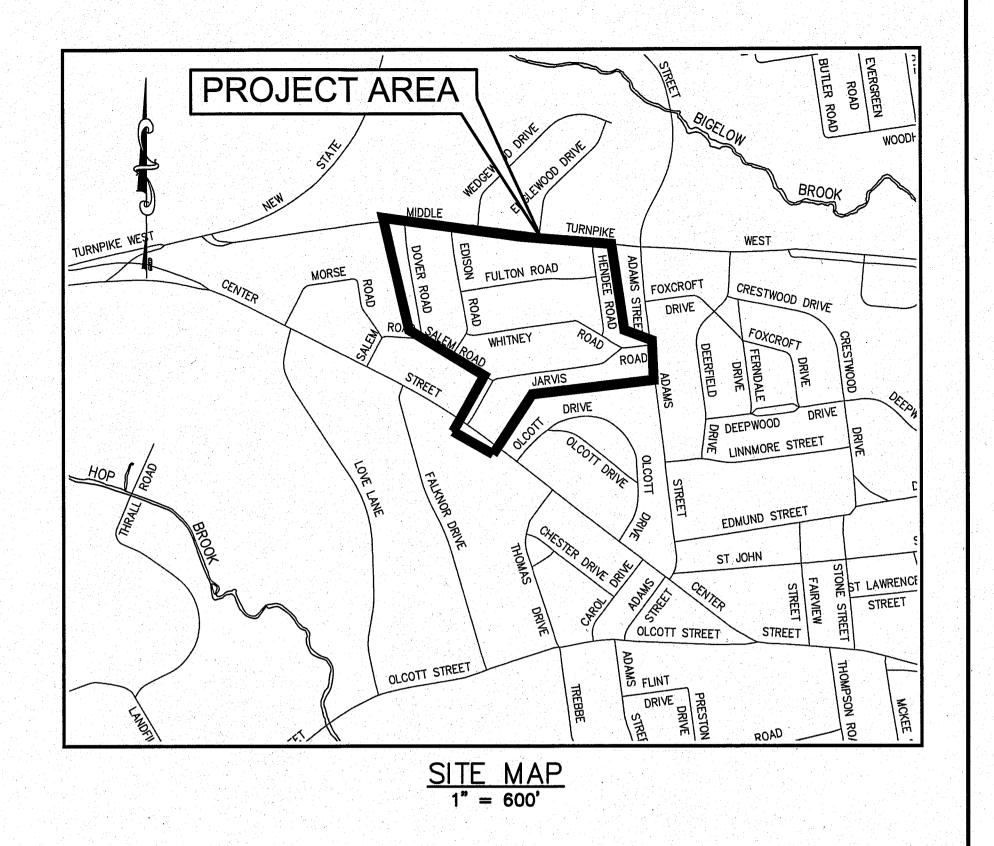


TOWN OF MANCHESTER

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION





JARVIS ROAD NEIGHBORHOOD INFRASTRUCTURE IMPROVEMENTS

AUGUST 2025

DESIGN STANDARD:

TOWN OF MANCHESTER PUBLIC IMPROVEMENT

STANDARDS, EFFECTIVE DATE OCTOBER 31, 2020,

AS AMENDED

DATUMS:

HORIZONTAL DATUM: TOWN OF MANCHESTER CONTROL NETWORK

(NAD83 AS ESTABLISHED IN 1998)

VERTICAL DATUM: TOWN OF MANCHESTER CONTROL NETWORK (NAVD88 USING GEOID 96)

STANDARD

SPECIFICATIONS:

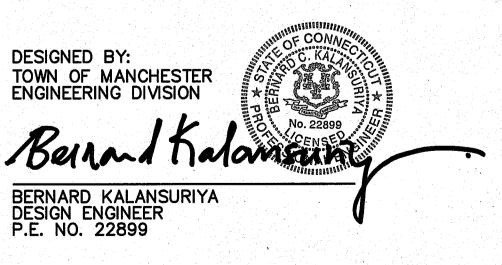
SEE CONTRACT DOCUMENTS

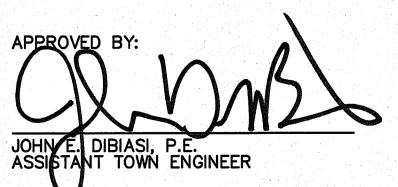
DESIGN SCALES:

PLAN: 1'' = 20'

OTHER SCALES AS NOTED

	LIST OF DRAWINGS
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1	COVER SHEET
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5	PLAN - WHITNEY ROAD & HENDEE ROAD
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9-11	DETAILS
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	CONNECTICUT DOT STANDARD DETAILS
TR-1210_04	PAVEMENT MARKING LINES AND SYMBOLS (08/2018)
TR-1210_08	PAVEMENT MARKINGS FOR NON-FREEWAYS (08/2018)





GENERAL NOTES:

- . ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "MANCHESTER PUBLIC IMPROVEMENT STANDARDS", EFFECTIVE OCTOBER 31, 2020, AS AMENDED AND THE STATE OF CONN. DEPT. OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES AND INCIDENTAL CONSTRUCTION, FORM 819, DATED 2024, INCLUDING ANY SUPPLEMENTS.
- IMPLEMENTING WORKER SAFETY AND HEALTH PROTOCOLS THAT ADDRESS COMPLIANCE WITH ALL RULES, LAWS AND REGULATIONS REGARDING SAFETY AND RISK OF EXPOSURE TO PHYSICAL AND CHEMICAL HAZARDS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ALL EMPLOYEES OF THE CONTRACTOR AND SUBCONTRACTORS ARE TO WEAR REFLECTIVE VESTS AND HARD HATS AT ALL TIMES WHEN ON THE PROJECT SITE.
- HORIZONTAL AND VERTICAL LOCATIONS OF PROPOSED WORK MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS WITH THE APPROVAL OF
- 4. THE QUANTITIES AS INDICATED IN THE CONTRACT DOCUMENTS ARE APPROXIMATE AND MAY NOT INDICATE THE ACTUAL QUANTITIES OF WORK REQUIRED. THE CONTRACTOR MUST VERIFY ALL QUANTITIES.
- 5. THE CONTRACTOR SHALL COMMIT SUFFICIENT RESOURCES TO THE PROJECT TO ENSURE THE PROJECT IS COMPLETED WITHIN THE ALLOTTED CONTRACT TIME. ONCE MOBILIZED, THE CONTRACTOR SHALL WORK CONTINUOUSLY ON THE PROJECT UNTIL COMPLETION. ANY UNAUTHORIZED VACATING OF THE JOBSITE IS SUBJECT TO PENALTIES DESCRIBED UNDER THE "LIQUIDATED DAMAGES" SECTION OF THE CONTRACT SPECIFICATIONS.
- 6. THE CONTRACTOR SHALL NOT STORE CONSTRUCTION EQUIPMENT OR MATERIALS WITHIN THE PUBLIC RIGHT-OF-WAY.
- 7. NO STORAGE OR REFUELING OF EQUIPMENT OR VEHICLES SHALL BE
- CONDUCTED WITHIN THE LIMITS OF THE AQUIFER PROTECTION AREA. 8. THE CONTRACTOR SHALL CONFINE ALL OPERATIONS AND ACTIVITIES FOR CONSTRUCTION PURPOSES WITHIN THE STREET LINE UNLESS SHOWN
- 9. FINAL LOCATION OF ALL PROPOSED UNDERGROUND UTILITIES SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

SURVEY, GIS & BASEMAPPING

OTHERWISE ON THE PLANS.

- 10. ALL ELEVATIONS ARE BASED ON THE TOWN OF MANCHESTER CONTROL
- 11. THE CONTRACTOR SHALL TAKE CARE NOT TO DISTURB EXISTING MONUMENTATION THAT MAY BE PRESENT NEAR THE PROJECT AREA.
- 12. EXISTING INFORMATION SHOWN ON THESE PLANS WAS OBTAINED FROM TOWN OF MANCHESTER GIS DATA; AND THEREFORE, IS CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IF CONDITIONS ENCOUNTERED IN THE FIELD ARE DIFFERENT THAN INFORMATION SHOWN ON THE PLANS.

- 13. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL REQUIRED PERMITS AND PAY ASSOCIATED FEES PRIOR TO ANY CONSTRUCTION ACTIVITY. THE CONTRACTOR MUST OBTAIN AN ENCROACHMENT PERMIT FROM THE STATE OF CONNECTICUT, DEPARTMENT OF TRANSPORTATION, PRIOR TO BEGINNING WORK WITHIN THE CENTER STREET (ROUTES 6 & 44) RIGHT-OF-WAY AND SHALL BE RESPONSIBLE FOR ALL ASSOCIATED FEES AND REQUIREMENTS.
- 14. ALL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH THE EROSION CONTROL PERMIT ISSUED BY THE MANCHESTER PLANNING AND ZONING COMMISSION, WHICH WILL BE PROVIDED AT THE PRE-CONSTRUCTION

PRECONSTRUCTION

- 15. A PRECONSTRUCTION MEETING WITH TOWN STAFF IS REQUIRED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.
- 16. NO WORK SHALL COMMENCE UNTIL ALL CONSTRUCTION AREA SIGNS ARE IN PLACE.

- 17. THE EXISTENCE OF UTILITIES AND APPURTENANCES AS SHOWN ON THESE DRAWINGS ARE FOR REFERENCE ONLY. THE EXACT SIZE, LOCATION, TYPE, AND ELEVATION OF ALL UTILITIES WITHIN ALL WORK AREAS SHALL BE THOROUGHLY INVESTIGATED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "CALL-BEFORE-YOU-DIG" AT 1-800-922-4455 AND MUST HAVE ALL UTILITIES MARKED ON THE GROUND PRIOR TO THE START OF CONSTRUCTION.
- VEHICULAR, PEDESTRIAN, & BICYCLE TRAFFIC OPERATIONS 18. THE CONTRACTOR SHALL PROVIDE TEMPORARY ACCESS TO ALL DRIVEWAYS AT ALL TIMES.
- 19. THE CONTRACTOR SHALL MAINTAIN TWO LANES OF TRAFFIC ON WEST MIDDLE TURNPIKE, ADAMS STREET AND CENTER STREET BETWEEN THE HOURS OF 7:00 A.M. AND 8:00 A.M. AND BETWEEN 4:30 P.M. AND 5: 30 P.M. EVERY DAY. IT IS ANTICIPATED THE ROAD WILL REMAIN OPEN AT ALL TIMES WITH ALTERNATING ONE LANE TRAFFIC AND POLICE OFFICERS FOR TRAFFIC CONTROL DURING CONSTRUCTION.
- ROADWAY PAVING & RECONSTRUCTION

 20. THE ROAD SHALL BE RECONSTRUCTED BY REMOVING THE EXISTING PAVEMENT SURFACE AND GRADING AND COMPACTING OF GRAVEL BASE MATERIAL FOR INSTALLATION OF HMA.
- 21. ELEVATIONS OF NEW CONCRETE SIDEWALK/CURB AND GRASS SHELVES IN MILL AND PAVE AREAS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD TO PROVIDE 6" REVEAL ABOVE FINAL GUTTER ELEVATIONS THAT ARE BASED ON FINAL ROAD CENTERLINE ELEVATIONS AND PROPOSED LANE SLOPES.
- 22. WHEN DIRECTED BY THE ENGINEER, TOPS, FRAMES AND COVERS FOR NEW STRUCTURES LOCATED WITHIN LIMITS OF ROAD RECONSTRUCTION SHALL BE TEMPORARILY SET AT THE BINDER COURSE ELEVATION AND RAISED TO THE FINAL COURSE ELEVATION IMMEDIATELY PRIOR TO PAVING. THERE WILL BE NO ADDITIONAL PAYMENT FOR RESET OF FRAMES AND COVERS TO FINAL ROAD ELEVATIONS.
- 23. PROPOSED STRUCTURE FRAME ELEVATIONS IDENTIFIED ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL SET FRAME ELEVATIONS AS REQUIRED BASED ON EXISTING FEATURES AND GRADES IN THE VICINITY AS DIRECTED BY THE ENGINEER.
- 24. ALL STREETS WITH DRAINAGE WILL BE RECONSTRUCTED TO PROVIDE APPROXIMATELY 4"-5" OF REVEAL ON EXISTING GRANITE CURB. THEREFORE, DRAINAGE STRUCTURE FRAME ELEVATIONS SHOULD BE SET 5.5" BELOW TOP OF CURB ELEVATIONS UNLESS DIRECTED OTHERWISE BY THE ENGINEER. TOP OF FRAME ELEVATIONS IDENTIFIED ON THE PLAN ARE APPROXIMATE.
- 25. STREET CORNERS AND SIDEWALK RAMPS SHALL BE CONSTRUCTED TO PROVIDE POSITIVE DRAINAGE TOWARDS THE NEAREST CATCH BASIN TO PREVENT PONDING OF STORMWATER. SIDEWALK RAMPS MUST BE INSTALLED TO MATCH PROPOSED GUTTER ELEVATIONS WHICH SHOULD PROVIDE 4"-5" OF REVEAL ON EXISTING GRANITE CURB ADJACENT TO
- STORMWATER, STORM SEWERS & CULVERTS 26. THE CONTRACTOR SHALL SUBMIT A PLAN TO THE ENGINEER FOR PROPOSED METHODS TO DEWATER THE SITE (WHERE REQUIRED). SUCH PLAN SHALL INCLUDE THE INSTALLATION OF SILT BAGS AT PUMP DISCHARGES WITH SILT FENCE/HAYBALES FOR EROSION CONTROL. PROPOSED DISCHARGE LOCATIONS AND ALL EROSION CONTROLS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- 27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY HANDLING OF ALL STORMWATER RUNOFF DURING CONSTRUCTION. METHODS OF HANDLING RUNOFF SHALL BE APPROVED BY THE ENGINEER.
- 28. AT THE END OF EACH WORKING DAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING NEW DRAINAGE SYSTEMS TO EXISTING. ALL DRAINAGE SYSTEMS WITHIN THE CONSTRUCTION LIMITS SHALL BE MAINTAINED BY THE CONTRACTOR.

- 29. ALL NEW CATCH BASINS SHALL BE TYPE "C" WITH GRANITE CURB INLETS (0'-10' DEEP) UNLESS NOTED OTHERWISE. GRANITE CURB INLETS SHALL BE INSTALLED WHERE GRANITE CURB EXISTS AND CONCRETE CURB INLETS THAT MATCH CURB DIMENSIONS SHALL BE INSTALLED WHERE BITUMINOUS CONCRETE CURB OR CONCRETE CURB EXISTS. CATCH BASINS WITH 3-SIDED TOPS SHALL BE USED WHERE REQUIRED CURB REVEAL IS NOT ATTAINABLE AS SHOWN ON THE PLANS OR WHERE DIRECTED BY THE ENGINEER (TYPICALLY INSTALLED ADJACENT TO CONCRETE DRIVEWAY APRONS SIDEWALK RAMPS).
- 30. THE CONTRACTOR SHALL NOT ABANDON ANY EXISTING DRAINAGE PIPES UNLESS CALLED FOR ON THE PLANS OR DIRECTED BY THE ENGINEER. PIPES THAT ARE TO BE ABANDONED SHALL BE BULKHEADED AT EACH END AND COMPLETELY FILLED WITH FLOWABLE CONCRETE AS DIRECTED BY THE ENGINEER (PAY ITEM: ABANDON PIPE). IF PIPE HAS A BLIND TIE-IN TO THE EXISTING MAIN, THEN PIPE SHALL BE BULKHEADED AT THE UPSTREAM END ONLY (PAY ITEM: PLUG PIPE)

WATER & SANITARY SEWER UTILITIES

- 31. FOR CONNECTIONS TO EXISTING SANITARY SEWER STRUCTURES AND PIPING, THE CONTRACTOR SHALL VERIFY EXISTING INVERT ELEVATIONS, NOTIFY THE ENGINEER IF A DISCREPANCY EXISTS. AND ADJUST THE PIPE SLOPES AS DIRECTED.
- 32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY HANDLING OF ALL SEWAGE FLOWS DURING CONSTRUCTION. METHODS OF HANDLING SEWAGE FLOWS SHALL BE APPROVED BY THE ENGINEER.
- 33. AT THE END OF EACH WORKING DAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING EXISTING SANITARY SEWER LATERALS TO NEW SANITARY FACILITIES. THE CONTRACTOR IS RESPONSIBLE FOR PROPER DISPOSAL OF ALL MATERIALS.
- 34. ALL SANITARY SEWER MANHOLES SHALL HAVE A 48" INTERNAL DIAMETER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
- 35. AT ALL WATER AND SEWER UTILITY CROSSINGS, A MINIMUM 18" VERTICAL AND 10' HORIZONTAL SEPARATION DISTANCE SHALL BE PROVIDED UNLESS INDICATED OTHERWISE ON THE PLANS OR APPROVED BY THE ENGINEER. IF THIS SEPARATION DISTANCE CANNOT BE ACHIEVED, THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING.
- 36. AS DIRECTED BY THE ENGINEER, A CONCRETE PIPE CRADLE SHALL BE INSTALLED WHEN THE VERTICAL CLEARANCE BETWEEN WATER, SANITARY SEWER, DRAINAGE AND OTHER UTILITY PIPING IS LESS THAN OR EQUAL TO 12" AND CRUSHED STONE SHALL BE USED WHENEVER THE VERTICAL CLEARANCE IS GREATER THAN 12" BUT LESS THAN OR EQUAL TO 18", IN ACCORDANCE WITH THE ASSOCIATED UTILITY SUPPORT DETAIL.
- 37. ALL EXISTING HYDRANTS AND FRAMES AND COVERS FROM SANITARY SEWER MANHOLES TO BE REMOVED, REPLACED OR ABANDONED SHALL BE SALVAGED. ALL OTHER MATERIALS WHICH ARE REMOVED FROM THE SITE BECOME PROPERTY OF THE CONTRACTOR, AND ARE TO BE DISPOSED OF PROPERLY, UNLESS INDICATED OTHERWISE ON THE PLANS. ALL MATERIALS THE ENGINEER DESIGNATES TO BE SALVAGED SHALL BE DELIVERED TO THE WATER & SEWER DEPARTMENT GARAGE ON CHARTER OAK STREET, MANCHESTER, CT AND PROPERLY UNLOADED BY THE CONTRACTOR.
- 38. ALL VALVE BOXES AND CURB BOXES SHALL BE ADJUSTED TO MATCH FINISHED GRADES. ALL CURB BOXES SHALL BE LOCATED IN GRASSED AREAS AT THE STREET LINE FRONTING THE PROPERTY UNLESS INDICATED OTHERWISE ON THE PLANS.
- 39. ALL NEW WATER MAINS AND SERVICES SHALL HAVE 4.5 FEET OF COVER UNLESS OTHERWISE INDICATED ON THE PLANS. COVER LESS THAN OR IN EXCESS OF 4.5 FEET SHALL BE ALLOWED ONLY WHERE INDICATED ON THE PLANS OR APPROVED BY THE ENGINEER. WATER MAINS AND SERVICES WITH COVER LESS THAN 4.5 FEET SHALL BE INSULATED UNLESS APPROVED OTHERWISE BY THE ENGINEER.
- 40. THRUST RESTRAINT FOR ALL MECHANICAL JOINTS AT VALVES AND FITTINGS SHALL BE PROVIDED BY MEANS OF DUCTILE IRON RESTRAINER

- GLANDS. WEDGE-ACTION JOINT RESTRAINERS OR GASKET-TYPE JOINT RESTRAINT SHALL BE USED TO RESTRAIN ALL DUCTILE IRON PIPE JOINTS FOR A DISTANCE OF AT LEAST 27 FEET ON EACH SIDE OF ALL VALVES OR FITTINGS. NO MORE THAN ONE PIPE JOINT SHALL BE ALLOWED WITHIN THAT 27 FEET OF PIPE.
- 41. ALL EXISTING WATER SERVICES SHALL BE RECONNECTED TO THE NEW FACILITIES. ALL WATER SERVICES SHALL BE NEW 1" COPPER TUBING FROM THE MAIN TO THE CURB BOX UNLESS OTHERWISE INDICATED ON THE PLANS. THE CURB BOX SHALL BE REPLACED AS PART OF THE INSTALLATION.
- 42. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY TEMPORARY THRUST RESTRAINT THAT IS REQUIRED.
- 43. ALL VALVES AND HYDRANTS SHALL BE RIGHT-OPENING (CLOCKWISE) UNLESS INDICATED OTHERWISE. ALL MAIN LINE AND AUXILIARY VALVES (4" TO AND INCLUDING 12") SHALL BE RESILIENT WEDGE GATE VALVES.
- 44. EXISTING WATER AND SEWER MAINS INDICATED ON THE PLANS TO BE ABANDONED SHALL BE REMOVED WHEN SUCH MAINS ARE LOCATED WITHIN THE HORIZONTAL TRENCH LIMITS OF NEW PIPE TO BE INSTALLED IN THE SAME LOCATION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE LINEAR FOOT COST FOR THE ASSOCIATED PIPE INSTALLATION.
- 45. WHEN DIRECTED BY THE ENGINEER, TEMPORARY FIRE HYDRANTS SHALL BE PROVIDED WHEN EXISTING HYDRANTS ARE OUT OF SERVICE DUE TO CONSTRUCTION. THERE WILL BE NO SEPARATE PAYMENT FOR TEMPORARY HYDRANTS, THEIR COST SHALL BE INCLUDED IN THE BID PRICE FOR "HYDRANT ASSEMBLY" OF THE TYPE SPECIFIED.
- 46. EVEN WHEN NOT SPECIFICALLY LABELED ON THE CONTRACT PLANS, EXISTING SIDEWALKS, DRIVEWAYS, DRIVEWAY APRONS, CURBING AND LAWN AREAS DISTURBED DURING INSTALLATION OF SANITARY SEWER AND WATER FACILITIES SHALL BE REPAIRED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION AND PAID FOR UNDER THE ASSOCIATED CONTRACT ITEMS.

RESTORATION, EROSION & SEDIMENTATION CONTROL

TYPICAL SECTION - WHITNEY RD

- 47. ALL SEDIMENT CONTROL SYSTEMS SHALL MEET THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" AS PREPARED BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION, LATEST REVISION. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION. MAINTENANCE AND REPAIR OF EROSION CONTROLS REQUIRED FOR THE PROJECT. ADDITIONAL EROSION CONTROLS SHALL BE INSTALLED BY THE CONTRACTOR FOR TEMPORARY STOCKPILING OF EXCAVATED MATERIAL AND WHERE DEEMED NECESSARY BY THE ENGINEER. EROSION CONTROLS SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL THE SITE IS STABILIZED AND THE ENGINEER APPROVES THEIR REMOVAL.
- 48. SILT SACKS SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASINS WITHIN THE PROJECT AREA AND WHERE DIRECTED BY THE ENGINEER. SILT SACKS SHALL BE THE APPROPRIATE TYPE FOR CATCH BASINS WITH AND WITHOUT CURB INLETS.
- 49. ALL GRASSED AREAS DISTURBED BY THE CONTRACTOR SHALL BE REPLACED WITH TOPSOIL, FERTILIZED AND SEEDED AS PER THE SPECIFICATIONS. CONTRACTOR SHALL MAKE ALL EFFORTS TO MINIMIZE THE LIMITS OF DISTURBANCE AND ASSOCIATED RESTORATION THAT IS REQUIRED.
- 50. ANY DRIVEWAYS, SIDEWALKS, CURB AND LAWN AREAS LOCATED ON PRIVATE PROPERTY OR WITHIN THE RIGHT-OF-WAY THAT ARE IMPACTED DURING CONSTRUCTION SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS AS IDENTIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE REQUIRED LIMITS OF SUCH RESTORATION SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. RESTORATION ON PRIVATE PROPERTY SHALL BE COMPLETED AS PROMPTLY AS PRACTICAL WITHIN THIRTY (30) CALENDAR DAYS OF COMPLETING WORK ON THE PROPERTY

TOWN OF MANCHESTER PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

> 494 MAIN STREET - P.O. BOX 191 MANCHESTER, CT 06045-0191

> > LEGEND

= WETLANDS BOUNDARY

= CONIFEROUS TREE = DECIDUOUS TREE ○ = STONE WALL S = SANITARY MANHOLE --- = STOCKADE FENCE (D) = DRAINAGE MANHOL x---x = WIRE FENCE = CULVERT EN እት = HYDRANT = RAILROAD TRACKS CS = CURB STOP BV = BUTTERFLY VALV ■ = GRANITE MONUMENT = BLOW OFF O = IRON PIPE - = SIGN o o = DOUBLE POST SIGN A = CONTROL POIN M = MAIL BOX = DRILL HOLE = UTILITY POLE WITH LIGH = GAS GATE O = TRAFFIC SPAN POLE T = TELEPHONE BOX E = ELECTRIC BOX ⊕ CATV TUBE = WETLAND FLAG

PROJECT NUMBER

FILENAME

OCCOORDI ANI DIMO

2023099PLAN.DWG				
NO.	DATE	FILE		
_	08/07/25	FOR BIDDING		

DRAWN BY: BK CHECKED BY: JD RELEASED BY: JL

DRAWING SCALE

NTS

HORIZONTAL: NAD83 VERTICAL: NAVD88

PROJECT LOCATION

JARVIS ROAD DOVER ROAD **FULTON ROAD** HENDEE ROAD **EDISON ROAD** WHITNEY ROAD

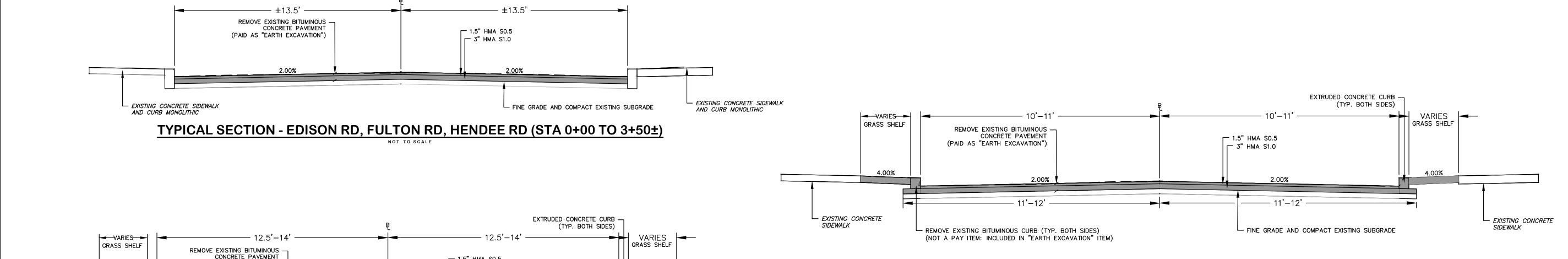
PROJECT TITLE

JARVIS ROAD

TYPICAL SECTIONS AND NOTES

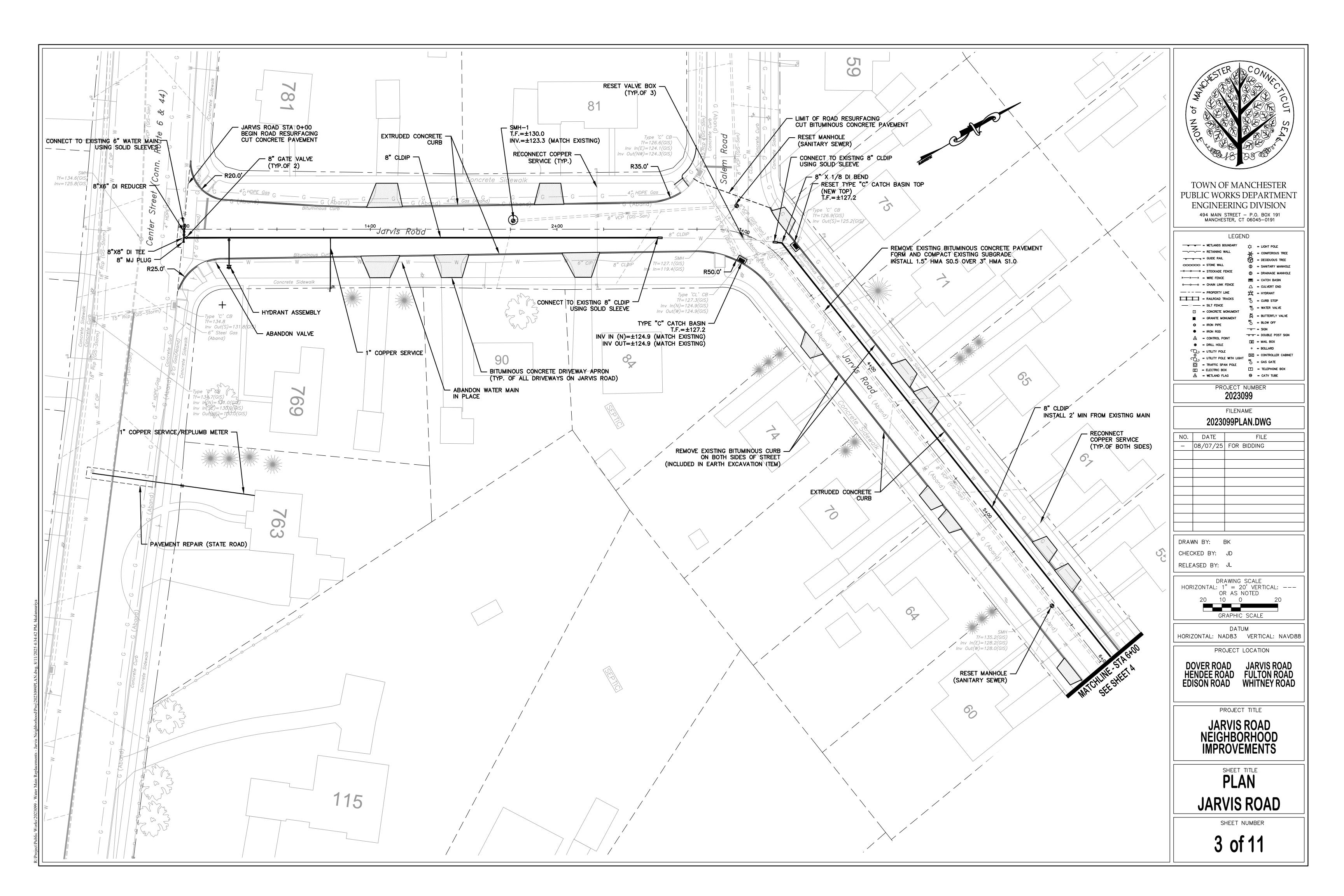
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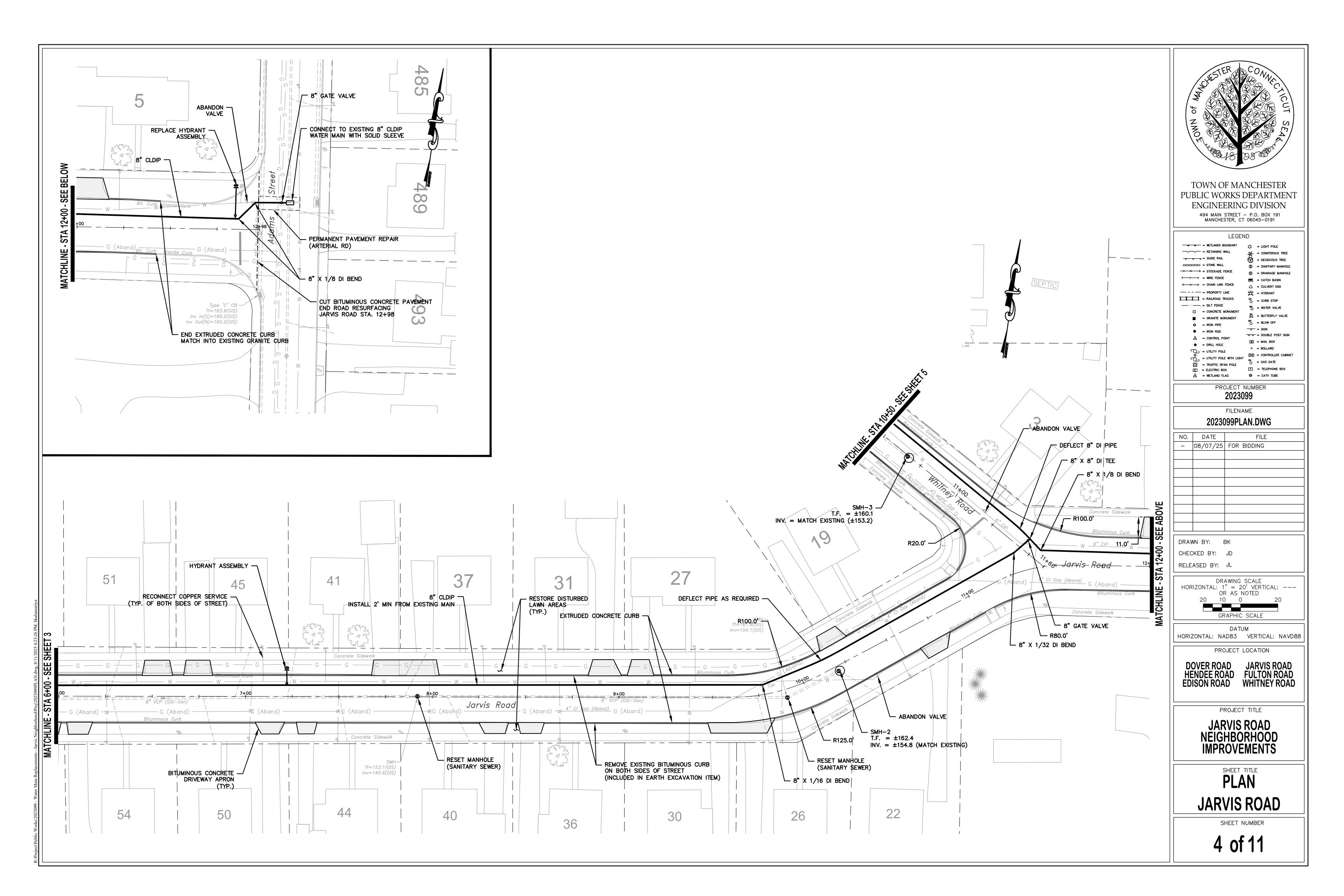
2 of 11

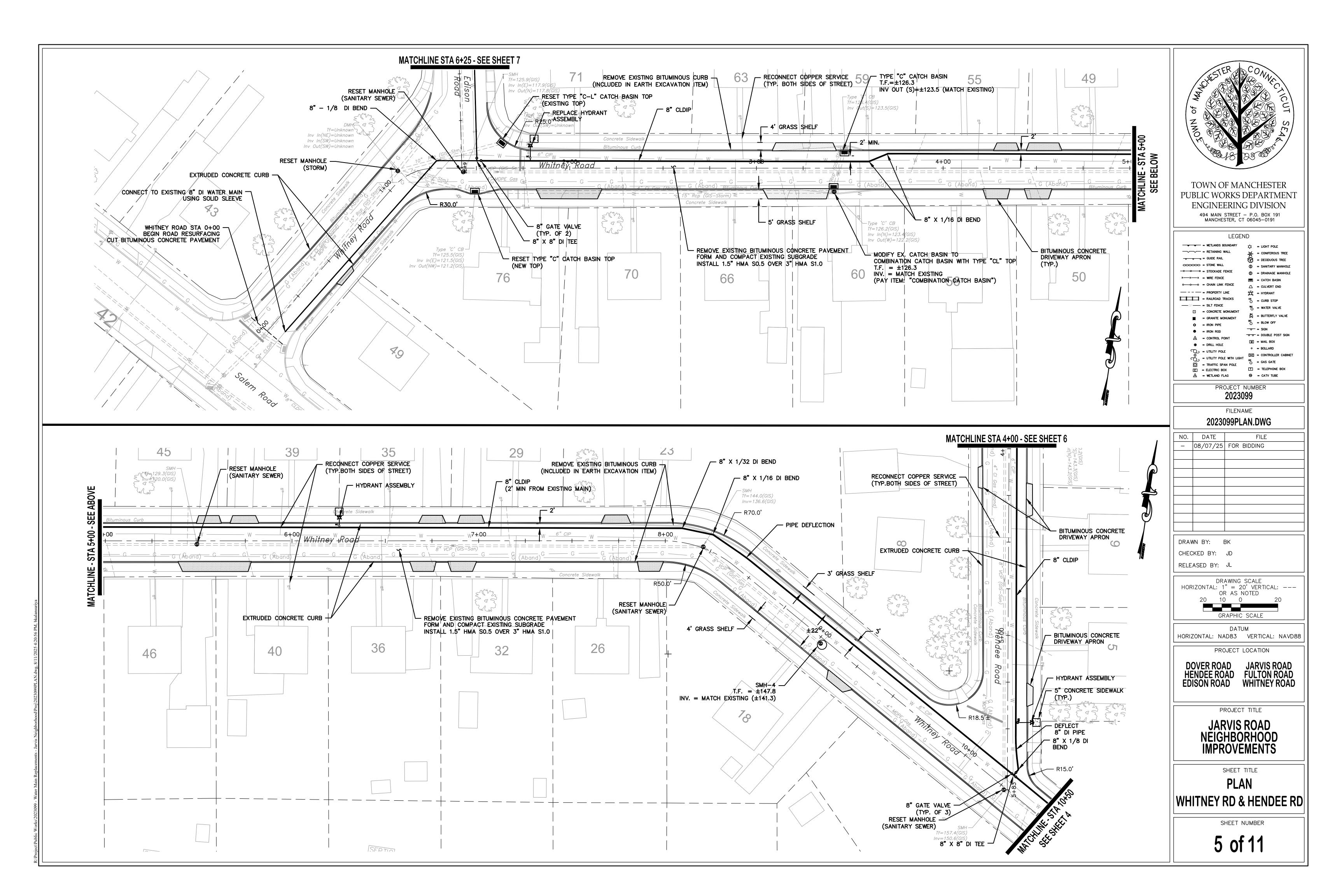


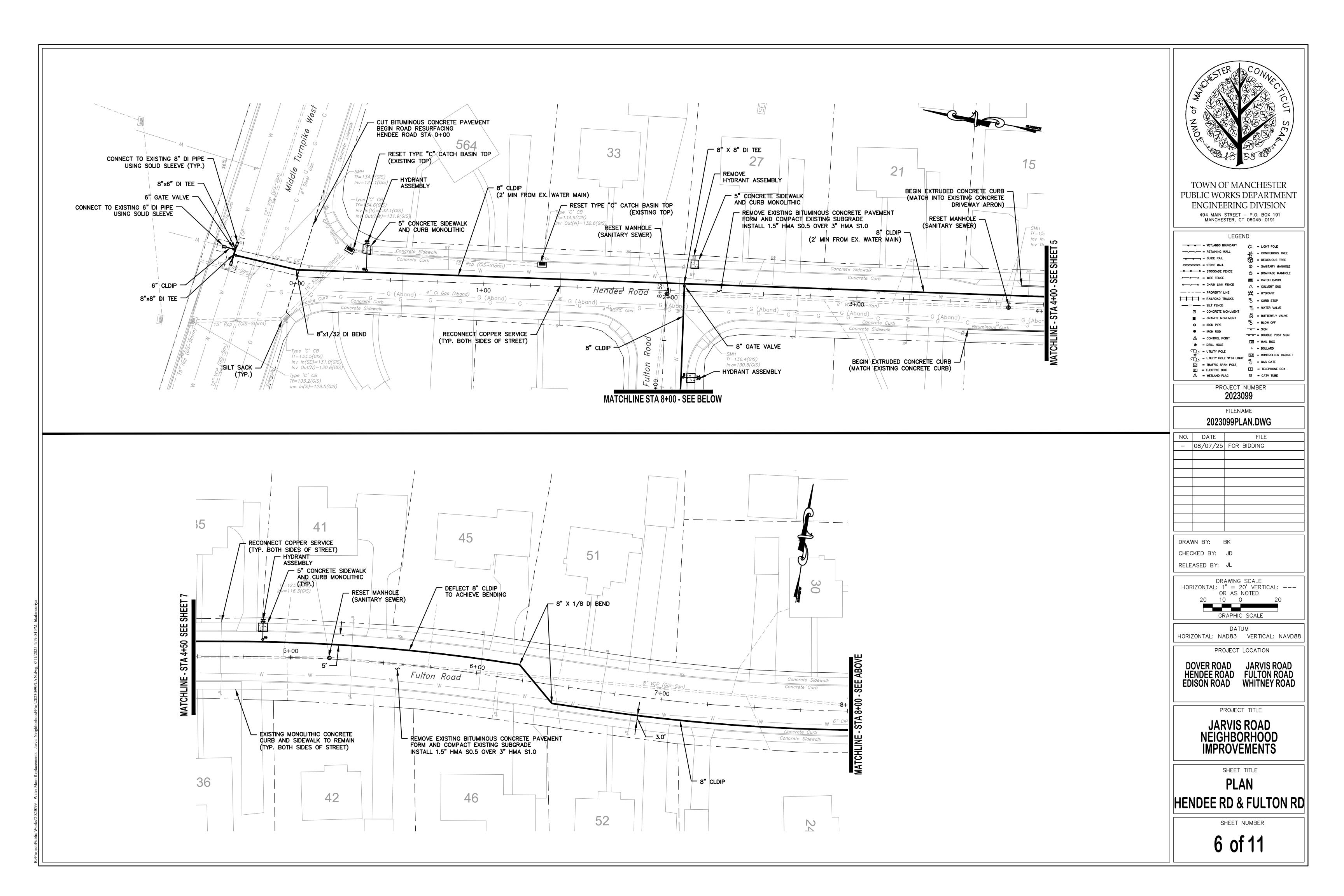
CONCRETE PAVEMENT - 1.5" HMA S0.5 (PAID AS "EARTH EXCAVATION") __ 3" HMA S1.0 4.00% 4.00% 2.00% 2.00% — 13.5**'**–15**'** - 13.5**'**–15**'** EXISTING CONCRETE EXISTING CONCRETE SIDEWALK - REMOVE EXISTING BITUMINOUS CURB (TYP. BOTH SIDES) FINE GRADE AND COMPACT EXISTING SUBGRADE (NOT A PAY ITEM: INCLUDED IN "EARTH EXCAVATION" ITEM)

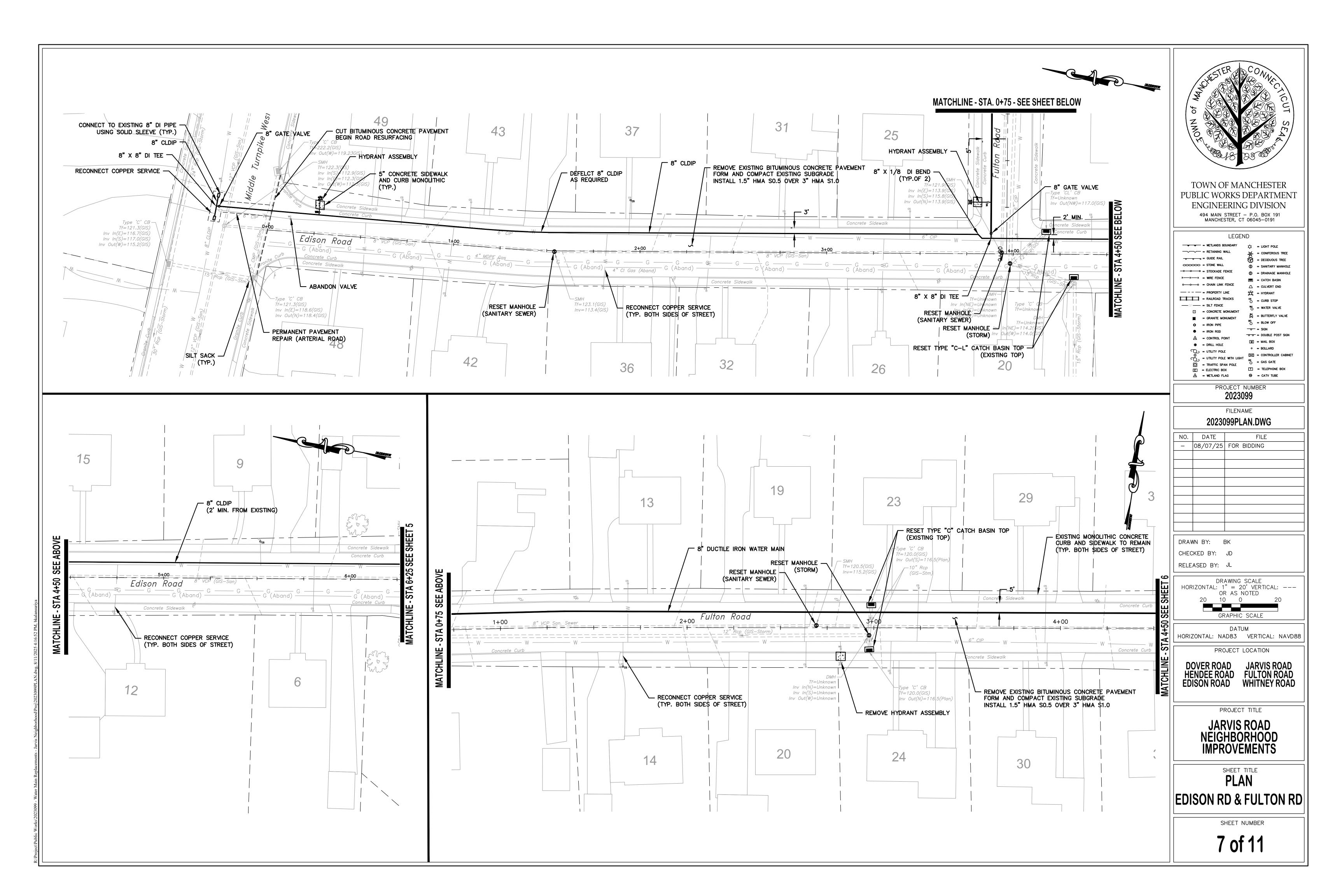
TYPICAL SECTION - JARVIS RD, DOVER RD, HENDEE RD (STA 3+50± TO STA 5+75±)

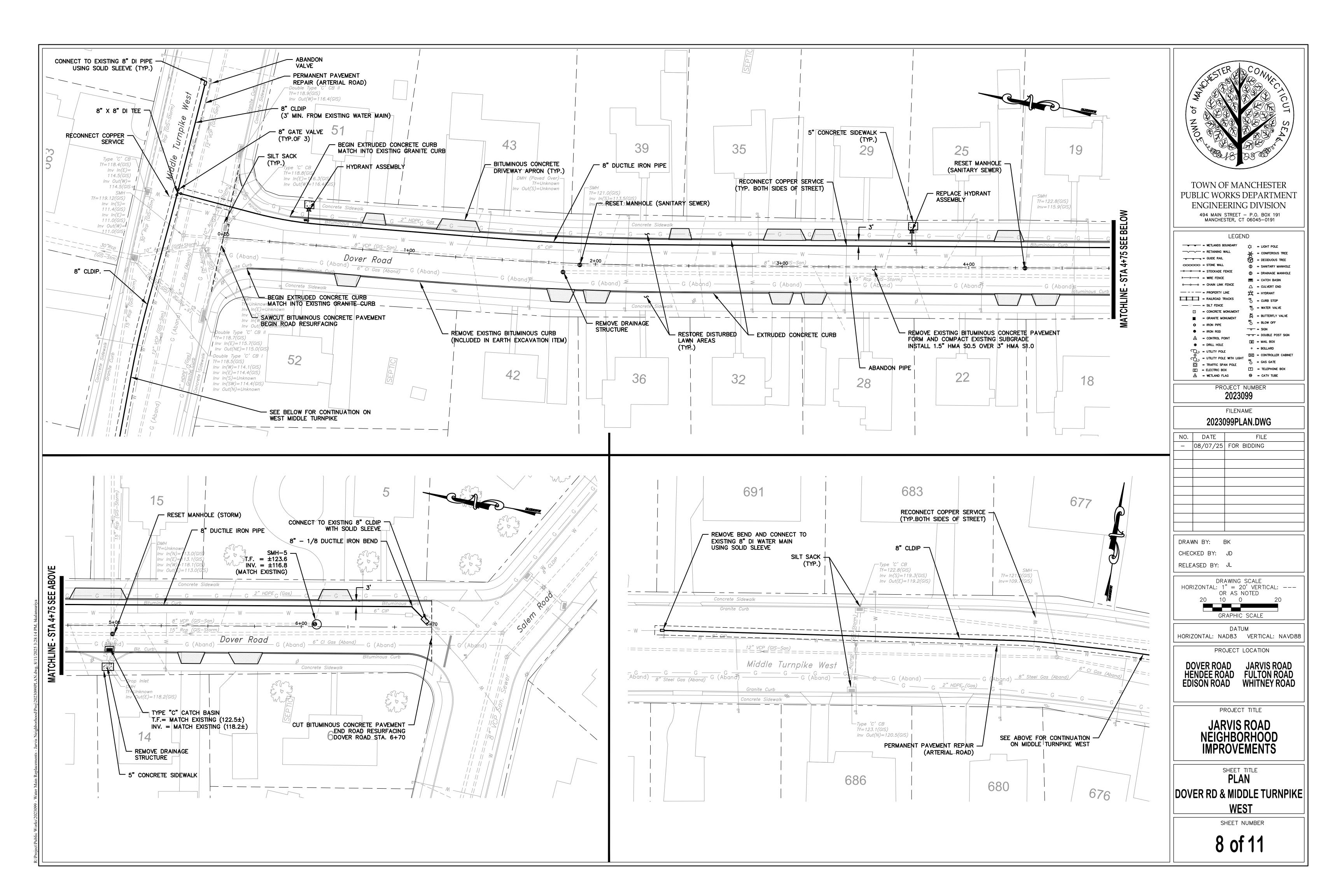


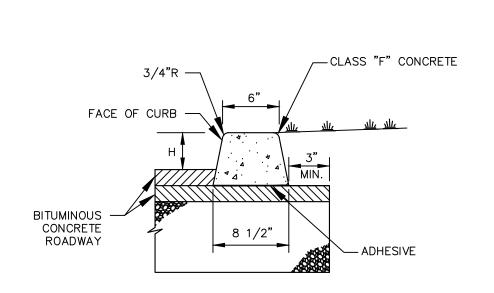








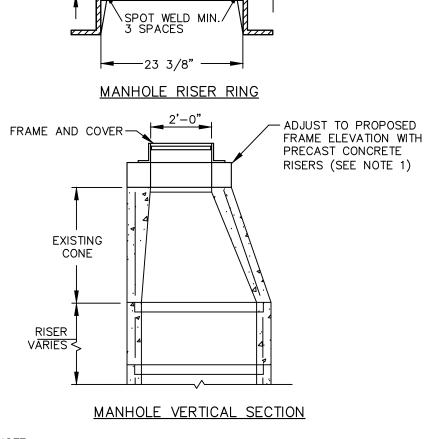




CURB HEIGHT (H) SHALL BE AS SPECIFIED ON THE PLANS.

EXTRUDED CONCRETE CURB

NOT TO SCALE



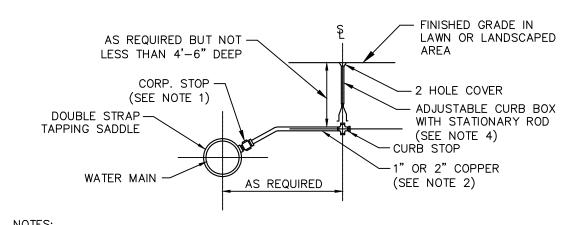
┌1 1/2" OR AS REQUIRED

NOTE:

1. CONCRETE BLOCKS OR BRICKS MAY BE USED AS DIRECTED BY

RESET MANHOLE

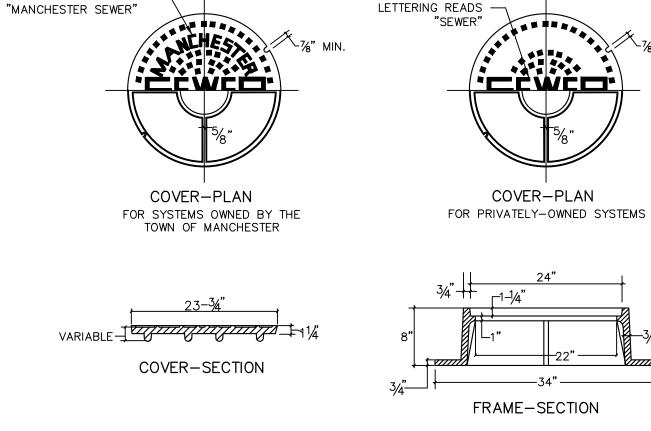
NOT TO SCALE



- NOTES:

 1. THE TOP OF THE CORPORATION AND THE FIRST THREE (3) FEET OF COPPER TUBING SHALL BE INSTALLED NO HIGHER THAN THE TOP OF THE WATER MAIN. 2. NO INTERMEDIATE SIZES (i.e. 3/4", 1 1/2", 1 3/4") ARE ALLOWED FOR COPPER SERVICES.
 ANY SERVICE REQUIREMENT GREATER THAN 2" COPPER SHALL BE CLDIP (4" MIN.) WITH THE SHUT-OFF LOCATED AT THE MAIN. COPPER TUBING SHALL BE CONTINUOUS WITH NO COUPLINGS BETWEEN THE CORPORATION STOP AND THE CURB STOP.
- 3. IN GENERAL, ALL EXISTING SERVICES THAT ARE CONSTRUCTED OF MATERIALS OTHER THAN COPPER TUBING BETWEEN THE CURB STOP AND METER SHALL BE REPLACED UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
- 4. TOP SECTION OF VALVE BOX WITH FLANGE SHALL BE SET AT FINISHED GRADE OVER CURB STOP COVER WHEN LOCATED WITHIN PAVED AREAS AND SIDEWALK.

TYPICAL WATER SERVICE CONNECTION NOT TO SCALE



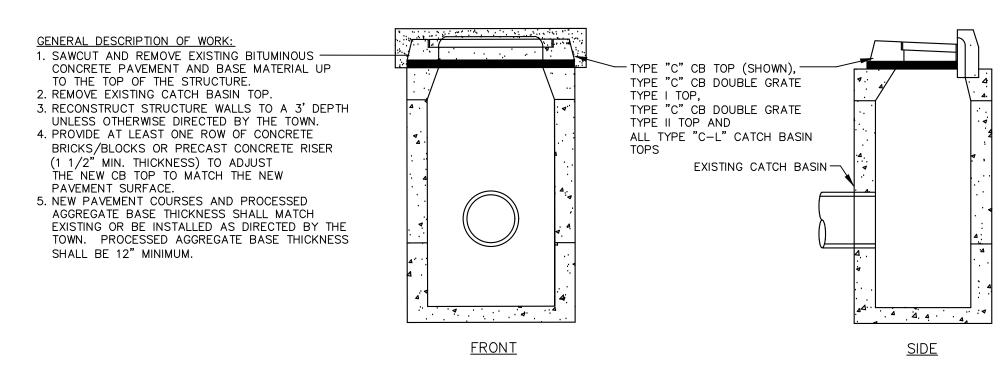
LETTERING READS -

NOTES:

1. MANHOLE FRAMES AND COVERS SHALL BE THE MODEL AND MANUFACTURER LISTED IN THE CONTRACT SPECIFICATIONS. 2. BOLTS FOR BOLTED COVERS SHALL BE 1/2" STAINLESS STEEL

SANITARY SEWER MANHOLE FRAME AND COVER

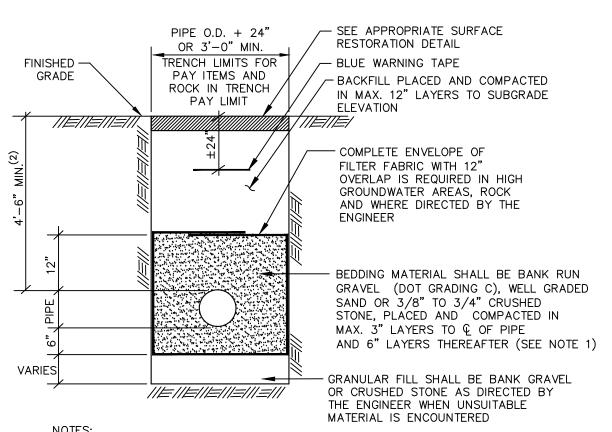
NOT TO SCALE



- 1. WHEN CONCRETE BLOCKS ARE USED, MAXIMUM CORBEL IS 2" PER
- COURSE OF BLOCK. 2. WALLS SHALL BE CONCRETE BLOCK OR PRECAST CONCRETE SECTIONS. 3. WALL THICKNESS TO BE 12" WHEN TOTAL HEIGHT OF STRUCTURE
- EXCEEDS 10' FROM TOP OF FRAME TO BOTTOM OF BASE. 4. THIS DETAIL SHOWN RESETTING A NEW TYPE "C" CATCH BASIN TOP WITH GRANITE CURB INLET; HOWEVER, IT SHALL BE USED FOR ALL CATCH BASIN TYPES SPECIFIED ON THE PLANS.

RESET CATCH BASIN TOP

NOT TO SCALE

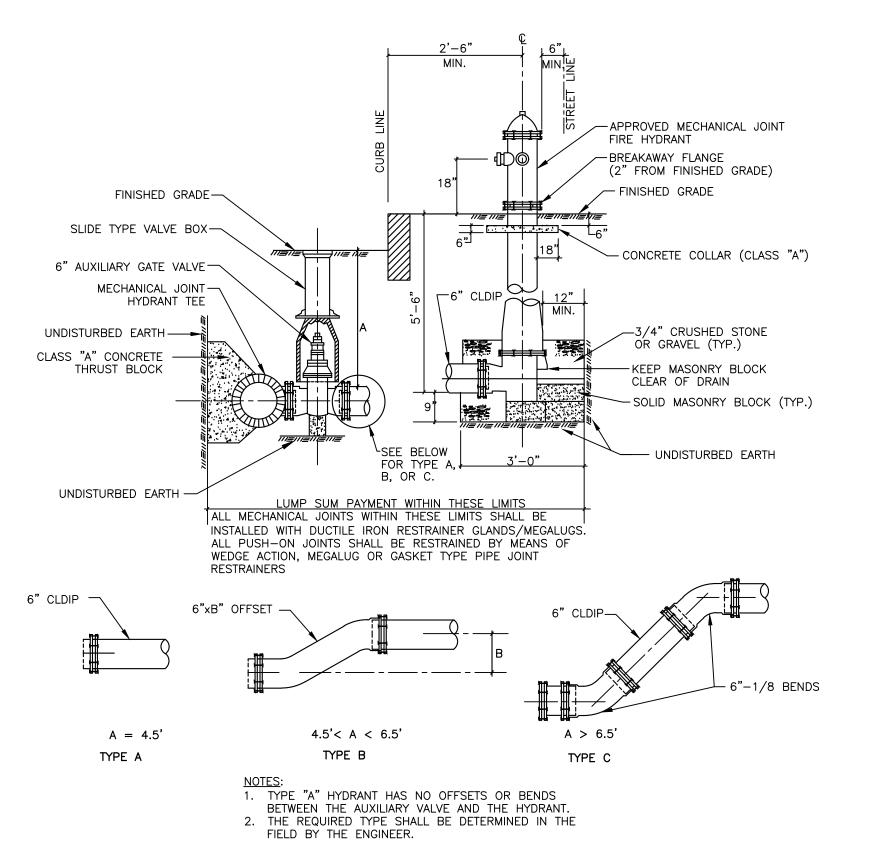


NOTES:

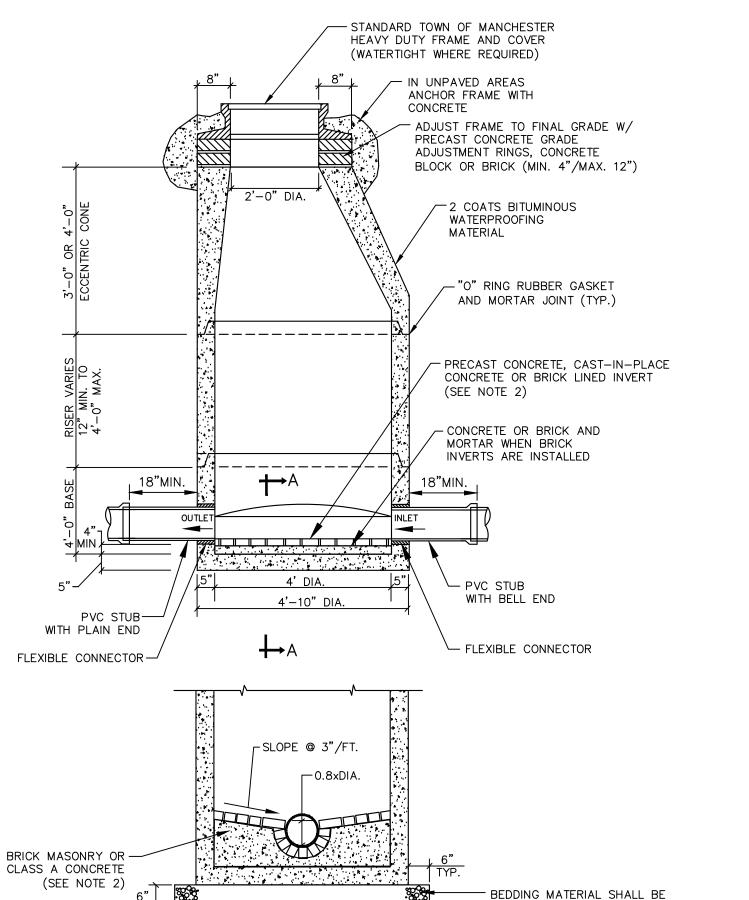
1. CRUSHED STONE SHALL ONLY BE USED IN HIGH GROUNDWATER CONDITIONS AS DIRECTED BY THE ENGINEER. 2. ALL WATER MAIN WITH LESS THAN 4'-6" OF COVER SHALL BE INSULATED UNLESS APPROVED OTHERWISE BY THE ENGINEER. SEE TYPICAL TRENCH DETAIL (INSULATED WATER) FOR ADDITIONAL INFORMATION.

TYPICAL TRENCH DETAIL (WATER)

NOT TO SCALE



HYDRANT ASSEMBLY NOT TO SCALE



MAXIMUM PIPE SIZE TO BE USED IN 4' DIA. MANHOLE IS 24". BRICK INVERT CONSTRUCTION IS SHOWN; HOWEVER, PRECAST OR CAST-IN-PLACE CONCRETE INVERTS SHALL BE INSTALLED UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

SECTION A-A

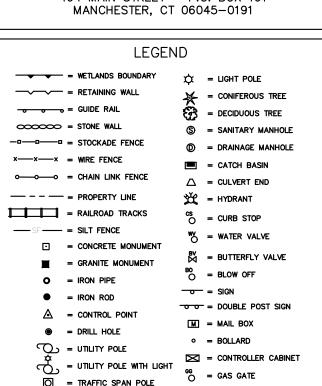
BANK GRAVEL (DOT GRADING A)

OR 3/8" TO 3/4" CRUSHED

48" SANITARY MANHOLE NOT TO SCALE



TOWN OF MANCHESTER PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION 494 MAIN STREET - P.O. BOX 191



PROJECT NUMBER 2023099

T = TELEPHONE BOX

⊕ CATV TUBE

FILENAME

OCCOORDI ANI DIMO

E = ELECTRIC BOX

= WETLAND FLAG

2023099PLAN.DWG				
NO.	DATE	FILE		
_	08/07/25	FOR BIDDING		

DRAWN BY: BK CHECKED BY: JD RELEASED BY: JL

DRAWING SCALE

NTS

HORIZONTAL: NAD83 VERTICAL: NAVD88

PROJECT LOCATION

JARVIS ROAD DOVER ROAD **FULTON ROAD EDISON ROAD** WHITNEY ROAD

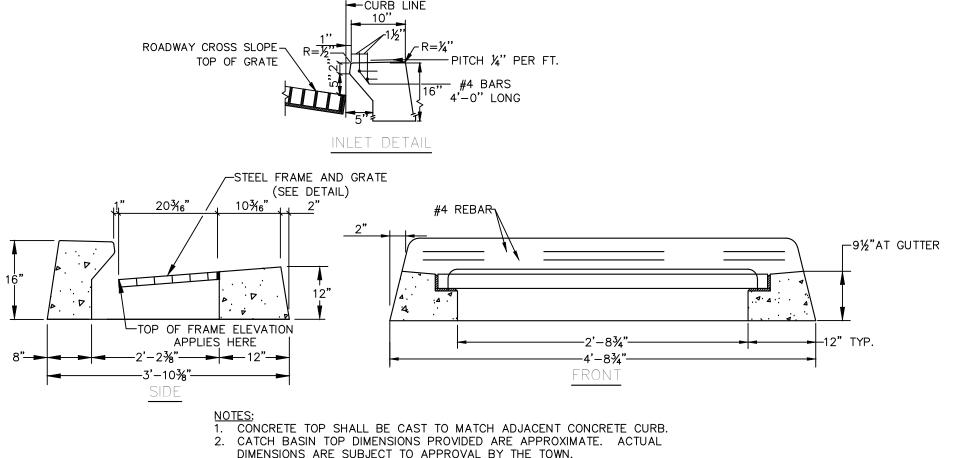
PROJECT TITLE

JARVIS ROAD

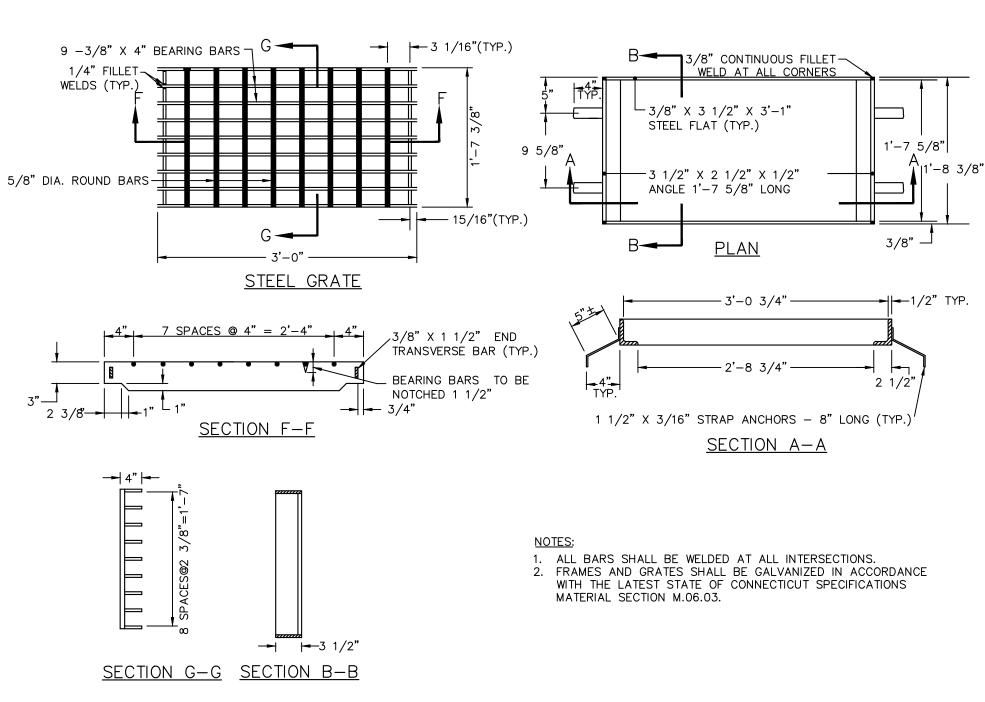
SHEET TITLE

DETAILS

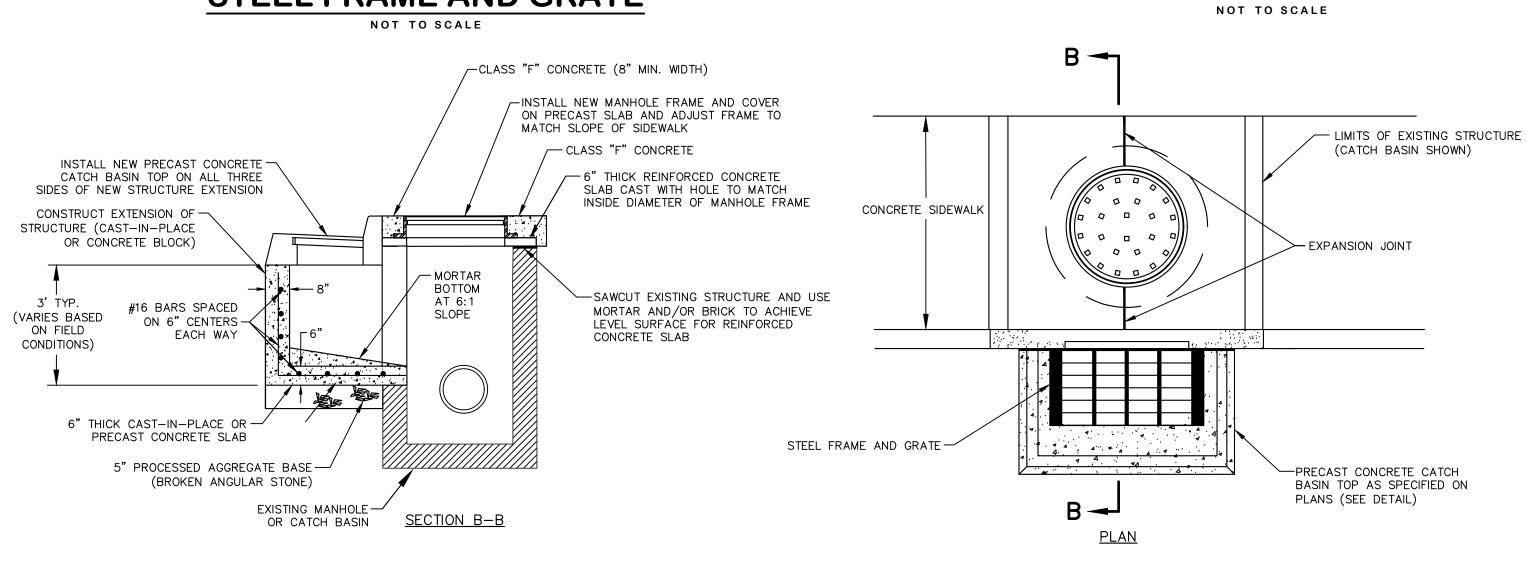
SHEET NUMBER



TYPE "C" CATCH BASIN TOP (FOR CONCRETE CURB) NOT TO SCALE



STEEL FRAME AND GRATE



STEEL FRAME AND GRATE (SEE DETAIL) ګ" MIN. DROP 3'-1¾" - 2'-8¾"--4'-8¾"-SECTION A-A TOP OF FRAME ELEVATION APPLIES HERE ګ" MIN. DROP 10¹¾₆" TYP. → 1¼" TYP. → | < <u>PLAN</u> NOTE: 1. CATCH BASIN TOP DIMENSIONS PROVIDED ARE SECTION B-B APPROXIMATE. ACTUAL DIMENSIONS ARE SUBJECT TO APPROVAL BY THE TOWN.

- SEE APPROPRIATE SURFACE

GRANULAR FILL OR APPROVED

NATIVE MATERIAL PLACED AND

- BEDDING MATERIAL (SEE NOTE 3)

-GRANULAR FILL AS DIRECTED BY

ENGINEER WHEN UNSUITABLE MATERIAL IS ENCOUNTERED

COMPACTED IN 12" (MAX.)

RESTORATION DETAIL

TYPE "C-L" CATCH BASIN TOP NOT TO SCALE

ROCK IN TRENCH

PAY LIMIT

PIPE DIA.

OR HORIZ. SPAN OF

ELLIPTICAL PIPE

I.D.+2' FOR PIPE

UNDER 30", I.D.+3' FOR PIPE

30"& OVER & FOR HORIZ.

ELLIPTICAL PIPE

NOTES:

1. ALL CONCRETE PIPE TO BE MINIMUM CLASS IV WITH 2 FT OF

COVER UNLESS OTHERWISE APPROVED BY THE ENGINEER. USE WATERTIGHT RUBBER GASKETS IN ALL PIPE JOINTS.

DIAMETER AND LARGER.

BEDDING MATERIAL SHALL BE INSTALLED A MINIMUM OF 12"
ABOVE THE TOP OF ALL PLASTIC PIPES AND PIPES 48" IN

4. EXCAVATION, BEDDING MATERIAL AND BACKFILL ARE INCLUDED IN CONTRACT UNIT PRICE BID FOR "CULVERT" OF THE TYPE

TYPICAL TRENCH DETAIL

(STORM SEWER)

FINISHED GRADE -

4" IN EARTH

VARIES

CATCH BASIN NOTES:

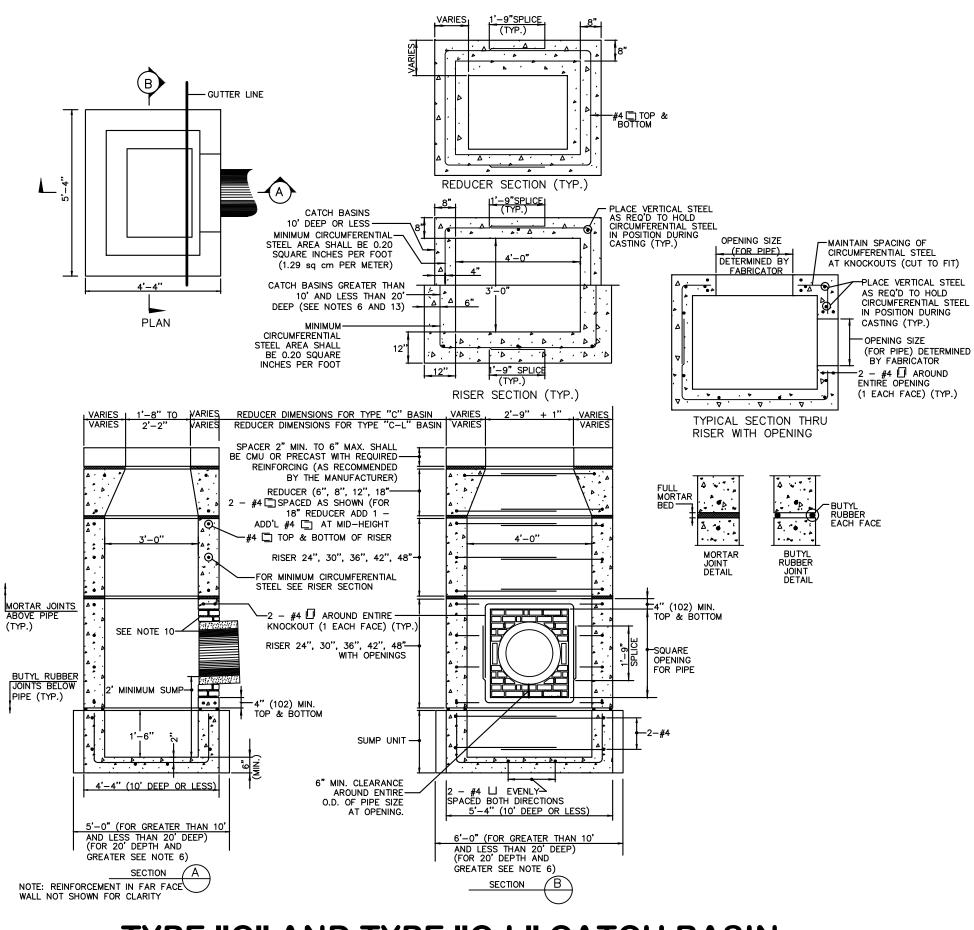
HIGHWAY BRIDGES.

- REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60. 2. CATCH BASIN DETAILS SHOW STANDARD REINFORCEMENT. WELDED WIRE FABRIC WITH AN AREA EQUAL TO OR GREATER THAN THE REINFORCING SHOWN MAY BE
- 3. ALL LAP SPLICES, DEVELOPMENT LENGTHS, BENDS FOR REINFORCEMENT, AND WELDED WIRE FABRIC SHALL CONFORM TO AASHTO STANDARD SPECIFICATIONS FOR
- 4. ALL REINFORCEMENT SHALL HAVE A MINIMUM CLEAR COVER OF 2". 5. MINIMUM CONCRETE COMPRESSIVE STRENGTH Fc' = 4000 PSI SHALL BE OBTAINED
- 6. BASES AND RISERS AT A DEPTH OF 20' OR MORE SHALL BE DESIGNED BY THE
- CONTRACTOR AND WORKING DRAWINGS SHALL BE SUBMITTED TO THE TOWN FOR
- . SEE APPROPRIATE DETAIL FOR CATCH BASIN FRAMES AND GRATES. RISERS MAY BE PREFABRICATED WITH PIPE OPENINGS IN ALL FOUR WALLS. ADEQUATE REINFORCING AROUND PIPE OPENINGS CONFORMING TO THESE PLANS SHALL BE PROVIDED. ANY RISERS USED WHERE A PIPE OPENING IS TO REMAIN IN PLACE, MUST BE FORMED UP WITH BRICK AS DIRECTED BY THE TOWN.
- . RISERS SHALL NEVER HAVE CORNER PIPE ENTRIES. 10. ALL OPENINGS SURROUNDING PIPES SHALL BE CLOSED USING CEMENT RUBBLE MASONRY CONFORMING TO THE LATEST STATE OF CONNECTICUT STANDARD SPECIFICATIONS MATERIAL SECTION M6.06. IF THE TOWN DETERMINES THAT THE CLOSURE OF ANY PIPE OPENING IS UNSATISFACTORY, THE CONTRACTOR SHALL IMMEDIATELY RECLOSE SAID OPENING. THE LOCATION OF PIPE OPENINGS SHALL NOT REDUCE THE WALL THICKNESS.
- 11. THE LATEST CONNECTICUT D.O.T. STANDARD SPECIFICATIONS AND SUPPLEMENTALS SHALL GOVERN.
- 12. WALL THICKNESS OF ALL CATCH BASINS OVER 10' DEEP SHALL BE INCREASED TO 12" THICK. INSIDE DIMENSION SHALL REMAIN THE SAME (THE 12" THICKNESS WILL
- START AFTER THE FIRST 10'). 13. BUTYL RUBBER JOINT SEAL SHALL CONFORM TO AASHTO M-198 AND MORTAR SHALL CONFORM TO THE LATEST STATE OF CONNECTICUT STANDARD

 SPECIFICATIONS MATERIAL SECTION M11.04. ALL CATCH BASINS SHALL BE BUILT
- WITH SPACERS AS SHOWN IN THE DETAILS. 14. SHRINKAGE AND TEMPERATURE REINFORCEMENT SHALL BE PROVIDED IN THE TOPS OF SLABS. THE TOTAL AREA OF REINFORCEMENT PROVIDED SHALL BE AT LEAST 0.125 SQUARE INCHES PER FOOT IN EACH DIRECTION. THE MAXIMUM SPACING OF
- THIS REINFORCEMENT SHALL NOT EXCEED 18 INCHES. 15. ALL CONCRETE CATCH BASIN TOPS SHALL BE CAST TO MATCH ADJACENT CURB
- 16. CATCH BASIN TOP DIMENSIONS PROVIDED ON THE PLANS ARE APPROXIMATE. ACTUAL DIMENSIONS ARE SUBJECT TO APPROVAL BY THE TOWN.

CATCH BASIN NOTES

NOT TO SCALE



TYPE "C" AND TYPE "C-L" CATCH BASIN

NOT TO SCALE



TOWN OF MANCHESTER PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION 494 MAIN STREET - P.O. BOX 191

MANCHESTER, CT 06045-0191

LEGEN	1D	
= WETLANDS BOUNDARY	ά	= LIGHT POLE
= RETAINING WALL	*	= CONIFEROUS TREE
GUIDE RAIL	8	= DECIDUOUS TREE
∞ = STONE WALL	S	= SANITARY MANHOLE
= STOCKADE FENCE	0	= DRAINAGE MANHOLI
×× = WIRE FENCE		= CATCH BASIN
oo = CHAIN LINK FENCE	Δ	= CULVERT END
= PROPERTY LINE	粱	= HYDRANT

= RAILROAD TRACKS = WATER VALVE ■ = GRANITE MONUMENT O = BLOW OFF o = SIGN o o = DOUBLE POST SIGN = CONTROL POIN M = MAIL BOX = DRILL HOLE = CONTROLLER CABINE = UTILITY POLE WITH LIGH

= GAS GATE

T = TELEPHONE BOX

 ⊕ CATV TUBE \triangle = WETLAND FLAG PROJECT NUMBER 2023099

O = TRAFFIC SPAN POLE

E = ELECTRIC BOX

FILENAME

2023099PLAN.DWG					
NO.	DATE	FILE			
_	08/07/25	FOR BIDDING			

DRAWN BY: BK CHECKED BY: JD

RELEASED BY: JL

DRAWING SCALE

NTS

HORIZONTAL: NAD83 VERTICAL: NAVD88

PROJECT LOCATION

JARVIS ROAD DOVER ROAD **FULTON ROAD EDISON ROAD** WHITNEY ROAD

PROJECT TITLE

JARVIS ROAD NEIGHBORHOOD

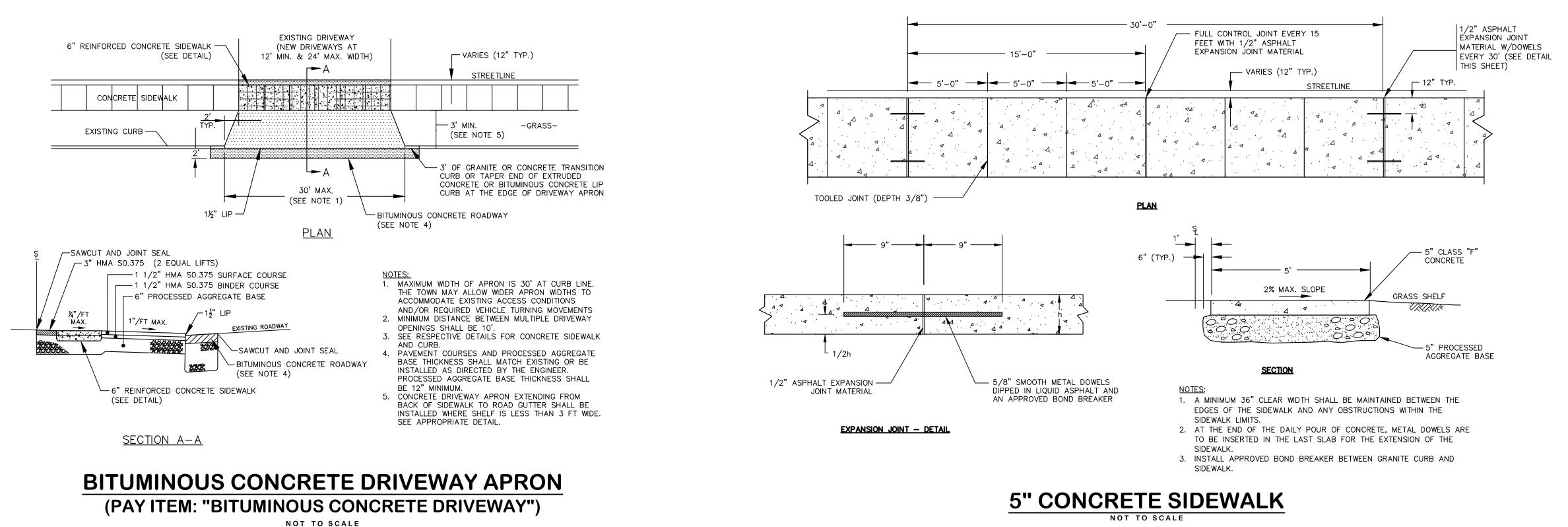
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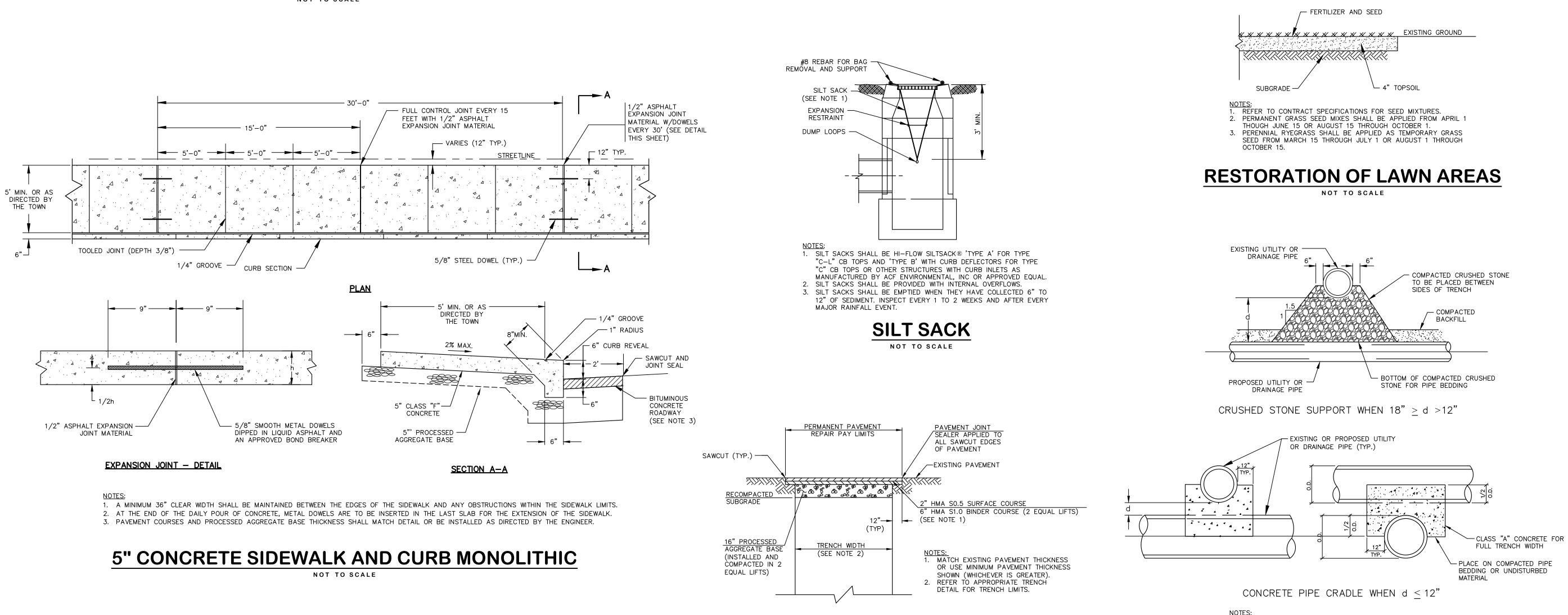
DETAILS

SHEET NUMBER

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COMBINATION CATCH BASIN





PERMANENT PAVEMENT REPAIR

(ARTERIAL ROAD)

NOT TO SCALE



TOWN OF MANCHESTER
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
494 MAIN STREET - P.O. BOX 191

MANCHESTER, CT 06045-0191

LEGEND = WETLANDS BOUNDARY ○ = STONE WALL S = SANITARY MANHOLE ---- = STOCKADE FENCE (D) = DRAINAGE MANHOLE ---- = PROPERTY LINE ₩ = HYDRANT = RAILROAD TRACKS WV = WATER VALVE ■ = GRANITE MONUMENT O = BLOW OFF o = SIGN o o = DOUBLE POST SIGN

= CONTROL POINT

2023099

PILENAME
2023099PLAN.DWG

NO. DATE FILE
- 08/07/25 FOR BIDDING

DRAWN BY: BK
CHECKED BY: JD
RELEASED BY: JL

DRAWING SCALE

NTS

DATUM HORIZONTAL: NAD83 VERTICAL: NAVD88

PROJECT LOCATION

DOVER ROAD JARVIS ROAD HENDEE ROAD FULTON ROAD EDISON ROAD WHITNEY ROAD

PROJECT TITLE

JARVIS ROAD NEIGHBORHOOD IMPROVEMENTS

SHEET TITLE

DETAILS

1. d = DISTANCE BETWEEN UTILITY AND DRAINAGE PIPES.

AND WHERE DIRECTED BY THE ENGINEER.

2. SUPPORTS SHALL BE INSTALLED WHERE SPECIFIED ON THE PLANS

3. CRUSHED STONE SUPPORTS SHALL BE INCLUDED IN THE COST OF THE PROPOSED UTILITY OR DRAINAGE PIPE AND CONCRETE PIPE

CRADLES SHALL BE PAID FOR AS "MISCELLANEOUS CONCRETE".

TYPICAL UTILITY SUPPORTS

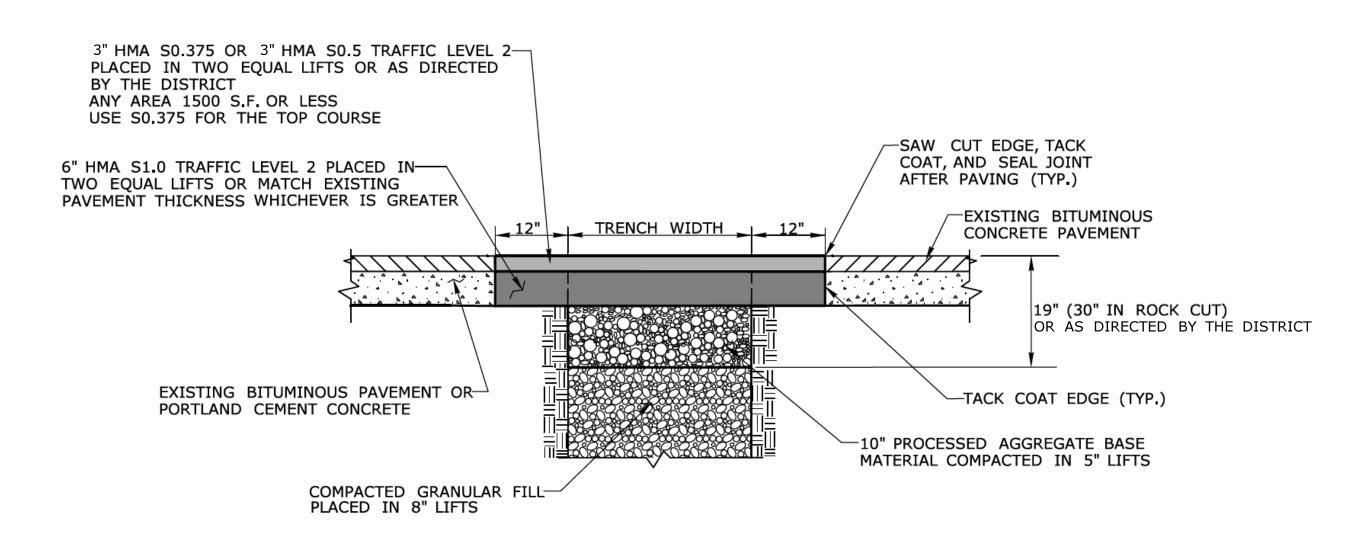
NOT TO SCALE

SHEET NUMBER

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—SAW CUT EDGE, TACK COAT, AND SEAL JOINT 4" HMA S0.5 TRAFFIC LEVEL 2 -AFTER PAVING (TYP.) PLACED IN TWO EQUAL LIFTS OR AS DIRECTED BY THE DISTRICT -EXISTING BITUMINOUS TRENCH WIDTH _ CONCRETE PAVEMENT 19" (30" IN ROCK CUT) EXISTING PORTLAND-CEMENT CONCRETE OR BITUMINOUS CONCRETE REMOVE ANY UNDERMINED AREAS (TYP.)-AND REPLACE WITH SUITABLE MATERIAL OR AS DIRECTED BY THE DISTRICT -15" PROCESSED AGGREGATE BASE COMPACTED GRANULAR FILL MATERIAL COMPACTED IN 5" LIFTS PLACED IN 8" LIFTS

TEMPORARY PAVEMENT REPAIR FOR TRENCH THROUGH OVERLAID PORTLAND CEMENT CONCRETE OR BITUMINOUS CONCRETE PAVEMENT



PERMANENT PAVEMENT REPAIR WITHOUT MILLING - THROUGH PORTLAND CEMENT CONCRETE OR BITUMINOUS CONCRETE PAVEMENT

MILL AND PAVE WITH 2" TO 3" HMA S0.375 OR — MILL AND PAVE 10' MIN. OR 2" TO 3" HMA SO.5 TRAFFIC LEVEL 2 OR AS AS DIRECTED BY THE DISTRICT DIRECTED BY THE DISTRICT AND FOR ANY AREA 1500 S.F. OR LESS USE S0.375 FOR THE TOP COURSE TACK COAT, AND SEAL JOINT 6" HMA S1.0 TRAFFIC LEVEL 2 PLACED IN-AFTER PAVING (TYP.) TWO EQUAL LIFTS OR MATCH EXISTING PAVEMENT THICKNESS WHICHEVER IS GREATER -EXISTING BITUMINOUS CONCRETE PAVEMENT 19" (30" IN ROCK CUT) OR AS DIRECTED BY THE DISTRICT TACK COAT EDGE (TYP.) EXISTING BITUMINOUS PAVEMENT OR-PORTLAND CEMENT CONCRETE 10" PROCESSED AGGREGATE BASE MATERIAL COMPACTED IN 5" LIFTS COMPACTED GRANULAR FILL PLACED IN 8" LIFTS

PERMANENT PAVEMENT REPAIR WITH MILLING

GENERAL NOTES:

-3" HMA SO.5 TRAFFIC LEVEL 2

AS DIRECTED BY THE DISTRICT

IN TWO EQUAL LIFTS

-COMPACTED GRANULAR FILL PLACED IN 8" LIFTS

PLACED IN TWO EQUAL LIFTS OR

6" HMA S1.0 TRAFFIC LEVEL 2 PLACED

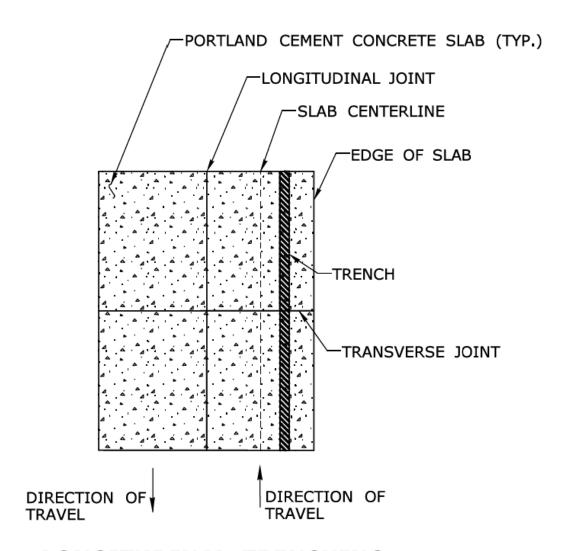
-10" PROCESSED AGGREGATE BASE

MATERIAL COMPACTED IN 5" LIFTS

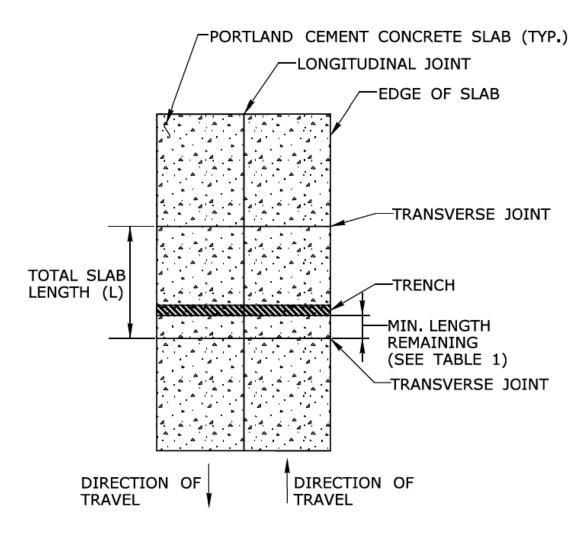
- 1. LONGITUDINAL TRENCHING FOR JOINTED CONCRETE PAVEMENT:
- A. IF THE LONGITUDINAL TRENCH FALLS BETWEEN THE SLAB CENTERLINE AND THE EDGE OF SLAB, REMOVE CONCRETE AND BITUMINOUS CONCRETE PAVEMENT FROM THE TRENCH EDGE TO THE EDGE OF ROAD. IF THE LONGITUDINAL TRENCH FALLS BETWEEN THE LONGITUDINAL JOINT AND THE SLAB CENTERLINE, REMOVE THE ENTIRE CONCRETE SLAB AND BITUMINOUS CONCRETE PAVEMENT TO THE EDGE OF ROAD. IN EITHER CASE REBUILD WITH THE FOLLOWING:
 - a. PLACE HMA S1.0 TRAFFIC LEVEL 2 IN TWO EQUAL 4" 5" LIFTS TO MATCH EXISTING CONCRETE PAVEMENT THICKNESS b. PLACE HMA S0.5 TRAFFIC LEVEL 2 IN 2" - 3" LIFTS TO MATCH EXISTING BITUMINOUS CONCRETE PAVEMENT THICKNESS, WITH THE FINAL LIFT BEING 2"
- 2. TRANSVERSE TRENCHING FOR JOINTED CONCRETE PAVEMENT:

TABLE 1					
TOTAL SLAB LENGTH (L)	MIN. LENGTH REMAINING				
40' OR LONGER	1/4 L				
15' - 40'	10'				
15' OR SHORTER	REBUILD TO NEAREST JOINT				

- A. FOR TRANSVERSE TRENCHES, THE MINIMUM SLAB LENGTH AS SHOWN IN TABLE 1 SHALL BE LEFT IN PLACE TO THE NEAREST TRANSVERSE JOINT. IF THIS CRITERIA CANNOT BE MET, THE EXISTING SLAB AREA FROM THE TRENCH EDGE TO THE NEAREST TRANSVERSE JOINT SHALL BE REMOVED AND REBUILT AS FOLLOWS:
 - a. PLACE HMA S1.0 TRAFFIC LEVEL 2 IN TWO EQUAL 4" 5" LIFTS TO MATCH EXISTING CONCRETE PAVEMENT THICKNESS b. PLACE HMA S0.5 TRAFFIC LEVEL 2 IN 2" 3" LIFTS TO MATCH EXISTING BITUMINOUS CONCRETE PAVEMENT THICKNESS, WITH THE FINAL LIFT BEING 2"



FOR JOINTED CONCRETE PAVEMENT
(SEE NOTE 1)



TRANSVERSE TRENCHING
FOR JOINTED CONCRETE PAVEMENT
(SEE NOTE 2)

OFFICE OF MAINTENANCE OPERATIONS
SPECIAL SERVICES AND PLANNING



TE OF CONNECTICUT

TICUT

DRAWING TITLE:

HIGHWAY OPERATIONS

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROADWAY PROFILE

