# Located in Sections 27 and 34, Township 43 North, Range 8 East Algonquin, McHenry County, Illinois



# Village of Algonquin

Village Hall 2200 Harnish Drive Algonquin, IL 60102 847.658.2700

Public Works Department 110 Meyer Drive Algonquin, IL 60102 847.658.2754

# Village Officials

Village President: John Schmitt Village Clerk: Jerry Kautz

## Trustees

Debby Sosine John Spella Jim Steigert

Laura Brehmer Jerry Glogowski Janis Jasper

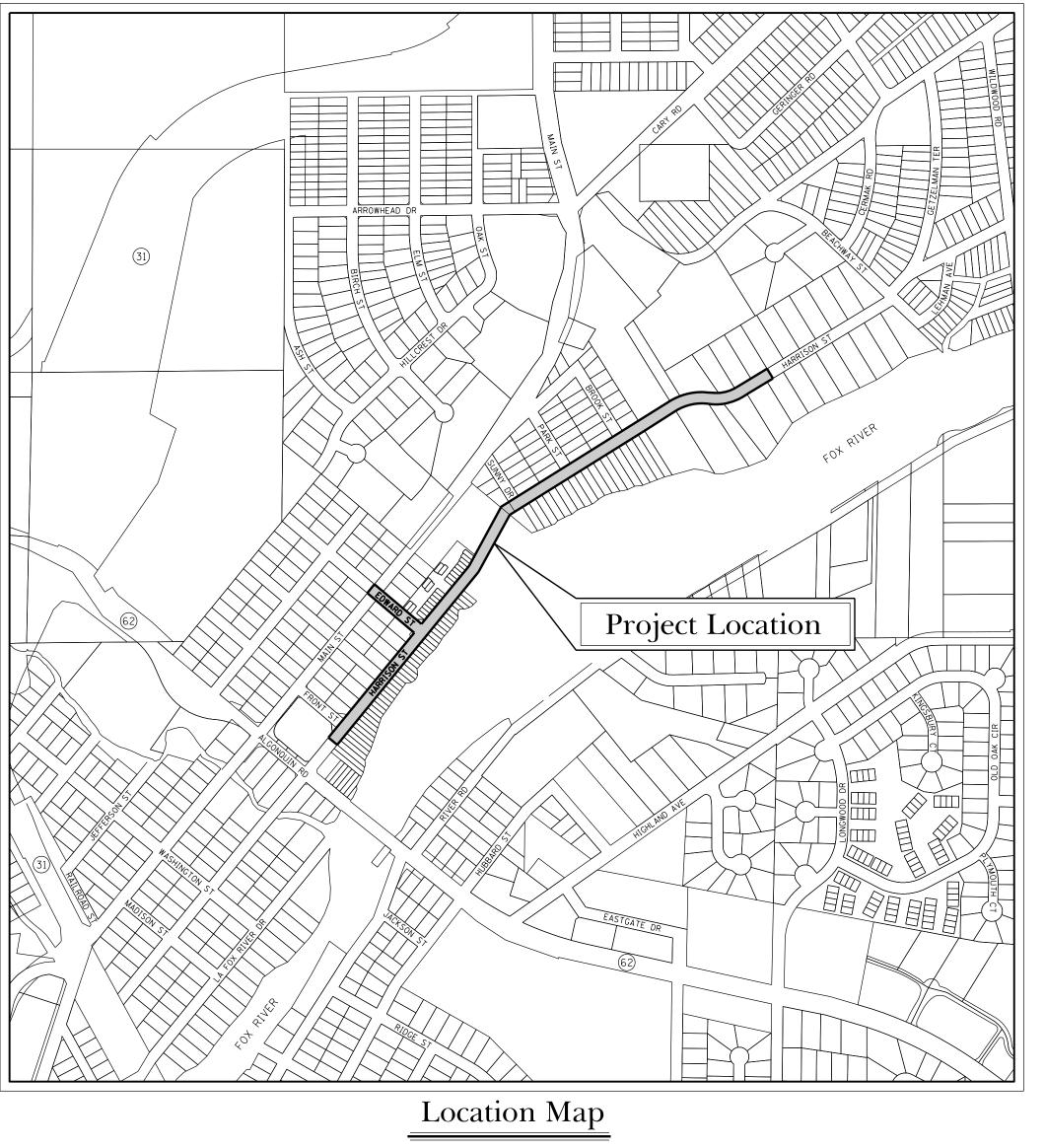
PLANS PREPARED BY:





NOTE THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTING COMPLETE SETS OF THESE PLANS AND PROJECT SPECIFICATIONS TO ALL SUB CONTRACTORS INVOLVED IN THIS PROJECT. A COMPLETE COPY OF THESE PLANS AND PROJECT SPECIFICATIONS SHALL BE IN THE POSSESSION OF THE CONTRACTOR AND ALL SUB CONTRACTORS ON THE PROJECT AT ALL TIMES.

# **Engineering Plans** for Village of Algonquin Project No. VoA16-02-25B Downtown Streetscape Stage 2 Wet Utilities



N.T.S.

Project Length = 3,100 Feet (0.59 Miles)

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### ELEVATION BENCHMARKS - DATUM: NAVD '88 ('99 GEOID) Provided by Others - Coordinate with the Village of Algonquin

NO.	DESCRIPTION	ELEV.
AJ2945	NGS MONUMENT-METAL ROD WITH 6" LOGO CAP LOCATED AT THE NORTHEAST CORNER OF HARNISH DR. AND SAWMILL LN. EAST OF VILLAGE HALL ENTRANCE	897.16
0SBM 11-50	THE NORTHWEST CORNER OF CONC. PAD TO SIGNAL CONTROL BOX AT THE NORTHEAST CORNER OF HARRISON ST. AND ALGONQUIN RD.	736.56
OSBM 15-50	SQUARE CUT AT INTERSECTION WALKS AT SOUTHEAST CORNER OF WASHINGTON ST. & MAIN ST.	740.06
OSBM 15-51	SQUARE CUT ON NORTHWEST CORNER OF BRIDGE WALL ON EASTERLY SIDE OF HARRISON ST. NORTH OF CRYSTAL CREEK OPPOSITE ADDRESS #20	740.20
OSBM 15-52	NORTHWESTRLY CORNER OF FIRST STEP UP @ ADDRESS #213 ON EASTERLY SIDE OF HARRISON ST.	736.91
OSBM 15-53	CORNER OF TOP STEP UP @ ADDRESS #315 ON EASTERLY SIDE OF HARRISON ST. SOUTH OF WASHINGTON ST.	738.07
OSBM 16-1	SQUARE CUT ON NORTHEAST CORNER OF STONE CAP OF SHELL GAS SIGN AT NORTHWEST CORNER OF ALGONQUIN RD. & MAIN ST.	742.47
OSBM 16-2	NORTHWEST CORNER OF CONC. STOOP TO HOUSE #309 MAIN ST. APPROX. 140'± NORTH OF EDWARD ST.	748.16
OSBM 16-3	LARGE SPIKE IN UTILITY POLE WITH LIGHT JUST NORTH OF RIVERVIEW AV. ON EAST SIDE OF MAIN ST.	792.81
OSBM 16-4	SPIKE IN UTILITY POLE WITH LIGHT - FIFTH POLE SOUTH OF CARY RD. ON EAST SIDE OF MAIN ST.	835.84
0SBM 16-5	SQUARE CUT ON MOST NORTH CORNER OF CONC. PAD OF TEL BOX AT NORTHWEST CORNER OF MAIN ST. & ARROWHEAD DR.	867.24
OSBM 16-6	SQUARE CUT ON LIGTH POLE BASE AT SOUTHEAST Corner of route 31 & Main st.	876.69

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION. DATED AT ST. CHARLES, ILLINOIS, THIS \_\_\_\_\_ DAY OF \_\_\_\_ April



TERRY HEITKAMP, P.F., TROTTER AND ASSOCIATES, INC. ILLINOIS REGISTERED PROFESSIONAL ENGINEER NO. 062-058718 / EXPIRATION DATE 11-30-2019 ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION FIRM NUMBER 184-002148

General Construction Notes

- 1. ALL PAVING, EARTHWORK AND STORM SEWER CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS (SSRBC), CURRENT EDITION, AND ALL SUPPLEMENTS AND REVISIONS THERETO; THE PROJECT SPECIFICATIONS AND/OR SPECIAL PROVISIONS; THESE CONSTRUCTION PLANS; AND THE STANDARD SPECIFICATIONS OF THE OWNER.
- ALL SANITARY SEWER AND WATER MAIN CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, CURRENT EDITION, AND ALL SUPPLEMENTS AND REVISIONS THERETO; THE PROJECT SPECIFICATIONS AND/OR SPECIAL PROVISIONS; THESE CONSTRUCTION PLANS; AND THE STANDARD SPECIFICATIONS OF THE OWNER.
- 3. CODES OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY TITLE 35, AND ALL PERTINENT O.S.H.A. REGULATIONS SHALL BE ADHERED TO FOR THE CONSTRUCTION OF THIS PROJECT.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTING COMPLETE SETS OF THE PLANS AND PROJECT SPECIFICATIONS TO ALL SUBCONTRACTORS INVOLVED IN THIS PROJECT. A COMPLETE COPY OF THE PLANS AND SPECIFICATIONS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION OPERATIONS.
- 5. EXISTING UTILITIES AND UTILITY EASEMENTS, BOTH PUBLIC AND PRIVATE, ARE SHOWN ON THE PLANS ACCORDING TO INFORMATION AVAILABLE TO THE ENGINEER AND ARE ONLY INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE OWNER AND ENGINEER ASSUME NO RESPONSIBILITY IN RESPECT TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS RELATIVE TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITY LINES, FOR THEIR PROTECTION, AND FOR THE PROPER REPAIR OR REPLACEMENT OF FACILITIES DAMAGED DUE TO CONSTRUCTION OPERATIONS.
- 6. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TO MARK FIELD LOCATIONS OF THEIR FACILITIES PRIOR TO THE START OF CONSTRUCTION. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT SAID CONFLICT MAY BE RESOLVED. CONTRACTOR SHALL INFORM THE OWNER/ENGINEER AND THE RESPONSIBLE MUNICIPAL DEPARTMENT PRIOR TO COMMENCING WORK ON EACH CATEGORY OF CONSTRUCTION, I.E. ELECTRIC, WATERMAIN, SANITARY, STREET, STORM SEWER, ETC. A TWENTY FOUR (24) HOUR NOTICE SHALL BE GIVEN FOR ANY ITEM THAT REQUIRES FINAL TESTING AND INSPECTION.
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING, AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE ENGINEER AND OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC.
- ALL PERMITS FROM THE APPROPRIATE REGULATORY AGENCIES WILL BE OBTAINED AND PAID FOR BY THE OWNER.
   CONTRACTOR SHALL INDEMNIFY OWNER AND ENGINEER AGAINST ANY PERSONAL INJURY CLAIMS OR OTHER CLAIMS RESULTING FROM THE PERFORMANCE OF ANY WORK IN CONNECTION WITH CONSTRUCTION OF THIS PROJECT. ALL CONTRACTORS AND SUBCONTRACTORS SHALL OBTAIN AND MAINTAIN COMPREHENSIVE GENERAL LIABILITY AND OTHER INSURANCE WHICH WILL PROVIDE PROTECTION FROM ANY OF THE AFORESAID CLAIMS WHICH MAY ARISE OUT OF, OR RESULT FROM, THE PERFORMANCE OF WORK BY ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THE CONTRACTOR, OR BY ANYONE WHOSE ACTS THE CONTRACTOR MAY BE LIABLE FOR.
- 10. CONTRACTOR MAY NOT COMMENCE WORK UNTIL HE HAS FILED WITH OWNER A CERTIFICATE OF INSURANCE SHOWING COMPLETE COVERAGE OF ALL INSURANCE REQUIRED, SIGNED BY THE INSURANCE COMPANIES AND THEIR AUTHORIZED AGENTS. EACH CERTIFICATE SHALL NOT BE TERMINATED OR REDUCED WITHOUT THIRTY (30) DAYS ADVANCE WRITTEN NOTICE TO THE OWNER AND ENGINEER. CONTRACTOR SHALL NAME OWNER AND ENGINEER AS ADDITIONAL INSUREDS ON THE COMPREHENSIVE GENERAL LIABILITY AND AUTOMOBILE LIABILITY INSURANCE POLICIES.
- 11. THE OWNER AND THEIR RESPRESENTATIVES SHALL BE ALLOWED ACCESS TO THE SITE AT ALL TIMES. CONTRACTOR SHALL TAKE WHATEVER STEPS NECESSARY TO ASSURE ON-SITE SAFETY, ACCESSIBILITY AND FULL COOPERATION WITH THE OWNER'S REPRESENTATIVES. THE OWNER AND/OR THEIR REPRESENTATIVES SHALL BE ALLOWED, AT ALL TIMES, TO INSPECT QUANTITY AND QUALITY OF THE WORK AND MATERIALS, AND SHALL BE GIVEN THE AUTHORITY TO REJECT WORK AND/OR MATERIALS THAT DO NOT COMPLY WITH THE PLANS AND SPECIFICATIONS. THE FINAL ACCEPTANCE OF THE WORK SHALL BE AUTHORIZED BY THE OWNER.
- 12. BEFORE FINAL APPROVAL BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED BY A REPRESENTATIVE OF THE OWNER. THE FINAL PAYMENT WILL BE MADE AFTER ALL OF THE CONTRACTORS WORK HAS BEEN APPROVED AND CERTIFIED TO BE COMPLETE. CONTRACTOR SHALL GUARANTEE THE WORK PERFORMED FOR A PERIOD OF AT LEAST ONE (1) YEAR FROM THE DATE ON THE CERTIFICATE OF COMPLETION AND SHALL BE HELD RESPONSIBLE FOR ANY DEFECTS IN MATERIAL OR WORKMANSHIP OF THIS WORK DURING THAT PERIOD.
- 13. CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE, SHOP DRAWING SCHEDULE AND PAYMENT SCHEDULE PRIOR TO THE START OF WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY AND SECURITY. ANY OPEN EXCAVATIONS OR OTHER POTENTIALLY DANGEROUS AREAS SHALL BE FENCED OR GUARDED DURING CONSTRUCTION OPERATIONS AND AT THE END OF EACH DAY FOR THE PROTECTION OF THE CONTRACTORS EMPLOYEES AND FOR GENERAL PUBLIC SAFETY.
   ALL FIELD OFFICES, STORAGE TRAILERS, AND EQUIPMENT SHALL BE PLACED ON SITE. PLACEMENT SHALL BE COORDINATED WITH OWNER.
- 16. CONTRACTOR SHALL COORDINATE PARKING FOR HIS STAFF WITH THE OWNER PRIOR TO THE START OF WORK.
- 17. CONTRACTOR SHALL SUPPLY PORTABLE SANITARY FACILITIES FOR WORKERS USE.
- 18. NO BURNING OR INCINERATION OF TREES, BRUSH OR RUBBISH WILL BE PERMITTED.
- 19. SHOULD CONSTRUCTION PROCESSES REQUIRE THE TEMPORARY REMOVAL OF STREET SIGNS, THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF ALGONQUIN PUBLIC WORKS DEPARTMENT AT 847-658-2700 FOR REMOVAL.

## Traffic Control and Protection

- 1. ALL TRAFFIC CONTROL DEVICES AND PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), CURRENT EDITION, AND ALL SUPPLEMENTS AND REVISIONS THERETO; THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS (SSRBC), CURRENT EDITION, AND ALL SUPPLEMENTS AND REVISIONS THERETO; THE PROJECT SPECIFICATIONS AND/OR SPECIAL PROVISIONS; THESE CONSTRUCTION PLANS; AND THE STANDARD SPECIFICATIONS OF THE OWNER.
- 2. CONTRACTOR SHALL FURNISH THE NAME OF THE INDIVIDUAL RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE TRAFFIC CONTROL FOR THIS PROJECT. THE TRAFFIC CONTROL CONTRACTOR SHALL PROVIDE A PHONE NUMBER WHICH CAN BE UTILIZED FOR 24 HOUR EMERGENCY MAINTENANCE OF THE TRAFFIC CONTROL FACILITIES.
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS AND TRAFFIC CONTROL DEVICES TO INFORM AND PROTECT THE PUBLIC DURING CONSTRUCTION OPERATIONS.
- 4. CONTRACTOR SHALL NOTIFY THE OWNER'S ENGINEERING DEPARTMENT AND EMERGENCY DISPATCHER A MINIMUM OF 48 HOURS IN ADVANCE OF ANY ROAD OR LANE CLOSURES.
- 5. SPECIAL SIGNAGE AS PROVIDED BY THE OWNER SHALL BE MAINTAINED BY THE CONTRACTOR.

## Paving and Street Construction

- 1. ALL PAVING AND STREET CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS (SSRBC), CURRENT EDITION, AND ALL SUPPLEMENTS AND REVISIONS THERETO; THE PROJECT SPECIFICATIONS AND/OR SPECIAL PROVISIONS; THESE CONSTRUCTION PLANS; AND THE STANDARD SPECIFICATIONS OF THE OWNER.
- 2. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF ALL REQUIRED PERMITS FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. ARRANGEMENTS SHALL BE MADE FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE ENGINEER AND THE CITY.
- CONTRACTOR SHALL COORDINATE WITH THE OWNER'S ENGINEERING DEPARTMENT 24 HOURS IN ADVANCE OF CURB PLACEMENT AND/OR PAVING IN THE PUBLIC RIGHT OF WAY.
   ANY PAVEMENTS OR CONCRETE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO CURBS, PAVEMENT AND SIDEWALK, THAT ARE NOT INDICATED AS REMOVED OR REMOVED
- AND REPLACED AND ARE DEEMED DAMAGED BY THE OWNER OR ENGINEER SHALL BE REPLACED BY THE CONTRACTOR IN A MANNER APPROVED BY THE OWNER OR ENGINEER. NO ADDITIONAL COMPENSATION WILL BE GRANTED UNLESS APPROVED IN WRITING BY THE OWNER. 5. SAWCUTTING OF EXISTING SURFACES WHEN REQUIRED FOR REMOVAL OR CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS REMOVAL ITEMS AND
- WILLNOT BE PAID FOR SEPARATELY, UNLESS NOTED OTHERWISE. 6. PAVEMENT, CURBS, AND SIDEWALKS SHALL BE CONSTRUCTED ON A THOROUGHLY COMPACTED SUBGRADE MEETING THE REQUIREMENTS OF THE IDOT STANDARD
- SPECIFICATIONS. 7. SURFACE COURSE AND BINDER COURSE SHALL CONFORM TO IDOT STANDARD SPECIFICATIONS FOR HOT MIX ASPHALT, EXCEPT WHERE SPECIFIED OTHERWISE. SEE PLANS
- FOR THICKNESSES.
- 8. ALL CURB AND GUTTER TO BE REMOVED AND REPLACED SHALL BE SAWCUT IN FIVE (5) FOOT SECTION. EXPANSION JOINTS SHALL BE USED WITH DOWEL RODS PER THE DETAIL PROVIDED IN THESE PLANS.
- 9. ALL SIDEWALKS WHICH INTERSECT STREETS SHALL HAVE HANDICAPPED ACCESSIBLE RAMPS MEETING ADA REQUIREMENTS.
- 10. ALL UTILITY STRUCTURE ADJUSTMENTS NECESSARY SHALL BE MADE WITH PRECAST CONCRETE ADJUSTING RINGS NOT TO EXCEED A MAXIMUM OF EIGHT (8) INCHES OVERALL IN HEIGHT. BITUMASTIC MATERIAL SHALL BE USED ON ALL JOINTS BETWEEN THE PRECAST ELEMENTS. AFTER FINAL ADJUSTMENTS HAVE BEEN MADE, ALL JOINTS IN PRECAST STRUCTURES SHALL BE MORTARED. THE MORTAR SHALL BE COMPOSED OF ONE PART CEMENT TO THREE PARTS SAND, BY VOLUME, BASED ON DRY MATERIALS AND SHALL BE THOROUGHLY WETTED BEFORE LAYING.

## Earthwork, Excavation and Grading

- 1. ALL EARTHWORK, EXCAVATION AND GRADING SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS, LATEST EDITION, AND ALL SUPPLEMENTS AND REVISIONS THERETO; WITH THE PROJECT SPECIFICATIONS AND/OR SPECIAL PROVISIONS; THESE CONSTRUCTION PLAND AND WITH THE STANDARD SPECIFICATIONS OF THE OWNER.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AND ENGINEER.
- 3. ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE STORM SEWER SYSTEM OR EXTENDED TO OUTLET INTO A DRAINAGE WAY. IF THIS CANNOT BE ACCOMPLISHED, THEN IT SHALL BE REPAIRED WITH NEW PIPE OF SIMILAR SIZE AND MATERIAL TO THE ORIGINAL LINE. A RECORD OF THE LOCATION OF ALL FIELD TILE OR DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE OWNER'S ENGINEERING DEPARTMENT.
- 4. THE GENERAL EXCAVATION ACROSS THE SITE SHALL BE COORDINATED WITH REQUIRED REMOVAL OF SOIL AS CALLED FOR IN THE GEOTECHNICAL REPORT. THE EXCAVATIONS FOR WALL FOOTINGS, SPREAD FOOTINGS, PITS, ETC. SHALL BE EXCAVATED ON AN INDIVIDUAL, LOCALIZED BASIS DOWN FROM THE REQUIRED SUBGRADE ELEVATIONS. EACH EXCAVATION SHALL BE EXCAVATED TO A TRIM, LEVEL SURFACE BY METHODS ACCEPTABLE TO THE OWNER'S SOIL TESTING LABORATORY, WITH MINIMAL DISTURBANCE TO THE NATURAL SUBGRADE.
- 5. PARKWAY RESTORATION SHALL BE ACCOMPLISHED USING PULVERIZED TOPSOIL AND SEED. THE CONTRACTOR SHALL BE RESPONSIBLE MAINTENANCE AND WATERINGS OF THE SEED IN ACCORDANCE WITH THE SPECIFICATIONS.
- 6. CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT ACCUMULATIONS OF SOIL ON PUBLIC THOROUGHFARES. AT THE END OF EACH DAY THE CONTRACTOR SHALL CLEAN UP ALL SOIL WHICH HAS BEEN TRACKED ONTO PUBLIC STREETS OR AS REQUIRED BY THE OWNER OR ENGINEER.
- 7. THE CONTRACTOR WILL BE RESPONSIBLE FOR ERECTING CONSTRUCTION FENCE AROUND ALL EXISTING TREES AND LANDSCAPING TO REMAIN. THIS SHALL BE MAINTAINED AT ALL TIMES UNTIL THE COMPLETION OF THE PROJECT.
- 8. SHOULD EXCAVATION TAKE PLACE ADJACENT TO A LIGHT OR POWER POLE, CONTRACTOR SHALL BRACE THE POLE SO AS TO AVOID DAMAGE TO THE POLE OR ANY OF THE COMPONENTS IT SUPPORTS AT NO ADDITIONAL COST TO THE CONTRACT.

Sar	nitary Sewer System
MAI	ITARY SEWER SYSTEM SHALL BE CONSTRUCTED TO MEET ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA), STANDARD SPECIFICATIONS FOR SEWER AND WATER N CONSTRUCTION IN ILLINOIS, LATEST EDITION AND OTHER APPLICABLE REQUIREMENTS. THE DESIGN SHALL INCORPORATE THE MORE STRINGENT REQUIREMENTS OF FOLLOWING ITEMS OR AGENCY REQUIREMENTS:
1.	EACH SINGLE-FAMILY LOT OR EACH BUILDING IN OTHER THAN SINGLE-FAMILY DEVELOPMENT SHALL BE SERVED WITH A SEPARATE SANITARY SEWER SERVICE. ALL STRUCTURES SHALL INCLUDE PROVISIONS FOR AN OVERHEAD SEWER SYSTEM.

- ALL NEW BUILDINGS SHALL INCLUDE PROVISIONS FOR AN OVERHEAD SEWER SYSTEM, UNLESS OTHERWISE APPROVED BY THE UTILITIES SUPERINTENDENT OR DIRECTOR OF PUBLIC WORKS.
   MANHOLES ARE TO BE PROVIDED AT EACH CHANGE IN DIRECTION OF FLOW, CHANGE IN PIPE SIZE, CHANGE IN SLOPE, CHANGE IN MATERIAL AND AT EACH PIPE INTERSECTION, EXCLUDING SERVICES, MAXIMUM MANHOLE SPACING IS THREE HUNDRED (300) FEET. WHERE FEASIBLE, THE SANITARY SEWER SYSTEM SHALL BE DESIGNED SO AS TO PROVIDE FOR MANHOLES TO BE INSTALLED WITHIN THE R.O.W. SANITARY SEWERS INSTALLED WITHIN THE RIGHTS-OF-WAY SHALL NOT BE
- 4. SANITARY SEWER SHALL BE CONSTRUCTED FITHER OF P.V.C. S.D.R. 26 (ASTM D-3034 PIPE & ASTM D-3212 JOINT) OF DR-25 (AWWA C-005 PIPE & ASTM D 317)
- 4. SANITARY SEWER SHALL BE CONSTRUCTED EITHER OF P.V.C., S.D.R. 26 (ASTM D-3034 PIPE & ASTM D-3212 JOINT) OR DR-25 (AWWA C-905 PIPE & ASTM D-3139 JOINT). PIPE SHALL BE LAID IN APPROVED BEDDING. MINIMUM SIZE SEWER MAIN SHALL BE EIGHT INCHES (8"). SANITARY SEWERS WITH AN INVERT ELEVATION FIFTEEN FEET OR GREATER IN DEPTH SHALL BE INSTALLED IN AS AN APPROVED SEWER SAFE LINED DUCTILE IRON PIPE.
  A. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING "Y", "T", OR AN EXISTING MANHOLE, ONE OR THE FOLLOWING METHODS SHALL BE USED:
  - I. REMOVE A SECTION OF PIPE AND REPLACE WITH A "Y" OR "T" BRANCH SECTION. PIPE SECTION SHALL BE REMOVED BY BREAKING ONLY THE TOP OF ONE BELL. AFTER THE "Y" OR "T" BRANCH IS INSERTED, CONCRETE SHALL BE PLACED OVER THE BROKEN AREA TO A MINIMUM THICKNESS OF FOUR INCHES (4") AND TO A DIMENSION OF EIGHT INCHES (8") IN ALL DIRECTIONS. ALL PIPE SLEEVES SHALL BE A NON-SHEAR MISSION COUPLING TYPE.
- II. USING PIPE CUTTER EQUAL TO SEWER TAP MACHINE BY TRANSMATE, NEATLY AND ACCURATELY CUT A HOLE OF PROPER DIMENSIONS AND INSERT AN INSERTA TEE LATERAL CONNECTION AND HOLD IT FIRMLY IN PLACE. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION.
   B. PIPE PENETRATIONS INTO EXISTING SANITARY MANHOLES SHALL BE PROPERLY SIZED AND CORED AND SEALED (KOR-N-SEAL BY NPC, INC.) WITH FLEXIBLE WATERTIGHT CONNECTIONS. NO CUT-IN CONNECTION SHALL BE MADE BY BREAKING OR CUTTING A HOLE IN THE MAIN AND INSERTING THE SPIGOT END OF AN ORDINARY SEWER PIPE. NO SERVICE CONNECTIONS SHALL BE MADE DIRECTLY INTO MANHOLES ARE PERMITTED UNLESS APPROVED BY THE SUPERINTENDENT.
- 5. FORCE-MAINS SHALL BE CONSTRUCTED OF SEWER SAFE DUCTILE IRON PIPE OF CLASS 52. ALL FIELD CUTS SHALL BE RESTORED PER MANUFACTURES RECOMMENDATIONS. AIR RELIEF VALVES ARE REQUIRED AT ALL HIGH POINTS ALONG THE MAIN, AND CLEAN OUTS SHALL BE INSTALLED PER DETAIL AT A MINIMUM OF EVERY 2000 FEET.
- 6. NEW SANITARY MANHOLES ARE TO BE PRE-CAST REINFORCED CONCRETE ECCENTRIC TYPE WITH A MINIMUM 48" I.D. BARREL SECTION, AND MONOLITHIC BOTTOM SECTION; PIPE PENETRATIONS ARE TO BE SEALED VIA THE USE OF A CAST-IN-PLACE FLEXIBLE SYNTHETIC RUBBER PIPE SLEEVE, WHICH IS TO BE FASTENED TO THE PIPE WITH STAINLESS STEEL BANDS. BARREL SECTIONS SHALL BE SEALED USING A BUTYL RUBBER MATERIAL STRIP AND/OR RUBBER GASKET AND A EIGHT-INCH (8 ) "MACWRAP" BY MAR MAC INC., EXTERNAL SEAL BAND OR APPROVED EQUAL. FRAMES SHALL BE SEALED TO THE MANHOLE BY USING A HEAT SHRINKABLE WRAP AROUND SLEEVE EQUAL TO THE WRAPID SEAL MANHOLE ENCAPSULATION SYSTEM BY CANUSA. EXISTING FRAMES REQUIRING ADJUSTMENT ARE ALSO REQUIRED TO BE SEALED. A MAXIMUM OF EIGHT INCHES (8") OF ADJUSTING RINGS MAY BE USED, WITH THE TOP RING BEING A GNR RECYCLED RUBBER RING, SUPPLIED BY EAST JORDAN. ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND MANHOLE FRAMES SHALL BE SET IN PLACE USING BUTYL RUBBER JOINT SEALANT. STEPS SHALL BE MADE OF STEEL REINFORCED PLASTIC, USING AN APPROVED PLASTIC MEETING ASTM D4101, TYPE II, GRADE 49108, OVER A #3 GRADE 60, ASTM A615, REINFORCING BAR. STEPS SHALL BE AT 16" (INCH) CENTERS.
- SANITARY SEWER MANHOLES CONSTRUCTED IN A FLOOD PLAIN MUST HAVE A RIM TWENTY FOUR INCHES (24") ABOVE BASE FLOOD ELEVATION AND HAVE A WATER-TIGHT-LOCK TYPE FRAME AND COVER, NEENAH R-1916 C OR APPROVED EQUAL. COVER MUST HAVE "SANITARY" CAST INTO THE TOP OF THE COVER.
   EXCEPT AS PROVIDED IN # 9 ABOVE, ALL FRAMES AND COVERS ARE TO BE EAST JORDAN IRON WORKS NUMBER 1050-Z1, WITH CONCEALED PICK HOLES AND SEALED COVER. VARIATIONS IN CASTING DIMENSIONS MAY BE APPROVED BY UTULITIES SUPERINTENDENT MANHOLE COVERS AND TAKE "SANITARY" CAST INTO THE TOP OF THE COVER.
- 8. EXCEPT AS PROVIDED IN # 9 ABOVE, ALL FRAMES AND COVERS ARE TO BE EAST JORDAN IRON WORKS NUMBER 1050-Z1, WITH CONCEALED PICK HOLES AND SEALED COVER. VARIATIONS IN CASTING DIMENSIONS MAY BE APPROVED BY UTILITIES SUPERINTENDENT. MANHOLE COVERS MUST HAVE "SANITARY" CAST INTO THE TOP OF THE COVER. MANHOLE COVERS SHALL BE EAST JORDAN IRON WORKS, PRODUCT NO. 102332, CATALOG NO. 1020A, REFERENCE NO. 102089. THE COVER CASTING SHALL INCLUDE THE VILLAGE OF ALGONQUIN LOGO. ALL CASTING SHALL BE COATED IMMEDIATELY AFTER CLEANING AND MACHINING. COATING SHALL BE A NON-TOXIC WATER BASE ASPHALT PAINT, COMPLYING TO THE AWWA CIO4 SPECIFICATION.
   9. ALL UTILITY AND SERVICE TRENCHES LINDER OR WITHIN TWO EFET OF PAVED SUPERACES OF DEDIVING APPEAR SHALL BE PACKETLED. WITH CARE MATERIAL
- ALL UTILITY AND SERVICE TRENCHES UNDER OR WITHIN TWO FEET OF PAVED SURFACES OR DRIVING AREAS SHALL BE BACKFILLED WITH CA-6 MATERIAL PROPERLY COMPACTED. MECHANICALLY COMPACTED BACKFILL SHALL BE PLACED IN TWELVE-INCH HORIZONTAL LAYERS OF THICKNESS. EACH LAYER SHALL BE EVENLY SPREAD, MOISTENED (OR DRIED, IF NECESSARY), AND THEN TAMPED OR ROLLED UNTIL 90 PERCENT RELATIVE DENSITY COMPACTION IS ACHIEVED.
   10. IEPA PERMIT IS REQUIRED PRIOR TO CONSTRUCTION OR INSTALLATION OF THE SANITARY SEWER SYSTEM IMPROVEMENTS OR ADDITIONS.
- 11. LEAKAGE AND DEFLECTION TESTING OF SANITARY SEWER PIPE SHALL BE IN ACCORDANCE WITH SECTION 31-1.12 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS.
- 12. LEAKAGE TESTING OF MANHOLES SHALL BE IN ACCORDANCE WITH ASTM C-969 OR ASTM C-1244.

# Water System

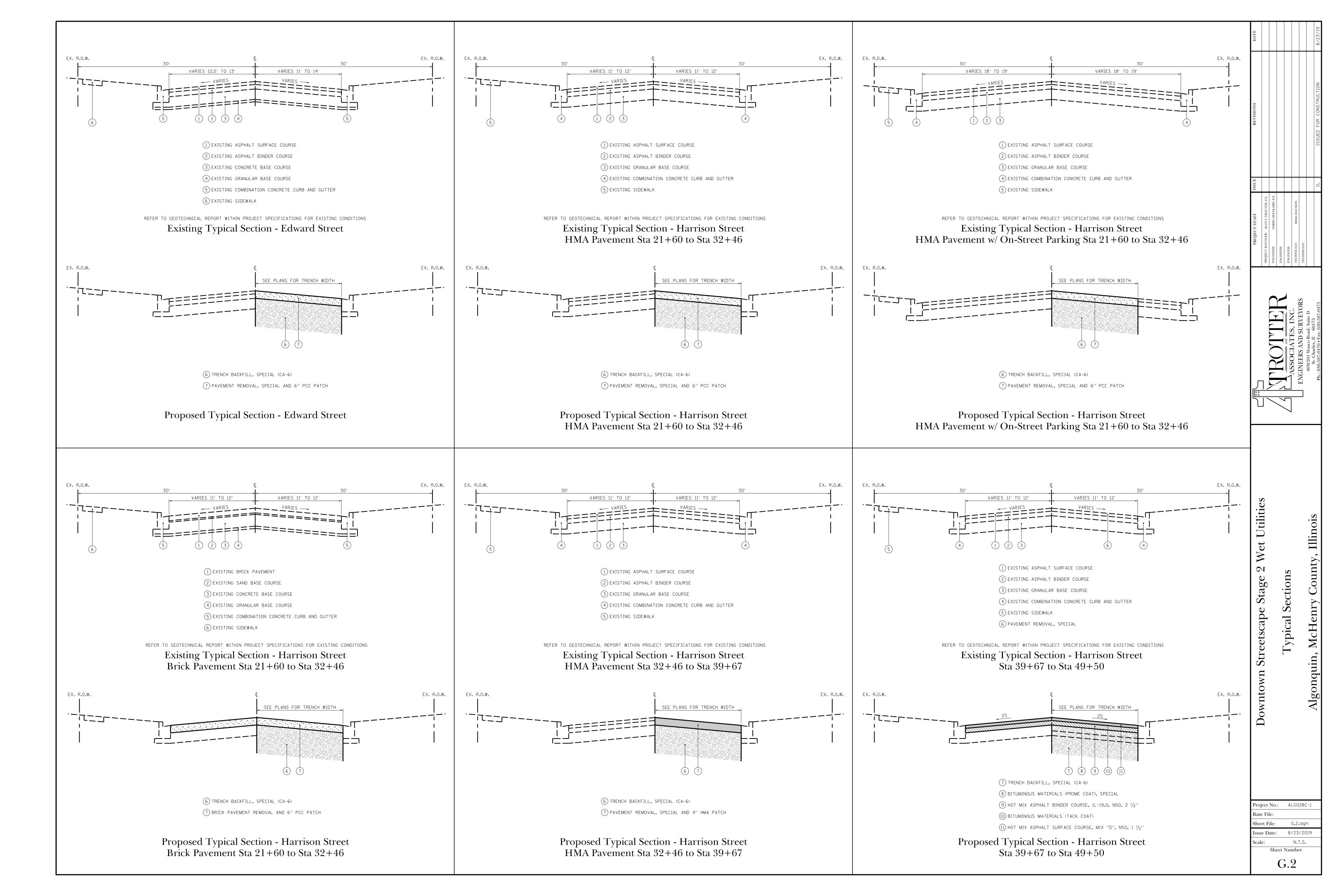
WATER MAIN SYSTEMS SHALL BE CONSTRUCTED TO MEET ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION AND OTHER APPLICABLE AGENCY REQUIREMENTS. THE DESIGN SHALL INCORPORATE THE MORE STRINGENT REQUIREMENTS OF THE FOLLOWING ITEMS OR AGENCY REQUIREMENTS. ONLY EMPLOYEES FROM THE VILLAGE OF ALGONQUIN ARE AUTHORIZED TO OPERATE VALVES CONNECTED TO THE VILLAGE WATER SYSTEM. IEPA PERMIT IS REQUIRED PRIOR TO CONSTRUCTION OR EXTENSION OF THE WATER SYSTEM

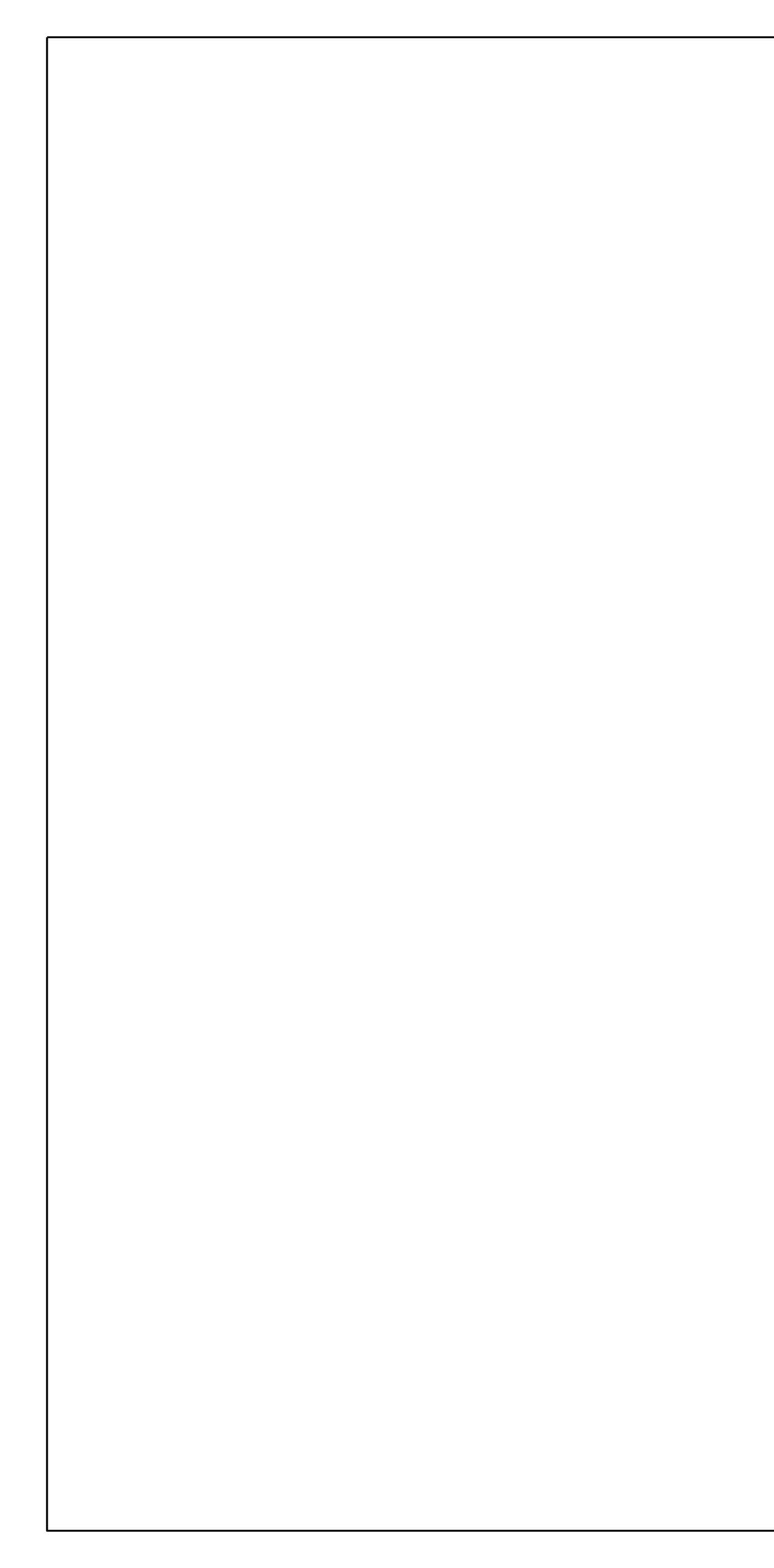
- THE MINIMUM SIZE WATER MAIN TO BE INSTALLED IS EIGHT INCHES (8") IN DIAMETER.
   ALL WATER MAINS SHALL BE DUCTILE IRON PIPE (DIP), CEMENT LINED, CLASS 52, AWWA C-151.
- 3. VALVES UP TO 12" SHALL BE OPEN LEFT RESILIENT WEDGE GATE VALVES "MUELLER A-2360 OR APPROVED EQUAL; INSTALLATION INTERVALS SHALL NOT EXCEED 1000 FEET OR AS DIRECTED BY THE VILLAGE ENGINEER. IT SHALL NOT REQUIRE MORE THAN THREE VALVES TO ISOLATE A SINGLE LOCATION WITHIN THE DISTRIBUTION SYSTEM. VALVES 16" AND LARGER SHALL BE BUTTERFLY TYPE AS MANUFACTURED BY PRATT OR VILLAGE OF ALGONQUIN APPROVED EQUAL.
- 4. WATERTIGHT VALVE VAULTS SHALL BE PROVIDED FOR EACH VALVE 6" & GREATER. VALVE VAULTS ARE TO BE PRECAST WITH MONOLITHIC BOTTOM SECTION, REINFORCED CONCRETE BARREL SECTIONS, CONCENTRIC TYPE TOP SECTION, BARREL SECTIONS SHALL BE SEALED USING A BUTYL RUBBER OR BITUMINOUS MASTIC MATERIAL. PIPE PENETRATIONS ARE TO BE SEALED VIA THE USE OF A CAST-IN-PLACE FLEXIBLE SYNTHETIC RUBBER PIPE SLEEVE, WHICH IS TO BE FASTENED TO THE PIPE WITH STAINLESS STEEL BANDS. INSIDE DIAMETER OF VALVE VAULTS SHALL BE 48" FOR VALVES 8" OR LESS. VALVES 10" OR GREATER SHALL BE INSTALLED IN VALVE VAULTS 60" IN DIAMETER OR AS REQUIRED BY THE VILLAGE ENGINEER OR UTILITIES SUPERINTENDENT. ALL TAPPING VALVES SHALL BE INSTALLED IN VALVE VAULTS 60" IN DIAMETER OR AS DIRECTED BY THE VILLAGE ENGINEER OR UTILITIES SUPERINTENDENT. A MAXIMUM OF EIGHT INCHES (8") OF ADJUSTING RINGS MAY BE USED.
- 5. HYDRANTS ARE TO BE WATEROUS PACER WB67-250 TRAFFIC BREAKAWAY TYPE, WITH A FRESH COAT OF RED PAINT. ALL HYDRANTS REQUIRE A 6" AUXILIARY VALVE (RESILIENT WEDGE GATE VALVE), AND VALVE BOX (TYLER 6860 SERIES) WITH A VALVE BOX STABILIZER (AMERICAN FLOW CONTROL TRENCH ADAPTER).
- 6. VALVE BOXES SHALL BE PROVIDED FOR ALL BURIED VALVES THAT ARE 4" AND SMALLER. VALVE BOXES SHALL BE ONE COMPLETE ASSEMBLED UNIT COMPOSED OF THE VALVE BOX AND EXTENSION STEM. ALL MOVING PARTS OF THE EXTENSION STEM SHALL BE ENCLOSED IN A HOUSING TO PREVENT CONTACT WITH THE SOIL. VALVE BOX ASSEMBLY SHALL BE ADJUSTABLE TO ACCOMMODATE VARIABLE TRENCH DEPTHS. THE STEM ASSEMBLY SHALL BE OF A TELESCOPING DESIGN THAT ALLOWS FOR VARIABLE ADJUSTMENT LENGTH. THE MATERIAL SHALL BE GALVANIZED SQUARE STEEL TUBING. THE STEM ASSEMBLY SHALL HAVE A BUILT-IN DEVICE THAT PREVENTS THE STEM ASSEMBLY FROM DISENGAGING AT ITS FULLY EXTENDED LENGTH. THE EXTENSION STEM MUST BE CAPABLE OF SURVIVING A TORQUE TEST TO 1,000 FT-LB WITHOUT FAILURE. VALVE BOX STABILIZER SHALL BE AMERICAN FLOW CONTROL S TRENCH ADAPTER.
- 7. SPACING BETWEEN HYDRANTS SHALL BE AT EACH INTERSECTION AND SHALL NOT EXCEED THREE HUNDRED FEET (300 ). FRONT OF HYDRANTS SHALL BE PLACED A MINIMUM OF THREE FEET FROM THE BACK OF CURB.
- 8. THE WATER SYSTEM MUST BE EXTENDED, AS A MINIMUM, TO THE LIMIT OF THE SUBDIVISION AND LOOPED WHEREVER POSSIBLE. NOTE ON PLANS WHICH MAINS ARE TO BE PUBLIC AND PRIVATE.
- 9. CONNECTION TO AN EXISTING WATER MAIN SHALL BE PERFORMED BY PRESSURE CONNECTION ONLY. PRESSURE CONNECTION AND VALVE SHALL BE LOCATED WITHIN A VALVE VAULT, MINIMUM DIAMETER SHALL BE SIXTY INCHES (60"). TAPPING SLEEVE SHALL BE MUELLER H-615. TAPPING VALVE SHALL BE RESILIENT WEDGE GATE VALVE NRS MECHANICAL JOINT VALVE. ALL FITTINGS WILL BE SWABBED WITH A CHLORINE SOLUTION OF AT LEAST 50 MG/L. THIS SOLUTION MUST BE TESTED BY A VILLAGE REPRESENTATIVE PRIOR TO USE. IF THE DIRECTOR OF PUBLIC WORKS DEEMS A PRESSURE CONNECTION CANNOT BE ACCOMPLISHED, USE OF A CUT-IN-SLEEVE AND TEE CONNECTION MAY BE PERMITTED. SHOP DRAWINGS OF PROPOSED MATERIAL SHALL BE SUBMITTED TO THE SUPERINTENDENT FOR APPROVAL.
- 10. MINIMUM DIAMETER OF WATER SERVICES IS ONE INCH (1"), TYPE "K" COPPER. ALL CORPORATION TAPS OF 2 AND SMALLER MUST USE THE DIRECT TAPPING METHOD. COPPER MUST BE ONE PIECE FROM CORPORATION TA (MUELLER H-15000) TO ROUND WAY (MUELLER H15154), AND ALSO ONE PIECE FROM THE ROUNDWAY TO THE METER UNLESS APPROVED BY VILLAGE PLUMBING INSPECTOR. CURB BOX IS TO BE MUELLER H-10300 SERIES MINNEAPOLIS PATTERN BASE
- 11. ALL FRAMES AND COVERS ARE TO BE EAST JORDAN IRON WORKS NUMBER 1050-Z1. VARIATIONS IN CASTING DIMENSIONS MUST BE APPROVED BY UTILITIES SUPERINTENDENT. VALVE VAULT COVERS MUST HAVE "WATER" CAST INTO THE TOP OF THE COVER. MANHOLE COVERS SHALL BE EAST JORDAN IRON WORKS, PRODUCT NO. 102332, CATALOG NO. 1020A, REFERENCE NO. 102089. THE COVER CASTING SHALL INCLUDE THE VILLAGE OF ALGONQUIN LOGO. ALL CASTING SHALL BE COATED IMMEDIATELY AFTER CLEANING AND MACHINING. COATING SHALL BE A NON-TOXIC WATER BASE ASPHALT PAINT, COMPLYING TO THE AWWA C104 SPECIFICATION
- ALL UTILITY AND SERVICE TRENCHES UNDER OR WITHIN TWO FEET OF PAVED SURFACES OR DRIVING AREAS SHALL BE BACKFILLED WITH CA-6 MATERIAL PROPERLY COMPACTED. MECHANICALLY COMPACTED BACKFILL SHALL BE PLACED IN TWELVE-INCH HORIZONTAL LAYERS OF THICKNESS. EACH LAYER SHALL BE EVENLY SPREAD, MOISTENED (OR DRIED, IF NECESSARY), AND THEN TAMPED OR ROLLED UNTIL 90 PERCENT RELATIVE COMPACTION IS ACHIEVED.
   CHLORINATING OF THE WATER MAIN AND COLLECTION OF SAFE WATER CAMPLES CHARTER FOR ACCORDANCE WITH LEDY PERCENTRIC THE ACCORDANCE FOR ACCORDANCE WITH LEDY PERCENTRIC THE ACCORDANCE FOR ACCO
- 13. CHLORINATING OF THE WATER MAIN AND COLLECTION OF SAFE WATER SAMPLES SHALL BE IN ACCORDANCE WITH IEPA REQUIREMENTS AND COMPLETED PRIOR THE INSTALLATION OF SERVICE TAPS.

# Water and Sewer Separation

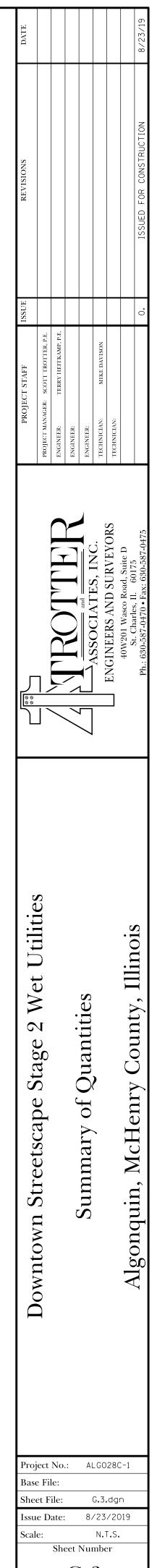
- 1. HORIZONTAL SEPARATION BETWEEN WATERMAINS AND SEWERS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 41-2.01A OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS:
- A. WATERMAINS SHALL BE LOCATED AT LEAST TEN (10) FEET HORIZONTAL FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, COMBINED SEWER OR SEWER SERVICE CONNECTION. B. WATERMAINS MAY BE LOCATED CLOSER THAN TEN (10) FEET TO A SEWER LINE WHEN.
- B. WATERMAINS MAY BE LOCATED CLOSER THAN TEN (10) FEET TO A SEWER LINE WHEN:a) LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET; AND
- D) LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET; AND D) THE WATERMAIN INVERT IS AT LEAST 18 INCHES ABOVE THE CROWN OF THE SEWER; AND
- SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS. 2. VERTICAL SEPARATION BETWEEN WATERMAINS AND SEWERS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 41-2.01B OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS:
- A. A WATERMAIN SHALL BE SEPARATED FROM A SEWER SUCH THAT ITS INVERT IS A MINIMUM OF 18 INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATERMAINS CROSS STORM, SANITARY, OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATERMAIN LOCATED WITHIN TEN (10) FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSED. A LENGTH OF WATERMAIN SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FOR THE SEWER OR DRAIN.
- B. BOTH THE WATERMAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, PRESTRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALANET TO WATERMAIN STANDARDS OF CONSTRUCTION WHEN:
  a) IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN A ABOVE; OR
  b) THE WATERMAIN PASSES UNDER A SEWER OR DRAIN.
- C. A VERTICAL SEPARATION OF 18 INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATERMAIN SHALL BE MAINTAINED WHERE A WATERMAIN CROSSES UNDER A SEWER OR DRAIN. SUPPORT THE SEWER OR DRAIN LINES TO PREVENT SETTLING AND BREAKING THE WATERMAIN, AS SHOWN ON THE
- PLANS APPROVED BY THE ENGINEER. D. CONSTRUCTION OF WATERMAIN QUALITY PIPE SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATERMAIN TO THE SEWER OR DRAIN IS AT LEAST TEN (10) FEET.

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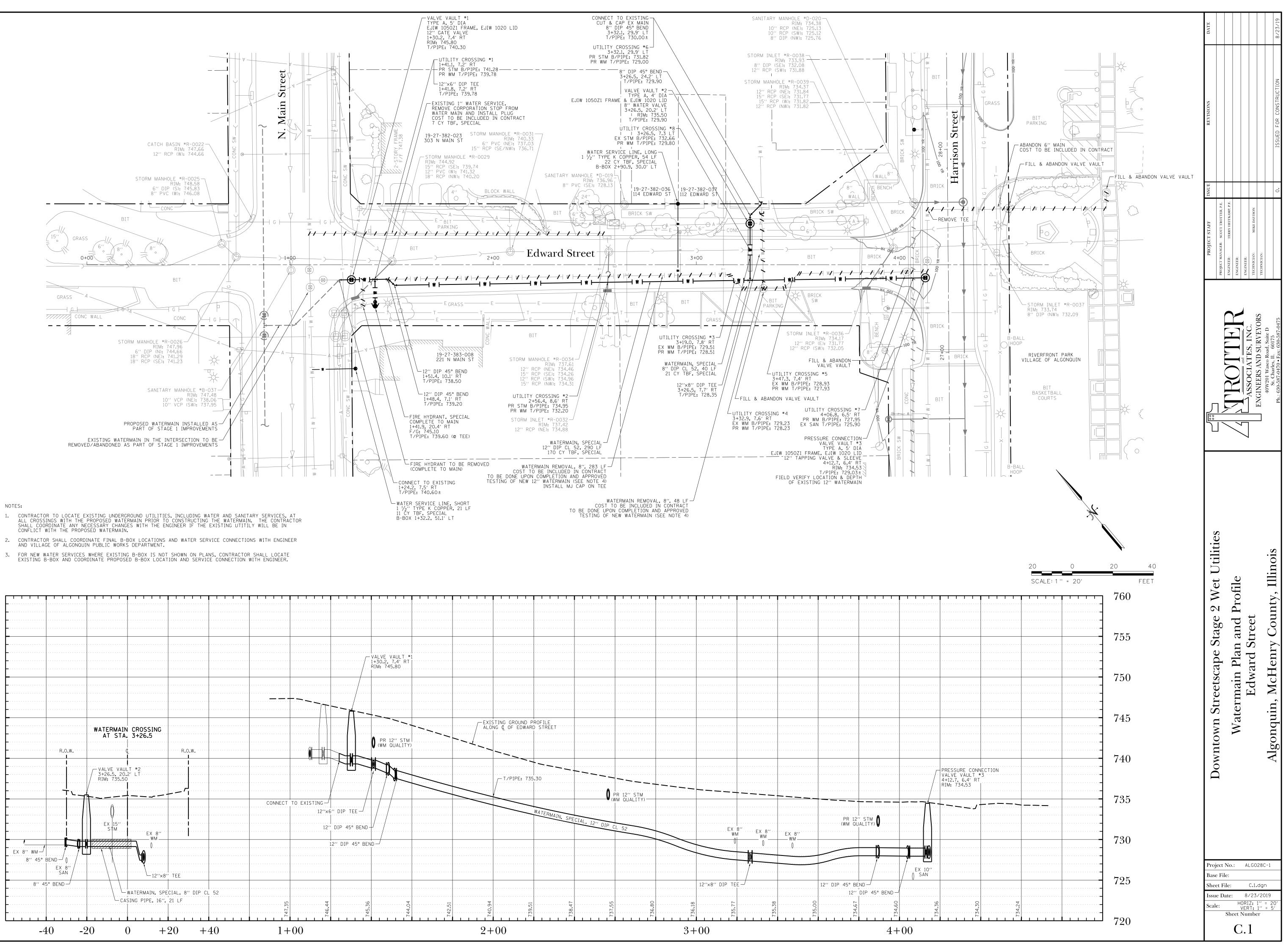




	SUMMARY OF QUANTITIES		
ITEM	DESCRIPTION	QUANTITY	UNIT
<u>NO</u> 1	AGGREGATE BASE REPAIR	100	CY
2	BITUMINOUS MATERIALS (TACK COAT)	6188	LB
3	BITUMINOUS MATERIALS (PRIME COAT), SPECIAL	1237	LB
4	BLOCK RETAINING WALL REMOVAL AND REPLACEMENT	350	SF
5	BRICK PAVEMENT REMOVAL	734	SY
6	BYPASS PUMPING	1	LSUN
7	CASING PIPE, 16"	21	
8 9	CURB & GUTTER REMOVAL, SPECIAL CURB & GUTTER REMOVAL & REPLACEMENT, SPECIAL	456 590	LF LF
10	DECOMMISSION AND ABANDON EXISTING LIFT STATION	1	LSUN
11	DRIVEWAY PAVEMENT REMOVAL	1,226	SY
12	DUST CONTROL WATERING	100	DAY
13	EXPLORATORY TRENCH, SPECIAL	200	LF
14	FERTILIZER	30.3	LB
15	FILL & ABANDON SANITARY MANHOLE	9	EA
16 17	FILL & ABANDON VALVE VAULTS FIRE HYDRANT TO BE REMOVED (COMPLETE TO MAIN)	5	EA EA
18	FIRE HYDRANT, SPECIAL, COMPLETE TO MAIN	1	EA
19	HMA BINDER COURSE, IL-19.0, N50	385	TON
20	HMA DRIVEWAY, SPECIAL	324	SY
21	HMA SURFACE COURSE, MIX "C", N30	239	TON
22	HMA SURFACE REMOVAL - BUTT JOINT	93	SY
23	INLET FILTER BASKETS	25	EA
24 25	METER RISER BOX & HYDRANT MOBILIZATION	1	EA L SUN
25 26	MODIFY LIFT STATION	1	LSUN
20	PAINT PAVEMENT MARKING - LINE 4"	3,232	L501
28	PAINT PAVEMENT MARKING - LINE 24"	13	LF
29	PATCHING, HMA 4"	1,074	SY
30	PATCHING, PCC 6"	2,324	SY
31	PAVEMENT REMOVAL, SPECIAL	5,404	SY
32	PCC DRIVEWAY, SPECIAL, 6"	879	SY
33	PCC SIDEWALK REMOVAL & REPLACEMENT	689	SF
34 35	REMOVE AND DISPOSE OF NON-HAZARDOUS SPECIAL WASTE OR CERTIFIED NON-SPECIAL WASTE REMOVE AND REPLACE BUFFALO BOX	100 15	CY EA
36	REMOVE AND REPLACE BUFFALO BOX & CURB STOP	2	EA
37	REMOVE AND REPLACE FIRE HYDRANT	3	EA
38	REMOVE AND REPLACE LINEAR DRIVEWAY DRAIN	32	LF
39	REMOVE AND RESET MAILBOX	1	EA
40	REMOVE METER VAULT	1	EA
41	ROCK EXCAVATION, SPECIAL	20	CY
42	SANITARY DROP MANHOLE, 5' DIAMETER, TYPE 1 FRAME, CLOSED LID	4	EA
43	SANITARY FORCE MAIN ABANDONMENT, 8"	330	
44 45	SANITARY MANHOLE, TYPE A, 4' DIAMETER, TYPE 1 FRAME, CLOSED LID SANITARY MANHOLE, TYPE A, 5' DIAMETER, TYPE 1 FRAME, CLOSED LID	1 7	EA EA
45 46	SANITARY MANHOLE, TYPE A, S DIAMETER, NEENAH R-1916 C	2	EA
47	SANITARY SERVICE, SPECIAL, 6" PVC SDR-26	1,033	LF
48	SANITARY SEWER ABANDONMENT, 6"	356	LF
49	SANITARY SEWER ABANDONMENT, 8"	237	LF
50	SANITARY SEWER ABANDONMENT, 10"	1,274	LF
51	SANITARY SEWER ABANDONMENT, 12"	261	LF
52	SANITARY SEWER, SPECIAL, 8" PVC SDR-26	35	LF
53	SANITARY SEWER, SPECIAL, 10" PVC SDR-26	7	
54 55	SANITARY SEWER, SPECIAL, 12" PVC SDR-26 SANITARY SEWER, SPECIAL, 24" PVC DR-25	24	LF LF
55 56	SANITARY SEWER, SPECIAL, 24" PVC DR-25 SANITARY SEWER, SPECIAL, 30" PVC DR-25	1,016	LF LF
57	SAWIART SEWER, STEERE, SO TVC DR-25	40	EA
58	SEED	0.17	ACR
59	SIDEWALK REMOVAL WITH TEMPORARY PCC REPLACEMENT	1,063	SF
60	STORM INLET, TYPE A, 2' DIA., TYPE 11V FRAME AND GRATE	3	EA
61	STORM SEWER, CLASS A, TYPE 1, 12", RCP ASTM C-361	447	LF
62	STORM SEWER, CLASS A, TYPE 1, 15", RCP ASTM C-361	36	
63 64	STORM SEWER, CLASS A, TYPE 1, 36", RCP ASTM C-361 STORM SEWER POINT REPAIR	32	LF EA
65	STRUCTURES TO BE ADJUSTED	6	EA EA
66	TAPPING VALVES AND SLEEVES, 12"	1	EA
67	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	1,859	LF
68	TOPSOIL FURNISH AND PLACE, 6"	808	SY
69	TRAFFIC CONTROL & PROTECTION, SPECIAL	1	LSUN
70		4	EA
71	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	28	
72 73	TREES, AMELANCHIER LAEVIS (ALLEGHENY SERVICEBERRY), 2" TREES, CERCIS CANADENSIS (EASTERN REDBUD), 2"	7	EA EA
73 74	TREES, CERCIS CANADENSIS (EASTERN REDBOD), 2	6,664	EA CY
7 <u>4</u> 75	TURF EROSION CONTROL BLANKET	808	SY
76	VALVE VAULT, TYPE A, 4' DIA., EAST JORDAN 1050Z1 FRAME, EAST JORDAN 1020 LID	1	EA
77	VALVE VAULT, TYPE A, 5' DIA., EAST JORDAN 1050Z1 FRAME, EAST JORDAN 1020 LID	2	EA
78	WATER MAIN, SPECIAL, 8", DUCTILE IRON	40	LF
	WATER MAIN, SPECIAL, 12", DUCTILE IRON	290	LF
79	WATER SERVICE LINE, 1-1/2", LONG	4	EA
80			
79 80 81 82	WATER SERVICE LINE, 1-1/2", SHORT WATER VALVES, 8"	2	EA EA

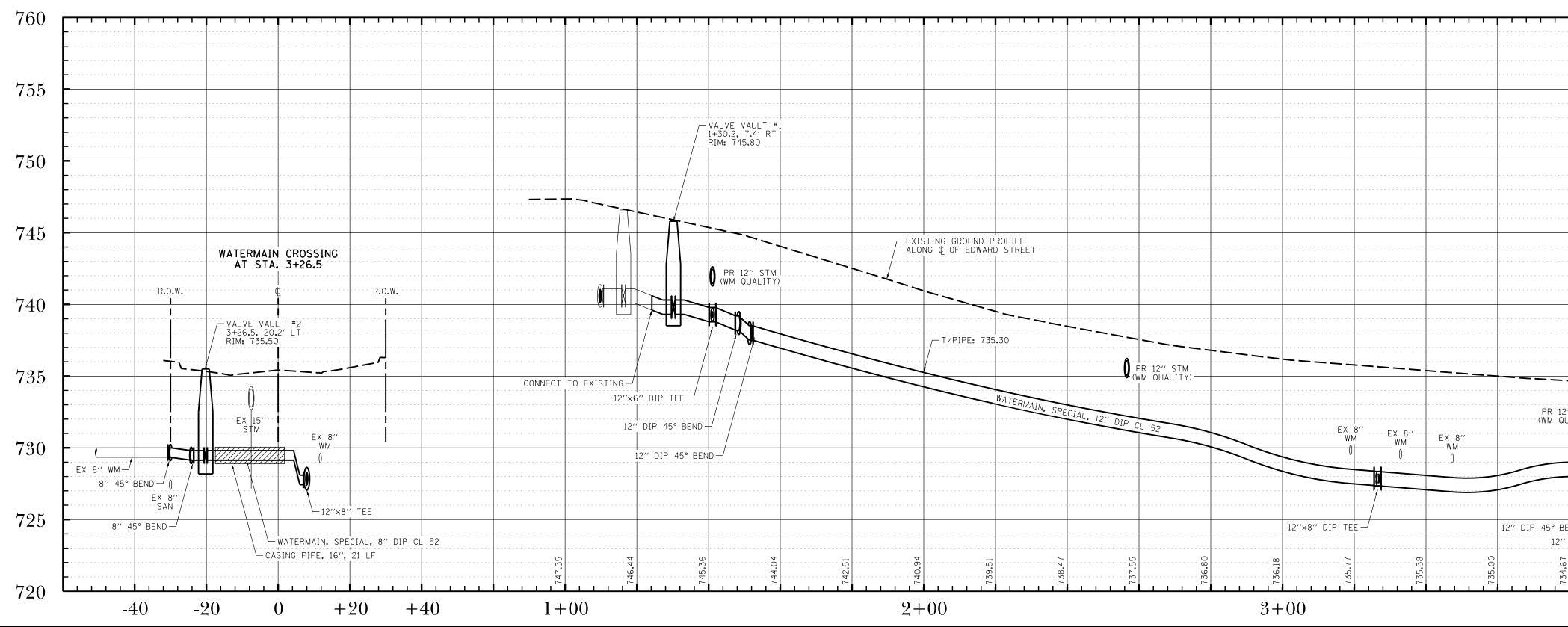


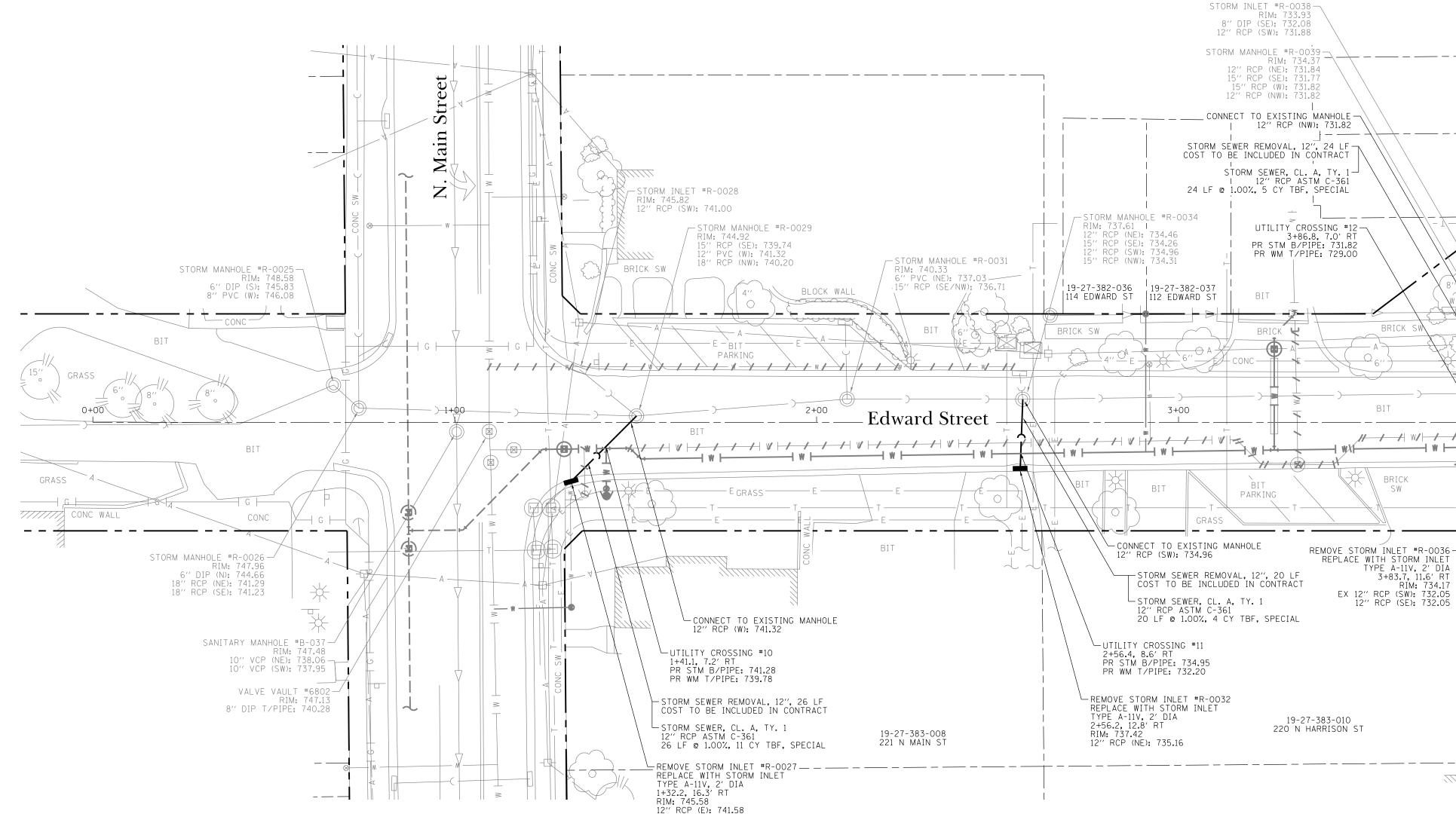
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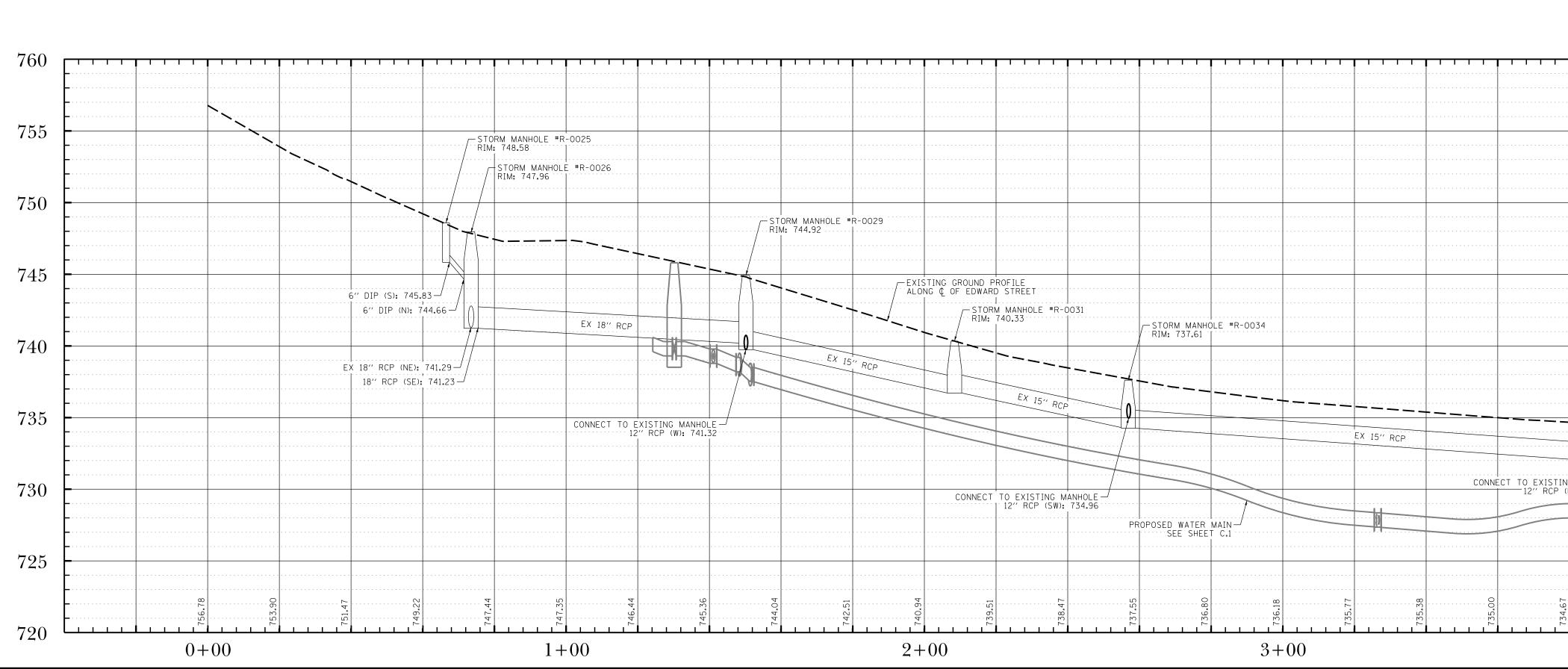


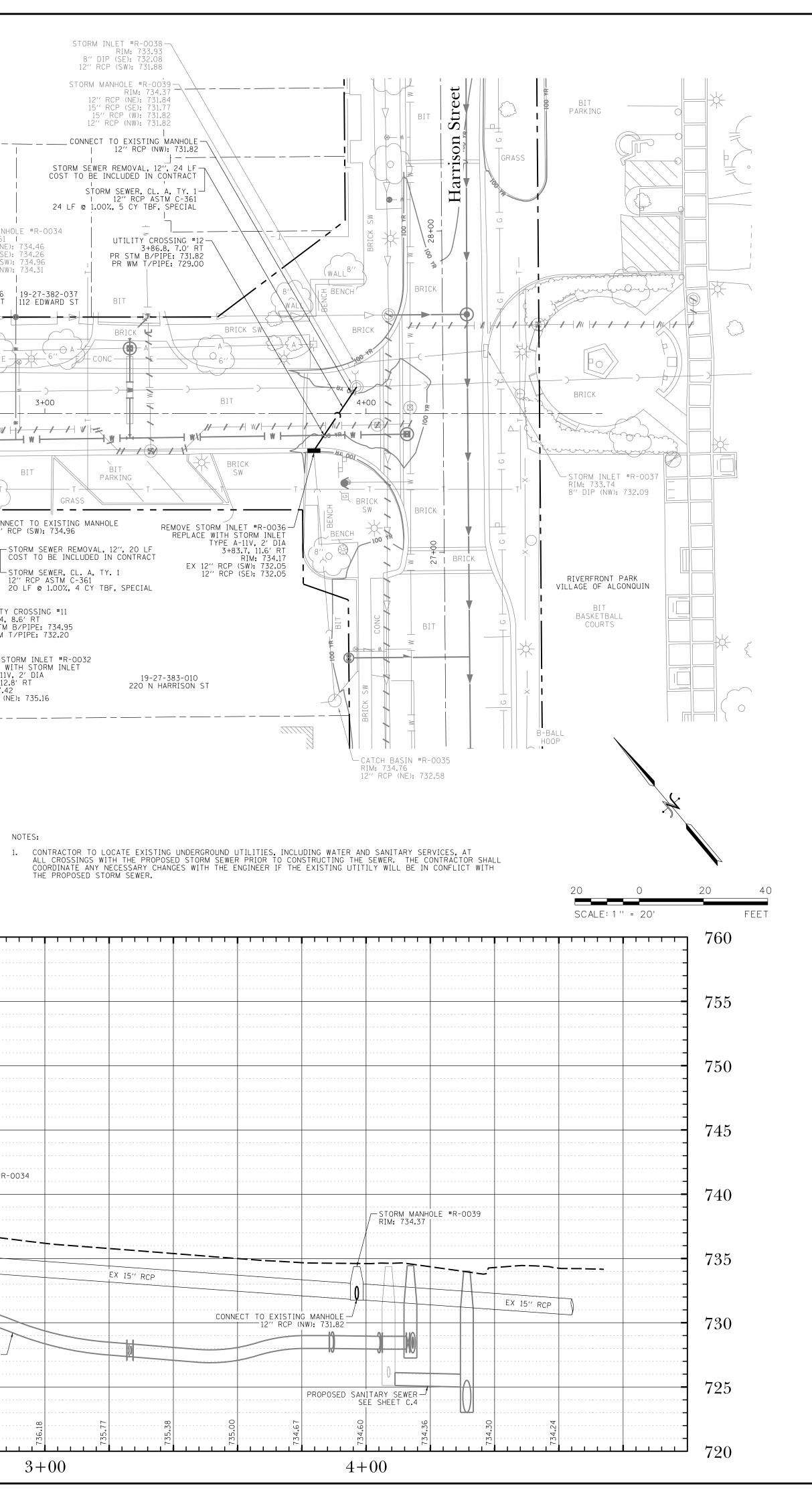
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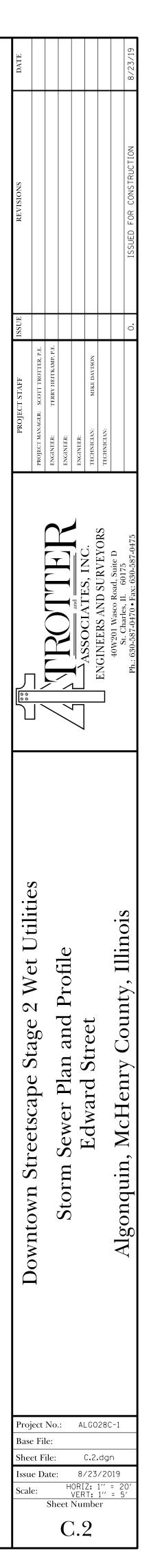
- 1. CONTRACTOR TO LOCATE EXISTING UNDERGROUND UTILITIES, INCLUDING WATER AND SANITARY SERVICES, AT ALL CROSSINGS WITH THE PROPOSED WATERMAIN PRIOR TO CONSTRUCTING THE WATERMAIN. THE CONTRACTOR SHALL COORDINATE ANY NECESSARY CHANGES WITH THE ENGINEER IF THE EXISTING UTITILY WILL BE IN
- 3. FOR NEW WATER SERVICES WHERE EXISTING B-BOX IS NOT SHOWN ON PLANS, CONTRACTOR SHALL LOCATE EXISTING B-BOX AND COORDINATE PROPOSED B-BOX LOCATION AND SERVICE CONNECTION WITH ENGINEER.

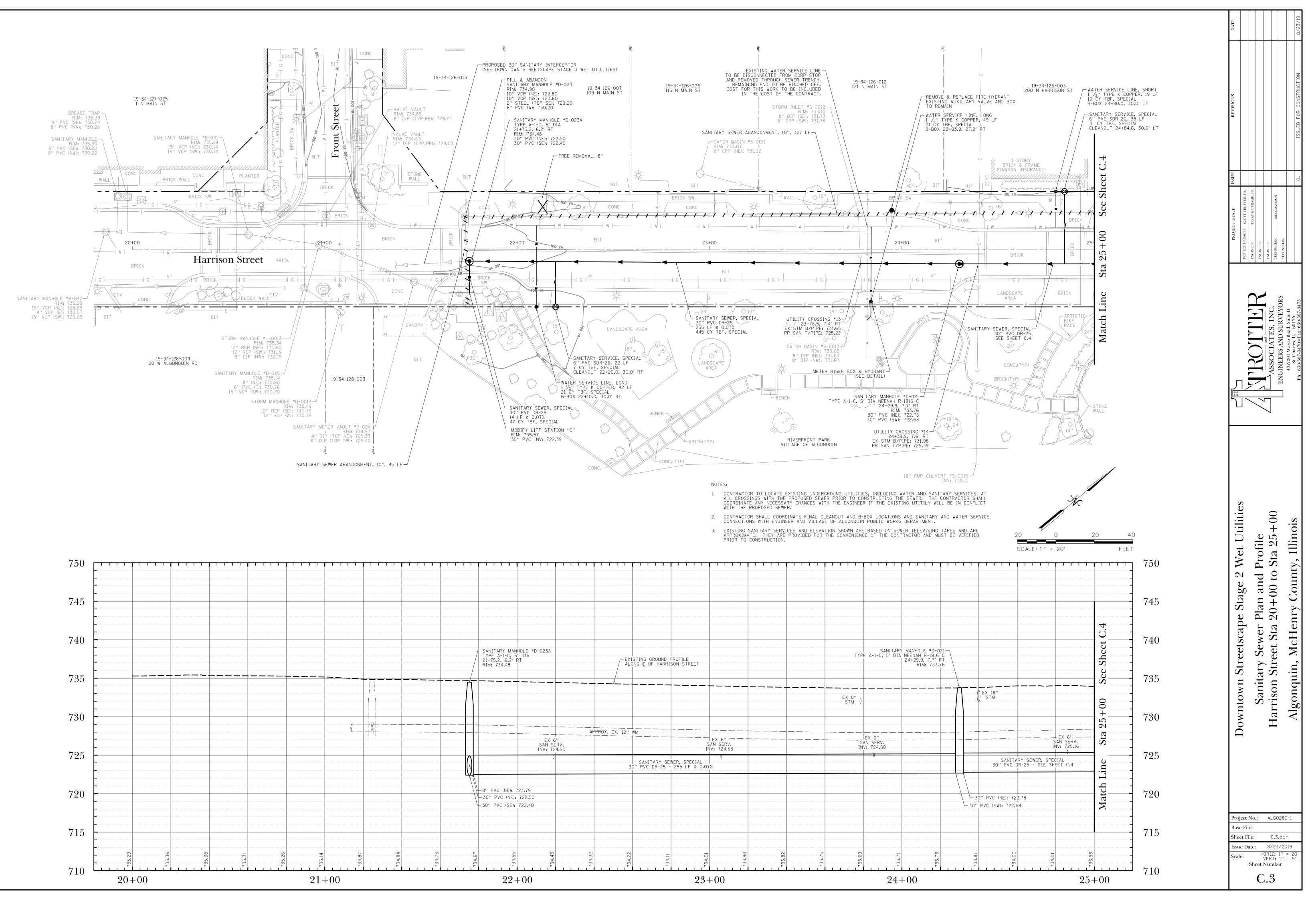


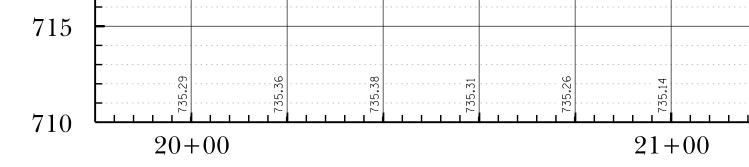


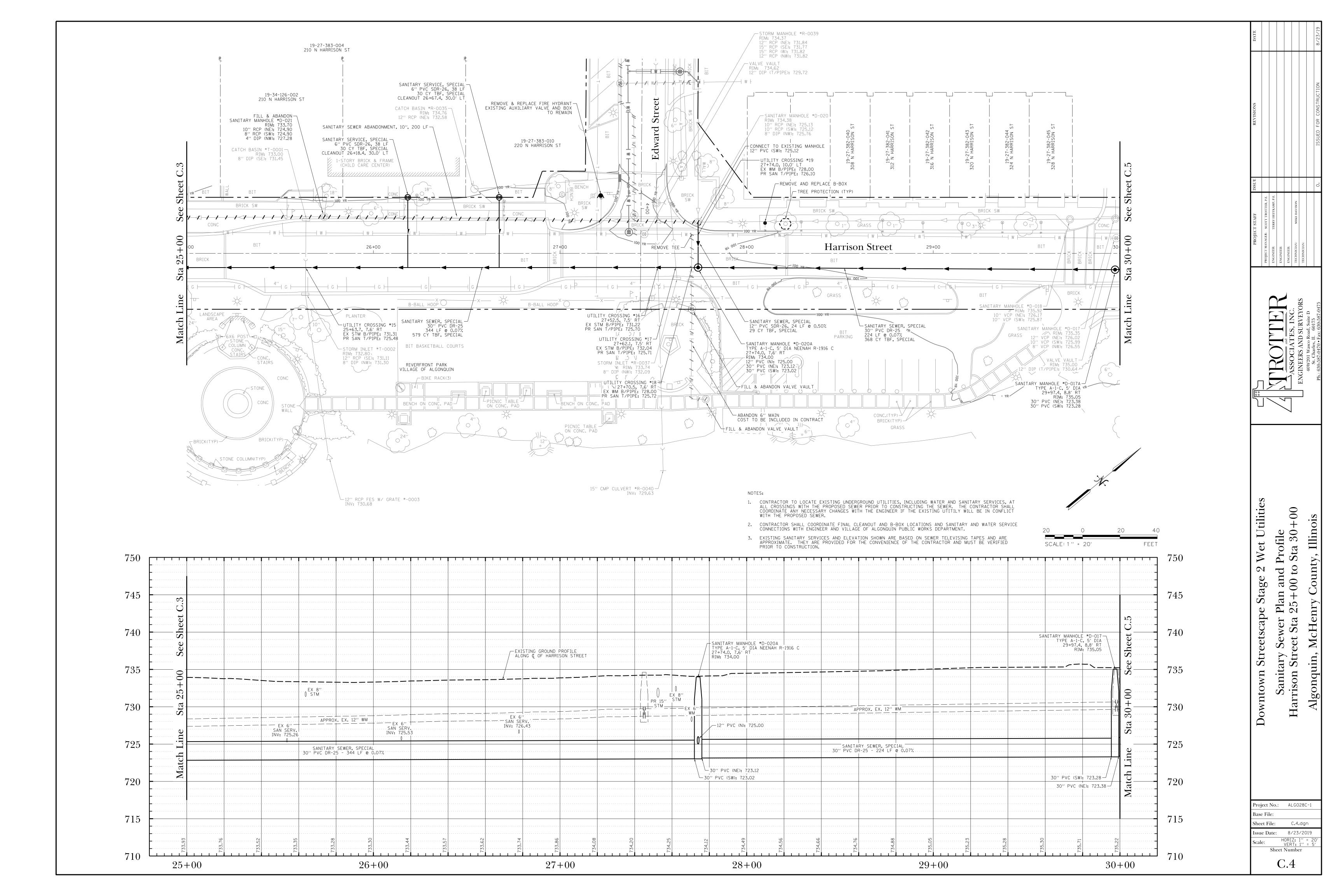


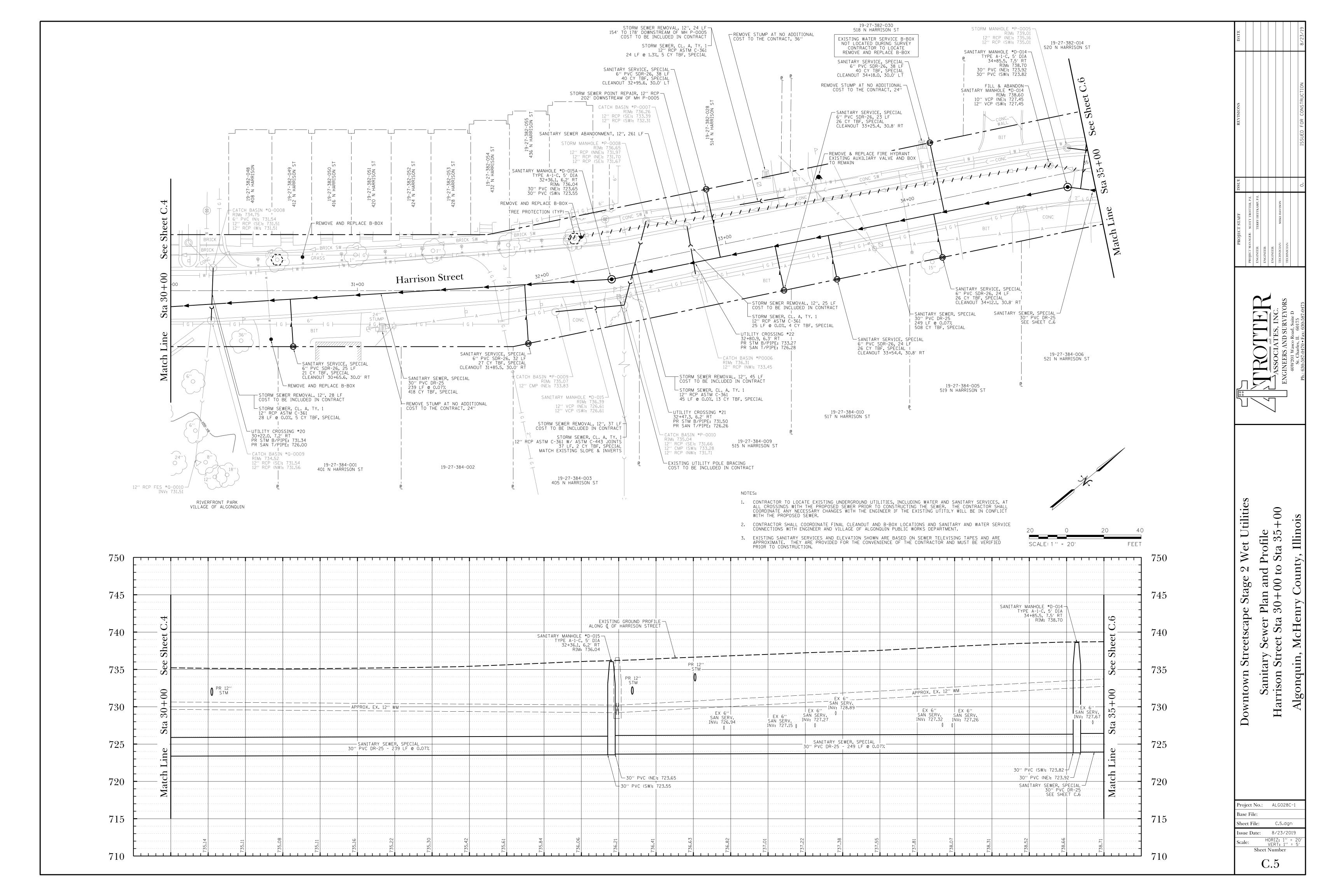


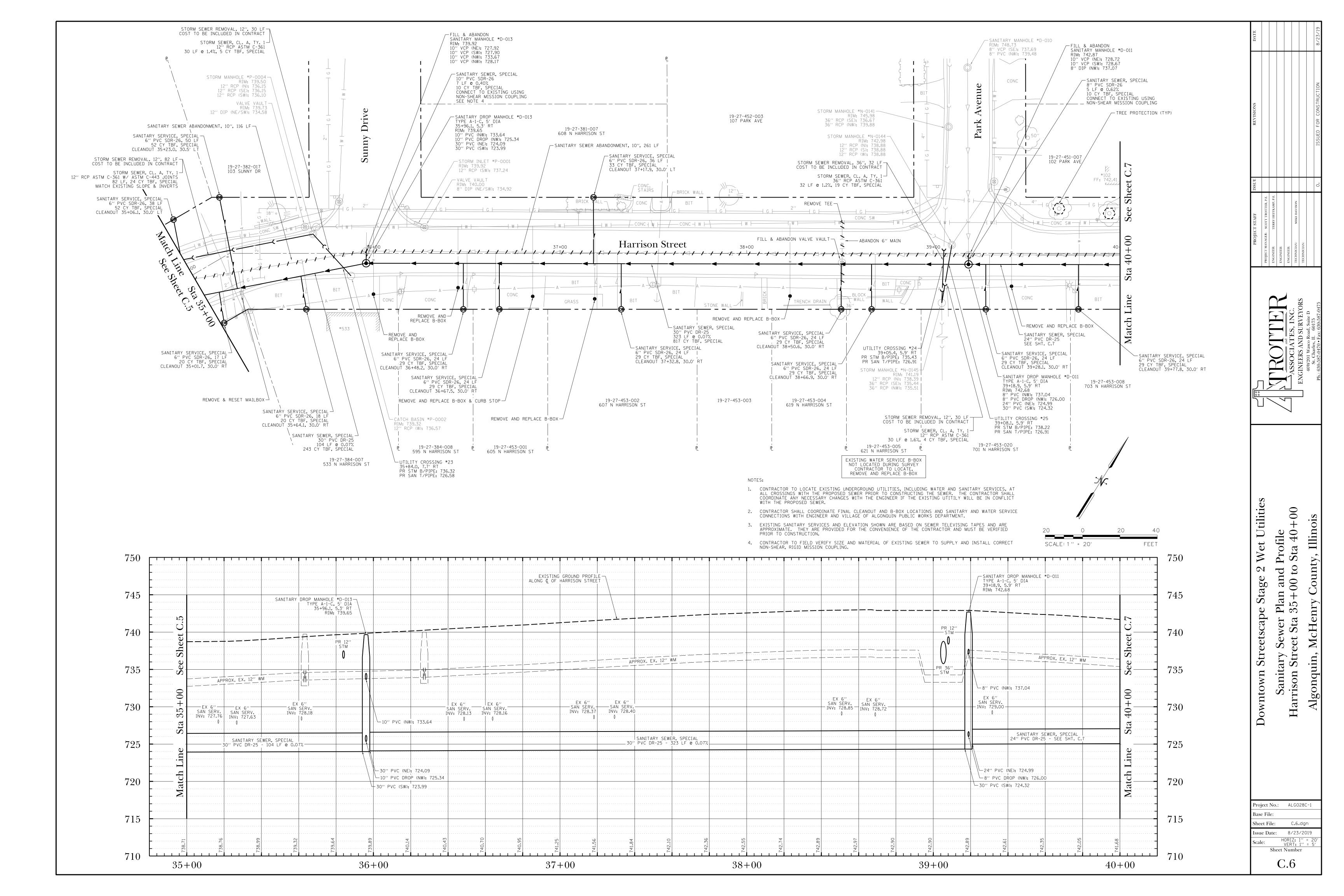


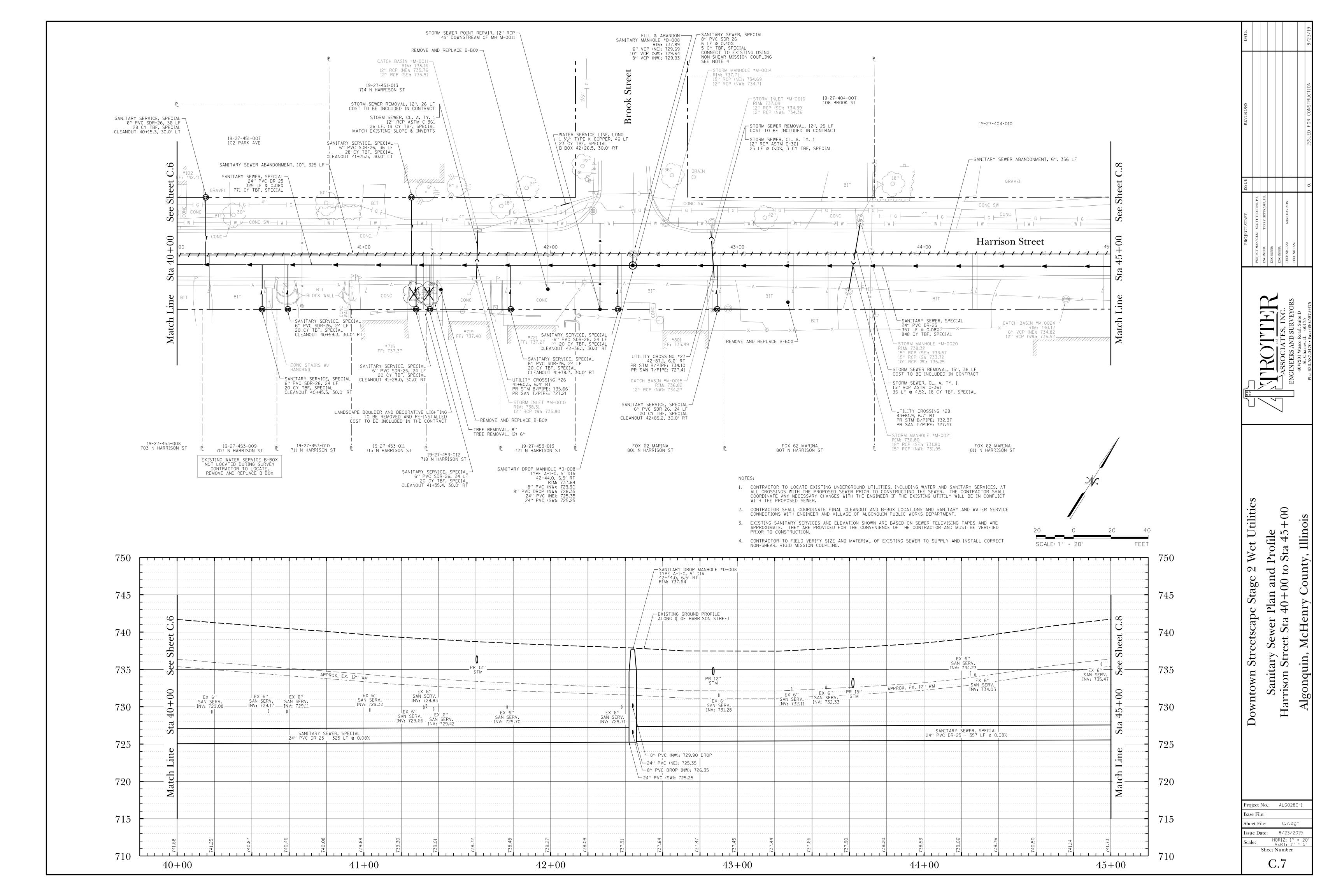


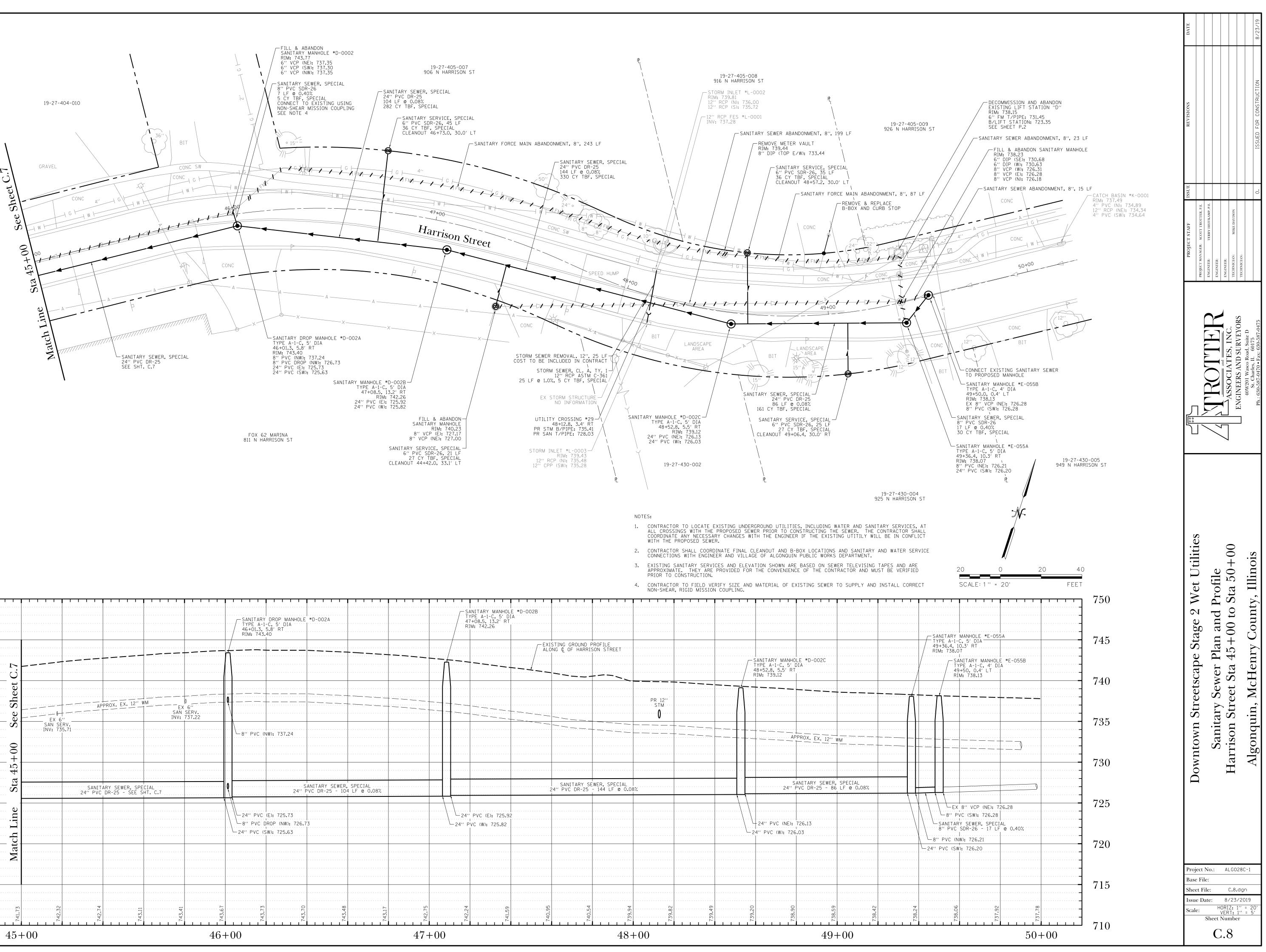


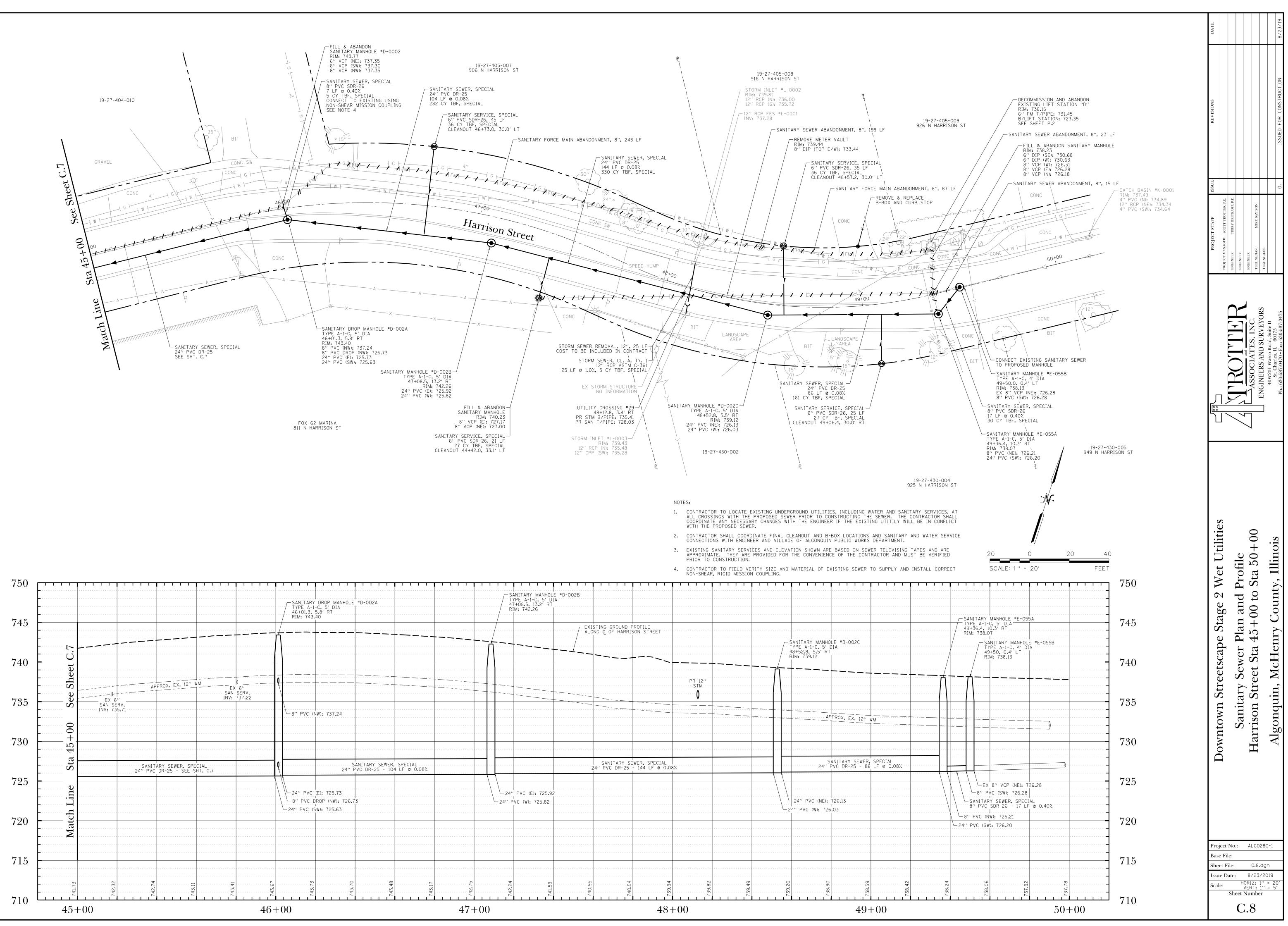


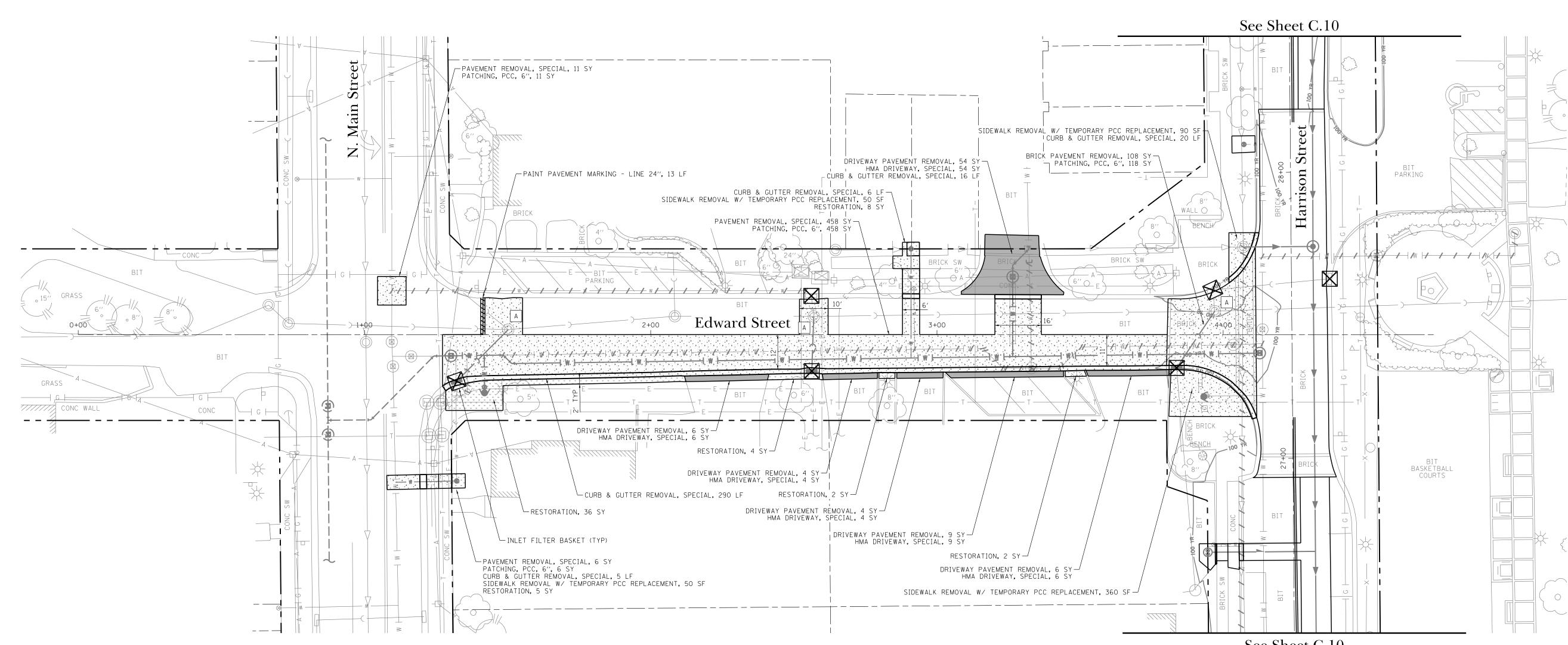


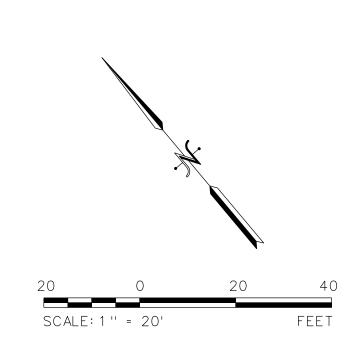












See Sheet C.10

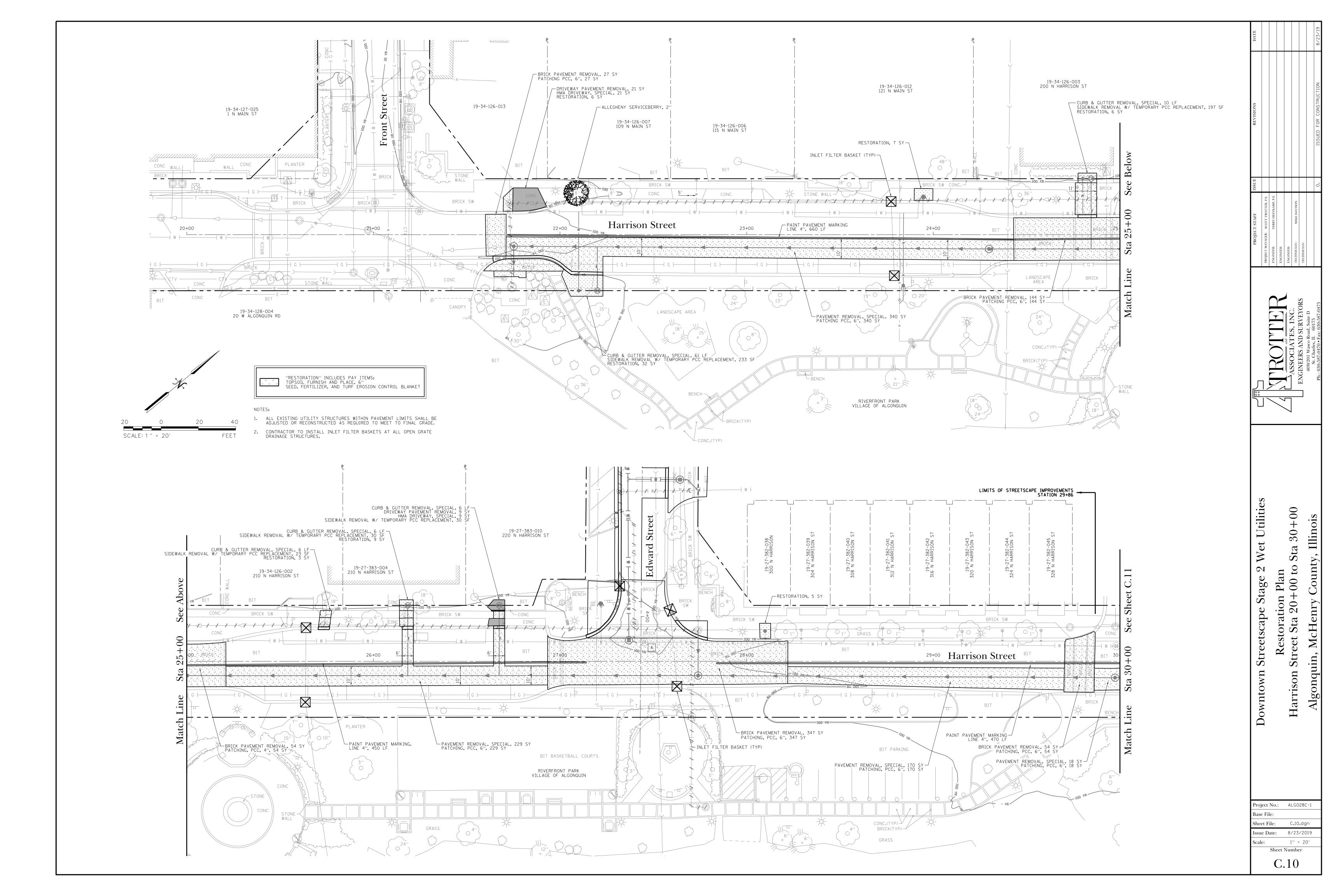
$\downarrow \downarrow \downarrow$ $\downarrow \downarrow \downarrow$	"RESTORATION" INCLUDES PAY ITEMS: TOPSOIL FURNISH AND PLACE, 6" SEED, FERTILIZER, AND TURF EROSION CONTROL BLANKET
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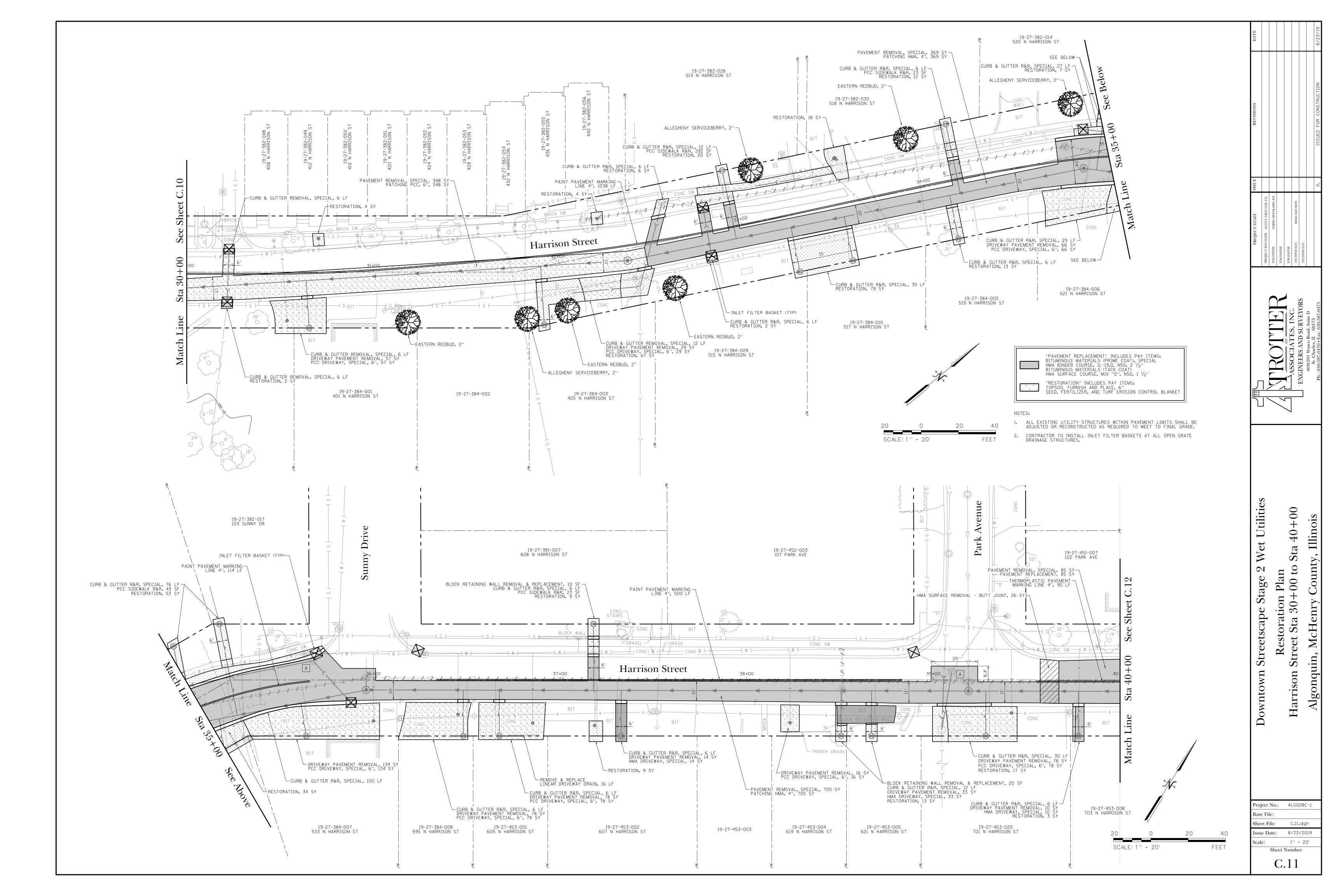
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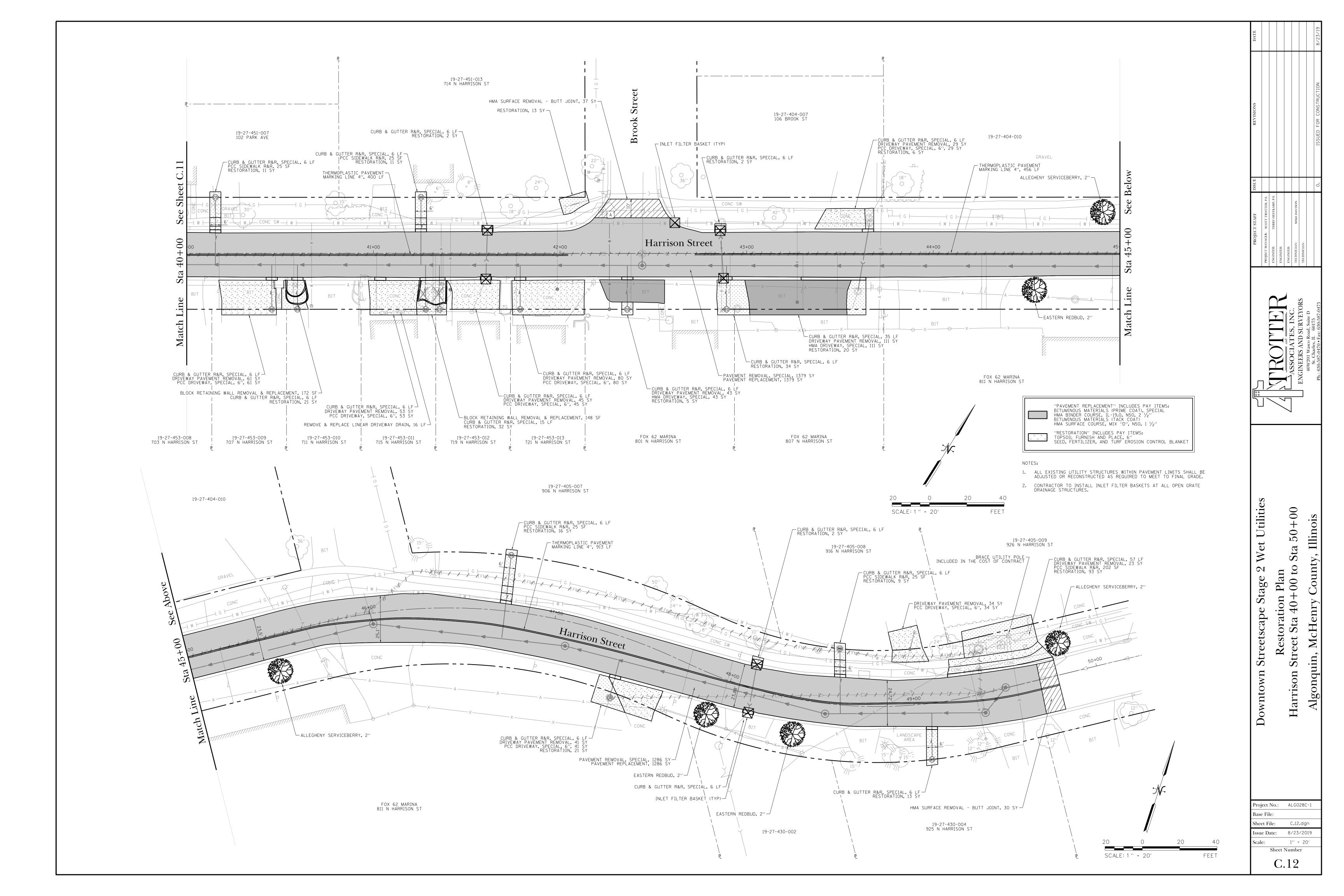
1. ALL EXISTING UTILITY STRUCTURES WITHIN PAVEMENT LIMITS SHALL BE ADJUSTED OR RECONSTRUCTED AS REQUIRED TO MEET TO FINAL GRADE.

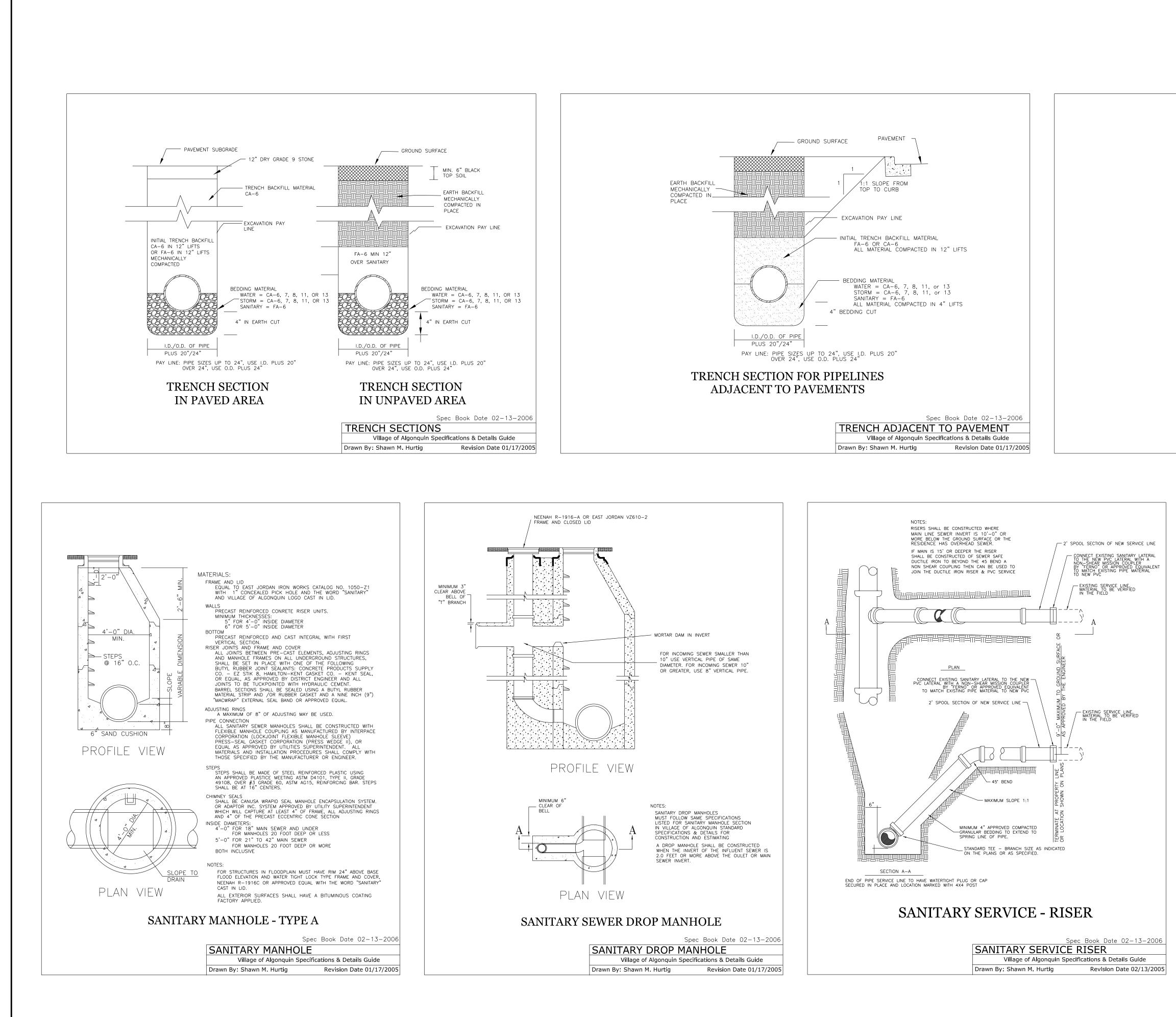
2. CONTRACTOR TO INSTALL INLET FILTER BASKETS AT ALL OPEN GRATE DRAINAGE STRUCTURES.

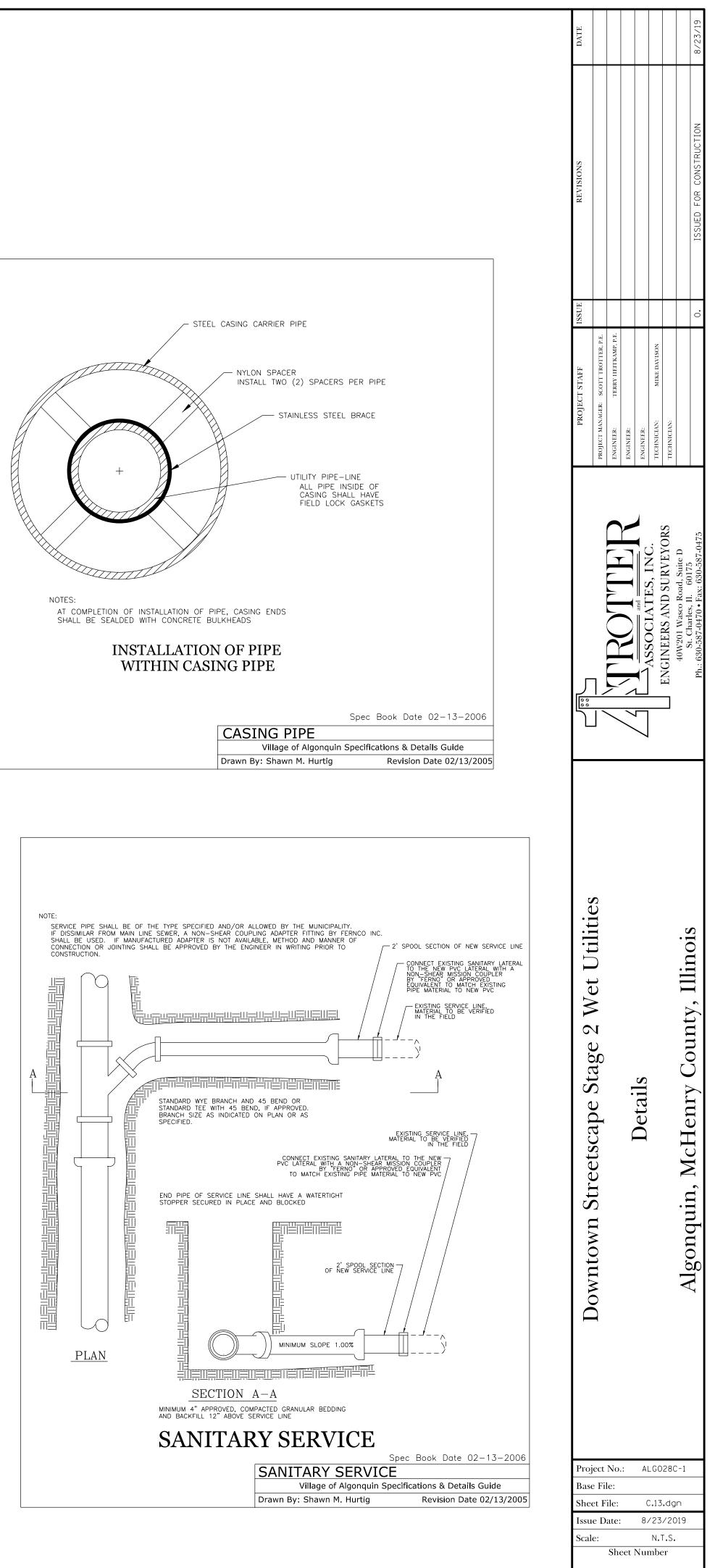
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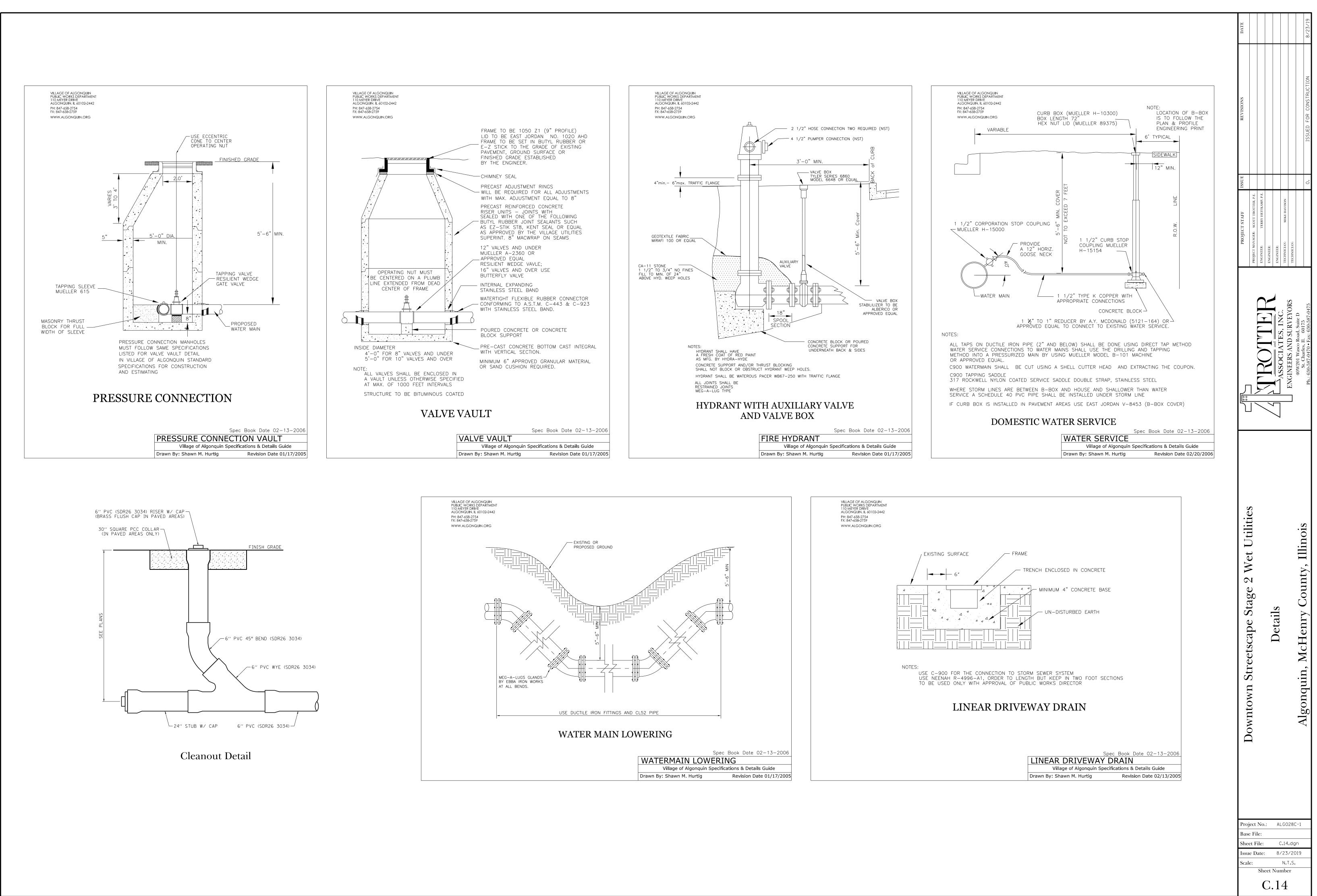


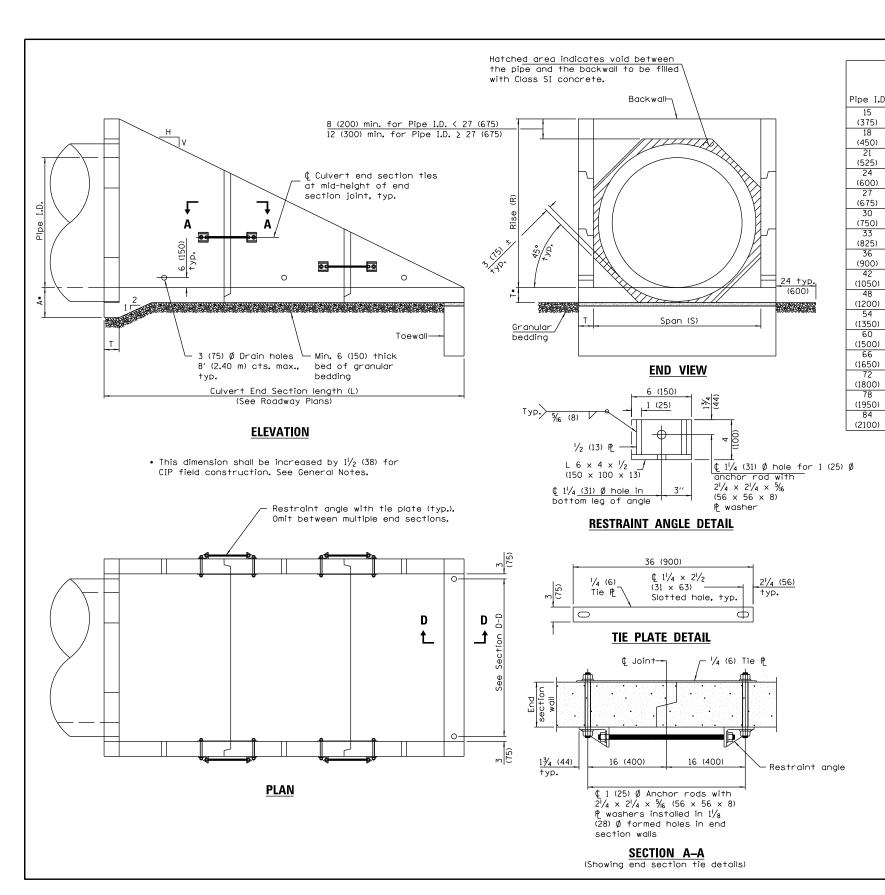


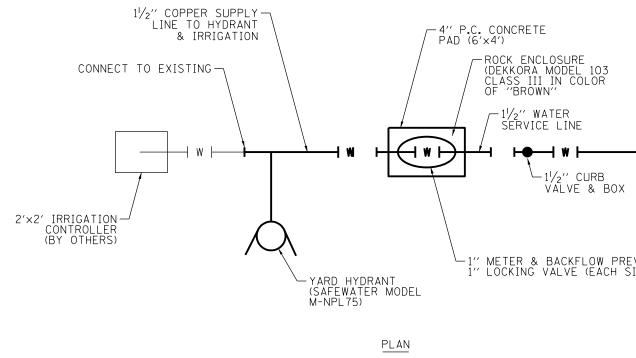


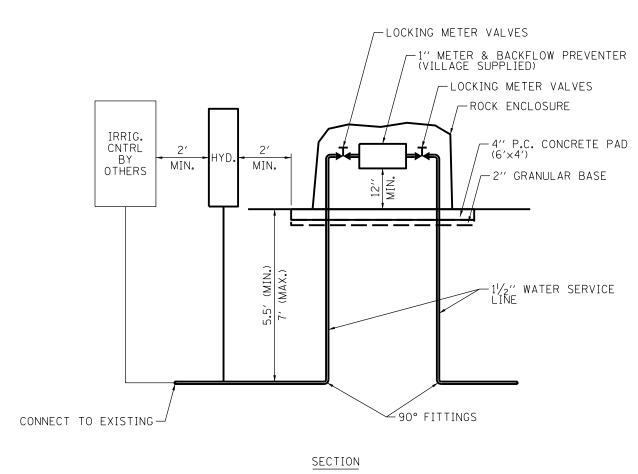








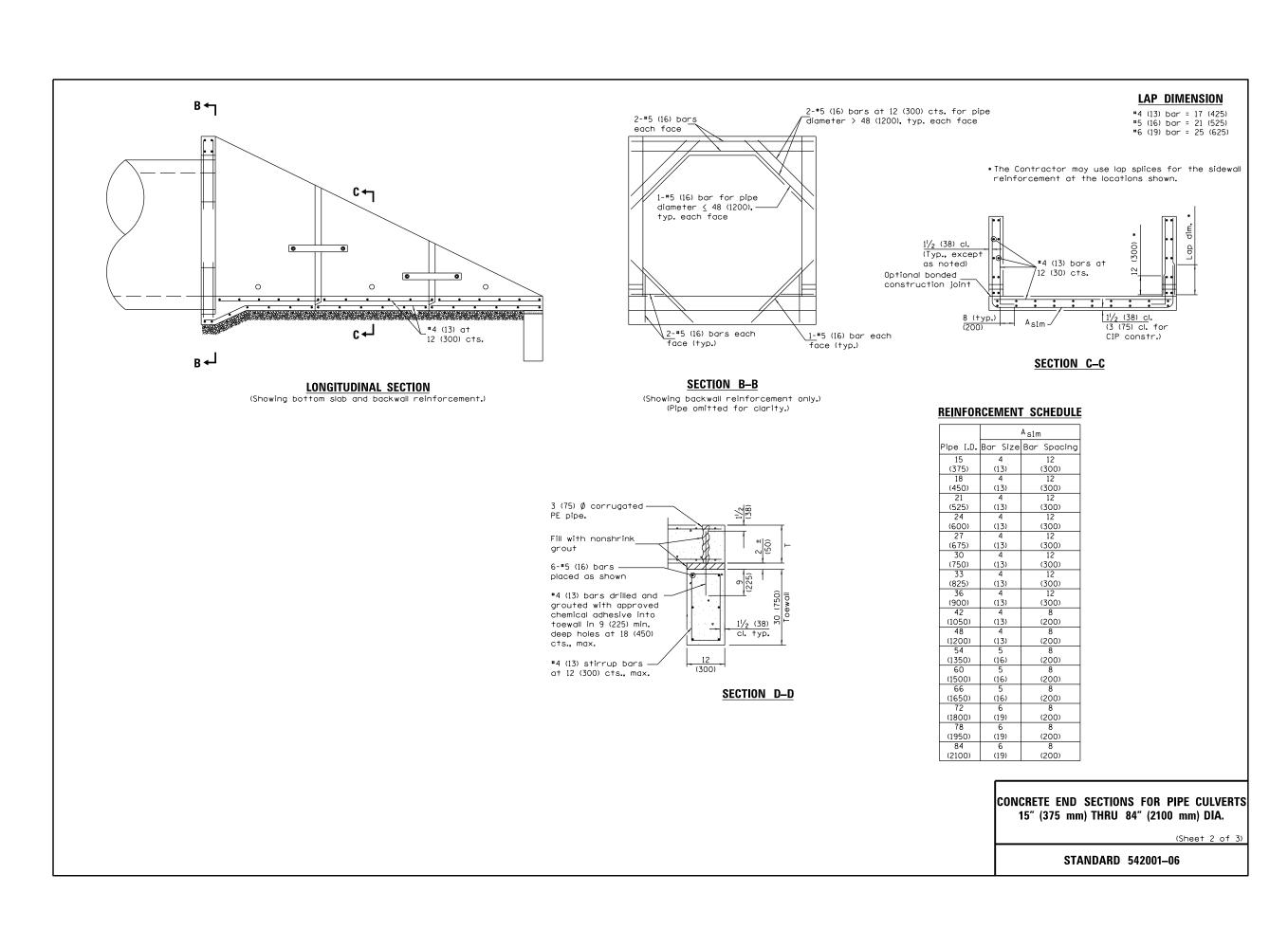


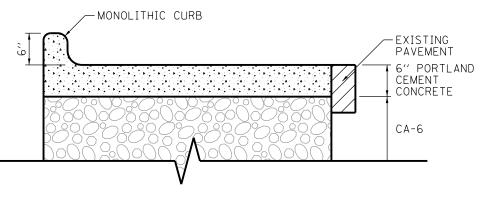


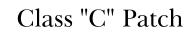
Meter Riser Box & Hydrant

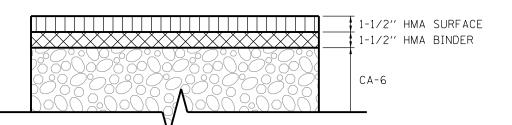
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).	A 14	R 29	28	8	1:2 5'-6''	1:3 7'-11''	1:4	1:6 15'-2''	
_	(350)	(737) 33	(711) 32	(200)	(1.68 m) 6'-2''	(2.42 m) 8'-11''	(3.16 m) 11'-8''	(4.63 m) 17'-2''	
	(375)	(838)	(813)	(200)	(1.88 m)	(2.72 m)	(3.56 m)	(5.24 m)	
	15 (375)	36 (914)	34 (864)	8 (200)	6'-8'' (2.03 m)	9'-8'' (2.95 m)	12'-8'' (3.86 m)	18'-8'' (5.69 m)	
	15 (375)	39 (990)	38 (970)	8 (200)	7'-2'' (2.19 m)	10'-5'' (3.18 m)	13'-8'' (4.17 m)	20'-2'' (6.15 m)	
+	15	3'-10''	3'-6''	8	8'-4''	12'-2''	16'-0''	23'-8''	
_	(375)	(1.17 m) 4'-2''	(1.07 m) 3'-10''	(200)	(2.54 m) 9'-0''	(3.71 m) 13'-2''	(4.88 m) 17'-4''	(7.21 m) 25'-8''	
	(400)	(1.27 m) 4'-5''	1.17 m) 4'-0''	(200)	(2.75 m)	(4.02 m)	(5.29 m)	(7.83 m)	
	16 (400)	(1.35 m)	(1.22 m)	8 (200)	9'-6'' (2.90 m)	13'-11'' (4.25 m)	18'-4'' (5.60 m)	27'-2'' (8.29 m)	
	16 (400)	4'-8'' (1.42 m)	4'-4'' (1.32 m)	8 (200)	10'-0'' (3.05 m)	14'-8'' (4.47 m)	19'-4'' (5.90 m)	28'-8'' (8.74 m)	
+	17	5'-3''	5'-0''	8	11'-2''	16'-5''	21'-8''	32'-2''	
+	(425) 17	(1.60 m) 5'-9''	(1.52 m) 5'-6''	(200)	(3.41 m) 12'-2''	(5.01 m) 17'-11''	(6.61 m) 23'-8''	(9.81 m) 35'-2''	
+	(425)	(1.75 m) 6'-4''	(1.68 m) 6'-2''	(200) 8	(3.71 m) 13'-4''	(5.46 m) 19'-8''	(7.22 m) 26'-0''	(10.73 m) 38'-8''	
	(450)	(1.93 m)	(1.88 m)	(200)	(4.07 m)	(6.00 m)	(7.93 m)	(11.79 m)	
	18 (450)	6'-10'' (2.08 m)	6'-8'' (2.03 m)	8 (200)	14'-4'' (4.37 m)	21'-2'' (6.46 m)	28'-0'' (8.54 m)	41'-8'' (12.71 m)	
T	19 (475)	7'-5'' (2.26 m)	7'-4'' (2.24 m)	8 (200)	15'-6'' (4.73 m)	22'-11'' (6.99 m)	30'-4'' (9.26 m)	45'-2'' (13.78 m)	
+	19	7'-11''	7'-10''	8	16'-6''	24'-5''	32'-4''	48'-2''	
+	(475) 21	(2.41 m) 8'-6''	(2.39 m) 8'-6''	(200)	(5.03 m) 17'-9''	(7.45 m) 26'-3''	(9.87 m) 34'-9''	(14.70 m) 51'-9''	
	(525)	(2.59 m)	(2.59 m) 9'-0''	(230)	(5.41 m)	(8.01 m) 27'-9''	(10.60 m)	(15.78 m)	
	21 (525)	9'-0'' (2.74 m)	(2.74 m)	(230)	18'-9'' (5.72 m)	(8.46 m)	36'-9'' (11.21 m)	54'-9'' (16.70 m)	
			Cic Th ex se sh Se dia En sk 21/	The number of t	ncrete. of segm y. The le equired to termined hy plans f h may be h roadway 5% (56 x	ents show ongth and o constru- by the Co or slope installed y. 56 x 8)	wn in elev I number Jot the e ontractor (V:H) and up to ± plate was	<ul> <li>space(s)</li> <li>vation is - of precase</li> <li>nd section</li> <li>pipe insid</li> <li>15 degrees</li> <li>shers shall</li> <li>the anch</li> </ul>	fo st n le s
			as fc Se	sembly mo rmed hole e Standa		led using for end	core bit	s in lieu c	)f
			di					s of vert splacemen	
				dimensio herwise :	ns are in shown.	inches (r	millimeters	s) unless	
			С					IPE CULV mm) DIA	
			L					(Sheet 1 c	٥f

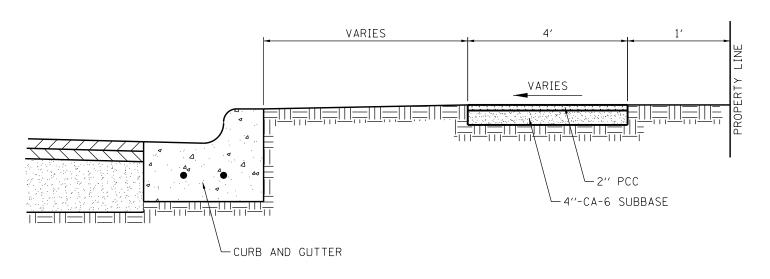
STANDARD 542001-06











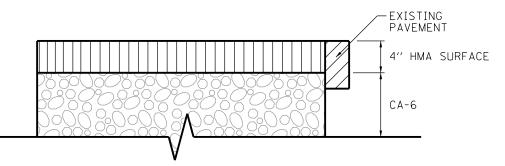
# Sidewalk Removal w/ Temporary PCC Replacement

Hot-Mix Asphalt Mixture Re	AIR VOIDS @ Ndes	QUALITY MANAGEMENT PROGRAM (QMP)
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm)	3.5% @ 50 GYR	QC/QA
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	3.5% @ 50 GYR	QC/QA
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 50 GYR	QC/QA

CONNECT TO EXISTING WATERMAIN

-1" METER & BACKFLOW PREVENTER (VILLAGE SUPPLIED) 1" LOCKING VALVE (EACH SIDE), COVER WITH ROCK ENCLOSURE

-2" GRANULAR BASE



Class "D" Patch



Proj Base Shee	Downtown Streetscape Stage 9 Wet Hilities		PROJECT STAFF ISSUE	ERVISIONS	DATE
e Fil			PROJECT MANAGER: SCOTT TROTTER, P.E.		
e:			ENGINEER: TERRY HEITKAMP, P.E.		
:	: ,		ENGINEER:		
	Details		ENGINEER:		
_GO C.15			TECHNICIAN: MIKE DAVISON		
		L ENGINEERS AND SURVEYORS	TECHNICIAN:		
	Almondin McHanny County Illindie	40W201 Wasco Road, Suite D St Charles 11 60175			
	rugunquin, mentenny county, minus	Ph.: 630-587-0470 • Fax: 630-587-0475	°0	ISSUED FOR CONSTRUCTION	8/23/19

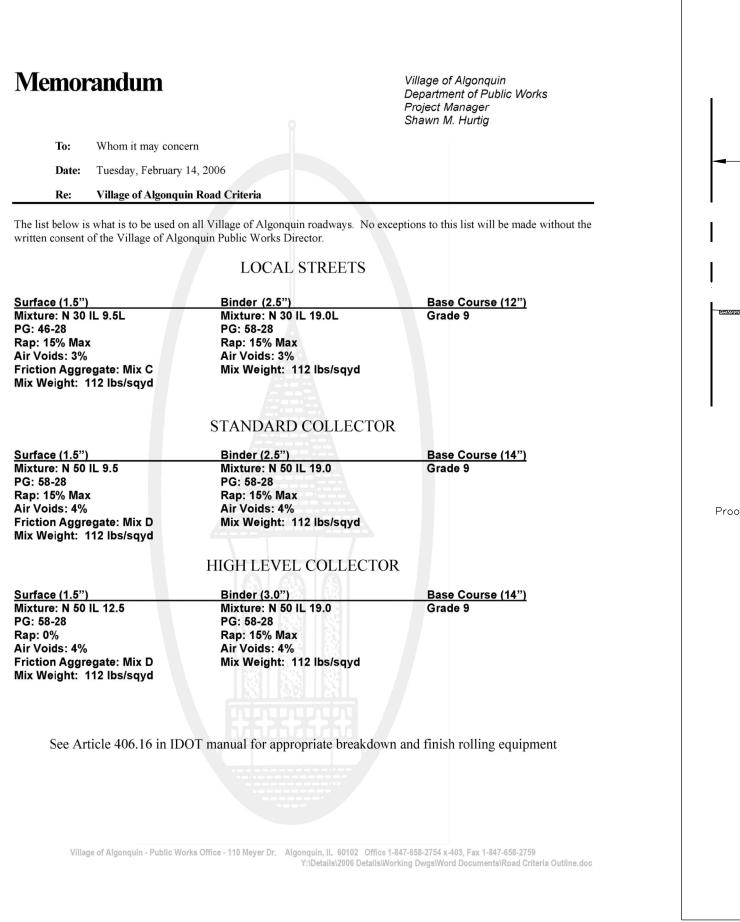
## Memorandum

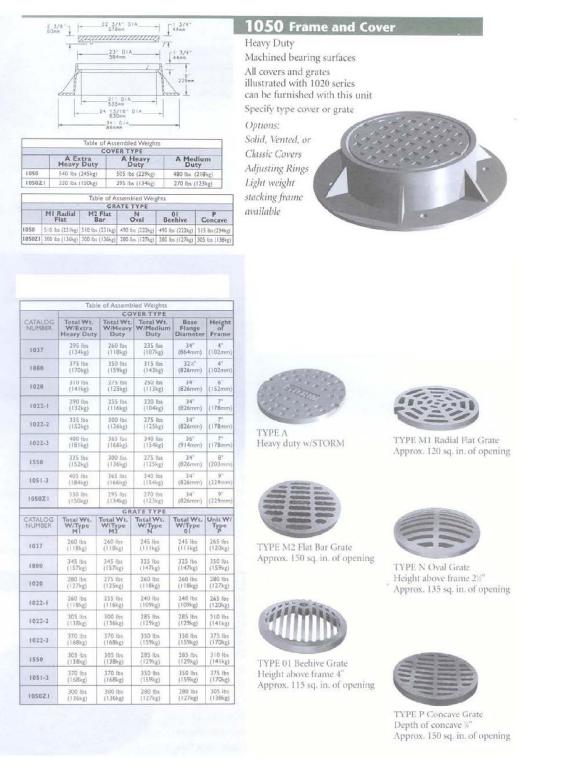
	11101		Department of Public Works Public Works Project Manager Shawn M. Hurtig
	То:	Project Estimators & Contractors	
	Date:	Tuesday, February 14, 2006	
	Re:	Iron Requirements	
		serve as a reference guide for the purchasing of iron for any project aquin corporate limits. If you have any questions please feel free to	
Sanitary	y:		
		East Jordan 1050-Z1	
Water:	Lid:	East Jordan 1050-Z1 Flat Heavy Duty (with Village of Algonquin	logo)
water.	Frame:	East Jordan 1050-Z1	
	Lid:	East Jordan 1050-Z1 Flat Heavy Duty (with Village of Algonquin	logo)
Storm:			
		East Jordan 7010	
	Back:	East Jordan 7010- T1	
	Grate:	East Jordan $7010 - M3$ sinusoidal (If slope is greater than 3% use	M4 vane)
		sed B6:12 installation East Jordan 7065 East Jordan 7060 – T1 East Jordan 7045 – M1	
	Paveme	ent or Yard Installation (Solid Lid)	
		East Jordan 1050-Z1	
	Lid:	East Jordan 1050-Z1 Flat Heavy Duty (w/ Village of Algonquin lo	g)
		ent Installation (Open Lid, to be used only in parking lots)	
		East Jordan 1050-Z1	
	Lid:	East Jordan 1050-Z1 M1 Flat Heavy Duty	
	Yard In	stallation (Open Lid, low flow)	
	Frame:	East Jordan 6527	
	Frame:	<i>istallation (Open Lid, high flow)</i> East Jordan 6508	
must ha a 4" rir	ive a recyng cast in	shall receive mastic, external chimney seal, and mortar. Any structure veled rubber adjusting ring be the top ring (only top ring to be rubber to the top. Please see Village of Algonquin standard details for addi ONS TO THE ABOVE WITH OUT WRITTEN APPROVAL FE ALGONQUIN PROJECT MANAGER OR PUBLIC WORKS D	r). Flat tops shall have tional structure info. <b>ROM THE VILLAGE</b>

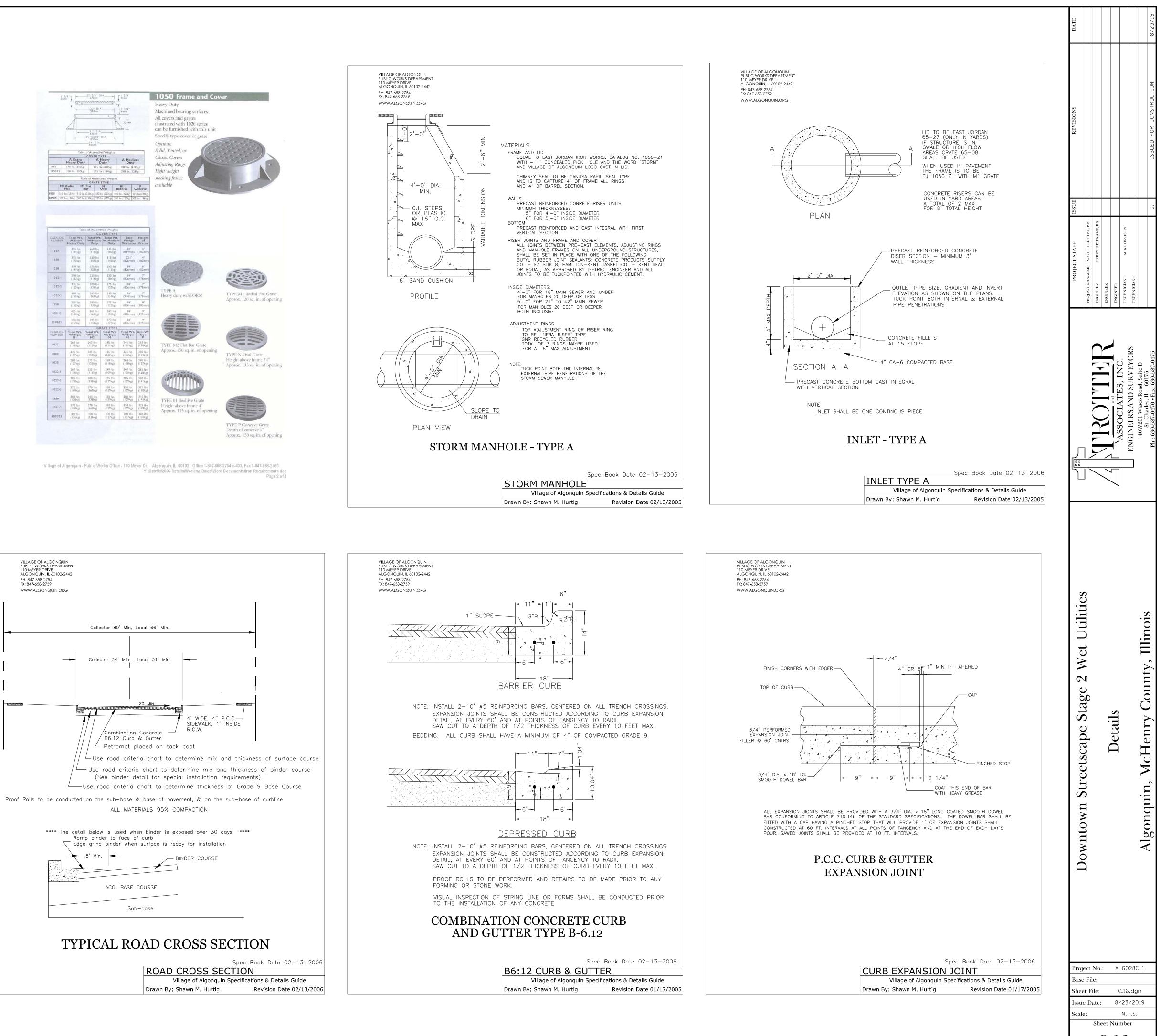
Respectfully Submitted, Shawn M. Hurtig

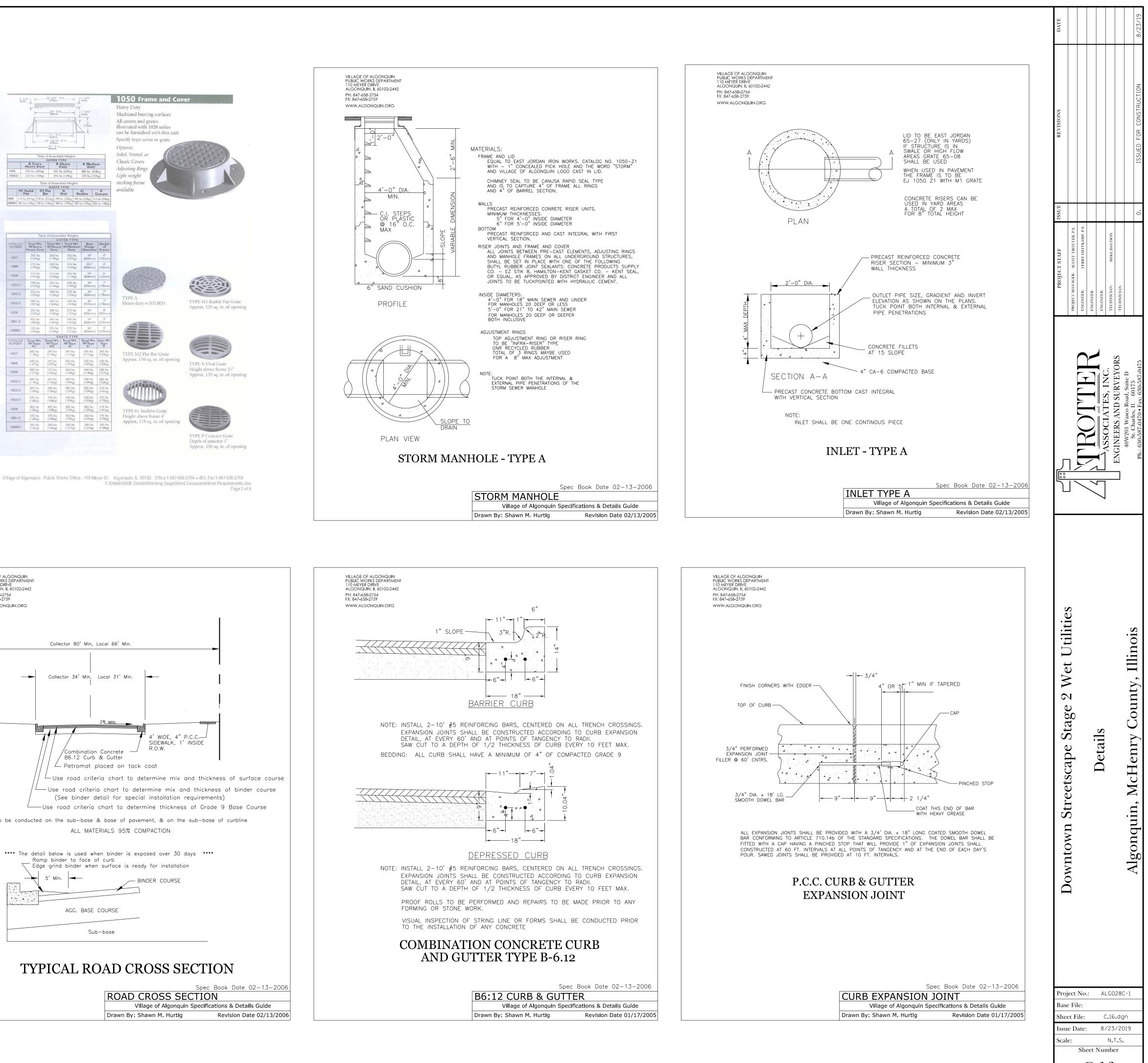
Village of Algonquin

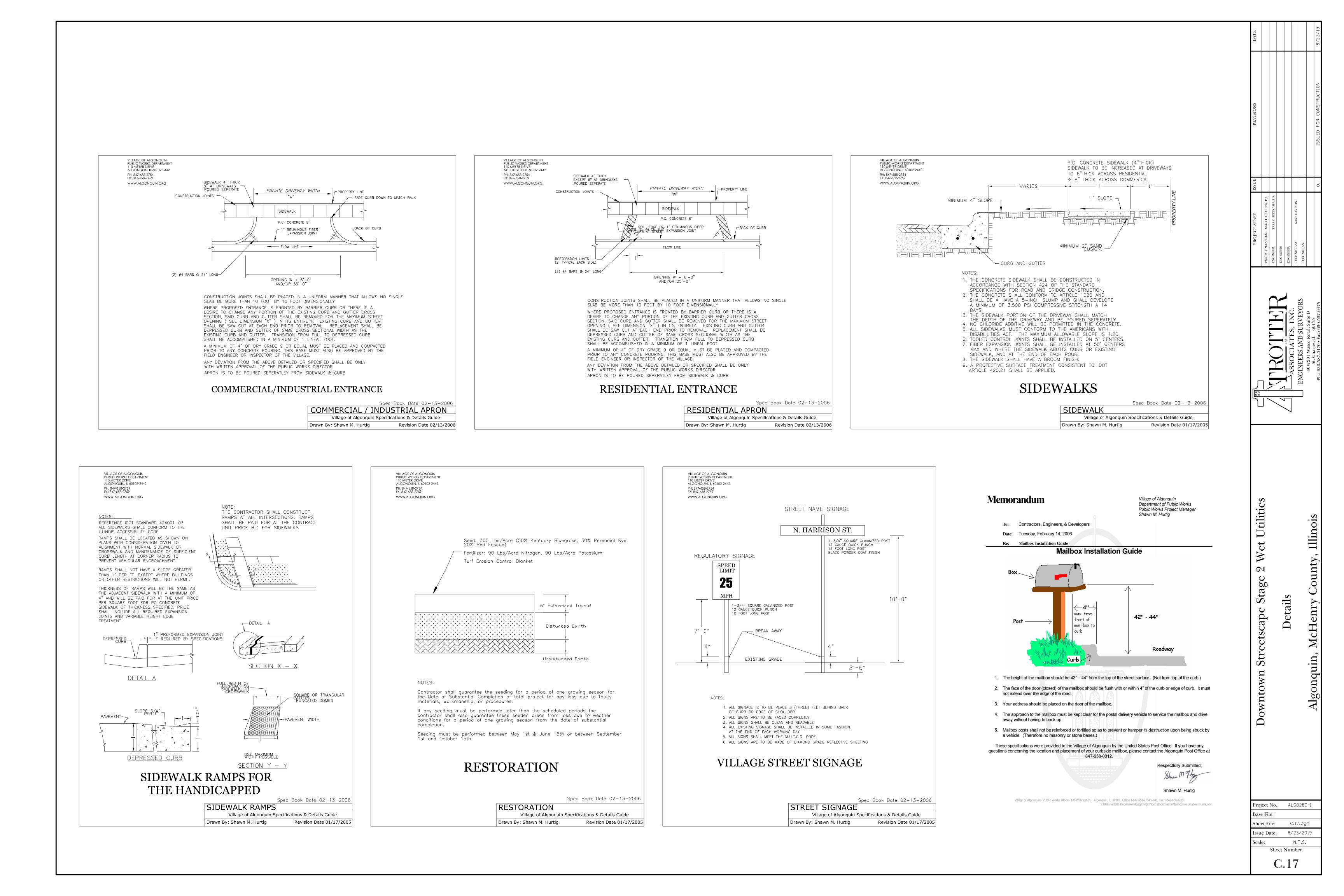
Village of Algonquin - Public Works Office - 110 Meyer Dr. Algonquin, IL 60102 Office 1-847-658-2754 x-403, Fax 1-847-658-2759 Y:\Details\2006 Details\Working Dwgs\Word Documents\Iron Requirements.doc Page 1 of 4

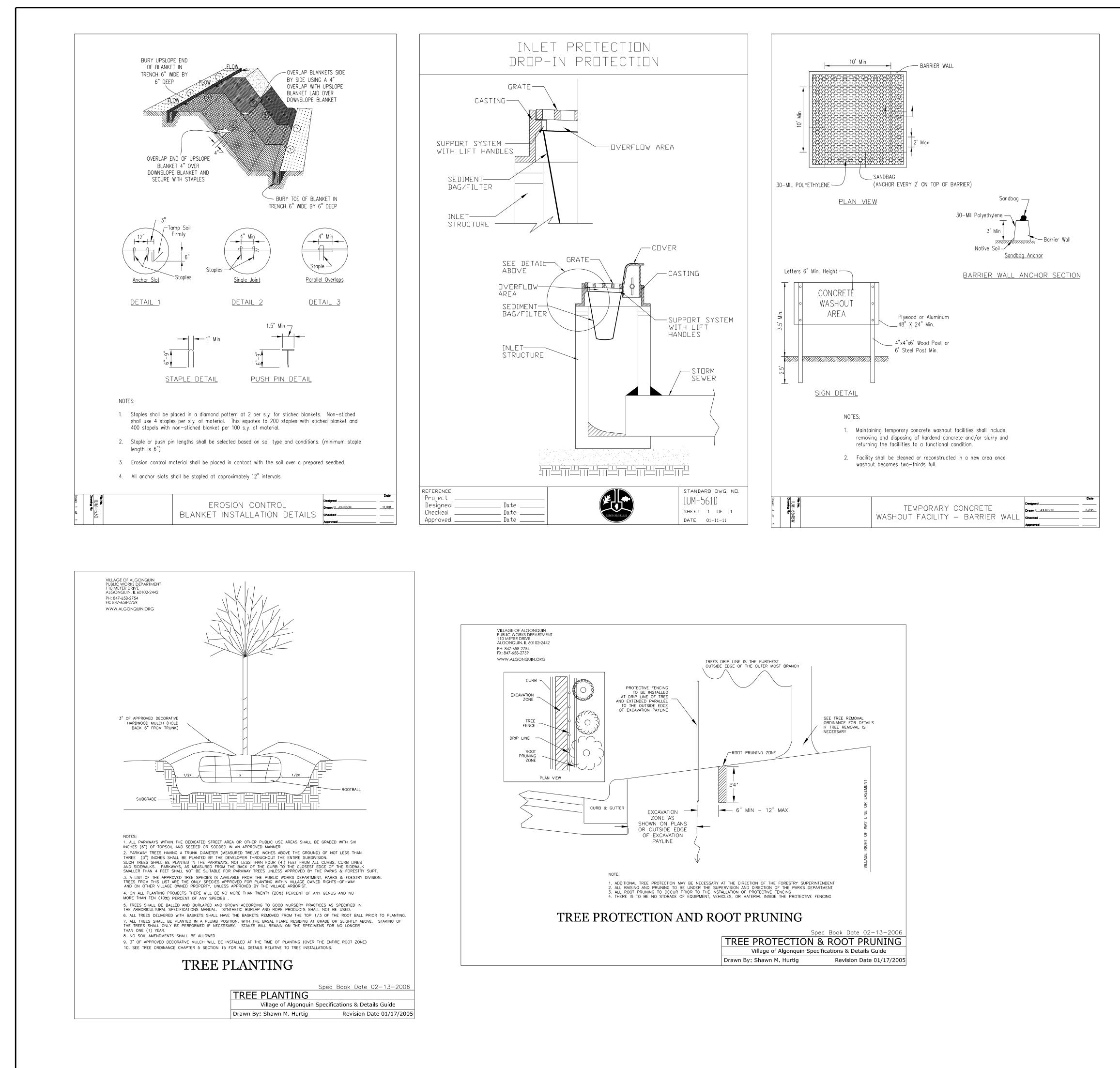












STANDARD SOIL EROSION AND SEDIMENT CONTROL NOTES

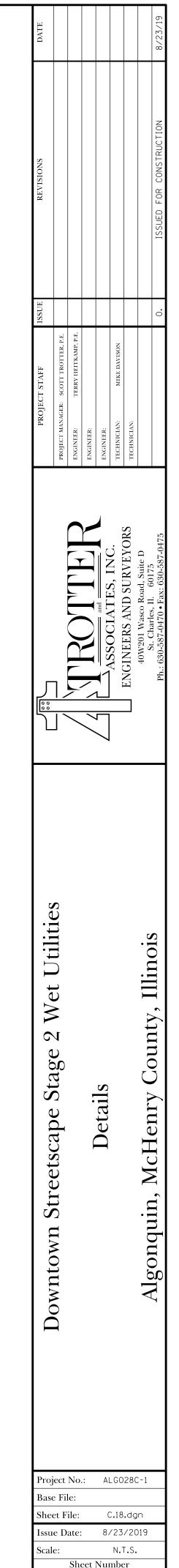
- 1. CONTROL MEASURES SHALL MEET THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE ILLINOIS URBAN MANUAL (WWW.AISWCD.ORG/IUM) UNLESS STATED OTHERWISE.
- 2. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. AREAS OF THE DEVELOPMENT SITE THAT ARE NOT TO BE DISTURBED SHALL BE PROTECTED FROM CONSTRUCTION TRAFFIC OR OTHER DISTURBANCE UNTIL FINAL STABILIZATION IS ACHIEVED.
- 3. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, DEVELOPMENT SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
- 4. STABILIZATION BY SEEDING SHALL INCLUDE TOPSOIL PLACEMENT AND FERTILIZATION, AS NECESSARY.
- 5. NATIVE SEED MIXTURES SHALL INCLUDE RAPID-GROWING ANNUAL GRASSES OR SMALL GRAINS TO PROVIDE INITIAL, TEMPORARY SOIL STABILIZATION.
- 6. OFFSITE PROPERTY SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. VELOCITY DISSIPATION DEVICES SHALL BE PLACED AT CONCENTRATED DISCHARGE LOCATIONS AND ALONG THE LENGTH OF ANY OUTFALL CHANNEL, AS NECESSARY TO PREVENT EROSION.
- SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE DISTURBANCE OF TRIBUTARY AREAS.
   STABILIZATION OF DISTURBED AREAS SHALL BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE DEVELOPMENT SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE DEVELOPMENT SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION OF DISTURBED AREAS SHALL BE INITIATED WITHIN 1 WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE, BUT NOT LATER THAN 14 CALENDAR DAYS FROM THE INITIATION OF STABILIZATION WORK IN AN AREA. EXCEPTIONS TO THESE TIME FRAMES ARE SPECIFIED BELOW:
- A. WHERE THE INITIATION OF STABILIZATION MEASURES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE; AND
- B. IN AREAS WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED AND WILL RESUME AFTER 14 DAYS, A TEMPORARY STABILIZATION METHOD MAY BE USED.
- DISTURBANCE OF STEEP SLOPES SHALL BE MINIMIZED. AREAS OR EMBANKMENTS HAVING SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH STAKED IN PLACE SOD, EROSION CONTROL BLANKET IN COMBINATION WITH SEEDING, OR AN EQUIVALENT CONTROL MEASURE.
   DEPENMETER CONTROL MEASURES SHALL BE PROVIDED DOWNSLOPE AND PERPENDICULAR TO THE ELOW OF PLUNCEE
- PERIMETER CONTROL MEASURES SHALL BE PROVIDED DOWNSLOPE AND PERPENDICULAR TO THE FLOW OF RUNOFF FROM DISTURBED AREAS, WHERE THE TRIBUTARY AREA IS GREATER THAN 5,000 SOUARE FEET, AND WHERE RUNOFF WILL FLOW IN A SHEET FLOW MANNER. PERIMETER EROSION CONTROL SHALL ALSO BE PROVIDED AT THE BASE OF SOIL STOCKPILES.
   THE STORMWATER MANAGEMENT SYSTEM SHALL BE PROTECTED FROM FROSION AND SEDIMENTATION DOWNSLOPE
- 11. THE STORMWATER MANAGEMENT SYSTEM SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION DOWNSLOPE FROM DISTURBED AREAS. INLET PROTECTION THAT REDUCES SEDIMENT LOADING, WHILE ALLOWING RUNOFF TO ENTER THE INLET SHALL BE REQUIRED FOR ALL STORM SEWERS. CHECK DAMS, OR AN EQUIVALENT CONTROL MEASURE, SHALL BE REQUIRED FOR ALL CHANNELS. FILTER FABRIC INLET PROTECTION AND STRAW BALE DITCH CHECKS ARE NOT ACCEPTABLE CONTROL MEASURES.
- 12. IF DEWATERING SERVICES ARE USED, DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (E.G., SEDIMENT TRAP OR AN EQUIVALENT CONTROL MEASURE). THE ENFORCEMENT OFFICER SHALL BE NOTIFIED PRIOR TO THE COMMENCEMENT OF DEWATERING ACTIVITIES.
- 13. ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION OF THE DEVELOPMENT SITE IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NECESSARY. TRAPPED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED.
- 14. STOCKPILED SOIL AND MATERIALS SHALL BE REMOVED FROM FLOOD HAZARD AREAS AT THE END OF EACH WORK DAY. SOIL AND MATERIALS STOCKPILED IN IWMC OR BUFFER AREAS SHALL BE PLACED ON TIMBER MATS, OR AN EQUIVALENT CONTROL MEASURE.
   15. EFFECTIVE CONTROL MEASURES SHALL BE HITLIZED TO MINIMUZE THE DISCHARCE OF POLLUTANTS FROM THE
- 15. EFFECTIVE CONTROL MEASURES SHALL BE UTILIZED TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THE DEVELOPMENT SITE. AT A MINIMUM, CONTROL MEASURES SHALL BE IMPLEMENTED IN ORDER TO:
   A. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATER; AND
- B. MINIMIZE THE EXPOSURE OF BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, VEHICLE FLUIDS, SANITARY WASTE, AND OTHER MATERIALS PRESENT ON THE DEVELOPMENT SITE TO PRECIPITATION AND TO STORMWATER.
- 16. ADEQUATE RECEPTACLES SHALL BE PROVIDED FOR THE DEPOSITING OF ALL CONSTRUCTION MATERIAL DEBRIS GENERATED DURING THE DEVELOPMENT PROCESS. THE APPLICANT SHALL NOT CAUSE OR PERMIT THE DUMPING, DEPOSITING, DROPPING, THROWING, DISCARDING OR LEAVING OF CONSTRUCTION MATERIAL DEBRIS UPON OR INTO ANY DEVELOPMENT SITE, CHANNEL, OR IWMC. THE DEVELOPMENT SITE SHALL BE MAINTAINED FREE OF CONSTRUCTION MATERIAL DEBRIS.
- 17. THE ENFORCEMENT OFFICER MAY REQUIRE ADDITIONAL OR ALTERNATE SOIL EROSION AND SEDIMENT CONTROL MEASURES, BASED ON DEVELOPMENT SITE SPECIFIC CONSIDERATIONS AND THE EFFECTIVENESS OF THE INSTALLED CONTROL MEASURES.
  STANDARD DRAIN TILE NOTES
- 1. DRAIN TILES DISTURBED DURING REGULATED DEVELOPMENT SHALL BE RECONNECTED BY THOSE RESPONSIBLE FOR THEIR DISTURBANCE, UNLESS THE DEVELOPMENT PLANS SPECIFY ABANDONMENT OF THE DRAIN TILES.
- 2. ALL ABANDONED DRAIN TILES WITHIN DISTURBED AREAS SHALL BE REMOVED IN THEIR ENTIRETY.
- 3. DRAIN TILES WITHIN THE DISTURBED AREA OF A DEVELOPMENT SITE SHALL BE REPLACED, BYPASSED AROUND THE DEVELOPMENT SITE OR INTERCEPTED AND CONNECTED TO THE STORMWATER MANAGEMENT SYSTEM FOR THE DEVELOPMENT SITE. THE SIZE OF THE REPLACED OR BYPASSED DRAIN TILE SHALL BE EQUIVALENT TO THE EXISTING DRAIN TILE.

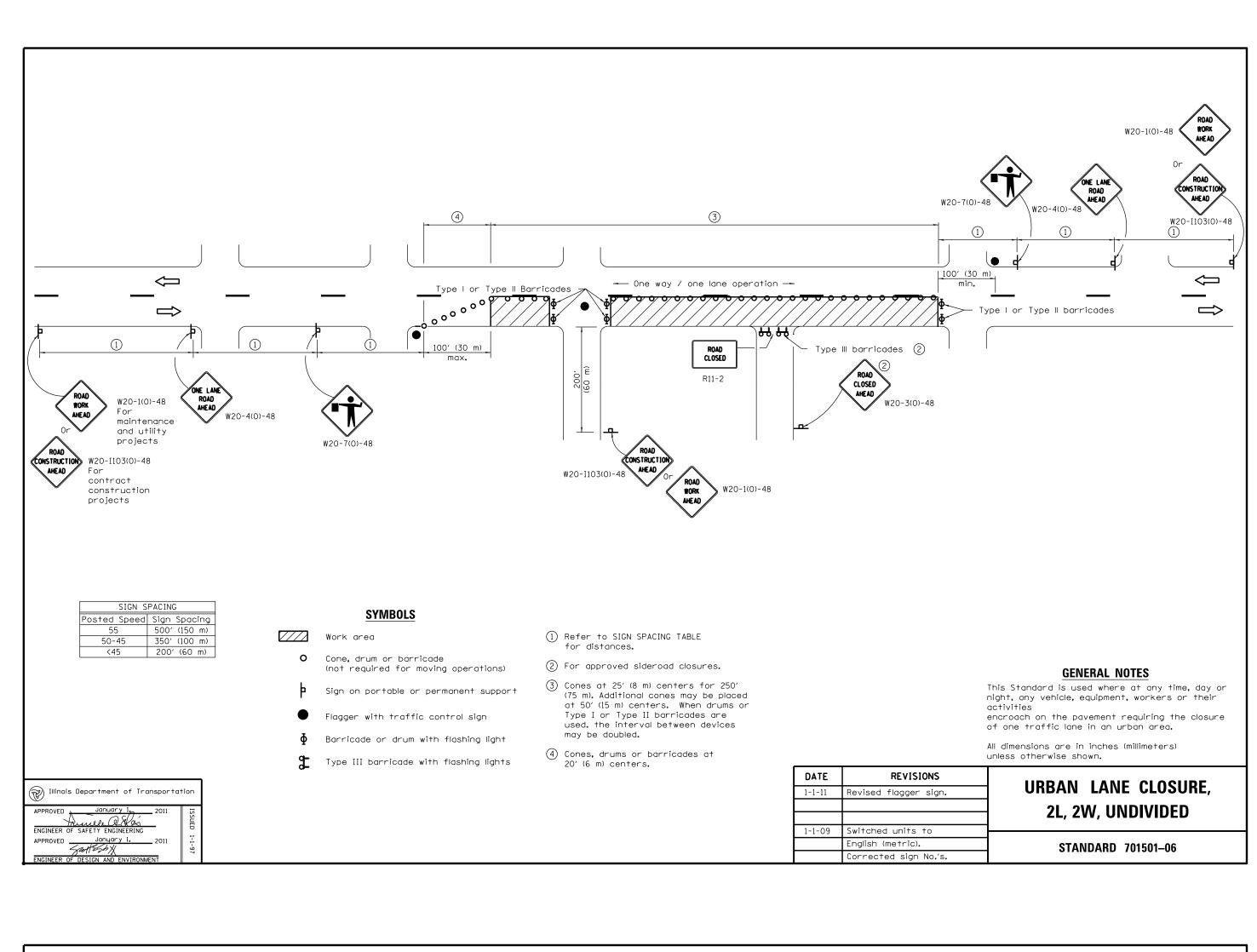
## Seeding & Stabilization Schedule

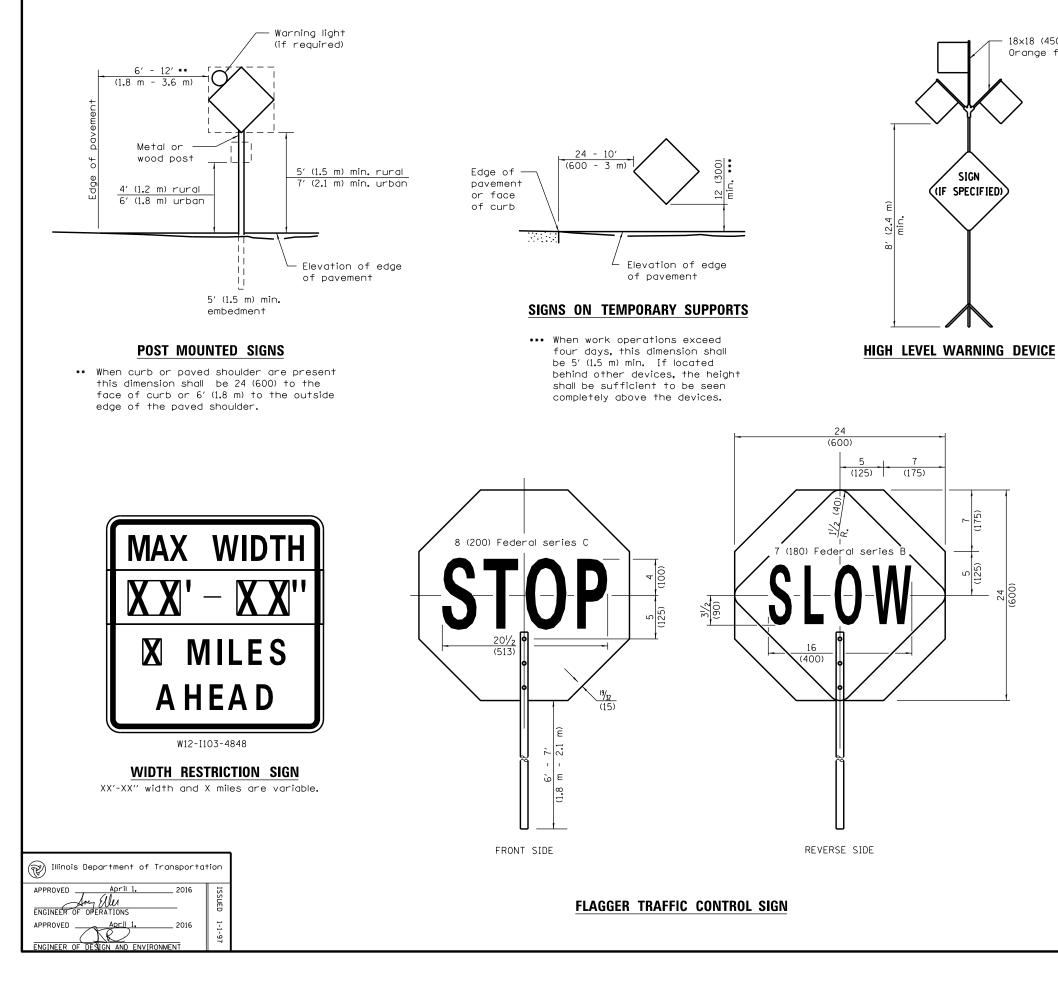
	STABILIZATION TYPE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	TEMPORARY SEEDING									-			
	MULCHI NG												-
	PERMANENT SEEDING									-			
	DORMANT SEEDING												
l	EACH PRACTICE SHALL BE	APPI	_I E D	AT A	MI NI	MUM	RATE	OF S	90 LB	/ACRE	Ξ		

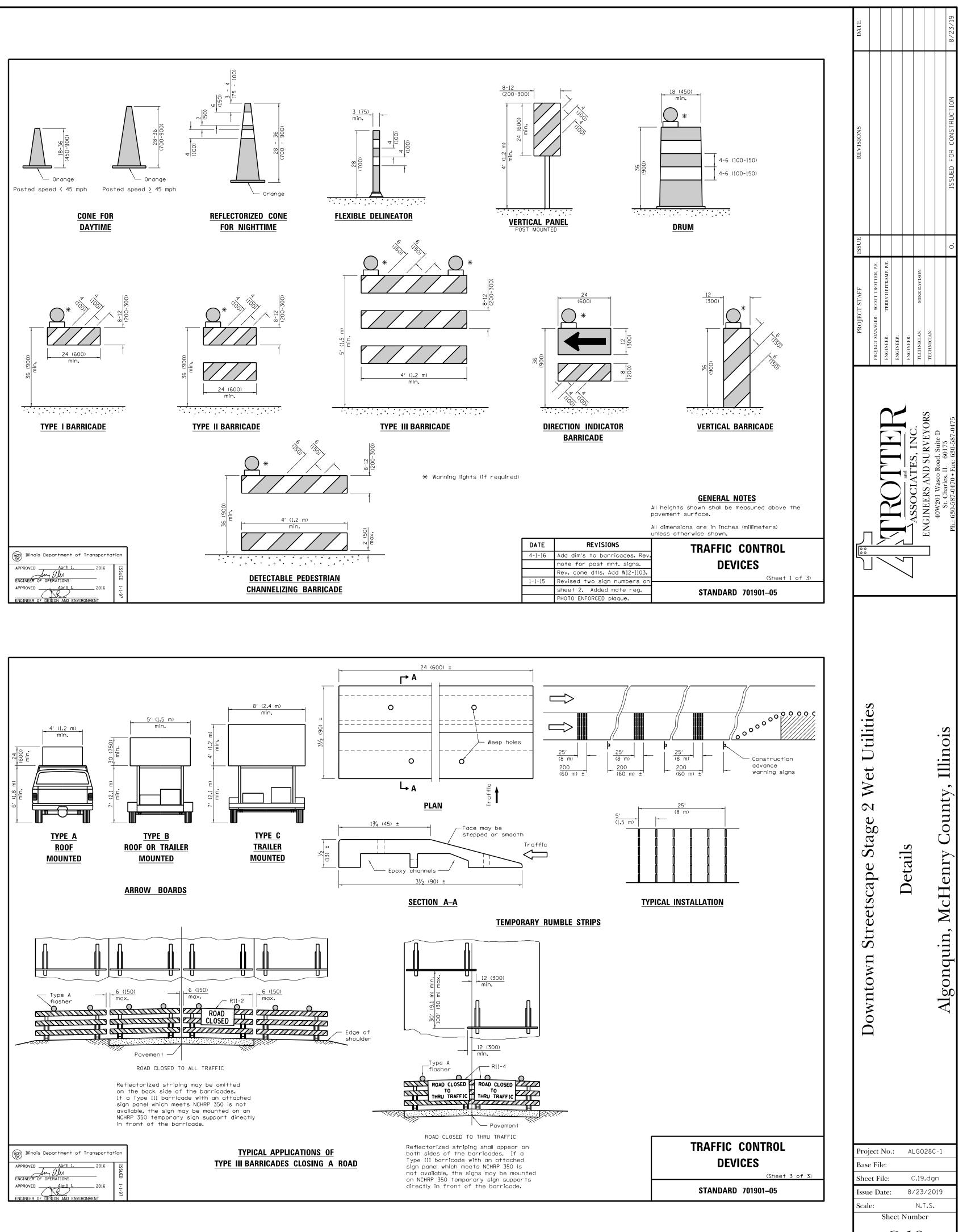
SEEDING AND MULCHING APPLICATION RATES AND APPLICATION TIMES OF YEAR, AS WELL AS SEEDING SPECIES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL, CURRENT EDITION

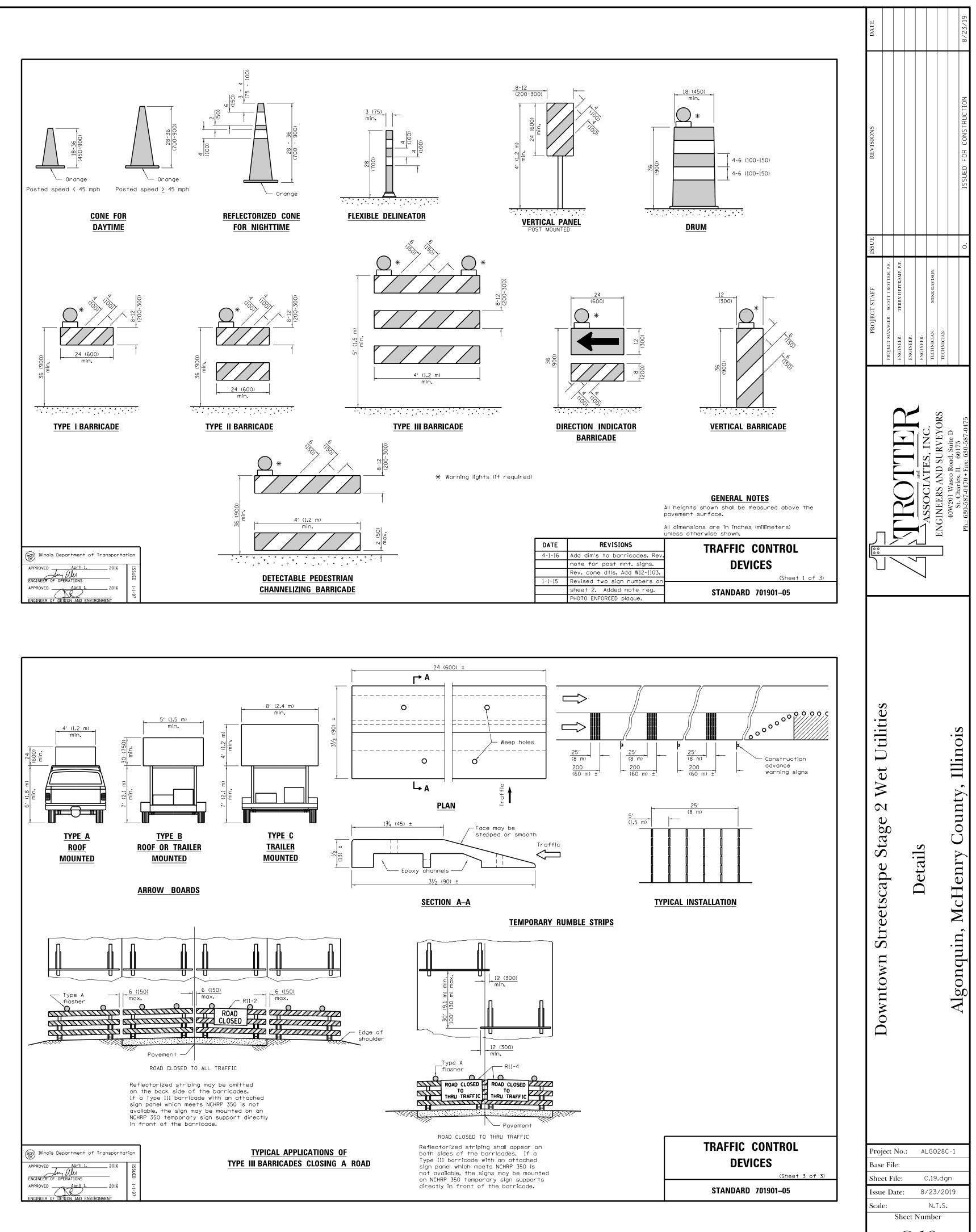
-				INCHES)	/ NATNI			
_ _	RR-3	GRAD. N	10. D50 5	DMA> 10	( MIN.	BLANKEI 15	THICKNESS	
	RR-4	17	9	14		20		
	RR-5 RR-6		12 15	19 22		28 32		
	RR-7		18	27		32		
-	1/ CC	INCRETE	BLOCK MAY	BE USED	TO REPLAC	CE RR-3.		
				TABLE 2				
	MINIMUM	ΙΤ	. ROCK SIZ	FS AND AI	PRON LENG	ТН (ГА Т	N FFFT)	
			JM AND MIN					
		MIN.	TAILWATER			MAX. TA	ILWATER	
CULVERT	5 F	FPS 1/	10 FF	PS 1/	5 FF	PS 1/	10 FPS	1/
SIZE (INCHES)	ROCK SIZE	LA	ROCK SIZE	LA	ROCK S I ZE	LΑ	ROCK SIZE	LA
12 18	RR-3 RR-3	1 O 1 4	RR-3 RR-4	12 16	RR-3 RR-3	12 12	RR-3 RR-3	15 16
24	RR-3	16	RR-4	20	RR-3	14	RR-4	17
30 36	RR-3 RR-4	18 20	RR-4 RR-5	22 24	RR-3 RR-3	16 16	RR-4 RR-4	20 22
48	RR-4	24	RR-6	28 36	RR-4	20	RR-4	24 26
60 72	RR-5 RR-6	32 40	RR-6 RR-6	36 44	RR-4 RR-5	22 24	RR-5 RR-5	29
96	RR-7	50	RR-7	54	RR-5	26	RR-5	32
/ MAXIM	UM CONDU	IT VELO	CITY FPS.					

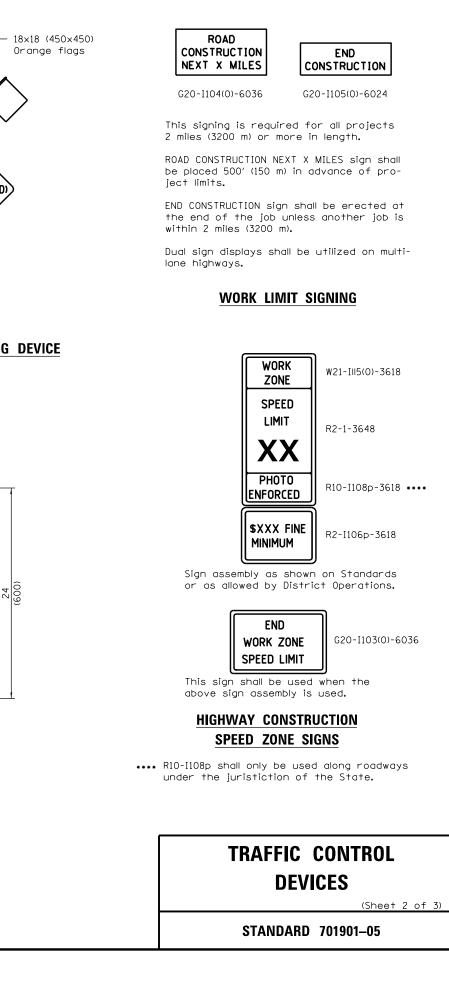




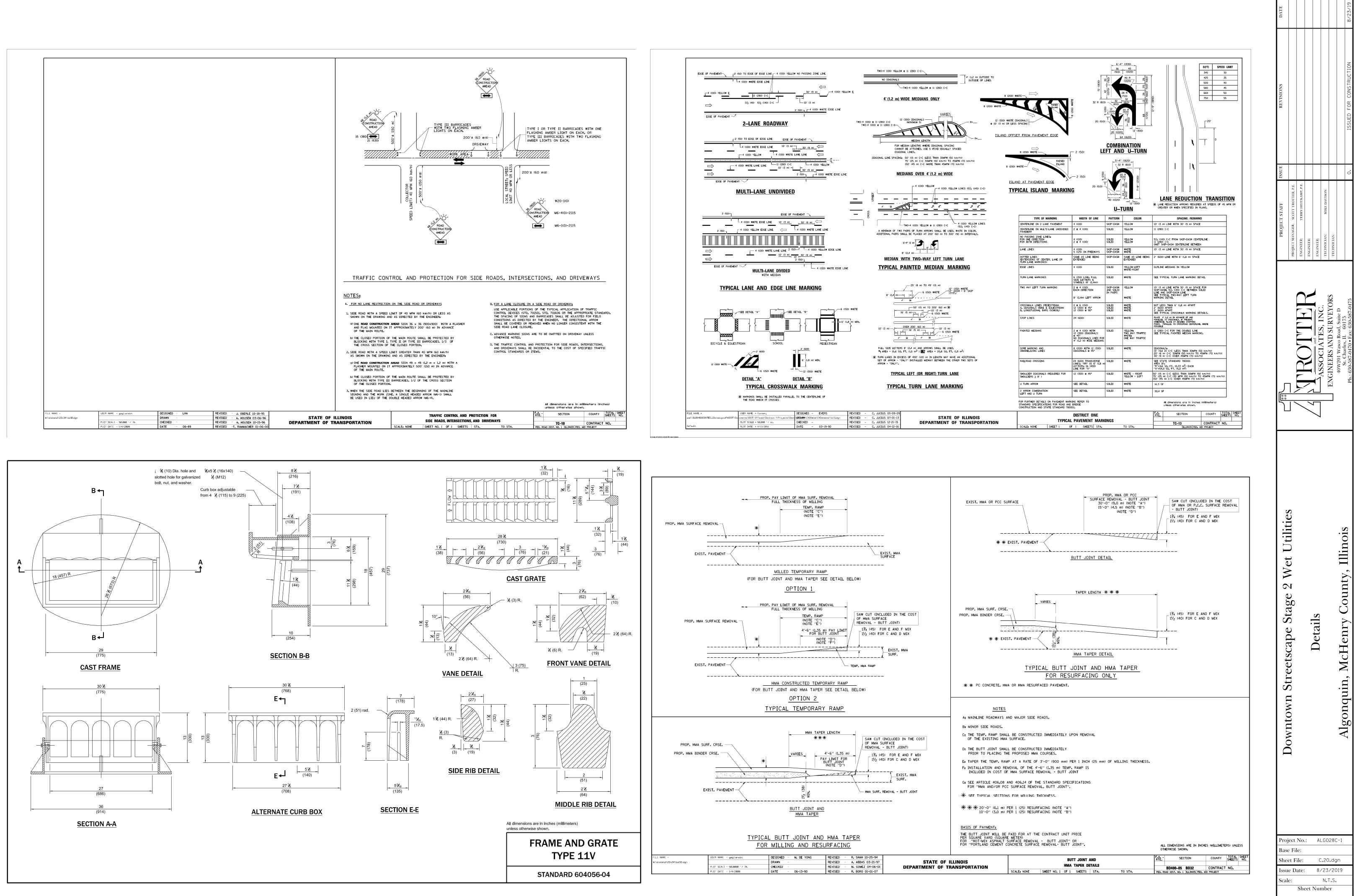


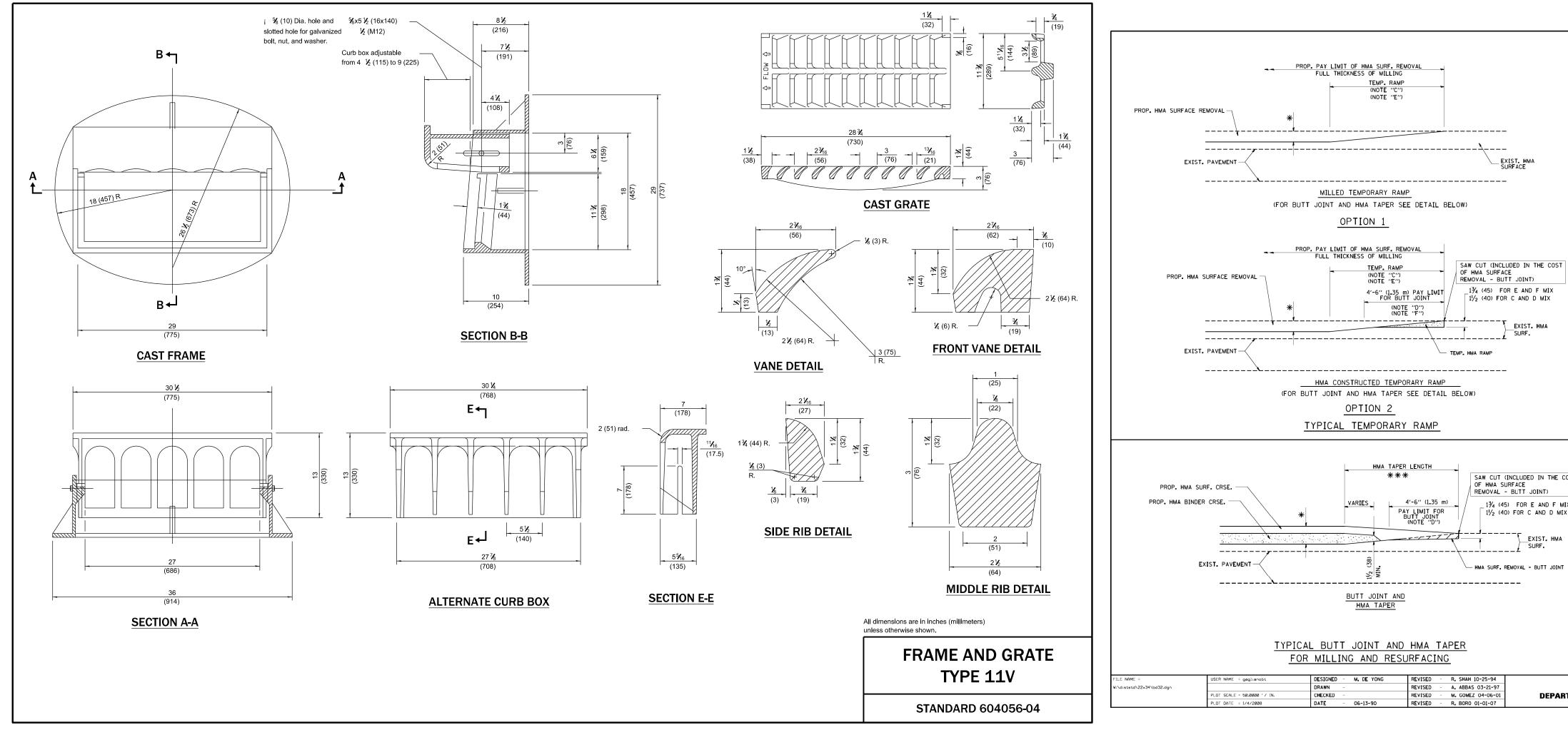


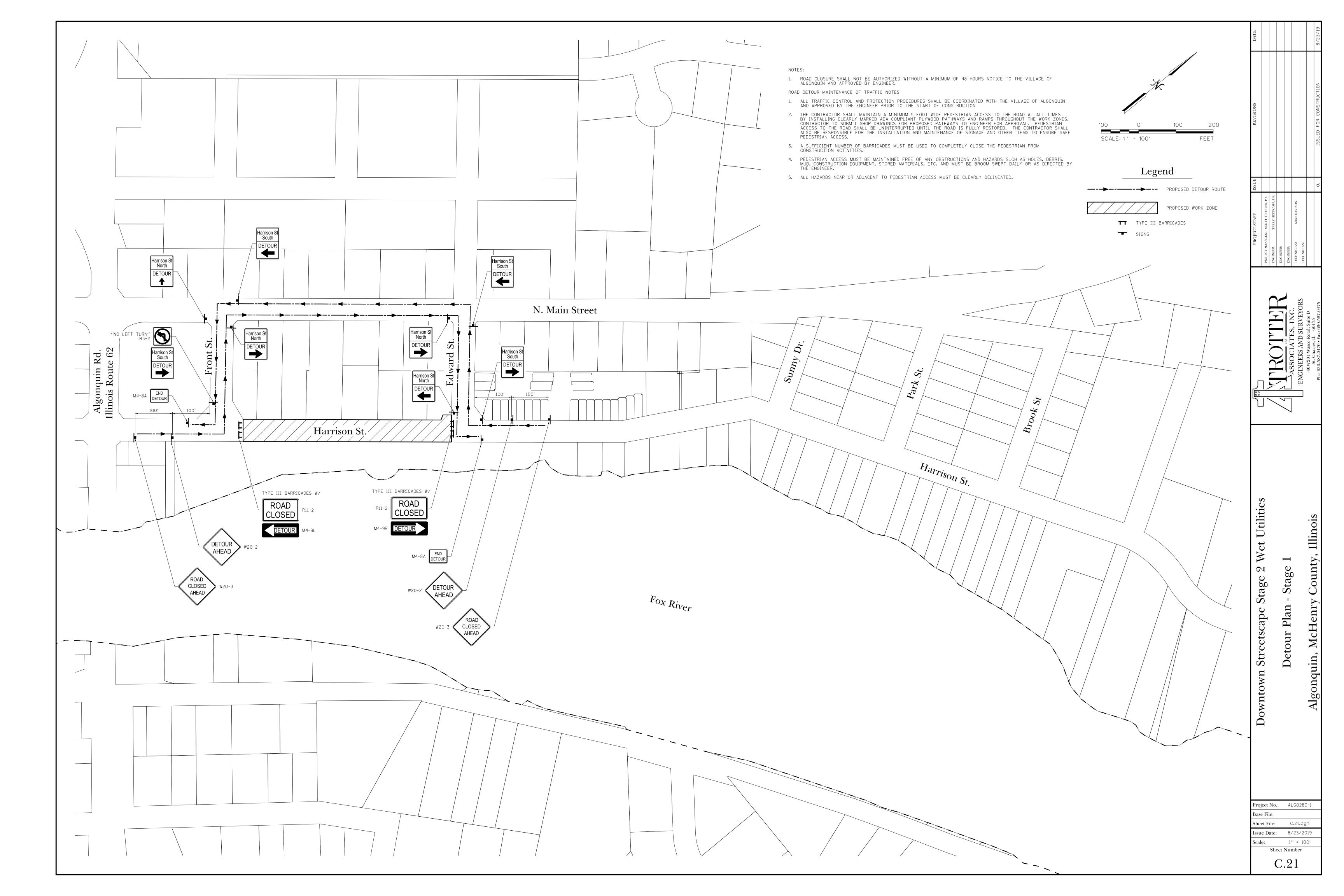


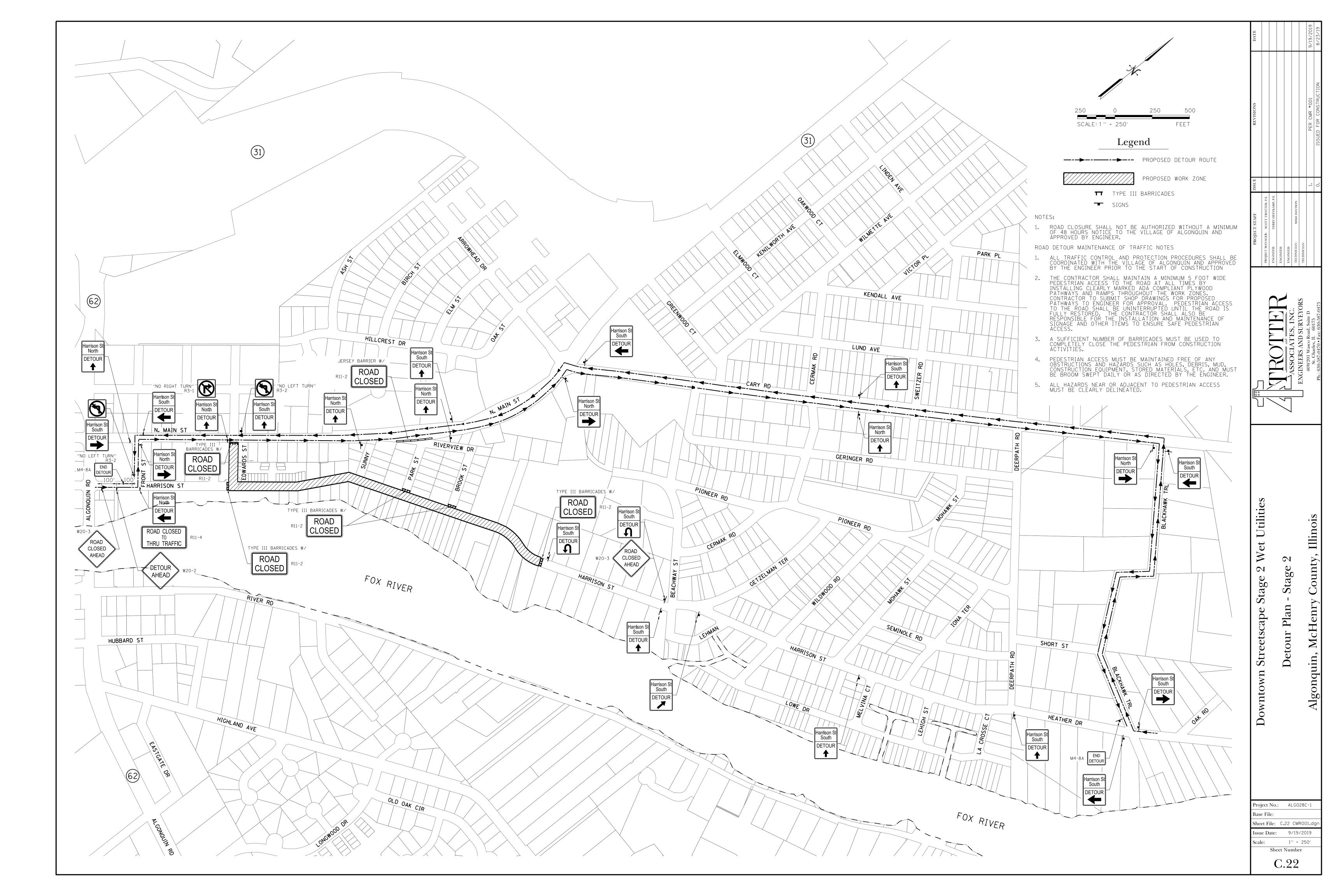


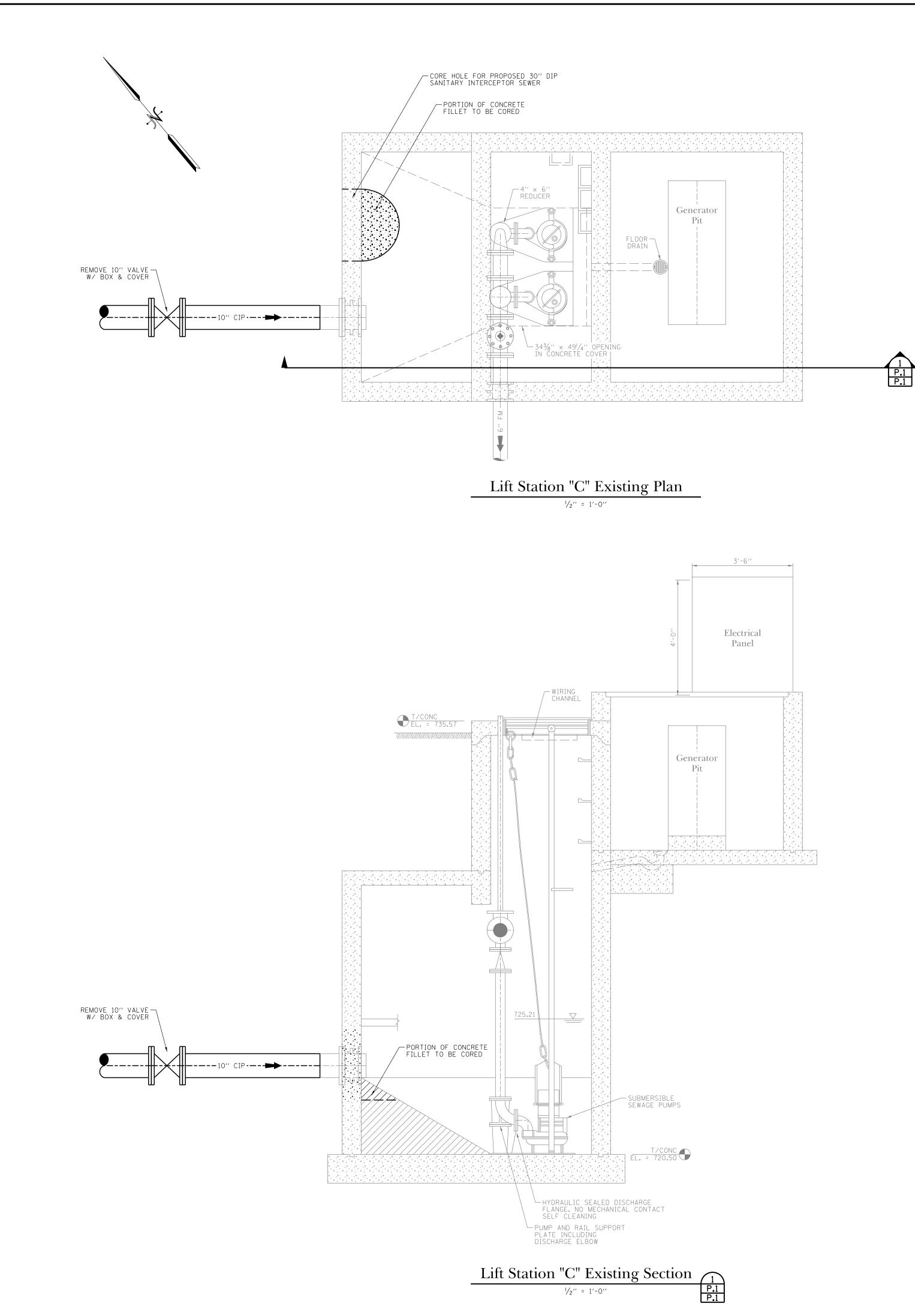
C.19

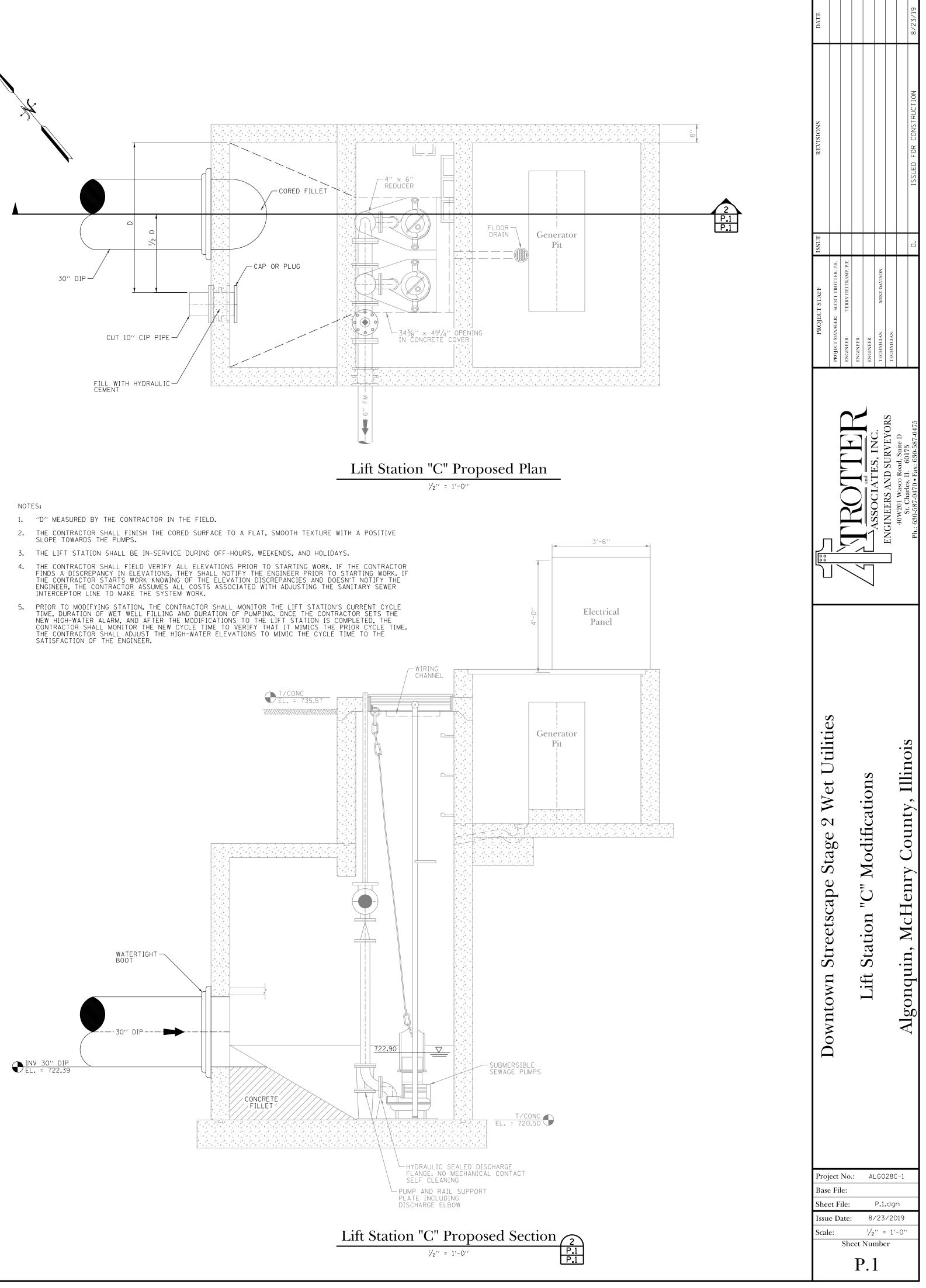


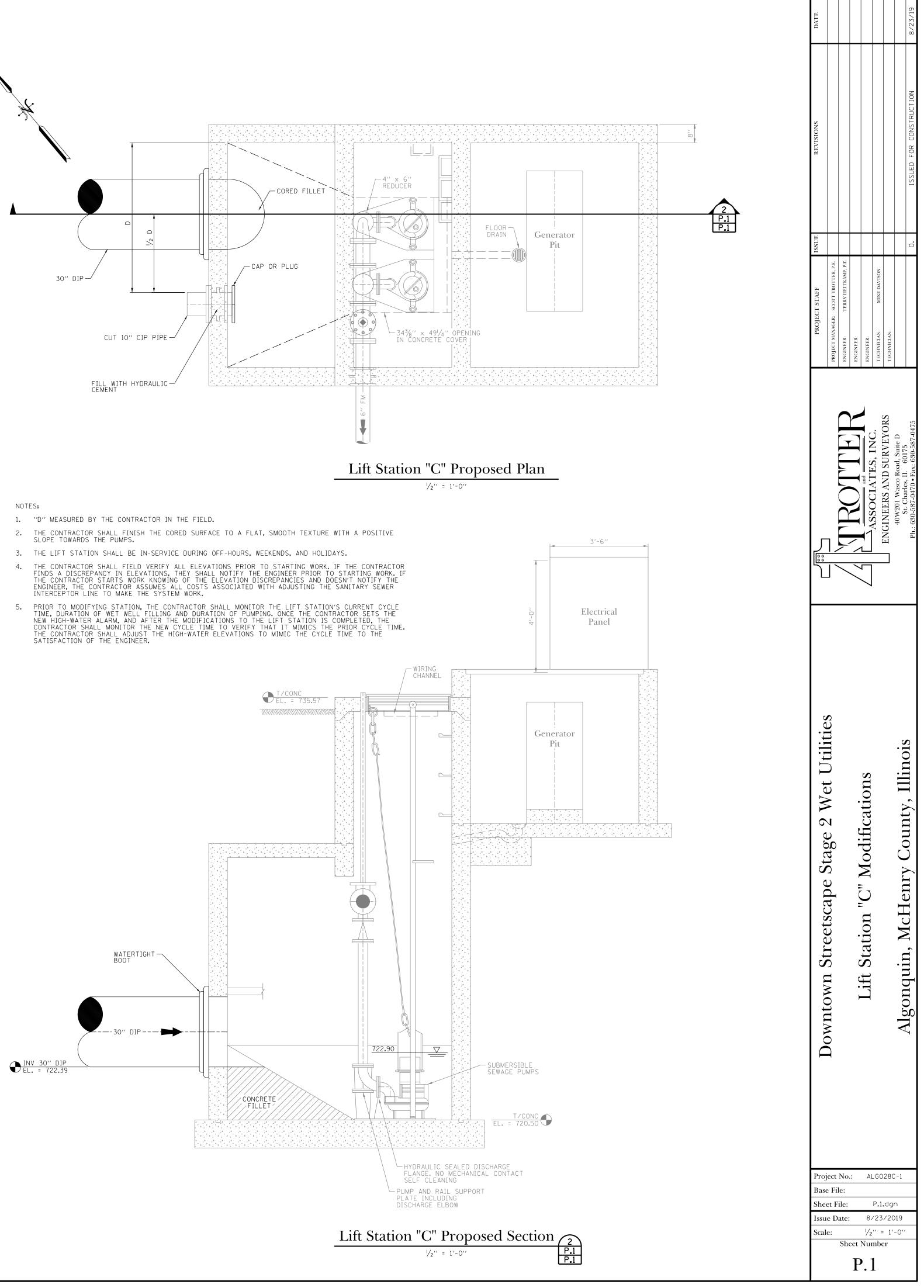


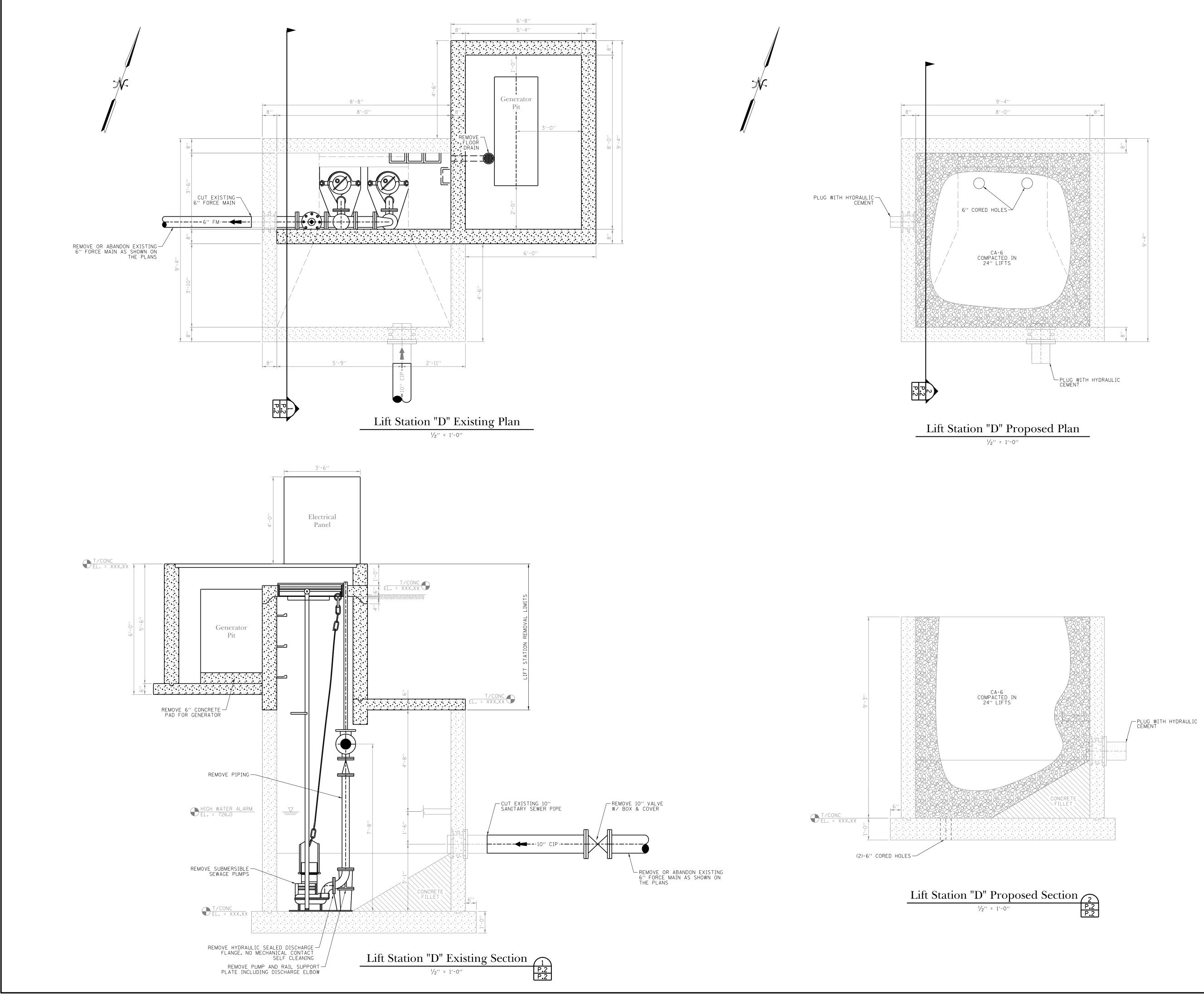












DATE								8/23/19	
REVISIONS								ISSUED FOR CONSTRUCTION	
ISSUE								0.	
PROJECT STAFF	PROJECT MANAGER: SCOTT TROTTER, P.E.	ENGINEER: TERRY HEITKAMP, P.E.	ENGINEER:	ENGINEER:	TECHNICIAN: MIKE DAVISON	TECHNICIAN:			
ENGINEERS AND SURVEYORS 40W201 Wasco Road, Suite D St. Charles, II. 60175 Ph.: 630-587-0476 • Fax: 630-587-0475									
Downtown Streetscape Stage 2 Wet Utilities			Lift Station "D" Decommissioning				Algonquin, McHenry County, Illinois		
Project No.:ALG028C-1Base File: $P.2.dgn$ Sheet File: $P.2.dgn$ Issue Date: $8/23/2019$ Scale: $1/2'' = 1'-0''$ Sheet Number									
	P.2								