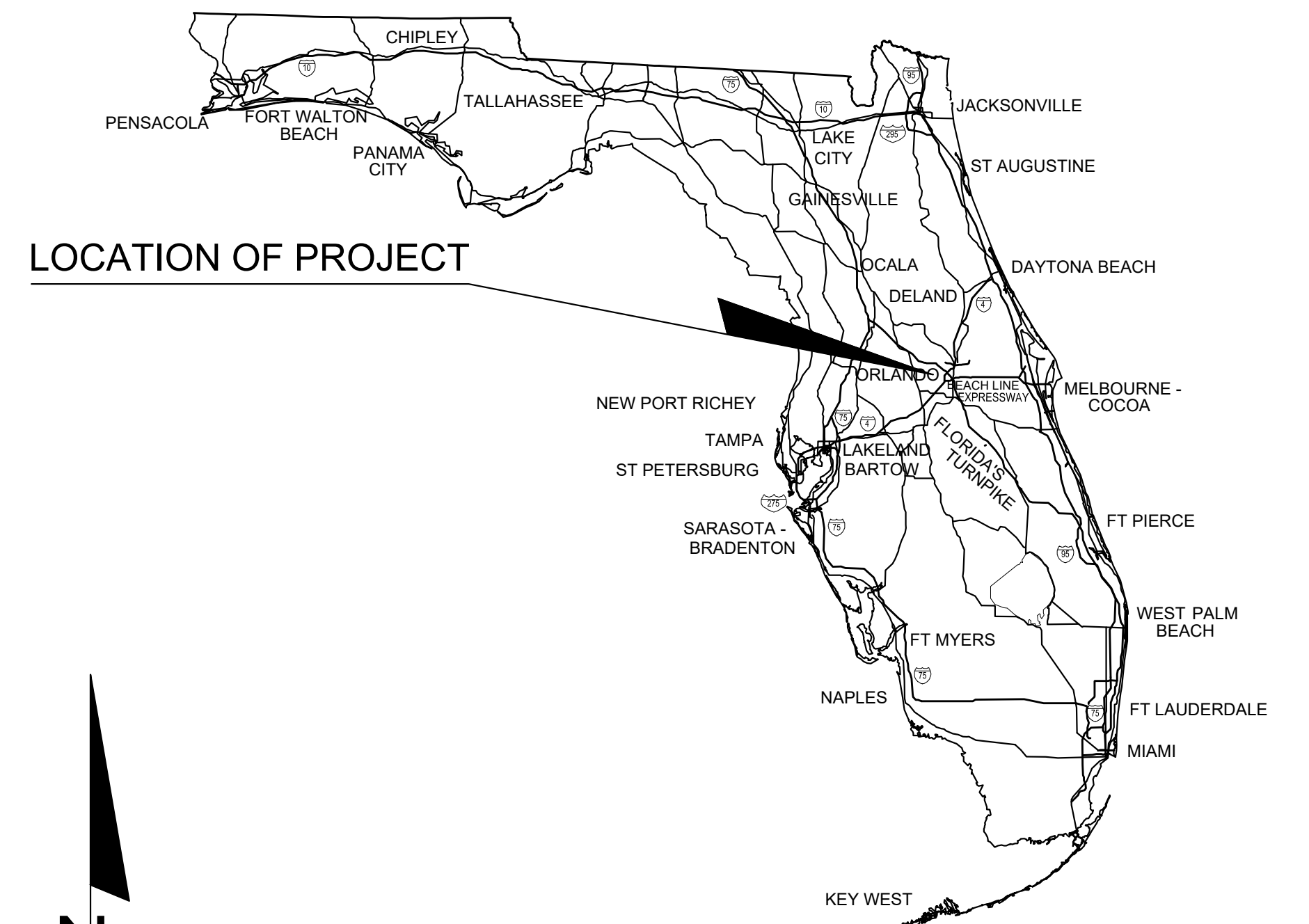


TOWN OF WINDERMERE

CONSTRUCTION PLANS

BESSIE STREET WATER MAIN INSTALLATION PERMIT NUMBER: 21-U-169

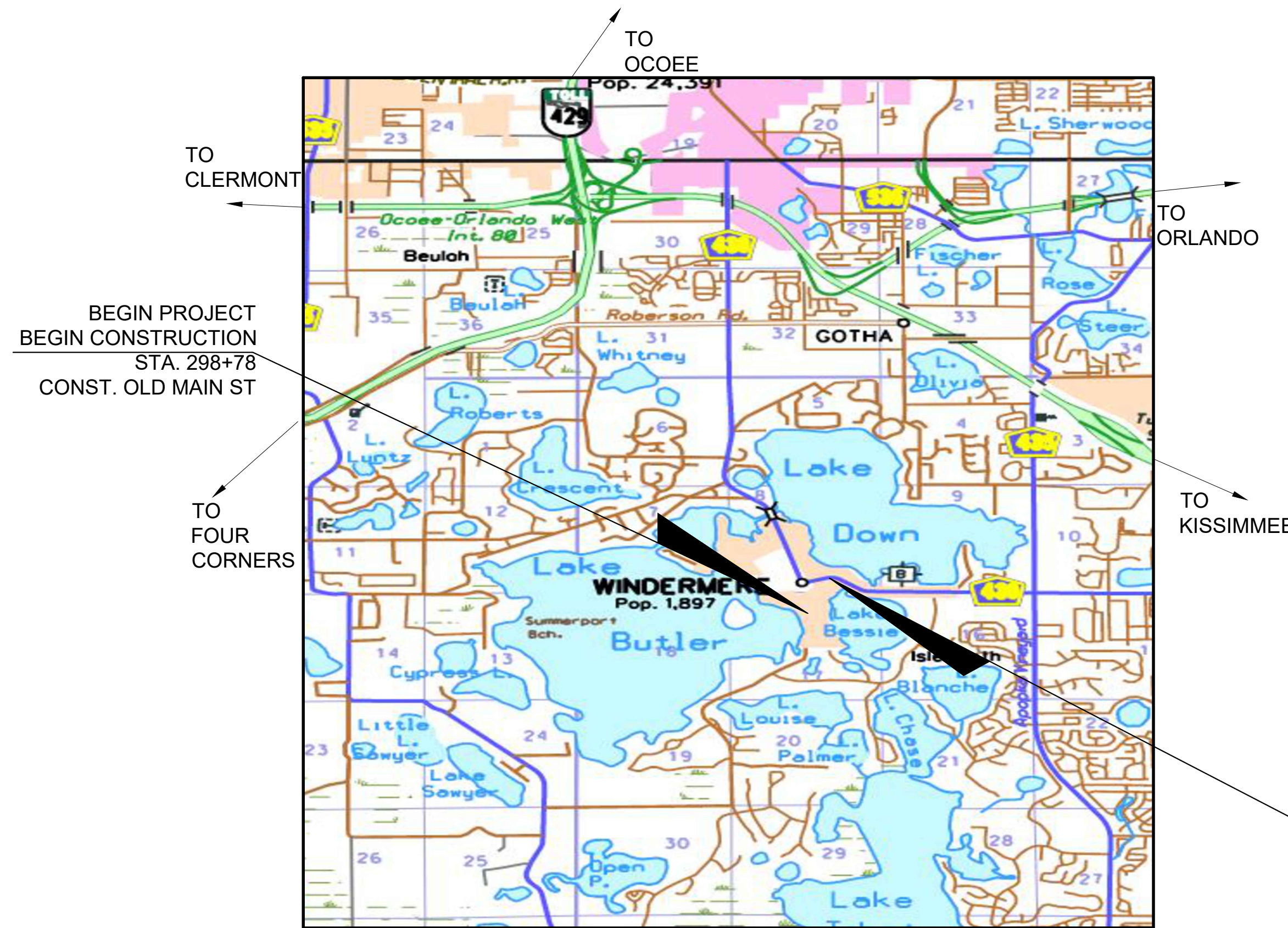


CONTRACT PLANS COMPONENTS

WATER MAIN PLANS

INDEX OF UTILITY PLANS

SHEET NO.	SHEET DESCRIPTION
T-1	COVER
G-1	GENERAL NOTES
G-2	KEY MAP
C-1	STA 298+50 TO STA 304+00
C-2	STA 304+00 TO STA 308+00
C-3	STA 308+00 TO STA 312+75
C-4	STA 312+75 TO STA 315+25
C-5	STA 315+25 TO STA 319+50
C-6	STA 319+50 TO STA 324+40
C-7	ASSET TABLES
D-1	DETAILS 1
D-2	DETAILS 2
D-3	DETAILS 3



GOVERNING DESIGN STANDARDS:

Orange County Utilities Standards and Construction Specifications Manual, October 2021

OWNER

ORANGE COUNTY UTILITIES
CONTACT: IGNACIO GARCIA-BENGOCHEA, P.E.
EMAIL: INGNACIO.GARCIA-BENGOCHEA@OCFL.NET

TOWN OF WINDERMERE
CONTACT: TONYA ELLIOTT-MOORE
EMAIL: TMOORE@TOWN.WINDERMERE.FL.US

GOVERNING STANDARD SPECIFICATIONS:

Orange County Utilities Standards and Construction Specifications Manual, October 2021

UTILITY PLANS ENGINEER OF RECORD:

A. TUCKER HUNTER, P.E. NO: 88634

Kimley»Horn

200 SOUTH ORANGE AVENUE SUITE 600
ORLANDO, FLORIDA 32801
TEL: (407) 898-1511
VENDOR NO. F560885615-001
CERTIFICATE OF AUTHORIZATION NO. 35106

				CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
0	CONSTRUCTION PLANS	7/2/2024	CAB		24	T-1
SUSERS	SDATES	STIMES	SFILES			

GENERAL PROJECT DATA

- THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLANS WERE DETERMINED FROM THE BEST INFORMATION AVAILABLE. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION TO THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE RELOCATION OF VARIOUS UTILITIES SHALL BE INCIDENTAL, WITH NO COMPENSATION FROM THE UTILITY. A SINGLE POINT UTILITY LOCATION SERVICE HAS BEEN SET UP FOR PARTICIPATING UTILITIES. CONTRACTOR IS TO CONTACT THE SUNSHINE STATE ONE CALL CENTER AT LEAST TWO (2) AND NO MORE THAN FIVE (5) WORKING DAYS PRIOR TO THE SPECIFIC CONSTRUCTION ACTIVITY FOR FIELD LOCATION. NOTE THAT NOT ALL UTILITIES PARTICIPATE IN THIS PROGRAM. CONTRACTOR SHOULD CONTACT NON-PARTICIPATING UTILITIES SEPARATELY FOR THEIR FIELD LOCATING OF FACILITIES. PER FLORIDA STATUTE 553.851, THE CONTRACTOR OR EXCAVATOR IS REQUIRED TO NOTIFY THE GAS COMPANY TWO (2) WORKING DAYS PRIOR TO STARTING EXCAVATION.
- ALL TESTING RESULTS FOR NEW CONSTRUCTION SHALL BE PROVIDED TO ORANGE COUNTY UTILITIES. TESTING REQUIREMENTS ARE TO BE IN ACCORDANCE WITH THE UTILITIES' SPECIFICATIONS AND REQUIREMENTS. ALL TEST RESULTS SHALL BE PROVIDED (PASSING AND FAILING) ON A REGULAR AND IMMEDIATE BASIS. NO TESTING TO BE SCHEDULED ON MONDAY OR FRIDAY.
- SHOP DRAWINGS AND CERTIFICATIONS FOR ALL WATER SYSTEM, RECLAIMED WATER SYSTEM AND SEWER SYSTEM MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE OWNER'S ENGINEER FOR APPROVAL, PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION.
- WHEREVER STATE, COUNTY, CITY OR LOCAL STANDARD SPECIFICATIONS DIFFER FROM THOSE CONTAINED HEREIN: THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND UTILITY FOR CLARIFICATION. TYPICALLY THE MORE STRINGENT SHALL GOVERN.
- A PRE-CONSTRUCTION CONFERENCE SHALL BE REQUIRED WITH ORANGE COUNTY UTILITIES, ENGINEER, AND CONTRACTOR IN ATTENDANCE. THE ENGINEER WILL SCHEDULE, WITH ALL PARTIES, THE TIME AND PLACE OF MEETING PRIOR TO ANY CONSTRUCTION COMMENCEMENT. ALL JURISDICTIONAL PERMITS, APPROVED SHOP DRAWINGS, AND CONNECTION FEES SHALL BE IN PLACE PRIOR TO PRE-CONSTRUCTION CONFERENCE SCHEDULING. THE UTILITY REQUIRES AT LEAST 72 HOURS NOTICE FOR SCHEDULING OF PRE-CONSTRUCTION CONFERENCE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY LINE LOCATIONS. PLANT STAFF WILL ONLY PROVIDE ASSISTANCE. GENERAL CONSTRUCTION REQUIREMENTS ALL WORK AND REQUIREMENTS FROM THE NOTES IN THIS PAGE SHALL BE A REQUIREMENT OF THE CONTRACT AND EXECUTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

GENERAL CONSTRUCTION REQUIREMENTS

ALL WORK AND REQUIREMENTS FROM THE NOTES IN THIS PAGE SHALL BE A REQUIREMENT OF THE CONTRACT AND EXECUTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE TOWN OF WINDERMERE

- ALL UTILITIES CONSTRUCTION CONNECTING TO THE ORANGE COUNTY PUBLIC UTILITIES SYSTEM SHALL CONFORM TO THE ORANGE COUNTY UTILITIES (OCU) - CURRENT STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL, AND BE ONE OF THE APPROVED PRODUCTS LISTED IN 'APPENDIX 'D' OF THE MANUAL
- COORDINATION AND COMMUNICATIONS WITH ORANGE COUNTY STAFF SHALL BE MADE THROUGH THE ORANGE COUNTY UTILITIES CONSTRUCTION DIVISION INSPECTOR. CONTACT THE OCU DISPATCH DURING EMERGENCIES
- THE ORANGE COUNTY UTILITIES CONSTRUCTION DIVISION SHALL BE NOTIFIED AT LEAST SEVEN (7) DAYS PRIOR TO CONSTRUCTION ACTIVITY, OR PRIOR TO ANY ACTIVITY REQUIRING THE PRESENCE OF OR AN ACTION BY UTILITIES STAFF SUCH AS SCHEDULING VALVE OPERATION, PRESSURE TESTING, PIPE CONNECTION, PUMP STATION OPERATIONS OR SHUTDOWNS, ETC.
- ORANGE COUNTY UTILITIES DEPARTMENT TELEPHONE NUMBERS:
ORANGE COUNTY UTILITIES DISPATCH 407-836-2777
ORANGE COUNTY UTILITIES CONSTRUCTION DIVISION 407-254-9798
ORANGE COUNTY FIELD SERVICES DIVISION 407-836-6818
ORANGE COUNTY UTILITIES ENGINEERING DIVISION 407-254-9900
- THE CONTRACTOR SHALL PROVIDE FOR ALL BY-PASSING AND/OR HAULING OF WASTEWATER DURING ALL INTERRUPTIONS OF FLOWS AND/OR CONNECTIONS TO THE EXISTING WASTEWATER SYSTEM.
- WATER, WASTEWATER AND RECLAIMED WATER VALVES, PUMP STATIONS OR OTHER UTILITY INFRASTRUCTURE ARE TO BE OPERATED ONLY BY ORANGE COUNTY UTILITIES PERSONNEL. ALL VALVES BEING INSTALLED ARE TO REMAIN CLOSED DURING CONSTRUCTION.
- ALL EXISTING WATER MAIN, FORCE MAINS, GRAVITY PIPES AND OTHER UTILITY FACILITIES WITHIN THE LIMITS OF THE PROJECT SHALL BE SUPPORTED AND PROTECTED AGAINST DAMAGE DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT UTILITY OWNERS FOR LOCATION OF ALL EXISTING FACILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH UTILITY OWNERS AND BE RESPONSIBLE FOR PROVIDING TEMPORARY SUPPORT FOR UTILITY POLES AND ALL OTHER UTILITIES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN PROXIMITY OF WATER MAIN, WASTEWATER FORCE MAINS, GRAVITY MAINS, AND RECLAIMED WATER MAIN. WATER MAINS, FORCE MAINS, GRAVITY MAIN, AND RECLAIMED WATER MAIN LOCATIONS SHOWN ON THE PLANS ARE NOT EXACT OR GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING UTILITY LOCATIONS.
- LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY EXISTENCE AND LOCATION OF ALL ABOVEGROUND AND UNDERGROUND UTILITIES. CONTRACTOR SHALL CONTACT UTILITY OWNERS, INCLUDING FIBER OPTICS COMPANIES, AT LEAST SEVEN (7) DAYS PRIOR TO CONSTRUCTION AND A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION. EXTREME CAUTION SHALL BE EXERCISED IN AREAS OF FIBER OPTICS.
- IMMEDIATELY AT ONSET OF CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES CRITICAL TO COMPLETING THE PROJECT (INCLUDING WATER, SEWER, RECLAIMED WATER, STORM WATER, POWER, TELEPHONE, GAS, AND CABLE TV) AND SHALL EVALUATE POTENTIAL CONFLICTS IN A WRITTEN REPORT. ANY CONFLICTS SHALL BE REPORTED TO ENGINEER/OWNER IMMEDIATELY UPON DISCOVERY AND DETAILED IN THE REPORT.
- CONTRACTOR SHALL COORDINATE WITH ALL OTHER UTILITY OWNERS FOR RESOLUTION OF CONFLICTS. CONTRACTOR SHALL HAVE 48 HOURS TO DETERMINE THE RESOLUTION OF ANY UNKNOWN OR UNFORESEEN CONFLICTS. COSTS INCURRED SHALL BE BORNE BY THE UTILITY OWNER AND/OR CONTRACTOR AND NO CLAIMS MAY BE MADE AGAINST ORANGE COUNTY OR THE ENGINEER FOR THESE CONFLICTS. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR THE PERIOD OF TIME TO RESOLVE ANY CONFLICTS.
- FLUSHING, HYDROSTATIC TESTING AND DISINFECTING OF WATER MAINS SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH AWWA SPECIFICATIONS C-600, C-651, AND APPLICABLE SECTIONS OF THE ORANGE COUNTY STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL. FITTINGS AND MINOR REPLACEMENT SEGMENTS REQUIRED TO MAKE CONNECTIONS TO EXISTING WATER LINES SHALL BE THOROUGHLY DISINFECTED BY SLOWING THE ENTIRE INTERIOR WITH A MINIMUM 5% CHLORINE SOLUTION PRIOR TO INSTALLATION. CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT, MATERIALS, AND MANPOWER TO ACCOMPLISH THESE OPERATIONS. AUTHORIZED ORANGE COUNTY UTILITIES PERSONNEL SHALL BE PRESENT DURING THE TEST. COORDINATE WITH ORANGE COUNTY UTILITIES INSPECTOR AT LEAST SEVEN (7) DAYS PRIOR TO START THIS WORK.
- ALL EXISTING AND NEW OCU WATER AND SEWER VALVES, VALVE BOXES, AND MANHOLES SHALL BE PROTECTED AND ADJUSTED TO FINISHED GRADE AS SHOWN ON THE DRAWINGS. VALVE AND VALVE BOXES SHALL REMAIN ACCESSIBLE AT ALL TIMES. ANY VALVES THAT MIGHT BE COVERED DURING CONSTRUCTION SHALL BE MARKED WITH A MARKER (GREEN FOR SEWER, BLUE FOR WATER, AND PURPLE FOR RECLAIMED WATER MAIN), A MINIMUM OF FOUR (4) FEET ABOVE GRADE. ALL VALVES UNDER CONSTRUCTION ARE TO REMAIN CLOSED DURING CONSTRUCTION.
 - ALL PVC WATER, SEWER, AND RECLAIMED WATER MAIN SHALL CONFORM TO THE FOLLOWING:
4" THROUGH 12" AWWA C900, DR 18
16" THROUGH 24" AWWA C905, DR 18
30" THROUGH 36" AWWA C905, DR 21
42" THROUGH 54" AWWA C905, DR 25
ALL PVC PRESSURE PIPE SHALL USE DUCTILE IRON FITTINGS. FITTINGS FOR SERVICES SHALL BE BRASS.
 - ALL DUCTILE IRON WATER AND RECLAIMED WATER MAIN SHALL CONFORM TO THE FOLLOWING:
4" THROUGH 12" ANSI/AWWA C151/A21.51, CLASS 350
16" THROUGH 24" ANSI/AWWA C151/A21.51, CLASS 250
30" THROUGH 64" ANSI/AWWA C151/A21.51, CLASS 200
 - ALL HDPE WATER, SEWER, AND RECLAIMED WATER MAIN SHALL BE PE/3408/PE4710, DUCTILE IRON PIPE SIZE, AND SHALL CONFORM TO THE FOLLOWING:
4" THROUGH 30" AWWA C906, DR 11
36" THROUGH 60" SEE PROJECT SPECIFICATIONS
- ALL PIPE, PIPE FITTINGS AND APPURTENANCES INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320 (21) (b) 3, FAS, USING BLUE AS A PREDOMINANT COLOR FOR WATER; GREEN FOR WASTEWATER; PURPLE FOR RECLAIMED WATER.
- ALL BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DRY DENSITY AS MEASURED BY AASHTO T-180 METHOD 'D' TEST (MODIFIED PROCTOR) IN OPEN AREAS AND TO NOT LESS THAN 98% MAXIMUM DRY DENSITY AS MEASURED BY AASHTO T-180 METHOD 'D' TEST (MODIFIED PROCTOR) UNDER ASPHALT OR CONCRETE PAVEMENT AND WITHIN 3-FT OF PAVEMENT. ALL SOIL TESTING TO BE CONDUCTED BY THE

- COUNTY. THE CONTRACTOR SHALL PROVIDE ALL REASONABLE ASSISTANCE DURING SOIL TESTING. FILL MATERIALS SHALL BE PLACED AND COMPACTED IN A MAXIMUM OF 12" LIFTS. THE CONTRACTOR SHALL PROVIDE THE ENGINEER AND OWNER WITH ALL (PASSING AND FAILING) TESTING RESULTS. RESULTS SHALL BE PROVIDED ON A TIMELY AND REGULAR BASIS PRIOR TO CONTRACTOR'S PAY REQUEST SUBMITTAL
- PIPE LENGTHS SHOWN ON PLANS ARE APPROXIMATE. ACTUAL LENGTHS ARE TO BE DETERMINED DURING CONSTRUCTION.
 - ALL STATIONS AND OFFSETS REFER TO BASELINE OF STATIONING.
 - MAINTAIN EMERGENCY VEHICLE ACCESS TO ALL BUSINESSES AND RESIDENCES AT ALL TIMES.
 - LOCAL RESIDENTIAL ACCESS SHALL BE MAINTAINED AT ALL TIMES. PROVIDE WRITTEN NOTIFICATION TO RESIDENTS SEVEN (7) DAYS PRIOR TO IMPLEMENTING ANY ROADWAY OR DRIVEWAY CLOSURE
 - ALL MAINS SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS. A MINIMUM COVER OF 36" SHALL BE MAINTAINED ON ALL MAINS, WHERE IT IS NOT OTHERWISE SPECIFIED ON PLANS OR DIRECTED BY THE ENGINEER. ALL DIRECTION CHANGES IN THE PIPE BOTH HORIZONTAL AND VERTICAL SHALL BE ACHIEVED THROUGH THE USE OF FITTINGS
 - ALL PIPES SHALL BE RESTRAINED IN ACCORDANCE WITH THE RESTRAINT TABLES SHOWN ON THE DETAIL SHEETS. IN ADDITION, ALL FITTINGS SHALL BE MECHANICAL JOINT RESTRAINED. NO THRUST BLOCKS SHALL BE PERMITTED EXCEPT WHERE SPECIFICALLY IDENTIFIED. RESTRAIN EXISTING PIPE WHERE REQUIRED IN ACCORDANCE WITH THE RESTRAINT TABLES.
 - COMPLETE ALL CONSTRUCTION WITHIN RIGHT OF WAY LIMITS AND EASEMENT LIMITS, UNLESS OTHERWISE NOTED.
 - PIPE SIZES SHOWN ON PLANS ARE MINIMUM INSIDE DIAMETER.
 - KEEP VALVES ON ALL WET TAPS CLOSED UNTIL CLEARED BY FDEP. ALL VALVES SHALL BE OPERATED BY OCU STAFF, DO NOT CONNECT ANY PROPOSED MAIN TO ANY EXISTING MAIN UNLESS CLEARED BY FDEP.
 - ALL CONNECTIONS TO EXISTING MAINS SHALL BE MADE BY THE CONTRACTOR ONLY AFTER THE PROPOSED CONNECTION PROCEDURE AND WORK SCHEDULE HAVE BEEN REVIEWED AND ACCEPTED BY OCU. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO OCU A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO SCHEDULING ANY CONNECTIONS. THE REQUEST SHALL REFERENCE THE PROFESSIONAL LAND SURVEYOR CERTIFIED COMPLETED AS-BUILT RECORD DRAWING PREVIOUSLY SUBMITTED AND SHALL OUTLINE THE FOLLOWING:
a.POINTS OF CONNECTION, FITTINGS TO BE USED, METHODS OF FLUSHING AND DISINFECTION AND VERIFICATION OF RESTRAINT ON EXISTING PIPE.

b. ESTIMATED CONSTRUCTION TIME FOR THE CONNECTIONS.

c. OCU SHALL REVIEW THE SUBMITTAL WITHIN TEN (10) WORKING DAYS AFTER RECEIVING IT AND INFORM THE CONTRACTOR REGARDING APPROVAL OR DENIAL OF THE REQUEST. IF OCU REJECTS THE REQUEST, THE CONTRACTOR SHALL RESUBMIT THE REQUEST MODIFYING IT IN A MANNER ACCEPTABLE TO OCU. CONNECTIONS SHALL ONLY BE MADE ON THE AGREED UPON DATE AND TIME.

d. SHOULD THE CONTRACTOR NOT INITIATE AND COMPLETE THE CONNECTION WORK IN THE AGREED UPON MANNER, HE SHALL BE REQUIRED TO RESCHEDULE THE CONNECTION BY FOLLOWING THE PROCEDURE OUTLINED ABOVE.

e. THE CONTRACTOR SHALL NOT OPERATE ANY VALVES IN THE SYSTEM.

f. MAINS SHALL NOT BE PLACED IN SERVICE UNTIL CLEARANCE IS RECEIVED FROM FDEP.

g. AS-BUILT DRAWINGS MUST BE COMPLETED AND SUBMITTED PRIOR TO WATER MAIN CHLORINATION

- PROTECT EXISTING IMPROVEMENTS TO THE MAXIMUM EXTENT POSSIBLE. RESTORE ALL EXISTING IMPROVEMENTS AND DISTURBED AREAS TO ORIGINAL CONDITION. PAVEMENT TO BE RESTORED IN ACCORDANCE WITH THE PAVEMENT RESTORATION DETAILS SHOWN ON THE CONSTRUCTION DETAIL SHEETS. ALL DAMAGED SIDEWALK, ROADWAY PAVEMENT AND OTHER IMPROVEMENTS SHALL BE RESTORED TO ORIGINAL CONDITION.
- ALL COUNTY ROADS TO BE OPEN CUT SHALL BE APPROVED BY ORANGE COUNTY PUBLIC WORKS PRIOR TO OPEN-CUTS. SUBMIT A MAINTENANCE OF TRAFFIC (MOT) PLAN CONFORMING TO ORANGE COUNTY RIGHT-OF-WAY UTILIZATION REGULATIONS TO ORANGE COUNTY PUBLIC WORKS A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO ANY WORK WITHIN COUNTY RIGHT-OF-WAY. A COPY OF THIS PLAN SHALL ALSO BE SUBMITTED TO THE ENGINEER AND UTILITY COUNTY INSPECTOR. NOTIFY THE COUNTY ENGINEER 48 HOURS PRIOR TO ANY OPEN CUT OF ROADWAYS OR JACK AND BORE OPERATIONS WITHIN THE COUNTY RIGHT-OF-WAY. TWO WAY TRAFFIC MUST BE MAINTAINED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION. MAINTAIN A SET OF OCU APPROVED CONSTRUCTION PLANS AND MOT PLANS AT THE CONSTRUCTION SITE AT ALL TIMES WHEN WORKING WITHIN THE ORANGE COUNTY RIGHT-OF-WAY.
- INSTALL AIR RELEASE VALVES (ARV) AT ALL HIGH POINTS IN THE SYSTEM WHERE THE CHANGE IN ELEVATION IS TWO FEET OR GREATER AND AIR CAN ACCUMULATE. AIR RELEASE VALVES AND APPURTENANCES SHALL BE COLOR CODED BLUE FOR WATER, GREEN FOR SEWER, AND PURPLE FOR RECLAIMED. STATIONING FOR AIR RELEASE VALVE IS APPROXIMATE. CONTRACTOR TO INSTALL AIR RELEASE VALVES AT HIGH POINTS IN MAIN.
- WATER, SEWER, AND RECLAIMED WATER LINE MARKERS SHALL BE PLACED EVERY 1,000 FT AND AT ALL VALVE AND DIRECTIONAL CHANGES. SEE VALVE AND PIPING MARKING DETAILS. NO MARKERS ARE REQUIRED AT VALVES ADJACENT TO FIRE HYDRANTS, OR IN RESIDENTIAL SUBDIVISIONS.
- BENCHMARK LOCATIONS AND ELEVATION ARE SHOWN IN THE PLANS AS REPRESENTED BY SURVEYOR AT THE TIME OF SURVEY. CONTRACTOR SHALL VERIFY ITS CORRECTNESS AT THE TIME OF CONSTRUCTION AND INSTALL HIS OWN TEMPORARY BENCHMARKS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OCU UTILITIES INSPECTOR.
- NO VALVE BOXES, METERS, PORTIONS OF MANHOLES, OR OTHER APPURTENANCES OF ANY KIND RELATING TO ANY UNDERGROUND UTILITIES SHALL BE LOCATED IN ANY PORTION OF A CURB-AND-GUTTER SECTION. CONTRACTOR SHALL ADVISE ENGINEER IMMEDIATELY UPON DISCOVERY OF A POTENTIAL CONFLICT.
- WHERE REQUIRED, AT NO ADDITIONAL COST TO THE OWNER, THE CONTRACTOR SHALL USE TEMPORARY SHEETING OR TRENCH BOXES TO MINIMIZE THE SIZE OF EXCAVATIONS AND PROTECT EXISTING ROADWAYS, UTILITIES AND OTHER FACILITIES. OR AS NEEDED TO REMAIN WITHIN THE LIMITS OF CONSTRUCTION. CONTRACTOR TO COMPLY WITH OSHA TRENCH SAFETY REQUIREMENTS AT ALL TIMES.
- CONTRACTOR TO PROVIDE DETAILED AS-BUILT DRAWINGS OF ALL UTILITIES UNCOVERED IN TRENCHES. THE AS-BUILT SHALL RECORD LOCATION, SIZE, TYPE, ELEVATION AND OWNER OF ALL UTILITY FACILITIES UNCOVERED.
- ALL EXISTING MAINS SHALL REMAIN IN SERVICE UNTIL THE PROPOSED MAIN(S) ARE ACCEPTED FOR SERVICE AND ALL SERVICE ARE TRANSFERRED TO THE MAIN(S).
- CONTRACTOR TO FURNISH AND INSTALL NEW METER BOXES.
- EROSION AND SILTATION CONTROL MEASURES ARE TO BE PROVIDED AND INSTALLED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. THESE MEASURES ARE TO BE INSPECTED BY THE CONTRACTOR ON A REGULAR BASIS AND ARE TO MAINTAINED OR REPAIRED ON AN IMMEDIATE BASIS, AS REQUIRED. LOCAL AND STATE JURISDICTIONAL AGENCIES SHALL BE REFERRED TO AND IMPLEMENTED DURING ALL CONSTRUCTION. SEE DIVISION 1 OF SPECS FOR FURTHER DETAILS.
- ALL FILL MATERIALS SHALL NOT CONTAIN ANY MUCK, STUMPS, ROOTS, BRUSH, VEGETATIVE MATTER, RUBBISH OR OTHER MATERIAL THAT WILL NOT COMPACT INTO A SUITABLE AND ENDURING BACKFILL. FILL SHALL BE CLEAN, NON-ORGANIC, GRANULAR MATERIAL WITH NOT MORE THAN 10% PASSING THE NO. 200 SIEVE. ANY BACKFILL FOR THE PROJECT THAT COMES FROM OFF-SITE SHALL BE SOURCED FROM A PRE-APPROVED BORROW PIT LOCATION.
- ALL TESTING RESULTS SHALL BE PROVIDED TO THE OWNER/OPERATOR, COUNTY, AND THE ENGINEER. TESTING REQUIREMENTS ARE TO BE IN ACCORDANCE WITH THE OWNER/OPERATOR'S SPECIFICATIONS AND REQUIREMENTS. ALL TEST RESULTS SHALL BE PROVIDED (PASSING AND FAILING) ON A REGULAR AND IMMEDIATE BASIS. CONTRACTOR SHALL PROVIDE TESTING SERVICES THROUGH A FLORIDA LICENSED GEOTECHNICAL ENGINEERING FIRM ACCEPTABLE TO THE OWNER AND ENGINEER.
- THE CONTRACTOR SHALL PERFORM HIS OWN INVESTIGATIONS AND CALCULATIONS AS NECESSARY TO ASSURE HIMSELF OF EARTHWORK QUANTITIES. THERE IS NO IMPLICATION THAT EARTHWORK BALANCES AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY IMPORT FILL NEEDED, OR FOR REMOVAL AND DISPOSAL OF EXCESS MATERIALS.
- ALL WETLANDS SHALL BE PROTECTED FROM DAMAGE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING FOR SITE CONSTRUCTION INCLUDING CLEARING FOR PAVING, UTILITIES, DRAINAGE FACILITIES AND BUILDING CONSTRUCTION. SEE PLANS FOR LIMITS OF CLEARING AND GRUBBING. ALL AREAS TO BE CLEARED SHALL BE FIELD STAKED AND REVIEWED BY THE OWNER AND ENGINEER PRIOR TO ANY CONSTRUCTION.
- ALL MATERIALS EXCAVATED SHALL BE UTILIZED TO BRING THE SITE TO FINAL GRADES. MATERIALS SHALL BE STOCKPILED SEPARATELY AS TO USABLE (NONORGANIC) FILL STOCKPILES AND ORGANIC (MUCK) STOCKPILES IF MUCK IS ENCOUNTERED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL UNSUITABLE FULL MATERIALS FROM THE SITE. ALL CLAY ENCOUNTERED SHALL BE EXCAVATED OUT AND REPLACED WITH CLEAN GRANULAR FULL MATERIALS.
- THE CONTRACTOR SHALL LOCATE AND FIELD STAKE PROJECT EASEMENTS ALONG THE ENTIRE PROJECT ROUTE. THE STAKED EASEMENT SHALL BE REVIEWED BY OCU FOR COMPLIANCE PRIOR TO INITIATING ANY WORK ACTIVITIES.
- DUCTILE IRON PIPE TO BE POLYETHYLENE ENCASED PER SPECIFICATIONS SECTION 09954



EMERGENCY CONTACT NUMBERS

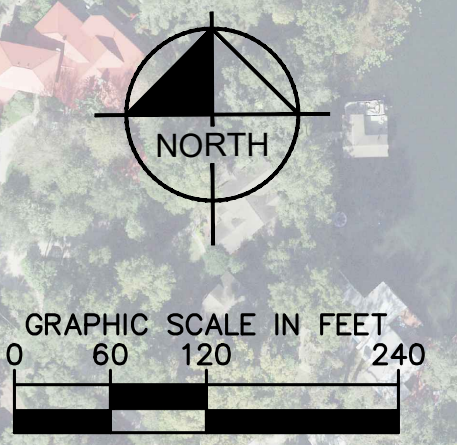
- THE ORANGE COUNTY UTILITY DISPATCH OPERATOR, (407-836-2777) AND SWRF SCADA OPERATOR (407-254-7732) SHALL BE NOTIFIED IMMEDIATELY IN THE EVENT OF A FORCE MAIN, GRAVITY SEWER, WATER MAIN, OR RECLAIMED WATER MAIN BREAK OR DAMAGE.
- ALL DAMAGES TO ORANGE COUNTY'S MAINS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. IF THE REPAIR IS NOT MADE IN A TIMELY AND APPROVED MANNER, AS DETERMINED BY THE ORANGE COUNTY UTILITIES INSPECTOR, ORANGE COUNTY MAY PERFORM THE REPAIRS AND THE CONTRACTOR WILL BE CHARGED FOR THE REPAIRS.

OCU GENERAL NOTES:

- THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN PROXIMITY OF INCLUDING, BUT NOT LIMITED TO: WATER MAINS, WASTEWATER FORCE MAINS, GRAVITY MAINS, RECLAIMED WATER MAINS, ELECTRIC, GAS, CABLE TV, TELECOMMUNICATIONS, STORM WATER, FIBER OPTIC AND OTHER UNDERGROUND FACILITIES. MAIN LOCATIONS SHOWN ON PLANS MAY NOT BE EXACT. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING UTILITY LOCATIONS.
- SHOULD A PIPE EMERGENCY OCCUR, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OCU DISPATCH OPERATOR (407-836-2777) AND THE OCU INSPECTOR.
- THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION INSPECTION SECTION, FIELD SERVICES DIVISION AT LEAST 10 CALENDAR DAYS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION PROJECT BY CALLING (407) 254-9798.
- THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION INSPECTOR IN ACCORDANCE WITH TABLE 4110-1 "UTILITIES" SCHEDULE OF NOTIFICATIONS IN THIS MANUAL.
- THE MATERIALS, PRODUCTS, AND CONSTRUCTION OF ALL UTILITIES CONNECTING TO THE OCU SYSTEM SHALL BE IN CONFORMANCE WITH THE STANDARDS, CONSTRUCTION SPECIFICATIONS, AND APPENDIX D IN THIS MANUAL.
- ALL EXISTING UTILITIES INCLUDING BUT NOT LIMITED TO: WATER MAINS, FORCE MAINS, RECLAIMED WATER MAIN, SANITARY GRAVITY PIPES, STORM WATER PIPES, ELECTRIC, TELEPHONE, GAS, POLES AND STAYS, CABLE TV AND OTHER UTILITY FACILITIES WITHIN THE LIMITS OF THE PROJECT WILL BE SUPPORTED AND PROTECTED AGAINST DAMAGE DURING CONSTRUCTION.
- THE CONTRACTOR SHALL ADJUST ALL EXISTING OCU MAINS AND FACILITIES IN CONFLICT WITH NEW GRADE, NEW OR ALTERED ROADWAYS, SIDEWALKS, DRIVEWAYS, CURBS, OR STORM WATER IMPROVEMENTS, OCU FACILITIES TO BE ADJUSTED INCLUDE, BUT ARE NOT LIMITED TO: PIPELINES, PUMP STATIONS, VALVE BOXES, AIR RELEASE VALVES, FIRE HYDRANTS, MANHOLE COVERS, AND METERS. ALL ADJUSTMENTS SHALL BE MADE TO CURRENT STANDARDS.
- ONLY OCU PERSONNEL SHALL OPERATE EXISTING OCU WATER, WASTEWATER, AND RECLAIMED WATER VALVES. THE CONTRACTOR IS RESPONSIBLE FOR OPERATING ANY NEWLY INSTALLED VALVE THAT HAS NOT BEEN CLEARED FOR USAGE BY FDEP AND OCU. THE CONTRACTOR SHALL COORDINATE VALVE OPERATION WITH THE OCU INSPECTOR. FOR OPERATION OF MAINS NOT OWNED BY OCU, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE APPROPRIATE UTILITY REPRESENTATIVE.
- CONSTRUCTION ACTIVITIES SHALL NOT CAUSE INTERRUPTIONS IN WATER, WASTEWATER, OR RECLAIMED WATER SERVICE. THE CONTRACTOR SHALL COORDINATE PRE-APPROVED INTERRUPTIONS OF SERVICE WITH THE OCU INSPECTOR 7 WORKING DAYS IN ADVANCE AND WRITTEN NOTICE SHALL BE GIVEN TO AFFECTED CUSTOMERS AT LEAST 4 WORKING DAYS IN ADVANCE.
- THE CONTRACTOR SHALL PROVIDE FOR BYPASSING AND / OR HAULING OF WASTEWATER DURING APPROVED INTERRUPTIONS OF WASTEWATER FLOWS AND CONNECTIONS. THE CONTRACTOR SHALL SUBMIT A BYPASS OR HAUL PLAN, REVIEWED AND APPROVED BY A PROFESSIONAL ENGINEER TO OCU DEVELOPMENT ENGINEERING AND TO THE INSPECTOR FOR APPROVAL PRIOR TO IMPLEMENTATION BY CONTRACTOR.
- ALL VALVES INSTALLED AS PART OF THIS CONSTRUCTION PROJECT SHALL REMAIN CLOSED DURING CONSTRUCTION. KEEP VALVES ON ALL WET TAPS CLOSED UNTIL CLEARED BY FDEP. DO NOT CONNECT NEWLY CONSTRUCTED WATER MAINS TO ANY EXISTING WATER MAINS UNLESS CLEARED BY FDEP AND OCU.
- THE CONTRACTOR SHALL PROVIDE A JUMPER ASSEMBLY WITH AN APPROVED BACKFLOW PREVENTER FOR MAKING TEMPORARY CONNECTIONS TO AN EXISTING POTABLE WATER SOURCE IN ORDER TO CHLORINATE AND FLUSH NEW WATER MAINS WITH POTABLE WATER. ANY TEMPORARY POTABLE WATER CONNECTIONS TO RECLAIMED WATER OR FORCE MAIN SHALL ALSO BE EQUIPPED WITH AN APPROVED BACKFLOW PREVENTER.
- FOR PVC PIPE, NO JOINT DEFLECTION OR PIPE BENDING IS ALLOWED. ALIGNMENT CHANGE SHALL BE MADE ONLY WITH FITTINGS.
- FOR DIP PIPE, LONG RADIUS CURVES, EITHER HORIZONTAL OR VERTICAL, MAY BE INSTALLED WITH STANDARD PIPE BY DEFLECTIONS AT THE JOINTS. MAXIMUM DEFLECTIONS AT PIPE JOINTS, FITTINGS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL NOT EXCEED 75 PERCENT OF THE PIPE MANUFACTURER'S RECOMMENDATION.
- FOR APPROVED PVC OR HDPE PIPE USED IN A HORIZONTAL DIRECTIONAL DRILL INSTALLATION, THE CURVATURE AND/OR DEFLECTION SHALL NOT EXCEED THE PARAMETERS ESTABLISHED IN THIS MANUAL.
- ALL DAMAGE TO ORANGE COUNTY INFRASTRUCTURE, PIPELINES, AND ASSETS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE WITH AN APPROVED METHOD BY THE COUNTY. IF THE REPAIR IS NOT PERFORMED IN A TIMELY MANNER, AS DETERMINED BY THE ORANGE COUNTY UTILITY INSPECTOR, ORANGE COUNTY MAY PERFORM REPAIRS AND THE CONTRACTOR WILL BE CHARGED FOR ALL EXPENSES ASSOCIATED WITH THE REPAIR.
- THE CONTRACTOR SHALL BE LIABLE FOR ANY AND ALL SANITARY SEWER OVERFLOWS (SSO) ASSOCIATED WITH THE WORK, REGARDLESS OF FAULT. THE CONTRACTOR WILL BE ASSESSED PENALTIES FOR ANY AND EACH SSO AS SPECIFIED IN SECTION 3110, GENERAL CONSTRUCTION REQUIREMENTS.

TEST HOLE REPORT				
TEST HOLE	UTILITY TYPE	MATERIAL	GROUND ELEVATION	UTILITY MANUAL DEPTH
1-1	WATER MAIN	PE	117.79	3.00
1-2	WATER MAIN	PE	117.92	1.00
1-3	WATER MAIN	PVC	117.69	2.65
1-4	GAS MAIN	HDPE	115.41	2.10
1-5	WATER MAIN	DIP	122.83	3.30
1-6	FIBER OPTIC	DBC	122.84	1.05
1-7	TELECOM	DBC	122.82	2.70

REVISIONS				DATE	DESCRIPTION	 Certificate Of Authorization No. 35106 A. TUCKER HUNTER, PE P. E. License No. 88634 200 South Orange Ave, Suite 600 Orlando, Florida 32801	 TOWN OF WINDERMERE	BESSIE STREET WATER MAIN GENERAL NOTES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION						
7/2/2024	CONSTRUCTION PLANS								G-1



LEGEND

- PROPOSED WATER MAIN
- PROPOSED STORM SEWER
- EXISTING WATER MAIN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
7/2/2024	CONSTRUCTION PLANS		

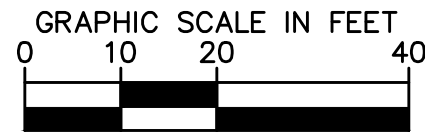
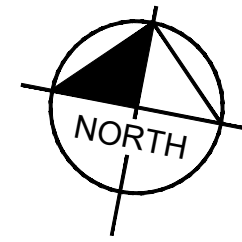
Kimley»Horn
 Certificate Of Authorization No. 35106
 A. TUCKER HUNTER, PE
 P.E. License No. 88634
 200 South Orange Ave, Suite 600
 Orlando, Florida 32801



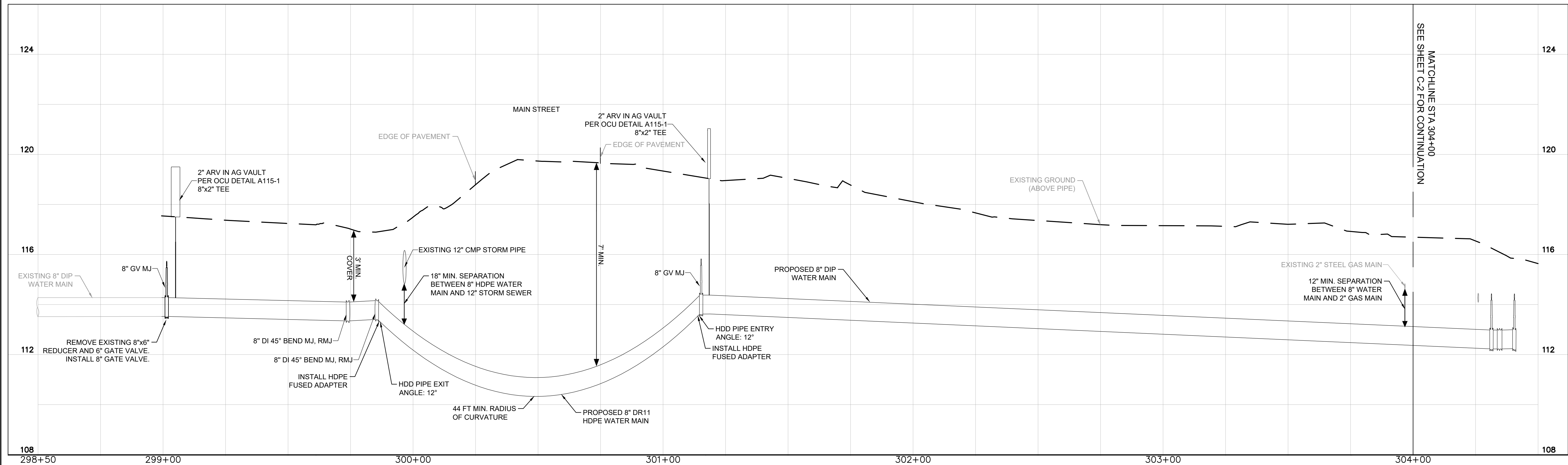
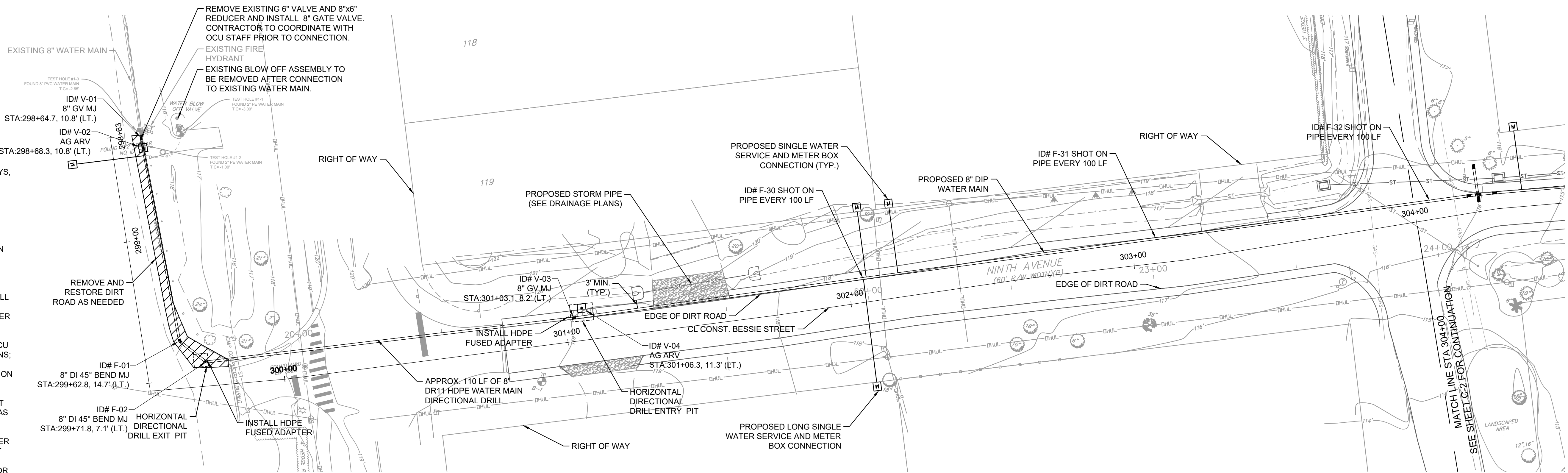
TOWN OF WINDERMERE

**BESSIE STREET WATER MAIN
KEY MAP**

SHEET NO.
G-2



- NOTES:
- CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO RESTORE GRADE, DRIVEWAYS, AND ROADWAYS TO EXISTING CONDITIONS OR BETTER AS SHOWN ON "BESSIE STREET DRAINAGE IMPROVEMENTS" DRAINAGE PLANS, PROJECT No. 049018019
 - CONTRACTOR TO PROTECT OR REPLACE FENCES, MAILBOXES, ETC. TO EXISTING CONDITIONS OR BETTER.
 - CONTRACTOR TO PROTECT EXISTING TREES IN RIGHT-OF-WAY.
 - ALL PIPE UNDER ROADWAY SHALL BE FULLY RESTRAINED.
 - ALL UTILITIES LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
 - MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES. PLEASE REFER TO THE FOLLOWING SECTIONS FROM THE 2021 OCU MANUAL: SECTION 2210, PART 4, A WATER MAINS; SECTION 2310, PART 5, B GRAVITY MAINS; SECTION 2311, PART 4, A FORCE MAINS; SECTION 2510, PART 6, A RECLAIMED WATER MAINS.
 - ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED (VERTICALLY AND HORIZONTALLY) AT ALL POINTS OF CONNECTION AND AT ALL AREAS OF CONFLICT WITH OCU INFRASTRUCTURE.
 - PROPOSED WATER SERVICES ARE TO BE 1" UNLESS NOTED OTHERWISE. METER AND METER BOX WILL BE INSTALLED BY SEPARATE PERMIT BY INDIVIDUAL HOME OWNER.
 - MINIMUM FIRE FLOW OF 1,000 GPM @ 20 PSI FOR 1 HOUR SHALL BE REQUIRED FOR ALL HYDRANTS.



HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
7/2/2024	CONSTRUCTION PLANS		

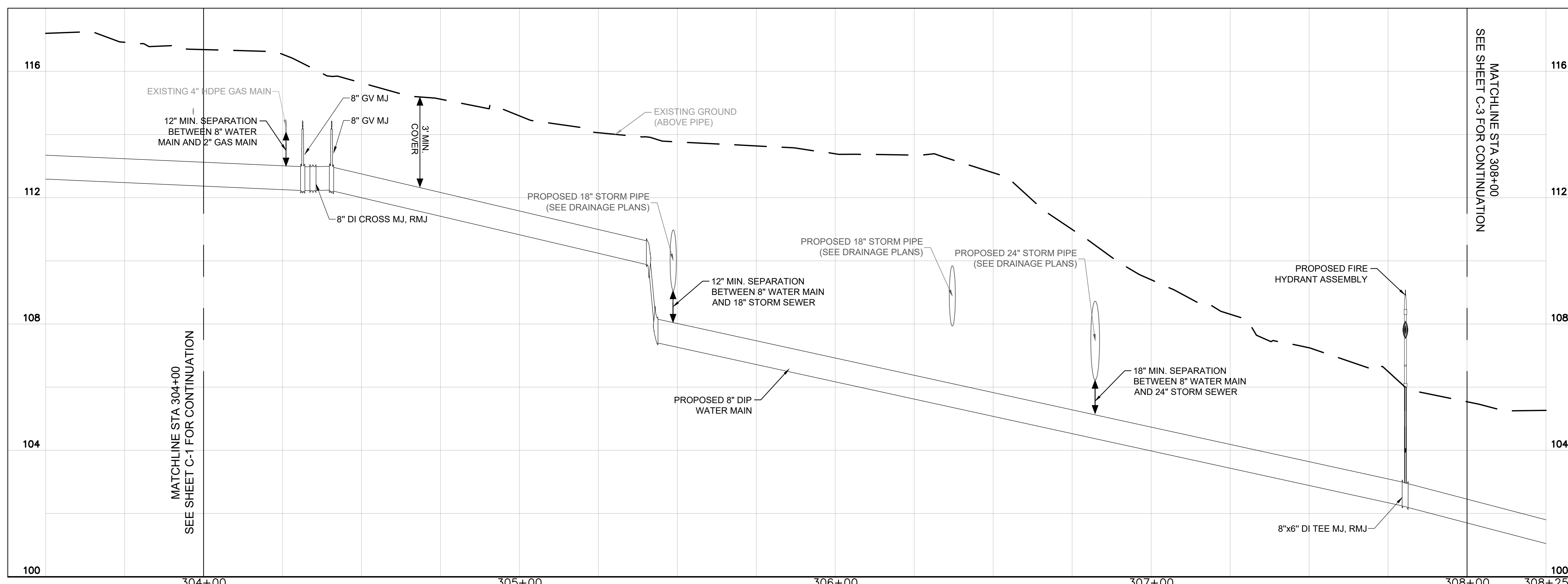
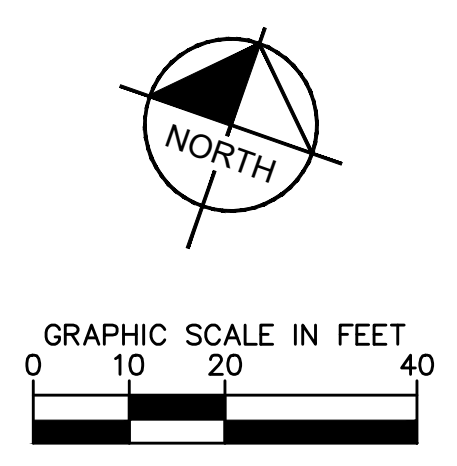
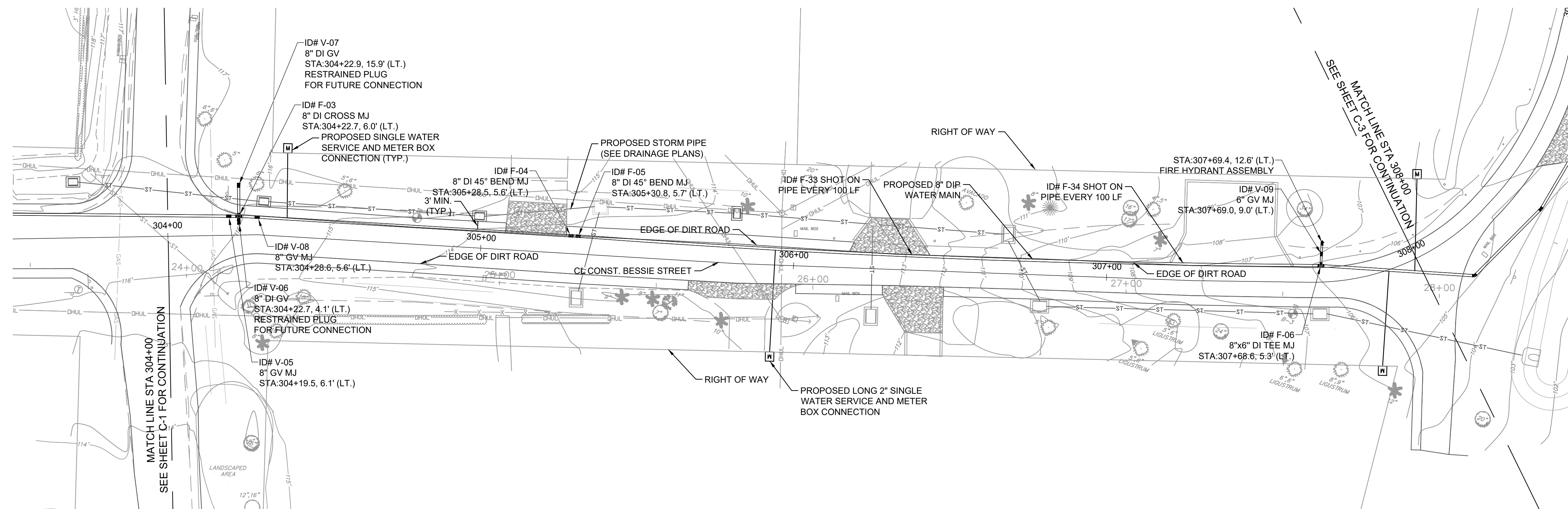
Kimley»Horn
 Certificate Of Authorization No. 35106
 A. TUCKER HUNTER, PE
 P.E. License No. 88634
 200 South Orange Ave, Suite 600
 Orlando, Florida 32801



TOWN OF
WINDERMERE

BESSIE STREET WATER MAIN
 WATER MAIN PLAN AND PROFILE
 STA 298+50 TO STA 304+00

SHEET NO.
C-1



- NOTES:
- CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO RESTORE GRADE, DRIVEWAYS, AND ROADWAYS TO EXISTING CONDITIONS OR BETTER AS SHOWN ON "BESSIE STREET DRAINAGE IMPROVEMENTS" ROADWAY PLANS, PROJECT No. 049018019
 - CONTRACTOR TO PROTECT OR REPLACE FENCES, MAILBOXES, ETC. TO EXISTING CONDITIONS OR BETTER.
 - CONTRACTOR TO PROTECT EXISTING TREES IN RIGHT-OF-WAY.
 - ALL PIPE UNDER ROADWAY SHALL BE FULLY RESTRAINED.

- NOTES (CONT.):
- ALL UTILITIES LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
 - MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES. PLEASE REFER TO THE FOLLOWING SECTIONS FROM THE 2021 OCU MANUAL: SECTION 2210, PART 4, A WATER MAINS; SECTION 2310, PART 5, B GRAVITY MAINS; SECTION 2311, PART 4, A FORCE MAINS; SECTION 2510, PART 6, A RECLAIMED WATER MAINS.
 - ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED (VERTICALLY AND HORIZONTALLY) AT ALL POINTS OF CONNECTION AND AT ALL AREAS OF CONFLICT WITH OCU INFRASTRUCTURE.

- NOTES (CONT.):
- PROPOSED WATER SERVICES ARE TO BE 1" UNLESS NOTED OTHERWISE. METER AND METER BOX WILL BE INSTALLED BY SEPARATE PERMIT BY INDIVIDUAL HOME OWNER.
 - MINIMUM FIRE FLOW OF 1,000 GPM @ 20 PSI FOR 1 HOUR SHALL BE REQUIRED FOR ALL HYDRANTS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
7/2/2024	CONSTRUCTION PLANS		

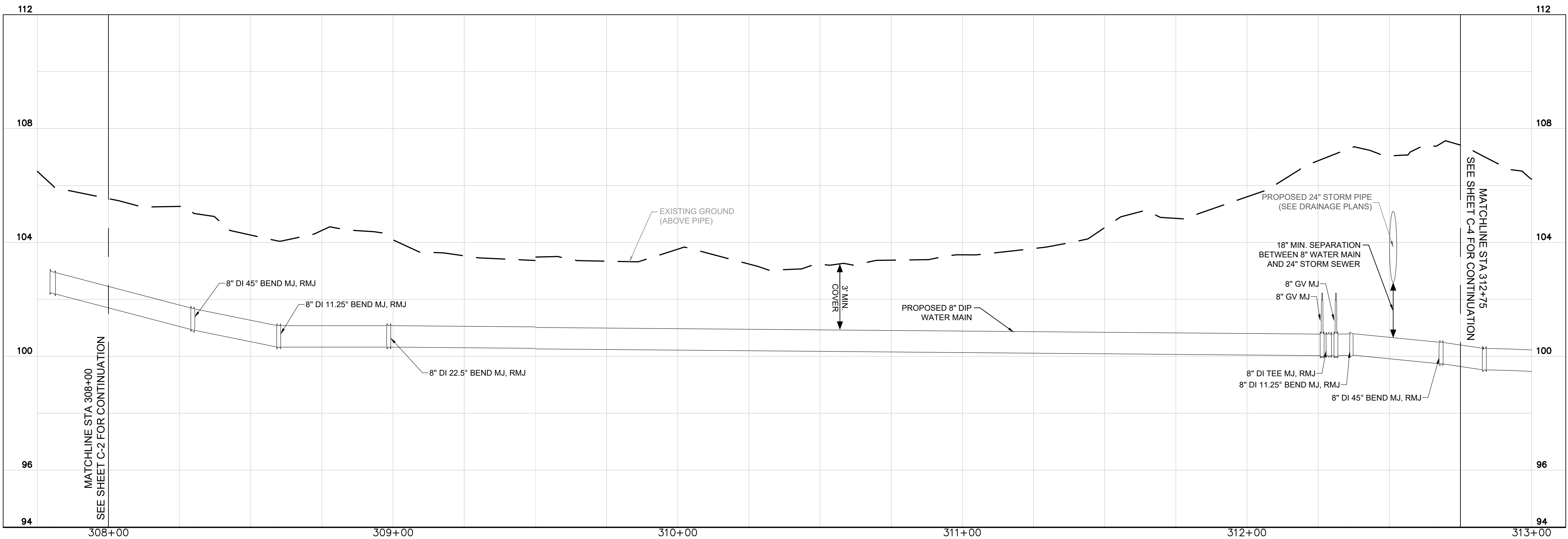
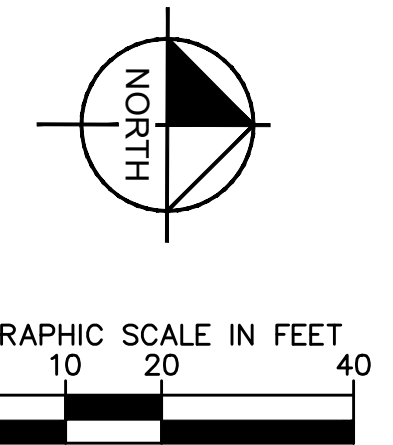
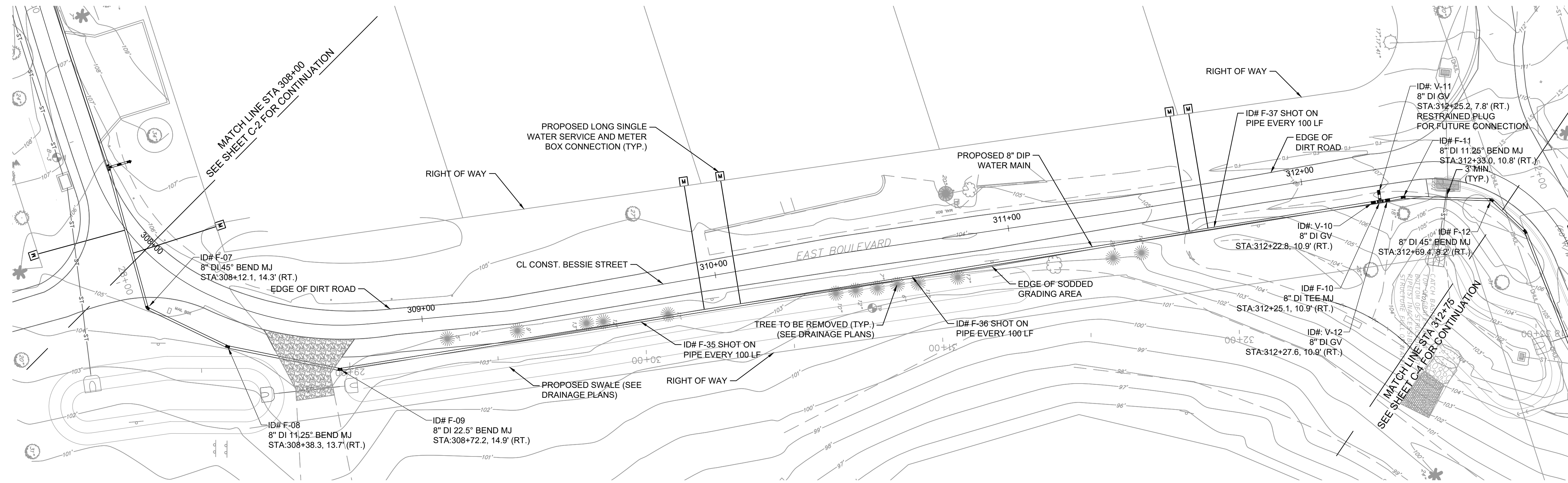
Kimley»Horn
 Certificate Of Authorization No. 35106
 A. TUCKER HUNTER, PE
 P.E. License No. 88634
 200 South Orange Ave, Suite 600
 Orlando, Florida 32801



TOWN OF
WINDERMERE

BESSIE STREET WATER MAIN
WATER MAIN PLAN AND PROFILE
 STA 304+00 TO STA 308+00

SHEET NO.
C-2



- NOTES:
- CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO RESTORE GRADE, DRIVEWAYS, AND ROADWAYS TO EXISTING CONDITIONS OR BETTER AS SHOWN ON "BESSIE STREET DRAINAGE IMPROVEMENTS" ROADWAY PLANS, PROJECT No. 049018019.
 - CONTRACTOR TO PROTECT OR REPLACE FENCES, MAILBOXES, ETC. TO EXISTING CONDITIONS OR BETTER.
 - CONTRACTOR TO PROTECT EXISTING TREES IN RIGHT-OF-WAY.
 - ALL PIPE UNDER ROADWAY SHALL BE FULLY RESTRAINED.

- NOTES (CONT.):
- ALL UTILITIES LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
 - MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES. PLEASE REFER TO THE FOLLOWING SECTIONS FROM THE 2021 OCU MANUAL: SECTION 2210, PART 4, A WATER MAINS; SECTION 2310, PART 5, B GRAVITY MAINS; SECTION 2311, PART 4, A FORCE MAINS; SECTION 2510, PART 6, A RECLAIMED WATER MAINS.
 - ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED (VERTICALLY AND HORIZONTALLY) AT ALL POINTS OF CONNECTION AND AT ALL AREAS OF CONFLICT WITH OCU INFRASTRUCTURE.

- NOTES (CONT.):
- PROPOSED WATER SERVICES ARE TO BE 1" UNLESS NOTED OTHERWISE. METER AND METER BOX WILL BE INSTALLED BY SEPARATE PERMIT BY INDIVIDUAL HOME OWNER.
 - MINIMUM FIRE FLOW OF 1,000 GPM @ 20 PSI FOR 1 HOUR SHALL BE REQUIRED FOR ALL HYDRANTS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
7/2/2024	CONSTRUCTION PLANS		

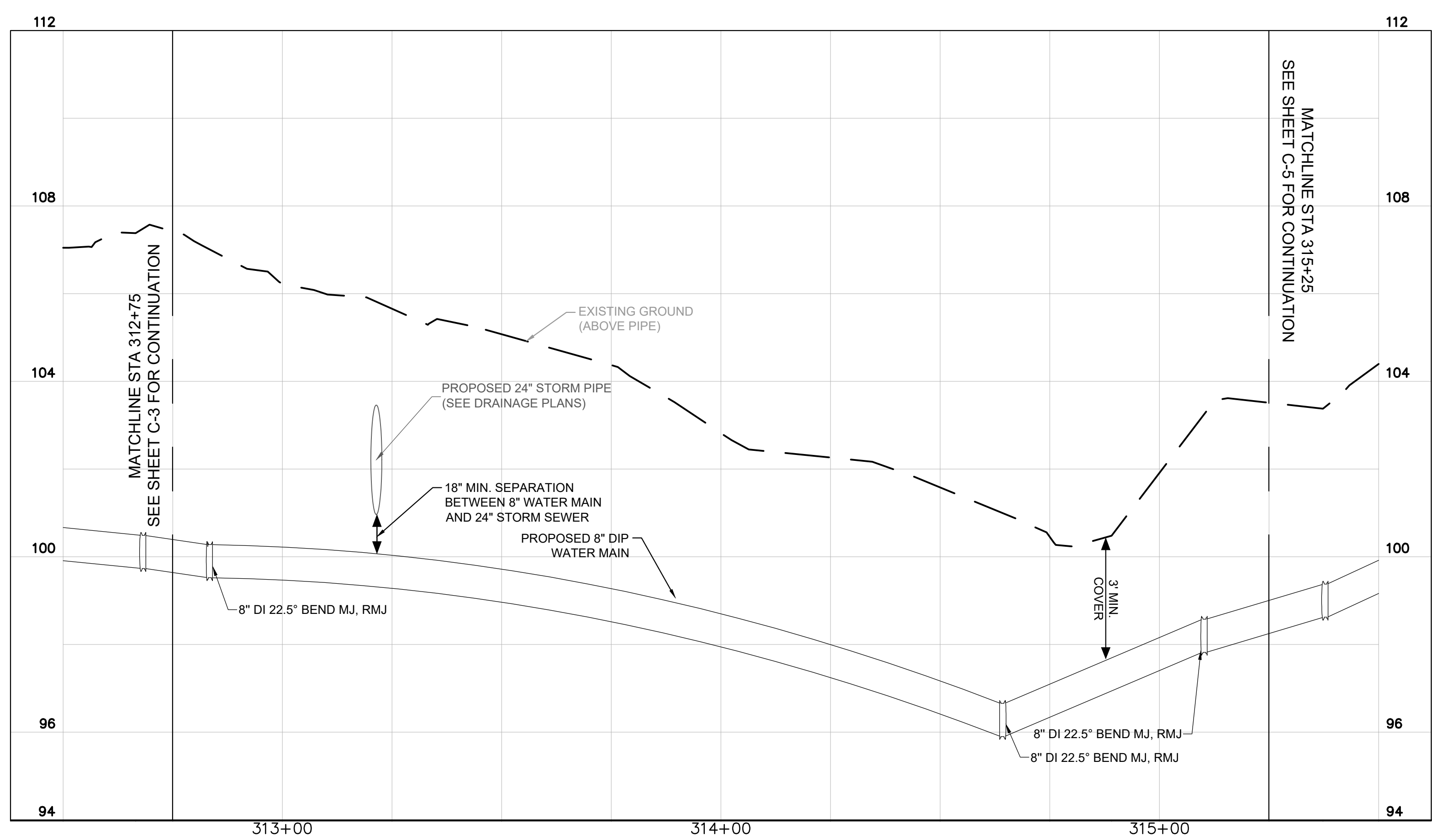
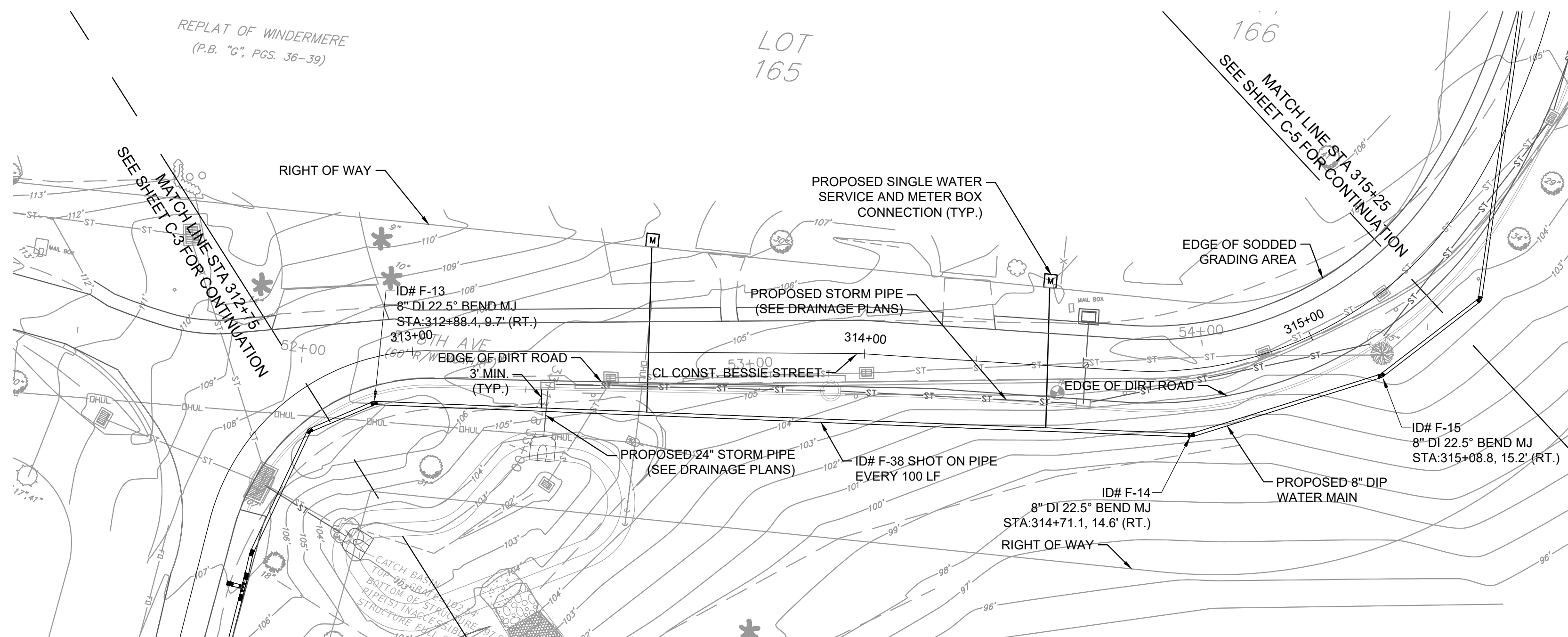
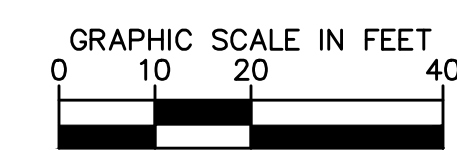
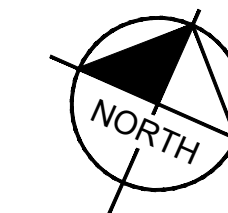
Kimley»Horn
 Certificate Of Authorization No. 35106
 A. TUCKER HUNTER, PE
 P.E. License No. 88634
 200 South Orange Ave, Suite 600
 Orlando, Florida 32801



TOWN OF
WINDERMERE

BESSIE STREET WATER MAIN
WATER MAIN PLAN AND PROFILE
 STA 308+00 TO STA 312+75

SHEET
 NO.
C-3



HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

- NOTES:
1. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 2. CONTRACTOR TO RESTORE GRADE, DRIVEWAYS, AND ROADWAYS TO EXISTING CONDITIONS OR BETTER AS SHOWN ON "BESSIE STREET DRAINAGE IMPROVEMENTS" ROADWAY PLANS, PROJECT No. 049018019
 3. CONTRACTOR TO PROTECT OR REPLACE FENCES, MAILBOXES, ETC. TO EXISTING CONDITIONS OR BETTER.
 4. CONTRACTOR TO PROTECT EXISTING TREES IN RIGHT-OF-WAY.
 5. ALL PIPE UNDER ROADWAY SHALL BE FULLY RESTRAINED.
 6. ALL UTILITIES LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
 7. MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES. PLEASE REFER TO THE FOLLOWING SECTIONS FROM THE 2021 OCU MANUAL: SECTION 2210, PART 4, A WATER MAINS; SECTION 2310, PART 5, B GRAVITY MAINS; SECTION 2311, PART 4, A FORCE MAINS; SECTION 2510, PART 6, A RECLAIMED WATER MAINS.
 8. ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED (VERTICALLY AND HORIZONTALLY) AT ALL POINTS OF CONNECTION AND AT ALL AREAS OF CONFLICT WITH OCU INFRASTRUCTURE.
 9. PROPOSED WATER SERVICES ARE TO BE 1" UNLESS NOTED OTHERWISE. METER AND METER BOX WILL BE INSTALLED BY SEPARATE PERMIT BY INDIVIDUAL HOME OWNER.
 10. MINIMUM FIRE FLOW OF 1,000 GPM @ 20 PSI FOR 1 HOUR SHALL BE REQUIRED FOR ALL HYDRANTS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
7/2/2024	CONSTRUCTION PLANS		

Kimley»Horn
Certificate Of Authorization No. 35106
A. TUCKER HUNTER, PE
P.E. License No. 88634
200 South Orange Ave, Suite 600
Orlando, Florida 32801

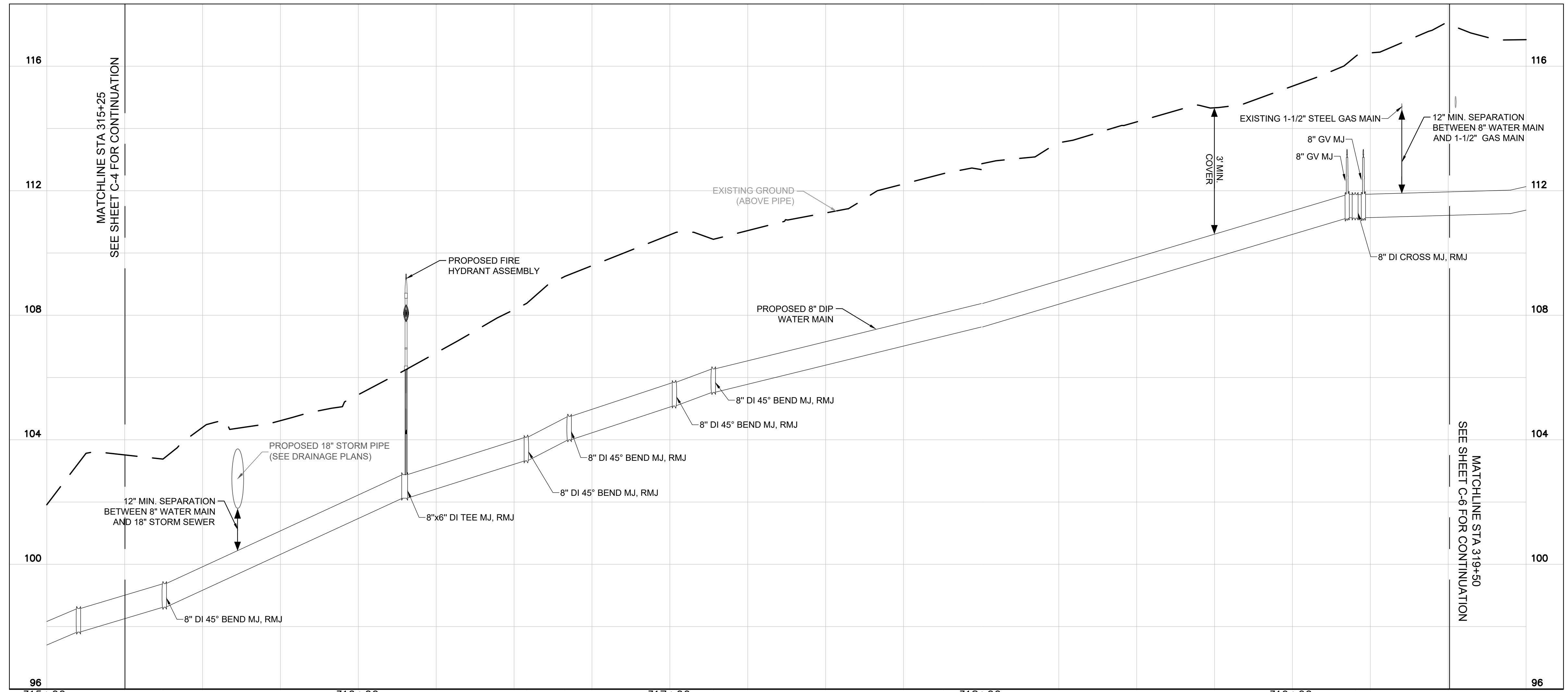
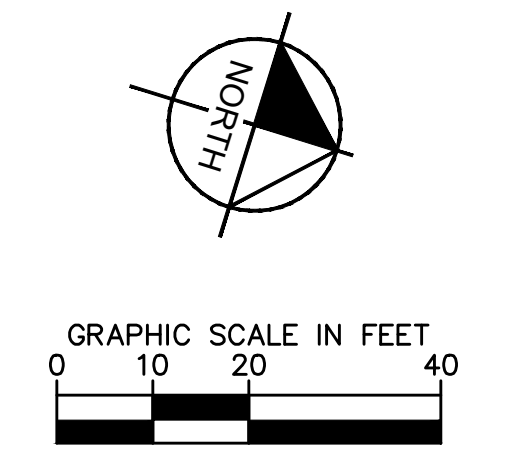
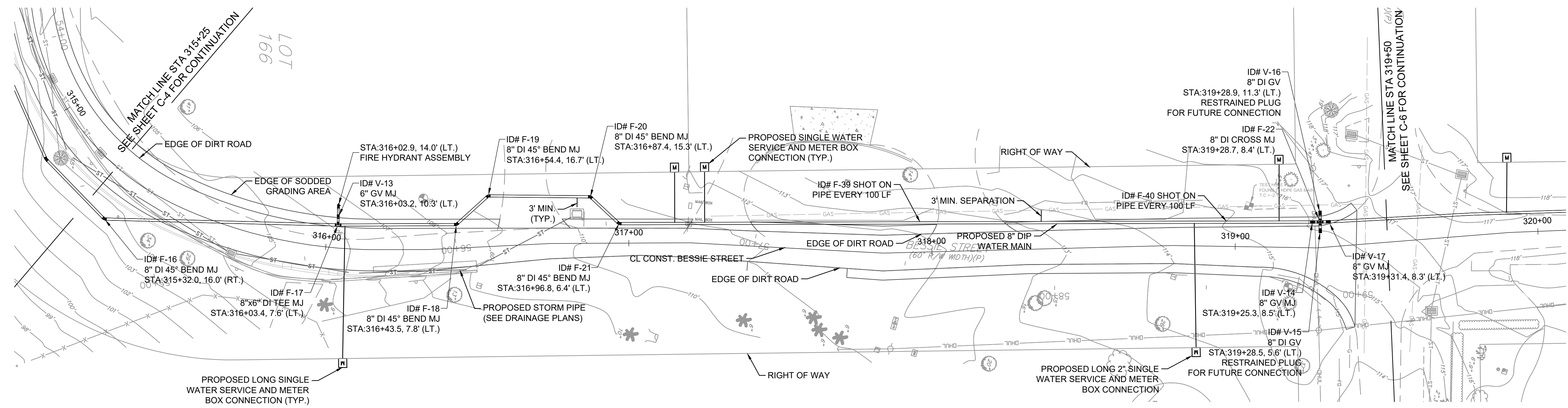


TOWN OF
WINDERMERE

BESSIE STREET WATER MAIN
WATER MAIN PLAN AND PROFILE
STA 312+75 TO STA 315+25

SHEET NO.

C-4



- NOTES:
- CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO RESTORE GRADE, DRIVEWAYS, AND ROADWAYS TO EXISTING CONDITIONS OR BETTER AS SHOWN ON "BESSIE STREET DRAINAGE IMPROVEMENTS" ROADWAY PLANS, PROJECT No. 049018019
 - CONTRACTOR TO PROTECT OR REPLACE FENCES, MAILBOXES, ETC. TO EXISTING CONDITIONS OR BETTER.
 - CONTRACTOR TO PROTECT EXISTING TREES IN RIGHT-OF-WAY.
 - ALL PIPE UNDER ROADWAY SHALL BE FULLY RESTRAINED.
 - ALL UTILITIES LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
 - MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES. PLEASE REFER TO THE FOLLOWING SECTIONS FROM THE 2021 OCU MANUAL: SECTION 2210, PART 4, A WATER MAINS; SECTION 2310, PART 5, B GRAVITY MAINS; SECTION 2311, PART 4, A FORCE MAINS; SECTION 2510, PART 6, A RECLAIMED WATER MAINS.
 - ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED (VERTICALLY AND HORIZONTALLY) AT ALL POINTS OF CONNECTION AND AT ALL AREAS OF CONFLICT WITH OCU INFRASTRUCTURE. PROPOSED WATER SERVICES ARE TO BE 1" UNLESS NOTED OTHERWISE. METER AND METER BOX WILL BE INSTALLED BY SEPARATE PERMIT BY INDIVIDUAL HOME OWNER.
 - MINIMUM FIRE FLOW OF 1,000 GPM @ 20 PSI FOR 1 HOUR SHALL BE REQUIRED FOR ALL HYDRANTS.

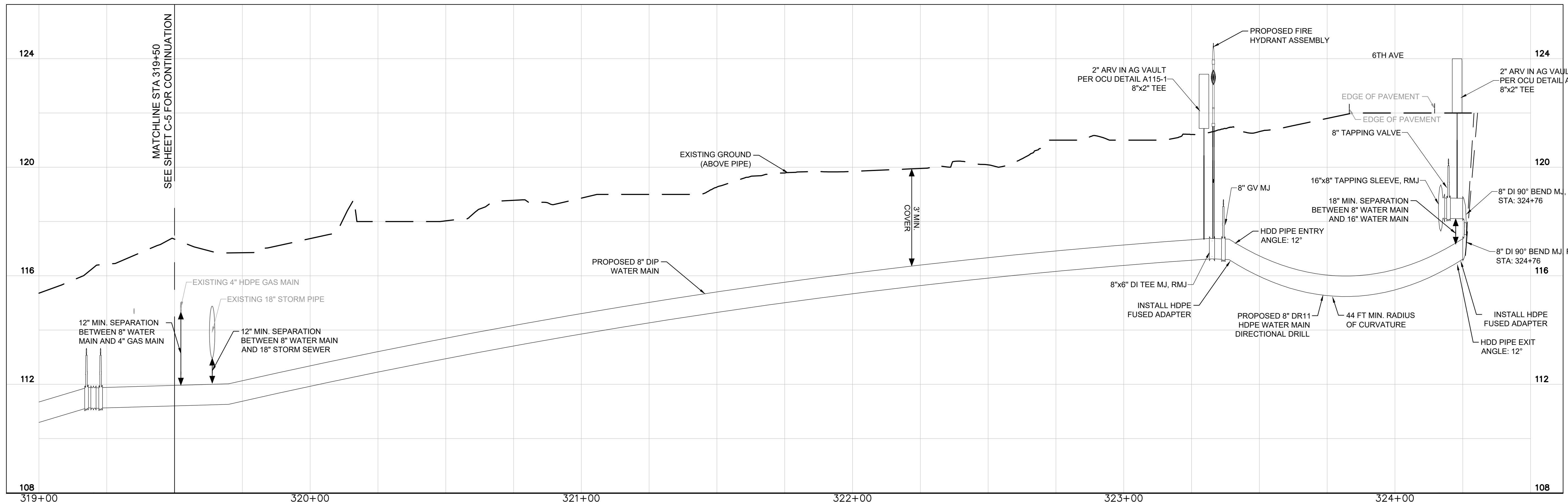
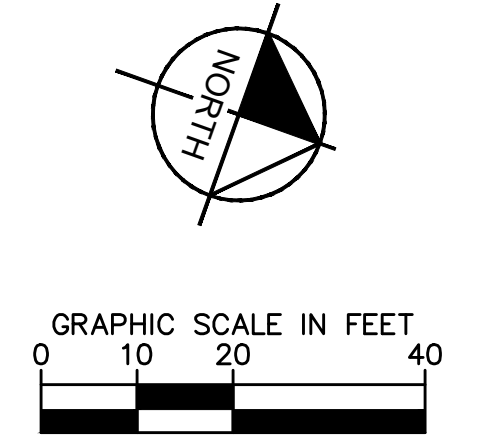
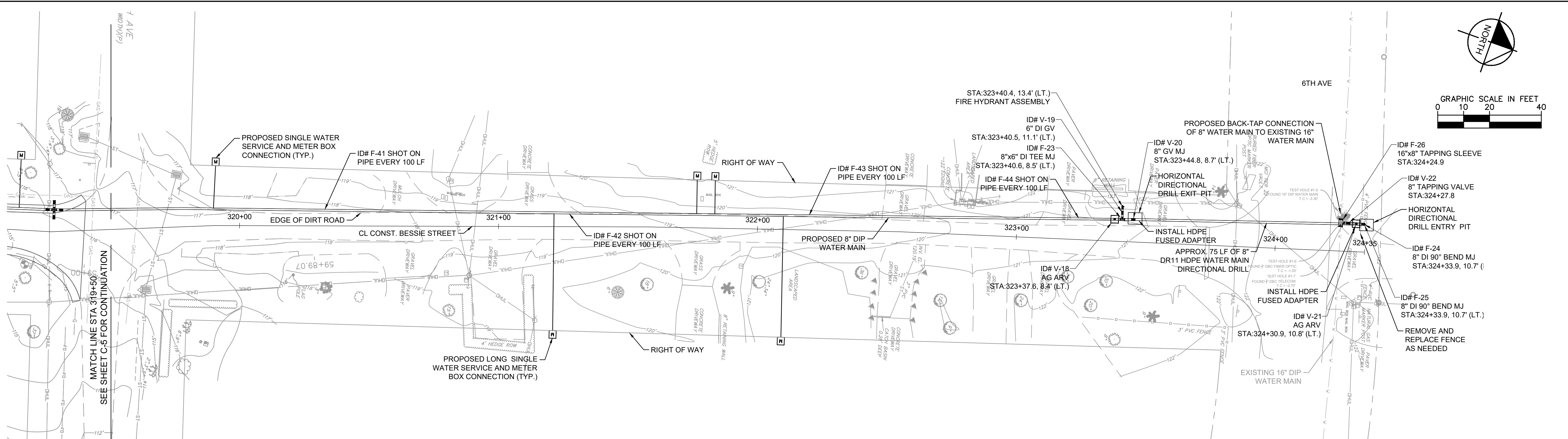
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
7/2/2024	CONSTRUCTION PLANS		

Kimley»Horn
 Certificate Of Authorization No. 35106
 A. TUCKER HUNTER, PE
 P.E. License No. 88634
 200 South Orange Ave, Suite 600
 Orlando, Florida 32801

THE TOWN OF WINDERMERE
 TOWN OF WINDERMERE

BESSIE STREET WATER MAIN
 WATER MAIN PLAN AND PROFILE
 STA 315+25 TO STA 319+50

SHEET NO.
C-5



- NOTES:
- CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO RESTORE GRADE, DRIVEWAYS, AND ROADWAYS TO EXISTING CONDITIONS OR BETTER AS SHOWN ON "BESSIE STREET DRAINAGE IMPROVEMENTS" ROADWAY PLANS, PROJECT No. 049018019
 - CONTRACTOR TO PROTECT OR REPLACE FENCES, MAILBOXES, ETC. TO EXISTING CONDITIONS OR BETTER.
 - CONTRACTOR TO PROTECT EXISTING TREES IN RIGHT-OF-WAY.
 - ALL PIPE UNDER ROADWAY SHALL BE FULLY RESTRAINED.

- NOTES (CONT.):
- ALL UTILITIES LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
 - MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES. PLEASE REFER TO THE FOLLOWING SECTIONS FROM THE 2021 OCU MANUAL: SECTION 2210, PART 4, A WATER MAINS; SECTION 2310, PART 5, B GRAVITY MAINS; SECTION 2311, PART 4, A FORCE MAINS; SECTION 2510, PART 6, A RECLAIMED WATER MAINS.
 - ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED (VERTICALLY AND HORIZONTALLY) AT ALL POINTS OF CONNECTION AND AT ALL AREAS OF CONFLICT WITH OCU INFRASTRUCTURE.

- NOTES (CONT.):
- PROPOSED WATER SERVICES ARE TO BE 1" UNLESS NOTED OTHERWISE. METER AND METER BOX WILL BE INSTALLED BY SEPARATE PERMIT BY INDIVIDUAL HOME OWNER.
 - MINIMUM FIRE FLOW OF 1,000 GPM @ 20 PSI FOR 1 HOUR SHALL BE REQUIRED FOR ALL HYDRANTS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
7/2/2024	CONSTRUCTION PLANS		

Kimley»Horn
 Certificate of Authorization No. 35106
 A. TUCKER HUNTER, PE
 P.E. License No. 88634
 200 South Orange Ave, Suite 600
 Orlando, Florida 32801



TOWN OF
WINDERMERE

BESSIE STREET WATER MAIN
WATER MAIN PLAN AND PROFILE
 STA 319+50 TO STA 324+40

SHEET NO.
C-6

FITTING TABLE					
ID NUMBER	DESCRIPTION	STATION	ELEVATION	NORTHING	EASTING
F-01	8" DI 45° BEND MJ	299+63			
F-02	8" DI 45° BEND MJ	299+72			
F-03	8" DI CROSS MJ	304+23			
F-04	8" DI 45° BEND MJ	305+29			
F-05	8" DI 45° BEND MJ	305+31			
F-06	8"x6" DI TEE MJ	307+69			
F-07	8" DI 45° BEND MJ	308+12			
F-08	8" DI 11.25° BEND MJ	308+38			
F-09	8" DI 22.5° BEND MJ	308+72			
F-10	8" DI TEE MJ	312+25			
F-11	8" DI 11.25° BEND MJ	312+33			
F-12	8" DI 45° BEND MJ	312+69			
F-13	8" DI 22.5° BEND MJ	312+88			
F-14	8" DI 22.5° BEND MJ	314+71			
F-15	8" DI 22.5° BEND MJ	315+09			
F-16	8" DI 45° BEND MJ	315+32			
F-17	8"x6" DI TEE MJ	316+03			
F-18	8" DI 45° BEND MJ	316+44			
F-19	8" DI 45° BEND MJ	316+54			
F-20	8" DI 45° BEND MJ	316+87			
F-21	8" DI 45° BEND MJ	316+97			
F-22	8" DI CROSS MJ	319+29			
F-23	8"x6" DI TEE MJ	323+46			
F-24	8" DI 90° BEND MJ	324+34			
F-25	8" DI 90° BEND MJ	324+34			
F-26	16"x8" TAPPING SLEEVE	324+25			

PRESSURE PIPE TABLE (SHOT ON PIPE)					
ID NUMBER	DESCRIPTION	STATION	ELEVATION	NORTHING	EASTING
F-30	8" DIP	302+06			
F-31	8" DIP	303+06			
F-32	8" DIP	304+06			
F-33	8" DIP	306+30			
F-34	8" DIP	307+30			
F-35	8" DIP	309+73			
F-36	8" DIP	310+73			
F-37	8" DIP	311+73			
F-38	8" DIP	313+89			
F-39	8" DIP	317+97			
F-40	8" DIP	318+97			
F-41	8" DIP	320+32			
F-42	8" DIP	321+32			
F-43	8" DIP	322+32			
F-44	8" DIP	323+32			

APPURTENANCE TABLE					
ID NUMBER	DESCRIPTION	STATION	ELEVATION	NORTHING	EASTING
H-01	FIRE HYDRANT	307+69			
H-02	FIRE HYDRANT	316+03			
H-03	FIRE HYDRANT	323+46			
V-01	8" GV MJ	298+65			
V-02	2" AIR RELEASE VALVE	298+68			
V-03	8" GV MJ	301+03			
V-04	2" AIR RELEASE VALVE	301+06			
V-05	8" GV MJ	304+20			
V-06	8" GV MJ	304+23			
V-07	8" GV MJ	304+23			
V-08	8" GV MJ	304+29			
V-09	6" GV MJ	307+69			
V-10	8" GV MJ	312+23			
V-11	8" GV MJ	312+25			
V-12	8" GV MJ	312+28			
V-13	6" GV MJ	316+03			
V-14	8" GV MJ	319+25			
V-15	8" GV MJ	319+29			
V-16	8" GV MJ	319+29			
V-17	8" GV MJ	319+31			
V-18	2" AIR RELEASE VALVE	323+43			
V-19	6" GV MJ	323+46			
V-20	8" GV MJ	323+73			
V-21	2" AIR RELEASE VALVE	324+31			
V-22	8" TAPPING VALVE	324+28			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
7/2/2024	CONSTRUCTION PLANS		

Kimley»Horn
 Certificate of Authorization No. 35106
 A. TUCKER HUNTER, PE
 P.E. License No. 88634
 200 South Orange Ave., Suite 600
 Orlando, Florida 32801



TOWN OF
WINDERMERE

BESSIE STREET WATER MAIN
ASSET TABLES

SHEET
 NO.

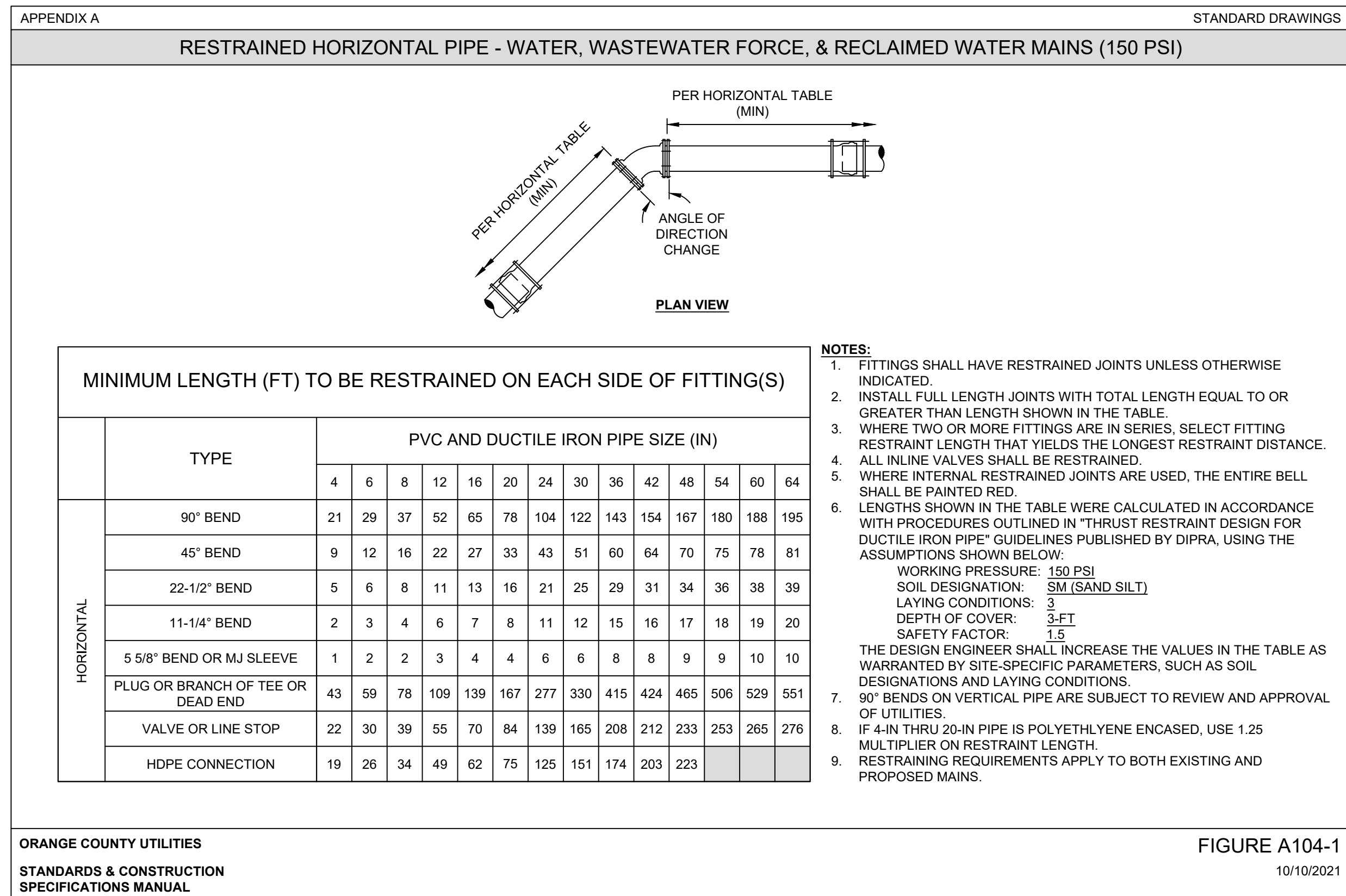
C-7

\$USERS

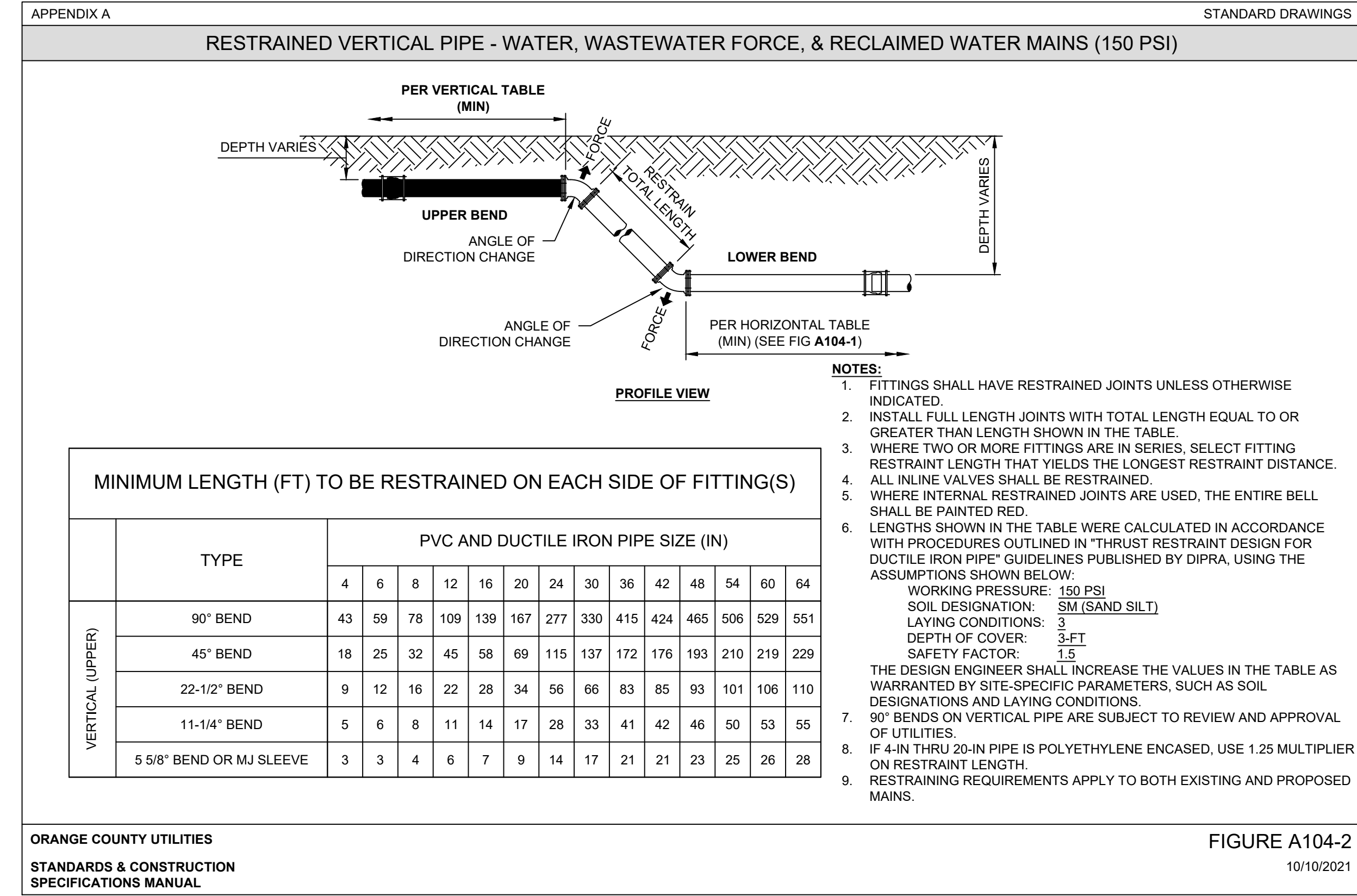
\$DATES

\$TIMES

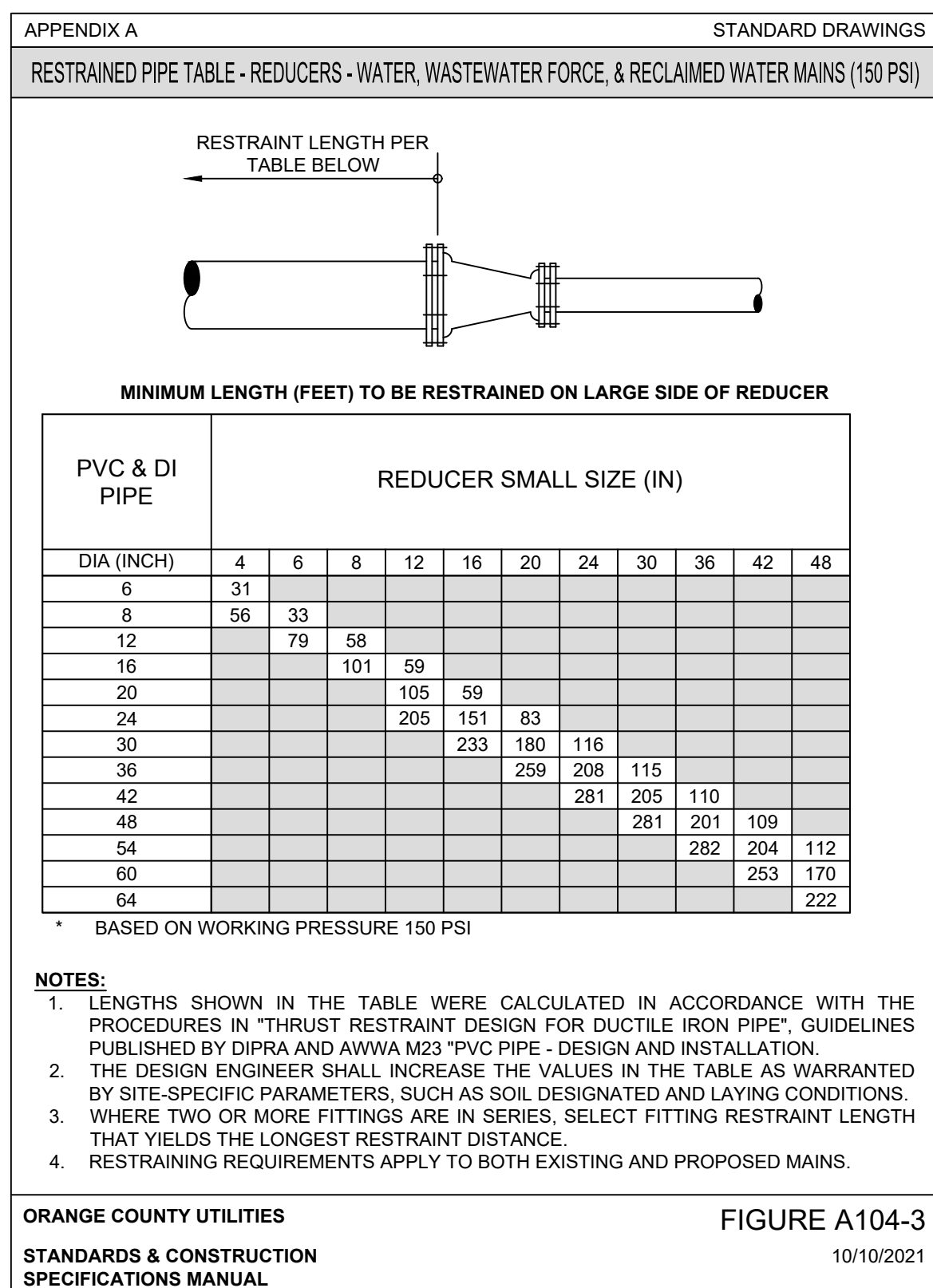
\$FILES



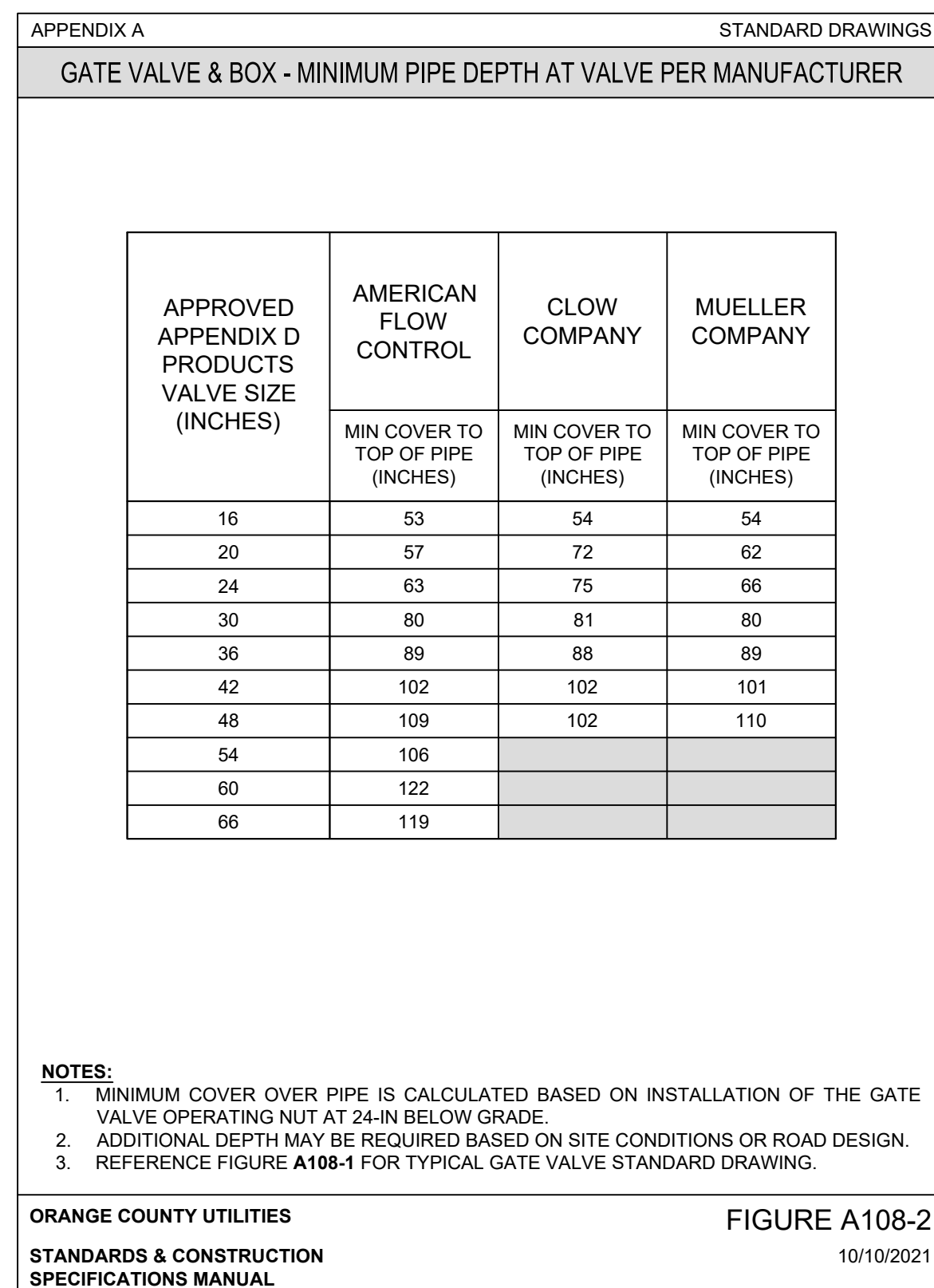
DETAIL 1
D-1
NO SCALE



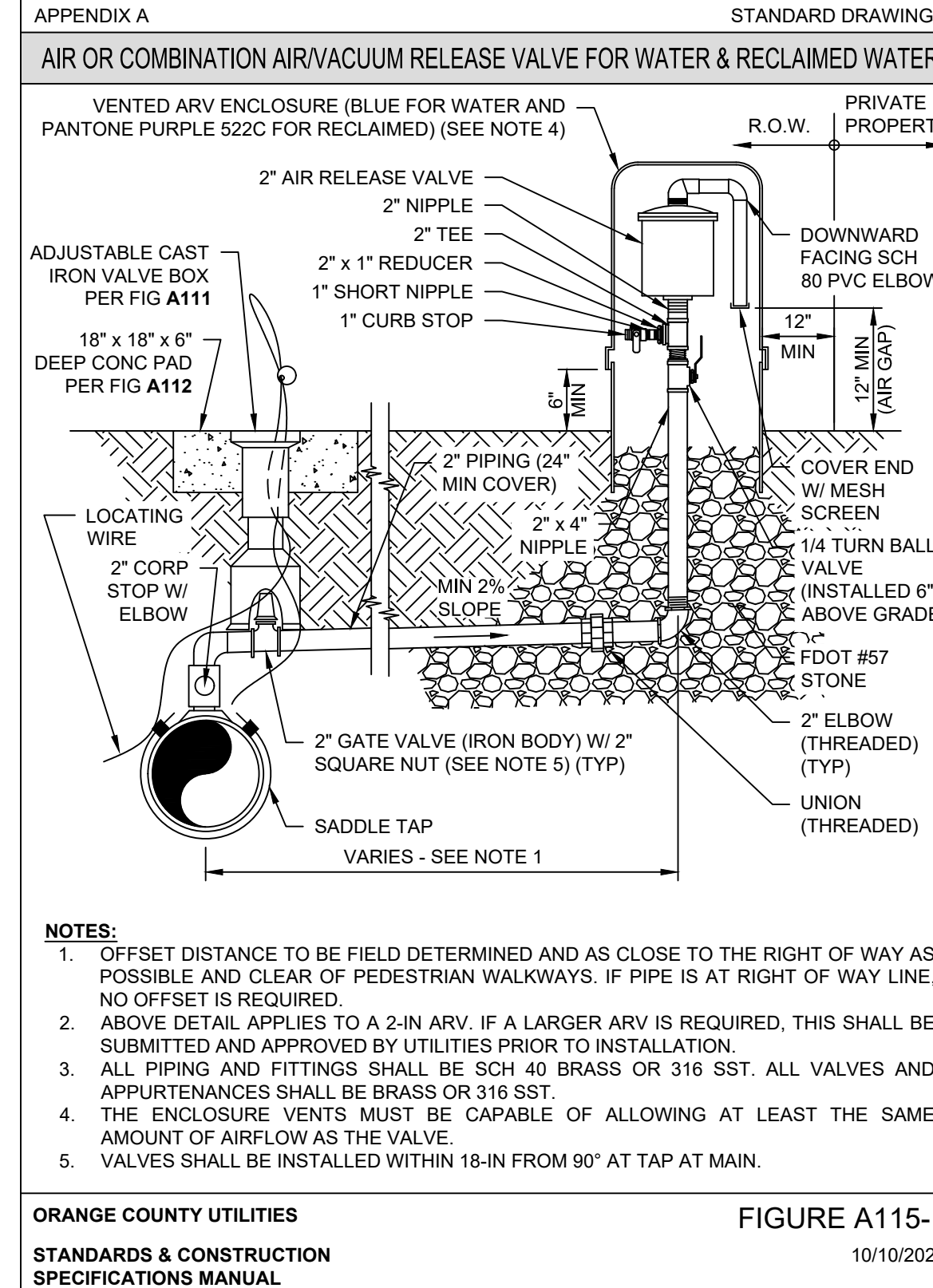
DETAIL 2
D-1
NO SCALE



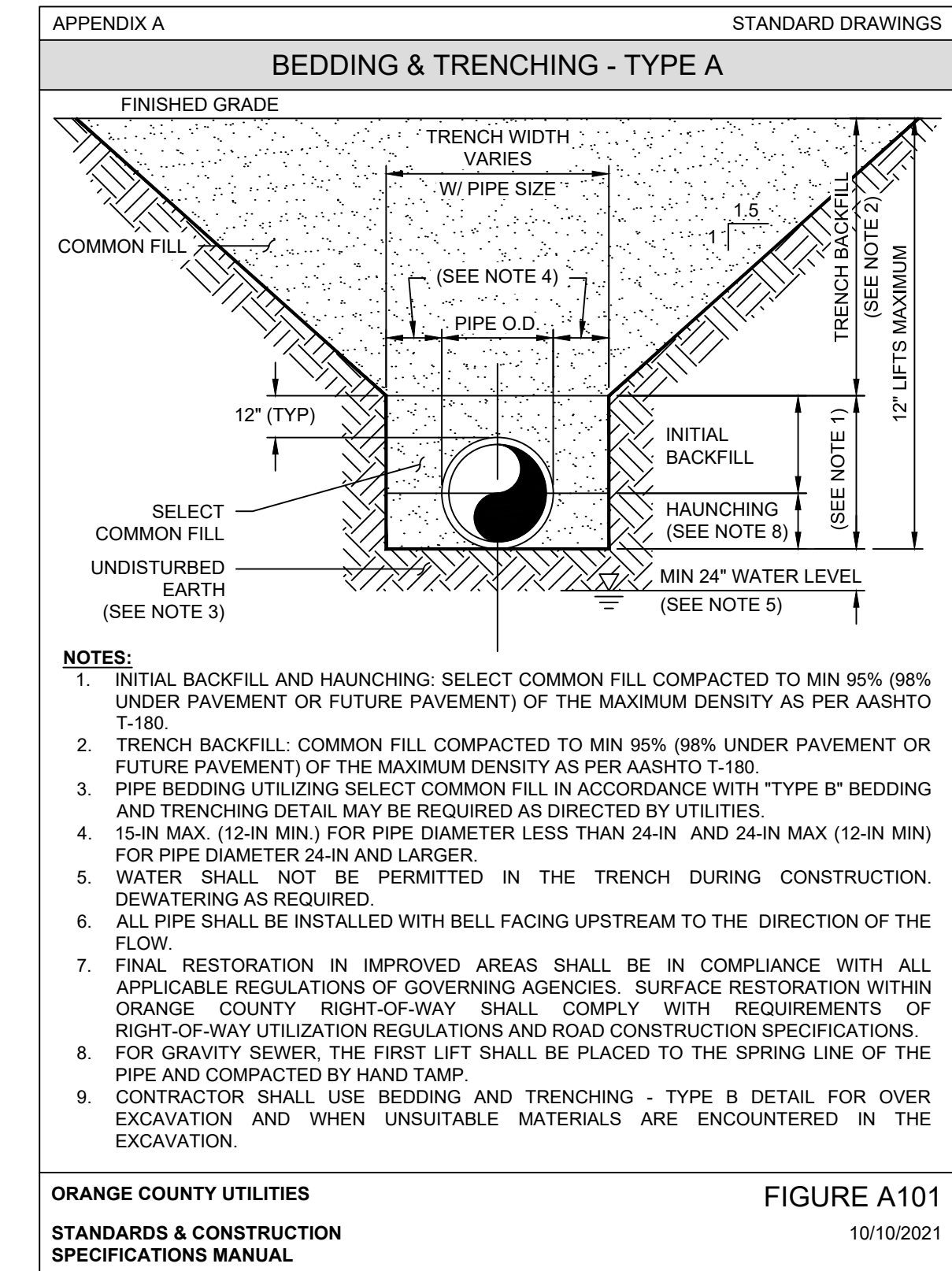
DETAIL 3
D-1
NO SCALE



DETAIL 4
D-1
NO SCALE



DETAIL 5
D-1
NO SCALE



DETAIL 6
D-1
NO SCALE

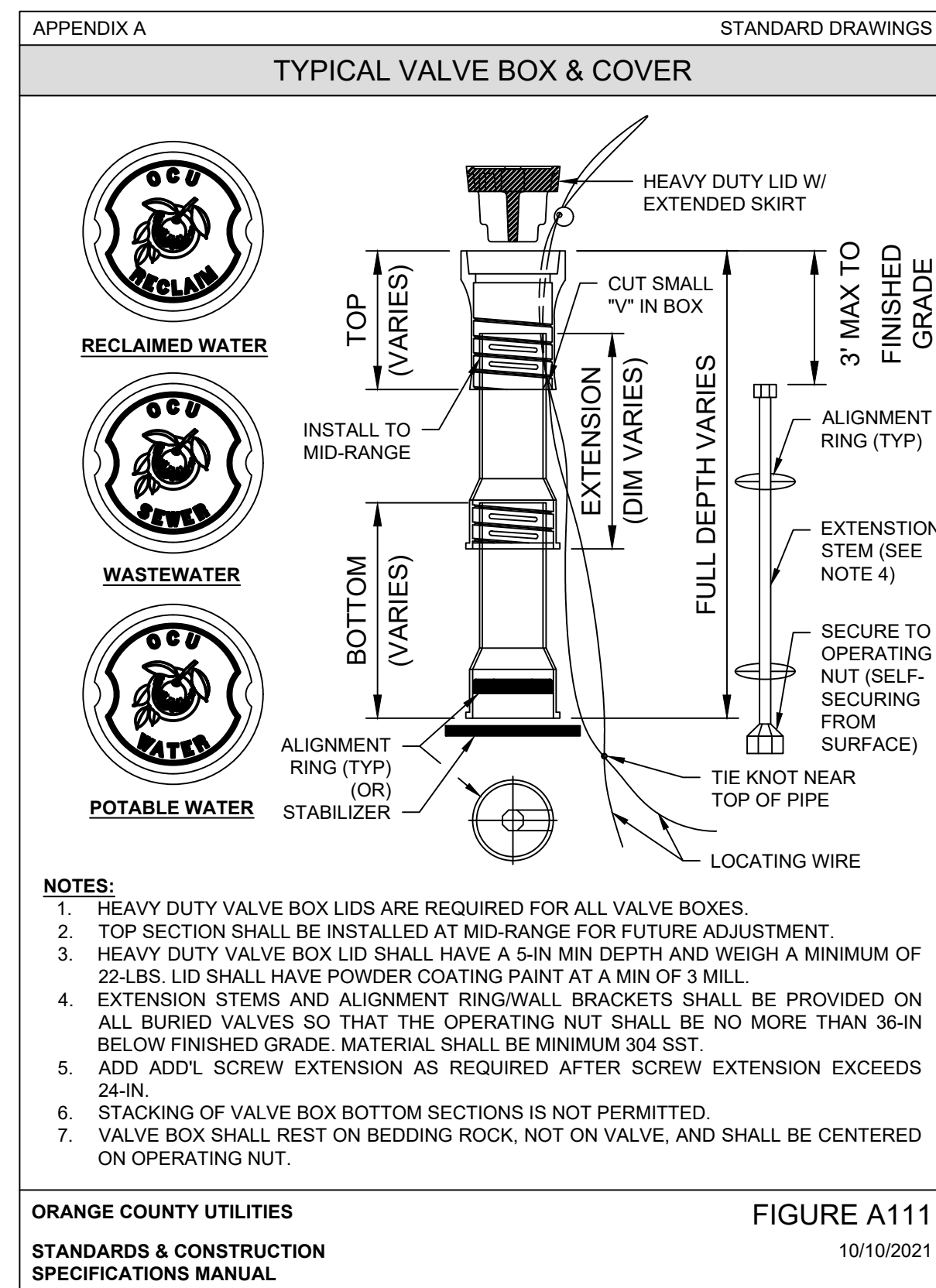
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
7/2/2024	CONSTRUCTION PLANS		

Kimley»Horn
 Certificate Of Authorization No. 35106
 A. TUCKER HUNTER, PE
 P.E. License No. 88634
 200 South Orange Ave., Suite 600
 Orlando, Florida 32801

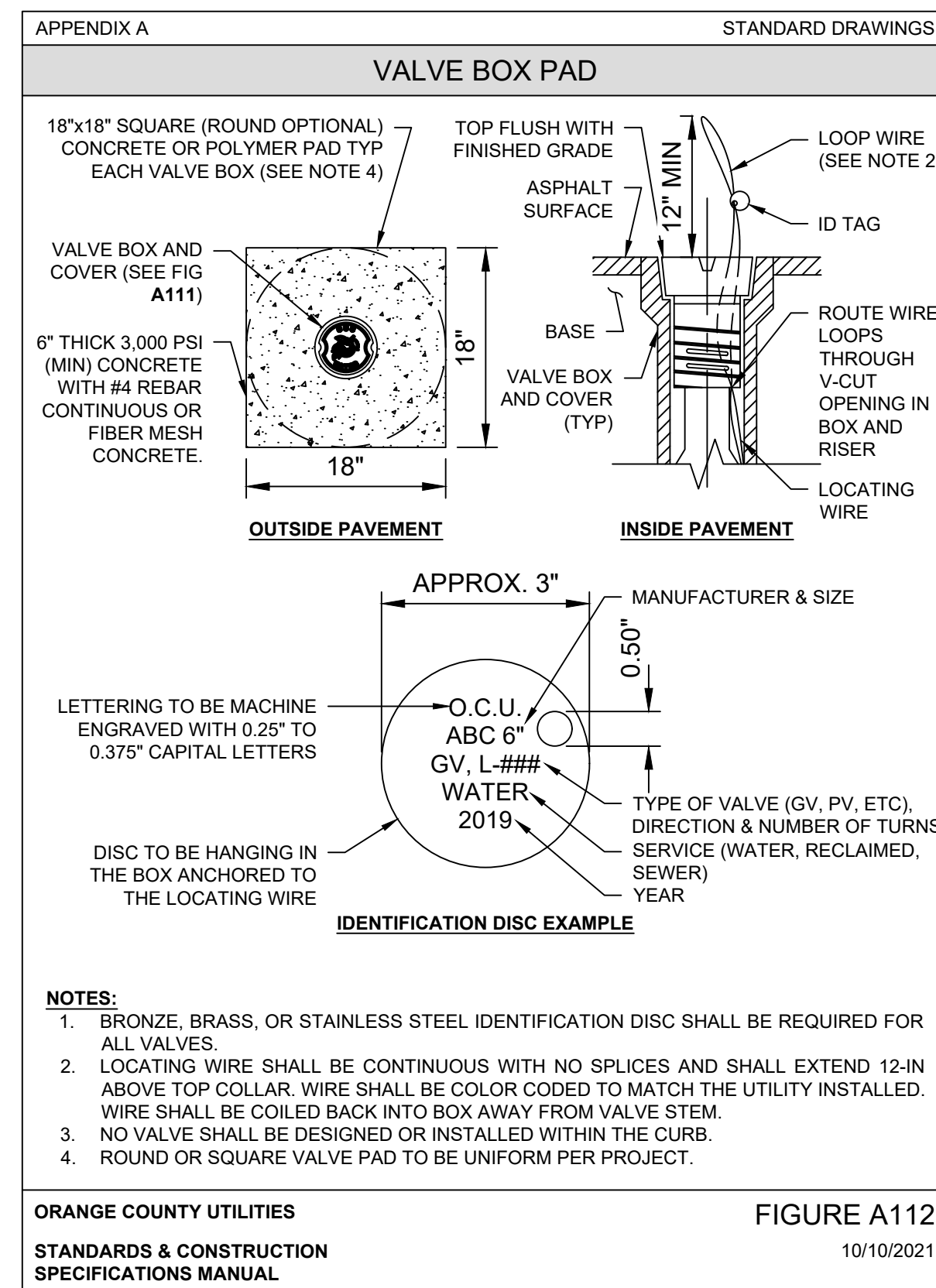
THE TOWN OF
WINDERMERE
 TOWN OF
WINDERMERE

BESSIE STREET WATER MAIN
 DETAILS - 1

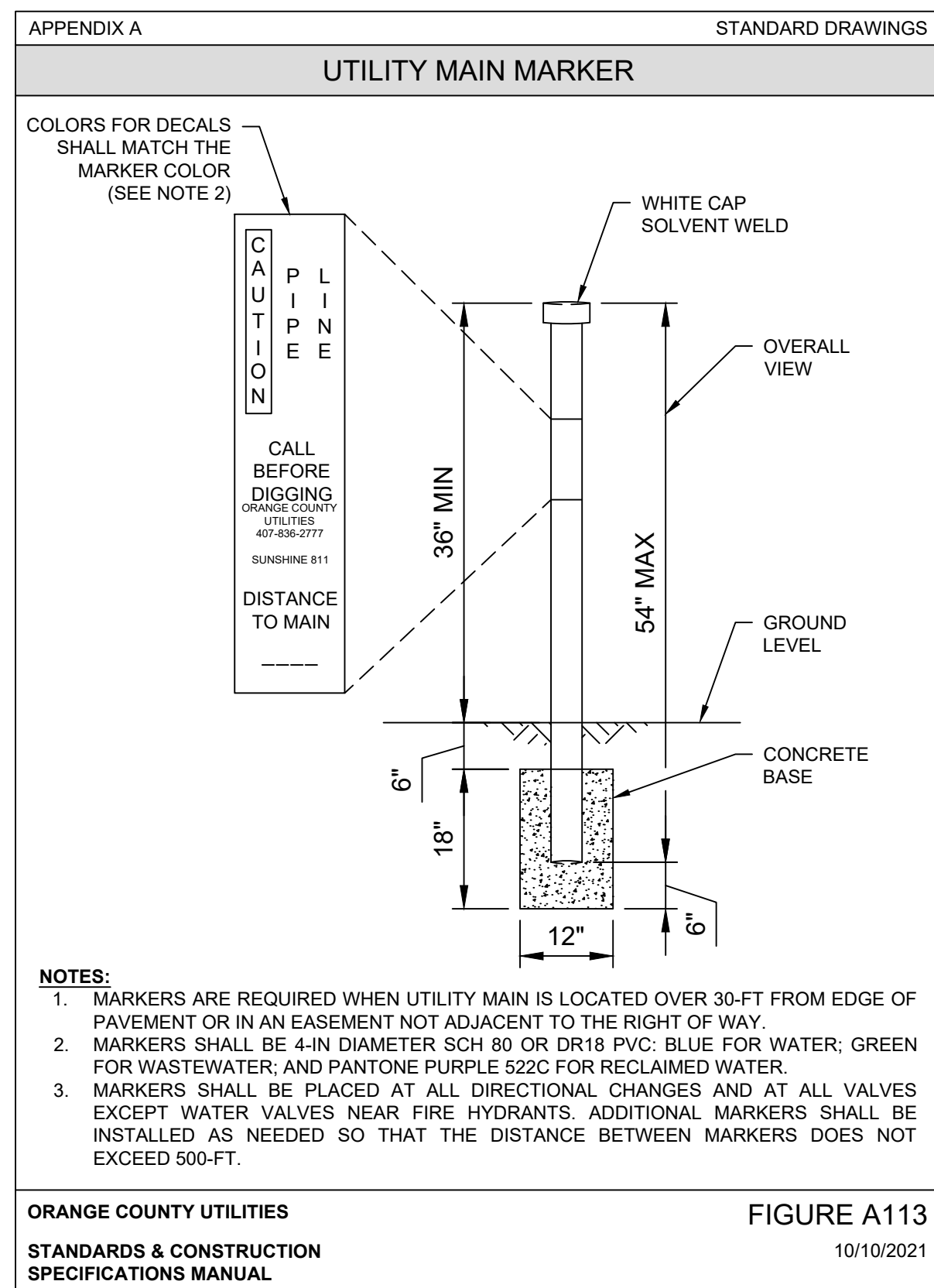
SHEET NO.
D-1



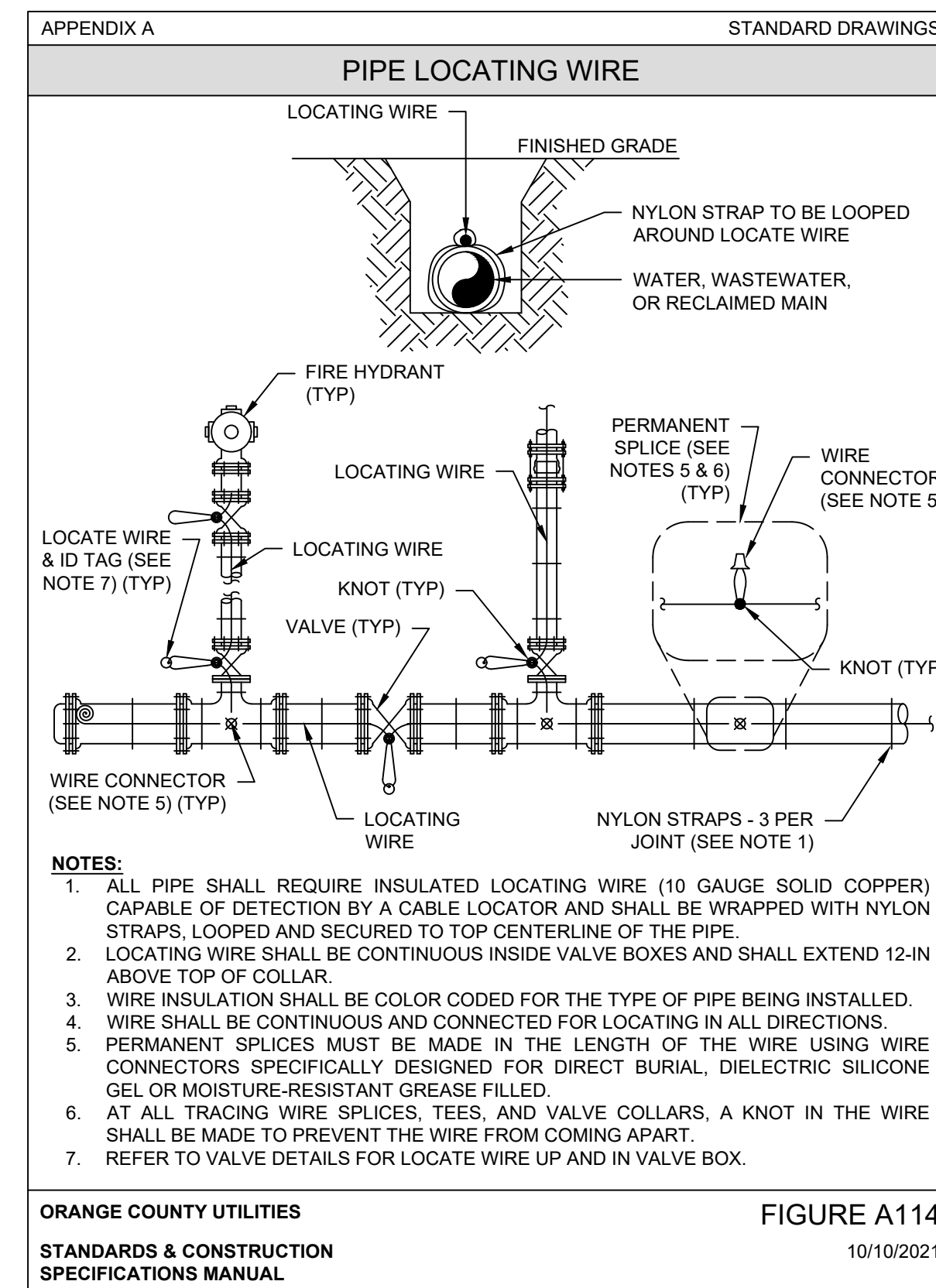
DETAIL 7
D-2
NO SCALE



DETAIL 8
D-2
NO SCALE



DETAIL 9
D-2
NO SCALE



DETAIL 10
D-2
NO SCALE

APPENDIX A STANDARD DRAWINGS

HORIZONTAL PIPELINE SEPARATION REQUIREMENTS

HORIZONTAL SEPARATION REQUIREMENTS (NOTES 1 & 2)

PROPOSED UTILITY	POTABLE WATER (NOTE 3)		RECLAIMED WATER MAIN (SEE NOTE 7)		WASTEWATER FORCEMAIN		SANITARY SEWER ALL SIZES	STORM SEWER ALL SIZES	STRUCTURAL FOUNDATION, WALLS, ETC. (SEE NOTE 8)
	4"-12"	16"-UP	4"-12"	16"-UP	4"-12"	16"-UP			
POTABLE WATER (NOTE 3)	3'	5'	3'	5'	6'	6'	6'	3'	10'
RECLAIMED WATER MAIN (SEE NOTE 7)	3'	5'	3'	5'	5'	5'	5'	5'	15' (NOTE 5)
WASTEWATER FORCEMAIN	6'	6'	5'	5'	5'	5'	5'	5'	15' (NOTE 5)
SANITARY SEWER	ALL SIZES	6'	3'	3'	5'	5'	5'	5'	VARIES PER DEPTH

NOTES:

- DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
- THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. FOR PIPES INSTALLED AT GREATER DEPTHS THAN THE MINIMUM OCU DESIGN STANDARDS, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH.
- THIS SEPARATION REQUIREMENT COMPLIES WITH THE MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, FAC. VARIANCES FROM THE FDEP REQUIREMENTS MUST COMPLY WITH 62-555.314(5), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH FDEP AND UTILITIES PRIOR TO INSTALLATION.
- NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
- PRESSURE MAINS 16-IN TO 24-IN MAY HAVE 10-FT SEPARATION FROM STRUCTURAL FOUNDATION, WALLS, ETC IF NEW MAINS ARE RESTRAINED FOR THE ENTIRE LENGTH.
- REFERENCE FIGURE A116-2 FOR VERTICAL PIPELINE SEPARATION REQUIREMENTS.
- RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- ADDITIONAL SEPARATION SHALL BE REQUIRED BY UTILITIES FOR CONSTRUCTION OF, INCLUDING, BUT NOT LIMITED TO: LIVE LOADS; MULTI-STORY COMMERCIAL BUILDINGS; SUPERSTRUCTURES; EMBANKMENTS; RETAINING WALLS; BRIDGES; RAILROADS; HIGH VOLTAGE TRANSMISSION MAINS, GAS MAINS, ETC.

ORANGE COUNTY UTILITIES **FIGURE A116-1**
STANDARDS & CONSTRUCTION SPECIFICATIONS MANUAL 10/10/2021

DETAIL 11
D-2
NO SCALE

APPENDIX A STANDARD DRAWINGS

VERTICAL PIPELINE SEPARATION REQUIREMENTS

VERTICAL SEPARATION REQUIREMENTS (NOTES 1 & 2)

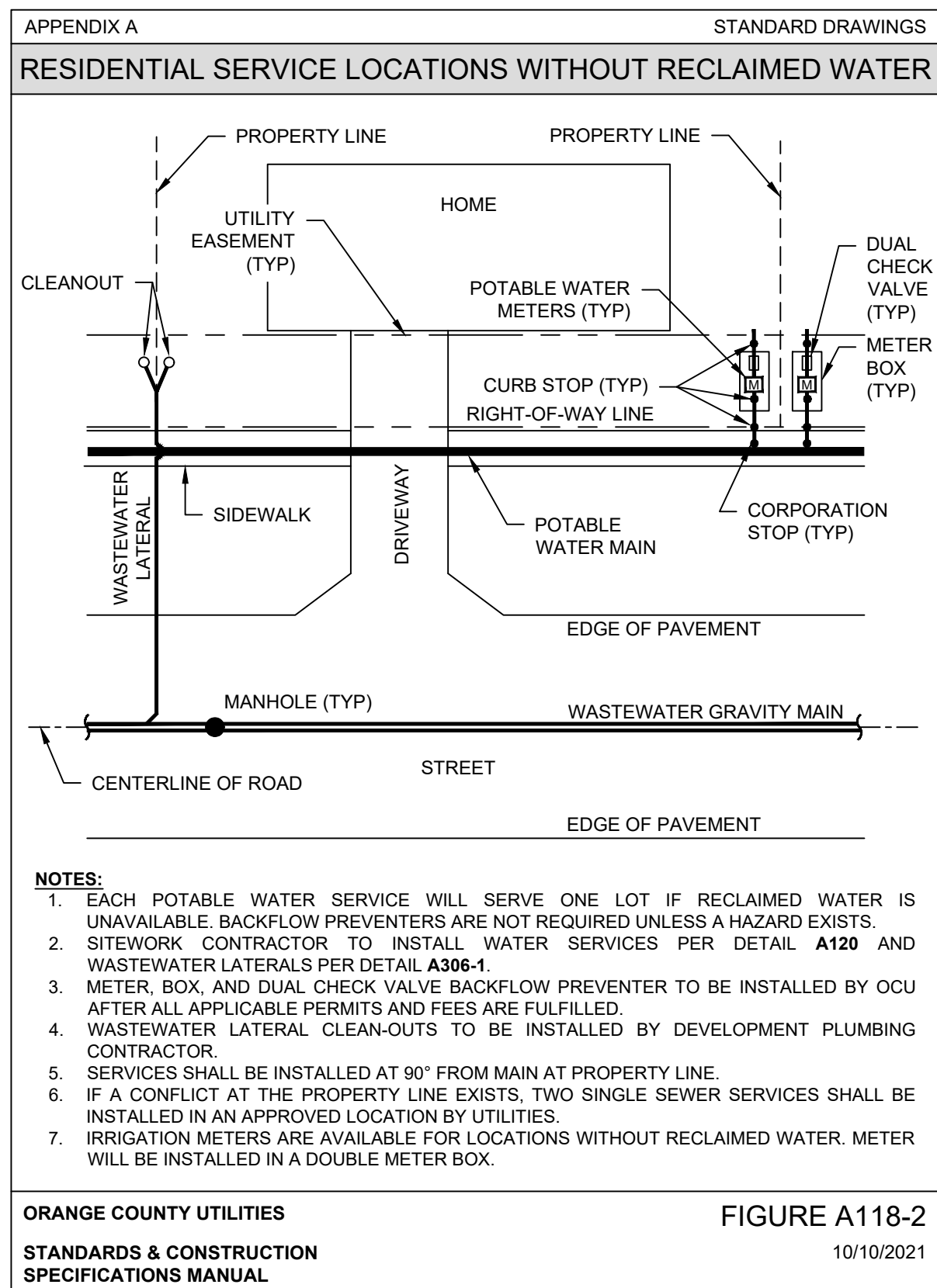
PROPOSED UTILITY	POTABLE WATER (NOTE 4)	RECLAIMED WATER MAIN	WASTEWATER FORCEMAIN	SANITARY SEWER	STORM SEWER (NOTE 3)
POTABLE WATER (NOTE 4)	12"	12"	12" / 18"	12" / 18"	12" / 18"
RECLAIMED WATER MAIN	12"	12"	12"	12"	12" / 18"
WASTEWATER FORCEMAIN	12"	12"	12"	12"	12" / 18"
SANITARY SEWER	12" / 18"	12"	12"	12"	12" / 18"

NOTES:

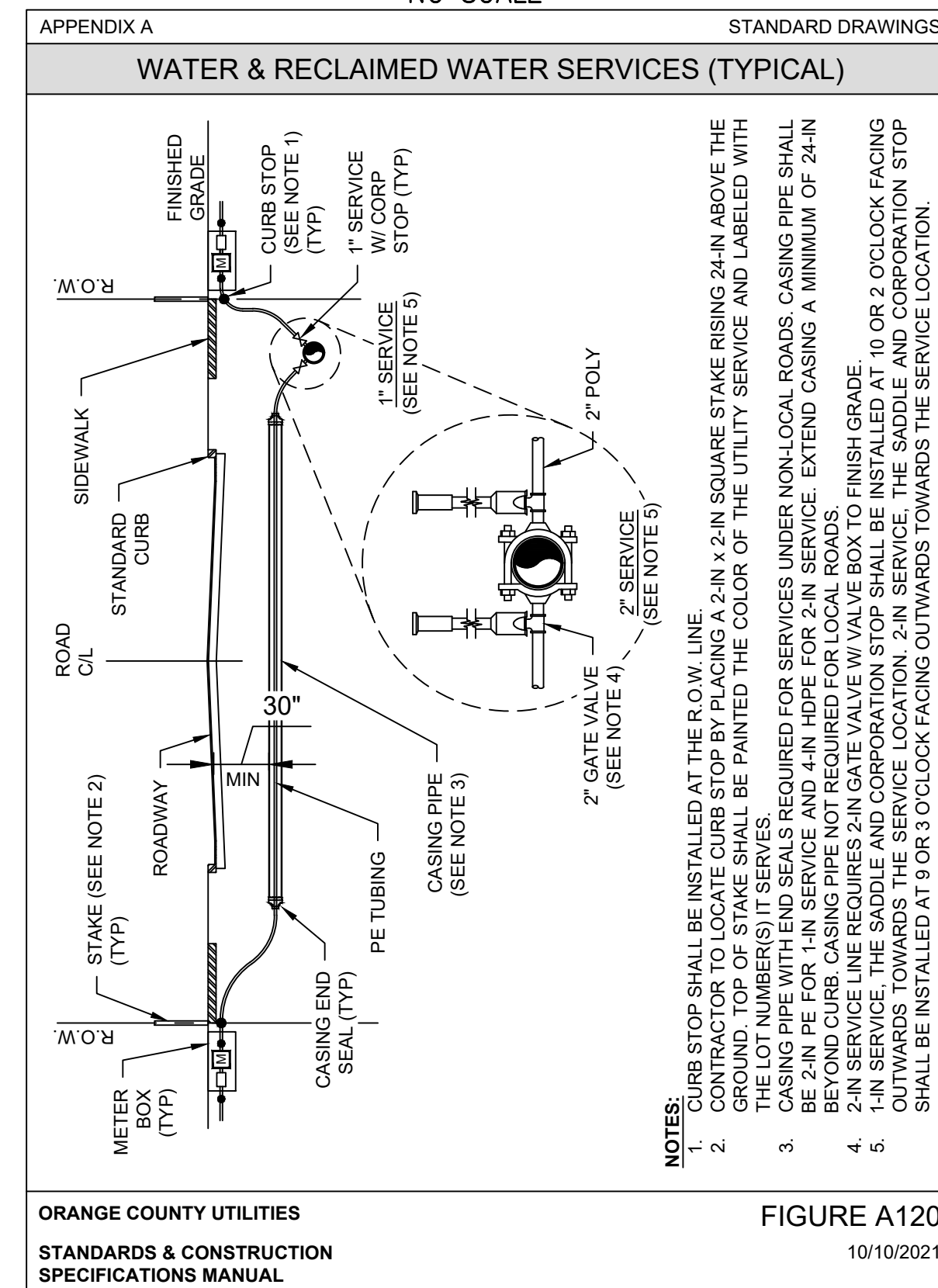
- DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
- THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE.
- THE 18-IN SEPARATION REQUIREMENT APPLIES WHEN THE STORM PIPE OR SANITARY SEWER CROSSES ABOVE THE UTILITY MAIN, AND WHEN THE STORM PIPE HAS A DIAMETER EQUAL TO OR GREATER THAN 24-IN. OTHERWISE, THE REQUIRED SEPARATION IS 12-IN.
- THIS SEPARATION REQUIREMENT COMPLIES WITH THE MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, FAC. VARIANCES FROM THE FDEP REQUIREMENTS MUST COMPLY WITH 62-555.314(5), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH FDEP AND UTILITIES.
- NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
- REFERENCE FIGURE A116-1 FOR HORIZONTAL PIPELINE SEPARATION REQUIREMENTS.
- JOINT SPACING AT CROSSING SHALL COMPLY WITH THE MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, F.A.C.

ORANGE COUNTY UTILITIES **FIGURE A116-2**
STANDARDS & CONSTRUCTION SPECIFICATIONS MANUAL 10/10/2021

DETAIL 12
D-2
NO SCALE



DETAIL 13
D-2
NO SCALE



DETAIL 14
D-2
NO SCALE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
7/2/2024	CONSTRUCTION PLANS		

Kimley»Horn
Certificate Of Authorization No. 35106
A. TUCKER HUNTER, PE
P.E. License No. 88634
200 South Orange Ave, Suite 600
Orlando, Florida 32801



TOWN OF
WINDERMERE

BESSIE STREET WATER MAIN
DETAILS - 2

SHEET NO.
D-2