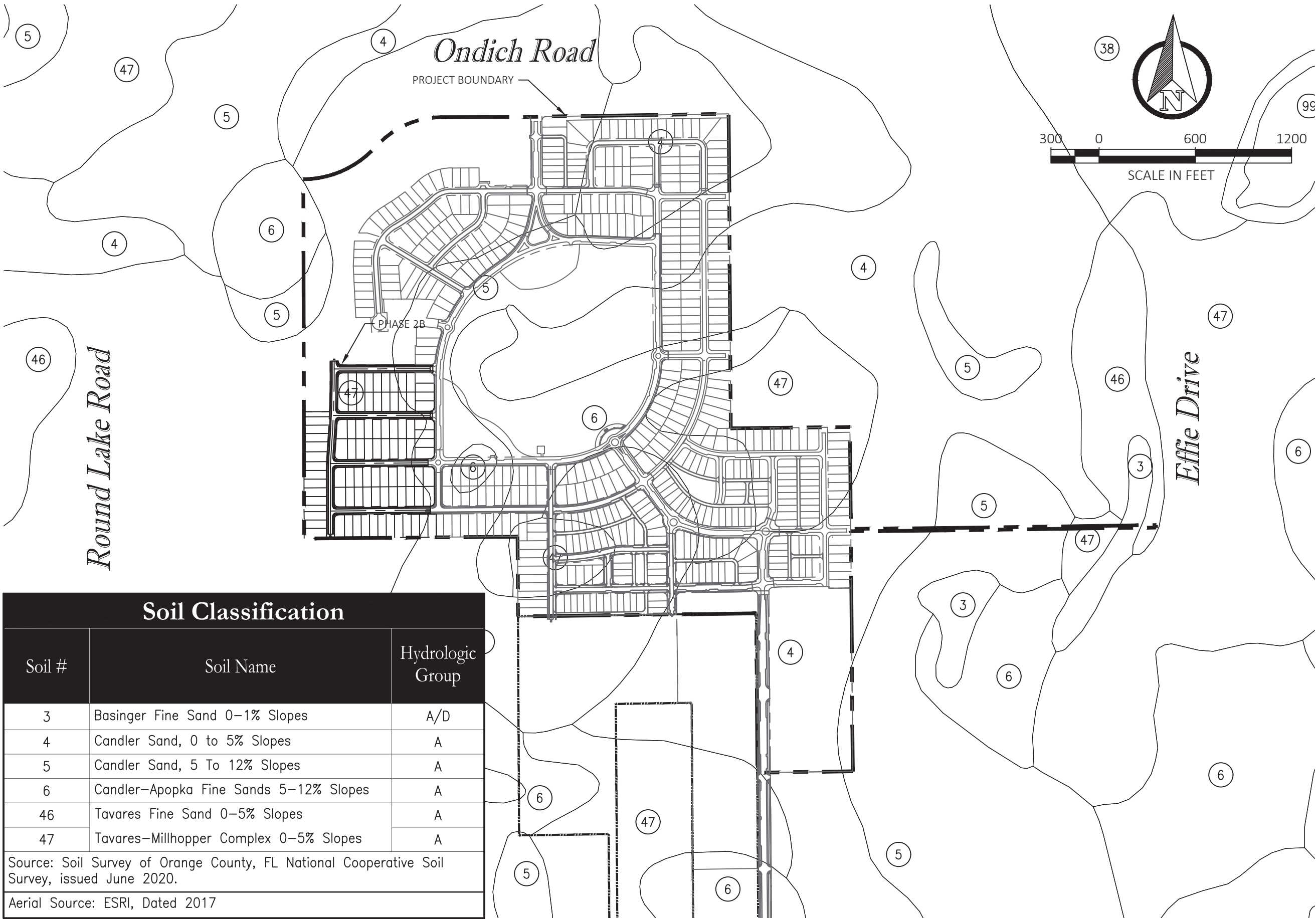
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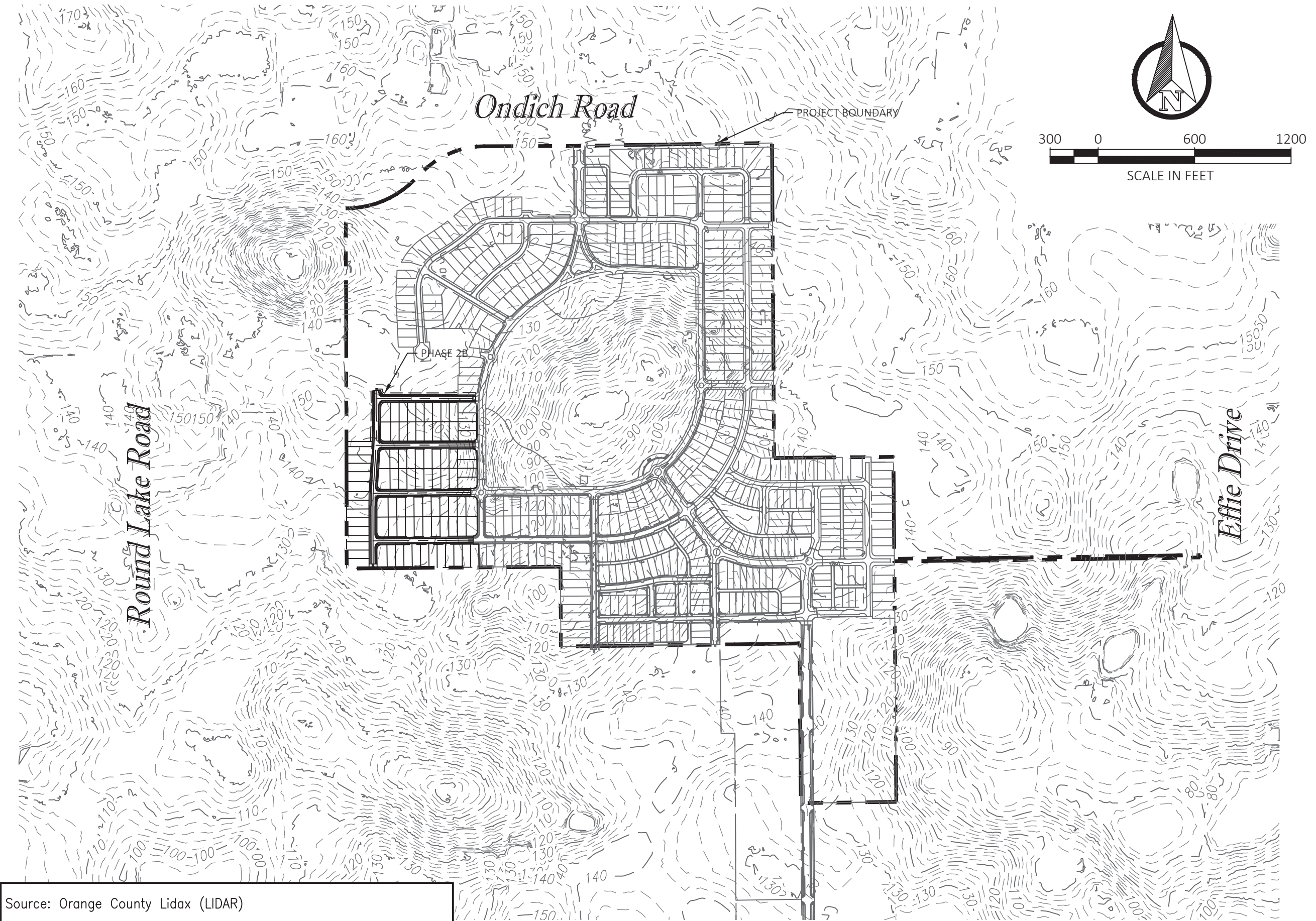
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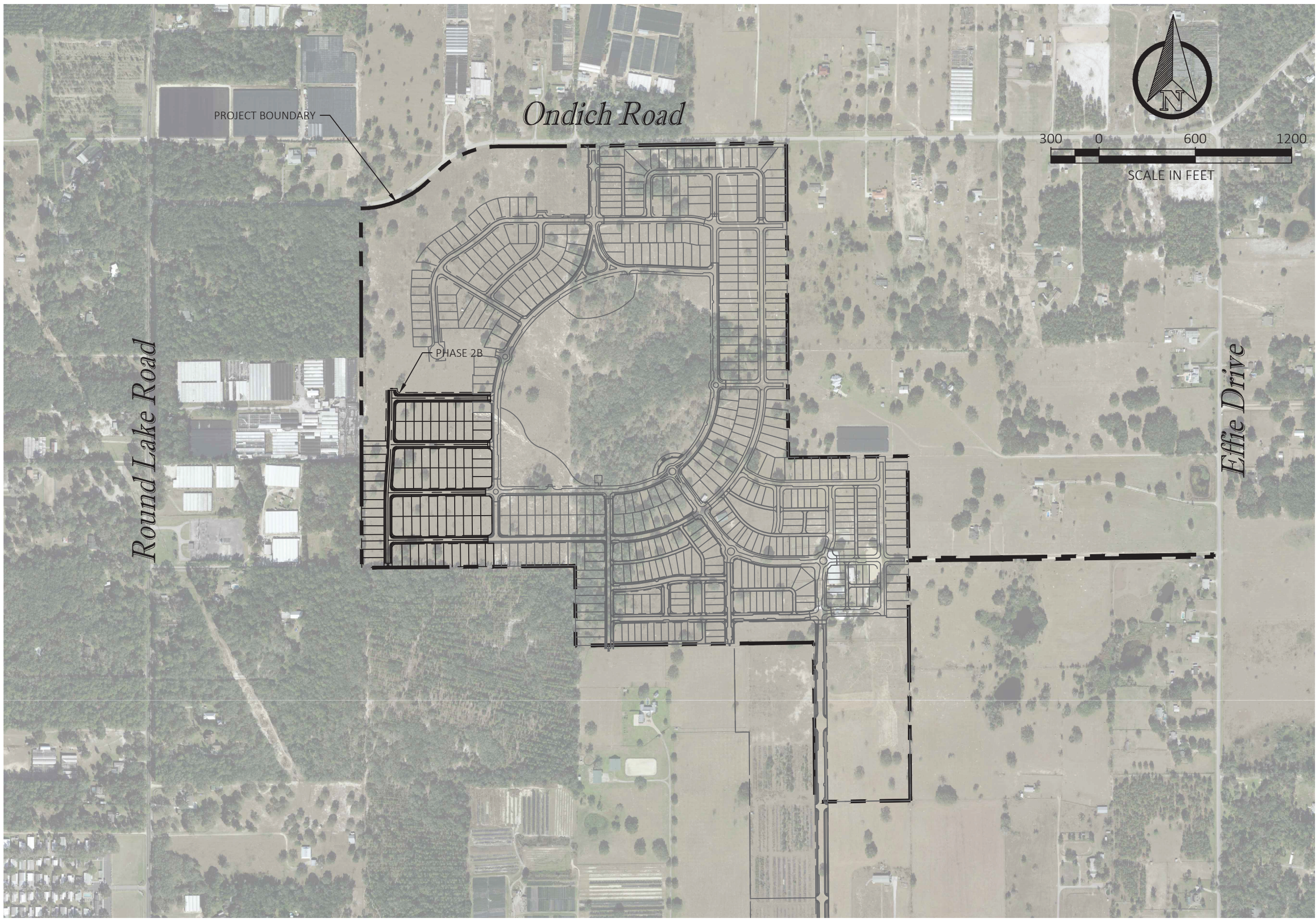
FEMA MAP



SOILS MAP



TOPOGRAPHY



AERIAL

Key Map:

10/07/2024		SUBMIT TO CITY OF APOPKA & SJRMWD	
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APPROVED BY:		MDS	
SCALE IN FEET:		1" = 600'	

CROSSROADS AT
KELLY PARK -
PHASE 2B

Jurisdiction:
CITY of APOPKA, FL

Sheet Title:
EXISTING
CONDITIONS PLAN

Sheet No.:
C0.03

Seal:
MARC DANIEL STEHLI
LICENSE
No. 52781
STATE OF
FLORIDA
Professional Engineer
DATE: October 7, 2024

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-  MASTER PLAN BOUNDARY
 PHASE LINE
 RIGHT-OF-WAY
 LOT LINE



- | | |
|---|----------------------------|
|  | 52' x 110' MIN. LOTS |
|  | 40' x 110' MIN. ALLEY LOTS |
|  | OPEN SPACE |
|  | PARK |
|  | FUTURE DEVELOPMENT |
|  | IMPACTED WETLAND |

Development Data (Ph 3 Acreages Not Included)

Gross Site Area	205.04 Acres
Kelly Park Character District	Neighborhood & Transition
Neighborhood	181.28 Acres
Impacted Wetland	0.08 Acres
Net Developable Area	181.20 Acres
Transition	23.76 Acres
Net Developable Area	23.76 Acres
Proposed Development Program (<i>Ph 3 Units Not Included</i>)	

Proposed Development Program (Ph 3 Units Not Included)

Neighborhood District	
Dwelling Units	651 Units
52' x 110' Minimum	498 Units
40' x 110' Minimum	153 Units
Maximum Density	5 Du/Ac.
Proposed Density	3.59 Du/Ac.

Transition District¹

Dwelling Units	319 Units
52' x 110' Minimum	6 Units
40' x 110' Minimum	13 Units
Future Multi-Family ²	300 Units
Maximum Density ³	15 Du/Ac.
Proposed Density	13.43 Du/Ac.
Total Number of Dwelling Units	970 Units

Notes:

1. Within the Transition District, density will be calculated based on the total number of units in the entire Transition District of this Master Plan.
2. Multi-Family development will comply with the requirements of the Kelly Park Interchange Form Based Code. Development details will be provided at Site Plan submittal. Access locations shown on the Master Site Plan for the Multi-Family development are preliminary. Final locations will be determined with Site Plan approval.
3. To achieve the maximum density allowed within the Transition district of 15 dwelling units/acre, the 3,000 square foot public open space, as required by the KPI Form-Based Code Section R.1.b, is provided within Park Tract P1A-16.
4. Future Development Tract will be require separate development plan.
5. The amenity elements depicted for Park Tracts P1A-1 & P1B-2 shall be provided with the development of these tracts. However, the site plans as depicted within these plans should be considered conceptual in nature and subject to modification based on final design and permitting requirements.
6. The Development shall coordinate with the City of Apopka to provide traffic calming measures. The requirement for and design of traffic calming measures shall be determined at the Final Construction Plan phase and shall be reflected in the Final Construction Plans.

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Z:\2024\21-027 GALWIN - KELLY PARK PARCELS\CAD\FINAL\CITY\PHASE 1-2B\21-027 -PHASE 1-2B-SOT

OWNERSHIP / MAINTENANCE		
ROADWAYS	PUBLIC	TO BE OWNED AND MAINTAINED BY CITY OF APOPKA
ALLEYS	PRIVATE	TO BE OWNED AND MAINTAINED BY THE CDD OR HOA
DRAINAGE TRACTS	PRIVATE	TO BE OWNED AND MAINTAINED BY THE CDD OR HOA WITH EASEMENT TO CITY OF APOPKA
DRAINAGE EASEMENTS (D.E.)	PUBLIC	TO BE DEDICATED TO CDD OR HOA . DRAINAGE FACILITIES WITHIN THE EASEMENTS ARE TO BE OWNED AND MAINTAINED BY CITY OF APOPKA.
PRIVATE DRAINAGE EASEMENTS (P.D.E.)	PRIVATE	TO BE DEDICATED TO THE CDD OR HOA. DRAINAGE FACILITIES WITHIN THE EASEMENTS ARE TO BE OWNED AND MAINTAINED BY THE CDD OR HOA.
UTILITY EASEMENTS	PUBLIC	TO BE DEDICATED TO CITY OF APOPKA. UTILITIES WITHIN THE EASEMENTS ARE TO BE OWNED AND MAINTAINED BY APOPKA UTILITIES.
WATER, RECLAIMED WATER AND SANITARY SEWER UTILITIES	PUBLIC	TO BE OWNED AND MAINTAINED BY CITY OF APOPKA UP TO METERS/CLEAN-OUTS
LIFT STATION TRACTS	PUBLIC	TO BE OWNED AND MAINTAINED BY CITY OF APOPKA
PARK/OPEN SPACE TRACTS	PRIVATE	TO BE OWNED AND MAINTAINED BY THE CDD OR HOA
SIDEWALKS IN PUBLIC RIGHT OF WAY	PUBLIC	TO BE OWNED AND MAINTAINED BY CITY OF APOPKA
STORMWATER & STREET LIGHTING	PUBLIC	AN MSBU WILL BE ESTABLISHED FOR ROUTINE MAINTENANCE OF STORMWATER SYSTEM FUNCTIONALITY AND STANDARD OPERATION MAINTENANCE OF STREET LIGHTING
SIDEWALK EASEMENTS	PUBLIC	TO BE OWNED AND MAINTAINED BY CITY OF APOPKA
STREET TREES IN PUBLIC ROW	PRIVATE	TO BE OWNED AND MAINTAINED BY THE HOA
PARKING SPACE STRIPING IN PUBLIC ROW	PRIVATE	TO BE OWNED AND MAINTAINED BY THE HOA

MISCELLANEOUS		
POTABLE WATER SERVICE	CITY OF APOPKA	
RECLAIMED WATER SERVICE	CITY OF APOPKA	
WASTEWATER SERVICE	CITY OF APOPKA	
ELECTRIC SERVICE	DUKE ENERGY	
FIRE PROTECTION	CITY OF APOPKA	

ALLEY TRACTS		
PHASE-1A	A1A-6	0.21
	A1A-7	0.19
	A1A-8	0.53
	A1A-9	0.14
PHASE-1A ALLEY TRACT		1.07
PHASE-1B	A1B-1	0.32
	A1B-2	0.08
	A1B-3	0.08
	A1B-4	0.39
	A1B-5	0.23
PHASE-1B ALLEY TRACT		1.10
PHASE-2A	A2A-12	0.20
PHASE-2A ALLEY TRACT		0.20
PHASE-3B	A3B-11	0.20
PHASE-3B ALLEY TRACT		0.20
TOTAL:		2.58

DRAINAGE TRACTS		
PHASE 1	SW1-1	28.91
PHASE-1 SUBTOTAL:		28.91
TOTAL:		28.91

OPEN SPACE TRACTS		
PHASE	TRACT ID	ACREAGE
PHASE-2	OS2-3	0.30
PHASE-2 SUBTOTAL:		0.30
PHASE-2A	OS2A-2	0.81
	OS2A-4	0.15
	OS2A-5	0.19
PHASE-2A SUBTOTAL:		1.15
PHASE-3B	OS3B-1	1.36
PHASE-3B SUBTOTAL:		1.36
TOTAL:		2.81

DEVELOPMENT STANDARDS		
	Character District	
	Neighborhood	Transition
Living Area		
Min. Living Area	1,200 sf	1,200 sf
Building and Floor Height		
Min. Building Height	NA	NA
Max. Building Height	Principal Building - 2 Stories	Principal Building - 3 Stories*
Min. Additional Floor Height	Accessory Building - 1 Story	Accessory Building - NA
	NA	8 ft
Building Setbacks		
Min. Front/Street Side	15 ft	10 ft
Max. Front/Street Side	30 ft	20 ft
Min. Side	Single-Family Detached (Rear Load) - 5 ft Single-Family Detached (Front Load) - 5 ft	Single-Family Detached (Rear Load) - 5 ft Single-Family Detached (Front Load) - 5 ft
Max. Side	NA	50% Frontage Arterial & Primary Street
	Single-Family Detached (Rear Load) - 10 ft Single-Family Detached (Front Load) - 10 ft	Single-Family Detached (Rear Load) - 10 ft Single-Family Detached (Front Load) - 10 ft
Min. Building Separation		Apartment Building - 20 ft
Min. Rear (Alley)	5 ft	5 ft
Min. Rear (No Alley)	20 ft	20 ft
Density		
Min. Density	1 du/ac	5 du/ac
Max. Density	5 du/ac	10 (15 with bonus) du/ac
Open Space		
Min. Open Space	20%	15%

*One (1) additional floor above the permitted base height may be permitted for every 1,500 square feet of public open space provided per KPI Form-Based Code Section R.1.b.

PHASING
1. THE OVERALL KELLY PARK PROPERTY WILL BE CONSTRUCTED IN MULTIPLE PHASES. DEVELOPMENT MAY NOT BE SEQUENTIAL. THE NEEDED INFRASTRUCTURE SHALL BE INCLUDED SUCH THAT EACH PHASE MAY STAND ALONE.

SIGNAGE
1. ONSITE SIGNAGE WILL BE IN ACCORDANCE WITH THE MIXED USE KELLY PARK INTERCHANGE FORM-BASED CODE.

LANDSCAPE
1. LANDSCAPE MATERIALS WILL BE CHOSEN FROM THE FLORIDA FRIENDLY PLANT DATABASE (CENTRAL FLORIDA REGION).
2. A TWENTY-FIVE (25) FOOT BUFFER IS PROVIDED ADJACENT TO ONDICH ROAD. IN ACCORDANCE WITH THE CITY OF APOPKA LAND DEVELOPMENT CODE SEC. 5.2.5 - LANDSCAPING AND BUFFER STANDARDS, BUFFER TYPE C WILL BE PROVIDED BETWEEN THE FUTURE MULTI-FAMILY PARCEL AND EXISTING SINGLE-FAMILY DETACHED DWELLING ABUTTING LAND. NO OTHER PERIMETER BUFFERS ARE REQUIRED.

GARBAGE PICKUP
1. FRONT LOADED SINGLE FAMILY UNITS TO BE PICKED UP AT FRONT RIGHT OF WAY. REAR LOADED UNITS TO BE PICKED UP AT REAR ALLEY.

PARKING REQUIREMENTS
1. OFF-STREET PARKING WILL BE PROVIDED IN ACCORDANCE WITH THE MIXED USE KELLY PARK INTERCHANGE FORM-BASED CODE.

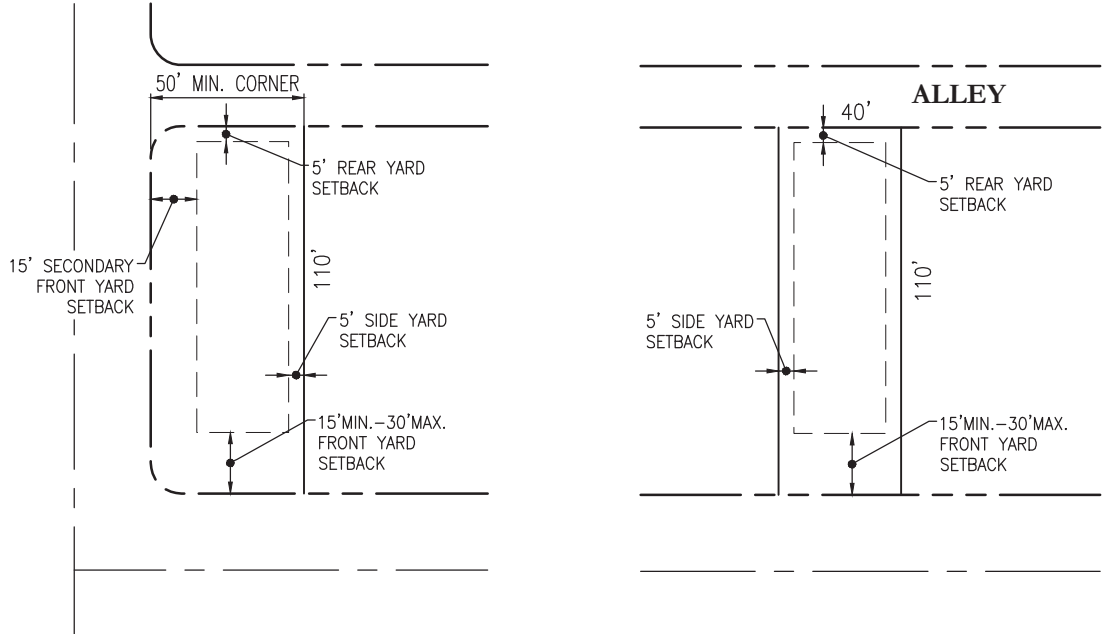
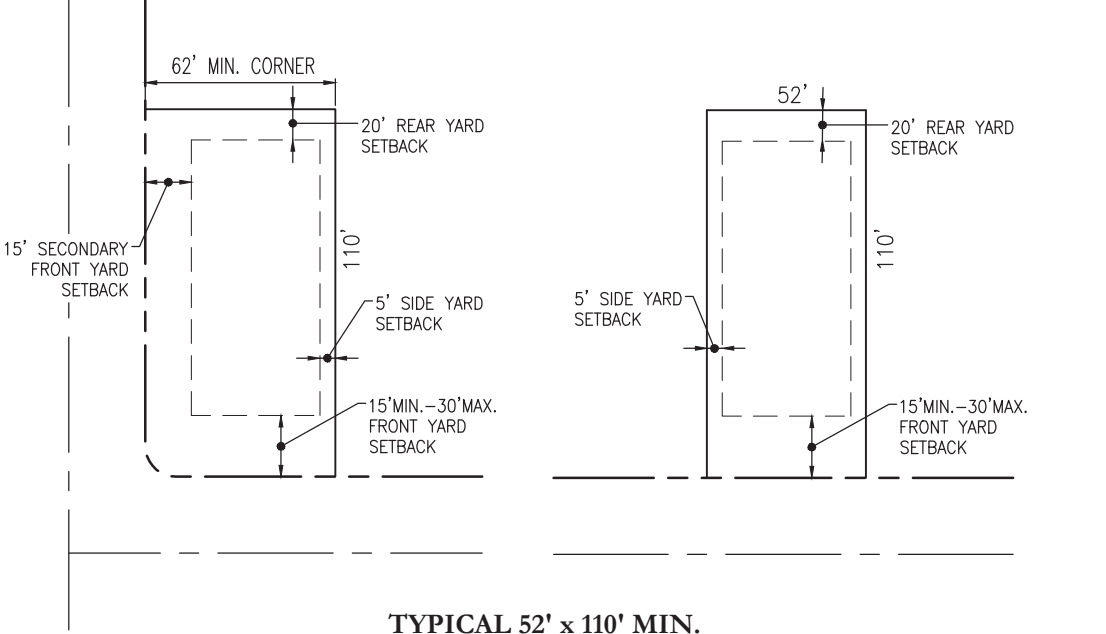
STREET LIGHTING
LIGHTING PHOTOMETRIC PLAN WILL BE PROVIDED AT THE TIME OF CONSTRUCTION PLAN SUBMITTAL. LIGHTING REQUIREMENTS SHALL MEET ALL APPLICABLE CITY OF APOPKA AND ELECTRIC PROVIDERS REGULATIONS AT THE TIME OF ANY CONSTRUCTION PLAN SUBMITTAL AND ANY SUBSEQUENT APPROVALS

SUSTAINABILITY		
Per LDC section 5.11.4.A.1.B, residential developments of 30 or more dwelling units shall obtain a minimum of 4 points from the green building point system, Table 5.11.4.B. this development shall satisfy this requirements as follows		
GREEN BUILDING STANDARD	POINTS EARNED	NOTES
Development as a traditional neighborhood planned development (TN-PD) district	0.75	Development is proposed as a block pattern traditional neighborhood
Use central air conditioners that are energy star qualified	0.50	All HVAC's installed on site will be energy star qualified
Use vegetation or vegetated structures to shade HVAC units	0.25	2 shrubs per A/C unit will be shown on the final landscape plans
Orient a minimum of 25 percent of residential dwelling units or lots in the development within 20 percent of east-west axis for maximum passive solar exposure	1.00	270 lots (30%) are oriented east west lots
Create a soil management plan for development site that promotes stormwater infiltration through improved organic matter content, reduced compaction levels, and increased infiltration capacity	0.50	The entire site is designed to drain to an on-site retention pond that will fully recover thought infiltration
Preserve large, non-exotic trees on site (large tree defined as 20 feet or greater in height and 24 inches or greater DBH)	1.00	A minimum of Large trees are being preserved. Please see landscape plans for the tree locations.
Install operable windows to allow for natural ventilation in the event of power failures	0.25	All windows will be operable
TOTAL	4.25	

OPEN SPACE & PARK REQUIREMENT TABLE								
	PHASE-1	PHASE-1A	PHASE-1B	PHASE-2	PHASE-2A	PHASE-2B	PHASE-3B	Grand Total
Neighborhood Acreage	67.72	28.11	25.57	1.84	27.92	14.79	19.80	185.75
REQUIRED	13.54	5.62	5.11	0.37	5.58	2.96	3.96	37.15
PROPOSED	29.21	3.79	3.67	0.30	1.26	0.24	2.27	40.74
Transition Acreage	0.00	3.07	0.07	0.00	0.00	0.00	0.00	3.15
REQUIRED	0.00	0.46	0.01	0.00	0.00	0.00	0.00	0.47
PROPOSED	0.00	0.47	0.07	0.00	0.00	0.00	0.00	0.54
Total Net Acreages	67.72	31.18	25.65	1.84	27.92	14.79	19.80	188.90

- 1) Open Space Requirements
Neighborhood District = 20%
Transition District = 15%
- 2) Open Space and park tracts count towards open space requirements
- 3) Open Space requirements shall be met project wide. Surplus Acreage may carry over and meet future phase requirements.

SITE DATA	
Site Information	
Parcel I.D. #	11-20-27-0000-00-003 11-20-27-0000-00-013 11-20-27-0000-00-036 11-20-27-0000-00-070
Current Zoning	T - Transition
Current FLU	Mixed Use
Proposed Zoning	Kelly Park Interchange - Mixed Use
Proposed Character District	Neighborhood & Transition
Land Summary (Acres)	
Gross Land Area	205.04 Acres
Neighborhood District	181.28 Acres
Transition District	23.76 Acres
Wetlands (Proposed for Impact)	0.08 Acres
Single-Family	670 Units
Multi-Family	300 Units
Proposed Units	970 Units



TYPICAL LOTS

N.T.S.

STUDENT GENERATION TABLE

KPI District		Units	Type	Generation Rate				Total
				ES	MS	HS		
Neighborhood		651	Single Family	0.178	0.094	0.133		264
Transition		19	Single Family	0.178	0.094	0.133		8
Transition		300	Multi-Family(Non High Rise)	0.141	0.065	0.08		86
Project Total								357

SOURCE: ORANGE COUNTY PUBLIC SCHOOLS STUDENT GENERATION RATES EFFECTIVE JUNE 22, 2021.

- NOTES
1. LOT AREAS, EASEMENT LINES AND TRACT AREAS ON THE FINAL PLAT MAY VARY FROM THAT SHOWN DUE TO FINAL ENGINEERING DESIGN CRITERIA AND CONSTRAINTS.
 2. THIS COMMUNITY IS NOT PROPOSED TO BE GATED. ALL RIGHTS OF WAY SHALL BE PUBLIC.
 3. SINGLE-FAMILY RESIDENTIAL ARCHITECTURE SHALL MEET THE INTENT OF KELLY PARK INTERCHANGE FORM-BASED CODE DEVELOPMENT DESIGN GUIDELINES.
 4. PARKS SHALL HAVE ADEQUATE LIGHTING ON AUTOMATIC TIMERS WITHOUT PROJECTING A GLARE ONTO ADJACENT PROPERTIES.
 5. THE PROJECT IS GOVERNED BY CAPACITY ENHANCEMENT AGREEMENT # APK-10-001. ANTICIPATED STUDENT GENERATION IS FOR THE PROPOSED DEVELOPMENT PROGRAM IS PROVIDED IN THE STUDENT GENERATION TABLE BELOW. AN ORANGE COUNTY PUBLIC SCHOOLS (OCPS) FORMAL DETERMINATION OF SCHOOL CAPACITY (APPLICATION ID: CMA-APK-22-002) HAS BEEN SUBMITTED AND IS CURRENTLY UNDER REVIEW.

Key Map:

10/07/2024 SUBMIT TO CITY OF APOPKA & SJRMWD

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Project Name:

CROSSROADS AT KELLY PARK - PHASE 2B

Jurisdiction:

CITY of APOPKA, FL

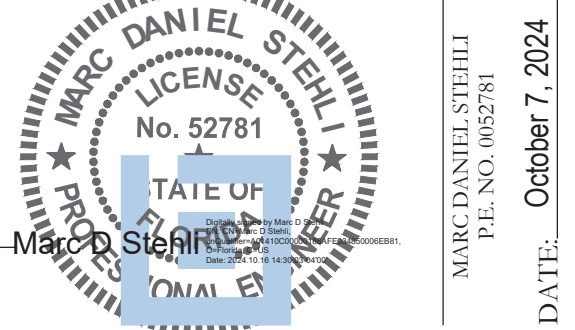
Sheet Title:

SITE DATA TABLES

Sheet No.:

C1.01

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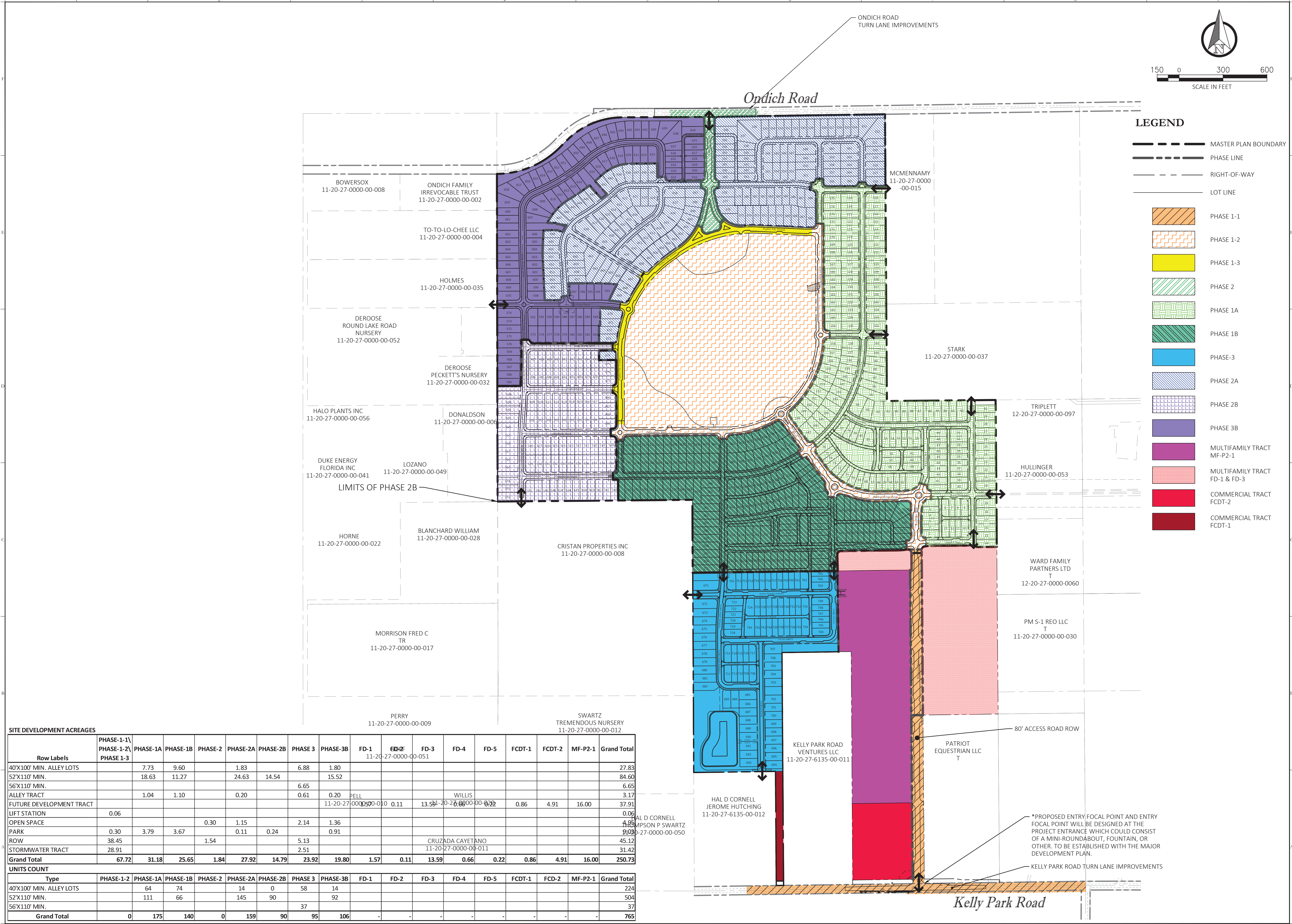


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Z:\2021\21-027 GALVIN - KELLY PARK PARCELS\CD\FINAL\CITY\PHASE 1-2B\21-027-PHASE 1-2B-OPP



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Project Name:
**CROSSROADS AT
KELLY PARK -
PHASE 2B**

Jurisdiction:
CITY of APOPKA, FL

Sheet Title:
**OVERALL PHASING
PLAN**

Sheet No.:
C1.02

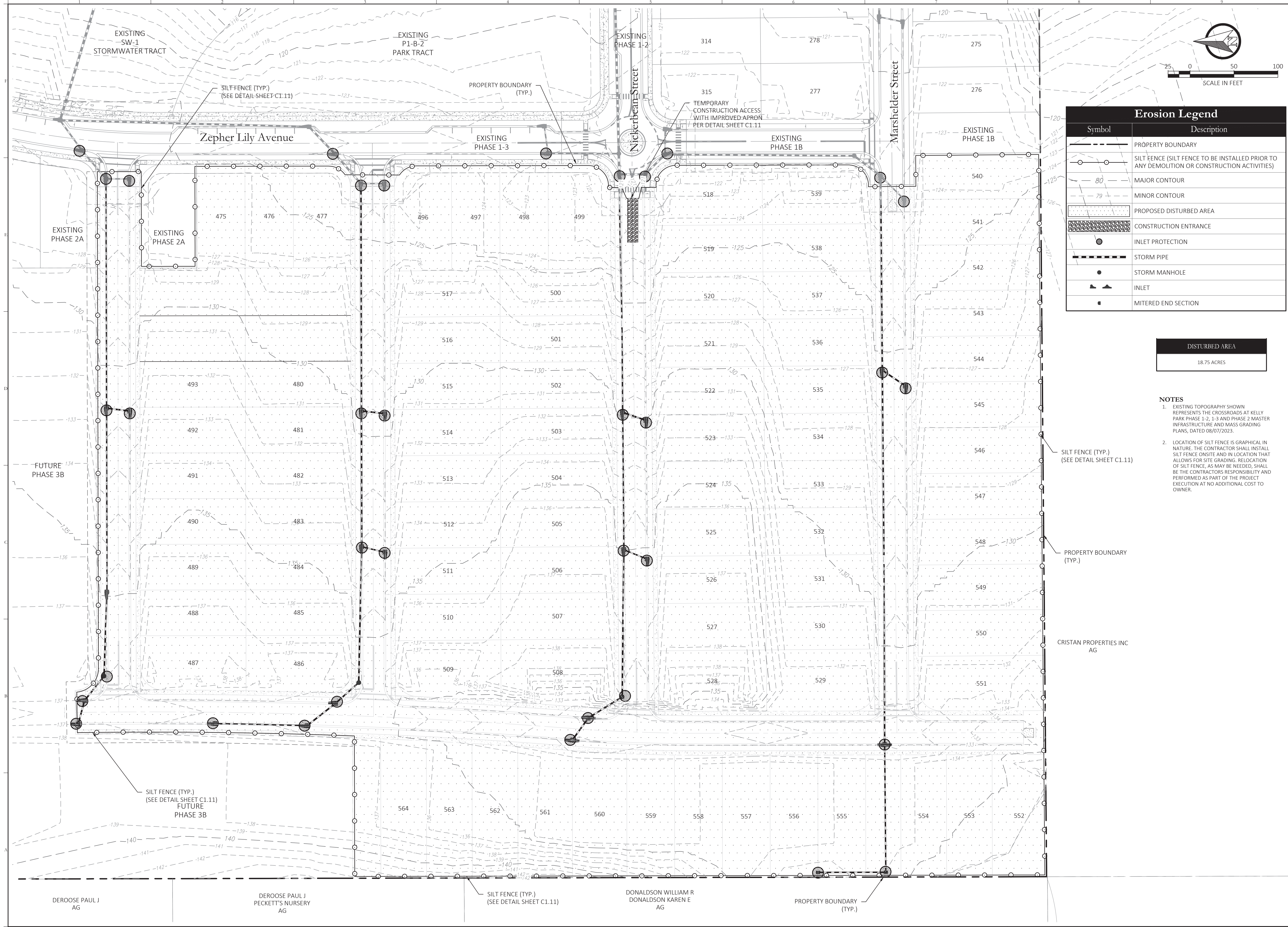


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Key Map:

Erosion Legend	
Symbol	Description
	PROPERTY BOUNDARY
	SILT FENCE (SILT FENCE TO BE INSTALLED PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITIES)
	MAJOR CONTOUR
	MINOR CONTOUR
	PROPOSED DISTURBED AREA
	CONSTRUCTION ENTRANCE
	INLET PROTECTION
	STORM PIPE
	STORM MANHOLE
	INLET
	MITERED END SECTION

DISTURBED AREA
18.75 ACRES

NOTES

- EXISTING TOPOGRAPHY SHOWN REPRESENTS THE CROSSROADS AT KELLY PARK PHASE 1-2, 1-3 AND PHASE 2 MASTER INFRASTRUCTURE AND MASS GRADING PLANS, DATED 08/07/2023.
- LOCATION OF SILT FENCE IS GRAPHICAL IN NATURE. THE CONTRACTOR SHALL INSTALL SILT FENCE ONSITE AND IN LOCATION THAT ALLOWS FOR SITE GRADING. RELOCATION OF SILT FENCE, AS MAY BE NEEDED, SHALL BE THE CONTRACTORS RESPONSIBILITY AND PERFORMED AS PART OF THE PROJECT EXECUTION AT NO ADDITIONAL COST TO OWNER.

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APPROVED BY:		MDS	
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Project Name:
**CROSSROADS AT
KELLY PARK -
PHASE 2B**

Jurisdiction:
CITY of APOPKA, FL

Sheet Title:
**EROSION CONTROL
PLAN**

Sheet No.:
C1.10



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Z:\2024\21-027 GALVIN - KELLY PARK PARCELS\CAD\FINAL\CITY\PHASE 1-2B\21-027-PHASE 1-2B-ECPD

EROSION CONTROL NOTES:

- DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO INSURE AGAINST POLLUTING, SILTING OR DISTURBING TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING SURFACE WATERS, SUCH MEASURES SHALL BE APPROVED BY THE PROJECT ENGINEER AND MAY INCLUDE, BUT NOT LIMITED TO, CONSTRUCTION OF TEMPORARY EROSION CONTROL STRUCTURES, SUCH AS SEDIMENT BASINS, SEDIMENT CHECKS, OR SILT BARRIERS.
- SODDING OF DETENTION PONDS AND OTHER AREAS DESIGNATED FOR SOD, SHOULD BE ACCOMPLISHED WITHIN SEVEN (7) DAYS FOLLOWING COMPLETION OF GRADING TO MINIMIZE EROSION POTENTIAL.
- AT A MINIMUM, THE RETENTION/DETENTION STORAGE AREA MUST BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACE WITHIN THE AREA TO BE SERVED BY THOSE FACILITIES TO PREVENT REDUCTION IN STORAGE VOLUME AND PERCOLATION RATES. ALL ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE STORAGE AREA PRIOR TO FINAL GRADING AND STABILIZATION.
- IF DURING CONSTRUCTION, THE PROPOSED EROSION CONTROL SYSTEM DOES NOT PERFORM SATISFACTORILY, ALTERNATIVES AND ADDITIONAL METHODS OF PROTECTION SHALL BE IMPLEMENTED BY THE CONTRACTOR IN ORDER TO COMPLY WITH S.J.R.W.M.D. AND CITY OF APOPKA EROSION PROTECTION STANDARDS.
- THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DETAILED EROSION CONTROL PLAN TO THE CITY OF APOPKA FOR REVIEW AND APPROVAL A MINIMUM OF 2 WORKING DAYS PRIOR TO THE PRECONSTRUCTION MEETING. THE EROSION CONTROL PLAN SHALL PROPOSE SILT SCREEN OR SYNTHETIC HAY BALES AND TURBIDITY BARRIERS, IN ACCORDANCE WITH THE CONSTRUCTION PLANS.
- ALL PERMANENT EROSION CONTROL MEASURES SHALL BE COMPLETED WITHIN 7 DAYS OF FINAL GRADING. ALL TEMPORARY EROSION CONTROL SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE COMPLETED AND ESTABLISHED.
- AT A MINIMUM SILT BARRIERS SHALL BE PLACED AS SHOWN ON THE CONSTRUCTION PLANS TO INSURE AGAINST POLLUTING, SILTING OR DISTURBING TO SUCH AN EXTENT TO CAUSE AN INCREASE IN TURBIDITY, OR DISCHARGE OF MATERIAL OFFSITE OR TO EXISTING WETLANDS. IF DURING CONSTRUCTION THE PROPOSED EROSION CONTROL SYSTEM DOES NOT PERFORM SATISFACTORY ALTERNATIVES AND ADDITIONAL MEASURES SHALL BE IMPLEMENTED BY THE CONTRACTOR IN ORDER TO COMPLY WITH CITY OF APOPKA AND S.J.R.W.M.D. EROSION PROTECTION STANDARDS.
- CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL EROSION CONTROL COSTS, INCLUDING ANY COST ASSOCIATED WITH COMPLIANCE ISSUES AND ENFORCEMENT ACTIONS.
- CONTRACTOR IS RESPONSIBLE FOR PREPARING AND ADHERING TO A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE FLORIDA STORMWATER, EROSION, AND SEDIMENTATION CONTROL INSPECTORS MANUAL PUBLISHED BY FDEP.
- CONTRACTOR SHALL STAKE IN ALL SOD UNTIL SUCH TIME THAT GROUND IS STABILIZED IN ORDER TO PREVENT EROSION.
- WORK SHALL BE DONE IN ACCORDANCE WITH EPA, FDEP, SJRWMD, AND CITY OF APOPKA BEST MANAGEMENT PRACTICES AND EROSION CONTROL SPECIFICATIONS.
- THE SITE SHALL BE STABILIZED FOLLOWING GRUBBING, CLEARING, EARTH WORK OR MASS GRADING TO ESTABLISH A DENSE STAND OF GRASS, OR SHALL INCORPORATE OTHER APPROVED BEST MANAGEMENT PRACTICES, ON ALL DISTURBED AREAS IF DEVELOPMENT DOES NOT BEGIN WITHIN 7 DAYS. FINAL STABILIZATION SHALL ACHIEVE A MINIMUM OF 70% COVERAGE OF THE DISTURBED LAND AREA AND SHALL INCLUDE A MAINTENANCE PROGRAM TO ENSURE MINIMUM COVERAGE SURVIVAL AND OVERALL SITE STABILIZATION UNTIL SITE DEVELOPMENT.
- IF DETERMINED TO BE NECESSARY DURING CONSTRUCTION A 6 FOOT HIGH SCREEN FENCE MAY BE REQUIRED ALONG ALL PROPERTY LINES.

DUST CONTROL PROVISIONS

- CONTRACTOR SHALL PRE-WATER THE SITE AND ALL WORK WILL BE PHASED TO REDUCED THE AMOUNT OF DISTURBED SURFACE AREA AT ANY ONE TIME ACTIVE OPERATIONS.
 - WATER TO BE APPLIED TO DRY AREAS DURING LEVELING, GRADING, TRENCHING, AND EARTHMOVING ACTIVITIES.
 - WATER TO BE APPLIED ON DISTURBED SURFACE AREAS TO FORM A VISIBLE CRUST.
 - VEHICULAR ACCESS TO BE RESTRICTED AND WATER OR DUST SUPPRESSANTS TO BE APPLIED AND MAINTAINED AT ALL UN-VEGETATED AREAS.
- CONTRACTOR SHALL PREVENT DUST FROM WIND EVENTS.
 - WATER TO BE APPLIED TO VEHICULAR TRAFFIC AND EQUIPMENT STORAGE AREAS.
 - WATER APPLICATION EQUIPMENT WILL APPLY WATER TO CONTROL FUGITIVE DUST DURING WIND EVENTS, UNLESS UNSAFE TO DO SO.
 - OUTDOOR CONSTRUCTION ACTIVITIES THAT DISTURB THE SOIL TO BE CEASED WHENEVER VISIBLE DUST EMISSIONS CANNOT BE EFFECTIVELY CONTROLLED.
- CONTRACTOR SHALL HANDLE BULK MATERIAL.
 - WATER TO BE APPLIED WHEN HANDLING BULK MATERIALS.
 - WATER TO BE APPLIED TO STORAGE PILES.
 - VEHICLE SPEED TO BE LIMITED ON THE WORK SITE.
 - ALL HAUL TRUCKS TO BE LOADED SUCH THAT THE FREEBOARD IS NOT LESS THAN SIX INCHES WHEN TRANSPORT USING A CHUTE OR CONVEYOR.
- CONTRACTOR SHALL DO DAILY CLEANUPS:
 - 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.
 - CLEAN UP METHODS:
 - MANUALLY SWEEPING AND PICKING UP.
 - MECHANICAL SWEEPING WITH A ROTARY BRUSH OR BROOM ACCOMPANIED BY WATER SPRAYER ON BROOM.

SWPPP NOTES

- CONSTRUCTION ACTIVITY PERTAINS TO CONSTRUCTION OF A SHARED PARK AND ASSOCIATED UTILITIES, AND SIDEWALKS. EXISTING ON-SITE SOILS: REFER TO NPDES TABLE.
- 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 BUFFERS AND WETLAND AREAS. ALL AREAS DISTURBED MORE THAN 7 DAYS SHALL BE STABILIZED WITH RYE GRASS OR OTHER APPROPRIATE TEMPORARY VEGETATION APPLIED AT MANUFACTURER'S RECOMMENDATION.
- THE TEMPORARY AND PERMANENT STABILIZATION PRACTICES INCLUDE SODDING ALL DISTURBED AREAS FOR STABILIZATION.
- SILT FENCE AND INLET/OUTLET PROTECTION SHALL BE INSTALLED PER BEST MANAGEMENT PRACTICES, SEE SECTION 8.
- CONTROL DETAILS OF POTENTIAL POLLUTANTS AS FOLLOWS:
 - WASTE DISPOSAL - ALL CONSTRUCTION MATERIALS AND DEBRIS WILL BE PLACED IN DUMPSTER AND HAULED OFF SITE TO A LANDFILL OR OTHER DISPOSAL SITE. NO MATERIALS SHALL BE BURIED ON SITE.
 - 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. USE OF FERTILIZERS MUST ADHERE TO THE CITY OF APOPKA FERTILIZER ORDINANCE. USE MUST BE IN COMPLIANCE WITH LOCAL ORDINANCES, SOME OF WHICH ARE MORE STRINGENT THAN CITY OF APOPKA. FOR INFORMATIONAL PURPOSES, SOME GENERAL FACTS ON THE COUNTY'S ORDINANCE INCLUDE:
 - NO MORE THAN 1 LB. OF FERTILIZER CONTAINING %50 SLOW RELEASE NITROGEN SHALL BE APPLIED PER 1,000 SQ. FT.
 - NO P CAN BE APPLIED WITHOUT A VALID SOIL DEFICIENCY TEST FROM IFAS. IF THEY PLAN TO APPLY P, PLEASE PROVIDE COPY OF SOIL TEST INDICATING P DEFICIENCY.
 - NO FERTILIZER CAN BE APPLIED WITHIN 15 FT. OF WATER BODIES.
 - FERTILIZER RELEASED ON TO IMPERVIOUS SURFACES MUST BE IMMEDIATELY CLEANED UP OR APPLIED PER CODE.
 - JUNE 1 - SEPTEMBER 30 IS THE SUMMER APPLICATION RESTRICTED PERIOD. APPLICATORS MUST SHOW PROOF OF TRAINING TO APPLY NITROGEN AND PHOSPHORUS FERTILIZER DURING THIS PERIOD.
 - STORAGE, APPLICATION, GENERATION AND MIGRATION OF ALL TOXIC SUBSTANCES - ALL PAINTS AND OTHER CHEMICALS WILL BE STORED IN A LOCKED COVERED SHED.
 - 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 DESIGNATED AT ALL TIMES AND WILL NOT BE LOCATED IN ANY AREA ALLOWING FOR DISCHARGE OF POLLUTED RUNOFF. A SMALL VEGETATED BERM SHALL BE PLACED AROUND THE WASHDOWN AREA.
- MAINTENANCE FOR ALL STRUCTURAL AND NON-STRUCTURAL CONTROLS SHALL BE AS FOLLOWS:
 - 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.
 - MAINTENANCE SHALL BE PERFORMED ON THE ROCK ENTRANCE WHEN ANY VOID SPACES ARE FULL OF SEDIMENTS.
 - 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.
 - BARE AREAS OF THE SITE THAT WERE PREVIOUSLY SEEDED SHALL BE RE-SEEDED PER MANUFACTURER'S INSTRUCTIONS.
 - MULCH AND SOD THAT HAS BEEN WASHED OUT SHALL BE REPLACED IMMEDIATELY.
 - MAINTAIN ALL OTHER AREAS OF THE SITE WITH PROPER CONTROLS AS NECESSARY.
- 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.
- NON-STORMWATER DISCHARGES MAY OCCUR FROM CONSTRUCTION ACTIVITIES SUCH AS WATERLINE FLUSHING, PAVEMENT WASH WATER (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED) AND UNCONTAMINATED GROUNDWATER (DEWATERING EXCAVATION). DEWATERING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEP GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED SITE ACTIVITY. IF SAID DISCHARGES DO OCCUR, THEY WILL BE DIRECTED TO THE TEMPORARY SEDIMENT BASIN PRIOR TO DISCHARGE. TURBID WATER FROM STORMWATER POND SHALL NOT BE PUMPED DIRECTLY INTO ANY RECEIVING WATERS. TREATMENT CAN INCLUDE SILT FENCES, SETTLING PONDS, PROPER USE OF FLOCCULATING AGENTS OR OTHER APPROPRIATE MEANS.
- DRY RETENTION POND TO BE PROTECTED FROM SILT DURING CONSTRUCTION ACTIVITIES. IF IT IS DETERMINED THAT THE POND BOTTOM HAS BECOME SILTED THEN 6 INCHES OF POND BOTTOM SHALL BE REMOVED & REPLACED WITH CLEAN BACKFILL.

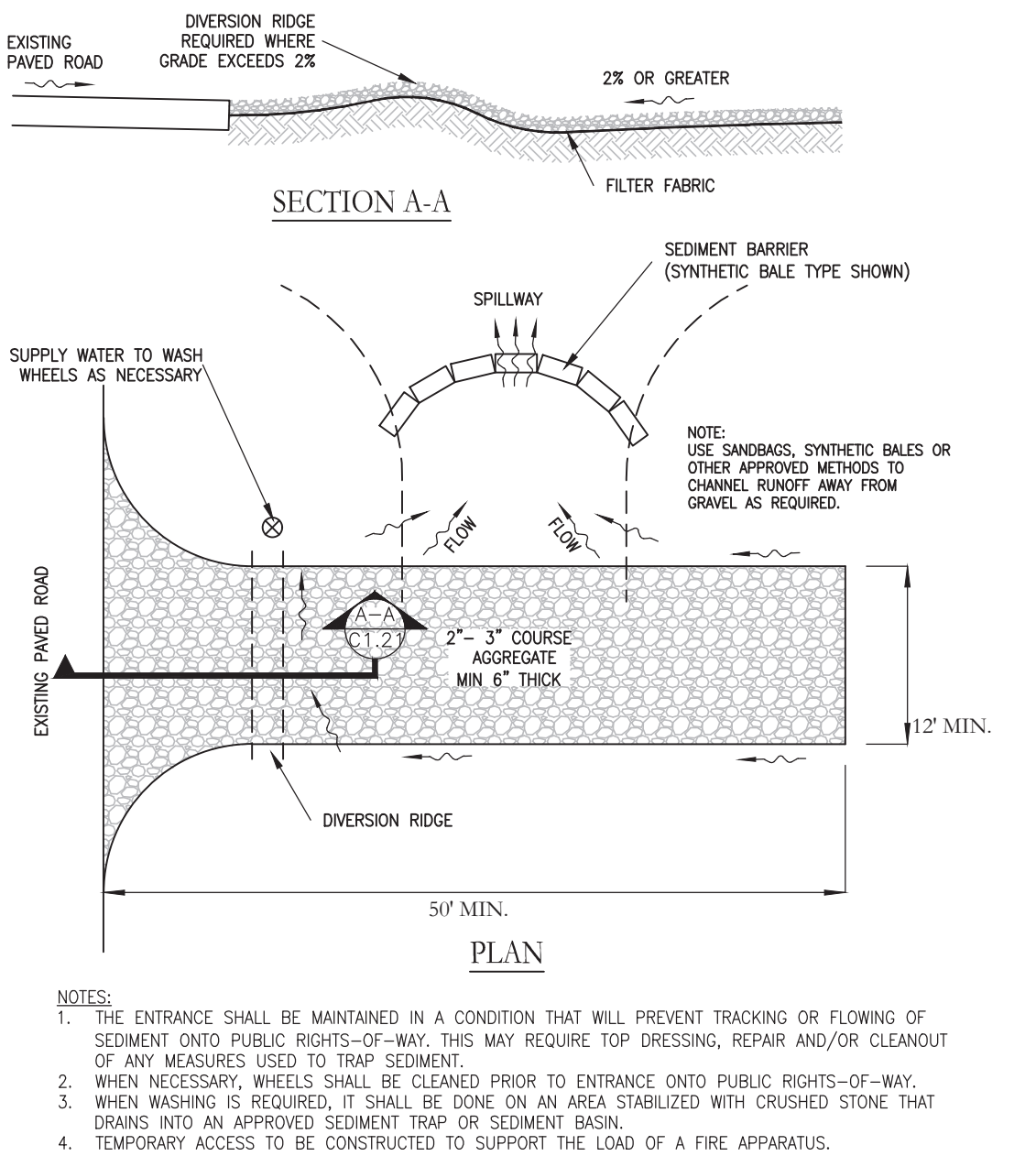
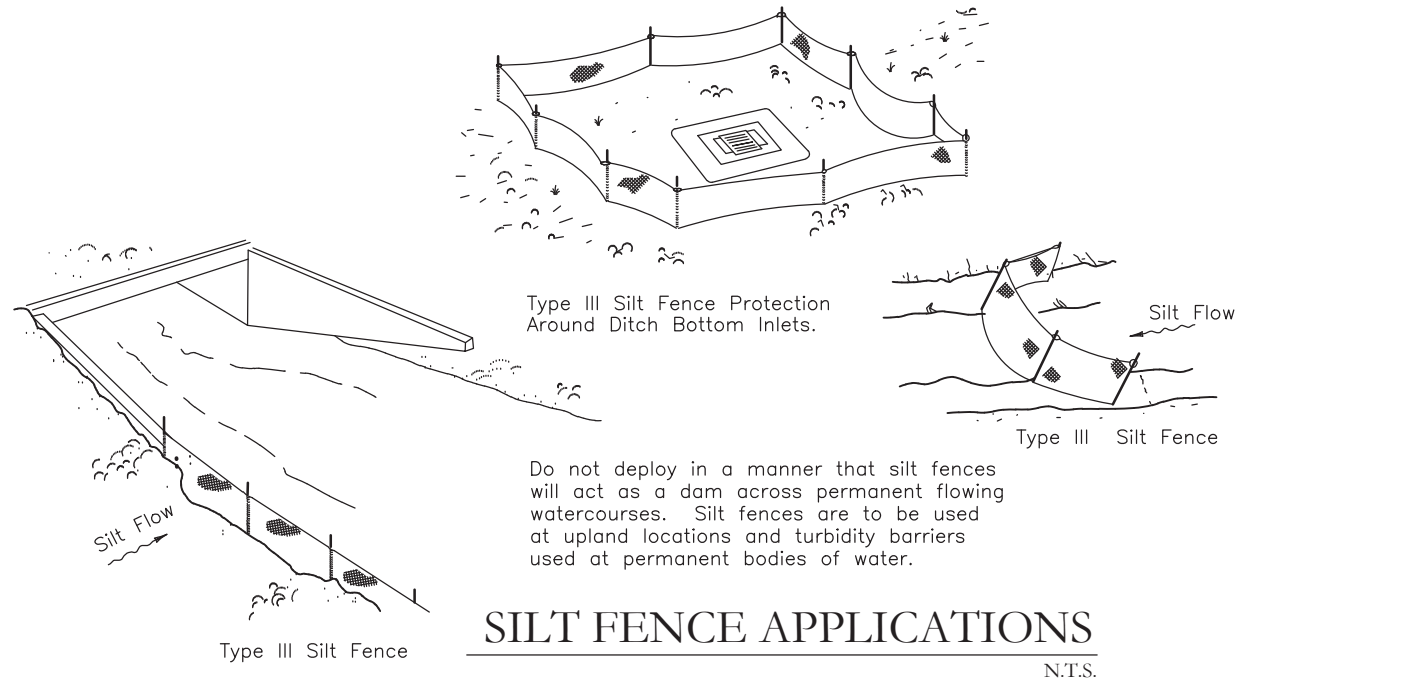
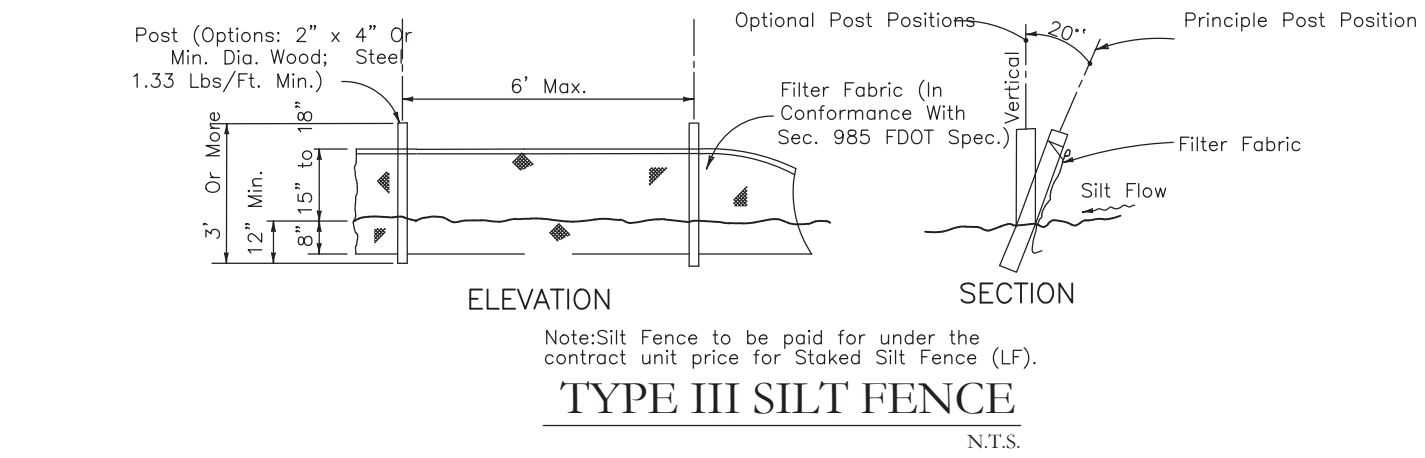
NPDES Information

Address	W. Kelly Park Road
Latitude	28°45'53.45" N
Longitude	81°35'15.95" W
Jurisdictional Authority	City Of Apopka
Total Area (Per Survey)	205.07 ac
Project (Disturbed) Area	±18.75 ac
Area Operator	N/A
MS4 Operator	N/A
Receiving Water Name	Onsite depressional area
	No. 4 Candler Fine Sand, 0 To 5 Percent Slopes
	No. 5 Candler Fine Sand, 5 To 12 Percent Slopes
Soils (USDA NCRS "Web Soil Survey")	No. 47 Tavares-Millhopper Complex, 0 To 5 Percent Slopes

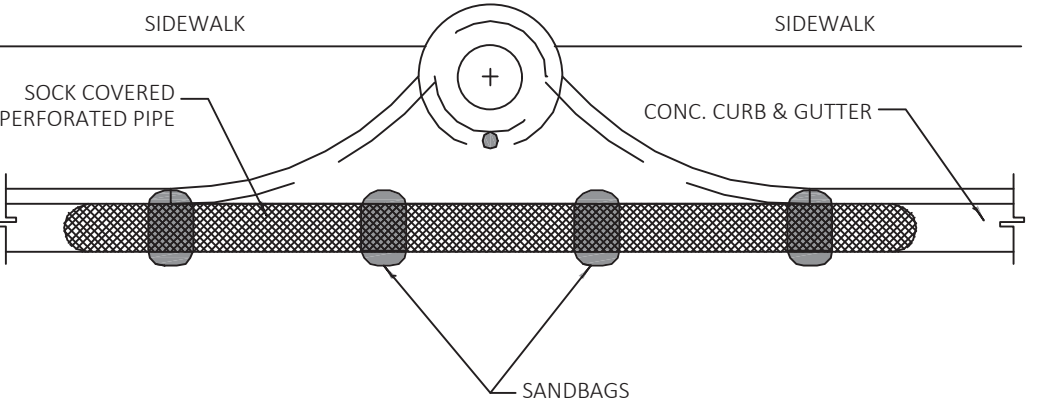
NOTE: FOR PROJECTS WITH DISTURBED AREAS LESS THAN 1 ACRE NPDES PERMITTING IS NOT REQUIRED.

NPDES PERMIT

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.



TEMPORARY CONSTRUCTION ENTRANCE



- NOTES:
- PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
 - SANDBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC ARE FILLED WITH GRAVEL LAYERED AND PACKED TIGHTLY.
 - LEAVE A ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.
 - INSPECT BARRIERS AND REMOVED SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.
 - AT THE END OF EACH WORKDAY, SWEEP OR SCRAPE UP SOIL TRACKED ONTO THE STREET.

CURB AND GUTTER SEDIMENT BARRIER

Key Map:

NO.	DATE:	DESCRIPTIONS:
SUBMISSIONS/REVISIONS		
VERTICAL DATUM:		NAVD 88
JOB NO.:		21-027
DESIGNED BY:		KML
DRAWN BY:		EHW
CHECKED BY:		KML
APPROVED BY:		MDS
SCALE IN FEET:		N.T.S.

Project Name:

CROSSROADS AT KELLY PARK - PHASE 2B

Jurisdiction:

CITY of APOPKA, FL

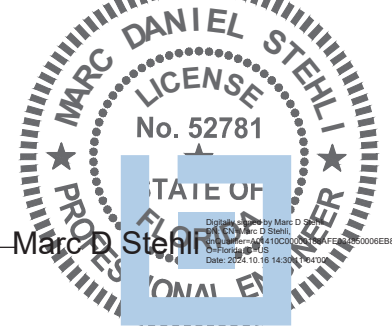
Sheet Title:

EROSION CONTROL DETAILS

Sheet No.:

C1.11

Seal:

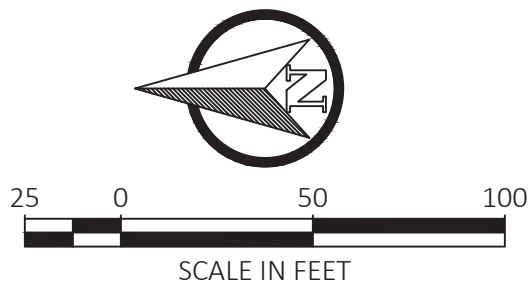
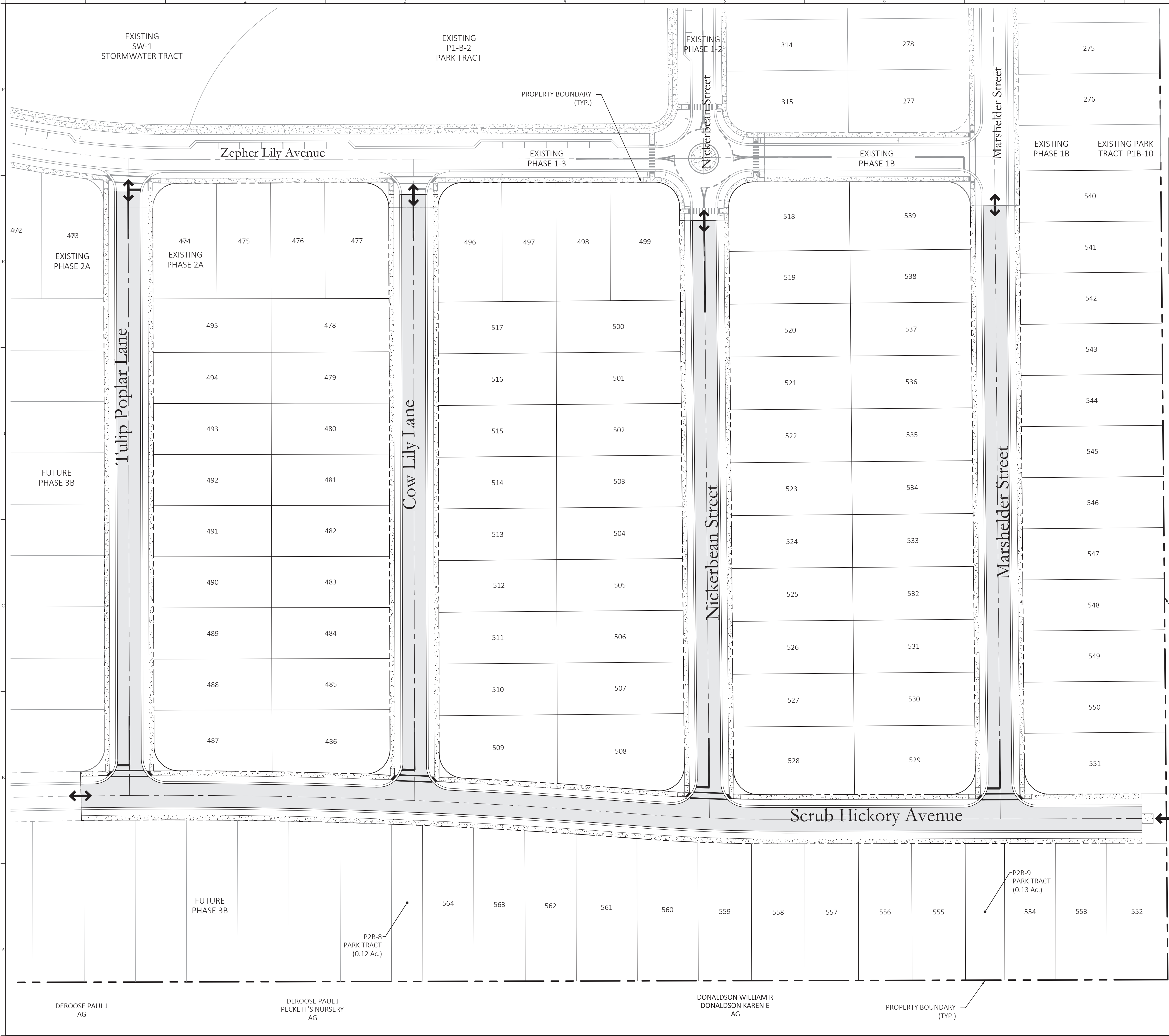


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Eng. Bus. No. 28567

Z:\2021\21-027 GALVIN - KELLY PARK PARCELS\CAD\FINAL\CITY\PHASE 1-2B\21-027 - PHASE 1-2B-SP



Ownership/Maintenance Table			
Name	Operation & Maintenance	Public/Private	Area (Ac.)
ROW	TO BE OWNED AND MAINTAINED BY CITY OF APOPKA	PUBLIC	3.96
P2B-8	TO BE OWNED AND MAINTAINED BY CITY OF APOPKA	PUBLIC	0.12
P2B-9	TO BE OWNED AND MAINTAINED BY HOA OR CDD	PRIVATE	0.13
LOTS		PRIVATE	14.54
TOTAL			18.75

LEGEND

- MASTER PLAN BOUNDARY
- ROW
- LOT LINES
- FULL ACCESS

PROPERTY BOUNDARY (TYP.)

CRISTAN PROPERTIES INC AG

Key Map:

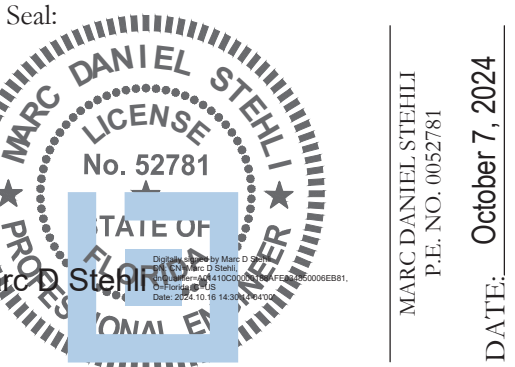
10/07/2024		SUBMIT TO CITY OF APOPKA & SJRMWD	
NO.	DATE:	DESCRIPTIONS:	
SUBMISSIONS/REVISIONS			
VERTICAL DATUM:		NAVD 88	
JOB NO.:		21-027	
DESIGNED BY:		KML	
DRAWN BY:		EHW	
CHECKED BY:		KML	
APPROVED BY:		MDS	
SCALE IN FEET:		1" = 50'	

CROSSROADS AT KELLY PARK - PHASE 2B

Jurisdiction: CITY of APOPKA, FL

Sheet Title: SITE PLAN

Sheet No.: C2.00

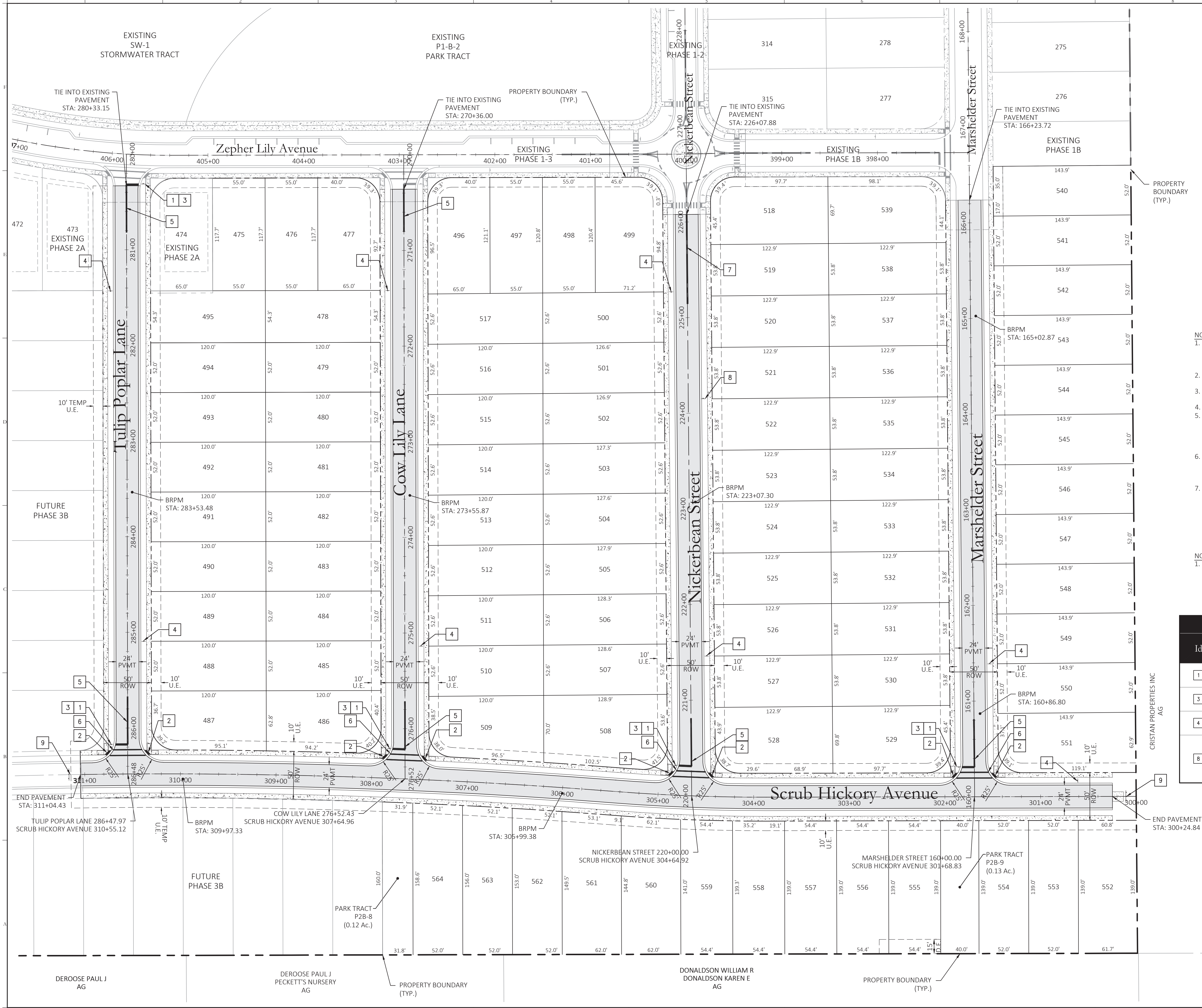


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SIGN & STRIPING LEGEND:

- 30" STOP SIGN (R1-1) & 24" WHITE STOP BAR
PER FDOT INDEX NO. 700-010
- CURB RAMP (CR-F) AND CAST IN PLACE DETECTABLE
WARNINGS PER FDOT INDEX NO. 522-002
- STREET NAME SIGN
(D3-1)
- SPEED LIMIT SIGN (25 MPH)
(R2-1)
- 50' LF-6" SOLID DOUBLE YELLOW
PER FDOT INDEX NO. 711-001
- SIDEWALK STANDARD CROSSWALK, 6'
AND 10' PER FDOT INDEX 711-001
- 100' LF-6" SOLID DOUBLE YELLOW
PER FDOT INDEX NO. 711-001
- PEDESTRIAN SIGN (W11-2) AND AHEAD
PLAQUE (W16-9P)
- STREET TERMINATOR BARRIER
(FDOT INDEX 700-109)

NOTES:

- ALL STRIPING & SIGNAGE PER FDOT STANDARDS &
SPECIFICATIONS MANUAL LATEST EDITION, MUTCD & CITY
OF APOPKA ROAD CONSTRUCTION SPECIFICATIONS,
UNLESS OTHERWISE SPECIFIED.
- ALL STRIPING SHALL BE THERMOPLASTIC UNLESS
OTHERWISE SPECIFIED.
- ALL PAVEMENT MARKINGS MUST COMPLY WITH FDOT
INDEX 711-001.
- SIGNS WILL NOT BE INSTALLED WITH CONCRETE.
- HANDICAP (HC) RAMPS AND DETECTABLE WARNING
SURFACE WILL BE CONSTRUCTED AT THE STREET
INTERSECTION(S) AND DRIVEWAY CONNECTION(S) TO
COMPLY WITH THE AMERICANS WITH DISABILITY ACT
(ADA) AND WILL MEET FDOT
- STREET SIGNS POSTS TO BE SQUARE GALVANIZED STEEL
AND HOLES SHALL BE CORED. 2 INCH SQUARE
GALVANIZED POLES SHALL BE PRE-SCORED OR QUICK
PUNCH.
- ALL TRAFFIC CONTROL SIGNS WITHIN THE RIGHT-OF-WAY
SHALL BE MANUFACTURED USING DIAMOND GRADE
REFLECTIVE SHEETING. ALL SIGNS SHALL BE
CONSTRUCTED IN ACCORDANCE WITH MUTCD AND CITY
OF APOPKA CRITERIA FOR SIGN SIZE AND SHAPE AND
LETTERING DIMENSIONS.

NOTES:

- DESIGN AND POSTED SPEED LIMITS ARE AS FOLLOWS:
INTERNAL STREETS
DESIGN SPEED: 30 MPH
POSTED SPEED: 25 MPH

Sign Legend				
Id.	M.U.T.C.D. Number	Dimensions		Symbol
		Width	Height	
1	R1-1	30"	30"	STOP
3	D3-1	VARIES	12"	Main St
4	R2-1	24"	30"	SPEED 25
8	W11-2	30"	30"	PEDESTRIAN
	W16-9P	24"	30"	AHEAD

Key Map:

10/07/2024 SUBMIT TO CITY OF APOPKA & SJRMWD

NO. DATE DESCRIPTIONS

SUBMISSIONS/REVISIONS

VERTICAL DATUM: NAVD 88

JOB NO.: 21-027

DESIGNED BY: KML

DRAWN BY: EHW

CHECKED BY: KML

APPROVED BY: MDS

SCALE IN FEET: 1" = 50'

Project Name:

CROSSROADS AT
KELLY PARK -
PHASE 2B

Jurisdiction:

CITY of APOPKA, FL

Sheet Title:

SIGNAGE, STRIPING
& GEOMETRY PLAN

Sheet No.:

C2.01

Seal:

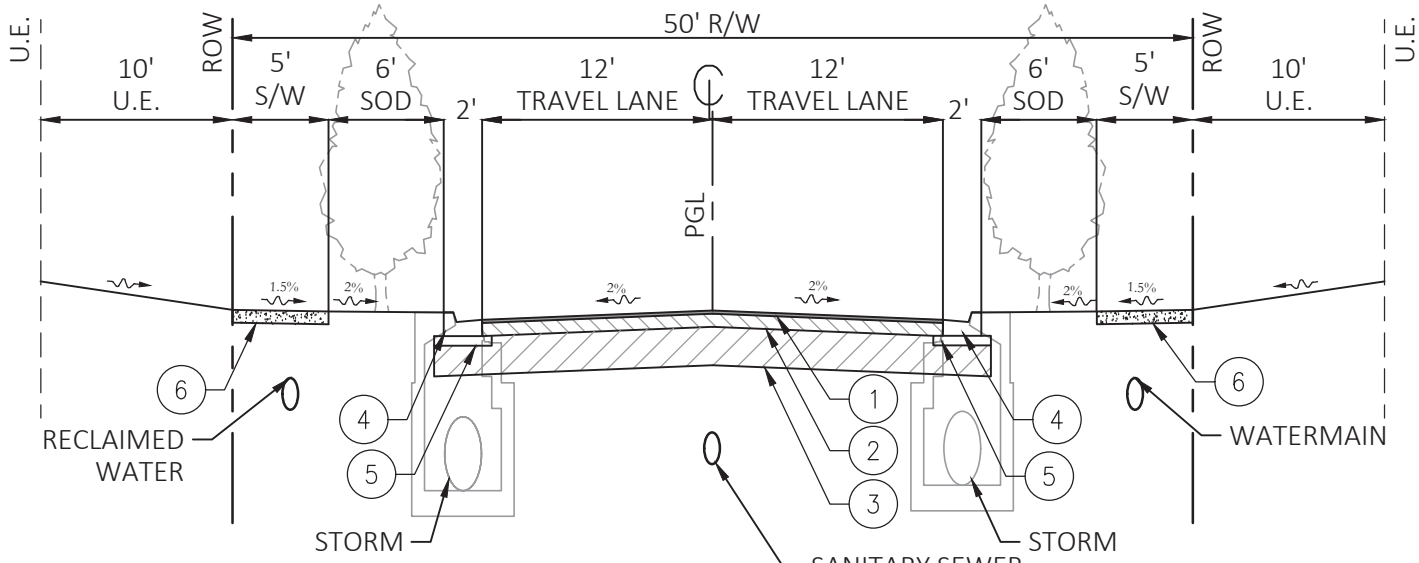


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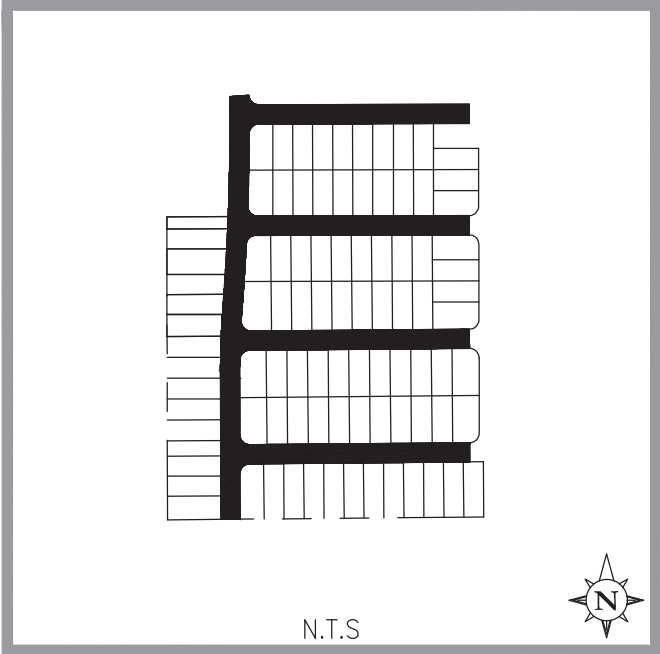
Z:\2021\21-027 GALVIN - KELLY PARK PARCELS\cadd\FINAL\CITY\PHASE 1-2B\21-027 -PHASE 1-2B-TPS



A TYPICAL ROAD SECTION (50' ROW)

1. STREET TREES SHALL NOT BE ROOT AGGRESSIVE AND SHALL BE INSTALLED WITH ROOT BARRIERS TO PREVENT ROOTS FROM ADVERSELY AFFECTING UTILITIES, CURBS AND/OR SIDEWALK
2. HOA DOCUMENTS SHALL INDICATE THAT THE HOA/CDD IS RESPONSIBLE FOR MAINTENANCE OF STREET TREES
3. PARKING ALLOWED ON ONE SIDE
4. A PERMANENT 10' UTILITY EASEMENT WILL BE PROVIDED WITH THE PLATTING OF EACH FUTURE RESIDENTIAL PHASE TO REPLACE THE TEMPORARY 10' UTILITY EASEMENT

N.T.S.



Pavement Legend	
Symbol Id.	Description
①	1.5" (IN.) TYPE SP-9.5 ASPHALT (SEE NOTE 1)
②	8" (IN.) LIMEROCK BASE COMPACTED TO A MIN. DENSITY OF 98% OF MODIFIED PROCTOR DRY DENSITY A MIN. LBR OF 100. THE LIMEROCK MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE CONSTRUCTION SPECIFICATIONS.
③	12" (IN.) COMPACTED SUBGRADE TO 98% MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) VALUE. THE UPPER 6" (IN.) OF SUBGRADE SHALL BE STABILIZED TO A MIN. LBR OF 40 AS SPECIFIED BY FDOT.
④	TYPE 'F' CONC. CURB & GUTTER
⑤	6" (IN.) STABILIZED SUBGRADE IN CURB AREA TO EXTEND 12" (IN.) EACH SIDE TO 50 FBV
⑥	4" (IN.) THICK CONC. SIDEWALK (3000 P.S.I.)

- NOTES:
1. ASPHALT MIX WILL REQUIRE A MIX DESIGN APPROVAL BY CITY OF APOPKA.
 2. THE ABOVE PAVEMENT THICKNESS IS THE MINIMUM REQUIRED THICKNESS. CONTRACTORS SHALL BE RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT WHERE TESTING RESULTS DO NOT MEET THE MINIMUM REQUIRED THICKNESS.
 3. CONTRACTOR SHALL INSTALL A 2' STRIP OF SOD ALONG THE BACK OF ALL ROADWAY CURBING.
 4. AT THE TIME OF PLATTING A 10' WIDE UTILITY EASEMENT WILL BE PROVIDED ADJACENT TO ALL RIGHT-OF-WAY. IF ROW IS ADJACENT TO A FUTURE PHASE A TEMPORARY 10' UTILITY EASEMENT SHALL BE PROVIDED, WHICH WILL BECOME PERMANENT WITH THE PLATTING OF THE FUTURE PHASE.
 5. SEE UNIVERSAL ENGINEERING SCIENCES REPORT NO. 1919910v2 REVISED MAY 26TH, 2023 FOR PAVEMENT RECOMMENDATIONS.

Key Map:

10/07/2024 SUBMIT TO CITY OF APOPKA & SJRMWD	
NO.	DATE DESCRIPTIONS
SUBMISSIONS/REVISIONS	
VERTICAL DATUM:	NAVD 88
JOB NO.:	21-027
DESIGNED BY:	KML
DRAWN BY:	EHW
CHECKED BY:	KML
APPROVED BY:	MDS
SCALE IN FEET:	N/A

Project Name:

**CROSSROADS AT
KELLY PARK -
PHASE 2B**

Jurisdiction:
CITY of APOPKA, FL

Sheet Title:
**TYPICAL ROAD
SECTIONS**

Sheet No.:
C3.00

Seal:

MARC DANIEL STEHLI
LICENSE
No. 52781
STATE OF FLORIDA
MECHANICAL ENGINEER

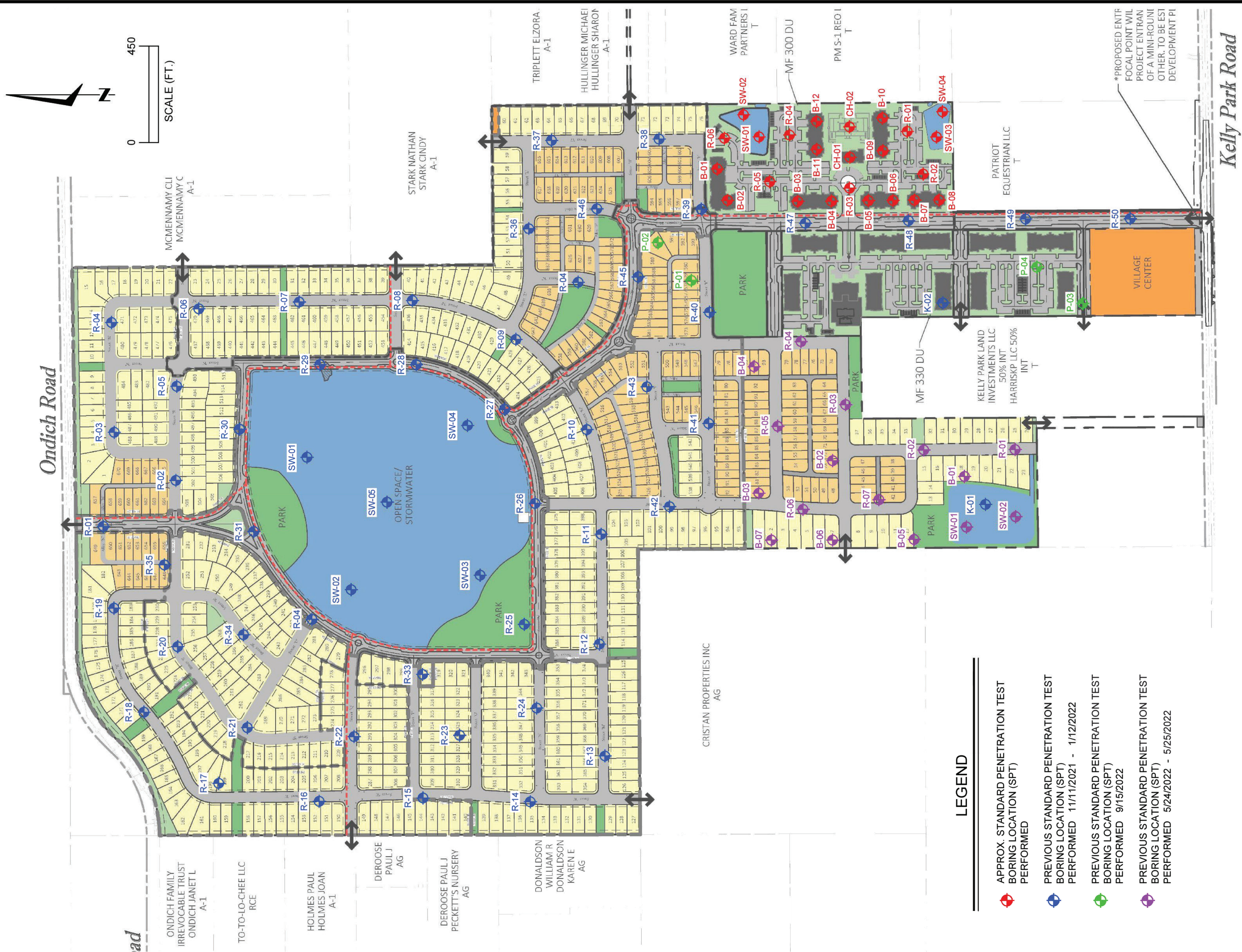
MARC DANIEL STEHLI
P.E. NO. 0652781
DATE: **October 7, 2024**

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

21-0638-02



- LEGEND**
- APPROX. STANDARD PENETRATION TEST BORING LOCATION (SPT) PERFORMED
 - PREVIOUS STANDARD PENETRATION TEST BORING LOCATION (SPT) PERFORMED 11/11/2021 - 1/12/2022
 - PREVIOUS STANDARD PENETRATION TEST BORING LOCATION (SPT) PERFORMED 9/15/2022
 - PREVIOUS STANDARD PENETRATION TEST BORING LOCATION (SPT) PERFORMED 5/24/2022 - 5/25/2022

THIS DRAWING CREATED USING PLAN PROVIDED BY CLIENT.

 UNIVERSAL ENGINEERING SCIENCES PAGE NO: B-2	EVALUATION OF MAPPED KARST AREAS KELLY PARK PROPERTY - SOUTHERN ASSEMBLAGE APOPKA, ORANGE COUNTY, FLORIDA				FOR: GALVIN LAND SERVICES, LLC			
	DRAWN BY: N.F.		DATE: 2 - 1 - 2023		CHECKED BY: Z.W.A.		DATE: -	
	REPORT NO: 1915768		SCALE: AS SHOWN		PROJECT NO: 0130.2100493.0000			
	BORING LOCATION PLAN							

NOTE: THIS PLAN IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
CONTRACTOR SHALL REFER TO UES REPORT NO. 1985238, DATED
OCTOBER 26, 2022, FOR ADDITIONAL SOIL INFORMATION.

Key Map:

10/07/2024 SUBMIT TO CITY OF APOPKA & SJRMWD	
NO. DATE DESCRIPTIONS	
SUBMISSIONS/REVISIONS	
VERTICAL DATUM:	NAVD 88
JOB NO.:	21-027
DESIGNED BY:	KML
DRAWN BY:	EHW
CHECKED BY:	KML
APPROVED BY:	MDS
SCALE IN FEET:	N/A

CROSSROADS AT
KELLY PARK -
PHASE 2B

Jurisdiction:
CITY of APOPKA, FL

Sheet Title:
BORING LOCATION
MAP

Sheet No.:
C3.10

DATE: October 7, 2024

Marc D Stehli

POULOS & BENNETT

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2602 E. Livingston St., Orlando, FL 32803
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Eng. Bus. No. 28567

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT: EVALUATION OF MAPPED KARST AREAS
KELLY PARK PROPERTY - SOUTHERN ASSEMBLAGE
APOPKA, FLORIDA
CLIENT: GALVIN LAND SERVICES, LLC
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

BORING I.D.: **R-12**
SECTION:
TOWNSHIP:
SHEET: **1 of 1**
RANGE:
G.S. ELEVATION (ft): 125.1
DATE STARTED: 12/13/21
WATER TABLE (ft): NE
DATE FINISHED: 12/13/21
DATE OF READING: 12/13/2021
DRILLED BY: ORL - AIDMDW
EST. SHGWT (ft): 10.0+
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS	K (FT/ DAY)	ORG. CONT. (%)
							LL	PI			
0						Very loose brown fine SAND [SP]					
1-1-1		2									
1-2-1		3				-- loose					
2-2-2		4									
2-3-2		5									
3-2-2		4									
2-2-2		4									
2-2-2		4				-- orange brown					
2-2-2		4				BORING TERMINATED AT 15.0 FEET					

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT: EVALUATION OF MAPPED KARST AREAS
KELLY PARK PROPERTY - SOUTHERN ASSEMBLAGE
APOPKA, FLORIDA
CLIENT: GALVIN LAND SERVICES, LLC
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

BORING I.D.: **R-13**
SECTION:
TOWNSHIP:
SHEET: **1 of 1**
RANGE:
G.S. ELEVATION (ft): 133.8
DATE STARTED: 12/13/21
WATER TABLE (ft): NE
DATE FINISHED: 12/13/21
DATE OF READING: 12/13/2021
DRILLED BY: ORL - AIDMDW
EST. SHGWT (ft): 10.0+
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS	K (FT/ DAY)	ORG. CONT. (%)
							LL	PI			
0						Loose brown fine SAND [SP]					
1-2-2		4									
2-2-2		4				-- very loose, light brown					
2-2-1		3									
2-1-2		3				-- loose					
2-2-2		4									
2-2-2		4									
2-2-2		4				Loose orange clayey fine SAND [SC]					
3-3-4		7				BORING TERMINATED AT 15.0 FEET					

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT: EVALUATION OF MAPPED KARST AREAS
KELLY PARK PROPERTY - SOUTHERN ASSEMBLAGE
APOPKA, FLORIDA
CLIENT: GALVIN LAND SERVICES, LLC
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

BORING I.D.: **R-14**
SECTION:
TOWNSHIP:
SHEET: **1 of 1**
RANGE:
G.S. ELEVATION (ft): 138.9
DATE STARTED: 12/13/21
WATER TABLE (ft): NE
DATE FINISHED: 12/13/21
DATE OF READING: 12/13/2021
DRILLED BY: ORL - AIDMDW
EST. SHGWT (ft): 8.0
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS	K (FT/ DAY)	ORG. CONT. (%)
							LL	PI			
0						Very loose grey brown fine SAND [SP]					
1-1-2		3									
1-1-1		2				-- light brown					
1-1-1		2									
1-2-2		4				Loose orange fine SAND with clay [SP-SC]					
2-2-2		4				Loose orange clayey fine SAND [SC]					
2-2-3		5									
4-4-6		10				BORING TERMINATED AT 15.0 FEET					

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT: EVALUATION OF MAPPED KARST AREAS
KELLY PARK PROPERTY - SOUTHERN ASSEMBLAGE
APOPKA, FLORIDA
CLIENT: GALVIN LAND SERVICES, LLC
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

BORING I.D.: **R-15**
SECTION:
TOWNSHIP:
SHEET: **1 of 1**
RANGE:
G.S. ELEVATION (ft): 143.2
DATE STARTED: 12/14/21
WATER TABLE (ft): NE
DATE FINISHED: 12/14/21
DATE OF READING: 12/14/2021
DRILLED BY: ORL - AICM
EST. SHGWT (ft): 10.0+
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS	K (FT/ DAY)	ORG. CONT. (%)
							LL	PI			
0						Loose light brown fine SAND [SP]					
2-2-2		4									
2-2-2		4				-- very loose					
1-2-1		3				-- loose					
2-2-2		4				-- very loose					
2-1-2		3				-- loose					
2-2-2		4									
2-2-3		5				-- light orange brown					
2-2-3		5				BORING TERMINATED AT 15.0 FEET					

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT: EVALUATION OF MAPPED KARST AREAS
KELLY PARK PROPERTY - SOUTHERN ASSEMBLAGE
APOPKA, FLORIDA
CLIENT: GALVIN LAND SERVICES, LLC
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

BORING I.D.: **R-23**
SECTION:
TOWNSHIP:
SHEET: **1 of 1**
RANGE:
G.S. ELEVATION (ft): 145.4
DATE STARTED: 12/14/21
WATER TABLE (ft): NE
DATE FINISHED: 12/14/21
DATE OF READING: 12/14/2021
DRILLED BY: ORL - AICM
EST. SHGWT (ft): 10.0+
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS	K (FT/ DAY)	ORG. CONT. (%)
							LL	PI			
0						Loose grey brown fine SAND [SP]					
2-2-2		4				-- very loose, light brown					
2-1-2		3									
1-1-1		2				-- loose					
1-2-2		4									
2-2-2		4									
2-2-2		4									
3-3-3		9				-- light orange					
3-3-3		9				BORING TERMINATED AT 15.0 FEET					

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT: EVALUATION OF MAPPED KARST AREAS
KELLY PARK PROPERTY - SOUTHERN ASSEMBLAGE
APOPKA, FLORIDA
CLIENT: GALVIN LAND SERVICES, LLC
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

BORING I.D.: **R-24**
SECTION:
TOWNSHIP:
SHEET: **1 of 1**
RANGE:
G.S. ELEVATION (ft): 135.1
DATE STARTED: 12/13/21
WATER TABLE (ft): NE
DATE FINISHED: 12/13/21
DATE OF READING: 12/13/2021
DRILLED BY: ORL - AICM
EST. SHGWT (ft): 8.0
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS	K (FT/ DAY)	ORG. CONT. (%)
							LL	PI			
0						Loose grey brown fine SAND [SP]					
2-2-2		4									
2-2-2		4				-- very loose					
2-2-1		3				-- light brown					
1-1-2		3				-- loose					
2-2-2		4				Loose light brown clayey fine SAND [SC]					
2-2-4		6				-- orange					
5-4-5		9				BORING TERMINATED AT 15.0 FEET					

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT: EVALUATION OF MAPPED KARST AREAS
KELLY PARK PROPERTY - SOUTHERN ASSEMBLAGE
APOPKA, FLORIDA
CLIENT: GALVIN LAND SERVICES, LLC
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

BORING I.D.: **R-33**
SECTION:
TOWNSHIP:
SHEET: **1 of 1**
RANGE:
G.S. ELEVATION (ft): 130.0
DATE STARTED: 12/14/21
WATER TABLE (ft): NE
DATE FINISHED: 12/14/21
DATE OF READING: 12/14/2021
DRILLED BY: ORL - AICM
EST. SHGWT (ft): 8.0
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS	K (FT/ DAY)	ORG. CONT. (%)
							LL	PI			
0						Loose grey fine SAND [SP]					
2-2-2		4				-- light brown					
1-1-1		2				-- very loose					
1-1-1		2									
1-1-2		3				-- loose					
3-2-3		5				Medium dense orange clayey fine SAND [SC]					
6-10-12		22									
9-13-11		24				BORING TERMINATED AT 15.0 FEET					

10/07/2024		SUBMIT TO CITY OF APOPKA & SJRMWD	
NO.	DATE:	DESCRIPTIONS:	
SUBMISSIONS/REVISIONS			
VERTICAL DATUM:		NAVD 88	
JOB NO.:		21-027	
DESIGNED BY:		KML	
DRAWN BY:		EHW	
CHECKED BY:		KML	
APPROVED BY:		MDS	
SCALE IN FEET:		N/A	

CROSSROADS AT
KELLY PARK -
PHASE 2B

Jurisdiction:
CITY of APOPKA, FL
Sheet Title:
SOIL BORINGS

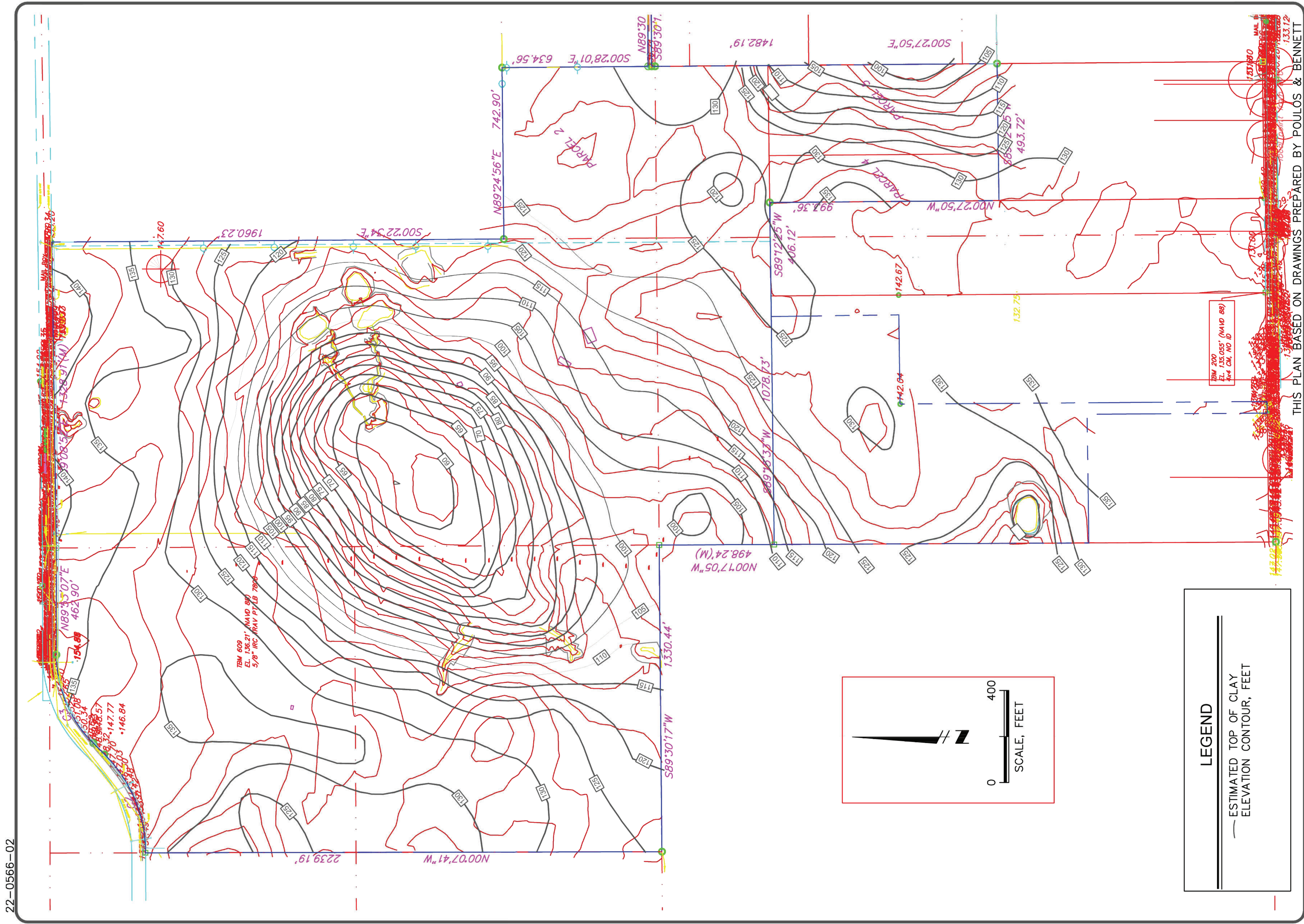
Sheet No.:
C3.11

Marc D Stehli
DATE: October 7, 2024

POULOS & BENNETT

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

NOTE: THIS PLAN IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
CONTRACTOR SHALL REFER TO UES REPORT NO. 1919910v2, DATED
MAY 26, 2023, FOR ADDITIONAL SOIL INFORMATION.



FOR:

GAL VIN LAND SERVICES, LLC

DRAWN BY:

R.K.

DATE:

2 - 27 - 2023

CHECKED BY:

A.W.

DATE:

2 - 27 - 2023

REPORT NO:

--

SCALE:

AS SHOWN

PROJECT NO:

0130 2200422.0000

GEOTECHNICAL EXPLORATION

KELLY PARK PROPERTY

APOPKA, ORANGE COUNTY, FLORIDA

TOP OF CLAY CONTOUR MAP

UNIVERSAL

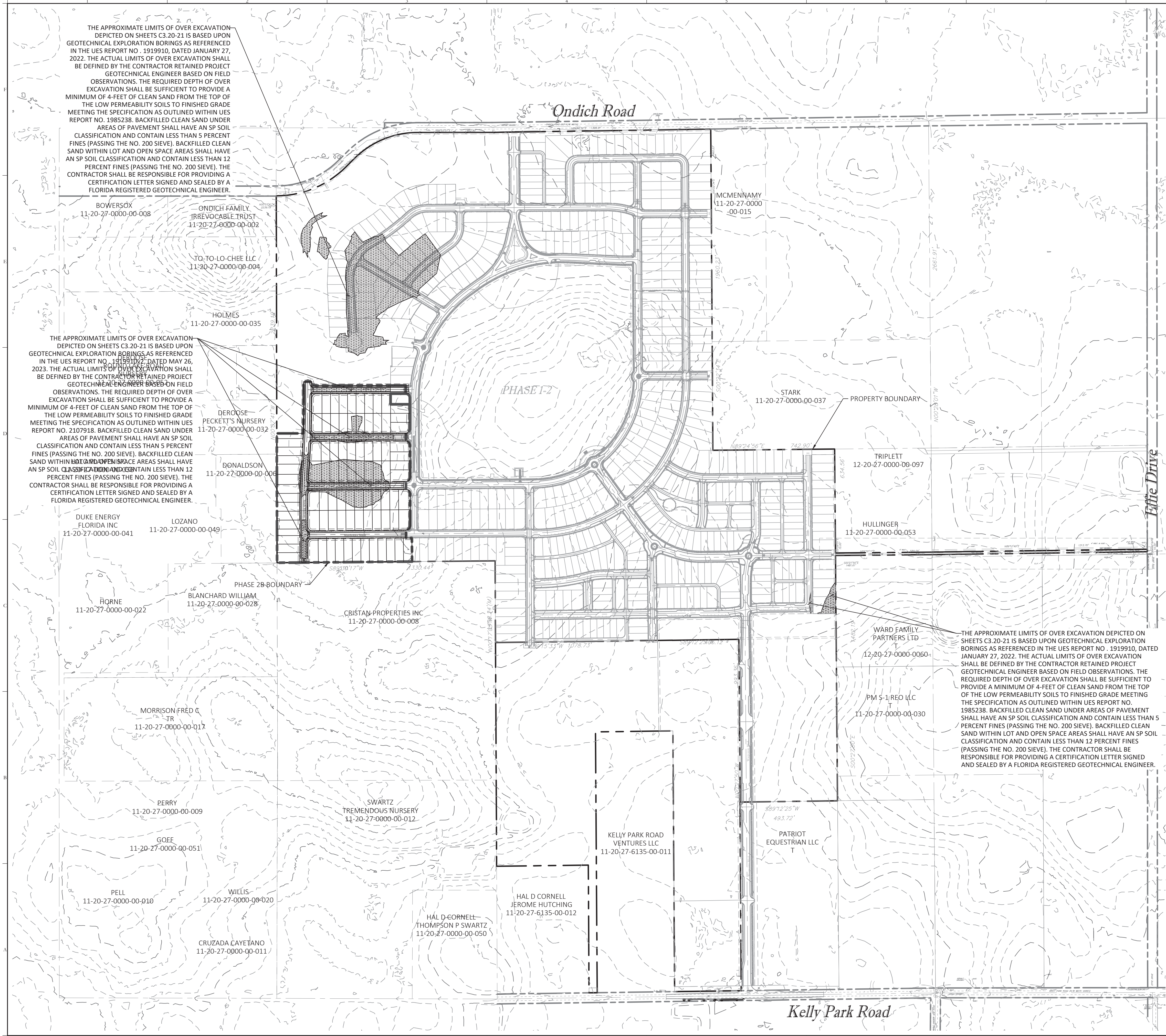
ENGINEERING SCIENCES

PAGE NO:

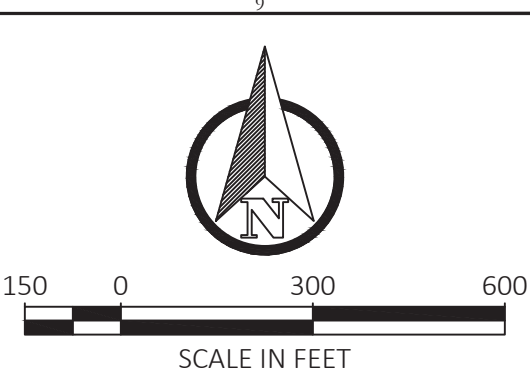
A-1

Key Map:

Z:\2021\21-027 GALVIN - KELLY PARK PARCELS\CD\FINAL\CITY\PHASE 1-2B\21-027 -PHASE 1-2B-0EP



Grading Legend	
Symbol	Description
---	EXISTING CONTOUR
---	AREA OF OVEREXCAVATION



Key Map:

SUBMISSIONS/REVISIONS	
NO.	DATE DESCRIPTIONS
1	10/07/2024 SUBMIT TO CITY OF APOPKA & SJRMWD
2	11/20/27-0000-00-008
3	11/20/27-0000-00-002
4	11/20/27-0000-00-004
5	11/20/27-0000-00-035
6	11/20/27-0000-00-032
7	11/20/27-0000-00-006
8	11/20/27-0000-00-049
9	11/20/27-0000-00-022
10	11/20/27-0000-00-028
11	11/20/27-0000-00-008
12	11/20/27-0000-00-017
13	11/20/27-0000-00-009
14	11/20/27-0000-00-051
15	11/20/27-0000-00-010
16	11/20/27-0000-00-020
17	11/20/27-0000-00-011
18	11/20/27-0000-00-012
19	11/20/27-0000-00-050
20	11/20/27-6135-00-011
21	11/20/27-6135-00-012
22	11/20/27-6135-00-011
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98	11/20/27-6135-00-011
99	11/20/27-6135-00-012
100	11/20/27-6135-00-011

Project Name:
CROSSROADS AT KELLY PARK - PHASE 2B

Jurisdiction:
CITY of APOPKA, FL

Sheet Title:
OVER EXCAVATION PLAN

Sheet No.:
C3.21

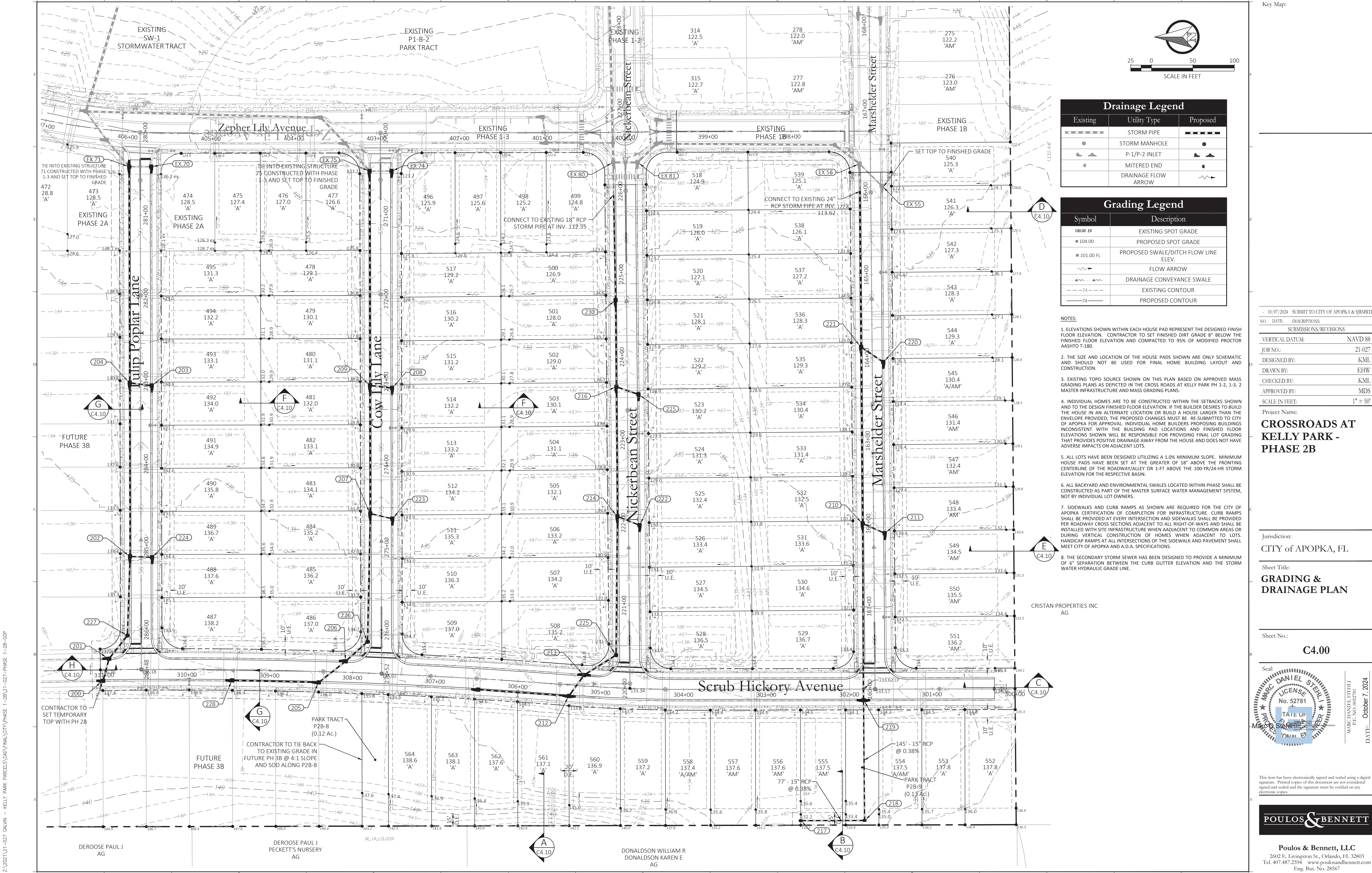
Seal:
MARC DANIEL STEHLI
LICENSE
No. 52781
STATE OF FLORIDA
Professional Engineer
DATE: **October 7, 2024**

This item has been electronically signed and sealed using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

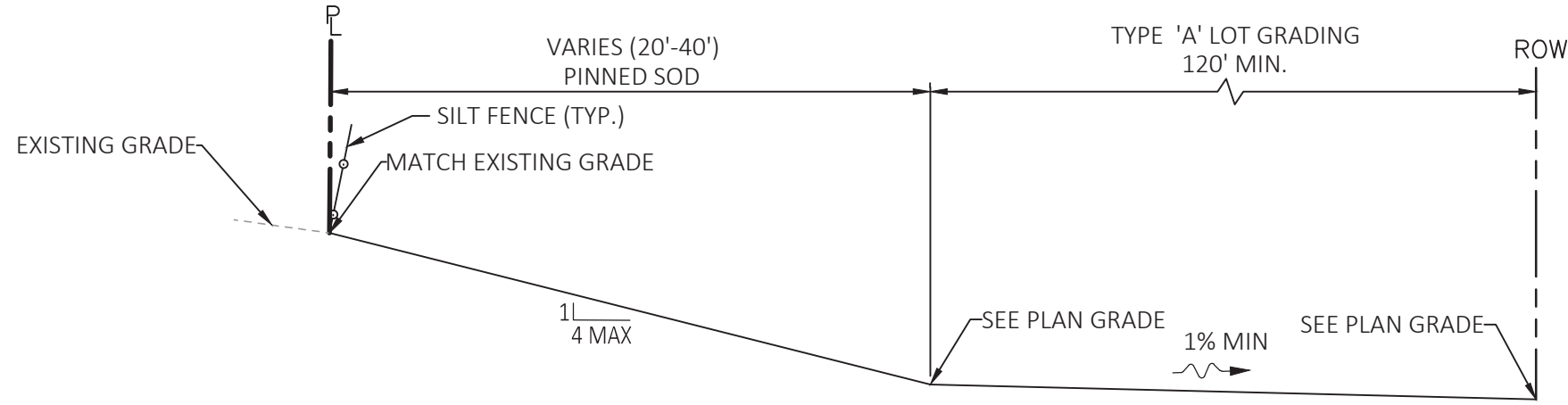
POULOS & BENNETT

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Eng. Bus. No. 28567

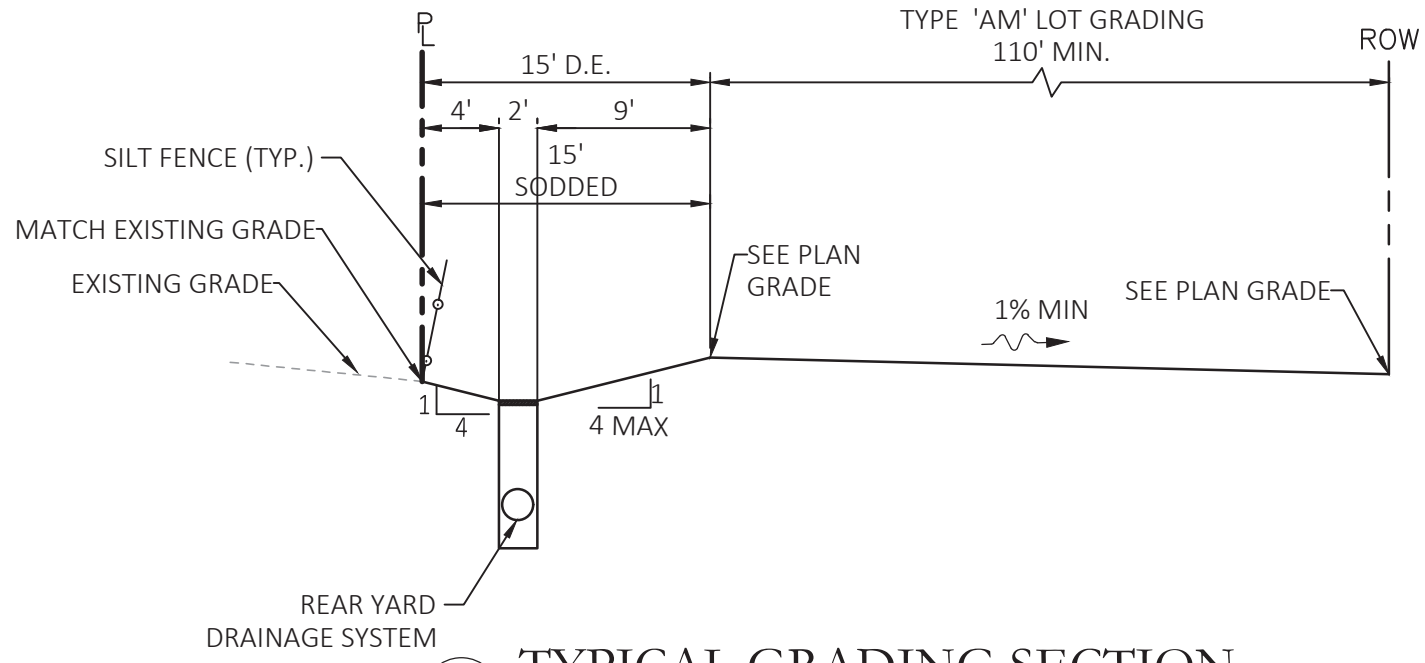
NOTE
THIS PLAN IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND REPRESENTS OVER EXCAVATION AS PROPOSED WITHIN THE CROSSROADS AT KELLY PARK PHASE 1-2, 1-3, 2 AND MASS GRADING CONSTRUCTION SITE PLANS. CONTRACTOR SHALL VERIFY THAT OVER EXCAVATION WITHIN PHASE 2B HAS BEEN PERFORMED AND SHALL NOTIFY ENGINEER IF OTHERWISE.



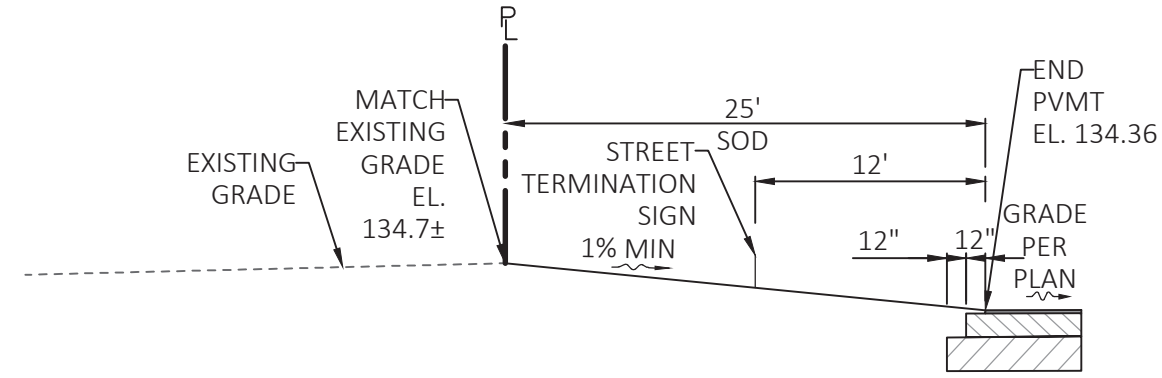
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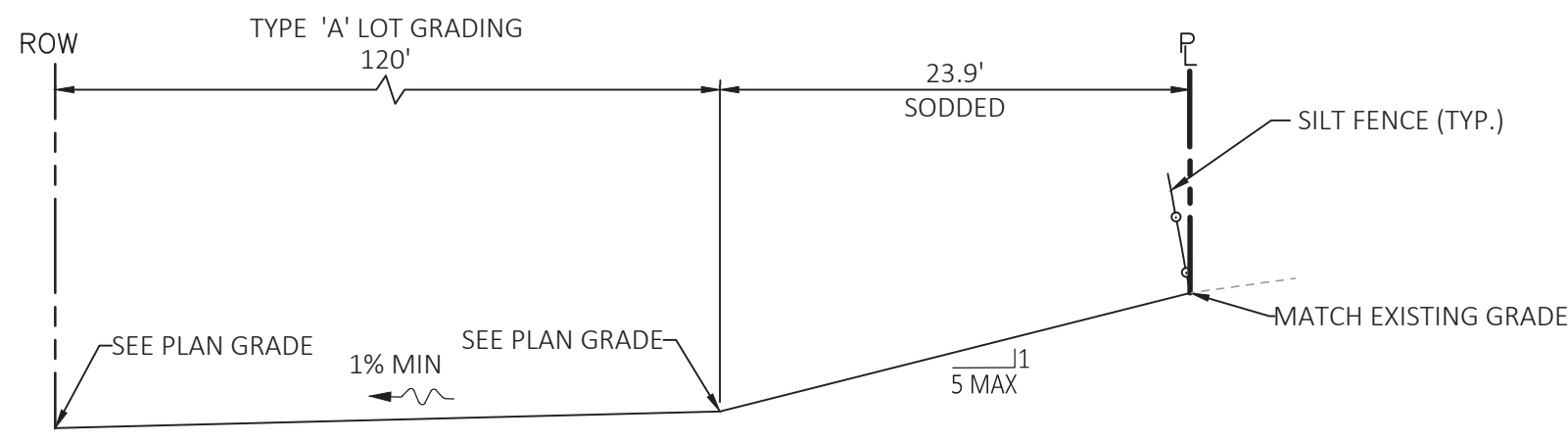
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N.T.S.



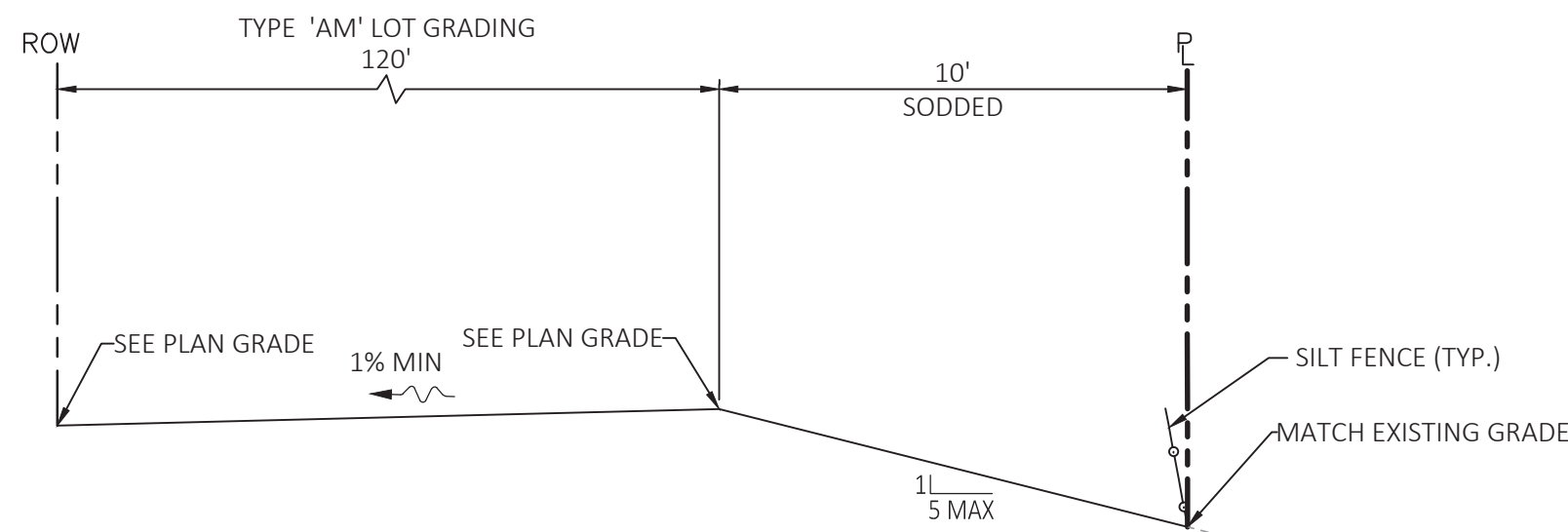
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N.T.S.



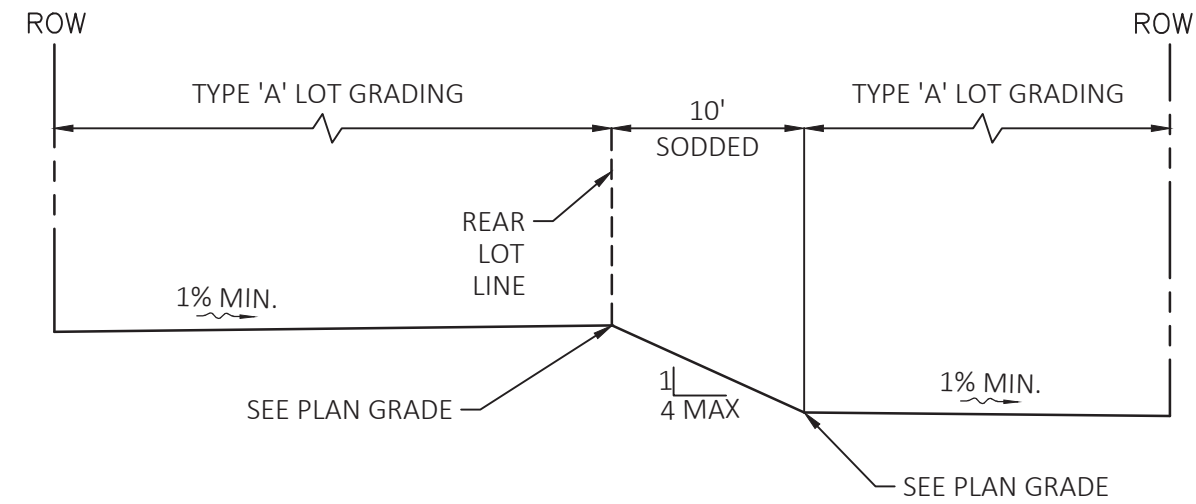
C STREET TERMINATION DETAIL
N.T.S.



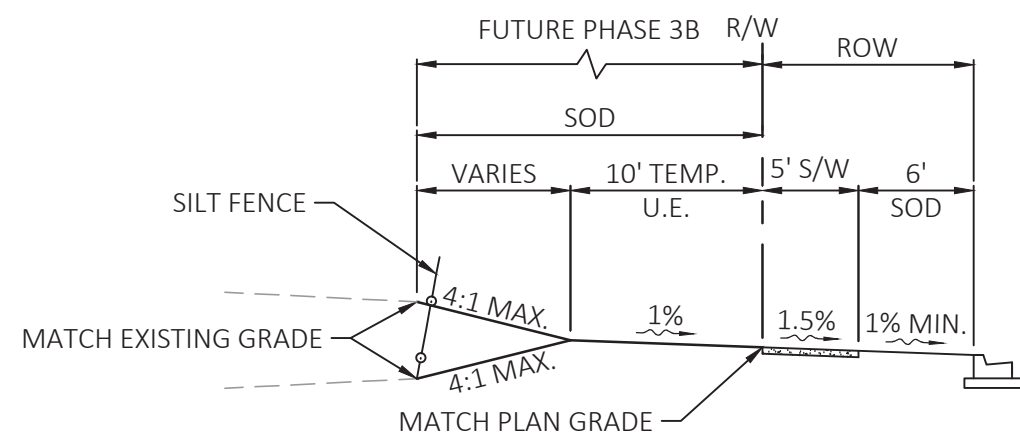
D TYPICAL GRADING SECTION
LOTS 540 - 545
N.T.S.



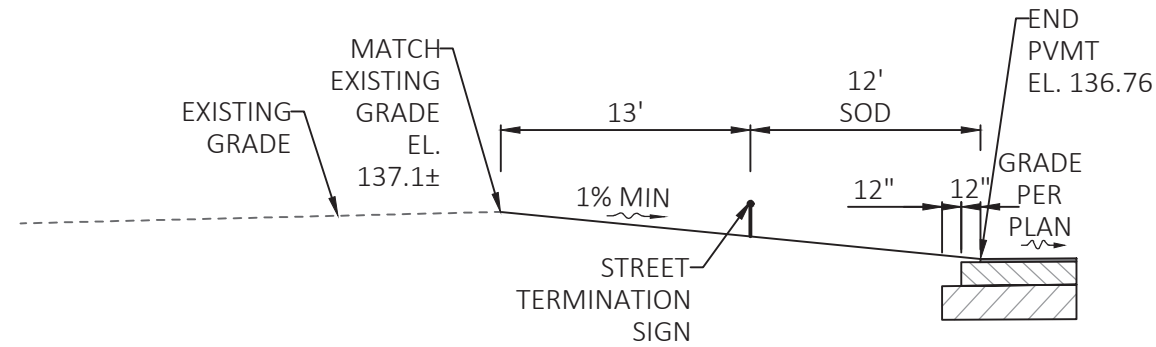
E TYPICAL GRADING SECTION
LOTS 545 - 551
N.T.S.



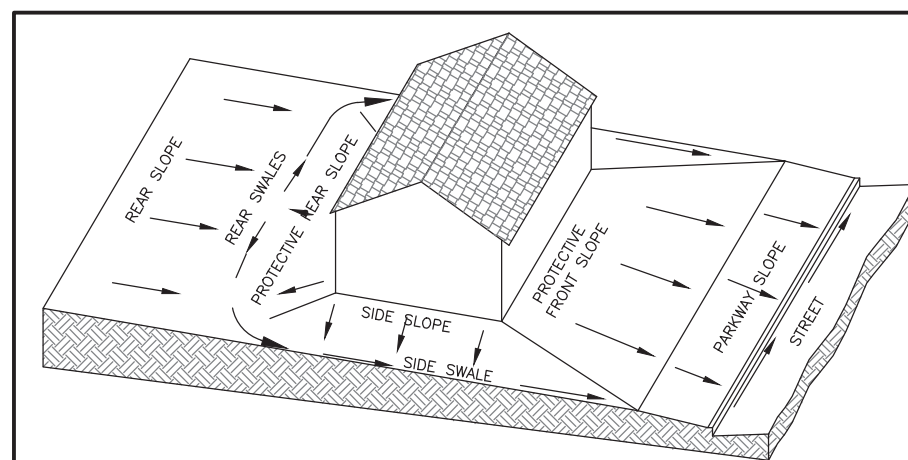
F TYPICAL GRADING SECTION
N.T.S.



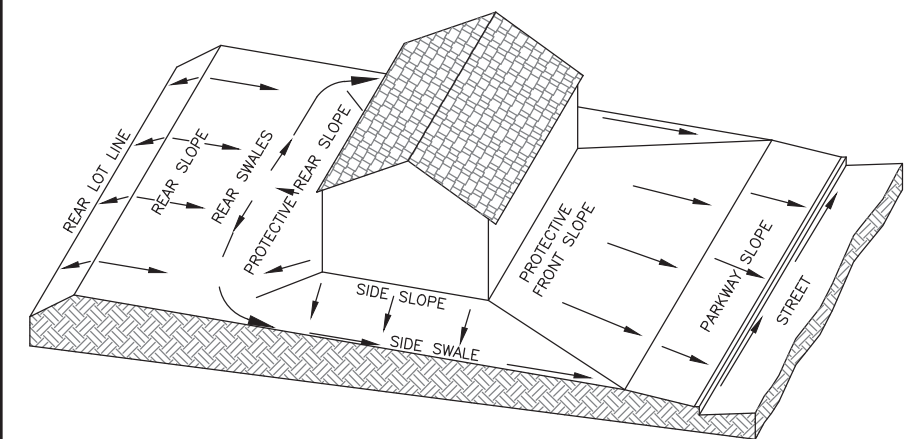
G TYPICAL GRADING SECTION
N.T.S.



H STREET TERMINATION DETAIL
N.T.S.



FHA 'A' LOT GRADING
N.T.S.



'AM' LOT GRADING
N.T.S.

Key Map:

10/07/2024		SUBMIT TO CITY OF APOPKA & SJRMWD	
NO.	DATE	DESCRIPTIONS:	
SUBMISSIONS/REVISIONS			
VERTICAL DATUM:		NAVD 88	
JOB NO.:		21-027	
DESIGNED BY:		KML	
DRAWN BY:		EHW	
CHECKED BY:		KML	
APPROVED BY:		MDS	
SCALE IN FEET:		N.T.S.	

Project Name:

CROSSROADS AT KELLY PARK - PHASE 2B

Jurisdiction:

CITY of APOPKA, FL

Sheet Title:

GRADING SECTIONS & DETAILS

Sheet No.:

C4.10

Seal:

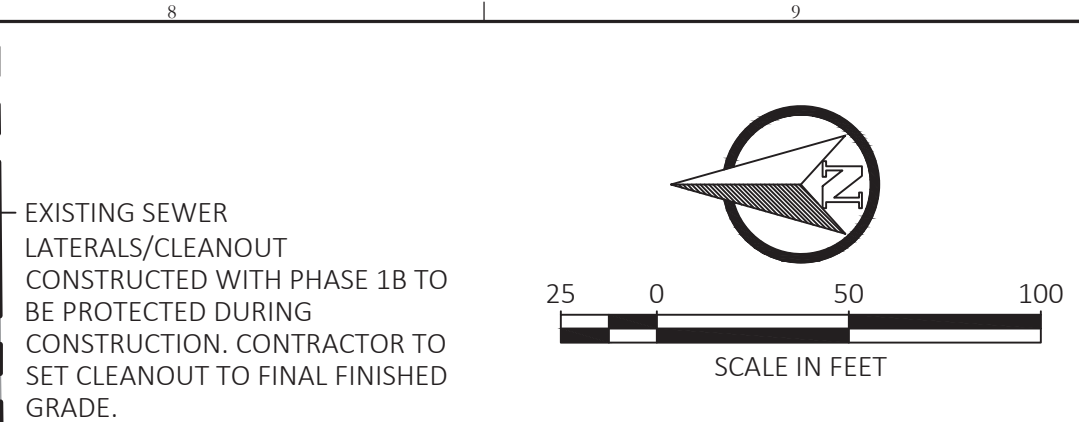
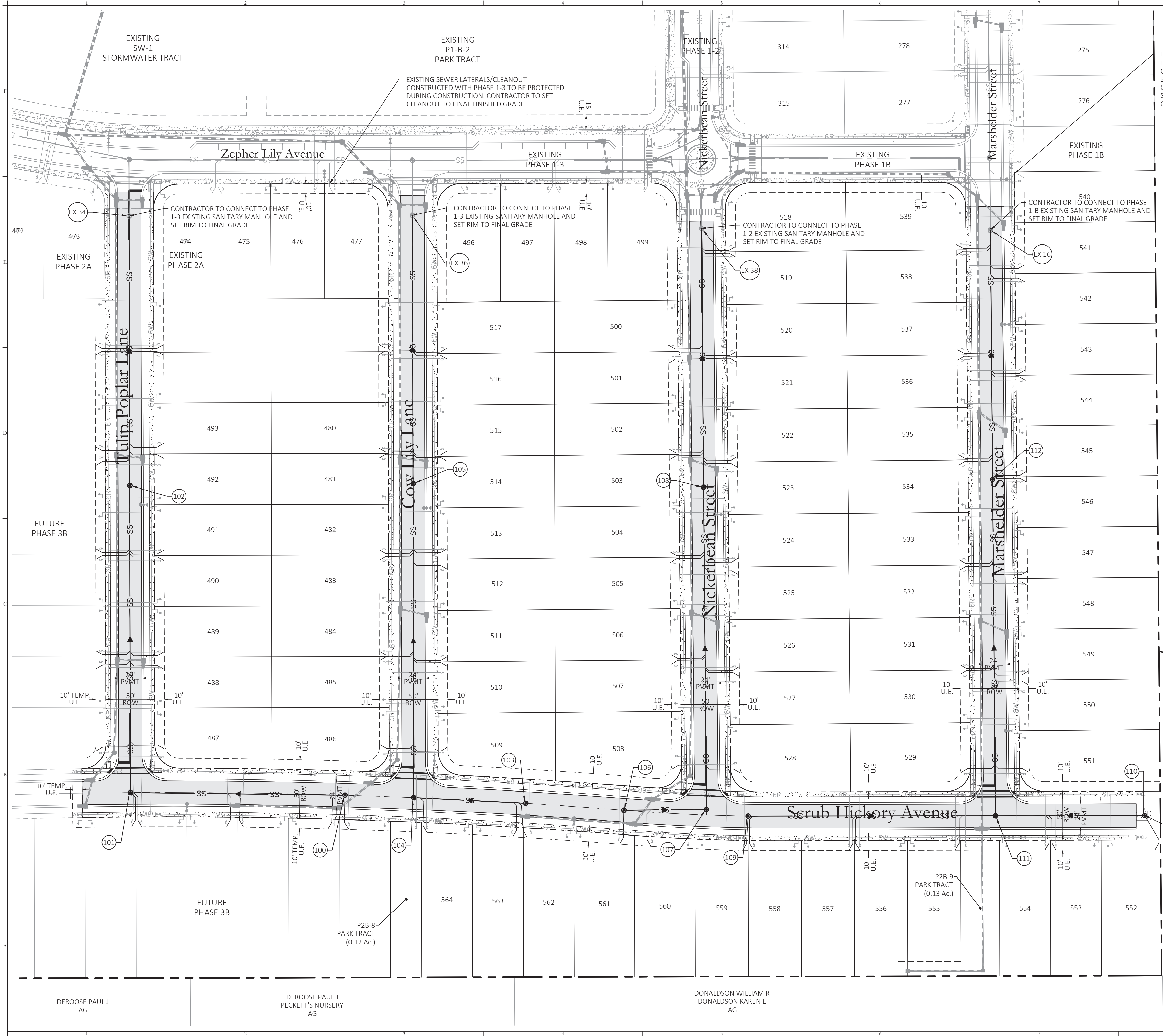


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Eng. Bus. No. 28567

Z:\2021\21-027 GALVIN - KELLY PARK PARCELS\040 FINAL\01\PHASE 1-2B\21-027-1-2B-WWCP



Utility Legend		
Existing	Utility Type	Proposed
--- WM ---	WATER MAIN (WM)	--- WM ---
--- RW ---	RECLAIM WATER MAIN (RW)	--- RW ---
--- SS ---	SANITARY SEWER (SS)	--- SS ---
	STORMWATER INLET	
	WATER SERVICE	
	RECLAIM WATER SERVICE	
	SANITARY SEWER LATERAL	
	GATE VALVE (G.V.)	
	TEE	
	BEND	
	REDUCER (RED.)	
	FIRE HYDRANT ASSEMBLY	
	ASSET I.D.	
	BT SAMPLE POINT	

- NOTES:
- AT THE TIME OF PLATTING A 10' WIDE DRAINAGE & UTILITY EASEMENT WILL BE PROVIDED ADJACENT TO ALL RIGHT-OF-WAY.
 - MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES.
 - UTILITY SYMBOLS ARE GRAPHICAL REPRESENTATIONS OF PROPOSED FACILITIES AND SHALL BE INSTALLED PER THE UTILITY PROVIDERS STANDARD DETAILS AND SPECIFICATIONS, LATEST EDITION.
 - ALL WATERMAIN, FORCEMAIN AND RECLAIM WATERMAIN TO BE PVC MATERIAL UNLESS OTHERWISE SPECIFIED ON THE PLAN.
 - TEMPORARY UTILITY EASEMENT ADJACENT TO RIGHT-OF-WAY SHALL BE PLATTED AS PERMANENT WITH THE DEVELOPMENT OF FUTURE PHASES.
 - ALL VALVES ARE TO BE LOCATED WITHIN CLOSE PROXIMITY OF TEE/CROSS WHENEVER POSSIBLE (WITHIN 24" PREFERRED). VALVES ARE NOT TO BE LOCATED WITHIN DETECTABLE WARNING MAT, SIDEWALK RAMP, OR CURB.

PROPERTY BOUNDARY (TYP.)

CRISTAN PROPERTIES INC
AG

FUTURE CONNECTION

Key Map:

NO.	DATE	DESCRIPTIONS
SUBMISSIONS/REVISIONS		
VERTICAL DATUM:		NAVD 88
JOB NO.:		21-027
DESIGNED BY:		KML
DRAWN BY:		EHW
CHECKED BY:		KML
APPROVED BY:		MDS
SCALE IN FEET:		1" = 50'

Project Name:
**CROSSROADS AT
KELLY PARK -
PHASE 2B**

Jurisdiction:
CITY of APOPKA, FL

Sheet Title:
**WASTEWATER
COLLECTION PLAN**

Sheet No.:
C5.00

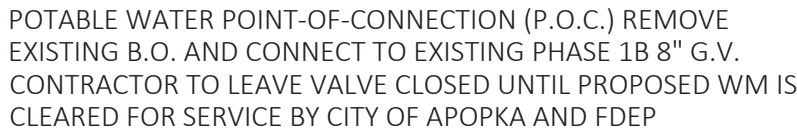
Seal:

DATE: October 7, 2024

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Utility Legend		
Existing	Utility Type	Proposed
	WATER MAIN (WM)	
	RECLAIM WATER MAIN (RW)	
	SANITARY SEWER (SS)	
	STORMWATER INLET	
	STORMWATER INLET	
	WATER SERVICE	
	RECLAIM WATER SERVICE	
	SANITARY SEWER LATERAL	
	GATE VALVE (G.V.)	
	TEE	
	BEND	
	REDUCER (RED.)	
	FIRE HYDRANT ASSEMBLY	
	ASSET I.D.	
	BT SAMPLE POINT	

1. AT THE TIME OF PLATTING A 10' WIDE DRAINAGE & UTILITY EASEMENT WILL BE PROVIDED ADJACENT TO ALL RIGHT-OF-WAY.

2. MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES.
3. UTILITY SYMBOLS ARE GRAPHICAL REPRESENTATIONS OF PROPOSED FACILITIES AND SHALL BE INSTALLED PER THE UTILITY PROVIDER'S STANDARD DETAILS AND SPECIFICATIONS, LATEST EDITION.
4. ALL WATERMAIN, FORCEMAIN AND RECLAIM WATERMAIN TO BE PVC MATERIAL UNLESS OTHERWISE SPECIFIED ON THE PLAN.
5. TEMPORARY UTILITY EASEMENT ADJACENT TO RIGHT-OF-WAY SHALL BE PLATTED AS PERMANENT WITH THE DEVELOPMENT OF FUTURE PHASES.
6. ALL VALVES ARE TO BE LOCATED WITHIN CLOSE PROXIMITY OF TEE/CROSS WHENEVER POSSIBLE (WITHIN 24" PREFERRED). VALVES ARE NOT TO BE LOCATED WITHIN DETECTABLE WARNING MAT, SIDEWALK RAMP, OR CURB.

- PROPERTY BOUNDARY (TYP.)

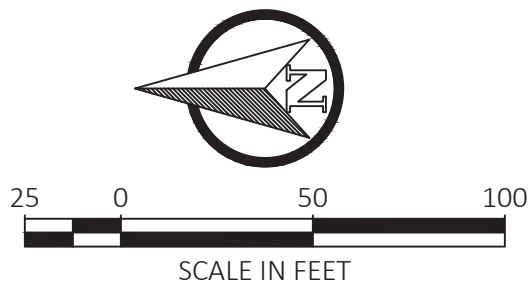
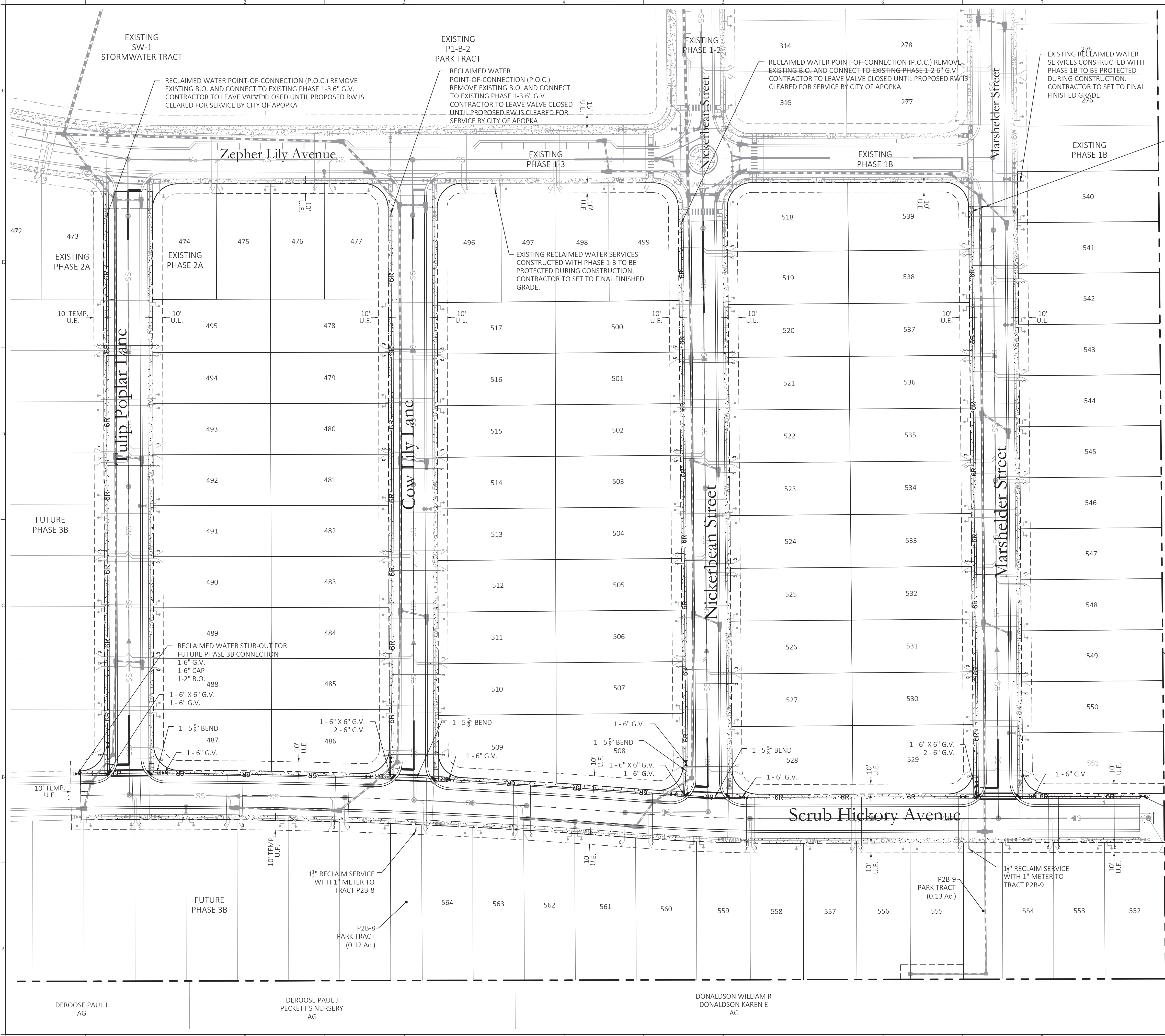
CRISTAN PROPERTIES INC
AG

POTABLE WATER STUB-OUT FOR
FUTURE CONNECTION
1-8" G.V.
1-8" CAP
1-2" B.O.

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Z:\2021\21-027 GALVIN - KELLY PARK PARCELS\CAD\FINAL\CITY\PHASE 1-2B\21-027-PHASE 1-2B-RWD.P



RECLAIMED WATER POINT-OF-CONNECTION (P.O.C.) REMOVE EXISTING B.O. AND CONNECT TO EXISTING PHASE 1B 6" G.V. CONTRACTOR TO LEAVE VALVE CLOSED UNTIL PROPOSED RW IS CLEARED FOR SERVICE BY CITY OF APOPKA

Utility Legend		
Existing	Utility Type	Proposed
--- WM --- WM ---	WATER MAIN (WM)	--- WM ---
--- RW --- RW ---	RECLAIM WATER MAIN (RW)	--- RW ---
--- SS --- SS ---	SANITARY SEWER (SS)	--- SS ---
	STORMWATER INLET	
	WATER SERVICE	
	RECLAIM WATER SERVICE	
	SANITARY SEWER LATERAL	
	GATE VALVE (G.V.)	
	TEE	
	BEND	
	REDUCER (RED.)	
	FIRE HYDRANT ASSEMBLY	
	ASSET I.D.	
	BT SAMPLE POINT	

NOTES:

- AT THE TIME OF PLATTING A 10' WIDE DRAINAGE & UTILITY EASEMENT WILL BE PROVIDED ADJACENT TO ALL RIGHT-OF-WAY.
- MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES.
- UTILITY SYMBOLS ARE GRAPHICAL REPRESENTATIONS OF PROPOSED FACILITIES AND SHALL BE INSTALLED PER THE UTILITY PROVIDERS STANDARD DETAILS AND SPECIFICATIONS, LATEST EDITION.
- ALL WATERMAIN, FORCEMAIN AND RECLAIM WATERMAIN TO BE PVC MATERIAL UNLESS OTHERWISE SPECIFIED ON THE PLAN.
- TEMPORARY UTILITY EASEMENT ADJACENT TO RIGHT-OF-WAY SHALL BE PLATTED AS PERMANENT WITH THE DEVELOPMENT OF FUTURE PHASES.
- ALL VALVES ARE TO BE LOCATED WITHIN CLOSE PROXIMITY OF TEE/CROSS WHENEVER POSSIBLE (WITHIN 24" PREFERRED). VALVES ARE NOT TO BE LOCATED WITHIN DETECTABLE WARNING MAT, SIDEWALK RAMP, OR CURB.

PROPERTY BOUNDARY (TYP.)

CRISTAN PROPERTIES INC
AG

RECLAIMED WATER STUB-OUT FOR FUTURE CONNECTION
1-6" G.V.
1-6" CAP
1-2" B.O.

Key Map:

10/07/2024 SUBMIT TO CITY OF APOPKA & SJRMWD

NO. DATE DESCRIPTIONS

SUBMISSIONS/REVISIONS

VERTICAL DATUM: NAVD 88

JOB NO.: 21-027

DESIGNED BY: KML

DRAWN BY: EHW

CHECKED BY: KML

APPROVED BY: MDS

SCALE IN FEET: 1" = 50'

Project Name:

CROSSROADS AT
KELLY PARK -
PHASE 2B

Jurisdiction:

CITY of APOPKA, FL

Sheet Title:

RECLAIMED WATER
DISTRIBUTION PLAN

Sheet No.:

C5.20

Seal:



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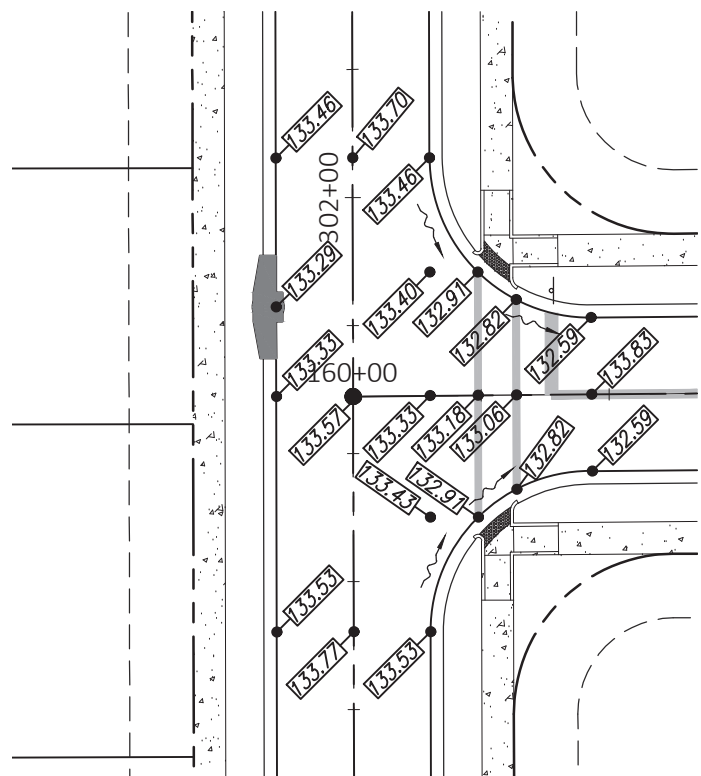
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Z:\2021\21-027 GALVIN - KELLY PARK PARCELS\CAD\FINAL\CTTY\PHASE 1-2B\21-027-PHASE 1-2B-PP MARSHELDER STREET

NOTES:

1. PROVIDE 3' MIN. HORIZONTAL SEPARATION BETWEEN SANITARY SEWER AND EDGE OF PAVEMENT.
2. PROVIDE 3' MIN HORIZONTAL SEPARATION BETWEEN WATERMAIN / RECLAIMED WATERMAIN AND STORMWATER DRAINAGE STRUCTURES.
3. PROVIDE 10' UTILITY EASEMENT ALONG ALL PROPOSED RIGHT-OF-WAY.
4. ALL UTILITIES (INCLUDING PUMP STATION IF APPLICABLE) LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
5. PROVIDE 36" MIN. COVER BETWEEN PROPOSED GRADE AND TOP OF POTABLE WATER, RECLAIMED WATER, AND FORCEMAIN PIPE.



Marshelder Street &
Scrub Hickory Avenue Intersection

1"=30'

For Cont. See
Sheet C6.04

For Cont. See
Sheet C6.04

Scrub Hickory
Avenue

Marshelder Street

RECLAIMED WATER POINT-OF-CONNECTION (P.O.C.) REMOVE
EXISTING B.O. AND CONNECT TO EXISTING PHASE 1B G.V.
CONTRACTOR TO LEAVE VALVE CLOSED UNTIL PROPOSED RW IS
CLEARED FOR SERVICE BY CITY OF APOPKA

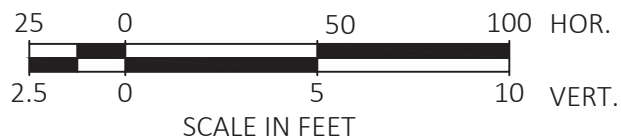
CONTRACTOR TO CONNECT TO PHASE
1-B EXISTING SANITARY MANHOLE
AND SET RIM TO FINAL GRADE

CONNECT TO EXISTING 24" RCP
STORM PIPE AT INV. 113.62

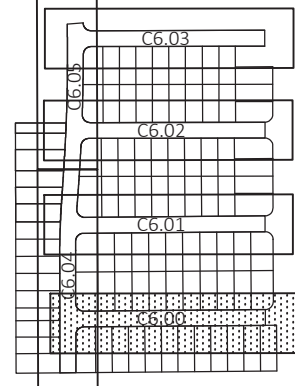
BEGIN PHASE 2B PAVEMENT
MARSHELDER STREET STA. 166+23.72

EXISTING RECLAIMED WATER
SERVICES CONSTRUCTED WITH
PHASE 1B TO BE PROTECTED
DURING CONSTRUCTION.
CONTRACTOR TO SET FINAL
FINISHED GRADE

POTABLE WATER POINT-OF-CONNECTION (P.O.C.) REMOVE
EXISTING B.O. AND CONNECT TO EXISTING PHASE 1B 8" G.V.
CONTRACTOR TO LEAVE VALVE CLOSED UNTIL PROPOSED WM IS
CLEARED FOR SERVICE BY CITY OF APOPKA AND FDEP



Key Map:



N.T.S

10/07/2024 SUBMIT TO CITY OF APOPKA & SJRMWD

NO. DATE DESCRIPTIONS

SUBMISSIONS/REVISIONS

VERTICAL DATUM: NAVD 88

JOB NO.: 21-027

DESIGNED BY: KML

DRAWN BY: EHW

CHECKED BY: KML

APPROVED BY: MDS

SCALE IN FEET: 1" = 50'

Project Name:

CROSSROADS AT
KELLY PARK -
PHASE 2B

Jurisdiction:

CITY of APOPKA, FL

Sheet Title:

PLAN & PROFILE
MARSHELDER
STREET

Sheet No.:

C6.00

Seal:

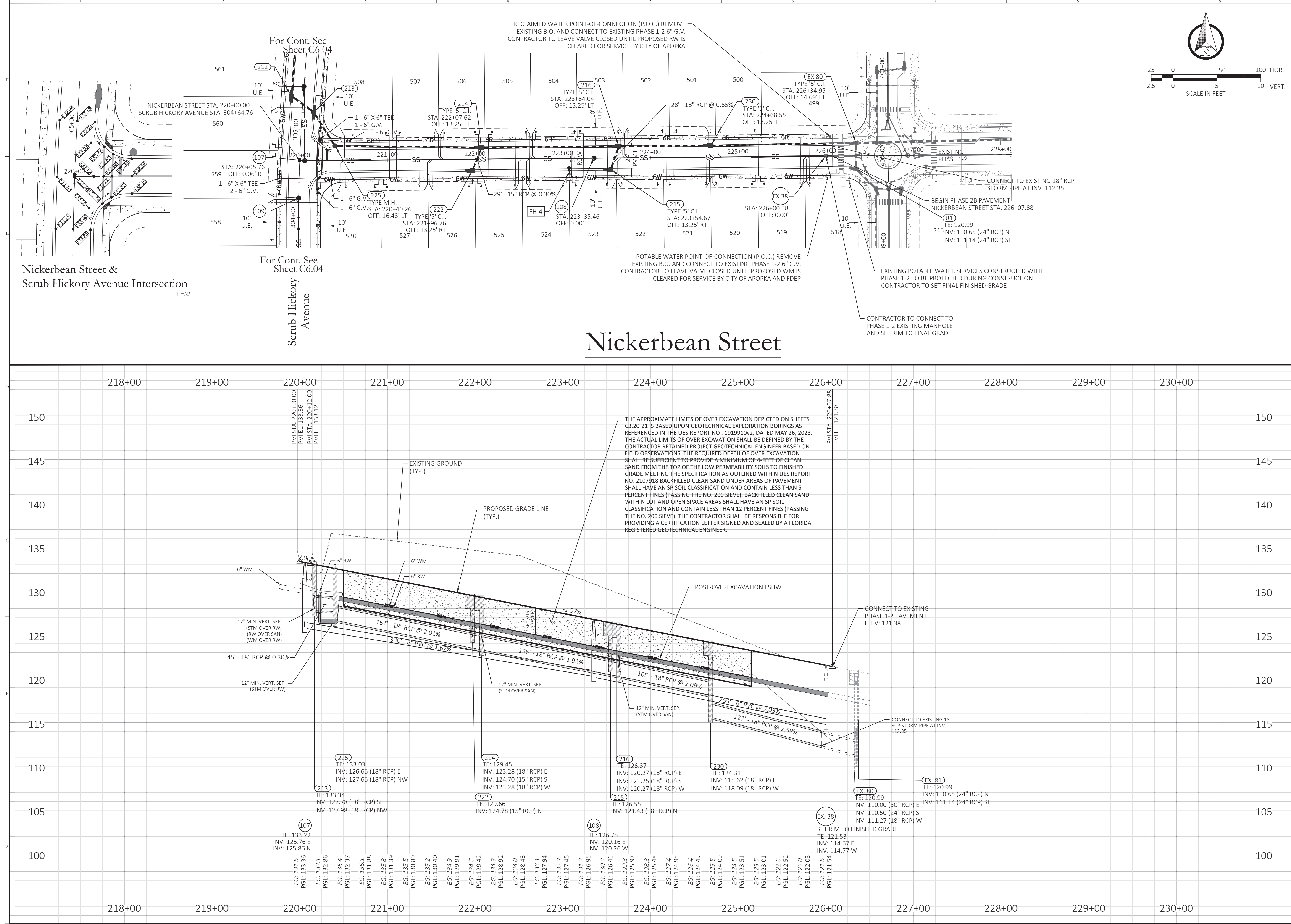


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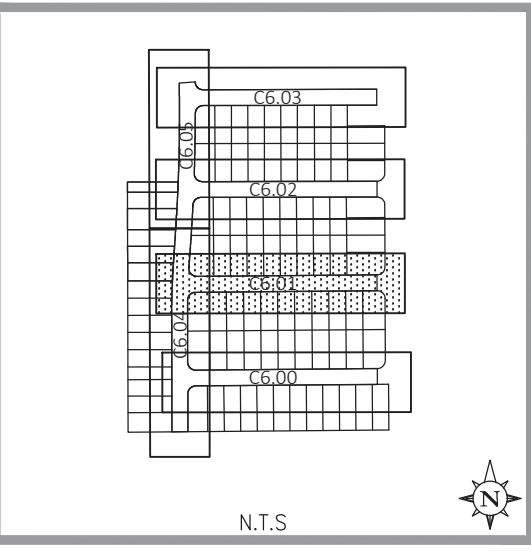
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Z:\2021\21-027 GALWIN - KELLY PARK PARCELS\CAD\FINAL\CITY\PHASE 1-2B\21-027-PHASE 1-2B-PP NICKERBEAN STREET



Key Map:



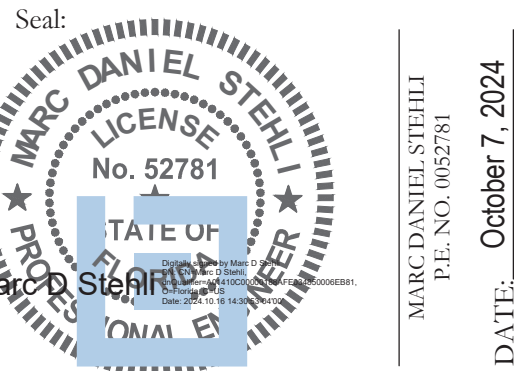
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JOB NO.:	21-027	
DESIGNED BY:	KML	
DRAWN BY:	EHW	
CHECKED BY:	KML	
APPROVED BY:	MDS	
SCALE IN FEET:	1" = 50'	

Project Name:
**CROSSROADS AT
KELLY PARK -
PHASE 2B**

Jurisdiction:
CITY of APOPKA, FL

Sheet Title:
**PLAN & PROFILE
NICKERBEAN
STREET**

Sheet No.:
C6.01



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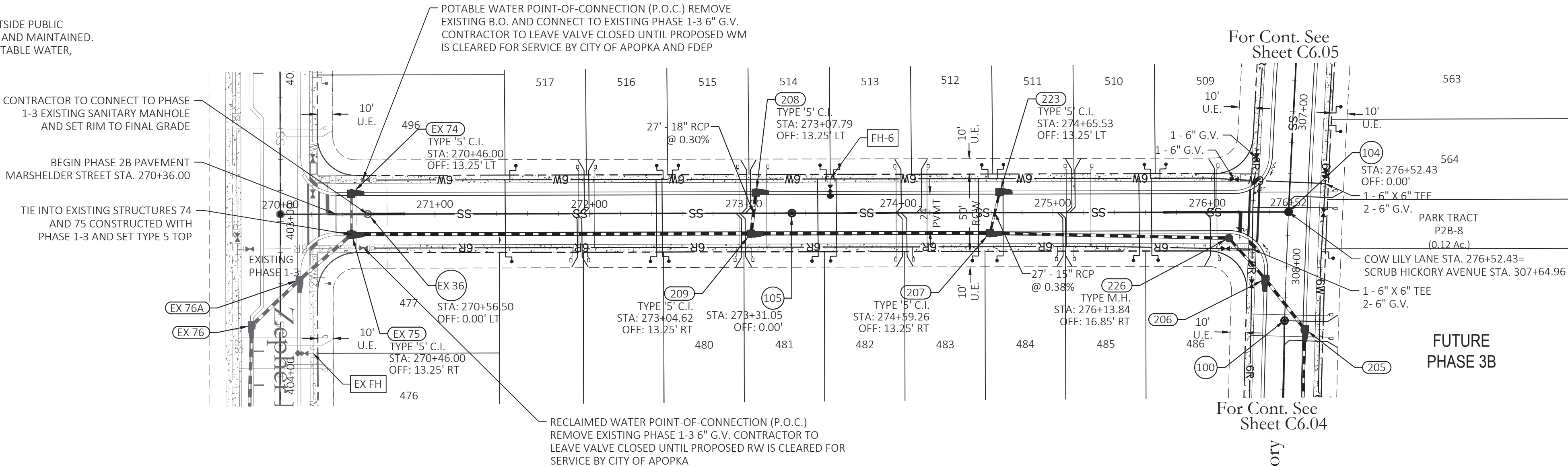
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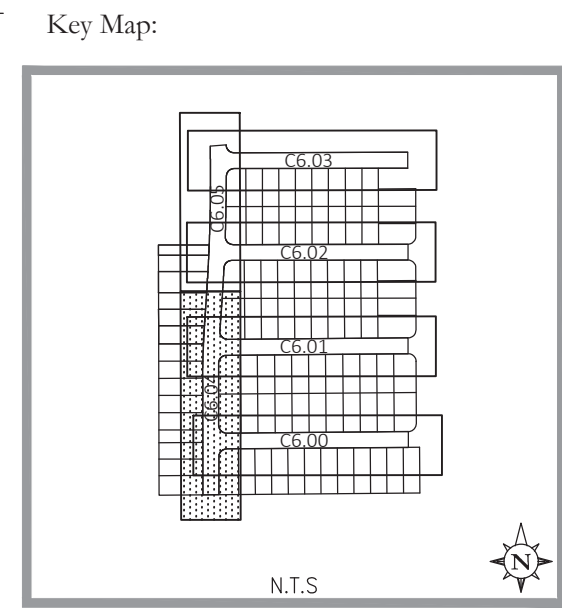
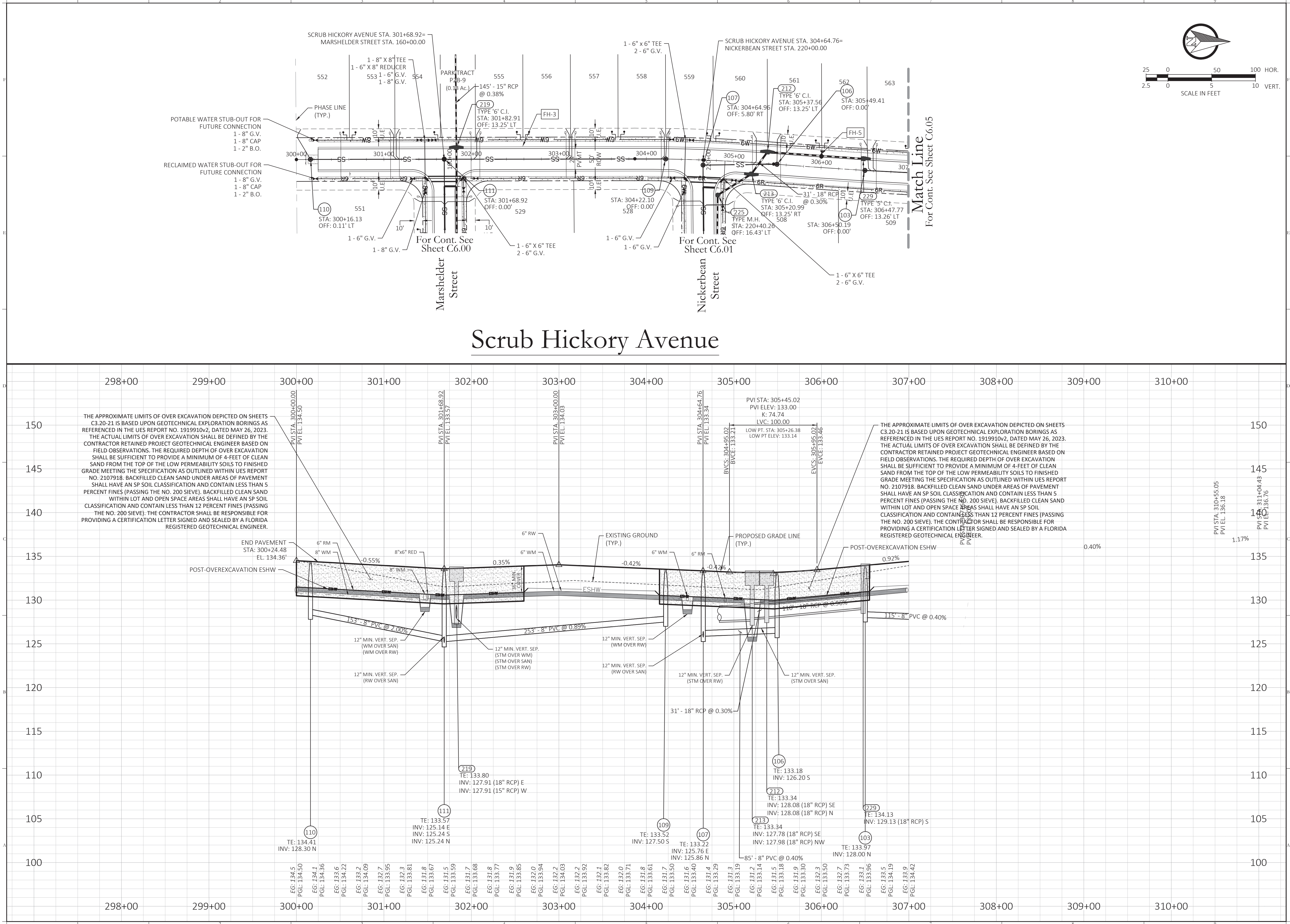
Z:\2021\21-027 GALVIN - KELLY PARK PARCELS\CAD\FINAL\CITY\PHASE 1-2B\21-027-PHASE 1-2B-PP COW LILY LANE

NOTES:

1. PROVIDE 3' MIN. HORIZONTAL SEPARATION BETWEEN SANITARY SEWER AND EDGE OF PAVEMENT.
2. PROVIDE 3' MIN HORIZONTAL SEPARATION BETWEEN WATERMAIN / RECLAIMED WATERMAIN AND STORMWATER DRAINAGE STRUCTURES.
3. PROVIDE 10' UTILITY EASEMENT ALONG ALL PROPOSED RIGHT-OF-WAY.
4. ALL UTILITIES (INCLUDING PUMP STATION IF APPLICABLE) LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
5. PROVIDE 36" MIN. COVER BETWEEN PROPOSED GRADE AND TOP OF POTABLE WATER, RECLAIMED WATER, AND FORCEMAIN PIPE.



Z:\2021\21-027 GALWIN - KELLY PARK PARCELS\CAD\FINAL\CITY\PHASE 1-2B\21-027-PHASE 1-2B-PP SCRUB HICKORY AVENUE



NO.	DATE	DESCRIPTIONS
SUBMISSIONS/REVISIONS		
VERTICAL DATUM:	NAVD 88	
JOB NO.:	21-027	
DESIGNED BY:	KML	
DRAWN BY:	EHW	
CHECKED BY:	KML	
APPROVED BY:	MDS	
SCALE IN FEET:	1" = 50'	

CROSSROADS AT KELLY PARK - PHASE 2B

Jurisdiction:
CITY of APOPKA, FL

Sheet Title:
**PLAN & PROFILE
SCRUB HICKORY
AVENUE**

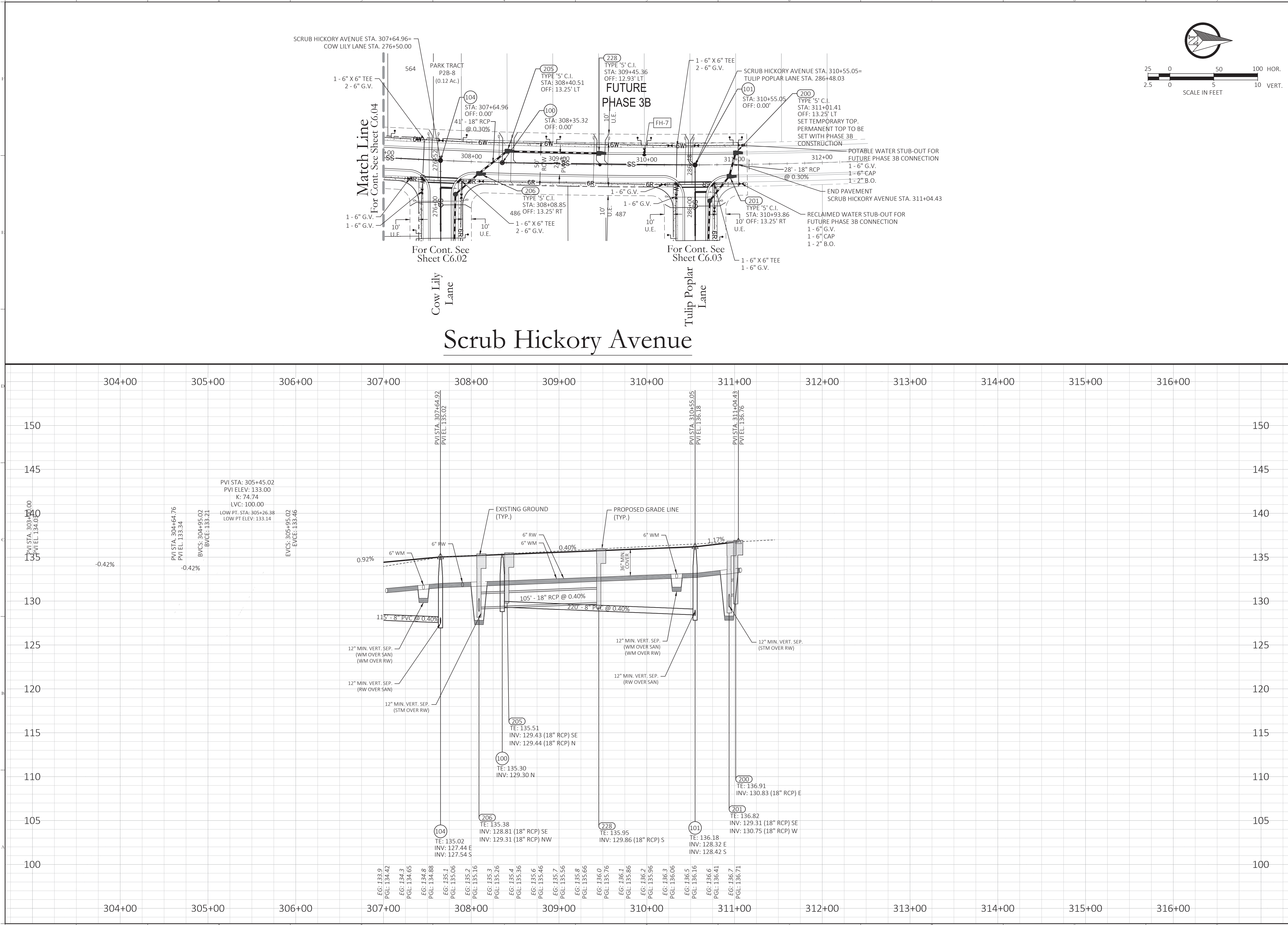
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C6.04

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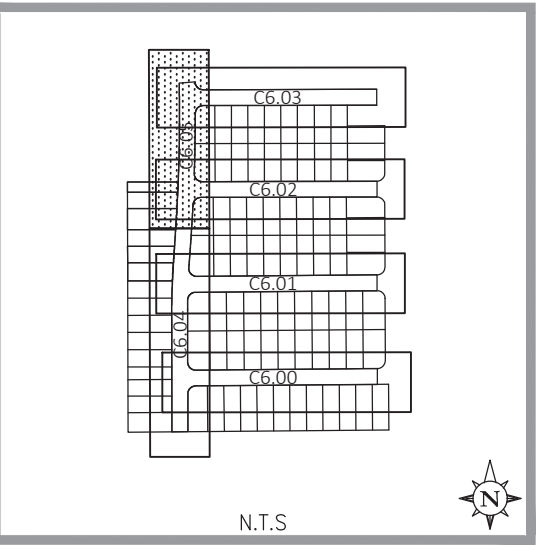
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Z:\2021\21-027 GALIN - KELLY PARK PARCELS\CAD\FINAL\CITY\PHASE 1-2B\21-027-PHASE 1-2B-PP SCRUB HICKORY AVENUE



Key Map:



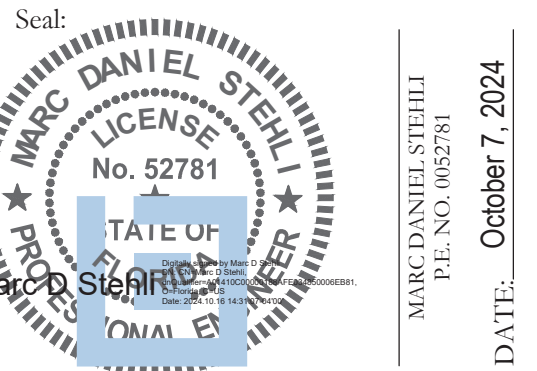
NO.	DATE	DESCRIPTIONS
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JOB NO.:	21-027	
DESIGNED BY:	KML	
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CHECKED BY:	KML	
APPROVED BY:	MDS	
SCALE IN FEET:	1" = 50'	

CROSSROADS AT KELLY PARK - PHASE 2B

Jurisdiction:
CITY of APOPKA, FL

Sheet Title:
**PLAN & PROFILE
SCRUB HICKORY
AVENUE**

Sheet No.:
C6.05

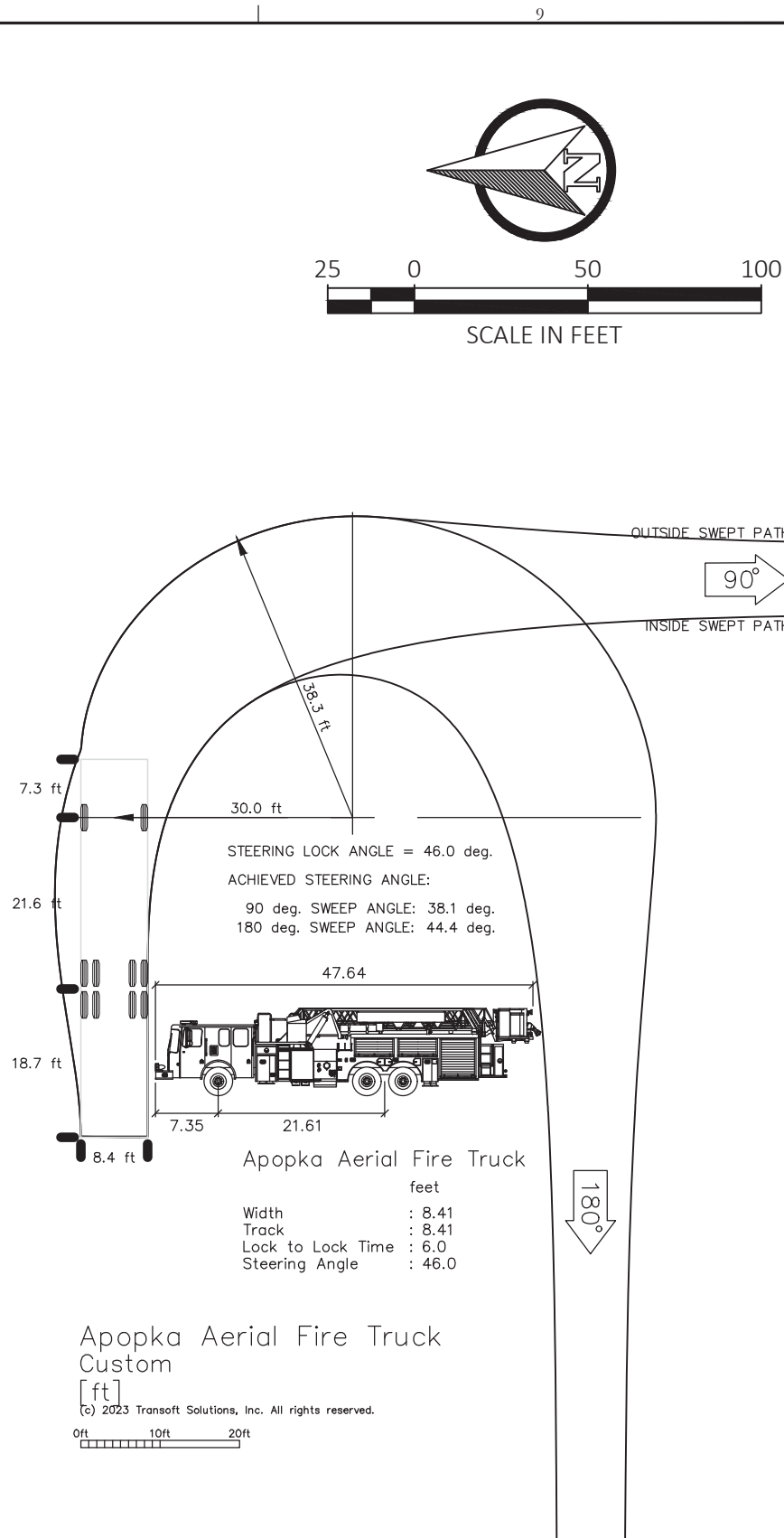
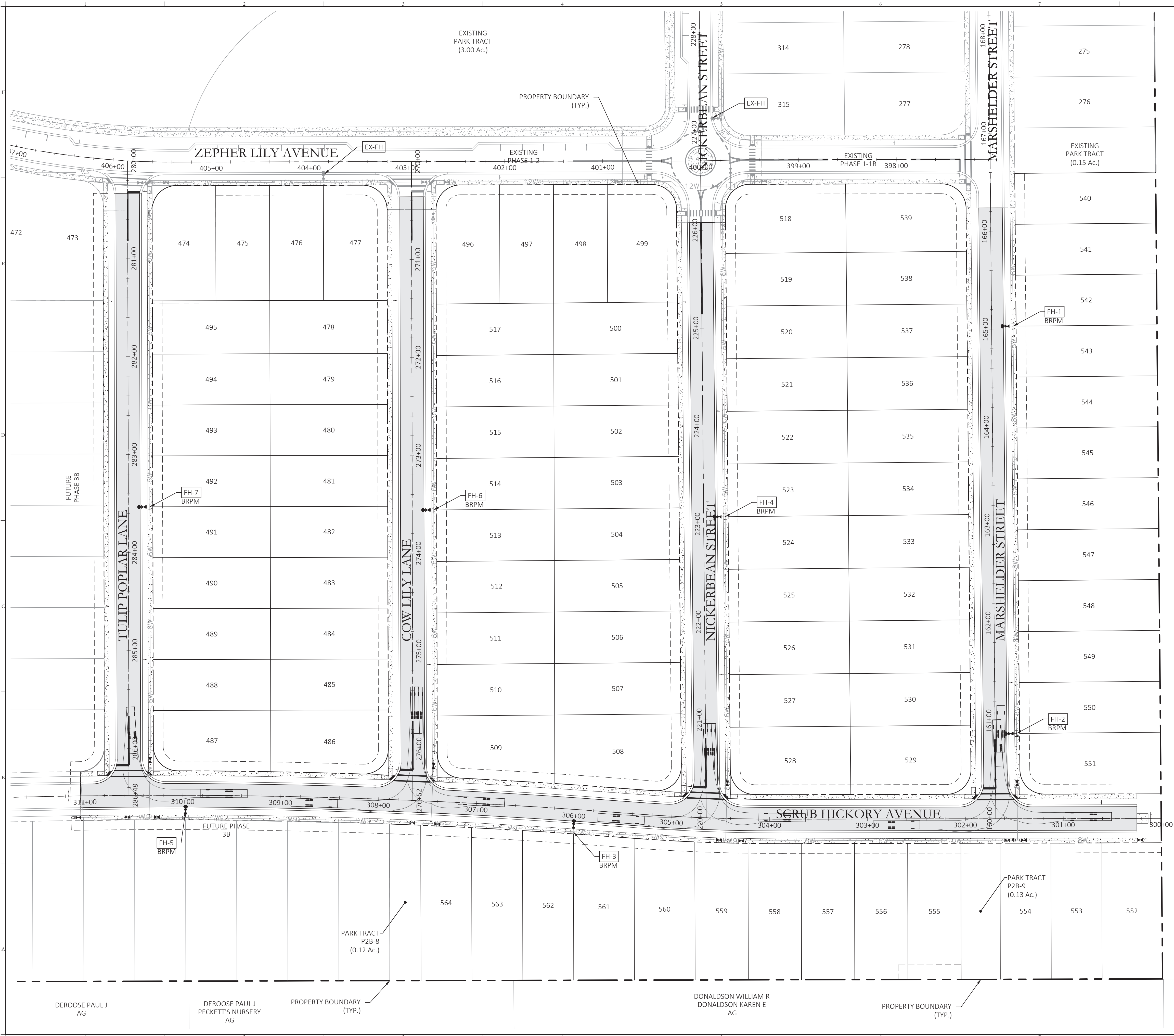


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Z:\2021\21-027 GALVIN - KELLY PARK PARCELS\CD\FINAL\CITY\PHASE 1-2B\21-027-PHASE 1-2B-FPP



NOTES:

1. FIRE HYDRANTS SHALL BE INSTALLED SO THAT THE DESIGN AND CALCULATIONS MEET THE REQUIREMENTS IN THE CITY OF APOPKA SUBDIVISION REGULATIONS AND THE FFPC 7TH EDITION AND NFPA DWELLING UNITS. ALLEYS HAVE BEEN DESIGNED FOR FIRE ACCESS WHERE REQUIRED. ACCESS SHALL BE IN ACCORDANCE WITH CHAPTER 18 OF THE FFPC 7TH EDITION AND NFPA 1(2018) WITH FLORIDA AMENDMENTS.
2. FIRE HYDRANTS SHALL BE PROVIDED FOR DETACHED ONE- AND TWO- FAMILY DWELLINGS IN ACCORDANCE WITH BOTH OF THE FOLLOWING:
3.1 THE MAXIMUM DISTANCE TO A FIRE HYDRANT FROM THE CLOSEST POINT ON THE BUILDING SHALL NOT EXCEED 250 FEET
3.2 THE MAXIMUM DISTANCE BETWEEN FIRE HYDRANTS SHALL NOT EXCEED 500 FEET.
3. FIRE HYDRANTS SHALL BE PROVIDED FOR BUILDINGS OTHER THAN DETACHED ONE- AND TWO-FAMILY DWELLINGS IN ACCORDANCE WITH BOTH OF THE FOLLOWING:
4.1 THE MAXIMUM DISTANCE TO A FIRE HYDRANT FROM THE CLOSEST POINT ON THE BUILDING SHALL NOT EXCEED 250 FEET.
4.2 THE MAXIMUM DISTANCE BETWEEN FIRE HYDRANTS SHALL NOT EXCEED 500 FEET.
4. NEEDED FIRE FLOW FOR SINGLE FAMILY DWELLINGS SHALL BE AS FOLLOWS: HOMES 5,000 S.F. OR LESS 1,000 GPM; HOMES EXCEEDING 5,000 S.F. SHALL PROVIDE FIRE FLOW IN ACCORDANCE WITH TABLE 18.4.5.2. 1OF THE FFPC 7TH EDITION AND NFPA 1(2018) WITH FLORIDA AMENDMENTS. REDUCTION OF FIRE FLOW MAY BE PERMITTED IF DWELLING IS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM OR SEPARATED FROM OTHER STRUCTURES BY 30 FEET BUT IN NO CASE SHALL THE FIRE FLOW BE LESS THAN 500 GPM PER 18.4.5 FFPC 7TH EDITION AND NFPA 1(2018) WITH FLORIDA AMENDMENTS.
5. DURING CONSTRUCTION, WHEN COMBUSTIBLES ARE BROUGHT ON TO THE SITE, ACCESS ROADS AND A SUITABLE TEMPORARY OR PERMANENT SUPPLY OF WATER ACCEPTABLE TO THE WIRE DEPARTMENT SHALL BE PROVIDED AND MAINTAINED PER FFPC 7TH EDITION AND N GFA 1(2018) WITH FLORIDA AMENDMENTS.
6. ALL PRIMARY BUILDING STRUCTURES SHALL BE LOCATED ON LOTS SUCH THAT THE FIRE DEPARTMENT ACCESS ROAD IS WITHIN 50 FT. OF AN EXTERIOR DOOR IN ACCORDANCE WITH 18.2.3.2. 1OF THE FFPC 7TH EDITION AND NFPA 1(2018) WITH FLORIDA AMENDMENTS
7. STREET DESIGN CAN ACCOMMODATE LARGE TRUCKS, FIRE TRUCKS, MOVING COMPANY SEMITRUCKS WB-40 AND GARBAGE TRUCKS AND BASED ON THE CENTERLINE MINIMUM RADIUS OF 50.0'.
8. ALL ROUNDABOUTS SHALL INCORPORATE A CONCRETE MOUNTABLE APRON TO ALLOW FIRE TRUCKS TO MANEUVER THROUGH THE INTERSECTION.
9. FIRE HYDRANTS SHALL BE LOCATED 5 FEET TO 7 FEET FROM THE EDGE OF PAVEMENT TO CENTER OF HYDRANTS
10. CONTRACTOR SHALL INSTALL BLUE REFLECTIVE PAVEMENT MARKING IN THE CENTER OF THE ADJACENT TRAVEL LANE IN FRONT OF ALL FIRE HYDRANTS.

Key Map:

NO.	DATE	DESCRIPTIONS
SUBMISSIONS/REVISIONS		
VERTICAL DATUM:	NAVD 88	
JOB NO.:	21-027	
DESIGNED BY:	KML	
DRAWN BY:	EHW	
CHECKED BY:	KML	
APPROVED BY:	MDS	
SCALE IN FEET:	1" = 50'	

CROSSROADS AT KELLY PARK - PHASE 2B

Jurisdiction:
CITY of APOPKA, FL

Sheet Title:
FIRE PROTECTION PLAN

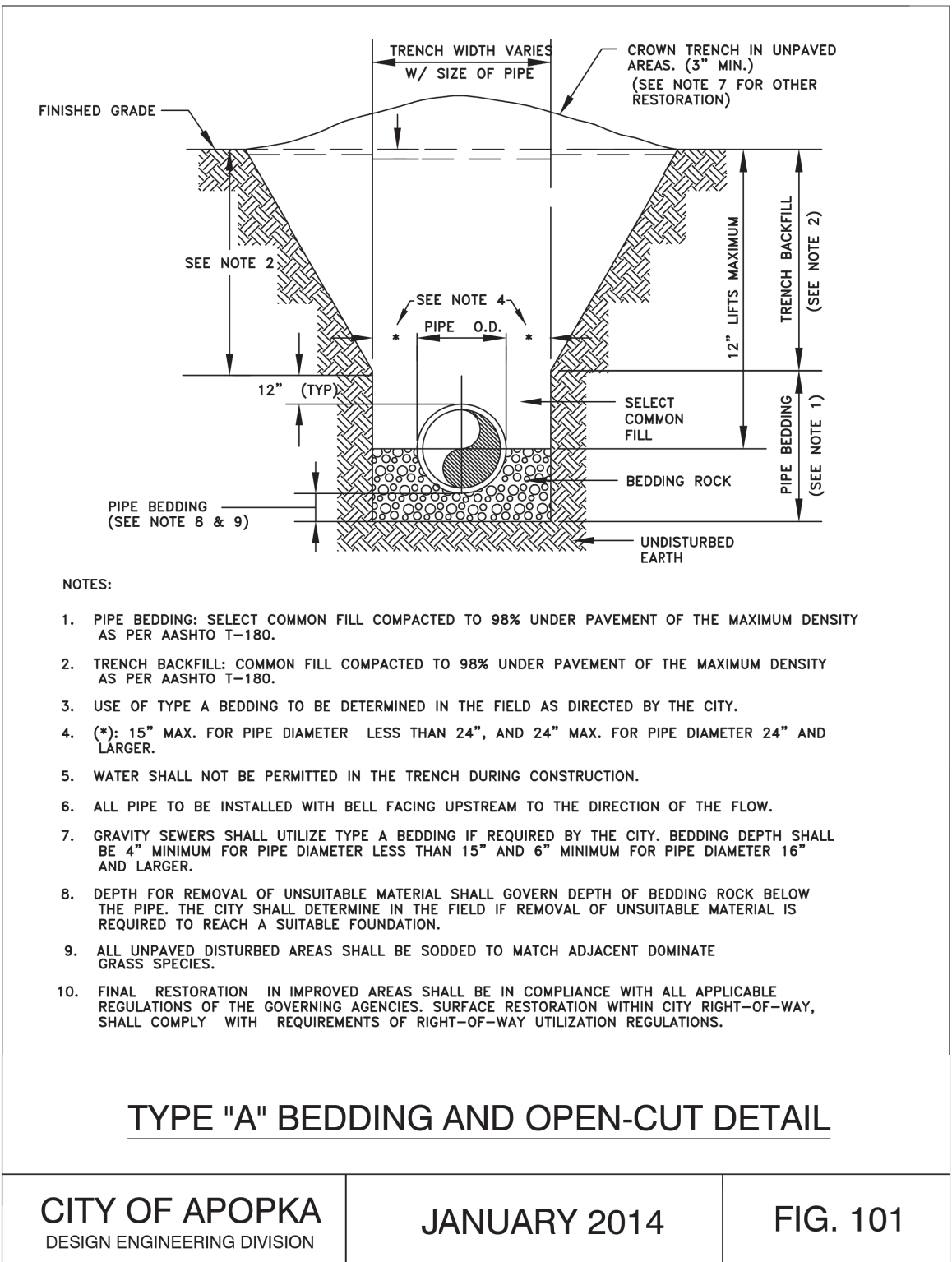
Sheet No.:
C7.00

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MARC DANIEL STEHLI
LICENSE No. 52781
STATE OF FLORIDA
Professional Engineer
DATE: October 7, 2024

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Tel. 407.487.2594 www.poulosandbennett.com
Eng. Bus. No. 28567



MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S). *												
	PIPE SIZE											
	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"	48"	
90° BEND					61	67	73	84	100	114		
45° BEND					26	28	31	35	42	48		
22-1/2° BEND					13	14	15	17	20	23		
11-1/4° BEND					6	7	8	9	10	12		
TEE**					52	62	74	95	124	152		
REDUCER (ONE SIZE SMALLER)					48	25	25	47	66	66		
DEAD END					111	123	135	157	188	218		

- ** ONLY RESTRAIN BRANCH PIPE FOR TEES. ONLY RESTRAIN LARGER PIPE FOR REDUCERS**
**** LENGTH ALONG RUN ASSUMED TO BE 18'**
- NOTES:
1. FITTINGS SHALL BE RESTRAINED JOINT TYPE. FM FITTINGS TO BE LINED WITH PROTECTO 401.
 2. INSTALL FULL LENGTHS OF PIPE WITH TOTAL LENGTH CONTAINING ONLY RESTRAINED JOINTS EQUAL TO OR GREATER THAN LENGTH SHOWN IN TABLE.
 3. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
 4. IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
 5. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, WITH THE FOLLOWING ASSUMPTIONS:

TYPE OF PIPE:		
WORKING PRESSURE:	150 P.S.I.**	** FM = 150 P.S.I. /
SOIL DESIGNATION:	SW(SAND SILT)	WM OR RWM = 150 P.S.I.
LAYING CONDITIONS:	3	
 6. VALUES NOT LISTED IN THE TABLE TO BE COMPLETED BY THE ENGINEER.

RESTRAINED PIPE TABLE (DI)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 106
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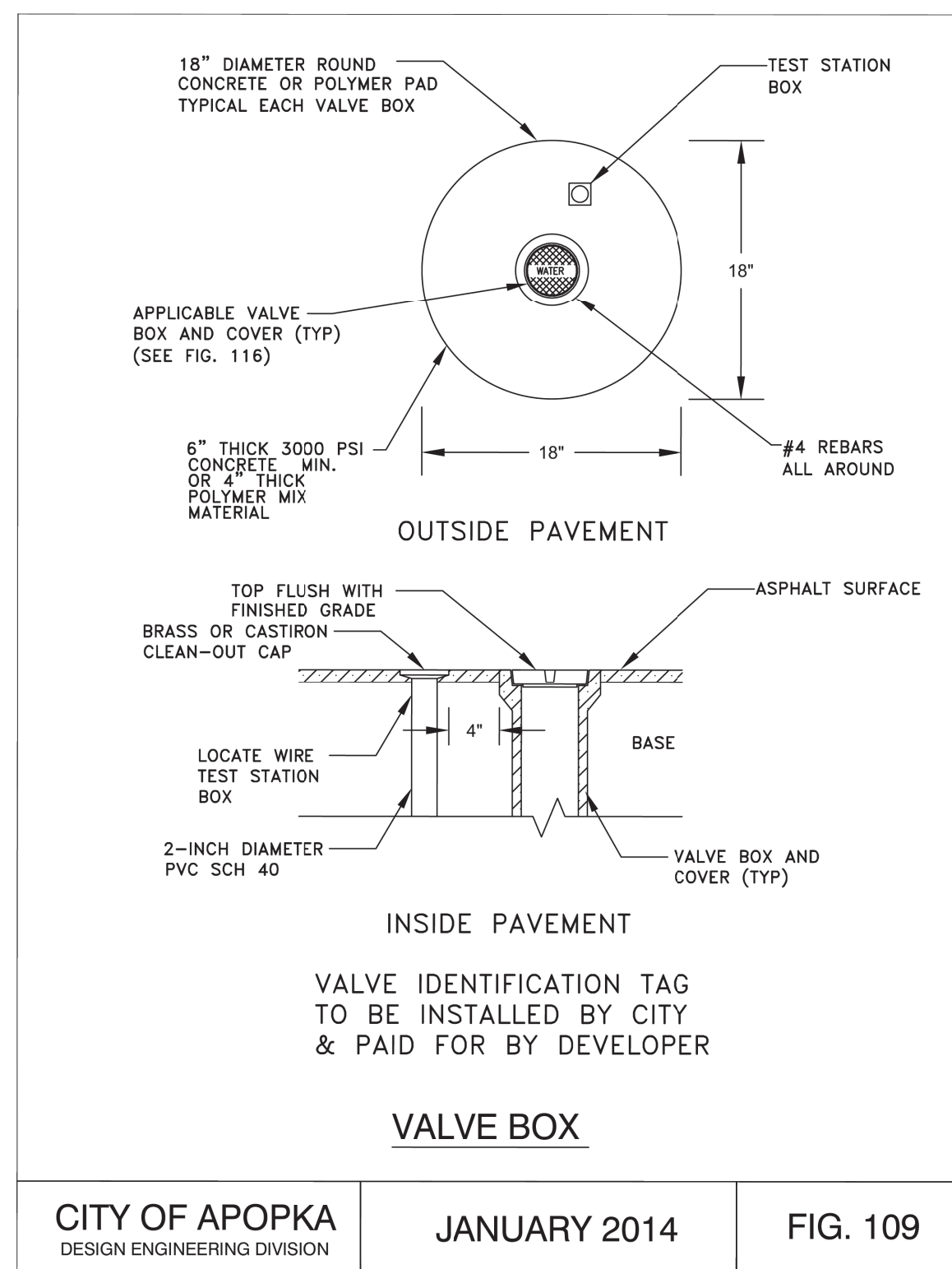


Diagram illustrating the installation of a 2" ARV (Air Release Valve) assembly, showing components and connections.

Components and Connections:

- 1- 1/2" PIPE, PVC (LENGTH AS REQUIRED)
- 1- 1/2" 90° PVC ELBOW
- 1- 1/2" PIPE, PVC (LENGTH AS REQUIRED)
- 316 SS SUPPORT
- 36" X 36" X 6" DEEP CONCRETE PAD
- #57 STONE
- 2" AIR OR AIR/VACUUM RELEASE VALVE
- 2" TEE
- 2" X 1" REDUCER
- 1" SHORT NIPPLE
- 1" CURB STOP
- 2" X 4" NIPPLE
- 2" BALL VALVE
- VALVE BOX
- MIN 24" COVER
- 2" PE TUBING
- 2" ELBOW
- SLOPE
- 2" 316 SS NIPPLE
- 2" BRASS CURB STOP W/ COMPRESSION CONNECTION
- 2" SADDLE TAP
- 2" BRASS CURB STOP W/ COMPRESSION CONNECTION
- VARIES - SEE NOTE 2

Table:

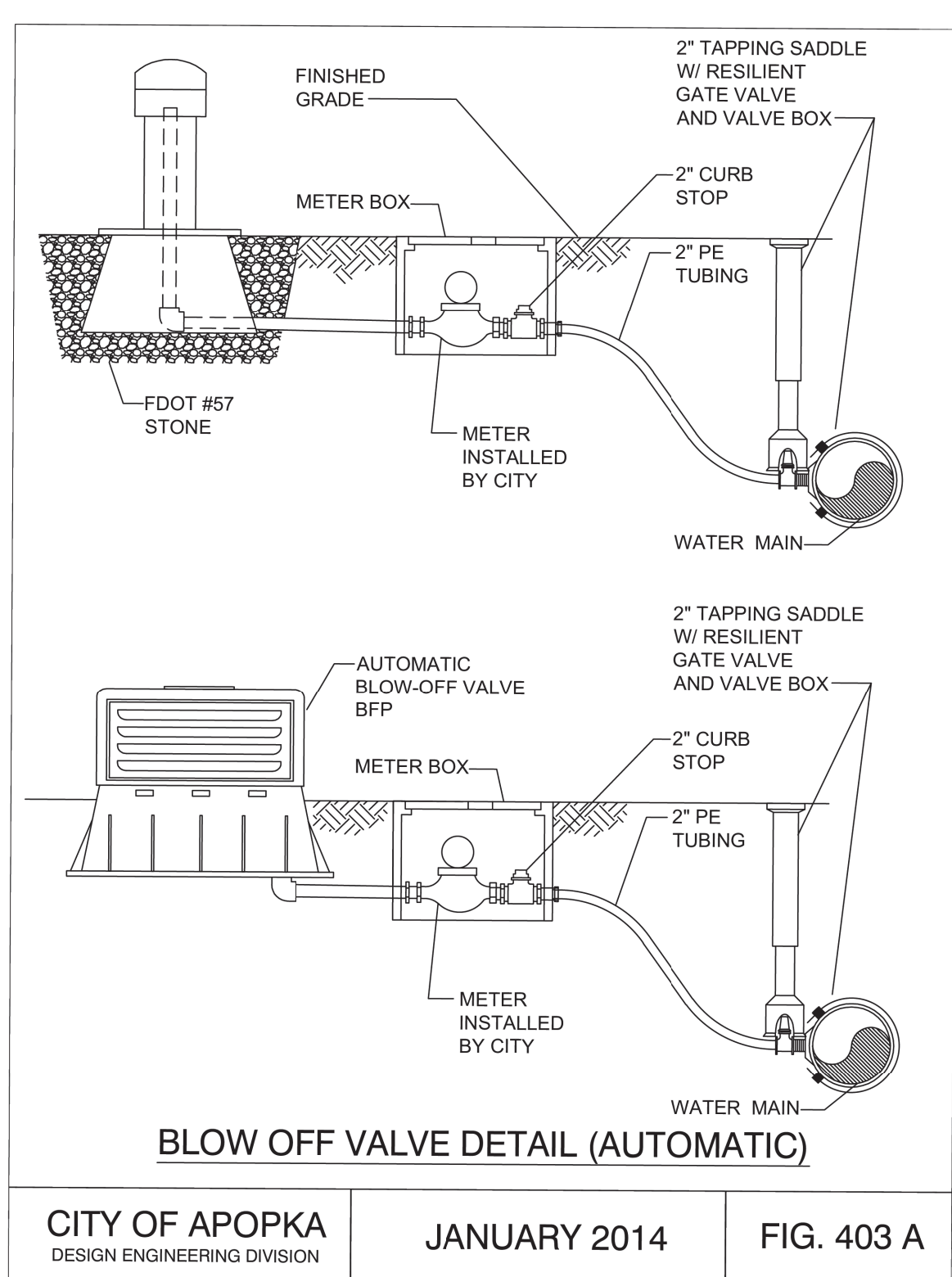
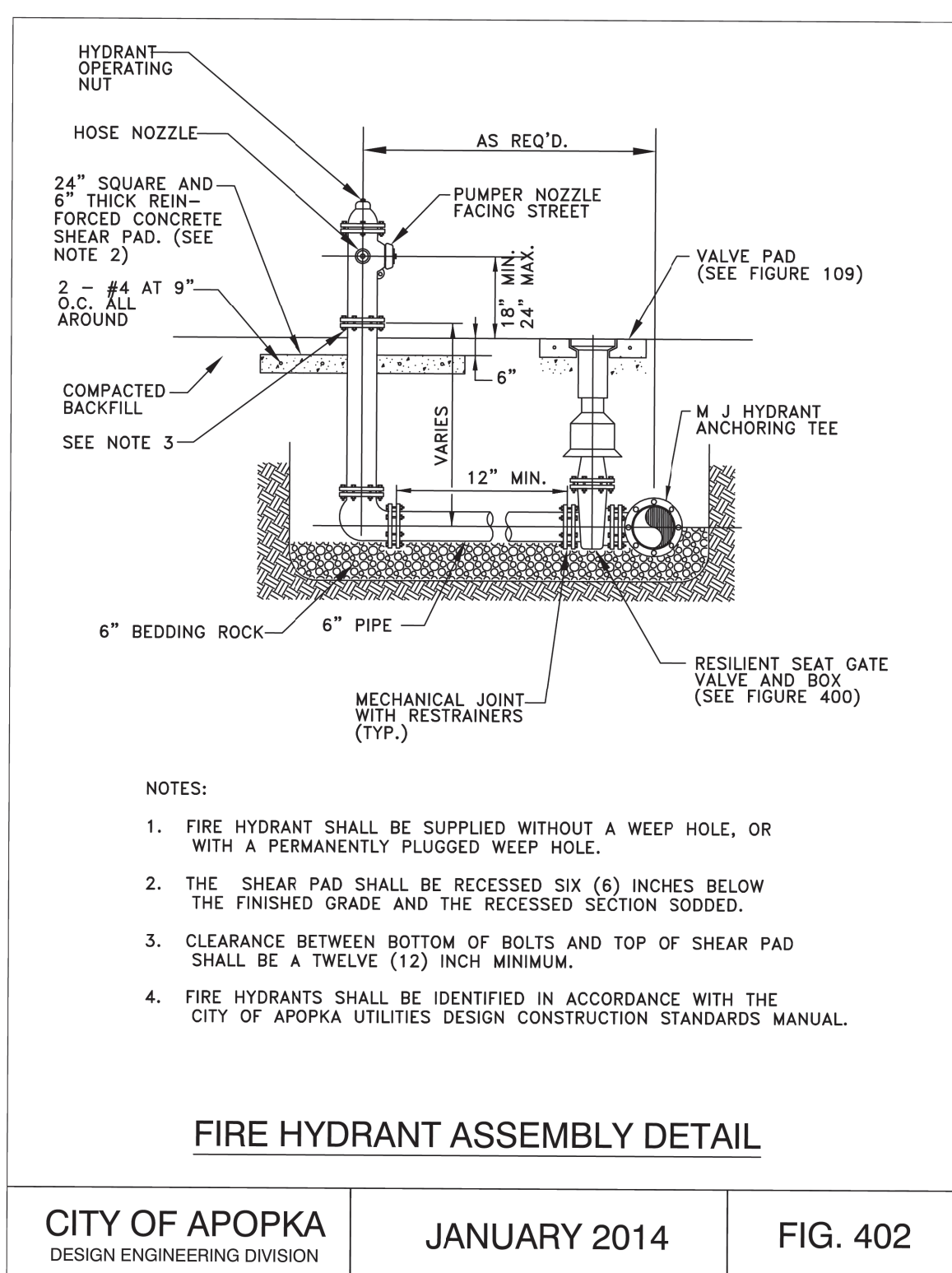
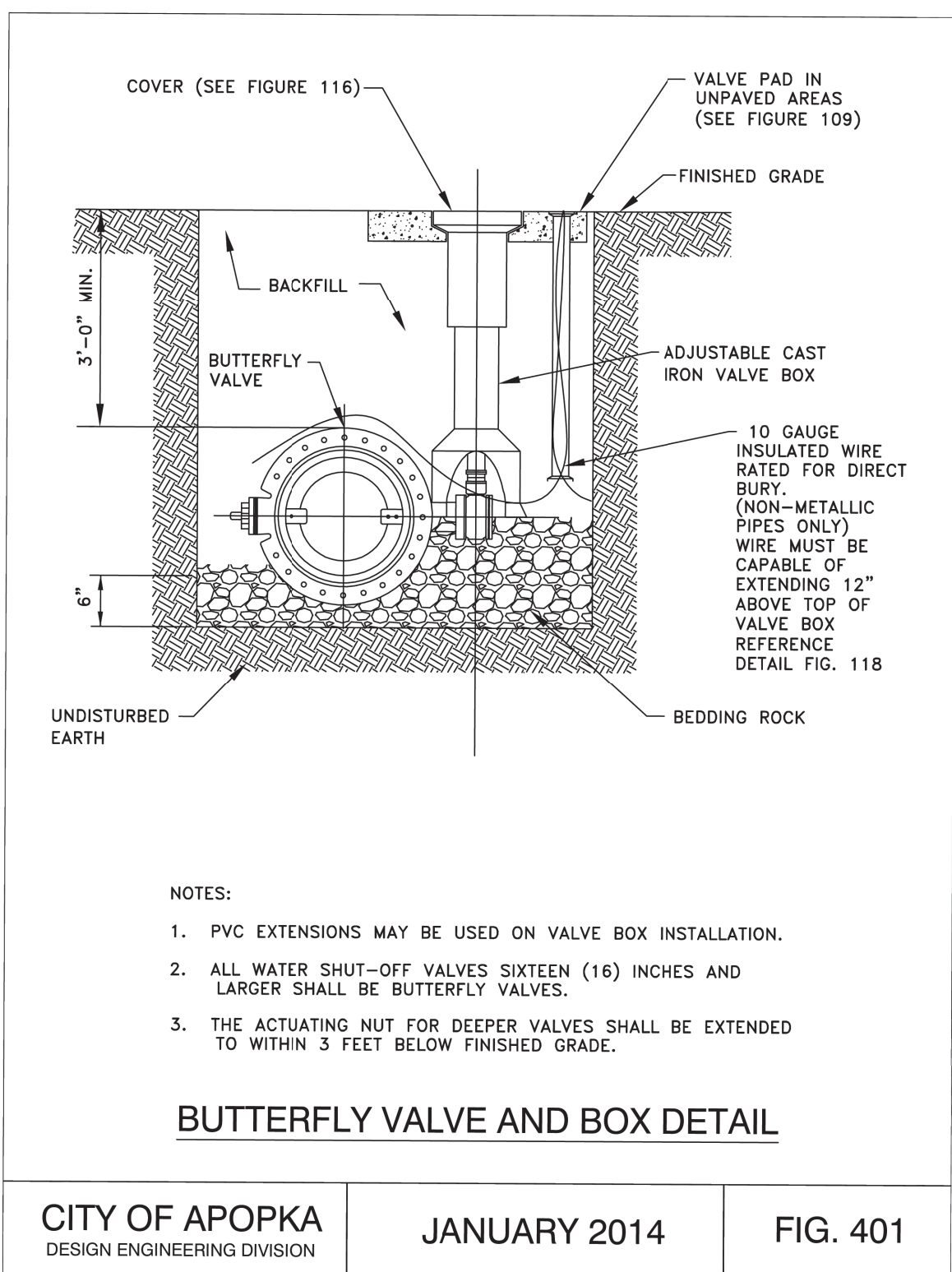
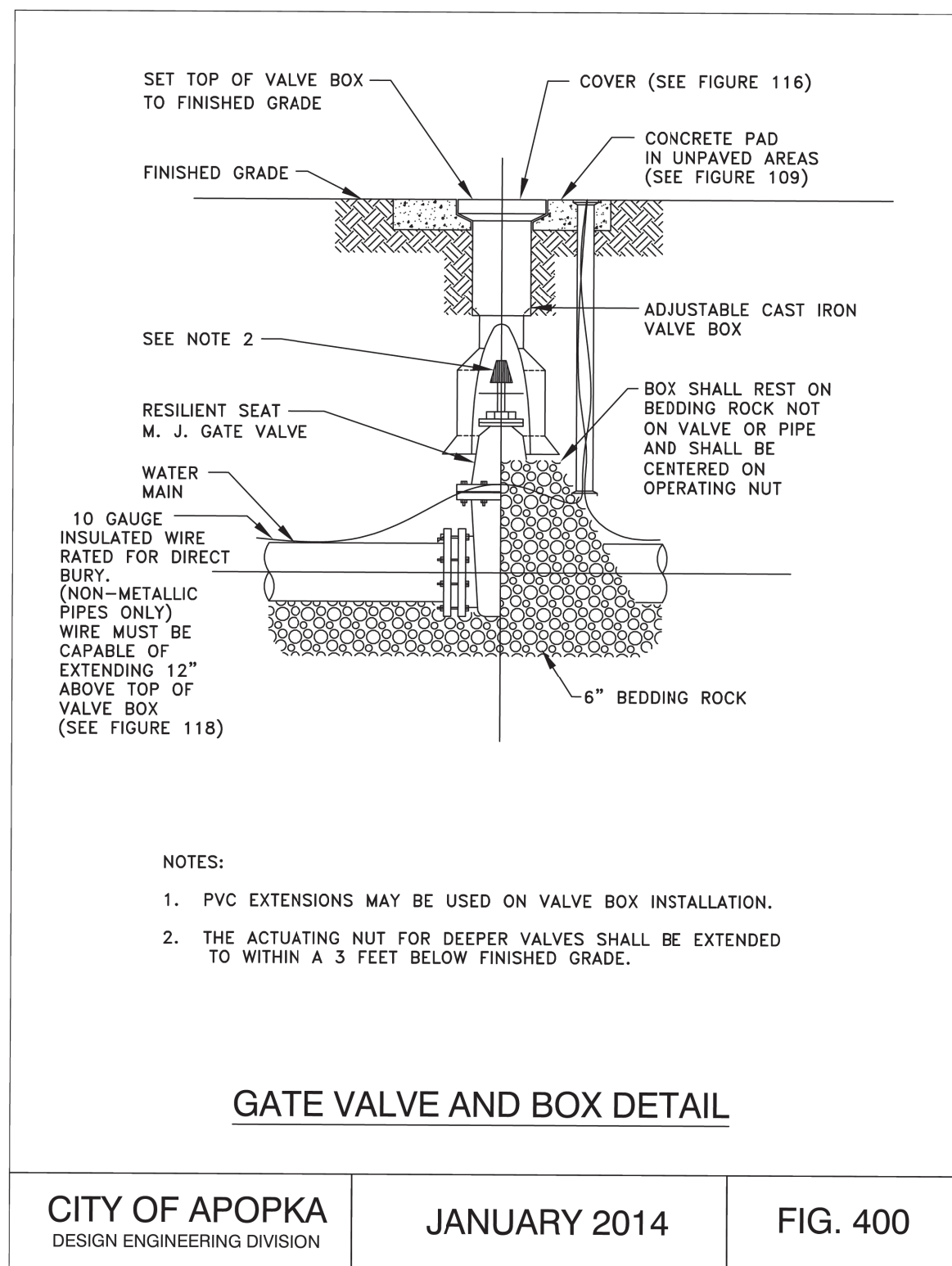
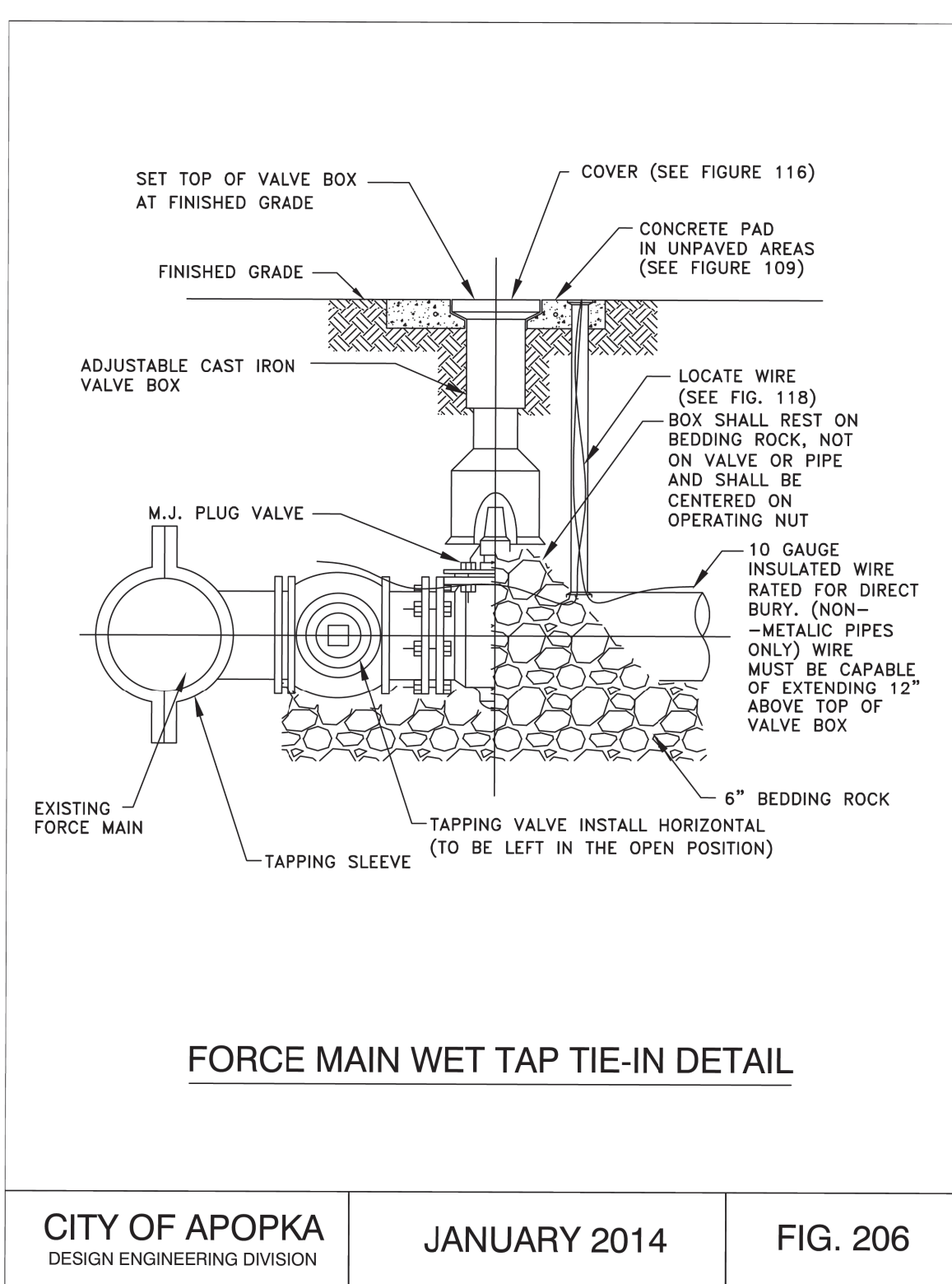
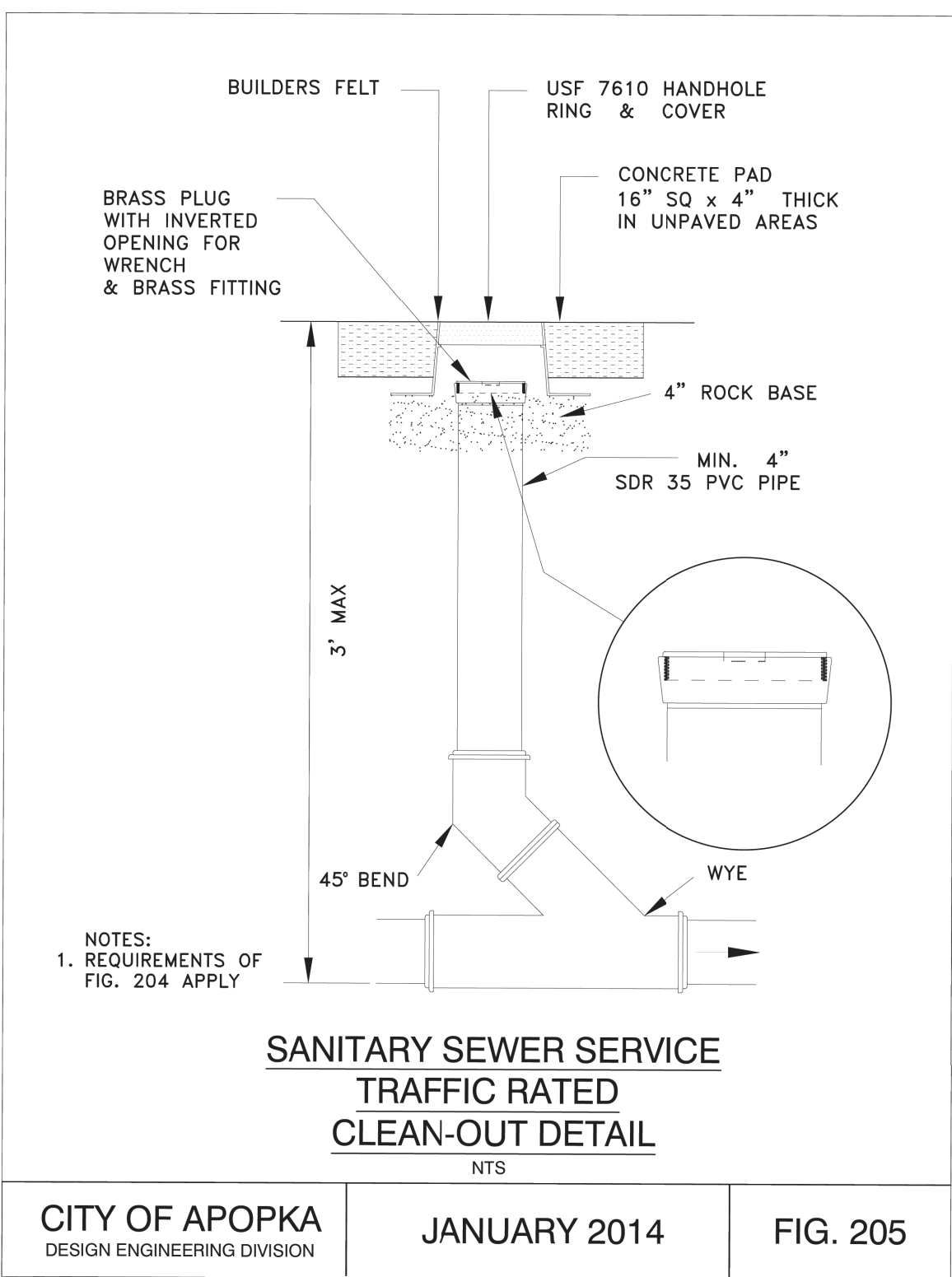
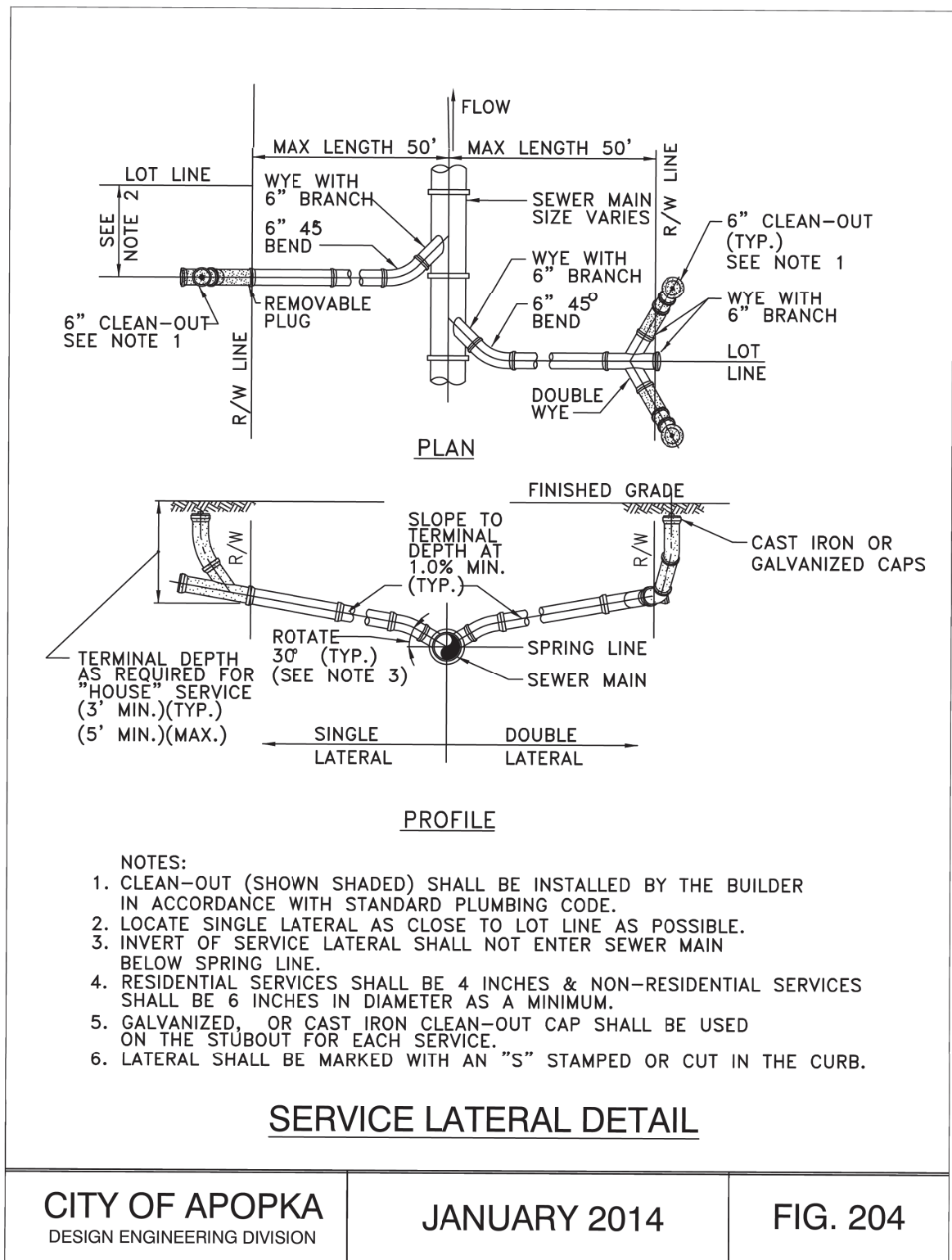
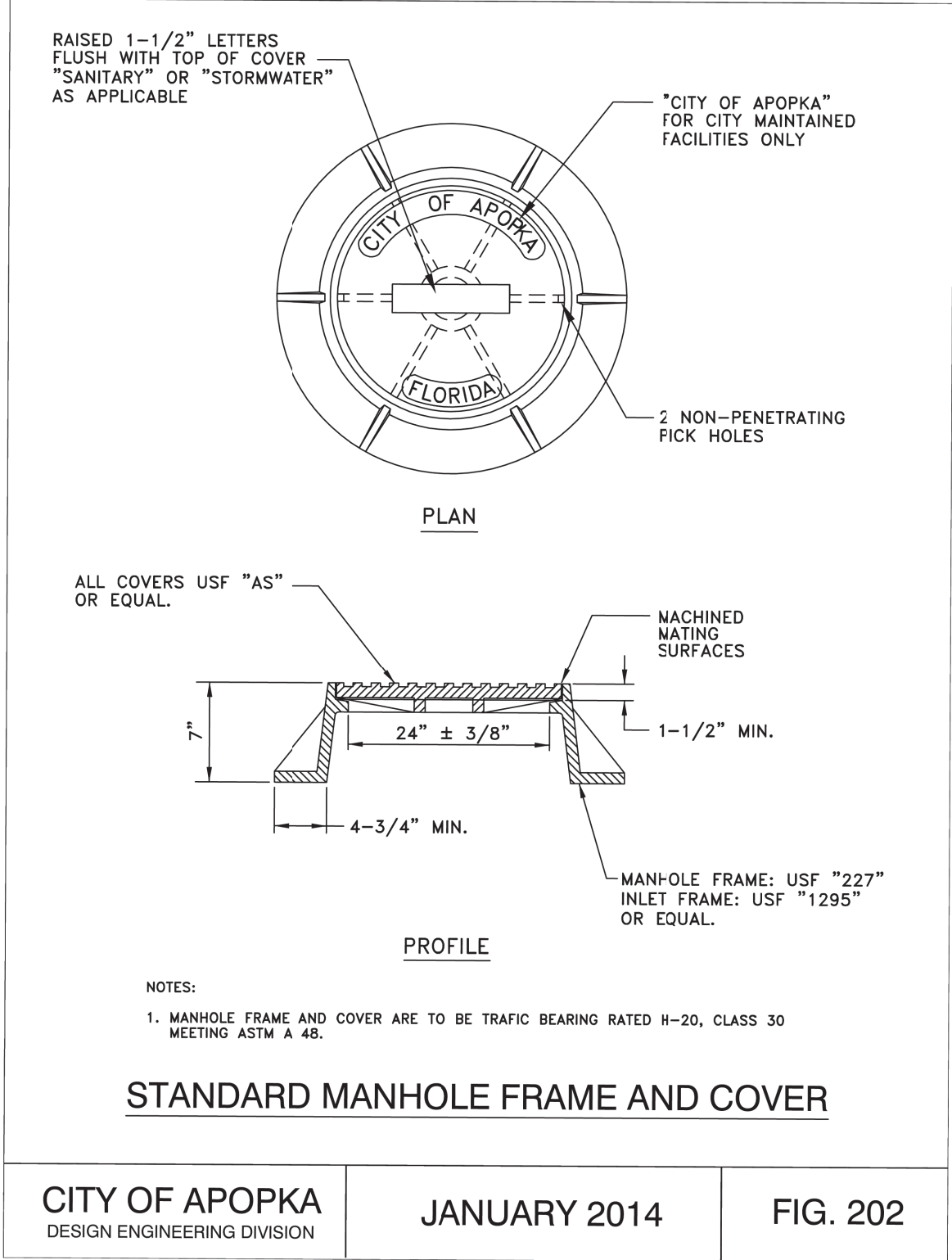
MAIN DIAMETER	ARV
14" AND SMALLER	2"
16" AND LARGER	3"

- NOTES:
FOR WASTEWATER USE ONLY.
OFFSET DISTANCE TO BE FIELD DETERMINED AND AS CLOSE TO THE R/W LINE AS
POSSIBLE
ADJUST HORIZONTAL LOCATION OF SIDEWALK, AS REQUIRED TO AVOID ARV ENCLASURE
LOCATE ARV ENCLOSURE WITHIN 6" OF R/W LINE.

OFFSET AIR OR COMBINATION AIR/VACUUM RELEASE VALVE DETAIL - WASTEWATER ONLY

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2015	FIG. 114
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Z:\2021\21-027 GALWIN - KELLY PARK PARCELS\CAD\FINAL\CITY\PHASE 1-2B\21-027 - PHASE 1-2B-C01LS



Key Map:

10/07/2024		SUBMIT TO CITY OF APOPKA & SJRMWD	
NO.	DATE	DESCRIPTIONS	
SUBMISSIONS/REVISIONS			
VERTICAL DATUM:		NAVD 88	
JOB NO.:		21-027	
DESIGNED BY:		KML	
DRAWN BY:		EHW	
CHECKED BY:		KML	
APPROVED BY:		MDS	
SCALE IN FEET:		N.T.S.	

Project Name:

CROSSROADS AT KELLY PARK - PHASE 2B

Jurisdiction:
CITY of APOPKA, FL

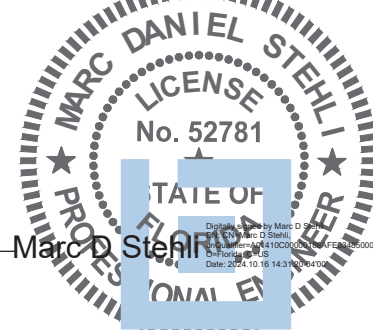
Sheet Title:

APOPKA CONSTRUCTION DETAILS

Sheet No.:

C9.12

Seal:



This item has been electronically signed and sealed using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

POULOS & BENNETT

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