

**MIAMI TOWNSHIP
CLERMONT COUNTY, OHIO**

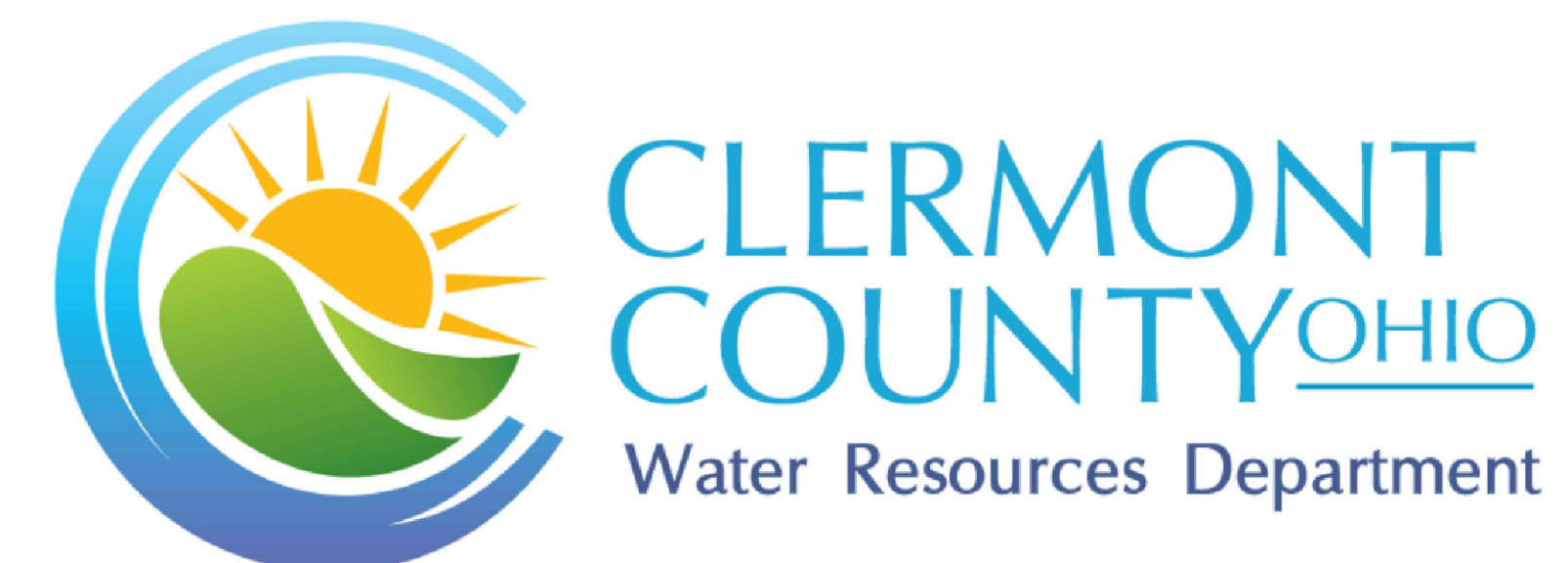
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THE CONSTRUCTION STANDARDS AND DRAWINGS OF THE CLERMONT COUNTY ENGINEER, CLERMONT COUNTY WATER RESOURCES AND THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND GENERAL NOTES LISTED IN THE PLAN, SHALL GOVERN THIS IMPROVEMENT. THE MOST RESTRICTIVE SHALL APPLY.

THE PROJECT IS LOCATED ON MILL STREET BETWEEN 3RD STREET AND MAIN STREET AND MAIN STREET FROM MILL STREET TO GLENDALE MILFORD ROAD IN MIAMI TOWNSHIP, OHIO. IT INCLUDES APPROXIMATELY 350 LF OF NEW STORM SEWER INCLUDING NEW CATCH BASINS, 1200 LF OF 6" WATER MAIN AND APPROXIMATELY 350 LF OF NEW INTEGRAL CURB AND SIDEWALK.



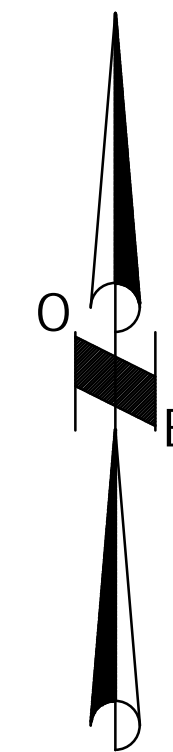
Approved _____
Date _____ TOWNSHIP ADMINISTRATOR



DAVID L. PAINTER
CLAIRE B. CORCORAN
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REVISIONS:
FILE NAME COVER
DRAWN BY JSM
CHECKED BY NNS
PROJECT No. CLEMIA2107
SHEET NUMBER 1 OF 19



**Contact Two Working Days
Before You Dig**



OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)



440 E. HOEWISHER ROAD • SIDNEY, OHIO 45365 • 937.497.0200
8956 GLENDALE MILFORD ROAD, SUITE 1 • LOVELAND, OHIO 45140 • 513.239.8554

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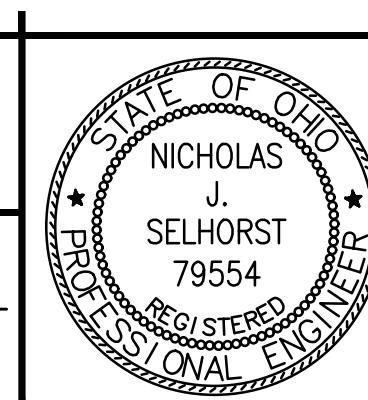
DECEMBER 12, 2022

STORM & ROADWAY

Nicholas J. Delhove

NICHOLAS J. SELHORST, P.E.
P.E.—#79554

12/12/2022

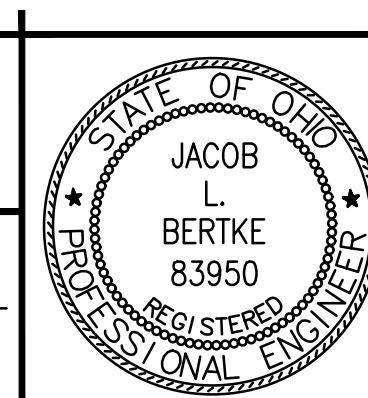


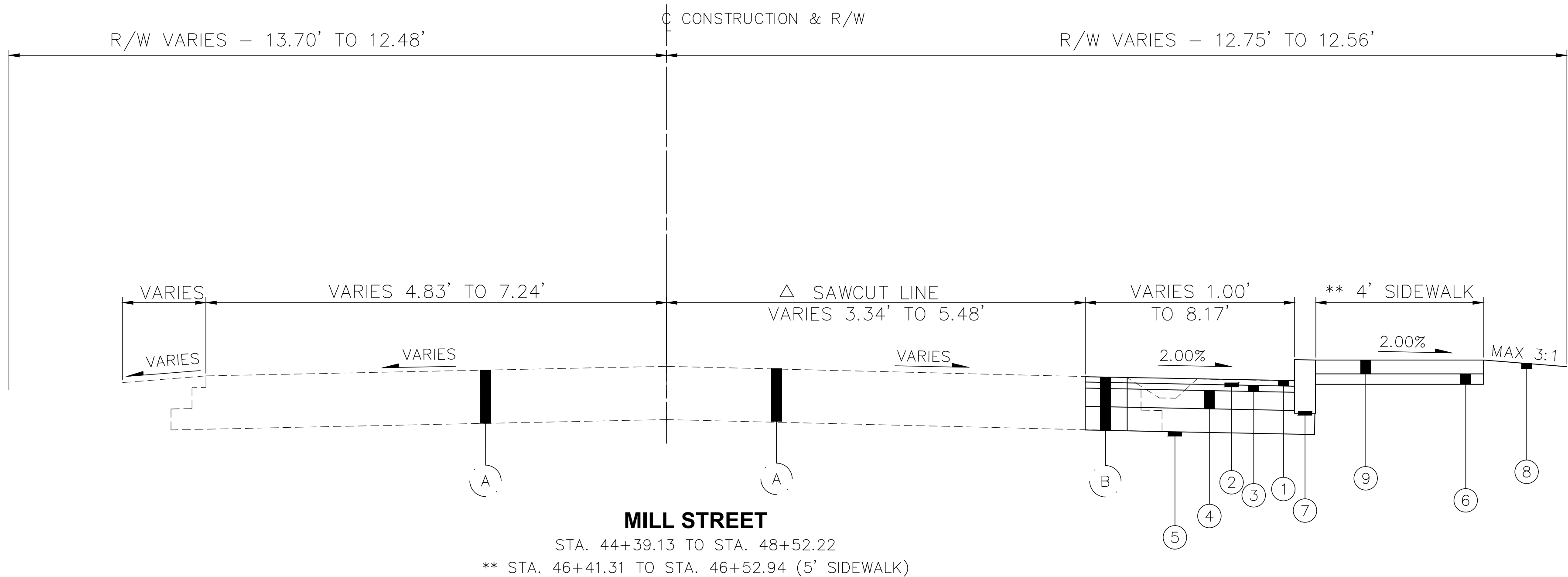
. WATER MAIN

John B. ...

JACOB L. BERTKE, P.E.
P.E.-#83950

12/12/2022

[illegible]



LEGEND

- (A) EXISTING PAVEMENT, BASE & SUBBASE TO REMAIN
- (B) EXISTING PAVEMENT, BASE & SUBBASE TO BE REMOVED
- (1) ITEM 441 – 1 1/2" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (449), PG 64–22
- (2) ITEM 407 – NON–TRACKING TACK COAT APPLIED AT RATE OF 0.06 GAL/S.Y.
- (3) ITEM 441 – 1–3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)
- (4) ITEM 301 – 6" ASPHALT CONCRETE BASE, (449), PG 64–22 (2 EQUAL LIFTS)
- (5) ITEM 204 – SUBGRADE COMPACTION
- (6) ITEM 411 – 3" STABILIZED CRUSHED AGGREGATE
- (7) ITEM 609 – ODOT TYPE 6 CURB W/ 3" REVEAL
- (8) ITEM 659 – SEEDING AND MULCHING, CLASS 2, AS PER PLAN
- (9) ITEM 608 – 4" CONCRETE WALK

HATCH LEGEND

- CONCRETE DRIVE:
ITEM 452, 6" NON–REINFORCED CONCRETE PAVEMENT
ITEM 304, 6" AGGREGATE BASE (2 EQUAL LIFTS)
- GRAVEL TRENCH REPAIR (WATER):
ITEM 304, 12" AGGREGATE BASE (2 EQUAL LIFTS)
(CDF BACKFILL UP TO BASE OF ODOT 304 AGGREGATE BASE)
- GRAVEL DRIVE:
ITEM 304, 12" AGGREGATE BASE (2 EQUAL LIFTS), AS PER PLAN
- SIDEWALK:
ITEM 608, 4" CONCRETE WALK
ITEM 411, 3" STABILIZED CRUSHED AGGREGATE
- ASPHALT DRIVE:
ITEM 441, 2" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (449) PG 64–22
ITEM 301, 4" ASPHALT CONCRETE BASE, PG 22–64, (449) (2 EQUAL LIFTS)
ITEM 304, 6" AGGREGATE BASE (2 EQUAL LIFTS)
- ASPHALT TRENCH RESTORATION (WATER):
MATCH TYPICAL SECTION
(CDF BACKFILL UP TO BASE OF ODOT 301 BASE COURSE)
- ASPHALT TRENCH RESTORATION (STORM):
MATCH TYPICAL SECTION
- BRICK DRIVEWAY AND SIDEWALK REPAIR:
ITEM SPECIAL – REMOVE AND REUSE EXISTING BRICK PAVERS
ITEM 304, 6" AGGREGATE BASE (2 EQUAL LIFTS)

ABBR./SYMBOL LEGEND

- (DND) DO NOT DISTURB (TBR) TO BE REMOVED
- (ATG) ADJUST TO GRADE (V) VALVE ADJUSTED TO GRADE

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT OF MEASURE	APPROX. QTY.
STREET AND STORM SEWER WORK			
201	CLEARING AND GRUBBING, AS PER PLAN	LUMP	1
202	REMOVED, AS PER PLAN	LUMP	1
202	WALK REMOVED	S.F.	1460
202	PIPE REMOVED, 24" AND UNDER	FT.	281
202	CATCH BASIN REMOVED	EACH	1
202	HEADWALL REMOVED	EACH	1
203	EXCAVATION, INCLUDING EMBANKMENT CONSTRUCTION, AS PER PLAN	C.Y.	500
301	ASPHALT CONCRETE BASE, PG. 64-22	C.Y.	70
304	AGGREGATE BASE, AS PER PLAN	C.Y.	35
407	NON-TRACKING TACK COAT, APPLIED @ 0.06 GAL/S.Y.	GAL.	30
411	3" STABILIZED CRUSHED AGGREGATE	C.Y.	11
441	1-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	C.Y.	10
441	1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG 64-22	C.Y.	8
452	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	S.Y.	66
608	4" CONCRETE WALK	S.F.	1136
609	TYPE 6 BARRIER CURB	FT.	388
611	4" CONDUIT, TYPE B, 707.45 (STORM REPAIR)	FT.	50
611	6" CONDUIT, TYPE B, 707.45 (STORM REPAIR)	FT.	50
611	8" CONDUIT, TYPE B, 707.45 (STORM REPAIR)	FT.	50
611	12" CONDUIT, TYPE B	FT.	20
611	15" CONDUIT, TYPE B	FT.	167
611	18" CONDUIT, TYPE B	FT.	352
611	TYPE 2-2B CATCH BASIN	EACH	4
611	HW-2.1	EACH	1
614	MAINTAINING TRAFFIC, AS PER PLAN	LUMP	1
623	CONSTRUCTION LAYOUT STAKES AND SURVEYING	LUMP	1
630	SIGN, FLAT SHEET, AS PER PLAN	S.F.	9
630	GROUND MOUNTED SIGN, REMOVED AND RESET	EACH	3
630	GROUND MOUNTED POST, REMOVED AND RESET	EACH	3
SPEC	REMOVE AND REUSE EXISTING BRICK PAVERS	LUMP	1
WATER MAIN WORK (PER CCWRD SPECIFICATIONS)			
1030	CONSTRUCTION LAYOUT STAKING	LS	1
1110	TRAFFIC CONTROL AND MAINTENANCE	LS	1
1125	SEEDING AND MULCHING	LS	1
1140	ASPHALT CONCRETE BASE	CY	10
1140	ASPHALT CONCRETE	CY	8
1160	DRIVEWAY CULVERT/DRAIN TILE REPLACEMENT (CONTINGENCY)	FT.	30
1210	CONTROLLED DENSITY FILL	CY	280
1220	AGGREGATE BACKFILL AND BASE	CY	32
1300	CONTINGENCY	LS	1
2110	6" DUCTILE IRON WATER MAIN AND DUCTILE IRON FITTINGS	LF	1025
2210	6" GATE VALVE AND VALVE BOX	EA	3
2250	CONNECT TO EXISTING WATER MAIN	EA	1
2300	FIRE HYDRANT ASSEMBLY, COMPLETE	EA	2
2400	TYPE 1 AND II WATER SERVICE/METER, RECONNECTION; INCLUDING ALL FITTINGS	EA	7
2400	3/4" TYPE K COPPER SERVICE LINE	LF	120
2430	TESTING/SAMPLING TAPS	EA	1
SPEC	ABANDON EXISTING WATERLINES & APPURTENANCES	LS	1



SIDNEY, OHIO 937.497.0200
LOVELAND, OHIO 513.239.8554
WWW.CHOICEONEENGINEERING.COM

MILL STREET & MAIN STREET IMPROVEMENTS
MIAMI TOWNSHIP
TYPICAL SECTION & ESTIMATED QUANTITIES

REVISIONS:

FILE NAME TYPICAL SECTION
DRAWN BY JSM
CHECKED BY NNS
PROJECT No. CLEMIA2107
DATE 12/12/2022
SHEET NUMBER

GENERAL NOTES AND DETAILS

ALL CONSTRUCTION METHODS, MATERIALS, AND SPECIFICATIONS SHALL COMPLY WITH THE CLERMONT COUNTY ENGINEER, CLERMONT COUNTY WATER RESOURCES STANDARDS AND SPECIFICATIONS OR OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION STANDARDS AND SPECIFICATIONS, WHICHEVER IS MORE RESTRICTIVE AS DETERMINED BY THE TOWNSHIP.

CONSTRUCTION MEETINGS

WEEKLY CONSTRUCTION MEETINGS WILL BE HELD WITH CONTRACTOR, ANY NECESSARY SUBCONTRACTOR, PROJECT FIELD REPRESENTATIVE, AND A REPRESENTATIVE FROM THE COUNTY.

RECORD DRAWINGS

THE CONTRACTOR SHALL PROVIDE 2 COMPLETE SETS OF RECORD DRAWINGS TO THE TOWNSHIP WITHIN 30 DAYS OF PROJECT COMPLETION. THESE DRAWINGS SHALL SHOW ALL CHANGES TO THE ORIGINAL DRAWINGS, ALL MANHOLE AND CATCH BASIN LOCATIONS AND INVERTS, ALL LATERAL LOCATIONS AND DEPTHS, ALL LOCATIONS AND DEPTHS OF EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION, AND ALL OTHER PERTINENT DATA TO THE IMPROVEMENTS. PAYMENT FOR THIS ITEM SHALL BE INCIDENTAL TO THE OTHER ITEMS PAID FOR IN THIS PROJECT.

MISCELLANEOUS

COMPENSATION FOR THE WORK AS SHOWN ON THE PLANS SHALL BE AT THE UNIT PRICES INCLUDED ON THE BID PROPOSAL. NO SEPARATE PAYMENT WILL BE MADE FOR TASKS (NOT ALL INCLUSIVE) INCLUDING ITEMS SUCH AS MOBILIZATION, RECORD DRAWINGS AND CONNECTIONS TO EXISTING FACILITIES.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC. EXISTING UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATION ACCORDING TO THE BEST AVAILABLE DATA. THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING THEM IN THE FIELD PRIOR TO CONSTRUCTION AND WILL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THEM. CONTRACTOR TO CONTACT OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) 48 HOURS PRIOR TO CONSTRUCTION.

NON-MEMBERS MUST BE CALLED DIRECTLY.

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. CHOICE ONE ENGINEERING CORPORATION MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. FURTHER, CHOICE ONE ENGINEERING CORPORATION DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH CHOICE ONE ENGINEERING CORPORATION DID LOCATE AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. CHOICE ONE ENGINEERING CORPORATION HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY INTERFERENCE

IF, DURING CONSTRUCTION, INTERFERENCE ARISES WITH EXISTING UTILITIES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE UTILITY COMPANY INVOLVED. ANY AND ALL WORK REQUIRED FOR PUBLIC OR PRIVATE UTILITIES WILL BE DONE BY AND AT THE EXPENSE OF THEIR RESPECTIVE OWNERS, UNLESS OTHERWISE NOTED ON THESE PLANS. THE CONTRACTOR SHALL NOTIFY, AT LEAST 7 DAYS BEFORE BREAKING GROUND, ALL PUBLIC SERVICE COMPANIES HAVING WIRES, POLES, PIPES, CONDUITS, MANHOLES, OR OTHER STRUCTURES THAT MAY BE AFFECTED BY THIS OPERATION, INCLUDING ALL STRUCTURES WHICH ARE AFFECTED AND NOT SHOWN ON THESE PLANS. THERE WILL BE NO DELAYS ALLOWED FOR UTILITY INTERFERENCES.

LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL UTILITIES, AND STRUCTURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE METHOD OF SUPPORT OR PROTECTION MUST BE APPROVED BY THE APPROPRIATE UTILITY COMPANY, AND IF FACILITY IS DAMAGED BY THE CONTRACTOR, ALL REPAIRS SHALL BE MADE BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR IS HEREBY ADVISED THAT ALL UTILITY COMPANIES AFFECTED BY THIS PROJECT MAY BE WORKING CONCURRENTLY WITHIN THE PROJECT LIMITS. NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR COORDINATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE UTILITY COMPANIES.

UTILITY OWNERSHIP

WATER & SANITARY

CLERMONT COUNTY WATER
RESOURCES DEPARTMENT (CCWRD)
4400 HASKELL LANE
BATAVIA, OH 45103
ATTN: CHRIS ROWLAND
513-732-8098

ELECTRIC

DUKE ENERGY
2010 DANA AVENUE
ROOM EF 324
CINCINNATI, OH 45207
ATTN: TROY DITTMER
513-458-3844

GAS

DUKE ENERGY
139 EAST FOURTH STREET
P.O. BOX 960, RM 460
CINCINNATI, OH 45202
ATTN: JESSE ORTH
513-906-0130

GAS TRANSMISSION

DUKE ENERGY – TRANSMISSION
139 EAST FOURTH STREET
CINCINNATI, OH 45202
ATTN: TIM MEYER
513-287-1266

TELEPHONE

FRONTIER COMMUNICATIONS
241 S NELSON AVENUE

TELEPHONE

ALTA FIBER
221 E. 4TH STREET
BUILDING 121-900
CINCINNATI, OH 45201-2301
ATTN: TIM SEESTEDT
513-565-7163

TELEPHONE

AT&T
525 VINCE STREET
ROOM 407
CINCINNATI, OH 45202
513-739-8658

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND BEFORE FINAL ACCEPTANCE BY THE TOWNSHIP, REPRESENTATIVES OF THE TOWNSHIP AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF ALL EXISTING SEWER THAT MAY BE AFFECTED BY THE WORK AND ARE TO REMAIN IN SERVICE. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE TOWNSHIP.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE TOWNSHIP.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE TOWNSHIP.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

EXISTING DRAINAGE FACILITIES

ANY DRAINAGE CONDUIT CURRENTLY CONNECTED TO THE EXISTING STORM SEWER SHALL BE CONNECTED TO THE PROPOSED STORM SEWER. ANY DRAINAGE CONDUIT DAMAGED BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR TO A CONDITION EQUAL TO OR BETTER THAN ITS ORIGINAL CONDITION. ALL CONDUIT REMOVED, REPLACED AND/OR CONNECTED TO THE STORM SEWER SHALL BE NOTED ON THE RECORD DRAWINGS AND SHALL BE INSPECTED BY THE TOWNSHIP BEFORE IT IS COVERED.

A CONCRETE COLLAR SHALL BE PROVIDED WHERE PROPOSED STORM SEWER PIPE IS CONNECTED TO AN EXISTING PIPE. THE COST SHALL BE INCLUDED IN THE BID PRICE FOR THE NEW CONDUIT.

ALL FIELD OR STORM DRAINS WHICH ARE ENCOUNTERED DURING CONSTRUCTION SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS OR PLUGGED AS APPROVED AND DIRECTED BY THE TOWNSHIP. THE TOWNSHIP WILL ASSIST IN ANY NECESSARY INVESTIGATION OR DYE TESTING PRIOR TO APPROVING THE PLUGGING OF A FIELD OR STORM CONDUIT. COST OF THE ITEMS ABOVE SHALL BE INCLUDED IN THE COST OF ITEM 611 CONDUIT, TYPE B, 707.45, STORM REPAIR.

THE LOCATION, TYPE, SIZE, AND GRADE OF THE NEW CONDUIT REQUIRED TO REPLACE OR EXTEND THE EXISTING DRAIN WILL BE DETERMINED BY THE TOWNSHIP OR TOWNSHIP'S REPRESENTATIVE DURING CONSTRUCTION, AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS AND INCLUDE ALL MATERIALS NECESSARY SUCH AS GRANULAR BEDDING, PROPER FITTINGS AND CONNECTIONS, AND PIPE.

THE FOLLOWING CONTINGENT ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS FOR THE WORK NOTED ABOVE:

ITEM 611	4" CONDUIT, TYPE B, 707.45, STORM REPAIR	50 FEET
ITEM 611	6" CONDUIT, TYPE B, 707.45, STORM REPAIR	50 FEET
ITEM 611	8" CONDUIT, TYPE B, 707.45, STORM REPAIR	50 FEET

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION, OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE TOWNSHIP SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT ANY EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE TOWNSHIP SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

WATER MAIN SEPARATION

WHENEVER A STORM SEWER AND A WATER MAIN MUST CROSS, THE PIPES SHALL BE LAID AT SUCH ELEVATIONS THAT THE CROWN OF ONE PIPE IS AT LEAST 18" BELOW THE BOTTOM OF THE OTHER.

WATER MAIN MUST BE INSTALLED WITH A MINIMUM OF 10' HORIZONTAL SEPARATION FROM ALL STORM AND SANITARY SEWERS, MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.

ABANDONED WATER MAIN

DURING THE CONSTRUCTION OF THIS PROJECT, IF THERE ARE CONFLICTS THAT ARISE BETWEEN PROPOSED CONSTRUCTION AND THE PROPOSED ABANDONED WATER MAIN, THE CONTRACTOR MAY CUT AND REMOVE THE EXISTING WATER MAIN AND PLUG THE OPEN ENDS ONLY AFTER THE EXISTING WATER MAIN IS COMPLETELY ABANDONED. THE CONTRACTOR SHALL CLOSE ALL ABANDONED VALVES, REMOVE THE VALVE BOX, AND PLACE CONCRETE TO SECURE VALVE IN THE CLOSED POSITION WHEN SYSTEM IS APPROVED, THEN TRANSFER TO NEW WATER MAIN. THE ABOVE WORK IS INCIDENTAL TO ITEM 638 WATER MAIN.

CLEAN WATER CONNECTIONS

ROOF DRAINS, FOUNDATION DRAINS, AND ALL OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SYSTEM ARE PROHIBITED.

SAFETY

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.

MUD

THE TRACKING OR SPILLING OF MUD, DIRT, OR DEBRIS UPON PUBLIC STREETS IS PROHIBITED, AND ANY SUCH OCCURRENCE SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR.

PROPERTY POINTS AND SURVEY MONUMENTS

CARE SHALL BE TAKEN BY THE CONTRACTOR TO SAFEGUARD ANY PROPERTY POINTS OR OTHER SURVEY REFERENCE MARKS ENCOUNTERED DURING CONSTRUCTION OF THIS PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESET ANY PROPERTY POINT OR SURVEY MONUMENT WHICH IS DISTURBED AS A RESULT OF CONSTRUCTION OF THIS PROJECT. THE PROPERTY POINTS AND SURVEY MONUMENTS SHALL BE RESET UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL SURVEYOR.

PAYMENT FOR THIS ITEM SHALL BE INCIDENTAL TO THE OTHER ITEMS PAID FOR IN THIS PROJECT.

NONRUBBER TIRE VEHICLES

NO NONRUBBER TIRE VEHICLES SHALL BE MOVED ON TOWNSHIP STREETS. EXCEPTIONS MAY BE GRANTED BY THE TOWNSHIP WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING AND ANY RESULTING DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE TOWNSHIP. THE CONTRACTOR SHALL USE EXTREME CARE WHEN OPERATING NONRUBBER TIRE VEHICLES ON STREETS OR DRIVEWAYS TO AVOID MARKING OR DAMAGING THE PAVEMENT. PROTECTION OF THE PAVEMENT FROM DAMAGE RESULTING FROM THE TRACKS OF NONRUBBER TIRE VEHICLES UTILIZED IN TRENCH EXCAVATION SHALL BE

REQUIRED. A WOOD PLANK SYSTEM, USED TIRES, RUBBER MATS, OR OTHER MEANS AS APPROVED BY THE TOWNSHIP'S REPRESENTATIVE SHALL BE USED TO PROTECT THE PAVEMENT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS OF THE CONTRACT.

CONSTRUCTION NOISE

IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ANY POWER-OPERATED CONSTRUCTION-TYPE DEVICES SHALL NOT BE OPERATED BETWEEN THE HOURS SPECIFIED IN THE TOWNSHIP NOISE ORDINANCE. IF THERE IS NO NOISE ORDINANCE IN PLACE, POWER-OPERATED CONSTRUCTION-TYPE DEVICES SHALL NOT BE OPERATED BETWEEN THE HOURS OF 7:00 PM TO 7:00AM.

GRAFFITI AND VANDALISM

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF ANY CONCRETE WORK OR OTHER PAY ITEM UNDER THIS CONTRACT WHICH IS DEEMED UNACCEPTABLE BY THE TOWNSHIP DUE TO GRAFFITI OR VANDALISM DAMAGE.

CONTROL OF SPILLS

BEST CONSTRUCTION PRACTICES ARE TO BE IMPLEMENTED TO MINIMIZE WATER QUALITY IMPACTS. IDLE EQUIPMENT, PETROCHEMICALS, AND TOXIC/HAZARDOUS MATERIALS SHALL NOT BE STORED NEAR DRAINAGE WAYS, DITCHES, OR STREAMS. REFUELING SHALL NOT BE UNDERTAKEN NEAR DRAINAGE WAYS, DITCHES, OR STREAMS. A SPILL CONTAINMENT KIT IS TO BE MAINTAINED ONSITE THROUGHOUT CONSTRUCTION ACTIVITIES. SPILLS OF FUELS, OILS, CHEMICALS, OR OTHER MATERIALS WHICH COULD POSE A THREAT TO GROUNDWATER SHALL BE CLEANED UP IMMEDIATELY. IF THE SPILL IS A REPORTABLE AMOUNT, THE LOCAL FIRE DEPARTMENT IS TO BE CONTACTED.

WORK LIMITS

ALL WORK SHALL BE WITHIN EXISTING OR PROPOSED RIGHT-OF-WAY AND/OR CONSTRUCTION LIMITS UNLESS OTHERWISE INSTRUCTED BY THE TOWNSHIP.

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

MINIMIZING OF CONSTRUCTION DAMAGE TO TREES

1. DESIGNATE STORAGE AREA FOR HEAVY EQUIPMENT AND MATERIALS WELL AWAY FROM TREE ROOTS.
2. KEEP THE SOIL AT THE PRESENT GRADE AS MUCH AS POSSIBLE.
3. SELECT A TRAVEL ROUTE FOR ALL CONSTRUCTION VEHICLES THAT WILL CAUSE THE LEAST AMOUNT OF SOIL COMPACTION.
4. CONSTRUCT WORK LIMIT FENCING AROUND EACH TREE.
5. DO NOT PILE SOIL, MATERIALS, OR EQUIPMENT ON THE ROOTS.
6. DO NOT PARK CARS, TRUCKS, OR EQUIPMENT ON THE ROOTS.
7. DO NOT GRADE SOIL AWAY FROM THE ROOTS.
8. STAY OUTSIDE THE WORK LIMIT FENCING TO REDUCE TRUNK DAMAGE AND SOIL COMPACTION.
9. STAY ON THE TRAVEL ROUTES. THIS CAN MINIMIZE SOIL COMPACTION AND CRUSHING OF ROOTS.
10. PLACE MULCH, GRAVEL, WOOD CHIPS, SNOW FENCE, OR PLANKING ON TRAVEL ROUTES TO MINIMIZE COMPACTION.
11. CUT AS FEW ROOTS AS POSSIBLE.
12. DO NOT USE A BACKHOE TO SEVER THE ROOTS. THE BACKHOE DAMAGES TREE ROOTS BY RIPPING AND TEARING THEM FARTHER UNDER THE SOIL. USE A SOIL SAW TO CUT ROOTS UP TO 14" DEEP.
13. PRUNE THE ROOTS AT THE EDGE OF THE TRENCH OR HOLE TO GENERATE NEW ROOTS.
14. DO NOT ALLOW THE ROOTS TO DRY AFTER THEY ARE CUT. PLACE DAMP BURLAP OVER THE EXPOSED ROOT ENDS TO MINIMIZE DRYING.
15. AVOID SOIL COMPACTION. DO NOT DRIVE EQUIPMENT OVER THE ROOTS.
16. PLACE 2"-3" OF BROWN MULCH 2' AROUND EXISTING, REMAINING TREES AND A DISTANCE BETWEEN THE CURB AND THE SIDEWALK IN A SQUARE PATTERN BEFORE AND DURING CONSTRUCTION, AND REAPPLY AFTER CONSTRUCTION IS COMPLETE.

ASPHALT

ALL ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS SHALL APPLY TO THIS PROJECT, EXCLUDING THE BINDER PRICE ADJUSTMENT PER ODOT 401.20. ALL ASPHALT DELIVERED SHALL BE ACCOMPANIED WITH A LOAD TICKET AS PER ITEM 401.21.



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MILL STREET & MAIN STREET IMPROVEMENTS
MIAMI TOWNSHIP
GENERAL NOTES

REVISIONS:
FILE NAME GNA
DRAWN BY JSM
CHECKED BY NNS
PROJECT No. CLEMIA2107
DATE 12/12/2022
SHEET NUMBER 3 OF 19

ESTIMATED AND CONTINGENT QUANTITIES

THESE PLANS INCLUDE ESTIMATED AND CONTINGENCY QUANTITIES THAT MAY OR MAY NOT BE USED. ANY UNUSED MATERIAL PURCHASED BY THE CONTRACTOR WILL NOT BE PURCHASED OR REIMBURSED BY THE TOWNSHIP. THE TOWNSHIP WILL NOT APPROVE ANY WORK DELAYS BECAUSE OF THE LACK OF MATERIALS AT THE SITE. ANY RESTOCKING FEES THAT MAY BE CHARGED WILL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR.

THE FOLLOWING CONTINGENT QUANTITIES HAVE BEEN INCLUDED IN THE ESTIMATE FOR POSSIBLE FIELD MODIFICATION BY THE TOWNSHIP AT THEIR DISCRETION:

RIGHT-OF-WAY

RIGHT-OF-WAY LINES AND ADJACENT PROPERTY LINES SHOWN HEREIN ARE BASED ON COUNTY GIS LINES AND OTHER READILY-AVAILABLE INFORMATION FROM THE COUNTY. NO BOUNDARY RESOLUTION WAS COMPLETED FOR THIS PROJECT.

CAD FILE DISCLAIMER

THE CAD FILE ASSOCIATED WITH THESE CONSTRUCTION PLANS IS A NON-CERTIFIED DOCUMENT. ANY USE OF THE INFORMATION OBTAINED OR DERIVED FROM THE ASSOCIATED CAD FILE WILL BE AT THE RECEIVING PARTY/USER'S RISK. CHOICE ONE ENGINEERING CORP. OFFERS NO WARRANTY AS TO THE ACCURACY OF THE INFORMATION IN THE CAD FILE OR THAT REVISIONS HAVE BEEN ISSUED AFTER THE CAD DRAWING WAS RELEASED. RECEIVING PARTIES/USERS SHALL HOLD HARMLESS TO THE MAXIMUM EXTENT ALLOWED BY LAW CHOICE ONE ENGINEERING CORP. FROM ANY USE OF THE CAD FILE BY THE RECEIVING PARTY/USER. IN ALL CIRCUMSTANCES, AND AT ALL TIMES, THE PUBLISHED PAPER AND/OR PDF DRAWINGS FOR THE PROJECT SHALL SUPERSEDE THE CAD FILES. IN THE CASE OF AN INCONSISTENCY BETWEEN THE PUBLISHED PAPER/PDF DRAWINGS AND THE ASSOCIATED CAD FILE, THE PUBLISHED PAPER/PDF DRAWINGS SHALL GOVERN THE PROJECT AND ALL WORK.

SIDEWALK AND CURB JOINTS

1. GENERAL: CONSTRUCT ISOLATION, CONSTRUCTION, AND CONTRACTION JOINTS, AND TOOL EDGINGS TRUE TO LINE WITH FACES PERPENDICULAR TO SURFACE PLANE OF CONCRETE. CONSTRUCT TRANSVERSE JOINTS AT RIGHT ANGLES TO CENTERLINE, UNLESS OTHERWISE INDICATED.

a. WHEN JOINING EXISTING SIDEWALK OR CURB, PLACE TRANSVERSE JOINTS TO ALIGN WITH PREVIOUSLY-PLACED JOINTS, UNLESS OTHERWISE INDICATED.

2. CONSTRUCTION JOINTS: SET CONSTRUCTION JOINTS AT SIDE AND END TERMINATION OF SIDEWALK OR CURB AND AT LOCATIONS WHERE SIDEWALK OR CURB OPERATIONS ARE STOPPED FOR MORE THAN ONE-HALF HOUR, UNLESS SIDEWALK OR CURB TERMINATES AT ISOLATION JOINTS.

3. ISOLATION JOINTS: FORM ISOLATION JOINTS OF PREFORMED JOINT-FILLER STRIPS ABUTTING MANHOLES, STRUCTURES, WALKS, OTHER FIXED OBJECTS, AND WHERE INDICATED.

- a. LOCATE EXPANSION JOINTS AT INTERVALS OF 60’ IN SIDEWALK AND 200’ IN CURB, UNLESS OTHERWISE INDICATED.
- b. THE EXPANSION JOINT MATERIAL SHALL BE FOAM TECH BY NMW, INC. OR EQUIVALENT. THE EXPANSION JOINT MATERIAL SHALL HAVE A "PEEL-OFF" TOP FOR CAULKING PURPOSES.
- c. REMOVE "PEEL-OFF" TOP AFTER CONCRETE IS SET AND MAKE SURE THE EXPANSION JOINT MATERIAL IS 1/2" – 3/4" BELOW THE FINISHED CONCRETE SURFACE.
- d. PLACE JOINT FILLER (SONOLASTIC ULTRA, EUCOLASTIC 1, OR EQUIVALENT) IN LIME STONE COLOR IN THE TOP 1/2" – 3/4" OF JOINT FOLLOWING MANUFACTURER INSTALLATION RECOMMENDATION. CONTRACTOR TO PLACE WHITE SILICA SAND ON TOP OF JOINT FILLER AFTER INITIAL SET.

4. CONTRACTION JOINTS: FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED IN THE PLANS. CONSTRUCT CONTRACTION JOINTS FOR A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF THE CONCRETE THICKNESS, WHERE INDICATED, AS FOLLOWS:

- a. GROOVED JOINTS: FORM CONTRACTION JOINTS AFTER INITIAL FLOATING BY GROOVING AND FINISHING EACH EDGE OF JOINT WITH GROOVER TOOL TO THE FOLLOWING RADIUS. ELIMINATE GROOVER OVERFLOW SLURRY MARKS ON CONCRETE SURFACES PRIOR TO FINAL BROOMING. RADIUS TO BE 1/4" (6 MM).
- b. SAWED JOINTS WILL NOT BE PERMITTED.
- c. QUALITY WORK, AS DETERMINED BY THE TOWNSHIP, SHALL BE PERFORMED OR THE NEW SIDEWALK OR CURB WILL BE REMOVED AND REDONE AT THE CONTRACTOR'S EXPENSE.

5. CURING COMPOUND: APPLY 2 COATS OF SUPER DIAMOND CLEAR CURING AND SEALING COMPOUND, WR MEADOWS, INC. CS-309-25, OR APPROVED EQUIVALENT PER MANUFACTURER'S RECOMMENDATIONS, ON ALL SURFACES, INCLUDING BACK, IMMEDIATELY AFTER FINISHING SURFACES.

ITEM 201 CLEARING AND GRUBBING, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 201 CLEARING AND GRUBBING, EXCEPT AS HEREIN MODIFIED.

THIS WORK SHALL CONSIST OF REMOVING AND TRIMMING TREES, REMOVING STUMPS, TRIMMING AND/OR REMOVING BUSHES, REMOVING LANDSCAPE TIMBERS, ETC., AS NOTED ON THE PLANS. WORK SHALL BE COORDINATED WITH THE INDIVIDUAL PROPERTY OWNERS TO ENHANCE MAXIMUM POSSIBLE SATISFACTION.

PAYMENT FOR ITEM 201 CLEARING AND GRUBBING, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE, SHALL BE AT THE CONTRACT LUMP SUM BID PRICE EXCEPT FOR ITEMS PAID FOR AS EACH, AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 202 REMOVED, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 202 REMOVAL OF STRUCTURES AND OBSTRUCTIONS, EXCEPT AS HEREIN MODIFIED.

ITEM 202 REMOVED, AS PER PLAN CONSISTS OF ALL ITEMS THAT DO NOT HAVE AN INDIVIDUAL REMOVAL BID ITEM, AS NECESSARY FOR THE CONSTRUCTION OF THE PROJECT, INCLUDING SAWCUTTING PAVEMENT.

THE FOLLOWING ODOT 202 ITEMS (PIPE REMOVED, MANHOLE REMOVED, AND CATCH BASIN AND INLET REMOVED) SHALL REFER TO ANY PIPE OR STRUCTURE THAT IS TO BE REMOVED OUTSIDE THE LIMITS OF ANY PROPOSED CONDUIT AND/OR STRUCTURE TRENCH AND SHALL BE PAID FOR UNDER EACH OF THOSE INDIVIDUAL REMOVED LINE ITEMS. ALL EXISTING PIPE, MANHOLE, CATCH BASIN, AND INLET LOCATED WITHIN THE TRENCH LIMITS OF ANY PROPOSED CONDUIT AND/OR STRUCTURE SHALL BE REMOVED FOR THE PROPER INSTALLATION OF THAT ITEM AND ANY ASSOCIATED REMOVAL COSTS SHALL BE INCLUDED IN THE COST OF THAT PROPOSED CONDUIT OR STRUCTURE ITEM. THE TRENCH LIMITS SHALL BE BASED ON THE TRENCH DETAIL SHOWN IN THE CONSTRUCTION PLANS.

ANY ITEM THAT IS REMOVED UNDER OR WITHIN 5’ OF PROPOSED CURB, PAVEMENT, SIDEWALK, OR DRIVEWAY SHALL BE BACKFILLED AND COMPACTED USING ONLY ODOT ITEM 703.11 STRUCTURAL BACKFILL TYPE 1 OR 2 STRUCTURAL MATERIAL.

THE CONTRACTOR SHALL SAWCUT ALL EXISTING PAVEMENT, SIDEWALK AND CURB AGAINST WHICH ALL IMPROVEMENTS ARE PROPOSED. PAVEMENT, WALK, AND CURB SHALL BE SAWCUT IN NEAT, STRAIGHT LINES. SAWCUT PAVEMENT JOINTS SHALL BE INCLUDED IN THE PAYMENT OF THIS ITEM. MORE THAN ONE SAWCUT MAY BE NECESSARY TO ENSURE A CLEAN CUT ON THE VERTICAL FACE OF SAWCUT JOINTS PRIOR TO PAYING AS PER 401.14. AFTER THE ASPHALT WORK IS COMPLETED, THE TRANSVERSE JOINTS SHALL BE SEALED WITH LIQUID ASPHALT, PER 401.22, 409.02 AND 409.03.

ANY PRIVATE PROPERTY WITHIN THE ROAD RIGHT-OF-WAY OR PROJECT CONSTRUCTION LIMITS SHALL BE REMOVED CAREFULLY AND STORED FOR THE PROPERTY OWNER AT A PLACE DESIGNATED BY THE PROPERTY OWNER ON THAT PARTICULAR PROPERTY. ANY SALVAGED PUBLIC ITEMS SHALL REMAIN MIAMI TOWNSHIP PROPERTY AND SHALL BE CAREFULLY REMOVED BY THE CONTRACTOR AND STORED AT A DESIGNATED LOCATION ON THE PROJECT SITE FOR MIAMI TOWNSHIP PICKUP.

PAYMENT FOR ITEM 202 REMOVED, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT LUMP SUM BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 203 EXCAVATION, INCLUDING EMBANKMENT CONSTRUCTION, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 203 ROADWAY EXCAVATION AND EMBANKMENT, EXCEPT AS HEREIN MODIFIED.

THE WORK OF EMBANKMENT CONSTRUCTION WILL NOT BE PAID FOR AS SUCH, BUT WILL BE CONSIDERED INCIDENTAL TO THIS ITEM AND THE MEASURED QUANTITY WILL BE THAT OF EXCAVATION ONLY.

CONTRACTOR SHALL EXCAVATE ALL MATERIAL FROM EXISTING SURFACE TO THE BOTTOM OF THE PROPOSED SUBGRADE. ASPHALT REMOVAL IS INCLUDED IN THIS ITEM UNLESS OTHERWISE SPECIFIED.

ALL SURFACE MATERIAL, EXCAVATED UNSUITABLE MATERIAL AND ALL EXCESS EXCAVATED MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT HIS OWN RESPONSIBILITY AND EXPENSE OUTSIDE OF THE RIGHT-OF-WAY AT A SITE APPROVED BY THE TOWNSHIP. THIS ITEM SHALL ALSO INCLUDE THE PLACING OF A MINIMUM OF 6" OF TOPSOIL ON ALL DISTURBED AREAS DURING FINAL GRADING.

PAYMENT FOR ITEM 203 EXCAVATION, INCLUDING EMBANKMENT

CONSTRUCTION, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT CUBIC YARD BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 452 NON-REINFORCED CONCRETE PAVEMENT, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 452 NON-REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, EXCEPT AS HEREIN MODIFIED.

CONCRETE SHALL BE ODOT CLASS QC-1P. CONTRACTOR TO PROVIDE THE CONCRETE WITH A BROOM FINISH AND TOOLED EDGES PER 451.10. CONTRACTOR TO PROVIDE 1/2" PREMOLDED EXPANSION JOINT TO ISOLATE THE APPROACHES FROM WALKS, CURB, AND EXISTING CONCRETE DRIVEWAY. DRIVE APPROACHES SHALL BE INSTALLED PER THE DETAIL IN THESE PLANS AND THE DRIVEWAY COMPOSITION SHALL BE PER THE HATCH LEGEND SHOWN IN THESE PLANS. ALL REINFORCEMENT, AS CALLED FOR IN THE DETAIL SHALL BE INSTALLED TO MEET MIAMI TOWNSHIP'S SATISFACTION.

PAYMENT FOR ITEM 452 NON-REINFORCED CONCRETE PAVEMENT, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT SQUARE YARD BID PRICE AND SHALL INCLUDE ALL MATERIAL, LABOR, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 611 CONDUITS/STRUCTURES AND RELATED WORK

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 611, PIPE CULVERTS, SEWERS, DRAINS, AND DRAINAGE STRUCTURES, EXCEPT AS HEREIN MODIFIED.

THE INSTALLATION OF ALL STORM SEWER, SANITARY SEWER, AND ALL CORRESPONDING STRUCTURES SHALL BE PER MANUFACTURER'S RECOMMENDATIONS OR AS NOTED ON THE PLANS. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN A HIGH STANDARD OF WORK. AND ENSURE THAT ALL ITEMS ARE FULLY AND PROPERLY FUNCTIONAL TO A QUALITY ACCEPTABLE TO THE OWNER.

ALL PIPE CULVERTS, CONDUITS, SEWERS, DRAINS, AND DRAINAGE STRUCTURES SHALL MEET THE MATERIAL REQUIREMENTS OF THIS ITEM. THE FOLLOWING ITEMS WILL NOT BE REQUIRED UNLESS OTHERWISE NOTED: 1) INSTALLATION PLAN, 2) CONSTRUCTION INSPECTION FORMS, 3) PERFORMANCE INSPECTIONS AND REPORTS, 4) CONDUIT AND DRAINAGE STRUCTURE EVALUATIONS.

THE CONTRACTOR SHALL ENSURE THE CONDUIT BEDDING AND BACKFILL COMPACTION DENSITY MEETS ASTM D698 (98% STANDARD PROCTOR). TESTING MAY BE REQUIRED IF DEEMED NECESSARY BY THE OWNER OR THE OWNER'S REPRESENTATIVE.

ITEM 614 MAINTAINING TRAFFIC

IT IS THE INTENTION TO PERFORM THE REQUIRED WORK WITHIN THESE PLANS WITH THE LEAST INCONVENIENCE TO, AND THE MAXIMUM SAFETY OF, THE CONTRACTOR, LOCAL MERCHANTS, PEDESTRIAN TRAFFIC, AND THE TRAVELING PUBLIC.

REQUIREMENTS FOR MAINTAINING TRAFFIC AS SPECIFIED IN THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (CURRENT EDITION, LATEST REVISION), PERTINENT PROVISIONS OF THE "OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS" (INCLUDING SUPPLEMENTAL SPECIFICATIONS) AND APPLICABLE STANDARD CONSTRUCTION DRAWINGS SHALL APPLY TO THIS PROJECT IN ADDITION TO THE FOLLOWING NOTES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE AND EFFECTIVE VEHICULAR TRAFFIC CONTROL 24 HOURS A DAY FOR THE DURATION OF THIS PROJECT. THIS WILL INCLUDE PROVIDING, PLACING, MAINTAINING, AND SUBSEQUENTLY REMOVING ALL NECESSARY TRAFFIC CONTROL MEASURES FOR ALL PROPOSED CONSTRUCTION OPERATIONS.

BEFORE THE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE TOWNSHIP THE NAME(S) AND TELEPHONE NUMBER(S) OF A PERSON OR PERSONS WHO CAN BE CONTACTED TWENTY-FOUR (24) HOURS A DAY BY THE TOWNSHIP, OR ANY OTHER INTERESTED POLICE AGENCY.

THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR REPAIRING AND/OR REPLACING ALL TRAFFIC CONTROL DEVICES NEEDED TO MAINTAIN THE SAFETY OF THE TRAVELED PAVEMENT FOR THE DURATION OF THIS PROJECT. THIS PERSON SHALL HAVE AVAILABLE ALL MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO PERFORM THE REQUIRED REPAIRS WITHIN A REASONABLE PERIOD OF TIME AS PER C.M.S. 614.14.

ACCESS TO AND FROM ALL LOCAL RESIDENTIAL AND BUSINESS DRIVES WITHIN THE LIMITS OF THIS PROJECT SHALL BE MAINTAINED AT ALL

TIMES (24 HOURS A DAY) BY USING THE EXISTING PAVEMENT, TEMPORARY PAVEMENT, AND THE PROPOSED PAVEMENT UNLESS OTHERWISE DIRECTED BY THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEQUENCE HIS WORK TO HELP MINIMIZE THE NEED FOR TEMPORARY AGGREGATE PAVEMENT. TEMPORARY AGGREGATE PAVEMENT CAN BE ASPHALT GRINDINGS OR OTHER AGGREGATE APPROVED BY THE TOWNSHIP. THE COST OF INSTALLATION, MATERIAL, AND REMOVAL OF THE TEMPORARY AGGREGATE PAVEMENT IS TO BE PART OF THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC.

WHERE MORE THAN ONE ACCESS TO A BUSINESS OR RESIDENCE EXISTS, ONLY ONE ACCESS NEEDS TO BE MAINTAINED AT A TIME DURING CONSTRUCTION. WHEN A BUSINESS OR RESIDENCE ONLY HAS ONE ACCESS DRIVE, ACCESS SHALL BE MAINTAINED AT ALL TIMES. IF THE PROJECT REQUIRES IMPROVEMENTS TO THIS ACCESS DRIVE, THE CONTRACTOR SHALL REPLACE HALF OF THE DRIVE AT ONE TIME TO ALLOW ACCESS AT ALL TIMES. THESE ACCESS OPTIONS ARE SUBJECT TO THE APPROVAL OF THE TOWNSHIP.

THE CONTRACTOR SHALL NOTIFY THE TOWNSHIP 21 DAYS PRIOR TO THE START OF ANY DETOUR OR LANE RESTRICTIONS. THE TOWNSHIP IS REQUIRED TO PROVIDE A 14 DAY NOTIFICATION PRIOR TO THE START OF DETOUR/LANE RESTRICTIONS TO ODOT, LOCAL SCHOOLS, AND EMERGENCY SERVICES. THIS DETOUR/LANE RESTRICTION COMMUNICATION MUST STATE THE DATE OF CLOSURE AND LENGTH OF CLOSURE.

ANY DAMAGE TO MAINTENANCE OF TRAFFIC EQUIPMENT SUCH AS SIGNS, BARRELS, ETC. SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR WILL BE REQUIRED TO PROVIDE, ERECT, MAINTAIN (IN PROPER POSITION, CLEAN AND LEGIBLE, AND IN GOOD WORKING CONDITION), AND SUBSEQUENTLY REMOVE ALL LIGHTS, SIGNS, CONES, BARRICADES, EXISTING PAVEMENT MARKINGS, AND ANY OTHER TRAFFIC CONTROL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC.

IT IS INTENDED THAT THE LOCAL TRAFFIC NOT BE SUBJECTED TO ANY LANE CLOSURES UNLESS ACTIVE WORK IS BEING PERFORMED IN OR IMMEDIATELY ADJACENT TO THE CLOSED LANE. THE ROADWAY SHALL NOT BE RESTRICTED TO ANY LANE CLOSURE DURING PERIODS OF INTERMITTENT OR IRREGULAR WORK, NOR CLOSED SOLELY FOR THE CONVENIENCE OF THE CONTRACTOR. THE TOWNSHIP SHALL MAKE THE FINAL DETERMINATION AS TO WHAT CONSTITUTES ACTIVE WORK AND WHETHER OR NOT THE LANE CLOSURE IS JUSTIFIED.

ITEM 623 CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 623 CONSTRUCTION LAYOUT STAKES, EXCEPT AS HEREIN MODIFIED.

THE VERTICAL CONTROL IS LISTED ON THE PLANS WITH THE BENCHMARKS. TRAVERSE POINTS ARE SHOWN BELOW FOR HORIZONTAL CONTROL. THE BEARINGS ARE LISTED FOR THE CENTERLINE OF CONSTRUCTION.

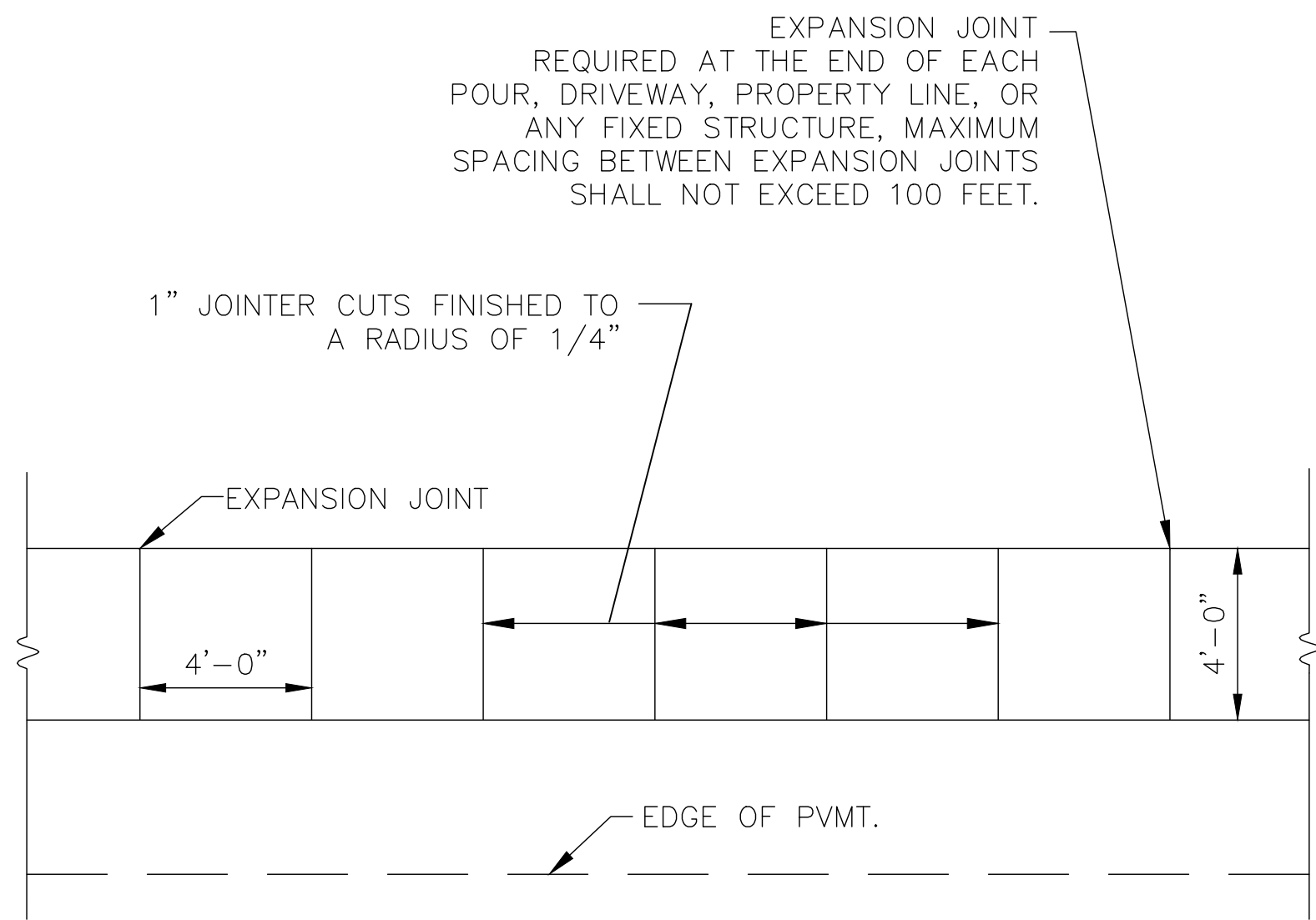
PAYMENT FOR ITEM 623 CONSTRUCTION LAYOUT STAKES, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT LUMP SUM BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT, REQUIRED TO COMPLETE THIS ITEM OF WORK.



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MILL STREET & MAIN STREET IMPROVEMENTS
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GENERAL NOTES

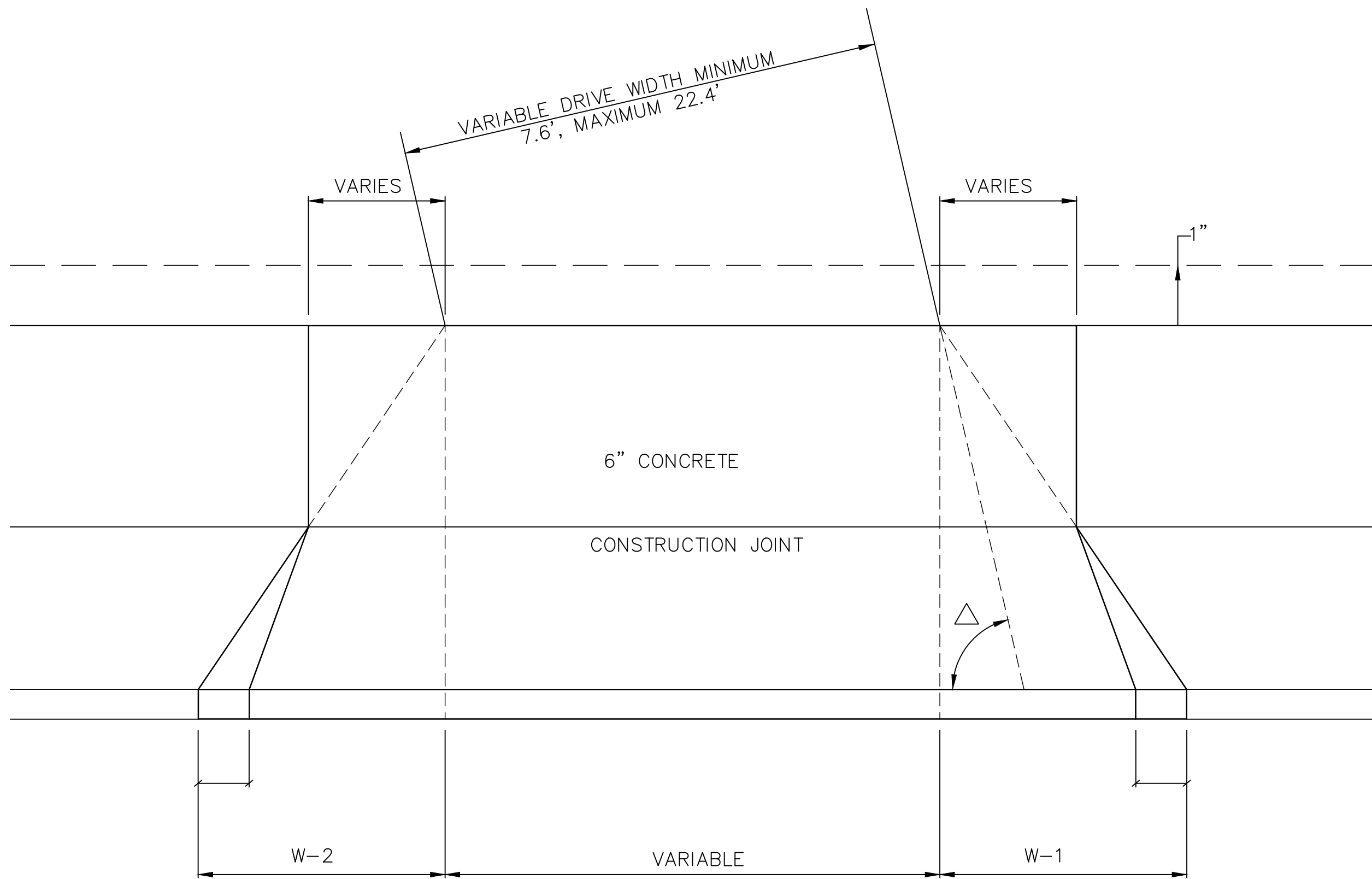
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PLAN VIEW

SIDEWALK NOTE:

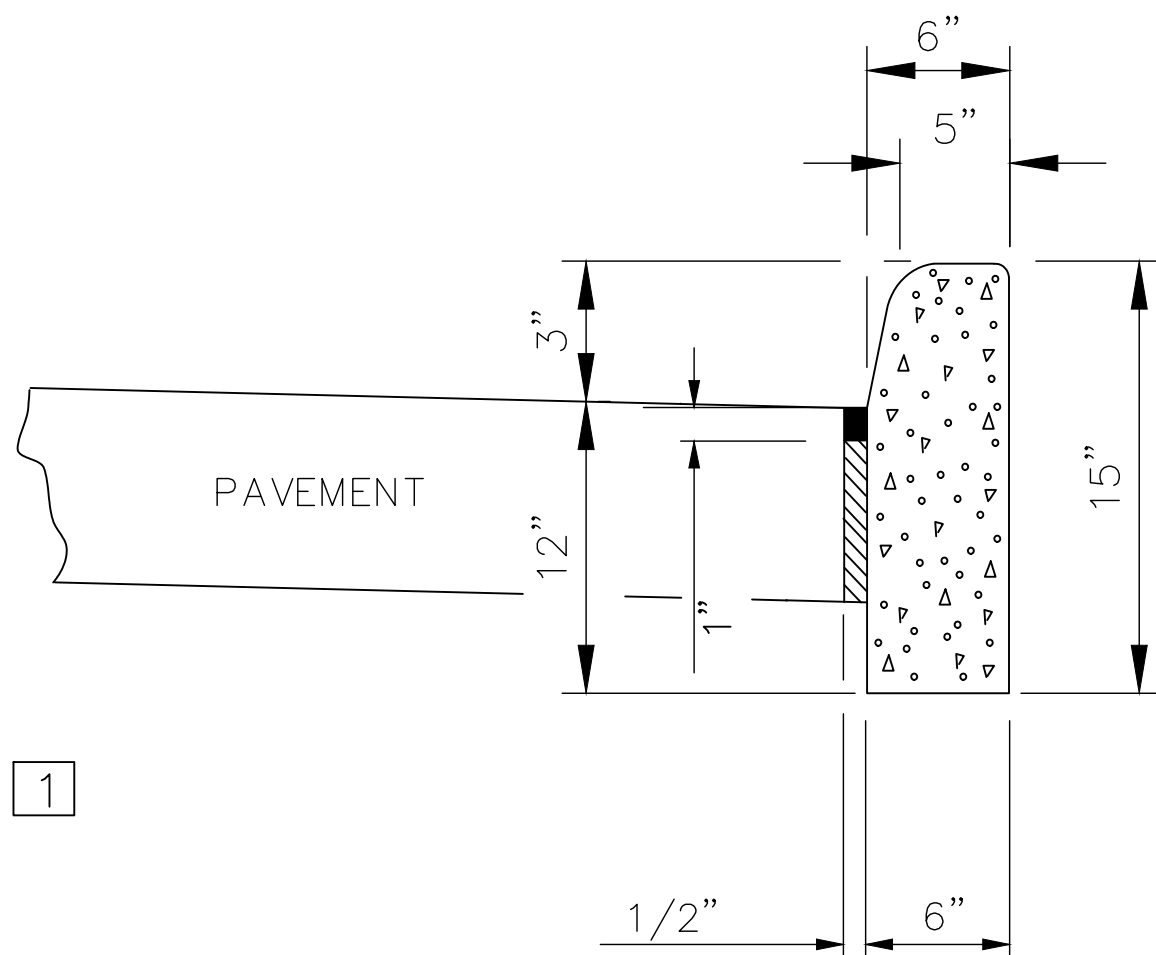
- A. WALK TO BE POURED ON ITEM 411, 3" STABILIZED CRUSHED AGGREGATE BEDDING.
- B. EQUIPMENT: SIDE FORMS SHALL BE OF STEEL, STRAIGHT AND OF A DEPTH EQUAL TO THE THICKNESS OF THE PAVEMENT AT ITS EDGE. THE USE OF BENT OR DAMAGED SIDE FORMS OR FORMS WITH DAMAGE JOINT LOCKS OR PIN POCKETS SHALL NOT BE PERMITTED. ALL FORMS SHALL BE CLEANED AND OILED EACH TIME THEY ARE USED. FLEXIBLE OR CURVED FORMS SHALL BE USED FOR CONSTRUCTION OF CIRCULAR PAVEMENT EDGES WHERE RADIUS IS ONE HUNDRED FEET (100') OR LESS.
- C. PROVIDE BROOM FINISH TO ALL EXPOSED SURFACES. TEXTURE SHALL BE A MEDIUM BROOM WITH TOOL FINISH, TOWNSHIP TO REVIEW AND APPROVE FIRST POUR.
- D. CONCRETE SHALL CONFORM TO ODOT ITEM 411 CONCRETE. CONCRETE WORK SHALL CONFORM TO ODOT ITEM 608, UNLESS OTHERWISE SPECIFIED WITHIN.
- E. PROVIDE EDGING AROUND ALL EXPOSED SURFACES.
- F. APPLY 2 COATS OF SUPER DIAMOND CLEAR CURING AND SEALING COMPOUND OR WR MEADOWS, INC. CS-309-25, OR APPROVED EQUIVALENT PER MANUFACTURER'S RECOMMENDATION ON ALL SURFACES INCLUDING BACK IMMEDIATELY AFTER FINISHING SURFACES.
- G. CONCRETE SHALL BE ODOT CLASS QC MISC., (4000 PSI, 600LB.CY CEMENT) ALL SIDEWALKS SHALL HAVE A MIN. THICKNESS OF 4"
- H. EXPANSION JOINTS SHALL BE VINYL EXPANSION JOINT MATERIAL, MEETING ASTM D-1752 AND AASHTO 153-98.
- I. CONTRACTION JOINTS: FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED IN THE PLANS. CONSTRUCT CONTRACTION JOINTS FOR A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF THE CONCRETE THICKNESS, WHERE INDICATED, AS FOLLOWS:
- a. GROOVED JOINTS: FORM CONTRACTION JOINTS AFTER INITIAL FLOATING BY GROOVING AND FINISHING EACH EDGE OF JOINT WITH GROOVER TOOL TO THE FOLLOWING RADIUS. REPEAT GROOVING OF CONTRACTION JOINTS AFTER APPLYING SURFACE FINISHES. ELIMINATE GROOVER OVERFLOW SLURRY MARKS ON CONCRETE SURFACES. QUALITY WORK SHALL BE PERFORMED OR THE NEW SIDEWALK WILL BE REMOVED AND REDONE AT THE CONTRACTOR'S EXPENSE. RADIUS TO BE 1/4 INCH (6 MM).
- b. SAWED JOINTS WILL NOT BE PERMITTED.
- J. EDGING: TOOL EDGES OF JOINTS IN CONCRETE AFTER INITIAL FLOATING WITH AN EDGING TOOL TO A RADIUS OF 1/4 INCH (6 MM). REPEAT TOOLING OF EDGES AFTER APPLYING SURFACE FINISHES. ("PICTURE-FRAME" EACH SECTION OF CONCRETE WALK.) ELIMINATE TOOL MARKS (OVERFLOW SLURRY) ON CONCRETE SURFACES.
- K. CONTRACTOR TO PROVIDE ISOLATION JOINTS BETWEEN FIXED OBJECTS(POLES, WATER METERS, ETC.) THAT ARE SHOWN IN THE PLANS WHERE THEIR LOCATION FALLS WITHIN THE PROPOSED SIDEWALK LIMITS. ISOLATION JOINTS SHALL BE VINYL EXPANSION JOINT MATERIAL, MEETING ASTM D-1752 AND AASHTO 153-98.
- L. NOTE WIDTH OF WALK FROM STATION 46+41.31 TO STATION 46+52.94 IS 5' WIDE TO ALLOW FOR PEDESTRIAN TRAFFIC CROSSING.



* EXPANSION JOINT FILLER NOT
REQUIRED AT ASPHALT DRIVE

TYPICAL DRIVEWAY DETAIL (WITH WALK AND CURB)

Δ	W-1	W-2
30°-40°	11.0	5.0
40°-50°	10.0	5.0
50°-60°	9.0	5.0
60°-70°	8.0	5.0
70°-80°	7.0	5.0
80°-90°	6.0	5.0
90°	5.0	5.0



CURB NOTES

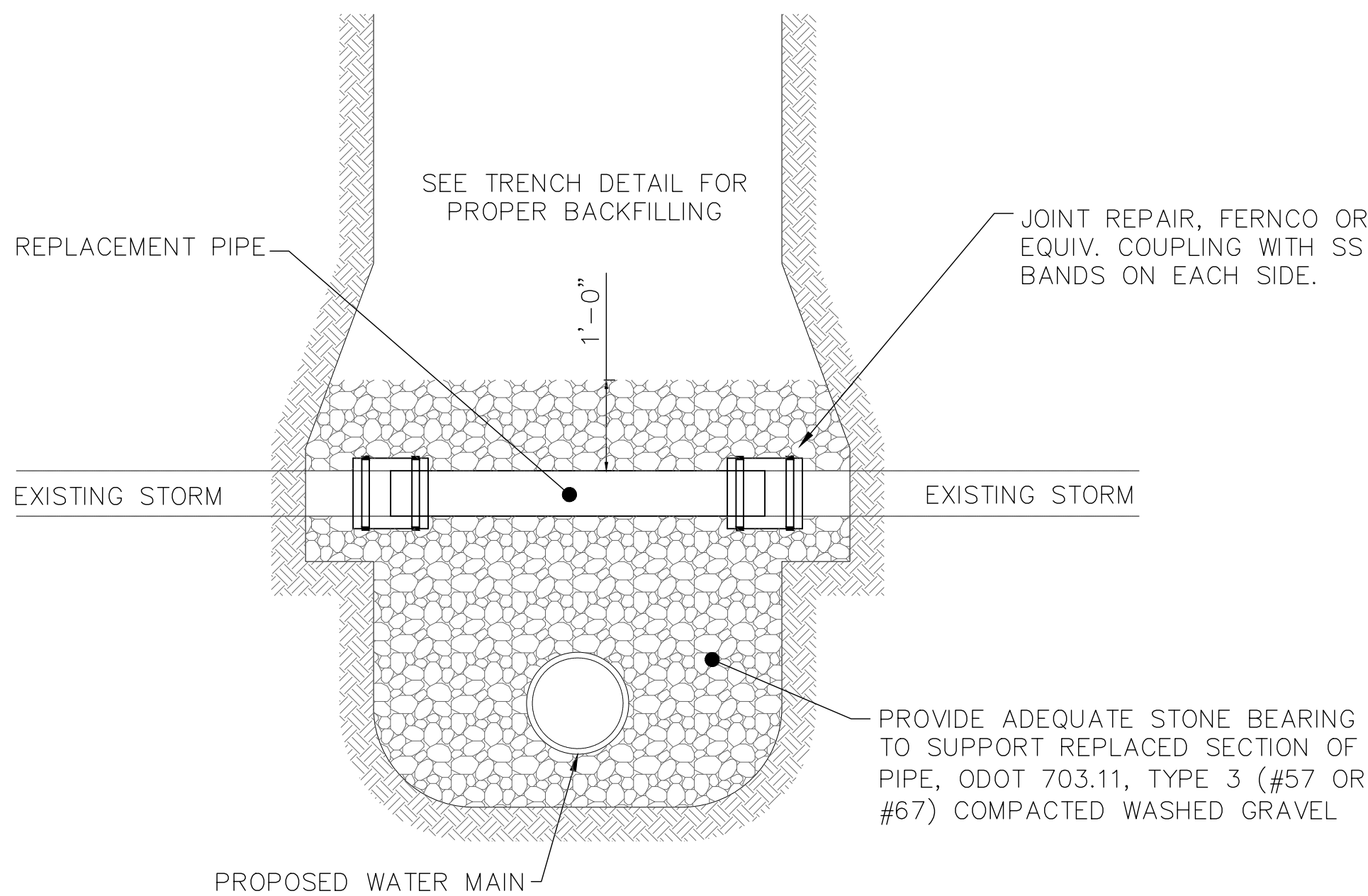
- CONCRETE AND WORK SHALL MEET THE REQUIREMENTS SET FORTH IN ODOT QC FS AT DRIVEWAYS AND QC MISC. EVERYWHERE ELSE (CEMENT ONLY - NO POZZOLAN MATERIAL).
- CURBING SHALL HAVE CONTRACTION JOINTS EVERY 10'.
- MINIMUM OF 6" OF ODOT 304 SHALL BE PLACED UNDER CURBING.
- CURBING SHALL BE BACKFILLED IMMEDIATELY AFTER FORMS ARE REMOVED.
- PROVIDE BROOM FINISH AND EDGING TO ALL EXPOSED SURFACES.
- APPLY WHITE PIGMENT CURING COMPOUND OR APPROVED EQUIVALENT PER MANUFACTURERS RECOMMENDATION ON ALL SURFACES INCLUDING BACK IMMEDIATELY AFTER FINISHING SURFACES.
- 1/2" PREMOLDED EXPANSION JOINTS SHALL BE CONSTRUCTED EACH SIDE OF DRIVE APPROACH SECTIONS AND AT P.C. POINTS, AT INTERSECTIONS, AND AT 100' MAX. INTERVALS.

- 1 EXPANSION JOINT MATERIAL AND JOINT SEALER ARE NOT REQUIRED FOR THE PORTION OF THE CURB THAT IS ADJACENT TO A FLEXIBLE PAVEMENT TYPE. BOTH MATERIALS ARE REQUIRED, AS DETAILED, FOR THE FULL HEIGHT OF RIGID PAVEMENT AND CONCRETE BASES.

MODIFIED ODOT TYPE 6 CURB

REVISIONS:

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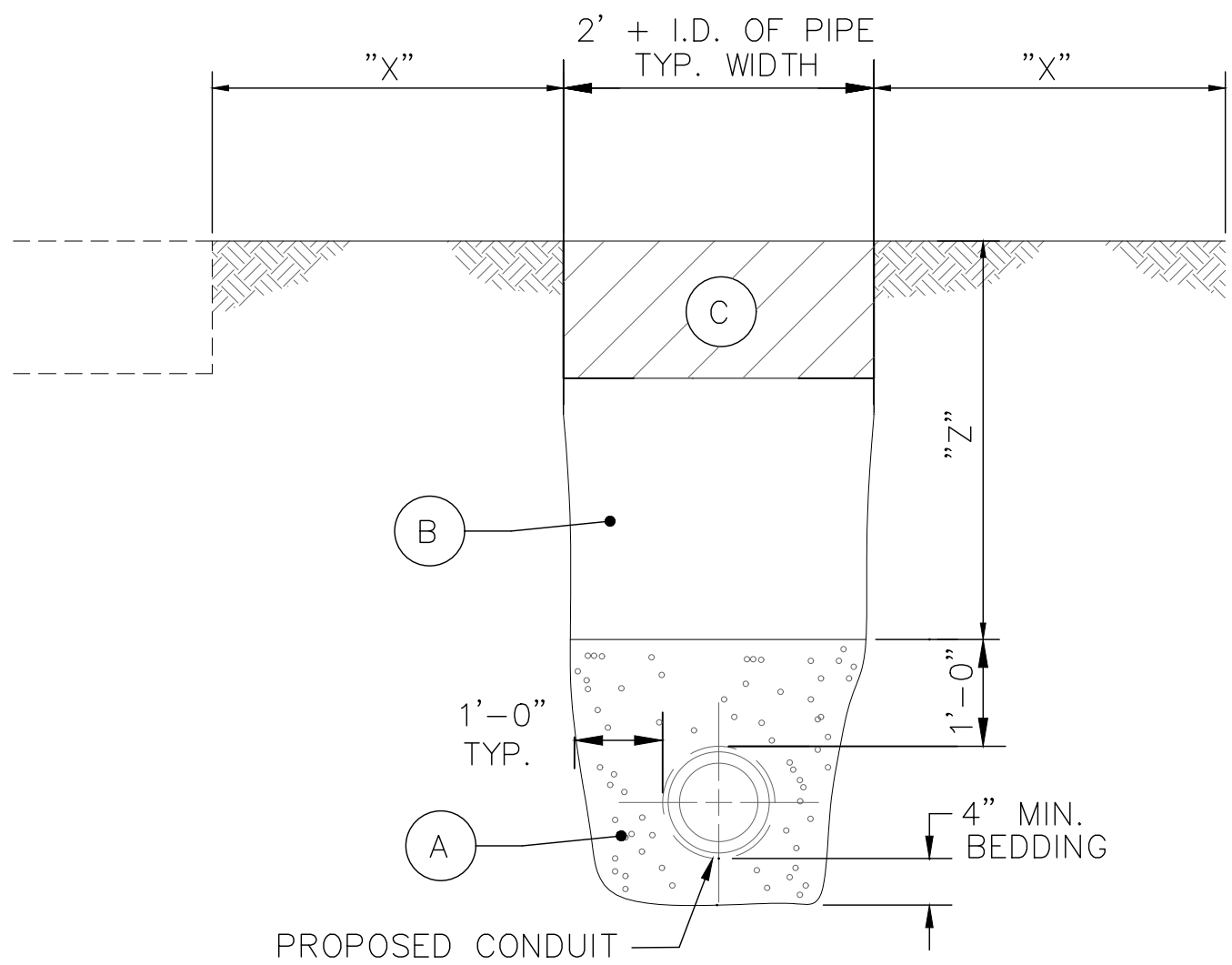
REPAIR OF EXISTING STORM OR SANITARY PIPE DETAIL

NOTES

- CONCRETE REPAIRS OR PATCHES ARE UNACCEPTABLE.
- ANY DRAINAGE TILE, STORM SEWER OR SANITARY SEWER DAMAGED BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR TO A CONDITION EQUAL TO OR BETTER THAN ITS ORIGINAL CONDITION. ANYTHING REMOVED, REPLACED, AND/OR CONNECTED TO THE STORM SEWER OR SANITARY SEWER SHALL BE NOTED ON THE AS-BUILT DRAWINGS AND SHALL BE INSPECTED BY THE INSPECTOR BEFORE THEY ARE COVERED.
- ALL FIELD OR STORM DRAINS WHICH ARE ENCOUNTERED DURING CONSTRUCTION SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS OR PLUGGED AS APPROVED AND DIRECTED BY THE VILLAGE.
- WHERE WATER MAIN IS INSTALLED UNDER A SANITARY SEWER MAIN, 20' OF THE SANITARY SEWER MUST BE REPLACED WITH WATER MAIN GRADE MATERIAL, CENTERED ON THE WATER MAIN.
- ANY SANITARY SEWER OR SANITARY LATERAL DAMAGED DURING CONSTRUCTION MUST BE REPAIRED IMMEDIATELY.

"X"= DISTANCE FROM EDGE OF TRENCH TO EDGE OF CLOSEST PROPOSED OR EXISTING PAVEMENT, CURB, DRIVEWAYS, ALLEYS, STONE AREA OR WALKS.

"Z" = DISTANCE FROM TOP OF BEDDING TO FINISH SURFACE.



TRENCH DETAIL (STORM)

STORM SEWER REPAIR NOTE

ANY DRAINAGE CONDUIT DAMAGED OR REMOVED TO PROPERLY INSTALL THE WATER SERVICE SHALL BE REPLACED BY THE CONTRACTOR TO A CONDITION EQUAL TO OR BETTER THAN ITS ORIGINAL CONDITION. ALL CONDUIT REMOVED, REPLACED AND/OR CONNECTED TO THE STORM SEWER SHALL BE NOTED ON THE RECORD DRAWINGS AND SHALL BE INSPECTED BY THE COUNTY BEFORE IT IS COVERED. A CONCRETE COLLAR SHALL BE PROVIDED WHERE NEW STORM SEWER PIPE IS CONNECTED TO EXISTING PIPE. THE COST SHALL BE INCLUDED IN THE CONTINGENCY QUANTITIES BELOW.

ALL WORK SHALL BE PER CLERMONT COUNTY WATER RESOURCES DEPARTMENT SPEC. 1160.

SANITARY LATERAL REPAIR NOTE

ANY SANITARY LATERAL DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO CLERMONT COUNTY WATER RESOURCES REQUIREMENTS.

STORM TRENCH DETAIL NOTES

- GRANULAR BEDDING SHALL BE CRUSHED STONE OR GRAVEL, ODOT 703.11 TYPE 3 (#57 OR #67), OR OTHER APPROVED EQUIVALENT.
- ALL TRENCHES WHERE "X" IS GREATER THAN "Z" FOR PROPOSED OR EXISTING PAVEMENT, CURB, DRIVEWAYS, ALLEYS, STONE AREA OR WALKS CAN BE COMPACTED EXISTING NATIVE MATERIAL IN 12" MAXIMUM LIFTS OR AS APPROVED BY THE TOWNSHIP. NO MATERIAL SHALL BE USED FOR BACK FILLING THAT CONTAINS STONE, ROCKS, ETC., GREATER THAN 4" DIAMETER.

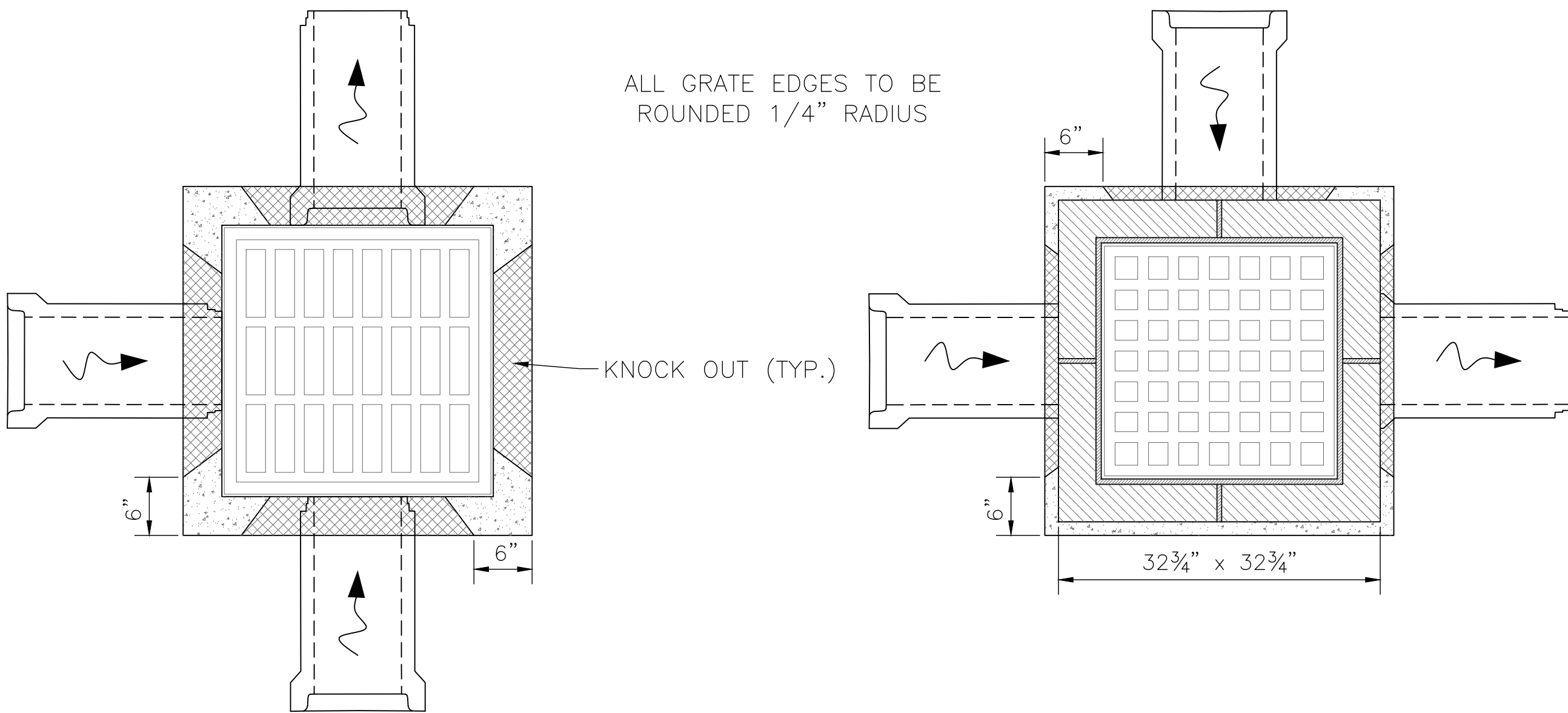
ALL TRENCHES WHERE "Z" IS GREATER THAN "X" FOR PROPOSED OR EXISTING PAVEMENT, CURB, DRIVEWAYS, ALLEYS, STONE AREA OR WALKS SHALL BE COMPACTED WITH GRANULAR BACKFILL MATERIAL ODOT 703.11 TYPE 1 OR TYPE 2, IN 6" MAXIMUM LIFTS OR LOW STRENGTH MORTAR BACKFILL ODOT ITEM 613 TYPE 1 UNTIL THE TOP OF THE COMPACTED GRANULAR BACKFILL OR LOW STRENGTH MORTAR BACKFILL IS HIGH ENOUGH WHERE "X" IS GREATER THAN "Z".

A DENSITY TEST ON GRANULAR BACKFILL OF 98% OF ASTM D698 STANDARD PROCTOR CURVE MAYBE REQUIRED TO BE PERFORMED BY A COMMERCIAL TESTING LAB SATISFACTORY TO THE TOWNSHIP.

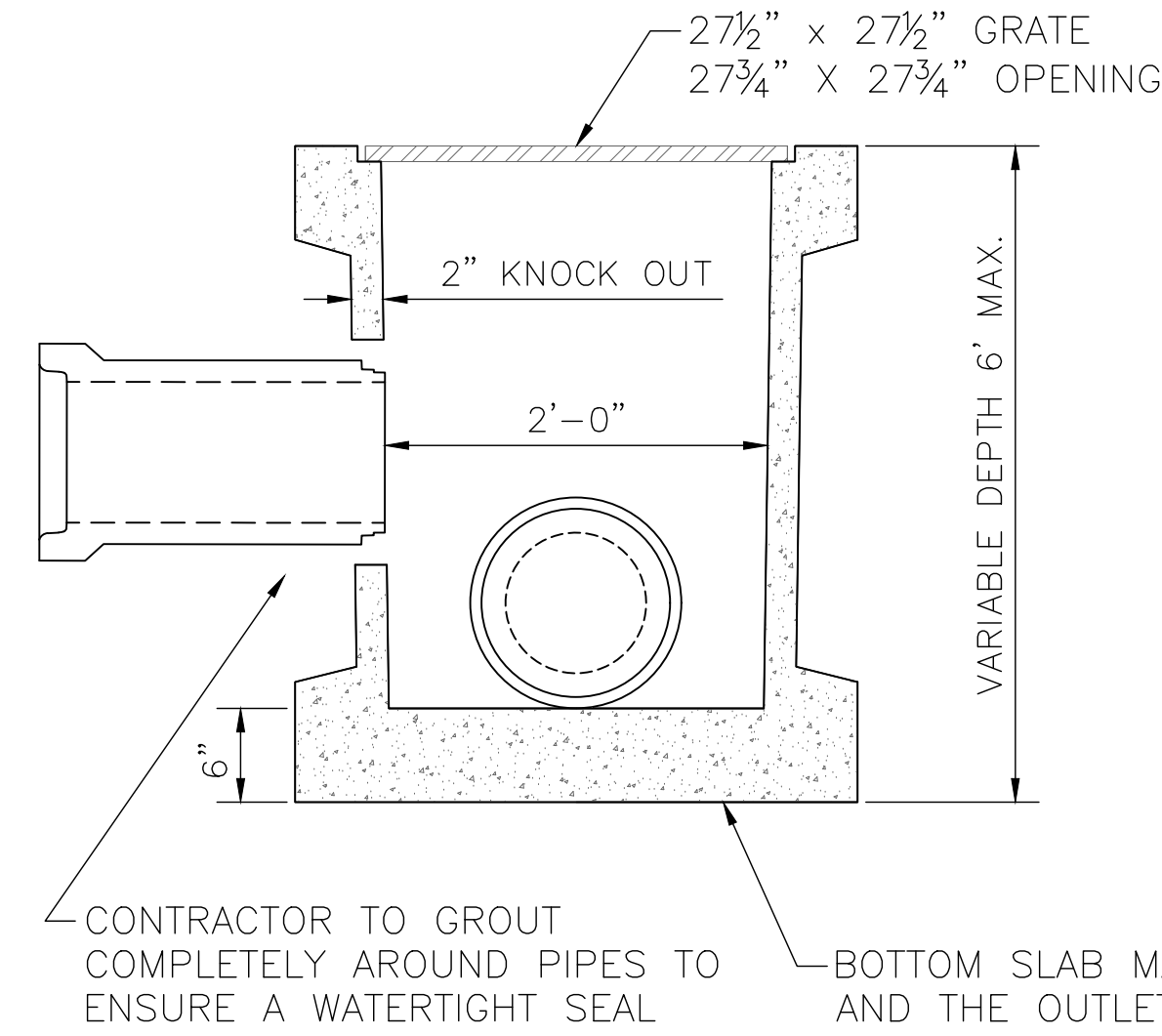
- OFF-PAVEMENT AREAS SHALL BE PROVIDED WITH A MINIMUM OF 6" OF TOPSOIL OVER THE COMPACTED MATERIAL AND THEN SEEDDED AND MULCHED PER ODOT ITEM 659.

IN-PAVEMENT AREAS SHALL FOLLOW TYPICAL PAVEMENT RESTORATION DETAILS SHOWN ON PAGE 2.

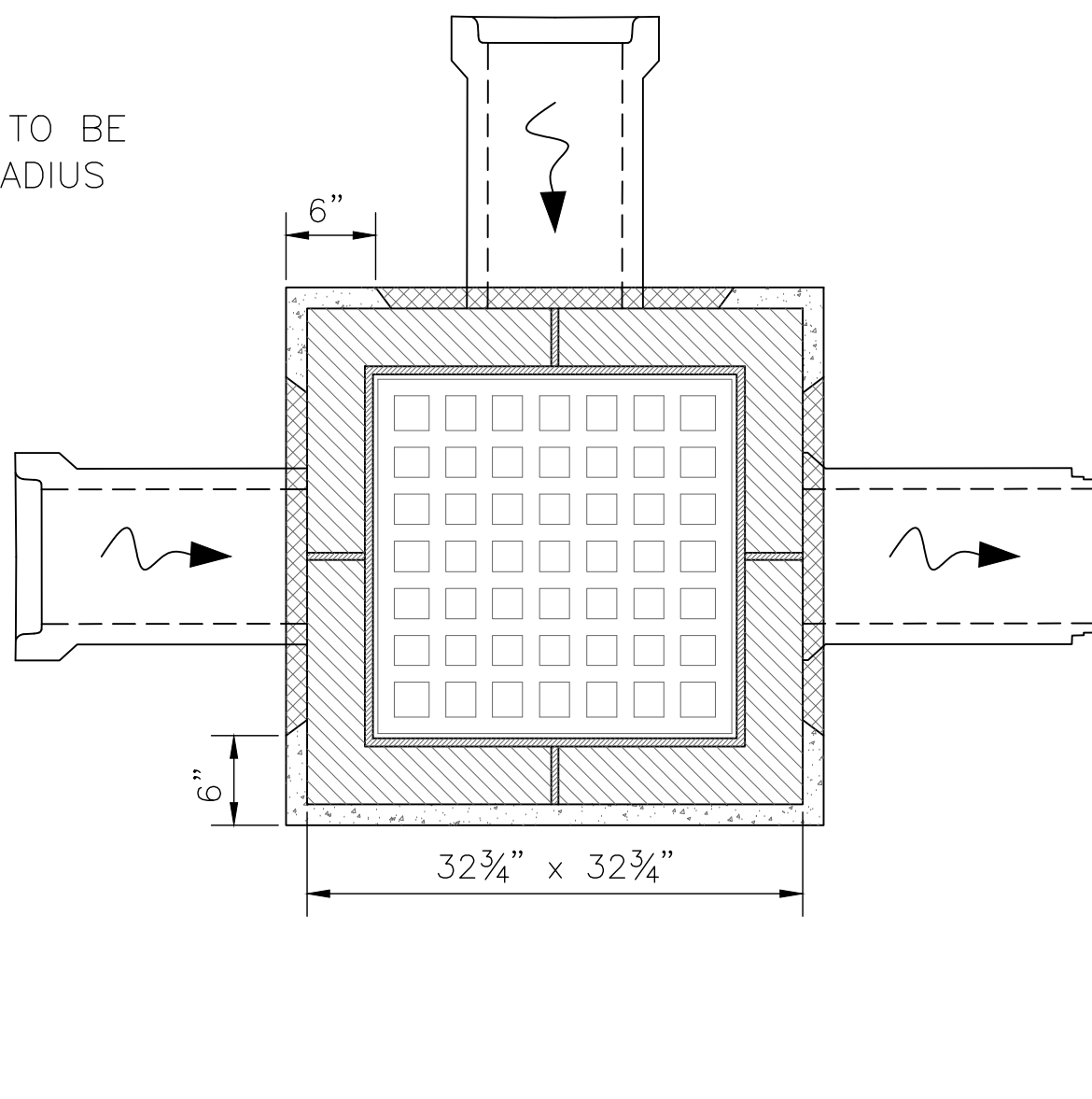
- THE OPEN ENDS OF ALL PIPES SHALL BE PLUGGED TO THE APPROVAL OF THE TOWNSHIP BEFORE LEAVING THE WORK FOR THE NIGHT.



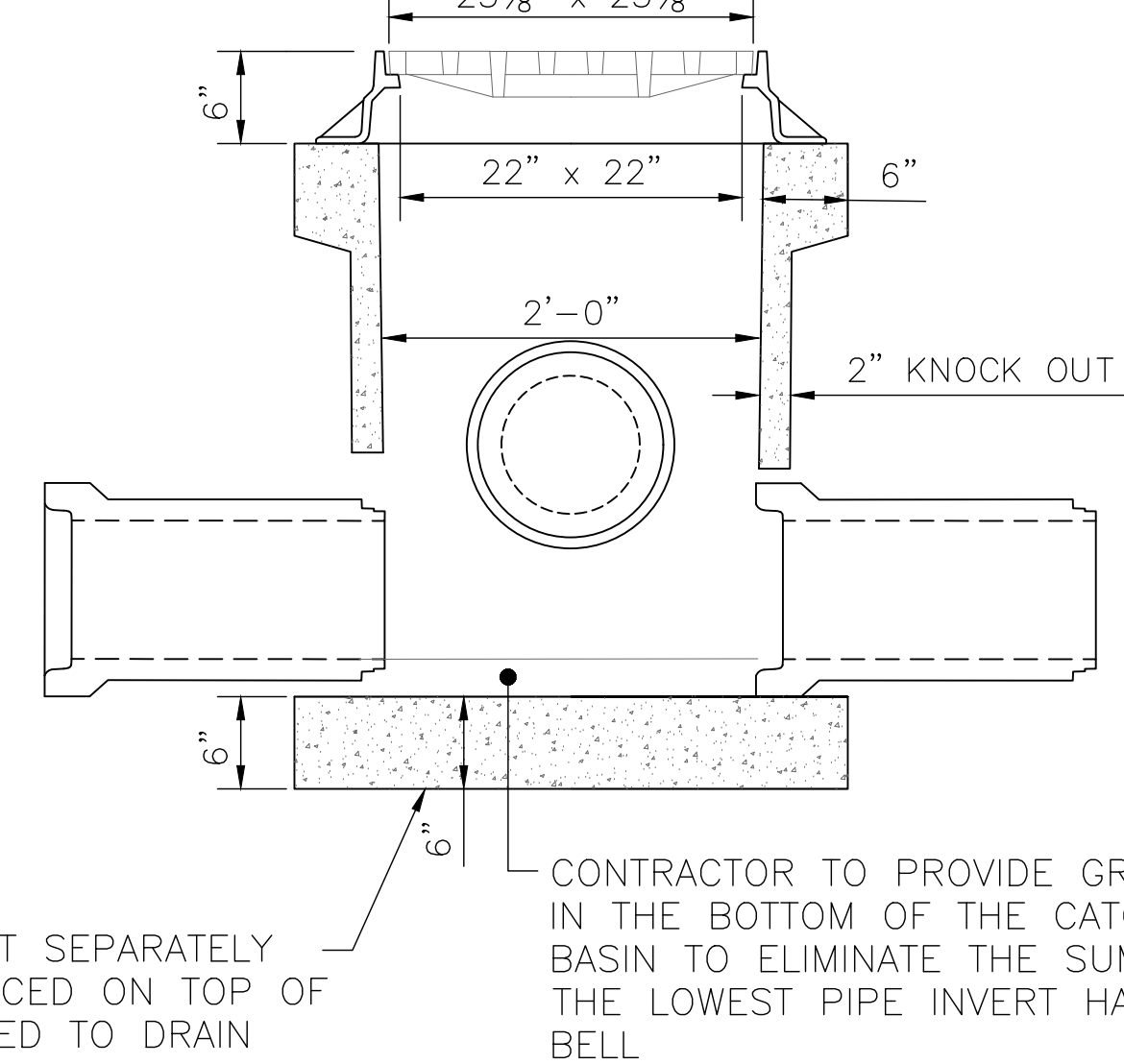
PLAN VIEW



NON-PAVED AREAS



PLAN VIEW



PAVED AREAS

NOTES

- LOCATION AND ELEVATIONS WHEN GIVEN ON THE PLANS IS TOP CENTER OF THE GRATE. WHEN SIDE OPENINGS ARE PROVIDED, ELEVATION SHALL BE THE FLOW LINE OF THE SIDE INLET.
- GRATE FOR NON-PAVED AREAS SHALL BE EAST JORDAN IRON WORKS 5110 TYPE M3 OR NEENAH CATALOG NO. R-4859-C OR EQUIVALENT.
- GRATE ELEVATION TO BE PLACED 4" TO 6" BELOW NORMAL DITCH RETURNING TO NORMAL 10' EACH SIDE OF BASIN.
- PRECAST CONSTRUCTION IS REQUIRED, UNLESS OTHERWISE APPROVED, AND CONCRETE SHALL MEET THE REQUIREMENTS OF 706.13 WITH 6±+2% AIR VOID CONTENT IN THE HARDENED CONCRETE. KNOCKOUTS CAN BE PROVIDED IN PRECAST CONSTRUCTION. PRECAST WALLS SHALL HAVE A SUFFICIENT AMOUNT OF REINFORCEMENT TO PERMIT SHIPPING AND PLACEMENT WITHOUT DAMAGE.
- CATCH BASINS NOT PERMITTED IN PAVEMENT AREAS UNLESS USING A FRAME AND GRATE EQUIVALENT OF NEENAH CATALOG NO. R-3405 OR EAST JORDAN IRON WORKS NO. 5250.
- FOR PIPES OVER 18" REFER TO ODOT CATCH BASIN 2-3 AND 2-4. FOR SIDE INLETS REFER TO ODOT CATCH BASIN 2-2A.
- CARE SHALL BE TAKEN WHEN CONNECTING TO AN EXISTING CATCH BASIN TO KEEP OPENING AS MINIMAL AS POSSIBLE. IF POSSIBLE, SAW CUT OR USE ROTARY HAMMER FOR OPENING TO MINIMIZE DAMAGE TO CATCH BASIN. PIPE TO INTRUDE INTO CATCH BASIN 1" ONLY AND PIPE MUST BE CUT PARALLEL TO CATCH BASIN. USE NONSHRINK GROUT AROUND PIPE TO SEAL BETWEEN PIPE AND CATCH BASIN.

2-2B CATCH BASIN

REVISIONS:

FILE NAME
GND
DRAWN BY
JSM
CHECKED BY
NNS
PROJECT No.
CLEMIA2107
DATE
12/12/2022
SHEET NUMBER

GENERAL NOTES

GENERAL: ALL WORK AND MATERIALS SHALL CONFORM TO THE LATEST RULES AND REGULATIONS OF THE CLERMONT COUNTY WATER RESOURCES DEPARTMENT FOUND AT WRD.CLERMONTCOUNTYOHIO.GOV. IT IS THE INTENT OF THESE CONSTRUCTION DRAWINGS AND SPECIFICATIONS TO DESCRIBE A COMPLETE FUNCTIONING SYSTEM IN ALL RESPECTS, WHETHER OR NOT EVERY SUB-ELEMENT OF THE TOTAL SYSTEM IS ACTUALLY DEFINED IN WRITING AND/OR DETAIL. PAYMENT TO THE CONTRACTOR(S) SHALL BE INFERRED TO COVER WORK AND MATERIALS REQUIRED FOR A COMPLETE FUNCTIONING SYSTEM SUCH THAT WHEN FINAL PAYMENT IS MADE, THE SYSTEM IS COMPLETELY OPERABLE AND FUNCTIONS IN ALL RESPECTS AS REQUIRED BY THE CONTRACT DOCUMENTS.

THE WORK TO BE PERFORMED UNDER THESE SPECIFICATIONS INCLUDES FURNISHING ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE THE WORK CALLED FOR IN THE CONTRACT DOCUMENTS.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY ELECTRIC, WATER, SANITARY FACILITIES AND WASTE DISPOSAL TO COMPLETE THE WORK.

A SITE VISIT IS HIGHLY RECOMMENDED PRIOR TO SUBMISSION OF BID.

THE EXISTING WATER MAIN IS SHOWN BASED ON FIELD SURVEYS AND THE BEST AVAILABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE START OF WORK.

THE EXISTING WATER MAIN IS TO REMAIN IN SERVICE DURING CONSTRUCTION OF THE NEW WATER MAIN.

THE PROPOSED WATER MAIN SHALL BE INSTALLED AT A MINIMUM 4' BELOW THE PROPOSED GRADE OR AS DIRECTED BY THE ENGINEER.

CONTRACTOR IS RESPONSIBLE TO PROVIDE SUPPORT TO THE EXISTING UTILITY POLES, AS NECESSARY TO COMPLETE THE WORK CALLED FOR IN THE CONTRACT DRAWINGS AND SPECIFICATIONS.

PAVEMENT: ALL PAVEMENT AND/ROADWAY SURFACE DISTURBED BY THE CONTRACTOR, SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND IN CONFORMANCE WITH THE REGULATIONS OF THE GOVERNING AUTHORITY OF SAID ROADWAYS. IN THE ABSENCE OF SUCH REGULATIONS, THE RESTORATION SHALL BE IN ACCORDANCE WITH INSTRUCTIONS BY THE OWNER'S REPRESENTATIVE WITH THE OBJECTION OF RESTORING THE PAVING OR ROADWAY SURFACE TO THE ORIGINAL CONDITION OF SAME.

RESTORATION: TEMPORARY RESTORATION AND RESTORATION OUTSIDE OF THE LIMITS OF THIS CONSTRUCTION PROJECT ARE THE RESPONSIBILITY OF THE CONTRACTOR. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE TO VIDEO TAPE AND PHOTOGRAPH ALL AREAS THAT WILL BE DISTURBED AS A RESULT OF HIS CONSTRUCTION ACTIVITIES AND WILL DELIVER TO THE OWNER'S REPRESENTATIVE A COPY OF THE VIDEO TAPE AND PHOTOGRAPHS. ALL PICTURES SHALL BE LABELED WITH THE LOCATION WHERE TAKEN. NONCOMPLIANCE MAY RESULT IN THE CONTRACTOR'S LIABILITY FOR ALL DISPUTED PROPERTY RESTORATIONS.

EROSION CONTROL: THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY TO COMPLETE THE WORK AS OUTLINED IN THESE DRAWINGS AND PROJECT SPECIFICATIONS AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. THIS WORK SHALL INCLUDE THE TIME FOLLOWING THE THIRD PARTY RESTORATION. ALL WORK SHALL BE PREFORMED IN ACCORDANCE WITH THE CLERMONT COUNTY WATER MANAGEMENT AND SEDIMENT CONTROL REGULATIONS AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE

UTILITIES: THE EXISTENCE, LOCATION, AND CONDITION OF UTILITIES AND STRUCTURES, BOTH ABOVE AND BELOW GROUND, SHALL BE INVESTIGATED AND VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE STARTING WORK. EXCAVATION IN THE VICINITY OF SUCH UTILITIES AND STRUCTURES, SHALL BE DONE CAREFULLY AND BY HAND IF NECESSARY. THE CONTRACTOR SHALL PROTECT ALL SUCH UTILITIES AND STRUCTURES, BOTH MARKED AND UNMARKED, AND BE HELD RESPONSIBLE FOR DAMAGE TO SAME. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ISOLATE, BRACE, SUPPORT, SHEET, ETC. AND PROTECT THE EXISTING UTILITIES FROM MOVING EITHER HORIZONTALLY OR VERTICALLY. IF SUCH MOVEMENT DOES OCCUR DUE TO THE CONTRACTOR'S OPERATIONS, HE SHALL REPAIR THE UTILITY TO THE SATISFACTION OF THE UTILITY OWNER AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO ALL OWNERS OF ADJACENT UTILITIES, FIXTURES, AND/OR PROPERTY, OF HIS IMPENDING OPERATIONS, BUT IN NO WAY SHALL SUCH NOTICE RELIEVE THE CONTRACTOR OF HIS LIABILITY FOR DAMAGES TO SAID UTILITIES, FIXTURES, AND/OR PROPERTY. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS IN ADVANCE OF EXCAVATION IN THE VICINITY OF SAID UTILITY. FIELD LOCATION SHALL BE MADE BY THE UTILITY OR ITS AUTHORIZED AGENCY BEFORE ANY WORK IS PERFORMED BY THE CONTRACTOR. IF AT ANYTIME DURING WORK, AN EXISTING UTILITY IS DAMAGED IN ANY WAY, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE APPROPRIATE GOVERNING ENTITY AND THE OWNER'S REPRESENTATIVE.

WATER MAIN SHUT DOWNS AND SCHEDULING –

- ALL WATER MAIN SHUT DOWNS SHALL BE COMPLETED DURING NIGHTTIME HOURS (GENERALLY 9:00 PM TO 6:00 AM)
- 1 WEEK TO PLAN, MINIMUM
- 48 HOURS NOTICE TO AFFECTED CUSTOMERS REQUIRED PRIOR TO SHUTDOWNS
- CONTRACTOR REQUIRED TO DISTRIBUTE THE SHUT DOWN NOTICES PROVIDED BY THE OWNER

TESTING AND DISINFECTION OF WATER MAIN: THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY TO DISINFECT THE COMPLETE WATER PIPE LINE IN ACCORDANCE WITH AWWA C-651 AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ALL PIPING AND APPURTANCES MUST BE PROPERLY DISINFECT WITH A MINIMUM OF 50 MILLIGRAMS PER LITER TOTAL CHLORINE RESIDUAL FOR 48 HOURS. THE PIPING MUST BE FLUSHED TO REMOVE ANY EXCESS CHLORINE. CHLORINE SOLUTION SHALL BE EVENLY APPLIED AND DISTRIBUTED THROUGHOUT THE PIPING.

A HYDROSTATIC TEST AS REQUIRED IN SECTION 4 OF THE STANDARD AWWA SPECIFICATIONS C-600 SHALL BE APPLIED TO INDIVIDUAL VALVED-OFF SECTIONS OF THE MAINS AND FIRE HYDRANT LEADS EITHER BEFORE OR AFTER THE TRENCH IS BACKFILLED. THE PRESSURE DURING THE TEST SHALL BE MAINTAINED AT 200 PSI, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE, IN ANY SECTION BEING TESTED. THE DURATION OF EACH TEST SHALL BE AT LEAST TWO HOURS. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, MAKE ALL TAPS OR CONNECTIONS REQUIRED, AND PROVIDED ANY NECESSARY PIPING AND ALL NECESSARY ASSISTANCE FOR CONDUCTING THE TEST.

THE ONLY EXCLUSION OF TESTING IS TIE IN PIPING LESS THAN 18' IN LENGTH. IN THIS CASE, THE PIPE WILL BE SWABBED OR SPRAY DISINFECTED WITH CHLORINE SOLUTION, IN ACCORDANCE WITH AWWA C-657.

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SPECS FOR PIPE, BENDS, VALVES AND APPURTANCES: DUCTILE IRON PIPE SHALL BE DUCTILE, CENTRIFUGALLY CAST TYPE IN ACCORDANCE WITH ANSI A21.51 (AWWA C-151) UNLESS OTHERWISE NOTED. FOR ALL IN-GROUND INSTALLATIONS THE PRESSURE CLASS SHALL BE CLASS 52, UNLESS A HIGHER CLASS IS REQUIRED BY LAYING CONDITIONS OR PRESSURE IN ACCORDANCE WITH ANSI A21.50 AND APPROVED BY THE OWNER'S REPRESENTATIVE. ALL DUCTILE PIPES SHALL HAVE BITUMINOUS COATED CEMENT LINING COMPLYING WITH AWWA C-104 AND SHALL HAVE AN OUTSIDE COATING OF BITUMASTIC ENAMEL OR APPROVED EQUAL. ALL DUCTILE IRON PIPES SHALL BE PROVIDED WITH EITHER MECHANICAL JOINT ENDS OR PUSH-ON JOINTS ENDS. ALL FITTINGS, WALL PIPES AND SPECIALS SHALL BE OF DUCTILE IRON OR IN ACCRODANCE WITH ANSI A21.10 (AWWA C-153). ALL FITTINGS SHALL HAVE A BITUMINOUS COATED CEMENT LINING COMPLYING WITH AWWA C-104 AND SHALL HAVE AN OUTSIDE COATING COMPLYING WITH AWWA C-153 OR AN EPOXY COATING COMPLYING WITH AWWA C-116. ALL DUCTILE IRON FITTINGS SHALL BE PROVIDED WITH AND ASSEMBLED USING MECHANICAL JOINT ENDS AND RETAINER GLANDS. CONCRETE THRUST BLOCKING, SUPPORTS AND/OR BUTTRESSES SHALL BE PROVIDED AT ALL TEES AND BENDS AND AT ANY OTHER LOCATIONS REQUIRED BY THE DISTRICT. THESE CONCRETE STRUCTURES SHALL BE BUILT TO THE LINES, GRADES AND DIMENSIONS SHOWN ON THE STANDARD DRAWINGS. CONCRETE USED FOR BLOCKING SHALL CONFORM TO CLASS C CONCRETE, HAVING A COMPRESSIVE STRENGTH OF 4,000 POUNDS PER SQUARE INCH. ALL CONCRETE SHALL BE MIXED BY MECHANICAL MEANS PRIOR TO INSTALLATION. THE INSTALLATION OF DRY CONCRETE WILL NOT BE PERMITTED.

PIPE JOINTS RESTRAINTS SHALL BE FIELD LOK GASKET, AMERICAN FAST GRIP, OR APPROVED EQUAL AS DETERMINED BY OWNER'S REPRESENTATIVE, EXCEPT AS MODIFIED HEREIN. ALL FIRE HYDRANT LEADS AND FIRE HYDRANT ASSEMBLIES SHALL BE RESTRAINED USING MEGALUG SERIES 1100 MECHANICAL JOINT RESTRAINT OR SIGMA CORPORATION ONE-LOCK SERIES SLDE MECHANICAL JOINT RESTRAINT FOR DUCTILE IRON PIPE OR APPROVED EQUAL AS DETERMINED BY OWNER'S REPRESENTATIVE.

POLYETHYLENE ENCASEMENT SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C105/A21.5 METHODS A OR B AND THE COUNTY'S SPECIFICATIONS. THE POLYETHYLENE ENCASEMENT SHALL BE A LOW-DENSITY POLYETHYLENE FILM MADE FROM VIRGIN LOW-DENSITY POLYETHYLENE RAW MATERIAL CONFORMING TO ASTM D4976 AND SHALL BE A MINIMUM OF EIGHT MILS IN THICKNESS.

GATE VALVES: ALL GATE VALVES SHALL CONFORM TO AWWA C-509 OR C-515 EXCEPT AS MODIFIED HEREIN. NEW GATE VALVES SHALL BE FULLY ENCAPSULATED RESILIENT WEDGE, NON-RISING STEM, LEFT HAND OPEN (COUNTER CLOCKWISE), AND SHALL HAVE RUBBER "O"-RING, PACKING SEALS AND MECHANICAL JOINT ENDS WITH A 250 PSI PRESSURE RATING, UNLESS OTHERWISE APPROVED BY THE OWNER'S REPRESENTATIVE. THE INTERNAL VALVE COATING SHALL BE IN ACCORDANCE WITH AWWA-C550. APPROVED MODELS ARE: AMERICAN FLOW CONTROL SERIES 2500, MUELLER 2362, US PIPE A-USP2, M&H 4067, M&H 7000, KENNEDY KS-RW, AND CLOW MODEL 2638. VALVE BOXES SHALL BE EQUAL TO F-2450 SERIES AS MANUFACTURED BY CLOW CORP OR SIGMA CORPORATION VB261-8. VALVE BOX ASSEMBLY SHALL BE OF CAST IRON WITH STAY PUT COVER AND PROPERLY SIZED BASE FOR THE VALVE BEING FITTED. COVER SHALL BE MARKED "WATER". ALL BOXES SHALL BE FURNISHED WITH THE NECESSARY EXTENSIONS TO BRING THE TOP OF THE BOX TO THE FINISHED GRADE.

BUTTERFLY VALVES: ALL BUTTERFLY VALVES SHALL CONFORM TO THE AWWA STANDARD SPECIFICATION FOR RUBBER SEATED BUTTERFLY VALVES; DESIGNATION AWWA C-504 OF THE LATEST REVISION EXCEPT AS MODIFIED HEREIN. VALVES SHALL BE SUITABLE FOR FLOW IN EITHER DIRECTION AND SHALL BE BUBBLE TIGHT IN EITHER DIRECTION. WAFER VALVES SHALL NOT BE ACCEPTABLE. INTERNAL VALVE COATING SHOULD BE IN ACCORDANCE WITH AWWA-C550. VALVES SHALL BE AWWA CLASS 250B DESIGNED FOR 250 PSI NON-SHOCK SHUT-OFF PRESSURE. VALVES AND APPURTENANCES, INCLUDING OPERATORS, SHALL BE CAST IRON SUITABLE FOR BURIED AND SUBMERGED SERVICE. VALVES FOR USE WITH DUCTILE IRON PIPE SHALL HAVE MECHANICAL JOINT ENDS FURNISHED WITH HIGH STRENGTH CAST IRON TEE HEAD BOLTS AND HEX NUTS, AND RUBBER GASKETS. BODIES SHALL BE CAST IRON CONFORMING TO ASTM A126, CLASS B, OR ASTM A48, CLASS 40, OR DUCTILE IRON CONFORMING TO ASTM A536 GRADE 65-45-12 OR 70-50-05. UNLESS OTHERWISE APPROVED, SHAFTS SHALL BE STAINLESS STEEL CONFORMING WITH ASTM A276, TYPE 304, OR ASTM 564, TYPE 630, OR MONEL, TURNED, GROUND AND POLISHED. SHAFTS SHALL BE SECURED TO THE VALVE DISC BY A PROCESS SUCH AS BOLTING, RIVETING, THREADING, UPSETTING, OR CROSS-PINNING, USING CORROSION-RESISTANT METALS. CHEMICAL POLYETHYLENE, ADHESIVES, OR WELDING SHALL NOT BE USED.

VALVES SHALL BE DESIGNED TO SEAT AT 90 DEGREES TO THE PIPE AXIS AND SHALL BE CONSTRUCTED OF CORROSION-RESISTANT MATERIALS. SEATS SHALL BE OF A RUBBER COMPOUND COMPLYING WITH THE REQUIREMENTS OF AWWA C-504. RUBBER SEATS SHALL BE ON THE BODY. OPERATORS SUITABLE FOR BURIED AND SUBMERGED SERVICE SHALL BE FURNISHED WITH EACH VALVE.

OPERATORS SHALL BE DESIGNED TO PRODUCE THE SPECIFIED OUTPUT TORQUE WITH A MAXIMUM INPUT TORQUE OF 150 FOOT-POUNDS APPLIED TO THE OPERATING NUT. OPERATORS SHALL BE TRAVELING NUT TYPE. THE TOTAL NUMBER OF TURNS APPLIED TO THE WRENCH NUT REQUIRED TO COMPLETELY OPEN (CLOSE) THE VALVE FROM COMPLETELY CLOSED (OPEN) POSITION SHALL BE NOT LESS THAN TWICE THE NOMINAL VALVE DIAMETER IN INCHES FOR VALVES LESS THAN 16 INCHES IN DIAMETER AND SHALL BE NOT LESS THAN 30 TURNS FOR 16 INCH AND LARGER VALVES. ALL OPERATORS SHALL BE FOR LEFT-HAND (COUNTER CLOCKWISE) OPENING.

APPROVED BUTTERFLY VALVES ARE: DEZURIK-250B, MUELLER LINESEAL XP11-250B, HENRY PRATT COMPANY-MODEL HP-2501I, AND KENNEDY CLASS 250B.

VALVE BOXES SHALL BE EQUAL TO F-2450 SERIES AS MANUFACTURED BY CLOW CORP OR SIGMA CORPORATION VB261-8. VALVE BOX ASSEMBLY SHALL BE OF CAST IRON WITH STAY PUT COVER AND PROPERLY SIZED BASE FOR THE VALVE BEING FITTED. COVER SHALL BE MARKED "WATER". ALL BOXES SHALL BE FURNISHED WITH THE NECESSARY EXTENSIONS TO BRING THE TOP OF THE BOX TO THE FINISHED GRADE.

WATER SERVICE, FITTINGS, AND METER SETTING:

DIRECT TAPS ARE TO BE USED FOR ¾" CONNECTIONS, TAPPING SADDLES ARE TO BE USED FOR CONNECTIONS LARGER THAT ¾". TAPPING SADDLES SHALL BE MANUFACTURED FOR THE FORD 4 METER BOX COMPANY STYLE 202BS WITH STAINLESS STEEL STRAP AND BRASS BODY WITH CC THREAD OUTLET.

CORPORATION STOPS – APPROVED CORPORATION STOPS SHALL BE:

- ¾" AND 1" – FORD METER BOX COMPANY F1000-6-G-NL
- 1-½" – FORD METER BOX COMPANY FB1000-6-G-NL
- 2" – FORD METER BOX COMPANY FB1000-7-G-NL

WATER SERVICE LINES, WHICH EXTEND FROM THE WATER MAIN TO 3' BEYOND THE METER, SHALL BE TYPE "K" COPPER CONFORMING TO ASTM B-88 SPECIFICATIONS.

METER BOXES SHALL BE:

- ¾" METER – OLD CASTLE HEAVY WALL METER PIT 0020-30 B BODY B-W 2 MSHI
- 1" METER– OLD CASTLE HEAVY WALL METER PIT 0020-30 BODY B-W 2 MSHI " AND
- 1-½" AND 2"– OLD CASTLE HEAVY WALL METER PIT 0030-30 B BODY B-W 2 MSHI OR APPROVED EQUAL.

ALL METERS USED IN THE CLERMONT COUNTY WATER RESOURCES DEPARTMENT DISTRIBUTION SYSTEM MUST BE PURCHASED FROM THE WATER RESOURCES DEPARTMENT AND INSTALLED ACCORDING TO THE WATER RESOURCES DEPARTMENT STANDARD DRAWINGS. WHERE EXISTING WATER SERVICES ARE BEING RELOCATED OR RECONNECTED, THE EXISTING WATER METER CAN BE RE-USED.

ANGLE VALVES FOR RELOCATED 5/8" X ¾" AND 1" WATER METERS SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE AND INSTALLED ACCORDING TO THE CLERMONT COUNTY WATER RESOURCES DEPARTMENT STANDARD DRAWINGS:

METER SIZE	ANGLED YOKE VALVE, W/PADLOCK WING	ANGLED CHECK VALVE
5/8" X ¾"	FORD AV94-323-WG-NL OR APPROVED EQUAL	FORD HA94-323-G-NL OR APPROVED EQUAL
1"	FORD AV94-323-WG-NL OR APPROVED EQUAL	FORD HA94-323-G-NL OR APPROVED EQUAL


THE EXISTING WATER METER, YOKE AND EXPANSION WHEEL ASSEMBLY SHALL BE RE-USED AND RE-INSTALLED BY THE CONTRACTOR.

METER ASSEMBLIES FOR 1-½" AND 2" DOMESTIC METERS SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE AND INSTALLED ACCORDING TO CLERMONT COUNTY WATER RESOURCES DEPARTMENT STANDARD DRAWINGS: 1-½" METERS– FORD VH76-18-11-66-G-NL, 2" METERS– FORD VH77-18-11-77-G-NL.

COMPRESSION FITTINGS USED FOR RELOCATED AND RECONNECTED WATER METERS SHALL BE FORD GRIP JOINT COUPLING (C44-XX-G-NL STYLE), FORD PACK JOINT COUPLING (C44-XX-NL STYLE), OR APPROVED EQUAL.

CONTRACTOR MUST SUBMIT LITERATURE AND/OR CATALOG CUT SHEETS FOR REVIEW AND APPROVAL PRIOR TO ORDERING OF ALL MATERIAL AND FITTINGS TO BE USED ASSOCIATED WITH THE INSTALLATION OF 2" AND SMALLER SIGNLE, DOMESTIC WATER SERVICES.

SUBMIT LITERATURE DETAILING THE CONSTRUCTION METHOD TO BE USED TO PROVIDE TRENCHLESS INSTALLATION OF WATER SERVICES FOR REVIEW AND APPROVAL. TRENCHLESS SERVICE LINE INSTALLATION IS REQUIRED FOR ALL SERVICES CROSSING PUBLIC ROADWAYS.

W 1-0	 CLERMONT COUNTY WATER RESOURCES DEPARTMENT 4400 HASKELL LANE BATAVIA, OHIO 45103	SCALE: N/A	GENERAL WATER NOTES	REVISION NO. 10	DATE 10/1/2013	BY JSM
		REVISION NO. 11		DATE 10/1/2013	BY JSM	
		REVISION NO. 12		DATE 10/1/2013	BY JSM	
		REVISION NO. 13		DATE 10/1/2013	BY JSM	
		REVISION NO. 14		DATE 10/1/2013	BY JSM	
				REVISION #1 -- GATE VALVES & BUTTERFLY VALVES		
				REVISION #2 -- TESTING OF WATER MAIN		

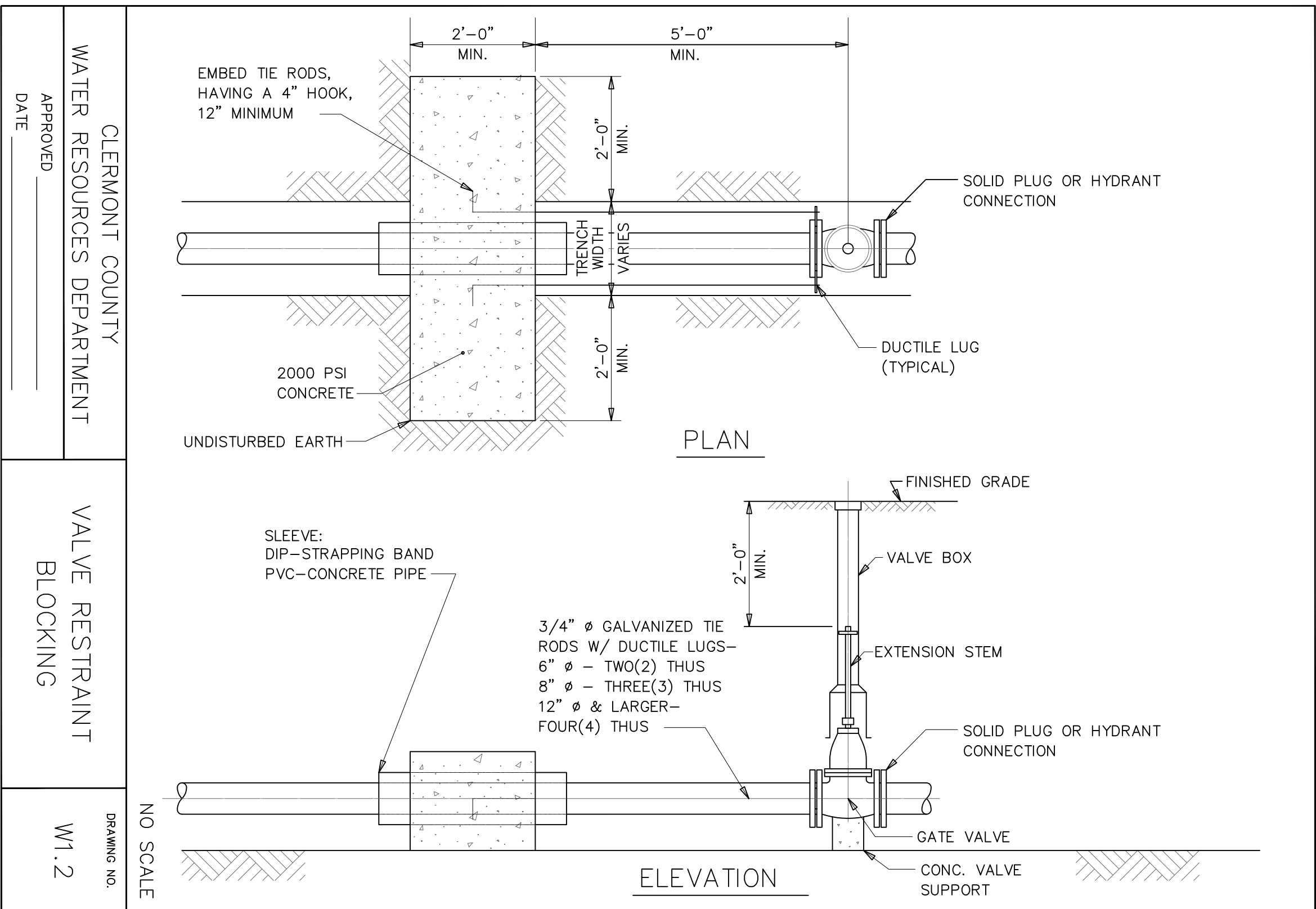
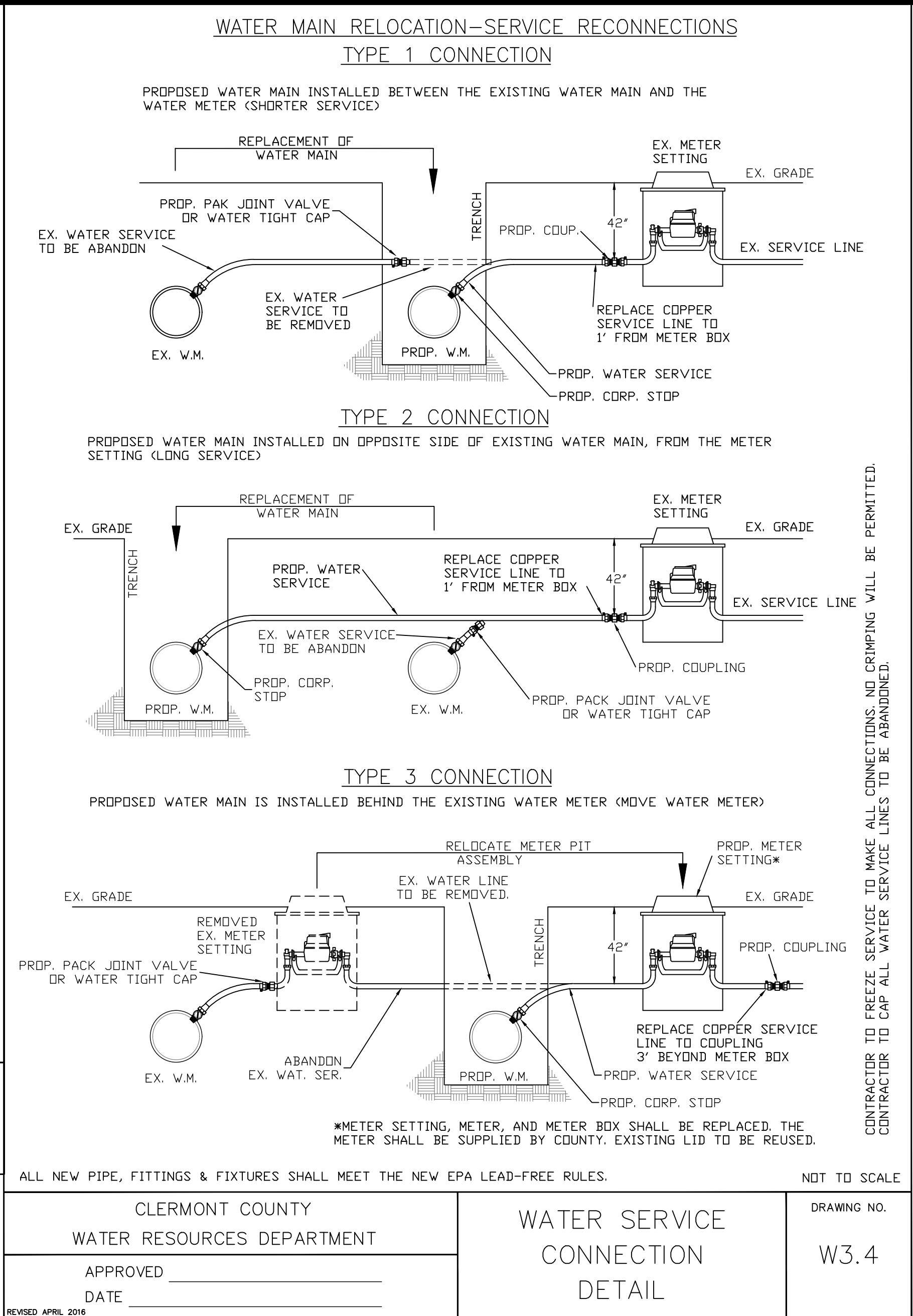
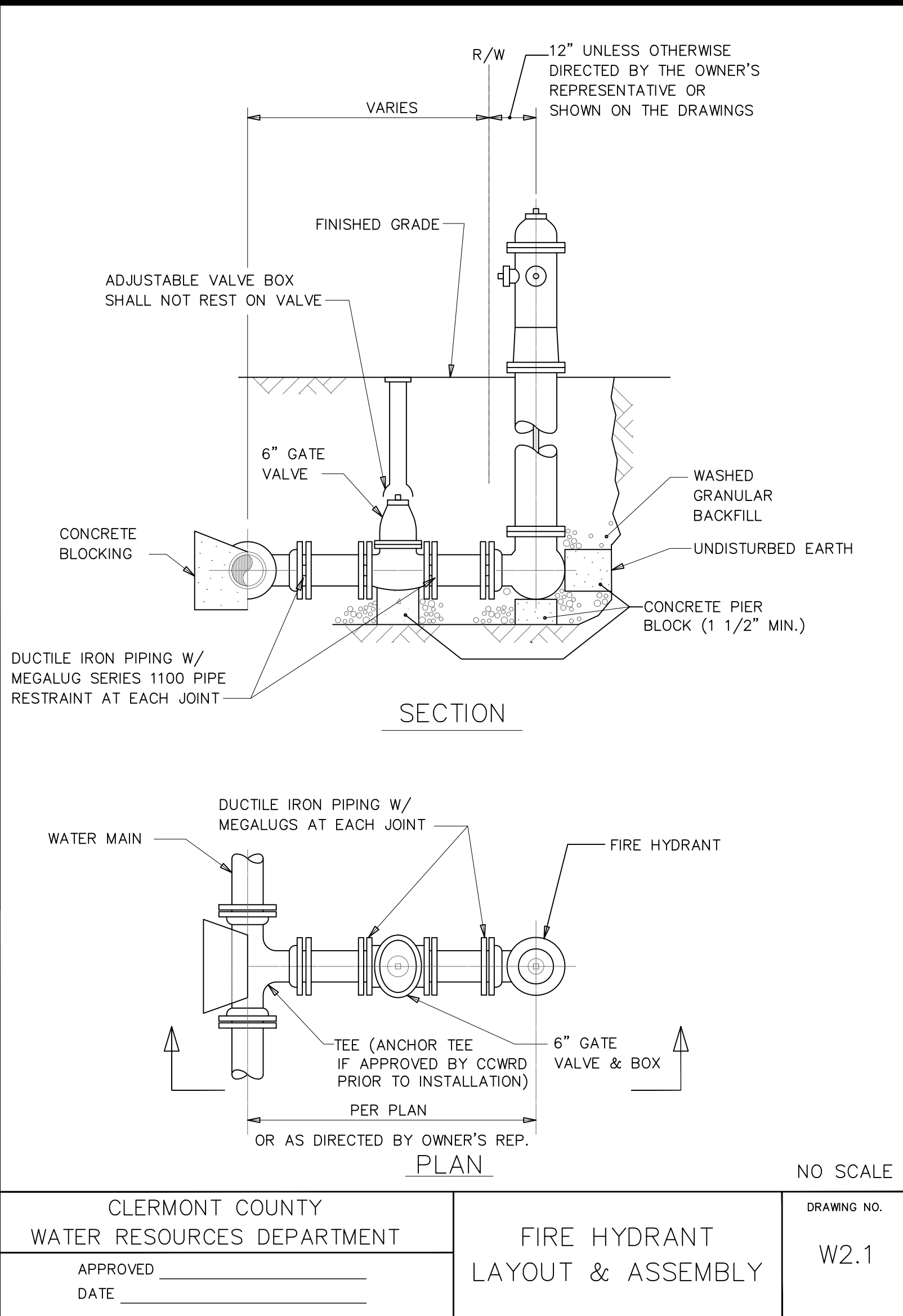
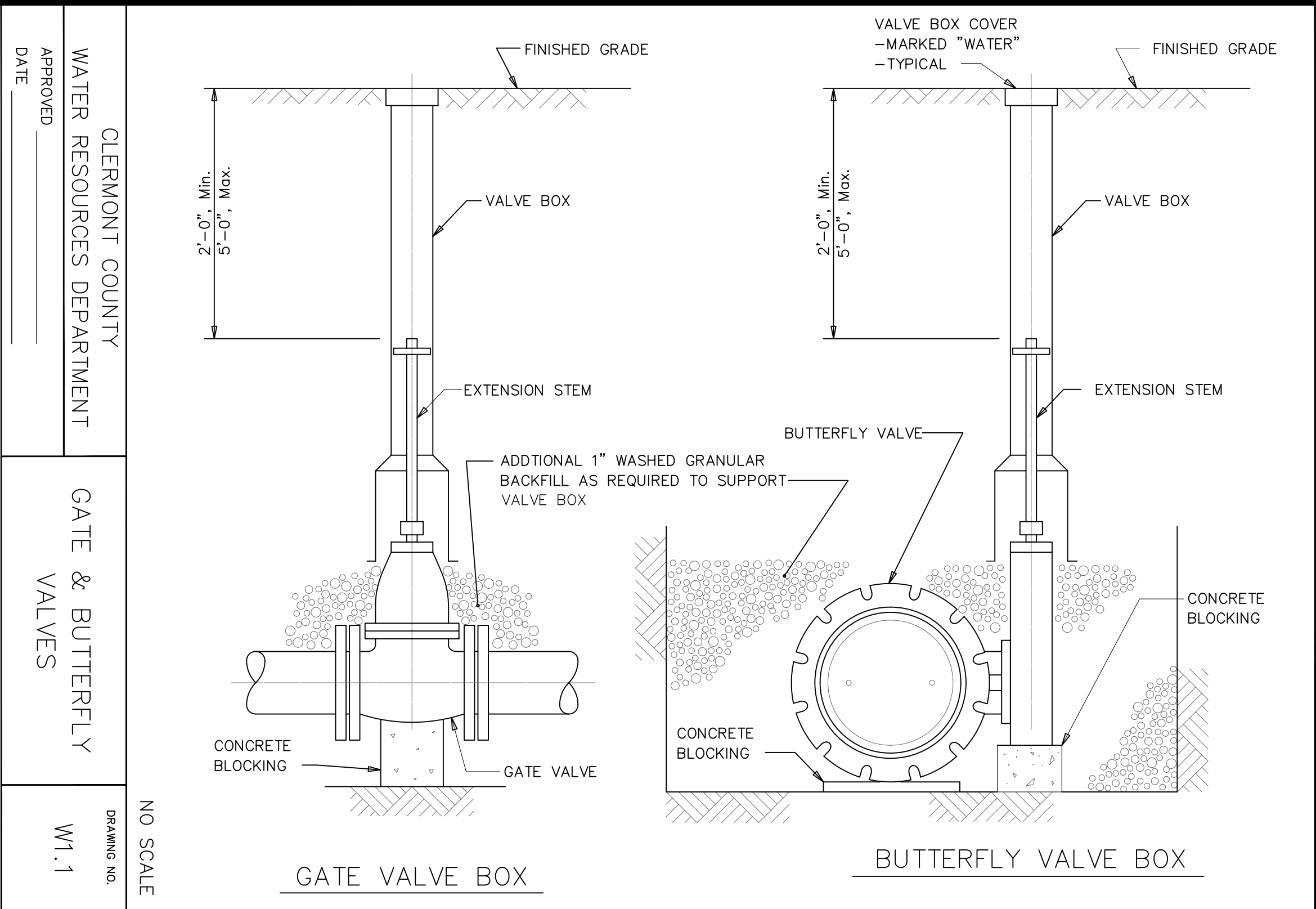


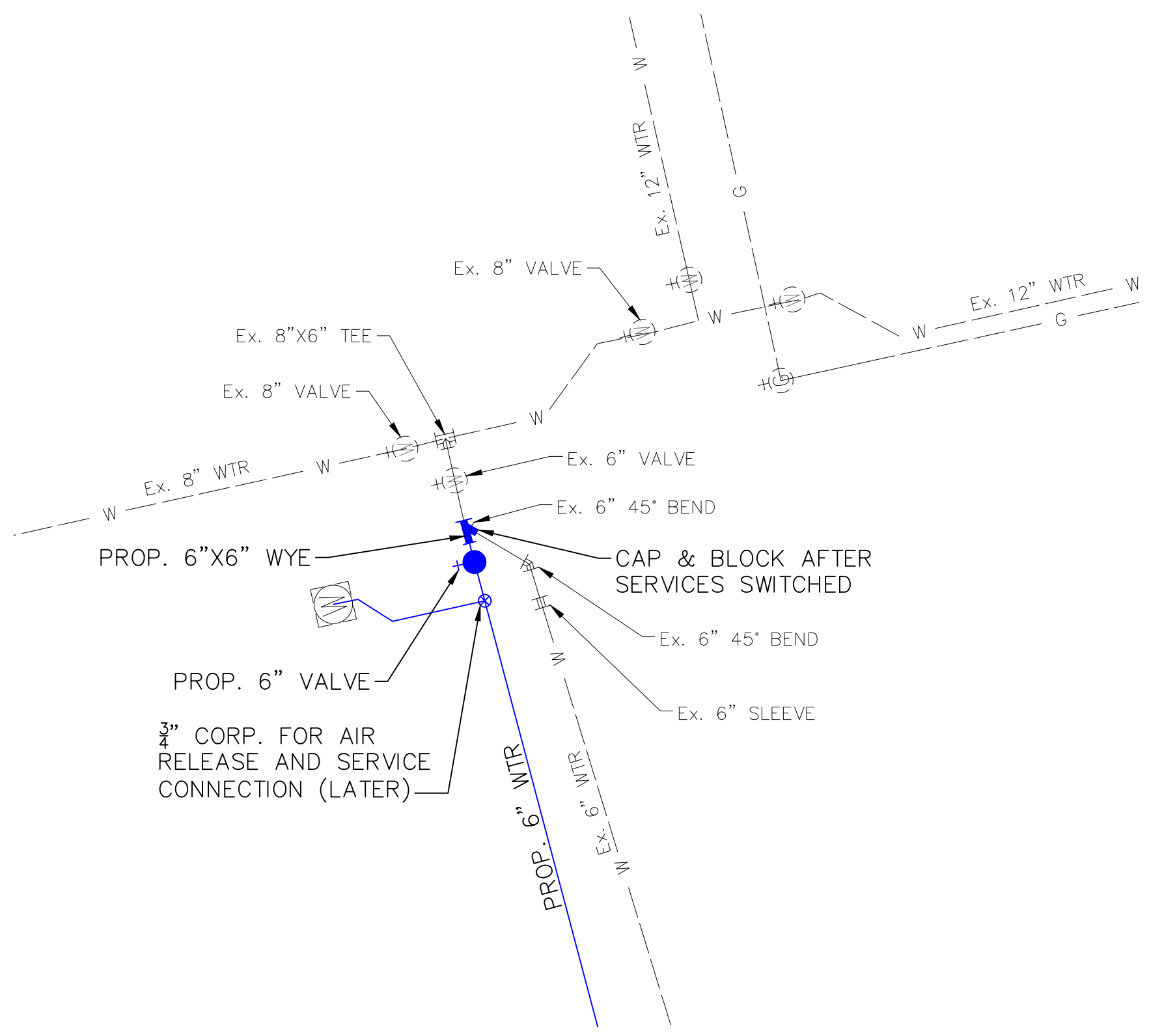
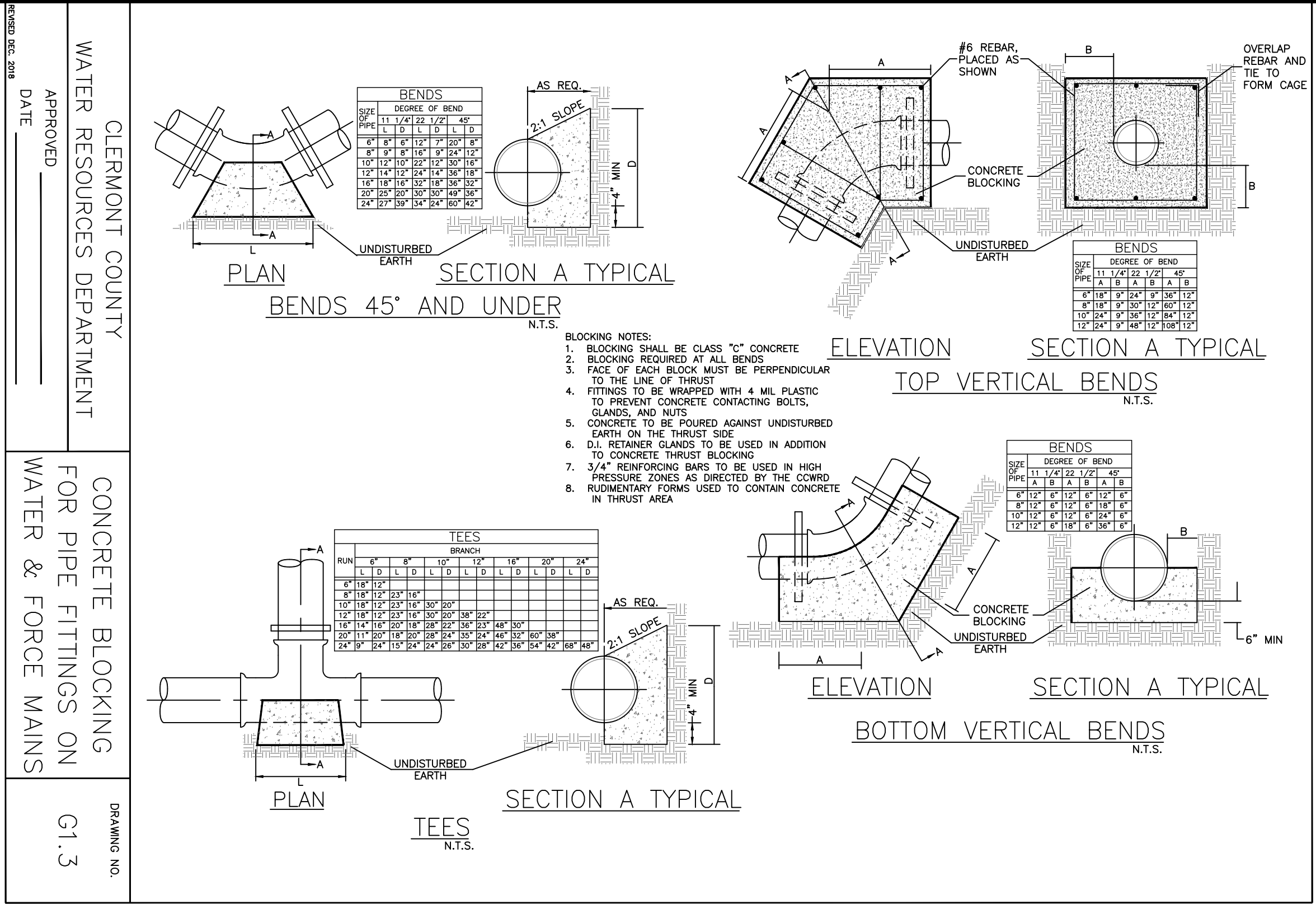
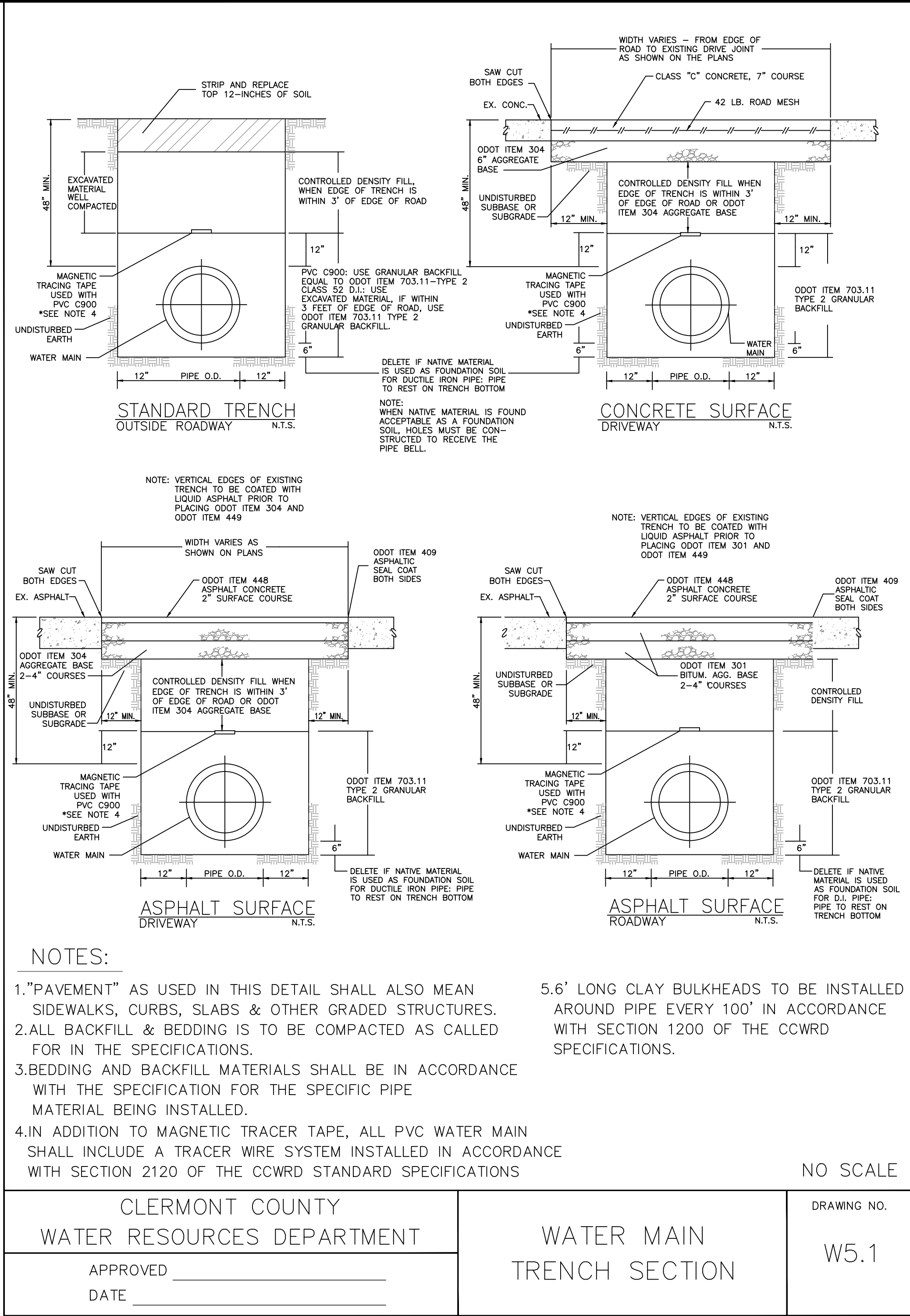
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LOVELAND, OHIO 513.239.8554
WWW.CHOICEONEENGINEERING.COM

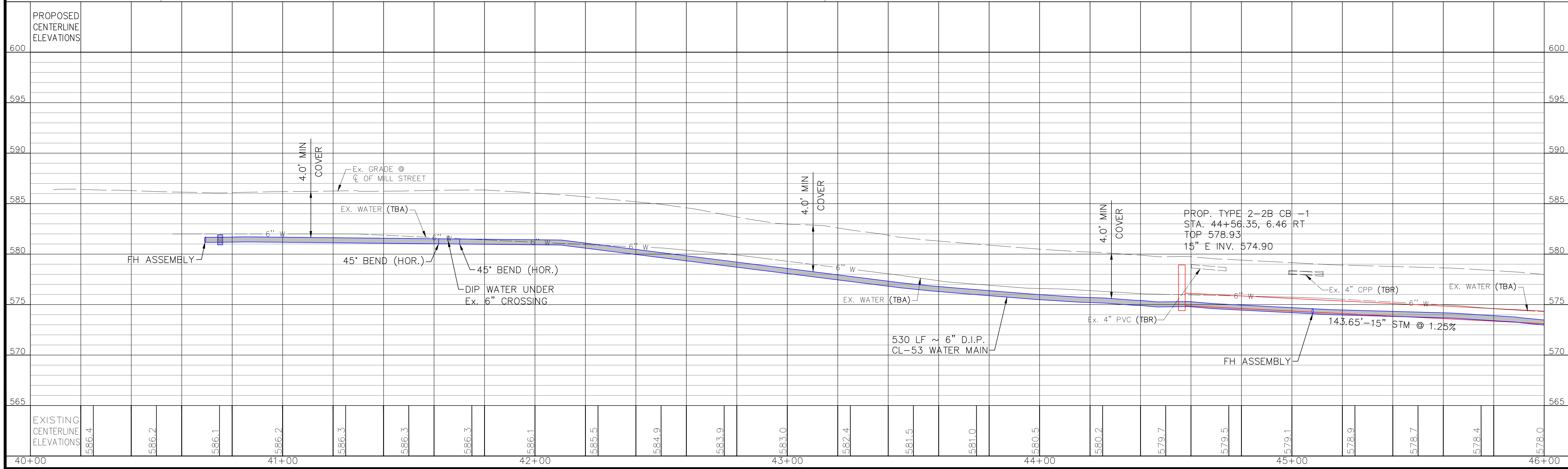
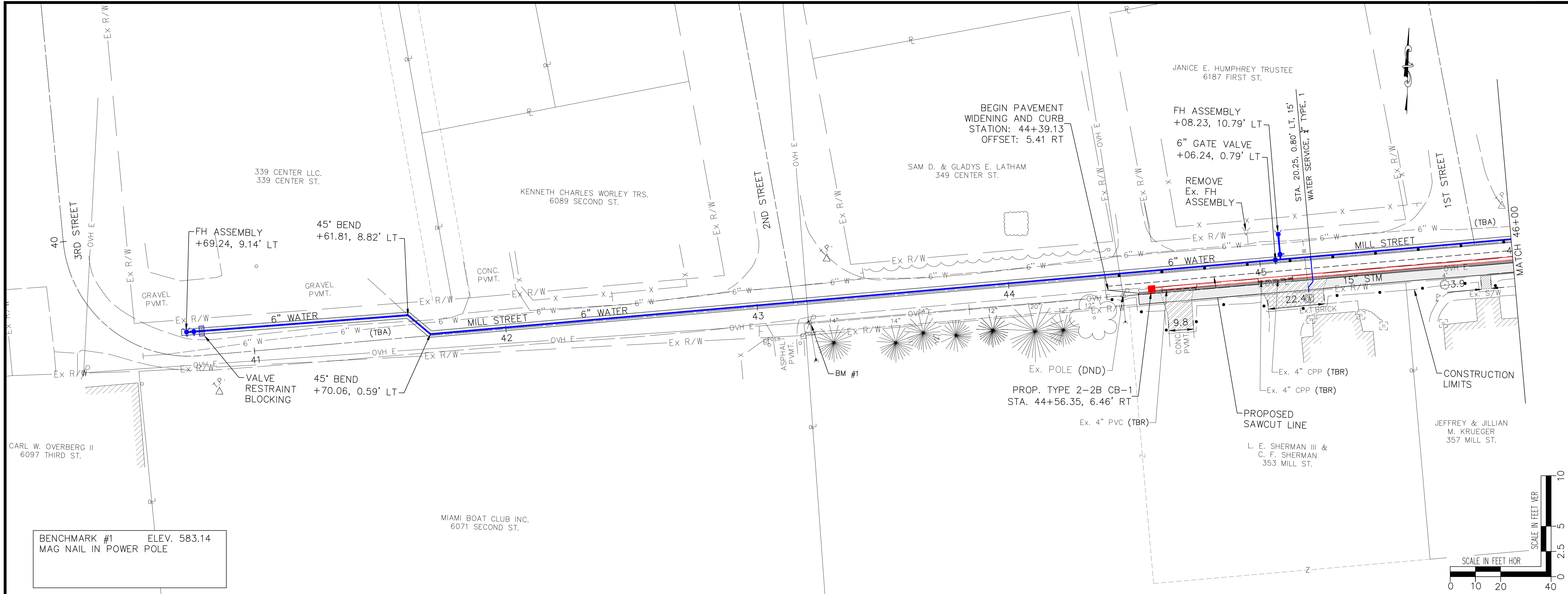
MILL STREET & MAIN STREET IMPROVEMENTS
MIAMI TOWNSHIP
CLERMONT COUNTY WATER GENERAL NOTES

REVISIONS:

FILE NAME ONE
DRAWN BY JSM
CHECKED BY NNS
PROJECT No. CLEMIA2107
DATE 12/12/2022
SHEET NUMBER









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MILL STREET & MAIN STREET IMPROVEMENTS

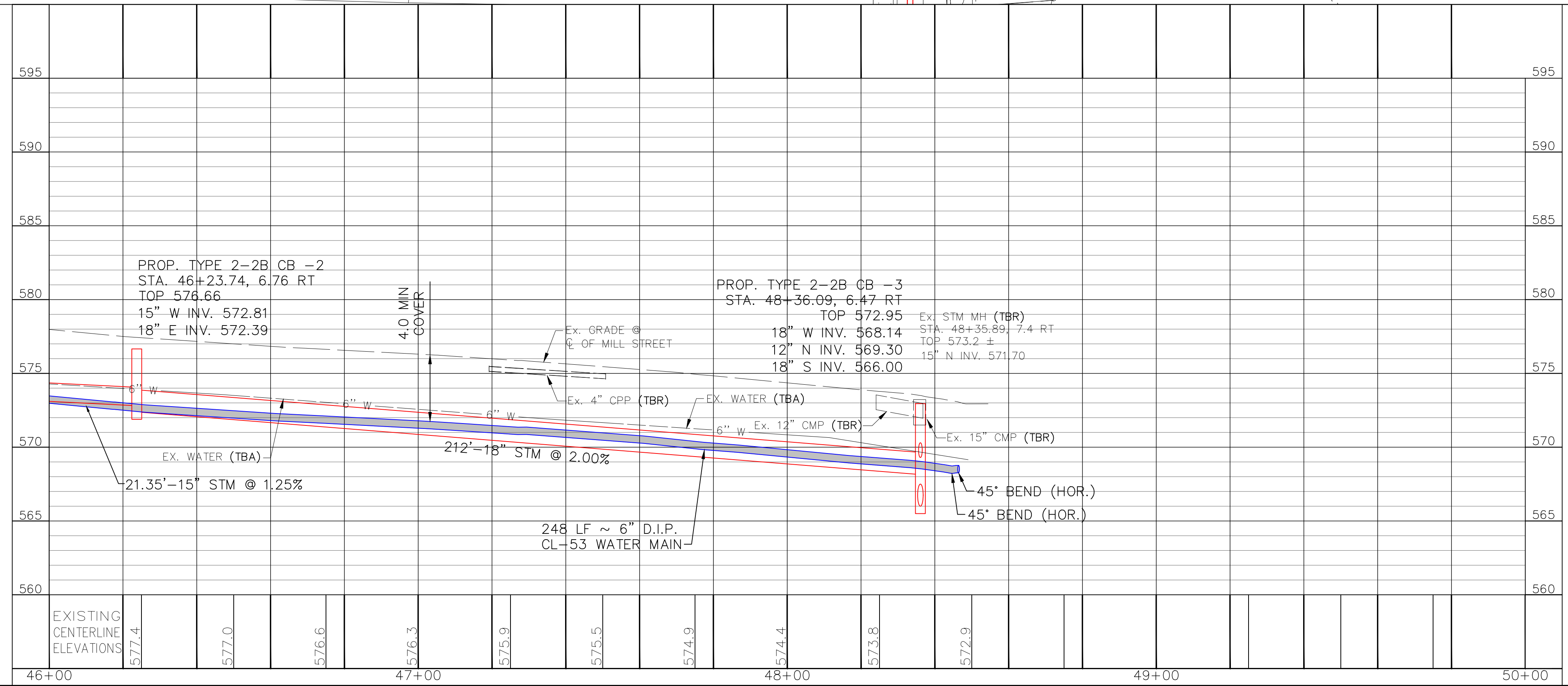
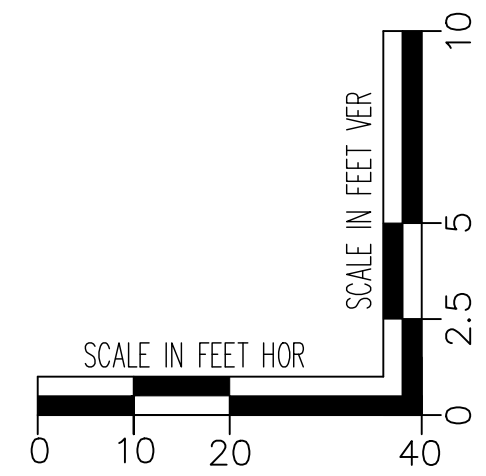
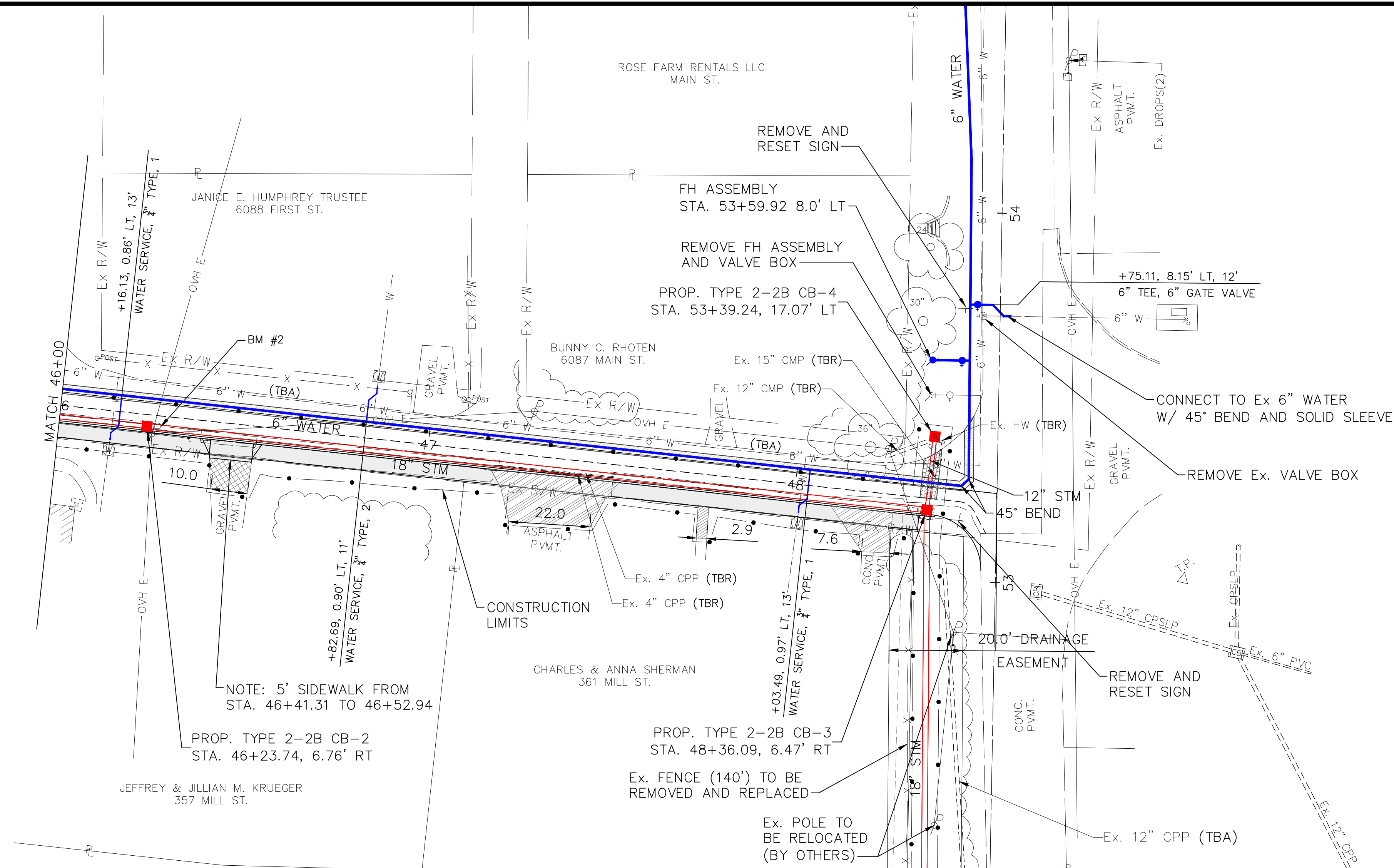
MIAMI TOWNSHIP

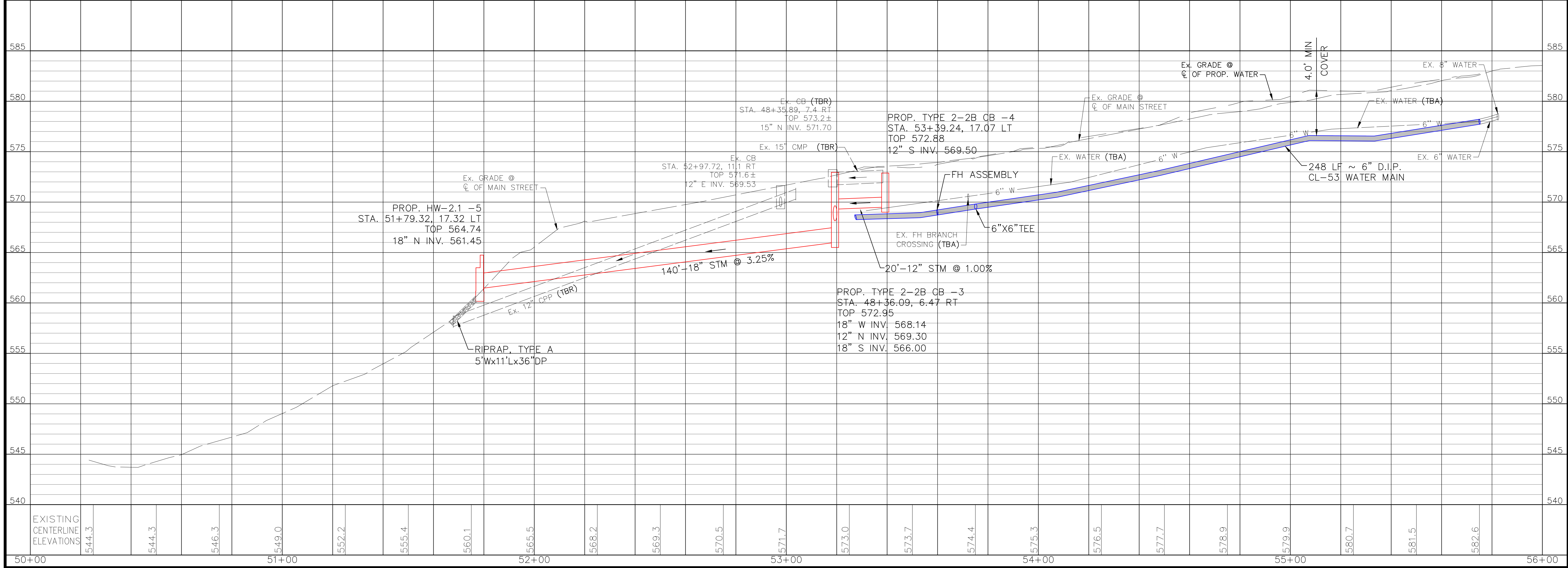
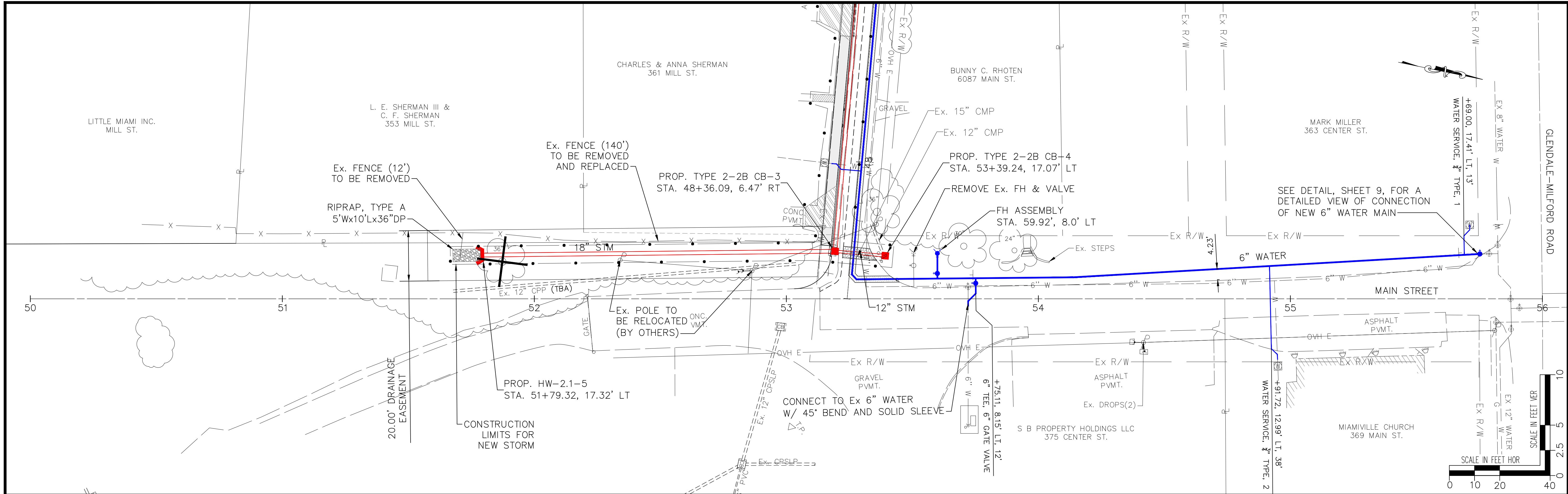
MILL STREET P-P STA. 40+00 TO STA. 46+00


REVISIONS:

FILE NAME	PP-Mill Street
DRAWN BY	JSM
CHECKED BY	NNS
PROJECT No.	CLEMIA2107
DATE	12/12/2022
SHEET NUMBER	10 OF 19

BENCHMARK #2 ELEV. 578.03
MAG NAIL IN POWER POLE







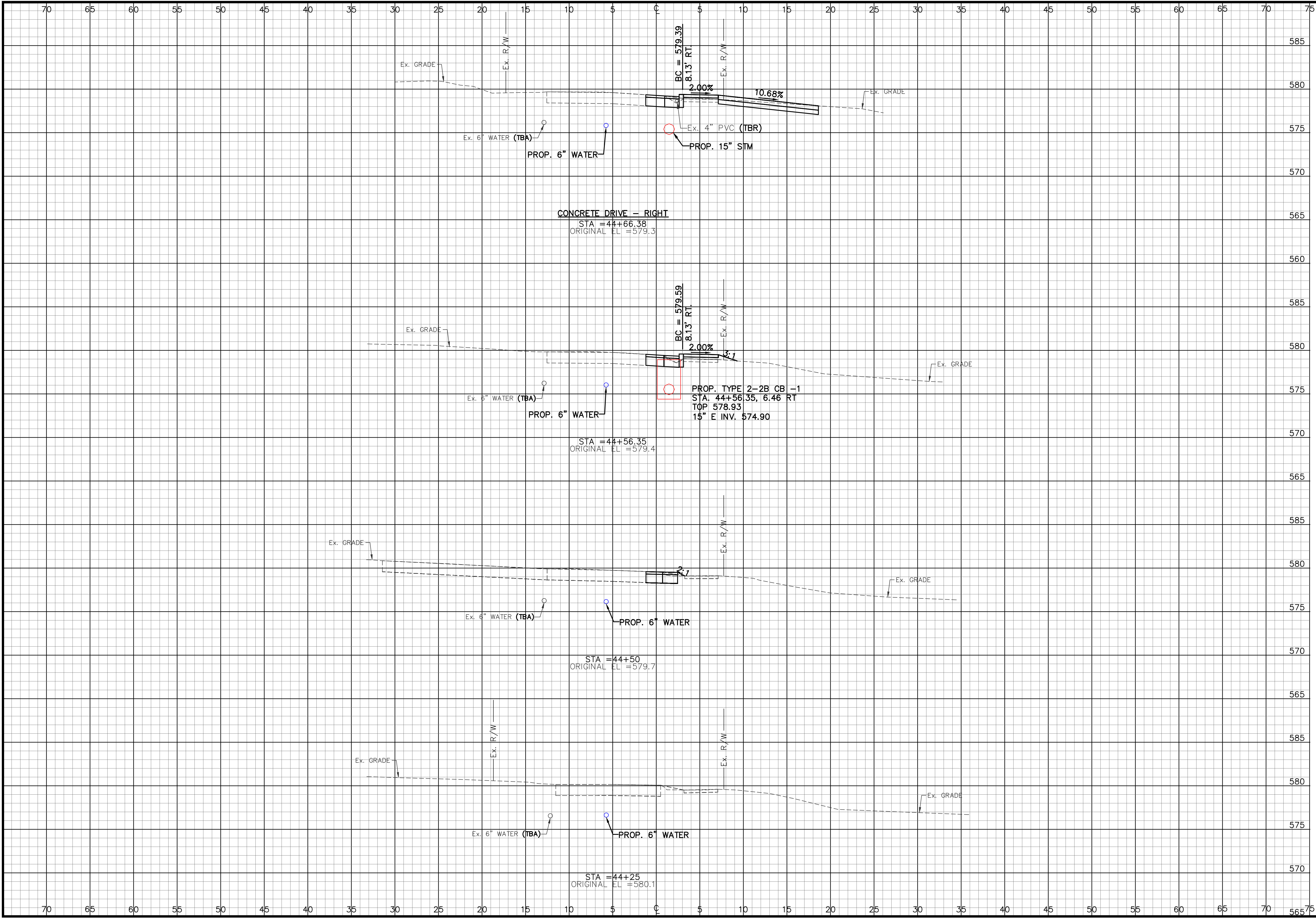
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MILL STREET & MAIN STREET IMPROVEMENTS
MIAMI TOWNSHIP

MAIN STREET P-P STA. 50+00 TO STA. 56+00

REVISIONS:

FILE NAME	PP-MAIN STREET
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PROJECT No.	CLEMIA2107
DATE	12/12/2022
SHEET NUMBER	12 OF 19





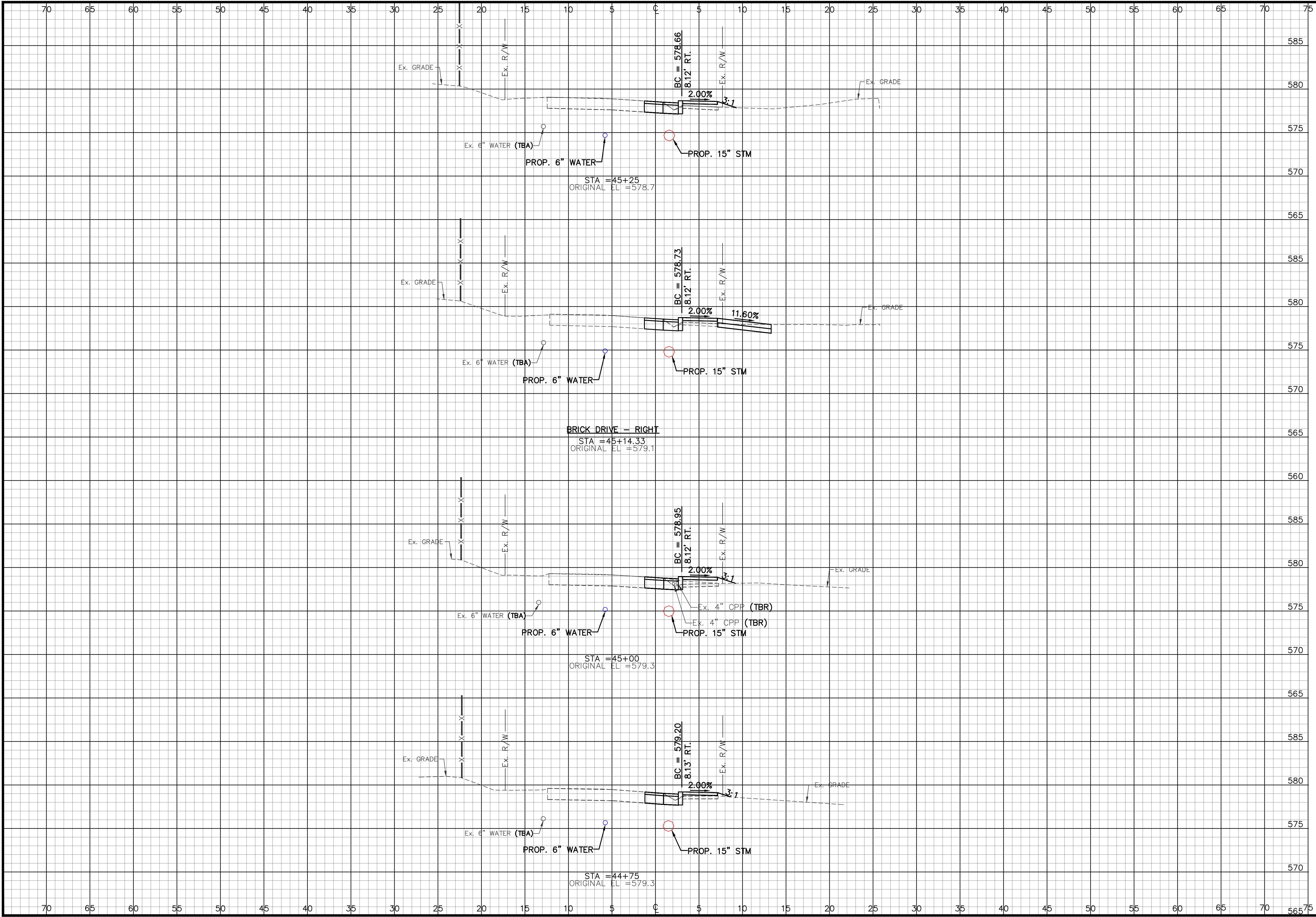
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MILL STREET CROSS SECTIONS - STA. 44+25 TO STA. 44+66.38

REVISIONS:

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MILL STREET CROSS SECTIONS - STA. 44+75 TO STA. 45+25

REVISIONS:

FILE NAME
CS-MILL STREET

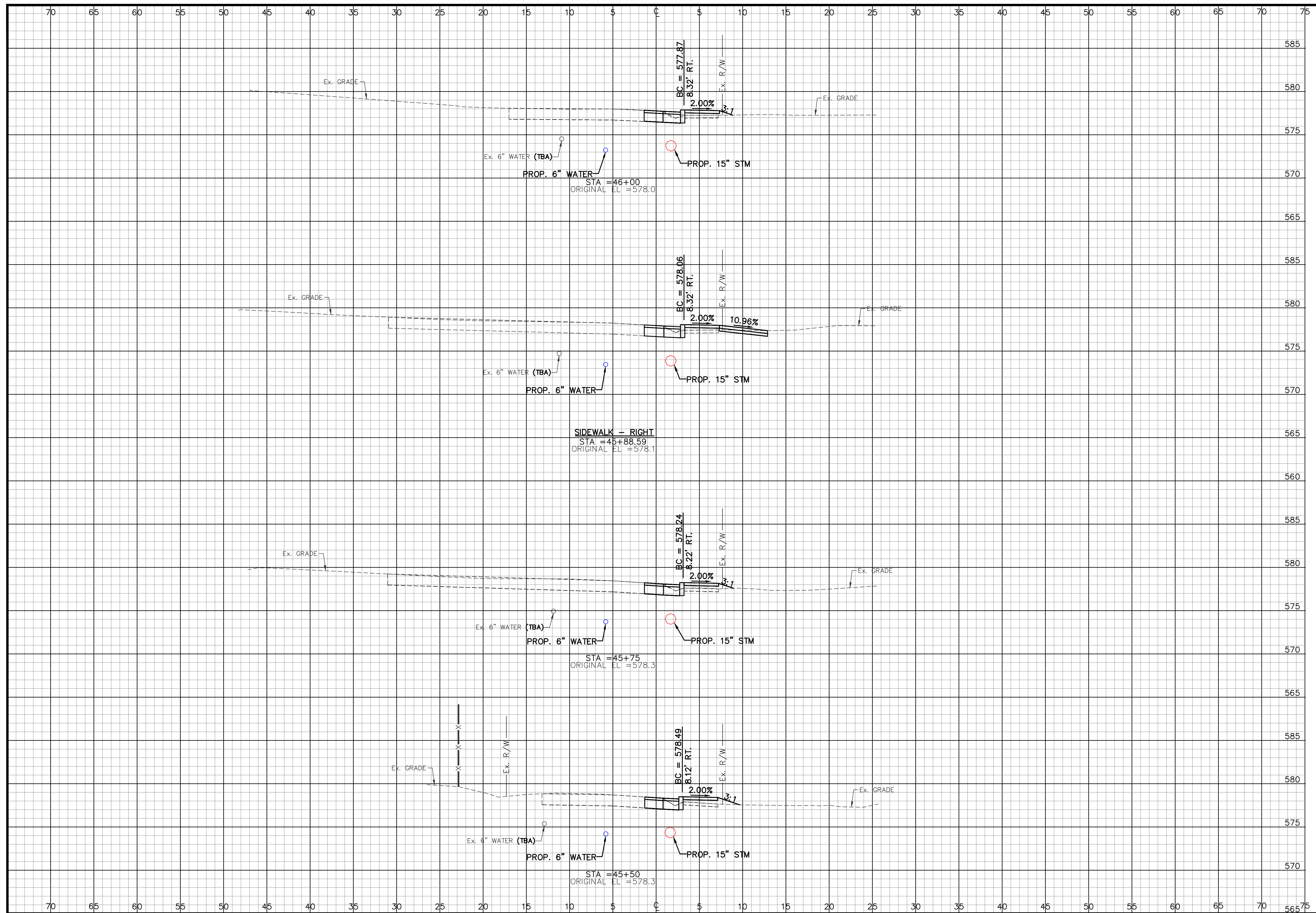
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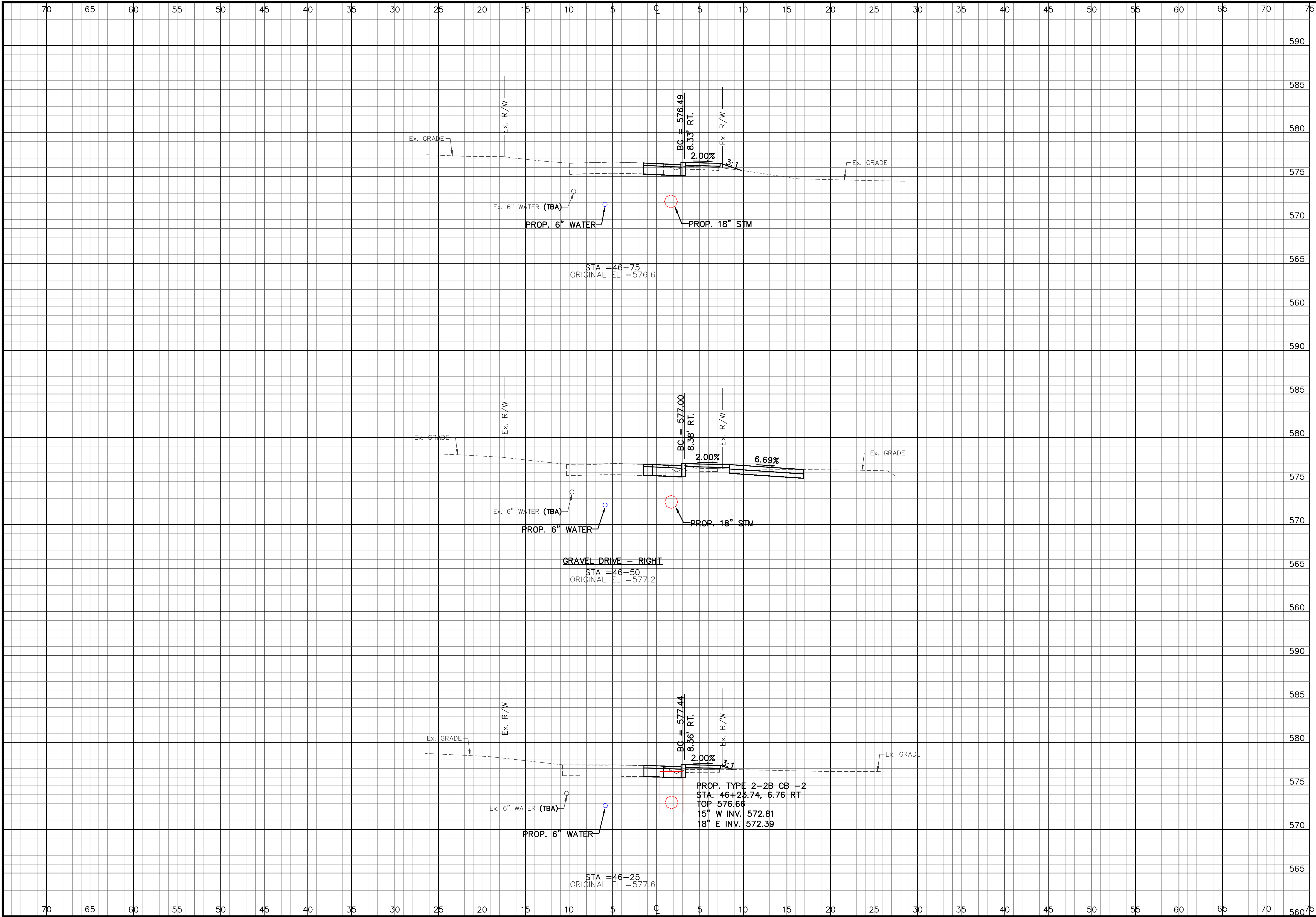
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MILL STREET CROSS SECTIONS - STA. 46+25 TO STA. 46+75

REVISIONS:

FILE NAME
CS-MILL STREET

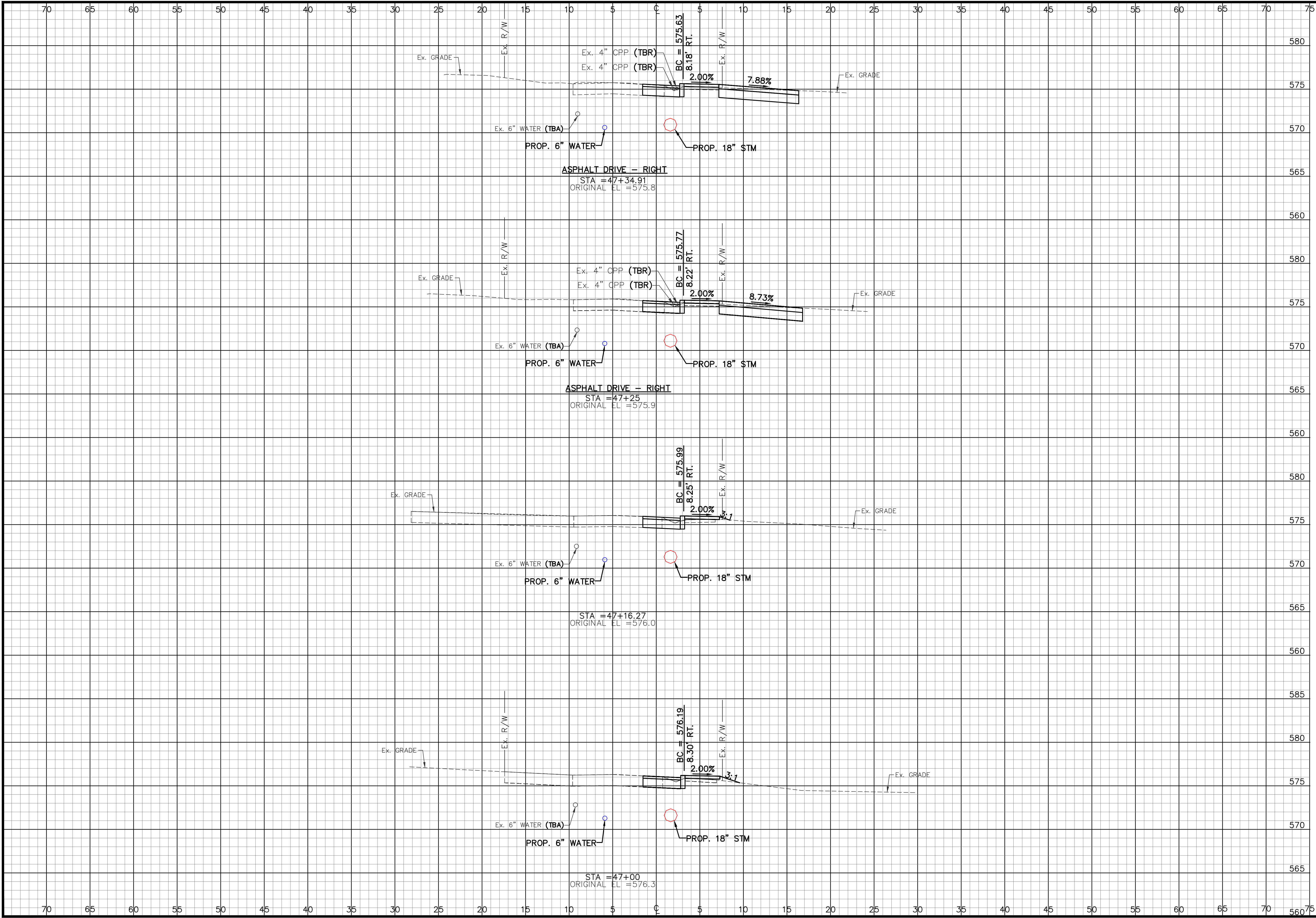
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16 OF 19





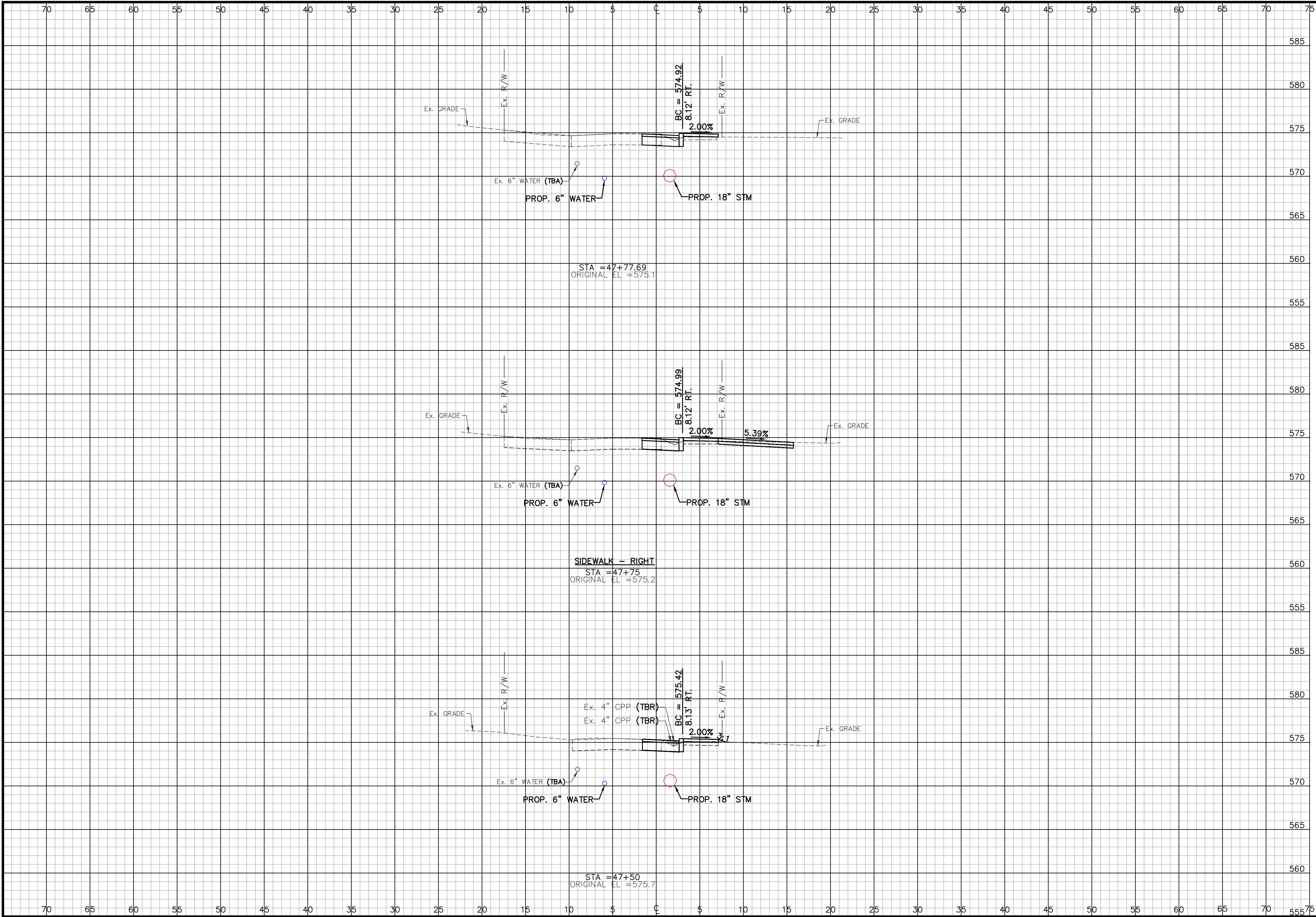
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MILL STREET CROSS SECTIONS - STA. 47+00 TO STA. 47+34.91

REVISIONS:

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MIAMI TOWNSHIP

MILL STREET CROSS SECTIONS - STA. 47+50 TO STA. 47+77.69

REVISIONS:

FILE NAME
CS-MILL STREET

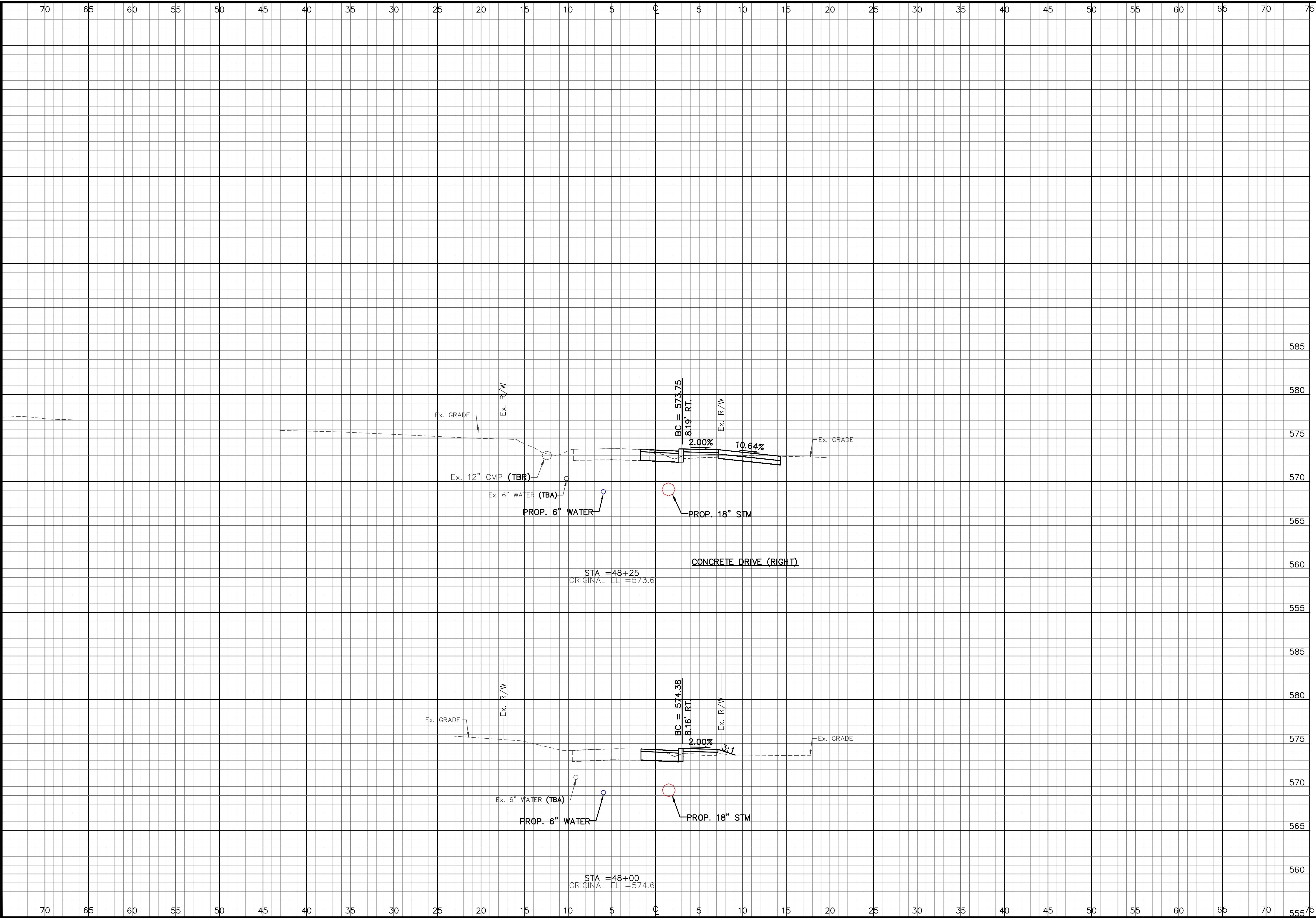
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MIAMI TOWNSHIP

MILL STREET CROSS SECTIONS - STA. 48+00 TO STA. 48+25

REVISIONS:

FILE NAME	CS-MILL STREET
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PROJECT No.	CLEMIA2107
DATE	12/12/2022
SHEET NUMBER	19 OF 19