



GENERAL

- THESE GENERAL NOTES SHALL APPLY TO ALL DRAWINGS INCLUDED IN THE CONTRACT.
- COORDINATES INDICATED ON THE DRAWINGS ARE FLORIDA STATE PLANE COORDINATE SYSTEM. NORTH AMERICAN DATUM OF 1983. ELEVATIONS INDICATED FOR LS 539 AND LS 557 ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ELEVATIONS INDICATED FOR LS 546 ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).
- THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING. PIPING AND UTILITY LOCATIONS SHOWN ON PLANS ARE NOT EXACT OR GUARANTEED. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING UTILITY LOCATIONS.
- EXISTING UTILITIES AND STRUCTURES (UNDERGROUND, SURFACE, OR OVERHEAD) ARE INDICATED ONLY TO THE EXTENT THAT SUCH INFORMATION WAS KNOWN, OR MADE AVAILABLE TO, OR DISCOVERED BY THE ENGINEER IN PREPARING THE DRAWINGS. THE LOCATIONS, CONFIGURATIONS, AND ELEVATIONS OF SUBSURFACE FACILITIES AND UTILITIES ARE APPROXIMATE, AND NOT ALL UTILITIES AND FACILITIES MAY BE INDICATED. THE CONTRACTOR SHALL VERIFY THE EXACT HORIZONTAL AND VERTICAL LOCATION OF UNDERGROUND UTILITIES IN THE AREA OF CONSTRUCTION PRIOR TO PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS AND PAY ALL COSTS ASSOCIATED WITH THE TEMPORARY RELOCATION, SUPPORT, MONITORING, PROTECTION, OR OTHER INTERACTION WITH UTILITY FEATURES WHICH MIGHT BE AFFECTED BY THE WORK. PROVIDE REQUIRED NOTICE TO OTHERS FOR SUCH WORK TO ALLOW THE PROJECT TO CONTINUE IN ACCORDANCE WITH THE CONTRACT SCHEDULE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE WHICH MIGHT RESULT FROM HIS FAILURE TO ADEQUATELY LOCATE AND PROTECT ANY AND ALL UTILITIES, WHETHER ABOVE OR BELOW GRADE. ANY DAMAGE SHALL BE REPAIRED AT NO ADDITIONAL COST TO OWNER. ANY NECESSARY ADJUSTMENTS TO NEW PIPE ALIGNMENT DUE TO THE CONFIRMED LOCATION OF EXISTING UTILITIES AND UNDERGROUND FEATURES SHALL BE IDENTIFIED AND BROUGHT TO THE ATTENTION OF OWNER AND ENGINEER FOR REVIEW SUFFICIENTLY AHEAD OF ORDERING OF MATERIALS TO ALLOW FOR DESIGN ADJUSTMENT TO BE IDENTIFIED. CONTRACTOR'S BID SHALL BE BASED ON THE DRAWINGS (PLAN, PROFILE).
- "SCREENED" (LIGHT) DELINEATION INDICATED ON THE DRAWINGS DENOTES EXISTING FACILITIES. "SCREENED" INFORMATION WAS TAKEN FROM EXISTING CONSTRUCTION DRAWINGS AND DATA AND FROM AVAILABLE INFORMATION COLLECTED FROM SURVEYS PERFORMED AT THE LS539 AND LS557 SITES. SCREENED INFORMATION SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE ORDERING OF MATERIALS AND BEGINNING OF CONSTRUCTION. "BOLD" DELINEATION IS NEW WORK TO BE CONSTRUCTED UNDER THIS CONTRACT.
- THE TERM "PROPOSED" AS INDICATED ON THE DRAWINGS MEANS THE ITEM IS DESIGNED OR PLANNED TO BE PROVIDED BY OWNER OR OTHERS SEPARATE FROM THIS CONTRACT. THE TERM "FUTURE" AS INDICATED ON THE DRAWINGS REFERS TO THE ENGINEER'S INTERPRETATION OF THE ITEM FOR THE FUTURE, BASED ON AVAILABLE INFORMATION.
- CONTRACTOR SHALL ADJUST VALVE BOXES, AIR RELEASE VALVES AND OTHER INFRASTRUCTURE IN CONFLICT WITH NEW WORK CONTRACTOR SHALL ATTEND PRE-BID MEETING TO HAVE A BETTER UNDERSTANDING OF EACH SITE.
- OWNER SHALL OPERATE ALL EXISTING VALVES AND LIFT STATIONS AND COORDINATE OPERATION WITH THE CONTRACTOR'S CONSTRUCTION APPROACH AS NEEDED FOR INSTALLATION OF THE NEW INFRASTRUCTURE AND TESTING / DISINFECTION.
- CONTRACTOR SHALL PROTECT EXISTING INFRASTRUCTURE / EQUIPMENT FROM DAMAGE DURING THE DURATION OF CONSTRUCTION. THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, SHALL IMMEDIATELY REPAIR ALL DAMAGES TO UTILITIES, MAINS AND FACILITIES. IF THE REPAIR IS NOT MADE IN A TIMELY MANNER, AS DETERMINED BY OWNER, OWNER MAY PERFORM REQUIRED REPAIRS AND CLEANUP. THE CONTRACTOR WILL BE CHARGED FOR ALL EXPENSES ASSOCIATED WITH THE REPAIR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL SURVEY BENCHMARKS. SURVEY BENCHMARKS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REESTABLISHED BY A LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA.
- CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING TREES, SHRUBS, AND PLANTS, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- CONTRACTOR SHALL RETURN THE ENTIRE AREA DISTURBED BY CONSTRUCTION ACTIVITIES TO THE ORIGINAL CONDITION UPON COMPLETION OF THE WORK. UNLESS OTHERWISE INDICATED, GRADE SHALL BE RETURNED TO ORIGINAL ELEVATION. THE ENTIRE DISTURBED AREA OF ALL ESTABLISHED LAWN AREAS SHALL BE SEEDED. AREA OF ALL DISTURBED ROADWAYS / PAVEMENT / SIDEWALK SHALL BE RESTORED PER MANATEE COUNTY OR FDOT STANDARDS, AS APPLICABLE.
- A TRAFFIC PLAN IN ACCORDANCE WITH THE SPECIFICATIONS SHOULD BE IMPLEMENTED AT ALL SITES, WHERE NECESSARY, INCLUDING AT TIE-IN WITH MANHOLE 11839 AND FOR LINER REPLACEMENT AT MANHOLES 11839, 12058 AND 12061.
- THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO CONNECTING TO OR DISRUPTING ANY EXISTING SERVICES.
- CONTRACTOR SHALL FIELD VERIFY PRECISE LOCATION, ELEVATION, AND ARRANGEMENT OF CONNECTIONS OF NEW PIPELINES WITH EXISTING PIPELINES BASED ON FIELD CONDITIONS, INCLUDING EXPOSING EXISTING PIPING PRIOR TO FABRICATING NEW PIPING. CONTRACTOR SHALL PROVIDE FITTINGS, ADAPTERS, SOLID SLEEVE CLOSURES, AND HARNESSSED MECHANICAL COUPLING; ROTATE FITTINGS; DEFLECT JOINTS; AND MODIFY EXISTING PIPING AS APPLICABLE AND AS REQUIRED TO MAKE CONNECTIONS, INCLUDING ADJUSTMENTS FOR ANY OFFSETS IN CENTERLINE ELEVATIONS BETWEEN PIPELINES. FITTINGS THAT ARE EXPECTED FOR THIS WORK, ARE AS SHOWN ON THE DRAWINGS AND AS SPECIFIED. CONTRACTOR SHALL PROVIDE TEMPORARY PLUG WITH FACTORY OUTLET SIZED AS REQUIRED FOR CONTRACTOR'S TESTING ACTIVITIES BEFORE MAKING CONNECTION, WHEN APPLICABLE. CONTRACTOR SHALL COORDINATE EACH TIE-IN WITH THE OWNER.
- PIPING SHALL BE INSTALLED IN ACCORDANCE WITH MANATEE COUNTY PUBLIC WORKS STANDARDS (SEE APPENDIX A SEPARATION MATRIX).
- RESTRAINED JOINTS, SHALL BE INSTALLED AT BEND AND FITTING LOCATIONS AND AT PIPE JOINT LOCATIONS BOTH UPSTREAM AND DOWNSTREAM AS REQUIRED BY MANATEE COUNTY STANDARDS, REGARDLESS OF SERVICE SIZE, LOCATION OR MATERIAL WITHOUT EXCEPTION.
- FOR ALL SITE GRADING, SMOOTH PARABOLIC TRANSITIONS SHALL BE MADE BETWEEN CHANGES IN SLOPE. PARABOLIC ROUNDING SHALL APPLY TO ALL CUT AND FILL SECTIONS.
- ALL DIRECTION CHANGES IN DIP BOTH HORIZONTAL AND VERTICAL SHALL BE BY JOINT DEFLECTION UNLESS FITTINGS ARE SPECIFICALLY CALLED OUT IN THE CONSTRUCTION DRAWINGS. JOINT DEFLECTION IN DIP SHALL NOT EXCEED 75% OF THE MANUFACTURER'S RECOMMENDED DEFLECTION. NO JOINT DEFLECTION OR PIPE BENDING IS ALLOWED FOR PVC PIPE. THE MAXIMUM ALLOWABLE TOLERANCE IN THE JOINT DUE TO VARIANCES IN INSTALLATION IS 0.75 DEGREES (3-INCHES PER JOINT PER 20-FOOT STICK OF PIPE). NO BENDING TOLERANCE IN THE PIPE BARREL SHALL BE ACCEPTABLE. ALIGNMENT CHANGE SHALL BE MADE ONLY WITH SLEEVES AND FITTINGS.
- NO WATER FROM TEMPORARY DE-WATERING OPERATIONS SHALL BE DISCHARGED IN A LOCATION OR MANNER WHICH WILL CAUSE THE TRANSFER OF SEDIMENT INTO DITCHES OR OTHER WETLAND AREAS. CONTRACTOR SHALL FOLLOW ALL LOCAL GUIDELINES AND OBTAIN NECESSARY PERMITS FOR DE-WATERING ACTIVITIES.
- CONSTRUCTION ACTIVITIES SHALL BE SCHEDULED AND SEQUENCED TO ENSURE CONTINUOUS OPERATION OF EXISTING FACILITIES, UNLESS OTHERWISE SPECIFICALLY ALLOWED FOR IN THE CONTRACT DOCUMENTS AND WITH WRITTEN AUTHORIZATION FROM OWNER. REFER TO SPECIFICATIONS FOR ADDITIONAL CONSTRUCTION CONSTRAINTS.
- CONTRACTOR SHALL NOT ADVERSELY IMPACT DRAINAGE AND SOIL SYSTEMS DURING CONSTRUCTION. CONTRACTOR SHALL TEMPORARILY RECONFIGURE THE DRAINAGE SYSTEM AS NEEDED AS THE CONSTRUCTION WORK PROGRESSES, TO NOT CAUSE ADVERSE IMPACTS TO SURFACE WATER DRAINAGE. CONTRACTOR SHALL NOT IMPAIR SURFACE WATER DRAINAGE CAPACITY. CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE APPROVED POLLUTION PREVENTION PLAN FOR THE PROJECT. SOIL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND MAINTAINED THROUGHOUT CONSTRUCTION UNTIL THE SITE IS PERMANENTLY STABILIZED. THE CONTRACTOR SHALL PROVIDE AND INSTALL SILT SCREENS AROUND THE PROPOSED CONSTRUCTION ACTIVITY, AS NECESSARY, TO PREVENT THE TRANSPORT OF SEDIMENT DOWNSTREAM INTO THE STREET, STORM SEWERS, OPEN DITCHES, LAKES, DETENTION POINTS, AND SHALL PERFORM ALL NECESSARY INSPECTIONS. SILT FENCE OR OTHER APPROPRIATE EROSION CONTROL DEVICE, SHALL BE INSTALLED BY CONTRACTOR WHERE THERE IS A GROUND DISTURBANCE THAT COULD CAUSE EROSION OR MIGRATION OF SOILS. THE CONTRACTOR SHALL DEVELOP A STORM WATER POLLUTION PLAN (SWPP) AND APPOINT A DESIGNATED SWPP INSPECTOR FOR THE PROJECT SITE. THE CONTRACTOR SHALL PAY FOR AND FILE A NOTICE OF INTENT TO USE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AT LEAST ONE WEEK PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL FILE A NOTICE OF TERMINATION AT THE COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHALL REMOVE AND LEGALLY DISPOSE OF ALL SURPLUS EXCAVATION MATERIALS AND DEBRIS FROM THE SITE AND SHALL MAINTAIN THE SITE IN A NEAT AND ORDERLY CONDITION. REFER TO SPECIFICATIONS SECTIONS 02220.
- THE DRAWINGS INDICATE TYPES OF PIPE SUPPORT SYSTEMS AT VARIOUS LOCATIONS. HOWEVER, ALL PIPE SUPPORTS, HANGERS, BRACKETS, INSERTS OR BRACES ARE NOT SHOWN. CONTRACTOR SHALL REFER TO SPECIFICATION 15140 REQUIREMENTS AND PROVIDE A COMPLETE SUPPORT SYSTEM AS REQUIRED.
- AT A MINIMUM, CONTRACTOR SHALL NOTIFY OWNER TWENTY-ONE (21) DAYS IN ADVANCE OF TIE-ING INTO EXISTING FACILITIES / PIPING.
- UNLESS ADDITIONAL SPACE IS APPROVED BY OWNER, PROVIDING SPACE FOR STAGING IS THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR WILL HAVE TO RESERVE PRIVATELY OWNED SPACE AND/OR OBTAIN SPACE IN MANATEE COUNTY ROW VIA PERMIT. STORAGE OF MATERIAL IS NOT ALLOWED IN THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) RIGHT OF WAY (ROW).
- CONTRACTOR IS ADVISED THAT THERE ARE OVERHEAD POWERLINES IN THE PROJECT WORK AREAS, AS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY IS MAINTAINED.

- CONSTRUCTION AREA SHALL BE CLEANED UP DAILY. ALL EXCAVATIONS MUST BE BACKFILLED BY END OF DAY, OR WITH PERMISSION FROM OWNER, MAY BE LEFT OPEN WITH PROPER SAFETY PRECAUTIONS.
- THE CONTRACTOR SHALL PROVIDE AT LEAST 48-HOURS NOTICE TO THE VARIOUS UTILITIES COMPANIES IN ORDER TO PERMIT THE LOCATION OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE UTILITIES NOTIFICATION CENTER, SUNSHINE STATE ONE CALL OF FLORIDA.
- THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO SUBMITTING PROPOSALS, TO CONDUCT WHATEVER INVESTIGATIONS THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR PROPOSALS WILL BE BASED.
- THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THERE MAY BE SOME UNEXPECTED UTILITY CONFLICTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL EXISTING UTILITIES ON THIS PROJECT. UTILITIES WHICH WERE LOCATED AS PART OF THIS PROJECT, ARE MARKED AS SUCH. ALL OTHER UTILITY ELEVATIONS, WHEN KNOWN, WERE TAKEN FROM RECORD DRAWINGS.
- FIELD CONDITIONS MAY NECESSITATE SITE ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED PIPE TO AVOID OBSTACLES AND TO PROVIDE THE REQUIRED CLEARANCE FROM OTHER BURIED UTILITIES. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES SUFFICIENTLY AHEAD OF PIPE LAYING TO IDENTIFY NECESSARY ALIGNMENT DEVIATION INCLUDING ADJUSTMENTS TO PROVIDE THE MINIMUM CLEARANCE TO BURIED UTILITIES. CONTRACTOR SHALL PERFORM VACUUM LOCATING, PROBING, HAND EXCAVATION, AND OTHER MEANS AS NECESSARY TO LOCATE EXISTING UTILITIES AHEAD OF PIPE LAYING.
- CONTRACTOR SHALL RESTORE ALL EXISTING FEATURES DISTURBED OR DAMAGED BY CONSTRUCTION TO THEIR ORIGINAL OR BETTER CONDITION INCLUDING COMPACTED GRADE, GRASS, PAVEMENT, SIDEWALKS, CURB AND GUTTER, CONCRETE MEDIANS, DRIVEWAYS, SIGNS, FENCES, IRRIGATION PIPING AND APPURTENANCES, LANDSCAPING, MAIL BOXES, HEADWALLS, CULVERT PIPING, AND OTHER EXISTING IMPROVEMENTS. RESTORATION OF THESE ITEMS SHALL BE COMPLETED AS SOON AS POSSIBLE. SIGNS, MAIL BOXES AND OTHER ESSENTIAL FEATURES SHALL BE RESTORED THE SAME DAY, AND ALL SUCH RESTORATION SHALL BE COMPLETED WITHIN TWO WEEKS. ANY SIDEWALK WHICH IS DISTURBED BY CONSTRUCTION ACTIVITIES MUST BE REPAIRED IN ACCORDANCE WITH FDOT STANDARDS, WHERE APPLICABLE, BUT ALSO MEET MANATEE COUNTY PUBLIC WORK STANDARDS (3,000 PSI). ANY DRIVEWAY WHICH IS DISTURBED BY CONSTRUCTION ACTIVITIES MUST BE REPAIRED IN ACCORDANCE WITH FDOT STANDARDS, WHERE APPLICABLE, BUT ALSO MEET MANATEE COUNTY PUBLIC WORK STANDARDS (3,000 PSI).
- CONTRACTOR SHALL UTILIZE APPROPRIATE SIZED EQUIPMENT AS NEEDED TO MAINTAIN ACTIVITIES WITHIN THE LIMITS-OF-CONSTRUCTION AND TO MINIMIZE OVERHEAD CONSTRAINTS SUCH AS OVERHEAD UTILITY WIRES AND TREE CANOPIES.
- CONTRACTOR SHALL ARRANGE, AT CONTRACTOR'S EXPENSE, FOR UTILITY COMPANIES TO PROVIDE SUPPORT OF THEIR INFRASTRUCTURE (OVERHEAD OR BELOW-GRADE) AS NECESSARY FOR CONSTRUCTION. CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT ADDITIONAL EXCAVATION, BEYOND THAT REQUIRED TO INSTALL THE FORCE MAIN AND TO FACILITATE THE UTILITY OWNER'S SUPPORT OF SAID INFRASTRUCTURE. IN SUCH CASES, THE COSTS ASSOCIATED WITH THE ADDITIONAL EXCAVATION, SHORING, BACKFILL, COMPACTION, AND RESTORATION OF THE SUBJECT AREA SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND, AS SUCH, SHALL BE INCLUDED IN THE BID PRICE.
- TEMPORARY TRAFFIC CONTROL SHALL BE REQUIRED BY LOCAL STANDARDS. WHERE LOCAL STANDARDS DO NOT EXIST, CONTRACTOR SHALL ADHERE TO FDOT 102 SERIES INDEXES, AS APPROPRIATE TO THE CONDITIONS ALONG US ROUTE 301 (LS 539):
  - CONTRACTOR IS REQUIRED TO SUBMIT SIGNED/SEALED TRAFFIC CONTROL PLAN 60 DAYS IN ADVANCE OF CONSTRUCTION FOR APPROVAL THROUGH SUBMITTAL PROCESS. CONTRACTOR MUST SUBMIT APPROVED PLAN TO FDOT 30 DAYS IN ADVANCE OF CONSTRUCTION WITH REVISION REQUEST TO UPDATE FDOT UTILITY PERMIT.
  - CLOSURE TIMES WILL BE LIMITED TO 8:00 PM - 5:00 AM, SUNDAY THROUGH SATURDAY WITH NO CLOSURES ON FRIDAYS SATURDAYS OR HOLIDAYS.
  - REFER TO SPECIFICATIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
- FOR WORK ACTIVITIES IN US ROUTE 301 RIGHT OF WAY (ROW), REFER TO APPENDIX A FDOT SPECIFICATIONS. CONTRACTOR SHALL FOLLOW FDOT GUIDANCE / RECOMMENDATIONS FOR ACTIVITIES INCLUDING CLEARING AND GRUBBING, EXCAVATION, HANDRAILS, CONCRETE GUTTERS AND CURBS, SIDEWALKS, PERFORMANCE TURF, AND TEMPORARY TRAFFIC CONTROL. IF THERE ARE ANY DISCREPENCIES BETWEEN COUNTY STANDARDS AND FDOT STANDARDS, THE FDOT STANDARDS SHOULD PREVAIL.

04/18/2022	ISSUED FOR 100% SUBMITTAL	2	AD	AW	MNT
09/20/2021	ISSUED FOR 60% SUBMITTAL	1	AD	AW	MNT
DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP
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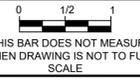


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 3405 W. Dr. M. L. King Jr. Blvd. Suite 125  
 Tampa, Florida  
 Certificate No. 8132

**MANATEE COUNTY FLORIDA**  
**NORTH SERVICE AREA**  
**FORCE MAIN REPLACEMENTS - CIP #6104280**

**GENERAL NOTES**

DESIGNED: JJ / AZ  
 DETAILED: HT / AD  
 CHECKED: AW  
 APPROVED: MNT  
 DATE: APRIL 2022



IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

PROJECT NO.  
49042

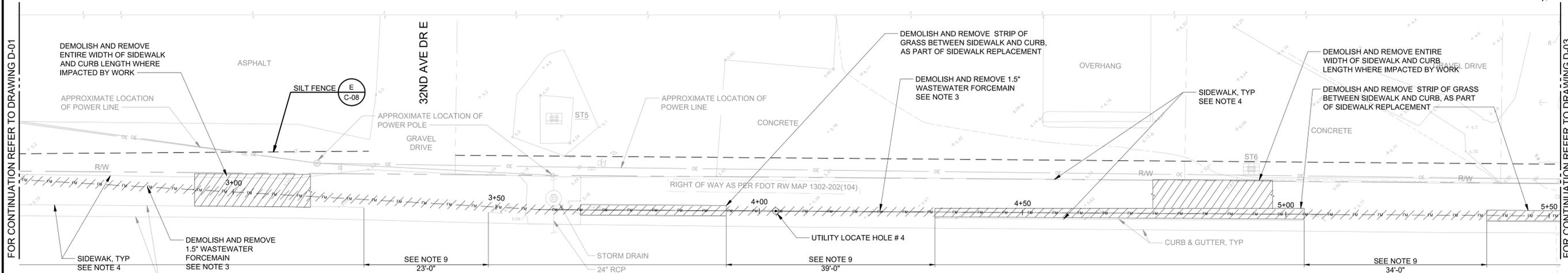
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ISSUED FOR CONSTRUCTION

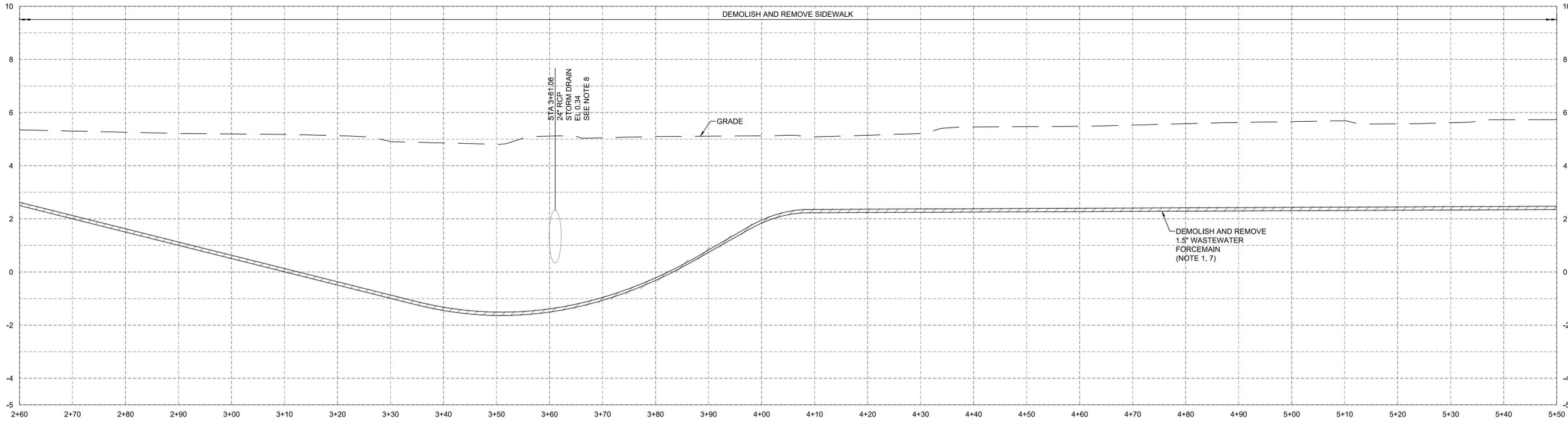




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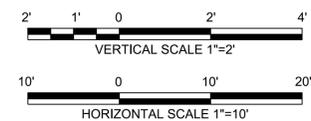
**PLAN VIEW**  
1" = 10'



**PROFILE VIEW OF 1.5" FORCE MAIN FROM LS 539 TO LS 504**  
1" = 10' HORIZONTAL  
1" = 2' VERTICAL

- NOTES:**
- AS-BUILT INFORMATION OBTAINED FROM RECORD DRAWINGS AND AVAILABLE SURVEY DATA. CONTRACTOR SHALL PERFORM FIELD RECONNAISSANCE BEFORE INITIATING THE DEMOLITION WORK. WORK SHOWN SHALL BE USED FOR BIDDING THE WORK AND ANY DEVIATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
  - FUNCTIONALITY OF FORCE MAIN SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. CONTRACTOR WILL NEED TO INSTALL THE NEW PIPE AND SUCCESSFULLY COMPLETE THE SPECIFIED PRESSURE AND LEAKAGE TESTING BEFORE INITIATING THIS DEMO WORK. ANY TEMPORARY EQUIPMENT NEEDED TO FULFILL THIS REQUIREMENT IS THE RESPONSIBILITY OF THE CONTRACTOR. REFER TO CIVIL DRAWINGS FOR LAYOUT OF NEW FORCE MAIN.
  - FORCE MAIN SHALL BE DEMOLISHED AND REMOVED TO THE EXTENTS SHOWN ON DRAWINGS.
  - SIDEWALK SHALL BE REPLACED FOLLOWING INSTALLATION OF NEW FORCE MAIN. EXISTING PIPE RUNS UNDER SIDEWALK FOR THE ENTIRE SECTION OF PIPING PARALLEL TO US ROUTE 301. SIDEWALK TO BE DEMOLISHED AND REMOVED FROM STATION 0+50.00 TO 7+78.46. REFER TO APPENDIX A FDOT SPECIFICATIONS.
  - CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING STREET SIGNS AND OTHER APPURTENANCES, WHETHER CALLED OUT OR NOT.
  - REFER TO CIVIL SHEETS FOR LIMITS OF CONSTRUCTION AND EROSION CONTROL REQUIREMENTS.

- PROFILE OF FORCE MAIN TO BE DEMOLISHED IS APPROXIMATE AND BASED OFF INFORMATION FROM THE UTILITY LOCATE HOLES, WHERE SPECIFICALLY NOTED. OTHER INFORMATION SHOWN HAS BEEN OBTAINED FROM RECORD DRAWINGS, WHERE AVAILABLE, AND SHALL BE CONFIRMED BY CONTRACTOR AS NOTED WITHIN THE CONTRACT DOCUMENTS.
- TOP OF PIPE ELEVATION OBTAINED FROM UTILITY LOCATE CONDUCTED IN FIELD. 24" RCW IS AT INVERT ELEVATION OF .25 FT TO NORTH OF MANHOLE AND INVERT ELEVATION OF 0.34 FT TO SOUTH OF MANHOLE.
- APPROXIMATE LOCATION OF DRIVEWAY. DEMOLISH EACH CONCRETE DRIVE AT THE WIDTH INDICATED, AS NEEDED TO COMPLETE THE WORK. REFER TO CIVIL DRAWINGS FOR NEW CONCRETE APRON DRIVEWAY.
- FOR WORK ACTIVITIES IN US ROUTE 301 ROW, REFER TO APPENDIX A FDOT SPECIFICATIONS. CONTRACTOR SHALL USE FDOT SPECIFICATIONS FOR ACTIVITIES INCLUDING CLEARING AND GRUBBING, EXCAVATION, HANDRAILS, CONCRETE GUTTERS AND CURBS, SIDEWALKS, PERFORMANCE TURF, AND TEMPORARY TRAFFIC CONTROL.



**ISSUED FOR CONSTRUCTION**

NO.	BY	CHK	APP	REVISIONS AND RECORD OF ISSUE
2	AD	AW	MNT	ISSUED FOR 100% SUBMITTAL
1	AD	AW	MNT	ISSUED FOR 60% SUBMITTAL

DATE: 04/18/2022  
 ISSUED FOR 100% SUBMITTAL  
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 ISSUED FOR 60% SUBMITTAL


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**MANATEE COUNTY FLORIDA**  
**NORTH SERVICE AREA**  
**FORCE MAIN REPLACEMENT - CIP #6104280**  
 DEMOLITION  
 DEMOLITION PLAN AT LS 539  
 2 OF 3

DESIGNED: JJ / AZ
DETAILED: AB / AD
CHECKED: AW
APPROVED: MNT
DATE: APRIL 2022
PROJECT NO. 409042
D-02 SHEET 05 OF 21

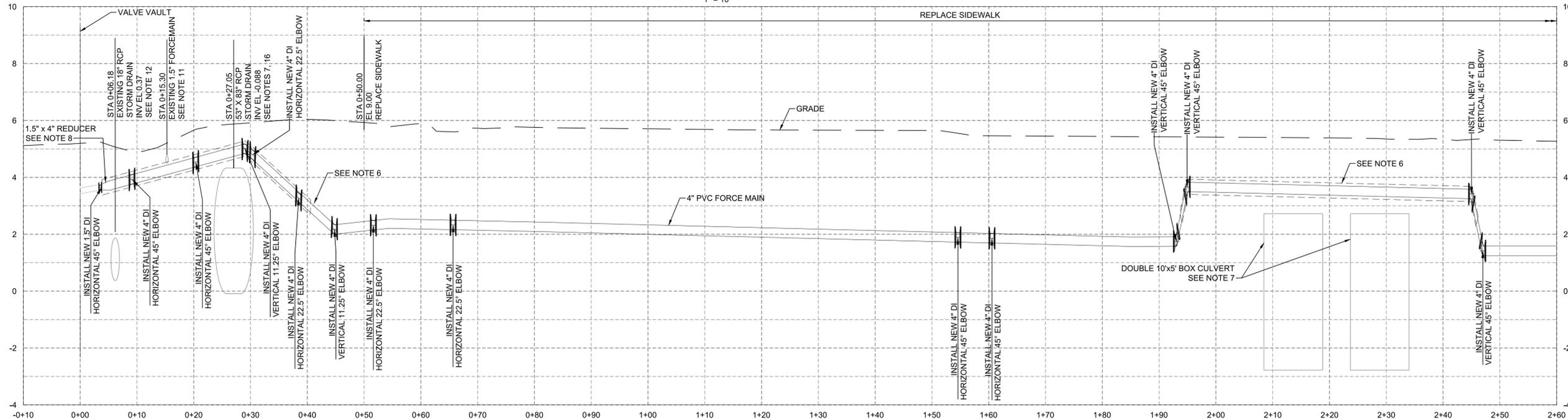
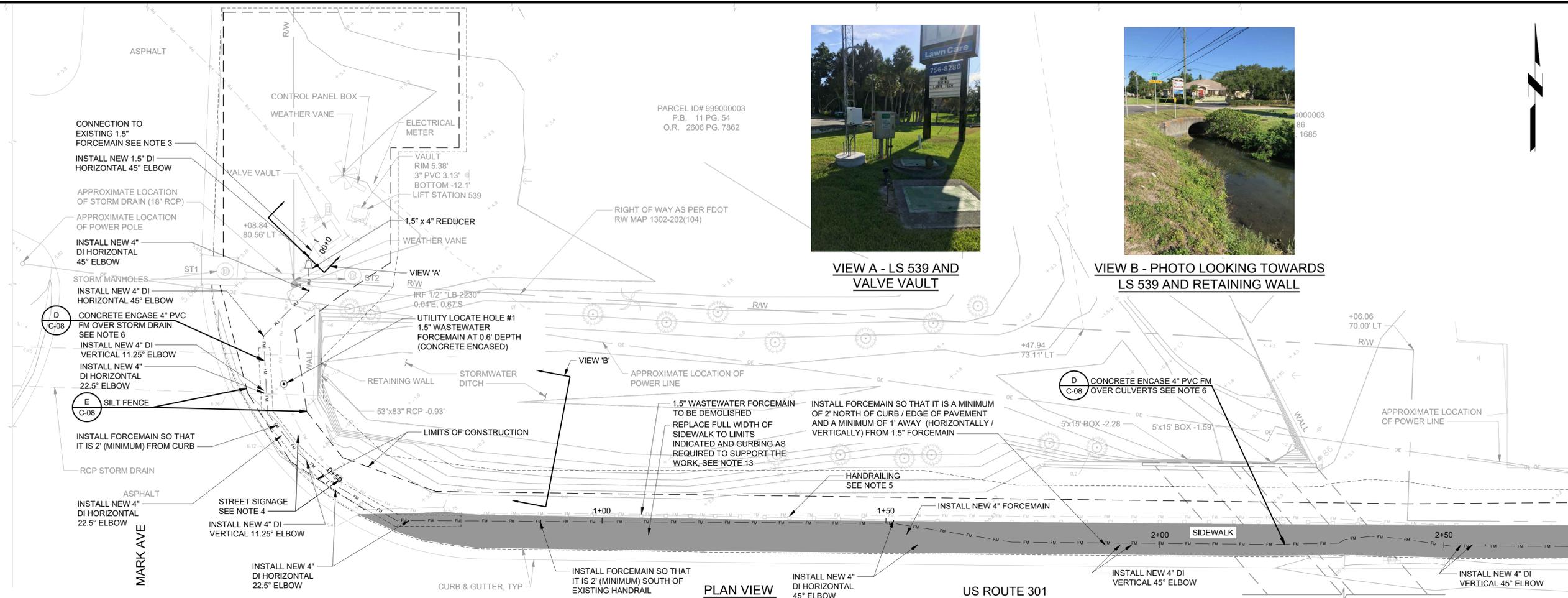






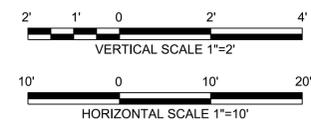


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**NOTES:**

1. AS-BUILT INFORMATION OBTAINED FROM RECORD DRAWINGS AND AVAILABLE SURVEY DATA. CONTRACTOR SHALL PERFORM FIELD RECONNAISSANCE BEFORE INITIATING THE NEW CONSTRUCTION WORK AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. PIPE TRENCHING DETAILS SHALL BE IN ACCORDANCE WITH DRAWING C-10 AND THE REQUIREMENTS IN THE DIVISION 2 SPECIFICATIONS.
3. PIPE RESTRAINT FOR WASTEWATER APPLICATION FROM MANATEE COUNTY APPROVED PRODUCT LIST SHALL BE USED WHEN CONNECTING EXISTING PIPE TO NEW PIPING. IMMEDIATELY DOWNSTREAM OF LS 539 VALVE VAULT, TIE-IN CANNOT BE MADE UNTIL PRESSURE AND LEAKAGE TESTING HAVE BEEN COMPLETED.
4. CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING STREET SIGNS AND OTHER APPURTENANCES, WHETHER CALLED OUT OR NOT.
5. APPROXIMATE EXTENTS OF HANDRAILING SHOWN. HANDRAILING IS ALONG NORTHERN EDGE OF SIDEWALK.
6. FOR PIPE SECTION THAT HAS LESS THAN 42" EMBEDMENT DEPTH, PIPE SHALL BE CONCRETE ENCASED IN ACCORDANCE WITH THE DRAWING DETAILS. REFER TO PROFILE FOR EXTENTS OF ENCASEMENT.
7. ELEVATION OBTAINED FROM UTILITY LOCATE CONDUCTED IN FIELD.
8. CONTRACTOR SHALL LOCATE PIPE IMMEDIATELY DOWNSTREAM OF VALVE VAULT TO IDENTIFY TIE-IN ELEVATION.
9. CONTRACTOR SHALL INSTALL 1.5" x 4" REDUCER AT START OF NEW PIPE SECTION.
10. REFER TO D-01, D-02, AND D-03 FOR DEMOLITION DRAWINGS.
11. REFER TO DRAWING C-10 FOR PIPE / PIPE TRENCHING DETAILS.
12. CONTRACTOR SHALL LOCATE ELEVATION OF 1.5" FORCE MAIN AT CROSSING WITH NEW 4" FORCE MAIN. CONTRACTOR'S BID SHALL BE BASED ON THE ELEVATIONS NOTED.
13. ELEVATION BASED ON RECORD DRAWINGS.
14. REFER TO FDOT STANDARDS 520-001 & 522-001 ON C-11 FOR CURB / GUTTER AND SIDEWALK REPLACEMENT, RESPECTIVELY.
15. FORCE MAIN SHALL BE FULLY RESTRAINED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
16. FITTING TYPE AND LOCATION FOR BIDDING ONLY. FINAL PIPE ROUTING SHALL BE SUBMITTED TO ENGINEER FOR REVIEW, AFTER CONTRACTOR PERFORMS FIELD INVESTIGATION.
17. CONTRACTOR SHALL MAINTAIN 6" MINIMUM CLEAR WHEN CROSSING STORM DRAIN.
17. FOR WORK ACTIVITIES IN US ROUTE 301 ROW, REFER TO APPENDIX A FDOT SPECIFICATIONS. CONTRACTOR SHALL USE FDOT SPECIFICATIONS FOR ACTIVITIES INCLUDING CLEARING AND GRUBBING, EXCAVATION, HANDRAILS, CONCRETE GUTTERS AND CURBS, SIDEWALKS, PERFORMANCE TURF, AND TEMPORARY TRAFFIC CONTROL.



ISSUED FOR CONSTRUCTION

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04/18/2022			2	AD	AW	MNT
09/20/2021			1	AD	AW	MNT
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MANATEE COUNTY FLORIDA  
 NORTH SERVICE AREA  
 FORCE MAIN REPLACEMENTS  
 CIVIL LAYOUT / PIPING PLAN AND PROFILE AT LS 539  
 1 OF 3

DESIGNED: JJ/AZ	APPROVED: MNT
DATE: APRIL 2022	
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	
PROJECT NO. 409042	SHEET 10 OF 21

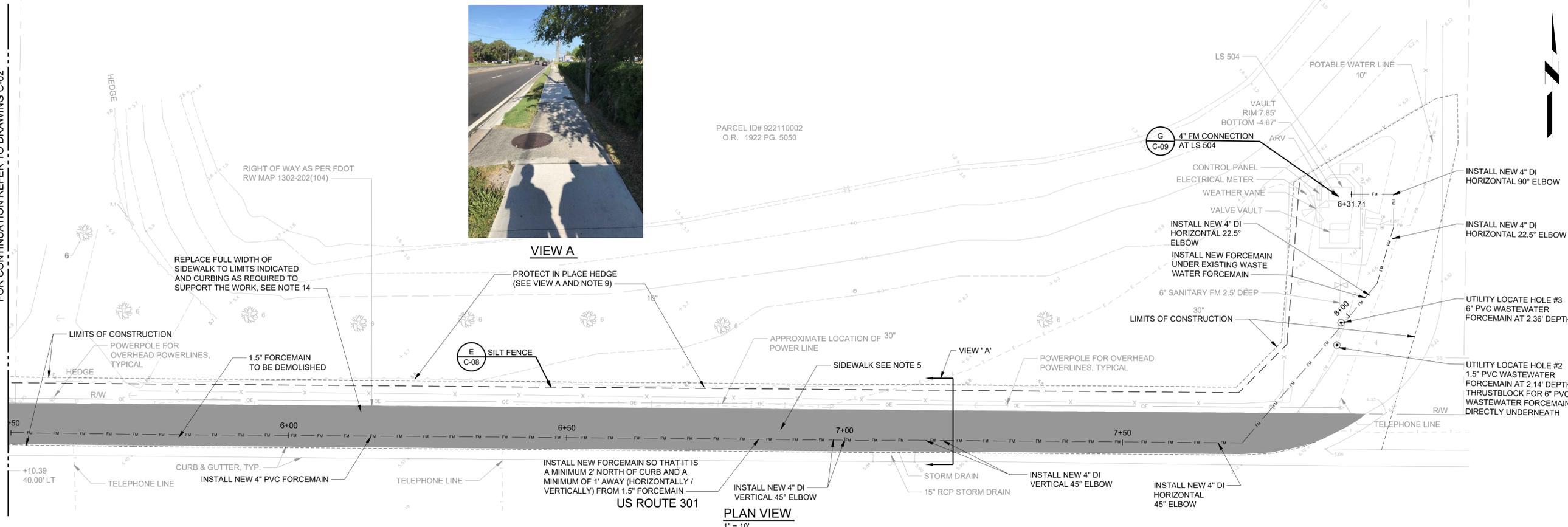


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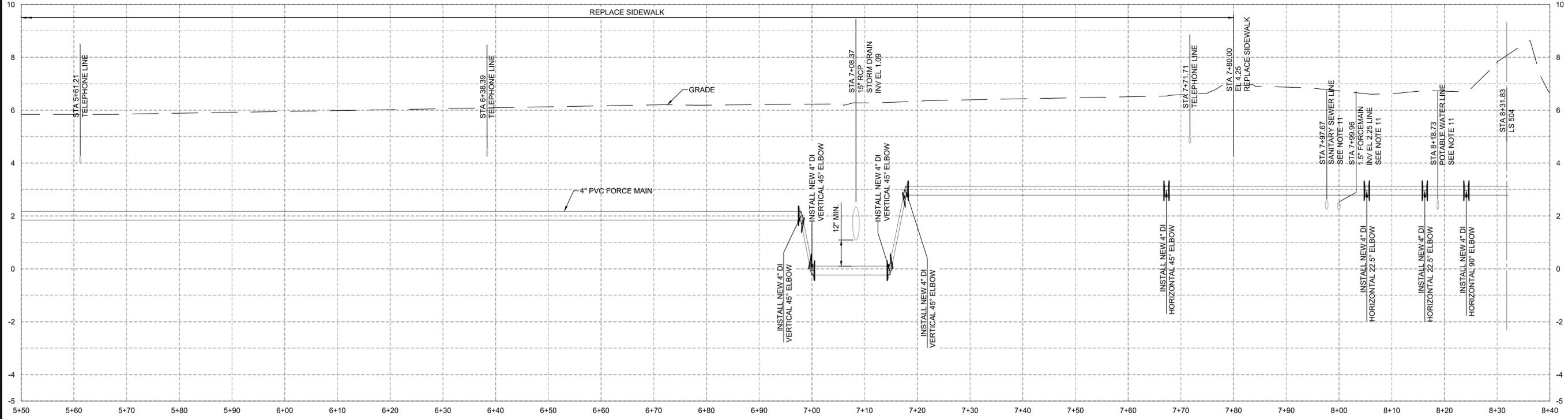
FOR CONTINUATION REFER TO DRAWING C-02



PARCEL ID# 922110002  
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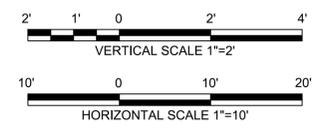
**PLAN VIEW**  
1" = 10'



**PROFILE VIEW OF NEW 4" FORCE MAIN FROM LS 539 TO LS 504**  
1" = 10' HORIZONTAL  
1" = 2' VERTICAL

**NOTES:**

1. AS-BUILT INFORMATION OBTAINED FROM RECORD DRAWINGS AND AVAILABLE SURVEY DATA. CONTRACTOR SHALL PERFORM FIELD RECONNAISSANCE BEFORE INITIATING THE DEMOLITION WORK AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. PIPE TRENCHING DETAILS SHALL BE IN ACCORDANCE WITH DRAWING C-10 AND THE REQUIREMENTS IN THE DIVISION 2 SPECIFICATIONS.
3. SIDEWALK SHALL BE REPLACED FOLLOWING DEMOLITION ACTIVITIES IN ACCORDANCE WITH THE SPECIFICATIONS. ADDITIONALLY, THE 2-FOOT WIDE SOD BETWEEN THE CURB AND SIDEWALK SHALL BE REPAIRED AS NEEDED. REFER TO VIEW A.
4. CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING STREET SIGNS AND OTHER APPURTENANCES, WHETHER CALLED OUT OR NOT.
5. PIPE UNDER SIDEWALK SHALL HAVE A MINIMUM EMBEDEDMENT DEPTH OF 42", WHILE PIPE SECTION UNDER GRASS SHALL BE 36". IF THIS REQUIREMENT IS NOT MET, PIPE SHALL BE CONCRETE ENCASED IN ACCORDANCE WITH THE STANDARD DETAIL.
6. ELEVATION OBTAINED FROM UTILITY LOCATE CONDUCTED IN FIELD.
7. REFER TO D-01, D-02, AND D-03 FOR DEMOLITION DRAWINGS.
8. REFER TO DRAWING C-10 FOR PIPE / PIPE TRENCHING DETAILS.
9. APPROXIMATE EXTENTS OF HEDGE SHOWN. REFER TO VIEW 'A' ON THIS SHEET FOR DEPICTION OF AREA. HEDGE IS LOCATED TO THE NORTH OF THE SIDEWALK, WITH THE POWERPOLES BETWEEN.
10. PROFILE IS APPROXIMATE AND BASED ON INFORMATION FROM THE UTILITY LOCATE HOLES, WHERE SPECIFICALLY NOTED. OTHER INFORMATION SHOWN HAS BEEN OBTAINED FROM RECORD DRAWINGS, WHERE AVAILABLE, AND SHALL BE CONFIRMED BY CONTRACTOR AS NOTED ON OTHER DRAWINGS AND IN THE SPECIFICATION BOOK.
11. ELEVATION IS UNKNOWN AND NEEDS TO BE CONFIRMED BY CONTRACTOR, AND PIPELINE SHIFTED ACCORDINGLY.
12. FORCEMAIN SHALL BE FULLY RESTRAINED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
13. FITTING TYPE AND LOCATION FOR BIDDING ONLY. FINAL PIPE ROUTING SHALL BE SUBMITTED TO ENGINEER FOR REVIEW, AFTER CONTRACTOR PERFORMS FIELD INVESTIGATION.
14. FOR WORK ACTIVITIES IN US ROUTE 301 ROW, REFER TO APPENDIX A FDOT SPECIFICATIONS. CONTRACTOR SHALL USE FDOT SPECIFICATIONS FOR ACTIVITIES INCLUDING CLEARING AND GRUBBING, EXCAVATION, HANDRAILS, CONCRETE GUTTERS AND CURBS, SIDEWALKS, PERFORMANCE TURF, AND TEMPORARY TRAFFIC CONTROL.



NO.	BY	CHK	APP	REVISIONS AND RECORD OF ISSUE
2	AD	AW	MNT	ISSUED FOR 100% SUBMITTAL
1	AD	AW	MNT	ISSUED FOR 80% SUBMITTAL
				DATE
				04/18/2022
				09/20/2021

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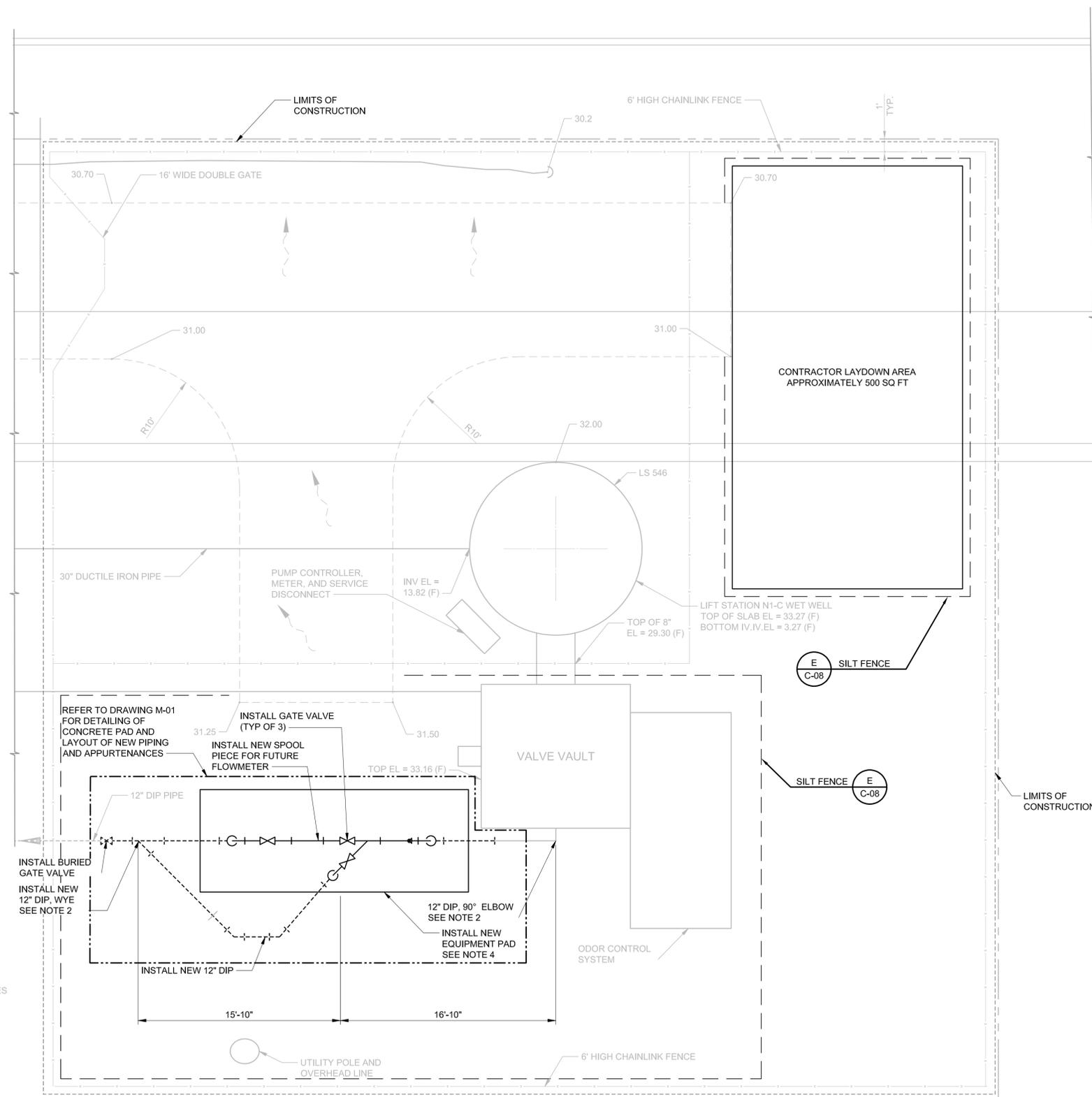
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**MANATEE COUNTY FLORIDA**  
**NORTH SERVICE AREA**  
**FORCE MAIN REPLACEMENTS**  
 CIVIL  
 CIVIL LAYOUT / PIPING PLAN AND PROFILE AT LS 539  
 3 OF 3

DESIGNED: JJ / AZ  
 DETAILED: AB / AD  
 CHECKED: AW  
 APPROVED: MNT  
 DATE: APRIL 2022

PROJECT NO.  
 409042  
**C-03**  
 SHEET  
 12 OF 21

**ISSUED FOR CONSTRUCTION**



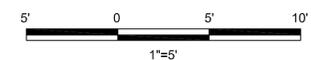
**NOTES:**

1. PARKING AVAILABLE FOR 4 CONTRACTOR PERSONNEL VEHICLES ADJACENT TO FENCE ALONG WEST SIDE OF LIFT STATION.
2. FUNCTIONALITY OF LIFT STATION SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. CONTRACTOR MUST TEMPORARILY BYPASS THE NEW WORK. BYPASS SHOULD START AT THE EXISTING 90-DEGREE ELBOW ON THE 12" DIP LINE IMMEDIATELY TO THE SOUTH OF THE VALVE VAULT AND EXTEND DOWNSTREAM OF THE NEW 12" WYE FITTING (DIP) BEING INSTALLED BY THE CONTRACTOR.
3. CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING STREET SIGNS AND OTHER APPURTENANCES, WHETHER CALLED OR NOT.
4. REFER TO DRAWING M-01 FOR LAYOUT OF NEW EQUIPMENT PAD AND ASSOCIATED PIPING AND APPURTENANCES. THIS EQUIPMENT REPLACES THE EXISTING FLOW METER VAULT, PIPING AND APPURTENANCES THAT WILL BE DEMOLISHED PER DRAWING D-04.
5. PIPE TRENCHING DETAILS SHALL BE IN ACCORDANCE WITH DRAWING C-10 AND THE REQUIREMENTS IN THE DIVISION 2 SPECIFICATIONS.
6. UPON MOBILIZATION, CONTRACTOR SHALL ASSESS SITE AND IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES.

**SITE PLAN - LS 546**  
1" = 5'

**LEGEND:**

- 11.8 EXISTING GRADE
- 11.80 FINISHED GRADE
- ⊕ EXISTING POWER POLE
- CONCRETE MONUMENT
- 6" WM- EXISTING WATER MAIN
- ~ DRAINAGE FLOW INTENT



DATE	ISSUED FOR 100% SUBMITTAL	ISSUED FOR 60% SUBMITTAL	NO.	BY	CHK	APP
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09/20/2021	1	AD	AW	MMT		

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**NORTH SERVICE AREA**  
**FORCE MAIN REPLACEMENT - CIP #6104280**

CIVIL  
CIVIL LAYOUT / PIPING PLAN AT LS 546

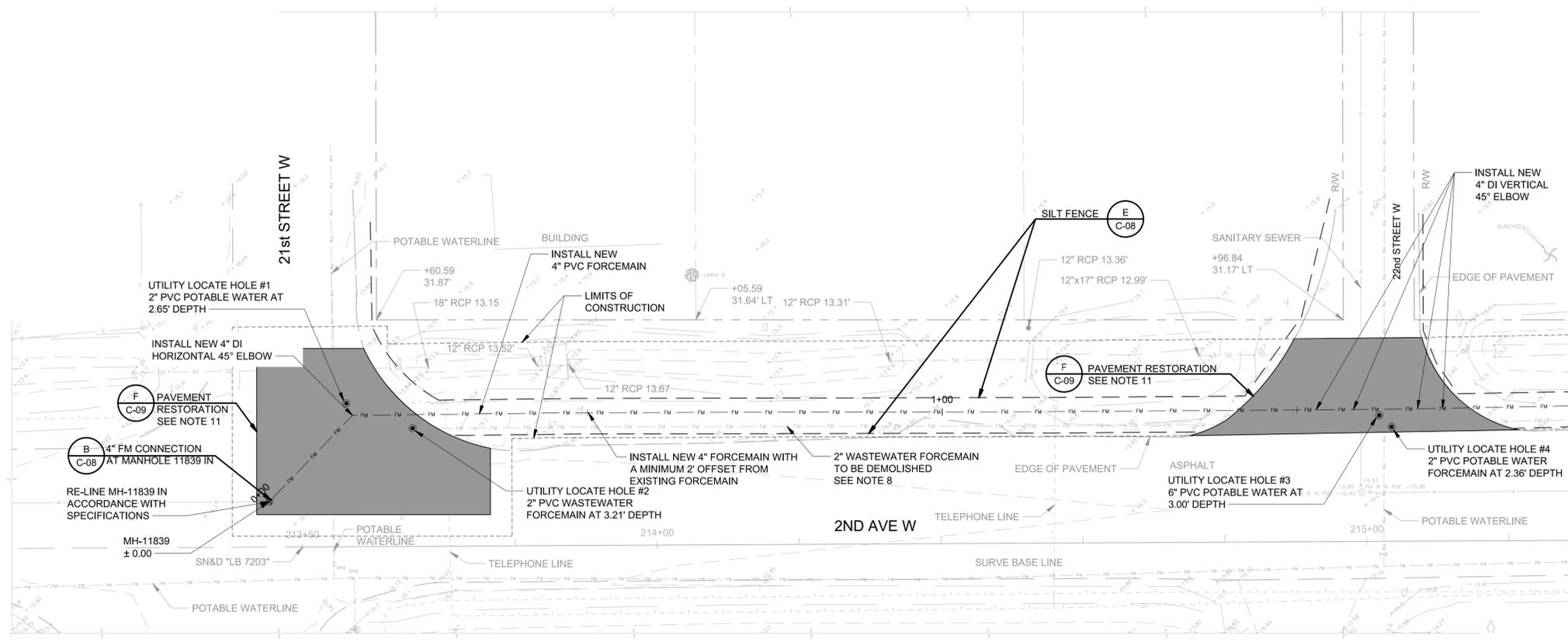
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CHECKED: AW  
APPROVED: MMT  
DATE: APRIL 2022

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1" THEN DRAWING IS NOT TO FULL  
SCALE

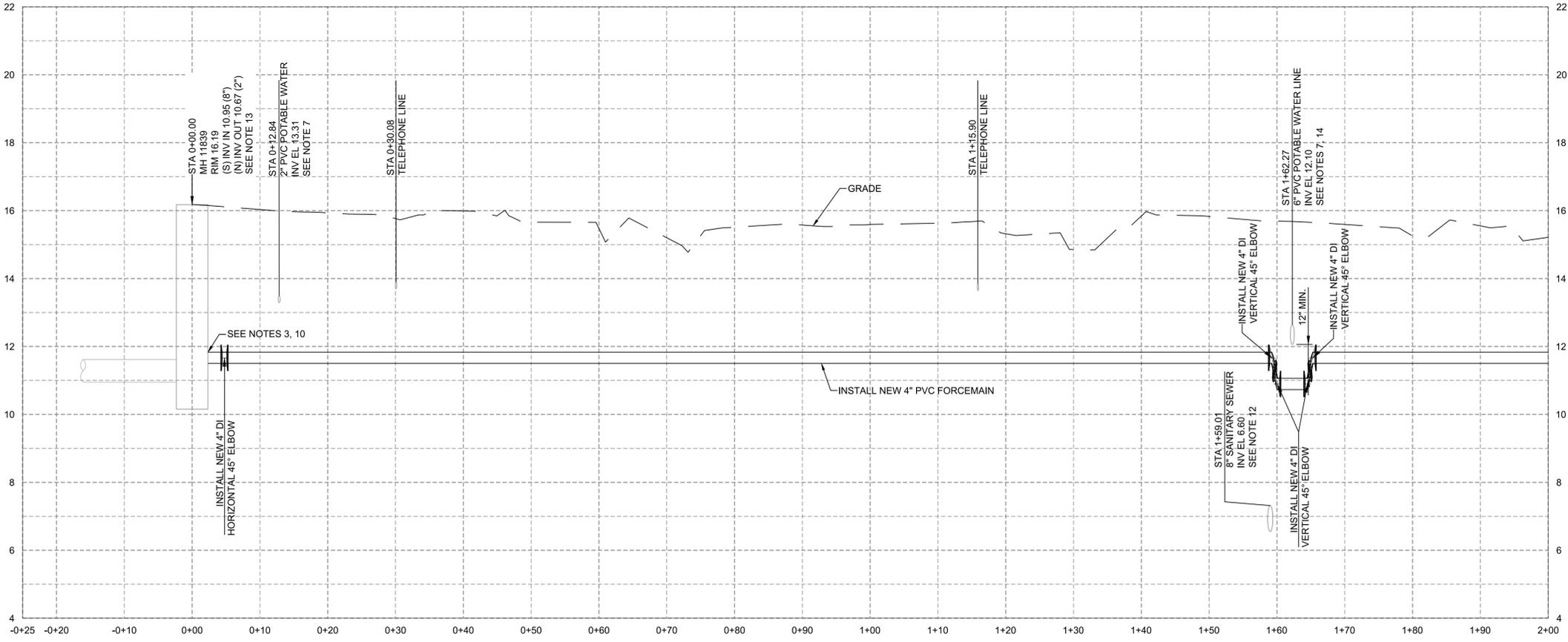
PROJECT NO.  
409042

**C-04**  
SHEET  
13 OF 21

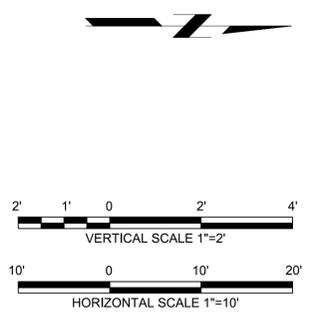
**ISSUED FOR CONSTRUCTION**



**PLAN VIEW**  
1" = 10'



**PROFILE VIEW OF NEW 4" FORCE MAIN FROM LS 557 TO MH 11839**  
1" = 10' HORIZONTAL  
1" = 2' VERTICAL



- NOTES:**
- AS-BUILT INFORMATION OBTAINED FROM RECORD DRAWINGS AND AVAILABLE SURVEY DATA. UPON MOBILIZATION, CONTRACTOR SHALL ASSESS SITE AND IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES.
  - PIPE TRENCHING DETAILS SHALL BE IN ACCORDANCE WITH DRAWING C-10 AND THE REQUIREMENTS IN THE DIVISION 2 SPECIFICATIONS.
  - TIE-IN TO MANHOLE MH-11839 CANNOT BE MADE UNTIL PRESSURE AND LEAKAGE TESTING HAVE BEEN COMPLETED.
  - CONTRACTOR SHALL REPAIR SOD THAT IS DISTURBED THROUGH CONSTRUCTION ACTIVITIES. AREAS OF PAVEMENT RESTORATION ARE SPECIFICALLY NOTED.
  - CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING MAILBOXES, STREET SIGNS AND OTHER APPURTENANCES, WHETHER CALLED OUT OR NOT.
  - EXISTING UTILITY ELEVATIONS ARE BASED OFF INFORMATION FROM THE UTILITY LOCATE HOLES, WHERE SPECIFICALLY NOTED. OTHER INFORMATION SHOWN HAS BEEN OBTAINED FROM RECORD DRAWINGS AND SHALL BE CONFIRMED BY THE CONTRACTOR.
  - ELEVATION OBTAINED FROM UTILITY LOCATE CONDUCTED IN FIELD.
  - REFER TO D-05 AND D-06 FOR DEMOLITION DRAWINGS.
  - REFER TO DRAWING C-10 FOR PIPE / PIPE TRENCHING DETAILS.
  - CONNECTION TO MH-11839 SHALL BE MADE IN ACCORDANCE WITH DETAIL B ON DRAWING C-08.
  - LIMITS OF PAVEMENT RESTORATION TO MATCH SEAMS AT ROADWAY CENTERLINES AND INTERSECTION APPROACHES.
  - ELEVATION BASED ON RECORD DRAWINGS.
  - FITTING TYPE AND LOCATION FOR BIDDING ONLY. FINAL PIPE ROUTING SHALL BE SUBMITTED TO ENGINEER FOR REVIEW, AFTER CONTRACTOR PERFORMS FIELD INVESTIGATION.
  - PIPE CROSSING WITH PIPE WATER LINE SHALL BE IN ACCORDANCE WITH DETAIL UG-2 ON DRAWING C-10.

FOR CONTINUATION REFER TO DRAWING C-06

FOR CONTINUATION REFER TO DRAWING C-06

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09/20/2021	ISSUED FOR 60% SUBMITTAL	1	AB	AW	MNT
	REVISIONS AND RECORD OF ISSUE		NO.	BY	CHK / APP

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**MANATEE COUNTY FLORIDA**  
NORTH SERVICE AREA  
FORCE MAIN REPLACEMENT - CIP #6104280

CIVIL  
CIVIL LAYOUT / PIPING PLAN AND PROFILE AT LS 557  
1 OF 2

DESIGNED: JJ / AZ  
 DETAILED: AB / AD  
 CHECKED: AW  
 APPROVED: MNT  
 DATE: APRIL 2022

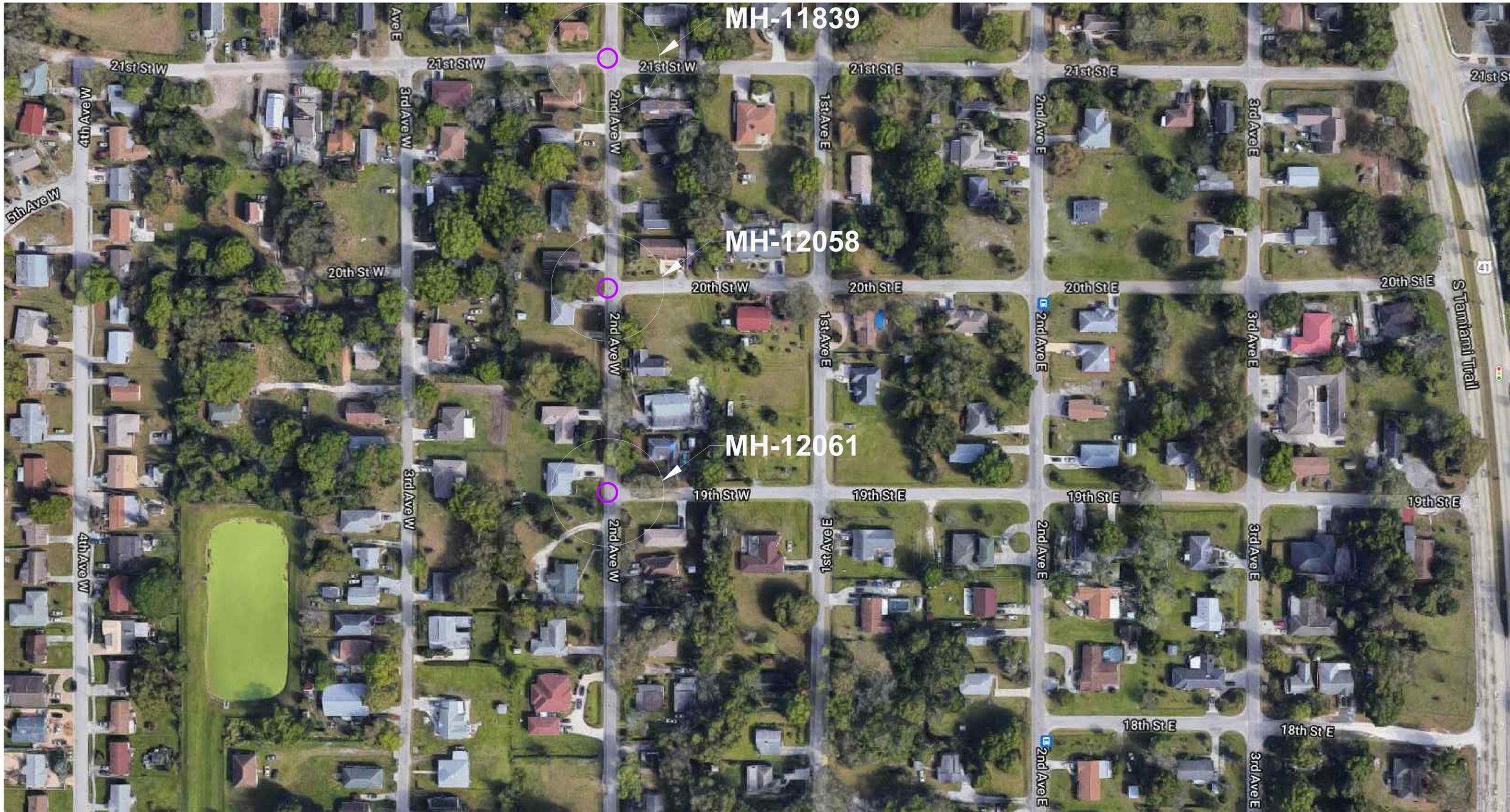
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 IF THIS BAR DOES NOT MEASURE  
 1" THEN DRAWING IS NOT TO FULL  
 SCALE

PROJECT NO.  
409042

**C-05**  
SHEET  
14 OF 21

**ISSUED FOR CONSTRUCTION**





MANHOLE LOCATIONS IN THE VICINITY OF LS 557  
NO SCALE

NOTES:

1. CONTRACTOR SHALL REHABILITATE THE FOLLOWING MANHOLES IN ACCORDANCE WITH THE SPECIFICATIONS: MH-11839, MH-12058, MH-12061.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH THE CONTRACT DOCUMENTS
3. CONTRACTOR SHALL CONDUCT THE MANHOLE REHABILITATION / LINING WORK WHILE THE WASTEWATER PIPE REMAINS IN OPERATION THROUGHOUT. TEMPORARY EQUIPMENT AND MATERIALS REQUIRED SHALL BE PROVIDED BY THE CONTRACTOR. REFER TO SPECIFICATIONS.

4/27/22  
409042

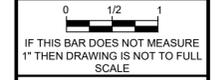
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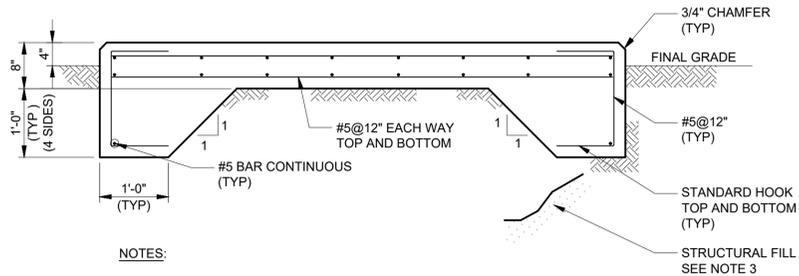
MANATEE COUNTY FLORIDA  
NORTH SERVICE AREA  
FORCE MAIN REPLACEMENT - CIP #6104280  
CIVIL  
MANHOLE REHABILITATION ADJACENT TO LS 557

DESIGNED: JJ / AZ
DETAILED: HT / AD
CHECKED: AW
APPROVED: MNT
DATE: APRIL 2022



PROJECT NO.  
409042  
**C-07**  
SHEET  
16 OF 21

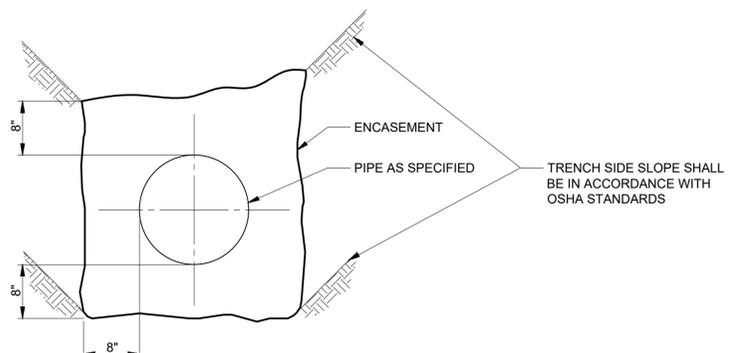
ISSUED FOR CONSTRUCTION



**NOTES:**

- REFER TO DRAWING M-01 FOR OVERALL DIMENSIONS OF SLAB.
- REFER TO DIVISION 2 SPECIFICATIONS FOR GEOTECHNICAL REQUIREMENTS (BACKFILLING AROUND STRUCTURES, COMPACTION, ETC).
- FILL SHALL EXTEND 2-FEET BELOW SLAB FOOTERS, AND SHALL BE PLACED IN UNIFORM LAYERS NOT MORE THAN 12" THICK AND COMPACTED TO A MINIMUM OF 98 PERCENT OF THE MAXIMUM DENSITY DETERMINED BY ASTM D1557. REFER TO DIVISION 2 SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

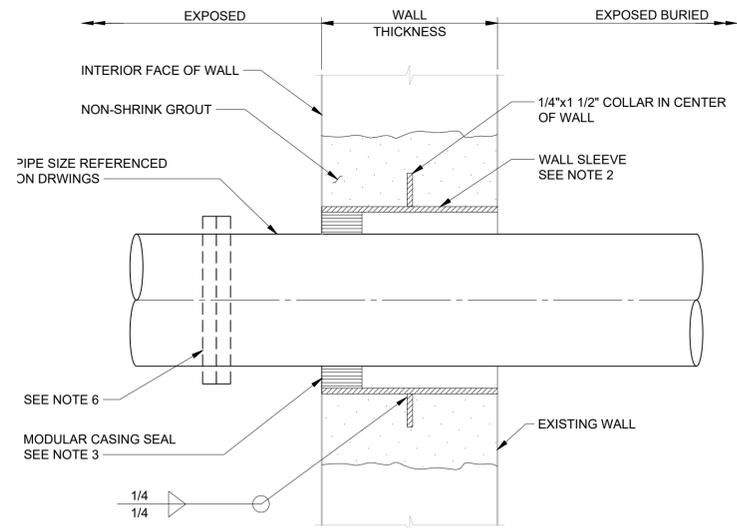
**A EXTERIOR EQUIPMENT PAD**  
M-01 NO SCALE



**NOTES:**

- CONCRETE SHALL BE 4,000 PSI.
- PIPE SHALL BE WRAPPED IN TO PROTECT PIPE. CONTRACTOR SHALL USE A VIRGIN POLETHYLENE POLYWRAP, NOT LESS THAN 8 MILS IN THICKNESS AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- LOCATE PIPE JOINT AT ENDS OF ENCASEMENT.

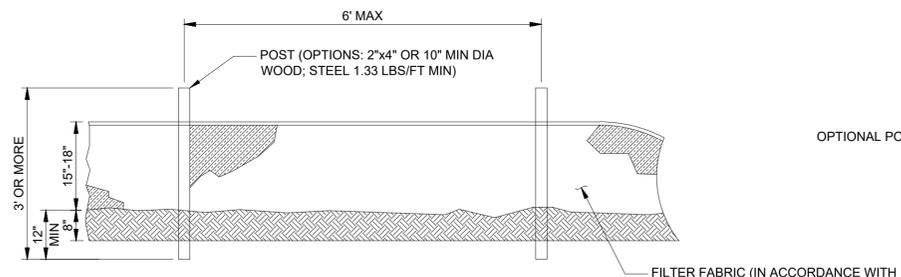
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NO SCALE



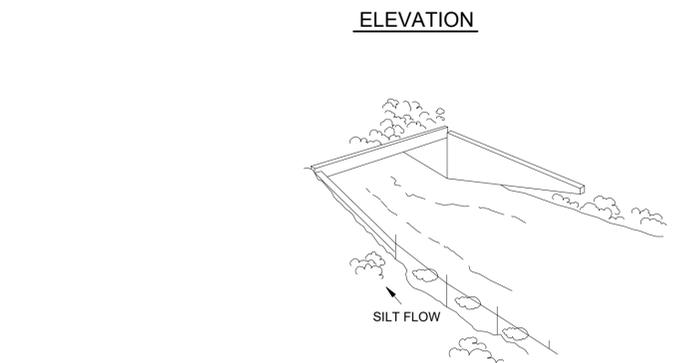
**NOTES:**

- CUT OPENING FOR WALL SLEEVE, ROUGHEN EXIST CONCRETE, APPLY BONDING AGENT AND FILL WITH NON-SHRINK GROUT PER THE SPECIFICATIONS. DIAMETER OF OPENING TO BE COLLAR DIAMETER + 4".
- WALL SLEEVE SHALL BE SCHEDULE 40 STAINLESS STEEL PIPE OR OTHER MATERIAL AS SPECIFIED ON DRAWINGS. COORDINATE SLEEVE SIZE WITH MODULAR CASING SEAL MANUFACTURER.
- WHERE SOIL MAY BE PRESENT, USE TWO SETS OF CASING SEALS. ONE AT EACH FACE OF WALL.
- FOR BURIED PIPING, CONTRACTOR SHALL PROVIDE AN ADDITIONAL FIELD JOINT AS CLOSE AS PRACTICAL TO FACE OF WALL, BUT NO MORE THAN 5 FEET.
- USE WAX TAPE TO PROTECT ALL BURIED FERROUS SURFACES INCLUDING PAINTED SURFACES. FOR PROTECTION OF ADJACENT PIPE BARREL SURFACES, SHRINK WRAP MAY BE USED IN LIEU OF WAX TAPE. SEE SPECIFICATIONS.
- PROVIDE FITTING AS INDICATED ON DRAWINGS.

**B WALL SLEEVE AT EXISTING CONCRETE WALL**  
C-08 NO SCALE

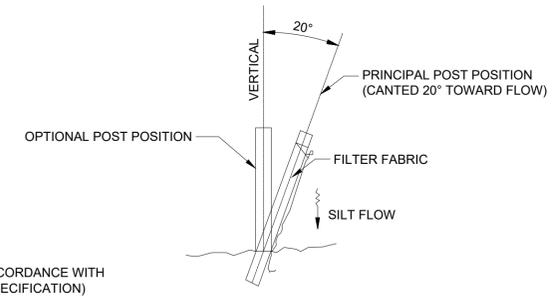


**C INFILL DETAIL FOR EXISTING WALL OR SLAB OPENING <=12"**  
NO SCALE



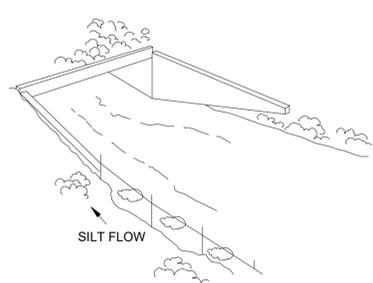
**ELEVATION**

**TYPE 3 SILT FENCE**

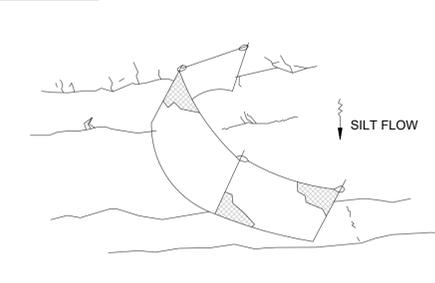


**SECTION**

**TYPE 3 SILT FENCE**



**TYPE 3 SILT FENCE**



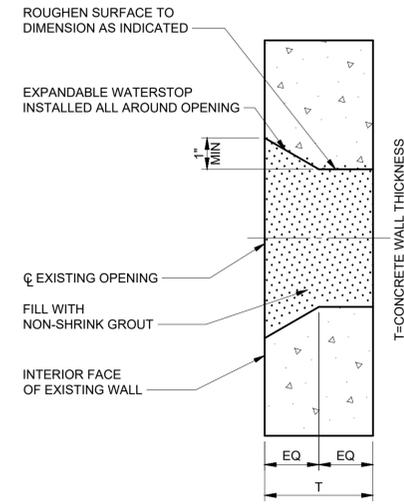
**TYPE 3 SILT FENCE**

DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

**NOTE:**

- IF ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED, REFER TO TEMPORARY EROSION AND SEDIMENTATION CONTROL SPECIFICATION.

**E TYPE 3 SILT FENCE APPLICATIONS SILT FENCE**  
NO SCALE



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					XREF4:
					USER: TAM72861
					DWG VER:

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CIVIL  
TYPICAL DETAILS - 1 OF 4

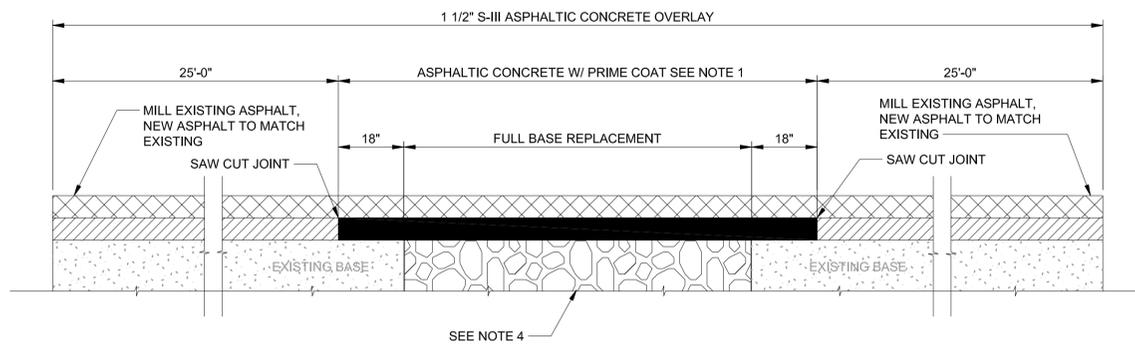
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APPROVED: MNT
DATE: APRIL 2022

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IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

PROJECT NO.  
409042

**C-08**  
SHEET  
17 OF 21

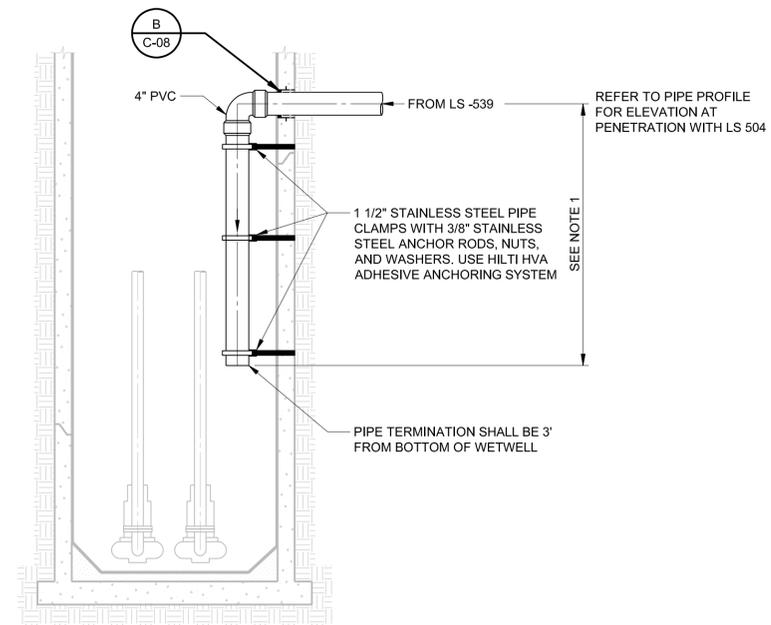
**ISSUED FOR CONSTRUCTION**



**NOTES:**

1. ASPHALT CONCRETE STRUCTURE COURSE WITH PRIME COAT SHALL BE THE SAME DEPTH AND TYPE AS EXISTING OR A MINIMUM OF 1 1/4 INCH, WHICHEVER IS GREATER.
2. MILL 25' BACK FROM TRENCH SAW CUT, ADJUST MILLING PER INDIVIDUAL SITE TO NOT IMPACT BASE, BUTT JOINT TO EXIST ASPHALT. FINAL OVERLAY LIMITS ARE FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT. FINAL OVERLAY TO MATCH EXISTING WITH NO DISCERNABLE "BUMP" AT JOINT. MILLING LIMITS THAT IMPACT INTERSECTION SHALL BE ADDRESSED ON A CASE BY CASE BASIS AND APPROVED BY MANATEE COUNTY.
3. SHEETING ORDERED LEFT IN PLACE TO BE CUT OFF 24" BELOW FINISHED GRADE OR 12" BELOW SUBGRADE.
4. BASE SHALL BE 8" MINIMUM THICKNESS CRUSHED CONCRETE. REFER TO DIVISION 2 SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
5. ASPHALT SHALL MATCH ORIGINAL GRADE UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS.
6. CONTRACTOR SHALL FOLLOW REQUIREMENTS IN THE PAVEMENT REPAIR AND RESTORATION SPECIFICATION.

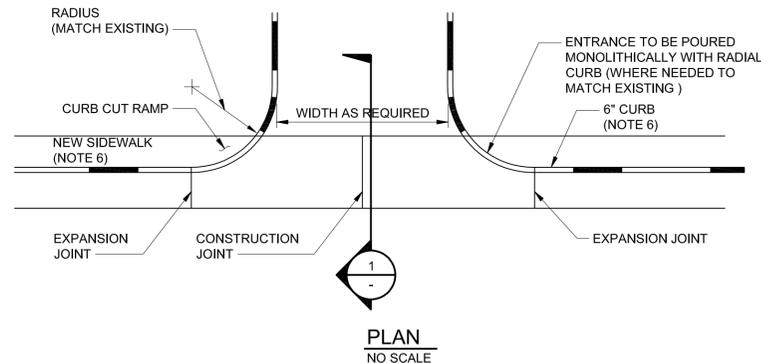
**F PAVEMENT RESTORATION**  
NO SCALE



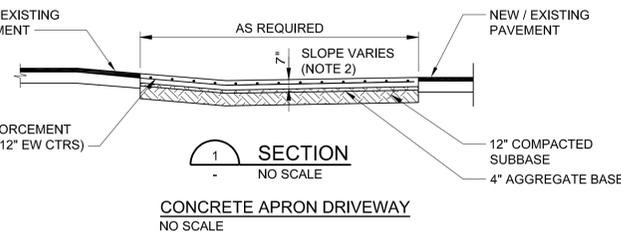
**NOTE:**

1. RECORD DRAWING FOR LS 504 WETWELL COULD NOT BE LOCATED. FOR THE PURPOSE OF BIDDING THIS WORK, CONTRACTOR SHALL ASSUME PIPE IS 20 FEET LONG AND PIPE CLAMPS ARE SPACED EVERY 10 FEET.

**G 4" FM CONNECTION AT LS 504**  
NO SCALE



**PLAN**  
NO SCALE



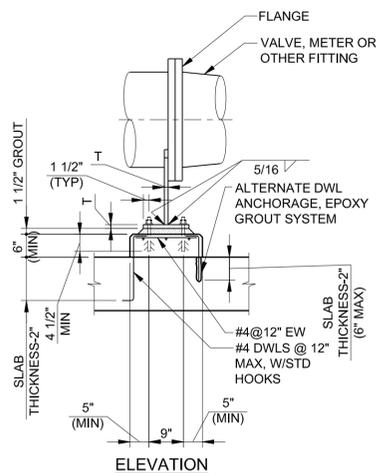
**SECTION**  
NO SCALE

**CONCRETE APRON DRIVEWAY**  
NO SCALE

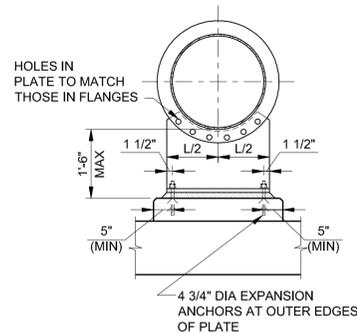
**NOTES:**

1. USE 3/4" EXPANSION JOINT MATERIAL BETWEEN CONCRETE PAVEMENT AND ABUTTING STRUCTURES.
2. CONCRETE PAVEMENT / ENTRANCE IS TO BE SLOPED TO DRAIN AT MINIMUM OF 2% OR AS NEEDED TO MATCH EXISTING GRADE.
3. CONSTRUCTION OR SAWED JOINTS SHALL BE SPACED AT A MINIMUM OF 15 FEET IN BOTH DIRECTIONS.
4. CONTRACTOR JOINTS SHALL BE PLACED BETWEEN ADJACENT POURS.
5. ALL NEW CONCRETE SHALL BE TIE INTO EXISTING CONCRETE OR GRADE SUCH THAT NO WATER WILL BE TRAPPED TO CREATE PONDING BUT WILL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES AND AWAY FROM ROADWAYS TOWARD STORM SEWER INLETS OR OTHER ACCEPTABLE DRAINAGE COURSE.
6. SIDEWALK AND CURB AS NEEDED. REFER TO CIVIL DRAWINGS.
7. CONCRETE FINISH SHALL MATCH EXISTING.
8. REFER TO ASPHALT CONCRETE SPECIFICATION FOR ADDITIONAL REQUIREMENTS.

**J CONCRETE APRON DRIVEWAY**  
NO SCALE



**ELEVATION**



**SECTION**

PIPE SIZE	T	L
14"-18"	5/8"	PIPE OD
20	3/4"	18"
24	3/4"	21"
30	3/4"	27"
36	3/4"	33"
42	3/4"	36"
48	3/4"	42"
54	3/4"	44"
60	3/4"	50"

**H FLANGE PIPE SUPPORT**  
NO SCALE

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1	AD	AW	MNT

DATE	REVISIONS AND RECORD OF ISSUE
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09/20/2021	ISSUED FOR 60% SUBMITTAL

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Certificate No. 8132

**MANATEE COUNTY FLORIDA**  
**NORTH SERVICE AREA**  
**FORCE MAIN REPLACEMENT - CIP #6104280**

CIVIL  
TYPICAL DETAILS - 2 OF 4

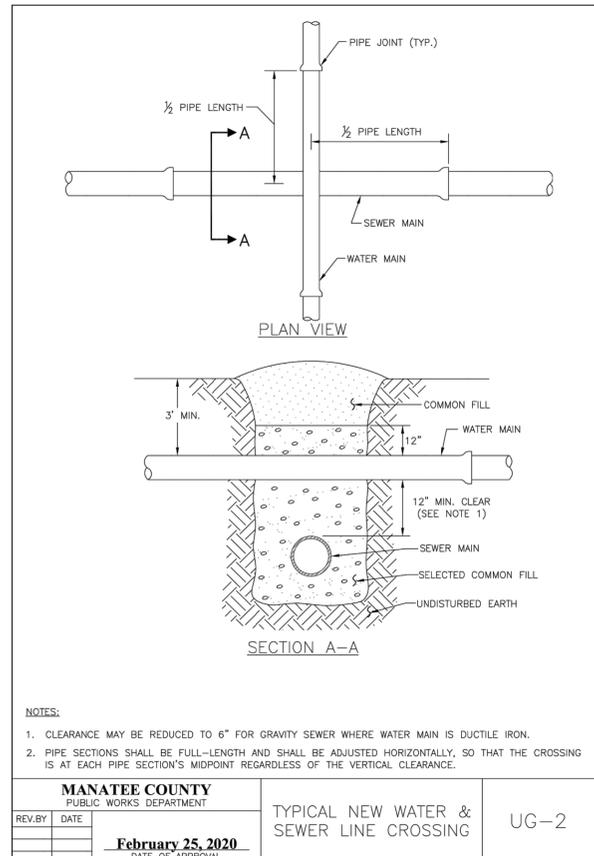
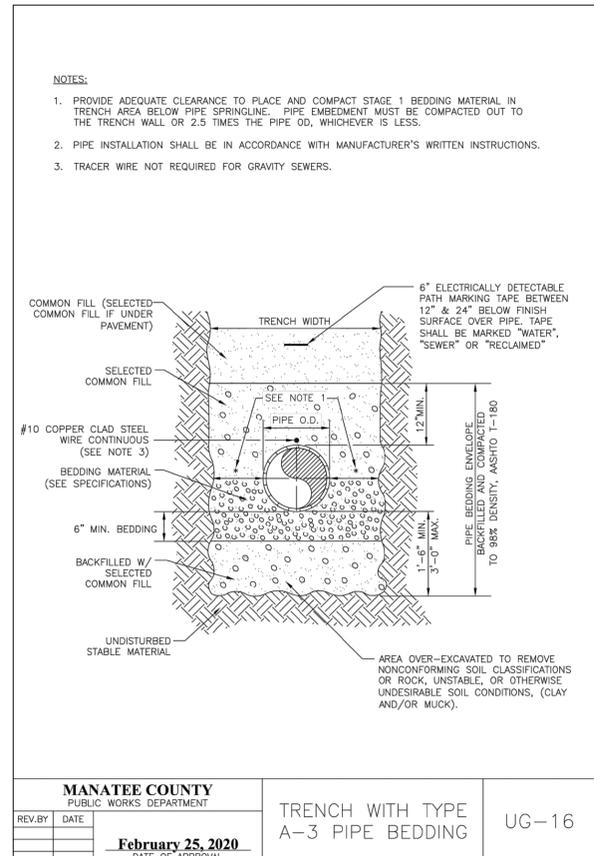
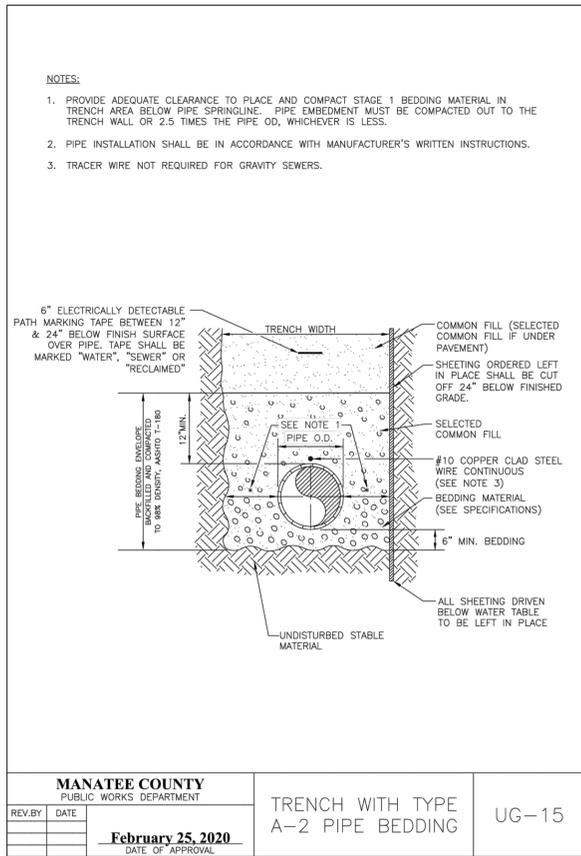
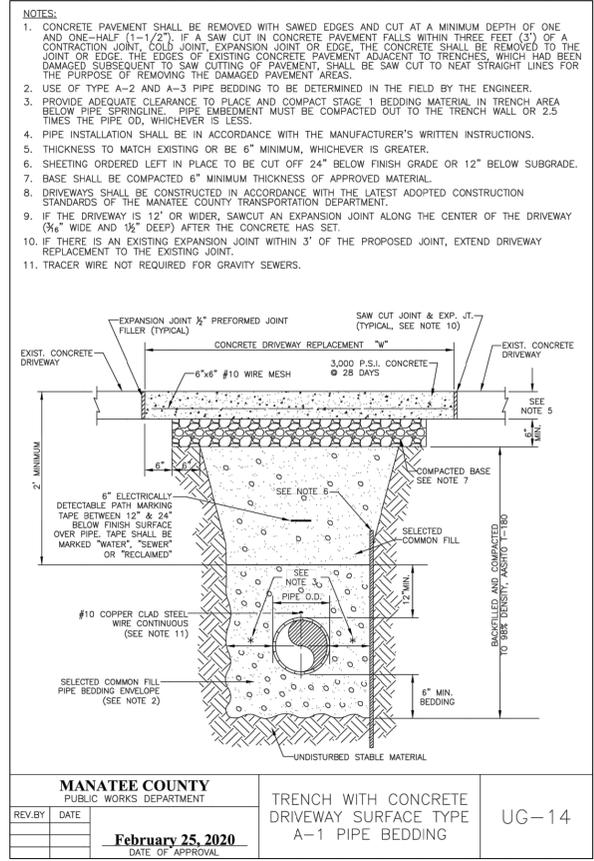
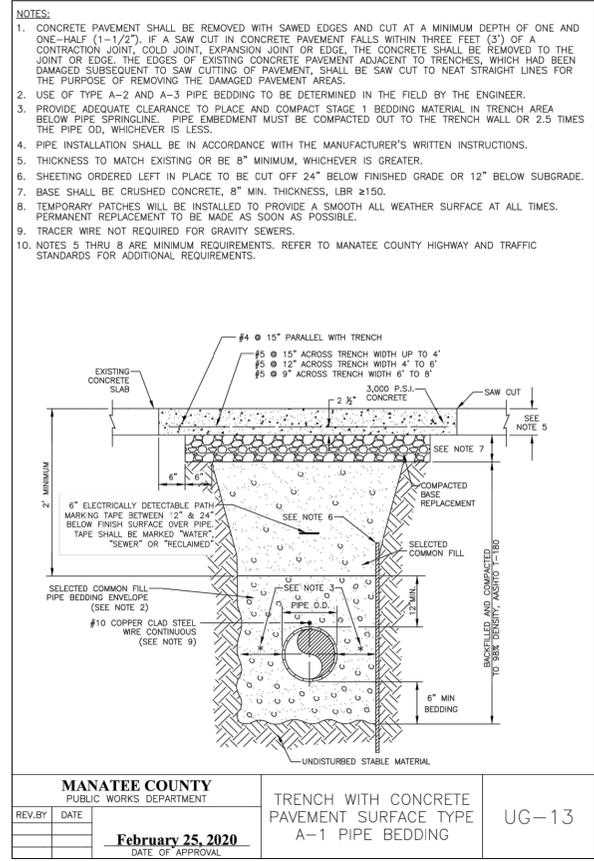
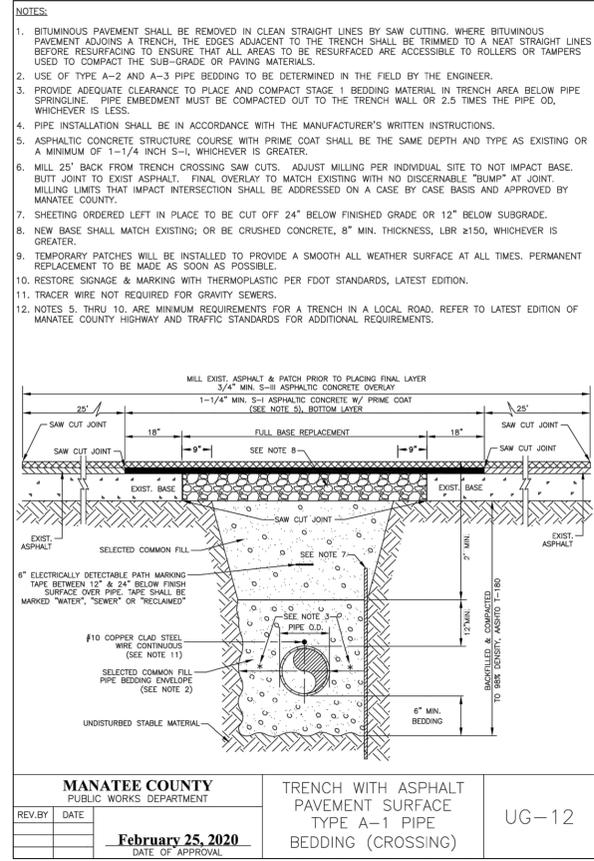
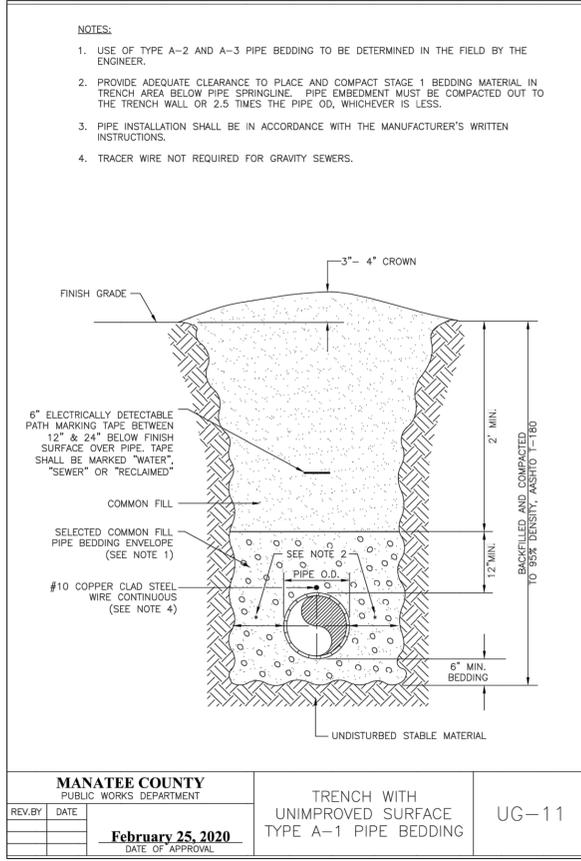
DESIGNED: JJ / AZ  
DETAILED: HT / AD  
CHECKED: AW  
APPROVED: MNT  
DATE: APRIL 2022

0 1/2 1  
IF THIS BAR DOES NOT MEASURE  
1" THEN DRAWING IS NOT TO FULL  
SCALE

PROJECT NO.  
409042

**C-09**  
SHEET  
18 OF 21

**ISSUED FOR CONSTRUCTION**



04/18/2022	ISSUED FOR 100% SUBMITTAL	2	AD	AW	MINT
09/20/2021	ISSUED FOR 60% SUBMITTAL	1	AD	AW	MINT
DATE					NO. BY CK APP
REVISIONS AND RECORD OF ISSUE					
XREF1: SAVED:CHA0808677_41/18/2022 9:28:33 AM					
XREF2: PLOTTED:TAI75651_41/3/2022 5:58:37 PM					
XREF3: USER:CHA0808677 DWG:VEER					
XREF4:					

**BLACK & VEATCH**  
Black & Veatch Corporation  
3405 W. Dr. M. L. King Jr. Blvd, Suite 125  
Tampa, Florida  
Certificate No. 8132

**MANATEE COUNTY FLORIDA**  
NORTH SERVICE AREA  
FORCE MAIN REPLACEMENT - CIP #6104280

CIVIL  
TYPICAL DETAILS - 3 OF 4

DESIGNED: JJ/AZ
DETAILED: HT/AD
CHECKED: AW
APPROVED: MNT
DATE: APRIL 2022

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

PROJECT NO. 409042  
C-10 SHEET 19 OF 21



