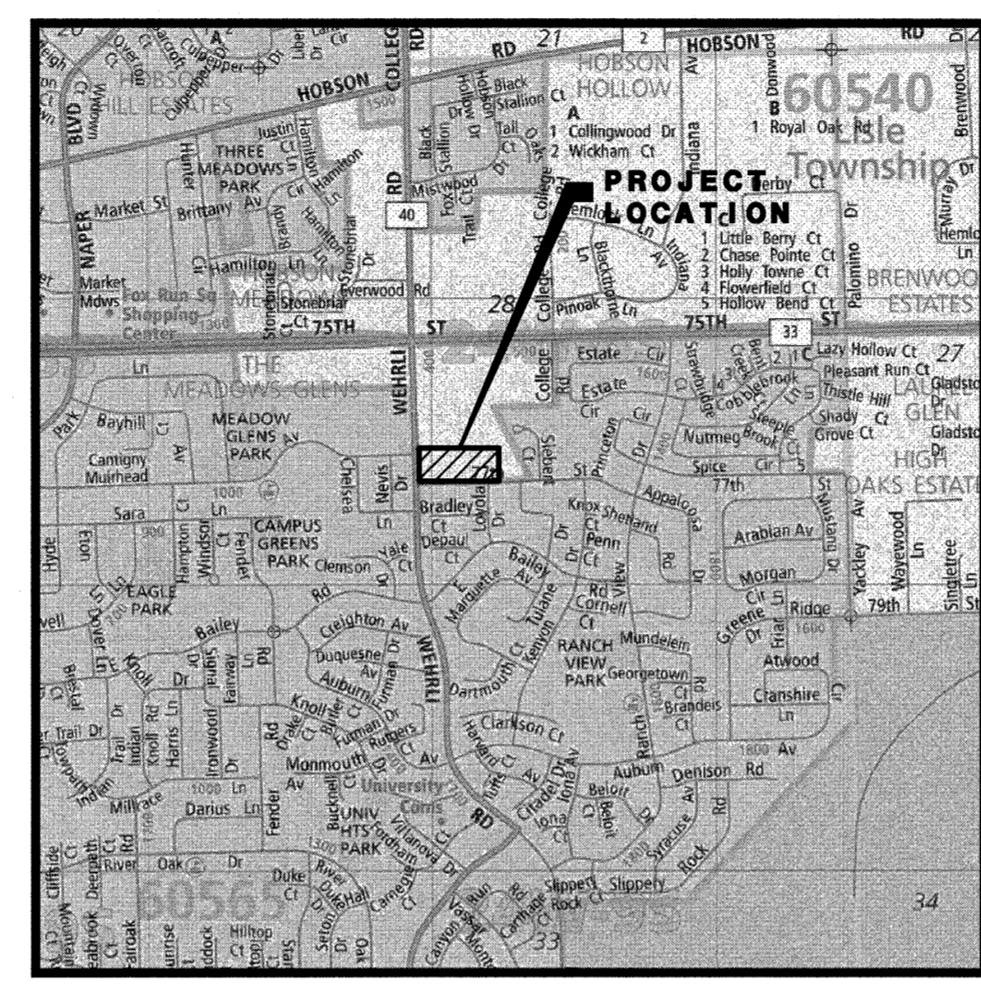


FINAL SITE DEVELOPMENT PLANS FOR **77TH STREET SUBDIVISION** NAPERVILLE, ILLINOIS

WATERMAIN-SANITARY SEWER-STREET-STREET LIGHTING AND DRAINAGE IMPROVEMENTS



LOCATION MAP



EXISTING	PROPOSED	DESCRIPTION
		MANHOLE
		CATCH BASIN
		INLET
		CLEANOUT
		SLOPE INLET BOX
		HEADWALL
		END SECTION
		STORM SEWER
		SANITARY SEWER
		WATERMAIN
		VALVE & BOX
		WATER VALVE IN VAULT
		FIRE HYDRANT
		CONTOURS
		ELEVATIONS
		STREET LIGHT
		WATERMAIN PROTECTION
		SILT FENCE INLET PROTECTOR
		TEMPORARY STRAW BALE DITCH CHECK
		SILT FENCE DITCH CHECK
		RIP-RAP
		OVERFLOW ROUTE

INDEX OF SHEETS

Sheet Number	Sheet Title
01	TITLE
02-03	CONSTRUCTION SPECIFICATIONS - GENERAL NOTES
04	STREET PAVEMENT DESIGN AND DETAILS
05	DEMOLITION PLAN
06	OVERALL UTILITY PLAN
7-8	DRAINAGE AND GRADING PLAN
9	PLAN & PROFILE: ELIJAH DRIVE
10	PLAN & PROFILE: 77TH STREET
11	PLAN & PROFILE: MYA COURT
12	PLAN & PROFILE: SIDEYARD SANITARY SEWER
13	SANITARY SEWER AND WATERMAIN CONSTRUCTION DETAILS
14	DRAINAGE STRUCTURE DETAILS
ER-1	OVERALL SOIL EROSION AND SEDIMENTATION CONTROL PLAN
ER-2	SOIL EROSION AND SEDIMENTATION CONTROL DETAILS
ER-3	STORMWATER POLLUTION PREVENTION PLAN

BENCHMARKS / CONTROL POINTS

ELEVATION REFERENCE MARK:
 ▲ CITY OF NAPERVILLE BENCHMARK #227 (PID AA3762): LOCATED IN THE CENTER MEDIAN OF 75TH ST, APPROXIMATELY 120 FT WEST OF THE INTERSECTION OF 75TH ST AND RANCHVIEW DR. ELEVATION: 739.48 NAVD 88

CONTROL POINTS:
 CP #110: SET CROSS IN THE CONCRETE SIDEWALK LOCATED AT THE SOUTHWEST CORNER OF WEHRLI ROAD AND MUIRHEAD AVENUE.
 NORTHING: 1850120.09
 EASTING: 1046935.97
 ELEVATION: 738.46 NAVD 88

CP #128: SET CROSS IN THE NORTH CURB LINE OF 77TH STREET APPROXIMATELY 6 FEET EAST OF DRIVEWAY APRON NEAR THE SOUTHEAST CORNER OF SUBJECT SITE.
 NORTHING: 1849925.89
 EASTING: 1047534.52
 ELEVATION: 728.88 NAVD 88

PROFESSIONAL ENGINEER'S CERTIFICATION

STATE OF ILLINOIS) SS.
 COUNTY OF DU PAGE)

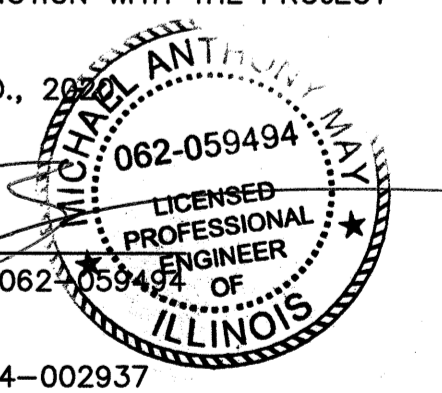
I, MICHAEL A. MAY, A LICENSED PROFESSIONAL ENGINEER OF ILLINOIS, HEREBY CERTIFY THAT THIS TECHNICAL SUBMISSION WAS PREPARED ON BEHALF OF OAK CREEK CAPITAL PARTNERS, LLC BY CEMCON, LTD. UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

DATED THIS 5 DAY OF March, A.D., 2020

ILLINOIS LICENSED PROFESSIONAL ENGINEER NO. 062-059494
 MY LICENSE EXPIRES ON NOVEMBER 30, 2021

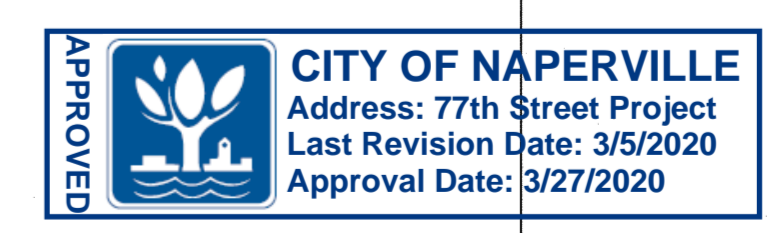
PROFESSIONAL DESIGN FIRM LICENSE NUMBER 184-002937
 EXPIRES APRIL 30, 2021

NOTE: UNLESS THIS DOCUMENT BEARS THE ORIGINAL SIGNATURE AND IMPRESSED SEAL OF THE DESIGN PROFESSIONAL ENGINEER, IT IS NOT A VALID TECHNICAL SUBMISSION.



FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123 or 811

DATE: _____
 RELEASED FOR PLAN REVIEW AND PERMIT PROCESSING ONLY.
 IF USED FOR BIDDING PURPOSES, THOSE PARTIES CONCERNED SHALL BE ADVISED THAT REVISIONS MAY BE REQUIRED PRIOR TO PLAN APPROVAL.
 NOT ISSUED FOR CONSTRUCTION UNTIL APPROVED BY THE CITY OF NAPERVILLE AND PERMITTED AS REQUIRED.



PREPARED FOR:
 OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

R E V I S I O N S					
NO.	DATE	SHEETS	NO.	DATE	SHEETS
▲	02-04-20/JGC	1, 2, 4-14, ER-1			
▲	03-05-20/JGC	5, 8, 14			

JOB NO. 782.029
 COMPLETION DATE :
 12-16-19
 SHEET 1 OF 14



APPROVED

DRAWING PATH: P:\2020\DWG\ENGR\DRAWINGS\FINAL\DRAWING\GENNOTES.DWG
 PLOT FILE CREATED: 3/5/2020 1:25 PM BY: JEFF CEBULA
 DRAWING LAST SAVED: 2/3/2020 3:08 PM BY: JEFF CEBULA
 DRAWING PATH: P:\2020\DWG\ENGR\DRAWINGS\FINAL\DRAWING\GENNOTES.DWG

CONSTRUCTION SPECIFICATIONS – GENERAL NOTES

CITY OF NAPERVILLE Storm Sewer Notes

1. NO CONNECTION TO AN EXISTING PUBLIC STORM SEWER MAY BE MADE WITHOUT PERMISSION OF THE CITY ENGINEER.
2. THE CONTRACTOR SHALL REPAIR ANY EXISTING FIELD DRAINAGE TILE DAMAGED DURING CONSTRUCTION AND PROPERLY REROUTE AND/OR CONNECT SAID TILE TO THE NEAREST STORM SEWER OUTLET. ALL LOCATIONS OF ENCOUNTERED FIELD DRAINAGE TILE SHALL BE PROPERLY INDICATED ON THE CONTRACTOR'S RECORD DRAWINGS.
3. THE FOLLOWING MATERIALS ARE PERMITTED FOR STORM SEWER AND PIPE CULVERTS, WHERE A PARTICULAR MATERIAL IS SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS, NO OTHER KIND OF MATERIAL WILL BE PERMITTED:
 - 3a. REINFORCED CONCRETE PIPE (RCP) IS REQUIRED IN PUBLIC RIGHT-OF-WAY – REINFORCED CONCRETE PIPE SHALL CONFORM TO ASTM DESIGNATION C 76, CLASSES I, II, III, IV OR V. BITUMINOUS JOINTS SHALL CONFORM TO ASTM DESIGNATIONS C 14 OR C 76 AS MAY BE APPLICABLE. BITUMINOUS MATERIAL SHALL CONSIST OF A HOMOGENEOUS BLEND OF BITUMEN, INERT FILLER, AND SUITABLE SOLVENT APPROVED BY THE CITY ENGINEER. RUBBER GASKET JOINTS SHALL CONFORM TO ASTM C 433 AND SHALL SPAN FROM STRUCTURE TO STRUCTURE AT WATERMAIN CROSSINGS. REINFORCED CONCRETE PIPE SHALL ALSO BE PERMITTED AS ROUND, ELLIPTICAL, OR BOX SHAPED OR AS REINFORCED CONCRETE ARCH CULVERT.
 - 3b. NON-REINFORCED CONCRETE PIPE IS PERMITTED FOR ANY STORM SEWER WITHIN AN EASEMENT OUTSIDE OF PUBLIC RIGHT OF WAY – NON-REINFORCED CONCRETE PIPE SHALL BE ALLOWED FOR PIPES WITH A 10 INCH OR SMALLER DIAMETER. NON-REINFORCED CONCRETE PIPE SHALL CONFORM TO ASTM DESIGNATION C 14, CLASS 3. BITUMINOUS JOINTS SHALL CONFORM TO ASTM DESIGNATIONS C 14 OR C 76 AS MAY BE APPLICABLE. BITUMINOUS MATERIAL SHALL CONSIST OF A HOMOGENEOUS BLEND OF BITUMEN, INERT FILLER, AND SUITABLE SOLVENT APPROVED BY THE CITY ENGINEER. RUBBER GASKET JOINTS SHALL CONFORM TO ASTM C 433 AND SHALL SPAN FROM STRUCTURE TO STRUCTURE AT WATERMAIN CROSSINGS.
 - 3c. DUCTILE IRON PIPE (DIP) IS PERMITTED FOR ANY STORM SEWER WITHIN AN EASEMENT OUTSIDE OF PUBLIC RIGHT OF WAY – DUCTILE IRON PIPE SHALL CONFORM TO ANSI A 21.51 (AWWA C-151), CLASS THICKNESS DESIGNED PER ANSI A 21.50 (AWWA C-150), TAR (SEAL) COATED AND CEMENT LINED PER ANSI A 21.4 (AWWA C-104), WITH MECHANICAL OR RUBBER RING (SIP SEAL OR PUSH ON) JOINTS. ALL DUCTILE IRON PIPE SHALL BE WRAPPED WITH POLYETHYLENE.
 - 3d. POLYVINYL CHLORIDE PIPE (PVC) IS PERMITTED FOR ANY STORM SEWER WITHIN AN EASEMENT OUTSIDE OF PUBLIC RIGHT OF WAY – POLYVINYL CHLORIDE (PVC) PIPE SHALL CONFORM TO ASTM D 3034, TYPE PSM. THE MINIMUM STANDARD DIMENSION RATIO (SDR) SHALL BE 26. THE PIPE SHALL BE MADE OF PVC PLASTIC HAVING A MINIMUM CELL CLASSIFICATION OF 12454-C, AND SHALL HAVE A MINIMUM PIPE STIFFNESS OF FORTY-SIX (46) LBS. PER INCH (317 KPA). JOINTS FOR PVC PIPE SHALL BE FLEXIBLE ELASTOMETRIC SEALS PER ASTM D 3212.
 - 3e. HIGH DENSITY POLYETHYLENE PIPE (HDPE) IS PERMITTED FOR ANY STORM SEWER WITHIN AN EASEMENT OUTSIDE OF PUBLIC RIGHT OF WAY – HIGH-DENSITY POLYETHYLENE (HDPE) PIPE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 252 AND M 294. PIPE AND FITTINGS SHALL BE MADE FROM VIRGIN PE COMPOUNDS WHICH CONFORM TO THE REQUIREMENTS OF CELL CLASS 324420C AS DEFINED AND DESCRIBED IN ASTM D 3350. RUBBER GASKET JOINTS SHALL BE USED.
4. BEDDING, OTHER THAN CONCRETE EMBEDMENT, SHALL CONSIST OF GRAVEL, CRUSHED GRAVEL, OR CRUSHED STONE 1/4 INCH TO 1 INCH IN SIZE, AS A MINIMUM, THE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF IDOT STANDARD SPECIFICATIONS. THE GRADATION SHALL CONFORM TO GRADATION CA-7 OR CA-11 OF THE STANDARD SPECIFICATIONS.
5. BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF IDOT STANDARD SPECIFICATIONS. THE GRADATION SHALL CONFORM TO GRADATION CA-6 OF THE STANDARD SPECIFICATIONS. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
6. JOINTS CONNECTING DISSIMILAR PIPE MATERIALS SHALL BE MADE WITH SEWER CLAMP NON-SHEAR TYPE COUPLINGS; CASCADE CSS; ROMAC LSS; FERMO; INO SHEAR RING, OR APPROVED EQUAL. WHEN AVAILABLE, A STANDARD JOINT WITH A TRANSITION GASKET MAY BE USED. THE NAME OF THE MANUFACTURER, CLASS, AND DATE OF ISSUE SHALL BE CLEARLY IDENTIFIED ON ALL SECTIONS OF PIPE. THE CONTRACTOR SHALL ALSO SUBMIT BILLS OF LADING, OR OTHER QUALITY ASSURANCE DOCUMENTATION WHEN REQUESTED BY THE CITY ENGINEER. ALL NUTS AND BOLTS FOR COUPLINGS SHALL BE STAINLESS STEEL.
7. MANHOLES FOR STORM SEWERS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES AND SHALL BE CONSTRUCTED OF PRECAST CONCRETE UNITS IN ACCORDANCE WITH ASTM C478-05 (OR LATEST EDITION) AND SHALL CONFORM TO THE CITY OF NAPERVILLE STANDARD DETAIL. ALL MANHOLES SHALL BE WATER-TIGHT. ALL VISIBLE LEAKS SHALL BE SEALED IN A MANNER ACCEPTABLE TO THE CITY ENGINEER.
8. MANHOLES SHALL BE FURNISHED WITH A SELF-SEALING FRAME AND SOLID COVER (EAST JORDAN IRON WORKS 1022 WITH TYPE A SOLID COVER, OR APPROVED EQUAL) WITH THE WORD "STORM" IMPRINTED ON THE COVER IN RAISED LETTERS. ALL FRAMES AND LIDS SHALL MEET OR EXCEED AASHTO H-20 LOADING SPECIFICATIONS. FRAMES SHALL BE SHOP PAINTED WITH ASPHALTIC BASE PAINT. BOTH THE MANHOLE FRAME AND COVER SHALL HAVE MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES. INVERTED MANHOLE FRAMES ARE NOT ALLOWED. PICK HOLES SHALL NOT CREATE OPENINGS IN THE MANHOLE COVER.
9. MANHOLE STEPS ON MAXIMUM 16 INCH CENTER SHALL BE FURNISHED WITH EACH MANHOLE, SECURELY ANCHORED IN PLACE, TRUE TO VERTICAL ALIGNMENT, IN ACCORDANCE WITH THE NAPERVILLE STANDARD DETAILS. STEPS SHALL BE COPOLYMER POLYPROPYLENE REINFORCED WITH 1/2 INCH A615/A615M-05A (OR LATEST EDITION) GRADE 60 STEEL REINFORCEMENT, MEETING OR EXCEEDING ASTM C 478-05 (OR LATEST EDITION) AND OSHA STANDARDS.
10. CATCH BASINS AND INLETS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 24 INCHES AND SHALL BE CONSTRUCTED OF PRECAST CONCRETE UNITS IN ACCORDANCE WITH ASTM C478-05 (OR LATEST EDITION) AND SHALL CONFORM TO THE CITY OF NAPERVILLE STANDARD DETAIL. ALL CATCH BASINS AND INLETS SHALL BE WATER-TIGHT AT ALL POINTS BELOW GRADE. ALL VISIBLE LEAKS SHALL BE SEALED IN A MANNER ACCEPTABLE TO THE CITY ENGINEER. CATCH BASINS AND INLETS SHALL BE FURNISHED WITH A FRAME AND GRATE BASED UPON THE LOCATION OF THE INSTALLATION AS LISTED BELOW. ALL FRAMES AND GRATES SHALL MEET OR EXCEED AASHTO H-20 LOADING SPECIFICATIONS. FRAMES SHALL BE SHOP PAINTED WITH ASPHALTIC BASE PAINT.
 - A) PAVEMENT: EAST JORDAN IRON WORKS 1022 FRAME WITH TYPE M1 RADIAL FLAT GRATE, OR APPROVED EQUAL.
 - B) BARRIER CURB AND GUTTER: EAST JORDAN IRON WORKS 7220 FRAME WITH TYPE M1 GRATE AND T1 CURB BOX, OR APPROVED EQUAL.
 - C) DEPRESSED CURB: EAST JORDAN IRON WORKS 5120 FRAME AND GRATE, OR APPROVED EQUAL.
 - D) MOUNTABLE CURB: EAST JORDAN IRON WORKS 7525 FRAME AND GRATE, OR APPROVED EQUAL.
 - E) NON-PAVED AREAS: EAST JORDAN IRON WORKS 6527 BEEHIVE GRATE, OR APPROVED EQUAL. ALTERNATELY, IN AREAS WHERE THERE IS THE LIKELIHOOD OF PEDESTRIAN TRAFFIC, EAST JORDAN IRON WORKS 1022 FRAME WITH TYPE M1 RADIAL FLAT GRATE, OR APPROVED EQUAL MAY BE USED.

Storm Sewer Notes

11. ALL PIPE SHALL BE LAID TRUE TO LINE AND GRADE. DIRT AND OTHER FOREIGN MATERIAL SHALL BE PREVENTED FROM ENTERING THE PIPE OR PIPE JOINT DURING HANDLING OR LAYING OPERATIONS. ALL STORM SEWER PIPE TO PIPE CONNECTIONS SHALL BE SEALED WITH BUTYL MASTIC TO ENSURE WATER TIGHTNESS. LIFT HOLES TO BE SEALED USING BUTYL MASTIC AND CONCRETE PLUGS. AT NO TIME SHALL CONNECTIONS BETWEEN THE STORM SEWER AND SANITARY SEWER BE ALLOWED.
12. FOR STRUCTURES LOCATED IN PAVED AREAS, A MINIMUM OF FOUR, 2-INCH DIAMETER HOLES SHALL BE DRILLED OR PRECAST INTO THE STRUCTURE WITHIN 1 FOOT OF THE LOWEST PIPE INVERT. THE HOLES SHALL BE DISTRIBUTED EQUIDISTANT AROUND THE PERIMETER OF THE STRUCTURE. A 1-FOOT BY 1-FOOT SECTION OF UNDERDRAIN FILTER CLOTH MATERIAL SHALL BE SUFFICIENTLY FIXED TO THE OUTSIDE OF THE MANHOLE WITH MASTIC MATERIAL TO PREVENT SLIPPAGE DURING BACKFILLING.
13. ADJUSTMENTS MAY BE NECESSARY TO ENSURE THAT FRAMES AND GRATES MATCH THE ELEVATION OF THE SURROUNDING PAVEMENT OR GROUND SURFACE. FRAME ADJUSTMENTS SHALL BE COMPLETED IN ACCORDANCE WITH SECTIONS 602 AND 603 OF STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, PREPARED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST EDITION, EXCEPT AS NOTED HEREIN.
14. PREFORMED ADJUSTING RINGS OF THE PROPER DIMENSIONS NEEDED TO MATCH THE FRAME TO THE PRECAST STRUCTURE SHALL BE USED. NO MORE THAN 12 INCHES OF VERTICAL ADJUSTMENT MAY BE MADE USING THE MINIMUM PRACTICAL NUMBER OF INDIVIDUAL RINGS.
15. ALL RINGS SHALL BE HIGH DENSITY POLYETHYLENE PLASTIC (HDPE), RECYCLED RUBBER, HIGH DENSITY EXPANDING POLYSTYRENE, EXPANDED POLYPROPYLENE (EPP), OR OTHER MATERIAL AS APPROVED BY THE CITY ENGINEER. PRECAST CONCRETE RINGS, BRICKS, ROCKS, SHIMS, OR CONCRETE BLOCKS WILL NOT BE ALLOWED. TAPERED ADJUSTING RINGS SHALL BE REQUIRED WHEN THE FRAME WILL NEED TO MATCH THE SLOPE OF THE ROADWAY.
16. A RESILIENT, FLEXIBLE, NON-HARDENING, PREFORMED BITUMINOUS MASTIC MATERIAL, CONSEL 102 B OR APPROVED EQUAL, SHALL BE USED BETWEEN THE CONE OR TOP BARREL SECTION OF THE STRUCTURE AND THE ADJUSTING RINGS. A THICK BEAD OF NON-HARDENING ELASTOMERIC JOINT SEALANT CONFORMING TO ASTM C-920, TYPE S, GRADE NS, SHALL BE APPLIED BETWEEN ALL INDIVIDUAL RINGS, AND BETWEEN THE ADJUSTING RINGS AND THE FRAME. THE SEALANT OR MASTIC MATERIAL SHALL BE APPLIED IN SUCH A MANNER THAT NO SURFACE WATER OR GROUND WATER INFLOW CAN ENTER THE STRUCTURE.
17. ALL STORM SEWER STRUCTURE FRAMES WITHOUT INSIDE FLANGES SHALL BE SHAPED WITH HYDRAULIC CEMENT OR ELASTOMERIC JOINT SEALANT TO FORM A FILLET TO THE STRUCTURE OR ADJUSTING RINGS AND TO MAINTAIN WATER-TIGHTNESS.
18. ALL STORM SEWER CASTINGS MUST INCLUDE "NO DUMPING, DRAINS TO RIVER" LOGOS.
19. ALL PIPE OUTLETS AND RIPRAP SHALL BE FLUSH WITH THE GROUND AND CONSTRUCTION OUTFALLS MUST NOT RESULT IN AN INCREASE IN GROUND ELEVATION IN THE FLOODPLAIN.

CITY OF NAPERVILLE Erosion Control and Drainage Notes

1. THE CONTRACTOR SHALL MAINTAIN PROPER DRAINAGE AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND PREVENT STORM WATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS.
2. DURING EXTENDED DRY PERIODS, THE CONSTRUCTION AREA(S) MAY NEED TO BE WATERED DOWN TO PREVENT THE BLOWING OF SOIL FROM THE SITE.
3. DURING CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE UTILIZED TO MINIMIZE THE TRACKING OF DIRT ONTO THE PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP PUBLIC STREET PAVEMENT CLEAN OF DIRT AND DEBRIS. ANY DIRT THAT IS TRACKED ONTO THE PUBLIC STREETS SHALL BE REMOVED THE SAME DAY, IF THE AMOUNT TRACKED ON THE PUBLIC STREET IS EXCESSIVE, CLEANING MAY BE REQUIRED MORE FREQUENTLY.
4. ALL EROSION CONTROL MEASURES SHALL BE PROPERLY INSTALLED, AS PERMITTED, PRIOR TO ANY LAND DISTURBANCE ACTIVITIES. ALL EROSION CONTROL SHALL BE MAINTAINED UNTIL TURF IS ESTABLISHED.
5. ACCEPTABLE PERIMETER EROSION CONTROL INCLUDES SILT FENCE, SILT WORM AND ANY OTHER APPLICATION APPROVED BY THE CITY ENGINEER.
6. ALL OPEN GRATE STRUCTURES SHALL HAVE EROSION CONTROL PROTECTION IN ACCORDANCE WITH THE APPROVED EROSION CONTROL PLANS. INLET BASKETS ARE THE PREFERRED METHOD; STRAW BALES SHALL NOT BE USED.
7. STOCKPILES NOT BEING DISTURBED FOR MORE THAN 14 DAYS SHALL BE SEEDED.
8. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY, AFTER ANY 0.5 INCH RAINFALL, OR MORE FREQUENTLY AS NECESSARY TO MAINTAIN THEIR FUNCTION.
9. IT IS THE RESPONSIBILITY OF THE OWNER OR HIS DESIGNEE TO INSPECT ALL TEMPORARY EROSION CONTROL MEASURES PER THE REQUIREMENTS OF THE NPDES PERMIT AND CORRECT ANY DEFICIENCIES AS NEEDED.

OTHER EROSION CONTROL NOTES

1. SEE STORMWATER POLLUTION PREVENTION PLAN FOR OTHER EROSION CONTROL NOTES.

CITY OF NAPERVILLE Geometric and Paving Notes

1. THE DEVELOPER AND CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO ADEQUATELY PROTECT THE PAVEMENT AND PROPERTY, CURB AND GUTTER AND OTHER RIGHT-OF-WAY IMPROVEMENTS, WHETHER NEWLY CONSTRUCTED OR EXISTING, FROM ANY AND ALL DAMAGE. SUFFICIENT MEANS SHALL BE EMPLOYED BY THE CONTRACTOR TO PROTECT AGAINST SUCH DAMAGE TO THE SATISFACTION OF THE CITY ENGINEER.
2. ANY NEW OR EXISTING IMPROVEMENTS THAT ARE DAMAGED SHALL BE REPAIRED OR REPLACED IN A MANNER THAT IS SATISFACTORY TO THE CITY ENGINEER.
3. THE CONTRACTOR AND/OR DEVELOPER SHALL SECURE ALL NECESSARY RIGHTS AND PERMISSIONS TO PERFORM ANY WORK ON PRIVATE PROPERTY NOT WITHIN THE OWNERSHIP RIGHTS OF THE DEVELOPER. THE DEVELOPER SHALL BEAR THE SOLE RESPONSIBILITY FOR DAMAGES THAT MAY OCCUR AS A RESULT OF WORK PERFORMED UNDER CONTRACTS THEY INITIATE.
4. THE CONTRACTOR/DEVELOPER WILL BE RESPONSIBLE FOR BRINGING PAVEMENTS (STREET, CURB AND GUTTER, SIDEWALK, DRIVEWAY) ON THE PROPERTY UP TO CITY STANDARDS INCLUDING ANY REPAIRS TO SUBSTANDARD PAVEMENTS THAT EXISTED PRIOR TO OR OCCURRED DURING CONSTRUCTION.
5. WHEREVER NEW WORK WILL MEET EXISTING CONDITIONS OTHER THAN LAWN AREAS, REGARDLESS OF WHETHER THE NEW OR EXISTING WORK IS ASPHALT OR CONCRETE, THE EXISTING ADJACENT SIDEWALK, DRIVEWAYS, PAVEMENT OR CURB SHALL BE NEATLY SAW CUT. THE SAW CUT SHALL BE IN A NEAT STRAIGHT LINE SUFFICIENTLY DEEP SO THAT IT RENDERS A SMOOTH VERTICAL FACE TO MATCH TO. IF THE CONTRACTOR IS NOT CAREFUL OR DOES NOT SAW DEEP ENOUGH AND THE CUT LINE BREAKS OUT OR CHIPS TO AN IMPERFECT EDGE, THEN THE EXISTING SIDE MUST BE RE-CUT SQUARE AND DONE OVER UNTIL IT IS CORRECT.

OTHER GEOMETRIC AND PAVING AND EARTHWORK NOTES

1. WORK UNDER THIS SECTION SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
 - A. CLEARING AND REMOVAL OF ALL UNDESIRABLE TREES AND OTHER VEGETATIVE GROWTH WITHIN THE CONSTRUCTION AREA. TREE REMOVAL SHALL BE DESIGNATED BY THE OWNER AND SHALL BE KEPT TO A MINIMUM.
 - B. STRIPPING OF TOPSOIL FROM ALL STREET, DRIVEWAY, PARKING LOT, RIGHT-OF-WAY, BUILDING PAD AND OTHER DESIGNATED STRUCTURAL AREAS.
 - C. 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 ONE (1) INCH DIAMETER, OR OTHER LITTER AND WASTE PRODUCTS INCLUDING EXTRANEOUS MATERIALS NOT CONDUCTIVE 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.
 - D. REMOVAL OF UNSUITABLE MATERIALS AS SPECIFIED FROM ROADWAY, DRIVEWAY/PARKING, BUILDING PAD AND OTHER DESIGNATED AREAS. OWNER TO VALIDATE UNSUITABLE AREAS BY ON-SITE MEASURING.
 - E. CLAY CUT AND CLAY FILL WITH COMPACTION WITHIN ROADWAY, DRIVEWAY/PARKING, BUILDING PAD AND OTHER DESIGNATED AREAS.
 - F. EXCAVATION AND GRADING OF THE OPEN SPACE, AND/OR YARD AREAS PER PLAN INCLUDING CONSTRUCTION OF BERMS, ETC.
 - G. PLACEMENT AND COMPACTION OF STRUCTURAL 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 ARE FINISHED GRADE ELEVATIONS AND THAT PAVEMENT AND/OR TOPSOIL REPLACEMENT THICKNESS MUST BE SUBTRACTED TO DETERMINE SUBGRADE ELEVATIONS.
 - H. IF REQUIRED, BORROW PIT EXCAVATION OF STRUCTURAL MATERIAL AND REFILL OF PIT WITH NON-STRUCTURAL MATERIAL.
 - I. PLACEMENT AND COMPACTION OF NON-STRUCTURAL FILLS.
 - J. MOVEMENT AND COMPACTION OF SOIL MATERIAL FROM THE CONSTRUCTION OF UNDERGROUND UTILITIES.
 - K. BACKFILLING OF CURBS AND/OR PAVEMENT AND SIDEWALK AFTER INSTALLATION OF SAME BY THE PAVING CONTRACTOR.
 - L. FINAL SHAPING AND TRIMMING TO THE LINES, GRADES, AND CROSS-SECTIONS SHOWN IN THESE PLANS; AND TOPSOIL PLACEMENT TO DESIGN FINISHED GRADE ELEVATIONS.
 - M. SOIL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS.
2. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SHALL NOTIFY THE ENGINEER AT ONCE OF ANY DISCREPANCIES. THE CONTRACTOR SHALL EXAMINE THE DRAINAGE PATTERNS SHOWN ON THE PLANS AND MAKE CERTAIN THAT ALL GUTTER FLAGS AND PAVEMENTS ARE PITCHED PROPERLY TO ACHIEVE THIS DRAINAGE PATTERN.
3. MATERIALS TESTING, IF REQUIRED BY THE MUNICIPALITY, SHALL BE PROVIDED BY THE CONTRACTOR. THIS ITEM WILL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE VARIOUS ITEMS OF WORK.
4. 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 MATERIAL CREATED AS A RESULT THEREOF.

OTHER GEOMETRIC AND PAVING AND EARTHWORK NOTES

5. 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.
6. THE GRADING OPERATIONS ARE TO BE CLOSELY SUPERVISED AND INSPECTED, PARTICULARLY DURING THE REMOVAL OF UNSUITABLE MATERIAL AND THE CONSTRUCTION OF EMBANKMENTS OR BUILDING PADS, BY THE SOILS 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 SOLE RESPONSIBILITY OF THE SOILS ENGINEER. HIS DIRECT EMPLOY TO SUPERVISE THIS WORK WITHOUT AUTHORIZATION FROM OWNER AND ASSIGNMENT OF AN EWO NUMBER.
7. THE GRADING AND CONSTRUCTION OF THE SITE IMPROVEMENTS SHALL NOT CAUSE PONDING OF STORM WATER. ALL AREAS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE.
8. THE PROPOSED GRADING ELEVATIONS SHOWN ON THE PLANS ARE FINISH GRADE. A MINIMUM OF SIX INCHES (6") OF TOPSOIL IS TO BE PLACED BEFORE FINISH GRADE ELEVATIONS ARE ACHIEVED.
9. THE SELECTED STRUCTURAL FILL MATERIAL SHALL BE PLACED IN LEVEL UNIFORM LAYERS SO THAT THE COMPACTED THICKNESS IS APPROXIMATELY SIX INCHES (6"); IF COMPACTION EQUIPMENT DEMONSTRATES THE ABILITY TO COMPACT GREATER THICKNESSES, THEN A GREATER THICKNESS MAY BE SPECIFIED. EACH LAYER SHALL BE THOROUGHLY MIXED DURING SPREADING TO INSURE UNIFORMITY.
10. EMBANKMENT MATERIAL WITHIN ROADWAY, DRIVEWAY, AND OTHER STRUCTURAL CLAY FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF NINETY-THREE PERCENT (93%) OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM SPECIFICATION D-1557 (MODIFIED PROCTOR METHOD), OR TO SUCH OTHER DENSITY AS MAY BE DETERMINED APPROPRIATE BY THE SOILS ENGINEER. EMBANKMENT MATERIAL FOR BUILDING PADS SHALL BE COMPACTED TO A MINIMUM OF NINETY-FIVE PERCENT (95%) OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM DESIGNATION D-1557 (MODIFIED PROCTOR METHOD) OR TO SUCH OTHER DENSITY AS MAY BE DETERMINED APPROPRIATE BY THE SOILS ENGINEER.
11. THE SURFACE VEGETATION, TOPSOIL AND ANY OBVIOUSLY SOFT UNDERLYING SOIL SHOULD BE STRIPPED FROM ALL AREAS TO RECEIVE STRUCTURAL FILL. IF THE UNDERLYING SUBGRADE SOILS RUT DEEPER THAN ONE INCH UNDER THE CONSTRUCTION EQUIPMENT OR IF THE MOISTURE CONTENT EXCEEDS THAT NEEDED FOR PROPER COMPACTION, THE SOIL SHALL BE SCARIFIED, DRIED AND RECOMPACTED TO THE REQUIRED SPECIFICATIONS (SEE SECTION 301.03 OF THE IDOT SPECIFICATIONS).
12. COMPLETED GRADING (FINISHED FINE GRADE) FOR PROPOSED PAVEMENT SUBGRADE AREAS, BUILDING PADS, AND YARD/OPEN SPACE AREAS SHALL BE WITHIN A TOLERANCE OF PLUS OR MINUS ONE-TENTH OF A FOOT (0.1') OF DESIGN SUBGRADE ELEVATIONS.
13. THE SUBGRADE FOR PROPOSED STREET AND PAVEMENT AREAS SHALL BE PROOF-ROLLED BY THE CONTRACTOR IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE AND ANY UNSTABLE AREAS ENCOUNTERED SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER AND SOILS ENGINEER. ANY UNDERCUT AND REPLACE NECESSARY WILL BE MEASURED FOR PAVEMENT AT THE CONTRACT UNIT PRICE.
14. ALL COMPENSATORY STORAGE SHALL BE OPERATIONAL PRIOR TO PLACEMENT OF FILL STRUCTURES, OR OTHER MATERIALS IN REGULATORY FLOODPLAIN. GRADING IN FLOODPLAIN AREAS SHALL BE DONE IN SUCH A MANNER THAT THE EXISTING FLOODPLAIN STORAGE IS MAINTAINED AT ALL TIMES.

CITY OF NAPERVILLE Traffic Control and Protection Notes

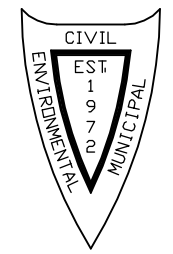
1. ALL DEVELOPERS AND CONTRACTORS SHALL PROVIDE SUITABLE TRAFFIC CONTROL FOR THEIR CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. TRAFFIC CONTROL MUST BE PROVIDED FOR ANY ACTIVITY THAT IMPACTS TRAFFIC FLOW. THIS INCLUDES, BUT IS NOT LIMITED TO, ROAD CLOSURES REQUIRING DETOURS, DAILY LANE CLOSURES, LONG TERM LANE CLOSURES, NARROW LANES, AND CONSTRUCTION VEHICLES ENTERING AND EXITING THE PUBLIC ROADWAY. ALL TRAFFIC CONTROL SET-UPS MAY BE INSPECTED BY THE CITY OF NAPERVILLE TO ENSURE THAT THEY ARE PROVIDING POSITIVE GUIDANCE TO MOTORISTS AND ARE NOT IN THEMSELVES PRESENTING A HAZARDOUS SITUATION. A REPRESENTATIVE OF THE DEVELOPER OR CONTRACTOR MUST PROVIDE PHONE NUMBERS AT WHICH THEY CAN BE REACHED 24 HOURS A DAY AND ON WEEKENDS SO THAT THEY CAN MAINTAIN TRAFFIC CONTROL DEVICES.
2. PEDESTRIANS MUST BE PROVIDED WITH A SAFE ALTERNATE ROUTE IF PEDESTRIAN FACILITIES ARE TO BE CLOSED AS A RESULT OF CONSTRUCTION ACTIVITIES. GUIDANCE MUST BE PROVIDED TO PEDESTRIANS SO THAT THEY MAY AVOID THE WORK ZONE. SAID PEDESTRIAN DETOUR PLAN (WITH SIGNAGE) IS TO BE REVIEWED AND ACCEPTED BY THE CITY IN WRITING, PRIOR TO THE COMMENCEMENT OF THE WORK.
3. THE CONTRACTOR SHALL EMPLOY THE APPROPRIATE METHODS OF TRAFFIC CONTROL IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, SUCH THAT THE SAFETY OF VEHICLES, AND PEDESTRIANS IS PRESERVED AT ALL TIMES. THE ERECTION AND MAINTENANCE OF THE TRAFFIC CONTROL DEVICES SHALL BE TO THE SATISFACTION OF THE AGENCY OF JURISDICTION AND THE CITY ENGINEER.
4. ANY TEMPORARY OPEN HOLES SHOULD BE BARRICADED AND PROTECTED IN ACCORDANCE WITH APPLICABLE STANDARDS.
5. LANE CLOSURES ON ARTERIAL ROADWAYS WITHIN THE CITY OF NAPERVILLE ARE NOT PERMITTED BETWEEN THE HOURS OF 6AM-9AM AND 3PM-7PM MONDAY THROUGH FRIDAY, UNLESS OTHERWISE PERMITTED BY THE CITY ENGINEER. LANE CLOSURES ON ARTERIAL STREETS ARE PERMITTED BETWEEN 7AM AND 7PM ON WEEKENDS, UNLESS OTHERWISE PERMITTED BY THE CITY ENGINEER. ARTERIAL ROADWAYS ARE DEFINED AS BOTH MAJOR AND MINOR ARTERIAL ROADWAYS AS DESIGNATED ON THE CITY'S MASTER THOROUGHFARE PLAN, LATEST EDITION.
6. ANY WORK THAT IMPACTS A TRAFFIC LANE ON AN ARTERIAL ROADWAY REQUIRES AN ARROWBOARD AS PART OF THE TRAFFIC CONTROL.
7. AT THE END OF EACH DAY OF WORK, THE ROADWAY MUST BE COMPLETELY REOPENED TO TRAFFIC. ANY OPEN HOLES MUST BE PLATED OR COLD PATCHED; THE CITY WILL NOT ALLOW THE HOLES TO BE FILLED WITH GRAVEL.

OTHER TRAFFIC CONTROL AND PROTECTION NOTES

1. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER AND CITY A TRAFFIC CONTROL PLAN FOR ANY WORK THAT NECESSITATES SUCH A PLAN.
2. AT THE PRECONSTRUCTION MEETING THE CONTRACTOR SHALL FURNISH THE NAME OF THE INDIVIDUAL IN HIS DIRECT EMPLOY WHO IS TO BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE TRAFFIC CONTROL FOR THIS PROJECT. THE ACTUAL INSTALLATION AND MAINTENANCE ARE TO BE ACCOMPLISHED BY A SUBCONTRACTOR. CONSENT SHALL BE REQUESTED OF THE ENGINEER AT THE TIME OF THE PRECONSTRUCTION MEETING IN ACCORDANCE WITH ARTICLE 108.01 OF THE STANDARD SPECIFICATIONS. THIS SHALL NOT RELIEVE THE CONTRACTOR OF THE FOREGOING REQUIREMENT FOR A RESPONSIBLE INDIVIDUAL IN HIS DIRECT EMPLOY TO SUPERVISE THIS WORK. THE CONTRACTOR WILL PROVIDE THE NAME OF ITS REPRESENTATIVE WHO WILL BE RESPONSIBLE FOR THE ADMINISTRATION OF THE TRAFFIC CONTROL PLAN.
3. THIS ITEM OF WORK SHALL INCLUDE FURNISHING, INSTALLING, MAINTAINING, RELOCATING AND REMOVING ALL TRAFFIC CONTROL DEVICES USED FOR THE PURPOSE OF REGULATING, WARNING OR DIRECTING TRAFFIC DURING THE CONSTRUCTION OR MAINTENANCE OF THIS IMPROVEMENT.
4. THE FOLLOWING TRAFFIC CONTROL REQUIREMENTS ARE OF SPECIAL IMPORTANCE. CONFORMANCE TO THESE REQUIREMENTS, HOWEVER, SHALL NOT RELIEVE THE CONTRACTOR FROM CONFORMING TO ALL OTHER APPLICABLE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
5. THE GOVERNING FACTOR IN THE EXECUTION AND STAGING OF WORK FOR THIS PROJECT IS TO PROVIDE THE MOTORING PUBLIC WITH THE SAFEST POSSIBLE TRAVEL CONDITIONS ALONG THE ROADWAY THROUGH THIS CONSTRUCTION ZONE. THE CONTRACTOR SHALL SO ARRANGE HIS OPERATION AS TO KEEP THE CLOSING OF ANY LANE OF THE ROADWAY TO A MINIMUM.
6. TRAFFIC CONTROL DEVICES INCLUDE: SIGNS AND THEIR SUPPORTS, SIGNALS, PAVEMENT MARKINGS, BARRICADES WITH SAND BAGS, CHANNELIZING DEVICES, WARNING LIGHTS, ARROWBOARDS, FLAGGERS, OR ANY OTHER DEVICE USED FOR THE PURPOSE OF REGULATING, WARNING, OR GUIDING TRAFFIC THROUGH THE CONSTRUCTION ZONE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER LOCATION, INSTALLATION, AND ARRANGEMENT OF ALL TRAFFIC CONTROL DEVICES. SPECIAL ATTENTION SHALL BE GIVEN TO ADVANCE WARNING SIGNS DURING CONSTRUCTION OPERATIONS IN ORDER TO KEEP LANE ASSIGNMENT CONSISTENT WITH BARRICADE PLACEMENT AT ALL TIMES. THE CONTRACTOR SHALL COVER ALL TRAFFIC CONTROL DEVICES WHICH ARE INCONSISTENT WITH DETOUR OR LANE ASSIGNMENT PATTERNS DURING THE TRANSITION FROM ONE CONSTRUCTION STAGE TO ANOTHER.
8. CONSTRUCTION SIGNS REFERRING TO DAYTIME LANE CLOSURE DURING WORKING HOURS SHALL BE REMOVED OR COVERED DURING NON-WORKING HOURS.
9. THE CONTRACTOR SHALL COORDINATE ALL TRAFFIC CONTROL WORK ON THIS PROJECT WITH ADJOINING OR OVERLAPPING PROJECTS, INCLUDING BARRICADE PLACEMENT NECESSARY TO PROVIDE A UNIFORM TRAFFIC DETOUR PATTERN. WHEN DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES WHICH WERE FURNISHED, INSTALLED AND MAINTAINED BY HIM UNDER THIS CONTRACT, AND SUCH DEVICES SHALL REMAIN THE PROPERTY OF THE CONTRACTOR. ALL TRAFFIC CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL SPECIFIC AUTHORIZATION FOR RELOCATION OR REMOVAL IS RECEIVED FROM THE ENGINEER.
10. THE CONTRACTOR SHALL ENSURE THAT ALL TRAFFIC CONTROL DEVICES INSTALLED BY HIM ARE OPERATIONAL 24 HOURS A DAY, INCLUDING SUNDAYS AND HOLIDAYS.
11. THE CONTRACTOR SHALL PROVIDE A MANNED TELEPHONE ON A CONTINUOUS 24-HOUR-A-DAY BASIS TO RECEIVE NOTIFICATION OF ANY DEFICIENCIES REGARDING TRAFFIC CONTROL AND PROTECTION AND SHALL DISPATCH WORKERS, MATERIALS AND EQUIPMENT TO CORRECT ANY SUCH DEFICIENCIES. THE CONTRACTOR SHALL RESPOND TO ANY CALL FROM THE CITY OF NAPERVILLE TRANSPORTATION, ENGINEERING AND DEVELOPMENT BUSINESS GROUP AT (630) 420-6082 CONCERNING ANY REQUEST FOR IMPROVING OR CORRECTING TRAFFIC CONTROL DEVICES AND BEGIN MAKING THE REQUESTED REPAIRS WITHIN TWO HOURS FROM THE TIME OF NOTIFICATIONS.
12. WHEN TRAVELING IN LANES OPEN TO PUBLIC TRAFFIC, THE CONTRACTOR'S VEHICLES SHALL ALWAYS MOVE WITH AND NOT AGAINST OR ACROSS THE FLOW OF TRAFFIC. VEHICLES SHALL ENTER OR LEAVE WORK AREAS IN A MANNER WHICH WILL NOT BE HAZARDOUS TO, OR INTERFERE WITH, TRAFFIC AND SHALL NOT PARK OR STOP EXCEPT WITHIN DESIGNATED WORK AREAS. PERSONAL VEHICLES SHALL NOT PARK WITHIN THE RIGHT-OF-WAY EXCEPT IN SPECIFIC AREAS DESIGNATED BY THE ENGINEER.
13. ANY DROP OFF GREATER THAN THREE INCHES, BUT LESS THAN SIX INCHES WITHIN EIGHT FEET OF THE PAVEMENT EDGE SHALL BE PROTECTED BY TYPE I OR II BARRICADES EQUIPPED WITH MONO-DIRECTIONAL STEADY BURN LIGHTS AT 100 FOOT CENTER TO CENTER SPACING. IF THE DROP OFF WITHIN EIGHT FEET OF THE PAVEMENT EDGE EXCEEDS SIX INCHES, THE BARRICADES MENTIONED ABOVE SHALL BE PLACED AT 50 FOOT CENTER TO CENTER SPACING. BARRICADES THAT MUST BE PLACED IN EXCAVATED AREAS SHALL HAVE LEG EXTENSIONS INSTALLED SUCH THAT THE TOP OF THE BARRICADE IS IN COMPLIANCE WITH THE HEIGHT REQUIREMENTS OF STANDARD 2299. VERTICAL PANELS OR OTHER DELINEATING DEVICES MAY BE SUBSTITUTED FOR TYPE I OR II BARRICADES WITH THE APPROVAL OF THE ENGINEER.
14. CHECK BARRICADES SHALL BE PLACED IN WORK AREAS PERPENDICULAR TO TRAFFIC EVERY 100 FEET, ONE (1) PER LANE AND SHOULDER, TO PREVENT MOTORISTS FROM USING WORK AREAS AS A TRAVELED WAY. ADDITIONAL CHECK BARRICADES SHALL BE PLACED IN ADVANCE OF ANY HAZARD IN THE WORK AREAS WHICH WOULD ENDANGER A MOTORIST. CHECK BARRICADES SHALL BE TYPE I OR II AND EQUIPPED WITH A FLASHING LIGHT.
15. PLACEMENT OF ALL SIGNS AND BARRICADES SHALL PROCEED IN THE DIRECTION OF FLOW OF TRAFFIC. REMOVAL OF ALL SIGNS AND BARRICADES SHALL START AT THE END OF THE CONSTRUCTION AREAS AND PROCEED TOWARD ONCOMING TRAFFIC UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
16. DELAYS TO THE CONTRACTOR CAUSED BY COMPLYING WITH THESE REQUIREMENTS WILL BE CONSIDERED INCIDENTAL TO THE ITEM FOR TRAFFIC CONTROL AND PROTECTION, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
17. THIS ITEM OR WORK WILL BE MEASURED ON A LUMP SUM BASIS FOR FURNISHING, INSTALLING, MAINTAINING, RELOCATING AND REMOVING THE TRAFFIC CONTROL DEVICES REQUIRED IN THE PLANS AND THESE SPECIAL PROVISIONS. PAYMENT FOR TRAFFIC CONTROL AND PROTECTION SHALL BE CONSIDERED AS INCLUDED INCLUDED IN THE WORK BEING DONE OR AS SPECIFIED IN THE
18. ADJACENT ROADWAYS MUST REMAIN OPEN TO TWO-WAY TRAFFIC AT ALL TIMES UNLESS OTHERWISE AUTHORIZED BY THE CITY ENGINEER.
19. IF NECESSARY, ANY TEMPORARY LANE CLOSURES ON ADJACENT ROADWAYS MUST BE COORDINATED WITH AND APPROVED BY CITY STAFF.
20. DURING THE PERIOD OF TIME WHEN THE PUBLIC SIDEWALK IS CLOSED, "SIDEWALK CLOSED" SIGNS MUST BE PLACED WITH POSITIVE DIRECTION TO PEDESTRIANS. A SIGN SHOULD BE PLACED AT THE EAST & WEST EXTENTS OF THE WORK ZONE TO DIRECT PEOPLE TO USE THE SIDEWALK ALONG THE NORTH SIDE OF THE STREET.
21. ALL CONTRACTOR AND SUB-CONTRACTOR VEHICLES MUST BE PARKED OFF OF PUBLIC STREETS UNLESS AUTHORIZED BY THE CITY OF NAPERVILLE ENGINEER.

Copyright © 2019 Cemcon, Ltd. All rights reserved.

PREPARED FOR:
 OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490



PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO.		DATE		DESCRIPTION		REVISIONS	
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION	NO.	DATE
1	02-04-20/JGC	REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 01-09-20					

CONSTRUCTION SPECIFICATIONS – GENERAL NOTES

77TH STREET SUBDIVISION

FILE NAME: GENNOTES	DSGN. BY: MAM	JOB NO.: 782.029	FLD. BK./PG.: ---	SHEET NO.
DIR: 782029	DRN. BY: JGC	DATE: 12-16-19	SCALE: 1" = NONE	2 of 14

CONSTRUCTION SPECIFICATIONS – GENERAL NOTES



**CITY OF NAPERVILLE
General Notes**

- THE OWNER OR HIS/HER/THEIR REPRESENTATIVE IS RESPONSIBLE TO OBTAIN ANY AND ALL PERMITS REQUIRED BY APPLICABLE GOVERNMENTAL AGENCIES.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF NAPERVILLE DESIGN MANUAL AND STANDARD SPECIFICATIONS (CURRENT EDITION) AND WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (CURRENT EDITION).
- ALL CONTRACTORS DOING WORK IN THE PUBLIC RIGHT-OF-WAY MUST BE LICENSED (WHEN APPLICABLE) TO MAKE PUBLIC IMPROVEMENTS WITHIN THE NAPERVILLE CORPORATE LIMITS.
- THE CONTRACTOR/DEVELOPER ASSUMES ALL RESPONSIBILITY AND LIABILITY FOR ANY ACTION RESULTING FROM THEIR WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR/DEVELOPER SHALL INDEMNIFY AND HOLD HARMLESS THE CITY OF NAPERVILLE.
- PRIOR TO COMMENCEMENT OF ANY OFF-SITE CONSTRUCTION, THE CONTRACTOR SHALL SECURE WRITTEN AUTHORIZATION THAT ALL OFF-SITE EASEMENTS HAVE BEEN SECURED AND THAT PERMISSION HAS BEEN GRANTED TO ENTER ONTO PRIVATE PROPERTY.
- THE CONTRACTOR AND THEIR ON-SITE REPRESENTATIVES WILL BE REQUIRED TO ATTEND A PRE-CONSTRUCTION MEETING WITH THE CITY OF NAPERVILLE PRIOR TO ANY WORK BEING STARTED. A PRE-CONSTRUCTION MEETING WILL NOT BE SCHEDULED UNTIL THE PROJECT HAS BEEN APPROVED BY THE CITY OF NAPERVILLE DEVELOPMENT REVIEW TEAM AND THE REQUIRED SURETY HAS BEEN POSTED.
- A MINIMUM OF 48 HOURS NOTICE SHALL BE GIVEN TO THE CITY OF NAPERVILLE TED BUSINESS GROUP (630-420-6082) PRIOR TO STARTING WORK OR RESTARTING WORK AFTER SOME ABSENCE OF WORK FOR ANY REASON.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ADEQUATELY IDENTIFY AND LOCATE ALL EXISTING UTILITIES PRIOR TO EXCAVATION. BEFORE STARTING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT JULIE FOR THE LOCATION OF ANY AND ALL UTILITIES. THE TOLL-FREE NUMBER IS 800-892-0123. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY PRIVATE FACILITIES OR NON-JULIE MEMBER FACILITIES.
- THE CONTRACTOR CAN SCHEDULE ALL NECESSARY SITE INSPECTIONS WITH THE CITY OF NAPERVILLE BY CALLING (630) 420-6082 BETWEEN THE HOURS OF 8:00AM AND 4:00PM (CLOSED 1:00PM TO 2:00PM DAILY) ON WEEKDAYS WHEN THE CITY IS OPEN FOR BUSINESS. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE THE SITE PERMIT NUMBER FOR THE PROJECT IN ORDER TO SCHEDULE THE INSPECTION(S).
- RECORD DRAWINGS ARE REQUIRED TO BE SUBMITTED AND APPROVED BY THE CITY OF NAPERVILLE PRIOR TO FINAL OCCUPANCY BEING GRANTED.
- FINAL ACCEPTANCE OF PUBLIC IMPROVEMENTS SHALL BE GRANTED ONLY AFTER A FINAL INSPECTION HAS BEEN COMPLETED AND HAS REVEALED THAT ALL IMPROVEMENTS HAVE BEEN SATISFACTORILY COMPLETED IN ACCORDANCE WITH THE NAPERVILLE STANDARD SPECIFICATIONS. UTILITIES ARE NOT CONSIDERED ACCEPTED UNTIL THEY ARE FORMALLY ACCEPTED BY THE CITY COUNCIL AS REQUIRED IN ACCORDANCE WITH THE NAPERVILLE MUNICIPAL CODE.

OTHER GENERAL NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND HEALTHFUL WORKING CONDITIONS THROUGHOUT THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- IF THE ENGINEER IS RETAINED FOR CONSTRUCTION STAKING SERVICES, THE ENGINEER AND T.E.D. WILL BE GIVEN SEVENTY-TWO (72) HOURS NOTICE FOR ANY STAKING THAT IS TO BE DONE. IF ENGINEER IS CONTRACTED BY OWNER OR CONTRACTOR FOR CONSTRUCTION STAKING SERVICES, EACH OF THE VARIOUS ITEMS OF WORK COVERED BY THIS CONTRACT WILL BE STAKED ONCE. ADDITIONAL STAKING REQUIRED DUE TO CONTRACTOR NEGLIGENCE SHALL BE PAID FOR BY THE CONTRACTOR AT THE CURRENT HOURLY RATE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING EACH OF THE UTILITY COMPANIES BEFORE ANY WORK IS STARTED. ALL UTILITIES MUST BE STAKED PRIOR TO CONSTRUCTION.
- AFTER CONSTRUCTION STAKING IS PERFORMED, BUT PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL CALL THE ATTENTION OF THE OWNER'S REPRESENTATIVE TO ANY ERRORS OR DISCREPANCIES WHICH MAY BE SUSPECTED IN LINES AND GRADES WHICH ARE ESTABLISHED BY THE OWNER, AND SHALL NOT PROCEED WITH THE WORK UNTIL ANY LINES AND GRADES WHICH ARE BELIEVED TO BE IN ERROR HAVE BEEN VERIFIED OR CORRECTED BY THE OWNER'S REPRESENTATIVE.
- THE UNDERGROUND CONTRACTOR SHALL BE RESPONSIBLE TO PLACE ON GRADE AND COORDINATE WITH OTHER CONTRACTORS ALL UNDERGROUND STRUCTURE FRAMES SUCH AS CATCH BASINS, INLETS, MANHOLES, HYDRANTS, BUFFALO BOXES, VALVES, ETC. NO ADDITIONAL COMPENSATION WILL BE PAID AND SAID ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO OTHER ITEMS OF CONSTRUCTION.
- CONTRACTORS SHALL KEEP PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS AND, WHEN NECESSARY, CLEAN PAVEMENTS ON A DAILY BASIS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS (INCLUDING UTILITY LOCATIONS) PRIOR TO THE INSTALLATION OR FABRICATION OF ANY MATERIALS. REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.

**CITY OF NAPERVILLE
Department of Public Utilities – Water/Wastewater General Notes**

- NEW WATER MAIN VALVES, INCLUDING PRESSURE TAP VALVES, ADJACENT TO AN EXISTING WATER MAIN AND EXISTING WATER MAIN VALVES SHALL ONLY BE OPERATED BY THE CITY OF NAPERVILLE, DEPARTMENT OF PUBLIC UTILITIES CEE/CM DIVISION PERSONNEL WITH 48-HOUR NOTICE (MONDAY-FRIDAY). CONTACT NAPERVILLE TED BUSINESS GROUP AT 630-420-6082 FOR SCHEDULING.
- ANY EXISTING UTILITY STRUCTURES REQUIRING ADJUSTMENT OR RECONSTRUCTION SHALL BE COMPLETED BY THE CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER. ADJUSTMENTS AND/OR RECONSTRUCTIONS NOT CALLED FOR ON THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. NO MORE THAN A TOTAL OF 12 INCHES OF ADJUSTING RINGS AND/OR 2 ADJUSTING RINGS SHALL BE ALLOWED. ALL STRUCTURE FRAMES SHALL BE FLUSH WITH FINAL GRADE.
- TREES SHALL BE INSTALLED A MINIMUM OF FIVE (5) FEET HORIZONTALLY FROM UNDERGROUND ELECTRICAL FEEDERS, SANITARY SEWERS, SANITARY SERVICES, WATER MAINS, AND WATER SERVICES. TREES SHALL BE INSTALLED A MINIMUM OF TEN (10) FEET HORIZONTALLY FROM UTILITY STRUCTURES AND APPURTENANCES, INCLUDING, BUT NOT LIMITED TO, MANHOLES, VALVE VAULTS, VALVE BOXES AND FIRE HYDRANTS. NO TREES, SHRUBS OR OBSTACLES WILL BE ALLOWED 10' IN FRONT OF, 5' ON THE SIDES, AND 7' TO THE REAR OF THE ELECTRICAL TRANSFORMER.
- ALL RETAINER GLANDS WHEN REQUIRED TO RESTRAIN VALVES, FITTINGS, HYDRANTS, AND PIPE JOINTS SHALL BE MECHANICAL JOINT WEDGE ACTION TYPE MEGALUG 1100 SERIES AS MANUFACTURED BY EBBA IRON, INC. OR UNI-FLANGE BLOCKBUSTER 1400 SERIES AS MANUFACTURED BY FORD METER BOX CO. AND SHALL BE FOR USE ON DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C151/A21.51, FOR NOMINAL PIPE SIZES 3" THROUGH 48".
- EXISTING DUCTILE IRON SYSTEMS FOR RESTRAINING PUSH-ON PIPE BELLS SHALL BE MEGALUG SERIES 1100HD OR FORD SERIES 1390.
- EXISTING DUCTILE IRON SYSTEMS REQUIRING RESTRAINT SHALL BE MEGALUG SERIES 1100SD (SPLIT MEGALUG) FOR MECHANICAL JOINTS.
- DUCTILE IRON WATER MAIN TO BE CLASS 52. ALL DUCTILE IRON PIPE IS TO BE ENCASED IN POLYETHYLENE FILM POLYETHYLENE ENCASEMENT TO BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C105/A21.5-05.
- A SET OF AS-BUILT RECORD DRAWING SHALL BE GIVEN TO THE CITY OF NAPERVILLE UPON COMPLETION OF IMPROVEMENTS SHOWING THE ELEVATION AND LOCATION (TIED TO TWO POINTS) OF ALL NEW AND EXISTING STRUCTURES INCLUDING FIRE HYDRANTS, VALVE BOXES AND VAULTS, LINES/STOP SLEEVES, WATER SERVICE CORPORATION STOPS, WATER MAIN FITTINGS/BENDS, MANHOLES, SANITARY SERVICE WYES (MEASURED FROM DOWNSTREAM MANHOLE), AND ABANDONED WATER OR SANITARY SERVICE LINES. ALL ELEVATIONS SHOULD BE REFERENCED TO THE SAME BENCHMARK DATUM AS THE ORIGINAL DESIGN PLANS. HORIZONTAL TIES SHALL BE REFERENCED TO LOT LINES, BACK OF CURB, OR PROPERTY CORNERS.
- ALL SANITARY SEWER PIPING SHALL BE PVC PIPE MEETING THE REQUIREMENTS OF ASTM D-2241 WITH JOINTS CONFORMING TO ASTM D-3139. ALL SANITARY SEWER FITTINGS SHALL BE PVC MEETING THE FOLLOWING REQUIREMENTS: 4" TO 12" SHALL BE INJECTION MOLDED FITTINGS MEETING ASTM D-2241. GREATER THAN 12" SHALL BE FABRICATED FITTINGS MEETING ASTM D-2241 OR C905. MINIMUM PRESSURE RATING SHALL BE 150 PSI.
- THE VALVES LESS THAN 16" SHALL BE STANDARD PATTERN, GATE VALVES AND SHALL HAVE THE NAME OR MARK OF THE MANUFACTURER, SIZE AND WORKING PRESSURE PLAINLY CAST IN RAISED LETTERS ON THE VALVE BODY. VALVES MAY BE APPROVED FROM ONE OF THE FOLLOWING MANUFACTURERS: AMERICAN, CLOW, WATERLOUS OR KENNEDY.
- STAINLESS STEEL NUTS, BOLTS/T-BOLTS, AND WASHERS, TYPE 304 OR BETTER, WILL BE REQUIRED ON ALL WATER MAIN INSTALLATIONS. THIS WOULD APPLY TO HYDRANTS, TAPPING SLEEVES, VALVES, FITTINGS, RESTRAINT, AND OTHER APPURTENANCES BURIED OR IN VALVE VAULTS. MECHANICAL JOINTS AND RESTRAINT GLANDS REQUIRE 304 STAINLESS STEEL T-BOLTS. AN ANTI-SEIZE COMPOUND SHALL BE FACTORY APPLIED TO NUTS OR BOLTS - ANY DAMAGE TO THIS COATING SHALL BE REPAIR WITH FIELD APPLIED APPROVED ANTI-SEIZE COMPOUND THAT IS A MOLYBDENUM-BASE LUBRICANT, BOSTIK NEVER-SEEZ OR APPROVED EQUAL.
- THE CONTRACTOR SHALL ROTATE AND/OR ADJUST ANY EXISTING AND/OR NEW HYDRANT TO THE SATISFACTION OF THE DEPARTMENT OF PUBLIC UTILITIES.
- WATER MAINS SHALL BE SUBJECTED TO A HYDROSTATIC/LEAKAGE TEST IN ACCORDANCE WITH NAPERVILLE STANDARD SPECIFICATIONS. TEST PRESSURE SHALL BE NO LESS THAN 150 PSI FOR A PERIOD OF 4 HOURS AND NOT VARY BY MORE THAN ± 5 PSI. DURING THE TEST, THE TEST GAUGE SHALL BE APPROVED BY THE CITY AND SHALL BE GLYCERIN OR OIL FILLED, WITH A RANGE OF NOT MORE THAN 200 PSI AND INCREMENTS NOT GREATER THAN 5 PSI. 4" MINIMUM DIAL SIZE. WATER RECOVERY TEST SHALL BE COMPLETED AT THE END OF THE TESTING PERIOD TO SHOW ACTUAL LEAKING AND THAT THE WATER MAIN DID NOT HAVE TOO MUCH TRAPPED AIR IN THE TESTED SECTION.
- THE CITY OF NAPERVILLE DPU-W/W DOES NOT GUARANTEE THAT ANY VALVE OR FITTING IN THE EXISTING WATER DISTRIBUTION SYSTEM WILL HOLD AGAINST A HYDROSTATIC/LEAKAGE TEST. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING AN ACCEPTABLE PRESSURE TEST WHICH SHALL INCLUDE PROVISIONS AROUND EXISTING VALVES AND FITTINGS.
- FIRE HYDRANT SHOULD BE BAGGED "NOT IN SERVICE" UNTIL ALL TESTING AND DISINFECTION HAS BEEN COMPLETED AND NEW WATER MAIN SECTION IS SERVICE.
- SANITARY SEWER AND WATER SHALL BE CONSTRUCTED, TESTED, AND PLACED INTO SERVICE IN ACCORDANCE WITH CITY OF NAPERVILLE STANDARD SPECIFICATION AND SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
- ALL VALVE BOXES, VAULTS, HYDRANTS, AND MANHOLES SHALL NOT BE COVERED WITH CONSTRUCTION DEBRIS AND SHALL REMAIN ACCESSIBLE TO THE RESPECTIVE UTILITY COMPANY.
- WATER SERVICE LINE SMALLER THAN 3" SHALL BE TYPE K COPPER. IF JOINTS ARE REQUIRED DUE TO LENGTH OF SERVICE, THEN ONLY COMPRESSION TYPE COUPLING SHALL BE PERMITTED. NO SOLDERED OR FLARED TYPE JOINTS ARE ALLOWED.

**CITY OF NAPERVILLE
Department of Public Utilities – Water/Wastewater General Notes**

- ALL SANITARY MANHOLES SHALL BE TESTED FOR LEAKAGE BY VACUUM TESTING. THE MANHOLE FRAME AND ADJUSTING RINGS SHALL BE IN PLACE WHEN TESTING. ANY LEAKS SHALL BE REPAIRED FROM EXTERIOR OF MANHOLE - PATCHING INSIDE OF MANHOLE SHALL NOT BE ACCEPTABLE. A VACUUM OF 10" (254 MM) HG SHALL BE PLACE ON THE MANHOLE AND THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9" (229 MM) HG. THE VACUUM SHALL NOT DROP BELOW 9" (229 MM) HG FOR THE FOLLOWING TIME PERIODS FOR EACH SIZE OF MANHOLE:
 - a) 48-INCH DIAMETER – 60 SECONDS
 - b) 60-INCH DIAMETER – 75 SECONDS
 - c) 72-INCH DIAMETER – 90 SECONDS
 - d) 84-INCH DIAMETER – 105 SECONDS
 ANY MANHOLES THAT FAIL THE TEST SHALL BE SEALED AND RE-TESTED UNTIL ACCEPTABLE.
- THE CONTRACTOR SHALL PROVIDE INTERNAL TELEVIEWED INSPECTION OF ALL INSTALLED SANITARY SEWER, LATERALS, MANHOLES AND CONNECTIONS TO THE PUBLIC SYSTEM. FOLLOWING COMPLETION OF TELEVIEWING WORK, THE CONTRACTOR SHALL SUBMIT VIDEO RECORDINGS ON DVD OR FLASH DRIVE ALONG WITH A COMPREHENSIVE TELEVIEWING REPORT WHICH WILL INDICATE THE LOCATION, FOOTAGES AND NATURE OF ANY DEFECTS. ALL DEFECTS SHALL BE REPAIRED TO THE SATISFACTION OF THE WATER/WASTEWATER UTILITY AND RE-TELEVIEWED.
- CONTRACTOR WORK HOURS ARE ONLY ALLOWED FROM 7:00 A.M. TO 5:00 P.M., MONDAY THROUGH SATURDAY. NO WORK SHALL BE PERMITTED ON SUNDAYS.
- SANITARY PIPES WITH LESS THAN 4 FEET OR MORE THAN 25 FEET OF COVER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPING (CLASS 50, MINIMUM) AND ENCASED IN POLYWRAP.
- ALL EXCAVATIONS MORE THAN 20 FEET DEEP MUST BE PROTECTED BY A SYSTEM DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
- CONTRACTOR SHALL MAINTAIN 2' MINIMUM CLEARANCE BETWEEN EXISTING UTILITIES AND NEW FOUNDATIONS AND UNDERGROUND FACILITIES. IN AREAS WHERE FOUNDATIONS AND UNDERGROUND FACILITIES ARE PROPOSED ADJACENT TO EXISTING UTILITIES, THE CONTRACTOR SHALL POT HOLE BY VACUUM EXCAVATION OR HAND EXCAVATION TO LOCATE THE EXISTING UTILITY TO VERIFY MINIMUM CLEARANCE REQUIREMENT.
- FENCES SHALL BE INSTALLED A MINIMUM OF 5 FEET FROM ANY WATER OR SANITARY MAINS WHEN RUNNING PARALLEL WITH THEM. WHERE FENCES ARE INSTALLED CROSSING WATER OR SANITARY MAINS, THE POSTS SHALL BE LOCATED TO HAVE THE MAIN BETWEEN THEM.
- ALL BRASS COMPONENTS SHALL BE CERTIFIED TO BE LEAD FREE IN COMPLIANCE WITH NSF 61 AND NSF 372 AND IDENTIFIED WITH APPLICABLE MARKINGS.
- ALL SANITARY SEWER CLEANOUT RISER CAPS SHALL BE ENCLOSED IN A CLEANOUT BOX, EJV 1566 OR APPROVED EQUAL.

OTHER SANITARY SEWER AND WATERMAIN NOTES

- WATERMAIN SERVICES SHALL HAVE A MINIMUM OF 5.0 FEET OF COVER AND SHALL BE RUN IN STRAIGHT ALIGNMENT UNLESS SPECIFICALLY SHOWN ON THE PLANS.
- ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION.
- THE CONTRACTOR SHALL BE AWARE OF POTENTIAL CONFLICTS WITH EXISTING UTILITIES AS INDICATED ON THE PLANS. THE CONTRACTOR SHALL EXCAVATE AROUND UTILITIES TO DETERMINE ELEVATIONS BEFORE BEGINNING CONSTRUCTION.
- "BAND-SEAL" OR SIMILAR NON-SHEAR COUPLINGS SHALL BE USED WHEN JOINING SEWER PIPES OF DISSIMILAR MATERIALS.
- ALL NEW SANITARY SEWERS SHALL HAVE WYES FOR PROPOSED BUILDING SERVICES. ALL CONNECTIONS TO EXISTING SANITARY SEWERS NOT HAVING WYES SHALL BE MADE WITH A CASCADE STAINLESS STEEL SEWER SADDLE FOR BUILDING SERVICES AND WITH A MANHOLE FOR SEWER EXTENSIONS. ALL TAPS SHALL INCLUDE A PROPERLY INSTALLED HUB WYE SADDLE.
- CONNECTIONS TO EXISTING SANITARY SEWER AND WATER SYSTEMS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- WATER SERVICES SHALL INCLUDE THE NECESSARY LENGTH OF TYPE "K" COPPER WATER TUBE OF THE SIZE SHOWN ON THE PLANS, CORPORATION STOP, CURB STOP, AND SERVICE BOX, ALL AS REQUIRED BY THE MUNICIPALITY, AND ALL NECESSARY LABOR, TOOLS, EQUIPMENT, EXCAVATION & BACKFILL, FOR A COMPLETE INSTALLATION AS SHOWN ON THE PLANS. TRENCH BACKFILL WILL BE PAID FOR SEPARATELY, WHEN REQUIRED.
- GRANULAR TRENCH BACKFILL SHALL BE USED IN ALL LOCATIONS WHERE THE PROPOSED UNDERGROUND UTILITY IS TO BE CONSTRUCTED UNDER PERMANENT TYPE PAVEMENTS, DRIVEWAYS, OR SIDEWALKS. IN ANY UTILITY TRENCH OVER WHICH ANOTHER UTILITY WILL PASS; OR AS DIRECTED BY THE ENGINEER, TRENCH BACKFILL SHALL BE EXTENDED TWO (2) FEET ON EACH SIDE OF THE PERMANENT TYPE SURFACE.
- ALL SANITARY SEWER SHALL BE CONSTRUCTED WITH STONE BEDDING (IDOT GRADATION CA-11) IN ACCORDANCE WITH ASTM D-2321-89 CLASS IB.
- THE COST OF PIPE BEDDING WILL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE CONTRACT UNIT PRICES OF THE VARIOUS SEWER ITEMS.
- DEFLECTION TESTING FOR FLEXIBLE THERMOPLASTIC PIPE:
 - A.) THE PIPELINE SHALL BE TESTED FOR EXCESS DEFLECTION BY PULLING A "GO-NO GO" MANDREL THROUGH THE PIPE FROM MANHOLE TO MANHOLE. THE MANDREL SHALL BE SIZED IN ACCORDANCE WITH SECTION 31-1.11 C (4), AND AS SPECIFIED IN THE SPECIAL PROVISIONS. A "DEFLECTOMETER" MAY ALSO BE USED TO CHECK AND RECORD DEFLECTION.
 - B.) WHEREVER POSSIBLE AND PRACTICAL, THE TESTING SHALL INITIATE AT THE DOWNSTREAM LINES AND PROCEED TOWARDS THE UPSTREAM LINES.
 - C.) WHERE DEFLECTION IS FOUND TO BE IN EXCESS OF ALLOWABLE TESTING LIMITS, THE CONTRACTOR SHALL EXCAVATE TO THE POINT OF EXCESS DEFLECTION AND CAREFULLY COMPACT AROUND THE POINT WHERE EXCESS DEFLECTION WAS FOUND. THE LINE SHALL THEN BE RETESTED FOR DEFLECTION. HOWEVER, SHOULD AFTER THE INITIAL TESTING THE DEFLECTED PIPE FAIL TO RETURN TO THE ORIGINAL SIZE (INSIDE DIAMETER), THE LINE SHALL BE REPLACED.
- DEFLECTION LIMITS FOR FLEXIBLE THERMOPLASTIC PIPE:
 - A.) DEFLECTION OF POLYVINYL CHLORIDE (PVC) PIPE SHALL NOT EXCEED 5.0% OF THE "BASE I.D." (INTERNAL DIAMETER) OF THE PIPE. "BASE I.D." SHALL BE CALCULATED IN ACCORDANCE WITH THE FOLLOWING:

$$AVG\ ID = AVG\ OD - 2(1.06)t$$

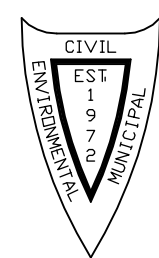
$$TOLERANCE\ PACKAGE = (A^2 + B^2 + C^2 + D^2)^{1/2}$$
 WHERE:
 - A = OD TOLERANCE (ASTM D3034)
 - B = EXCESS WALL THICKNESS TOLERANCE = 0.06t
 - C = OUT-OF-ROUNDNESS TOLERANCE = 0.15(AVG OD)
 - D = MINIMUM WALL THICKNESS (ASTM D-2241)
$$BASE\ ID = AVG.\ ID - TOLERANCE\ PACKAGE$$
- ALL SANITARY SEWERS SHALL PASS INFILTRATION AND EXFILTRATION AND AIR TESTS AND DEFLECTION TESTING AND SANITARY SEWER MANHOLES SHALL PASS VACUUM TESTING MEETING THE APPROVAL OF THE CITY OF NAPERVILLE.

PROTECTION OF WATERMAIN AND WATER SERVICE

- WATERMANS AND WATER SERVICE LINES SHALL BE PROTECTED FROM SANITARY SEWERS, STORM SEWERS, COMBINED SEWERS, HOUSE SEWER SERVICE CONNECTIONS AND DRAINS AS FOLLOWS:
- WATERMANS:
 - HORIZONTAL SEPARATION:
 - A) WATERMANS SHALL BE LAID AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, COMBINED SEWER OR SEWER SERVICE CONNECTION.
 - B) WATERMANS MAY BE LAID CLOSER THAN TEN FEET TO A SEWER LINE WHEN:
 - LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN FEET; AND
 - THE WATERMAIN INVERT IS AT LEAST 18 INCHES ABOVE THE CROWN OF THE SEWER; AND
 - THE WATERMAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER.
 - C) BOTH THE WATERMAIN AND DRAIN OR SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, PRESTRESSED CONCRETE PIPE (STORM SEWER ONLY), OR PVC PIPE MEETING THE REQUIREMENTS OF SECTION 653.111 OF THE I.E.P.A. TECHNICAL POLICY STATEMENTS, WHEN IT IS IMPOSSIBLE TO MEET (A) OR (B) ABOVE. THE DRAIN OR SEWER SHALL BE PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE BACKFILLING.
 - VERTICAL SEPARATION:
 - A) A WATERMAIN SHALL BE LAID SO THAT ITS INVERT IS 18 INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER, WHENEVER WATERMANS CROSS STORM SEWERS, SANITARY SEWERS OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATERMAIN LOCATED WITHIN TEN FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSED. A LENGTH OF WATERMAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN.
 - B) THE DRAIN OR SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, PRESTRESSED CONCRETE PIPE (STORM SEWER ONLY), OR PVC PIPE MEETING THE REQUIREMENTS OF SECTION 653.111, OR THE DRAIN OR SEWER SHALL BE SLEEVED WITH STEEL PIPE OR CONSTRUCTED OF REINFORCED CONCRETE PIPE CONFORMING TO ASTM C-361 (STORM SEWERS ONLY), FOR THE ENTIRE LENGTH OF STORM SEWER BETWEEN STRUCTURES WHEN STORM SEWER IS PERPENDICULAR TO WATERMAIN, IF:
 - IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN (A) ABOVE; OR
 - 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. SUPPORT THE SEWER OR DRAIN LINES TO PREVENT SETTLING AND BREAKING THE WATERMAIN.
 - D) CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATER MAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN FEET.
 - E) EXCEPT IN THE CASE OF DIRECT CONFLICT DO NOT LOWER WATERMAIN TO CLEAR OBSTRUCTIONS.
 - F) WHEN WATERMAIN CROSSES UNDER ANY SEWER FOLLOW THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS" MAY 1996, FIFTH EDITION (SEE PAGE 162, DRAWING NUMBER 19).
 - WATER SERVICE LINES:
 - THE HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER SERVICE LINES AND ALL STORM SEWERS, SANITARY SEWER, COMBINED SEWERS OR ANY DRAIN OR SEWER SERVICE CONNECTION SHALL BE THE SAME AS WATER MAIN SEPARATION DESCRIBED IN (a) ABOVE.
 - WATER PIPE DESCRIBED IN (a) ABOVE SHALL BE USED FOR SEWER SERVICE LINES WHEN MINIMUM HORIZONTAL AND VERTICAL SEPARATION CANNOT BE MAINTAINED.
 - SPECIAL CONDITIONS – ALTERNATE SOLUTIONS SHALL BE PRESENTED TO THE AGENCY WHEN EXTREME TOPOGRAPHICAL, GEOLOGICAL OR EXISTING STRUCTURAL CONDITIONS MAKE STRICT COMPLIANCE WITH (a) AND (b) ABOVE TECHNICALLY AND ECONOMICALLY IMPRACTICAL. ALTERNATE SOLUTIONS WILL BE APPROVED PROVIDED WATER TIGHT CONSTRUCTION STRUCTURALLY EQUIVALENT TO APPROVED WATERMAIN MATERIAL IS PROPOSED.
 - WATERMANS SHALL BE SEPARATED FROM SEPTIC TANKS, DISPOSAL FIELDS AND SEEPAGE BEDS BY A MINIMUM OF 25 FEET.
 - WATERMANS AND WATER SERVICE LINES SHALL BE PROTECTED AGAINST ENTRANCE OF HYDROCARBONS THROUGH DIFFUSION THROUGH ANY MATERIAL USED IN CONSTRUCTION OF THE LINE.

Copyright © 2019 Cemcon, Ltd. All rights reserved.

PREPARED FOR:
OAK CREEK CAPITAL PARTNERS, LLC
P.O. BOX 5726
NAPERVILLE, IL 60567
(630) 710-9490



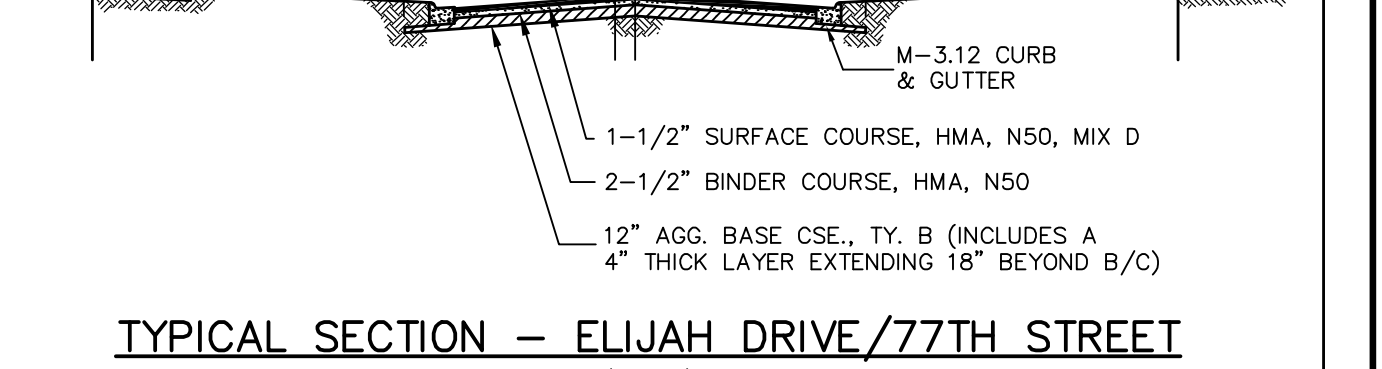
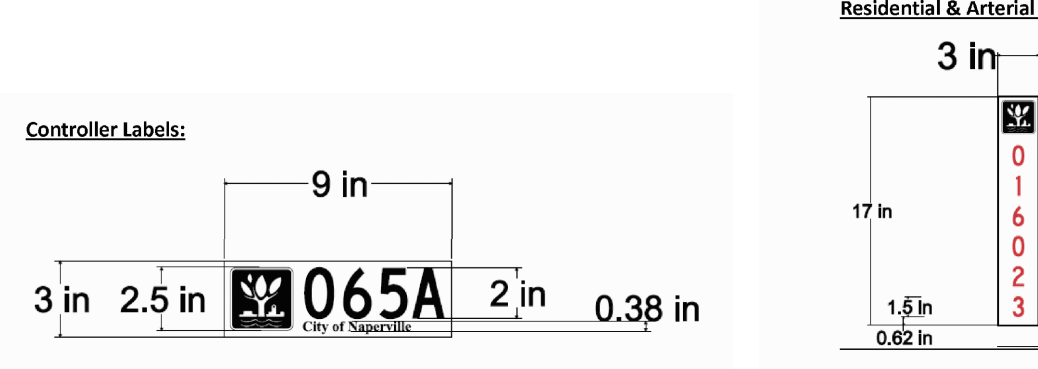
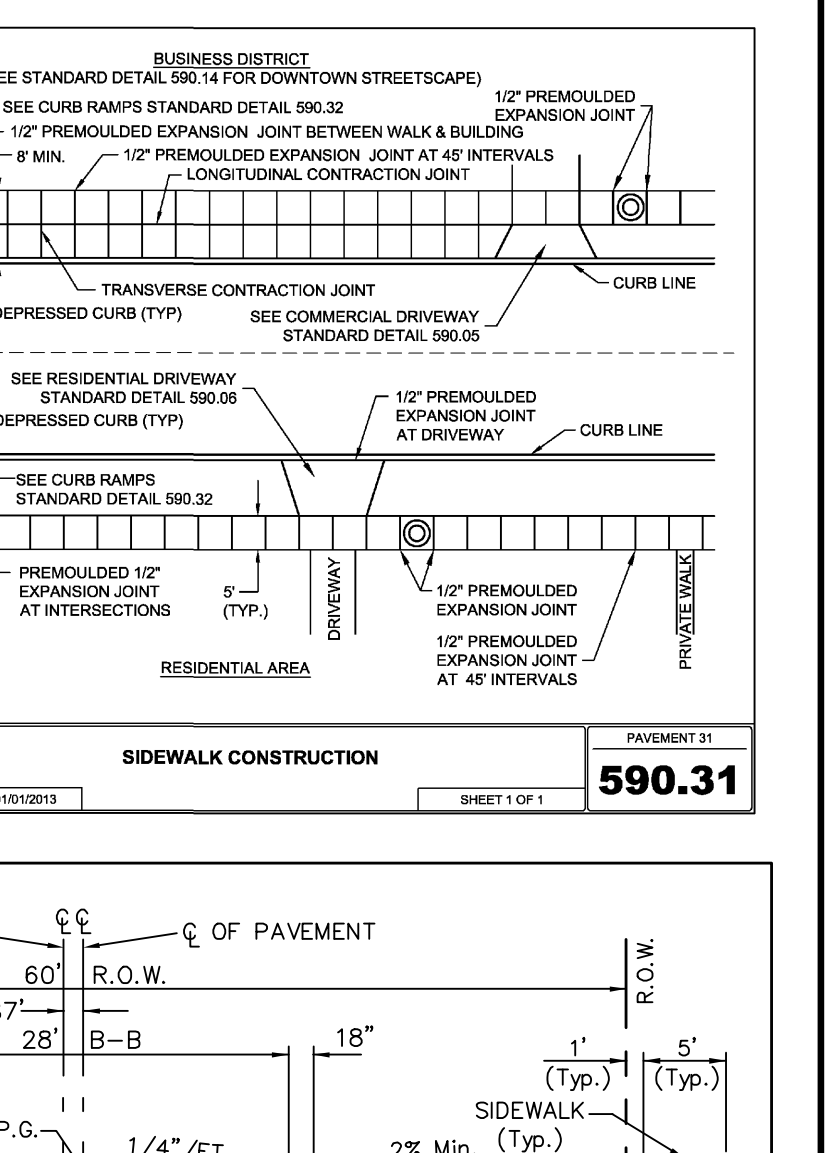
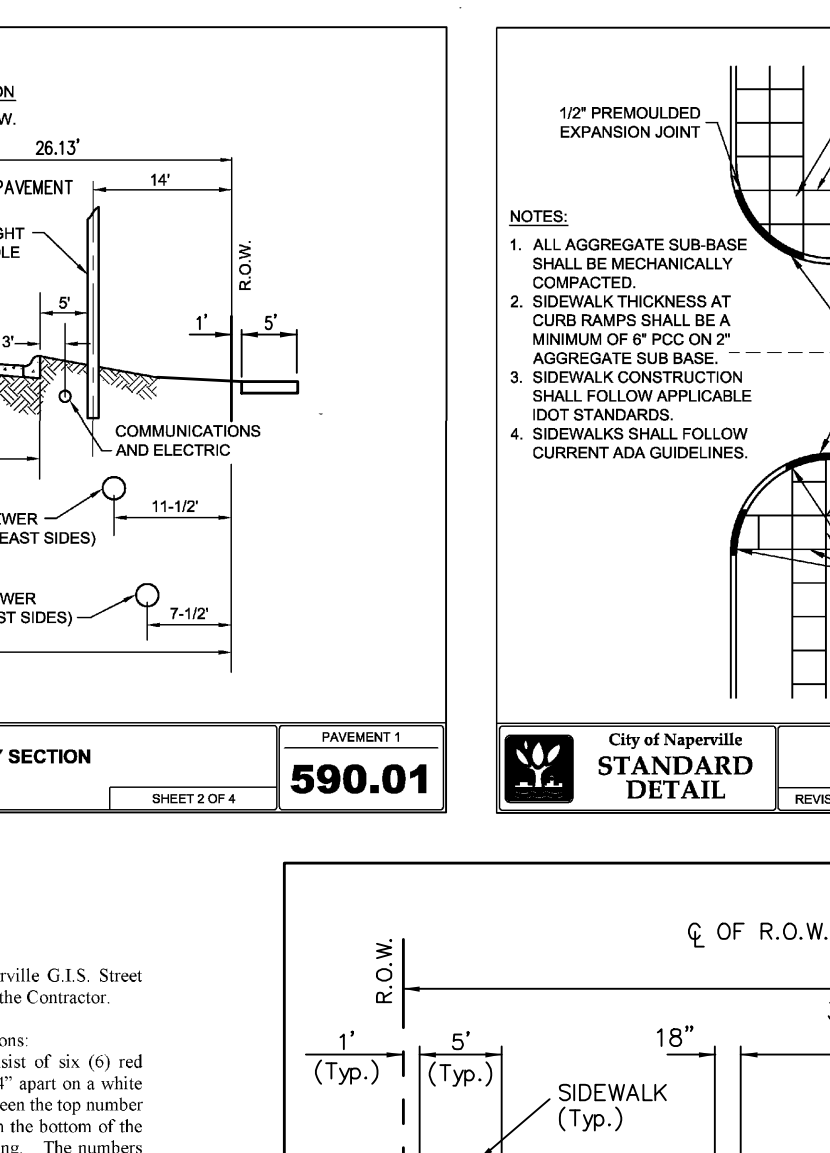
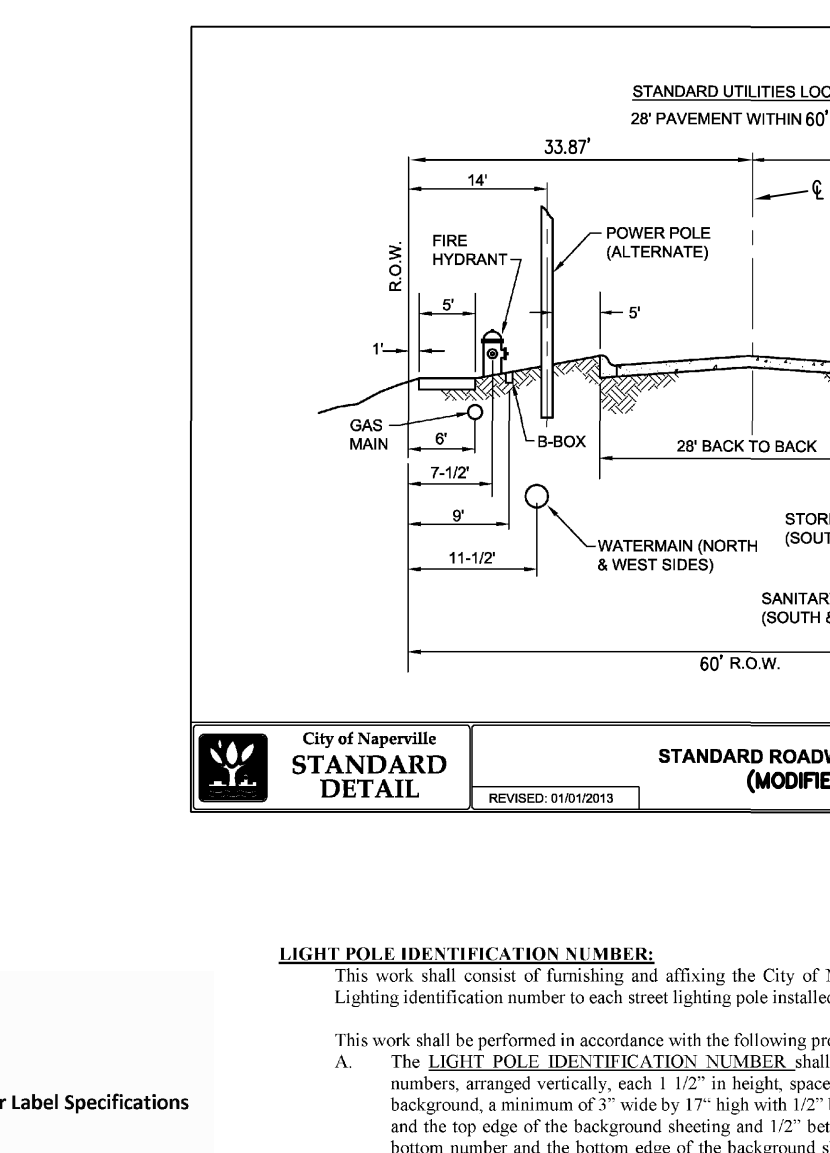
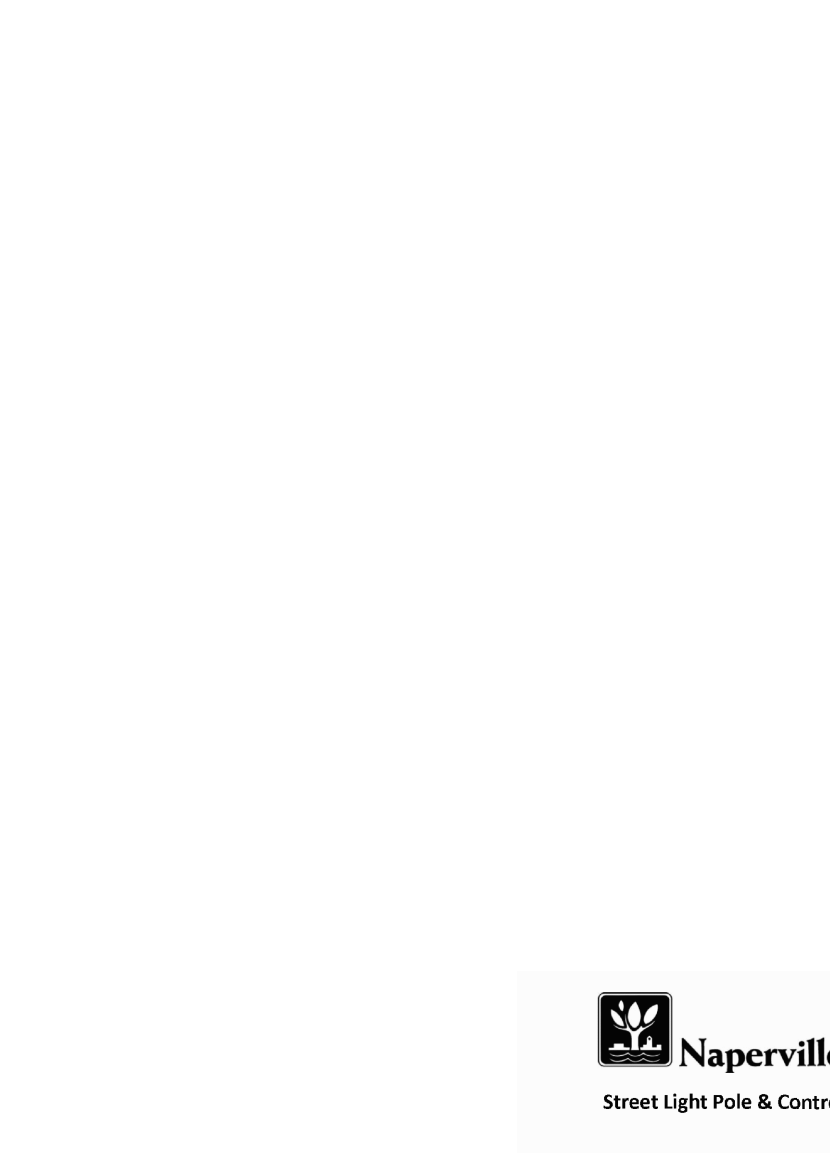
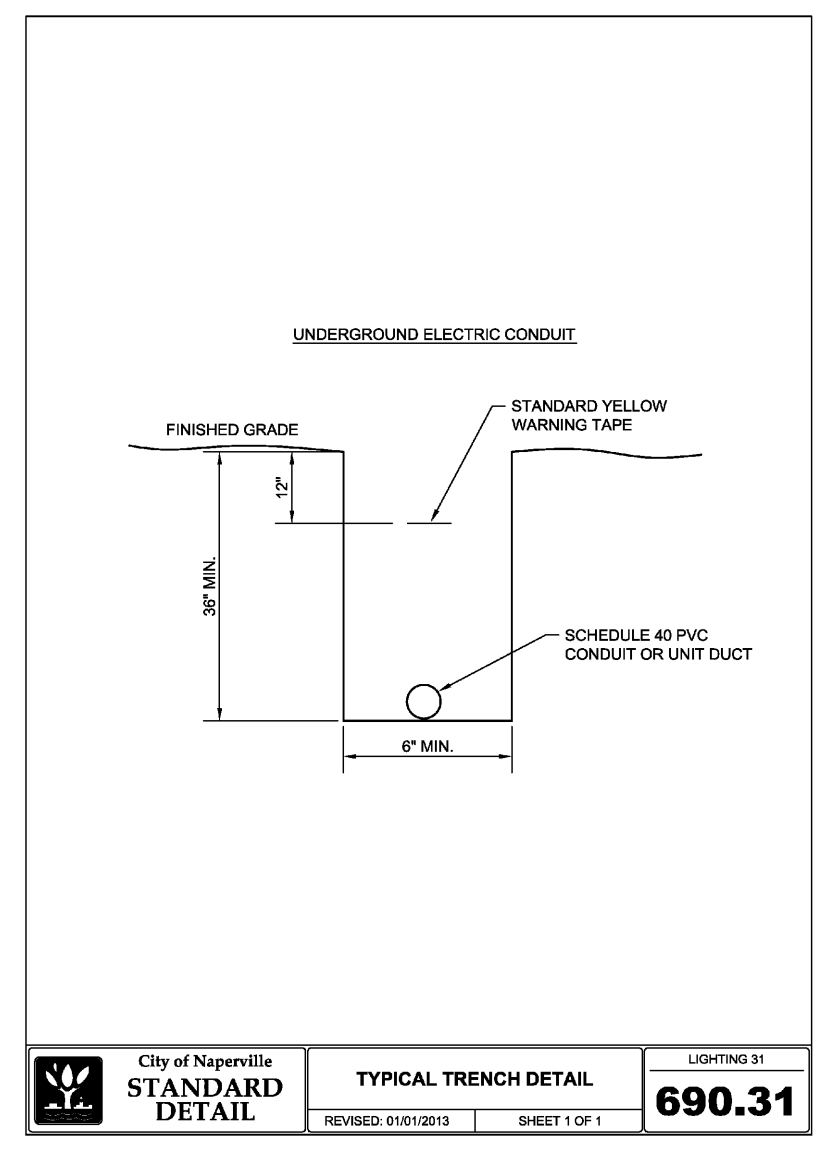
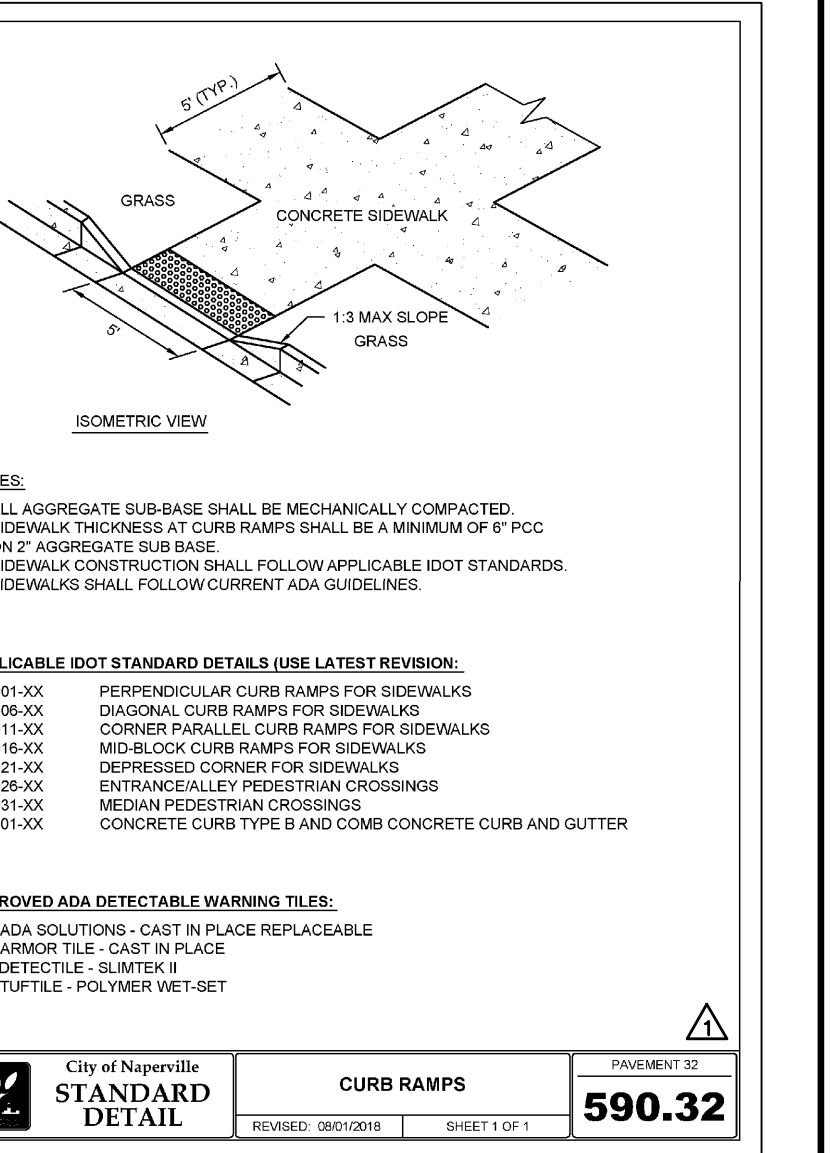
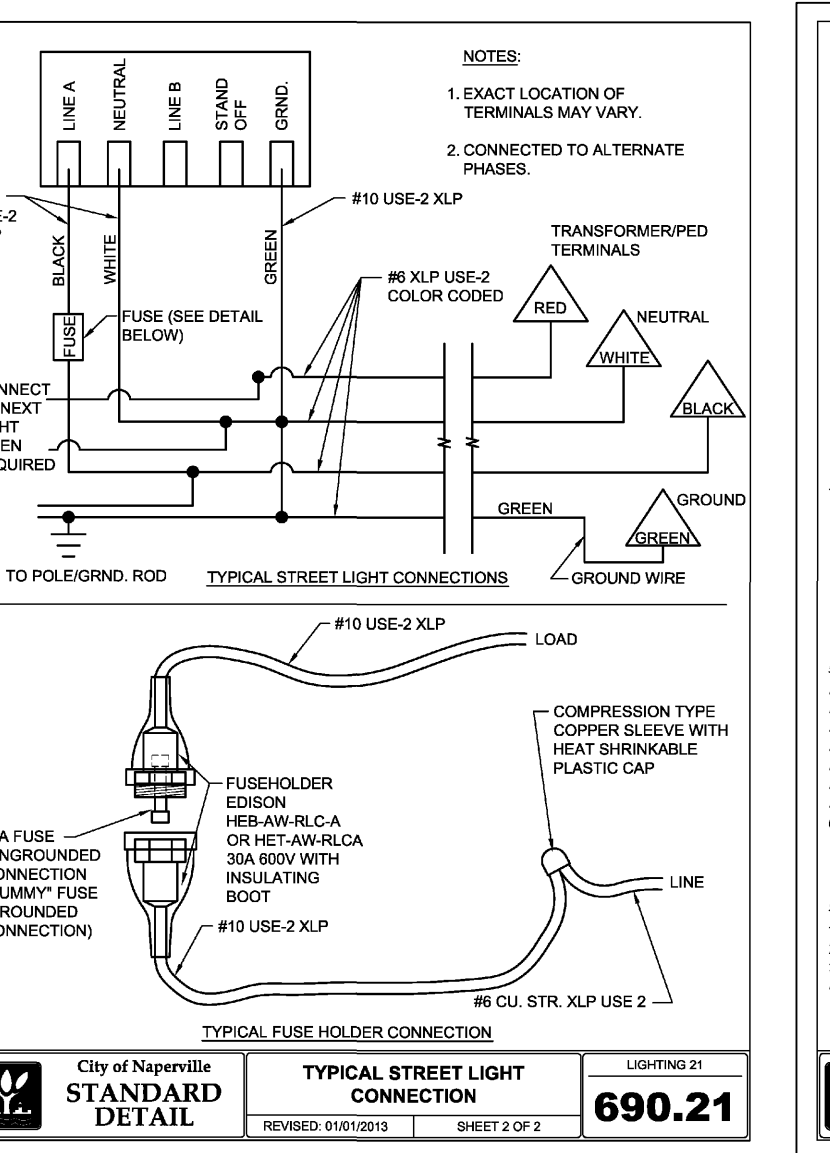
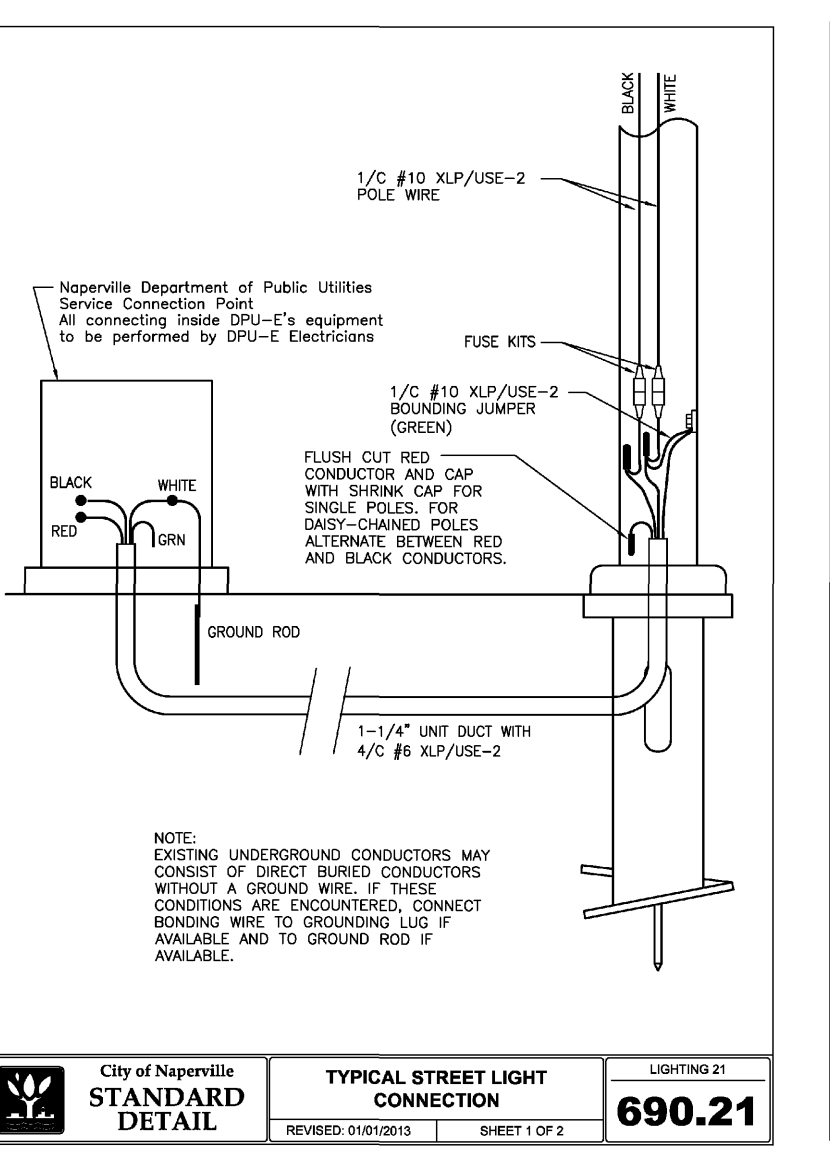
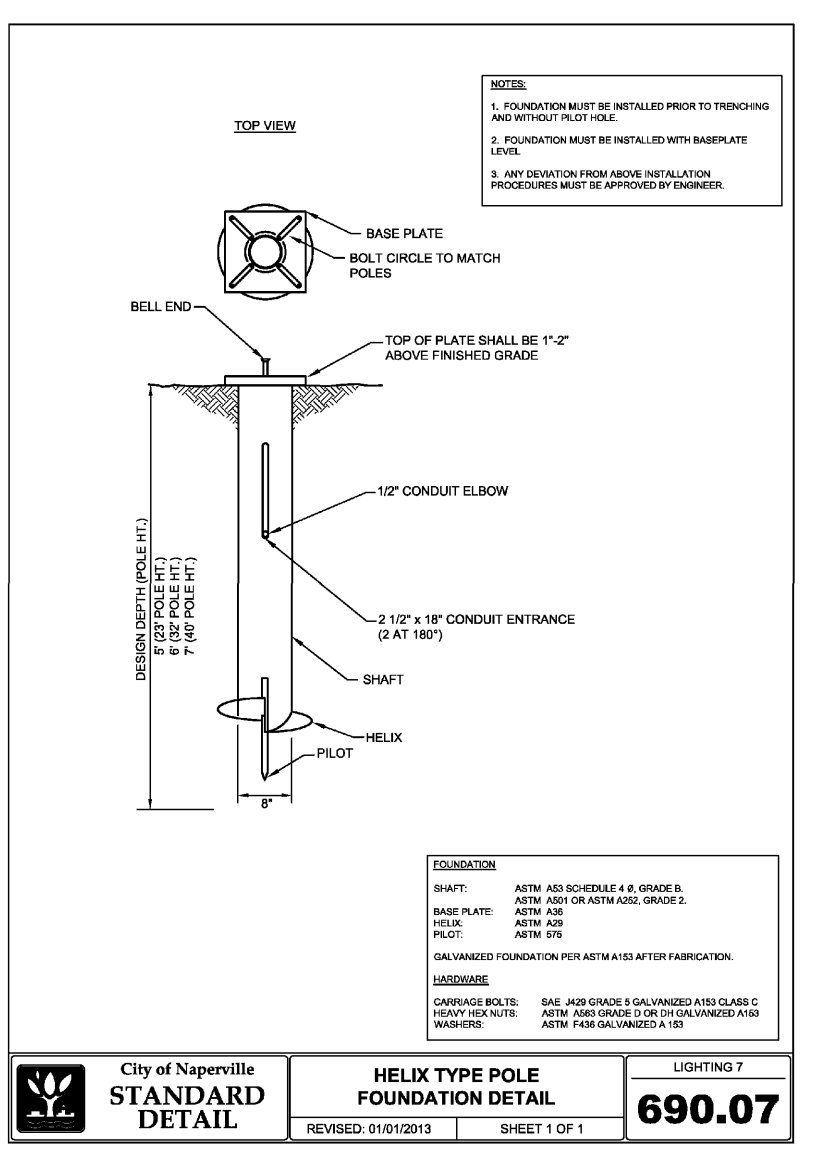
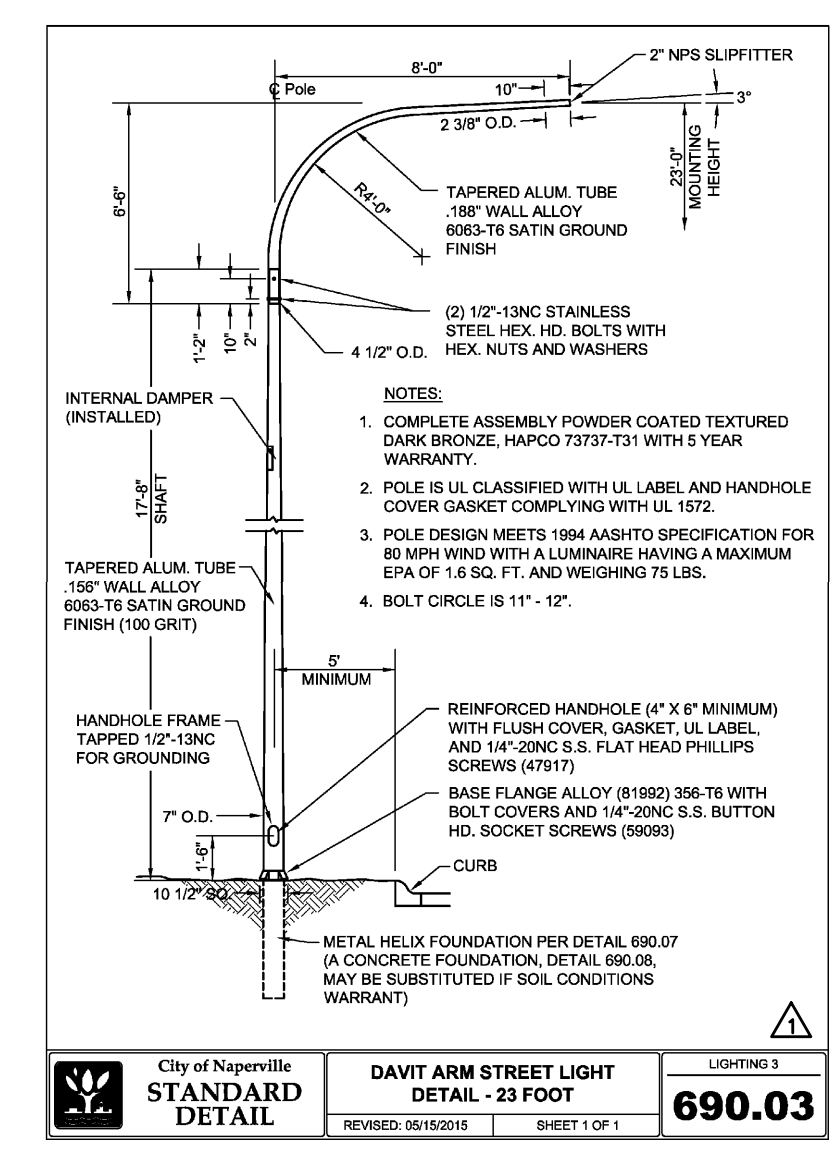
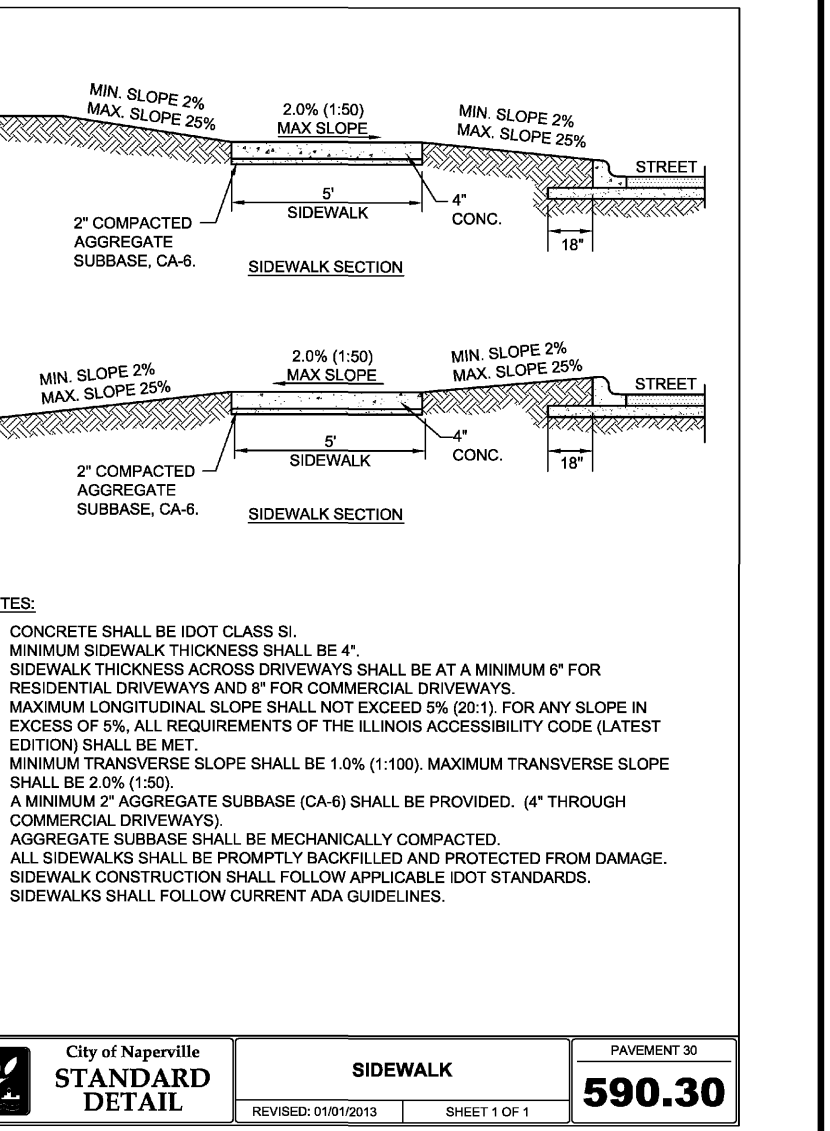
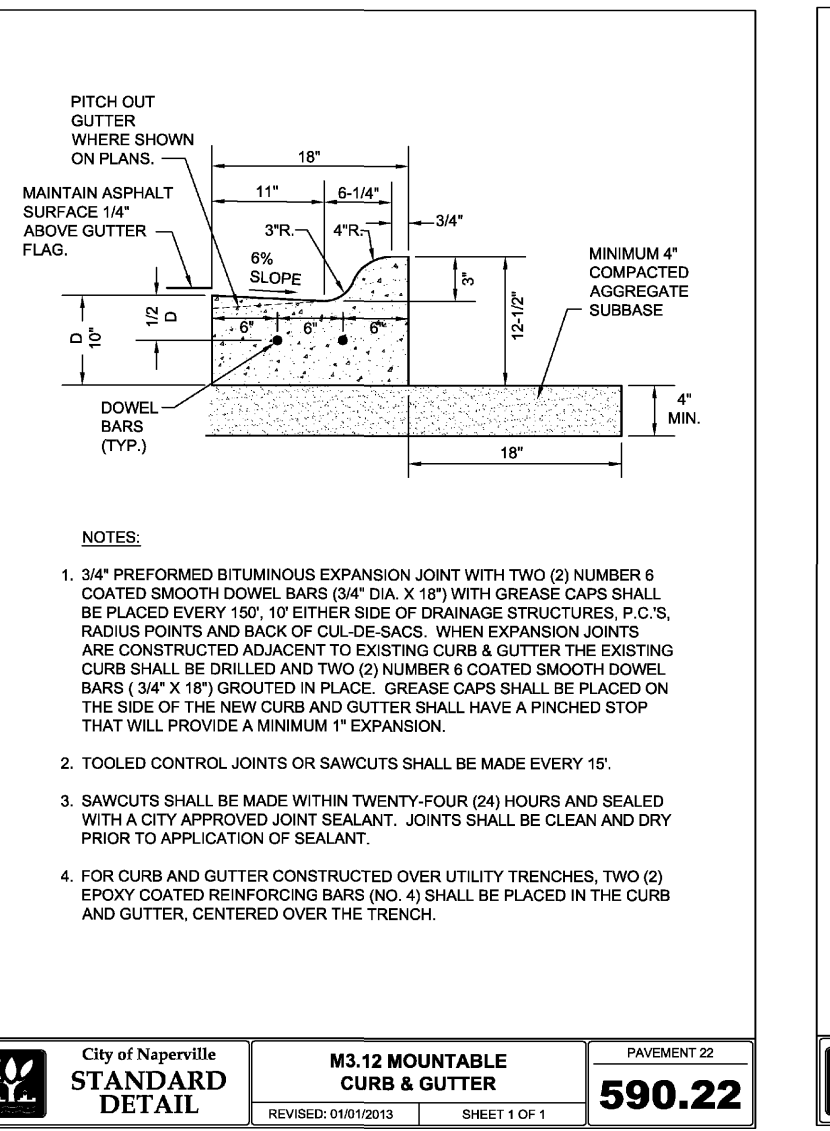
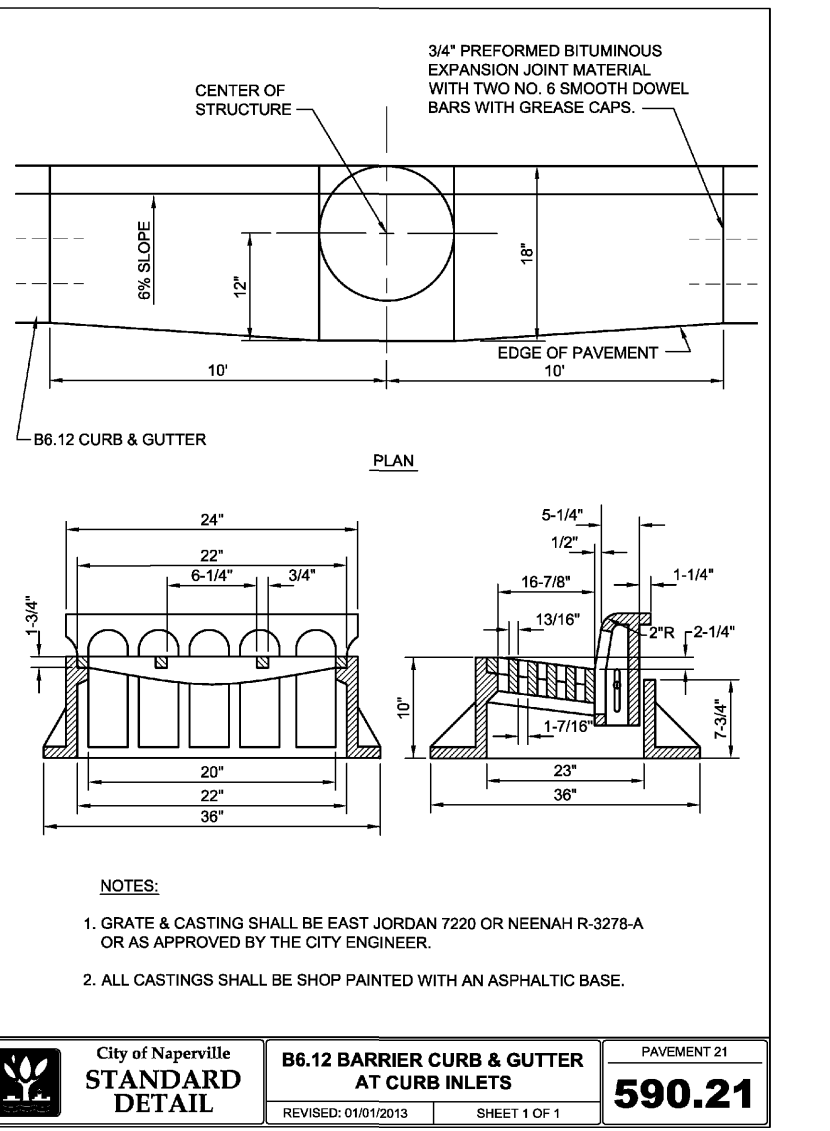
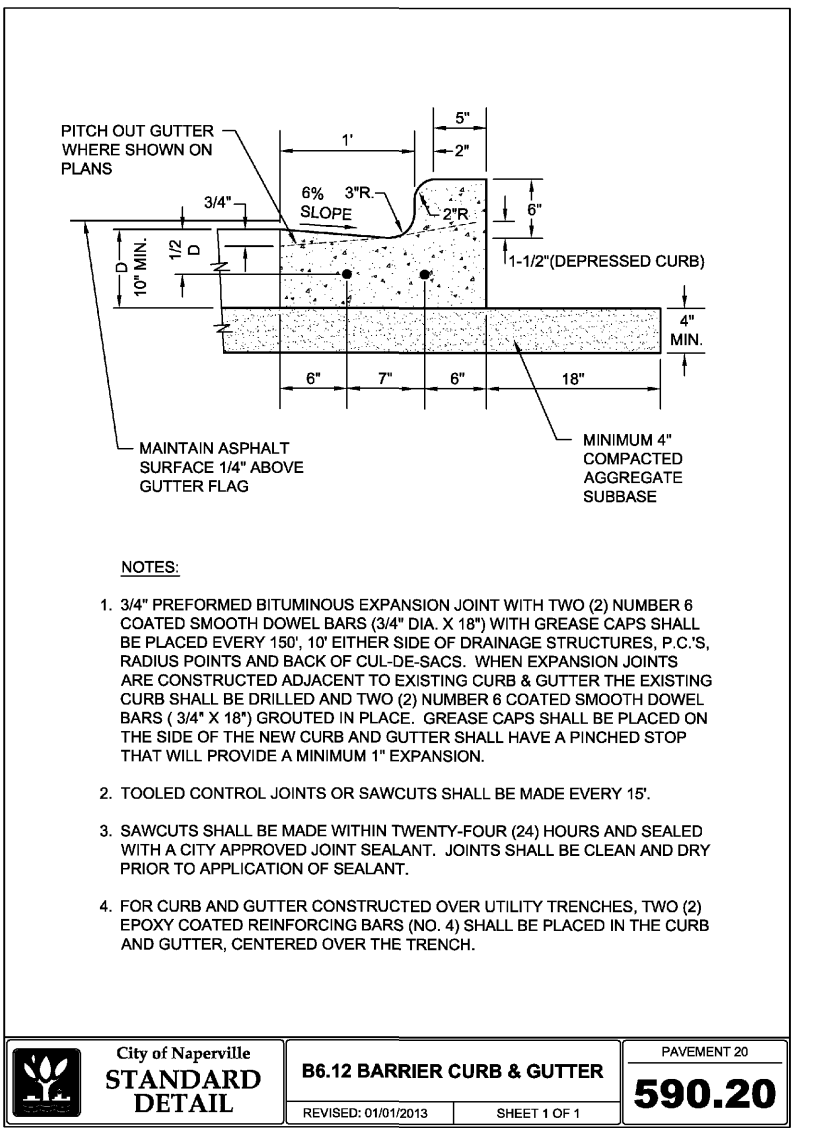
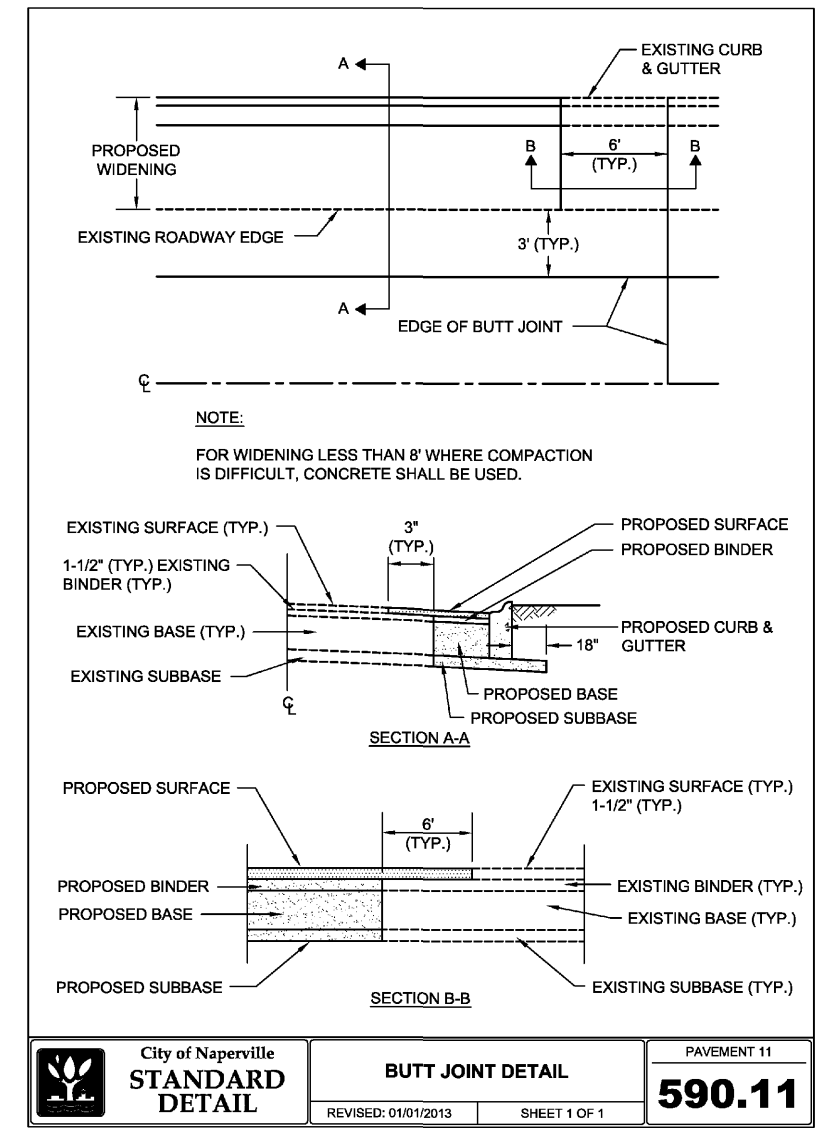
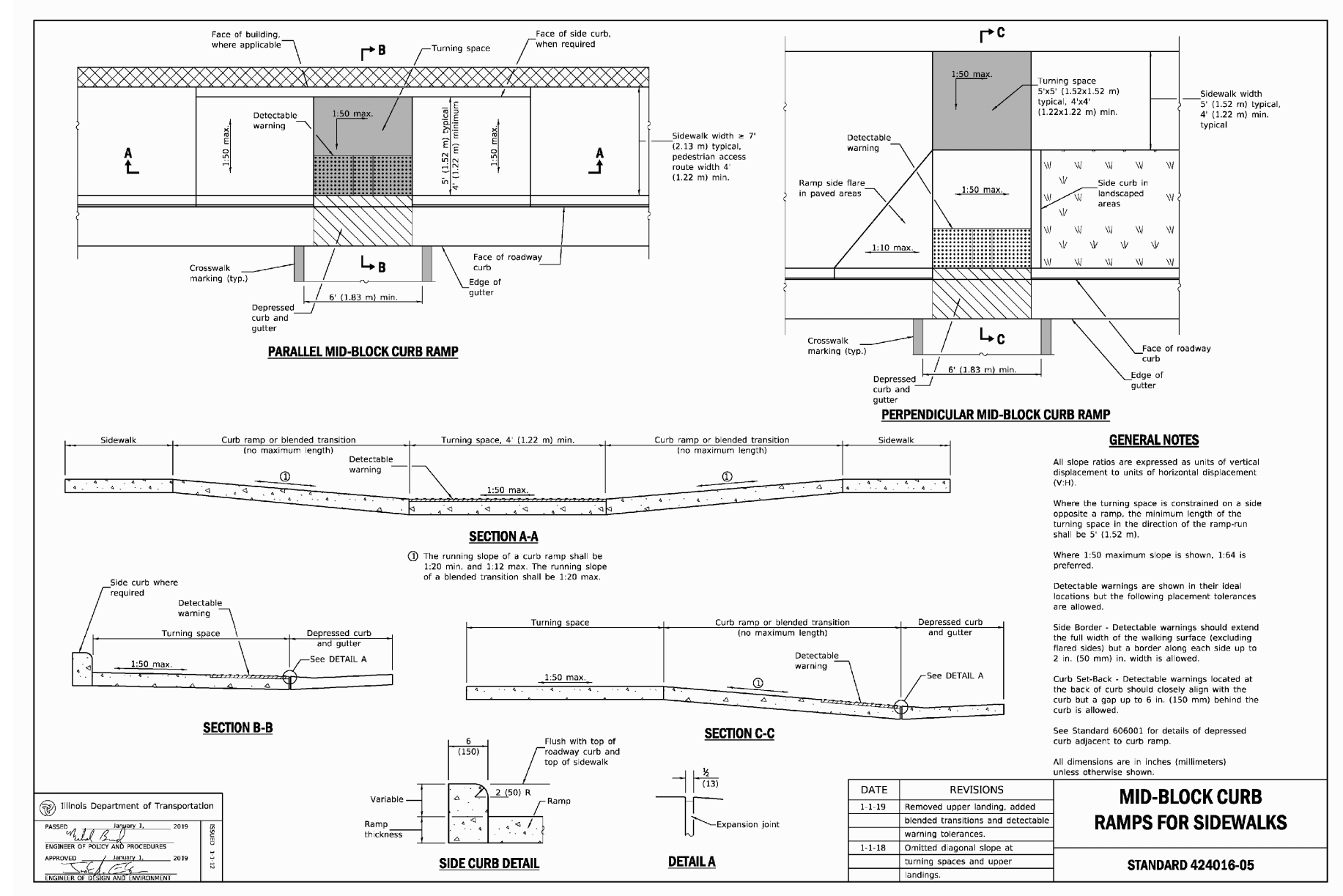
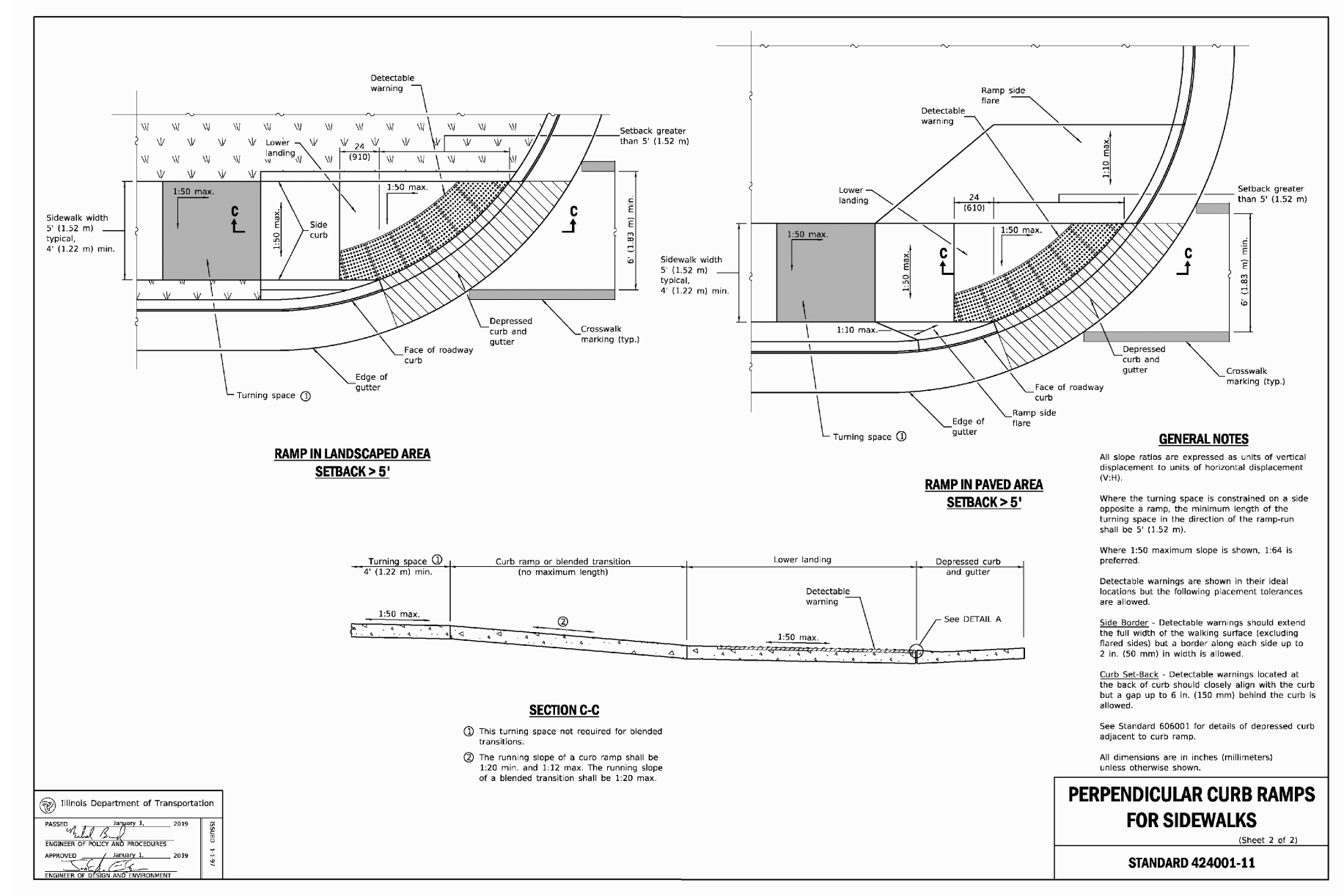
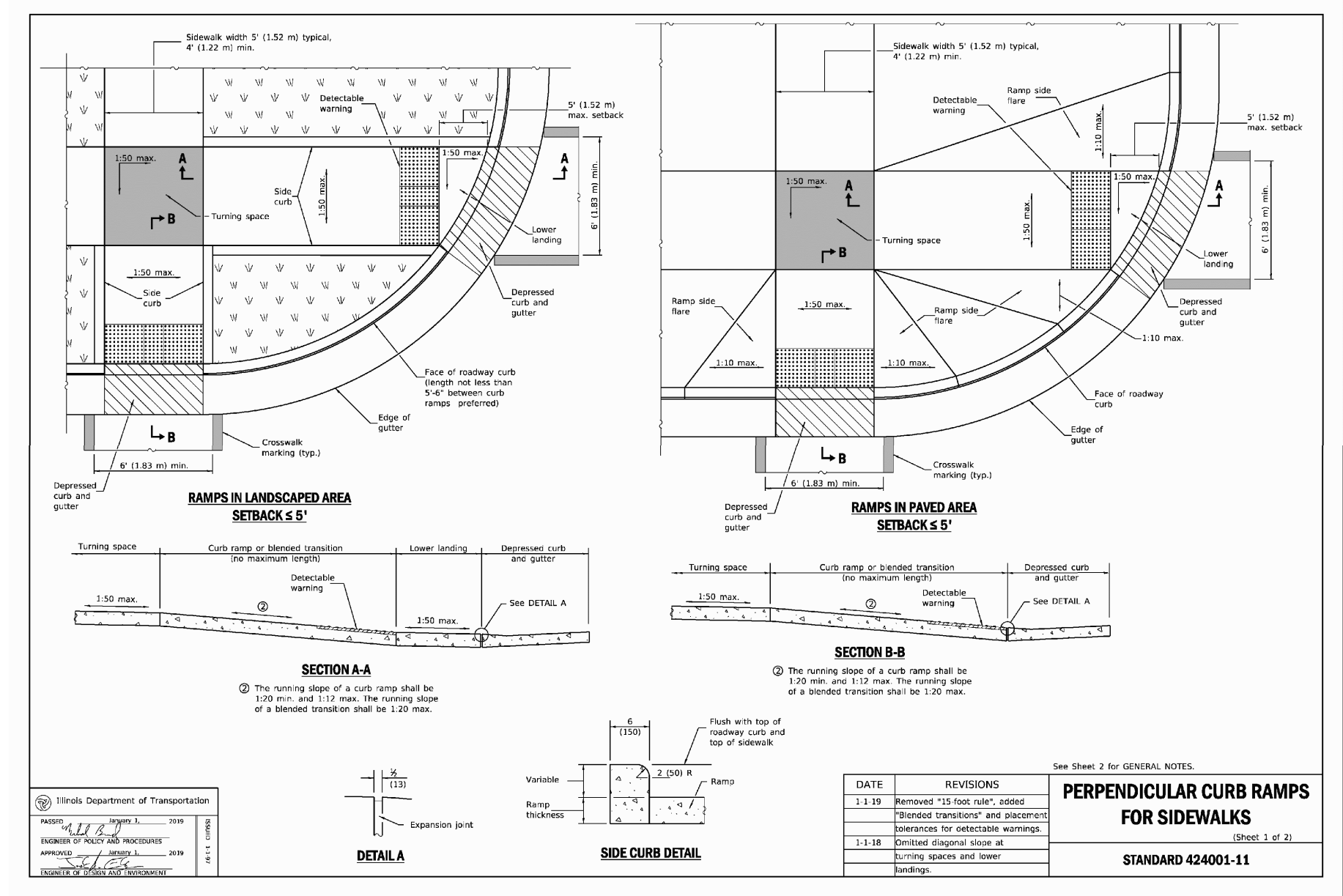
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60502-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO.		DATE	DESCRIPTION	REVISIONS		NO.	DATE	DESCRIPTION

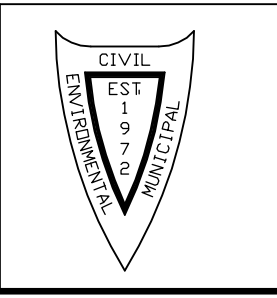
CONSTRUCTION SPECIFICATIONS – GENERAL NOTES

77TH STREET SUBDIVISION

FILE NAME: GENNOTES	DSGN. BY: MAM	JOB NO.: 782.029	F.LD. BK./PG.: ---	SHEET NO.
DIR: 782029	DRN. BY: JGC	DATE: 12-16-19	SCALE: 1" = NONE	3 of 14



PREPARED FOR:
 OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490



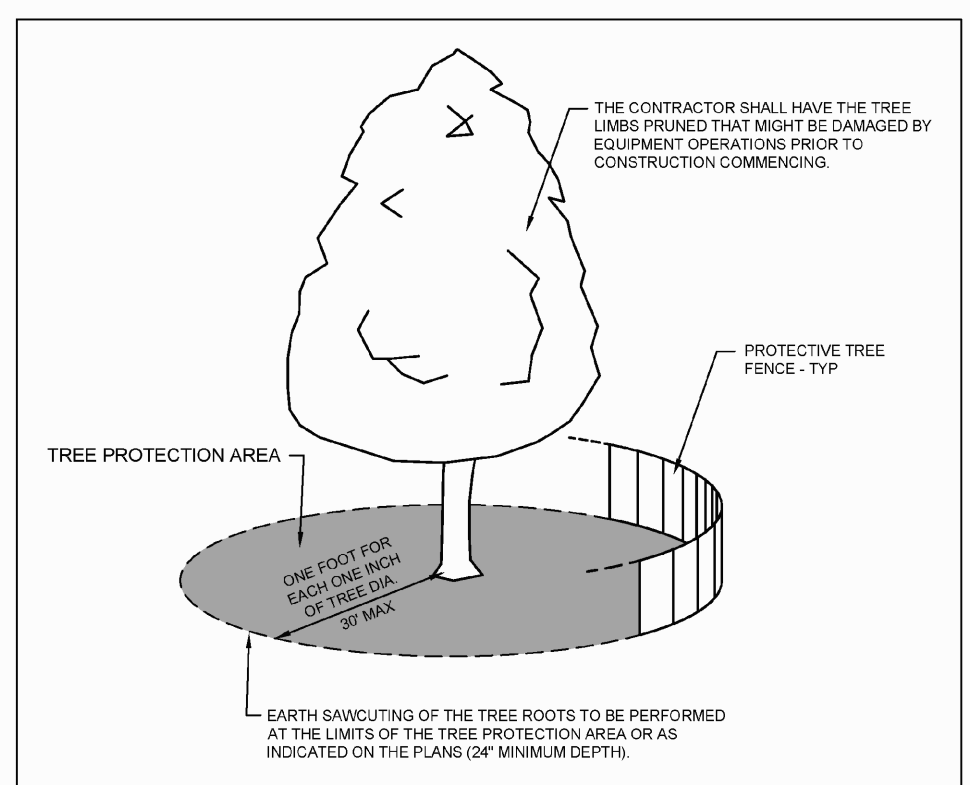
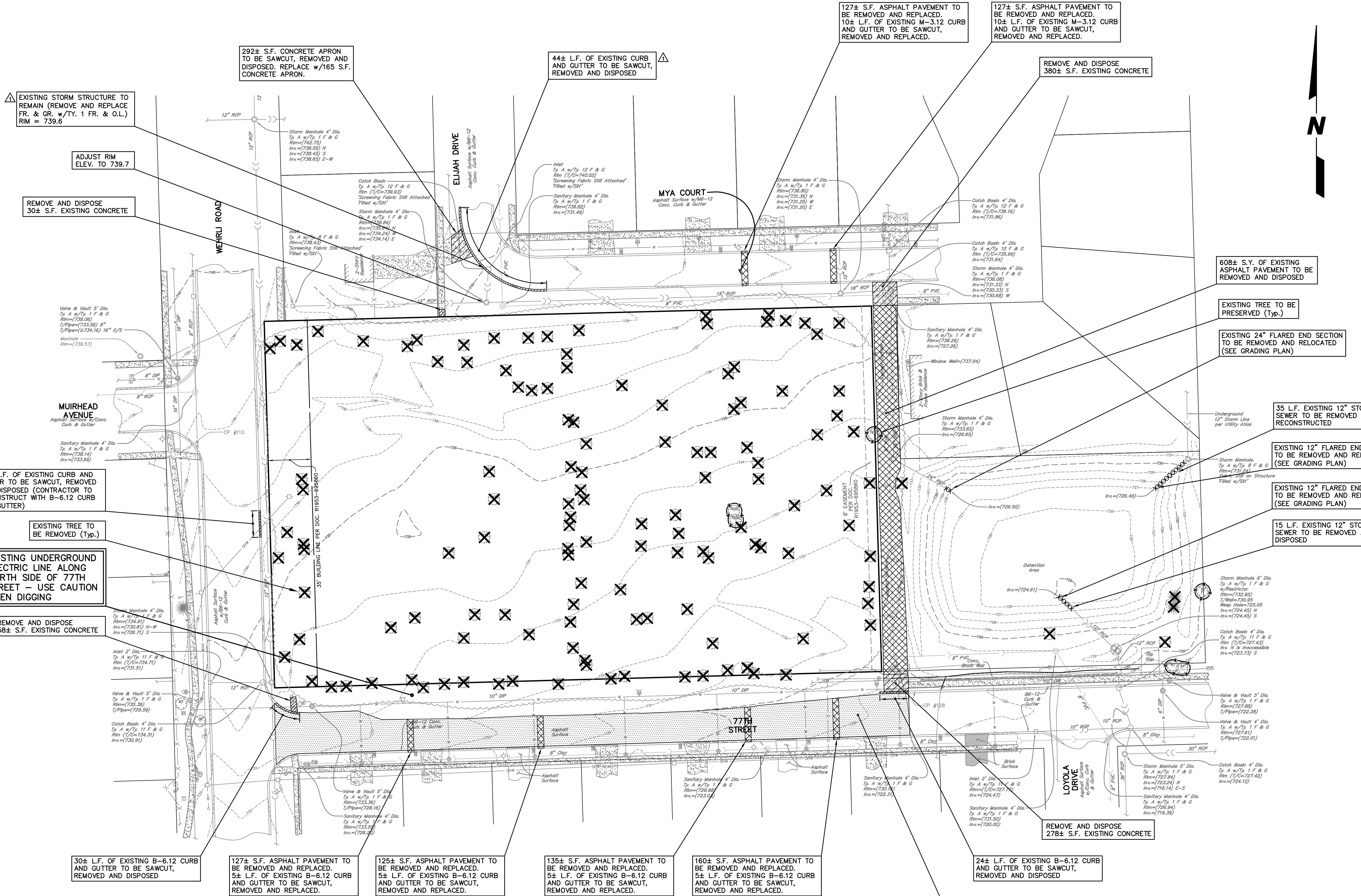
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO.		DATE		REVISIONS		DESCRIPTION	
1	02-04-20/JGC	REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 01-09-20					

STREET PAVEMENT DESIGN AND DETAILS			
77TH STREET SUBDIVISION			
FILE NAME: DETAILS	DSGN. BY: MAM	JOB NO.: 782.029	F.L.D. BK./PG.: ---
DIR: 782029	DRN. BY: JGC	DATE: 12-16-19	SCALE: 1" = N.T.S.
			SHEET NO. 4 of 14



DRAWING PATH: P:\2020\2020\DRAWINGS\DRAWINGS\DRAWING\DEM.DWG
 DRAWING LAST SAVED: 3/5/2020 1:02 PM BY: JEFF CEBULA
 PLOT FILE CREATED: 3/5/2020 1:25 PM BY: JEFF CEBULA



NOTES:

- A TREE PROTECTION AREA SHALL BE ESTABLISHED AROUND A TREE A DISTANCE OF ONE FOOT FOR EACH ONE INCH OF TREE DIAMETER, UP TO A MAXIMUM OF 30 FEET.
- PROTECTIVE TREE FENCE SHALL BE INSTALLED AT THE LIMITS OF THE TREE PROTECTION AREA. THE FENCE SHALL BE HIGH ENOUGH TO BE VISIBLE TO ALL CONSTRUCTION PERSONNEL.
- GRADE CHANGES, UTILITY TRENCHES, STORAGE OF CONSTRUCTION MATERIAL, DUMPING OF WASTE, OR OPERATION OR STORAGE OF ANY EQUIPMENT SHALL NOT BE ALLOWED WITHIN THE TREE PROTECTION AREA.
- AUGURING IS REQUIRED IF A UTILITY MUST BE INSTALLED WITHIN THE TREE PROTECTION AREA. AUGURED UTILITIES MUST BE A MINIMUM OF 24 INCHES BELOW GRADE.
- ALL TREES TO BE SAVED WHICH HAVE BEEN SUBJECTED TO CONSTRUCTION ACTIVITY WITHIN THE TREE PROTECTION AREA SHOULD BE SELECTIVELY THINNED TO BY AN ARBORIST SKILLED AT THE PROPER THINNING PROCEDURE. NONE OF THE TREES SHALL BE TOPPED, HEADED BACK, BRANCHED, REMOVAL OF THE INTERIOR BRANCHES, OR CLIMBED WITH SPIKES. ALL DEAD WOOD SHOULD BE REMOVED TO AVOID HAZARD.
- IT IS RECOMMENDED THAT FOLLOWING CONSTRUCTION, TREES BE MAINTAINED IN THEIR NATIVE CONDITION. NO LAMBS SHOULD BE PLACED AROUND THE TREES. IT IS RECOMMENDED THAT THE AREA BE MULCHED WITH 2 INCHES OF DECOMPOSED LEAVES AND 2 INCHES OF WOOD CHIPS OR BARK.

City of Naperville STANDARD DETAIL	TREE PROTECTION	LANDSCAPE 10
REVISED: 09/01/2010	SHEET 1 OF 1	790.10

- NOTES:
- ALL EXISTING UTILITIES TO BE REMOVED FROM THE SITE INCLUDING BUT NOT LIMITED TO WATER SERVICE, SANITARY SEWER, ELECTRIC, GAS, AND PHONE.
 - IF A WELL OR SEPTIC TANK IS ENCOUNTERED ON SITE, CONTRACTOR MUST OBTAIN A REMOVAL PERMIT FROM THE HEALTH DEPARTMENT AND REMOVE OR ABANDON FACILITIES IN ACCORDANCE WITH HEALTH DEPARTMENT STANDARDS.
 - ALL SURPLUS MATERIAL NOT NEEDED FOR ANY PART OF THE WORK SHALL BE TRILLED OFF AND LEGALLY DISPOSED OF BY THE CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE PAID AND SAID WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
 - CONTRACTOR TO FOLLOW ALL LOCAL, STATE, FEDERAL AND OSHA GUIDELINES FOR BUILDING REMOVAL AND DISPOSAL.
 - SEE STORMWATER POLLUTION PREVENTION PLAN FOR EROSION CONTROL MEASURES WHICH SHALL BE INSTALLED PRIOR TO DEMOLITION.
 - CONTRACTOR SHALL COORDINATE ALL UTILITY REMOVAL AND RELOCATION WITH UTILITY COMPANIES AND MUNICIPALITY.
 - ALL EXISTING FENCES WITHIN THE LIMITS OF THE SITE TO BE REMOVED.
 - BACKFILL FOR ALL FOUNDATION REMOVAL OF EXISTING STRUCTURES WITHIN THE LIMITS OF THE PROPOSED PERMEABLE PAVEMENT STORMWATER MANAGEMENT SYSTEM SHALL BE OPEN GRADED FREE DRAINAGE STONE.
 - CONTRACTOR SHALL MAINTAIN DRAINAGE AT ALL TIMES AND NOT REMOVE EXISTING STORM SEWERS PRIOR TO PROVIDING PROPOSED STORM SEWERS OR TEMPORARY DRAINAGE SYSTEMS.
 - CONTRACTOR TO FOLLOW IDOT STANDARDS AND DIRECTION FROM CITY OF NAPERVILLE REGARDING ROAD CLOSURE, PARTIAL ROAD CLOSURE AND ALL TRAFFIC CONTROL.

LEGEND

	ASPHALT PAVEMENT TO BE REMOVED
	CONCRETE, SIDEWALK OR CURB TO BE REMOVED
	UTILITY TO BE REMOVED
	EXISTING TREE TO BE REMOVED
	EXISTING TREE, WITH TREE PROTECTION FENCE, TO BE PRESERVED IF IN GOOD CONDITION. SEE LANDSCAPE PLANS FOR FURTHER INFORMATION.

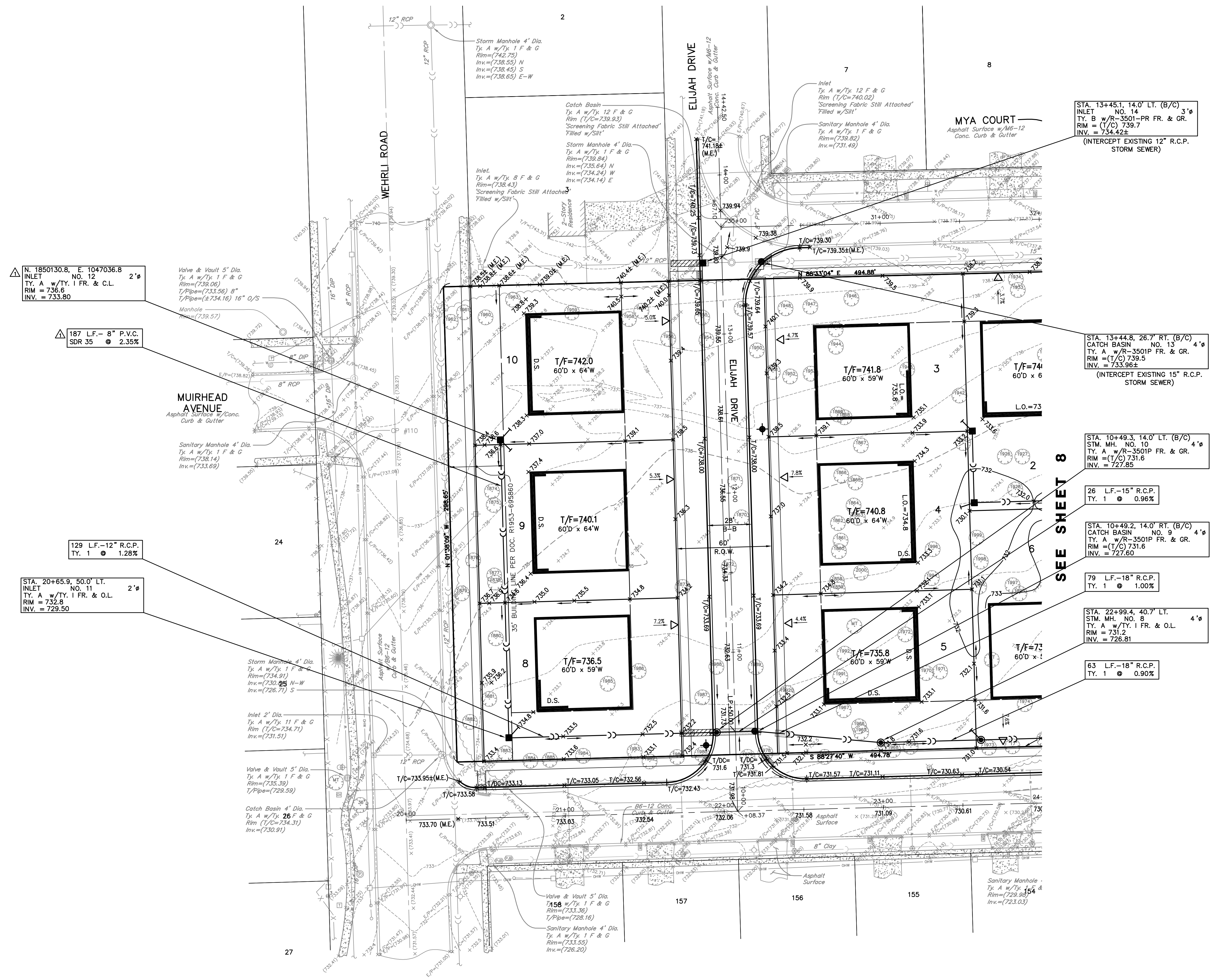
Copyright © 2019 Cemcon, Ltd. All rights reserved.

PREPARED FOR:
 OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO.		DATE		DESCRIPTION	
1	02-04-20/JGC	REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 01-09-20			
2	03-05-20/JGC	REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 03-04-20			

DEMOLITION PLAN				
77TH STREET SUBDIVISION				
FILE NAME: DEMO	DSGN. BY: MAM	JOB NO.: 782.029	FLD. BK./PG.: ---	SHEET NO. 5 of 14
DIR: 782029	DRN. BY: JGC	DATE: 12-16-19	SCALE: 1" = 40'	



- DRAINAGE & GRADING NOTES**
- ELEVATIONS SHOWN FOR ALL CURB INLETS, CATCH BASINS, AND MANHOLES ARE TOP OF CURB.
 - ALL CURBS SHALL BE BACKFILLED TO WITHIN 6 INCHES OF THE TOP OF CURB.
 - ALL BACK YARD SWALES SHALL BE CUT OR FILLED 6 INCHES BELOW FINISHED GRADE.
 - EXISTING DRAINAGE TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE PRESERVED OR REPAIRED IN ACCORDANCE WITH SPECIFICATION (SEE SHEET 2).
 - T/F - INDICATES PROPOSED TOP OF FOUNDATION ELEVATIONS.
 - THE TOP OF WINDOW WELLS SHALL BE CONSTRUCTED NO LOWER THAN 0.3 FEET BELOW THE TOP OF FOUNDATION ELEVATION (T/F). UNLESS OTHERWISE NOTED ON OVERFLOW CROSS-SECTIONS, ANY WINDOW WELLS ADJACENT TO RETENTION BASIN OR OVERFLOW ROUTES MUST BE 18" ABOVE H.W.L.
 - THE FINISHED TOPSOIL ELEVATION AT THE FOUNDATION SHOULD GENERALLY BE 0.7 FEET BELOW THE TOP OF FOUNDATION ELEVATION UNLESS INDICATED OTHERWISE.
 - G/F - INDICATES THE PROPOSED GARAGE FLOOR ELEVATION. THE PLACEMENT OF THE GARAGE / DRIVEWAY IS CRITICAL WHEN AND WHERE SHOWN ON THIS PLAN. IT IS MANDATORY THAT THE GARAGE BE CONSTRUCTED ON THE SIDE INDICATED.
 - L.O. OR W.O. - INDICATED THOSE LOTS WHERE A "LOOK-OUT" (L.O.) OR "WALK-OUT" (W.O.) BASEMENT CAN BE CONSTRUCTED. THE REQUIRED ELEVATION OF THE LOWEST FOUNDATION OPENING IS GIVEN. IF A LOOK-OUT OR WALK-OUT BASEMENT IS NOT DESIRED, A DETAILED GRADING PLAN OF THE ALTERNATE DESIGN MUST BE SUBMITTED TO THE GOVERNING AUTHORITY.
 - D.S. - INDICATES DROP SIDING IS SUGGESTED TO MINIMIZE REAR YARD SLOPES. DROP SIDING CAN BE MODIFIED AS NECESSARY AS LONG AS POSITIVE DRAINAGE IS ACHIEVED.
 - ACCENTED SIDES OF PROPOSED HOUSE FOUNDATIONS ARE INTENDED TO INDICATE THE APPROXIMATE LOCATION WHERE A LOOK-OUT OR WALK-OUT BASEMENT MAY BE CONSTRUCTED OR TO INDICATE THAT SPECIAL CONSTRUCTION MEASURES MUST BE EMPLOYED IN ORDER TO MINIMIZE SIDE YARD, REAR YARD AND / OR FRONT YARD GRADIENTS (E.G. DROPPED SIDING, STEPPED FOUNDATION, RETAINING WALL, ETC.) - SEE NOTES ABOVE FOR FURTHER DETAILS.
 - LOT DIMENSIONS SHOWN ON THIS PLAN MAY NOT NECESSARILY CORRESPOND TO THE PLATTED DIMENSIONS. REFER TO THE FINAL RECORDED PLAT OF SUBDIVISION.
 - WATERMAIN PROTECTION (SEE SHEETS 2 & 3 FOR DETAILS.)
 - INDICATES THE LOCATION AND DIRECTION OF AN OVERLAND FLOOD ROUTE THAT MUST BE RESPECTED IN ALL FINAL GRADING OPERATIONS (SEE DETAIL).
 - DENOTES AREA WHERE GRANULAR TRENCH BACKFILL IS REQUIRED.
 - (ELEV.) - INDICATES EXISTING ELEVATION.
 - DENOTES EXISTING UTILITY TO BE REMOVED.
 - INDICATES DRIVEWAY LOCATION.
 - INDICATES PVC SUMP DRAIN CONDUIT.
 - INDICATES REVERSE PITCH GUTTER FLAG.
 - INDICATES DEPRESSED CURB.
 - INDICATES M-3.12 CURB & GUTTER.
 - INDICATES B-6.12 CURB & GUTTER.
 - INDICATES TREES TO BE PRESERVED IF IN GOOD CONDITION; SEE LANDSCAPE PLANS FOR FURTHER INFORMATION.
 - DENOTES DETECTABLE WARNING STRIP
 - MAXIMUM DRIVEWAY SLOPE IS 8%. SOME BUILDINGS WILL NEED TO BE MOVED BACK FROM R.O.W. THE INDICATED AMOUNT TO MEET THE SLOPE REQUIREMENTS.
 - MAXIMUM SIDE SLOPE OF A LANDSCAPE BERM SHALL BE 3:1.
 - ALL STORM SEWER WITHIN SIDEYARD EASEMENTS SHALL HAVE GASKETED JOINTS. FOR RCP THE JOINTS SHALL BE IN ACCORDANCE w/ASTM C-361.

NO.	DATE	DESCRIPTION
02-04-20	JGC	REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 01-09-20

PREPARED FOR:
OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

DRAINAGE AND GRADING PLAN

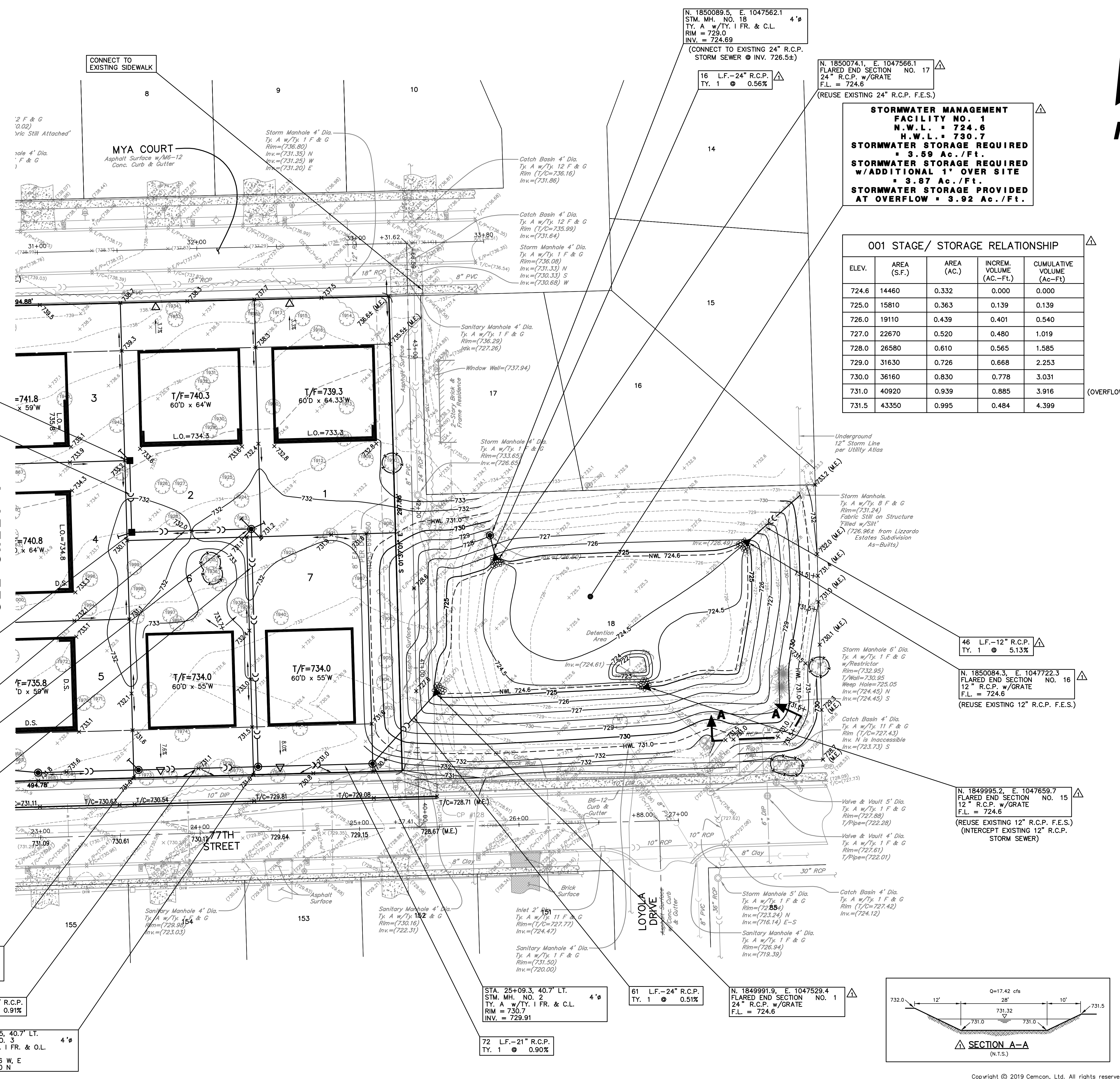
77TH STREET SUBDIVISION

JOB NO.: 782.029	DATE: 12-16-19	SHEET NO. 7 of 14
DSGN. BY: MAM	DRN. BY: JGC	
FILE NAME: GRADE	FLD. BK./PG.: ---	
DIR: 782029	SCALE: 1" = 30'	



APPROVED

PLOT FILE CREATED: 3/5/2020 11:25 PM BY: JEFF CEBULA
 DRAWING LAST SAVED: 3/5/2020 10:03 PM BY: JEFF CEBULA
 DRAWING PATH: P:\782029\DWG\ENG\DRAWINGS\FINAL\DRAWING\GRADE.DWG



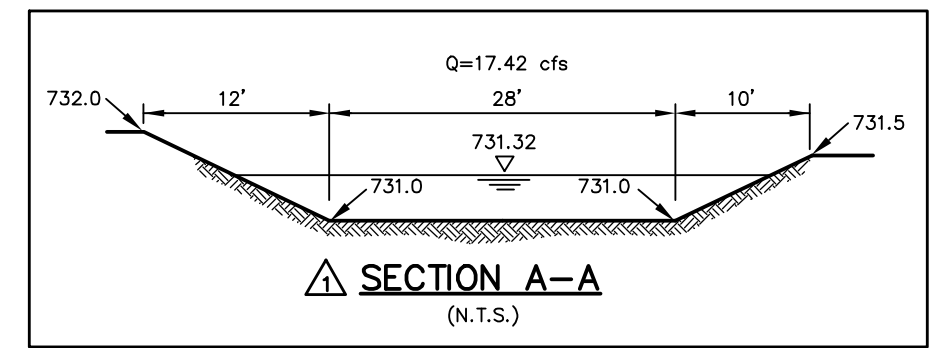
STORMWATER MANAGEMENT FACILITY NO. 6
 N.W.L. = 724.6
 H.W.L. = 730.7
STORMWATER STORAGE REQUIRED = 3.59 Ac./Ft.
STORMWATER STORAGE REQUIRED w/ADDITIONAL 1" OVER SITE = 3.87 Ac./Ft.
STORMWATER STORAGE PROVIDED AT OVERFLOW = 3.92 Ac./Ft.

001 STAGE/ STORAGE RELATIONSHIP

ELEV.	AREA (S.F.)	AREA (AC.)	INCR. VOLUME (AC.-Ft.)	CUMULATIVE VOLUME (Ac.-Ft.)
724.6	14460	0.332	0.000	0.000
725.0	15810	0.363	0.139	0.139
726.0	19110	0.439	0.401	0.540
727.0	22670	0.520	0.480	1.019
728.0	26580	0.610	0.565	1.585
729.0	31630	0.726	0.668	2.253
730.0	36160	0.830	0.778	3.031
731.0	40920	0.939	0.885	3.916
731.5	43350	0.995	0.484	4.399

(OVERFLOW)

- DRAINAGE & GRADING NOTES**
- ELEVATIONS SHOWN FOR ALL CURB INLETS, CATCH BASINS, AND MANHOLES ARE TOP OF CURB.
 - ALL CURBS SHALL BE BACKFILLED TO WITHIN 6 INCHES OF THE TOP OF CURB.
 - ALL BACK YARD SWALES SHALL BE CUT OR FILLED 6 INCHES BELOW FINISHED GRADE.
 - EXISTING DRAINAGE TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE PRESERVED OR REPAIRED IN ACCORDANCE WITH SPECIFICATION (SEE SHEET 2).
 - T/F - INDICATES PROPOSED TOP OF FOUNDATION ELEVATIONS.
 - THE TOP OF WINDOW WELLS SHALL BE CONSTRUCTED NO LOWER THAN 0.3 FEET BELOW THE TOP OF FOUNDATION ELEVATION (T/F). UNLESS OTHERWISE NOTED ON OVERFLOW CROSS-SECTIONS, ANY WINDOW WELLS ADJACENT TO RETENTION BASIN OR OVERFLOW ROUTES MUST BE 18" ABOVE H.W.L.
 - THE FINISHED TOPSOIL ELEVATION AT THE FOUNDATION SHOULD GENERALLY BE 0.7 FEET BELOW THE TOP OF FOUNDATION ELEVATION UNLESS INDICATED OTHERWISE.
 - G/F - INDICATES THE PROPOSED GARAGE FLOOR ELEVATION. THE PLACEMENT OF THE GARAGE / DRIVEWAY IS CRITICAL WHEN AND WHERE SHOWN ON THIS PLAN. IT IS MANDATORY THAT THE GARAGE BE CONSTRUCTED ON THE SIDE INDICATED.
 - L.O. OR W.O. - INDICATES THOSE LOTS WHERE A "LOOK-OUT" (L.O.) OR "WALK-OUT" (W.O.) BASEMENT CAN BE CONSTRUCTED. THE REQUIRED ELEVATION OF THE LOWEST FOUNDATION OPENING IS GIVEN. IF A LOOK-OUT OR WALK-OUT BASEMENT IS NOT DESIRED, A DETAILED GRADING PLAN OF THE ALTERNATE DESIGN MUST BE SUBMITTED TO THE GOVERNING AUTHORITY.
 - D.S. - INDICATES DROP SIDING IS SUGGESTED TO MINIMIZE REAR YARD SLOPES. DROP SIDING CAN BE MODIFIED AS NECESSARY AS LONG AS POSITIVE DRAINAGE IS ACHIEVED.
 - ACCENTED SIDES OF PROPOSED HOUSE FOUNDATIONS ARE INTENDED TO INDICATE THE APPROXIMATE LOCATION WHERE A LOOK-OUT OR WALK-OUT BASEMENT MAY BE CONSTRUCTED OR TO INDICATE THAT SPECIAL CONSTRUCTION MEASURES MUST BE EMPLOYED IN ORDER TO MINIMIZE SIDE YARD, REAR YARD AND / OR FRONT YARD GRADIENTS (E.G. DROPPED SIDING, STEPPED FOUNDATION, RETAINING WALL, ETC.) - SEE NOTES ABOVE FOR FURTHER DETAILS.
 - LOT DIMENSIONS SHOWN ON THIS PLAN MAY NOT NECESSARILY CORRESPOND TO THE PLATTED DIMENSIONS. REFER TO THE FINAL RECORDED PLAT OF SUBDIVISION.
 - WATERMAIN PROTECTION (SEE SHEETS 2 & 3 FOR DETAILS.)
 - INDICATES THE LOCATION AND DIRECTION OF AN OVERLAND FLOOD ROUTE THAT MUST BE RESPECTED IN ALL FINAL GRADING OPERATIONS (SEE DETAIL).
 - DENOTES AREA WHERE GRANULAR TRENCH BACKFILL IS REQUIRED.
 - (ELEV.) - INDICATES EXISTING ELEVATION.
 - DENOTES EXISTING UTILITY TO BE REMOVED.
 - INDICATES DRIVEWAY LOCATION.
 - INDICATES PVC SUMP DRAIN CONDUIT.
 - INDICATES REVERSE PITCH GUTTER FLAG.
 - INDICATES DEPRESSED CURB.
 - INDICATES M-3.12 CURB & GUTTER.
 - INDICATES B-6.12 CURB & GUTTER.
 - INDICATES TREES TO BE PRESERVED IF IN GOOD CONDITION; SEE LANDSCAPE PLANS FOR FURTHER INFORMATION.
 - DENOTES DETECTABLE WARNING STRIP
 - MAXIMUM DRIVEWAY SLOPE IS 8%. SOME BUILDINGS WILL NEED TO BE MOVED BACK FROM R.O.W. THE INDICATED AMOUNT TO MEET THE SLOPE REQUIREMENTS.
 - MAXIMUM SIDE SLOPE OF A LANDSCAPE BERM SHALL BE 3:1.
 - ALL STORM SEWER WITHIN SIDEYARD EASEMENTS SHALL HAVE GASKETED JOINTS. FOR RCP THE JOINTS SHALL BE IN ACCORDANCE w/ASTM C-361.



NO.	DATE	DESCRIPTION
03-05-20/JGC		REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 03-04-20
02-04-20/JGC		REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 01-09-20

REVISIONS

PREPARED FOR:
OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

DRAINAGE AND GRADING PLAN
77TH STREET SUBDIVISION

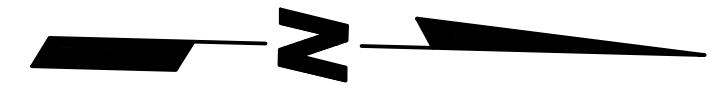
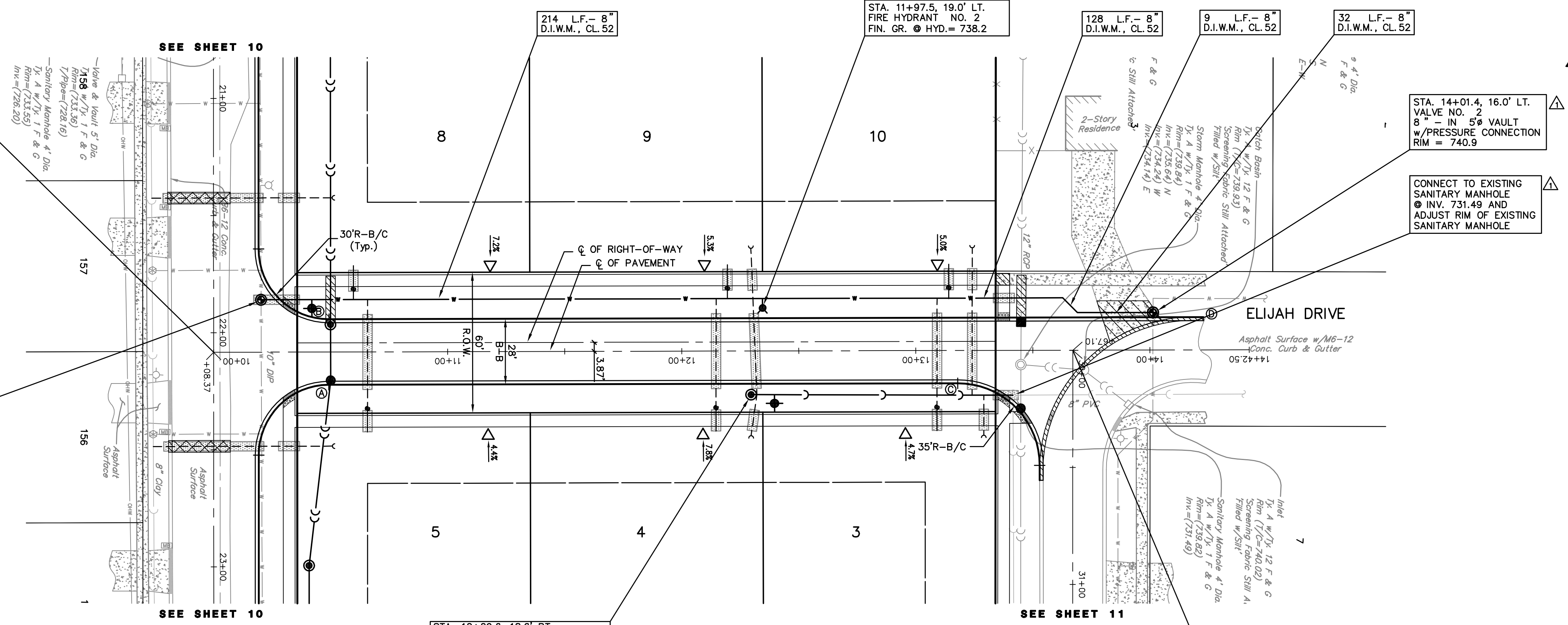
JOB NO.: 782.029	DATE: 12-16-19	SHEET NO. 8 of 14
DSGN. BY: MAM	DRN. BY: JGC	
FILE NAME: GRADE	FLD. BK./PG.: ---	

SCALE: 1" = 30'

Copyright © 2019 Cemcon, Ltd. All rights reserved.



STA. 10+00.00 C - ELIJAH DRIVE
 STA. 22+08.37 C - 77TH STREET



STA. 10+20.3, 22.4' LT.
 VALVE NO. 1
 10" - IN 5' VAULT
 W/ 8"X10" PRESSURE CONNECTION
 RIM = 731.90

STA. 12+29.6, 18.6' RT.
 SAN. MH. NO. 1
 TY. A W/TY. 1 FR. & SS LID
 RIM = 738.2
 INV. = 732.05

STA. 14+01.4, 16.0' LT.
 VALVE NO. 2
 8" - IN 5' VAULT
 W/PRESSURE CONNECTION
 RIM = 740.9

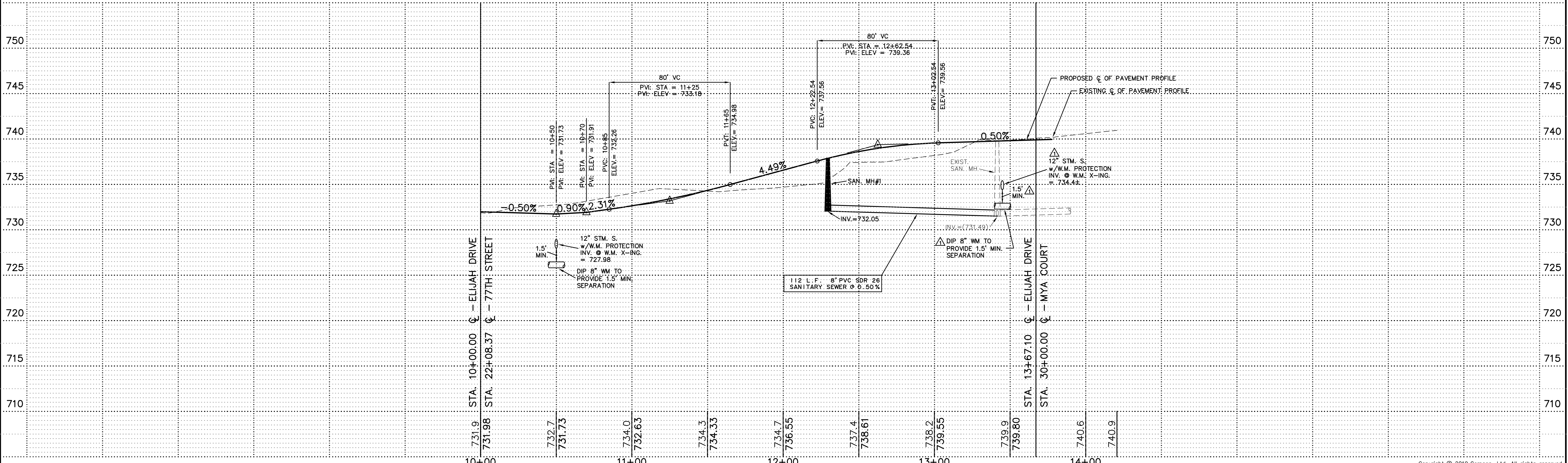
CONNECT TO EXISTING
 SANITARY MANHOLE
 INV. 731.49 AND
 ADJUST RIM OF EXISTING
 SANITARY MANHOLE

CURB RETURN TABLE

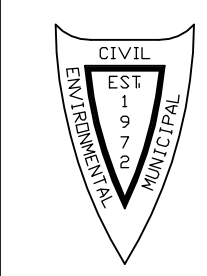
I.D.	STATION	OFFSET	T/C ELEV.
A	10+49.15	14.00' RT.	731.66
B	10+49.30	14.00' LT.	731.66
C	13+17.85	14.00' RT.	739.57
D	14+22.95	14.00' LT.	741.18+ (M.E.)

- INDICATES DEPRESSED CURB
- INDICATES WATER MAIN PROTECTION
- INDICATES DETECTABLE WARNING STRIP
- INDICATES TRENCH BACKFILL (REQUIRED UNDER ALL DRIVEWAYS)
- INDICATES DRIVEWAY LOCATION
- INDICATES RISER REQUIRED
- INDICATES OVERHEAD SEWER REQUIRED
- INDICATES CURB RETURN
- INDICATES 6" PVC SDR 26 SANITARY SERVICE @ MINIMUM 1.0% SLOPE
- INDICATES 1.5" TYPE K COPPER WATER SERVICE W/B-BOX

PLOT FILE CREATED: 3/5/2020 11:25 PM BY JEFF CEBULA DRAWING LAST SAVED: 2/20/2020 4:19 PM BY JEFF DRAWING PATH: P:\782029\DWG\ENG\DRAWINGS\FINAL DRAFTING\PP.DWG



PREPARED FOR:
 OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490



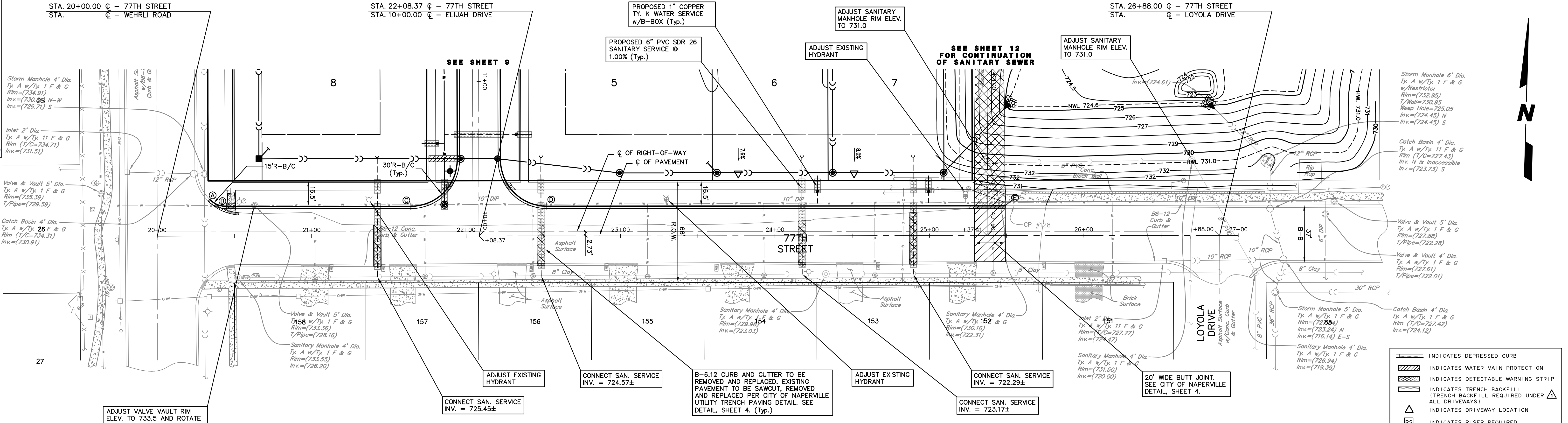
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO.		DATE		DESCRIPTION	
1	02-04-20/JGC	REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 01-09-20			

**ELIJAH DRIVE
 77TH STREET SUBDIVISION**

FILE NAME: PP	DSGN. BY: MAM	JOB NO.: 782.029	FLD. BK./PG.: ---	SHEET NO.
DIR: 782029	DRN. BY: JGC	DATE: 12-16-19	SCALE: 1" = 30'H, 5'V.	9 of 14

Copyright © 2019 Cemcon, Ltd. All rights reserved.

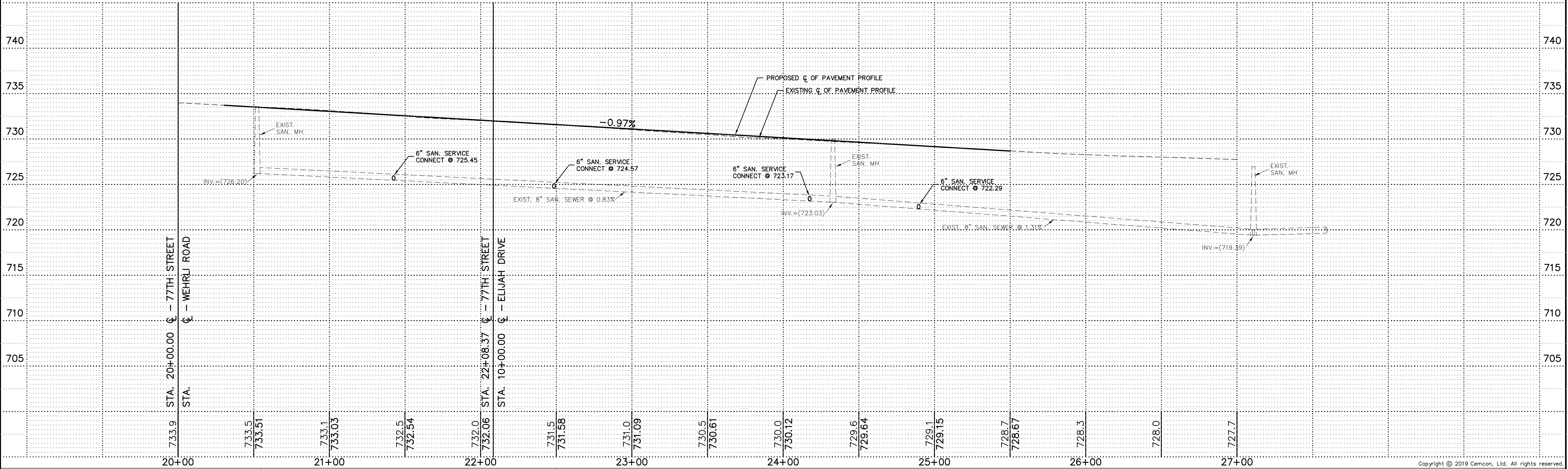


77TH STREET

CURB RETURN TABLE

I.D.	STATION	OFFSET	T/C ELEV.
A	20+34.07	23.66' LT.	733.95± (M.E.)
B	20+44.73	19.23' LT.	733.58
C	21+64.29	19.23' LT.	732.43
D	22+52.29	19.22' LT.	731.57
E	25+49.14	19.22' LT.	728.71± (M.E.)

PLOT FILE CREATED: 3/5/2020 1:25 PM BY JEFF CEBULA DRAWING LAST SAVED: 2/20/2020 4:19 PM BY JEFF CEBULA DRAWING PATH: P:\782029\DWG\ENG\DRAWINGS\FINAL DRAFTING\PP.DWG



PREPARED FOR:
 OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO.		DATE		DESCRIPTION	
1	02-04-20/JGC	REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 01-09-20			

77TH STREET
77TH STREET SUBDIVISION

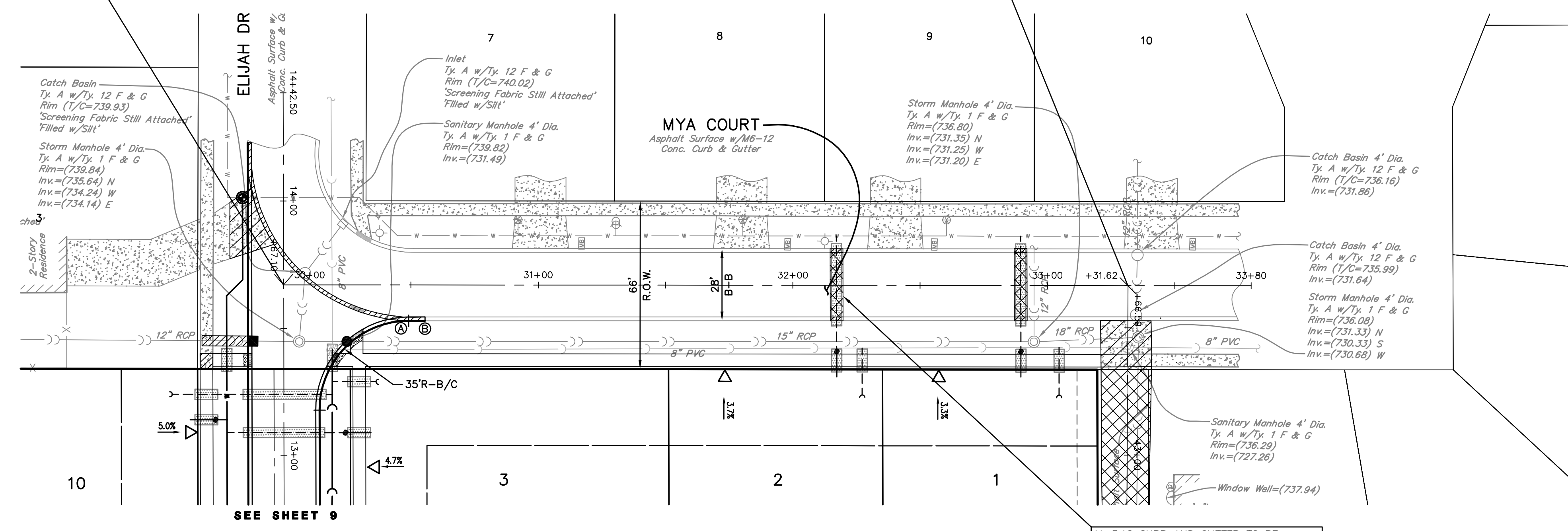
FILE NAME: PP	DSGN. BY: MAM	JOB NO.: 782.029	FLD. BK./PG.: ---	SHEET NO.
DIR: 782029	DRN. BY: JGC	DATE: 12-16-19	SCALE: 1" = 30'H.,5'V.	10 of 14

Copyright © 2019 Cemcon, Ltd. All rights reserved.



STA. 30+00.00 ☉ - MYA COURT
 STA. 13+67.10 ☉ - ELIJAH DRIVE

STA. 33+31.62 ☉ - MYA COURT
 STA. 43+66.59 ☉ - SIDEYARD SANITARY SEWER



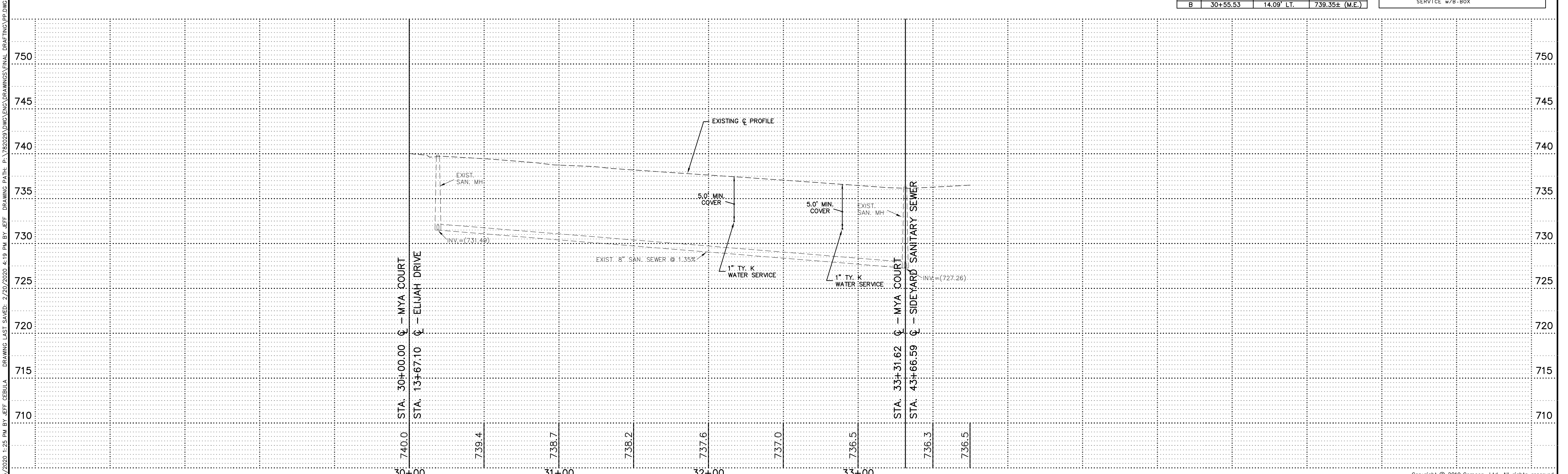
M-3.12 CURB AND GUTTER TO BE REMOVED AND REPLACED. EXISTING PAVEMENT TO BE SAWCUT, REMOVED AND REPLACED PER CITY OF NAPERVILLE UTILITY TRENCH PAVING DETAIL. SEE DETAIL, SHEET 4. (Typ.)

- INDICATES DEPRESSED CURB
- INDICATES WATER MAIN PROTECTION
- INDICATES DETECTABLE WARNING STRIP
- INDICATES TRENCH BACKFILL (TRENCH BACKFILL REQUIRED UNDER ALL DRIVEWAYS)
- INDICATES DRIVEWAY LOCATION
- INDICATES RISER REQUIRED
- INDICATES OVERHEAD SEWER REQUIRED
- INDICATES CURB RETURN
- INDICATES 6" PVC SDR 26 SANITARY SERVICE @ MINIMUM 1.0% SLOPE
- INDICATES 1.5" TYPE K COPPER WATER SERVICE W/B-BOX

CURB RETURN TABLE

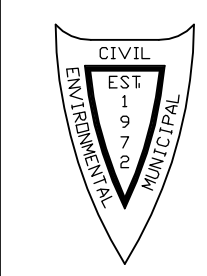
I.D.	STATION	OFFSET	T/C ELEV.
A	30+49.12	14.10' RT.	739.30
B	30+55.53	14.09' LT.	739.35± (M.E.)

MYA COURT



Copyright © 2019 Cemcon, Ltd. All rights reserved.

PREPARED FOR:
 OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490



PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO.		DATE	DESCRIPTION	REVISIONS		NO.	DATE	DESCRIPTION
1	02-04-20/JGC	REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 01-09-20						

MYA COURT
77TH STREET SUBDIVISION

FILE NAME: PP	DSGN. BY: MAM	JOB NO.: 782.029	FLD. BK./PG.: ---	SHEET NO.
DIR: 782029	DRN. BY: JGC	DATE: 12-16-19	SCALE: 1" = 30'H, 5'V.	11 of 14

PLOT FILE CREATED: 3/5/2020 1:25 PM BY JEFF CEBULA DRAWING LAST SAVED: 2/20/2020 4:19 PM BY JEFF CEBULA DRAWING PATH: P:\782029\DWG\ENG\DRAWINGS\FINAL DRAFTING\PP.DWG

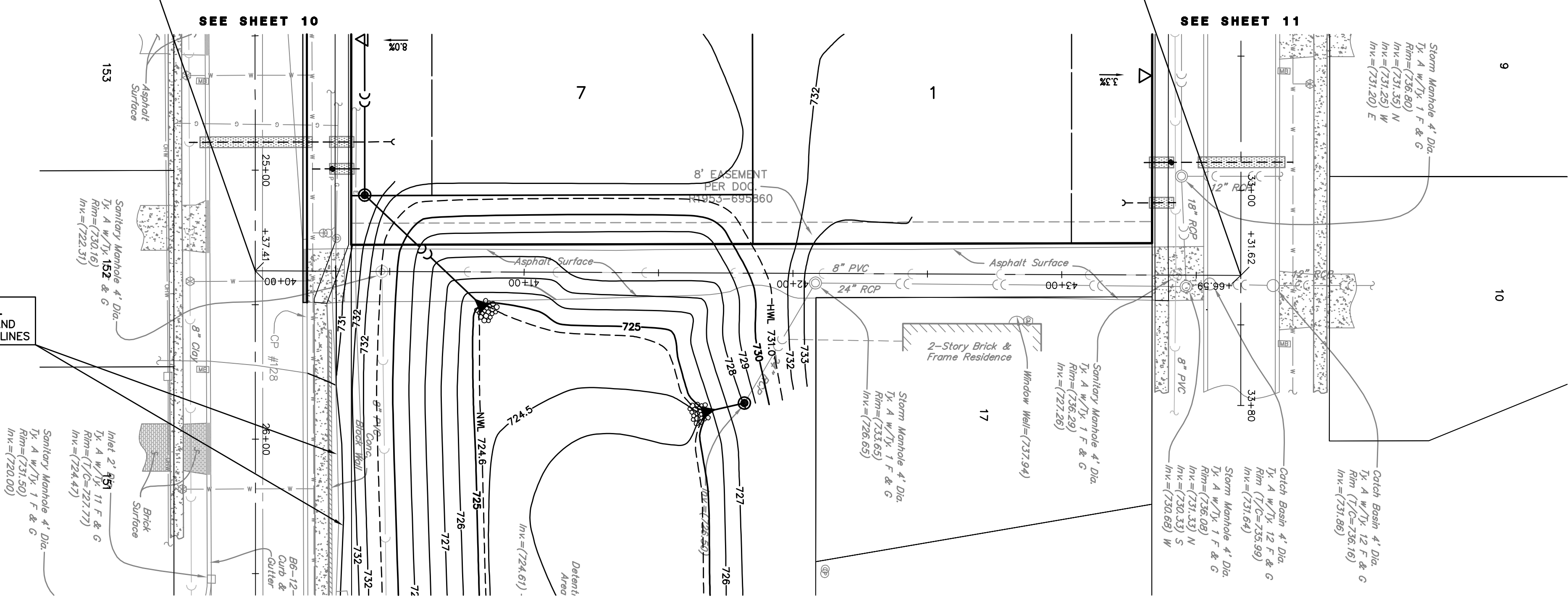


STA. 40+00.00 ☉ - SIDEYARD SANITARY SEWER
 STA. 25+37.41 ☉ - 77TH STREET

STA. 43+66.59 ☉ - SIDEYARD SANITARY SEWER
 STA. 33+31.62 ☉ - MYA COURT

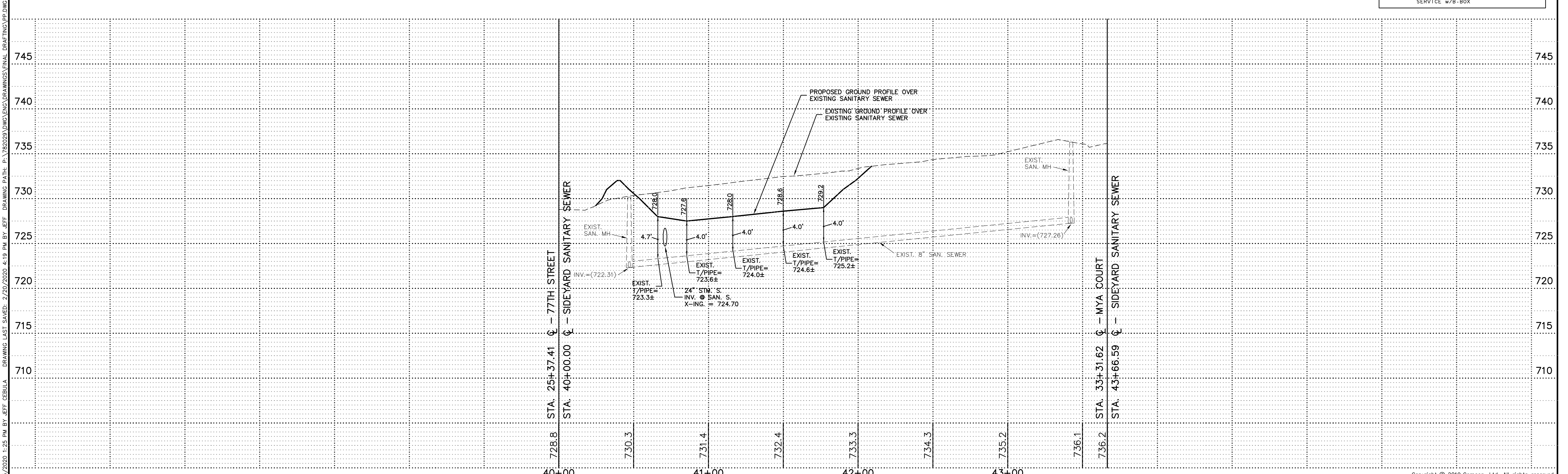


CAUTION!
 BURIED GAS AND
 COMMUNICATION LINES



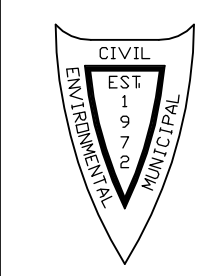
- INDICATES DEPRESSED CURB
- INDICATES WATER MAIN PROTECTION
- INDICATES DETECTABLE WARNING STRIP
- INDICATES TRENCH BACKFILL REQUIRED UNDER ALL DRIVEWAYS
- INDICATES DRIVEWAY LOCATION
- INDICATES RISER REQUIRED
- INDICATES OVERHEAD SEWER RETURN
- INDICATES CURB RETURN
- INDICATES 6" PVC SDR 26 SANITARY SERVICE @ MINIMUM 1.0% SLOPE
- INDICATES 1.5" TYPE K COPPER WATER SERVICE W/B-BOX

SIDEYARD SANITARY SEWER



Copyright © 2019 Cemcon, Ltd. All rights reserved.

PREPARED FOR:
 OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490



PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO. DATE DESCRIPTION			REVISIONS		
1	02-04-20/JGC	REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 01-09-20			

**SIDEYARD SANITARY SEWER
 77TH STREET SUBDIVISION**

FILE NAME: PP	DSGN. BY: MAM	JOB NO.: 782.029	FLD. BK./PG.: ---	SHEET NO.
DIR: 782029	DRN. BY: JGC	DATE: 12-16-19	SCALE: 1" = 30'H, 5'V.	12 of 14

PLOT FILE CREATED: 3/5/2020 1:25 PM BY JEFF CEBULA DRAWING LAST SAVED: 2/20/2020 4:19 PM BY JEFF CEBULA DRAWING PATH: P:\782029\DWG\ENG\DRAWINGS\FINAL DRAFTING\PP.DWG



City of Naperville STANDARD DETAIL
 SANITARY SEWER MANHOLE
 REVISED: 01/01/2013 SHEET 1 OF 1
390.01

City of Naperville STANDARD DETAIL
 CAST IRON STEPS
 REVISED: 01/01/2013 SHEET 1 OF 1
290.06

City of Naperville STANDARD DETAIL
 TRENCH SECTION FOR PVC PIPE
 REVISED: 01/01/2013 SHEET 1 OF 1
390.10

City of Naperville STANDARD DETAIL
 RISE FOR SERVICE LATERAL
 REVISED: 01/01/2013 SHEET 1 OF 1
390.20

City of Naperville STANDARD DETAIL
 SANITARY SEWER CONNECTION
 REVISED: 01/01/2013 SHEET 1 OF 1
390.21

City of Naperville STANDARD DETAIL
 VALVE VAULT WITH CAST DUCTILE IRON SLEEVE PRESSURE TAP
 REVISED: 01/01/2013 SHEET 1 OF 1
490.02

City of Naperville STANDARD DETAIL
 VALVE VAULT - FRAME & COVER
 REVISED: 01/01/2013 SHEET 1 OF 1
490.04

City of Naperville STANDARD DETAIL
 HYDRANT
 REVISED: 09/10/2015 SHEET 1 OF 1
490.06

City of Naperville STANDARD DETAIL
 WATER MAIN TRENCH SECTION
 REVISED: 01/01/2013 SHEET 1 OF 1
490.10

City of Naperville STANDARD DETAIL
 THRUST BLOCK
 REVISED: 09/10/2015 SHEET 1 OF 1
490.11

City of Naperville STANDARD DETAIL
 PIPE INSULATION
 REVISED: 09/10/2015 SHEET 1 OF 1
490.12

City of Naperville STANDARD DETAIL
 LOWERING/ADJUSTING WATER MAIN
 REVISED: 09/10/2015 SHEET 1 OF 1
490.13

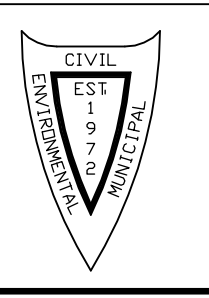
City of Naperville STANDARD DETAIL
 WATER MAIN PROTECTION FROM EXISTING STORM SEWER PIPE
 REVISED: 01/01/2013 SHEET 1 OF 1
490.14

City of Naperville STANDARD DETAIL
 POLYETHYLENE ENCASEMENT
 REVISED: 01/01/2013 SHEET 1 OF 1
490.15

City of Naperville STANDARD DETAIL
 SERVICE TAP AND CONNECTION
 REVISED: 09/10/2015 SHEET 1 OF 1
490.20

City of Naperville STANDARD DETAIL
 UTILITY TRENCH PAVING SECTION (FLEXIBLE PAVEMENTS)
 REVISED: 01/01/2013 SHEET 1 OF 1
590.13

PREPARED FOR:
 OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490



PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

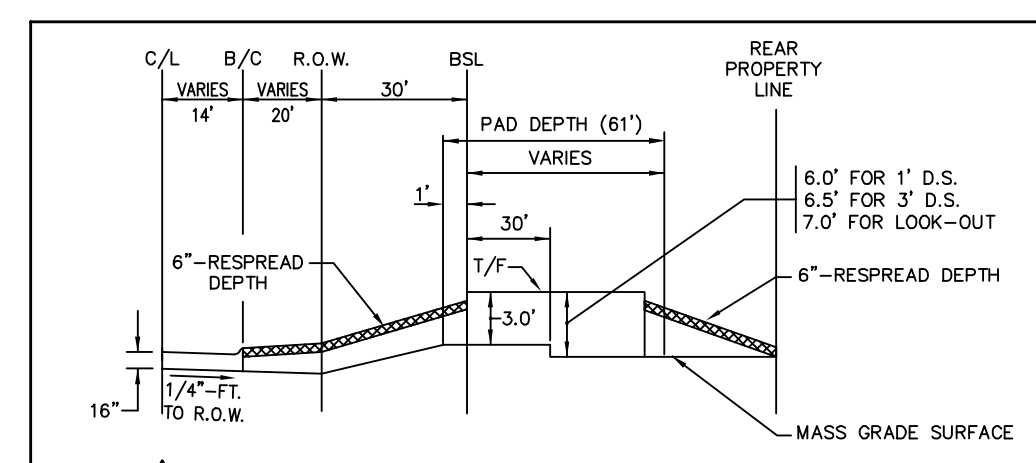
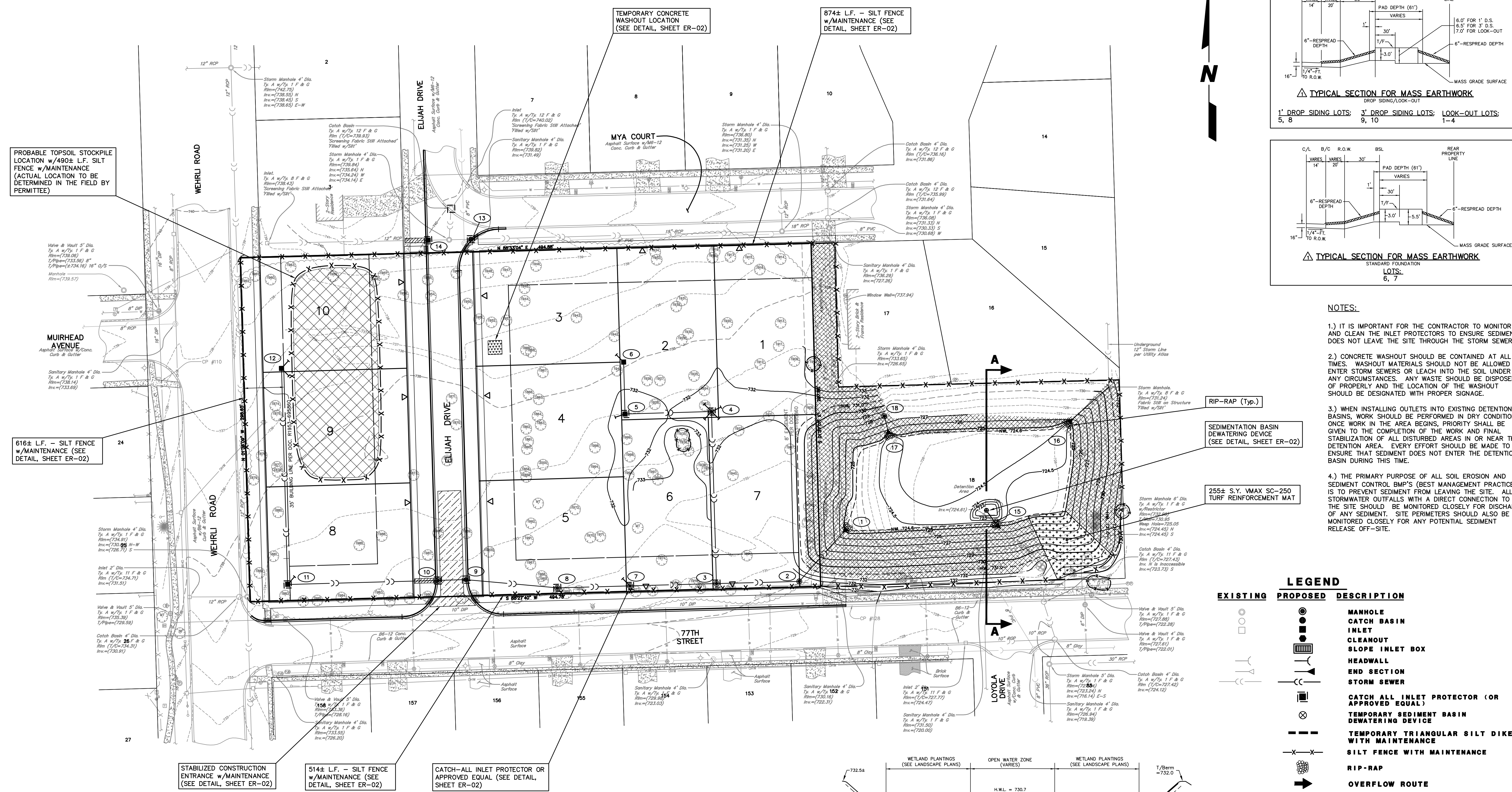
NO.		DATE		DESCRIPTION		REVISIONS	
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION	NO.	DATE
1	02-04-20/JGC	REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 01-09-20					

Copyright © 2019 Cemcon, Ltd. All rights reserved.

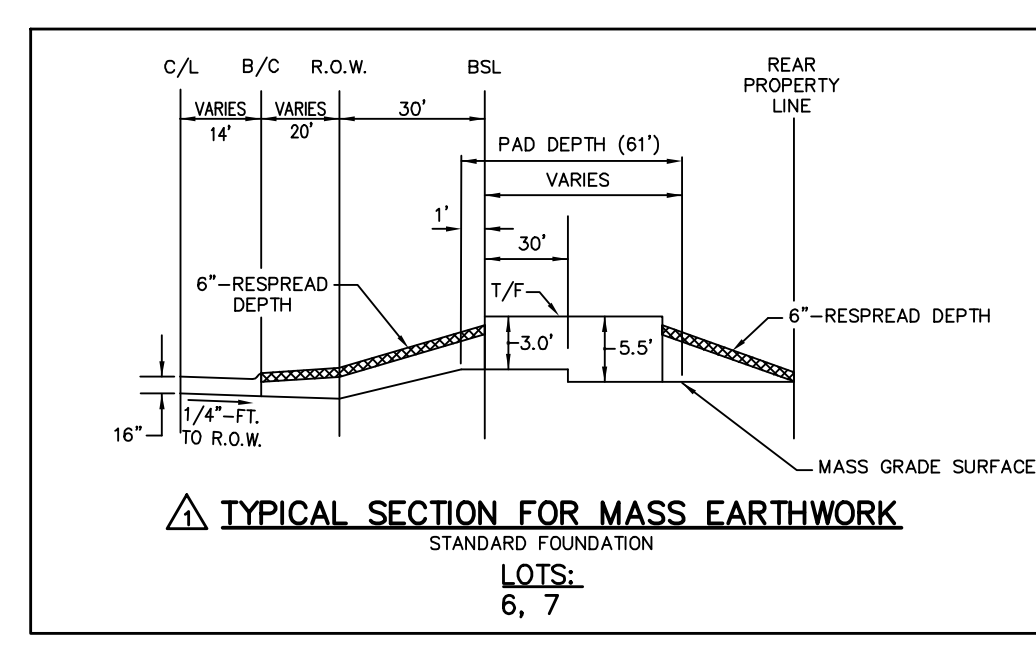
SANITARY SEWER AND WATERMAIN CONSTRUCTION DETAILS

77TH STREET SUBDIVISION

FILE NAME: DETAILS	DSGN. BY: MAM	JOB NO.: 782.029	F.L.D. BK./PG.: ---	SHEET NO.
DIR: 782029	DRN. BY: JGC	DATE: 12-16-19	SCALE: 1" = N.T.S.	13 of 14



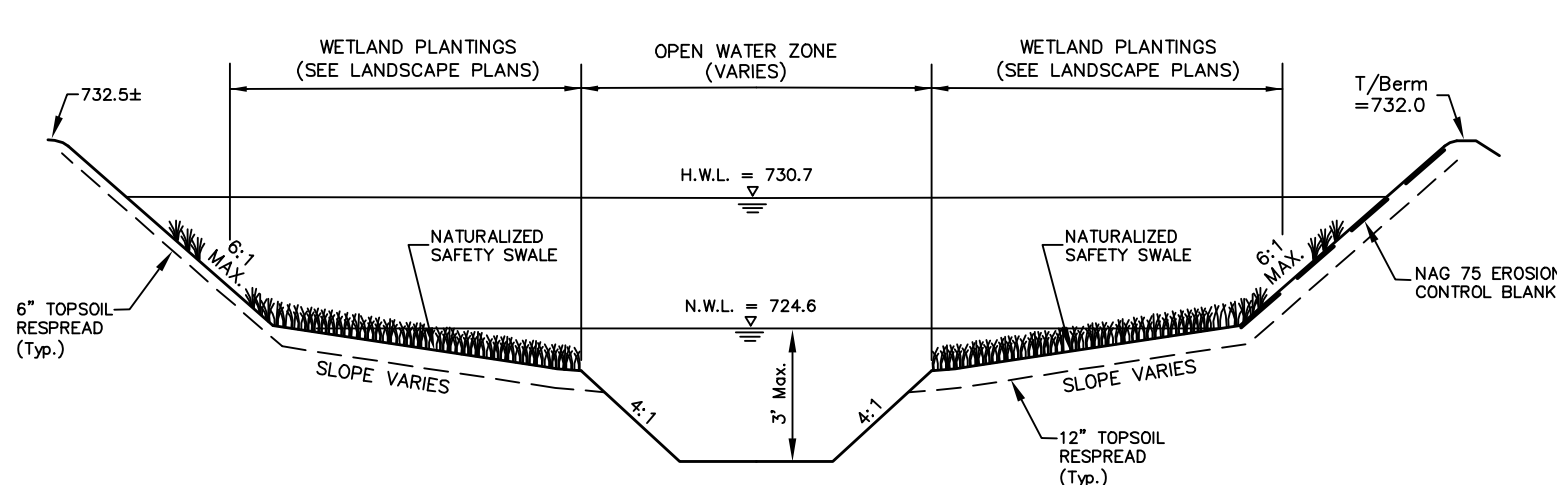
1' DROP SIDING LOTS: 5, 8
 3' DROP SIDING LOTS: 9, 10
 LOOK-OUT LOTS: 1-4



- NOTES:**
- IT IS IMPORTANT FOR THE CONTRACTOR TO MONITOR AND CLEAN THE INLET PROTECTORS TO ENSURE SEDIMENT DOES NOT LEAVE THE SITE THROUGH THE STORM SEWER.
 - CONCRETE WASHOUT SHOULD BE CONTAINED AT ALL TIMES. WASHOUT MATERIALS SHOULD NOT BE ALLOWED TO ENTER STORM SEWERS OR LEACH INTO THE SOIL UNDER ANY CIRCUMSTANCES. ANY WASTE SHOULD BE DISPOSED OF PROPERLY AND THE LOCATION OF THE WASHOUT SHOULD BE DESIGNATED WITH PROPER SIGNAGE.
 - WHEN INSTALLING OUTLETS INTO EXISTING DETENTION BASINS, WORK SHOULD BE PERFORMED IN DRY CONDITIONS. ONCE WORK IN THE AREA BEGINS, PRIORITY SHALL BE GIVEN TO THE COMPLETION OF THE WORK AND FINAL STABILIZATION OF ALL DISTURBED AREAS IN OR NEAR THE DETENTION AREA. EVERY EFFORT SHOULD BE MADE TO ENSURE THAT SEDIMENT DOES NOT ENTER THE DETENTION BASIN DURING THIS TIME.
 - THE PRIMARY PURPOSE OF ALL SOIL EROSION AND SEDIMENT CONTROL BMP'S (BEST MANAGEMENT PRACTICES) IS TO PREVENT SEDIMENT FROM LEAVING THE SITE. ALL STORMWATER OUTFALLS WITH A DIRECT CONNECTION TO THE SITE SHOULD BE MONITORED CLOSELY FOR DISCHARGE OF ANY SEDIMENT. SITE PERIMETERS SHOULD ALSO BE MONITORED CLOSELY FOR ANY POTENTIAL SEDIMENT RELEASE OFF-SITE.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
○	●	MANHOLE
□	■	CATCH BASIN
○	●	INLET
□	■	CLEANOUT
□	■	SLOPE INLET BOX
□	■	HEADWALL
□	■	END SECTION
□	■	STORM SEWER
□	■	CATCH ALL INLET PROTECTOR (OR APPROVED EQUAL)
□	■	TEMPORARY SEDIMENT BASIN DEWATERING DEVICE
□	■	TEMPORARY TRIANGULAR SILT DIKE WITH MAINTENANCE
□	■	SILT FENCE WITH MAINTENANCE
□	■	RIP-RAP
□	■	OVERFLOW ROUTE
□	■	PROBABLE TOPSOIL STOCKPILE LOCATIONS
□	■	NAG 75 EROSION CONTROL BLANKET
□	■	VMAX 8C-250 TURF REINFORCEMENT MAT
○	○	NUMBERING SYSTEM USED ON PLANS FOR DRAINAGE STRUCTURE IDENTIFICATION
○	○	NUMBERING SYSTEM USED ON PLANS FOR CLEANOUT STRUCTURE IDENTIFICATION



PROBABLE TOPSOIL STOCKPILE LOCATION w/490± L.F. SILT FENCE w/MAINTENANCE (ACTUAL LOCATION TO BE DETERMINED IN THE FIELD BY PERMITTEE)

816± L.F. - SILT FENCE w/MAINTENANCE (SEE DETAIL, SHEET ER-02)

STABILIZED CONSTRUCTION ENTRANCE w/MAINTENANCE (SEE DETAIL, SHEET ER-02)

514± L.F. - SILT FENCE w/MAINTENANCE (SEE DETAIL, SHEET ER-02)

CATCH-ALL INLET PROTECTOR OR APPROVED EQUAL (SEE DETAIL, SHEET ER-02)

TEMPORARY CONCRETE WASHOUT LOCATION (SEE DETAIL, SHEET ER-02)

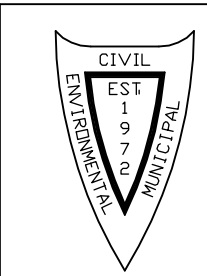
874± L.F. - SILT FENCE w/MAINTENANCE (SEE DETAIL, SHEET ER-02)

RIP-RAP (Typ.)

SEDIMENTATION BASIN DEWATERING DEVICE (SEE DETAIL, SHEET ER-02)

255± S.Y. VMAX 8C-250 TURF REINFORCEMENT MAT

PREPARED FOR:
 OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490



PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO.		DATE		DESCRIPTION	
1	02-04-20/JGC	REVISED PER CITY OF NAPERVILLE REVIEW LETTER DATED 01-09-20			

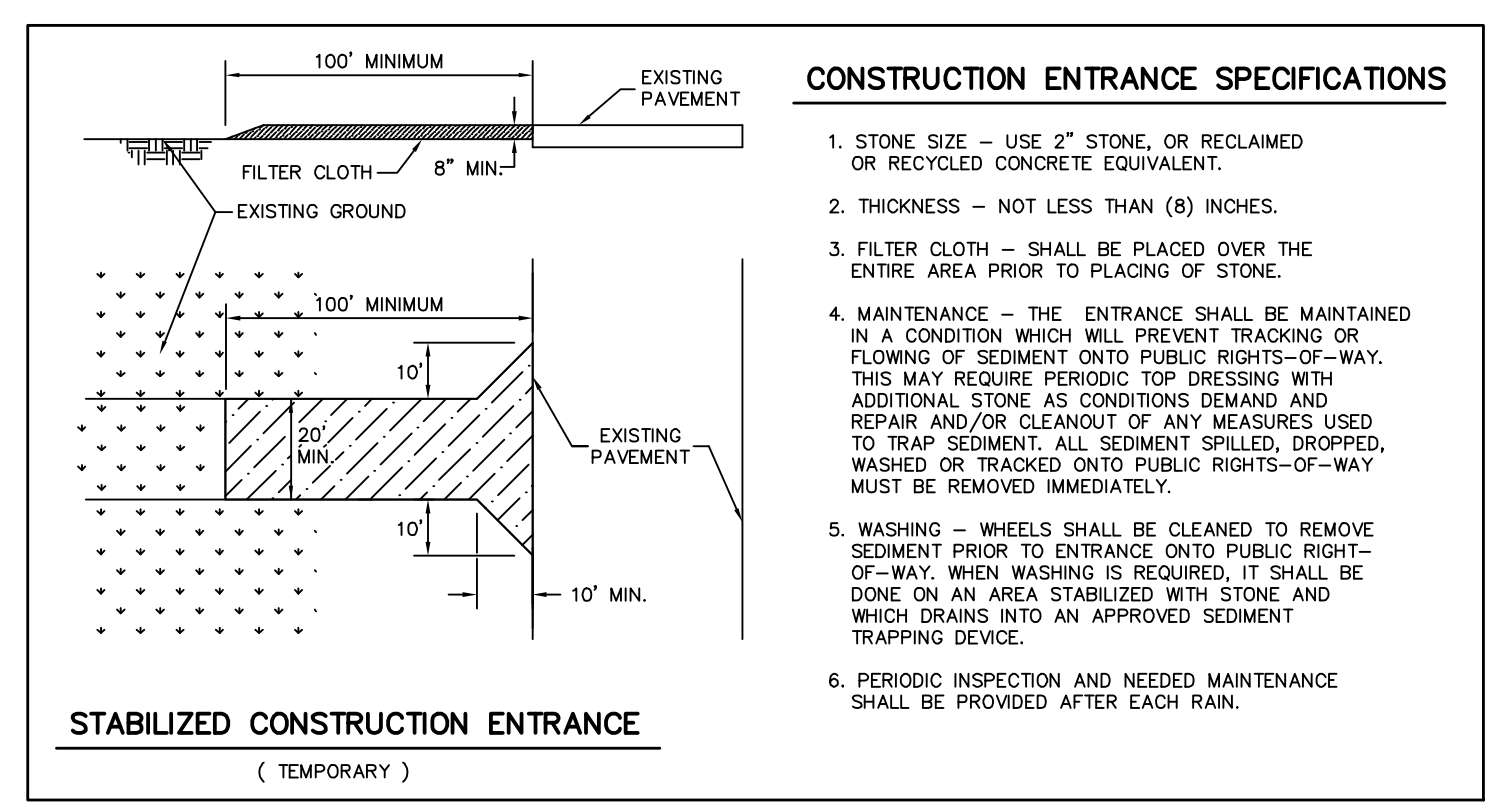
STORMWATER POLLUTION PREVENTION PLAN

77TH STREET SUBDIVISION

FILE NAME: SOILERO	DSGN. BY: MAM	JOB NO.: 782.029	FLD. BK./PG.: ---	SHEET NO.:
DIR: 782029	DRN. BY: JGC	DATE: 12-16-19	SCALE: 1" = 40'	ER-1 of ER-3



PLOT FILE CREATED: 3/5/2020 1:25 PM BY: JEFF CEBULIA
 DRAWING LAST SAVED: 2/4/2020 12:49 PM BY: JEFF CEBULIA
 DRAWING PATH: F:\782029 DWG (ENG)\DRAWINGS\FINAL DRAWING\SOILERO.DWG

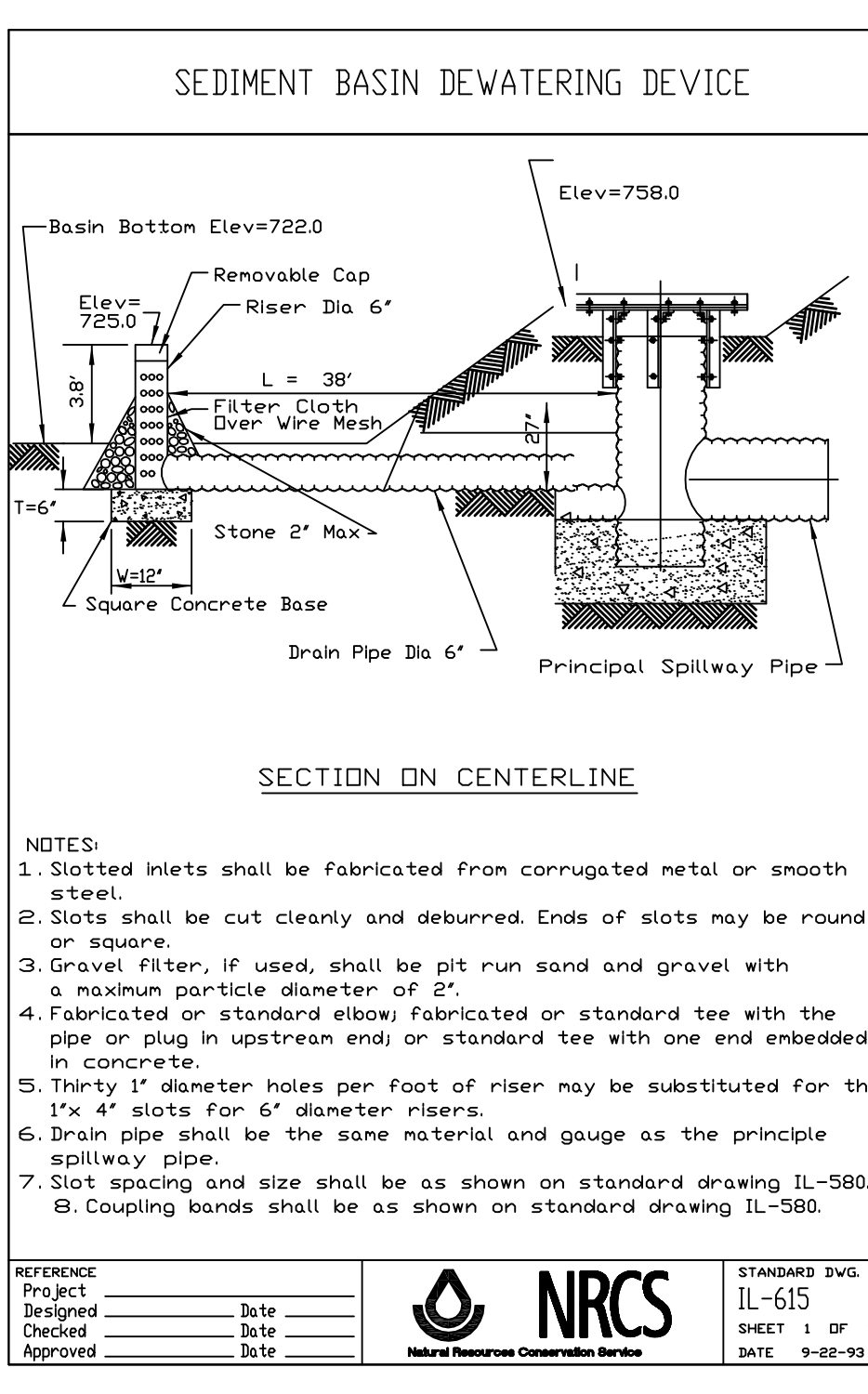
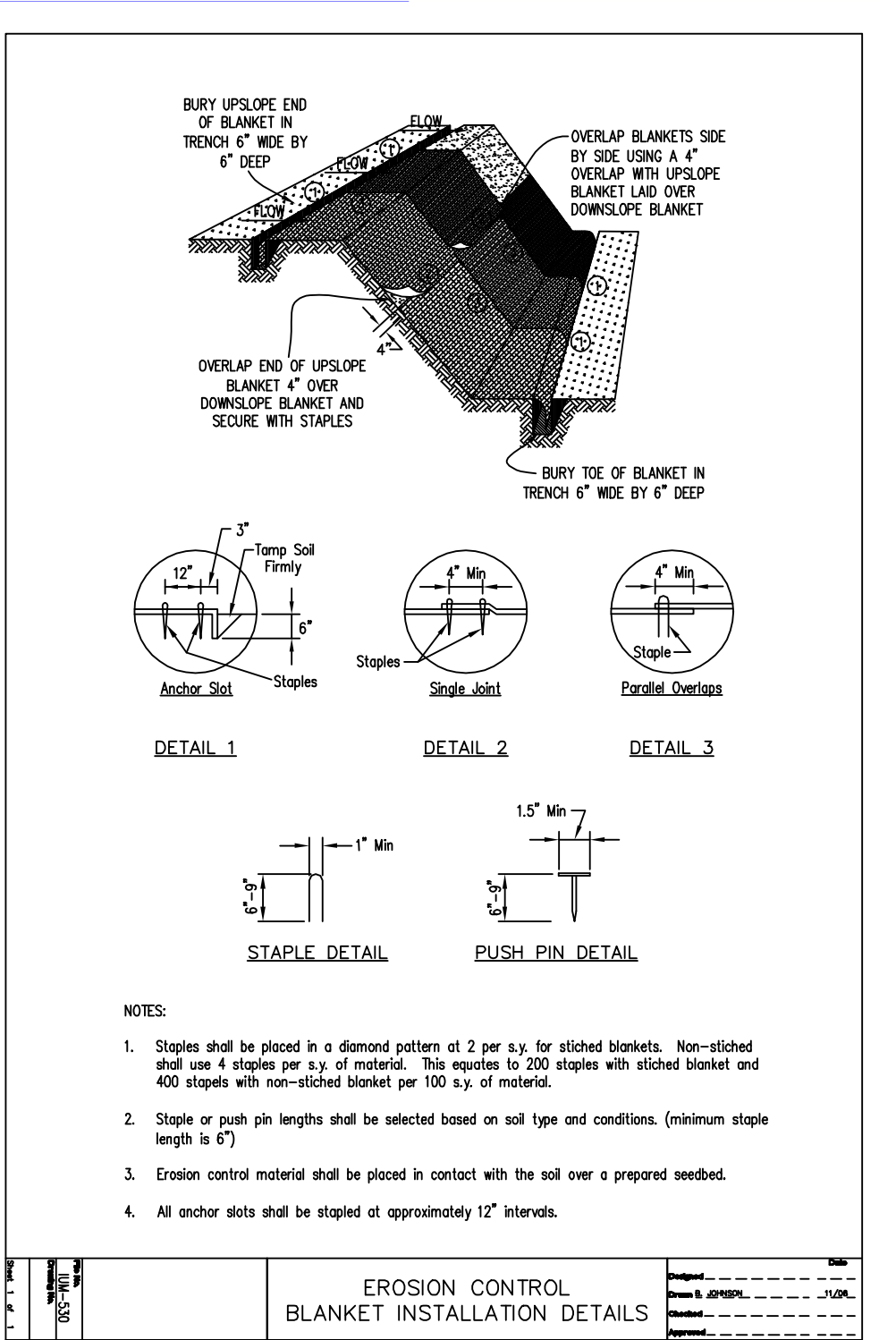
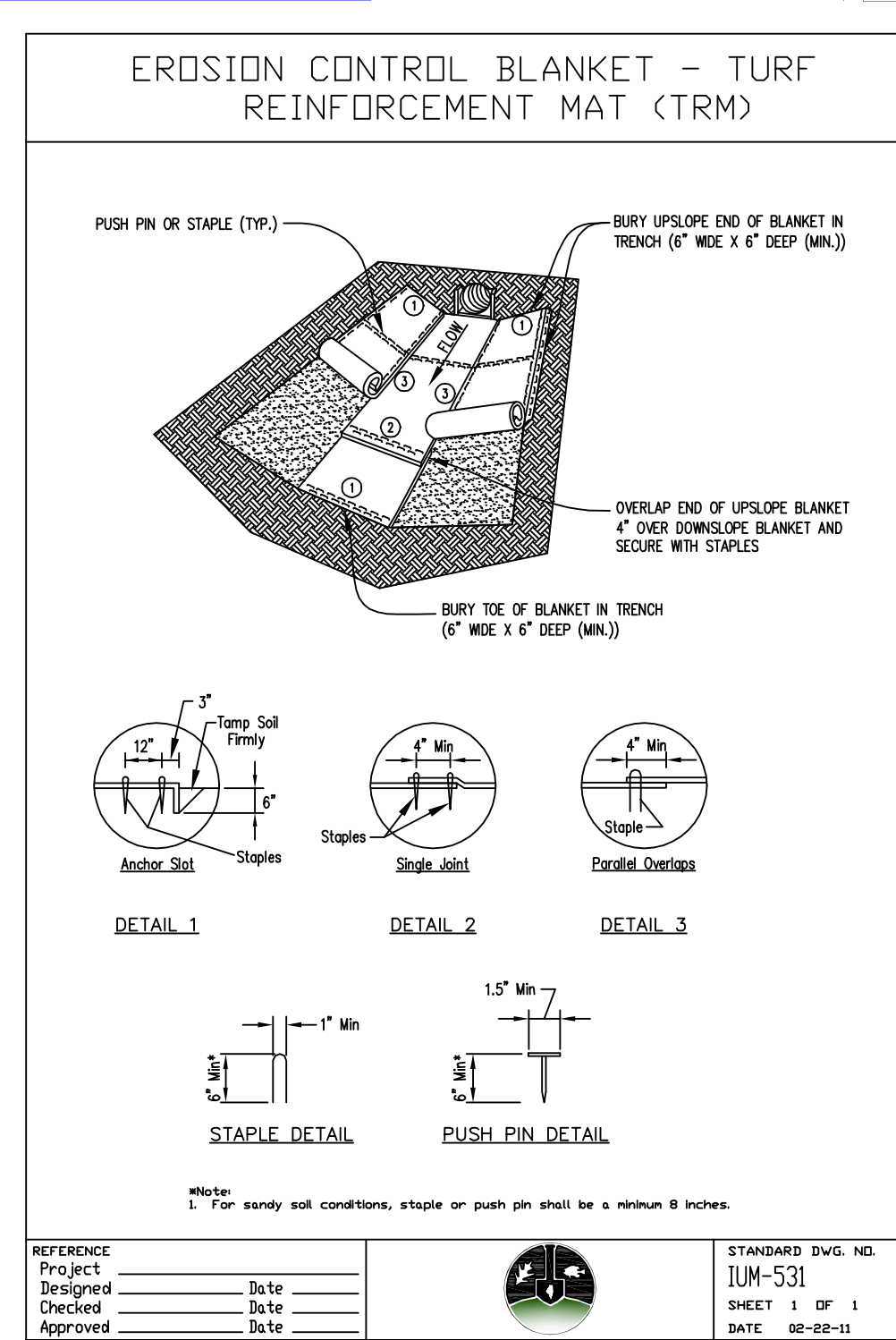
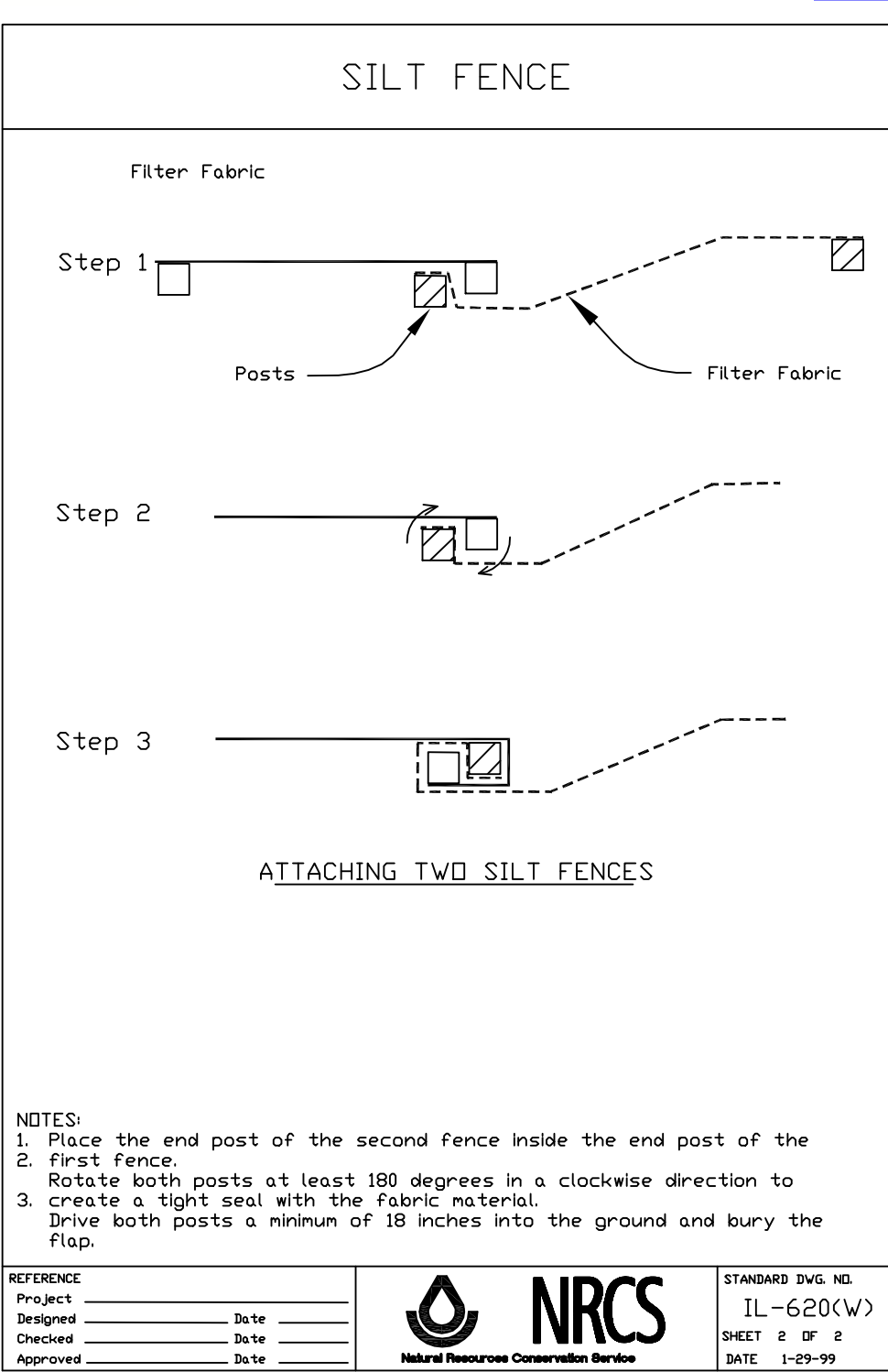
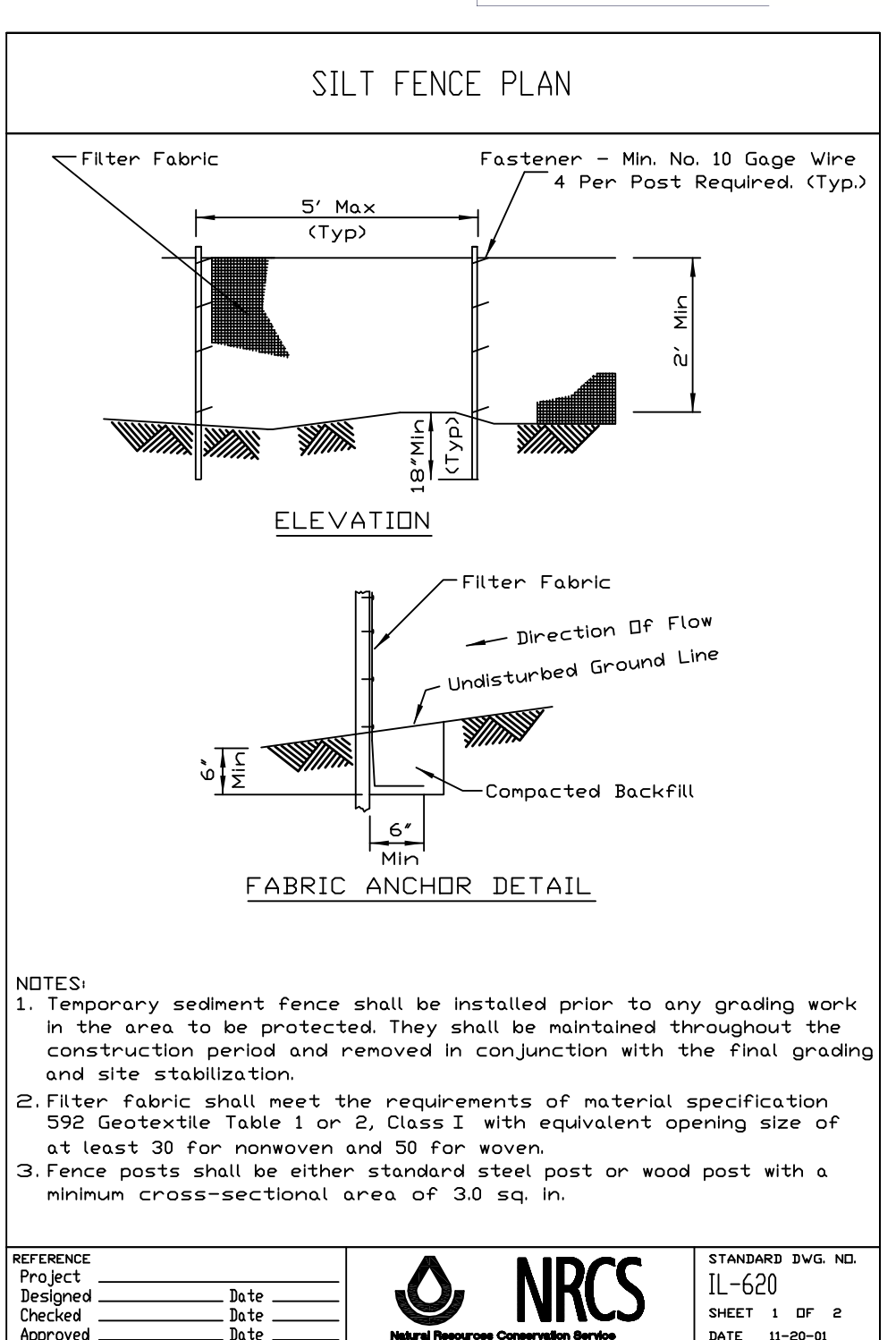
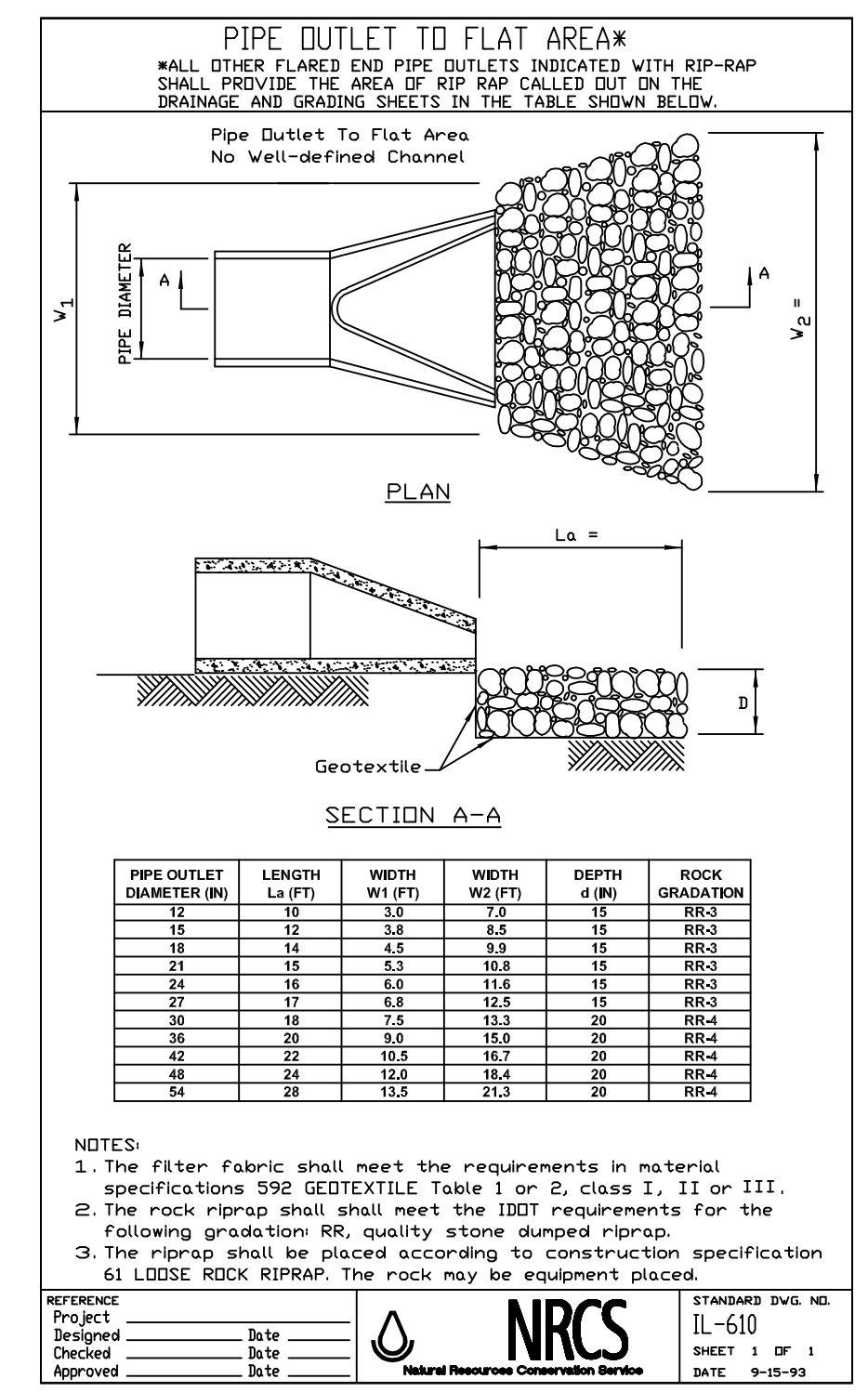
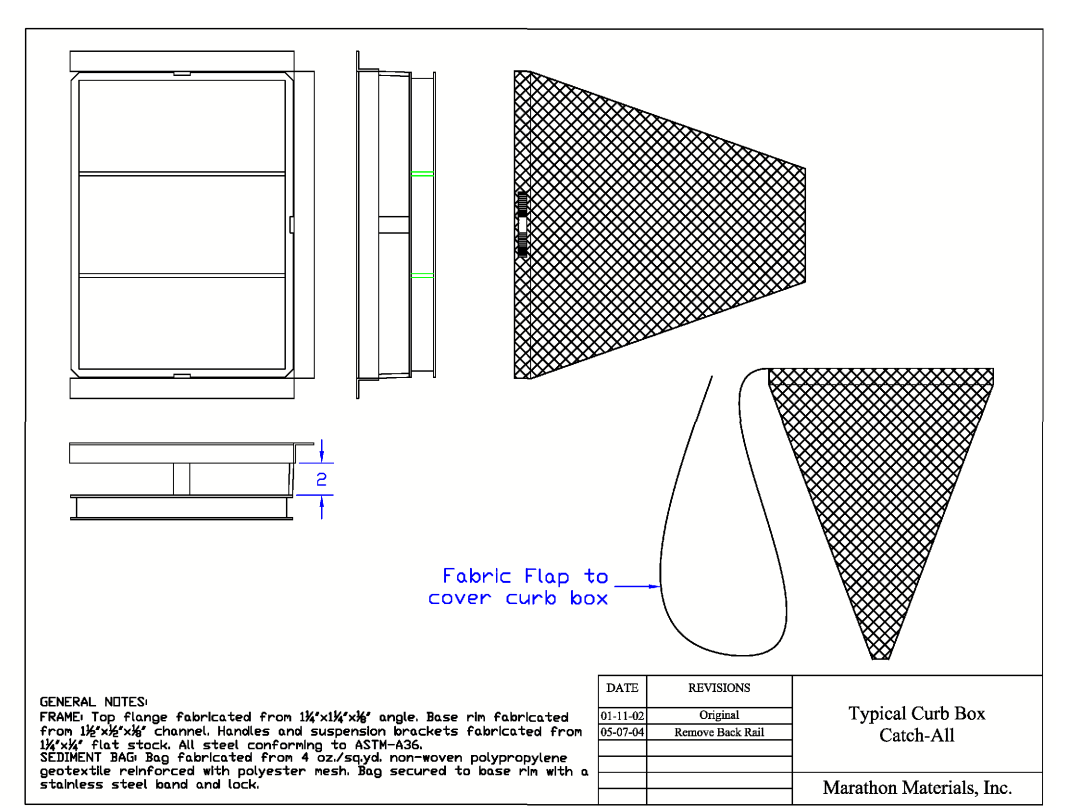
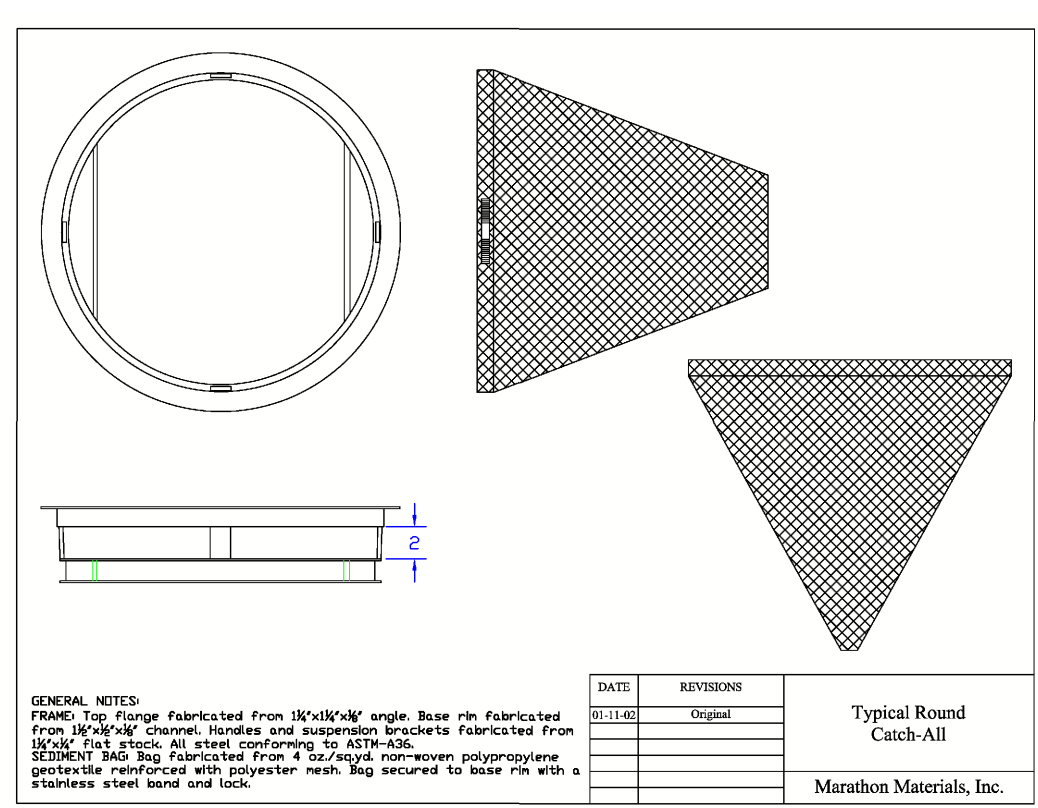


- ### CONSTRUCTION ENTRANCE SPECIFICATIONS
- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
 - THICKNESS - NOT LESS THAN 8" INCHES.
 - FILTER CLOTH - SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
 - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 - WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
 - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

Catch-All Inlet Protector
 Custom Made to Fit Any Size Storm Drain

Marathon Materials, Inc.
 2222 W. State Street
 Peoria, IL 61614
 (309) 763-0474

- ### Suggested Maintenance Catch-All Inlet Protector
- The frequency and degree of maintenance required is dependent on site conditions and rainfall. Certain types of soil and runoff filter with hydrocarbons, (oil, sediments, etc.) tend to "soak up" the fabric bags more quickly than others.
- Generally, the bags can be emptied, inverted, washed, and reused throughout an entire project. They may also be vacuumed. The mat must be replaced if it is severely worn or torn.
- #### GUIDELINES FOR CONSTRUCTION SITES
- Inspect the bag at least every 2 weeks - Clean, if needed.
 - Inspect the bag every time there is rainfall totaling 1/2" or more inches - Clean, if needed.
 - Replace the bag if it has a hole in it.
 - Replace the bag if it appears clean but won't pass water.
- Suggested Maintenance Catch-All HR
- Typically, the Catch-All HR is installed in a gravel parking lot or maintenance yard. The degree and frequency of maintenance required is generally far less than for Catch-All installed at construction sites.
- #### GUIDELINES FOR PARKING LOTS & MAINTENANCE YARDS
- Inspect the bag at least once per month - Clean, if needed.
 - Inspect the bag every time there is rainfall totaling more than two inches - Clean, if needed.
 - Replace the bag if it has a hole in it.
 - Replace the bag if it appears clean but won't pass water.



Vmax3 SC250 (INSTALL PER MANUFACTURER INSTRUCTIONS)

Permanent Turf Reinforcement Mat Vmax3 SC250 is constructed of a permanent, high-strength, three-dimensional matting structure that incorporates a straw/coconut fiber matrix. The straw/coconut fiber matrix enhances the permanent matting component's initial mulching and erosion control performance for up to 24 months. SC250 provides extended-term, pre-vegetated erosion protection and permanent turf reinforcement in a wide range of applications, including severe slopes, medium- to high-flow channels, and stream banks. It is proven in extensive laboratory and field research to increase the shear resistance of vegetation up to 10 lbs./ft² (480 Pa). With the toughest unreinforced grasses typically failing at shear stress levels of 3.7 lbs./ft², the high-performance SC250 more than doubles the shear resistance of vegetation. This enables SC250 to be used in applications where rock riprap and concrete were once specified.

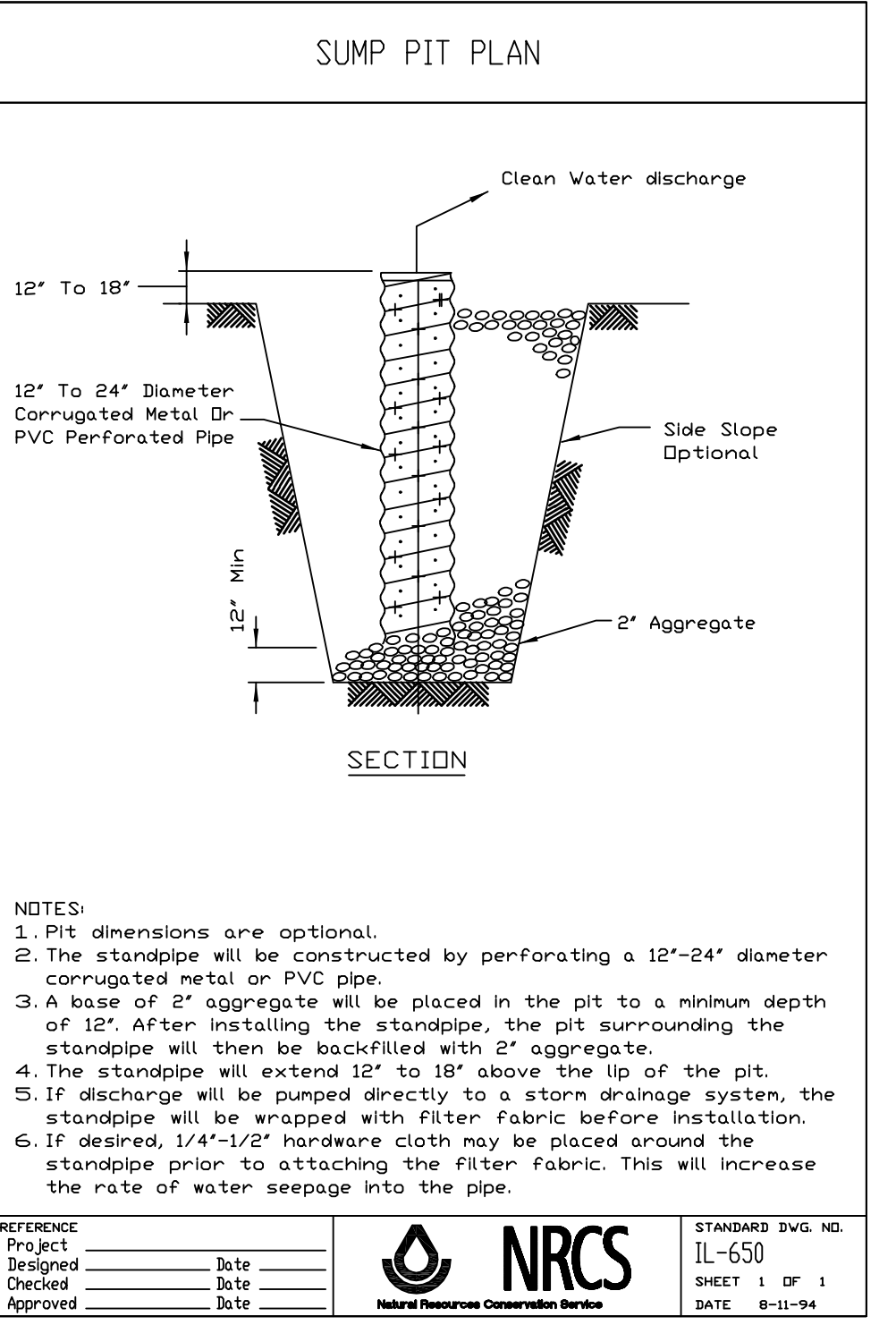
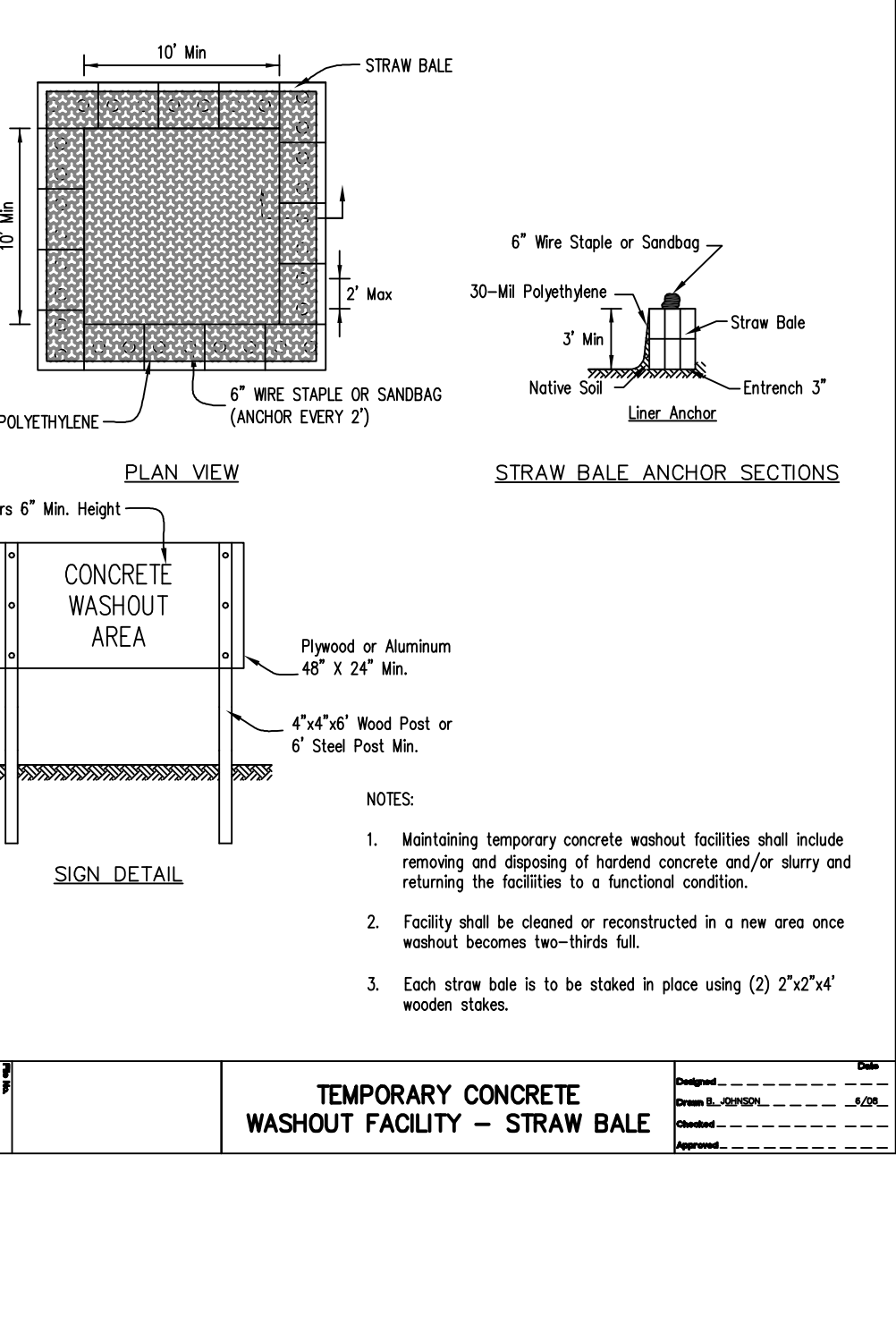
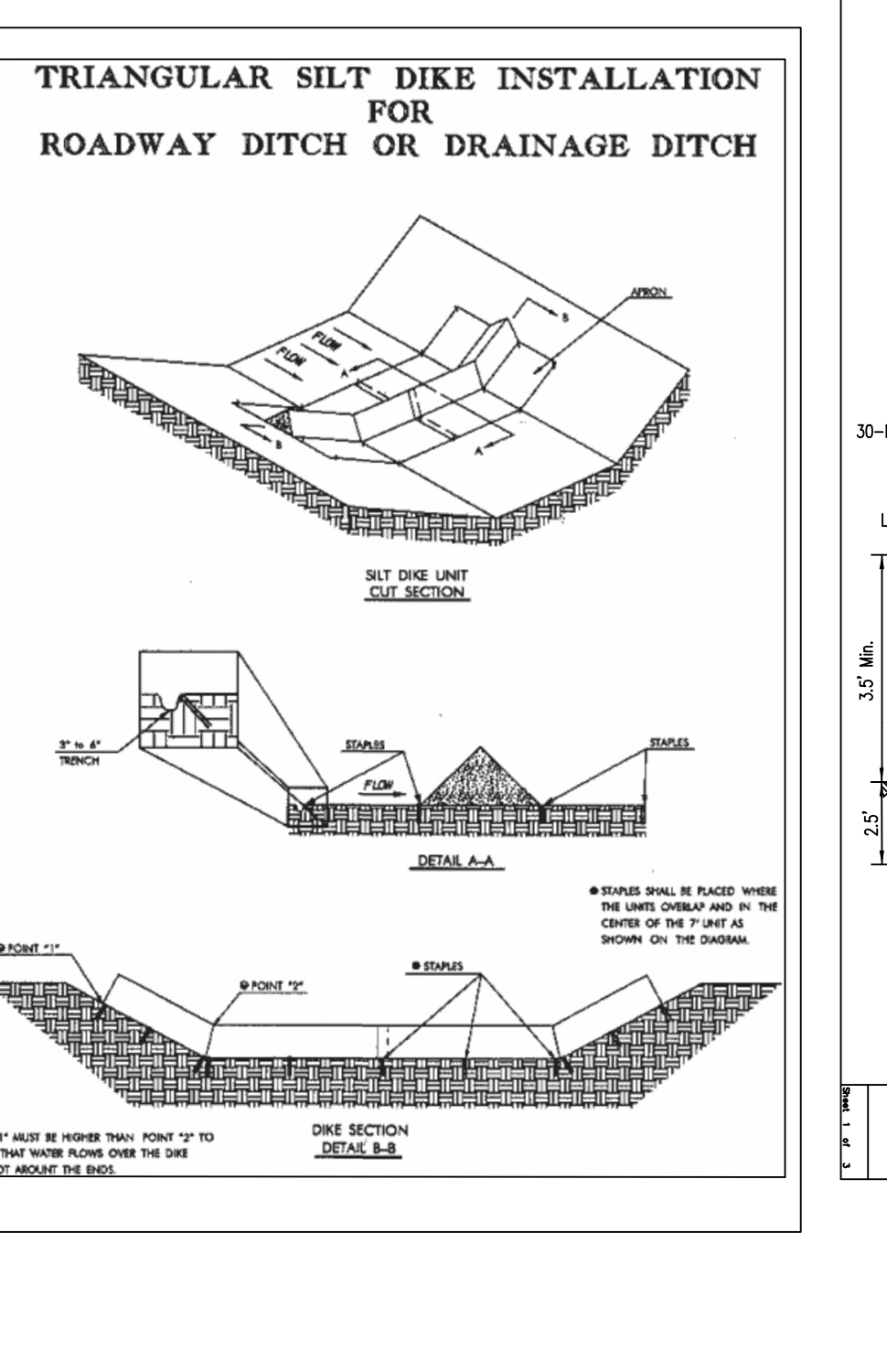
Top Net Polypropylene
 5.0 lbs/1,000 ft²
 (2.44 kg/100 m²) approx. wt.

Center Net Polypropylene, corrugated
 24.0 lbs/1,000 ft²
 (11.7 kg/100 m²) approx. wt.

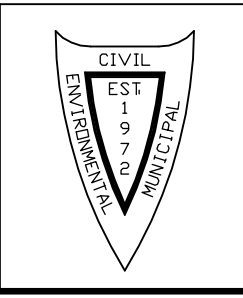
Matrix Material
 70% agricultural straw
 0.35 lbs/yd²
 (0.19 kg/m²)
 30% coconut fiber
 0.15 lbs/yd²
 (0.08 kg/m²)

Bottom Net Polypropylene
 5.0 lbs/1,000 ft²
 (2.44 kg/100 m²) approx. wt.

Thread Permanent



PREPARED FOR:
 OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490



PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

REVISIONS		REVISIONS			
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

STORMWATER POLLUTION PREVENTION PLAN DETAILS

77TH STREET SUBDIVISION

FILE NAME: SOILERO	DSGN. BY: MAM	JOB NO.: 782.029	F.L.D. BK./PG.: ---	SHEET NO. ER-2 of ER-3
DIR: 782029	DRN. BY: JGC	DATE: 12-16-19	SCALE: 1" = N.T.S.	

STORMWATER POLLUTION PREVENTION PLAN

CITY OF NAPERVILLE
 Address: 777 North College Street
 Last Revision Date: 3/5/2020
 Approval Date: 3/27/2020
 APPROVED

DRAWING PATH: F:\782029\DWG\ENG\DRAWINGS\FINAL\ DRAFTING\SOILERO.DWG
 DRAWING LAST SAVED: 2/4/2020 12:49 PM BY: JEFF
 PLOT FILE CREATED: 3/5/2020 1:25 PM BY: JEFF CEBULLA

- SOIL EROSION AND SEDIMENT CONTROL (SESC) FEATURES MUST BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF UPLAND DISTURBANCE. SOIL DISTURBANCE MUST BE PHASED OR ENACTED IN SUCH A MANNER AS TO MINIMIZE EROSION SOIL STABILIZATION MEASURES MUST CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY AND/OR PERMANENT MEASURES.
- THE EROSION AND SEDIMENT CONTROLS SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED AS DIRECTED BY PULTE OR THE MUNICIPALITY'S AUTHORIZED REPRESENTATIVE. ALL ADDITIONAL MEASURES MUST BE IN PLACE WITHIN 3 DAYS OF DISTURBANCE AND ANY EMERGENCY SESC MEASURES MUST BE INSTALLED IMMEDIATELY.
- THE CONTRACTOR MUST CLEAN UP, GRADE THE WORK AREAS AS THE PROJECT PROGRESSES, AND INSTALL EROSION PROTECTION TO ELIMINATE THE CONCENTRATION OF RUNOFF, OR MUST INSTALL APPROPRIATE SEDIMENT CONTROL DEVICES TO TRAP SEDIMENT. PAVEMENT MUST BE CLEANED DAILY OR AS NECESSARY TO REMOVE TRACK-OUT MATERIAL.
- AFTER ALL PERIMETER EROSION BARRIER IS REMOVED, THE AREAS DAMAGED BY THE PERIMETER EROSION BARRIER MUST BE RESTORED.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DIVERT ALL WATER (GROUND, STORM, AND CONSTRUCTION) DURING CONSTRUCTION IN ORDER TO KEEP THE CONSTRUCTION AREAS FREED OF WATER, BYPASS PUMPING, INCLUDING SILT BAGS AND AN ENERGY DISSIPATION SURFACE FOR THE PUMPS, SHALL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE COST OF WEIR STRUCTURE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SIZE THE PUMPS APPROPRIATELY.
- DURING DE-WATERING/PUMPING OPERATIONS, ONLY UNCONTAMINATED WATER SHOULD BE ALLOWED TO DISCHARGE TO PROTECTED NATURAL AREAS, WATERS OF THE STATE, OR TO A STORM SEWER SYSTEM (IN ACCORDANCE WITH LOCAL PERMITS). INLET HOSES SHOULD BE PLACED IN A STABILIZED SUMP PIT OR FLOATED AT THE SURFACE OF THE WATER IN ORDER TO LIMIT THE AMOUNT OF SEDIMENT INTAKE. PUMPING OPERATIONS MAY BE DISCHARGED TO A STABILIZED AREA THAT CONSISTS OF AN ENERGY DISSIPATING DEVICE (E.G., STONE), SEDIMENT FILTER BAG, OR BOTH. ADDITIONAL EROSION AND SEDIMENT CONTROLS SHOULD BE USED DURING DE-WATERING OPERATIONS AS NECESSARY. DEWATERING SEDIMENT LADEN WATER DIRECTLY INTO FIELD TILES, STORM WATER STRUCTURES, OR "WATERS OF THE US" IS PROHIBITED.
- TEMPORARY CONSTRUCTION ENTRANCES WILL BE CONSTRUCTED AT ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES THE SITE. THESE LOCATIONS SHALL BE DETERMINED IN THE FIELD, AS NEEDED. GRAVELED ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES IF NECESSARY, MUST BE PROVIDED TO PREVENT THE DEPOSIT OF SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING PUBLIC OR PRIVATE ROADWAY MUST BE REMOVED IMMEDIATELY.
- STABILIZATION OF DISTURBED AREAS MUST, AT A MINIMUM, BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING, OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION OF DISTURBED AREAS MUST 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 DAYS FROM THE INITIATION OF STABILIZATION WORK IN AN AREA. EXCEPTIONS TO THESE TIME FRAMES ARE SPECIFIED AS FOLLOWS:

 WHERE THE INITIATION OF STABILIZATION MEASURES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.

 ON AREAS WHERE CONSTRUCTION ACTIVITY CEASED AND WILL RESUME AFTER 14 DAYS, A TEMPORARY STABILIZATION METHOD CAN BE USED.
- STOCK PILES OR SOIL MUST NOT BE LOCATED IN FLOOD PLAINS, RIPARIAN AREAS (VEGETATED FLOOD PLAINS), WETLANDS AND WATERS OF THE U.S., UNLESS OTHERWISE AUTHORIZED BY THE RELEVANT PERMITTING AUTHORITY. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN THREE DAYS, PERIMETER EROSION BARRIER MUST BE PROVIDED. ALL STOCKPILE LOCATIONS MUST BE APPROVED BY PULTE.
- CONTRACTOR MUST INSTALL PERIMETER EROSION BARRIER AT ANY LOCATION IN WHICH SHEET FLOWS MAY RESULT IN SEDIMENT RUNOFF OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR MAY USE OTHER METHODS TO CONTROL RUNOFF, INCLUDING BUT NOT LIMITED TO, TEMPORARY DIVERSION SWALES, TEMPORARY SEDIMENT TRAPS, SHAPED DITCHES TO CONVEY WATER, ETC.
- PULTE SHALL PROVIDE A QUALIFIED PERSON WHO WILL BE RESPONSIBLE FOR CONDUCTING SITE INSPECTIONS IN COMPLIANCE WITH THE ILR10 NPDES PERMIT. AFTER EACH INSPECTION, A REPORT SHOULD BE PREPARED BY THE PERSON WHO PERFORMED THE INSPECTION. THE INSPECTION REPORT SHOULD BE MAINTAINED ON SITE AS PART OF THE PLAN. INSPECTIONS SHOULD BE CONDUCTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM, OR BY THE END OF THE FOLLOWING BUSINESS OR WORK DAY, THAT IS 0.5 INCHES OR GREATER.

INSPECTIONS MAY BE REDUCED TO ONCE PER MONTH WHEN CONSTRUCTION ACTIVITIES HAVE CEASED DUE TO FROZEN CONDITIONS. INSPECTIONS MUST COMMENCE WHEN CONSTRUCTION ACTIVITIES ARE CONDUCTED, OR IF THERE IS A 0.5" OR GREATER RAIN EVENT, OR DISCHARGE DUE TO SNOWMELT OCCURS.

ALL STORM SEWER INLET STRUCTURES (INCLUDING INLETS LOCATED WITHIN THE HAUL ROUTES) MUST BE PROTECTED WITH STORM SEWER INLET PROTECTION (I.E. INLET FILTERS) PER INLET PROTECTION DETAILS IN THE PLANS.

WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THE SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL.

COMPLETED SLOPES SHALL BE SEEDED AND MULCHED [OR BLANKETED, IF APPLICABLE] AS THE EXCAVATION PROCEEDS TO THE EXTENT CONSIDERED DESIRABLE AND PRACTICAL. PERMANENT SEEDING SHALL BE USED WHENEVER POSSIBLE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR PROLONG FINAL GRADING AND SHAPING SO THAT THE ENTIRE PROJECT CAN BE PERMANENTLY SEEDED AT ONE TIME.

THE SITE SHOULD BE PHASED IN A WAY THAT REDUCES THE AMOUNT OF STRIPPED, UNSTABILIZED AREAS WITHIN THE SITE AT ANY ONE TIME. MASS GRADING THE ENTIRE SITE SHOULD BE AVOIDED AS TO PREVENT EROSION ON SITE AND SEDIMENTATION ISSUES DOWNSTREAM.

ONCE THE CONTRIBUTING AREA IS STABILIZED, THE BASIN NEEDS TO BE CLEANED OUT AND THE FINAL PROPOSED GRADE MUST BE ACHIEVED.

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL LATEST EDITION.

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED FOR REVIEW BY THE MUNICIPALITY.

IT IS THE RESPONSIBILITY OF THE LANDOWNER AND/OR GENERAL CONTRACTOR TO INFORM ANY SUB-CONTRACTOR(S) WHO MAY PERFORM WORK ON THE PROJECT, OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS AND ASSURE COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

THE PRIMARY PURPOSE OF ALL SOIL EROSION AND SEDIMENT CONTROL BMP'S (BEST MANAGEMENT PRACTICES) IS TO PREVENT SEDIMENT FROM LEAVING THE SITE. ALL STORMWATER DISCHARGE LOCATIONS WITH A DIRECT CONNECTION TO THE SITE SHOULD BE MONITORED CLOSELY FOR EVIDENCE OF SEDIMENT. THE MUNICIPALITY MAY REQUEST THAT ADDITIONAL BMP'S BE INSTALLED IN THE EVENT OF OFF-SITE SEDIMENT DISCHARGE OR HIGH POTENTIAL FOR DISCHARGE.

ANY AREA IMPACTED BY CONSTRUCTION SHALL BE RESTORED TO MATCH EXISTING CONDITIONS OR AS SPECIFIED ON THE PLANS.

CONCRETE WASHOUT SHOULD BE CONTAINED AT ALL TIMES. WASHOUT MATERIAL SHOULD NOT BE ALLOWED TO ENTER WATER BODIES, STORM SEWERS OR LEACH INTO THE SOIL UNDER ANY CIRCUMSTANCES. ANY WASTE SHOULD BE DISPOSED OF PROPERLY AND THE LOCATION OF THE WASHOUT SHOULD BE DESIGNATED WITH PROPER SIGNAGE. FAILURE TO COMPLY COULD RESULT IN AN INCIDENT OF NONCOMPLIANCE (ION).

SEE LANDSCAPE PLAN FOR DETENTION BASIN SEED MIX

IT IS IMPORTANT FOR THE CONTRACTOR TO MONITOR AND CLEAN THE INLET PROTECTORS TO ENSURE SEDIMENT DOES NOT LEAVE THE SITE THROUGH THE STORM SEWER.

WHEN INSTALLING OUTLETS INTO EXISTING DETENTION BASINS, WORK SHOULD BE PERFORMED IN DRY CONDITIONS. ONCE WORK IN THE AREA BEGINS, PRIORITY SHALL BE GIVEN TO THE COMPLETION OF THE WORK AND FINAL STABILIZATION OF ALL DISTURBED AREAS IN OR NEAR THE DETENTION AREA. EVERY EFFORT SHOULD BE MADE TO ENSURE THAT SEDIMENT DOES NOT ENTER THE DETENTION BASIN DURING THIS TIME.

THE PRIMARY PURPOSE OF ALL SOIL EROSION AND SEDIMENT CONTROL BMP'S (BEST MANAGEMENT PRACTICES) IS TO PREVENT SEDIMENT FROM LEAVING THE SITE. ALL STORMWATER OUTFALLS WITH A DIRECT CONNECTION TO THE SITE SHOULD BE MONITORED CLOSELY FOR DISCHARGE OF ANY SEDIMENT. SITE PERIMETERS SHOULD ALSO BE MONITORED CLOSELY FOR ANY POTENTIAL SEDIMENT RELEASE OFF-SITE. THE MUNICIPALITY MAY REQUEST THAT ADDITIONAL BMP'S BE INSTALLED UPSTREAM OF STORMWATER RELEASE IN THE EVENT OF OFF-SITE SEDIMENT DISCHARGE OF HIGH POTENTIAL FOR DISCHARGE.

EROSION CONTROL BLANKET (DEPENDING ON SLOPE, SLOPE LENGTH, AND FLOW RATES) SHALL BE INSTALLED ON ALL SLOPES AND IN CRITICAL AREAS (I.E. DETENTION BASIN PERIMETERS, BERMS, ETC.) IMMEDIATELY UPON FINAL GRADING.

PRIORITY SHALL BE GIVEN TO THE COMPLETION AND STABILIZATION OF THE DETENTION AREAS. WORK IN THESE AREAS SHALL NOT BE PROLONGED IN ATTEMPT THAT ALL FINAL GRADING AND STABILIZATION CAN TAKE PLACE AT ONE TIME.

ALL NPDES RELATED INSPECTION REPORTS AND CORRESPONDENCE SHOULD BE SENT TO THE MUNICIPALITY.

INSPECTIONS
 THE OWNER OR ITS DESIGNATED REPRESENTATIVE SHALL PROVIDE QUALIFIED PERSONNEL TO INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE WHICH HAVE NOT BEEN STABILIZED WITH TEMPORARY OR PERMANENT VEGETATIVE STABILIZATION, PROTECTED WITH STRUCTURAL CONTROL MEASURES, OR LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER OF EQUIVALENT SNOWFALL.

A. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHILE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF SITE SEDIMENT TRACKING.

B. BASED ON THE RESULTS OF THE INSPECTION, THE DESCRIPTION OF POTENTIAL POLLUTANT SOURCES IDENTIFIED IN SECTION 1 ABOVE AND POLLUTION PREVENTION MEASURES IDENTIFIED IN SECTION 2 ABOVE SHALL BE REVISED AS APPROPRIATE AS SOON AS PRACTICABLE AFTER SUCH INSPECTION. ANY CHANGES TO THIS PLAN RESULTING FROM THE REQUIRED INSPECTIONS SHALL BE IMPLEMENTED WITHIN 7 CALENDAR DAYS FOLLOWING THE INSPECTION.

C. A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THIS STORMWATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH SECTION 4.B SHALL BE MADE AND RETAINED AS PART OF THE PLAN FOR AT LEAST THREE (3) YEARS AFTER THE DATE OF THE INSPECTION. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART VI. G OF THE GENERAL PERMIT.

D. IF ANY VIOLATION OF THE PROVISIONS OF THIS PLAN IS IDENTIFIED DURING THE CONDUCT OF THE CONSTRUCTION WORK COVERED BY THIS PLAN, THE RESIDENT ENGINEER OR RESIDENT TECHNICIAN SHALL COMPLETE AND FILE AN "INCIDENT OF NONCOMPLIANCE (ION)_ REPORT FOR THE IDENTIFIED VIOLATION. THE RESIDENT ENGINEER OR RESIDENT TECHNICIAN SHALL USE FORMS PROVIDED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY AND SHALL INCLUDE SPECIFIC INFORMATION ON THE CAUSE OF NONCOMPLIANCE, ACTIONS WHICH WERE TAKEN TO PREVENT ANY FURTHER CAUSE OF NONCOMPLIANCE, AND A STATEMENT DETAILING ANY ENVIRONMENTAL IMPACT WHICH MAY HAVE RESULTED FROM THE NONCOMPLIANCE. ALL REPORTS OF NONCOMPLIANCE SHALL BE SIGNED BY A RESPONSIBLE AUTHORITY IN ACCORDANCE WITH PART VI. G OF THE GENERAL PERMIT. THE REPORT OF NONCOMPLIANCE SHALL BE MAILED TO THE FOLLOWING ADDRESS:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 DIVISION OF WATER POLLUTION CONTROL
 ATTN: COMPLIANCE ASSURANCE SECTION
 1021 NORTH GRAND EAST
 POST OFFICE BOX 19276
 SPRINGFIELD, ILLINOIS 62794-9276

5. NON-STORMWATER DISCHARGES

EXCEPT FOR FLOWS FROM FIRE FIGHTING ACTIVITIES, SOURCES OF NON-STORMWATER THAT MAY BE COMBINED WITH STORMWATER DISCHARGES ASSOCIATED WITH THE INDUSTRIAL ACTIVITY ADDRESSED IN THIS PLAN, ARE DESCRIBED BELOW:

- WATERMAIN FLUSHING
- FIRE HYDRANT FLUSHING
- WATERING FOR DUST CONTROL
- IRRIGATION DRAINAGE FOR VEGETATIVE GROWTH FOR SEEDING, ETC.

THE POLLUTION PREVENTION MEASURES AS DESCRIBED BELOW, WILL BE IMPLEMENTED FOR NON-STORMWATER COMPONENTS OF THE DISCHARGE:

THE FIRE HYDRANT AND WATERMAIN SHALL NOT BE FLUSHED DIRECTLY ON THE EXPOSED AREA OR SUBGRADE OF THE PAVEMENT. HOSES SHALL BE USED TO DIRECT THE FLOW INTO THE STORM SEWER SYSTEM, IF AVAILABLE.

THE EROSION DUE TO IRRIGATION OF SEEDING AND DUST CONTROL SHALL BE COLLECTED AND RE-SPREAD ON SITE. TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES SHALL BE IMPLEMENTED AS NECESSARY TO CONTROL FUTURE EROSION FROM AREAS PREVIOUSLY ERODED DUE TO IRRIGATION OF SEEDING AND DUST CONTROL.

ALL SITE DE-WATERING, INCLUDING PUMP DISCHARGE, MUST PASS THROUGH THE PROPER STRUCTURAL PRE-SEDIMENTATION BASINS OR EQUAL STRUCTURAL CONTROLS BEFORE LEAVING THE SITE.

6. PLAN REVIEW
 THE PERMITEE SHALL MAKE PLANS AVAILABLE UPON REQUEST FROM THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) OR A LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS, GRADING PLANS, OR STORM WATER MANAGEMENT PLANS; OR IN THE CASE OF A STORM SEWER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY WHICH DISCHARGES THROUGH A MUNICIPAL SEPARATE STORM SYSTEM WITH AN NPDES PERMIT, TO THE MUNICIPAL OPERATOR OF THE SYSTEM.

THE IEPA MAY NOTIFY THE PERMITEE AT ANY TIME THAT THE PLAN DOES NOT MEET ONE OR MORE OF THE MINIMUM REQUIREMENTS OF PART IV. OF THE GENERAL PERMIT. SUCH NOTIFICATION SHALL IDENTIFY THOSE PROVISIONS OF THE PERMIT WHICH ARE NOT BEING MET BY THE PLAN, AND IDENTIFY WHICH PROVISIONS OF THE PLAN REQUIRES MODIFICATIONS IN ORDER TO MEET THE MINIMUM REQUIREMENTS OF PART IV. OF THE GENERAL PERMIT. WITHIN SEVEN (7) DAYS FROM THE RECEIPT OF THE NOTIFICATION FROM THE IEPA, THE PERMITEE SHALL MAKE THE REQUIRED CHANGES TO THE PLAN AND SHALL SUBMIT TO THE IEPA A WRITTEN CERTIFICATION THAT THE REQUESTED CHANGES HAVE BEEN MADE. FAILURE TO COMPLY SHALL TERMINATE AUTHORIZATION UNDER THE GENERAL PERMIT.

7. AMENDMENTS
 THE PERMITEE SHALL AMEND THE PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE PLAN OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM THE SOURCES IDENTIFIED UNDER 2. (CONTROLS) ABOVE, OR OTHERWISE ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SITE ACTIVITY. IN ADDITION, THE PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT A MEASURE OF THE PLAN. AMENDMENTS TO THE PLAN MAY BE REVIEWED BY THE IEPA IN THE SAME MANNER AS 6. (PLAN REVIEW) ABOVE.

8. RECORDS
 THE PERMITEE SHALL RETAIN COPIES OF THE PLAN AND ALL REPORTS AND NOTICES REQUIRED BY THE GENERAL PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THE GENERAL PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED. THE PERIOD MAY BE EXTENDED BY THE REQUEST OF THE IEPA AT ANY TIME.

THE PERMITEE SHALL RETAIN A COPY OF THE PLAN REQUIRED BY THE GENERAL PERMIT AT THE CONSTRUCTION SITE FROM THE DATE OF THE PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

9. CONTRACTORS
 THIS PLAN REQUIRES IDENTIFICATION FOR EACH MEASURE IN THE PLAN, THE CONTRACTOR(S) OR SUBCONTRACTOR(S) THAT WILL IMPLEMENT THE IDENTIFIED MEASURE:

CONTRACTOR(S): _____
 ADDRESS: _____

PHONE: _____
 MEASURES IMPLEMENTED: _____

SUB-CONTRACTOR(S): _____
 ADDRESS: _____

PHONE: _____
 MEASURES IMPLEMENTED: _____

SUB-CONTRACTOR(S): _____
 ADDRESS: _____

PHONE: _____
 MEASURES IMPLEMENTED: _____

THE OWNER AND SUB-CONTRACTORS IDENTIFIED ABOVE SHALL SIGN THE FOLLOWING CERTIFICATION STATEMENT BEFORE CONDUCTING ANY PROFESSIONAL SERVICE AT THE IDENTIFIED SITE. SIGNATURES SHALL BE PROVIDED BY A RESPONSIBLE CORPORATE OFFICER:

CERTIFICATION STATEMENT: I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR100000) THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

OWNER: PULTE HOME COMPANY, LLC
 SIGNATURE: _____ DATE: _____

CONTRACTOR: _____
 SIGNATURE: _____ DATE: _____

SUB-CONTRACTOR: _____
 SIGNATURE: _____ DATE: _____

SUB-CONTRACTOR: _____
 SIGNATURE: _____ DATE: _____

SUB-CONTRACTOR: _____
 SIGNATURE: _____ DATE: _____

SEQUENCE/PHASING OF SESC MEASURES

- INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
 A. SILT FENCE INSTALLATION;
 B. INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE(S);
 C. INSTALL INLET PROTECTION IN EXISTING STORM SEWER STRUCTURES.
- DESIGNATE STABILIZED VEHICLE, EQUIPMENT, AND MATERIAL STORAGE AREAS.
- DEMOLITION AND TREE CLEARING.
- MASS GRADING, STORM WATER FACILITY EXCAVATION, AND SOIL STOCKPILING.
- CONSTRUCT AND PERMANENTLY STABILIZE STORM WATER FACILITY AND INSTALL SEDIMENT CONTROL DEVICE(S).
- INSTALL STORM SEWER AND ASSOCIATED INLET AND OUTLET PROTECTION.
- CONSTRUCT CONCRETE AND CONSTRUCTION WASHOUT CONTAINMENT FACILITIES.
- ROAD CONSTRUCTION AND PAVING.
- INITIATE TEMPORARILY STABILIZE AREAS THAT WILL REMAIN IDLE FOR 14 DAYS WITHIN 1 DAY OF LAST CONSTRUCTION ACTIVITY IN THAT AREA (INCLUDING TOPSOIL STOCKPILES).
- VERTICAL CONSTRUCTION.
- TOPSOIL RE-SPREAD.
- INSTALL PERMANENT OR TEMPORARY SOIL STABILIZATION AND VEGETATIVE ENHANCEMENTS.
- REMOVE ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES AFTER THE SITE IS STABILIZED WITH VEGETATION.

MAINTENANCE SCHEDULE

ALL SEDIMENT BASINS TO BE INSPECTED REGULARLY AND SEDIMENT PLUMES TO BE REMOVED ON AN AS NEEDED BASIS AND AT PROJECT CLOSE OUT.
 SIDE SLOPES OF THE BASINS TO BE INSPECTED REGULARLY AND ANY GULLY OR OTHER EROSION TO BE REPAIRED ON AN AS NEEDED BASIS.
 SCOUR PROTECTION AT THE FLARED END SECTIONS SHALL BE INSPECTED REGULARLY AND REPAIRED AS NECESSARY.
 THE BASINS SHALL BE AS-BUILT PRIOR TO PROJECT CLOSE OUT TO ENSURE PROPER STORAGE VOLUME.

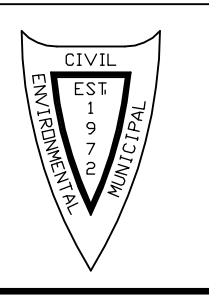
STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING			A									
DORMANT SEEDING	B										B	
TEMPORARY SEEDING			C			D						
SOODING			E									
MULCHING	F											

- A KENTUCKY BLUEGRASS 100 LBS/ACRE MIXED WITH PERENNIAL BREGRASS 60 LBS/ACRE AND CREEPING RED FESCUE 40 LBS/ACRE + 2 TONS STRAW MULCH/ACRE.
- B KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL BREGRASS 70 LBS/ACRE + 2 TONS STRAW MULCH/ACRE.
- C SPRING OATS 100 LBS/ACRE
- D WHEAT OR CEREAL RYE 150 LBS/ACRE.
- E SOD
- F STRAW MULCH 2 TONS/ACRE.

SOIL PROTECTION CHART

* IRRIGATION NEEDED DURING JUNE AND JULY.
 ** IRRIGATION NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOD.

PREPARED FOR:
 OAK CREEK CAPITAL PARTNERS, LLC
 P.O. BOX 5726
 NAPERVILLE, IL 60567
 (630) 710-9490



PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60502-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO.		DATE		DESCRIPTION	

STORMWATER POLLUTION PREVENTION PLAN NOTES
 77TH STREET SUBDIVISION

FILE NAME: SOILERO	DSGN. BY: MAM	JOB NO.: 782.029	FLD. BK./PG.: ---	SHEET NO.
DIR: 782029	DRN. BY: JGC	DATE: 12-16-19	SCALE: 1" = NONE	ER-3 of ER-3

Copyright © 2019 Cemcon, Ltd. All rights reserved.