SUMMERLAKE FORCE MAIN AND RECLAIMED WATER MAIN

201 EAST PINE STREET, SUITE 1000

ORLANDO, FLORIDA 32801

PHONE: (407) 839-3955 FAX: (407) 839-3790

www.tetratech.com



CONSTRUCTION DRAWINGS FOR

ORANGE COUNTY BOARD
OF COUNTY COMMISSIONERS

ORANGE COUNTY MAYOR TERESA JACOBS

COUNTY ADMINISTRATOR

AJIT LALCHANDANI

DIRECTOR OF UTILITIES RAY HANSON, P.E.



PREPARED FOR

UTILITIES ENGINEERING ORANGE COUNTY, FLORIDA

ORANGE COUNTY BOARD
OF COUNTY COMMISSIONERS

DISTRICT 1
BETSY VANDERLEY

DISTRICT 2
BRYAN NELSON

DISTRICT 3
PETE CLARKE

DISTRICT 4
JENNIFER THOMPSON

DISTRICT 5
EMILY BONILLA

DISTRICT 6
VICTORIA P. SIPLIN

PROJECT LOCATION:

CLIENT INFORMATION:

ORANGE COUNTY, FL

ORANGE COUNTY UTILITIES 9150 CURRY FORD ROAD ORLANDO, FLORIDA

Tt PROJECT No.: CLIENT PROJECT No.:

200-10034-16002

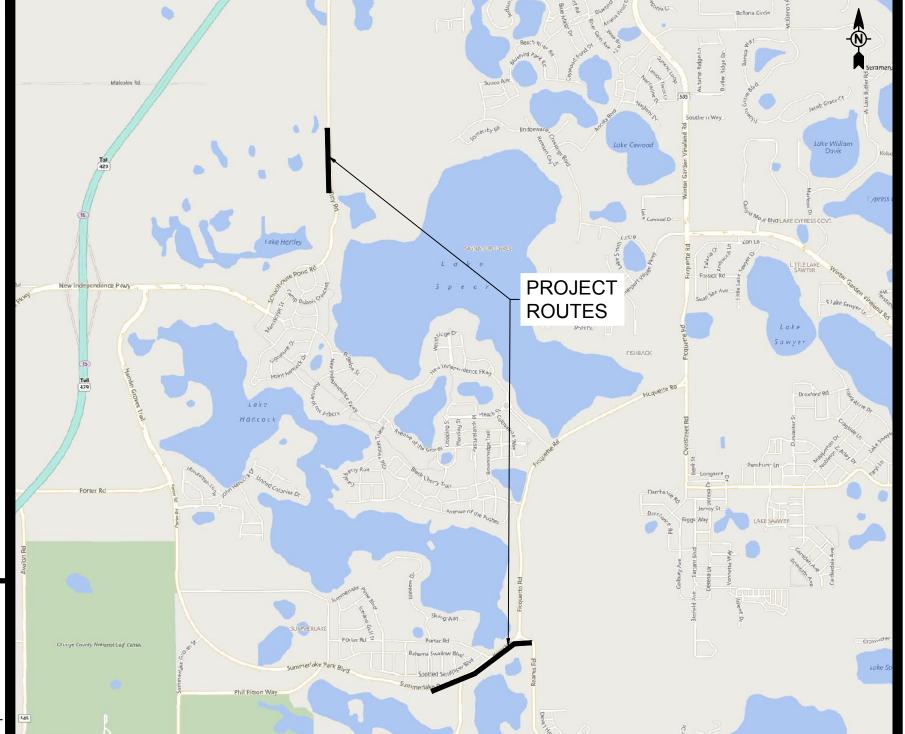
PROJECT DESCRIPTION / NOTES:

APPROXIMATELY 1,500 LF OF 24-INCH RECLAIMED WATER MAIN PIPING ALONG TINY ROAD AND 2,300 LF OF 24-INCH FORCE MAIN PIPING ALONG SUMMERLAKE PARK BLVD. IN ORANGE COUNTY, FLORIDA.

ISSUED:

BID SET

VICINITY MAP



Janine M. Alexander, P P.E. No. 59244, FL

> Orlando, Florida 32801 Engineering Business No. 2429

DATE ____

- 1. ALL UTILITIES FACILITIES CONSTRUCTION CONNECTING TO THE ORANGE COUNTY PUBLIC UTILITIES SYSTEM SHALL CONFORM TO THE ORANGE COUNTY UTILITIES STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL, AND BE ONE OF THE APPROVED PRODUCTS LISTED IN APPENDIX 'D' OF THE
- 2. THE UTILITIES IMPROVEMENTS AND ADJUSTMENT SHOWN ON THESE DRAWINGS ARE INTENDED TO MAINTAIN THE INTEGRITY OF THE ORANGE COUNTY WATER, WASTEWATER, AND RECLAIMED WATER SYSTEMS. THE DRAWINGS DO NOT INCLUDE WORK PERFORMED ON, OR FOR UTILITY SYSTEMS OWNED BY OTHERS, UNLESS STATED OTHERWISE ON THE DRAWINGS.
- 3. COORDINATION AND COMMUNICATIONS WITH ORANGE COUNTY STAFF SHALL BE MADE THROUGH THE ORANGE COUNTY UTILITIES CONSTRUCTION DIVISION INSPECTOR.
- 4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ORANGE COUNTY UTILITIES DISPATCH (EMERGENCY ONLY) IN THE EVENT OF UTILITY MAIN BREAK OR DAMAGE AT 407-836-2777.
- 5. THE ORANGE COUNTY UTILITIES CONSTRUCTION DIVISION SHALL BE NOTIFIED AT LEAST SEVEN (7) DAYS PRIOR TO ANY 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.
- 3. 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.
- 7. ORANGE COUNTY UTILITIES DEPARTMENT TELEPHONE NUMBERS:
- 407-836-2777 ORANGE COUNTY UTILITIES DISPATCH
 407-254-9798 ORANGE COUNTY UTILITIES CONSTRUCTION DIVISION
- 407-254-9680 ORANGE COUNTY UTILITIES WATER RECLAMATION DIVISION
- 407-254-9850 ORANGE COUNTY UTILITIES WATER DIVISION 407-254-9900 ORANGE COUNTY UTILITIES ENGINEERING DIVISION
- 8. SUPPORT AND PROTECT ALL EXISTING UTILITIES. CONTRACTOR SHALL CONTACT UTILITY OWNERS FOR LOCATION OF ALL EXISTING FACILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH UTILITY OWNERS AND FOR PROVIDING TEMPORARY SUPPORT FOR THE UTILITY POLES, ANCHOR GUYS, AND ALL OTHER UTILITIES DURING CONSTRUCTION.
- 9. 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, POWER, TELEPHONE, GAS, FIBER OPTIC 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 REPORT.
- 10. 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.
- 11. ALL MAIN REPAIRS TO BE COMPLETED IMMEDIATELY BY THE CONTRACTOR, AT THE CONTRACTOR'S COST. IF THE MAIN IS NOT REPAIRED IN A TIMELY MANNER, AS DETERMINED BY THE ENGINEER, ORANGE COUNTY UTILITIES PERSONNEL MAY REPAIR MAIN AND THE CONTRACTOR WILL BE BACK CHARGED FOR REPAIRS.
- 12. USE EXTREME CAUTION WHEN EXCAVATING OR CONNECTING TO ASBESTOS CEMENT PIPE. THE CONTRACTOR WILL BE REQUIRED TO SUPPLY TRUCKS CAPABLE OF PUMPING OUT THE PUMP STATION UPSTREAM FROM BREAKS OR CONNECTION POINT. WHEN CONNECTING TO ASBESTOS CEMENT WATER MAIN OR FORCE MAIN THE CONTRACTOR IS REQUIRED TO REPLACE ANY DAMAGED LENGTHS OF PIPE. THE AMOUNT OF REPLACED PIPE WILL BE DETERMINED BY THE ORANGE COUNTY UTILITIES INSPECTOR
- 13. EXISTING PIPING SHALL BE TAKEN OUT OF SERVICE, GROUTED AND ABANDONED IN PLACE. UNLESS OTHERWISE NOTED ON PLANS
- 14. 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.
- 15. SEE DETAIL SHEET FOR SEPARATION REQUIREMENTS BETWEEN WATER MAINS, SEWER MAINS AND OTHER PIPELINES AND MAINS. NO CONCRETE ENCASEMENT OF PIPES WILL BE PERMITTED.
- 16. PVC PIPE 4-INCH TO 12-INCH SHALL CONFORM TO THE REQUIREMENTS OF AWWA STANDARD C900, DR18. PVC PIPE 16-INCH TO 30-INCH SHALL CONFORM TO THE REQUIREMENTS OF AWWA STANDARD C905, DR18. 36-INCH PVC PIPE SHALL CONFORM TO AWWA STADARD C905, DR21. ALL PVC PRESSURE PIPE SHALL USE DUCTILE IRON FITTINGS. ALL DUCTILE IRON WATER MAIN SHALL CONFORM TO ANSI/AWWA A25.1/C151. ALL MATERIAL FOR USE IN POTABLE WATER SYSTEMS SHALL BE LISTED AS MEETING NSF-61.
- 17. ALL DUCTILE IRON PIPE, MECHANICAL JOINT FITTINGS, AND PIPE RESTRAINTS SHALL BE POLYETHYLENE ENCASED.
- 18. 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.
- 19. PIPE LENGTHS SHOWN ON PLANS ARE APPROXIMATE. ACTUAL LENGTHS ARE TO BE DETERMINED DURING CONSTRUCTION.
- 20. ALL NORTHING AND EASTING COORDINATES ARE BASED ON THE STATE PLAIN COORDINATE SYSTEM. STATIONING IS FOR REFERENCE ONLY.
- 21. ALL STATIONS AND OFFSET REFER TO BASELINE OF STATIONING.
- 22. MAINTAIN EMERGENCY VEHICLE ACCESS TO ALL BUSINESSES AND RESIDENCES AT ALL TIMES.
- 23. IN AREAS WHERE CONSTRUCTION ACTIVITIES RESTRICT NORMAL ACCESS TO PROPERTIES, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALTERNATE ACCESS ROUTES WHICH ARE SUBJECT TO APPROVAL BY THE ENGINEER, AS PART OF THE M.O.T. PLAN.
- 24. 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.
- 25. ALL EXCAVATIONS SHALL BE BACK FILLED AT THE END OF EACH WORK DAY.
- 26. ALL MAINS SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS. A MINIMUM COVER OF 36-INCHES SHALL BE MAINTAINED ON ALL MAINS, WHERE IT IS NOT OTHERWISE SPECIFIED ON PLANS OR DIRECTED BY THE ENGINEER.

- 27. 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. RESTRAIN EXISTING PIPE WHERE REQUIRED IN ACCORDANCE WITH THE RESTRAINT TABLES.
- 28. COMPLETE ALL CONSTRUCTION WITHIN RIGHT OF WAY LIMITS AND EASEMENT LIMITS, UNLESS OTHERWISE NOTED.
- 29. PIPE SIZES SHOWN ON PLANS ARE NOMINAL DIAMETER.
- 30. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DE-WATERING REQUIRED DURING CONSTRUCTION AND TO OBTAIN AND PAY FOR ALL PERMITS REQUIRED FOR THE TEMPORARY DE-WATERING.
- 31. CONTRACTOR SHALL INSTALL AIR RELEASE VALVES (ARV) AT ALL HIGH POINTS IN THE SYSTEM WHERE 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 VALVES IS APPROXIMATE. CONTRACTOR SHALL COORDINATE WITH THE OCU INSPECTOR.
- 32. WHERE SHOWN ON THE PLANS, LINE STOPS WILL BE USED TO ISOLATE PORTIONS OF THE EXISTING MAINS. THE ORANGE COUNTY INSPECTOR SHALL BE NOTIFIED 72 HOURS IN ADVANCE OF LINE STOP INSTALLATION.
- 33. 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 THE OWNER. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE OWNER 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 DRAWINGS 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. THE OWNER SHALL REVIEW THE SUBMITTAL WITHIN FIVE (5) WORKING DAYS AFTER RECEIVING IT AND INFORM THE CONTRACTOR REGARDING APPROVAL OR DENIAL OF THE REQUEST. IF THE OWNER REJECTS THE REQUEST, THE CONTRACTOR SHALL RESUBMIT THE REQUEST MODIFYING IT IN A MANNER ACCEPTABLE TO THE OWNER. ALL 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.

CHLORINATION.

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

PAVEMENT AND OTHER IMPROVEMENTS SHALL BE RESTORED TO ORIGINAL CONDITION.

- 35. 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 MAILBOXES, IRRIGATION SYSTEMS, FENCING, SIDEWALK, ROADWAY
- 26. 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 COUNTY APPROVED CONSTRUCTION PLANS AND MOT PLANS AT THE CONSTRUCTION SITE AT ALL TIMES WHEN WORKING WITHIN THE COUNTY RIGHT-OF-WAY.
- 37. BENCHMARK LOCATIONS AND ELEVATIONS ARE SHOWN IN THE PLANS AS REPRESENTED BY THE 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.
- 38. 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.
- 39. WHERE REQUIRED, AT NO ADDITIONAL COST TO THE COUNTY, 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.
- 40. 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.
- 41. ALL EXISTING MAINS SHALL REMAIN IN SERVICE UNTIL THE PROPOSED MAIN(S) ARE ACCEPTED FOR SERVICE AND ALL SERVICES ARE TRANSFERRED TO THE MAIN(S).
- 42. CONTRACTOR SHALL APPLY FOR AND SECURE ALL NECESSARY PERMITS FROM STATE, COUNTY, AND LOCAL MUNICIPALITIES. PERMITS SHALL INCLUDE, BUT NOT BE LIMITED TO, RIGHT OF WAY USE, CONSTRUCTION, BUSINESS LICENSE, AND DEWATERING.
- 43. FOR PVC PIPE NO HORIZONTAL/VERTICAL PIPE DEFLECTION WILL BE ALLOWED. CONTRACTOR SHALL USE FITTINGS TO OBTAIN THE REQUIRED CLEARANCES. ON DUCTILE IRON PIPE CONTRACTOR SHALL NOT EXCEED 75% OF THE MANUFACTURES RECOMMENDATION FOR PIPE DEFLECTION. OTHERWISE USE FITTINGS TO OBTAIN REQUIRED CLEARANCES. ALL FITTINGS SHALL BE ADDED TO THE COORDINATE ASSET ATTRIBUTE TABLE.
- 44. UTILITY MAIN MARKERS ARE REQUIRED WHEN UTILITY MAIN IS LOCATED OVER 30 FEET FROM EDGE OF PAVEMENT OR IN AN EASEMENT NOT ADJACENT TO THE RIGHT OF WAY.
- 45. THE DISPOSAL OF ANY EXCESS EARTH WORK MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 46. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER SALVAGE AND/OR DISPOSAL OF ALL MATERIALS AND EQUIPMENT AS DIRECTED BY THE ORANGE COUNTY UTILITIES INSPECTOR.
- 47. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN CONSTRUCTION AND ARE THE MINIMUM REQUIRED. CONTRACTOR SHALL FURNISH ADDITIONAL CONTROLS AS NEEDED AT NO ADDITIONAL COST. MATERIALS FROM WORK ON THIS PROJECT SHALL BE CONTAINED AND NOT ALLOWED TO COLLECT ON ANY OFF PERIMETER AREAS OR IN WATERWAYS. SILT SCREENS, HAY BALES, AND TURBIDITY BARRIERS MUST REMAIN IN PLACE AND IN GOOD CONDITION AT ALL LOCATIONS IN PLANS OR AS REQUIRED UNTIL THE CONTRACT IS COMPLETED AND SOILS ARE STABILIZED AND VEGETATION IS ESTABLISHED. MEASURES SHOWN ON THE PLANS ARE MINIMUM REQUIRED, AND THE CONTRACTOR SHALL ENSURE THAT THERE IS NO DIRECT OR INDIRECT DISCHARGE OF CONSTRUCTION MATERIALS IN TURBID WATERS TO OFF SITE AREAS OR WATERWAYS.
- 48. CONTRACTOR SHALL MAINTAIN SAFE PREDESTRIAN ACCESS ALONG AND ACROSS THE WORK AREA AT ALL TIMES. PROVIDE QUALIFIED PERSONNEL TO MONITOR AND ESCORT PEDESTRIANS AS NEEDED. REESTABLISH SAFE PEDESTRIAN ACCESS EVERY NIGHT PRIOR TO LEAVING THE WORK AREA. INCLUDE THE CONTRACTOR'S PLAN FOR PEDESTRIAN ACCESS WITH THE MOT SUBMITTAL.

- 49. ALL SIDEWALKS AND DRIVEWAYS MUST MEET ADA STANDARDS AND SPECIFICATIONS.
- 50. CONTRACTOR SHALL COMPLETE AND PLACE IN SERVICE THE WORK INCLUDING TESTING AND RESTORATION ON TINY ROAD OR SUMMERLAKE BOULVARD PRIOR TO STARTING THE WORK ON THE OTHER ROADWAY. CONTRACTOR SHALL IDENTIFY WHICH SEGMENT WILL BE COMPLETE FIRST IN THEIR PROJECT SCHEDULE.

SPILL NOTES

- 1. THE CONTRACTOR SHALL PROVIDE TANKERS AND SIGNED DOCUMENTS ACKNOWLEDGING THE UNDERSTANDING OF THE ORANGE COUNTY "EMERGENCY WATEWATER SPILL AND WATER MAIN BREAK PROCEDURES" IN THE PRECONSTRUCTION PACKET FOR THE MEETING.
- 2. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ON-SITE DURING THE LIFE OF THE PROJECT, A WEATHER PROOF ENCLOSURE CONTAINING A READILY ACCESSIBLE LIST OF EMERGENCY CONTACTS AND PHONE NUMBERS.

EMERGENCY WASTEWATER SPILL, WATER MAIN, RECLAIMED WATER MAIN BREAKER PROCEDURES DAMAGE NOTIFICATION:

1. THE ORANGE COUNTY UTILITY DISPATCH OPERATOR (407-836-2777) SHALL BE NOTIFIED IMMEDIATELY IN THE EVENT OF A FORCE MAIN, GRAVITY SEWER, OR RECLAIMED WATER MAIN BREAK OR DAMAGE.

IMMEDIATE REPAI

2. ALL DAMAGE TO ORANGE COUNTY'S MAIN SHALL BE REPAIRED IMMEDIATELY WITHOUT DELAY 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.

WASTEWATER AND STORMWATER BY-PASS NOTES

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING ADEQUATE BY-PASS PUMPING TO MAINTAIN WASTEWATER SERVICE TO ALL CUSTOMERS.
- 2. THE CONTRACTOR SHALL PROVIDE TEMPORARY BY-PASS PUMPING AS NEEDED FOR EACH CONNECTION AND EACH MANHOLE TO BE REHABILITATED AND/OR REPLACED PRIOR TO THE START OF ANY WORK. BOTH THE PRIMARY AND THE BACKUP BY-PASS PUMPING SYSTEMS SHALL BE OF ADEQUATE CAPACITIES AND SIZES TO HANDLE THE FLOW AND SHALL MAINTAIN CONTINUOUS SERVICE DURING THE ENTIRE CONSTRUCTION PROCESS UNTIL THE NEW OR REHABILITATED MANHOLE HAS BEEN ACCEPTED BY THE COUNTY PRIOR TO INSTALLATION.
- 3. CONTRACTOR SHALL SUBMIT TO THE COUNTY A WRITTEN BY-PASS PLAN FOR APPROVAL AND ACCEPTANCE PRIOR TO CONSTRUCTION.
- 4. CONTRACTOR SHALL ADHERE TO ALL REQUIREMENTS AND PROVISIONS AS SPECIFIED IN SECTION 01516 OF THE CONTRACT DOCUMENTS.
- 5. FLOW CONTROL SHALL INCLUDE ACCOMMODATION OF FLOW FROM ANY SIDE SEWERS AFFECTED BY THE WORK.
- 6. CONTRACTOR SHALL MAINTAIN LATERAL SERVICE TO ANY RESIDENTIAL OR BUSINESS DURING LINE INSTALLATION OR PIPE REPAIR/REPLACEMENT.
- 7. BYPASS PUMPING OR OTHER MEASURES FOR STORMWATER FLOW CONTROL MUST BE IN PLACE PRIOR TO STORMWATER PIPING REMOVAL OR REPLACEMENT. WHERE STORMWATER PIPING IS BEING REMOVED OR REPLACED, CONTRACTOR TO PERFORM ALL IMPROVEMENTS PRIOR TO RAINFALL TO ENSURE THAT WASHOUTS AND SEDIMENT TRANSPORT DOES NOT OCCUR.

EROSION CONTROL NOTES

- TEMPORARY STABILIZATION IS REQUIRED OF ALL SOIL LEFT BARE.
- 2. PERMANENT SOIL STABILIZATION REQUIRED FOR ALL RESTORATION. THE LIMITS OF SOD SHOWN IN THE PLANS ARE FOR ILLUSTRATION ONLY. CONTRACTOR IS RESPONSIBLE FOR ALL SOD REQUIRED FROM CONSTRUCTION OF PROPOSED IMPROVEMENTS.
- 3. A STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P) AND AN EROSION CONTROL PLAN SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO THE PRE-CONSTRUCTION MEETING.
- 4. REQUIRED INSPECTIONS BY CONTRACTOR DURING CONSTRUCTION FOR STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS (S.W.P.P.P.):
- A. ONCE EACH WEEK OR WITHIN 24 HRS OF A STORM EVENT (GREATER THAN 1/2 IN.) INSPECT ALL CONTROL MEASURES.
- B. REPAIR ALL DAMAGED AREAS WITHIN 24 HRS OF DISCOVERY.
- C. REMOVE ANY BUILT-UP SEDIMENT AROUND FENCES THAT REACHES 1/3 OF THE SILT FENCE
- D. SILT FENCES SHOULD BE INSPECTED FOR DEPTH OF SEDIMENT AND TEARS TO INSURE FABRIC HAS NOT PULLED AWAY FROM POSTS.
- E. INSPECT ALL TEMPORARY AND PERMANENT SOIL STABILIZATION FOR WASHOUTS OR BARE SPOTS.
- F. INSPECTION REPORTS MUST BE AVAILABLE FOR INSPECTION AT ALL TIMES. THE SITE SUPERINTENDENT SHALL CONDUCT ALL INSPECTIONS AND MAINTAIN REPORTS.
- G. DATES OF ALL MAJOR GRADING ACTIVITIES MUST BE RECORDED AND MAINTAINED WITH SITE INSPECTIONS WHEN MAJOR GRADING HAS CEASED IN ANY AREA, THE DATE MUST ALSO BE
- 5. GOOD HOUSEKEEPING THE SITE SHOULD BE KEPT IN AN ORDERLY FASHION, THE CONTRACTOR SHALL INSURE THE FOLLOWING ITEMS ARE ADDRESSED.
- 6. AN EFFORT SHOULD BE MADE TO STORE ONLY WHAT IS NEEDED ON THE SITE.7. KEEP ALL STORED MATERIALS IN A NEAT AND ORDERLY FASHION IN THE ORIGINAL CONTAINERS WHEN
- POSSIBLE.

 8. INSPECT DAILY TO INSURE WASTE MATERIAL IS DISPOSED OF PROPERLY.
- 9. CONTRACTOR WILL BE RESPONSIBLE FOR EROSION CONTROL. MINIMUM EROSION CONTROL IS SHOWN
- 10. SILT FENCE SHALL BE INSTALLED COINCIDENT WITH THE LIMITS OF CONSTRUCTION THROUGHOUT THE ENTIRE PROJECT

813-342-0512

UTILITY CONTACTS

AT&T DISTRIBUTION ● TELEPHONE

RECORDED.

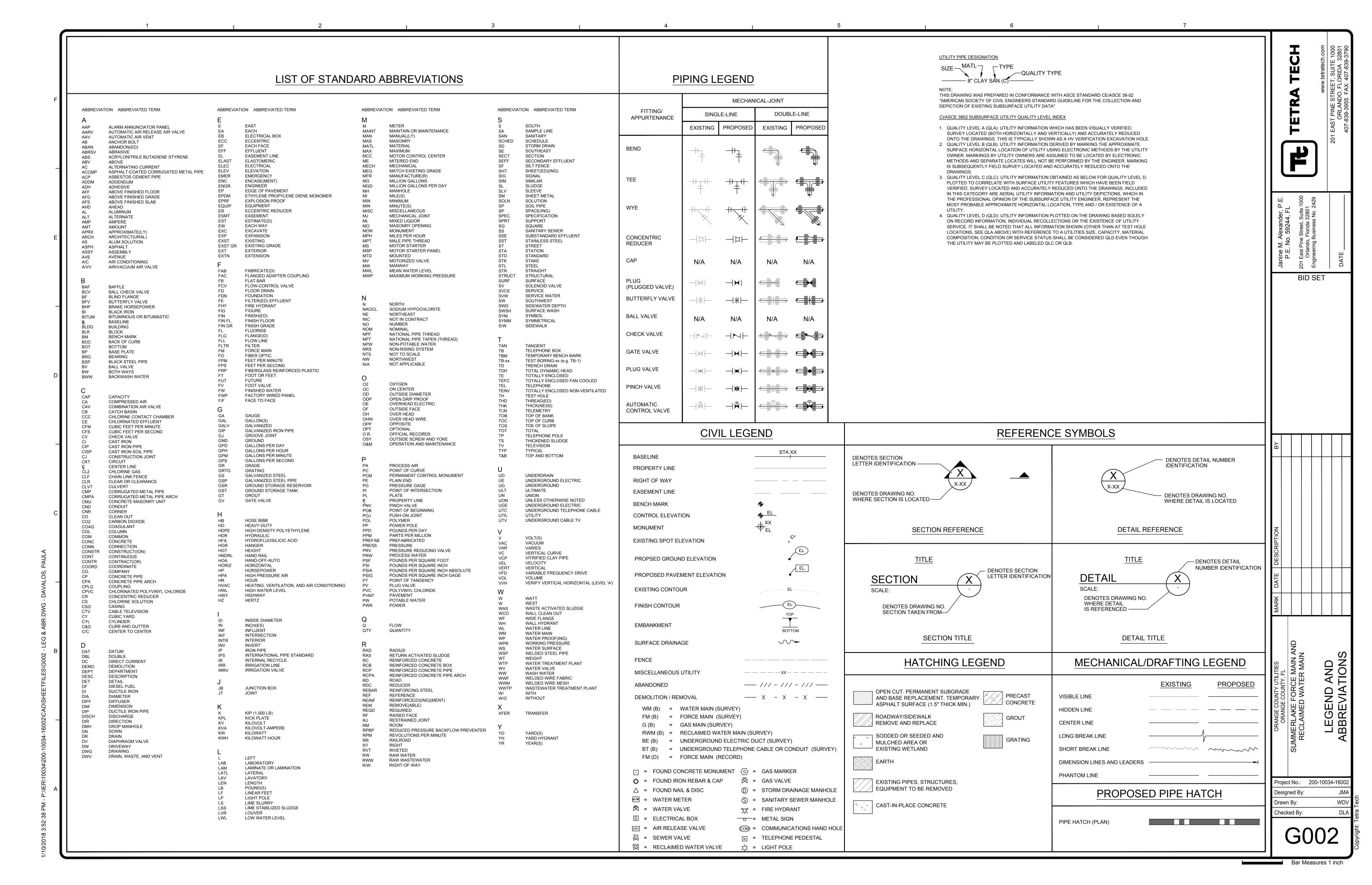
AT&T TRANSMISSION ● TELEPHONE	770-918-5424
BRIGHT HOUSE ● CABLE TV	407-532-8511
CENTURYLINK ● TELEPHONE	407-501-2132
DUKE ENERGY ● ELECTRIC	407-905-3345
LAKE APOPKA NATURAL GAS DISTRICT • GAS	407-656-2734 X 1
ORANGE COUNTY UTILITIES WASTEWATER DIVISION	407-254-9764
ORANGE COUNTY UTILITIES WATER RECLAMATION DIVISION	407-509-4573
ORANGE COUNTY UTILITIES WATER DIVISION	407-254-9764

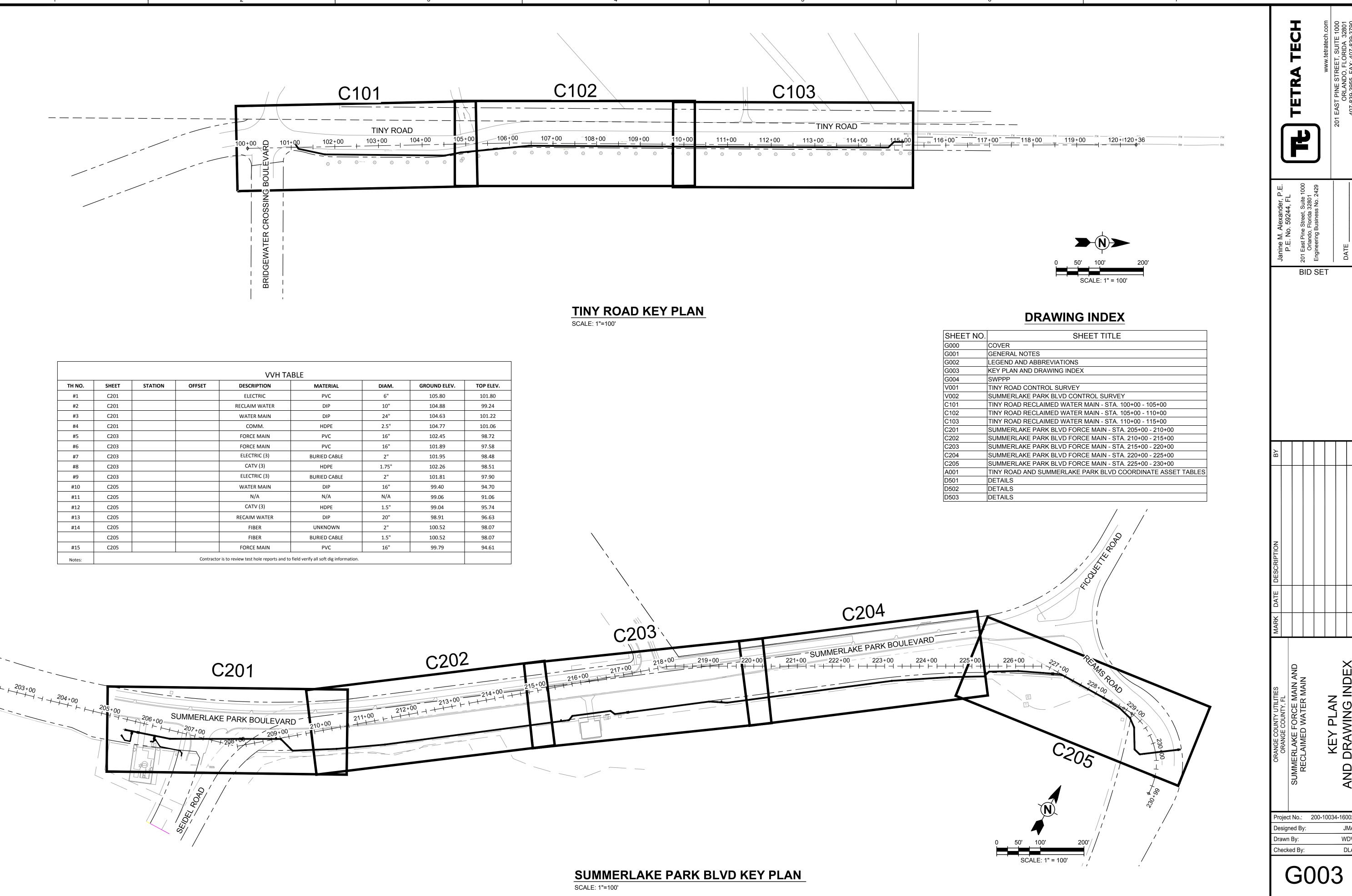
TETRA TECH

hecked By:

G001

Bar Measures 1 inch





1/10/2018 3:53:25 PM - P:\IER\10034\200-10034-16002\CAD\SHEETFILES\C100 KEY PLAN.DWG - DAVAL

-- NA--------- 4 Se-al-

SITE DESCRIPTION	POLLUTION SOURCE CONTROLS	NON-STORMWATER DISCHARGES	CERTIFICATION	I .com
SITE LOCATION & DESCRIPTION: SUMMERLAKE PARK BOULEVARD, BETWEEN FICQUETTE ROAD AND SEIDEL ROAD.	EROSION AND SEDIMENT CONTROLS STABILIZATION PRACTICES: ACCEPTABLE PRACTICES INCLUDE TEMPORARY SEEDING. PERMANENT SEEDING. MULCHING. GEOTEXTILES. SOD STABILIZATION.	NON-STORMWATER DISCHARGES WHICH MUST BE IDENTIFIED ON THE POLLUTION PREVENTION PLAN INCLUDE: FIRE HYDRANT FLUSHINGS	OWNER/OPERATOR'S CERTIFICATION I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR	Etratech.
TINY ROAD NORTH OF BRIDGEWATER CROSSING BOULEVARD. TOTAL SITE AREA:	VEGETATIVE BUFFER STRIPS, FENCE PROTECTION OF TREES, PRESERVATION OF MATURE VEGETATION. STABILIZATION, STABILIZATION, VEGETATIVE BUFFER STRIPS, FENCE PROTECTION OF TREES, PRESERVATION OF MATURE VEGETATION. STABILIZATION SHALL BE INITIATED NO MORE THAN 14 DAYS IN AREAS WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. CONTRACTOR SHALL MAINTAIN A RECORD OF DATES WHEN MAJOR GRADING ACTIVITIES OCCUR, WHEN CONSTRUCTION TEMPORARILY OR PERMANENTLY CEASES AND WHEN STABILIZATION IS INITIATED AND COMPLETED	WATERS USED TO SPRAY OFF LOOSE SOLIDS FROM VEHICLES OR CONTROL DUST POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS IRRIGATION DRAINAGE ROUTINE EXTERNAL BUILDING WASHDOWN WHICH DOES NOT USE DETERGENTS PAVEMENT WASHWATERS WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED AND WHERE	SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	www.te
	STRUCTURAL PRACTICES: ACCEPTABLE STRUCTURAL PRACTICES INCLUDE SILT FENCES, HAY BALES, EARTH DIKES, DRAINAGE SWALES, SEDIMENT TRAPS, CHECK DAMS, TURBIDITY BARRIERS, SUBSURFACE DRAINS, PIPE SLOPE DRAINS, LEVEL SPREADERS, STORM DRAIN INLET	DETERGENTS ARE NOT USED. AIR CONDITIONING CONDENSATE SPRINGS FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS SUCH AS SOLVENTS.	SIGNED: DATE:	E LA
TOTAL DISTURBED AREA: SITE AREA	PROTECTION, ROCK OUTLET PROTECTION, REINFORCED SOIL RETAINING SYSTEMS, GABIONS, AND TEMPORARY OR PERMANENT SEDIMENT BASINS. STRUCTURAL PRACTICES SHOULD BE PLACED ON UPLAND SOILS UNLESS SPECIFIED OTHERWISE BY THE FLORIDA WETLAND RESOURCE OR ENVIRONMENTAL RESOURCE PERMIT. FOR DRAINAGE LOCATIONS SERVING MORE THAN 5 ACRES OF DISTURBED LAND AT ONE TIME. A SEDIMENT BASIN PROVIDING 3.600	APPROVED STATE OR LOCAL PLANS	PRINTED NAME/TITLE: (OWNER/OPERATOR OR AUTHORIZED AGENT)	201 EA
NATURE OF CONSTRUCTION ACTIVITY: APPROXIMATELY 1,500 LF OF 24-INCH RECLAIMED WATER MAIN PIPING ALONG TINY ROAD AND 2,300 LF OF 24-INCH FORCE MAIN PIPING ALONG SUMMERLAKE PARK BLVD. IN ORANGE COUNTY, FLORIDA.	CUBIC FEET OF STORAGE PER ACRE DRAINED OR EQUIVALENT MEASURE MUST BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE.	ALL REQUIREMENTS APPLICABLE TO PROTECTION OF SURFACE WATER QUALITY, SEDIMENT, AND EROSION CONTROL STATED AS GENERAL AND/OR SPECIFIC PROJECT CONDITIONS OF STATE, REGIONAL AND/OR LOCAL ENVIRONMENTAL RESOURCE PERMITS FOR THE PROJECT ARE INCLUDED AS PART OF THIS PLAN. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS STIPULATED IN THE STATE, REGIONAL, AND/OR LOCAL PERMITS.	CONTRACTOR/SUBCONTRACTOR CERTIFICATION	
SEQUENCE OF CONSTRUCTION AND SOIL DISTURBING ACTIVITIES: IMPLEMENTATION OF MAINTENANCE OF TRAFFIC AND STORMWATER POLLUTION PREVENTION BEST MANAGEMENT PRACTICES WITHIN CATCH BASINS.	MUST BE COMPLETELY REMOVED AND EXCAVATION FOR TEMPORARY SEDIMENT BASIN SHALL NOT EXCEED INCHES ABOVE THE BOTTOM ELEVATION OF THE PERMANENT STORM WATER POND. SILT FENCES OR EQUIVALENT SEDIMENT CONTROLS ARE REQUIRED FOR ALL SIDE SLOPE AND DOWN SLOPE BOUNDARIES OF THE CONSTRUCTION AREA.	LOCAL WMD PERMIT NO APPROVAL DATE: EXPIRATION DATE: FDOT DRAINAGE PERMIT NO APPROVAL DATE: EXPIRATION DATE:	ANY AND ALL CONTRACTORS AND SUBCONTRACTORS LISTED IN THE POLLUTION PREVENTION PLAN MUST COMPLETE THE FOLLOWING CERTIFICATION TO BE KEPT WITH THE PLAN. SITE LOCATION:	P.E. L 1000 11
EXCAVATION AND INSTALLATION OF WATER MAIN PIPING CONNECTION OF EXISTING WATER SERVICES TO INSTALLED WATER MAIN RESTORATION OF PAVEMENT/SIDEWALK/SWALE AREAS	STORM DRAIN INLETS SHALL BE PROTECTED FROM SEDIMENT LOADING DURING THE COURSE OF CONSTRUCTION BY THE USE OF SEDIMENT FILTERS OR AN EXCAVATED IMPOUNDING AREA PROPERLY INSTALLED AND MAINTAINED AROUND THE STORM DRAIN DROP OR CURB INLET. INLET PROTECTION SHALL REMAIN IN PLACE UNTIL PERMANENT STABILIZATION OF DISTURBED AREA TO KEEP POLLUTANTS FORM ENTERING THE CONVEYANCE SYSTEM.	MAINTENANCE	CONTRACTING FIRM INFORMATION:	exander, 59244, F treet, Suite orida 3280 siness No.
	EROSION CONTROL DEVICES TO BE INSTALLED IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS, JANUARY 200 (OR LATEST EDITION).	A REGULAR MAINTENANCE PROGRAM SHOULD INSURE INSPECTION AND MAINTENANCE OF BMPS BY THE CONTRACTOR WEEKLY	ADDRESS:	M. Ale No. (
POTENTIAL POLILITANTO ONGITE.	STORMWATER MANAGEMENT CONTROLS & BEST MANAGEMENT PRACTICES WATER QUALITY IS BEING PROVIDED THROUGH LAKES ON SITE PRIOR TO DISCHARGE THROUGH BERM. POLLUTION RETARDANT BAFFLES IN STRUCTURES PRIOR TO RUNOFF. SITE WILL HOLD RUNOFF UNTIL THE 25YR-3D STORM MAX. STAGE.	AND/OR AFTER SIGNIFICANT RAIN EVENTS. ANY FAILURES SHOULD BE ANALYZED TO PREVENT RECURRENCE. SUBSTANTIAL CHANGES TO THE APPROVED PLAN MUST BE MADE OR REVIEWED BY THE DESIGNER AND APPROVED BY THE APPROPRIATE REGULATORY AGENCY. POLLUTION PREVENTION CONTROLS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT AND WHEN SEDIMENT HAS OVER ACCUMULATED. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN SUCH A MANNER THAT IT WILL NOT ERODE.	PHONE NO.: () I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE FINAL NATIONAL POLLUTANT	Janine P.E. P.E. Orla ACIONAL
POTENTIAL POLLUTANTS ONSITE: SAND & SEDIMENTATION ROCK ASPHALT CLEANING SOLVENTS		EXAMPLE MAINTENANCE ROUTINES INCLUDE: SILT BARRIERS: SEDIMENT MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ½ THE HEIGHT OF THE BARRIER. STORM DRAIN INLET PROTECTION:	DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES, PUBLISHED IN THE FEDERAL REGISTER ON MARCH 31, 1998, THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION. SIGNED: DATE:	
GASOLINE OILS GREASE PAINT CEMENT		SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ½ OF THE DESIGN DEPTH OF THE TRAP. STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED. SEDIMENT TRAPS: SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED	PRINTED NAME/TITLE:	
PAPER CARDBOARD DOMESTIC GARBAGE	<u>WASTE, SANITARY, AND SEPTIC TANK DISPOSAL CONTROLS</u> SOLID WASTE PRODUCED ON-SITE SHALL BE PROPERLY DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE,	TO ½ THE DESIGN VOLUME OF THE TRAP. THE STRUCTURE SHOULD BE CHECKED REGULARLY TO INSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT. THE HEIGHT OF THE OUTLET SHOULD BE CHECKED TO ENSURE THAT ITS CENTER IS AT LEAST ONE FOOT (30 CM) BELOW THE TOP OF THE EMBANKMENT. TURBIDITY BARRIERS:	CONTRACTOR/ AUTHORIZED SIGNATURE DATE PHONE NO.	
	AND LOCAL LAWS. SOLID WASTE IS TO BE HAULED OFF-SITE AND DISPOSED OF AT A LICENSED LAND FILL. NO SOLID MATERIALS INCLUDING BUILDING MATERIALS SHALL BE DESIGNATED FOR WASTE RECEPTACLES AND A COLLECTION SCHEDULE MUST BE ESTABLISHED SPECIAL PROVISIONS SHALL BE MADE FOR THE COLLECTION, STORAGE, AND DISPOSAL OF TOXIC AND HAZARDOUS SUBSTANCES IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL HEALTH AND SAFETY REGULATIONS.	THE DEVELOPER/OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE FILTER CURTAIN FOR THE DURATION OF THE PROJECT TO ENSURE THE CONTINUOUS PROTECTION OF THE WATERCOURSE. SHOULD REPAIRS TO THE GEOTEXTILE FABRIC BECOME NECESSARY, THERE ARE NORMALLY REPAIR KITS AVAILABLE FROM THE MANUFACTURERS; MANUFACTURER'S INSTRUCTIONS MUST BE FOLLOWED TO ENSURE THE ADEQUACY OF THE REPAIR. WHEN THE CURTAIN IS NO LONGER REQUIRED AS DETERMINED BY THE INSPECTOR, THE CURTAIN AND RELATED COMPONENTS SHALL BE REMOVED IN SUCH A MANNER AS TO MINIMIZE TURBIDITY. SEDIMENT SHALL BE REMOVED AND THE ORIGINAL DEPTH (OR PLAN ELEVATION) RESTORED BEFORE REMOVING THE CURTAIN.	COMPANY NAME (PRINT NAME/TITLE)	
EXISTING SOIL DATA SEE GEOTECHNICAL REPORT PROVIDED WITH PROJECT SPECIFICATIONS	WASTE COLLECTION AREAS ARE TO BE MAINTAINED AND ARE TO BE LOCATED IN LOCATIONS LEAST LIKELY TO BE AFFECTED BY CONCENTRATED STORMWATER RUNOFF. CONTRACTOR SHALL ENSURE AND DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS DURING	REMAINING SEDIMENT SHALL BE SUFFICIENTLY SETTLED BÈFORE REMOVING THE CURTAIN. ANY SPOILS MUST BE TAKEN TO AN UPLAND AREA AND STABILIZED.		
	WASTE, SANITARY, AND SEPTIC TANK DISPOSAL. ADEQUATE SANITARY FACILITIES SHALL BE PROVIDED ON SITE FOR WORKERS IN ACCORDANCE WITH APPLICABLE HEALTH	INSPECTIONS	4	
	REGULATIONS.	QUALIFIED PERSONNEL (PROVIDED BY THE DISCHARGER) SHALL INSPECT ALL POINTS OF DISCHARGE INTO WATERS OF THE U.S. OR TO A MUNICIPAL SEPARATE STORM SEWER SYSTEM AND ALL DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.25 INCHES OR GREATER. WHERE SITES HAVE BEEN FINALLY STABILIZED, SAID INSPECTION SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH UNTIL THE NOTICE OF TERMINATION (NOT) IS FILED.		AB B∀
		SITE OPERATOR'S NPDES INSPECTION REPORT FORM INSPECTOR: DATE/TIME:		
		DATE OF LAST RAINFALL: RAINFALL AMOUNT: SITE DESCRIPTION PROJECT NAME AND LOCATION:		
		DISCHARGE LOCATIONS: WHERE ACCESSIBLE, INSPECT TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE. FINDING:		NOILa
	OFF-SITE VEHICLE TRACKING OF SEDIMENTS CONTROLS OFF-SITE VEHICLE TRACKING OF SEDIMENTS AND GENERATION OF DUST SHALL BE MINIMIZED. CALCIUM CHLORIDE, OILS OR OTHER CHEMICAL DUST CONTROL AGENTS SHOULD NOT BE USED ON CONSTRUCTION ROADS. AREAS SHALL BE PERIODICALLY WATERED TO MINIMIZE DUST.	DISTURBED AREAS: INSPECT FOR EVIDENCE OF, OR POTENTIAL FOR, POLLUTANTS ENTERING THE STORM WATER SYSTEM.		DESCRIF
	A STONE STABILIZED PAD SHALL BE LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON THE CONSTRUCTION SITE TO AVOID TRANSPORTING SEDIMENTS TO OFF-SITE ROADS.	FINDING:		JATE [
	SPECIALLY DESIGNATED WASH AREAS FOR WASHING OF VEHICLES SHALL BE LOCATED WHERE WASH WATER WILL NOT DISCHARGE DIRECTLY TO SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS. WASH AREAS SHALL BE LOCATED WHERE WASH WATER CAN SPREAD OUT AND EVAPORATE OR INFILTRATE DIRECTLY INTO THE GROUND OR WHERE RUNOFF CAN BE COLLECTED IN TEMPORARY HOLDING OR SEEPAGE BASIN. WASH AREAS SHALL HAVE GRAVEL BASES TO MINIMIZE MUD GENERATION.	MATERIALS STORAGE AREAS: INSPECT FOR EVIDENCE OF, OR POTENTIAL FOR, POLLUTANTS ENTERING THE STORM WATER SYSTEM. FINDING:		MARK
	DEMOLITION CONTROLS CALCIUM CHLORIDE, OILS OR OTHER CHEMICAL DUST CONTROL AGENTS SHOULD NOT BE USED TO CONTROL DUST. AREAS SHALL BE PERIODICALLY WATERED TO MINIMIZE THE TRANSPORT OF AIRBORNE POLLUTANTS. WATER OR SLURRY USED TO CONTROL DUST MUST BE RETAINED ONSITE AND NOT ALLOWED TO RUN INTO SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS.	STRUCTURAL CONTROL DEVICES: INSPECT TO ENSURE PROPER OPERATION. FINDING:		Д
	FERTILIZER AND PESTICIDE CONTROLS FERTILIZERS: A. ALL FERTILIZERS SHALL BE STORED IN A DRY STORAGE AREA PROTECTED FROM RAINFALL AND PONDING.	VEHICLE INGRESS/EGRESS LOCATIONS: INSPECT FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING. FINDING:		MAIN AN
	B. NO FERTILIZER CONTAINING IN EXCESS OF 2% PHOSPHATE/PHOSPHORUS (P205) PER GUARANTEED ANALYSIS LABEL (AS DEFINED BY CHAPTER 576, FLORIDA STATUTES) SHALL BE APPLIED TO TURFGRASS, PASTURES, PADDOCKS, OR USED IN NURSERIES UNLESS JUSTIFIED BY A SOIL TEST. C. FERTILIZER CONTAINING IN EXCESS OF 2% PHOSPHATE/PHOSPHORUS (P205) PER GUARANTEED ANALYSIS LABEL SHALL NOT BE	STORM WATER MANAGEMENT FACILITIES: INSPECT TO ENSURE PROPER INSTALLATION.		TY UTILITY FILL OUNTY, FILL NUNTY, FILL NU
	APPLIED WITHIN 5 FEET OF THE EDGE OF WATER OR WITHIN 5 FEET OF A DRAINAGE FACILITY. D. ALL FERTILIZER SHALL BE APPLIED SUCH THAT SPREADING OF FERTILIZER ON ALL IMPERVIOUS SURFACES IS MINIMIZED. E. LIQUID FERTILIZERS CONTAINING IN EXCESS OF 2% PHOSPHATE/PHOSPHORUS (P2O5) PER GUARANTEED ANALYSIS LABEL SHALL NOT BE APPLIED THROUGH AN IRRIGATION SYSTEM WITHIN 10 FEET OF THE EDGE OF WATER OR WITHIN 10 FEET OF A DRAINAGE	FINDING:		SE COUNANGE CC AKE FC MED W
	FACILITY. F. LIQUID FERTILIZERS CONTAINING IN EXCESS OF 2% PHOSPHATE/PHOSPHORUS (P205) PER GUARANTEED ANALYSIS LABEL SHALL NOT BE APPLIED THROUGH HIGH OR MEDIUM MIST APPLICATION OR DIRECTED SPRAY APPLICATION WITHIN 10 FEET OF THE EDGE OF WATER OR WITHIN 10 FEET OF A DRAINAGE FACILITY.	RECOMMENDED REVISIONS TO PPP BASED ON THIS REPORT:		ORAN OR MMERL, RECLAI
	PESTICIDES: THE USE OF PESTICIDES, FUNGICIDES, OR HERBICIDES IS LIMITED TO PRODUCTS THAT MEET THE FOLLOWING CRITERIA: A. MUST BE CONSISTENT WITH THE USDA-NRCS SOIL RATING FOR SELECTING PESTICIDES.	REVISIONS TO BE COMPLETED ON OR BEFORE: BY: BY:		ns I
	 B. MUST HAVE THE MINIMUM POTENTIAL FOR LEACHING INTO GROUNDWATER OR LOSS FROM RUNOFF. C. PRODUCTS MUST BE EPA APPROVED. D. THE HALF-LIFE OF PRODUCTS USED SHALL NOT EXCEED SEVENTY (70) DAYS 	CERTIFICATION I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR	REFERENCES FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS	Project No.: 200-10034-1
		THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	(LATEST EDITION)	Designed By: Drawn By:
		SIGNED: DATE:		Checked By:
				J G004

Bar Measures 1 inch

VICINITY MAP & CONTROL POINTS (NOT TO SCALE) GIS 264 BILL ROBERSON " IRON PIPE IN CM

CONTROL SURVEY

A PORTION OF TINY ROAD LOCATED IN SECTION 16, TOWNSHIP 27 EAST, RANGE 23 SOUTH ORANGE COUNTY, FLORIDA.

LEGEND:

- PB PLAT BOOK
 ORB OFFICIAL RECORDS BOOK
 PG PAGE NUMBER
- PG PAGE NUMBER
 R/W RIGHT-OF-WAY
 IRC IRON REBAR & CAP
 N&D NAIL & DISC
 CM CONCRETE MONUMENT
 PID PARCEL ID
 SURVEY CONTROL POINT
 FOUND IRON REBAR
 A FOUND NAIL & DISC

SURVEYOR'S NOTES:

- 1. THIS CONTROL SURVEY IS ACCOMPANIED BY A SIGNED AND SEALED SURVEYOR'S REPORT AND NEITHER IS COMPLETE WITHOUT THE OTHER.
- 2. GRAPHIC SYMBOLS, SHOWN HEREON, ARE NOT SHOWN TO SCALE. 3. LAST DAY IN THE FIELD: MAY 31, 2016

DATUM REFERENCE:

HORIZONTAL DATUM:

COORDINATE VALUES AND BEARINGS FOR THIS PROJECT ARE IN THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983/1990 ADJUSTMENT, EXPRESSED IN U.S. SURVEY FEET.

VERTICAL DATUM:

ALL VERTICAL CONTROL IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), EXPRESSED IN U.S. SURVEY FEET.

PUBLISHED CONTROL POINTS: HORIZONTAL CONTROL POINTS:

GPS 18 LAKE - SURVEY DISC SET IN TOP OF CONCRETE MONUMENT NORTHING: 1495980.974' EASTING: 425033.396'

KO28 - STAINLESS STEEL ROD W/O SLEEVE (10 FT.+) NORTHING: 1459257.842' EASTING: 390215.334'

RTMP 21 - SURVEY DISC SURROUNDED BY MASS OF CONCRETE NORTHING: 1457564.544' EASTING: 389275.314'

GIS 0114 BLOUNT SIKES ASSOC 2 - SURVEY DISC SET IN TOP OF CONCRETE MONUMENT NORTHING: 1538825.828' EASTING: 474171.744'

R 733 - STAINLESS STEEL ROD W/O SLEEVE (10 FT.+) NORTHING: 1443110.135' EASTING: 514149.958'

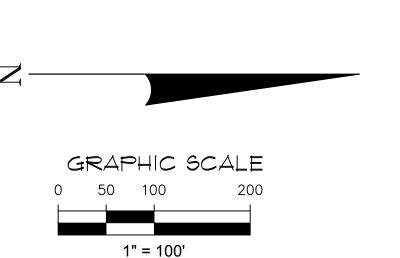
GIS 146 RESET - SURVEY DISK SET IN TOP OF CONCRETE MONUMENT NORTHING: 1475306.425' EASTING: 493426.945'

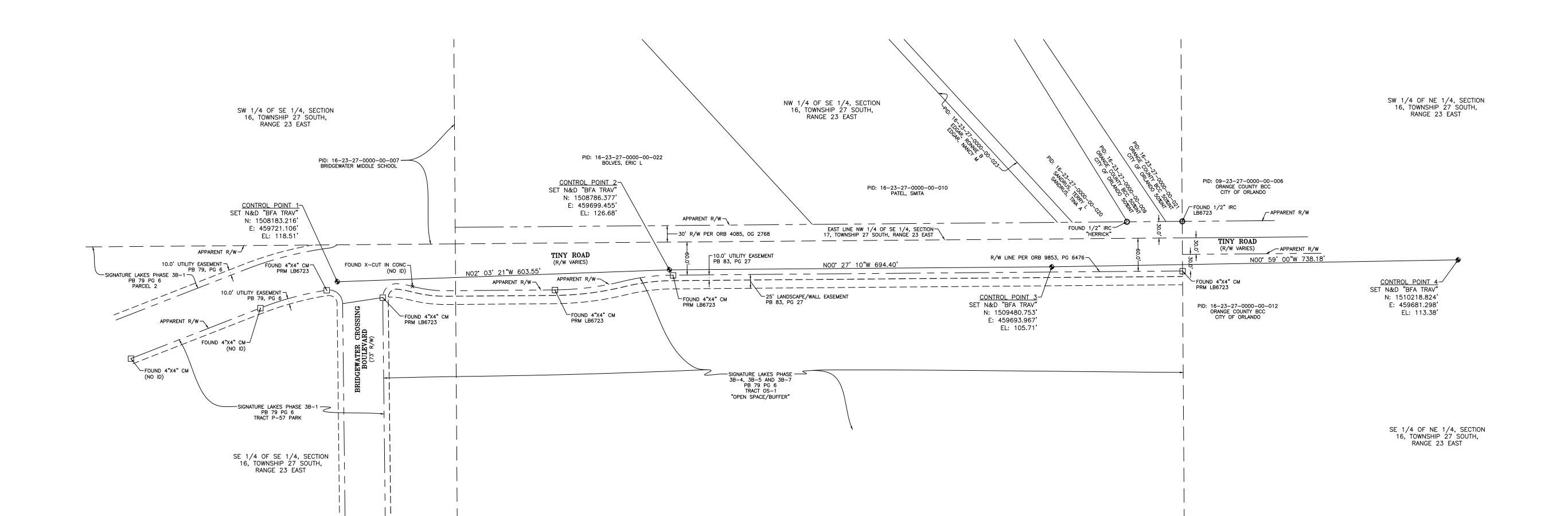
VERTICAL CONTROL POINTS:

GIS 264 BILL ROBERSON

1" IRON PIPE IN CONCRETE MONUMENT IN FRONT OF 5534 TINY ROAD ELEVATION = 131.125

SQUARE CUT IN CONCRETE PAD FOR POWER BOX ON WEST SIDE OF POWER BOX, 25'± EAST OF C/L OF MANN ROAD & 300'± SOUTH OF C/L OF TOLL ROAD 429 ELEVATION = 116.51

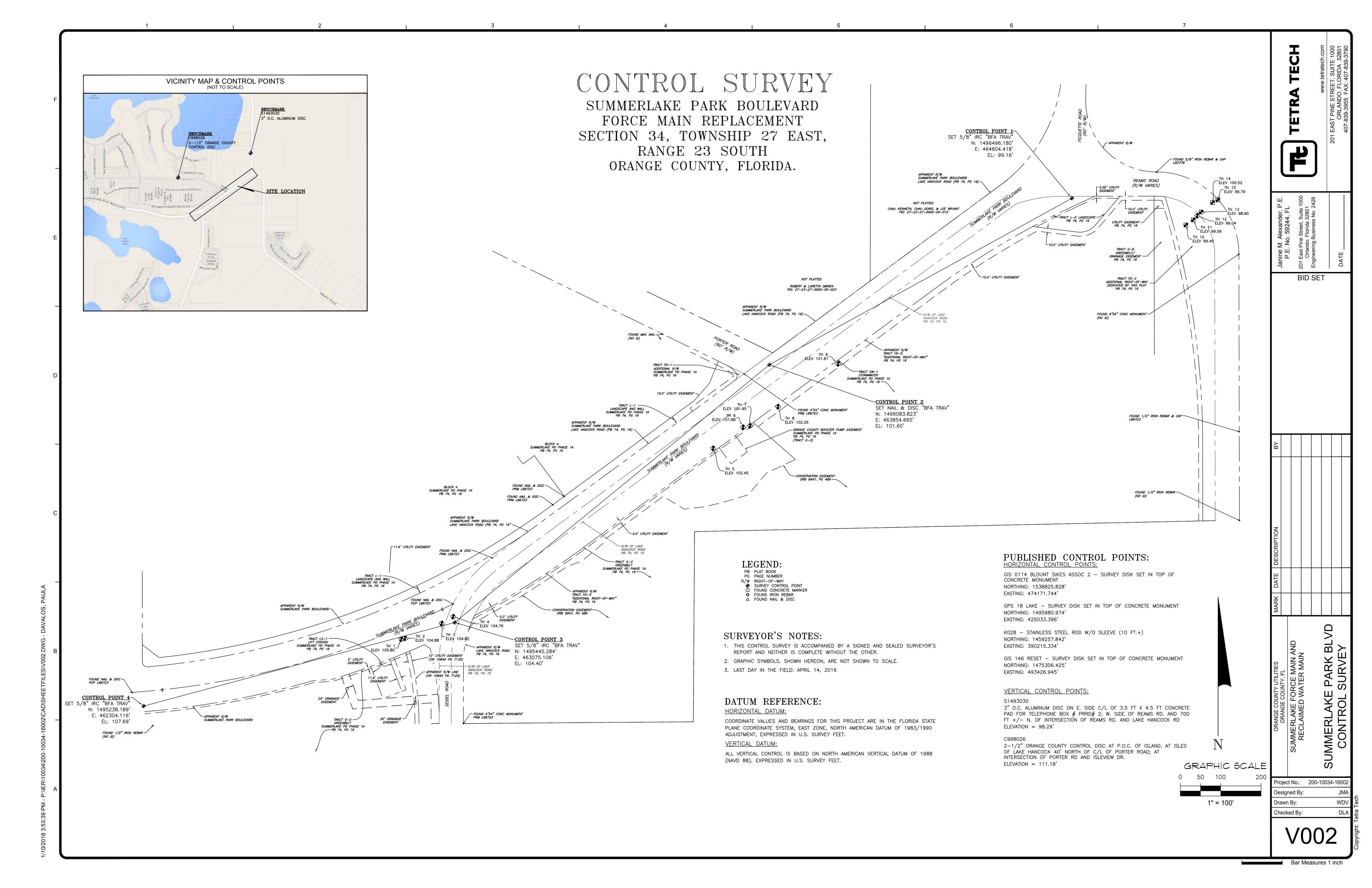


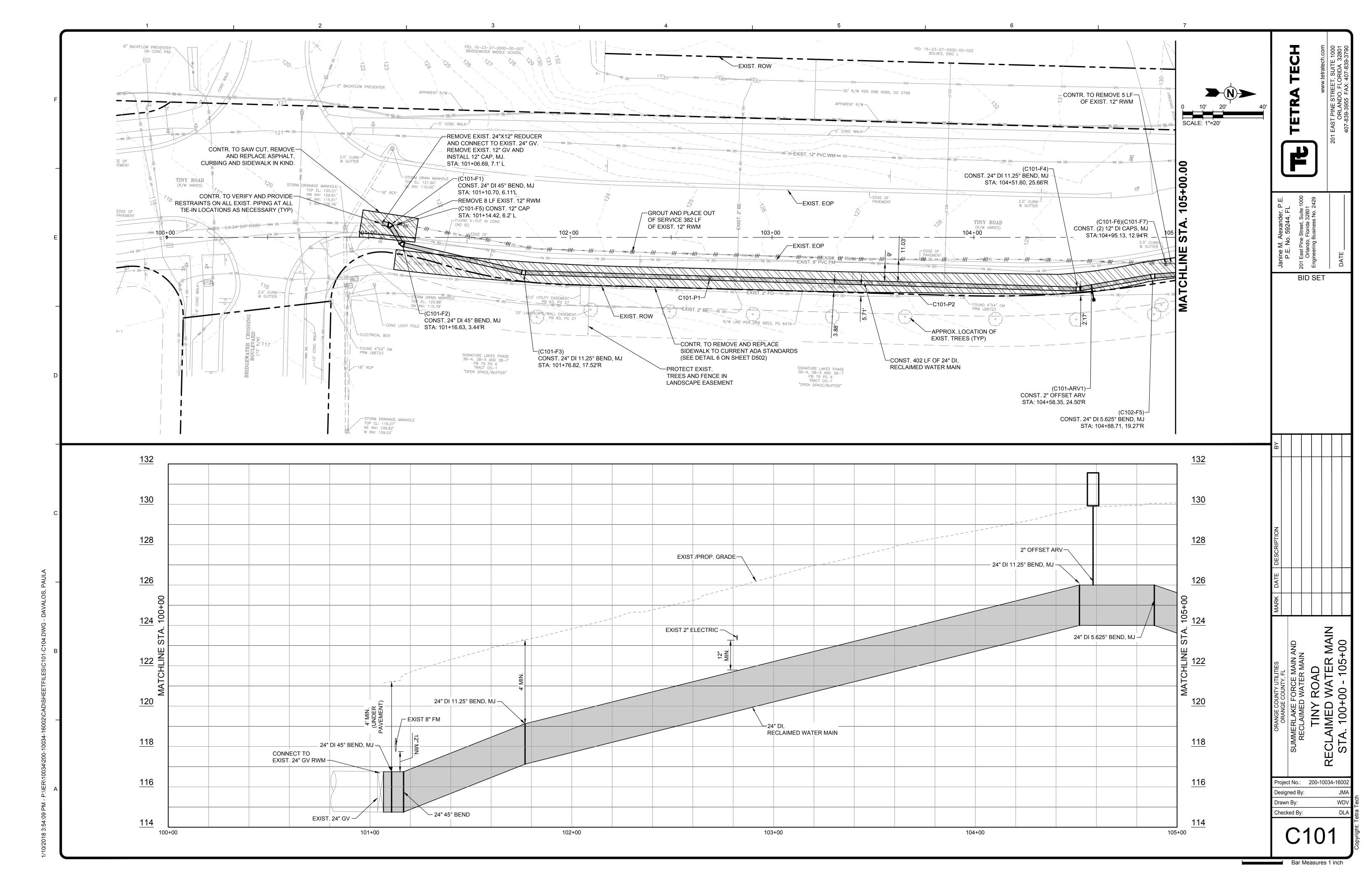


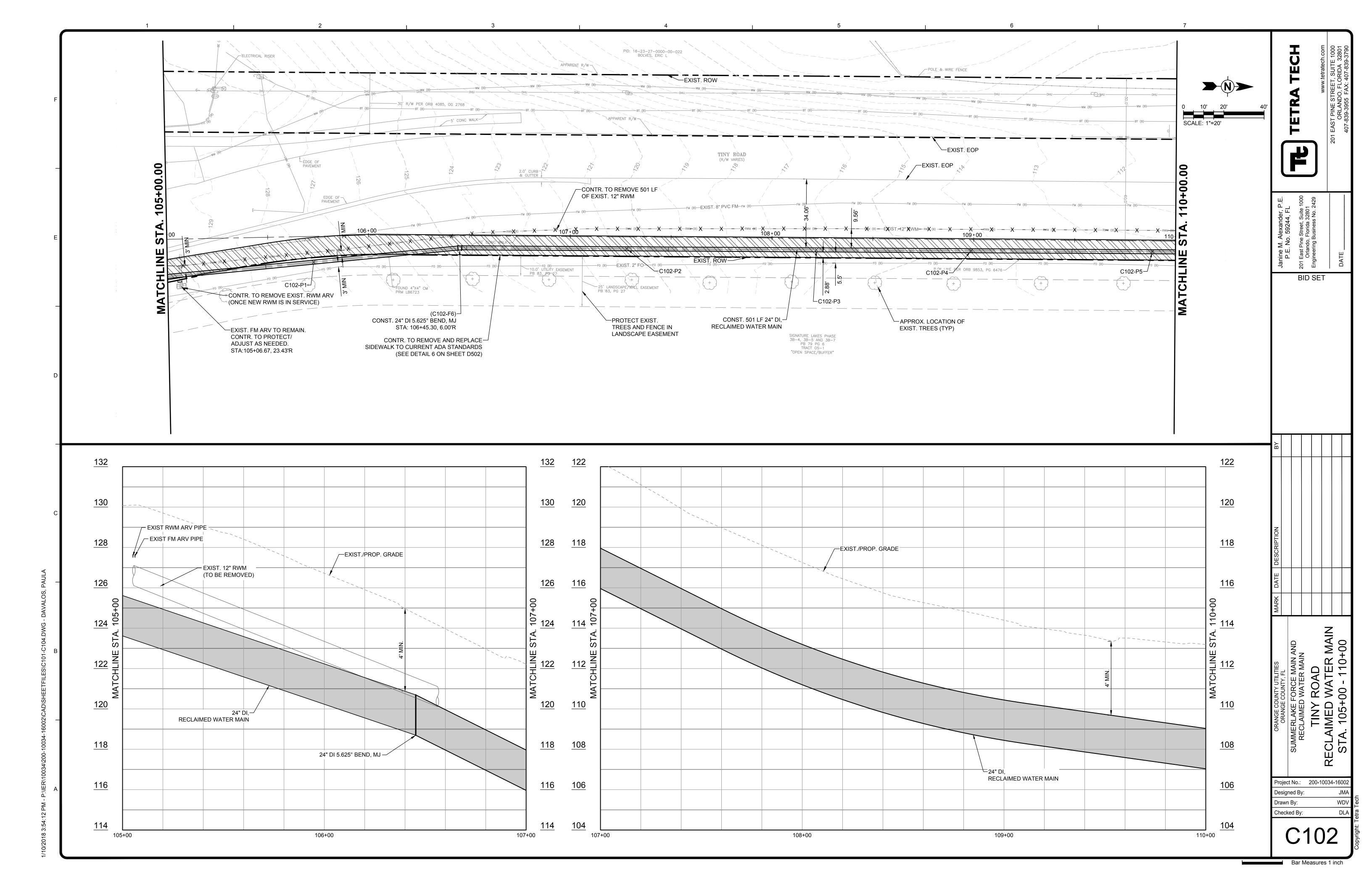
Project No.: 200-10034-1600 Designed By: Drawn By: Checked By:

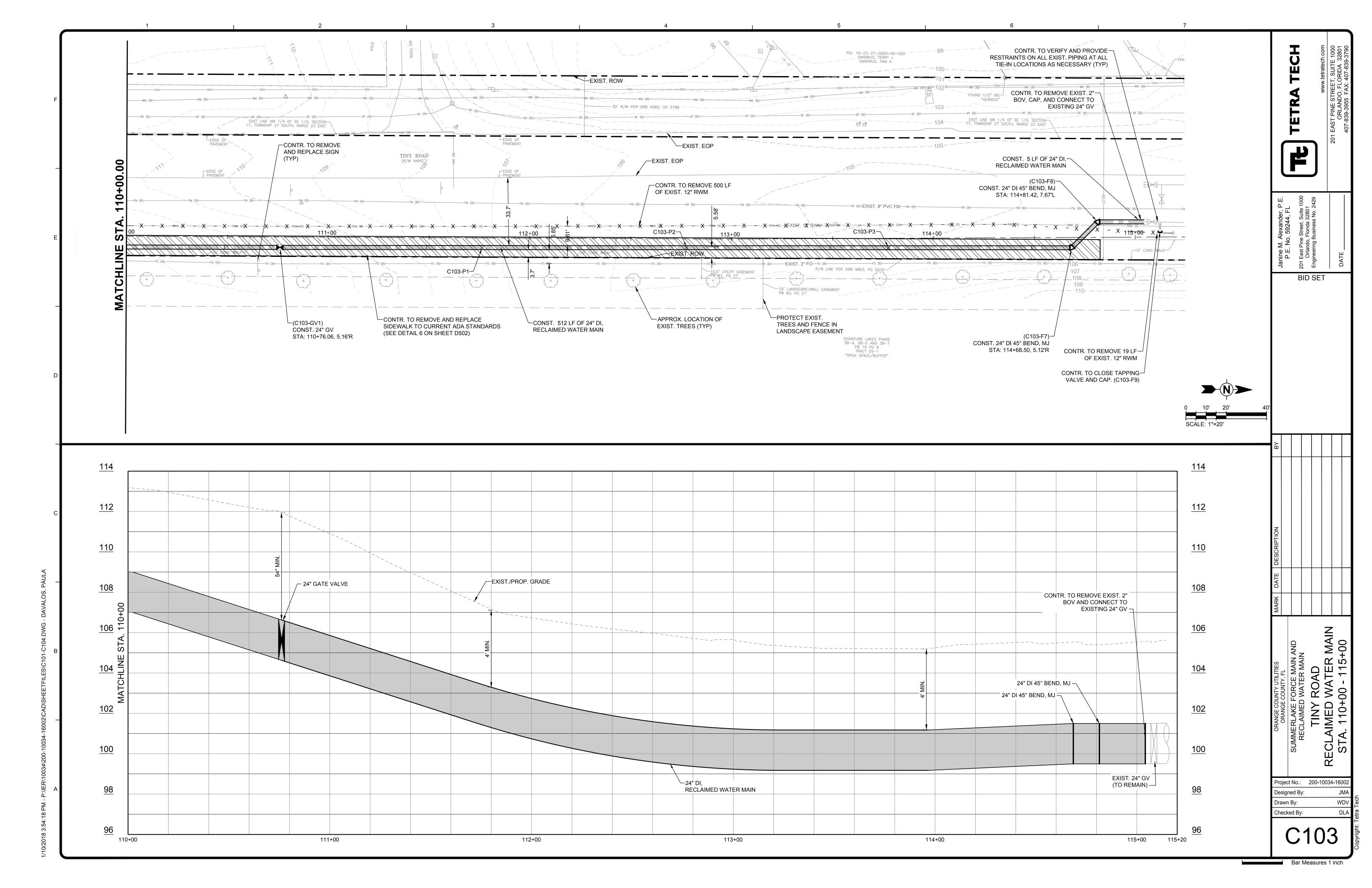
BID SET

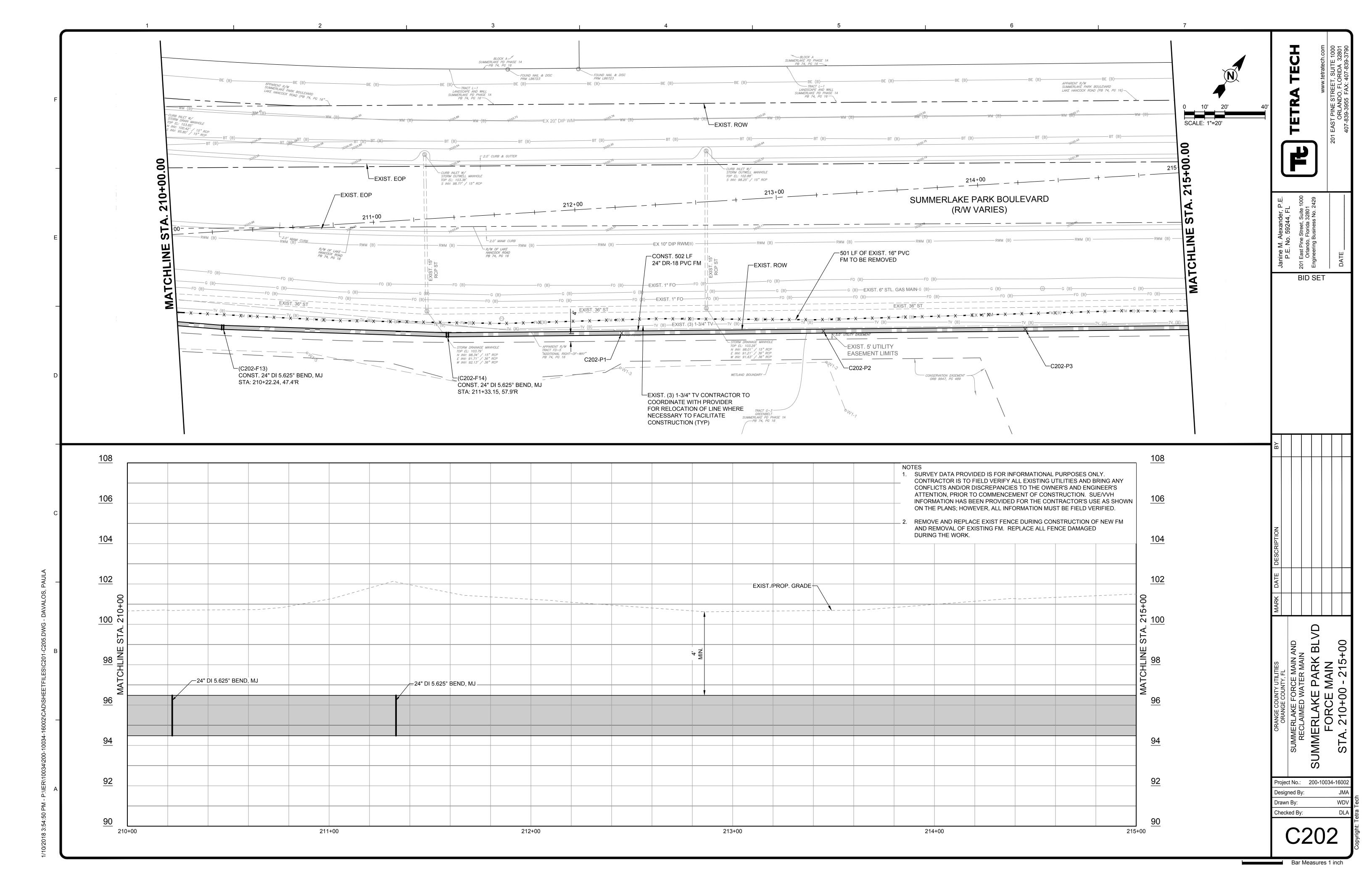
Bar Measures 1 inch

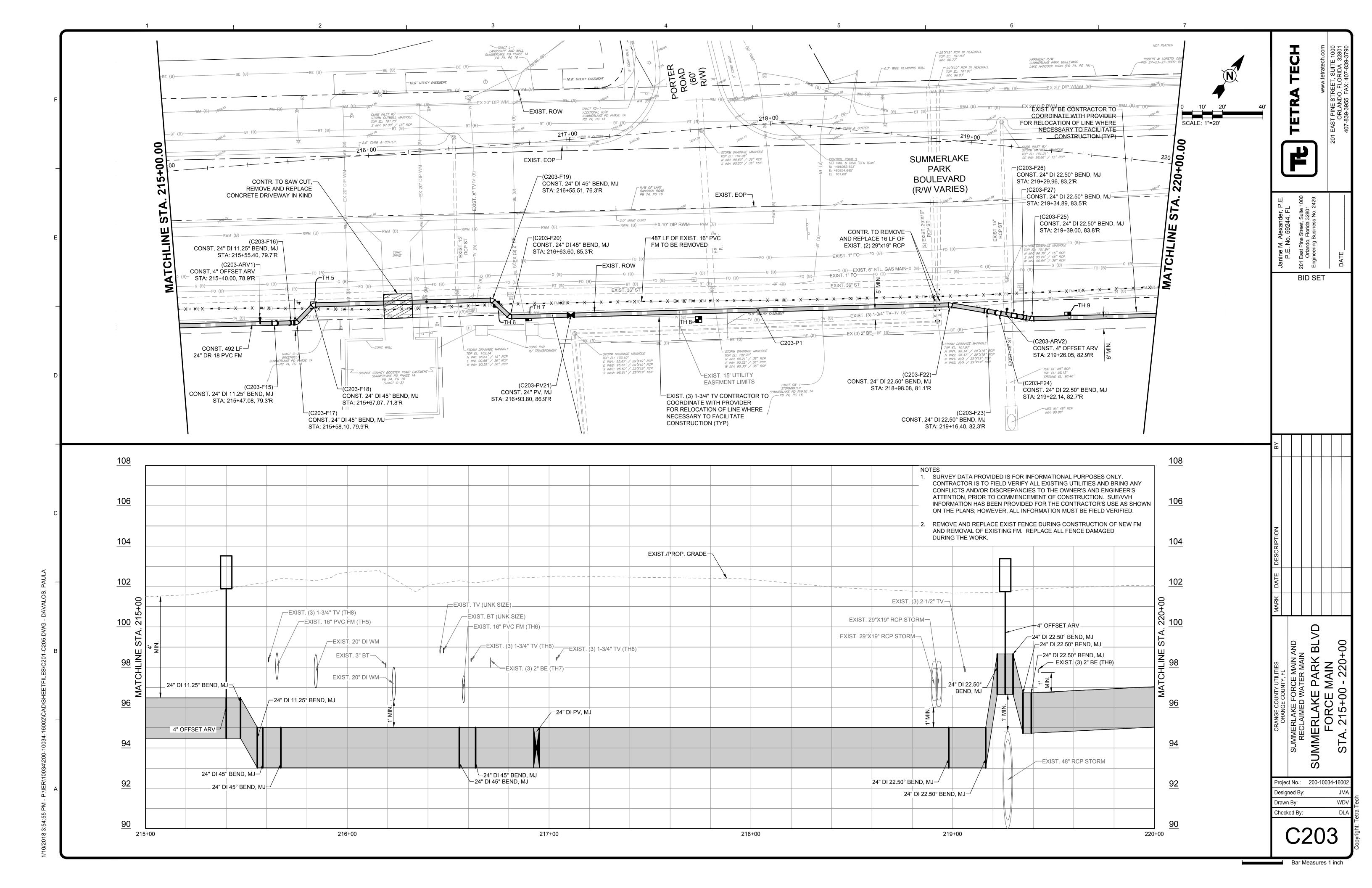


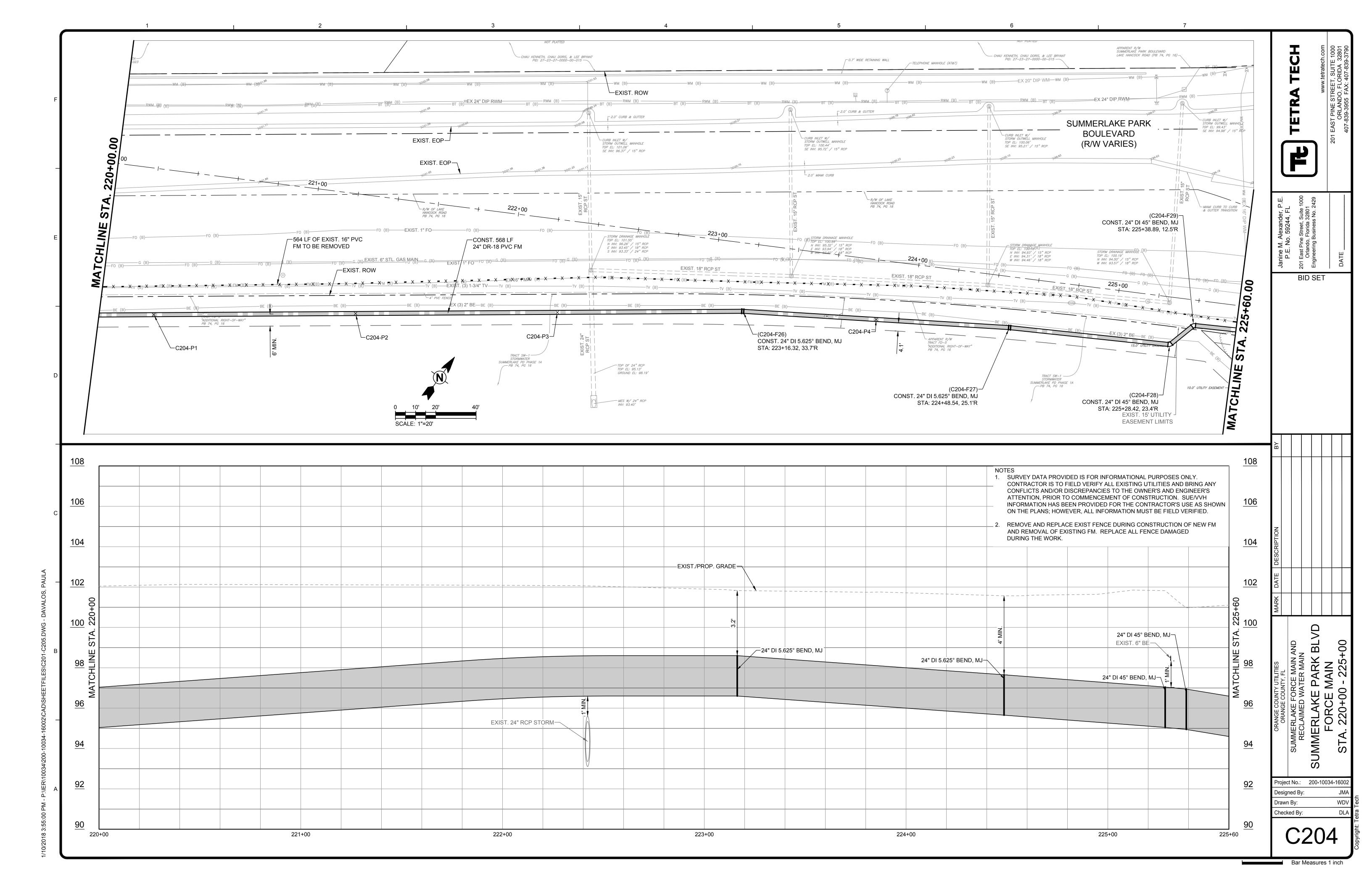


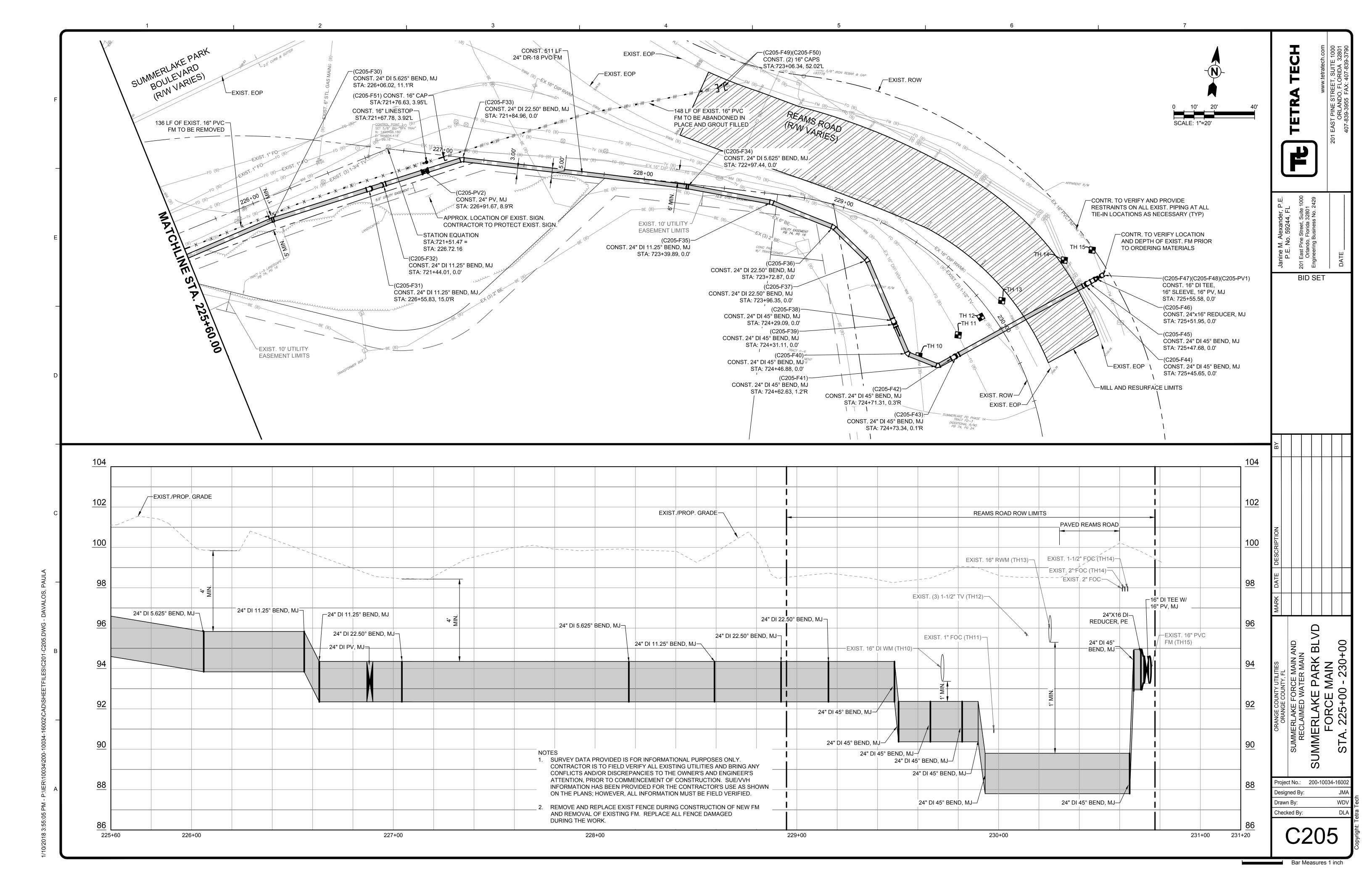












		TINE I	RD RW	/M ARV	ASSET	TABLE		
ID NUMBER	PLAN SHEET#	STATIONING	EASTING	NORTHING	ELEVATION	SERVICE TYPE	FITTING TYPE	COMMENTS
C101-ARV1	C101	SEE PLANS				FORCE MAIN	2" OFFSET ARV	

		TINE RI	D RWM	1 VALVE	ES ASSE	ET TABLE		
ID NUMBER	PLAN SHEET#	STATIONING	EASTING	NORTHING	ELEVATION	SERVICE TYPE	FITTING TYPE	COMMENTS
C103-GV1	C103	SEE PLANS				FORCE MAIN	24" GV	

	TINY RD RWM PIPE ASSET TABLE											
ID NUMBER	PLAN SHEET#	EASTING	NORTHING	ELEVATION	MAIN TYPE	SERVICE TYPE	COMMENTS					
C101-P1	C101				PRESSURIZED	FORCE MAIN						
C101-P2	C101				PRESSURIZED	FORCE MAIN						
C102-P1	C102				PRESSURIZED	FORCE MAIN						
C102-P2	C102				PRESSURIZED	FORCE MAIN						
C102-P3	C102				PRESSURIZED	FORCE MAIN						
C102-P4	C102				PRESSURIZED	FORCE MAIN						
C102-P5	C102				PRESSURIZED	FORCE MAIN						
C103-P1	C103				PRESSURIZED	FORCE MAIN						
C103-P2	C103				PRESSURIZED	FORCE MAIN						
C103-P3	C103				PRESSURIZED	FORCE MAIN						

ID NUMBER	PLAN SHEET #	STATIONING	EASTING	NORTHING	ELEVATION	SERVICE TYPE	FITTING TYPE	COMMENTS
C201-F1	C201	SEE PLANS				FORCE MAIN	30"x24" DI REDUCER, MJ	
C201-F2	C201	SEE PLANS				FORCE MAIN	24"x12" TEE, MJ	
C201-F3	C201	SEE PLANS				FORCE MAIN	24"x16" TEE, MJ	
C201-F4	C201	SEE PLANS				FORCE MAIN	24" DI 11.25° BEND, MJ	
C201-F5	C201	SEE PLANS				FORCE MAIN	24" DI 11.25° BEND, MJ	
C201-F6	C201	SEE PLANS				FORCE MAIN	24" DI 11.25° BEND, MJ	
C201-F7	C201	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C201-F8	C201	SEE PLANS				FORCE MAIN	24" DI 11.25° BEND, MJ	
C201-F9	C201	SEE PLANS				FORCE MAIN	24" DI 11.25° BEND, MJ	
C201-F10	C201	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C201-F11	C201	SEE PLANS				FORCE MAIN	12"x12" TAPPING SLEEVE, MJ	
C201-F12	C201	SEE PLANS				FORCE MAIN	12" DI 45° BEND, MJ	
C201-F13	C201	SEE PLANS				FORCE MAIN	12" DI 90° BEND, MJ	
C201-F14	C201	SEE PLANS				FORCE MAIN	12" DI 45° BEND, MJ	
C201-F15	C201	SEE PLANS				FORCE MAIN	12" DI 45° BEND, MJ	
C201-F16	C201	SEE PLANS				FORCE MAIN	12" DI 45° BEND, MJ	
C201-F17	C201	SEE PLANS				FORCE MAIN	16" DI 45° BEND, MJ	
C201-F18	C201	SEE PLANS				FORCE MAIN	16"x8" DI TEE, MJ	
C201-F19	C201	SEE PLANS				FORCE MAIN	8" DI 45° BEND, MJ	
C201-F20	C201	SEE PLANS				FORCE MAIN	8" DI 45° BEND, MJ	
C201-F21	C201	SEE PLANS				FORCE MAIN	8" DI 45° BEND, MJ	
C201-F22	C201	SEE PLANS				FORCE MAIN	8" DI 45° BEND, MJ	
C201-F23	C201	SEE PLANS				FORCE MAIN	8" LINESTOP	
C201-F24	C201	SEE PLANS				FORCE MAIN	16" DI 90° BEND, MJ	
C201-F25	C201	SEE PLANS				FORCE MAIN	16" DI 45° BEND, MJ	
C201-F26	C201	SEE PLANS				FORCE MAIN	16" CAP, MJ	
C201-F27	C201	SEE PLANS				FORCE MAIN	16" CAP, MJ	
C202-F13	C202	SEE PLANS				FORCE MAIN	24" DI 5.625° BEND, MJ	
C202-F14	C202	SEE PLANS				FORCE MAIN	24" DI 5.625° BEND, MJ	
C203-F15	C203	SEE PLANS				FORCE MAIN	24" DI 11.25° BEND, MJ	
C203-F16	C203	SEE PLANS				FORCE MAIN	24" DI 11.25° BEND, MJ	
C203-F17	C203	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C203-F18	C203	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C203-F19	C203	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	

	SI	JMMERL	AKE F	M ARV	ASSET	TABLE		
ID NUMBER	PLAN SHEET#	STATIONING	EASTING	NORTHING	ELEVATION	SERVICE TYPE	FITTING TYPE	COMMENTS
C201-ARV1	C201	SEE PLANS				FORCE MAIN	4" OFFSET ARV	
C203-ARV1	C203	SEE PLANS				FORCE MAIN	4" OFFSET ARV	
C203-ARV2	C203	SEE PLANS				FORCE MAIN	4" OFFSET ARV	

	SUMMERLAKE FM VALVES ASSET TABLE											
ID NUMBER PLAN SHEET # STATIONING EASTING NORTHING ELEVATION SERVICE TYPE FITTING TYPE COMMEN												
C201-PV1	C201	SEE PLANS				FORCE MAIN	24" PV, MJ					
C201-PV2	C201	SEE PLANS				FORCE MAIN	12" PV, MJ					
C201-PV3	C201	SEE PLANS				FORCE MAIN	8" PV, MJ					
C201-PV4	C201	SEE PLANS				FORCE MAIN	8" PV, MJ					
C201-PV5	C201	SEE PLANS				FORCE MAIN	24" PV, MJ					
C201-PV6	C201	SEE PLANS				FORCE MAIN	12" PV, MJ					
C203-PV21	C203	SEE PLANS				FORCE MAIN	24" PV, MJ					
C205-PV1	C205	SEE PLANS				FORCE MAIN	16" PV, MJ					
C205-PV2	C205	SEE PLANS				FORCE MAIN	24" PV, MJ					

ID NUMBER	PLAN SHEET#	STATIONING	EASTING	NORTHING	ELEVATION	SERVICE TYPE	FITTING TYPE	COMMENTS
C203-F20	C203	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C203-F22	C203	SEE PLANS				FORCE MAIN	24" DI 22.50° BEND, MJ	
C203-F23	C203	SEE PLANS				FORCE MAIN	24" DI 22.50° BEND, MJ	
C203-F24	C203	SEE PLANS				FORCE MAIN	24" DI 22.50° BEND, MJ	
C203-F25	C203	SEE PLANS				FORCE MAIN	24" DI 22.50° BEND, MJ	
C203-F26	C203	SEE PLANS				FORCE MAIN	24" DI 22.50° BEND, MJ	
C203-F27	C203	SEE PLANS				FORCE MAIN	24" DI 22.50° BEND, MJ	
C204-F26	C204	SEE PLANS				FORCE MAIN	24" DI 5.625° BEND, MJ	
C204-F27	C204	SEE PLANS				FORCE MAIN	24" DI 5.625° BEND, MJ	
C204-F28	C204	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C204-F29	C204	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C205-F30	C205	SEE PLANS				FORCE MAIN	24" DI 5.625° BEND, MJ	
C205-F31	C205	SEE PLANS				FORCE MAIN	24" DI 11.25° BEND, MJ	
C205-F32	C205	SEE PLANS				FORCE MAIN	24" DI 11.25° BEND, MJ	
C205-F33	C205	SEE PLANS				FORCE MAIN	24" DI 22.50° BEND, MJ	
C205-F34	C205	SEE PLANS				FORCE MAIN	24" DI 5.625° BEND, MJ	
C205-F35	C205	SEE PLANS				FORCE MAIN	24" DI 11.25° BEND, MJ	
C205-F36	C205	SEE PLANS				FORCE MAIN	24" DI 22.50° BEND, MJ	
C205-F37	C205	SEE PLANS				FORCE MAIN	24" DI 22.50° BEND, MJ	
C205-F38	C205	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C205-F39	C205	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C205-F40	C205	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C205-F41	C205	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C205-F42	C205	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C205-F43	C205	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C205-F44	C205	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C205-F45	C205	SEE PLANS				FORCE MAIN	24" DI 45° BEND, MJ	
C205-F46	C205	SEE PLANS				FORCE MAIN	24"x16" REDUCER, MJ	
C205-F47	C205	SEE PLANS				FORCE MAIN	16" DI TEE, MJ	
C205-F48	C205	SEE PLANS				FORCE MAIN	16" SLEEVE	
C205-F49	C205	SEE PLANS				FORCE MAIN	16" CAP, MJ	
C205-F50	C205	SEE PLANS				FORCE MAIN	16" CAP, MJ	
C205-F51	C205	SEE PLANS				FORCE MAIN	16" CAP, MJ	

	SUMMERLAKE FM PIPE ASSET TABLE											
ID NUMBER	PLAN SHEET#	EASTING	NORTHING	ELEVATION	MAIN TYPE	SERVICE TYPE	COMMENTS					
C201-P1	C201				PRESSURIZED	FORCE MAIN						
C202-P1	C202				PRESSURIZED	FORCE MAIN						
C202-P2	C202				PRESSURIZED	FORCE MAIN						
C202-P3	C202				PRESSURIZED	FORCE MAIN						
C203-P1	C203				PRESSURIZED	FORCE MAIN						
C204-P1	C204				PRESSURIZED	FORCE MAIN						
C204-P2	C204				PRESSURIZED	FORCE MAIN						
C204-P3	C204				PRESSURIZED	FORCE MAIN						
C204-P4	C204				PRESSURIZED	FORCE MAIN						





BID SET

Checked By:

TYPE A BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE. 4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE

DIAMETER 24" AND LARGER. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.

ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE

. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.

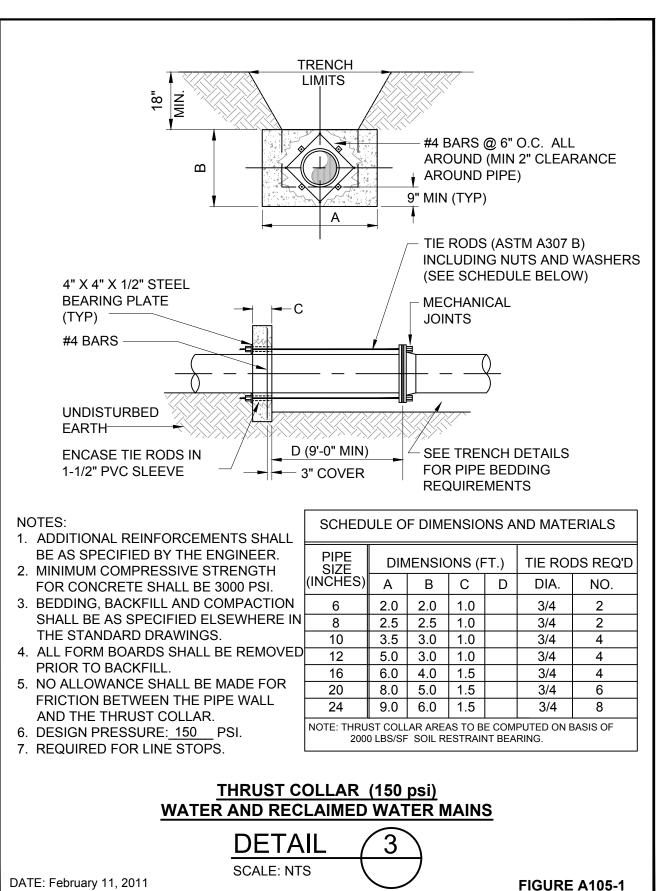
3. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.

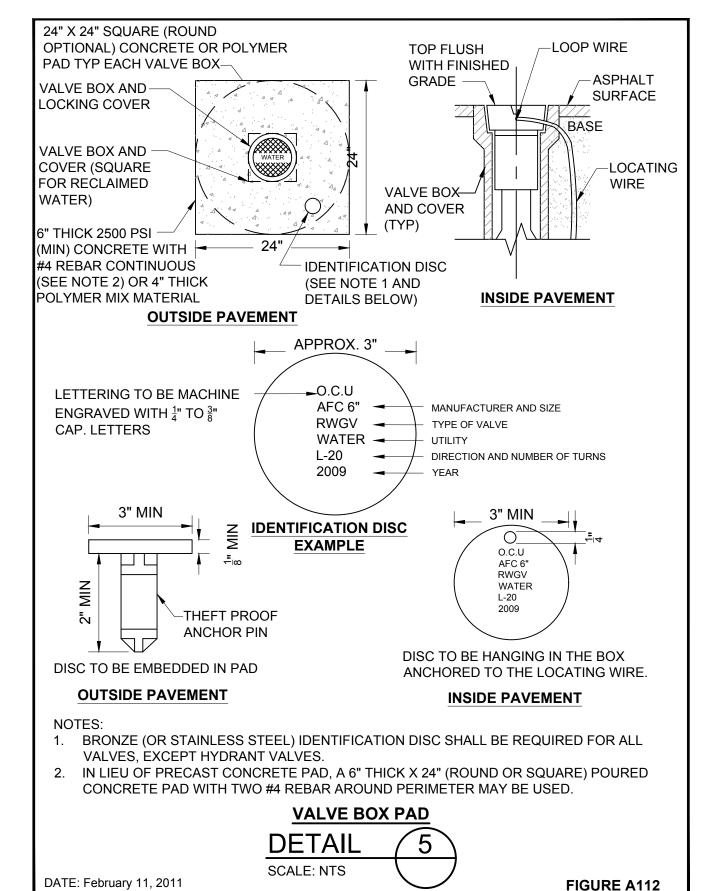
. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF R/W UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

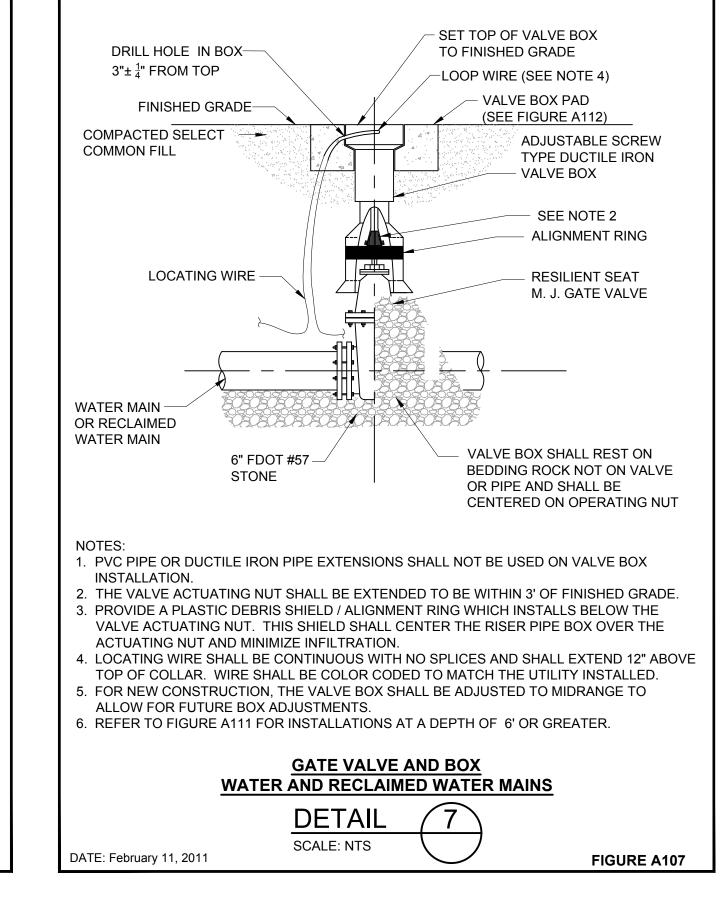
BEDDING AND TRENCHING - TYPE A

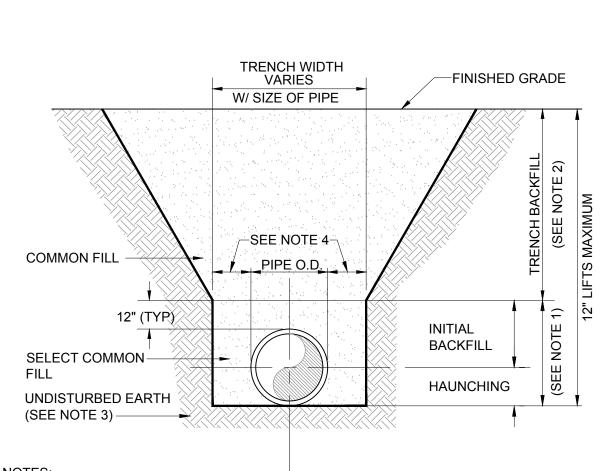
DETAIL SCALE: NTS

FIGURE A101









NOTES:

DATE: February 11, 2011

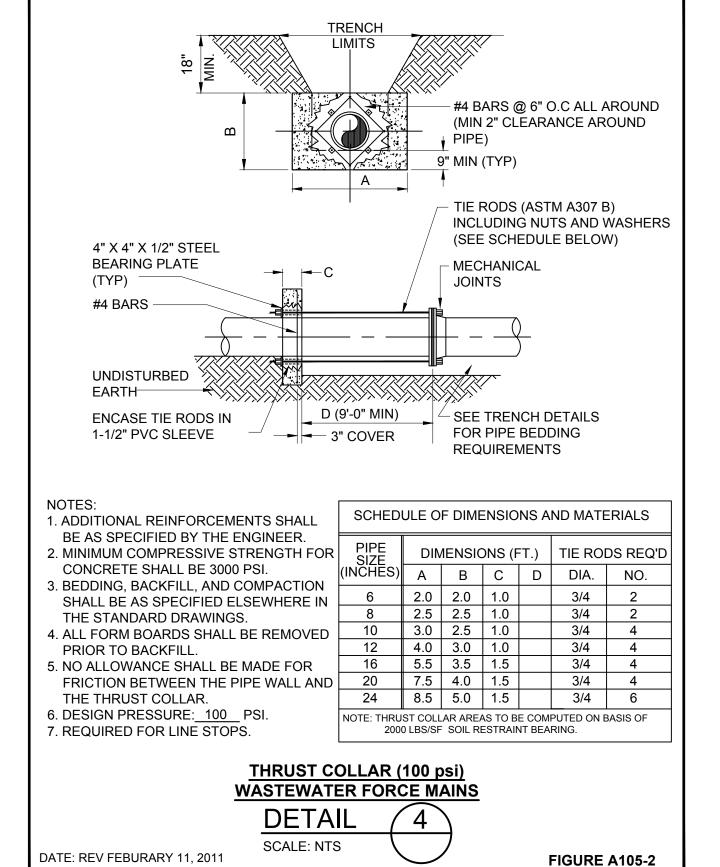
DATE: February 11, 2011

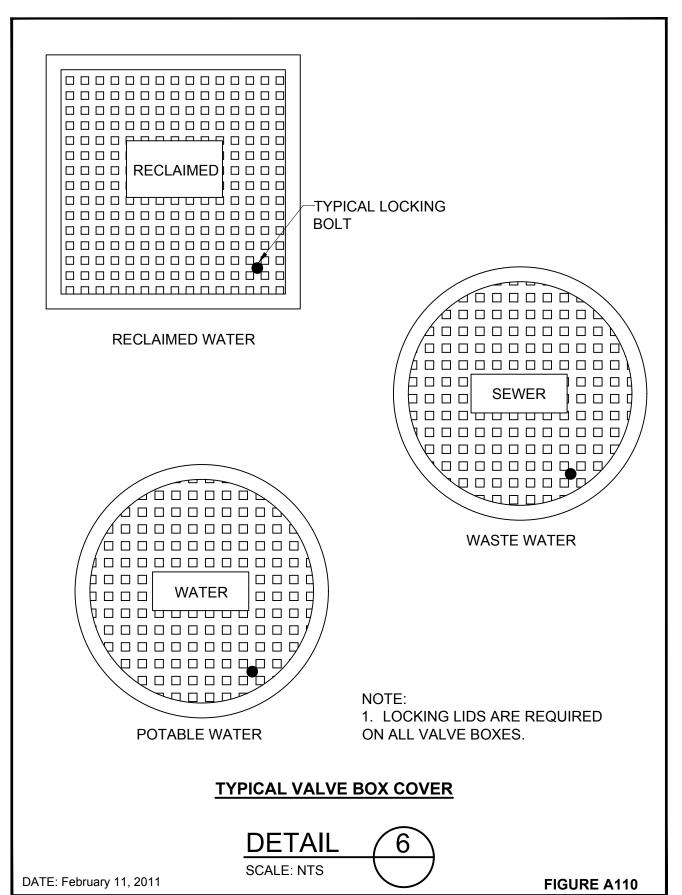
- 1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98%
- UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180. 2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE
- MAXIMUM DENSITY AS PER AASHTO T-180. 3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY
- UTILITIES. 4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE
- DIAMETER 24" AND LARGER. 5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
- 6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE
- 7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

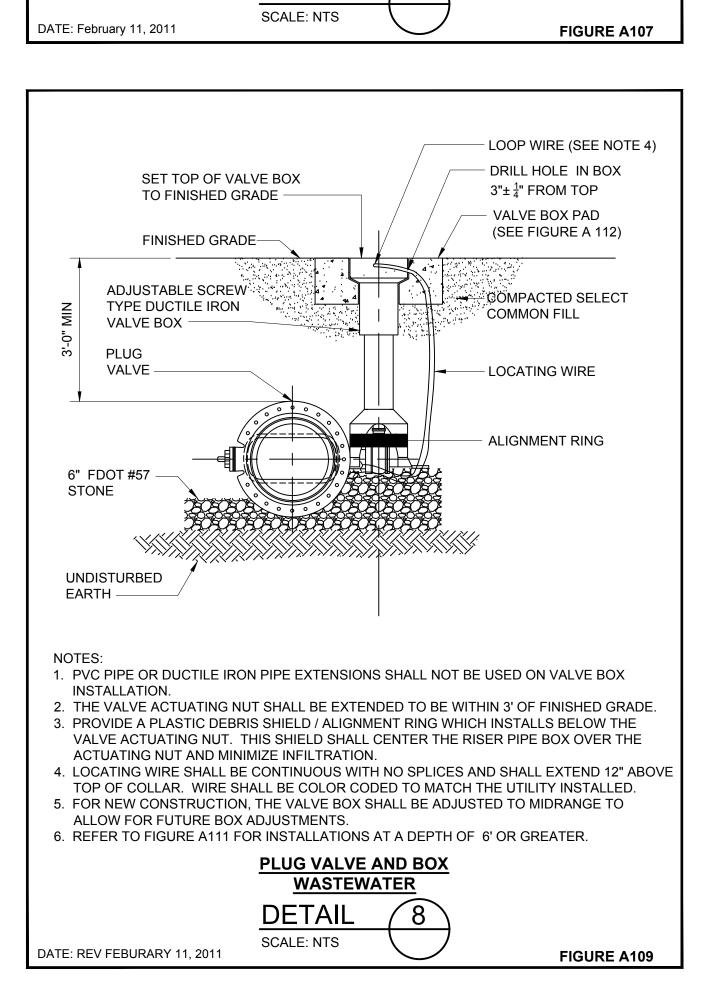
BEDDING AND TRENCHING - TYPE B

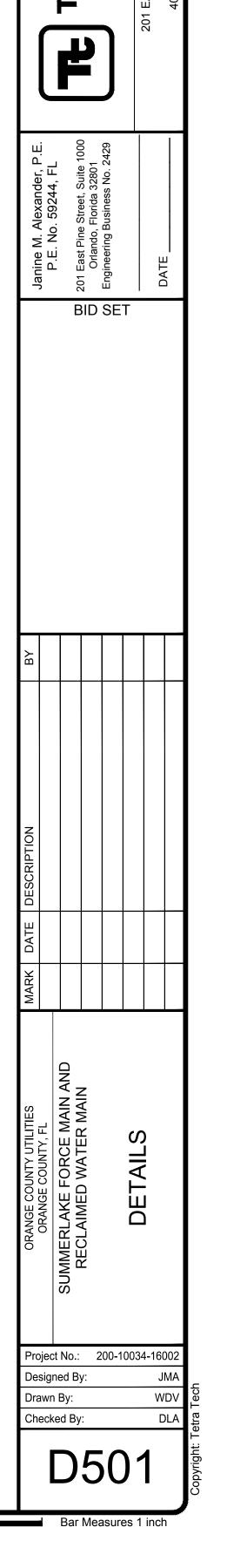
DETAIL SCALE: NTS

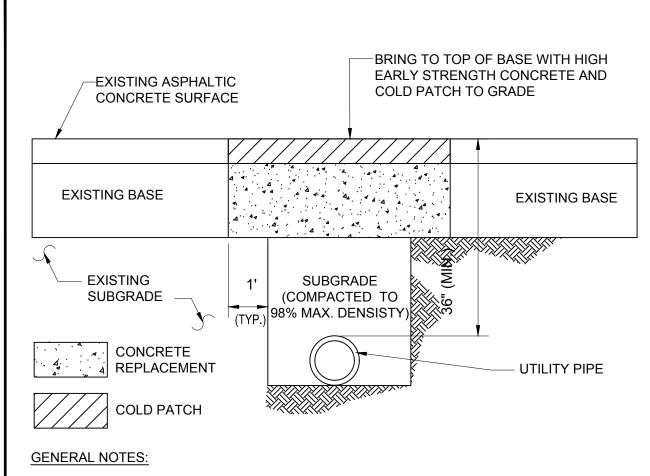
FIGURE A102











1. BASE REPLACEMENT SHALL BE 3000 PSI HIGH EARLY STRENGTH CONCRETE.

2. ASPHALTIC CONCRETE SURFACE MATERIAL SHALL BE REPLACED WITH THE SAME TYPE OF MATERIAL THAT EXISTED AT THE TIME OF REMOVAL.

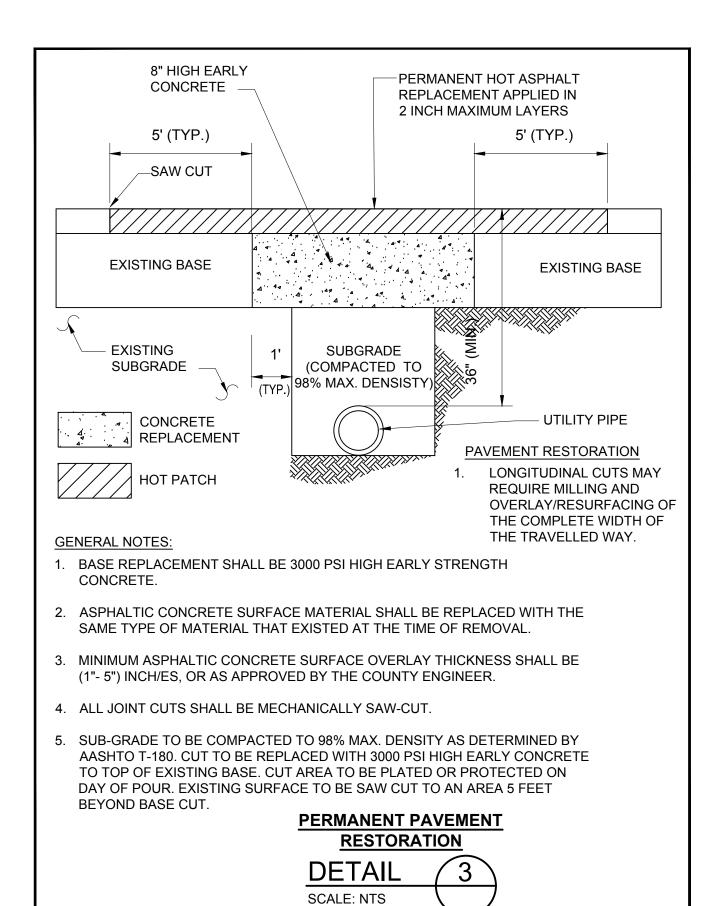
3. MINIMUM ASPHALTIC CONCRETE SURFACE OVERLAY THICKNESS SHALL BE (1"- 5") INCH/ES.

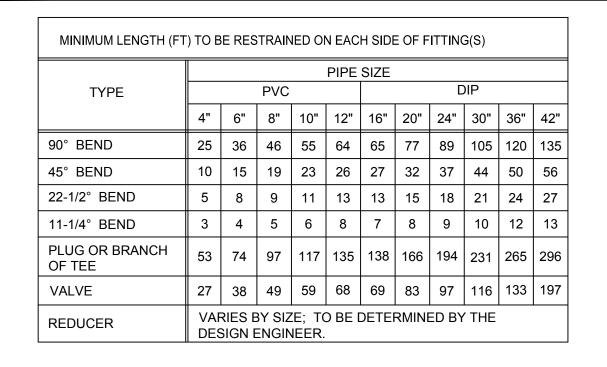
4. ALL JOINT CUTS SHALL BE MECHANICALLY SAW-CUT.

5. SUB-GRADE TO BE COMPACTED TO 98% MAX. DENSITY AS DETERMINED BY AASHTO T-180. CUT TO BE REPLACED WITH 3000 PSI HIGH EARLY CONCRETE TO TOP OF EXISTING BASE. CUT AREA TO BE PLATED OR PROTECTED ON DAY OF POUR. TEMPORARY COLD PATCH TO BE APPLIED AND BROUGHT TO GRADE NEXT DAY.

TEMPORARY PAVEMENT RESTORATION







1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.

2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE

3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.

4. ALL INLINE VALVES SHALL BE RESTRAINED.

5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.

6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA, USING THE ASSUMPTIONS SHOWN BELOW:

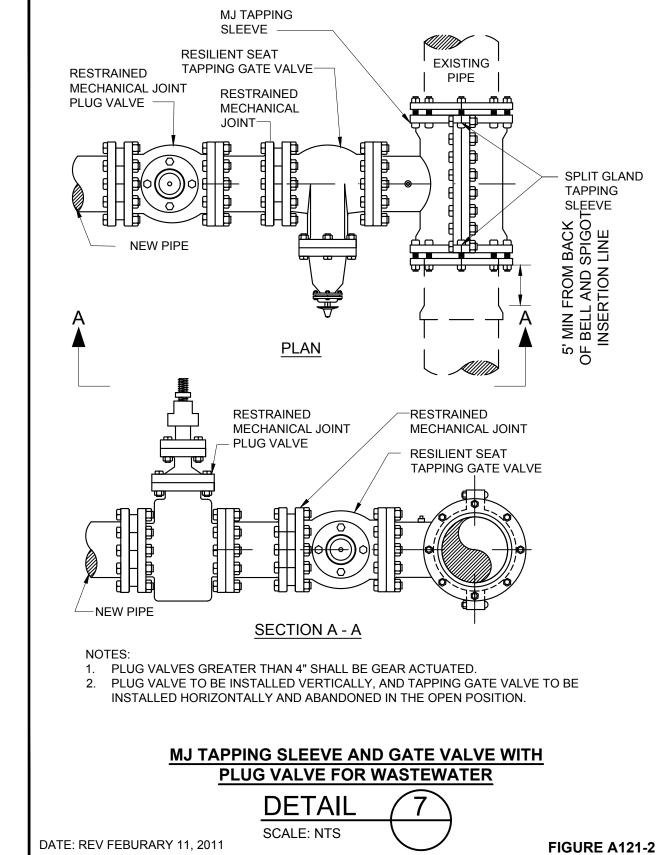
WORKING PRESSURE: 150 PSI SOIL DESIGNATION: SM (SAND SILT) LAYING CONDITIONS: 3 DEPTH OF COVER: 3 FT SAFETY FACTOR: 1.5

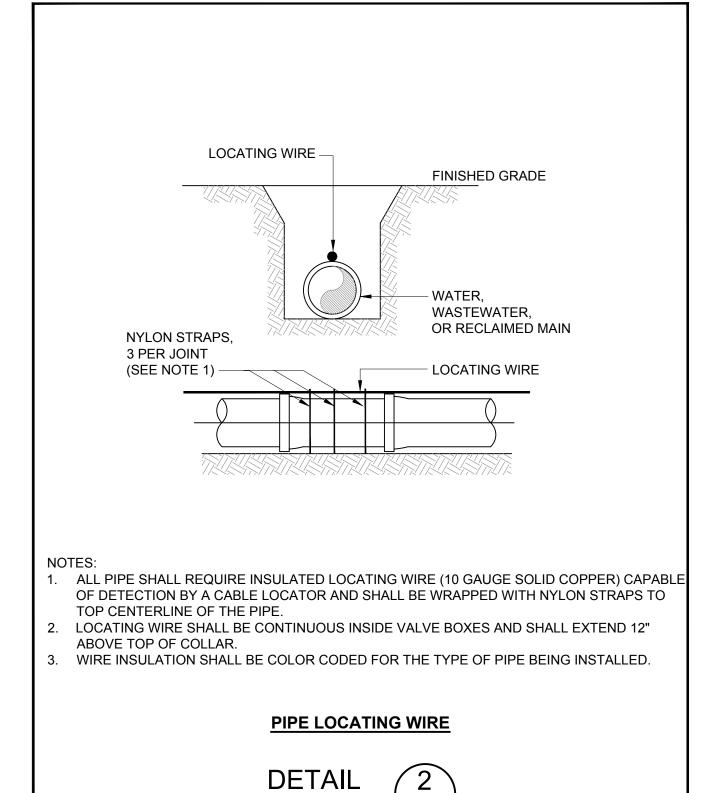
CONVERSION FACTOR FOR PVC PIPE: 1.25

THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC SOIL DESIGNATIONS, LAYING CONDITIONS, PIPE MATERIAL, ETC. FOR DIP ENCASED IN POLYETHYLENE, INCREASE THE GIVEN VALUE BY A FACTOR OF

RESTRAINED PIPE TABLE WATER AND RECLAIMED WATER MAINS

DETAIL

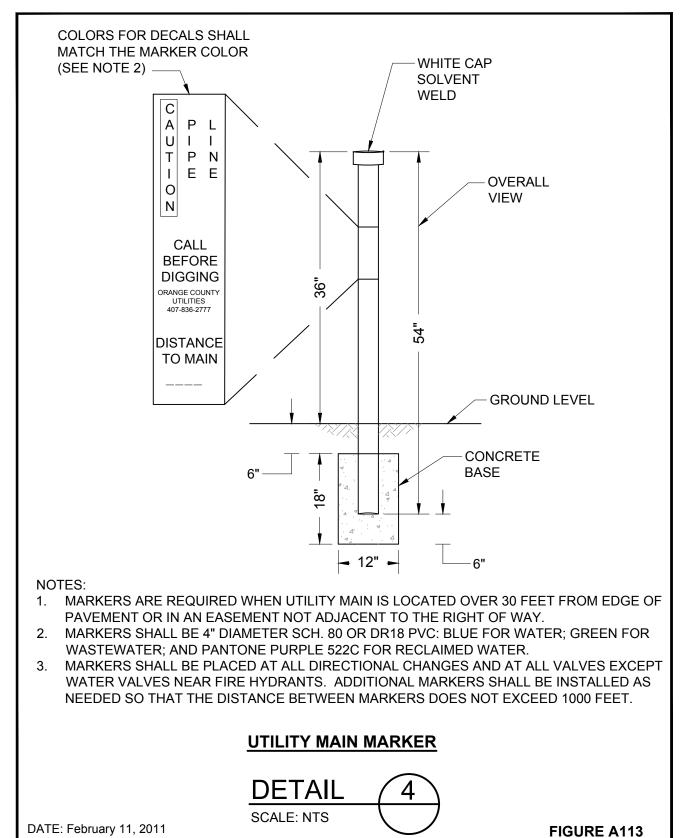


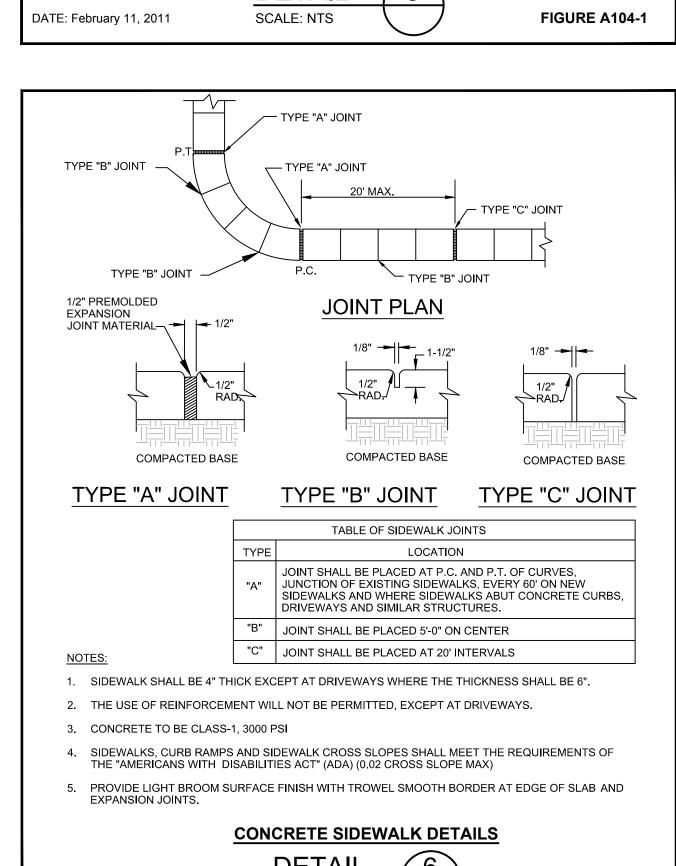


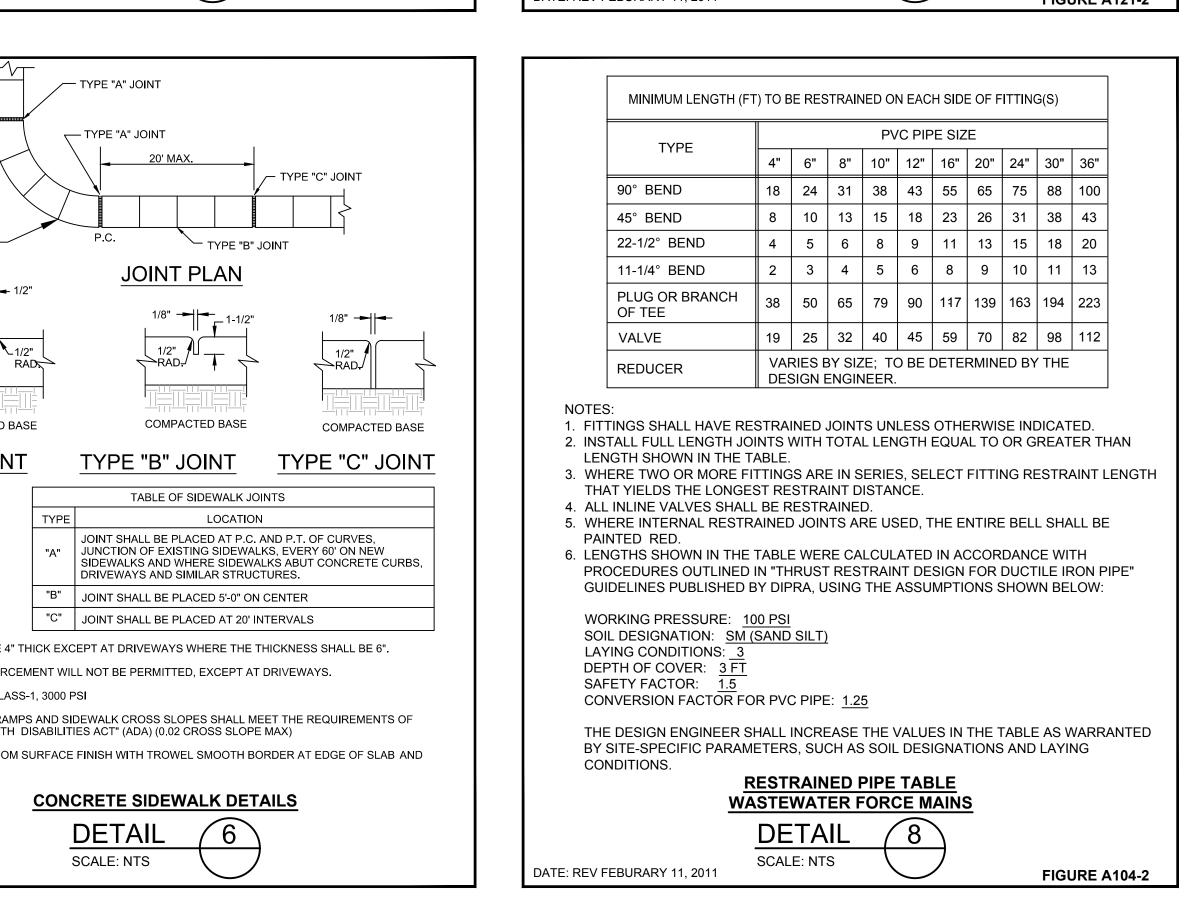
SCALE: NTS

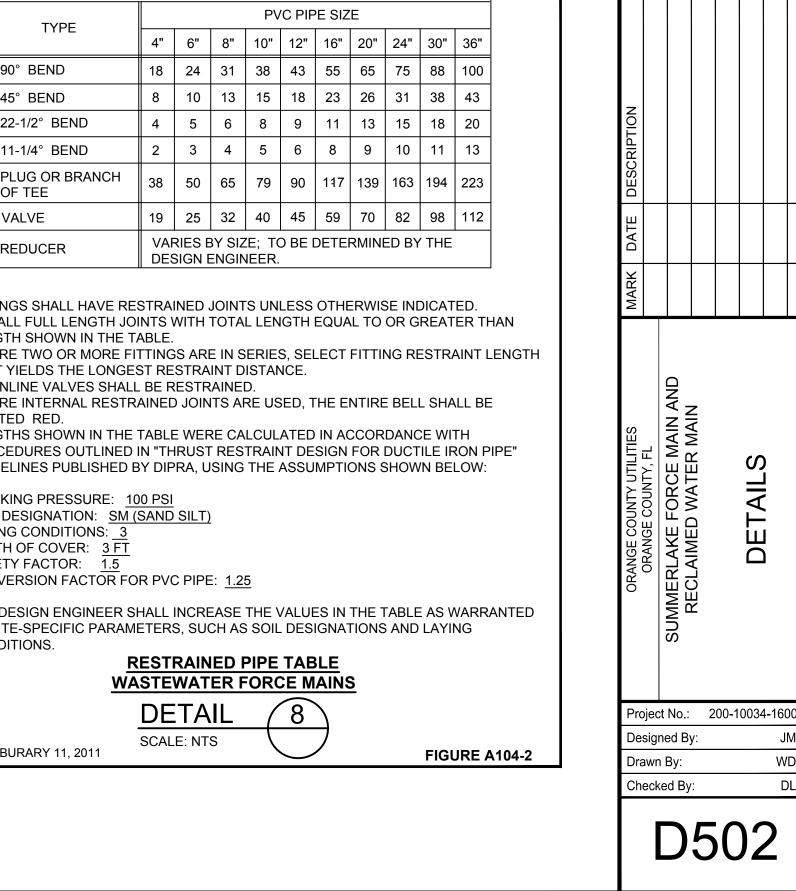
FIGURE A114

DATE: February 11, 2011



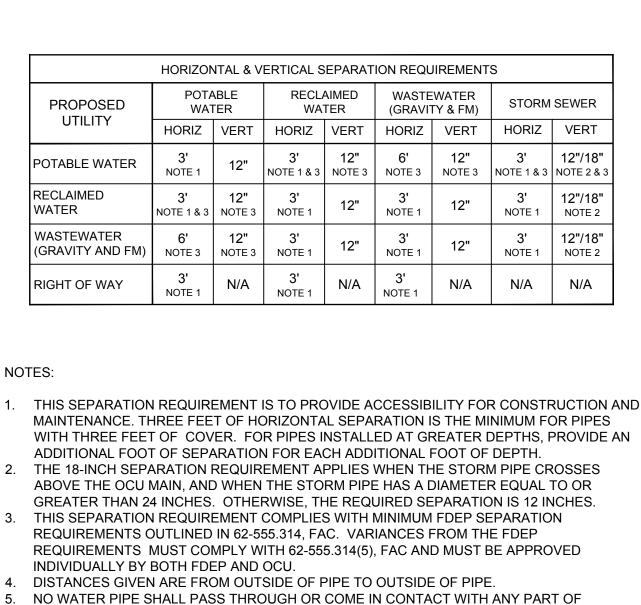






Bar Measures 1 inch

BID SET



SEPARATION REQUIREMENTS FOR

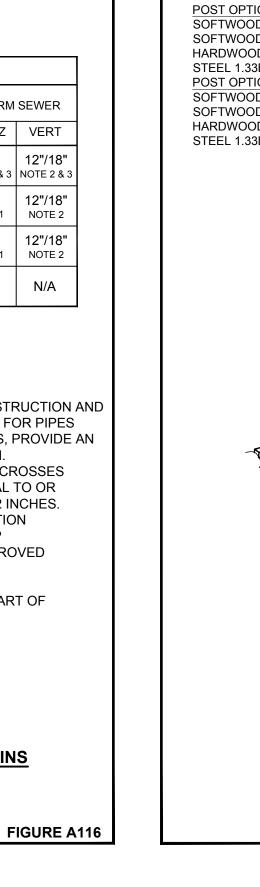
WATER, WASTEWATER AND RECLAIMED WATER MAINS

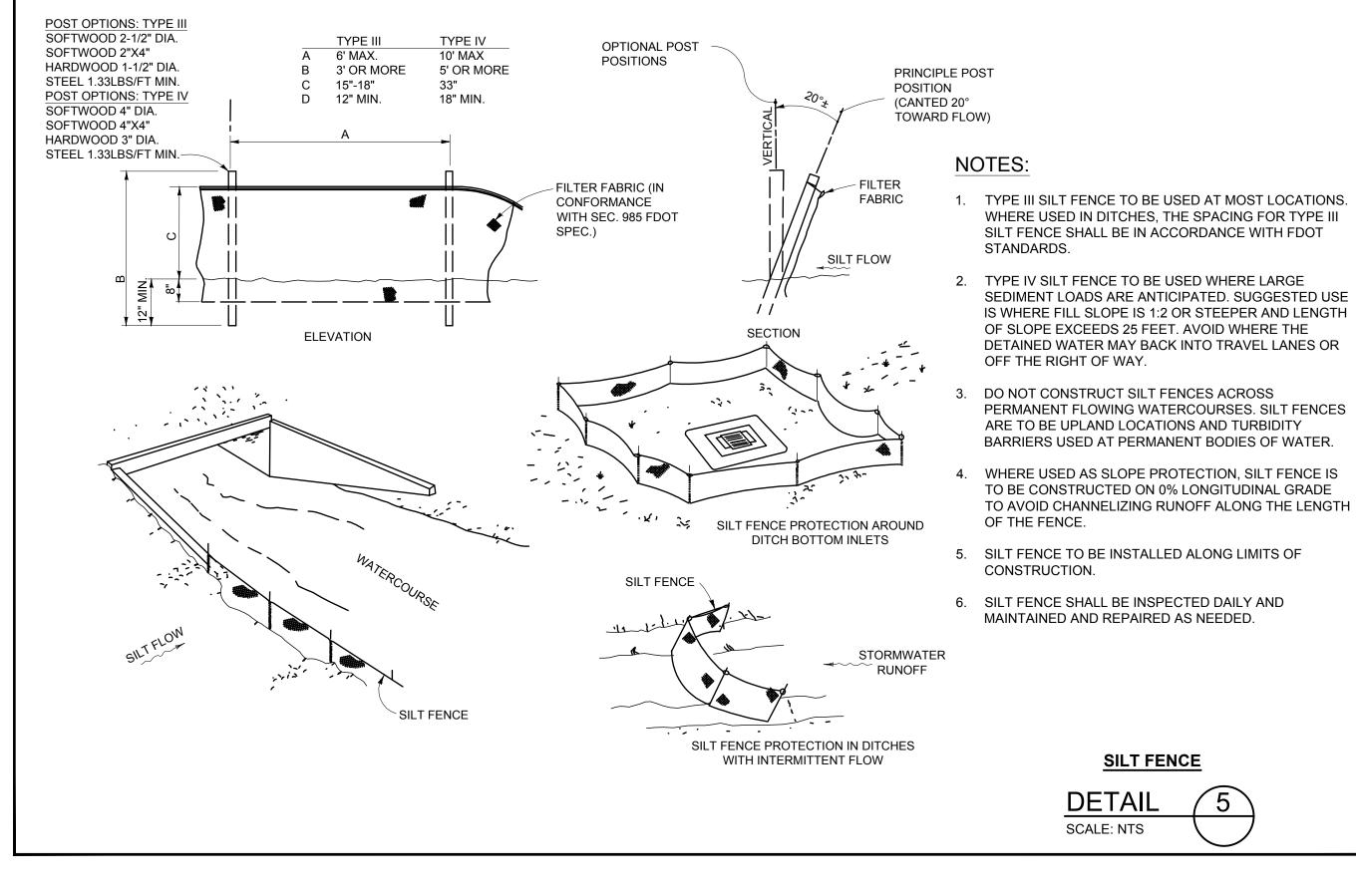
DETAIL

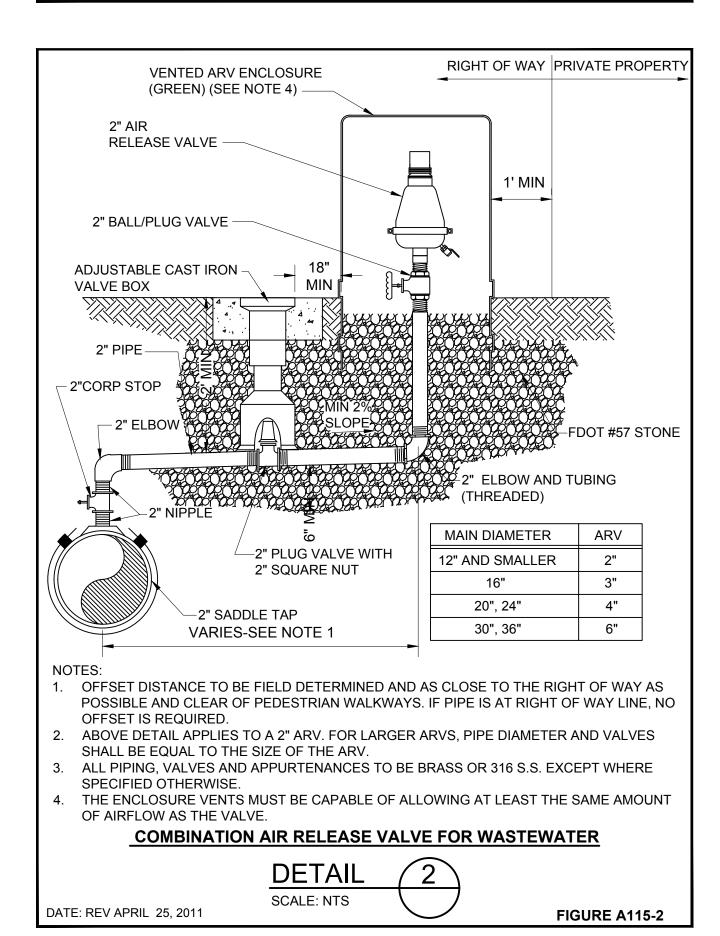
SCALE: NTS

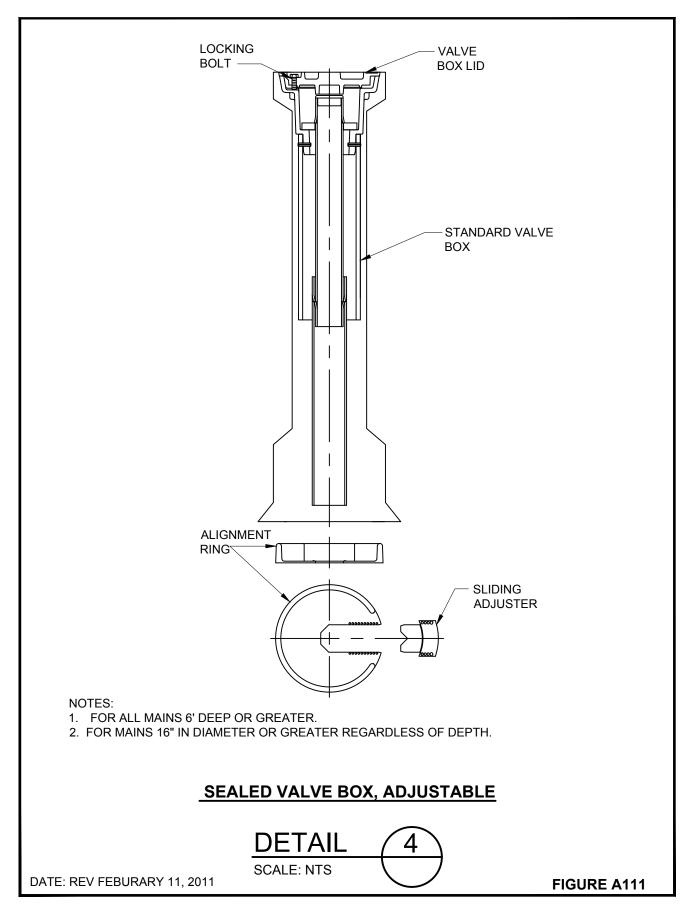
SANITARY OR STORM WATER MANHOLE OR STRUCTURE.

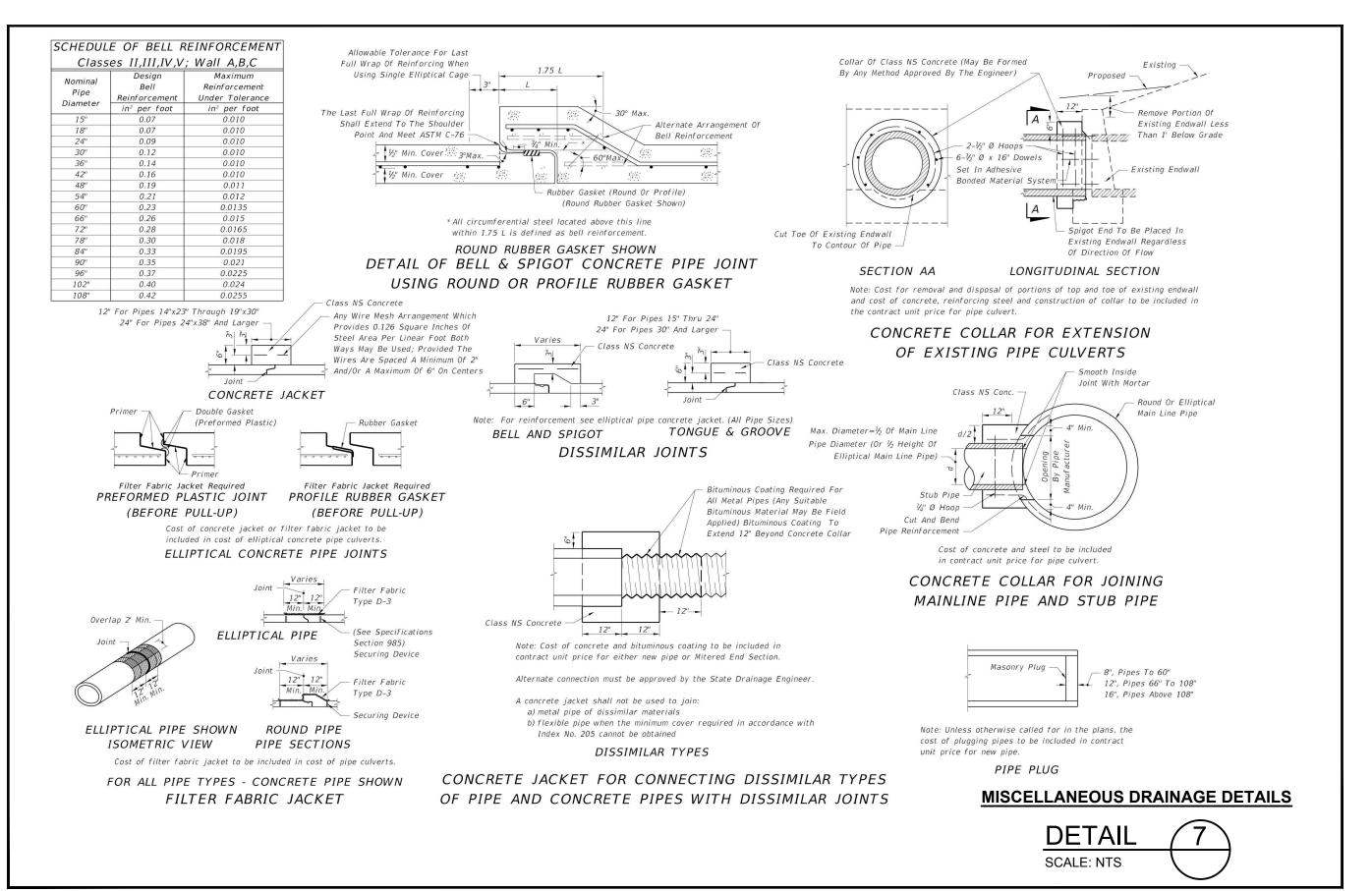
DATE: February 11, 2011











BID SET Project No.: 200-10034-1600 Designed By Drawn By: Checked By:

Bar Measures 1 inc