PROJECT:

BANGS LAKE OUTFALL IMPROVEMENTS

OWNER:

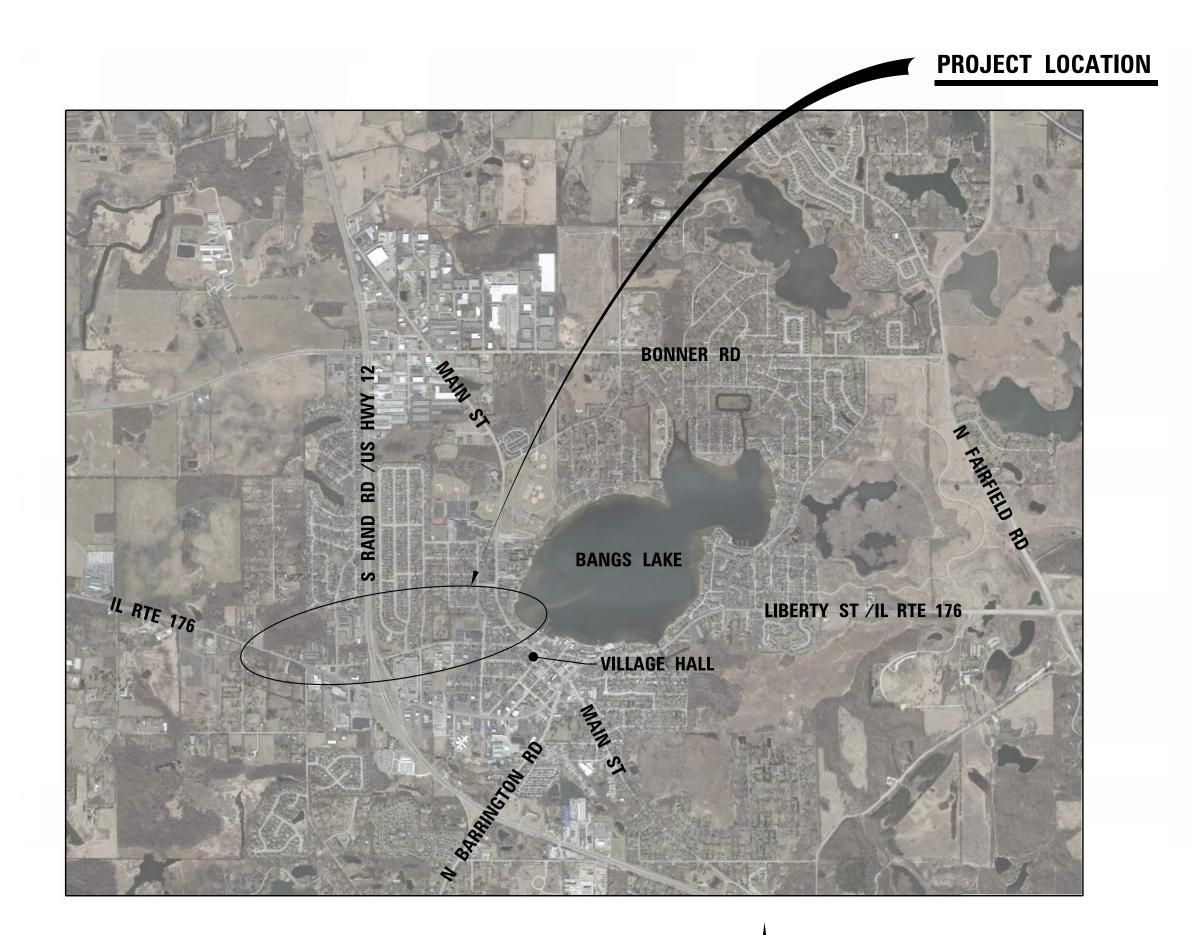
VILLAGE OF WAUCONDA 101 N MAIN STREET WAUCONDA, IL 60084

ENGINEER:

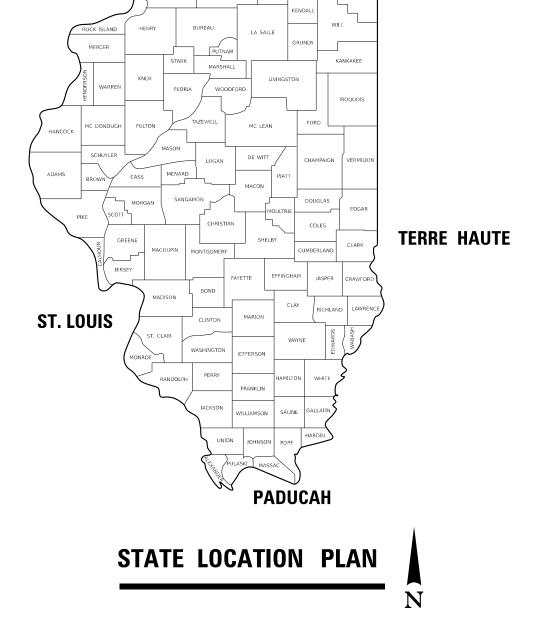
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LOCATION MAP



FOR BIDDING

DATE: 11/05/2024

DEREK A. ANDERSON, P.E.

LICENSED PROFESSIONAL ENGINEER IN ILLINOIS

LICENSE 062-073221

EXPIRES: NOVEMBER 30, 2025

PROFESSIONAL ENGINEER

OF ILLINOISMAN

SURVEY
PK, DAA
DESIGN
CSB, DAA, JRM
CHECKED
CSB, DAA
DATE
SEPTEMBER 2024
SHEET

1

JOB NO.

OUTFALL IMPROVEMENTS WAUCONDA, IL

GENERAL NOTES

- THE GENERAL NOTES LISTED ON THESE PLANS, THE CONTRACT SPECIFICATIONS AND DRAWINGS ARE ALL PART OF THE CONTRACT DOCUMENTS. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE TO BE CONSIDERED A PART OF THE CONTRACT. IF A CONFLICT EXISTS BETWEEN THESE GENERAL NOTES, THE CONTRACT SPECIFICATIONS AND DRAWINGS. THE MORE STRINGENT SHALL GOVERN.
- 2. ALL WORK SHALL CONFORM TO THE FOLLOWING STANDARD SPECIFICATIONS:
- A. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS" AS PREPARED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION LATEST EDITION. (HERE AFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS")
- B. "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION. SHALL GOVERN ALL WATER AND
- SEWER MAIN CONSTRUCTION C. THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS" AS PUBLISHED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST
- D. IEPA STANDARD SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 3. NO CONSTRUCTION PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED 'FOR CONSTRUCTION'. PRIOR TO COMMENCEMENT OF BIDDING AND CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING HIS WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS. HE MUST IMMEDIATELY REPORT SAME TO THE ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS AND/OR DETAILS. THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
- 4. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED AGAINST ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF WHATEVER NATURE BY THE CONTRACTOR AND HIS SURETY FOR A PERIOD OF 12 MONTHS FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK BY THE OWNER, ENGINEER AND OTHER APPLICABLE GOVERNMENTAL AGENCIES
- 5. BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER OR HIS REPRESENTATIVE. FINAL PAYMENT WILL BE MADE AFTER ALL OF THE CONTRACTOR'S WORK HAS BEEN APPROVED AND ACCEPTED, AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. HE SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING. SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. HE 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
- 7. ALL CONSTRUCTION LAYOUT AND STAKING SHALL BE PERFORMED BY THE CONTRACTOR (COST INCIDENTAL). THE CONTRACTOR SHALL NOTIFY THE OWNER/ENGINEER OF ANY MISSING BENCHMARKS SHOWN ON THE PLANS,
- 8. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- 9. WHENEVER THE PERFORMANCE OF WORK IS INDICATED ON THE PLANS. AND NO ITEM IS INCLUDED IN THE CONTRACT FOR PAYMENT. THE WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 10. THE CONTRACTOR SHALL FIELD VERIFY LOCATION. ELEVATION. MATERIAL. AND SIZE OF EXISTING UTILITIES AND STRUCTURES. NO ADDITIONAL COMPENSATION IS ALLOWED FOR MINOR DEVIATIONS OF ACTUAL CONDITIONS FROM THOSE SHOWN. IF THERE ARE ANY DISCREPANCIES. THE CONTRACTOR IS TO NOTIFY THE ENGINEER AT ONCE. NO WORK SHALL BE DONE UNTIL THE DISCREPANCY IS RESOLVED
- 11. WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS. DRAINAGE STRUCTURES. DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED. THIS LOOSE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY BY THE RESPONSIBLE PARTY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION. BARRICADES AND WARNING SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH THE I.D.O.T. STANDARD SPECIFICATIONS. ADEQUATE LIGHTING SHALL BE MAINTAINED FROM DUSK TO DAWN AT ALL LOCATIONS WHERE CONSTRUCTION OPERATIONS WARRANT. OR AS DESIGNATED BY THE ENGINEER OR OWNER OR APPLICABLE GOVERNMENTAL AGENCIES. ALL TRAFFIC CONTROL WORK SHALL BE DONE IN ACCORDANCE WITH THE I.D.O.T. "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. " AND I.D.O.T. "STANDARD DETAILS".
- 13. ALL PERMANENT TYPE PAVEMENTS OR OTHER PERMANENT IMPROVEMENTS WHICH ABUT THE PROPOSED IMPROVEMENT AND MUST BE REMOVED. SHALL BE SAWED AS DIRECTED PRIOR TO REMOVAL. ALL ITEMS SO REMOVED SHALL BE REPLACED WITH SIMILAR CONSTRUCTION MATERIALS TO THEIR ORIGINAL CONDITION OR BETTER. PAYMENT FOR SAWING SHALL BE INCLUDED IN THE COST FOR REMOVAL OF EACH ITEM AND REPLACEMENT WILL BE PAID UNDER THE RESPECTIVE ITEMS IN THE CONTRACT. UNLESS OTHERWISE INDICATED.
- 14. THE CONTRACTOR WILL BE REQUIRED TO REPLACE IN KIND ALL SURFACE FEATURES DAMAGED OR REMOVED INCLUDING, BUT NOT LIMITED TO, CURB AND GUTTER, STREET PAVING, SIDEWALKS, DRIVES, LAWNS, TREES, PROPERTY PINS AND/OR MONUMENTS (COST INCIDENTAL).
- 15. STREETS ARE TO BE KEPT CLEANED OF DIRT AND DEBRIS AT THE END OF EACH DAY'S OPERATIONS IN ACCORDANCE WITH ARTICLE 107.15 OF THE I.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
- 16. WHERE OVERHANGING BRANCHES INTERFERE WITH OPERATIONS OF CONSTRUCTION. SAID BRANCHES SHALL BE TRIMMED AND SEALED IN ACCORDANCE WITH SECTION 201 OF THE I.D.O.T. STANDARD SPECIFICATIONS. AND THE COST OF SAME SHALL BE INCIDENTAL TO THE CONTRACT. TREES SHALL BE REMOVED ONLY AFTER RECEIVING APPROVAL OF THE OWNER. THE OWNER SHALL DESIGNATE THOSE TREES WHICH ARE TO BE REMOVED. THE CONTRACTOR SHALL ALTER THE ALIGNMENT OF SEWERS. WATER MAINS. PATHWAYS. SIDEWALKS. AND DRIVEWAYS AS DIRECTED TO PRESERVE TREES. A CONTRACTOR REMOVING TREES WITHOUT OWNER'S APPROVAL WILL BE RESPONSIBLE FOR REPLACEMENT OF SAID TREE(S) AS DIRECTED BY OWNER AT CONTRACTOR'S EXPENSE. IF ADDITIONAL TREES OR SHRUBS MUST BE REMOVED, THEY WILL BE PAID FOR IN **ACCORDANCE WITH SPECIFICATIONS**
- 17. ALL EXISTING TRAFFIC SIGNS, STREET SIGNS, ETC., WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND ARE NOT NOTED FOR REMOVAL OR DISPOSAL SHALL RE REMOVED AND RESET BY THE CONTRACTOR AT LOCATIONS AS DESIGNATED BY THE ENGINEER. THIS SHALL RE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. DAMAGE TO THESE ITEMS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE. ALL SIGNS NOT REQUIRED TO BE RESET SHALL BE DELIVERED TO THE RIGHTFUL OWNER AS APPROPRIATE. IN ADDITION, ALL MAIL BOXES THAT INTERFERE WITH CONSTRUCTION SHALL BE SIMILARLY RELOCATED AT NO ADDITIONAL COST IN ACCORDANCE WITH THE I.D.O.T. STANDARD SPECIFICATIONS.
- 18. ALL FIELD TILES ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE PROPOSED STORM SEWER OR EXTENDED TO OUTLET INTO A PROPOSED DRAINAGEWAY. IF THIS CANNOT BE ACCOMPLISHED. THEN IT SHALL BE REPAIRED WITH NEW PIPE OF SIMILAR SIZE AND MATERIAL TO THE ORIGINAL LINE AND PUT IN ACCEPTABLE OPERATION CONDITION. A RECORD OF THE RELOCATION OF ALL FIELD TILE FOR ON-SITE DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE ENGINEER UPON COMPLETION OF THE PROJECT. THE COST OF THIS WORK SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE
- 19. DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHALL INSURE POSITIVE SITE DRAINAGE AT THE CONCLUSION OF EACH DAY. SITE DRAINAGE MAY BE ACHIEVED BY DITCHING, PUMPING OR ANY OTHER ACCEPTABLE METHOD. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF. CONSTRUCTION SHALL NOT BLOCK OFF-SITE DRAINAGE.
- 20. PUMPING GROUNDWATER AND/OR STORMWATER FROM OPEN TRENCHES OR DEPRESSIONAL AREAS IS CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTION. PUMPING SHALL BE IN ACCORDANCE WITH IEPA AND LAKE COUNTY REQUIREMENTS FOR DISCHARGE

IMPROVEMENTS AS INDICATED IN THE CONSTRUCTION DOCUMENTS.

- 21. IT SHALL BE THE RESPONSIBILITY OF EACH RESPECTIVE CONTRACTOR TO REMOVE FROM THE SITE ANY AND ALL MATERIALS AND DEBRIS WHICH RESULT FROM HIS CONSTRUCTION OPERATIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 22. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS. METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE. PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE ALL LABOR. MATERIAL. EQUIPMENT, ETC. NECESSARY TO PERFORM ALL THE WORK REQUIRED FOR CONSTRUCTION OF THE PROPOSED
- 23. SPECIAL ATTENTION IS DRAWN TO THE FACT THAT ARTICLE 105.06 OF THE I.D.O.T. STANDARD SPECIFICATIONS REQUIRES THE CONTRACTOR TO HAVE A COMPETENT SUPERINTENDENT ON THE PROJECT SITE AT ALL TIMES IRRESPECTIVE OF THE AMOUNT OF WORK SUBLET. THE SUPERINTENDENT SHALL BE CAPABLE OF READING AND UNDERSTANDING THE PLANS AND SPECIFICATIONS. SHALL HAVE FULL AUTHORITY TO EXECUTE ORDERS TO EXPEDITE THE PROJECT, AND SHALL BE RESPONSIBLE FOR SCHEDULING AND HAVE CONTROL OF ALL WORK AS THE AGENT OF THE CONTRACTOR. FAILURE TO COMPLY WITH THIS PROVISION WILL RESULT IN A SUSPENSION OF WORK AS PROVIDED IN ARTICLE 108.07.
- 24. ELECTRIC, TELEPHONE, NATURAL GAS, AND OTHER UTILITY COMPANIES HAVE UNDERGROUND AND/OR OVERHEAD SERVICE FACILITIES IN THE VICINITY OF THE PROPOSED WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE CONTRACTOR SHALL CALL J. U. L. I. E AT (800) 892-0123 FOR UTILITY LOCATIONS AT LEAST 48 HOURS PRIOR TO THE START OF
- 25. NOT ALL GAS, POWER OR TELEPHONE LINES, WHETHER ABOVE OR BELOW GROUND, HAVE BEEN SHOWN ON THE PLANS. THE LOCATION OF EXISTING UNDERGROUND UTILITIES, SUCH AS WATERMAINS, SEWERS, FIELD TILES, ETC., AS SHOWN ON THE PLANS, HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR MUST ASSUME RESPONSIBILITY FOR ALL UTILITIES WHETHER SHOWN OR NOT, AND MUST REALIZE THAT THE ACTUAL LOCATIONS OF THE UTILITIES SHOWN MAY BE DIFFERENT THAN INDICATED.
- 26. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND FEDERAL SAFETY REGULATIONS AS OUTLINED IN THE LATEST REVISIONS OF THE FEDERAL CONSTRUCTION SAFETY STANDARDS (SERIES 1926) AND WITH APPLICABLE PROVISIONS AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS OF THE WILLIAMS STELGER OCCUPATIONAL HEALTH STATE SAFETY ACT OF 1970 (REVISED). THE CONTRACTOR, ENGINEER AND OWNER SHALL EACH BE RESPONSIBLE FOR HIS OWN RESPECTIVE AGENTS AND EMPLOYEES.
- 27. THE CONTRACTOR SHALL INDEMNIFY THE ENGINEER, THEIR AGENTS, ETC., THE OWNER AND ITS AGENTS. FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION. INSTALLATION AND TESTING OF THE WORK ON THIS PROJECT AND NAME THEM AS CO-INSURED.

GENERAL NOTES CONTINUED

- 28. THE CONTRACTOR SHALL KEEP A SET OF "APPROVED" CONSTRUCTION PLANS ON THE JOB SITE, AND SHALL MAINTAIN (AS INDICATED HEREIN AND ELSEWHERE WITHIN THESE CONSTRUCTION NOTES. SPECIFICATIONS. AND PLANS) A LEGIBLE RECORD ON SAID PLANS OF ANY FIELD TILE ENCOUNTERED, ANY MODIFICATIONS/ALTERATIONS TO ALIGNMENT AND/OR TO PLANS AND SPECIFICATIONS OF PROPOSED IMPROVEMENTS, ETC. UPON COMPLETION OF THE CONTRACTORS' WORK. SAID PLANS AND INFORMATION SHALL BE PROVIDED TO OWNER. FINAL CONTRACT PAYMENT SHALL NOT COME DUE UNTIL THIS INFORMATION IS RECEIVED BY THE OWNER AND DEEMED TO BE COMPLETE AND ACCEPTABLE
- 29. THE CONTRACTOR SHALL BE REQUIRED TO ATTEND A PRECONSTRUCTION MEETING WITH OWNER PRIOR TO THE START OF CONSTRUCTION TO REVIEW SHOP DRAWING PROCEDURES. CONSTRUCTION METHODS. GENERAL SEQUENCING AND TO ESTABLISH A WELL DEFINED TASK SPECIFIC
- 30. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF STARTING ANY CONSTRUCTION
- 31. THE CONTRACTOR SHALL SUBMIT A WELL DEFINED TASK SPECIFIC CONSTRUCTION SCHEDULE TO THE OWNER AND ENGINEER PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL INFORM THE OWNER AND ENGINEER OF ALL CHANGES IN THE CONSTRUCTION SCHEDULE OR GENERAL SEQUENCE AS SOON AS THEY BECOME APPARENT

CONSTRUCTION NOTES

THIS PROJECT IS TO BE CONSTRUCTED WITH AN ABSOLUTE MINIMUM OF DISRUPTION, INCONVENIENCE AND SAFETY HAZARD TO RESIDENTS AND THE

THE CONTRACTOR SHALL PLAN AND SCHEDULE HIS WORK TO ACHIEVE THE FOLLOWING:

- NO EXISTING RESIDENTIAL DRIVEWAY SHALL BE BLOCKED FOR MORE THAN FOUR HOURS. CONTRACTOR IS TO GIVE RESIDENTS A MINIMUM OF 24-HOURS NOTICE PRIOR TO CLOSING ANY DRIVEWAY.DOOR HANGERS ARE TO BE USED TO NOTIFY RESIDENTS.
- 2. TRAFFIC FLOW IS TO BE MAINTAINED THROUGH THE CONSTRUCTION AREA WITH MINIMUM DISRUPTION AND NO SAFETY HAZARD.CONTRACTOR IS TO PROVIDE FLAGMEN, BARRICADES, WARNING LIGHTS, SIGNS, ETC., AT ANY TIME CONSTRUCTION OPERATIONS ARE IN THE ROADWAY. TRAFFIC CONTROL IS TO BE IN ACCORDANCE WITH THE APPROPRIATE ARTICLES OF SECTION 701 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS" PREPARED BY THE DEPARTMENT OF TRANSPORTATION OF THE STATE OF ILLINOIS, LATEST EDITION.

TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE EMPLOYED WHEN NECESSARY AND SHALL MEET THE REQUIREMENTS OF ARTICLE 107.14 OF

- 3. IN PARKWAYS, BACKFILLING AND ROUGH GRADING (WITHIN 2-INCHES + OF FINAL GRADE) IS TO BE COMPLETED THE SAME DAY FOR THE FULL EXTENT OF THE EXCAVATION FOR THAT DAY'S PIPE LAYING OPERATION.
- 4. CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AND JULIE AT (800) 892-0123 OR 811, AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION.

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- THE CONTRACTOR AT HIS OWN EXPENSE SHALL BE REQUIRED TO REMOVE AND RELOCATE ALL ROAD SIGNS WHICH INTERFERE WITH HIS CONSTRUCTION OPERATIONS, AND TO TEMPORARILY RESET SUCH SIGNS DURING HIS CONSTRUCTION OPERATIONS. ALL WORK INVOLVING SIGNS SHALL BE COVERED BY THE FOLLOWING REQUIREMENTS:
- SIGNS SHALL NOT BE REMOVED UNTIL PROGRESS OF WORK NECESSITATES REMOVAL.

RESTORATION IS TO BE COMPLETED IN A TIMELY MANNER AS THE PROJECT PROGRESSES.

- EVERY SIGN REMOVED MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER VISIBLE TO TRAFFIC.ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND NEAT APPEARING FOR THE DURATION OF THE TEMPORARY SETTING.
- C. ALL SIGNS MUST BE RE-ERECTED IN THEIR PERMANENT LOCATIONS AS DESIGNATED BY THE OWNER AS THE WORK IS COMPLETED.
- CONTRACTOR IS TO MAINTAIN TRENCHES AT STREETS, DRIVEWAYS, PARKING AREAS, ETC., IN A DRIVEABLE CONDITION ON A 24 HOUR, 7 DAY A WEEK BASIS.SPECIAL ATTENTION SHALL BE PAID TO THE CONDITION OF THESE TRENCHES AT THE END OF EACH DAY'S OPERATION AND PRIOR TO WEEKENDS AND HOLIDAYS TO FORESTALL COMPLAINTS WHICH WILL REQUIRE ATTENTION DURING NON-WORKING PERIODS.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND IS TO COMPARE THE SITE CONDITIONS AS INDICATED ON THE ENGINEERING DRAWINGS.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER WITH AS-BUILT CONDITIONS OF THE DESIGNATED IMPROVEMENTS.ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE ENGINEER AS WORK PROGRESSES.THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE AS-BUILT INFORMATION IN ORDER THAT THE APPROPRIATE DRAWINGS CAN BE PREPARED.
- 10. CONTRACTOR IS TO VERIFY ALL ELEVATIONS PRIOR TO THE START OF WORK AND IF THERE ARE ANY DISCREPANCIES, IS TO NOTIFY THE ENGINEER
- IT ONCE NO WORK SHALL BE DONE UNTIL THE DISCREPANCY IS RESOLVED. 11. THESE CONSTRUCTION NOTES ARE COMPLEMENTARY TO THE SPECIFICATIONS, BUT IN CASE OF CONFLICT, THE MORE STRINGENT SHALL GOVERN.
- 12. CONTRACTOR IS TO REFER TO "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, ILLINOIS DEPARTMENT OF TRANSPORTATION FOR TRENCH BACKFILL, SURFACING, BASE COURSE, ETC., GRADATIONS AND CLASSIFICATIONS, ETC., AS CALLED FOR ON THE
- 13. ALL TRENCHES CAUSED BY THIS CONSTRUCTION AROUND, UNDER AND NEAR ANY PAVED SURFACE, STREETS, SIDEWALKS, ETC., SHALL BE BACKFILLED WITH CA-6, GRADE 8 OR 9, 100% CRUSHED (NOT CRUSHED CONCRETE) OR FA-2 AND SHALL BE MECHANICALLY COMPACTED IN PLACE TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE AS DETERMINED BY THE STANDARD PROCTOR TEST. ALL TRENCHES IN PARKWAY SHALL BE BACKFILLED WITH SELECT EXCAVATED AND MECHANICALLY COMPACTED TO 90% STANDARD PROCTOR.
- ALL DRIVEWAY CULVERTS REMOVED SHALL BE REPLACED WITH THE SAME DIAMETER BUT MATERIAL SHALL BE A CORRUGATED POLYETHYLENE PIPE WITH A SMOOTH WALL INTERIOR AND SHALL MEET THE REQUIREMENTS OF AASHTO M 294. ALL CULVERTS SHALL HAVE ALUMINUM FLARED END SECTIONS INSTALLED WITH THE CULVERT AND SHALL MEET AASHTO M 196 REQUIREMENTS. NO EXTRA COMPENSATION ALLOWED.
- ALL EXCAVATED MATERIAL SHALL BE REMOVED FROM THE PROJECT SITE AT THE END OF EACH WORKING DAY.EXCAVATED MATERIAL SHALL NOT BE STOCKPILED ON THE PROJECT SITE DURING NON-WORKING HOURS WITHOUT PERMISSION FROM THE OWNER/ENGINEER.
- 16. PIPE EQUIPMENT AND EQUIPMENT STORAGE ALL MATERIALS AND EQUIPMENT STORED OVERNIGHT AND/OR FOR EXTENDED PERIODS OF TIME MUST BE PLACED EITHER ON THE ROAD RIGHT-OF-WAY OR ON PRIVATE PROPERTY WITH PROOF OF AN EXECUTED AGREEMENT BETWEEN THE CONTRACTOR AND THE PRIVATE OWNER.STORAGE LOCATIONS ARE SUBJECT TO REVIEW AND APPROVAL BY THE OWNER/ENGINEER.STORAGE LOCATIONS SHALL NOT INTERFERE WITH SIGHT LINES FOR THE MOTORING PUBLIC.
- EXISTING SANITARY SEWER SERVICES ENCOUNTERED DURING TRENCHING OPERATIONS ARE TO BE REPLACED WITH WATERMAIN QUALITY PIPING (PVC OR DI CONTRACTOR'S OPTION) FOR THE FULL WIDTH OF THE TRENCH PLUS 3-FT. MINIMUM BEARING ON UNDISTURBED EARTH AT EACH SIDE OF THE TRENCH WATERTIGHT CONNECTIONS TO EXISTING SANITARY SERVICES SHALL BE MADE USING NON-SHEAR STAINLESS-STEEL REINFORCED

EARTHWORK NOTES

- 1. WORK UNDER THIS SECTION SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:
- CLEARING AND REMOVAL OF UNDESIRABLE TREES AND OTHER VEGETATIVE GROWTH WITHIN THE CONSTRUCTION AREA. TREE REMOVAL SHALL BE AS DESIGNATED BY THE OWNER AND SHALL BE KEPT TO A MINIMUM. THE TREES AND BRUSH SHALL BE DISPOSED OFF-SITE. NO
- B. STRIPPING OF TOPSOIL AND REMOVAL OF UNSUITABLE MATERIALS FROM ALL DESIGNATED AREAS SHOWN BY THE ENGINEER.
- STOCKPILING OF TOPSOIL AT LOCATIONS AS DIRECTED BY THE OWNER. TOPSOIL STOCKPILED FOR FUTURE USE SHALL BE RELATIVELY FREE FROM LARGE ROOTS, STICKS, WEEDS, BRUSH, STONES LARGER THAN 1-INCH DIAMETER, OR OTHER LITTER AND WASTE PRODUCTS INCLUDING EXTRANEOUS MATERIALS NOT CONDUCIVE TO PLANT GROWTH. TOPSOIL SHALL BE STOCKPILED IN SEQUENCE TO ELIMINATE ANY REHANDLING OR DOUBLE MOVEMENTS BY THE CONTRACTOR. FAILURE TO PROPERLY SEQUENCE THE STOCKPILING OPERATIONS SHALL NOT CONSTITUTE A CLAIM FOR ADDITIONAL COMPENSATION. NO MATERIAL SHALL BE STOCKPILED IN FRONT YARDS, OVERLAND DRAINAGE SWALES (FLOOD ROUTING AREAS), IN PROPOSED UTILITY LOCATIONS, IN UTILITY EASEMENTS, OR IN THE RIGHT-OF-WAY.
- EXCAVATION AND GRADING OF THE OPEN SPACE AND/OR YARD AREAS PER PLAN INCLUDING DESIGNATED REGRADING, CONSTRUCTION OF
- PLACEMENT AND COMPACTION OF CLAY OR GRANULAR MATERIAL TO THE DESIGN SUBGRADE ELEVATIONS AS REQUIRED BY THE STANDARDS AND DETAILS ON THE CONSTRUCTION PLANS. THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS RE FINISHED GRADE ELEVATIONS AND THAT TOPSOIL REPLACEMENT THICKNESS MUST BE SUBTRACTED TO DETERMINE SUBGRADE
- PLACEMENT AND COMPACTION OF NON-STRUCTURAL FILLS.
- G. IF REQUIRED, REMOVAL FROM SITE AND DISPOSAL OF ANY EXCESS OR UNSUITABLE MATERIAL UPON COMPLETION OF MASS GRADING.
- FINAL SHAPING AND TRIMMING TO THE LINES, GRADES, AND CROSS-SECTIONS SHOWN IN THESE PLANS, AND TOPSOIL PLACEMENT TO DESIGN FINISHED GRADE ELEVATIONS
 - SOIL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS.
- J. IF REQUIRED, PROVIDE SUITABLE STRUCTURAL FILL MATERIAL FOR MASS GRADING.
- THE QUANTITIES, IF GIVEN, IN THE ENGINEER'S SUMMARY FOR EARTHWORK ARE INTENDED AS A GUIDE FOR THE CONTRACTOR IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND APPRAISE HIMSELF OF ALL SITE CONDITIONS. NO CLAIMS FOR EXTRA WORK WILL BE RECOGNIZED UNLESS ORDERED IN WRITING BY THE OWNER.
- PRIOR TO ON-SET OF MASS GRADING OPERATIONS, THE EARTHWORK CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SOIL EROSION CONTROL SPECIFICATIONS. THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF FILTER FENCING, ETC., TO PROTECT ADJACENT PROPERTY SHALL OCCUR BEFORE MASS GRADING BEGINS, AND IN ACCORDANCE WITH THE SOIL EROSION CONTROL CONSTRUCTION
- THE GRADING OPERATIONS ARE TO BE CLOSELY SUPERVISED AND INSPECTED, PARTICULARLY DURING THE REMOVAL OF UNSUITABLE MATERIAL BY THE ENGINEER OR HIS REPRESENTATIVE. ALL TESTING INSPECTION AND SUPERVISION OF SOIL QUALITY, UNSUITABLE REMOVAL AND ITS REPLACEMENT AND OTHER SOILS RELATED OPERATIONS SHALL BE ENTIRELY THE RESPONSIBILITY OF THE ENGINEER.
- THE GRADING AND CONSTRUCTION OF THE SITE IMPROVEMENTS SHALL NOT CAUSE PONDING OF STORMWATER. ALL AREAS ADJACENT TO THESE IMPROVEMENTS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE.
- 6. THE PROPOSED GRADING ELEVATIONS SHOWN ON THE PLANS ARE FINISH GRADE. UNLESS INDICATED OTHERWISE, A MINIMUM OF 6-INCHES OF TOPSOIL IS TO BE PLACED BEFORE FINISH GRADE ELEVATIONS ARE ACHIEVED.

EARTHWORK NOTES CONTINUED

- EMBANKMENT MATERIAL (RANDOM FILL) WITHIN NON-STRUCTURAL FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM SPECIFICATION D-1557 (MODIFIED PROCTOR METHOD)
- COMPLETED GRADING (FINISHED FINE GRADE) FOR ALL AREAS SHALL BE WITHIN A TOLERANCE 0.1-FT+/- OF DESIGN ELEVATIONS.
- RIP-RAP MATERIAL TO BE PROVIDED IN CONJUNCTION WITH THE EARTHWORK IMPROVEMENTS SHALL CONFORM TO SECTION 1005 OF THE I.D.O.T. SPECIFICATIONS, AND IF GROUTED IN PLACE IN ACCORDANCE WITH SECTION 281 OF SAME STANDARD SPECIFICATIONS, UNLESS NOTED
- 10. ALL EARTHWORK AND ALL ASSOCIATED RELATED WORK NECESSARY SHALL BE INCLUDED IN THE CONTRACT UNIT PRICES. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR ANY WORK THAT CAN REASONABLY BE ASSUMED OR INFERRED FROM THE CONTRACT DOCUMENTS INCLUDING BUT NOT LIMITED TO TOPSOIL SPRIPPING AND STOCKPILING, EXCAVATION AND FILLING, REMOVAL, HAULING AND DISPOSAL OF UNSUITABLES OR OTHER MATERIALS THAT CAN'T BE USED ONSITE, IMPORTING, PLACING AND COMPACTING STRUCTURAL FILL, ROUGH GRADING, IMPORTING AND RESPREADING TOPSOIL, FINE GRADING, BACKFILLING, ETC.
- 11. EXCESS EXCAVATED MATERIAL NOT SUITABLE OR REQUIRED FOR BACKFILLING OR SITE GRADING AND ALL MATERIALS CONTAINING SLAG, CINDERS, FOUNDRY SAND, DEBRIS AND RUBBLE SHALL BE REMOVED FROM SITE AND LEGALLY DISPOSED AT NO ADDITIONAL COST.
- 12. IT SHALL BE THE RESPONSIBILITY OF THE EXCAVATION CONTRACTOR TO REMOVE FROM THE SITE ANY MATERIALS AND DEBRIS WHICH RESULT

ADDITIONAL NOTES

_/ _// _// _// _// _//

- CONTRACTOR TO COORDINATE TEMPORARY ROAD LANE CLOSURES WITH THE ENGINEER. VILLAGE OF WAUCONDA. ILLINOIS DEPARTMENT OF NSPORTATION, RESIDENTS, POLICE DEPARTMENT AND FIRE DISTRICT 48 HOURS PRIOR TO UNDERTAKING WORK.
- NO EXISTING RESIDENTIAL OR COMMERCIAL DRIVEWAY SHALL BE BLOCKED FOR MORE THAN 2 HOURS. CONTRACTOR IS TO GIVE PROPERTY OWNER A MINIMUM OF 48 HOURS NOTICE PRIOR TO CLOSING ANY DRIVEWAYS. DOOR HANGERS ARE TO BE USED TO NOTIFY PROPERTY OWNERS.
- CONTRACTOR SHALL VERIFY DEPTH OF ALL EXISTING UTILITIES EITHER AT CROSSINGS OF, OR IN CLOSE PROXIMITY TO THE PROPOSED IMPROVEMENTS PRIOR TO THE START OF CONSTRUCTION (COST INCIDENTAL). REPORT CONFLICTS TO THE ENGINEER.
- ALL CONSTRUCTION ACTIVITY SHALL BE LIMITED TO WITHIN THE PUBLIC RIGHT-OF-WAY (ROW) UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- THE CONTRACTOR SHALL EXERCISE CARE WHEN WORKING AROUND EXISTING TREES AND BUSHES. ANY TREE OR BUSH DAMAGED OR DESTROYED OUTSIDE THE LIMITS OF CONSTRUCTION BY CONTRACTOR'S WORK ACTIVITY SHALL BE REPLACED IN KIND AS DIRECTED BY THE ENGINEER. COST INCIDENTAL. EXISTING TREES/BRUSH SHALL BE REMOVED AS NECESSARY TO GRADE DITCH. REMOVAL OF TREES GREATER THAN 6" DIA. SHALL BE APPROVED IN ADVANCE BY THE ENGINEER.
- THE LIMITS OF EARTH SAW CUT OF TREE ROOTS SHALL BE AS DIRECTED BY THE ENGINEER.

M HIS CONSTRUCTION OPERATIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.

- CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONTROL DUST AND MUD ASSOCIATED WITH THIS PROJECT. SEE SPECIFICATION SECTION 01000. ITEM 1.10.M FOR DETAILS.
- WATER PUMPED FROM TRENCHES, EXCAVATIONS, ETC. SHALL HAVE SUSPENDED SOLIDS REDUCED TO LIMITS NOTED IN THE SPECIFICATIONS PRIOR TO DISCHARGE INTO WATERWAYS, BODIES OF WATERS, ETC. (COST INCIDENTAL).
- PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL INSTALL ALL REQUIRED SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, AS DELINEATED ON THE PLANS AND AS NOTED IN THE SPECIFICATIONS.
- 10. ALL CONSTRUCTION DEBRIS AND ALL EXCESS EXCAVATED MATERIAL SHALL BE DISPOSED OF OFF SITE AT THE CONTRACTOR'S EXPENSE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM ALL NECESSARY FIELD AND LABORATORY ANALYSES TO OBTAIN THE LICENSED PROFESSIONAL ENGINEER'S CERTIFICATION REQUIRED PER ILLINOIS PUBLIC ACT 96-1416 REGARDING CLEAN CONSTRUCTION AND DEMOLITION DEBRIS (CCCD) REQUIREMENTS.
- 11. BYPASS PUMPING OF EXISTING GROUNDWATER AND STORM WATER FLOW IN DITCHES MAY BE REQUIRED,

SYMBOL LEGEND

EXISTING		PROPOSED
	STORM SEWER	
	STORM UNDERDRAIN	
\odot	STORM MANHOLE	lacktriangle
	STORM CATCHBASIN	•
\triangleleft	STORM FLARED END SECTION	◀
	STORM INLETS	
-))	SANITARY SEWER	-)))))
$\overline{}$	SANITARY FORCE MAIN	
	SANITARY MANHOLE	•
lacktriangle	SANITARY AIR RELEASE VALVE	•
0	SANITARY CLEANOUT	•
— 8 "W — 8 "W —	WATERMAIN	— w — w —
	WATER SERVICE	ws ws
Ø	FIRE OR FLUSHING HYDRANT	lacksquare
\bowtie	AUXILARY VALVE	
	WATER SERVICE BUFFALO BOX	
\otimes	WATER VALVE VAULT	Θ
\bowtie	WATER VALVE BOX	×
W	WELL	
-	STREET LIGHT	
	TREELINE, BUSHES, ETC.	
	RETAINING WALL	
595	MAJOR CONTOUR	 595
594	MINOR CONTOUR	594
	WETLAND	
_ x x x	FENCE	— x —— x —— x -
	DITCH LINE	
Ф—ОНW——	OVERHEAD AERIAL WITH UTILITY POLE	
——E———E——	UNDERGROUND ELECTRIC	——Е——Е—
TT	UNDERGROUND TELECOMMUNICATION	
	GAS MAIN WITH SIZE AND VALVE	
	UNDERGROUND CABLE TELEVISION	
* 6"	CONIFEROUS AND DECIDUOUS TREE	
•	SIGN	
	CURB AND GUTTER	
	REVERSE GUTTER	
	TERROODADY FACERACRIT	

TEMPORARY EASEMENT

PERMANENT EASEMENT

REQUIREMENTS FOR IN-STREAM CONSTRUCTION

THE U.S. ARMY CORPS OF ENGINEERS SHALL BE CONTACTED FOR A REVIEW OF THE PROPOSED IN-STREAM WORK PLAN WHICH MUST BE APPROVED BY THIS OFFICE PRIOR TO THE COMMENCEMENT OF WORK. THE PLAN SHALL MEET THE EROSION AND SEDIMENT CONTROL STANDARDS LISTED BELOW AND INCLUDE MEANS AND METHODS FOR COMPLETING WORK WITHIN A WATERWAY. ALL COFFERDAMS SHALL BE CONSTRUCTED TO ALLOW THE PASSAGE OF HIGH FLOWS, MAINTAIN DOWNSTREAM FLOWS, AND WITHISTAND ANTICIPATED EROSIVE FORCES. COFFERDAMS SHALL BE DESIGNED AND INSTALLED SO AS NOT TO IMPEDE THE MOVEMENT OF AQUATIC ORGANISMS.

THE FOLLOWING DEFINITIONS APPLY TO THESE NOTES:

CONSTRUCTION ACTIVITIES.

COFFERDAM: A TEMPORARY STRUCTURE WITHIN A WATERWAY OR BODY OF WATER DESIGNED TO PROVIDE A DRY WORK AREA FOR TEMPORARY CONSTRUCTION ACTIVITIES AND TO CONTAIN DISTURBED SOIL AND/OR SUSPENDED SEDIMENTS. <u>IN-STREAM WORK AREA:</u> WORK OCCURRING AT OR BELOW THE ORDINARY HIGH WATER MARK (OHWM) OF A WATERWAY OR THE NORMAL WATER LEVEL (NWL) OF ABUTTING WETLANDS, INCLUDING ADJACENT UPLANDS.

DEWATERING: THE REMOVAL OF WATER WITH THE PURPOSE OF CREATING A DRY WORK AREA FOR TEMPORARY

WORK WITHIN A WATERWAY MUST MEET THE FOLLOWING STANDARDS:

- WORK IN THE WATERWAY SHOULD BE TIMED TO TAKE PLACE DURING LOW OR NO-FLOW CONDITIONS. LOW FLOW CONDITIONS ARE FLOW AT OR BELOW THE NORMAL WATER ELEVATION.
- THE PLAN WILL BE DESIGNED TO ALLOW FOR THE CONVEYANCE OF THE 2-YEAR PEAK FLOW PAST THE WORK AREA WITHOUT OVERTOPPING THE COFFERDAM. THE CORPS HAS THE DISCRETION TO REDUCE THIS REQUIREMENT IF DOCUMENTED BY THE APPLICANT TO BE INFEASIBLE OR UNNECESSARY.
- WATER SHALL BE ISOLATED FROM THE IN-STREAM WORK AREA USING A COFFERDAM CONSTRUCTED OF NON-ERODIBLE MATERIALS (STEEL SHEETS, AQUA BARRIERS, RIP RAP AND GEOTEXTILE LINER, ETC.). EARTHEN COFFERDAMS ARE NOT PERMISSIBLE.
- THE COFFERDAM MUST BE CONSTRUCTED FROM THE UPLAND AREA AND NO EQUIPMENT MAY ENTER FLOWING WATER AT ANY TIME. IF THE INSTALLATION OF THE COFFERDAM CANNOT BE COMPLETED FROM SHORE AND ACCESS IS NEEDED TO REACH THE AREA TO BE COFFERDD, OTHER MEASURES, SUCH AS THE CONSTRUCTION OF A CAUSEWAY, WILL BE NECESSARY TO ENSURE THAT EQUIPMENT DOES NOT ENTER THE WATER. ONCE THE COFFERDAM IS IN PLACE AND THE ISOLATED AREA IS DEWATERED, EQUIPMENT MAY ENTER THE COFFERD
- IF BYPASS PUMPING IS NECESSARY, THE INTAKE HOSE SHALL BE PLACED ON A STABLE SURFACE OR FLOATED TO PREVENT SEDIMENT FROM ENTERING THE HOSE. THE BYPASS DISCHARGE SHALL BE PLACED ON A NON-ERODIBLE, ENERGY DISSIPATING SURFACE PRIOR TO REJOINING THE STREAM FLOW AND SHALL NOT CAUSE EROSION. FILTERING OF BYPASS WATER IS NOT NECESSARY UNLESS THE BYPASS WATER HAS BECOME DIMENT-LADEN AS A RESULT OF THE CURRENT CONSTRUCTION ACTIVITIES
- DURING DEWATERING OF THE COFFERED WORK AREA, ALL SEDIMENT-LADEN WATER MUST BE FILTERED TO REMOVE SEDIMENT. POSSIBLE OPTIONS FOR SEDIMENT REMOVAL INCLUDE BAFFLE SYSTEMS, ANIONIC POLYMERS SYSTEMS, DEWATERING BAGS, OR OTHER APPROPRIATE METHODS. WATER SHALL HAVE SEDIMENT REMOVED PRIOR TO BEING RE-INTRODUCED TO THE DOWNSTREAM WATERWAY. A STABILIZED CONVEYANCE FROM THE DEWATERING DEVICE TO THE WATERWAY MUST BE IDENTIFIED IN THE PLANS. DISCHARGE WATER IS CONSIDERED CLEAN IF IT DOES NOT RESULT IN A VISUALLY IDENTIFIABLE DEGRADATION OF WATER CLARITY.

CONSTRUCTION SCHEDULE

THE PROJECT SHALL BE COMPLETE BY NOVEMBER 22, 2025

THE PROJECT SHALL BE COMPLETED IN A TIMELY MANNER WITH REGARD TO THE FOLLOWING REQUIREMENTS.

RESTRICTIVE DATES

TREE CLEARING (TREES 3" DBH OR GREATER) SHALL ONLY OCCUR BETWEEN NOVEMBER 1 AND MARCH 31 OF ANY CONSTRUCTION YEAR, TO AVOID POTENTIAL IMPACTS TO THE NORTHERN LONG-EARED BAT.

IN-STREAM CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO LOW OR NO-FLOW CONDITIONS, SEE REQUIREMENTS FOR IN-STREAM CONSTRUCTION.

WORK AT PHIL'S BEACH SHALL BE COMPLETED BY MAY 24, 2025. IF DUE TO UNFORSEEN REASONS, WORK CANNOT BE COMPLETED PRIOR TO THIS DATE, WORK SHALL THEN RESUME AFTER SEPTEMBER 2, 2025. WORK AT WAUCONDA MIDDLE SCHOOL SHALL TAKE PLACE BETWEEN JUNE 2ND AND AUGUST 2ND.

NOTES

FNERAL

E OUTFALL WAUCOND

HMG ENGINEERS, INC. 975 CAMPUS DRIVE AUNDELEIN, ILLINOIS 60060

CSB. DAA. JRN CSB. DAA SHEET

PLOT DATE

DWG FILE

NERAL PLAN

LAKE OUTFALL IMPROVEMENTS WAUCONDA, IL

LINOIS 60060
WWW.HMGENGINEERS

975 CAMPU MUNDELEIN, ILL

URVEY PK, DA
ESIGN CSB, DA
ERAWN CSB, DAA, JRI
HECKED CSB, DA
ATE SEPTEMBER 202

SHEET 3

JOB NO.

SCHEDULE OF QUANTITIES

<u>ITEI</u> No	_	<u>UNIT</u>	QUANTIT
1	Storm Sewers, Rubber Gasket, Class A, Type 1, 12"	LF	137
2	Storm Sewers, Rubber Gasket, Class A, Type 2, 12"	LF	98
3	Storm Sewers, Rubber Gasket, Class A, Type 2, 18"	LF	9
	Storm Sewers, Rubber Gasket, Class A, Type 1, 27"	LF	14
)	Storm Sewers, Rubber Gasket, Class A, Type 2, 30"	LF	14
	Storm Sewers, Rubber Gasket, Class A, Type 1, 36"	LF	37
	Storm Sewers, Class A, Type 1, 29"x45" Elliptical RCP	LF	200
	Storm Sewers, Class A, Type 1, 34"x53" Elliptical RCP	LF	140
	Precast Concrete Box Culverts, 5' x 5'	LF	68
0	Precast Concrete Box Culverts, 12' x 3'	LF	56
1	Storm Inlet, Type A, 2' Diameter, Type 1 Frame and Grate	Each	4
2	Storm Inlet, Type A, 2' Diameter, Type 8 Grate	Each	2
3	Storm Inlet, Type A, 2' Diameter, Type 11 Frame and Grate	Each	3
4	Storm Manhole, Type A, 5' Diameter, Type 3 Frame and Grate	Each	1
5	Storm Manhole, Type A, 5' Diameter, Type 11 Frame and Grate	Each	1
6	Storm Manhole, Type A, 4' Diameter, Type 1 Frame and Grate	Each	1
7	Storm Manhole, Type A, 7' Diameter, Type 11 Frame and Grate	Each	1
8	Catch Basin, Type A, 4' Diameter, Type 37 Frame and Grate	Each	1
9	Inlets to be Adjusted	Each	1
0	Concrete Box Culvert End Section, 5' x 5'	Each	1
1	Precast Concrete Box Culvert End Section, 12' x 3'	Each	2
2	Modifications to Wingwall at Larkdale Row	LS	1
3	Modifications to Headwall at Osage Street	LS	1
4	Bangs Lake Intake Structure 1	LS	1
5	Bangs Lake Intake Structure 2	LS	1
6	Scada and Electrical Improvements at Intake Structure 1	LS	1
7	Precast Flared End Section Removed, Salvaged and Reinstalled	Each	2
8	Precast Flared End Section, 12"	Each	1
9	Precast Flared End Section, 34"x53"	Each	1
0	Remove and Replace 15" RCP Storm Sewer at Gravity Wall (1 stick)	LF	8
1	6" Ductile Iron Pipe at Gravity Wall with Check Valve	LS	1
2	Undercut/Stabilization Stone	CY	50
3	Trench Backfill	CY	375
4	CLSM Trench Backfill	CY	5
5	CLSM Abandonment of Culverts at Main Street	CY	70
6	Porous Granular Backfill	CY	40
7	Select Backfill	CY	50
8	Sidewalk Removal	SF	2,400
9	Concrete Sidewalk, 5"	SF	2,400
0	Aggregate Path, 8' Wide	SY	980
1	Concrete Curb and Gutter Removal	LF	342
2	Combination Concrete Curb and Gutter, B6.24	LF	200
3	Combination Concrete Curb and Gutter, B6.12	LF	142
4	Milling of Existing Roadway, 3"	SY	360
5	Roadway Pavement Removal	SY	456
6	HMA Leveling Binder, N50, Mix D, 1"	TONS	35
7	HMA Surface Course, N50, Mix D, 2"	SY	816
8	HMA Binder Course, IL-19.0, N50, 3"	SY	286
9	Class D Base Patches, Type IV, 6"	SY	170
0	Water Main in Steel Casing, 12"	LF	20

<u>NO</u>	ITEM DESCRIPTION	<u>UNIT</u>	QUANTITY
51	Ductile Iron Water Main, 6"	LF	35
52	Water Main Removal, 6"	LF	50
53	Insertion Valve, 6"	Each	1
54	Water Service Installation for 321 Main Street	LS	1
55	Abandonment of Service Tap for 321 Main Street	LS	1
56	Bypass Pumping of Sanitary Sewers	LS	1
57	Sanitary Sewer Removal, 12"	LF	65
58	Sanitary Sewer Removal, 15" Clay	LF	36
59	Ductile Iron Class 52 Sanitary Sewer, 12"	LF	46
60	Ductile Iron Class 52 Sanitary Sewer, 15"	LF	36
61	Sanitary Sewer in Steel Casing, 20"	LF	20
62	Sanitary Drop Manhole, 4' Diameter	Each	1
63	Sanitary Manhole Modifications	Each	1
64	Sanitary Manhole Adjustment Including External Chimney Seal	Each	2
65	Ornamental Fence, 6'	LF	50
66	Ornamental Fence Mounted to Block Wall, 4'	LF	340
67	Ornamental Fence Mounted to Block Wall, 2'	LF	96
68	Block Retaining Wall With Capstone	SF	3,497
69	Flood Control Wall With Capstone	SF	523
70	Steel Sheet Piling Retaining Wall with Cap	LF	225.50
71	Stream Grading and Shaping	LF	1,260
72	Earth Excavation at Stream	CY	145
73	Earth Excavation at Rip Rap Stabilization	CY	212
74	Earth Excavation at Aggregate Path	CY	220
75	Earth Excavation for Site Grading	CY	75
76	Biotechnical Riprap Stabilization	LF	181
77	Biotechnical Riprap Stabilization with Grading	LF	547
78	Rock Riffle	Each	6
79	Initial Channel Backfill, Riprap (RR4)	LF	297
80	Secondary Channel Backfill, Native Bed Material	LS	1
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Structural Streambank Stabilization

Steel Plate Beam Guardrail, Type A, 6' Steel Posts

Traffic Barrier Terminal, Type 1 (Special) Tangent

Storm Sewer Removal, 29"x45" Elliptical RCP

Remove 18" Flared End Section and Toe Block

Storm Sewer Removal, 34"x49" Arch CMP

Storm Sewer Removal, 64"x43" Arch CMP

Filter Fabric at Aggregate Path

Filter Fabric at Sheet Pile Wall

Traffic Barrier Terminal, Type 2

Storm Sewer Removal, 12" RCP

Storm Sewer Removal, 15" RCP

Storm Sewer Removal, 18" RCP

Storm Sewer Removal, 27" RCP

Storm Sewer Removal, 30" RCP

Storm Sewer Removal, 36" CPP

Remove Inlet, 2' Diameter

Remove Manhole, 4' Diameter

Remove Manhole, 5' Diameter

Filter Fabric at Riprap

HMG ENGINEERS, INC. 975 CAMPUS DRIVE MUNDELEIN, ILLINOIS 60060

SY

SY

SY

SY

LF

Each

Each

LF

LF

LF

LF

LF

LF

LF

LF

LF

Each

Each

Each

Each

275

275

980

130

317

3

3

5

8

34

55

202

111

124

69

CSB, DAA

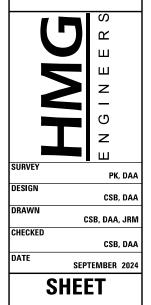
SCHEDULE OF QUANTITIES

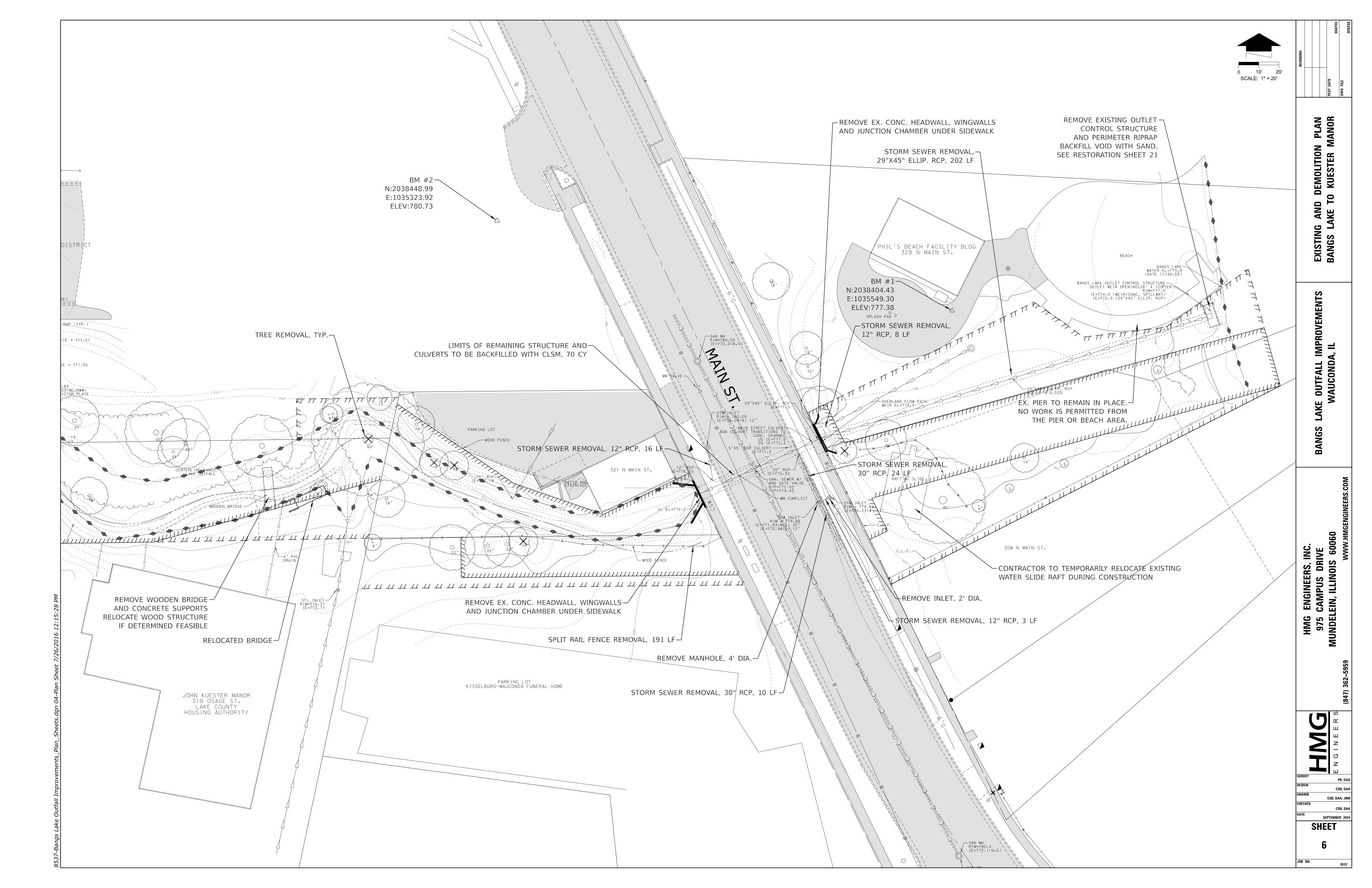
<u>ITEM</u> <u>NO.</u>	ITEM DESCRIPTION	<u>UNIT</u>	QUANTITY
101	Remove 27" Flared End Section and Toe Block	Each	1
102	Remove Frame and Grate	Each	2
103	Remove Concrete End Section	Each	1
104	Tree Removal (6 to 15 Units Diameter)	Unit	480
105	Tree Removal (Over 15 Units Diameter)	Unit	264
106	Clearing, Acres (Less than 6 Units Diameter)	Acre	1.25
107	Beaver Dam Removal and Disposal	Each	2
108	Remove Split Rail Fence	LF	191
109	Remove Chain Link Fence	LF	82
110	Remove Ornamental Fence	LF	98
111	Remove Guardrail	LF	468
112	Remove Concrete Spillway at Culvert Outfall	SF	415
113	Remove Timber Retaining Wall	LS	1
114	Remove Outlet Control Structure at Phil's Beach	LS	1
115	Remove Concrete Headwall, Wingwalls and Junction Chamber at Main Street	Each	2
116	Removal of Wooden Bridge and Supports at Kuester Manor	LS	1
117	Temporary Construction Fencing	LF	1,150
118	Temporary Relocation of Raft and Trailer at Phil's Beach	LS	1
119	Special Waste Disposal	CY	50
120	Hazardous Waste Disposal	CY	50
121	Seeding, IDOT Class 1	SY	8,100
122	Seeding, IDOT Class 4A	SY	2,850
123	Seeding, IDOT Class 4B	SY	400
124	Interseeding, IDOT Class 4A	SY	1,325
125	Sodding	SY	1,250
126	Mulch	SY	520
127	Sand	CY	35
128	Thermoplastic Pavement Marking - Line, 4"	LF	400
129	Erosion Control Blanket	SY	11,150
130	Topsoil Furnish and Place, Variable Depth	SY	11,150
131	Site Grading and Shaping	LS	1
132	Soil Erosion and Sedimentation Control	LS	1
133	Dust and Mud Control	LS	1
134	Dewatering	LS	1
135	Traffic and Pedestrian Control	LS	1
136	Mobilization	LS	1
137	Pre-Construction Video Documentation	LS	1
138	Project Maintenance and Monitoring (Bangs Lake to Larkdale Row)	Year	3

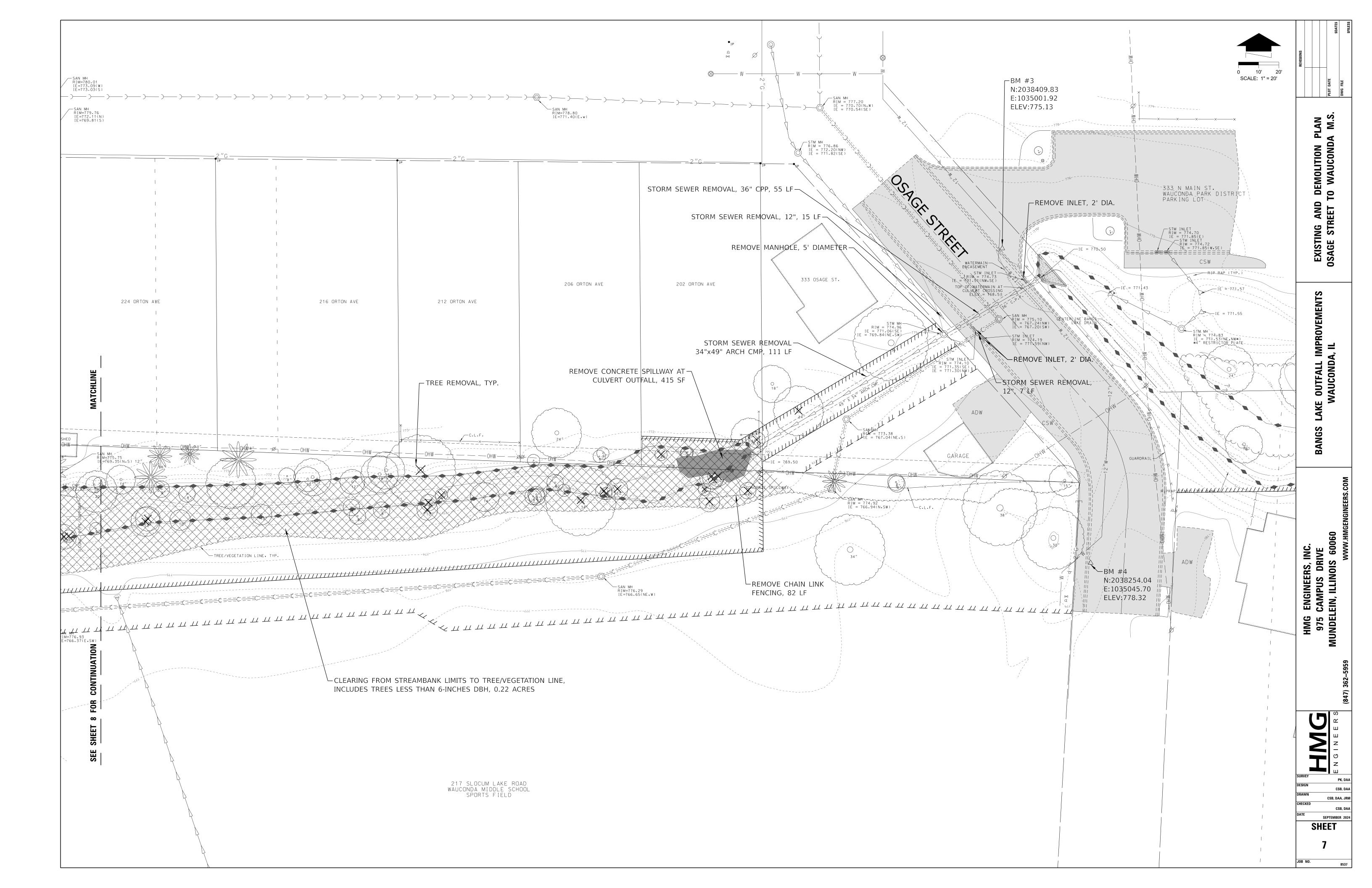
<u>ITEM</u>	
<u>NO.</u>	<u>ITEM DESCRIPTION</u>
d Altern	nate A
	Storm Sewers, Rubber Gasket, Class A, Type 2, 1
) -	Storm Sewers, Rubber Gasket, Class A, Type 2, 1
	Storm Sowers Pubber Cooket Class A Type 2 /

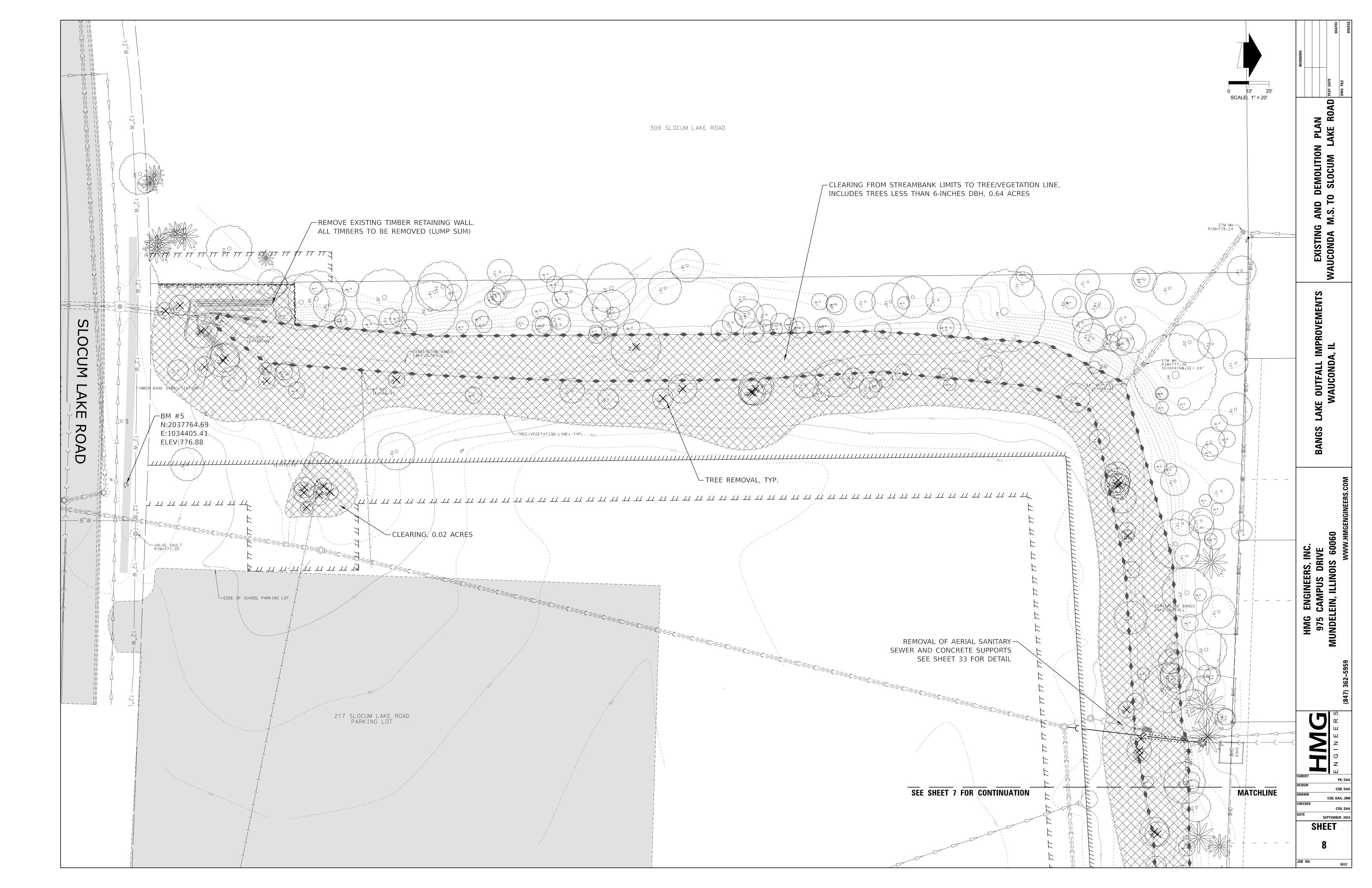
NO	<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	QUANTITY
Bid Alte	ernate A		
A 1	Storm Sewers, Rubber Gasket, Class A, Type 2, 12"	LF	3
A2	Storm Sewers, Rubber Gasket, Class A, Type 2, 18"	LF	18
A3	Storm Sewers, Rubber Gasket, Class A, Type 2, 48"	LF	236
A4	Storm Manhole, Type A, 8' Diameter, Type 1 Frame and Grate	Each	2
A 5	Storm Manhole, Type A, 9' Diameter, Type 1 Frame and Grate	Each	1
A6	Trench Backfill	CY	365
A7	Manhole to be Reconstructed at Slocum Lake Road	Each	1
A8	Manhole to be Reconstructed at WWTP	Each	1
A9	CLSM Abandonment of Storm Sewer at Public Works Building	CY	56
A10	Sidewalk Removal	SF	100
A11	Concrete Sidewalk, 5"	SF	100
A12	Concrete Curb and Gutter Removal	LF	159
A13	Combination Concrete Curb and Gutter, B6.12	LF	159
A14	Roadway Pavement Removal	SY	344
A15	HMA Surface Course, N50, Mix D, 2"	SY	344
A16	HMA Binder Course, IL-19.0, N50, 3"	SY	344
A17	Storm Sewer Removal, 42"	LF	11
A18	Storm Sewer Removal, 60"	LF	27

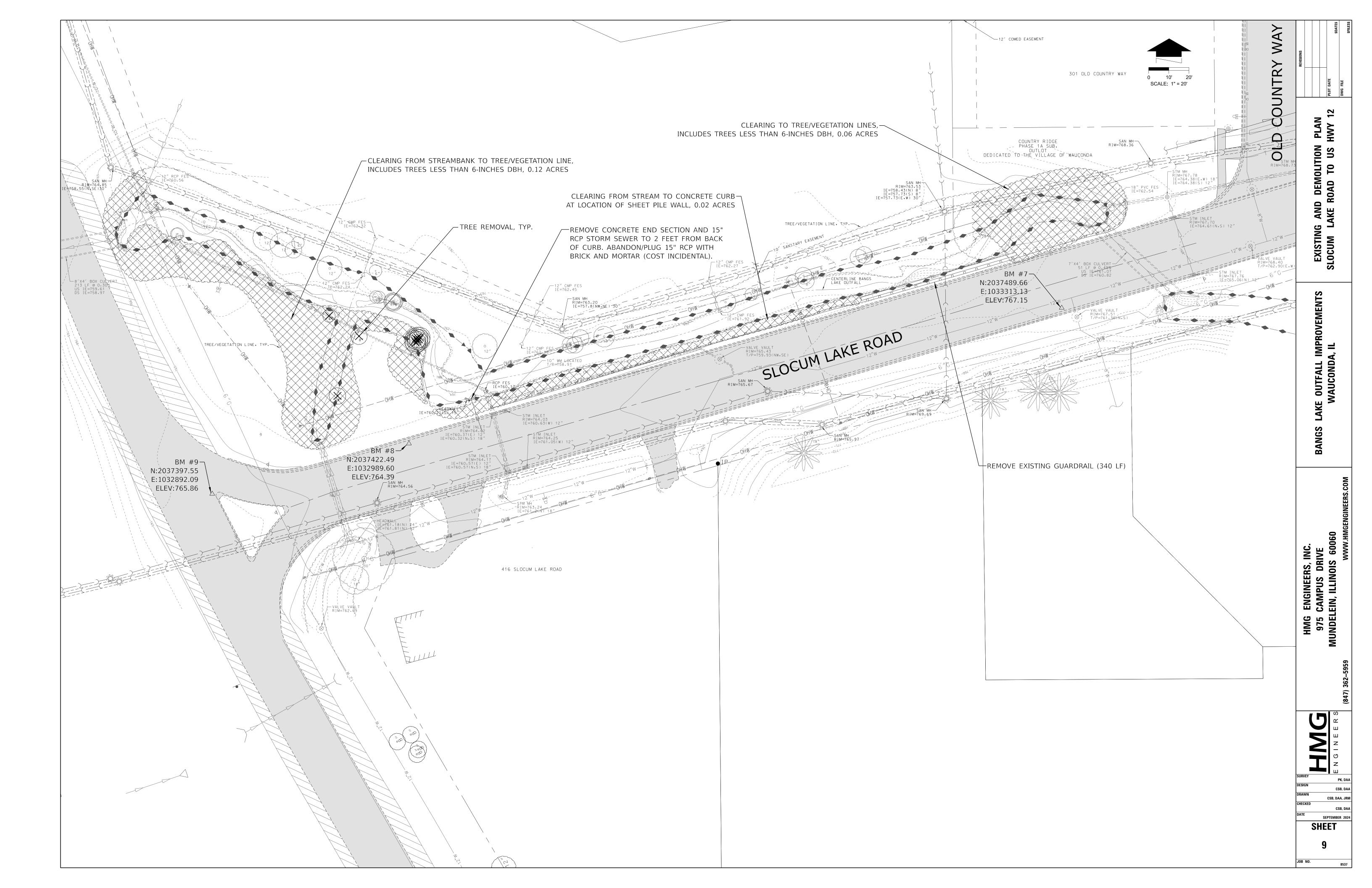
ITE NO	_	<u>UNIT</u>	QUANTITY
Bid Alt	ernate B		
B1	Tree Removal (Larkdale Row to IL Route 176)	Acre	1.40
B2	Project Maintenance and Monitoring (Larkdale Row to IL Route 176)	Year	3

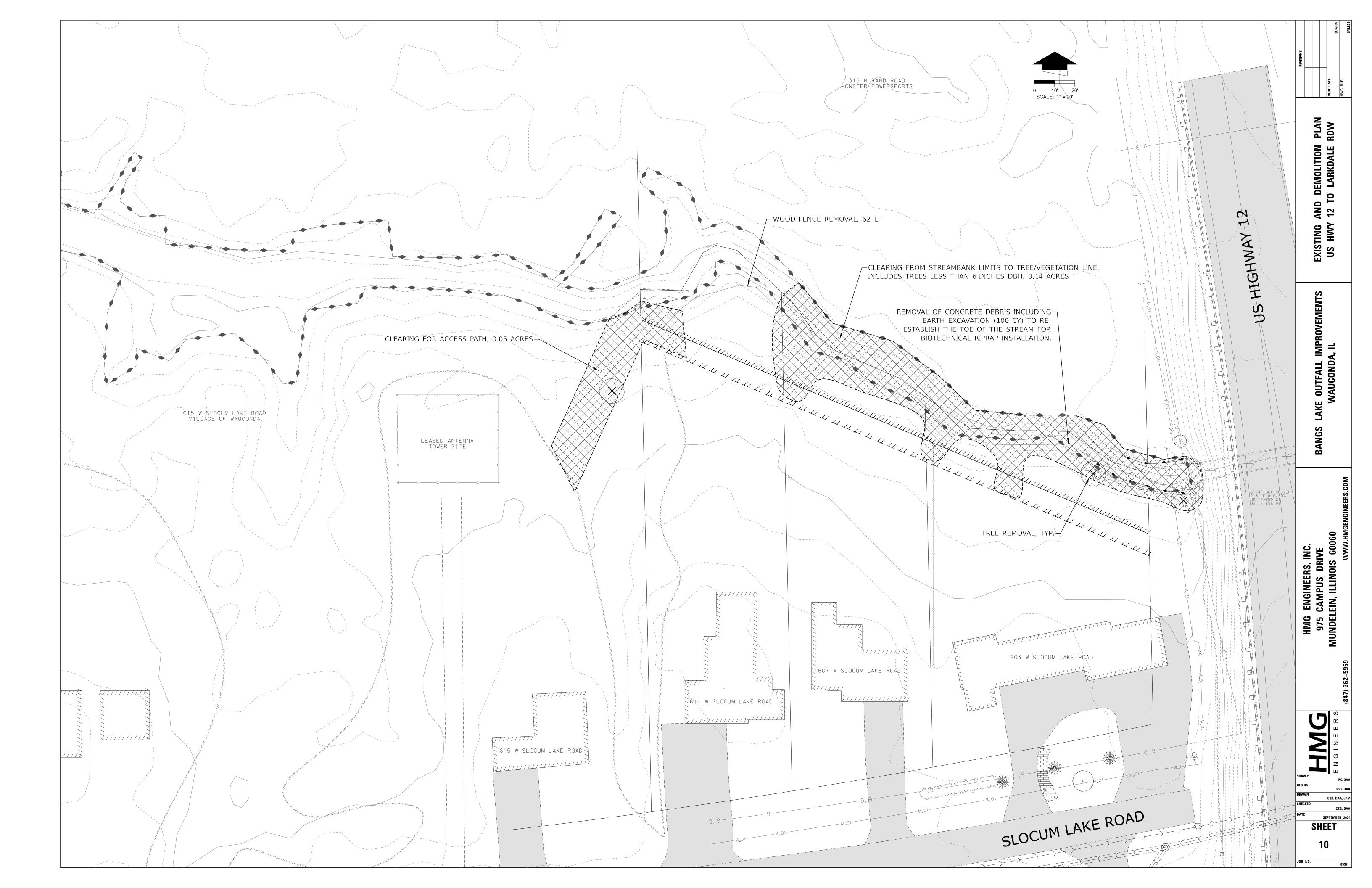


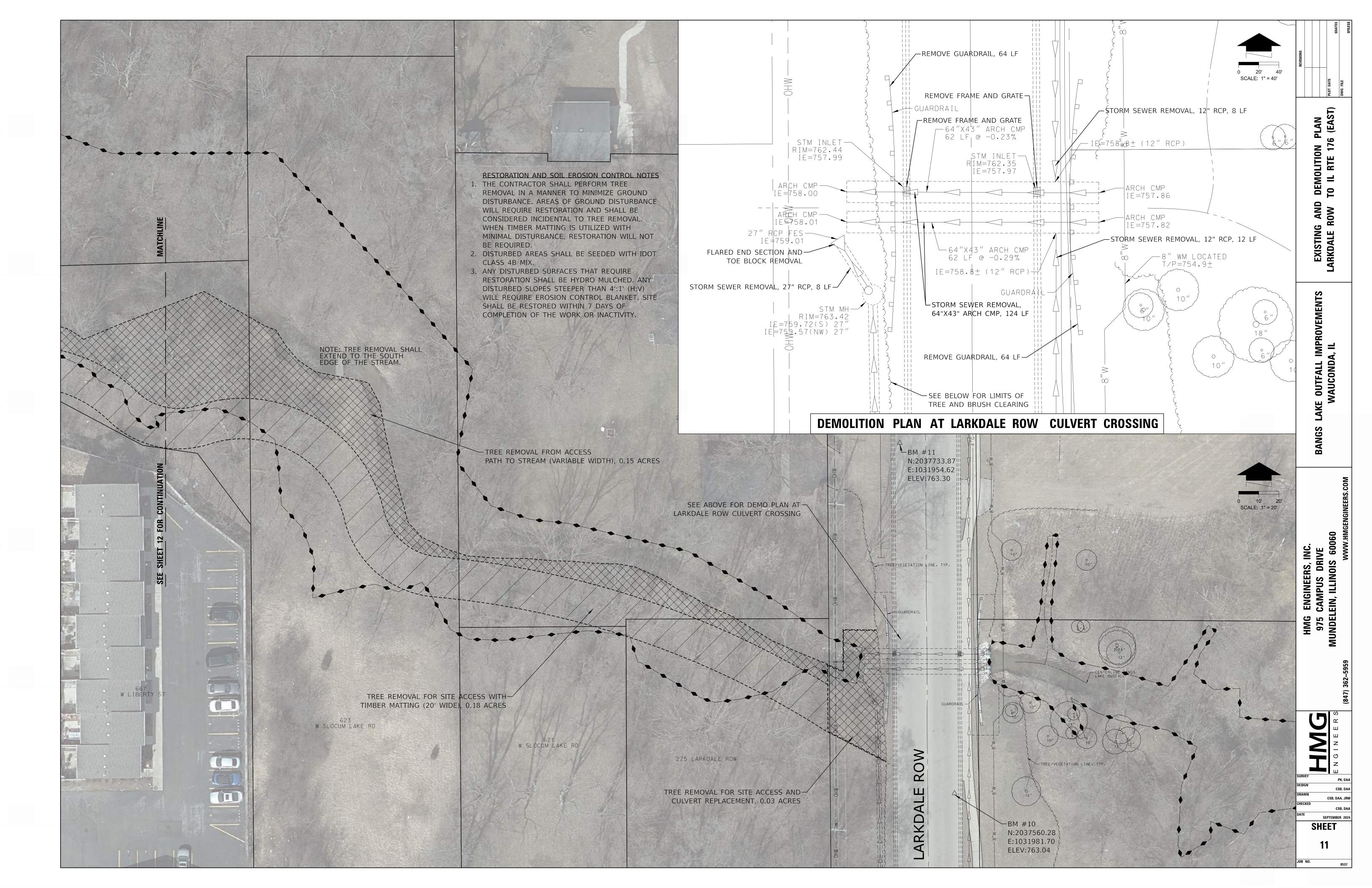


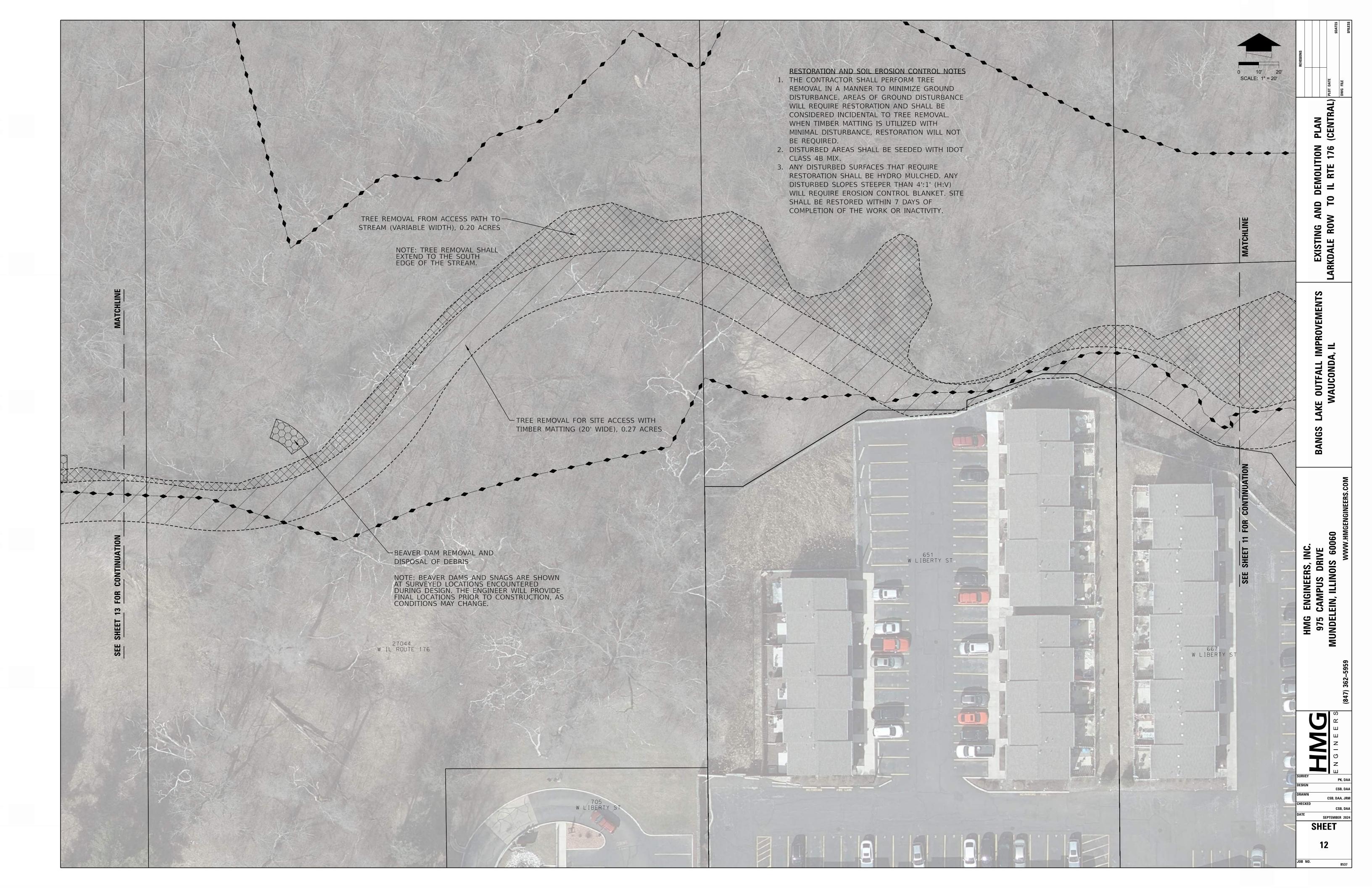


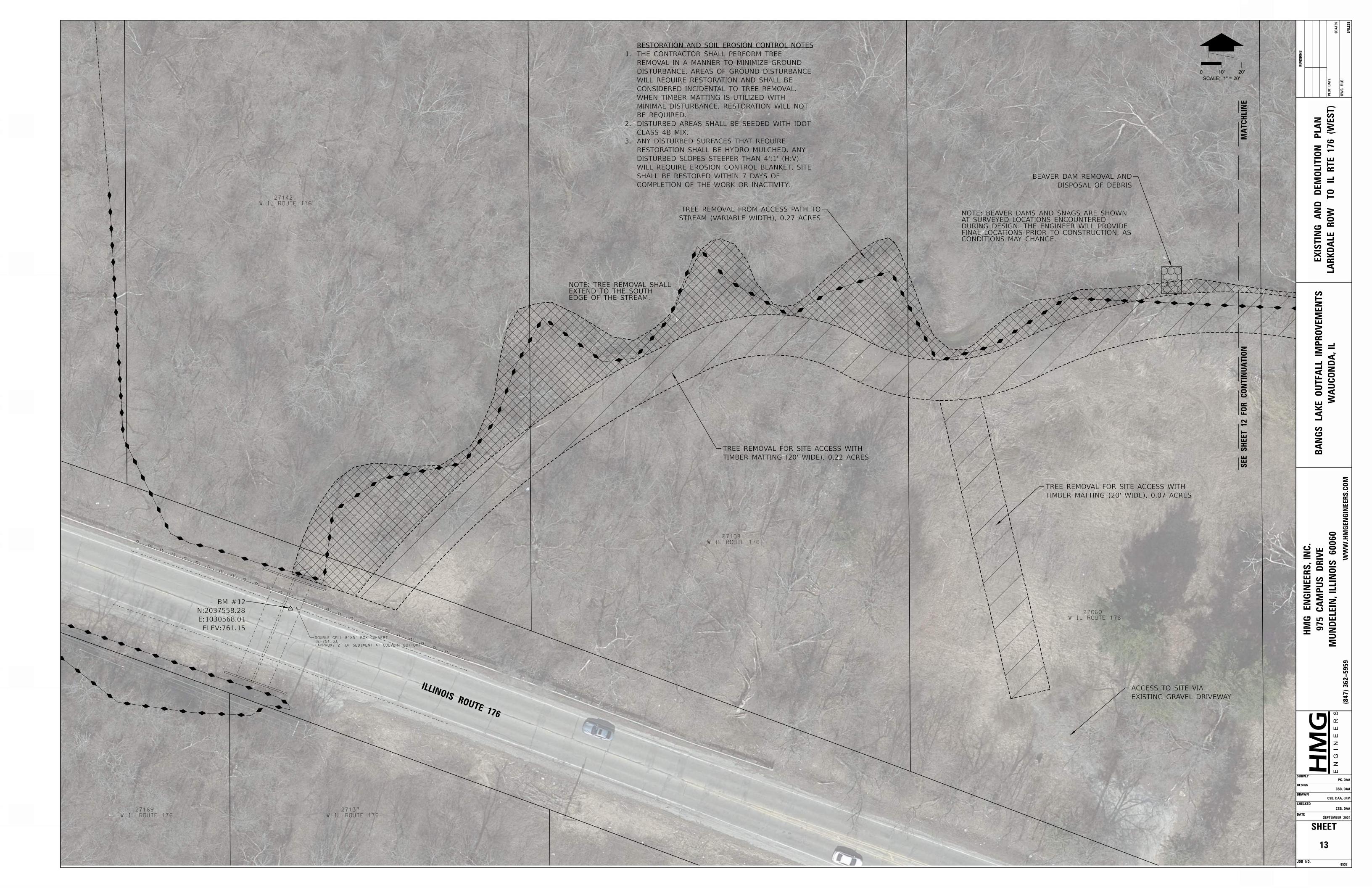


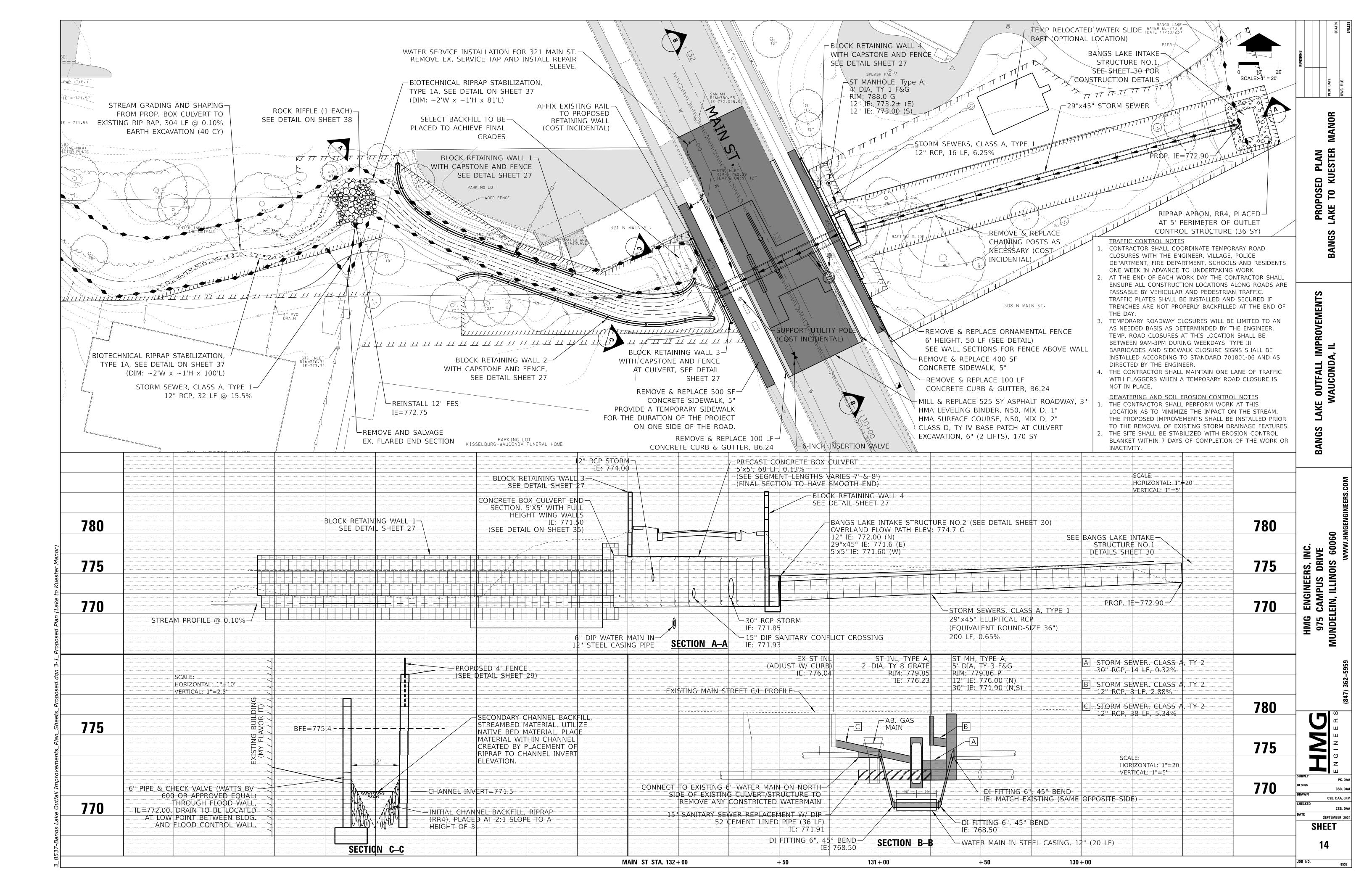


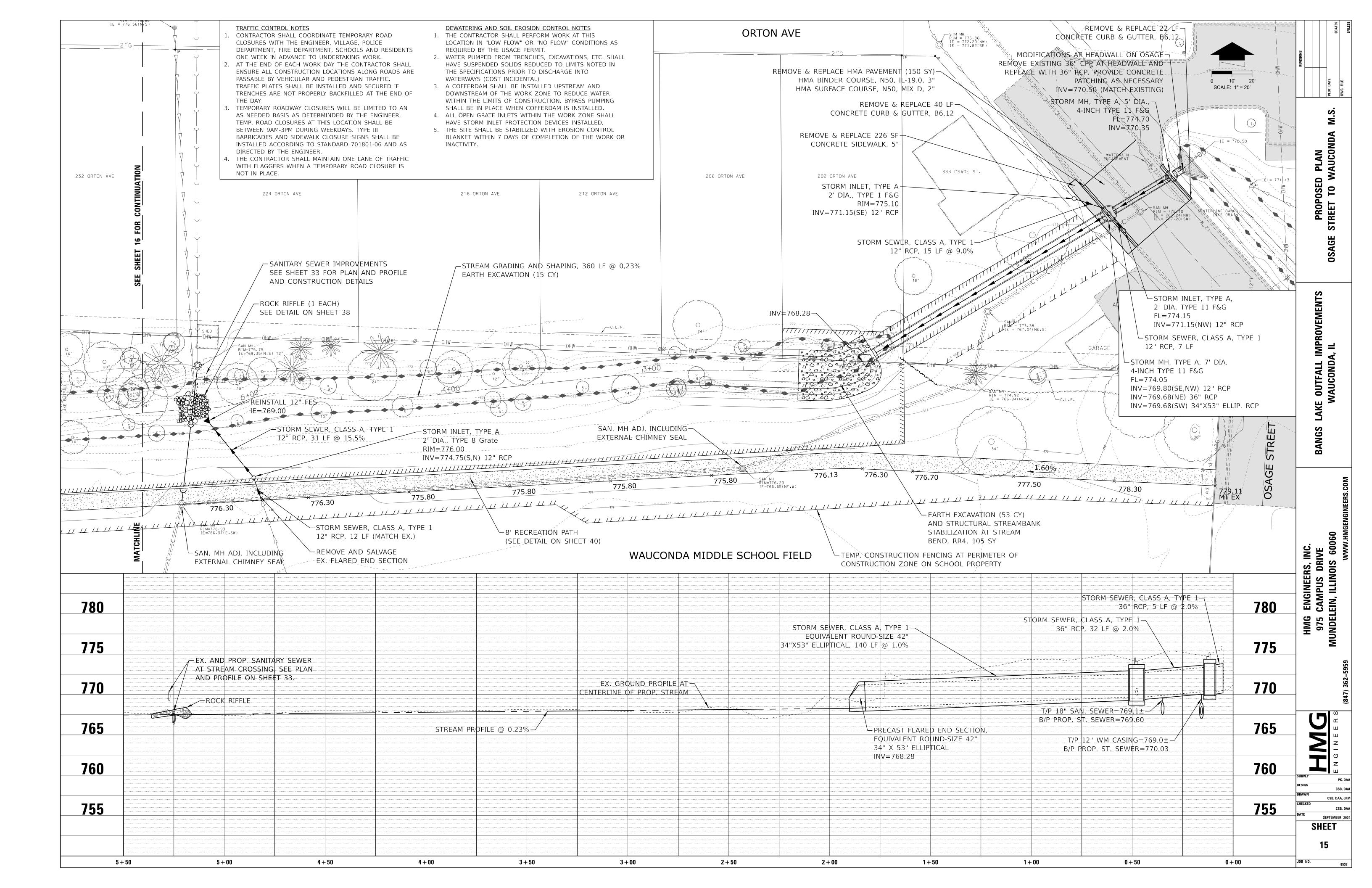


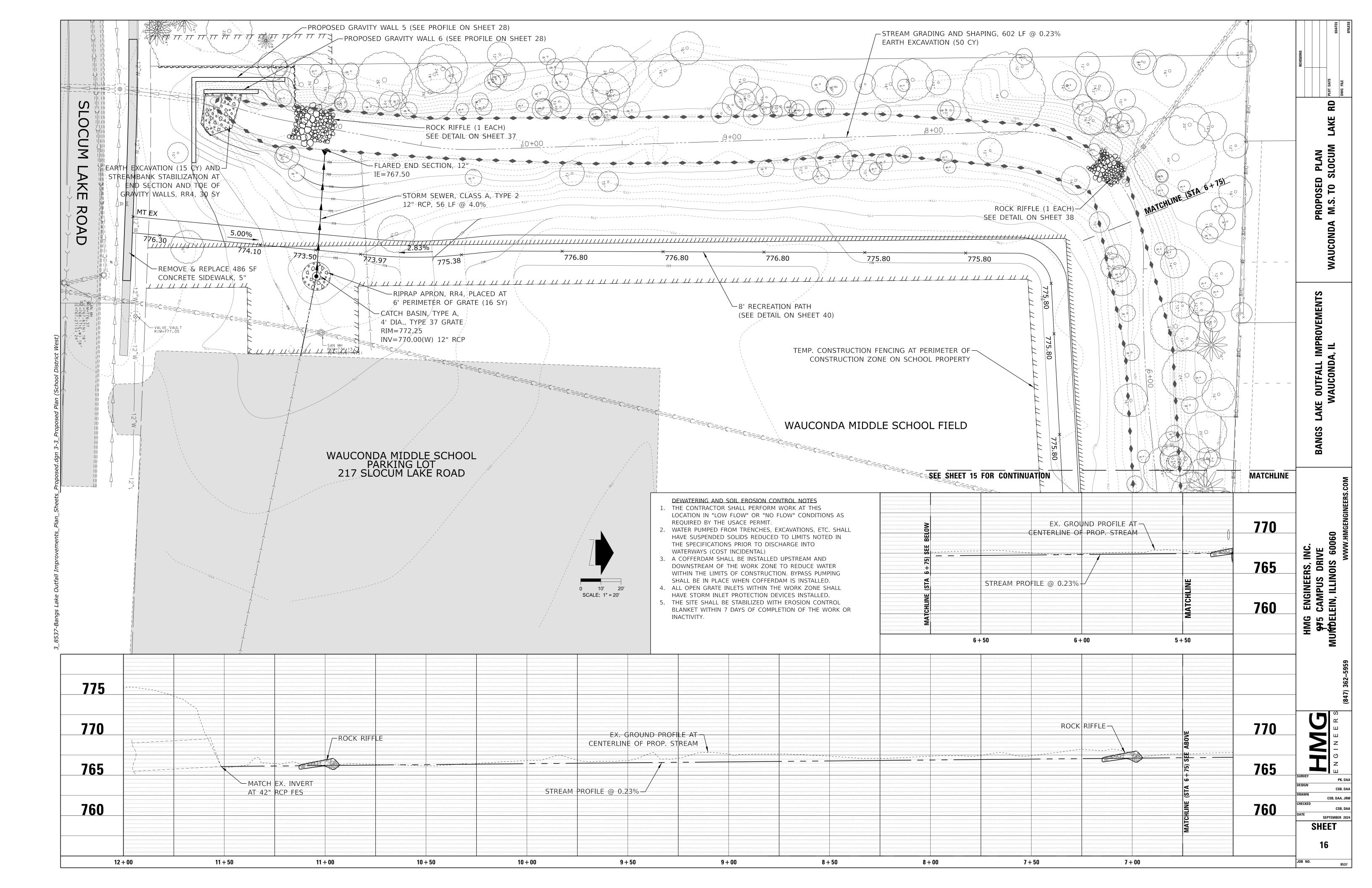


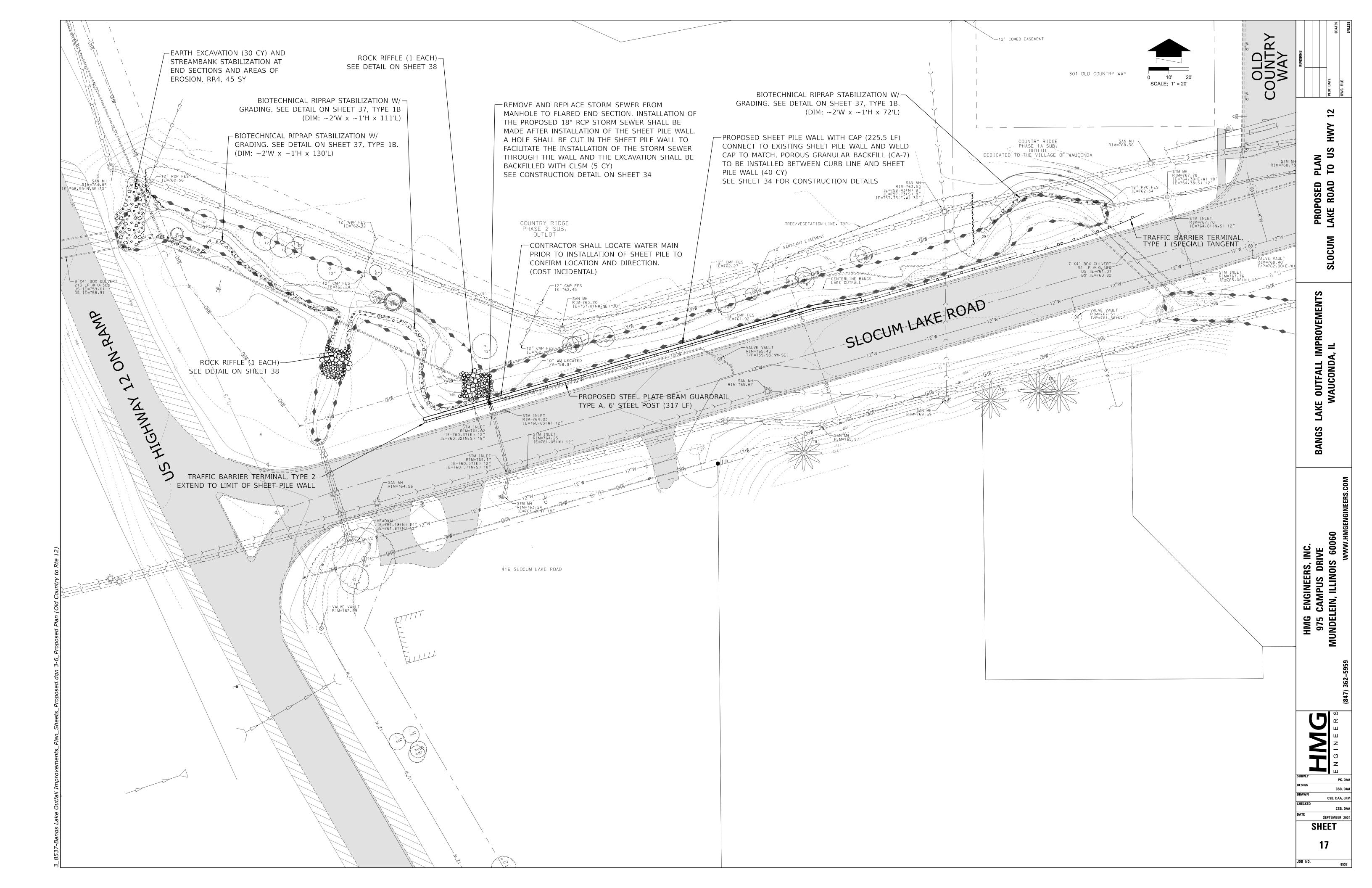


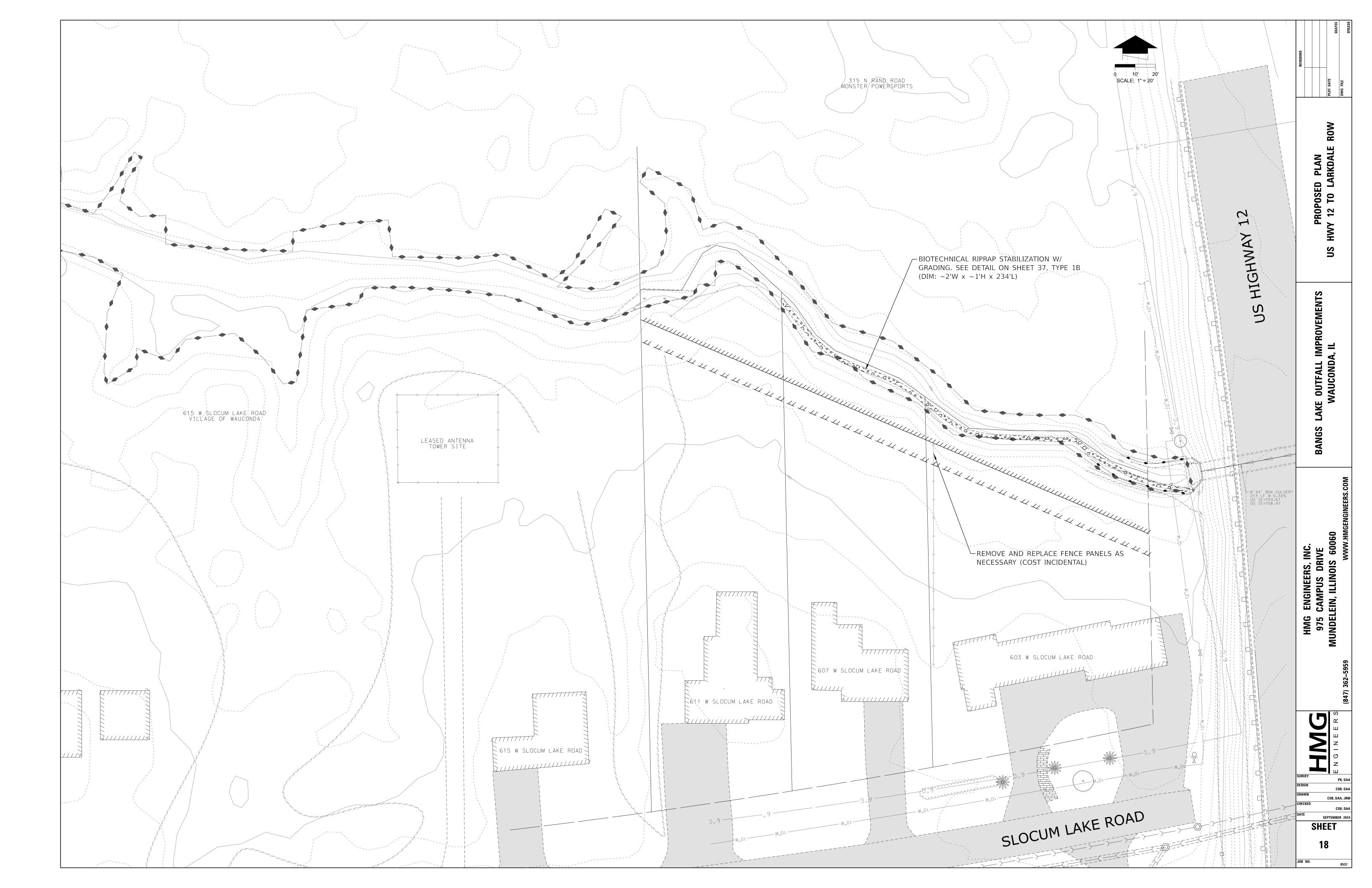




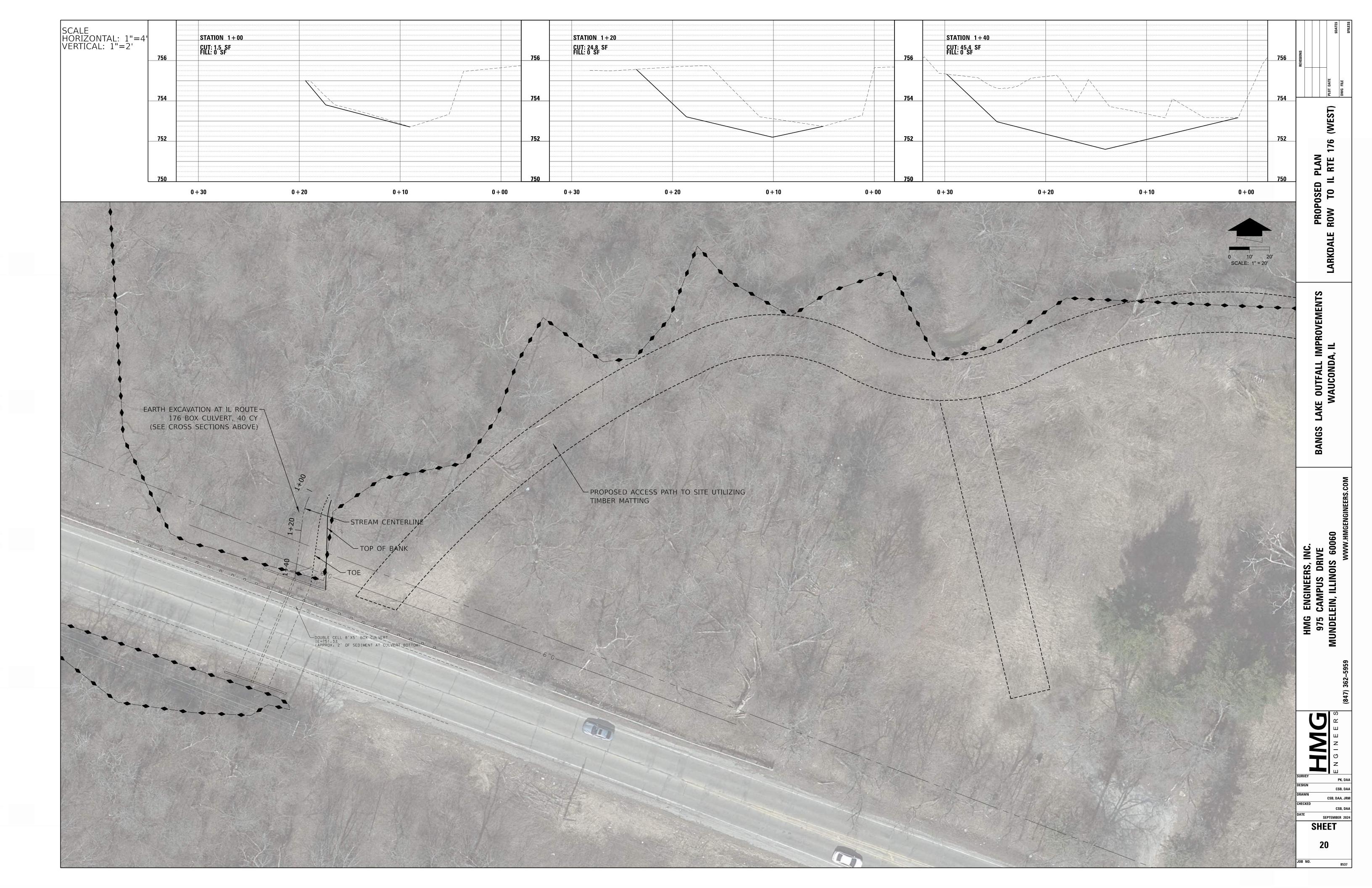


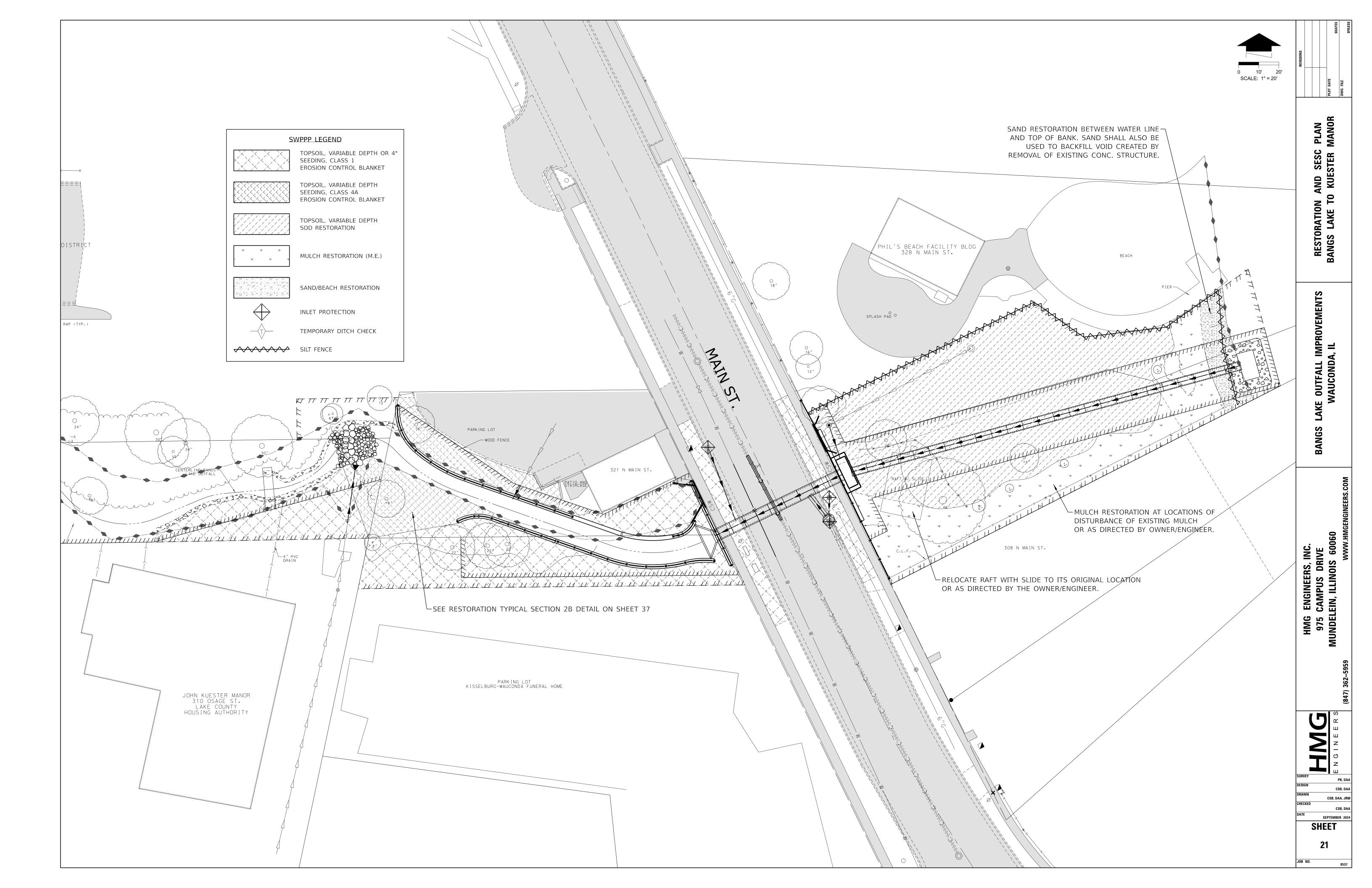


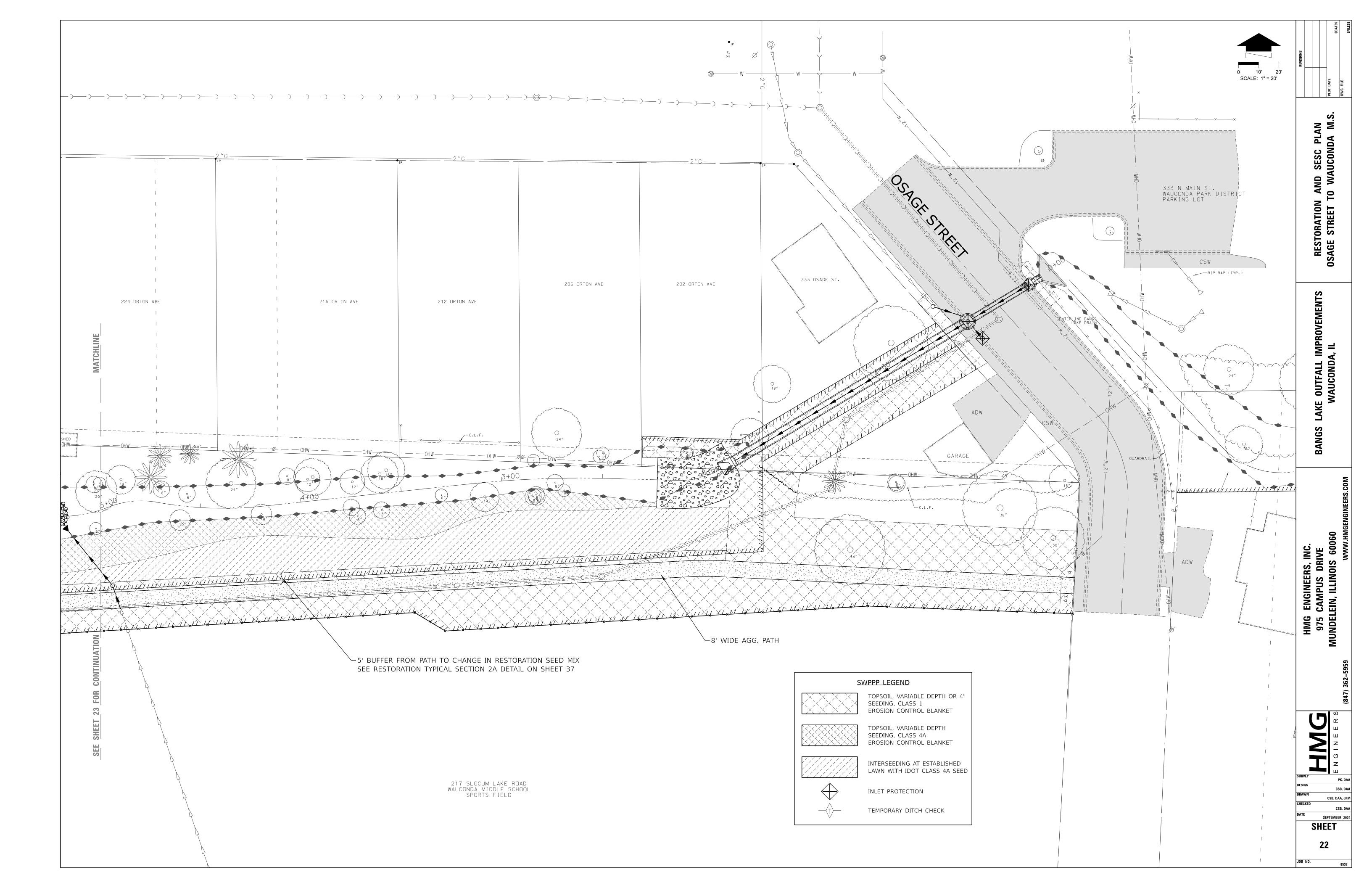


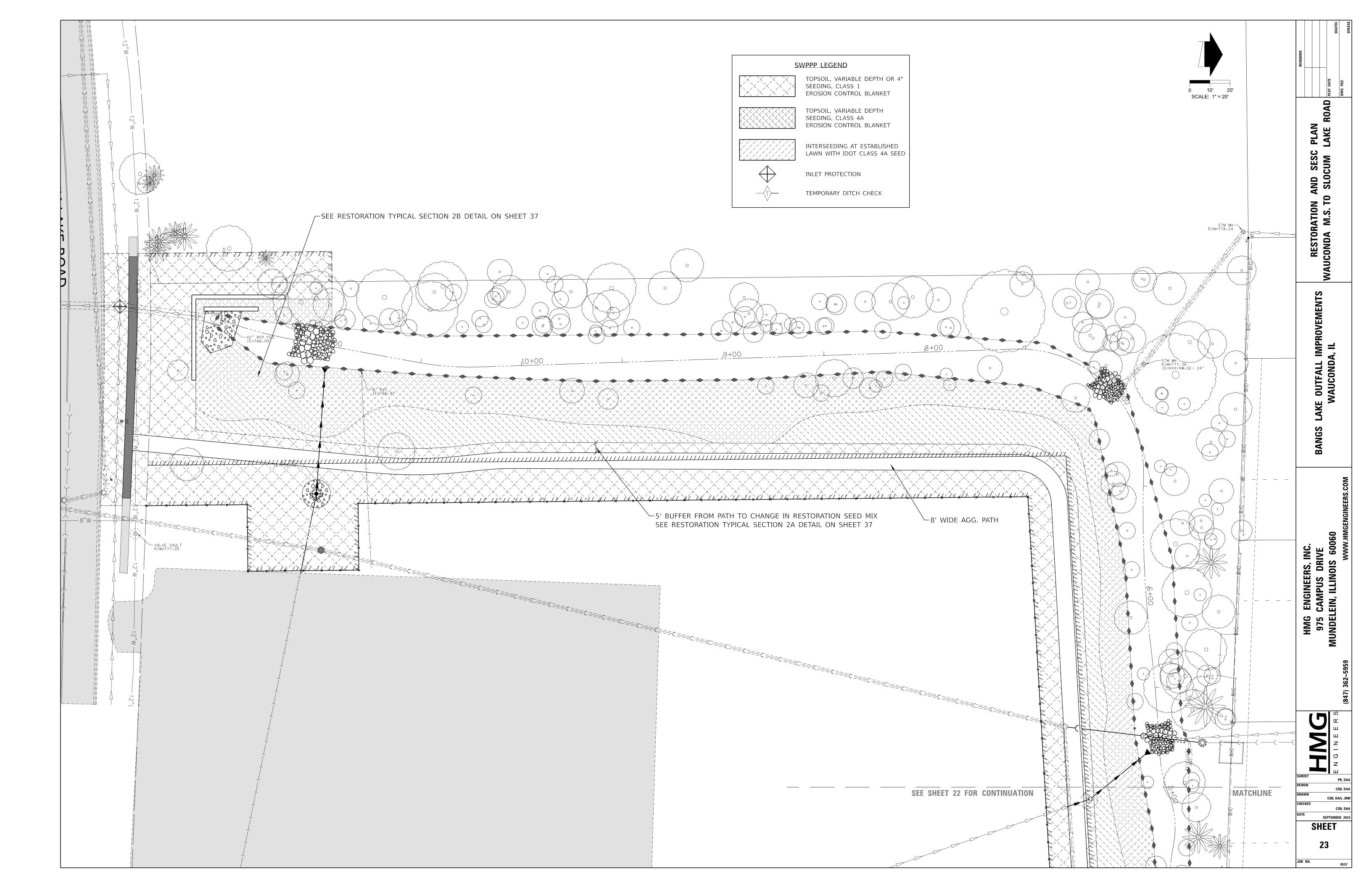


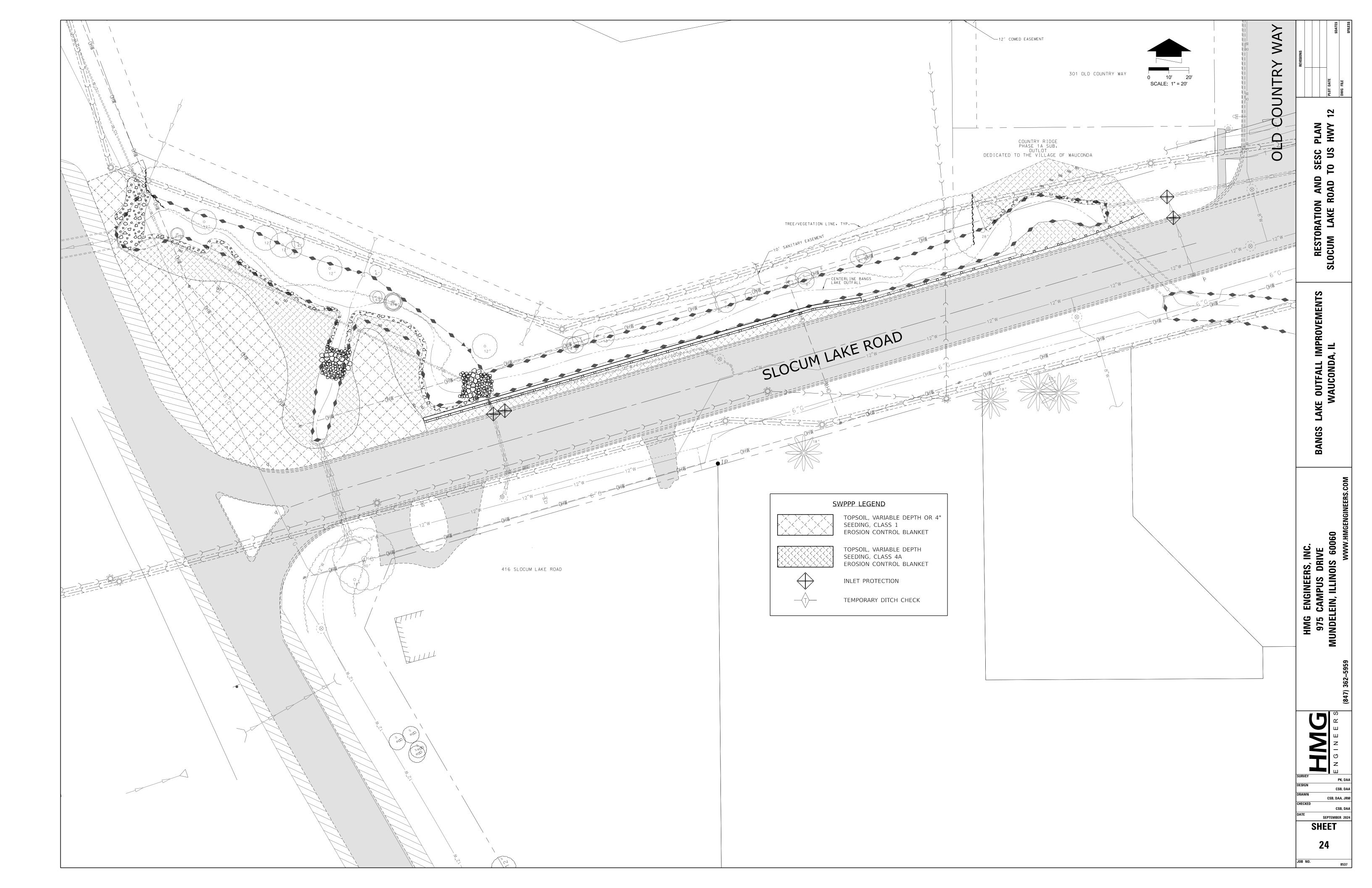


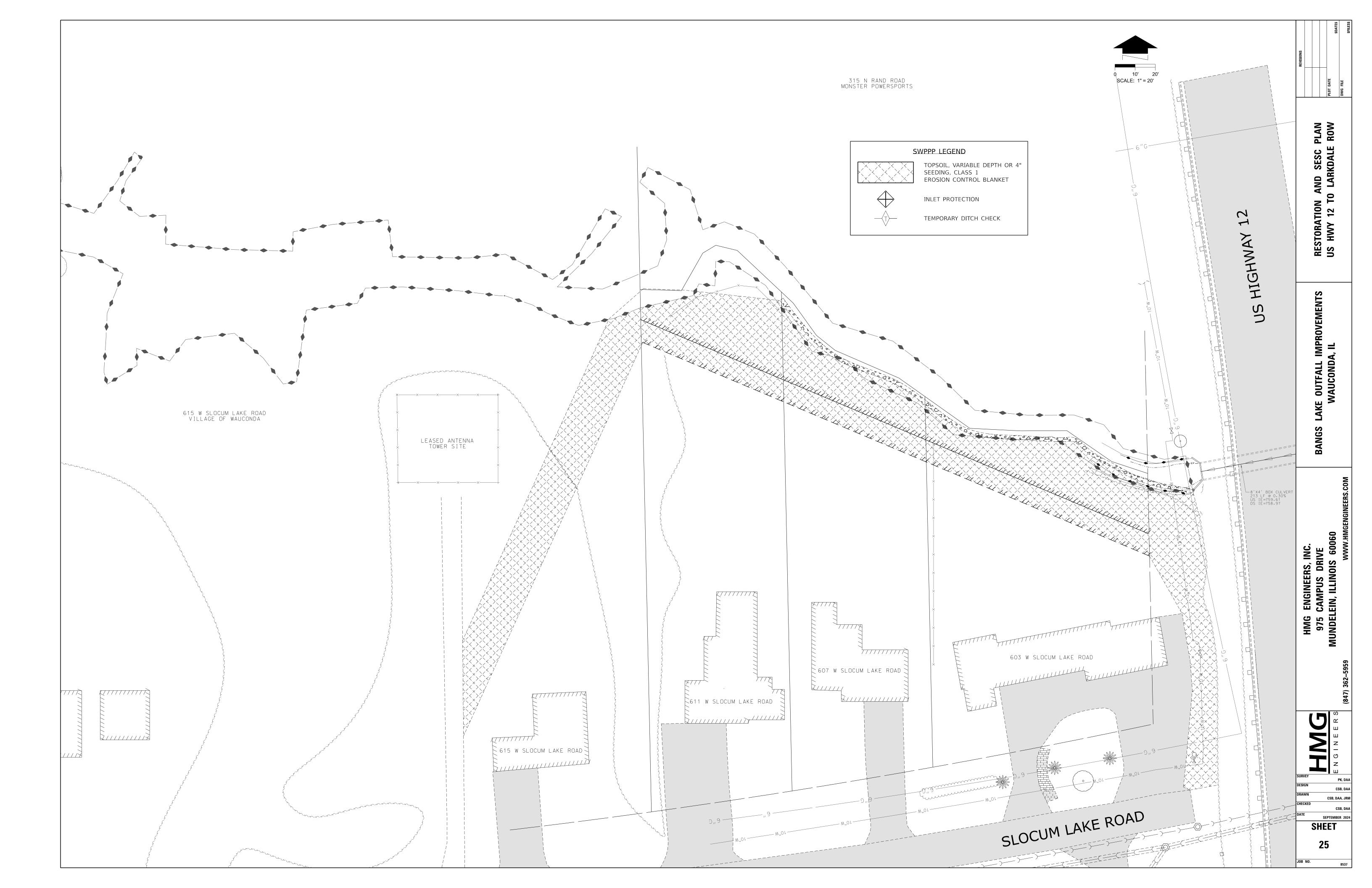


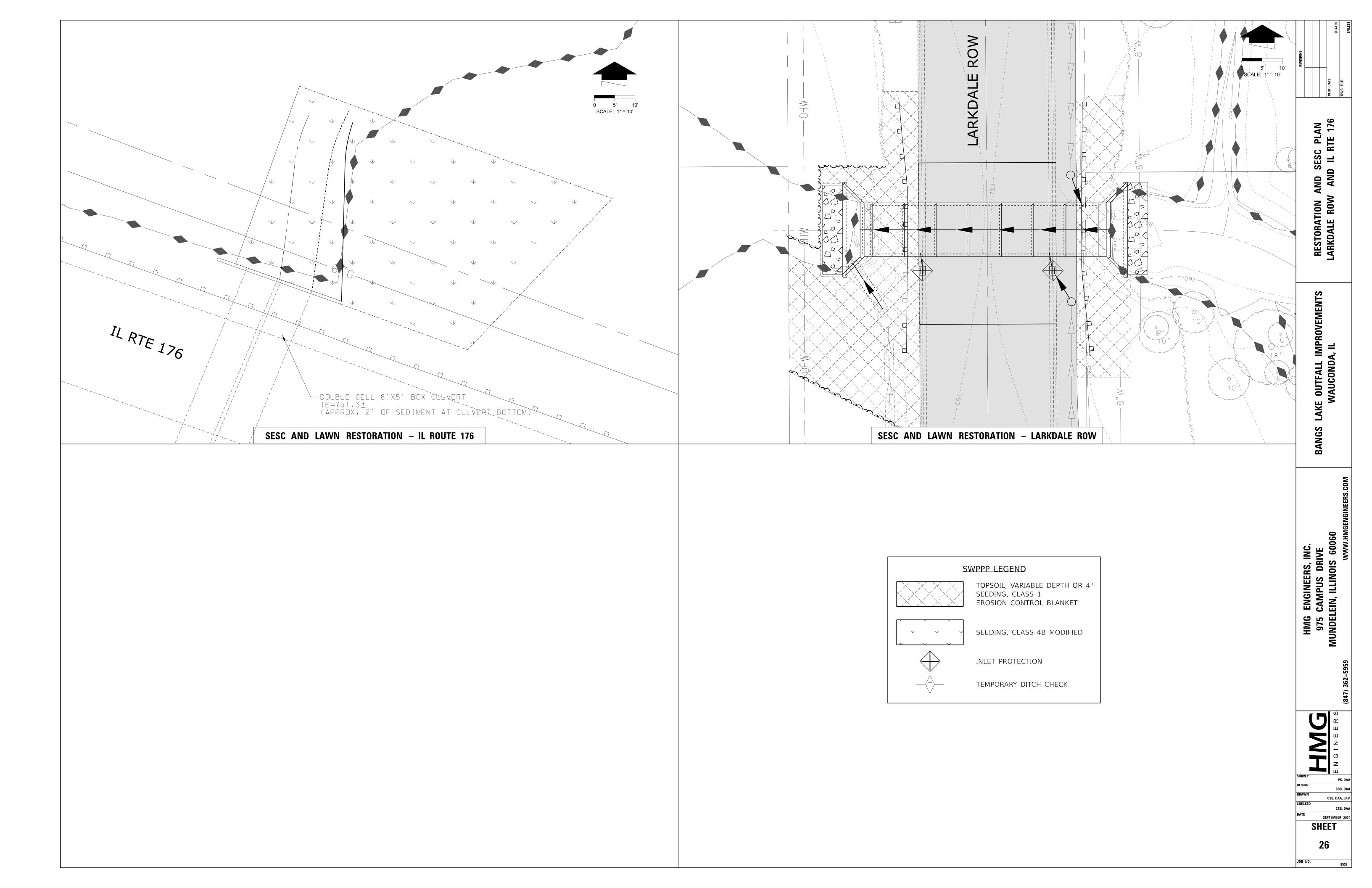


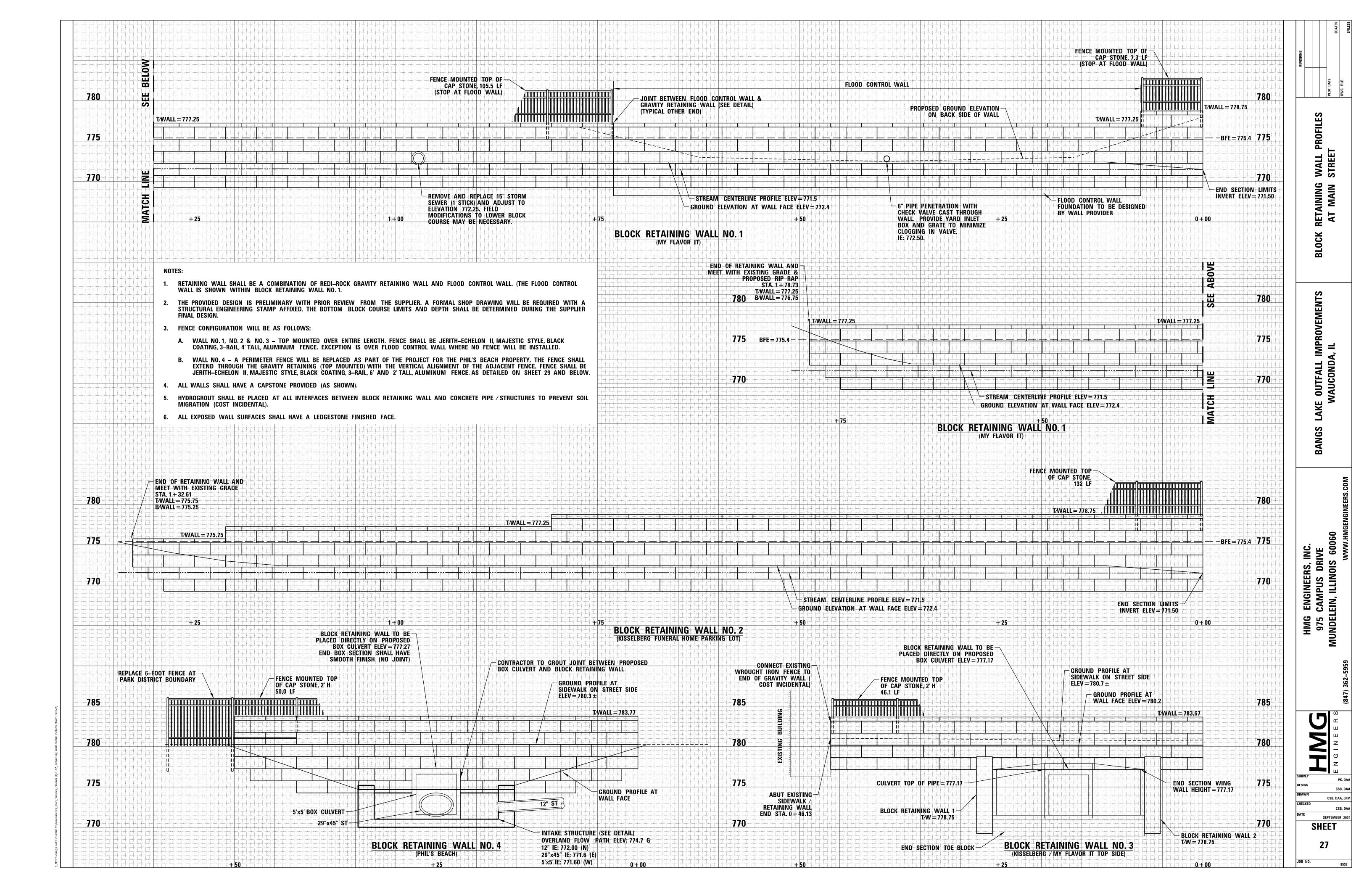


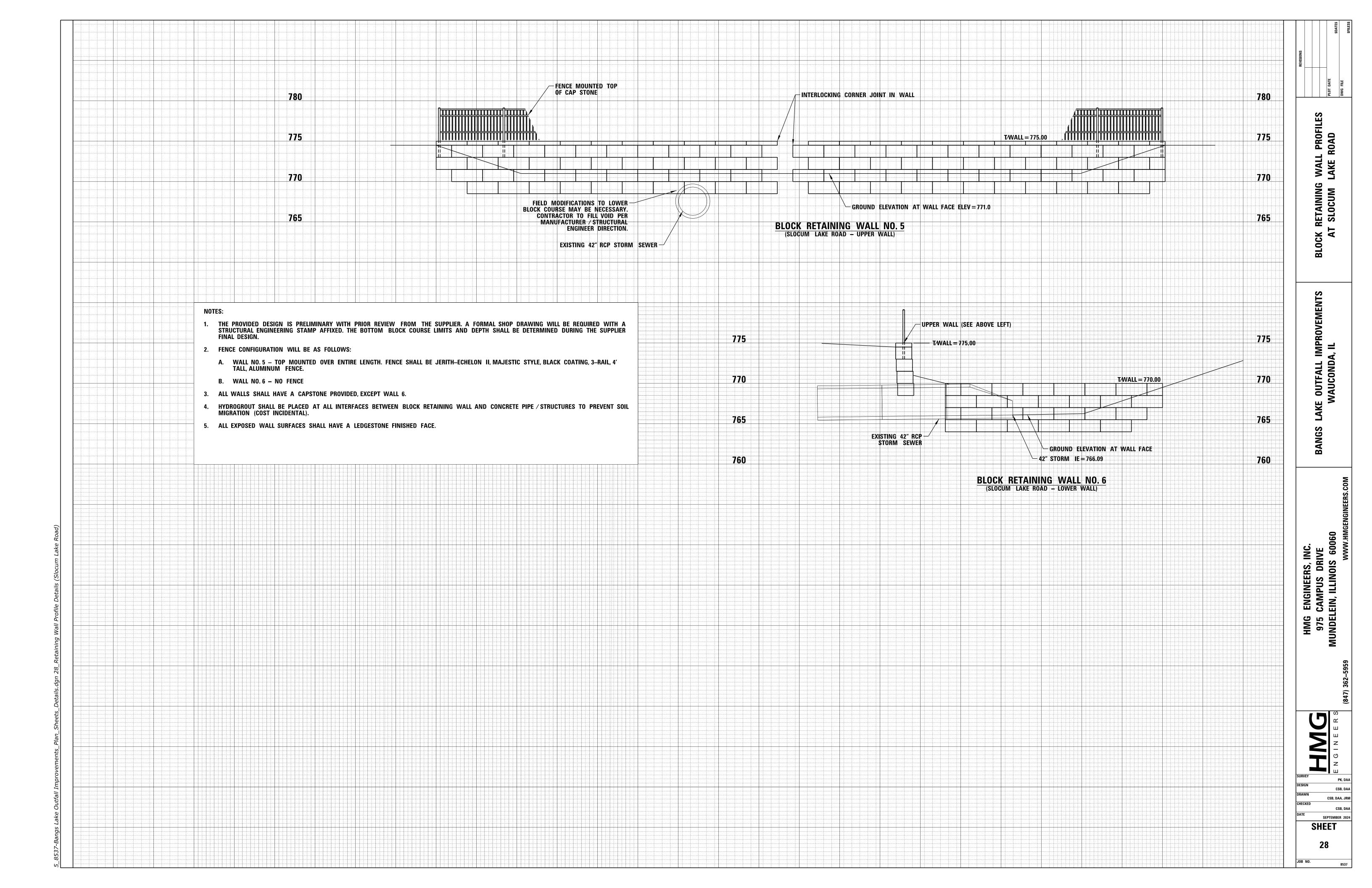


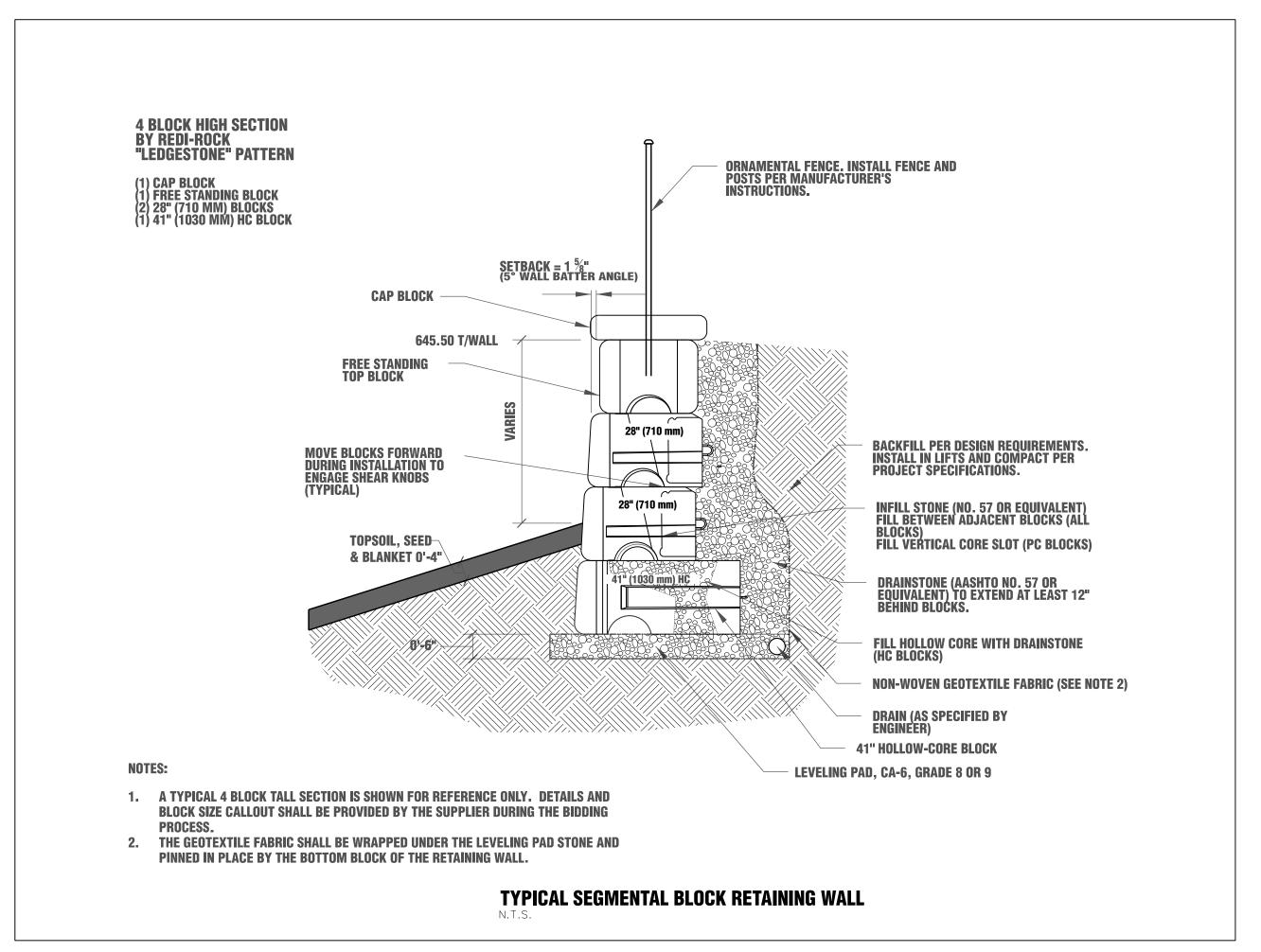




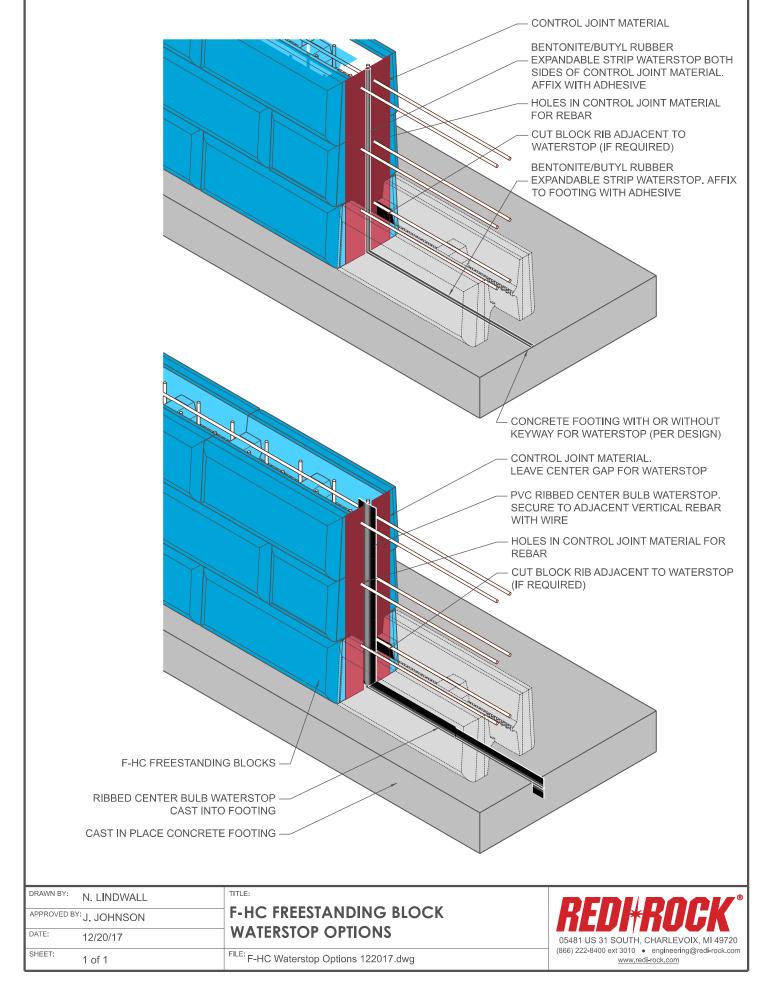


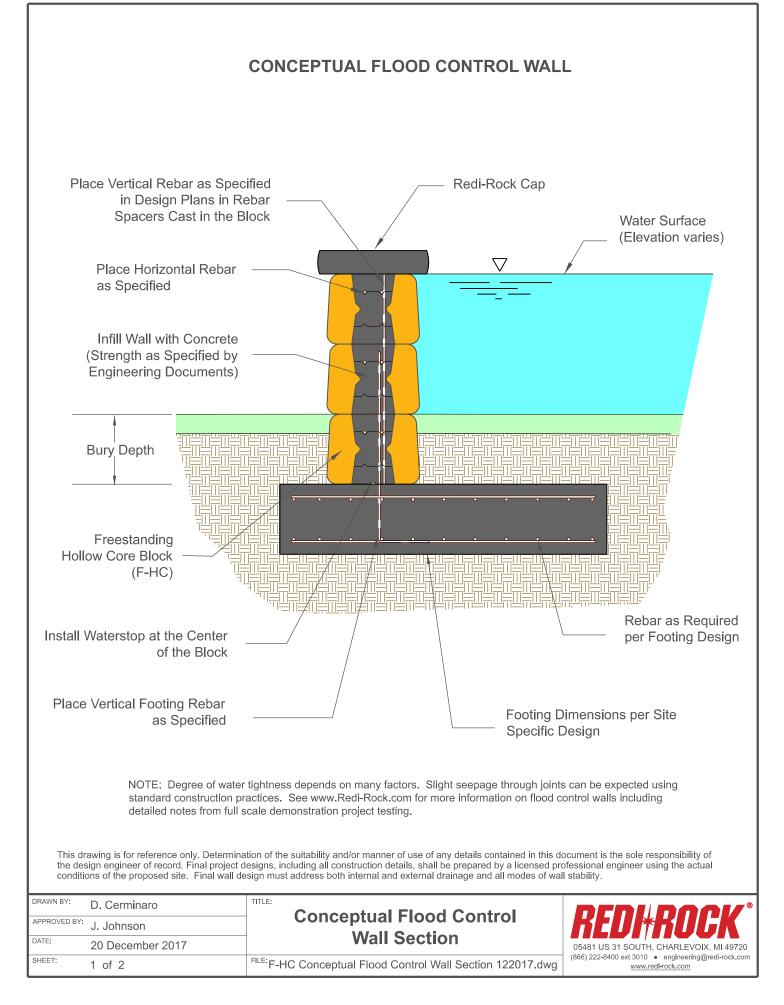


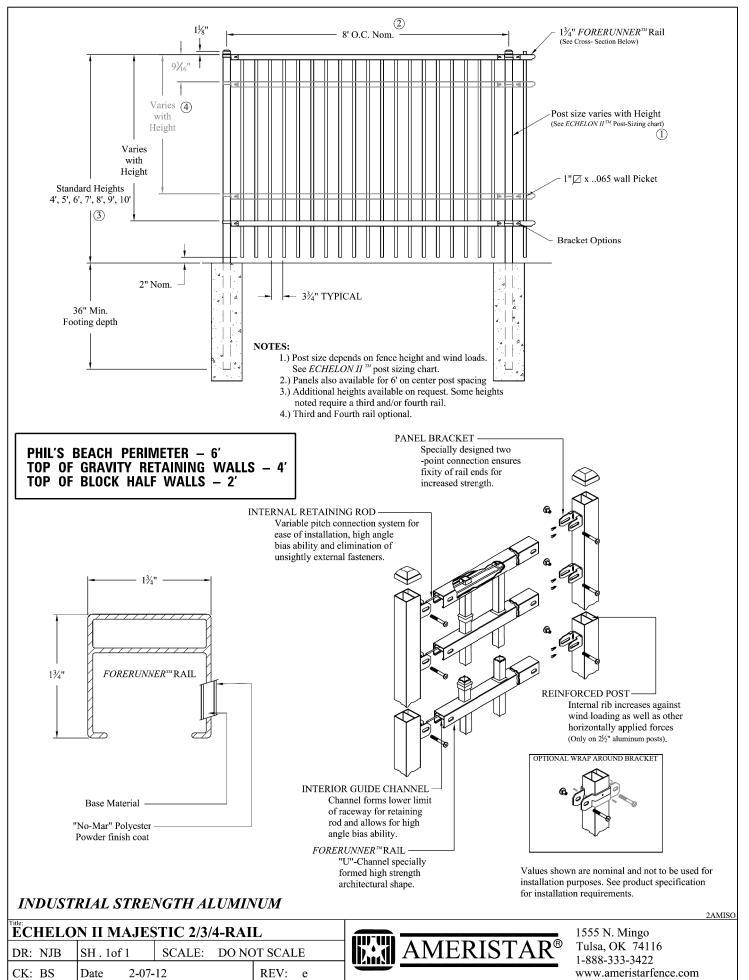




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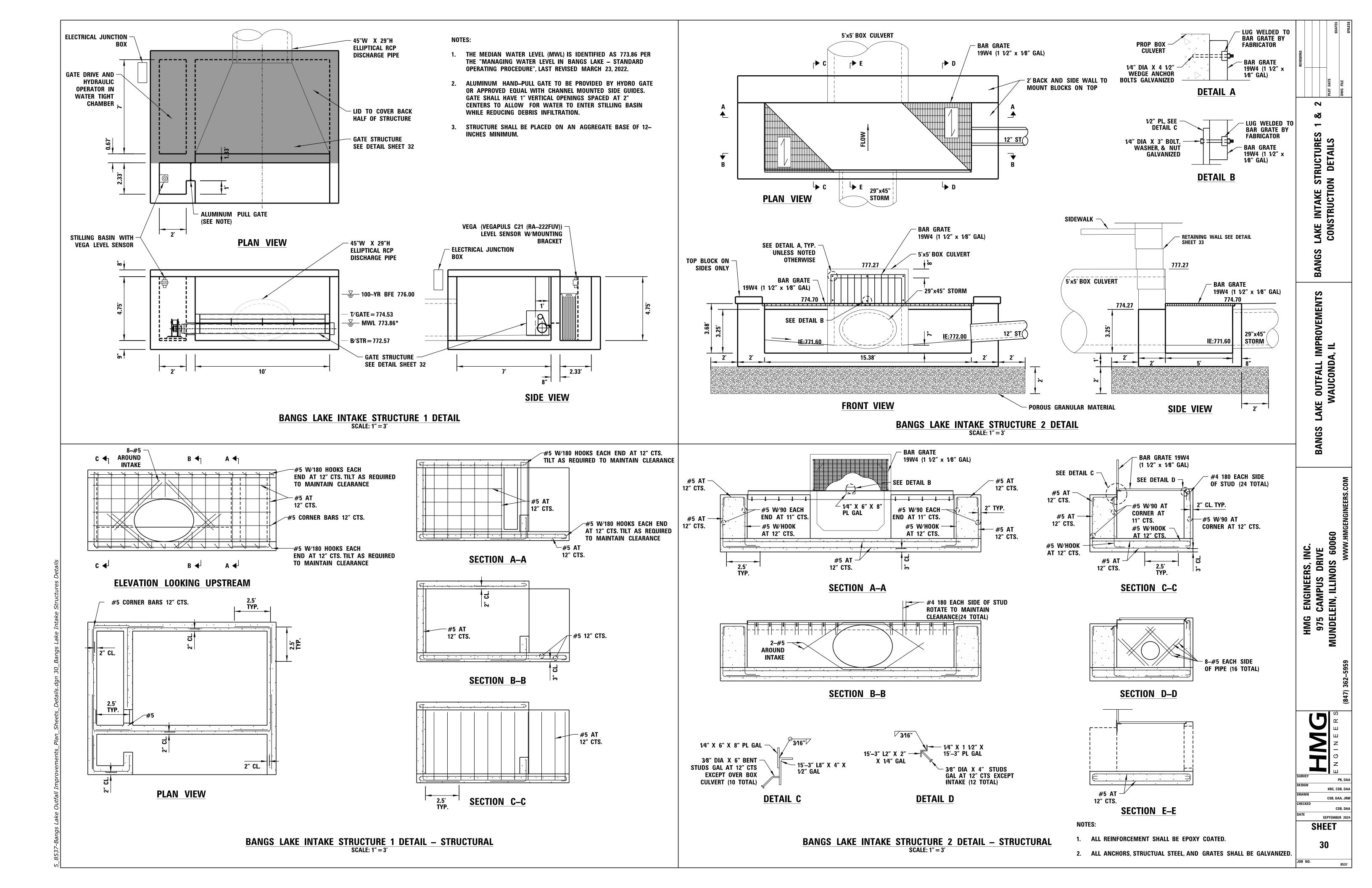
HMG ENGINEERS, INC. 975 CAMPUS DRIVE MUNDELEIN, ILLINOIS 60060

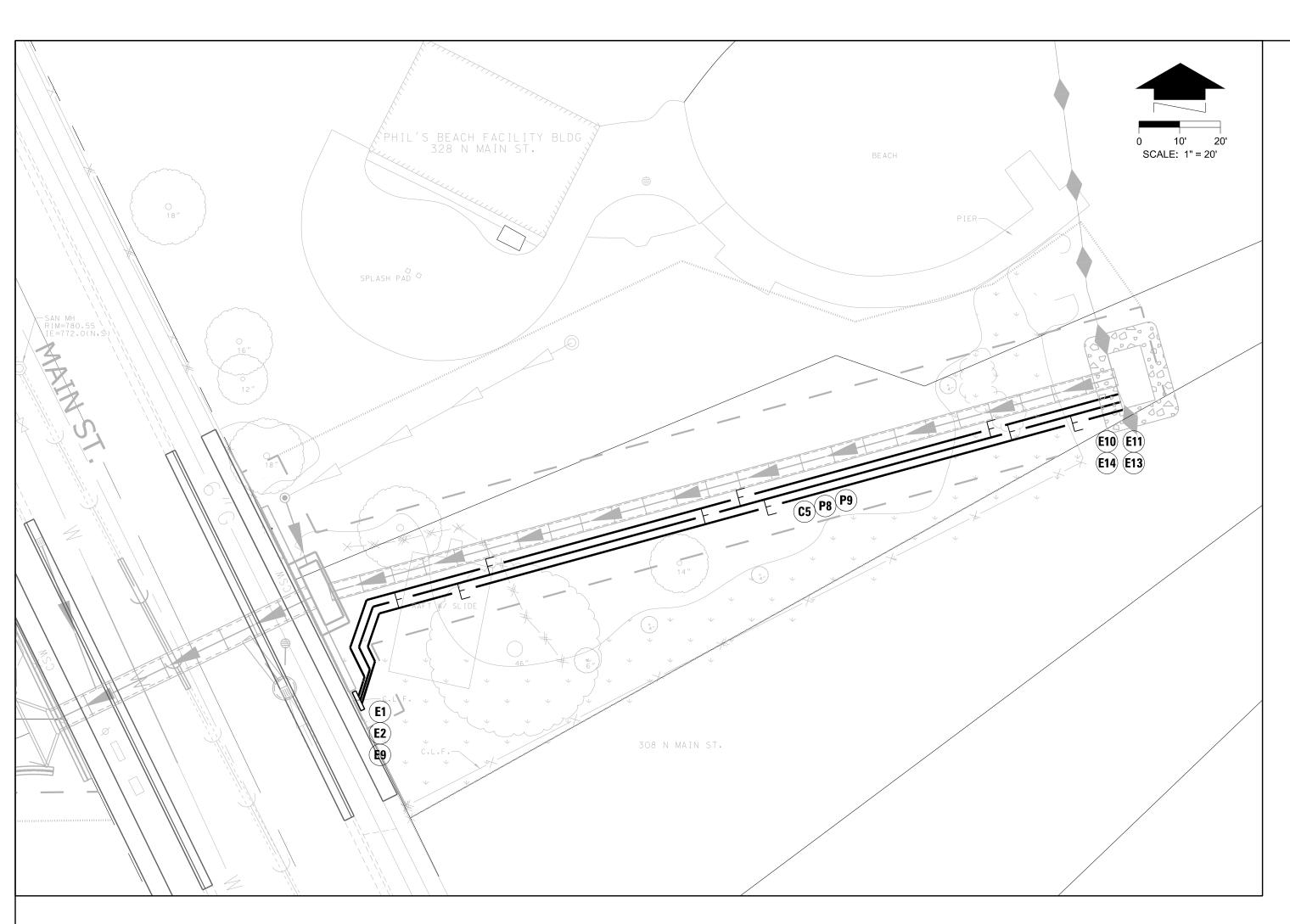
BLOCK RETAINING WALL AND ORNAMENTAL FENCING CONSTRUCTION DETAILS

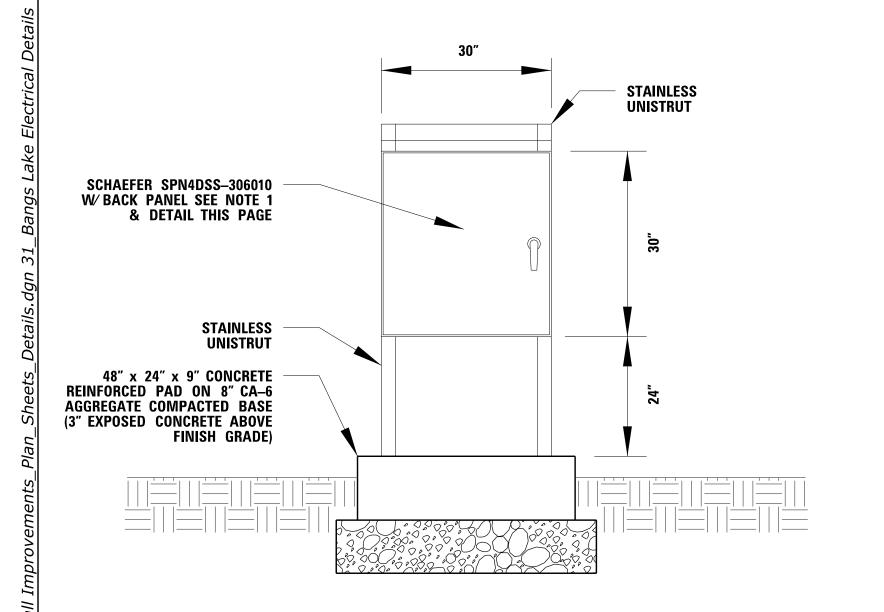
LAKE OUTFALL IMPROVEMENT WAUCONDA, IL

BANGS

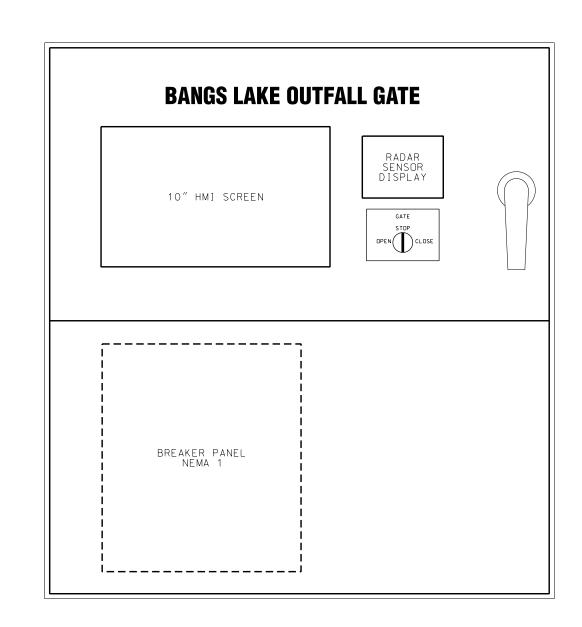
CSB, DAA, JRM CSB, DAA SHEET







COMBINATION CONTROL & GATE POWER PANEL N.T.S.



CONTROL & POWER PANEL ENLARGED LAYOUT N.T.S.

BANGS LAKE OUTFALL DISTRIBUTION PANEL SCHEDULE

	BUS AMPS:	200	ARAD				MOUNTING F	REMARKS MCP	
PANEL SCHEDULE	MAIN: VOLTAGE: PHASE:	200 / 120 / 1 PH/					SURFACE FLUSH	AIC 12 CKT	
LOAD DESCRIF	PTION		CKT. BKR.	CKT. NO.	CKT. NO.	CKT. BKR.	LOAD DE	SCRIPTION	

LOAD DESCRIPTION		CKT. BKR.		СКТ.	CKT. BKR.		LOAD DESCRIPTION	
LOAD DESCRIPTION	AMPS	POLES	CKT. NO.	NO.	AMPS	POLES	DLES LOAD DESCRIPTION	
PROP GATE CONTROL PANEL	20	1	1	2	20	1	SCADA EQUIPMENT	
VEGA RADAR SENSOR	20	1	3	4	20	1	ENCLOSURE LIGHT/HEATER	
SPARE	20	1	5	6	20	1	SPARE	
SPARE	20	1	7	8	20	1	SPARE	
SPD	20	2	9	10	20	1	SPARE	
SPD	20	2	11	12	20	1	SPARE	

EQUIPMENT

- E1. PROPOSED UTILITY METER
- E2. PROPOSED 200 AMP SERVICE DISCONNECT
- E9. NEW NEMA 4X STAINLESS STEEL CONTROL/SCADA PANEL
- E10. NEW NEMA 4X JUNCTION BOX WITH LOCAL DISCONNECTS SUPPLICED BY GATE MANUFACTURER
- E11. NEW NEMA 4X JUNCTION BOX
- E12. GROUND ROD
- E13. VEGA RADAR LEVEL SENSOR
- E14. STEEL-FAB CREST GATE & REXA ACTUATOR

CONDUITS

- P1. 4 3/0 AWG THWN IN 3" GRS CONDUIT WITH EXPANSION COUPLING (EXISTING)
- P2. 4 3/0 AWG THWN IN 3" GRS CONDUIT WITH EXPANSION COUPLING (EXISTING)
- P3. 4 3/0 AWG THWN IN 3" GRS CONDUIT WITH EXPANSION COUPLING (EXISTING) P8. MANUFACTURER FEEDBACK CABLE IN 2" GRS CONDUIT WITH EXPANSION COUPLING
- P9. MANUFACTURER ACTUATOR/STEPPER CABLE IN 2" GRS CONDUIT WITH EXPANSION COUPLING
- P11. 2" GRS CONDUIT WITH GATE ACTUATOR/STEPPER CORD
- P12. 2" GRS CONDUIT WITH MANUFACTURER FEEDBACK CABLE
- P14. #4 GRND IN 3/4" CONDUIT
- C5. 1" GRS CONDUIT WITH RADAR SENSOR, 3C #16 SHIELDED, 12 #14 THWN C6. 1" GRS CONDUIT WITH RADAR SENSOR

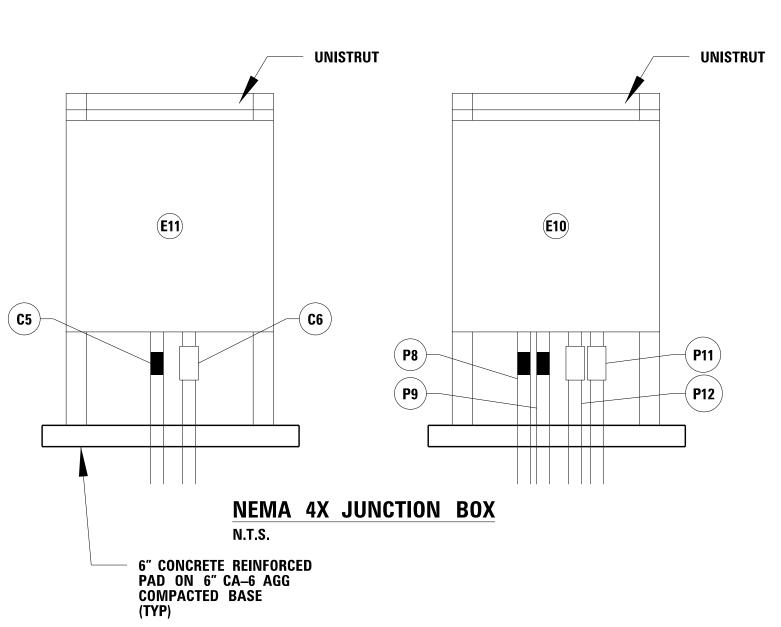
- 1. THE BANGS LAKE INTAKE STRUCTURE CONTRACTOR AND CONCENTRIC WILL BE RESPONSIBLE FOR ALL INTEGRATION WORK OF THE NEW SCADA SYSTEM AND NEW RADIO EQUIPMENT. THE CONTRACTOR SHALL COORDINATE THIS WORK WITH CONCENTRIC AND INCLUDE THIS WORK IN THEIR BID. NEW SCADA SYSTEM SHALL MATCH EXISTING FEATURES & SCREENS. CONTRACTOR SHALL CONTACT JIM GRAMHOFER (815-444-4447) (JGRAMHOFER@GOCONCENTRIC.COM) TO OBTAIN A PROPOSAL FOR SCADA WORK / SERVICES AND INCLUDE THIS COST AND SCOPE IN THEIR BID. ALL ELECTRICAL EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS AS DETERMINED BY THE AUTHORITY HAVING JURISDICTION.
- 2. THE ELECTRIC SERVICE SHALL BE INSTALLED AS 120 / 240 V, 1 PHASE, 200 AMP.
- 3. THE GATE CONTROL ENCLOSURE SHALL BE INSTALLED NEAR THE PROPOSED WALL 4 ADJACENT TO MAIN STREET.
- 4. THE CONCRETE PAD SHALL BE FURNISHED WITH A GROUND ROD, AND ALSO A CONCRETE-ENCASED ELECTRODE IN ACCORDANCE WITH NEC ARTICLE 250.52(A)(3), EITHER METHOD.
- 5. THE NEW SCADA EQUIPMENT AND NEW RADIO EQUIPMENT TO BE PROVIDED BY CONCENTRIC AND INSTALLED BY CONTRACTOR IN THE CONTROL PANEL.

UTILITY CONNECTION **UTILITY TRANSFORMER** 200 AMP SERVICE DISCONNECT 120 /240 V, 1 PHASE

PROPOSED ELECTRICAL ONE—LINE DIAGRAM

CONTROL PANEL NOTES:

- 1. THE CONTROL PANEL BUILDER SHALL SIZE ALL INTERNAL WIRING PER NEC, UNLESS OTHERWISE NOTED.
- 2. THE CONTROL PANEL SHALL BE UL-508 AND UL-913 LISTED AND LABELED.
- 3. ALL TERMINATIONS AT ALL EQUIPMENT SHALL BE MADE FINGER SAFE.
- 4. ELECTRICAL SYSTEMS AND COMPONENTS INSTALLED IN AND EXTENDING FROM THE WETWELL SHALL COMPLY WITH NEC REQUIREMENTS FOR CLASS 1, DIVISION 1 GROUP D LOCATIONS.
- 5. ALL EQUIPMENT SHALL BE NEMA RATED AND SIZED PER NEC REQUIREMENTS.
- 6. SEE ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND DETAILS.
- 7. CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS OF THE PUMP CONTROL PANEL INCLUDING ALL ELECTRICAL DIAGRAMS AND LIST OF COMPONENTS. A COMPLETE ELECTRICAL DIAGRAM SHALL BE PROVIDED IN THE CONTROL CABINET.

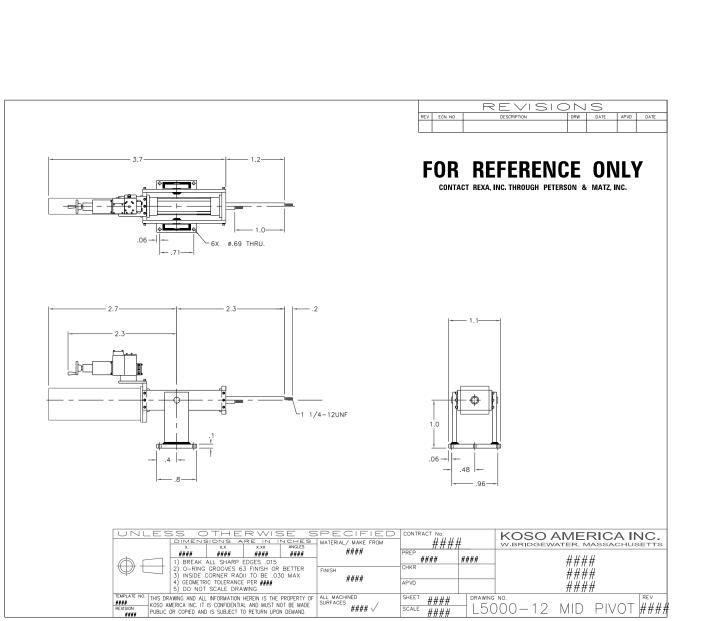


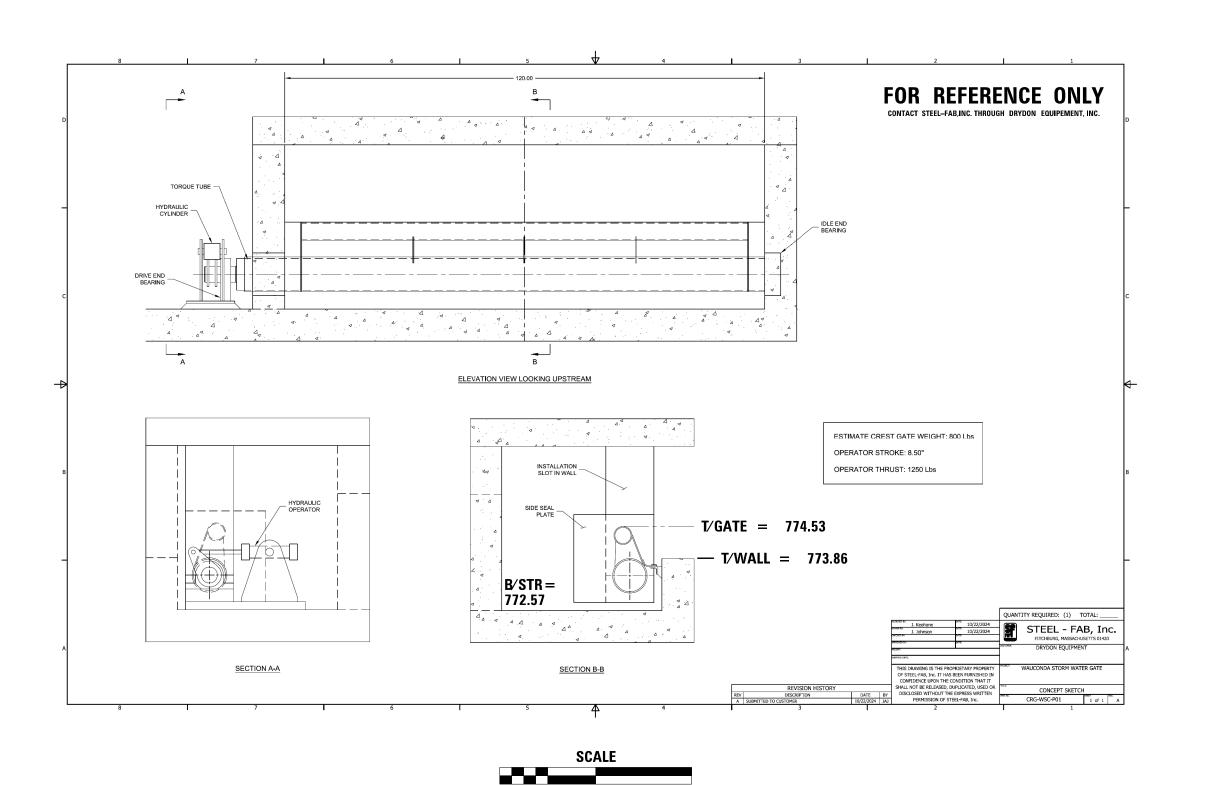
BANGS LAKE INTAKE ELECTRICAL DETAILS

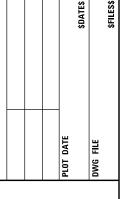
E OUTFALL IMPR WAUCONDA, IL

HMG ENGINEERS, INC. 975 CAMPUS DRIVE MUNDELEIN, ILLINOIS 60060

SDJ, CSB, DAA CSB, DAA, JRM CSB, DAA SEPTEMBER 202







BANGS LAKE INTAKE GATE EQUIPMENT DETAILS

BANGS LAKE OUTFALL IMPROVEMENTS WAUCONDA, IL

HMG ENGINEERS, INC. 975 CAMPUS DRIVE MUNDELEIN, ILLINOIS 60060

4 E E R S (847) 362-5959

SURVEY

SURVEY

PK, DAA

DESIGN

CSB, DAA

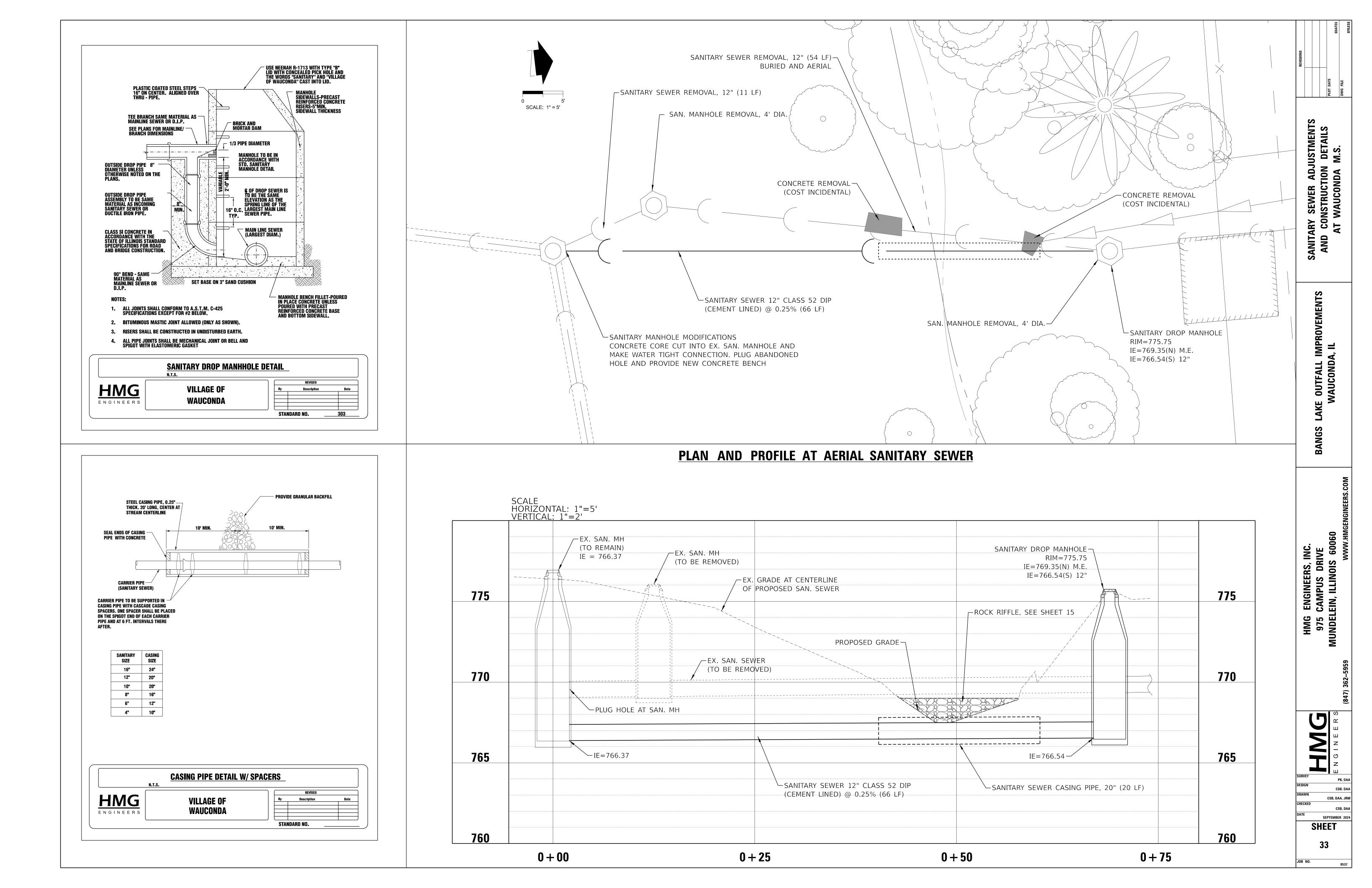
DRAWN

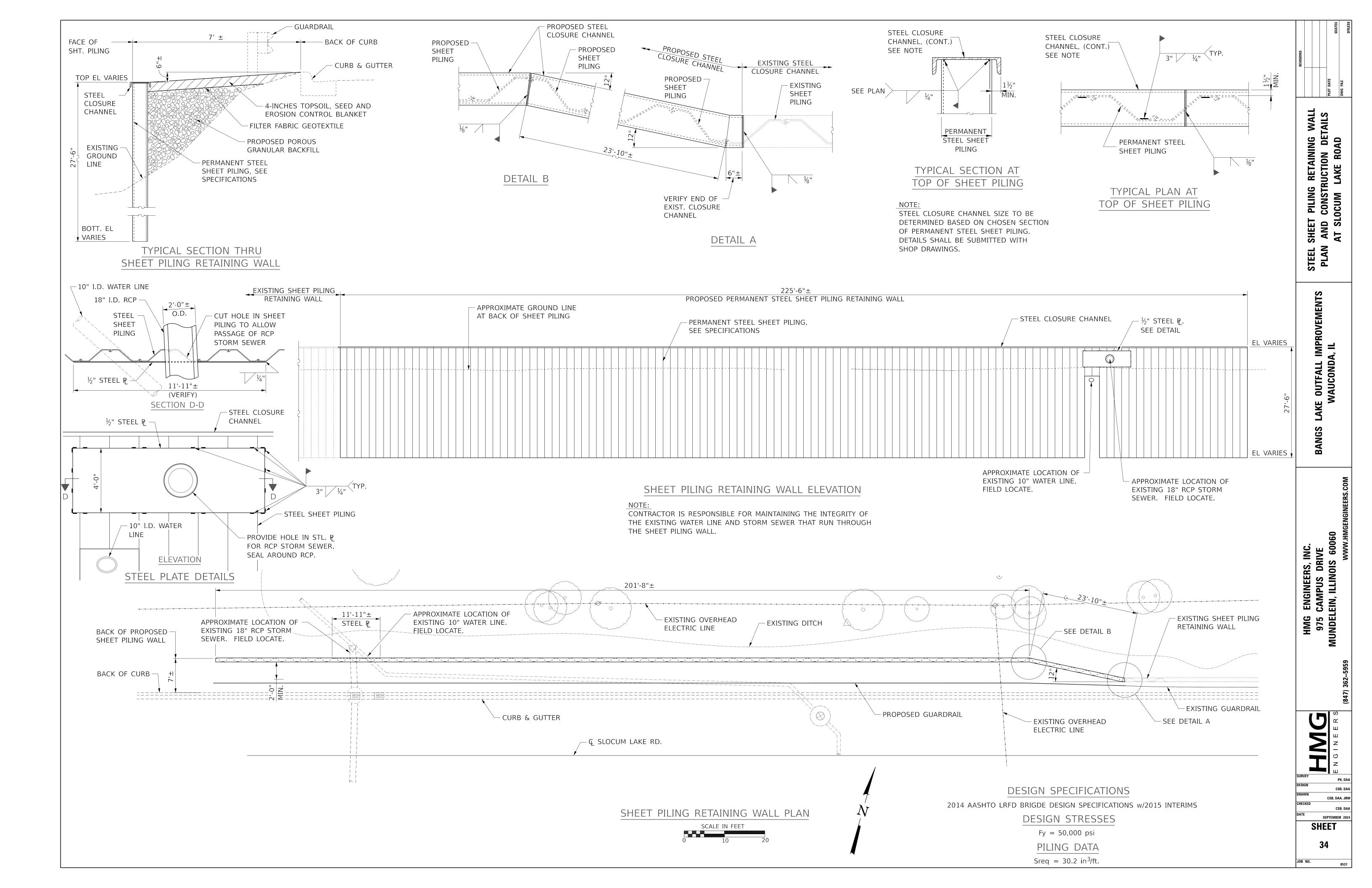
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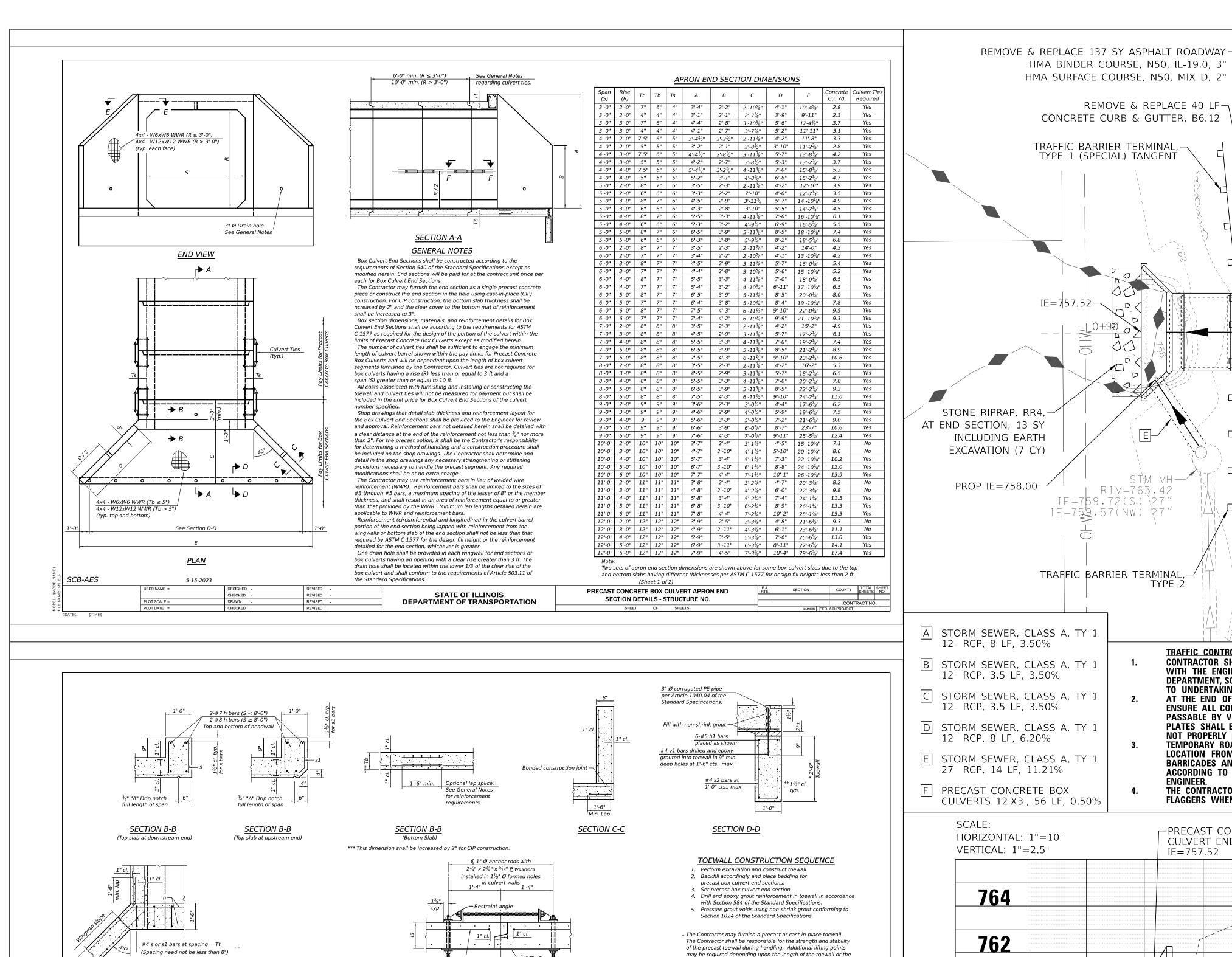
CSB, DAA

DATE

SHEET







- — € Joint

2½" x 2½" x ½16"

SECTION F-F
(Showing culvert tie details)

RESTRAINT ANGLE DETAIL

TIE PLATE DETAIL

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

 $\underbrace{C}_{1}^{1/4}$ " x $2^{1/2}$ " Slotted hole, typ.

∠ 6" x 4" x ½"-

SECTION E-E

SCB-AES

BAR s1

BAR s2

BAR s3

Contractor may need to modify the design of the toewall for the

** If soil conditions permit, the sides of the toewall may be poured

directly against the soil. The clear cover on the sides of the toewall shall be increased to 3" by increasing the thickness of

proposed handling method.

1" Ø anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for the tie plate and restraint angle shall conform to the

requirements of Article 1006.04 of the Standard Specifications, All components of the

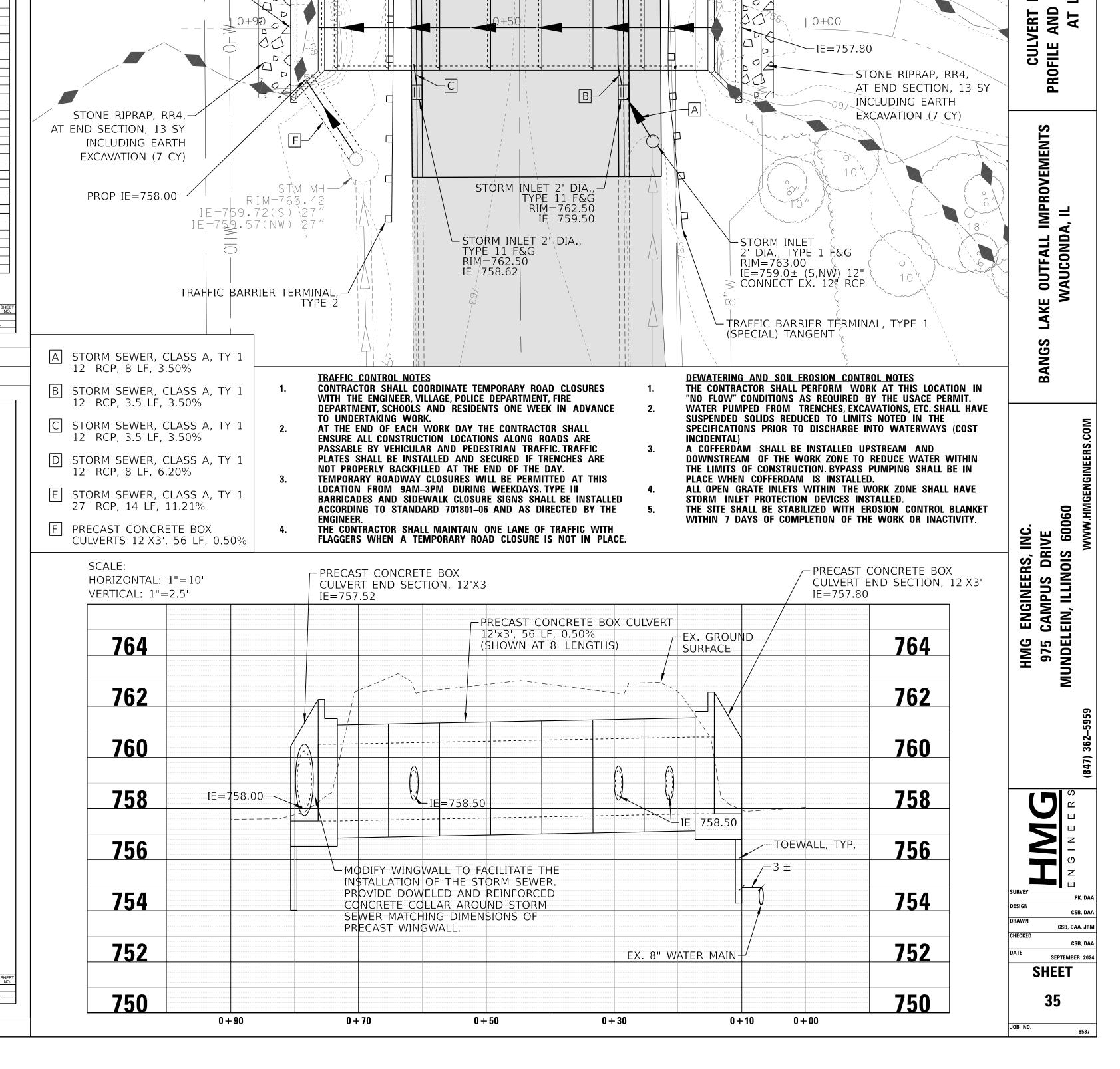
bits in lieu of using formed holes

(Sheet 2 of 2)
PRECAST CONCRETE BOX CULVERT APRON END

SECTION DETAILS - STRUCTURE NO.

culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable. $2^{1/4}$ " $x^{2/4}$ " $x^{5/6}$ " plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight

condition followed by an additional $\frac{1}{2}$ turn on one of the nuts for anchor rods installed in the walls. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core



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ARKD

-REMOVE & REPLACE 40 LF

TYPE 1 F&G

RIM=763.05

TYPE 2

CONCRETE CURB & GUTTER, B6.12

-TRAFFIC BARRIER TERMINAL,

-REMOVE & REPLACE 200 SF

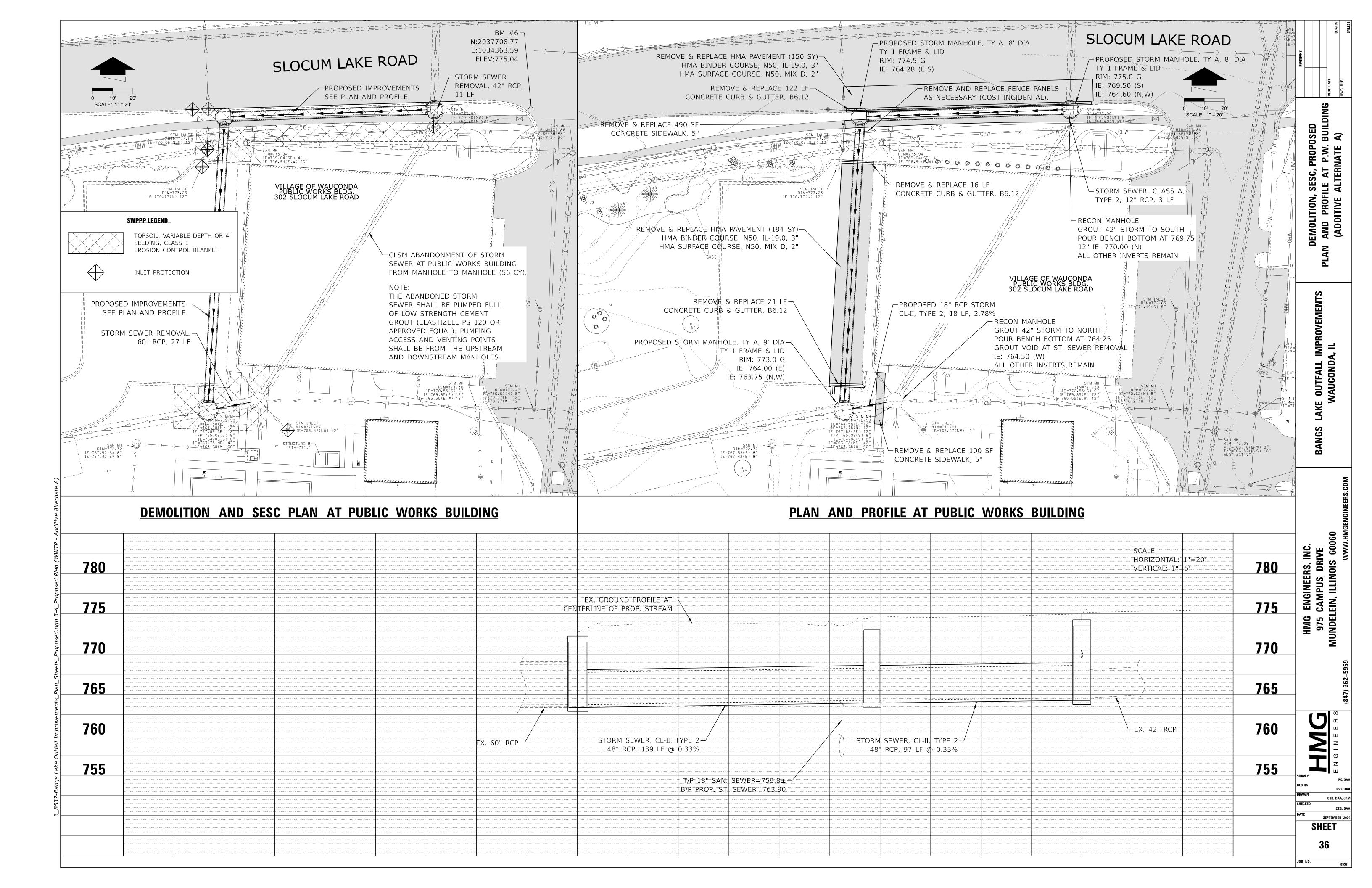
CONCRETE SIDEWALK, 5"

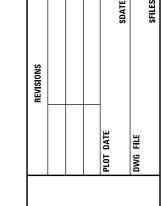
STORM INLET, 2' DIA.

IE=759.0± (N,SW) 12" CONNECT EX. 12" RCP SCALE: \1" = 10'

AN, DET,

REPLACEMENT PI CONSTRUCTION LARKDALE ROW





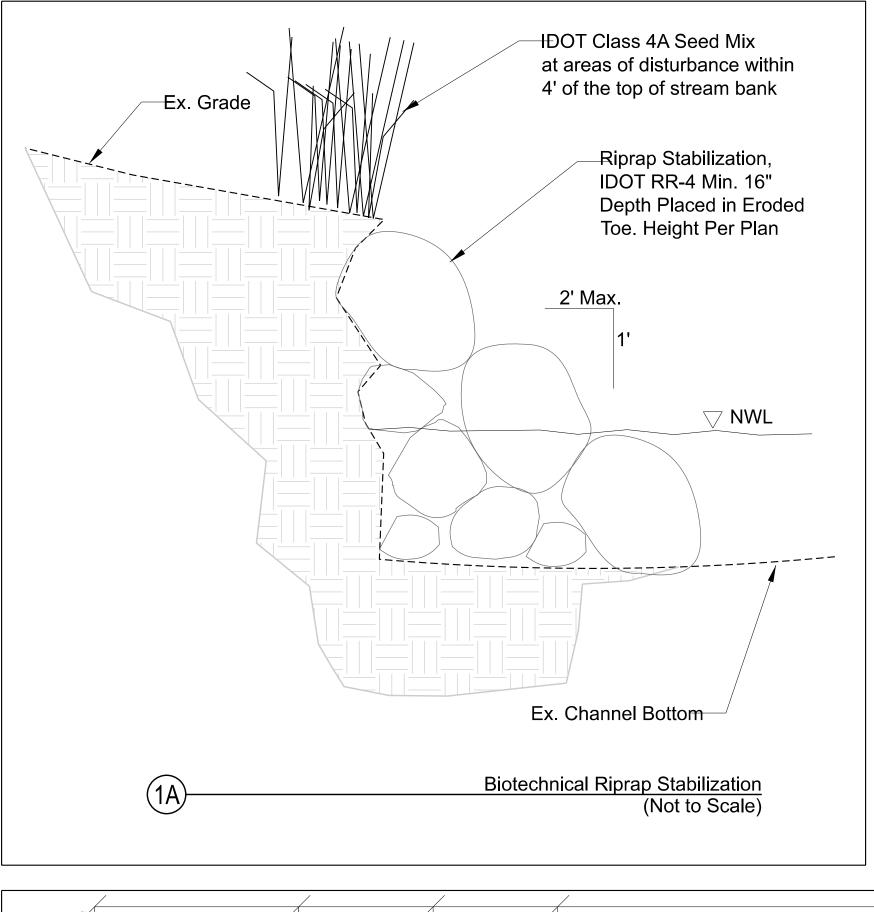
SECTIONS CROSS

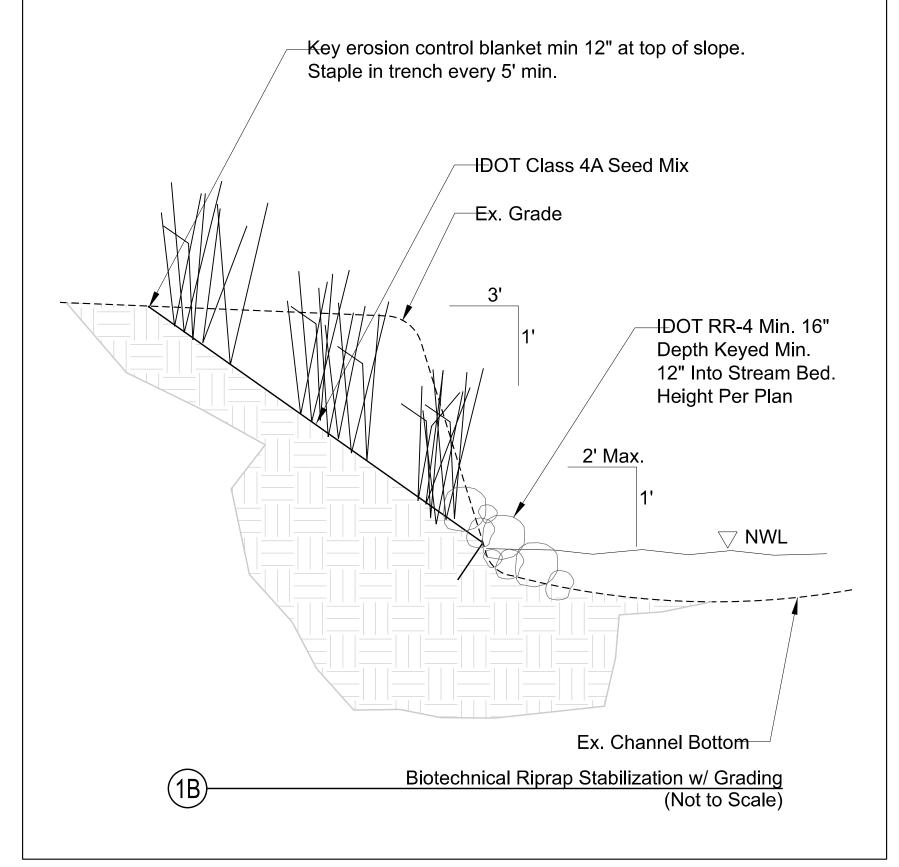
TYPICAL

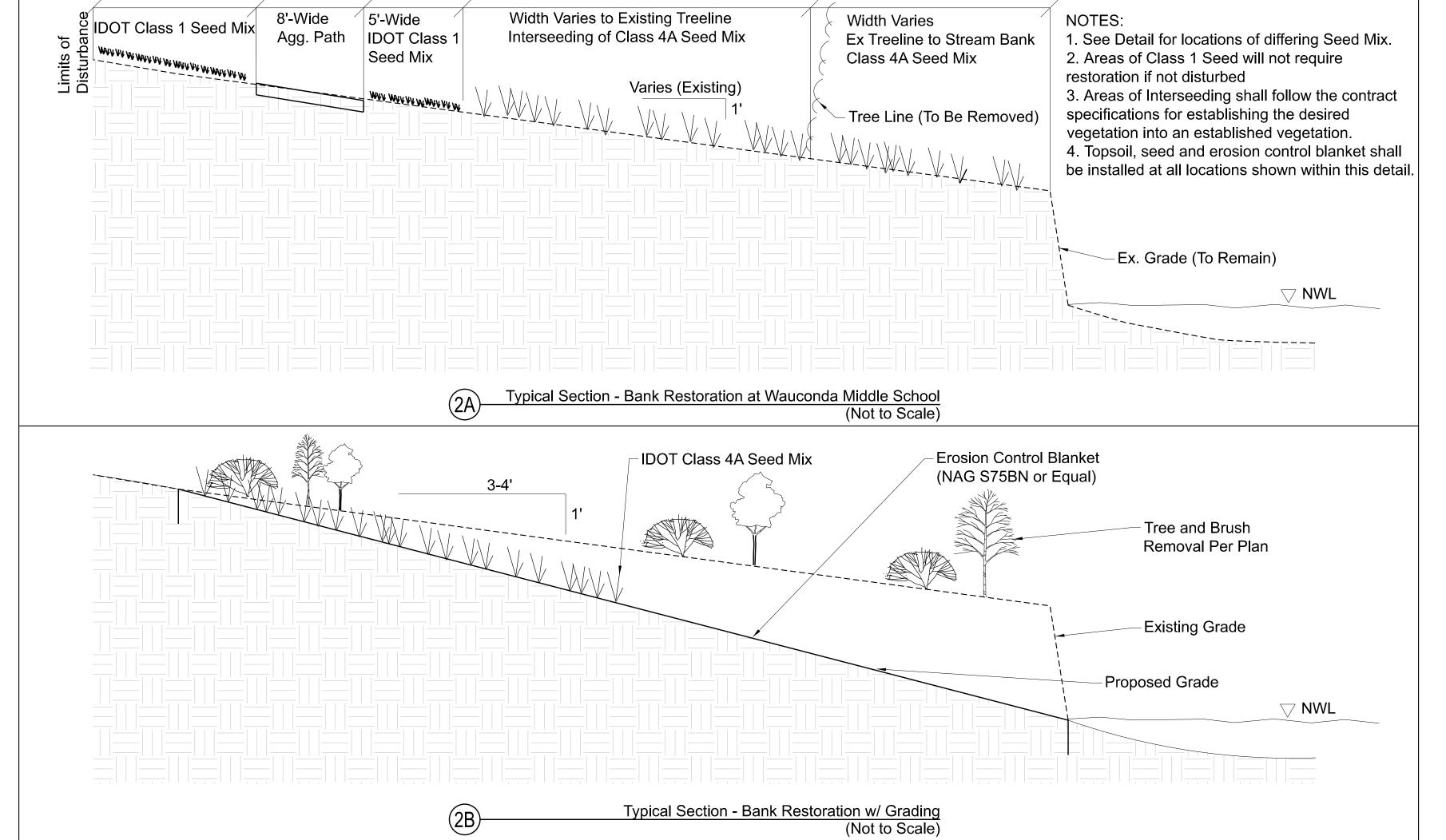
LAKE OUTFALL IMPROVEMENTS WAUCONDA, IL

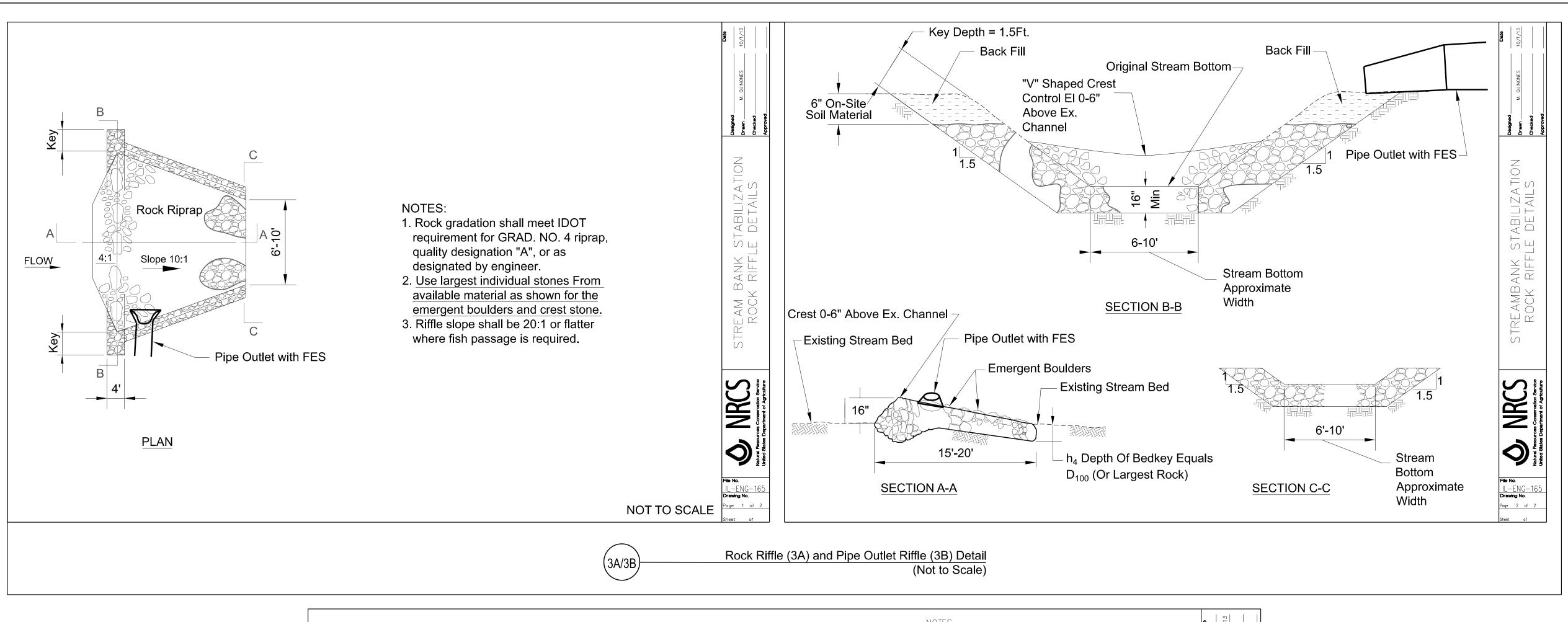
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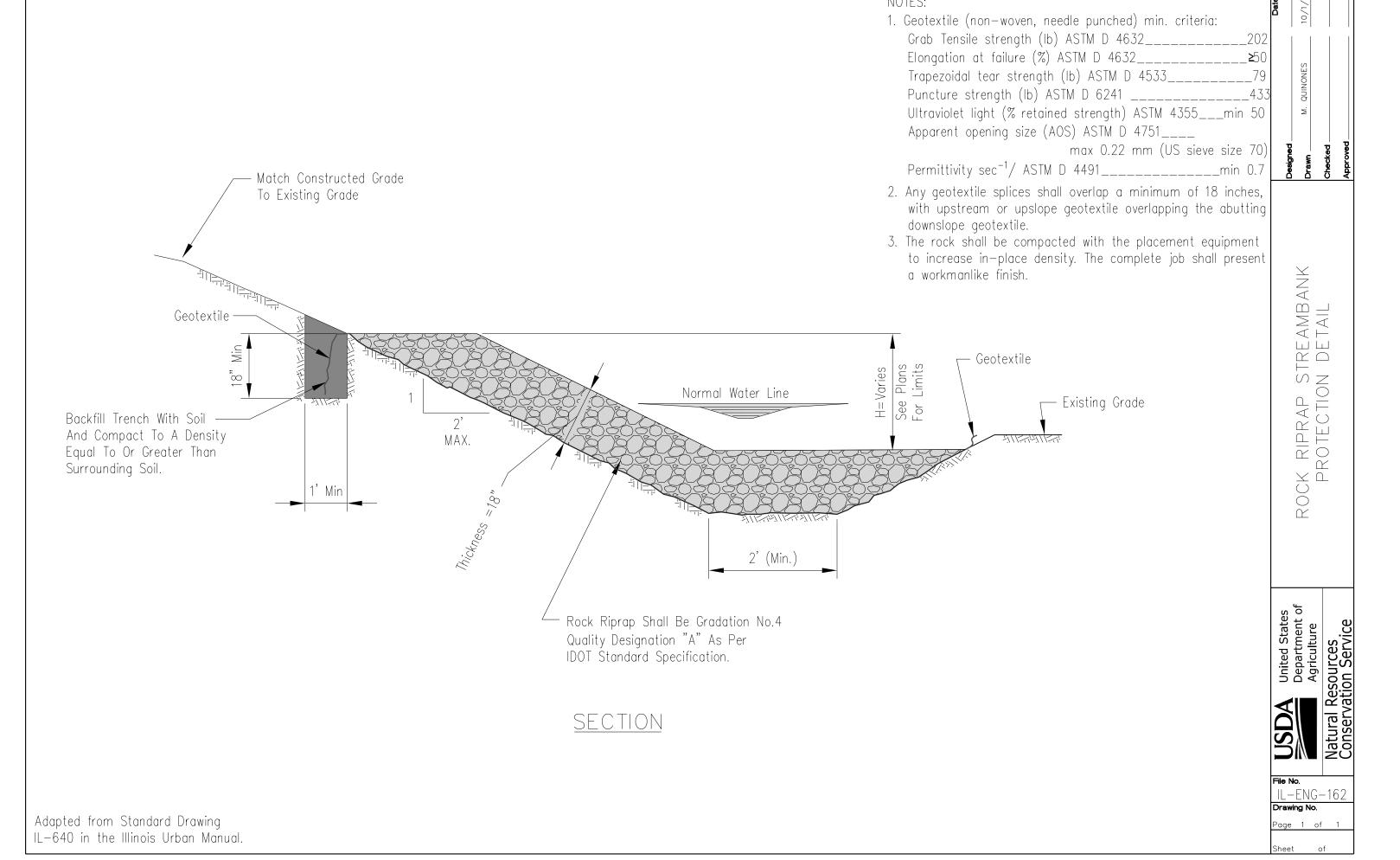
37







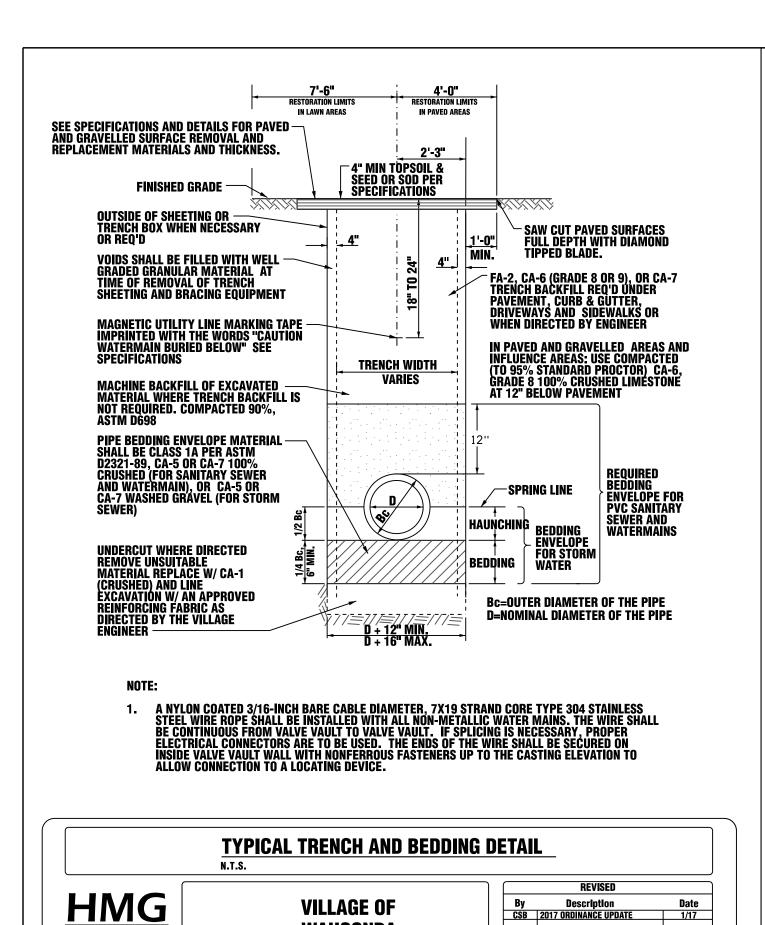




STREAMBANK STABILIZATION CONSTRUCTION DETAILS

LAKE OUTFALL IMPROVEMENTS WAUCONDA, IL

CSB, DAA, JRM



WAUCONDA

SECTION

VILLAGE OF

WAUCONDA

STORM INLET, TYPE A

STANDARD NO.

4" GRAVEL, SAND OR

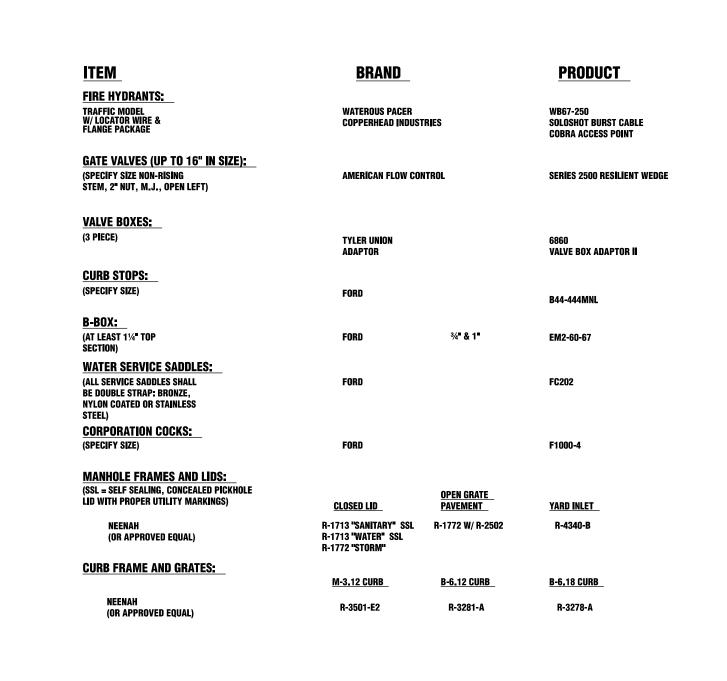
CRUSHED STONE BASE

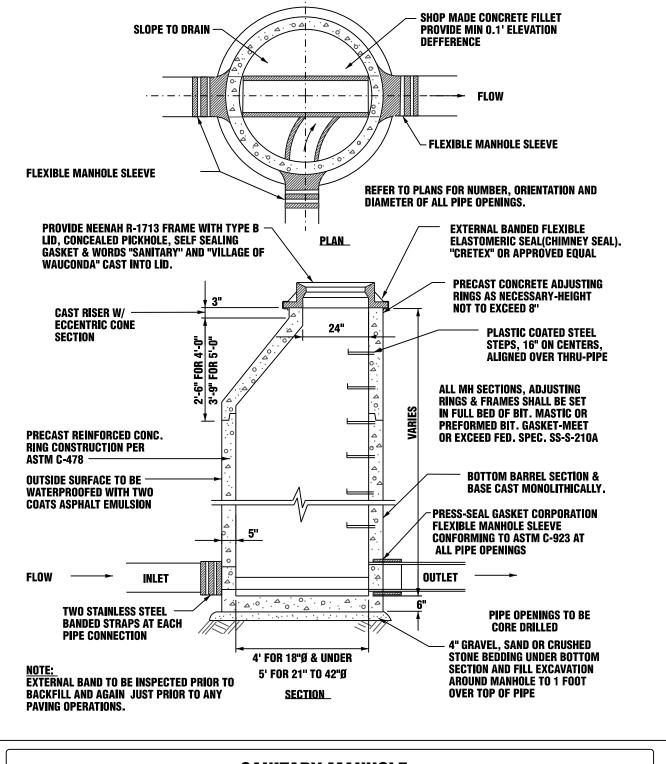
FOR LEVEL SURFACE

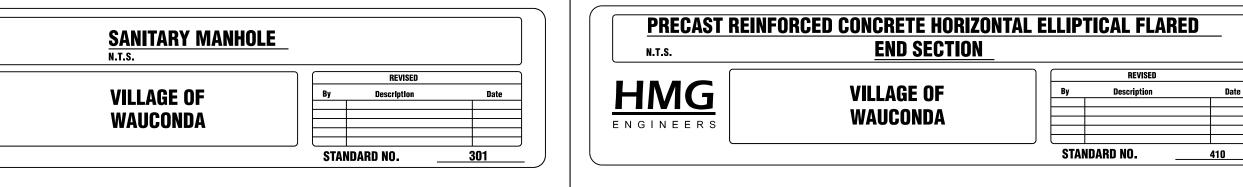
HMG

ENGINEERS

ENGINEERS







NOTE: END CONNECTION TO FIT PIPE USED

SLOPE X TO Y

8"<36"

1. PRECAST CONCRETE FLARED END SECTIONS SHALL CONFORM TO THE APPLICABLE REQUIREMENT OF AASHTO M-2.07

INSTALLATION. THE END BLOCK SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE FLARED END SECTION.

2. PRECAST CONCRETE FLARED END SECTION FOR ELLIPTICAL PIPE REQUIRED SHALL BE AS INDICATED ON DETAIL PLAN FOR EACH INDIVIDUAL

3. THE END BLOCK SHALL BE BACKFILLED IN ACCORDANCE WITH ART. 502.10 OF THE IDOT STANDARD SPECIFICATIONS, COST INCIDENTAL TO

10">36"

TONGUE GROVE

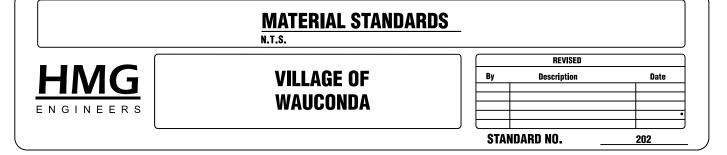
REINFORCEMENT AS

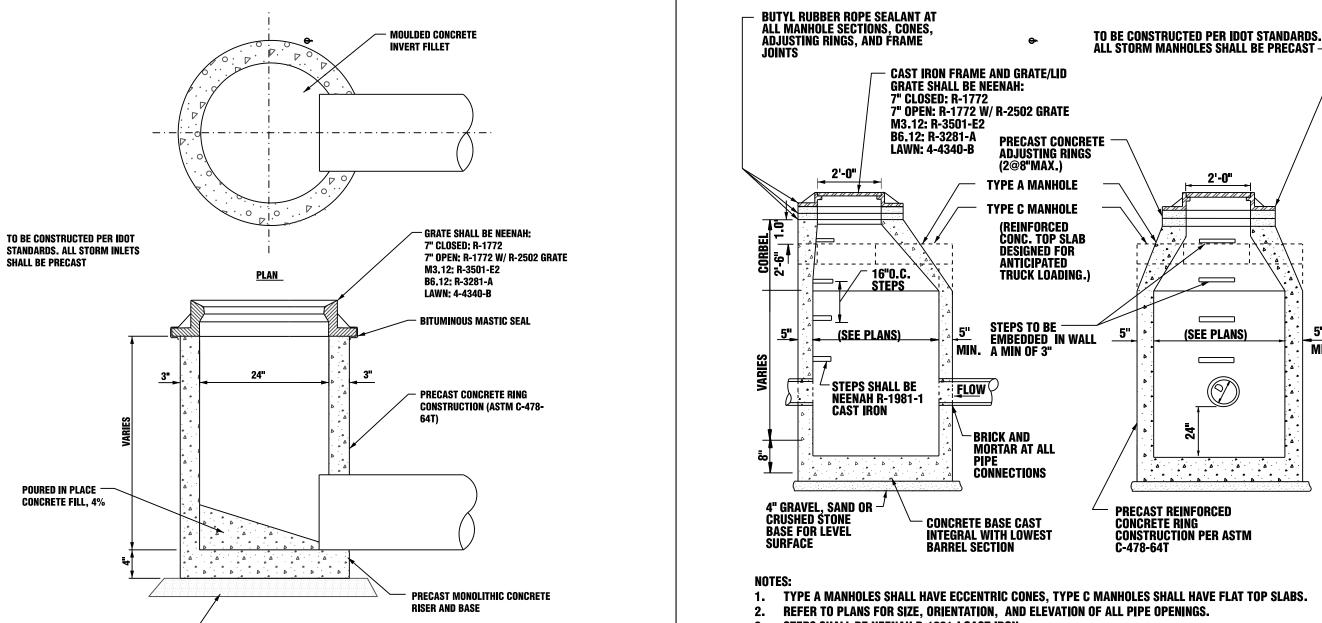
FOR CONCRETE HORIZONTAL

LONGITUDINAL SECTION

ELLIPTICAL PIPE

INNER CAGE

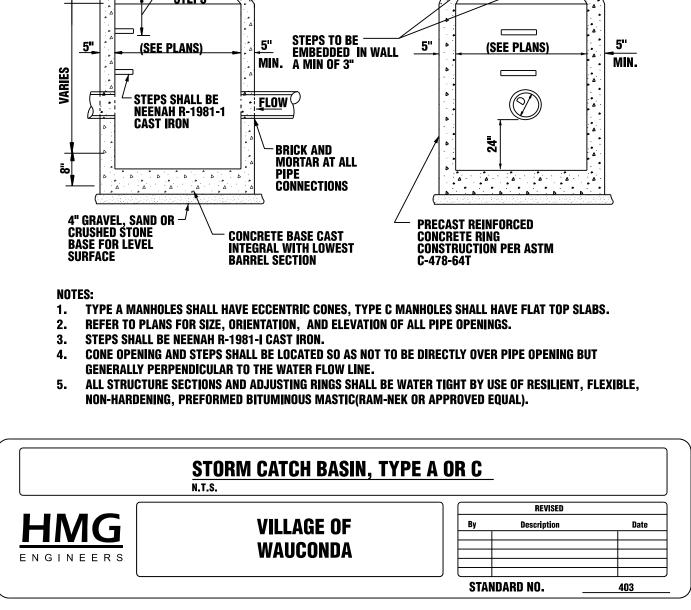


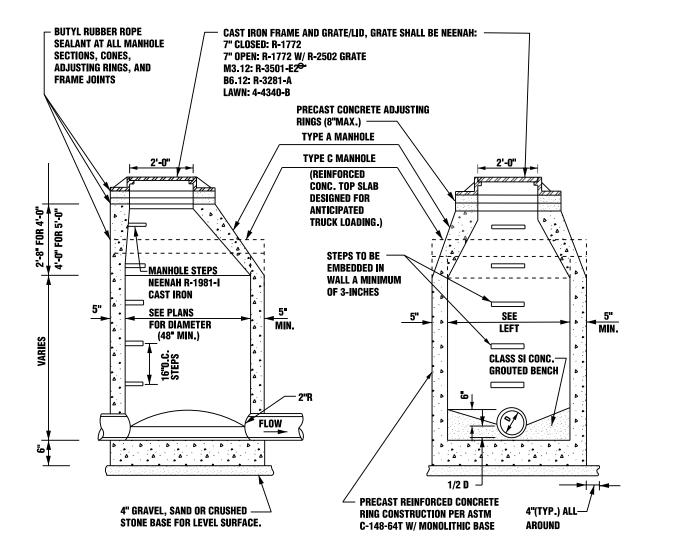


CSB 2017 ORDINANCE UPDATE

STANDARD NO. _

201





1. TYPE A MANHOLES SHALL HAVE ECCENTRIC CONES, TYPE C MANHOLES SHALL HAVE FLAT TOP SLABS. REFER TO PLANS FOR SIZE, ORIENTATION, AND ELEVATION OF ALL PIPE OPENINGS.

CONE OPENING AND STEPS SHALL BE LOCATED SO NOT TO BE DIRECTLY OVER PIPE OPENING BUT GENERALLY PERPENDICULAR TO THE WATER FLOW LINE. ALL STRUCTURE SECTIONS AND ADJUSTING RINGS SHALL BE WATER TIGHT BY USE OF RESILIENT, FLEXIBLE, NON-HARDENING, PREFORMED BITUMINOUS MASTIC(RAM-NEK OR APPROVED EQUAL).

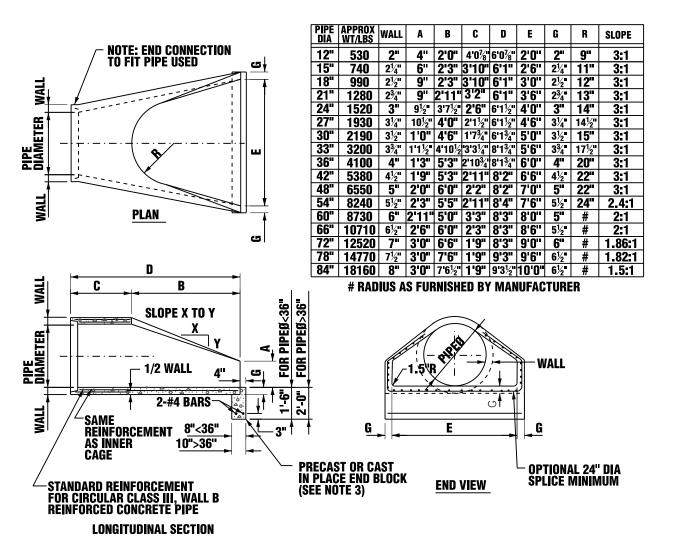
THE MANHOLE BENCH FOR STORM SEWER MANHOLES SHALL BE IN ACCORDANCE WITH I.D.O.T. REQUIREMENTS. THE BENCH SHALL BEGIN AT THE SPRINGLINE OF THE PIPE.

PROVIDE MOULDED INVERT CHANNEL.

HMG

ENGINEERS

STORM MANHOLE. TYPE A OR C						
HMG ENGINEERS	VILLAGE OF WAUCONDA		EVISED iption Date			
		STANDARD NO	402			

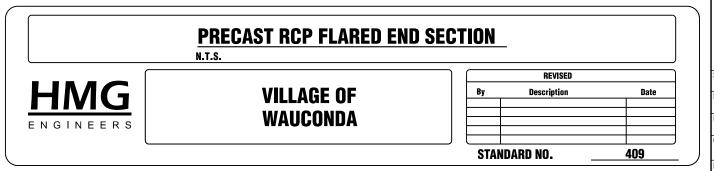


DESIGN NOTES:

CONCRETE FLARED END SECTIONS SHOULD BE CONSIDERED FOR USE WITH CONCRETE PIPE CULVERTS HAVING SKEWS NO GREATER THAN 15°.

STANDARDS 2364 AND 2379 (GRATING FOR CONCRETE FLARED END SECTIONS) SHOULD BE CONSIDERED FOR USE WITH THIS STANDARD WHENEVER FLARED END SECTIONS FOR 24" THRU 54 DIAMETER ACROSS ROAD CULVERTS ARE, OR WILL BE, LOCATED WITHIN THE CLEAR ZONE OF THE

3. THE END BLOCK SHALL BE PLACED PRIOR TO THE INSTALLATION



54 6 68 43 96 60 36 90 25½ 18²/₂ 58³/₂ 6 6 16

R-2 —

END VIEW

SPAN

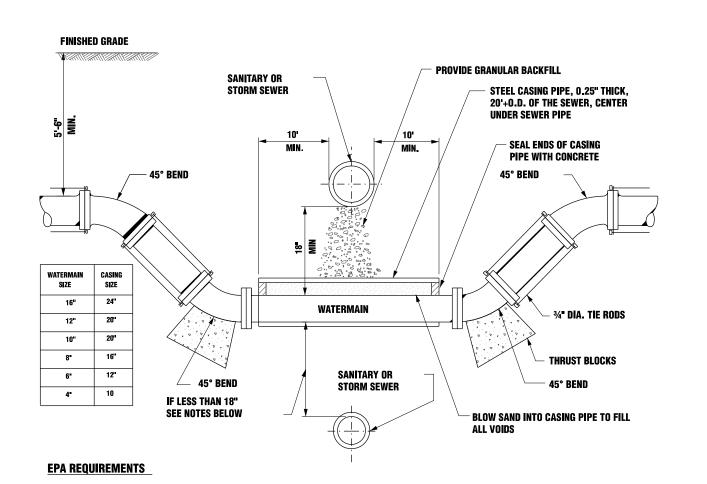
RAD = WALL/2

CONSTRUCTION DETAILS STORM AND SANITARY SEWER

IMPROVEMEN E OUTFALL IN WAUCONDA, I

HMG ENGINEERS, INC. 975 CAMPUS DRIVE MUNDELEIN, ILLINOIS 60060

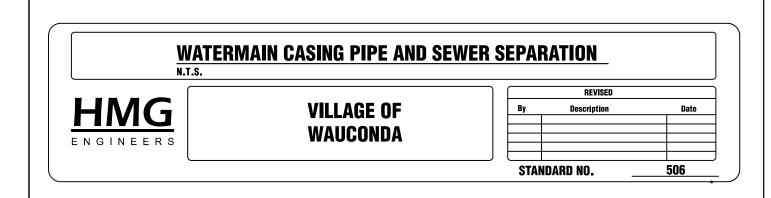
CSB, DAA CSB. DAA. JRN CSB, DAA SEPTEMBER 20 SHEET

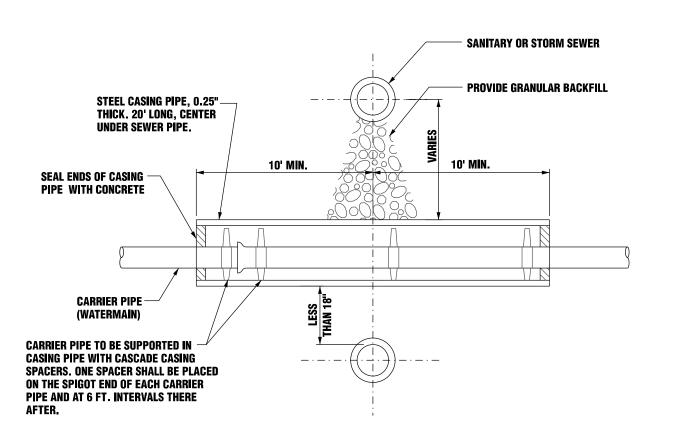


WHERE A WATERMAIN CROSSES BELOW A SANITARY OR STORM SEWER. REGARDLESS OF THE VERTICAL SEPARATION. BOTH THE WATERMAIN AND THIS SEWER MUST BE CONSTRUCTED OF WATERMAIN TYPE MATERIALS. AND CONSTRUCTION MUST EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATERMAIN TO THE SEWER IS AT LEAST 10 FEET, THE SEWER MUST BE CONSTRUCTED 0 SLIP-ON OR MECHANICAL JOINT CAST IRON OR DUCTILE IRON PIPE, ASBESTOS CEMENT PRESSURE PIPE, PRE-STRESSED CONCRETE PIPE OR PVC PIPE MEETING WATERMAIN STANDARDS. AS AN ALTERNATE, EITHER THE WATERAMAIN OR THE SEWER CAN BE INSTALLED INSIDE A CASINO PIPE WHICH EXTENDS AT LEAST 10 FEET ON EACH SIDE OF THE CROSSING

THE PRECEDING REQUIREMENT ALSO APPLIES WHERE THE BOTTOM OF THE WATERMAIN IS LESS THAN 18" ABOVE THE TOP OF THE SANITARY OR STORM SEWER AND WHERE THE HORIZONTAL DISTANCE BETWEEN THE WATERMAIN AND THE SANITARY OR STORM SEWER IS LESS THAN 10'.

**ALSO SEE "IEPA WATER AND SEWER SEPARATION REQUIREMENTS" FOR ADDITIONAL REQUIREMENTS

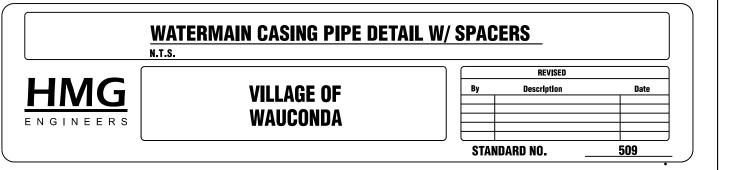


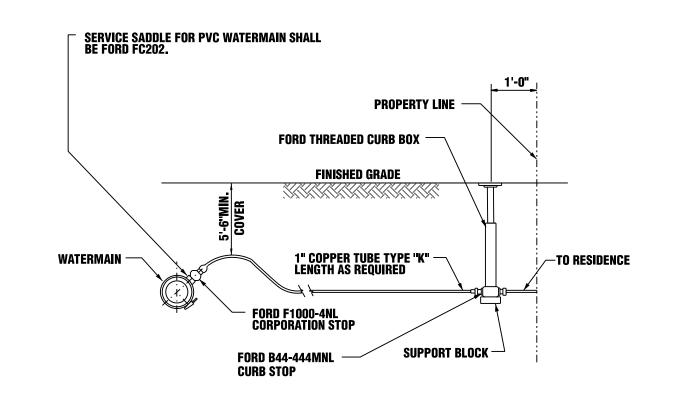


WATERMAIN Size	CASING SIZE
16"	24"
12"	20"
10"	20"
8"	16"
6"	12"
4"	10"

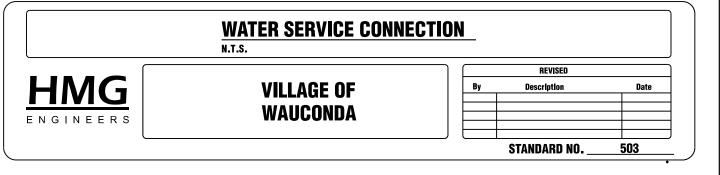
WHERE A WATERMAIN CROSSES BELOW A SANITARY OR STORM SEWER, REGARDLESS OF THE VERTICAL SEPARATION, BOTH THE WATERMAIN AND SEWER MUST BE CONSTRUCTED OF WATERMAIN TYPE MATERIALS. AND THAT THIS CONSTRUCTIO MUST EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE THE PRECEDING 18-INCHES ABOVE THE TOP OF THE SANITARY OR STORM SEWER. NORMAL DISTANCE FROM THE WATERMAIN TO THE SEWER IS AT LEAST 10-FEET THE SEWER MIIST. BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST IRON OR DUCTILE IRON PIPE PRESTRESSED CONCRETE PIPE OR PVC PIPE MEETING WATERMAIN STANDARDS.AS AN ALTERNATE, EITHER THE WATERMAIN OR THE SEWER CAN BE INSTALLED INSIDE A CASING PIPE WHICH EXTENDS AT LEAST 10-FEET ON EACH SIDE OF THE CROSSING THE PRECEDING REQUIREMENT ALSO APPLIES WHERE THE BOTTOM OF THE WATERMAIN

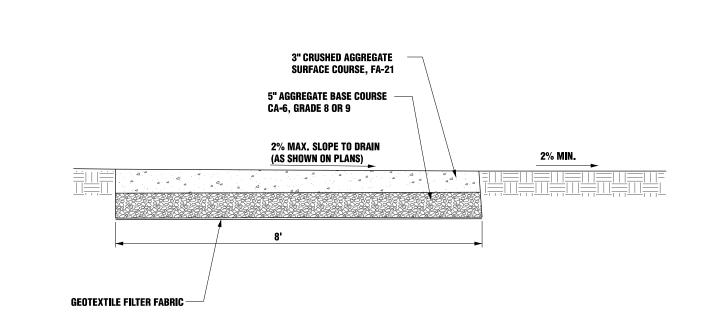
IS LESS THAN 18-INCHES ABOVE THE TOP OF THE SANITARY OR STORM SEWER.





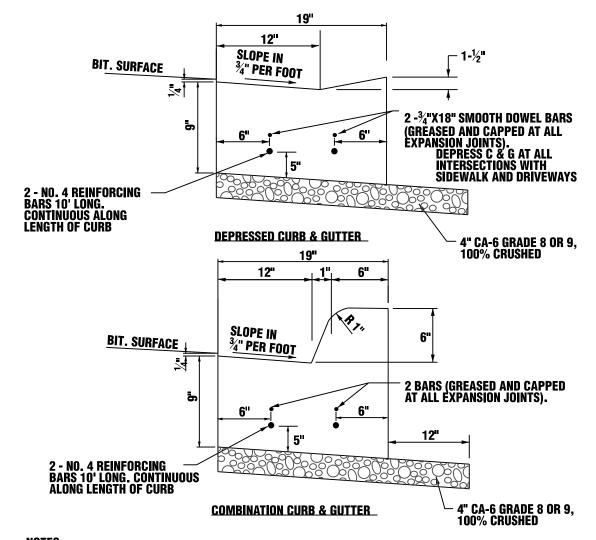
- NO JOINTS SHALL BE PERMITTED IN THE SERVICE LINE FROM THE MAIN TO THE CURB STOP EXCEPT AS NECESSARY TO CLEAR OTHER UTILITIES ETC. SUBJECT TO THE APPROVAL OF THE VILLAGE OR ITS REPRESENTATIVE.
- 2. ALL SERVICES TO BE TAPPED AFTER WATERMAIN PASSES PRESSURE AND CHLORINATION TESTS.
- 3. THE WATER SERVICE IS THE RESPONSIBILITY OF THE PROPERTY OWNER FROM THE CONNECTION AT THE MAIN TO THE BUILDING.





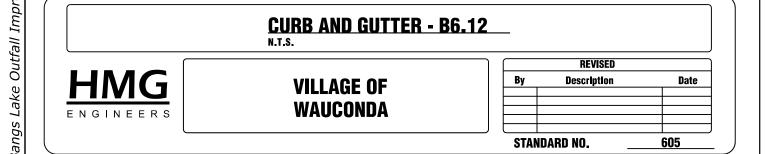
- 2. SUBGRADE SHALL BE COMPACTED PRIOR TO THE INSTALLATION OF THE GEOTEXTILE FILTER FABRIC.
- 3. CA-6 AGGREGATE BASE SHALL BE COMPACTED IN 6-INCH LIFTS MAX.
- 4. FA-21 SURFACE COURSE AGGREGATE SHALL BE COMPACTED TO FINAL GRADES AS SHOWN ON THE PLANS

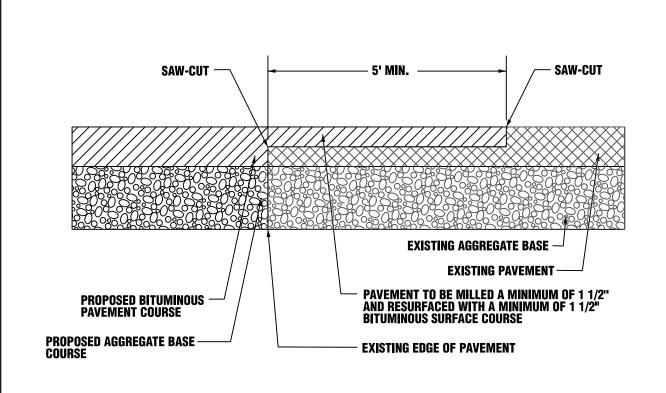
	CRUSHED AGGREGATE I	PATH_		
HMG ENGINEERS	VILLAGE OF WAUCONDA	By	REVISED Description	Date
		STAN	IDARD NO	612

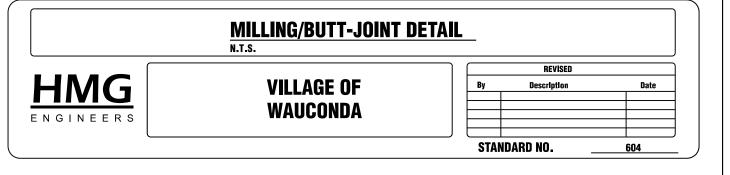


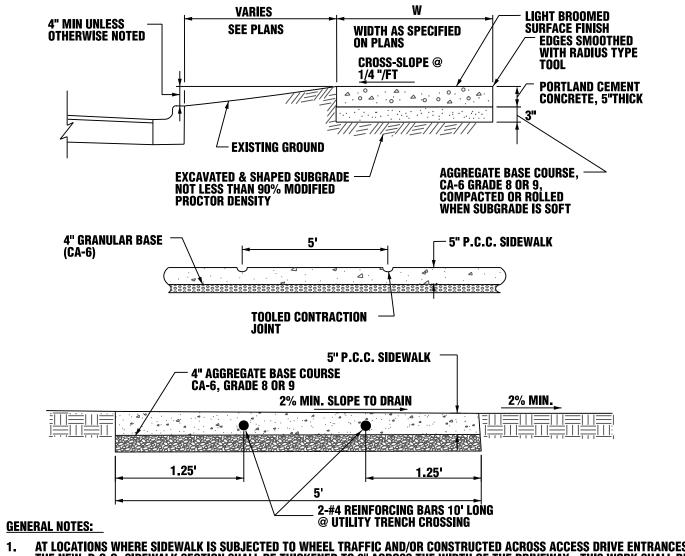
CONTRACTION JOINTS SHALL BE PLACED AT TWENTY FEET INTERVALS (MAXIMUM) AND SHALL BE SAW CUT TO A DEPTH OF 3 1/2 INCHES WITHIN 24 HOURS OF CONCRETE PLACEMENT.

- 2. EXPANSION JOINTS SHALL BE INSTALLED FIVE FEET EACH SIDE OF CURB INLETS, AT ALL PC'S AND PT'S, AT 60 FOOT INTERVALS AND AT THE END OF EACH DAYS POUR.
- 3. CONCRETE SHALL BE CLASS SI AND IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS.
- 4. EXPANSION MATERIAL SHALL BE 3/4" PREFORMED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- 5. CONCRETE TO BE CURED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- REVERSE PITCH CURB AND GUTTER SHALL SLOPE 3/4" PER FOOT AWAY FROM FACE OF CURB IN AREAS INDICATED ON PLANS.



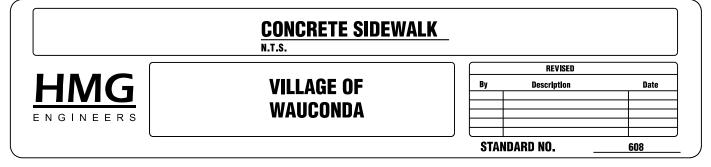


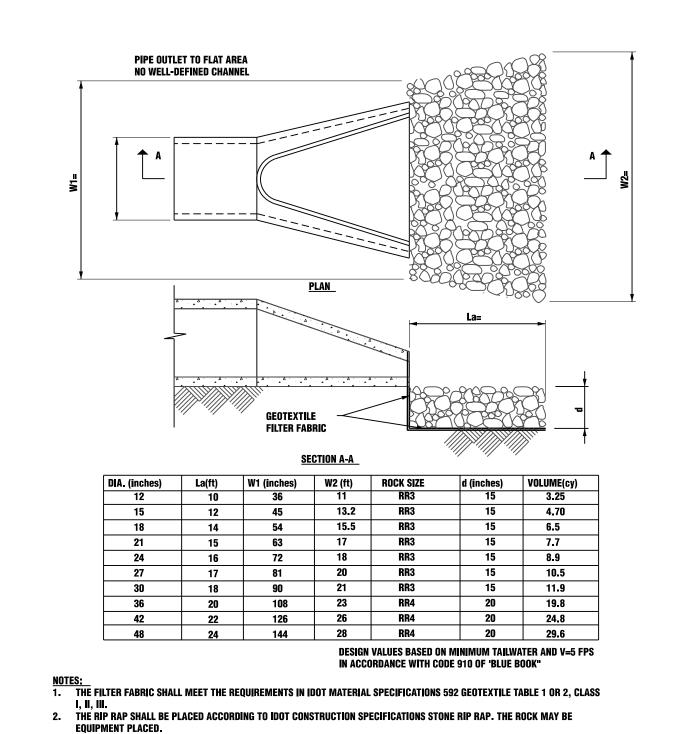




AT LOCATIONS WHERE SIDEWALK IS SUBJECTED TO WHEEL TRAFFIC AND/OR CONSTRUCTED ACROSS ACCESS DRIVE ENTRANCES, THE NEW P.C.C. SIDEWALK SECTION SHALL BE THICKENED TO 6" ACROSS THE WIDTH OF THE DRIVEWAY. THIS WORK SHALL BE CONSIDERED AS INCIDENTAL, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
 PLACING, FINISHING AND CURING OF P.C.C. SIDEWALK SHALL MEET THE REQUIREMENTS OF SECTIONS 624 & 625 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. USE 6 1/2 BAG MIX WITH 4% AIR ENTRAINMENT.
 SLAB OR PANEL CONTRACTION (CONTROL) JOINTS SHALL BE AS FOLLOWS:
 FOR 4' SIDEWALK WIDTH = 5' O.C. JOINT SPACING
 5' SIDEWALK WIDTH = 5' O.C. JOINT SPACING
 6' SIDEWALK WIDTH = 8' O.C. JOINT SPACING
 8' SIDEWALK WIDTH = 8' O.C. JOINT SPACING

- 6' SIDEWALK WIDTH = 6' U.C. JOINT SPACING 8' SIDEWALK WIDTH = 8' U.C. JOINT SPACING TRANSVERSE EXPANSION JOINTS SHALL CONSIST OF PREFORMED JOINT FILLER OF THICKNESS AS FOLLOWS: 1/2" BETWEEN SIDEWALK AND STRUCTURES, STANDARDS, POLES 3/4" AT SIDEWALK INTERVALS OF NOT MORE THAN 50 FEET &ABUTTING CONCRETE CURBING OR PAVEMENT. IF EXCAVATION OR UNDERCUTTING OF SUBGRADE HAS BEEN MADE DEEPER THAN NECESSARY, THE BASE SHALL BE BROUGHT TO PROPER GRADE BY THE ADDITION OF WELL COMPACTED BEDDING MATERIAL WITHOUT ANY EXTRA COMPENSATION DUE THE CONTRACTOR.





LIMITS OF RIP RAP AT FLARED END SECTION SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS, OTHERWISE, THE ABOVE TABLE SHALL BE USED FOR PLACEMENT OF RIP RAP. RIP RAP AT FLARED END SECTION **HMG VILLAGE OF** Description WAUCONDA ENGINEERS STANDARD NO.

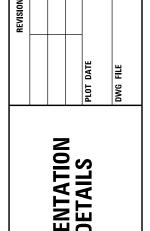
CSB, DAA, JRM CSB, DAA SEPTEMBER 202 **SHEET**

HMG ENGINEERS, INC. 975 CAMPUS DRIVE MUNDELEIN, ILLINOIS 60060

CONSTRUCTION

IMPROVEMEN

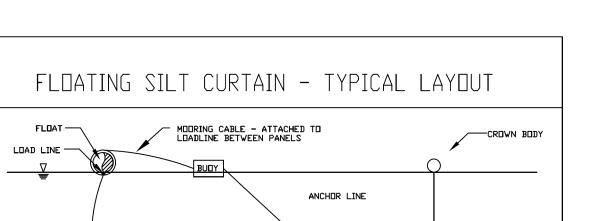
E OUTFALL IN WAUCONDA, |

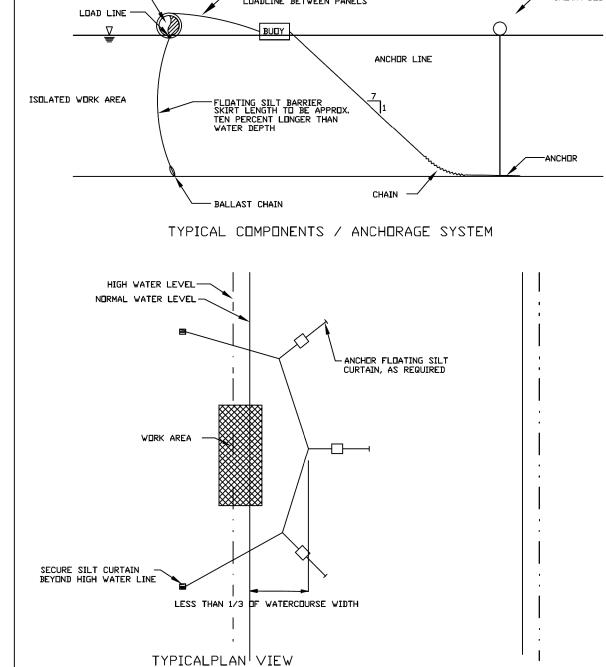


SOIL EROSION AND SEDIMENTATION CONTROL CONSTRUCTION DETAILS

LAKE OUTFALL IMPROVEMENTS WAUCONDA, IL

CSB, DAA CSB, DAA, JRM CSB, DAA SEPTEMBER 202 SHEET





Maximum flow for waterbody shall be less than 5fps. Isolated work area shall not exceed more than 1/3 stream width. Silt curtain shall be placed parallel to stream flow.

REFERENCE Project Designed Date Checked Date Approved Date		STANDA IUM-6 SHEET DATE	17A 1 of 1 1-06-2012
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REFERENCE

Project

Designed

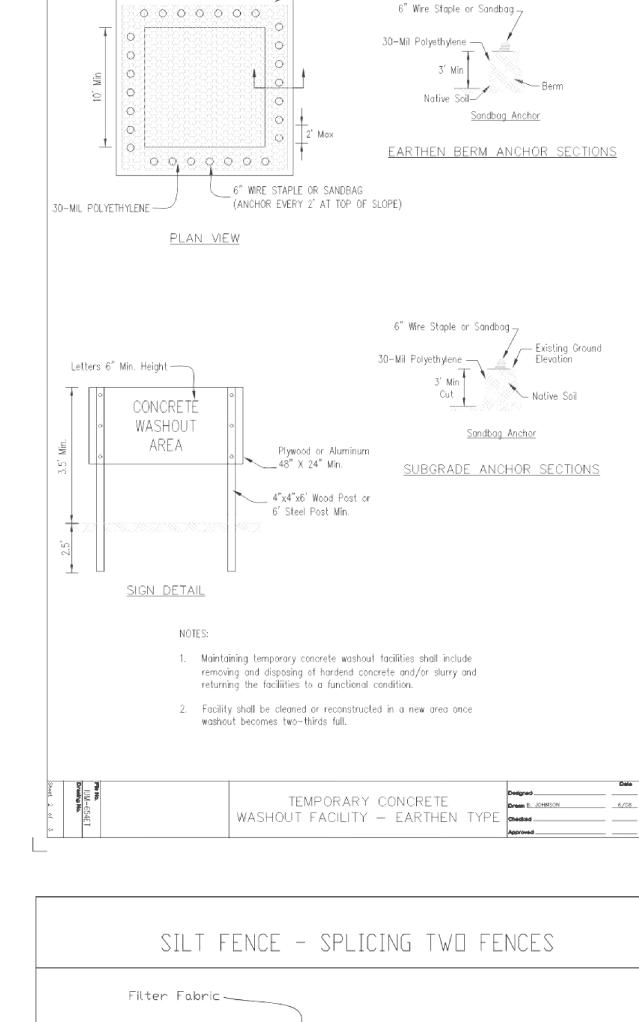
Checked

Approved _

_Date _

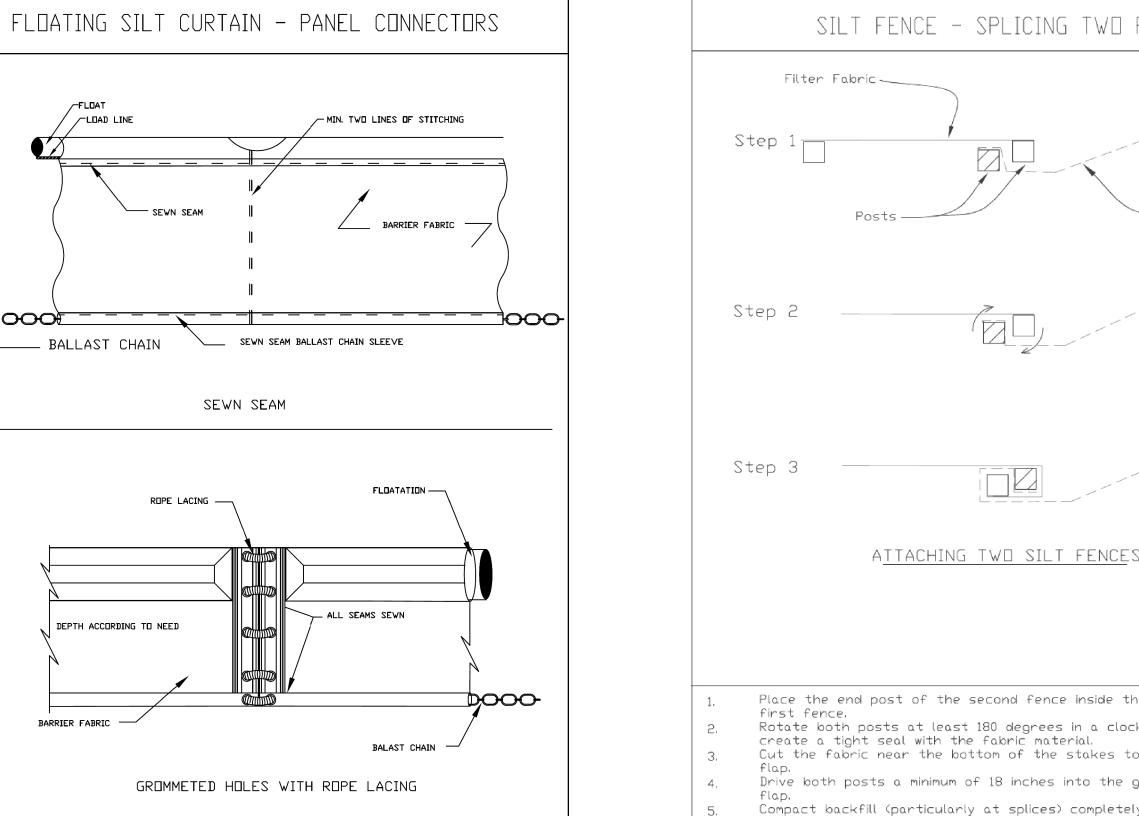
_ Date

_ Date _



EARTHEN BERM

AUTOCAD2006



Project

Designed _

Approved _

Checked

.Date .

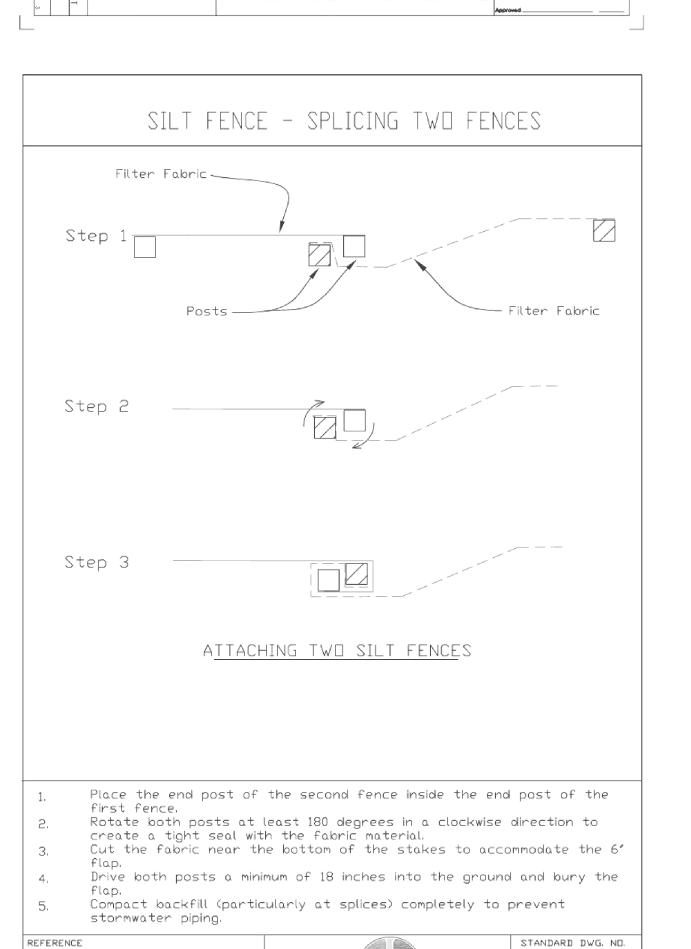
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STANDARD DWG, NO.

IUM-617B

SHEET 1 OF 1

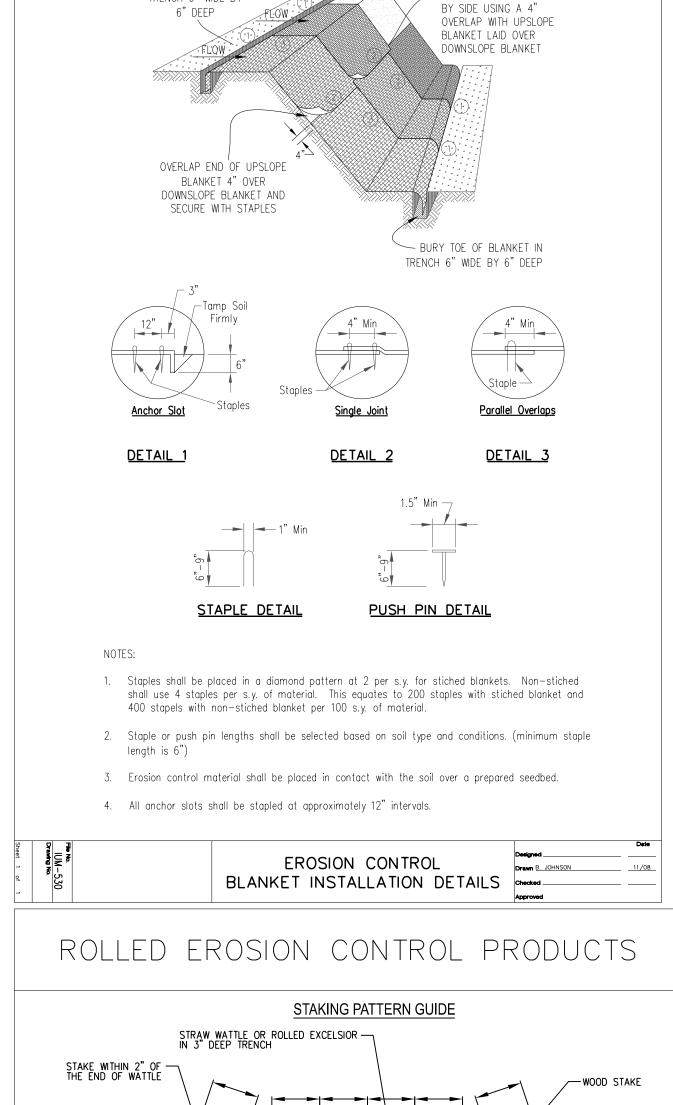
DATE 1-6-2012



IUM-620B(W)

SHEET 1 DF 1

DATE 3-16-2012

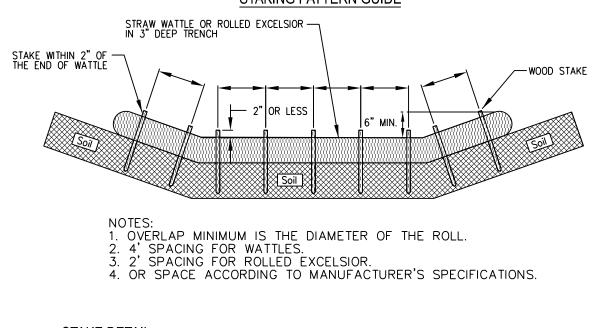


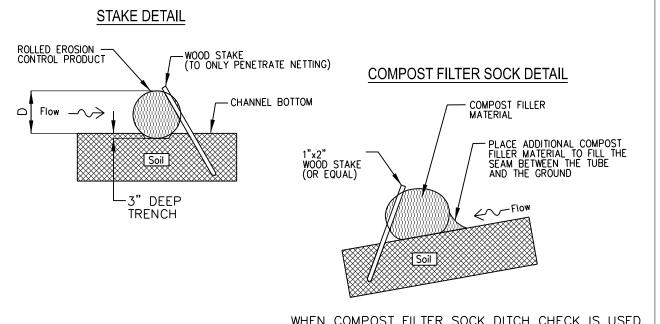
-OVERLAP BLANKETS SIDE

BURY UPSLOPE END OF BLANKET IN

TRENCH 6" WIDE BY







	MUEN COMPOSI FILIER SOCK DITCH CHECK IS OSEL
	PLACE A COMPOST BERM UPSTREAM OF THE FILTER
	SOCK (SEE IUM 805). A TRENCH IS NOT REQUIRED.
OTES:	
DRAWINGS ARE NOT TO SCALE.	
ENDS OF WATTLES OR ROLLED EXCELS	IOR SHALL BE TURNED AT LEAST 6" UPSLOPE.

2. ENDS OF WATTLES OR ROLLED EXCELSION SHALL BE TURNED AT LEAST 6 OPSLOPE.

3. RECOMMENDED STAKES ARE 1 1/8" WIDE x 1 1/8" THICK x 30" LONG.

4. STAKES SHALL NOT EXTEND ABOVE THE STRAW WATTLE MORE THAN 2".

5. SPACING: THE TOE OF THE UPSTREAM DITCH CHECK SHALL CREATE A HORIZONTAL LINE WITH THE TOP OF THE DOWNSTREAM DITCH CHECK.

6. WHEN COMPOST FILTER SOCK DITCH CHECK IS USED, PLACE A COMPOST BERM UPSTREAM OF THE FILTER SOCK (SEE IUM 805). A TRENCH IS NOT REQUIRED.

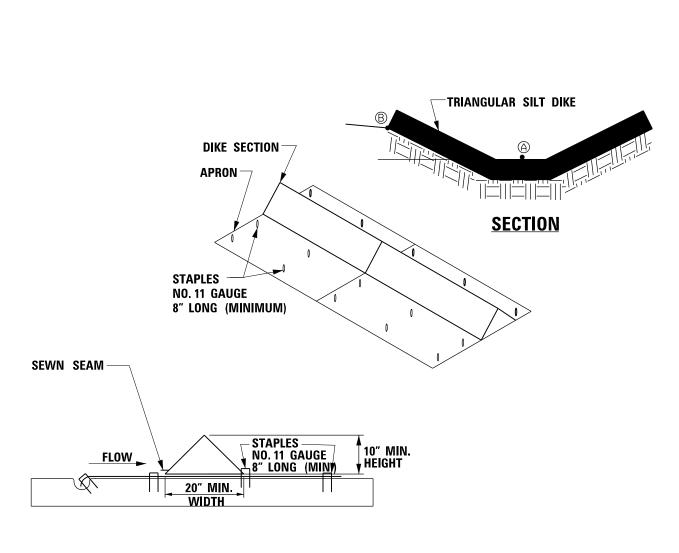
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Approved	Date	
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(BASED ON LAKE COUNTY STORMWATER MANAGEMENT COMMISSION REQUIREMENTS)

- A. SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- B. FOR THOSE DEVELOPMENTS THAT REQUIRE A DESIGNATED EROSION CONTROL INSPECTOR (DECI), INSPECTIONS ANDDOCUMENTATION SHALL BE PERFORMED, AT A
 - *UPON COMPLETION OF SEDIMENT AND RUNOFF CONTROL MEASURES (INCLUDING PERIMETER CONTROLS AND DIVERSIONS),
 - *PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, AFTER EVERY SEVEN (7) CALENDAR DAYS OR STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
- C. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- D. A STABILIZED MAT OF CRUSHED STONE MEETING IDOT GRADATION CA-1 UNDERLAIN WITH FILTER FABRIC AND IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL, OR OTHER APPROPRIATE MEASURE(S) AS APPROVED BY THE ENFORCEMENT OFFICER, SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE, SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN.
- F. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE END OF ACTIVE HYDROLOGIC DISTURBANCE OR REDISTURBANCE,
- ALL STOCKPILES SHALL HAVE APPROPRIATE MEASURES TO PREVENT EROSION. STOCKPILES SHALL NOT BE PLACED IN FLOOD PRONE AREAS OR WETLANDS AND DESIGNATED BUFFERS.
- H. SLOPES STEEPER THAN 3H:1V SHALL BE STABILIZED WITH APPROPRIATE MEASURESAS APPROVED BY THE ENFORCEMENT OFFICER.
- APPROPRIATE EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL INTERIOR DETENTION BASIN SIDE SLOPES BETWEEN THENORMAL WATER LEVEL AND HIGH WATER LEVEL.

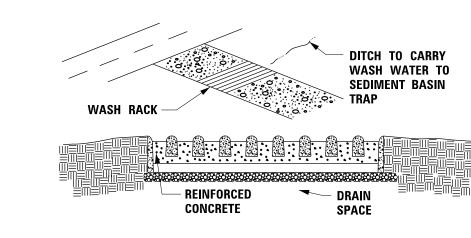
SILT FENCE DETAIL

- J. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
- K. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION, DISCHARGES SHALL BE ROUTED THROUGH AN APPROVED ANIONIC POLYMER DEWATERING SYSTEM OR A SIMILAR MEASURE AS APPROVED BY THE ENFORCEMENT OFFICER. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE ENFORCEMENT OFFICER, OR APPROVED REPRESENTATIVE, MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
- L. IF INSTALLED SOIL EROSION AND SEDIMENT CONTROL MEASURES DO NOT MINIMIZE SEDIMENT LEAVING THE DEVELOPMENT SITE, ADDITIONAL MEASURES SUCH AS ANIONIC POLYMERS OR FILTRATION SYSTEMS MAY BE REQUIRED BY THE ENFORCEMENT OFFICER.
- M. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR,
- N. ALL TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
- O. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BEREQUIRED, AS DIRECTED BY THE ENGINEER, ENFORCEMENT OFFICER, OR OTHER GOVERNING AGENCY,
- P. IF HORIZONTAL DIRECTIONALLY DRILLED PIPE INSTALLATIONS ARE PART OF THE PROJECT, THEN SILT FENCE SHALL BE ERECTED AROUND THE PERIMETER OF ALL BORE PITS (COST INCIDENTAL).
- Q. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

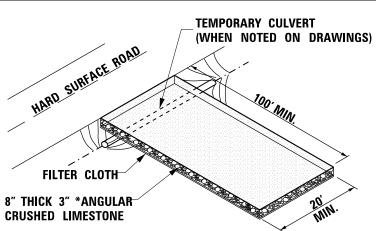


- TRIANGULAR SILT DIKES OR APPROVED EQUAL SHALL BE INSTALLED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE OWNER OR ENGINEER.
- 2. TRIANGULAR SILT DIKES SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- 3. ELEVATION OF POINT (A) SHALL NEVER EXCEED ELEVATION OF POINT (B)

TRIANGULAR SILT DIKE



CONSTRUCTION ENTRANCE WITH WASH RACK



TIE DOWN STRAP

FILTERED WATER

ANIONIC POLYMER

DISCHARGE

SOAKED JUTE YARN

- 1. A STABILIZED MAT OF AGGREGATE UNDERLAIN WITH FILTER CLOTH (OR OTHER APPROPRIATE MEASURE) SHALL BE LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA.
- MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED INTO PUBLIC RIGHTS-OF-WAY ECT. MUST BE REMOVED IMMEDIATELY AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- FILTER CLOTH WILL BE PLACE OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE INTO PUBLIC RIGHTS-OF-WAY. WHEN A WASH RACK IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT-TRAPPING DEVICE, CONSTRUCTION ENTRANCE(S) SHALL INCLUDE A WASH RACK WHERE NOTED ON DRAWINGS, OR WHEN NECESSARY.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN STABILIZED GRAVEL CONSTRUCTION ENTRANCE AT ALL LOCATIONS NOTED ON THE PLANS (COST INCIDENTAL).
- REMOVE STABILIZATION GRAVEL ENTRANCE AT TIME OF FINAL RESTORATION. REMOVE TEMPORARY CULVERT (IF INSTALLED) AND REGRADE TO ORIGINAL CONDITIONS AND/OR AS NOTED ON DRAWINGS (COST

STABILIZED CONSTRUCTION ENTRANCE

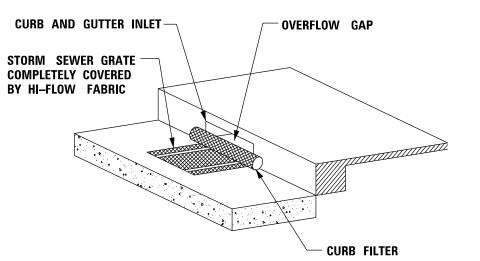
STAINLESS STEEL **LOCKING BAND GEOTEXTILE FILTER BAG** WITH REINFORCED POLYESTER OUTER MESH * INLET PROTECTION TO BE "CATCH-ALL" OR APPROVED

* TYPE 1 INLET FILTER ASSEMBLY SHOWN CONTRACTOR SHALL USE THE APPROPRIATE SIZE INLET FILTER FOR EACH INLETS/CATCH BASINS.

GALVANIZED STEEL FRAME

LIFT HANDLES

INLET SEDIMENT CONTROL DEVICE

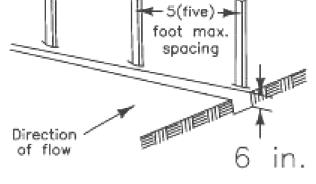


CURB INLET SEDIMENT CONTROL DEVICE WITH CURB FILTER

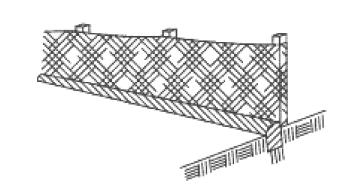
- 1. PERFORM MAINTENANCE AFTER EACH RAINFALL, SNOWFALL, OR SNOWMELT EVENT (1/2" IN 24 HOURS) AND
- 2. FOR CURB INLETS, CONTRACTOR TO INSTALL SEDIMENT CONTROL DEVICE WITH CURB FILTER. FOR INLETS NOT IN CURBLINE, INSTALL INLET SEDIMENT CONTROL DEVICE

CURB BAGS

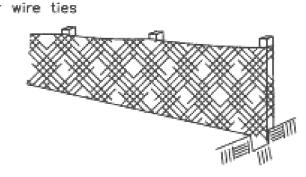
 Set posts and excavate or slit—trench a 6-inch deep trench upslope along the line of the post



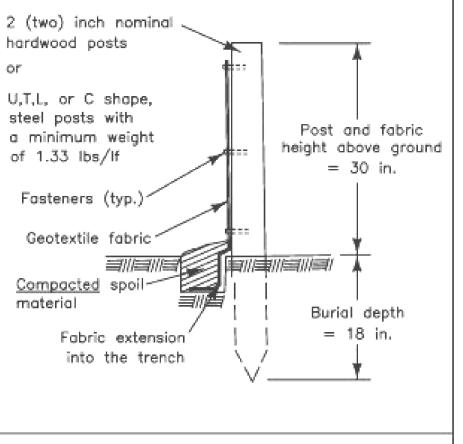
3. Backfill and compact the excavated spoil materials



Attach the geotextile filter fabric to each post with a minimum of 3 (three) fasteners per post and extend to the bottom of the trench. Acceptable fasteners include staples, zip ties,

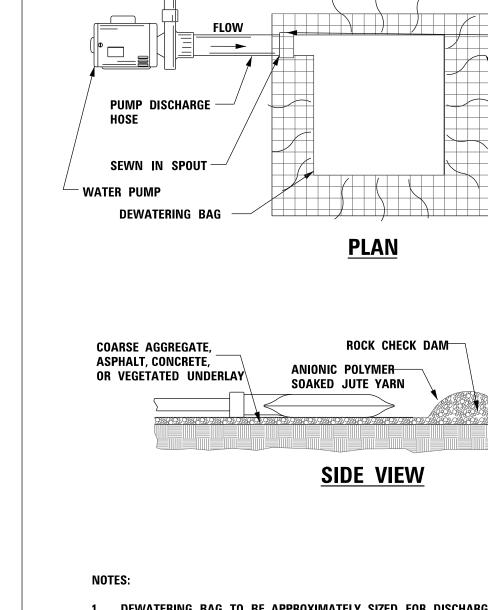


Geotextlle Requirement	Test Method	MARV		
Grab strength - Machine direction - X-machine direction	ASTM D 4632	550 N 450 N		
Permittivity	ASTM D 4491	0.05 sec-1		
Apparent opening size*	ASTM D 4751	0.60 mm		
Ultraviolet stability (retained strength)	ASTM D 4355	70% after 500 hours		
Note: Value for apparent opening size represents maximum average roll value.				





DATE: 4/21/08 BY: KAW



- DEWATERING BAG TO BE APPROXIMATELY SIZED FOR DISCHARGE PUMP.
- INSTALL ROCK CHECK DAM OF CLEAN, ANGULAR STONE, CA-7 OR CA-11 (NO FINES) PROPOSED
- BEEN GREATLY REDUCED. REPLACE JUTE YARN WHEN CLOGGED OR AS NECESSARY.
- ADD ADDITIONAL ANIONIC POWDER POLYMER AS DIRECTED BY MANUFACTURER OR AS

DEWATERING BAG

E OUTFALL IN WAUCONDA,