

FINAL ENGINEERING PLANS

NAPERVILLE WHEATON TOWNHOMES

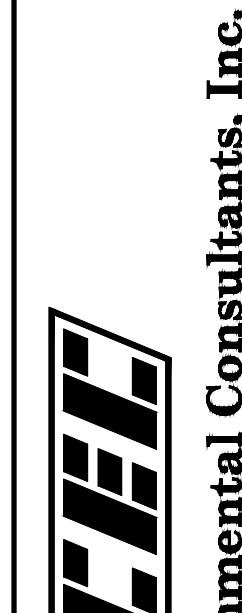
NAPERVILLE, ILLINOIS

PROPOSED	EXISTING	DESCRIPTIONS
—	—	BOUNDARY PROPERTY LINE
—	—	PROPERTY LINE
—	—	RIGHT-OF-WAY
—	—	UNDERLYING PROPERTY LINE
—	—	CENTER LINE
—	—	EASEMENT LINE
—	—	SETBACK LINE
—	—	SECTION LINE
—	—	INDEX (MAJOR) CONTOUR
—	—	INTERMEDIATE (MINOR) CONTOUR
X—X	X—X	EXISTING FENCE LINE
/—/—/—/	/—/—/—/	EXISTING WOOD FENCE LINE
—	—	CURB
—	—	EDGE OF PAVEMENT
—	—	EDGE OF GRAVEL
—	—	PAVEMENT SHOULDER
—	—	STORM PIPE
—	—	DOWNSPOUT SERVICE LINE
—	—	WATER LINE
—	—	SANITARY SEWER LINE
—	—	PROPOSED FORCEMAIN
—	—	GAS LINE
—	—	OVERHEAD WIRE
—	—	ELECTRIC LINE
—	—	CABLE LINE
—	—	FIBER OPTIC LINE
—	—	TELEPHONE LINE
—	—	GUIDE RAIL
—	—	TREELINE
—	—	PROPOSED TRENCH BACKFILL
—	—	PROPOSED CONCRETE
—	—	PROPOSED PAVEMENT
—	—	PROPOSED RIPRAP
—	—	PROPOSED STRIPING
—	—	BUILDING
—	—	PROPOSED SLOPE LABEL
—	—	PROPOSED SPOT ELEVATION
—	—	TOP OF WALL ELEVATION
—	—	BOTTOM OF WALL ELEVATION
—	—	TOP OF CURB ELEVATION
—	—	BOTTOM OF CURB ELEVATION
—	—	FLOWLINE ELEVATION
—	—	SANITARY MANHOLE
—	—	CLEANOUT
—	—	FLARED END SECTION
—	—	STORM MANHOLE
—	—	STORM CATCH BASIN (ROUND LID)
—	—	STORM CATCH BASIN (CURB LID)
—	—	STORM CURB INLET
—	—	STORM INLET (CIRCULAR)
—	—	STORM INLET (SQUARE)
—	—	STORM BEEHIVE INLET
—	—	STORM DRAIN OR DOWNSPOUT
—	—	WATER VALVE VAULT
—	—	WATER VALVE BOX
—	—	FIRE HYDRANT
—	—	ELECTRIC CONTROL CABINET (ABOVE GRADE)
—	—	ELECTRIC HANDHOLE
—	—	TRANSFORMER
—	—	ELECTRIC METER
—	—	LIGHT STANDARD
—	—	UTILITY POLE
—	—	TRAFFIC MANHOLE
—	—	TELEPHONE PULL BOX (FLUSH WITH GRADE)
—	—	TELEPHONE BOX/CABINET (ABOVE GRADE)
—	—	CABLE MANHOLE
—	—	FIBER OPTIC BOX/CABINET (ABOVE GRADE)
—	—	FIBER OPTIC MANHOLE
—	—	GAS LINE MARKER
—	—	MANHOLE (UNKNOWN)



SITE MAP
N.T.S.

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C200	DIMENSION PLAN
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Civil & Environmental Consultants, Inc.
1230 East Diehl Road, Suite 200 - Naperville, IL 60563
630-963-6026 • 877-363-6026
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BENCHMARKS:

REFERENCE BENCHMARK:

1. NAPERVILLE MONUMENT #703: BERNSTEN MONUMENT IN 6" PVC PIPE WITH BMAC 6 ALUMINUM ACCESS COVER AT OGDEN AVENUE ENTRANCE OF OGDEN MALL AT NORTHWEST CORNER OF NAPERVILLE-WHEATON ROAD AND OGDEN AVENUE.

ELEVATION= 780.31

SITE BENCHMARKS:

1. 'X' IN TOP OF CURB WEST SIDE OF NAPERVILLE-WHEATON ROAD, 5'± NORTH OF THE NORTH PROPERTY LINE OF SUBJECT SITE EXTENDED.
ELEVATION= 763.52
2. 'X' IN TOP OF CURB WEST SIDE OF NAPERVILLE-WHEATON ROAD, 64'± SOUTH OF THE SOUTH PROPERTY LINE OF SUBJECT SITE EXTENDED.
ELEVATION= 761.44



ILLINOIS LAW REQUIRES ANYONE DIGGING TO CALL JULIE AT 1-800-892-0123 AT LEAST 48 HOURS/TWO WORKING DAYS PRIOR TO THE START OF EXCAVATION AND THE PROJECT MUST BEGIN WITHIN 14 CALENDAR DAYS FROM THE CALL.

PROJECT TEAM

OWNER

NAPERVILLE WHEATON LLC
127 AURORA AVENUE
NAPERVILLE, ILLINOIS 60540
PH: (630) 355-4600
CONTACT: VINCE ROSANOVA

ARCHITECT

STUDIO 21 ARCHITECTS
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PH: (630) 789-2513
CONTACT: THOMAS FEND, R.A.

CIVIL ENGINEER

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NAPERVILLE, ILLINOIS 60563
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LANDSCAPE ARCHITECT

WESTWOOD ENVIRONMENTAL LLC
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WEST CHICAGO, ILLINOIS 60185
PH: (630) 774-2561
CONTACT: CRAIG HERNAN, RLA

STATE OF ILLINOIS
COUNTY OF DUPAGE } SS

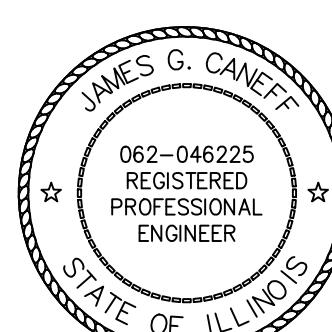
I, JAMES G. CANEFF, AN ILLINOIS PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC., ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM NO. 184-004002, LICENSE EXPIRES APRIL 30, 2023, UNDER MY PERSONAL DIRECTION FOR THE EXCLUSIVE USE OF THE CLIENT NOTED BELOW. REPRODUCTION OR USE BY THIRD PARTIES IS STRICTLY PROHIBITED WITHOUT THE WRITTEN PERMISSION OF THE UNDERSIGNED.

GIVEN UNDER MY HAND AND SEAL THIS 15TH DAY OF FEBRUARY, 2023.

James G. Caneff

ILLINOIS LICENSED PROFESSIONAL ENGINEER NO. 46225
REGISTRATION VALID THROUGH NOVEMBER 30, 2023
*HAND SIGNATURE ON FILE

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COVER SHEET

NAPERVILLE WHEATON LLC
127 AURORA AVENUE
NAPERVILLE, ILLINOIS 60540
DATE: JANUARY 13, 2023 DRAWN BY: MAJ
DWG SCALE: NONE CHECKED BY: JGC
PROJECT NO: 190-086-AW00 APPROVED BY: JGC

DRAWING NO.: C000
CITY PROJECT NO. 23-10000002
SHEET 1 OF 17

PROJECT TECHNICAL SPECIFICATIONS

1. GENERAL NOTES

- A. DEFINITIONS
 - (1) Whenever in these Project Technical Specifications the following terms are used, the intent and meaning shall be interpreted as follows:
 - (a) Governing Agency: Government or regulatory entity with authority to implement and enforce specific laws, permit requirements, or construction requirements. City of Naperville Standard Specifications for Construction and Standard Details are available online at <https://www.naperville.il.us/projects-in-naperville/standard-specifications-for-construction/>.
 - (b) Owner: Entity or individual for whom the project is being performed.
 - (c) Contractor: Entity or individual responsible for performing construction activities and furnishing all labor, materials, equipment and other incidental work necessary for the successful completion of the project and for carrying out all duties and obligations imposed by the contractor.
 - (d) Engineer: Licensed professional engineering entity, or licensed professional engineer and/or authorized agent(s), who represents the Owner during the construction phase of the project work.
 - (e) Geotechnical Engineer: Licensed professional engineering entity, or licensed professional engineer and/or authorized agent(s), who, in representing the Owner, is involved with the principles, properties and behavior of earth materials with regard to the project work.
 - (f) Project Drawings / Plans: The drawings that define the required site development activities and improvements.
 - (g) IDOT Standard Specifications: The current edition of the Illinois Department of Transportation's (IDOT) "Standard Specifications For Road & Bridge Construction" including all applicable current supplemental specifications and special provisions.

B. GOVERNING REGULATIONS

- (1) All project activities and improvements shall be in accordance with the Governing Agency regulations. In the event of conflict with these Project Technical Specifications, or the indicated Reference Specifications, the Governing Agency regulations shall apply.

C. REFERENCE STANDARDS AND SPECIFICATIONS

- (1) Site development activities and improvements, including site preparation and demolition, earthwork, sanitary sewers, storm drainage, water supply, pavement, lighting, landscape improvements, and erosion/sediment control measures shall be in accordance with the Reference Specifications indicated throughout these Project Technical Specifications. All Reference Specifications shall be incorporated into and made a part of the Project Technical Specifications. When the Reference Specifications conflict with Project Technical Specifications, Project Technical Specifications shall govern.

D. CONTRACT GENERAL CONDITIONS

- (1) These Project Technical Specifications supplement the engineering plans, the Agreement between Owner and Contractor, and other supplemental documents that comprise the overall project Contract. These Project Technical Specifications address the technical requirements of the project design as indicated on the Project Drawings (Plans). Unless specifically addressed in the Plans or these Project Technical Specifications, general conditions such as bid items, quantities, unit prices, terms of payment, change management, construction schedule, submittals, and other conditions are defined in the Agreement between Owner and Contractor.
- (2) The Contractor shall be responsible for complying with applicable Federal, State, and local requirements, together with exercising precaution at all times for the protection of persons (including employees) and property. It is the sole responsibility of the contractor to initiate, maintain, and supervise all safety requirements, precautions, and programs in connection with the work.
- (3) The Contractor shall indemnify and hold harmless the Owner and Engineer for any and all injuries and/or damages to personnel, equipment, and/or existing facilities occurring in the course of the site improvement construction work described in the Plans and these Project Technical Specifications.
- (4) The Contractor shall obtain all required construction permits in accordance with local, state, and federal regulations.
- (5) The Contractor shall guarantee all materials and workmanship for a period of 1 year following final acceptable by the Owner and the Governing Agencies.

E. QUALITY CONTROL OF MATERIALS

- (1) Materials shall be inspected, sampled, and tested before, during, and after they are incorporated into the work. The timing of these activities shall be as appropriate for the materials being placed and the properties (composition, gradation, density, strength, compaction, etc.) being examined. The requirements for quality testing are specified within the applicable sections of these Project Technical Specifications.
- (2) Materials not conforming to the requirements of the Project Technical Specifications at the time they are used or installed will be considered unacceptable and shall be removed and replaced with acceptable materials properly installed in place at the Contractor's expense.
- (3) When material test results are not within specification tolerances, the supplier shall make appropriate adjustments at its source to correct the issue.
- (4) Material inspections, sampling, and testing shall be performed by an independent testing agency/laboratory with suitable capabilities and experience. The testing entity shall be retained by Contractor or Owner, as required or as specified in the Contract Documents.

2. EXISTING CONDITIONS & SITE PREPARATION

A. EXISTING CONDITIONS

- (1) Existing conditions as depicted on the Plans are general and illustrative in nature. It is the responsibility of the Contractor to examine the site and be familiar with existing conditions prior to initiating construction. If conditions are encountered, before or during construction, that are significantly different than those shown on the Plans, Contractor shall notify the Engineer immediately.
- (2) It is not the Engineer's intent that any single plan sheet in the Plans fully depicts all work associated with the project. The Contractor shall be familiar with all similar plans in the Plans for construction. Contractor shall be familiar with all structural, architectural, mechanical, electrical, or other plans, as necessary, for the construction of the overall project.
- (3) Contractor shall protect all property corner pins, permanent monuments, and permanent benchmarks during construction. If disturbed, Contractor shall have items reset by a licensed surveyor at Contractor expense.
- (4) Contractor shall protect all existing utilities, structures, and features to remain. Any items to remain that have been disturbed or damaged as a result of construction shall be repaired or replaced at Contractor expense.

B. EXISTING UTILITIES

- (1) Underground utility information shown on the Plans may be based upon a combination of topographic survey data, field observations, historical utility maps, Owner-provided information, or other available data for the Site. The Plans constitute a representation of utility locations from best known information available to the Engineer. There is no guarantee that the utilities shown comprise all such utilities in the area, either in service, or abandoned.
- (2) Contractor shall be responsible for contacting all agencies, utility companies, and pipeline companies known or suspected to have buried cable, duct, sewer, pipes, etc., which may conflict with the project improvements to determine the location and depth of the existing utilities.
- (3) If conflicts occur after the existing utility conditions have been determined by field investigations, Contractor shall immediately notify Engineer and either:
 - (a) Adjust the location and depth of the proposed improvements as directed by Engineer in cooperation with the Owner, or
 - (b) If relocation of proposed improvements is not feasible, Contractor shall work with Owner and Engineer to make arrangements with the affected utility companies to have their utilities protected or relocated.
- (4) All utility disconnection, removal, relocation, cutting, capping, and/or abandonment shall be coordinate with the appropriate utility company / agency.

C. EROSION / SEDIMENTATION CONTROL

- (1) Erosion/sedimentation control measures, as indicated on the Plans and as required elsewhere in these Project Technical Specifications, shall be employed during the course of construction operations and until suitable ground covers are installed on all construction site areas.
- (2) Erosion/sedimentation control measures shall be properly installed and functional prior to any earth disturbing activities.

D. CONSTRUCTION ACCESS

- (1) Construction ingress-egress shall be limited to defined connections to adjacent driveways and public roadways, and as indicated on the plans and as required elsewhere in these Project Technical Specifications.

E. TRAFFIC CONTROL

- (1) The Contractor shall provide necessary traffic control for work performed in active transportation areas, including any specific traffic control requirements as indicated on the Plans.

F. TEMPORARY CONSTRUCTION FENCING

- (1) Temporary construction fences shall be installed where indicated on the Plans and where required by the Engineer to restrict access to and from certain areas. Such fences shall be maintained during construction and removed when all work activities are completed.
- (2) Temporary construction fences shall consist of 48-inch-high plastic fabric, metal fabric, or wood lathe fence (material approved by the Engineer, prior to placement) attached to suitable metal posts that are set at 6-foot (or less) intervals and anchored at least 18 inches into the ground.
- (3) Temporary chain link construction fences shall be provided where indicated on the Plans.

G. TREE AND LANDSCAPE PROTECTION

- (1) Highly visible temporary fences shall be placed around trees and landscape areas designated for protection. Vehicles, equipment, and material storage shall not be allowed within the protection zone.

- (2) Vehicle and equipment parking and material storage shall not be permitted within the drip line of any tree, even if the tree is not enclosed in a protective barrier. Vehicles and equipment shall avoid travel within the drip line of trees whenever possible.
- (3) Overhanging tree branches within the construction zone that are expected to come in contact with construction equipment shall be properly removed (sawcut) prior to construction in the area. Engineer approval is required before a branch is removed.
- (4) Roots of trees that are to be preserved shall be pruned (cut) where indicated on the Plans or required by the Engineer. Tree roots shall be cut with appropriate root pruning equipment to a depth of 24 inches (minimum) before construction begins. The cut shall be made approximately 12 inches closer to the tree than the construction limit (edge of excavation).

H. MATERIAL DISPOSAL

- (1) All demolition waste and construction debris shall become the property of the Contractor unless otherwise stated in the Agreement between Owner and Contractor.
- (2) The following shall be removed from the construction site and properly disposed of in a legal manner. Unless otherwise stated in the Agreement between Owner and Contractor, the cost of removal and disposal shall be included in the fixed or unit prices for the various contract pay items and no additional payment will be allowed thereafter.
 - (a) All surplus excavated materials.
 - (b) Construction and demolition debris such as building materials, asphalt and concrete pavement materials, culvert and sewer pipe, utility and drainage structures, retaining walls (concrete, stone and timber), trees, shrubs, and miscellaneous landscape features removed during the installation of the project improvements.
- (3) If Contractor intends to dispose of generated construction / demolition debris materials or excavated soils at a regulated clean construction / demolition debris (CCCD) or uncontaminated soil fill operation, the contractor shall be responsible for taking all actions and preparing all documents required by 35 Illinois Administrative Code 1100 prior to transport of the materials / soil to the disposal facility. Materials and soils that do not meet CCDD and uncontaminated soil constituent limit requirements shall be disposed of at a permitted landfill facility. The cost of testing and documentation to evaluate the materials / soils and determine proper disposal requirements shall be as defined in the Agreement between Owner and Contractor.
- (4) See Earthwork Operations specification section for additional requirements.

3. EARTHWORK OPERATIONS

A. GENERAL

- (1) Except where modified by the following Project Technical Specifications, all earthwork operation and compaction requirements shall be in conformance with the material, installation and testing requirements of the IDOT Standard Specifications.
- (2) Earthwork shall include site clearing, tree and hedge removal, topsoil and rootmat stripping and stockpiling, earth and fill material excavation, construction of embankments and slopes, placement and compaction of non-structural fill areas, pavement areas, and structural fill areas, removal and disposal of surplus and unsuitable excavated materials, topsoil placement, and final shaping and trimming to the lines and grades indicated on the Plans.
- (3) Prior to commencement of earthwork operations, Contractor shall notify any Utility Protection Service or other Governing Agency, as may be required.

B. SITE CLEARING

- (1) All construction site features and items such as structures, foundations, fences, pavements, rubbish/debris, trees, shrubs, and surface vegetation shall be removed where necessary and as indicated on the Plans for the construction of the project improvements.
- (2) No tree, shrub, or surface vegetation shall be removed unless it is marked for removal or the Engineer specifically authorizes its removal.
- (3) When indicated on the Plans, brush, shrubs, branches and small trees shall be shredded or chipped using suitable mechanical equipment. The resulting material shall be stockpiled on-site, as directed by the Engineer, for the Owner's future use. Tree trunks, branches, and removed stumps too large to be chipped shall be removed from the site and disposed of.
- (4) Tree stumps shall be removed by excavation or grinding to a depth of not less than 12 inches below ground surface. Material resulting from stump grinding shall be spread on the ground and excavated as part of topsoil or rootmat stripping.
- (5) All items and materials not specifically required to remain on-site shall be removed from the site and disposed of in a legal manner.

C. TOPSOIL AND ROOTMAT REMOVAL

- (1) Existing topsoil shall be removed from proposed pavement and building areas, non-structural fill areas, and structural fill areas. Sufficient existing topsoil shall be stockpiled for future use as topsoil replacement. When approved by Geotechnical Engineer, stripped topsoil may be used as non-structural fill to design elevations. Topsoil not used for replacement or for non-structural fill shall be removed from the site and legally disposed of, unless directed by Owner to stockpile on-site for future use. Stockpile locations shall be as authorized by Owner.
- (2) Topsoil supplied from off-site sources shall be natural, fertile agricultural soil material capable of sustaining vigorous plant growth. It shall contain not less than 4% nor more than 10% organic matter, as determined in accordance with AASHTO T194. It shall contain not less than 12% nor more than 50% clay and the sand content shall not exceed 55%, both as determined in accordance with AASHTO T88. The pH shall be between 5.0 and 8.0. Topsoil material shall be relatively free from large roots, sticks, weeds, brush, stones larger than 1-inch in diameter, or other litter or waste products. It shall be a loamy mixture having at least 90% passing the No. 10 sieve.
- (3) Within proposed pavement and building areas where there is no existing topsoil, the surface layer of organic material (friable soil containing roots or other vegetative matter) shall be removed before starting fill and compaction operations. Such removed material may be used as non-structural fill. If this material is not used as non-structural fill, it shall be removed from the site and legally disposed of.

D. EXCAVATION

- (1) Existing earth and fill materials within the project construction limits shall be excavated as necessary to establish the elevations, contours, and drainage patterns indicated on the Plans. Excavated materials classified by Geotechnical Engineer as suitable structural fill material shall be used to construct compacted subgrades within the project building and pavement areas. Excess materials not needed for filling or for the construction of berms or embankments shall be removed from the site and legally disposed of, unless directed by the Engineer or Owner to stockpile on-site for future use. Stockpile locations shall be as authorized by the Owner.
- (2) Rock materials within the project construction limits shall be excavated to a minimum of 6 inches below subgrade levels of proposed pavements and structures. Rock materials shall be removed to a minimum of 18 inches below building and structure foundations. Rock materials shall be defined as boulders one cubic yard or greater in volume and all materials in ledges, bedded deposits, and conglomerate deposits that exhibit the physical characteristics of rock, as determined by Geotechnical Engineer. Excavated rock materials not used for filling or for the construction of berms or embankments shall be removed from the site and disposed of, unless directed by the Engineer or Owner to stockpile on-site for future use. Stockpile locations shall be as authorized by the Owner.

E. EXCAVATION

- (1) Excavated materials classified as unstable or unsuitable for structural fill purposes and not needed for non-structural fill, shall be removed from the site and legally disposed of, unless directed by the Engineer or Owner to stockpile on-site for future use. Stockpile locations shall be as authorized by the Owner.
- (2) Excavated materials classified as unstable or unsuitable for structural fill purposes and not needed for non-structural fill, shall be removed from the site and legally disposed of, unless directed by the Engineer or Owner to stockpile on-site for future use. Stockpile locations shall be as authorized by the Owner.
- (3) Excavations shall be maintained in a well-drained condition at all times. Temporary drainage (dewatering) facilities shall be provided where surface runoff is not possible or effective. Such facilities shall be operated during the entire course of earthwork operations. Dewatering facilities shall include appropriate erosion and sediment control measures, as indicated elsewhere in these Project Technical Specifications. Unless otherwise stated in the Agreement between Owner and Contractor, the cost of temporary drainage facilities and dewatering activities shall be considered incidental to the various pay items of the work.

F. FILL PLACEMENT

- (1) Before placing any fill within pavement or structural areas, the existing subgrade shall be compacted as indicated in the "Compaction" section of these Project Technical Specifications. Pavement subgrade areas shall be proof-rolled to check for soft, unstable, or otherwise unsuitable materials and approved by a Geotechnical Engineer prior to paving operations. Where possible, proof-rolling shall be accomplished with at least four passes of a fully loaded tandem axle dump truck. Below-grade footing or foundation areas shall be inspected by a Geotechnical Engineer prior to foundation installation. Soft, unstable, or otherwise unsuitable materials shall be removed and replaced as directed by Geotechnical Engineer.

G. TOPSOIL PLACEMENT

- (1) Topsoil shall be placed on all of the following areas. Minimum topsoil depth shall be 6 inches unless otherwise indicated on the Plans. Topsoil placement shall include grading and shaping to required final contours and elevations.
 - (a) All project grass, landscape, or other vegetated areas indicated on the Plans.
 - (b) All unpaved offsite areas damaged by installation of project associated utilities or pavements.
 - (c) All unpaved offsite areas disturbed by project associated activities.
- (2) Within new wetland areas, topsoil shall be placed in a manner to minimize compaction of the material. Minimum lift thickness shall be 12 inches unless otherwise indicated on the Plans. The placed material shall be disked or tilled to a depth of at least 8 inches. Once the topsoil is placed, no vehicles except the disk/disking equipment shall be allowed on the material.

- (3) If required or as indicated on the Plans, Contractor shall obtain and provide necessary topsoil material from off-site sources (any stockpiled topsoil on the site shall also be used). The suitability of material supplied by Contractor shall be determined elsewhere in these Earthwork Specifications. Contractor shall provide the Geotechnical Engineer access to proposed off-site sources to take samples and evaluate the materials.

H. DISPOSAL OF MATERIALS

- (1) Surplus soil materials remaining after completion of fill placement and construction of berms shall be removed from the site and disposed of in legal manner, unless directed by the Owner to stockpile on-site for future use. Stockpile locations shall be as authorized by the Owner.
- (2) Removal and disposal of existing utility pipes and structures, construction debris, or other obstructions which interfere with proposed construction and which are not indicated in the Agreement between Owner and Contractor as a separate pay item shall be considered incidental to the earthwork operations.
- (3) Contractor shall be responsible for finding locations and obtaining approvals for the off-site disposal of demolition and construction debris, rubbish, pavement materials, shrubs, trees, and surplus, unsuitable excavated soil materials. Owner shall be advised, in writing, of the specific locations of all off-site disposal sites.

I. EARTHWORK FILLS - SOIL MATERIALS

- (1) Highly visible temporary fences shall be placed around trees and landscape areas designated for protection. Vehicles, equipment, and material storage shall not be allowed within the protection zone.

(6) UNSUITABLE SUBGRADE CONDITIONS:

- (a) Within areas of new or reconstructed pavements, specific requirements for removal and remedial procedures shall be as directed by Geotechnical Engineer. Soft or otherwise unacceptable subgrade materials shall typically be removed to a depth where the minimum in situ unconfined compressive strength is 2.0 tsf and the in situ moisture content is no more than 3 percentage points above the optimum moisture content per ASTM D1557. When the depth of unsuitable material is excessive and does not warrant complete removal, remedial procedures will typically require partial removal of unsuitable subgrade material, placement of a geotextile fabric (MIRAFI 600X or approved equal), and sufficient aggregate fill (IDOT CA-1 or alternate acceptable granular material) to the required subgrade level. Depths of unsuitable subgrade removal will be as directed by the Geotechnical Engineer. Alternative procedures may be required depending on the conditions encountered.
- (b) Removal of unsuitable materials and installation of replacement fill material under and adjacent to proposed buildings and structures shall be as specified by Geotechnical Engineer.
- (c) Payment for removal and replacement of unacceptable materials and the installation of geotextile fabric and aggregate fill shall be as indicated in the agreement between Owner and Contractor. Such payment shall include all work necessary for removal and disposal of unsuitable materials, supply and placement of fabric and aggregate materials, supply, placement and compaction of additional structural fill material, if required, and any dewatering required during these activities.
- (d) Where necessary, structural fill materials shall be placed and compacted under proposed pavements, buildings, and structures. Compacted structural fill shall be placed to required subgrade elevations.
- (e) Unsuitable materials may be placed within non-structural fill areas only where fill is required to obtain final subgrade levels. If borrow pits are used to obtain structural fill material, unsuitable materials may be used to bring the borrow areas to grade. Placement of such materials shall be limited to areas and depths authorized by the Geotechnical Engineer. If sufficient acceptable placement areas are not available, remaining unsuitable and unsuitable materials shall be removed from the site and legally disposed of.
- (f) If necessary, Contractor shall provide sufficient suitable structural fill material from off-site sources as necessary to complete earthwork operations to the required levels and elevations indicated on the Plans. Structural fill materials shall be in conformance with the stated criteria for structural fill. Contractor shall provide the Geotechnical Engineer access to the proposed off-site sources to take samples and evaluate materials.

F. FILL COMPACTION

- (1) Fill materials shall be placed in layers (lifts) and compacted in accordance with the following specified requirements. Lift thickness shall not exceed 8 inches (loose condition) and the fill material (when compacted) shall have a moisture content within the limits of -1 to +3 percentage points of optimum value. Specific lift thickness and moisture content shall be as determined by the Geotechnical Engineer to obtain the required compaction and strength of material in place.
- (2) Cohesive soils and well-graded aggregate mixtures shall be sampled and tested to determine the laboratory maximum density and optimum moisture content (control values) of the material. The test method shall be the ASTM Standard.
- (3) Free-draining cohesionless soils and aggregate mixtures shall be sampled and tested to determine the laboratory relative density (control value) of the material.
- (4) Laboratory density and moisture tests shall be performed to determine the control values for each type and source of material to be used. One test of laboratory maximum density and optimum moisture content shall be performed for each 300 cubic yards of fill and backfill material, and when any change in material occurs that may affect the maximum density or optimum moisture content values.
- (5) Aggregate supplier shall provide a written certification that the aggregate gradation and quality conforms to the project requirements. If a certification is not provided, gradation and quality tests shall be performed for each 300 cubic yards of stockpiled in-place source material.
- (6) Non-Structural Areas: The top 6 inches of existing subgrade and all layers of cohesive soil and well-graded granular fill materials shall be compacted to at least 90% maximum dry density, as determined by the Standard Proctor Method (ASTM D698). Free-draining aggregate and soil materials (ASTM D4253 & D4254) shall be placed and compacted as indicated by the Geotechnical Engineer.
- (7) Pavement Areas: The top 6 inches of existing subgrade and all layers of cohesive soil and well-graded granular fill materials shall be compacted to at least 95% maximum dry density, as determined by the Standard Proctor Method (ASTM D698). Free-draining aggregate and soil materials (ASTM D4253 & D4254) shall be placed and compacted as specified by Geotechnical Engineer.
- (8) Building Areas: The top 6 inches of existing subgrade and all layers of cohesive soil and well-graded granular fill materials shall be compacted to at least 95% maximum

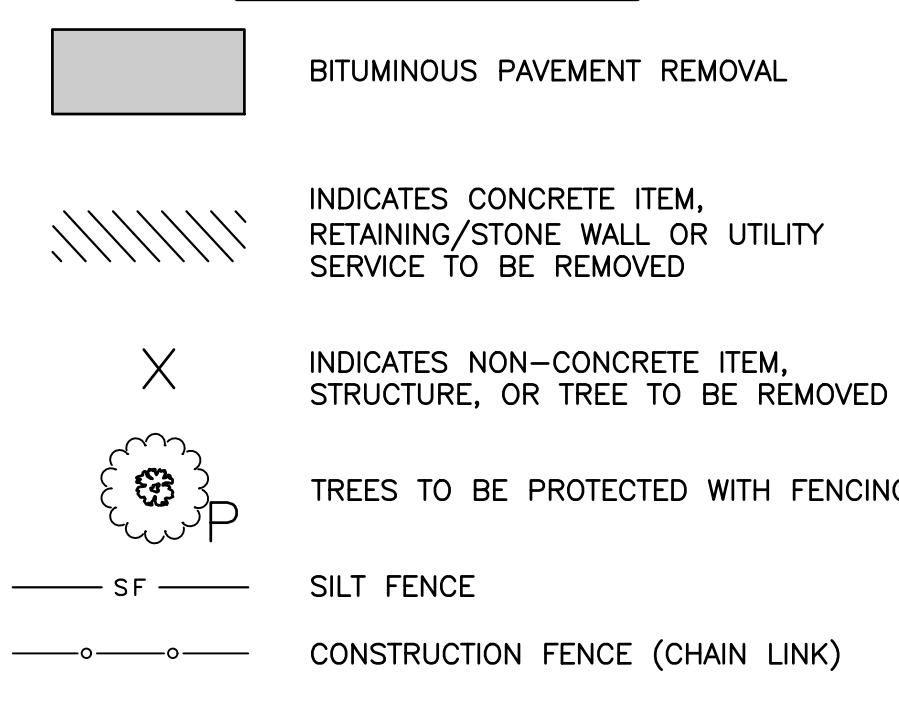
NAPERVILLE WHEATON TOWNHOMES		NAPERVILLE WHEATON LLC 127 AURORA AVENUE NAPERVILLE, ILLINOIS 60540	
SITE SPECIFICATIONS - 2		REVISION RECORD	
NO.	DATE	DESCRIPTION	NOTE/REVISIONS THIS SHEET
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<p>CITY OF NAPERVILLE - DEPARTMENT OF PUBLIC UTILITIES WATER/WASTEWATER GENERAL NOTES</p> <p>a. 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 DPU-WWW (630) 420-4122 for scheduling.</p> <p>b. 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.</p> <p>c. 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, vaults, 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.</p> <p>d. 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".</p> <p>e. Existing ductile iron systems for restraining push-on pipe bells shall be MEGALUG SERIES 1100HD or FORD SERIES 1390.</p> <p>f. Existing ductile iron systems requiring restraint shall be MEGALUG SERIES 1100SD (split MEGALUG) for mechanical joints.</p> <p>g. 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.</p> <p>h. 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, linestop 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.</p> <p>i. 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.</p> <p>j. 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, Waterous or Kennedy.</p> <p>k. 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. All nuts of bolts - any damage to this coating shall be repair with field applied approved anti-seize compound that is molybdenum-base lubricant, Bostik Never-Seize or approved equal.</p> <p>l. The contractor shall rotate and/or adjust any existing and/or new hydrant to the satisfaction of the Department of Public Utilities.</p> <p>m. 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.</p> <p>n. The City of Naperville DPU-WWW 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.</p> <p>o. Fire hydrant should be bagged "NOT IN SERVICE" until all testing and disinfection has been completed and new water main section is service.</p> <p>p. 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.</p> <p>q. All valve boxes, vaults, hydrants, and manholes shall not be covered with construction debris and shall remain accessible to the respective utility company.</p> <p>r. 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.</p> <p>s. 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 fine 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:</p> <ul style="list-style-type: none"> i. 48-inch diameter - 60 seconds ii. 60-inch diameter - 75 seconds iii. 72-inch diameter - 90 seconds iv. 84-inch diameter - 105 seconds <p>Any manholes that fail the test shall be sealed and re-tested until acceptable.</p> <p>t. The contractor shall provide internal televised inspection of all installed sanitary sewer, laterals, manholes and connections to the public system. Following completion of televising work, the contractor shall submit video recordings on DVD or flash drive along with a comprehensive televising report which will indicate the location, footings and nature of any defects. All defects shall be repaired to the satisfaction of the Water/Wastewater Utility and re-télévised.</p> <p>u. 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.</p> <p>v. 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.</p> <p>w. All excavations more than 20 feet deep must be protected by a system designed by a registered professional engineer.</p> <p>x. 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.</p> <p>y. 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.</p> <p>z. All brass components shall be certified to be lead free in compliance with NSF 61 and NSF 372 and identified with applicable markings.</p> <p>OTHER NOTES:</p> <p>A. Manholes shall be furnished with a self-sealing frame and solid cover (Neenah Foundry R-1772-CVH, East Jordan Iron Works 1022-3, or equal approved by the City Engineer) with the word "Sanitary" imprinted on the cover in raised letters (see Standard Detail SAN 3). Frames and lids shall meet or exceed AASHTO H-20 loading specifications.</p> <p>B. Both the manhole frame and cover shall have machined horizontal and vertical bearing surfaces. Inverted manhole frames are not allowed.</p> <p>C. Pick holes shall not create openings in the manhole cover.</p> <p>D. Bolt-down frames and covers shall be Neenah Foundry R-19116-F1, East Jordan Iron Works 1040 ZPT or equal approved by the City Engineer. Frames are to be bolted to cone. Bolt-down frames shall be used where indicated on the plans.</p> <p>E. Manhole frames shall be adjusted to proper grade using reinforced, precast concrete or fiberized rings. Brick or concrete blocks will not be allowed. Fiberized adjusting rings shall be required when frame will be with a roadway area. Final frame adjustment for manholes within the roadway area shall be in accordance with Sections 602 and 603 of Standard Specifications for Road and Bridge Construction, prepared by the Illinois Department of Transportation, latest edition.</p> <p>F. All manhole frames and adjusting rings shall be securely sealed to the cone section or top barrel section of the manhole using resilient, non-hardening, preformed bituminous mastic material. Conseal 102 B or approved equal. The mastic shall be applied in such a manner that no surface water or ground water inflow can enter the manhole through gaps between the top barrel section or cone section and the first adjusting ring, between adjusting rings, or between the last adjusting ring and the manhole frame. Up to 12 inches (300 mm) of adjusting rings may be installed on a given manhole. No more than one 2-inch (50 mm) adjusting ring, and no more than two adjusting rings in total shall be used.</p> <p>G. A continuous layer of non-hardening, preformed bituminous mastic material, Conseal 102 B or approved equal shall be applied to each manhole barrel cone and top section to provide a watertight seal.</p> <p>H. All brass components shall be certified to be lead free in compliance with NSF 61 and NSF 372 and identified with applicable markings.</p> <p>I. The sanitary force main shall be tested a minimum of one (1) hour at 1.5 times the shut off head of the pump, 2.5 times the operating pressure, or 20 psi, whichever is greatest. Allowable leakage shall be in accordance with section 41-2.14C of the Standard Specifications for Water and Sewer Construction.</p>		<p>TRANSPORTATION, ENGINEERING AND DEVELOPMENT BUSINESS GROUP STANDARD CONSTRUCTION PLAN NOTES FOR DEVELOPMENT PROJECTS</p> <p>GENERAL NOTES</p> <p>1. THE OWNER OR HIS/HER/ THEIR REPRESENTATIVE IS RESPONSIBLE TO OBTAIN ANY AND ALL PERMITS REQUIRED BY APPLICABLE GOVERNMENTAL AGENCIES.</p> <p>2. 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).</p> <p>3. ALL CONTRACTORS DOING WORK IN THE PUBLIC RIGHT-OF-WAY MUST BE LICENSED (WHEN APPLICABLE) TO MAKE PUBLIC IMPROVEMENTS WITHIN THE NAPERVILLE CORPORATE LIMITS.</p> <p>4. THE CONTRACTOR/DEVELOPER ASSUMES ALL RESPONSIBILITY AND LIABILITY FOR ANY ACTION RESULTING FROM THEIR WORK WITHIN THE PUBLIC RIGHT-OF-WAY.</p> <p>5. THE CONTRACTOR/DEVELOPER SHALL INDEMNIFY AND HOLD HARMLESS THE CITY OF NAPERVILLE.</p> <p>6. 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.</p> <p>7. 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.</p> <p>8. A MINIMUM OF 48 HOURS NOTICE SHALL BE GIVEN TO THE CITY OF NAPERVILLE TIED BUSINESS GROUP (630-420-6082) PRIOR TO STARTING WORK OR RESTARTING WORK AFTER SOME ABSENCE OF WORK FOR ANY REASON.</p> <p>9. 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.</p> <p>10. 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).</p> <p>11. RECORD DRAWINGS ARE REQUIRED TO BE SUBMITTED AND APPROVED BY THE CITY OF NAPERVILLE PRIOR TO FINAL OCCUPANCY BEING GRANTED.</p> <p>12. 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.</p> <p>STORM SEWER NOTES (GENERAL)</p> <p>1. NO CONNECTION TO AN EXISTING PUBLIC STORM SEWER MAY BE MADE WITHOUT PERMISSION OF THE CITY ENGINEER.</p> <p>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.</p> <p>STORM SEWER NOTES (STORM SEWER WORK IN PLANS)</p> <p>1. 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.</p> <p>a. REINFORCED CONCRETE PIPE (RCP) - 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. REINFORCED CONCRETE PIPE SHALL ALSO BE PERMITTED AS ROUND, ELLIPTICAL, OR BOX SHAPED OR AS REINFORCED CONCRETE ARCH CULVERT.</p> <p>b. NON-REINFORCED CONCRETE PIPE - 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 44.</p> <p>c. DUCTILE IRON PIPE (DIP) - 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 (SLIP SEAL OR PUSH ON) JOINTS. ALL DUCTILE IRON PIPE SHALL BE WRAPPED WITH POLYETHYLENE.</p> <p>d. PVC/CHLORIDE PIPE (PVC) - POLYVINY 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.</p> <p>e. HIGH DENSITY POLYETHYLENE PIPE (HDPE) - 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.</p> <p>f. FULLY GALVANIZED CORRUGATED STEEL PIPE - FULLY GALVANIZED CORRUGATED STEEL PIPE MAY BE USED FOR RESIDENTIAL DRIVEWAY CROSSINGS ONLY WHEN A DITCH SECTION IS PRESENT. THE MINIMUM CULVERT SIZE IS 12 DIAMETER.</p> <p>g. 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.</p> <p>h. 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.</p> <p>i. JOINTS CONNECTING DISSIMILAR PIPE MATERIALS SHALL BE MADE WITH SEWER CLAMP NON-SHEAR TYPE COUPLINGS; CASCADE CSS, ROMAC LSS, FERNO, INC. 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.</p> <p>j. 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.</p> <p>k. 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.</p> <p>l. 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 A615M-05A (OR LATEST EDITION) GRADE 60 STEEL REINFORCEMENT, MEETING OR EXCEEDING ASTM C 478-05 (OR LATEST EDITION) AND OSHA STANDARDS.</p> <p>5. 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</p> <p>6. GRATES SHALL MEET OR EXCEED AASHTO H-20 LOADING SPECIFICATIONS. FRAMES SHALL BE SHOP PAINTED WITH ASPHALTIC BASE PAINT.</p> <p>7. PAVEMENT: EAST JORDAN IRON WORKS 1022 FRAME WITH TYPE M1 RADIAL FLAT GRATE, OR APPROVED EQUAL.</p> <p>8. BARRIER CURB AND GUTTER: EAST JORDAN IRON WORKS 7220 FRAME WITH TYPE M1 GRATE AND TT CURB BOX, OR APPROVED EQUAL.</p> <p>9. DEPRESSED CURB: EAST JORDAN IRON WORKS 5120 FRAME AND GRATE, OR APPROVED EQUAL.</p> <p>10. MOUNTABLE CURB: EAST JORDAN IRON WORKS 7525 FRAME AND GRATE, OR APPROVED EQUAL.</p> <p>11. 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.</p> <p>12. 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.</p> <p>13. 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.</p> <p>14. ADJUSTMENTS MAY BE NECESSARY TO ENSURE THAT FRAMES AND GRATES MATCH THE ELEVATION OF THE SURROUNDING PAVEMENT OR GROUND SURFACE. PREFORMED ADJUSTING RINGS OF THE PROPER DIMENSIONS NEEDED TO MATE 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.</p> <p>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.</p> <p>16. A RESILIENT, FLEXIBLE, NON-HARDENING, PREFORMED BUTIMINOUS MASTIC MATERIAL, CONSEAL 102 B OR APPROVED EQUAL, SHALL BE USED BETWEEN THE CONCRETE 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.</p> <p>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.</p> <p>18. 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.</p> <p>EROSION CONTROL AND DRAINAGE NOTES (GENERAL)</p> <p>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.</p> <p>2. DURING EXTENDED DRY PERIODS, THE CONSTRUCTION AREA(S) MAY NEED TO BE WATERED DOWN TO PREVENT THE BLOWING OF SOIL FROM THE SITE.</p> <p>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 ONTO THE PUBLIC STREET IS EXCESSIVE, CLEANING MAY BE REQUIRED MORE FREQUENTLY.</p> <p>EROSION CONTROL AND DRAINAGE NOTES (PROJECT SPECIFIC)</p> <p>1. 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.</p> <p>2. ACCEPTABLE PERIMETER EROSION CONTROL INCLUDES SILT FENCE, SILT WORM AND ANY OTHER APPLICATION APPROVED BY THE CITY ENGINEER.</p> <p>3. 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.</p> <p>4. STOCKPILES NOT BEING DISTURBED FOR MORE THAN 14 DAYS SHALL BE SEEDED.</p> <p>5. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY, AFTER ANY 0.5 INCH RAINFALL, OR MORE FREQUENTLY AS NECESSARY TO MAINTAIN THEIR FUNCTION.</p> <p>6. 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.</p> <p>GEOMETRIC AND PAVING NOTES (GENERAL)</p> <p>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.</p> <p>2. ANY NEW OR EXISTING IMPROVEMENTS THAT ARE DAMAGED SHALL BE REPAIRED OR REPLACED IN A MANNER THAT IS SATISFACTORY TO THE CITY ENGINEER.</p> <p>3. THE CONTRACTOR AND/OR DEVELOPER SHALL SECURE ALL NECESSARY RIGHTS AND PERMISSES 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.</p> <p>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.</p> <p>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.</p> <p>TRAFFIC CONTROL AND PROTECTION NOTES (GENERAL)</p> <p>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 DET</p>					



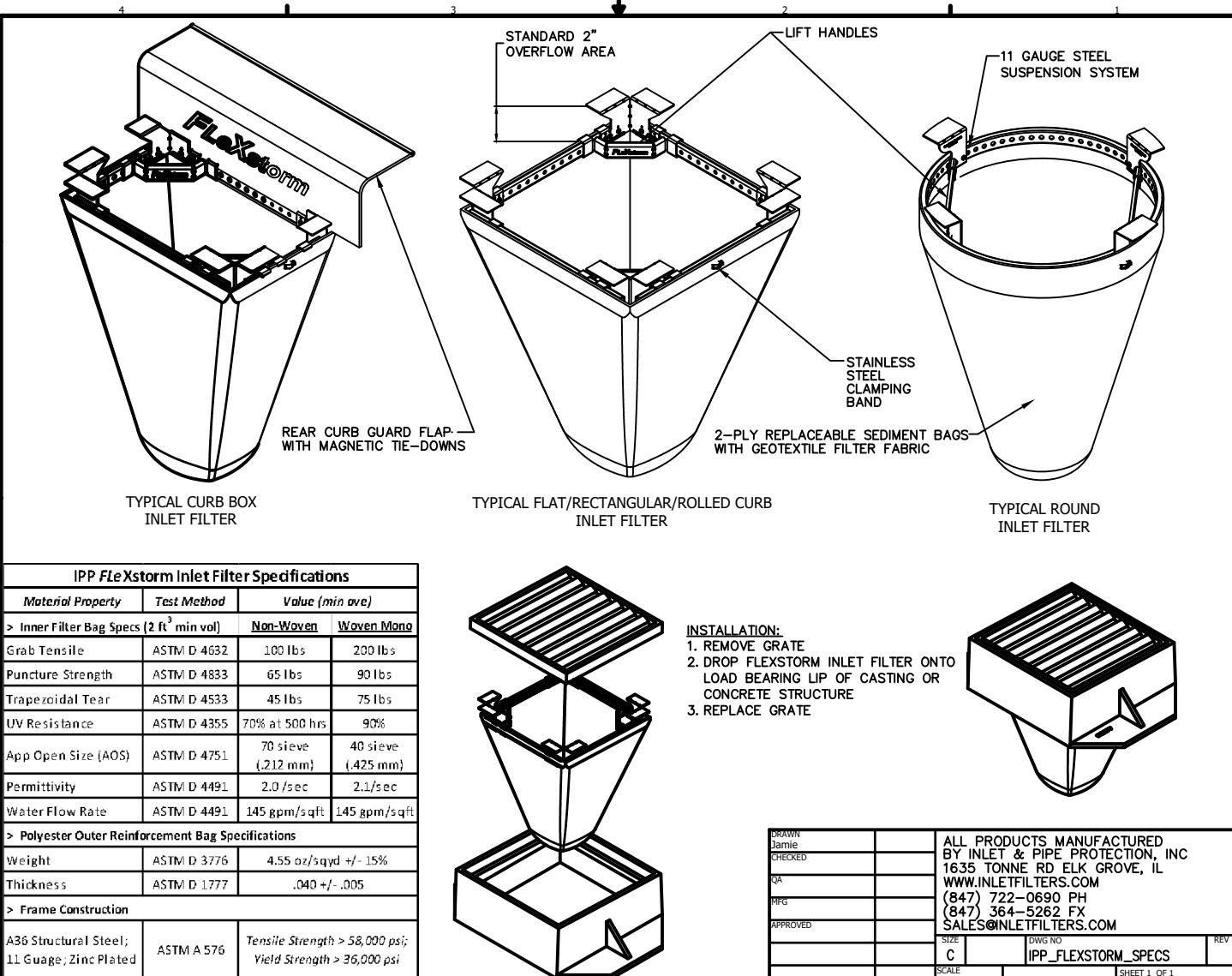
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DEMOLITION LEGEND



DEMOLITION NOTES:

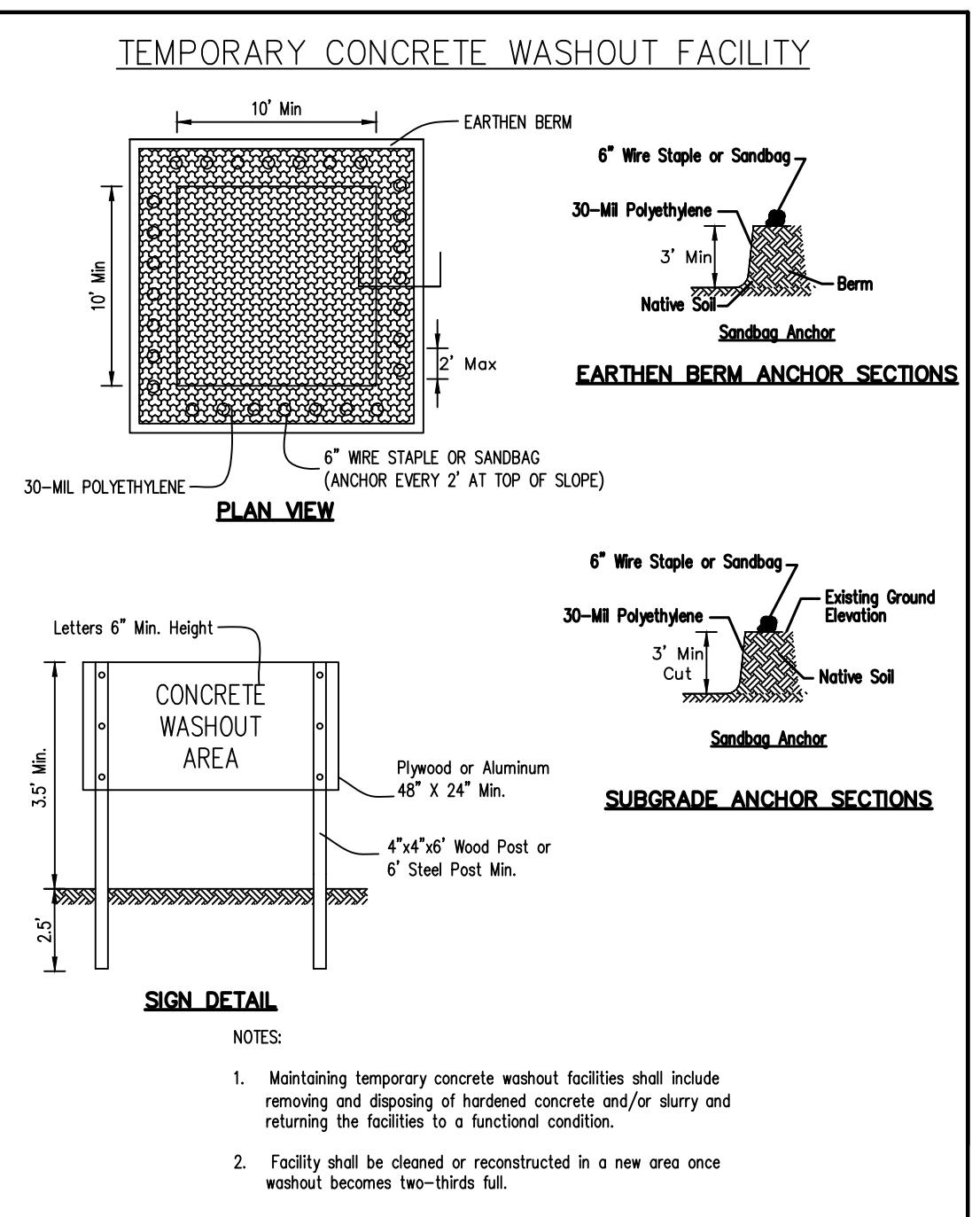
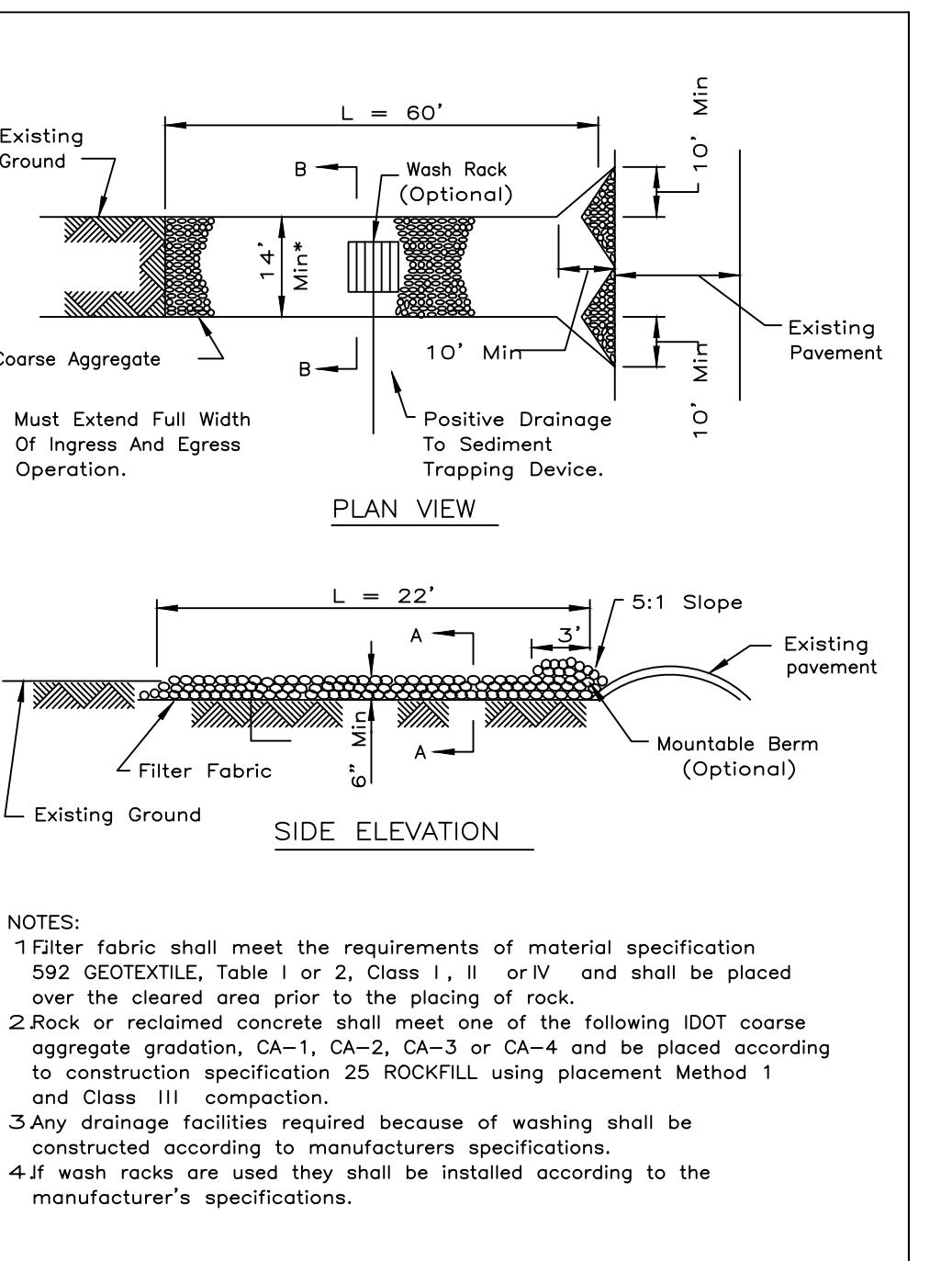
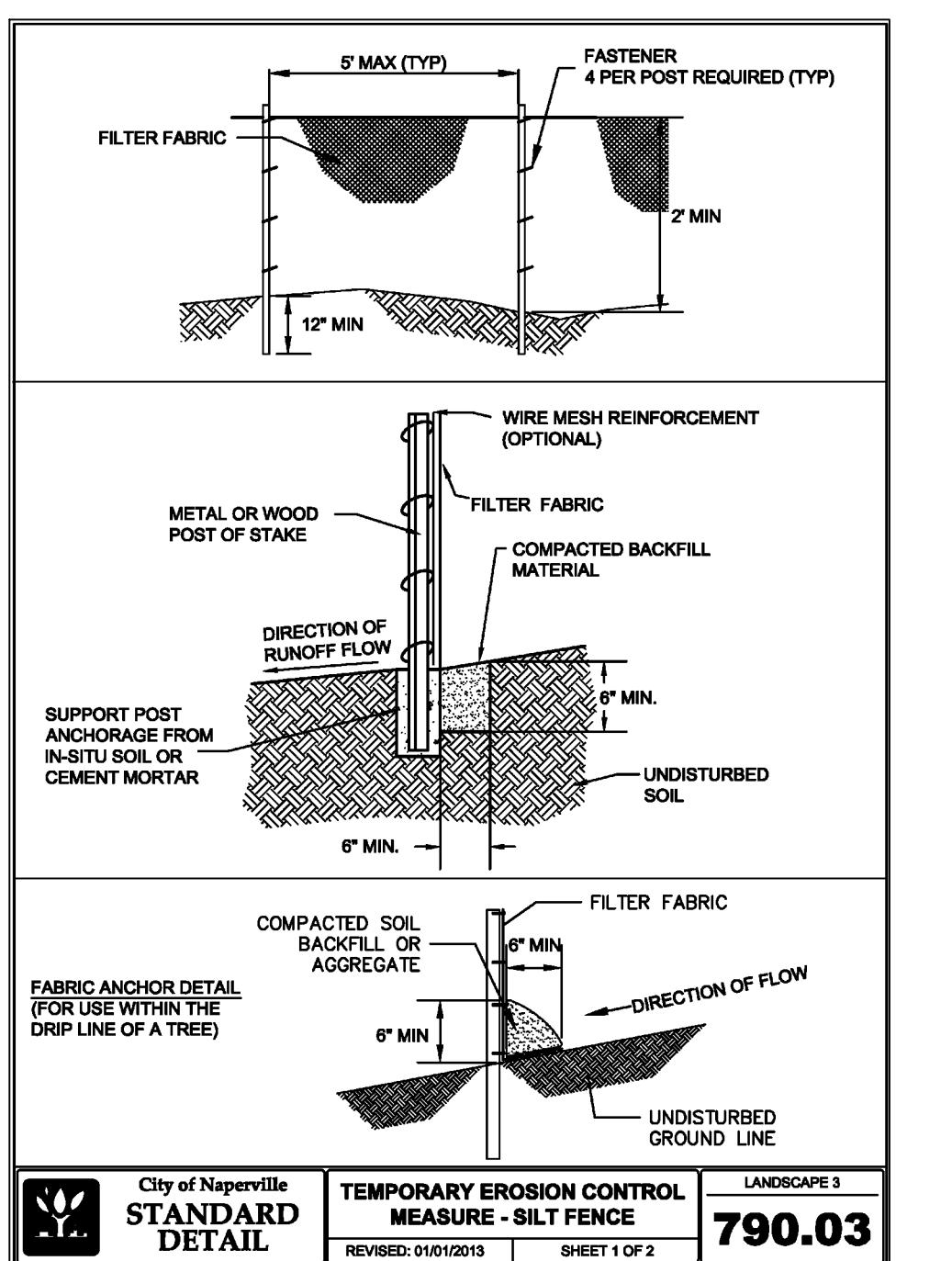
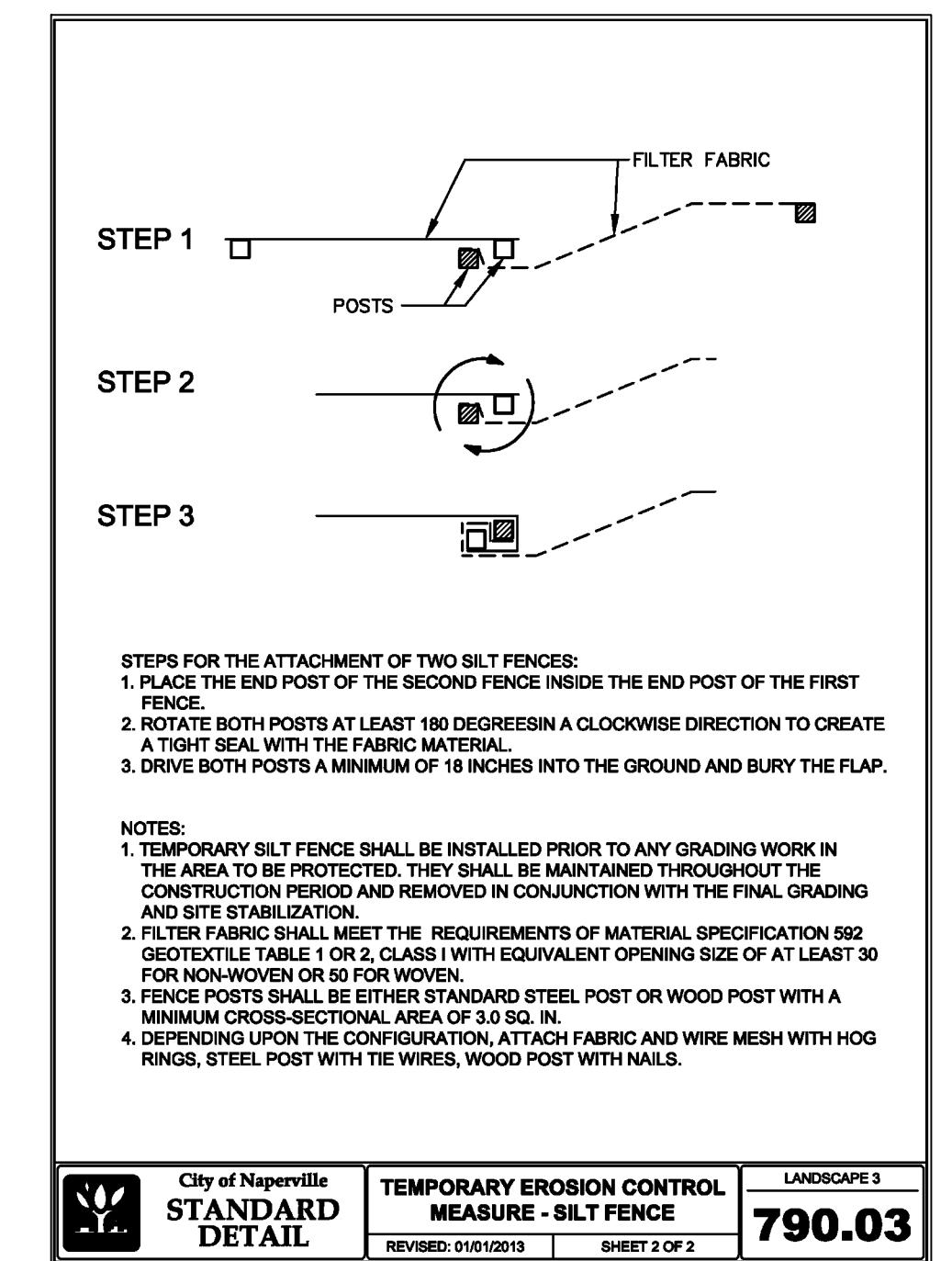
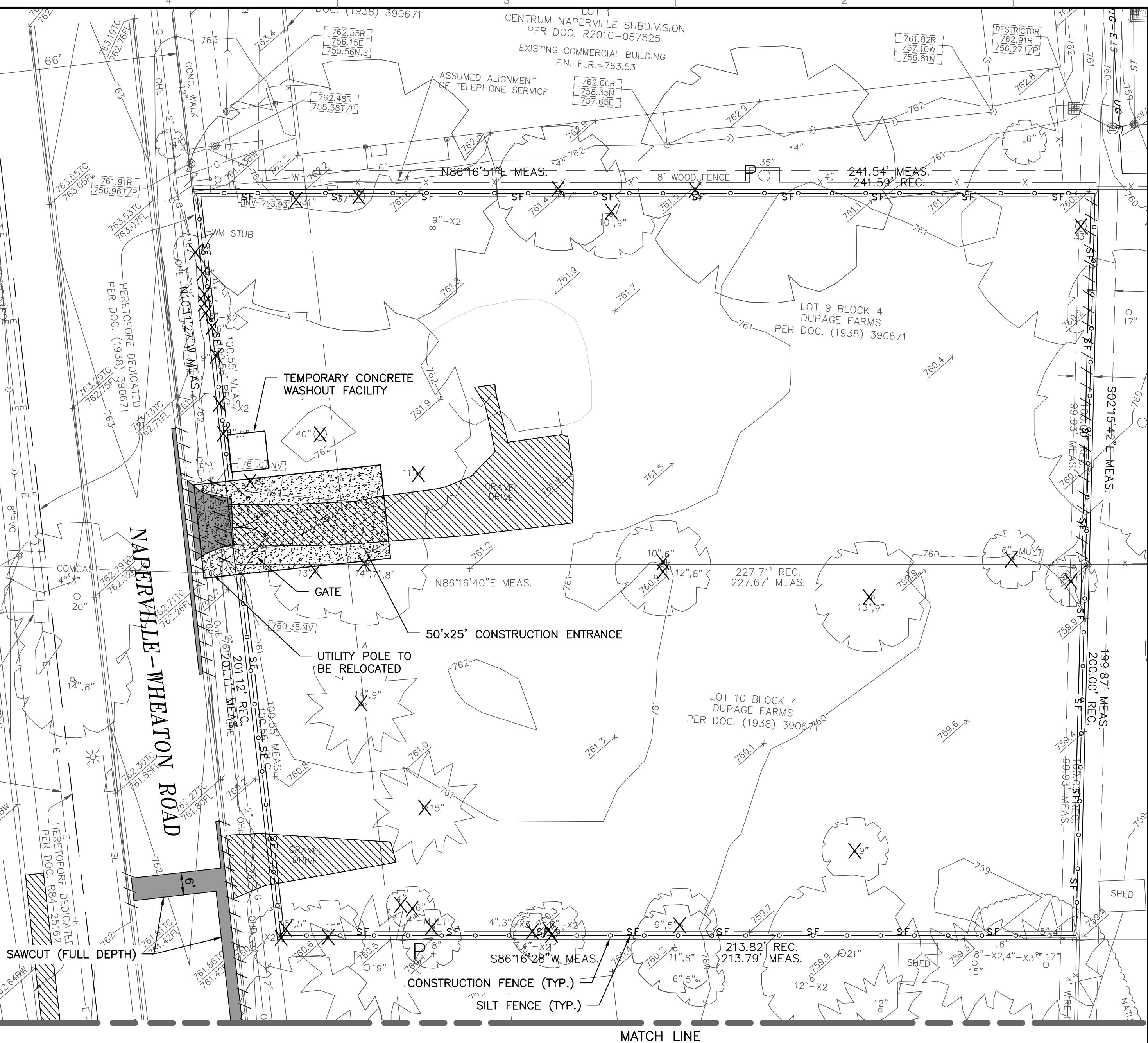
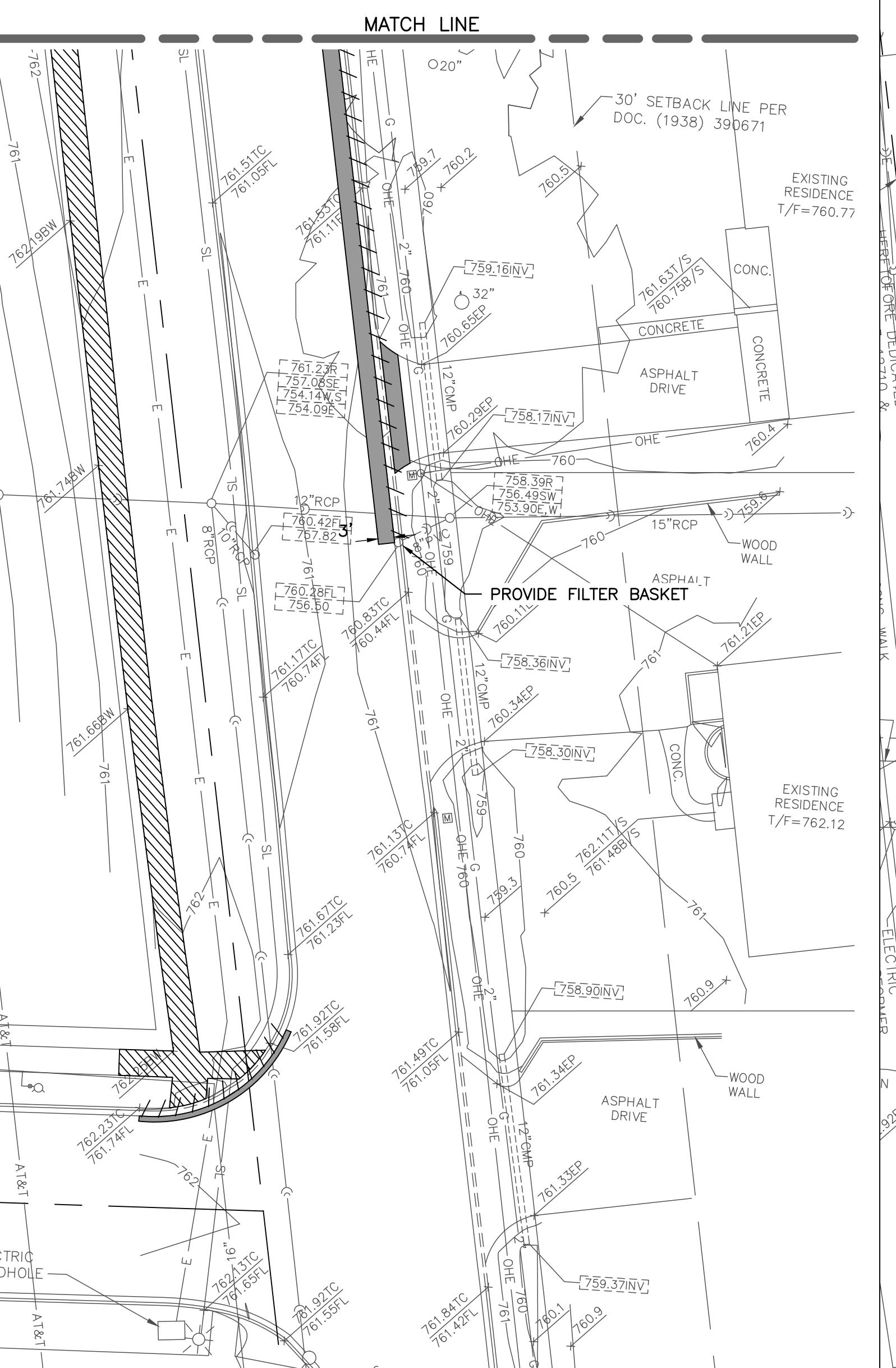
1. ALL PAVEMENTS, UTILITIES, TREES, ETC. WITHIN THE SUBJECT PROPERTY SHALL BE COMPLETELY REMOVED. REMOVAL ITEMS SHOWN OUTSIDE OF THE PROPERTY LIMITS ARE APPROXIMATE AND MAY OR MAY NOT CONSTITUTE ALL WORK NECESSARY TO CONSTRUCT THE PROJECT. REMOVAL OF PUBLIC SIDEWALKS, ROADWAYS, DRIVEWAYS, CURB & GUTTER, PUBLIC UTILITIES, ETC., SHALL BE STAGED BY THE CONTRACTOR WITH CONCURRENCE FROM THE OWNER, ENGINEER, AND THE CITY OF NAPERVILLE STAFF.
2. TRENCHES, WITHIN PROPOSED PAVED OR BUILDING PAD AREAS, RESULTING FROM THE REMOVAL OF EXISTING UTILITIES SHALL BE BACKFILLED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF ART. 550.07 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
3. ALL EXISTING PAVEMENT WITHIN THE CONSTRUCTION LIMITS, INCLUDING BITUMINOUS PAVEMENT, DRIVEWAYS, CONCRETE SLABS, AND SIDEWALKS SHALL BE COMPLETELY REMOVED. AGGREGATE MATERIALS APPROVED AS SUITABLE FILL BY THE SOILS ENGINEER SHALL BE SET ASIDE FOR FUTURE PLACEMENT.
4. ALL TREES, LANDSCAPE MATERIALS AND BRUSH WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED. TREE STUMPS AND/OR ROOT BALLS SHALL BE COMPLETELY REMOVED. TREES TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO FINALIZING HIS BID FOR TREE REMOVAL.
5. EXISTING UTILITY LOCATIONS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES THAT ARE INTENDED TO CONTINUE TO PROVIDE SERVICE WHETHER THESE UTILITIES ARE SHOWN ON THE PLANS OR NOT. THIS SHALL INCLUDE PRIVATE SERVICES AS WELL.
6. ALL DEBRIS FROM DEMOLITION SHALL BE HAULED OFF SITE AND DISPOSED OF BY LEGAL MEANS.
7. ALL WORK SHALL BE DONE IN GENERAL ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS CONTAINED IN THE MUNICIPAL "SOIL EROSION AND SEDIMENTATION CONTROL" ORDINANCE. THE CONTRACTOR SHALL INSTALL THE NECESSARY EROSION AND SEDIMENTATION CONTROL DEVICES THAT WILL PROTECT THE EXISTING STORM SEWERS, PUBLIC ROADWAYS, AND ADJACENT PROPERTIES FROM SEDIMENT THAT MAY ARISE FROM THE PROPOSED DEMOLITION AND/OR CONSTRUCTION. DEVICES SHALL INCLUDE SILT FENCE, FILTER BASKETS INSERTED INTO DRAINAGE STRUCTURES, CONSTRUCTION ENTRANCE, PAVEMENT CLEANING, ETC. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
8. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO SEDIMENT BASINS OR SILT TRAPS. CONCRETE TRUCKS SHALL NOT BE PERMITTED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON SITE. SPECIFIC AREAS FOR THIS ACTIVITY SHALL BE DESIGNATED BY THE CONTRACTOR AND PROVIDED WITH ADEQUATE SILTATION BASINS AND OTHER FACILITIES TO ASSURE THAT DISCHARGE IS CONTAINED AND CLEANSED BEFORE ENTERING THE RECEIVING STORM SEWER SYSTEM.
9. ALL ADJACENT STREETS SHOULD BE KEPT CLEAR OF MUD/DEBRIS. THE CONTRACTOR SHALL INSPECT THE STREETS DAILY AND CLEAN THEM AS NECESSARY.
10. A TEMPORARY CHAINLINK CONSTRUCTION FENCE AND GATE ARE SHOWN AT THE PROPOSED CONSTRUCTION ENTRANCE. THE FENCE WILL BE REMOVED AND REPLACED AS REQUIRED TO ALLOW FOR UTILITY INSTALLATIONS, ROADWAY WORK, ETC. DURING WORKING HOURS BUT SHALL BE REINSTALLED AT THE END OF EACH DAY TO PROVIDE A SECURE CONSTRUCTION SITE.



REFERENCE

1. EXISTING CONDITIONS ARE BASED UPON FIELD OBSERVATIONS MADE ON JUNE 7, 2018 BY ROAKE AND ASSOCIATES, INC.

2. FIELD DATUM: ILLINOIS STATE PLANE NAVD83 (2011) NAVD88 (VRS).
3. UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON FIELD OBSERVATIONS, ATLAS MAPS PROVIDED BY THE CITY OF NAPERVILLE AND THOSE PUBLIC UTILITY COMPANIES OPERATING UNDER FRANCHISE OR CONTRACT WITH THE CITY OF NAPERVILLE.



NAPERVILLE WHEATON TOWNHOMES
NAPERVILLE WHEATON LLC
127 AURORA AVENUE
NAPERVILLE, ILLINOIS 60540

DEMOLITION PLAN

ING NO.:

6 OF 17

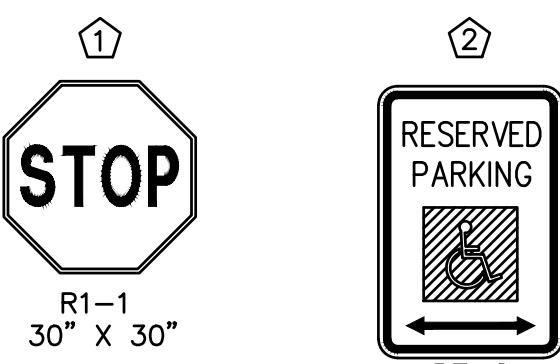


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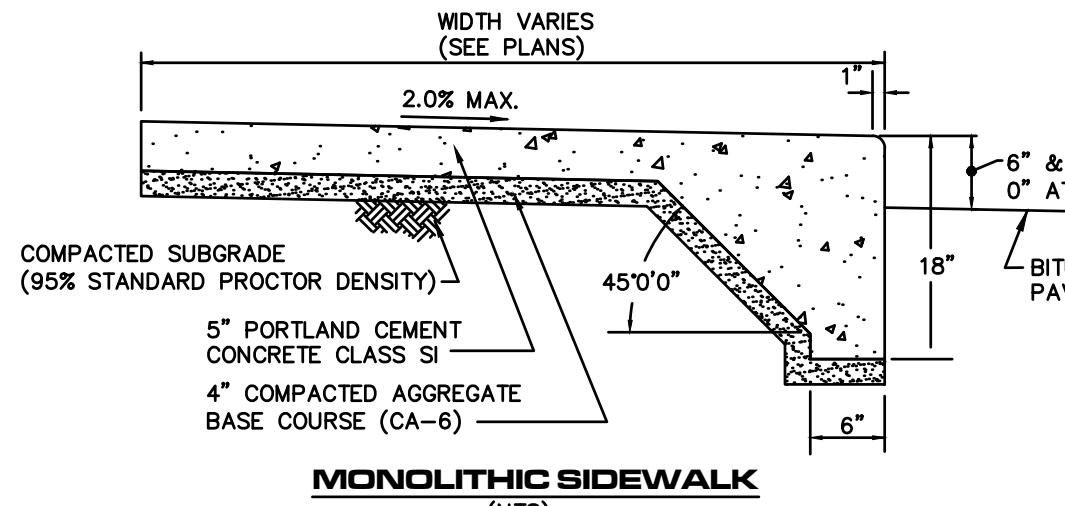
DIMENSION NOTES:

1. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO THE BACK OF CURB AND FACE OF MONOLITHIC SIDEWALK.
2. FOR PROPOSED BUILDING DIMENSIONS SEE ARCHITECTURAL PLANS.
3. ON-SITE AND PUBLIC HANDICAP RAMP DETAILS SHALL BE CONSTRUCTED IN ACCORDANCE WITH IDOT STANDARD 424001.
4. PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
 - ACCESSIBLE PARKING SPACE – AS DETAILED ON ACCESSIBLE PARKING SPACE MARKINGS AND HANDICAPPED PAINTED SYMBOL.
 - PARKING SPACES – YELLOW PAINT, 4" WIDE.
 - STOP BAR – WHITE PAINT, 24" WIDE.
5. 'VCH' INDICATES VARIABLE CURB HEIGHT. THE CONTRACTOR SHALL REVIEW THE PROPOSED GRADING PLAN AND TAKE NOTE WHERE PROPOSED CURB VARIES IN HEIGHT.
6. THE LIMITS OF THE 6-FOOT WIDE MONOLITHIC SIDEWALK IN FRONT OF BOTH BUILDINGS SHALL BE FROM THE PROPOSED 6" CONCRETE BARRIER CURB WEST TO THE EAST EDGE OF THE PARKING LOT AND THE 4-FOOT WIDE NORTH-SOUTH SIDEWALK CONNECTING TO THE TRASH ENCLOSURE

SIGN LEGEND



DIEMNSION PLAN AND GRADING DETAIL



1 1/2" HOT MIX ASPHALT SURFACE COURSE, IL-9.5
(0.40 X 1.5 = 0.60)

2 1/4" (MINIMUM) HOT MIX ASPHALT BINDER COURSE IL-19.0
(0.33 X 2.25 = 0.74)

PRIME AGGREGATE @ 0.25 GAL/SY

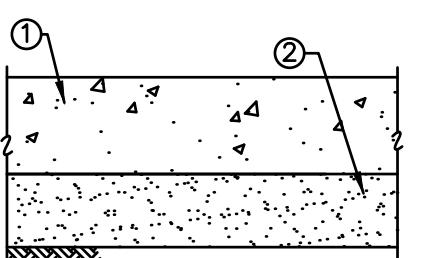
10" AGGREGATE BASE COURSE TYPE B (CA-6)
(0.13 X 10 = 1.30)

COMPACTED SUBGRADE (95% STANDARD PROCTOR DENSITY)

ASPHALT PAVEMENT SECTION

ASPHALT PAVEMENT SECTION

(PARKING LOT)



FRAGILE ENCL. SOURCE, RAD. AND. ARRON. AND. PRIMETUM. ARRON.

8" PORTLAND CEMENT CONCRETE, CLASS PV
4" COMPACTED CA-6 AGGREGATE BASE COURSE

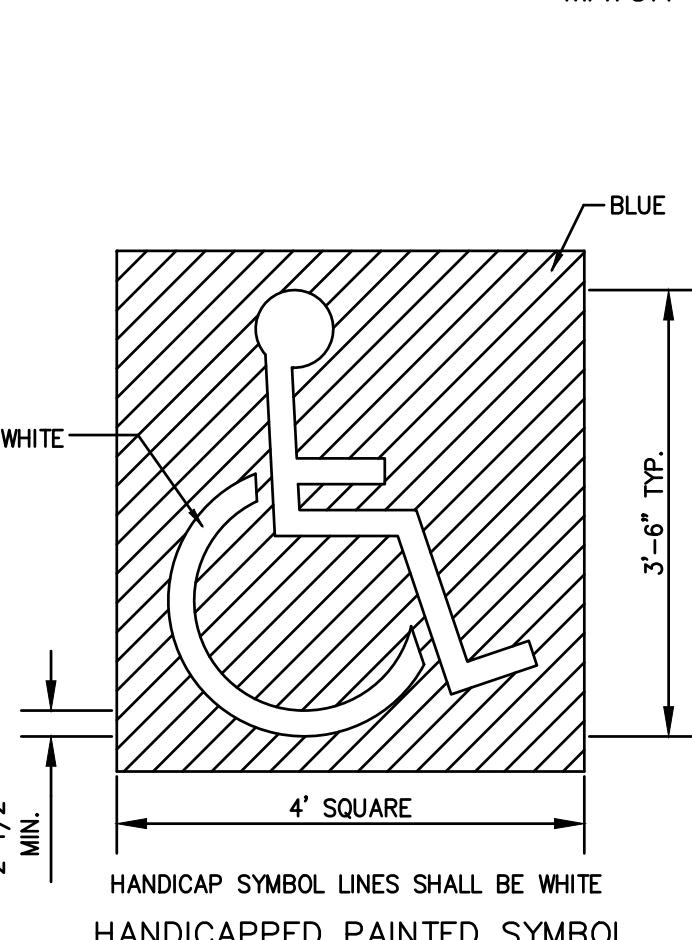
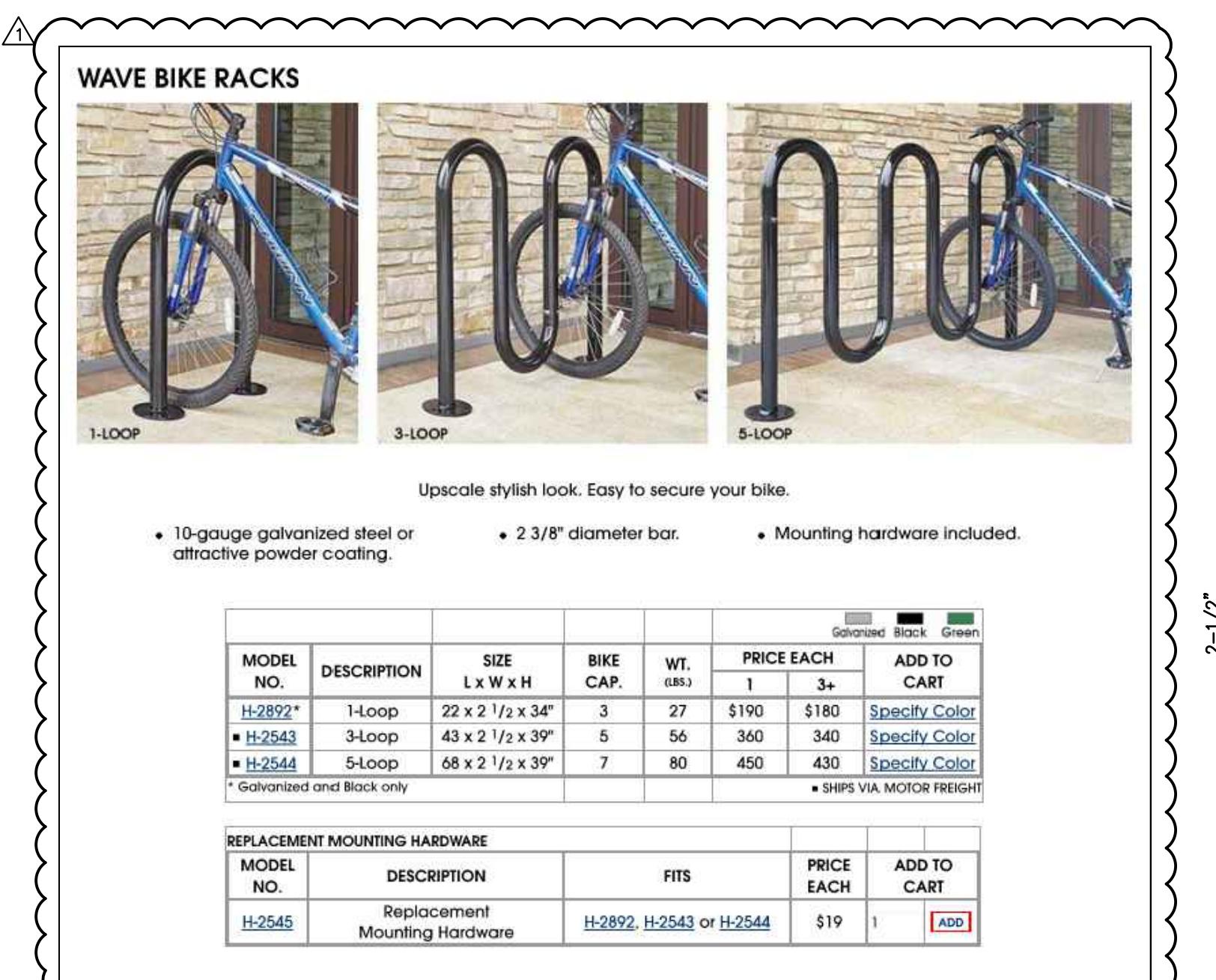
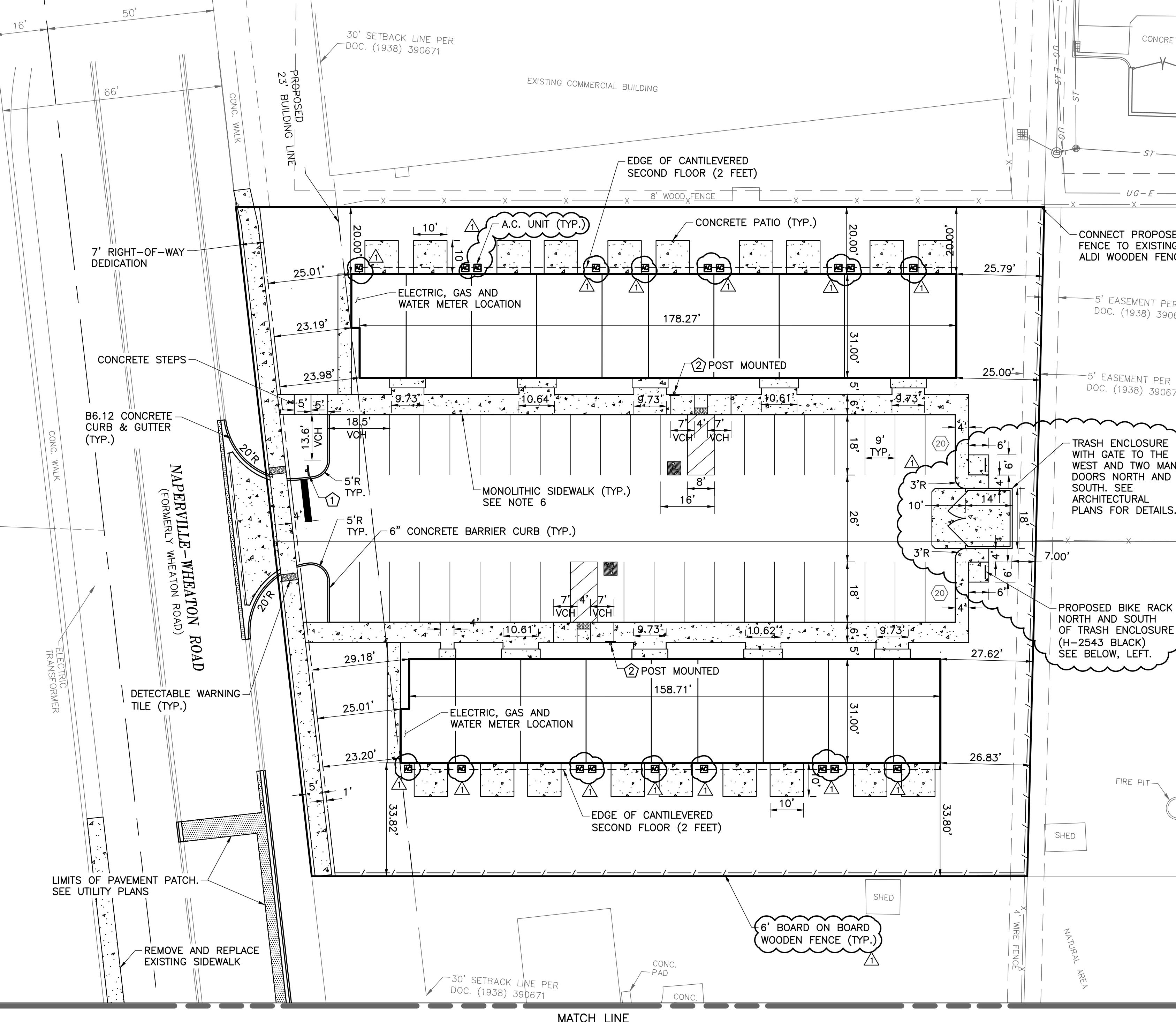
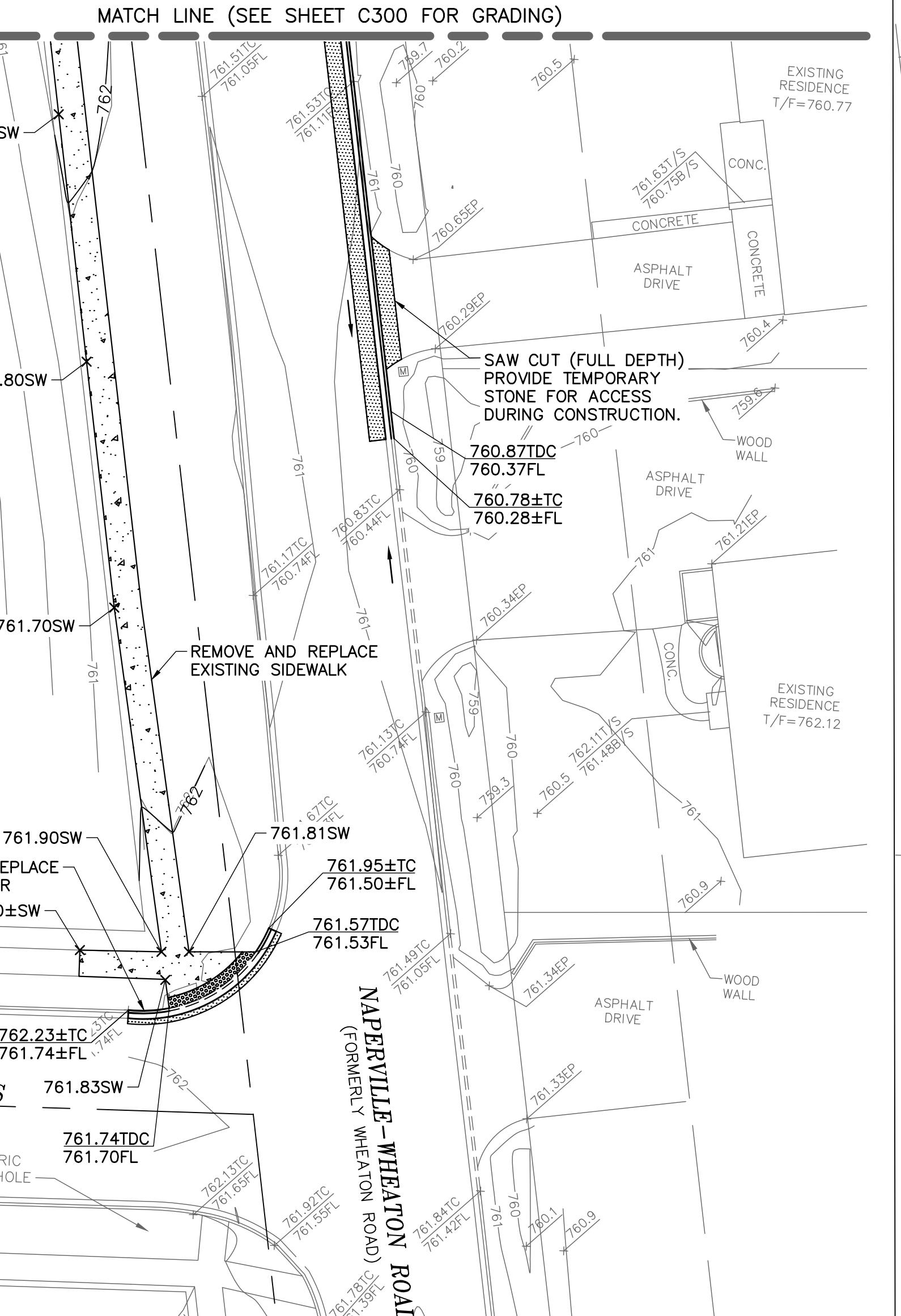
SIDEWALK

REFERENCE

1. EXISTING CONDITIONS ARE BASED UPON FIELD OBSERVATIONS MADE ON JUNE 7, 2018 BY ROAKE AND ASSOCIATES, INC.

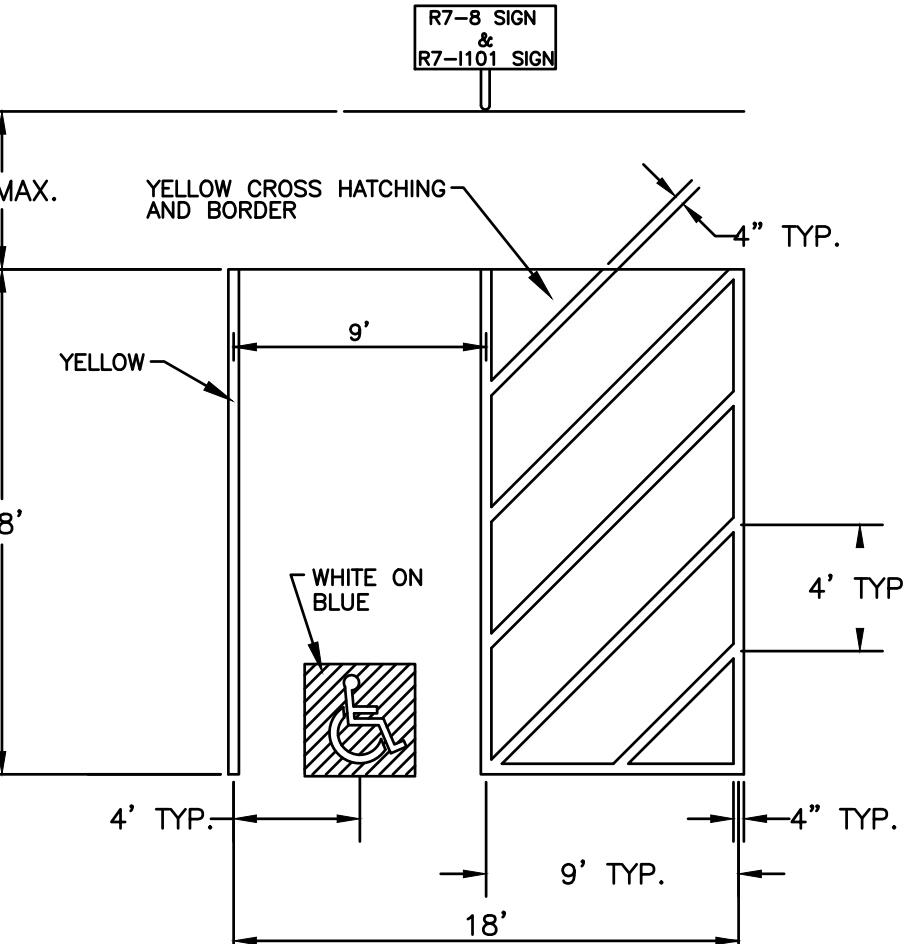
2. FIELD DATUM: ILLINOIS STATE PLANE NAVD83 (2011) NAVD88 (VRS).

3. UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON FIELD OBSERVATIONS, ATLAS MAPS PROVIDED BY THE CITY OF NAPERVILLE AND THOSE PUBLIC UTILITY COMPANIES OPERATING UNDER FRANCHISE OR CONTRACT WITH THE CITY OF NAPERVILLE.



NOTES FOR HANDICAP PARKING STALLS:

1. EACH PARKING SPACE SHALL BE AT LEAST EIGHT FEET WIDE, WITH AN EIGHT FOOT WIDE ACCESS AISLE, FOR A TOTAL OF SIXTEEN FEET.
2. ADJACENT HANDICAPPED PARKING SHALL NOT SHARE A COMMON ACCESS AISLE.
3. SIGNS SHALL BE VERTICALLY MOUNTED ON A POST OR A WALL AT THE FRONT CENTER OF THE PARKING SPACE NO MORE THAN FIVE (5) FEET HORIZONTALLY FROM THE FRONT OF A PARKING SPACE AND SET A MINIMUM OF FOUR (4) FEET FROM THE FINISHED GRADE TO THE BOTTOM OF THE SIGN.
4. HANDICAPPED PARKING SIGNS SHALL ALSO EXHIBIT THE WORDS "\$250.00 FINE".
5. PARKING SPACES DESIGNED FOR PERSONS WITH DISABILITIES AND ACCESSIBLE PASSENGER LOADING ZONES THAT SERVE A PARTICULAR BUILDING, SHALL BE LOCATED ON THE SHORTEST POSSIBLE ACCESSIBLE ENTRANCE OF THE BUILDING.
6. IN SEPARATE PARKING STRUCTURES OR LOTS THAT DO NOT SERVE A PARTICULAR BUILDING, PARKING SPACES FOR PERSONS WITH DISABILITIES SHALL BE LOCATED ON THE SHORTEST POSSIBLE CIRCULATION ROUTE TO AN ACCESSIBLE PEDESTRIAN ENTRANCE OF THE PARKING FACILITY.



ACCESSIBLE PARKING SPACE MARKINGS





UTILITY CROSSINGS

① 8" SAN. INV. = 756.16±
6" WM. T/P = 754.6±

② 12" WM. T/P = 755.0± (ASSUME BEHIND GAS,
STREETLIGHT, COMCAST, ELECTRIC AND AT&T)

③ 2" GAS B/P = 758.0± (ASSUMED)
12" STM. T/P = 755.7±

④ 12" WM. B/P = 755.5±
8" STM. T/P = 754.9±

UTILITY NOTES:

1. CONFLICT AREAS BETWEEN THE PROPOSED IMPROVEMENTS AND EXISTING ELECTRIC, TELEPHONE, CABLE AND GAS HAVE BEEN SHOWN ON THE PLANS. THE UNDERLYING UTILITY OWNER SHALL REVIEW THE PROPOSED IMPROVEMENTS AND MAKE HIS/HER OWN DETERMINATION ON RELOCATION, MAINTAINING SERVICE FOR EXISTING CUSTOMERS, ETC.

2. WITH THE EXCEPTION OF WHERE DESIGNATED AS "PUBLIC", ALL PROPOSED STORM SEWER SHALL BE PRIVATELY OWNED AND MAINTAINED.

3. DRAINAGE STRUCTURES LOCATED IN TURF AREAS SHALL BE CONSTRUCTED WITH A CONE SECTION. IF A FLAT SLAB TOP IS USED, A MINIMUM 6-INCH ADJUSTING RING SHALL BE USED SO THAT ADEQUATE TOPSOIL THICKNESS CAN BE PLACED.

4. THE STEEL CASING PIPE SHALL HAVE A MINIMUM WALL THICKNESS OF 0.375 INCHES, SHALL MEET THE REQUIREMENTS OF ASTM A-139, GRADE B AND SHALL BE BITUMINOUS COAT INSIDE AND OUT.

MANUFACTURED NON-METALLIC SPACERS SHALL BE USED TO SUPPORT THE PIPE WITHIN THE CASING AND SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION. A MINIMUM OF TWO SUPPORTS SHALL BE USED PER JOINT OF PIPE FOR LENGTHS UP TO 12.5 FEET, AND A MINIMUM OF THREE SUPPORTS SHALL BE USED PER JOINT FOR LENGTHS GREATER THAN 12.5 FEET. THE ANNUAL SPACING SHALL BE FILLED WITH PEA GRAVEL, LOW STRENGTH GROUT, OR CELLULAR FOAM CONCRETE WITH NO VOIDS REMAINING IN THE CASING PIPE. A MEMBER OF DPU-WATER SHALL WITNESS THE ANNUAL SPACING FILLING OPERATIONS.

PAYMENT FOR "CASING PIPE, 24-INCH" SHALL BE MADE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT, WHICH SHALL INCLUDE ALL MATERIAL, EQUIPMENT, AND LABOR TO FURNISH AND INSTALL THE INSTALLATION NOTED ABOVE.

5. ALL DUCTILE IRON PIPE, FITTINGS, ETC., SHALL BE POLYWRAPPED.

6. ALL BENDS SHALL BE PROVIDED WITH 'MEGA-LUG' TYPE FLANGES AND SHALL HAVE PROPER BLOCKAGE.

7. THE CONTRACTOR SHALL PROVIDE INLET FILTER BASKETS BEHIND ALL OPEN LID STRUCTURES TO MINIMIZE INTRUSION OF DEBRIS/SILT INTO THE STORM SEWER SYSTEM.

8. UPON COMPLETION OF THE UTILITY INSTALLATIONS, THE PUBLIC RIGHT OF WAY SHALL BE RESTORED TO ITS ORIGINAL CONDITION. THIS SHALL INCLUDE BUT NOT BE LIMITED TO 6 INCH TOPSOIL PLACEMENT, HYDROSEED, DRIVEWAY REMOVAL AND REPLACEMENT, SIDEWALK REMOVAL AND REPLACEMENT, AND LANDSCAPING REMOVAL AND REPLACEMENT.

9. INSTALL STREET LIGHT FOUNDATION 5 FEET FROM BACK OF CURB. PUSH STREETLIGHT CABLE BENEATH PARKWAY TREES TO CONNECTION POINT. EXISTING STREETLIGHT 150' TO THE SOUTH. SEE SHEET C804 FOR CITY OF NAPERVILLE LIGHTING DETAILS.

10. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN INSTALLING PROPOSED INFRASTRUCTURE NEAR THE OVERHEAD UTILITIES LOCATED IN THE EASTERLY PARKWAY OF NAPERVILLE-WHEATON ROAD.

11. THE PROPOSED WATERMAIN CROSSING SHALL BE CONSTRUCTED UNDER A ROAD CLOSURE. DETOUR PLAN SHALL BE COORDINATED WITH CITY STAFF.

12. SEE SHEET C802 FOR CITY OF NAPERVILLE STANDARD DETAIL 590.13 - UTILITY TRENCH PAVING SECTION (FLEXIBLE PAVEMENTS).

13. CLEANOUT RISERS ARE REQUIRED ON EACH SANITARY SERVICE. THE RISERS SHALL BE INSULATED AND ENCLOSED IN A SERVICE BOX, EJW 1566, OR APPROVED EQUAL.

14. ALL CASTINGS SHALL BE SHOP PAINTED WITH ASPHALTIC BASE PAINT.

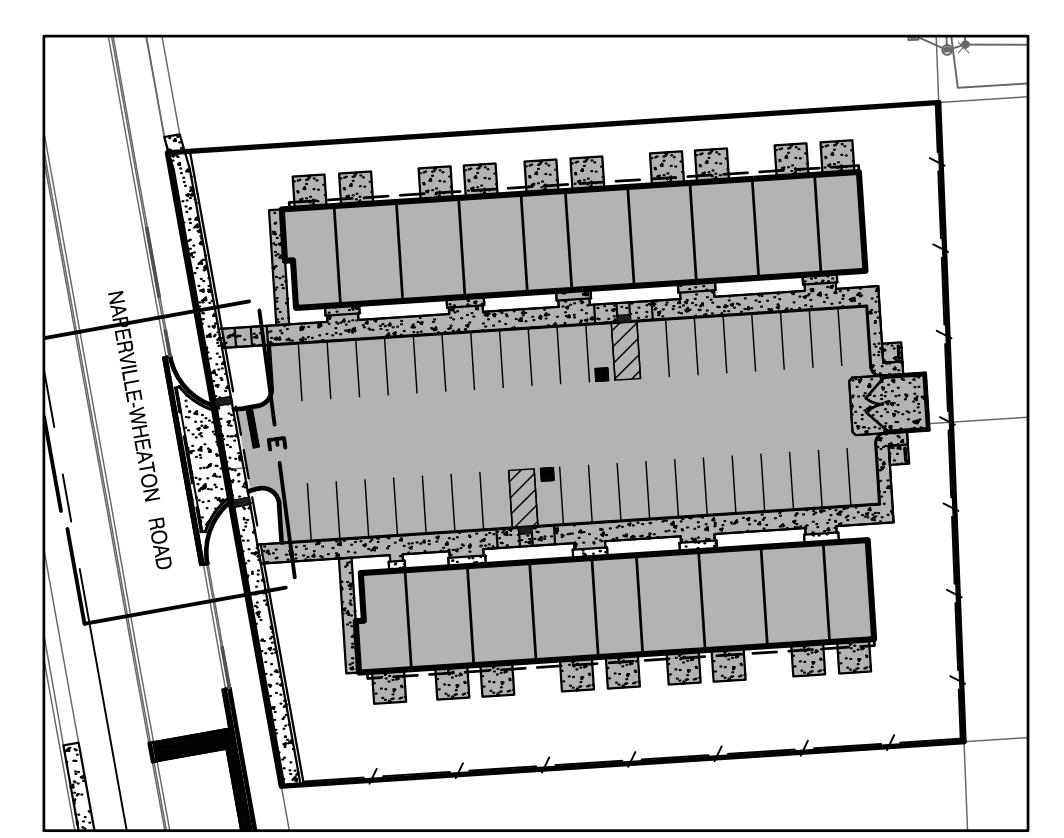
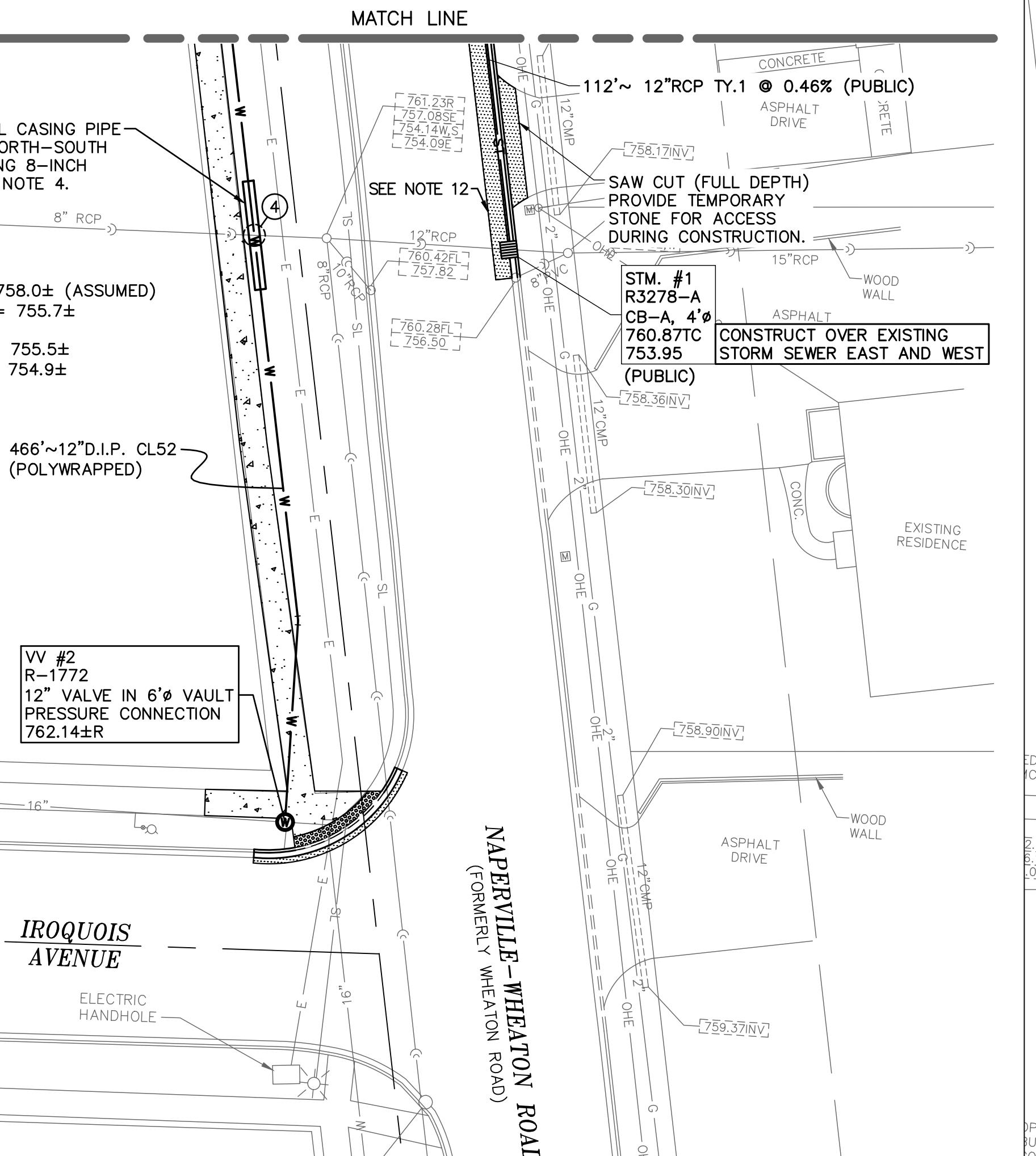
15. THE PROPOSED ELECTRIC FACILITIES ALIGNMENT TO SERVE THE PROPOSED DEVELOPMENT HAVE BEEN SHOWN AS DESIGNED BY DPU-ELECTRIC. BASED ON THE PROPOSED ALIGNMENT, DPU-ELECTRIC WOULD SUPPLY THE DEVELOPMENT WITH SINGLE-PHASE 120/240 VOLT POWER.

REFERENCE

1. EXISTING CONDITIONS ARE BASED UPON FIELD OBSERVATIONS MADE ON JUNE 7, 2018 BY ROAKE AND ASSOCIATES, INC.

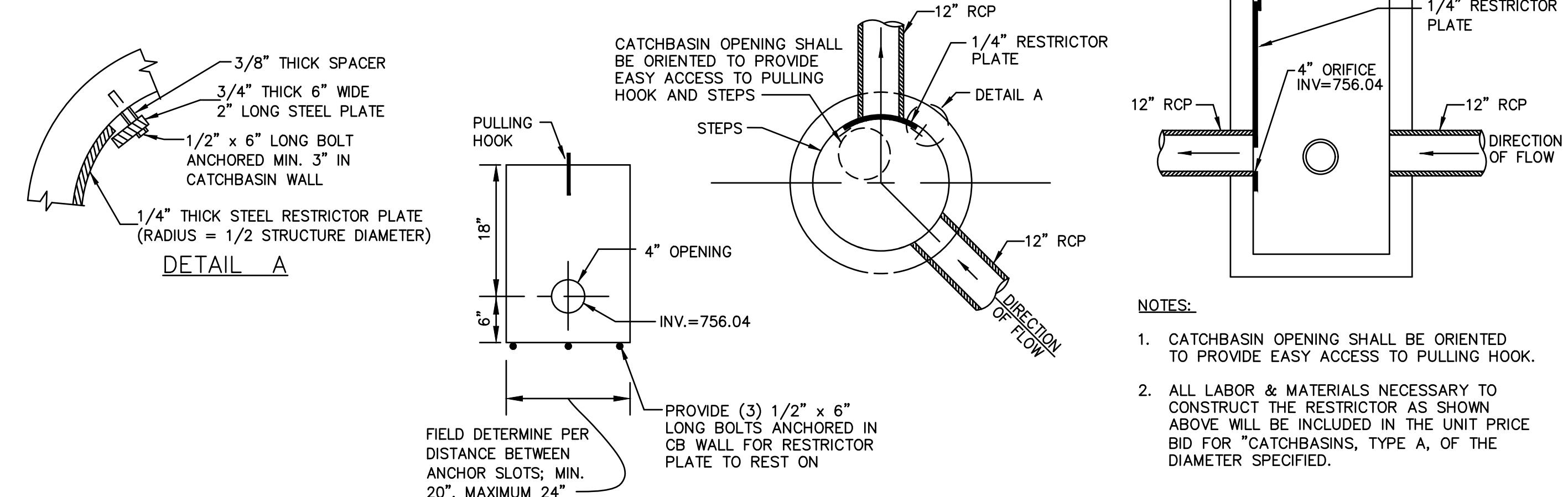
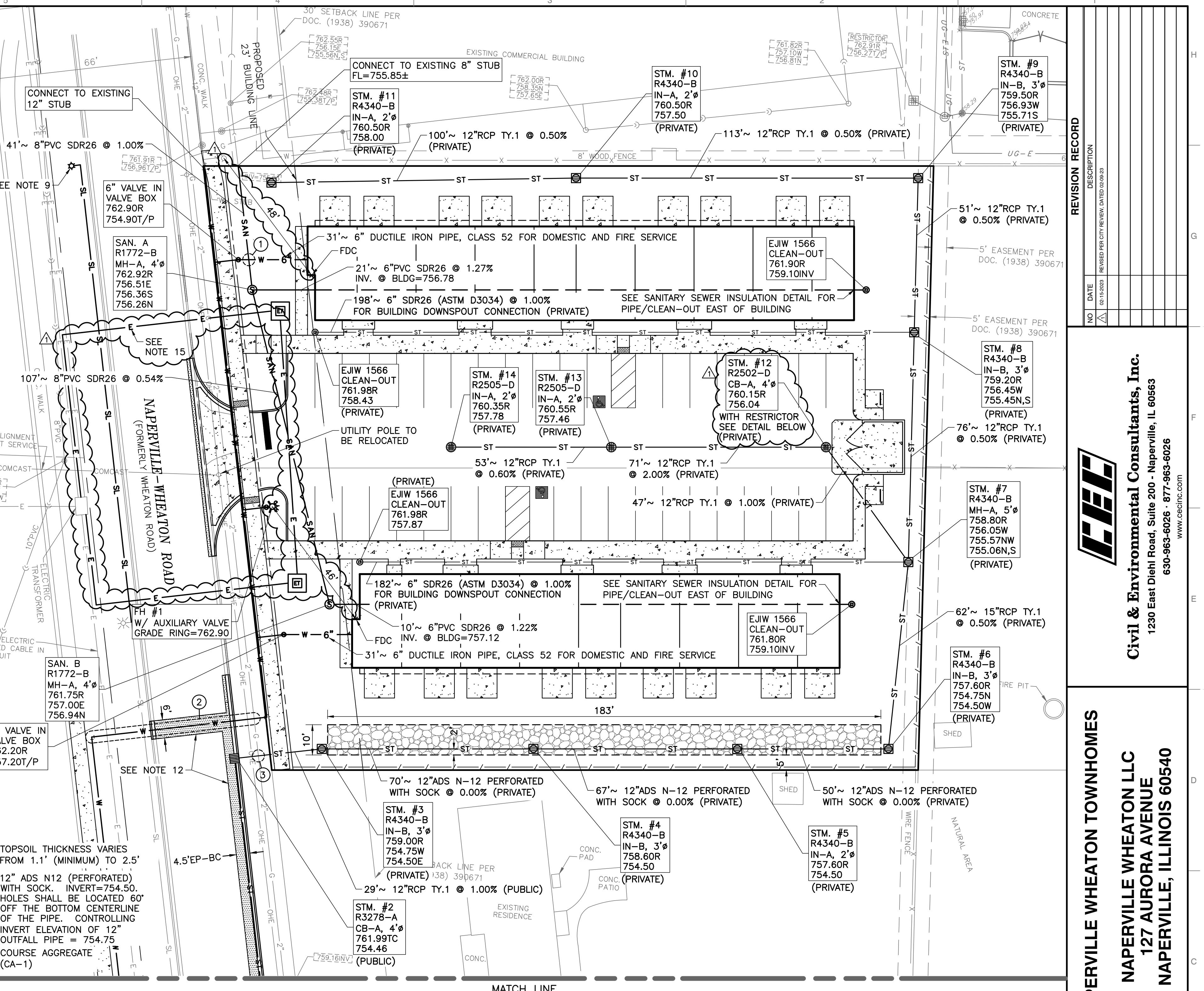
2. FIELD DATUM: ILLINOIS STATE PLANE NAVD83 (2011) NAVD88 (VRS).

3. UNDERGROUND UTILITY INFORMATION SHOWN HERON IS BASED UPON FIELD OBSERVATIONS, ATLAS MAPS PROVIDED BY THE CITY OF NAPERVILLE AND THOSE PUBLIC UTILITY COMPANIES OPERATING UNDER FRANCHISE OR CONTRACT WITH THE CITY OF NAPERVILLE.



PERVIOUS/IMPERVIOUS CALCULATIONS		
	IMPERVIOUS AREA	PERVIOUS AREA
EXISTING	6,856 S.F.	38,634 S.F.
PROPOSED	28,130 S.F.	17,360 S.F.
DIFFERENCE	21,274 S.F.	45,490 S.F.

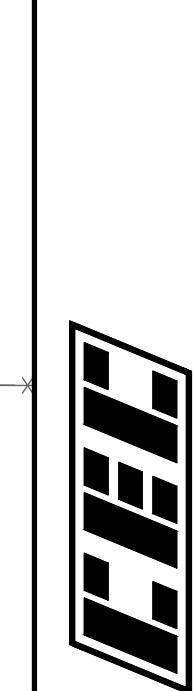
28,130 S.F. x 1.25 IN. x (1FT/12IN.) = 2,930 CU.FT. OF RUNOFF
2,930 CU.FT. x (1 CU.FT. OF STONE/0.36 VOID SPACE) = 8,139 CU.FT. OF STONE
ASSUME 10 FT. TRENCH WIDTH AND 183' LENGTH
8,139/(10 x 183) = 4.5 FT DEPTH
THE NET NEW IMPERVIOUS AREA IS GREATER THAN 2,500 S.F., BUT LESS THAN 25,000 S.F. SO FORMALIZED DETENTION IS NOT REQUIRED.



RESTRICTOR PLATE DETAIL CATCHBASIN NO. 12

UTILITY PLAN

NAPERVILLE WHEATON LLC
127 AURORA AVENUE
NAPERVILLE, ILLINOIS 60540



Civil & Environmental Consultants, Inc.
1230 East Diehl Road, Suite 200 - Naperville, IL 60563
630-562-8026 • 877-363-6026
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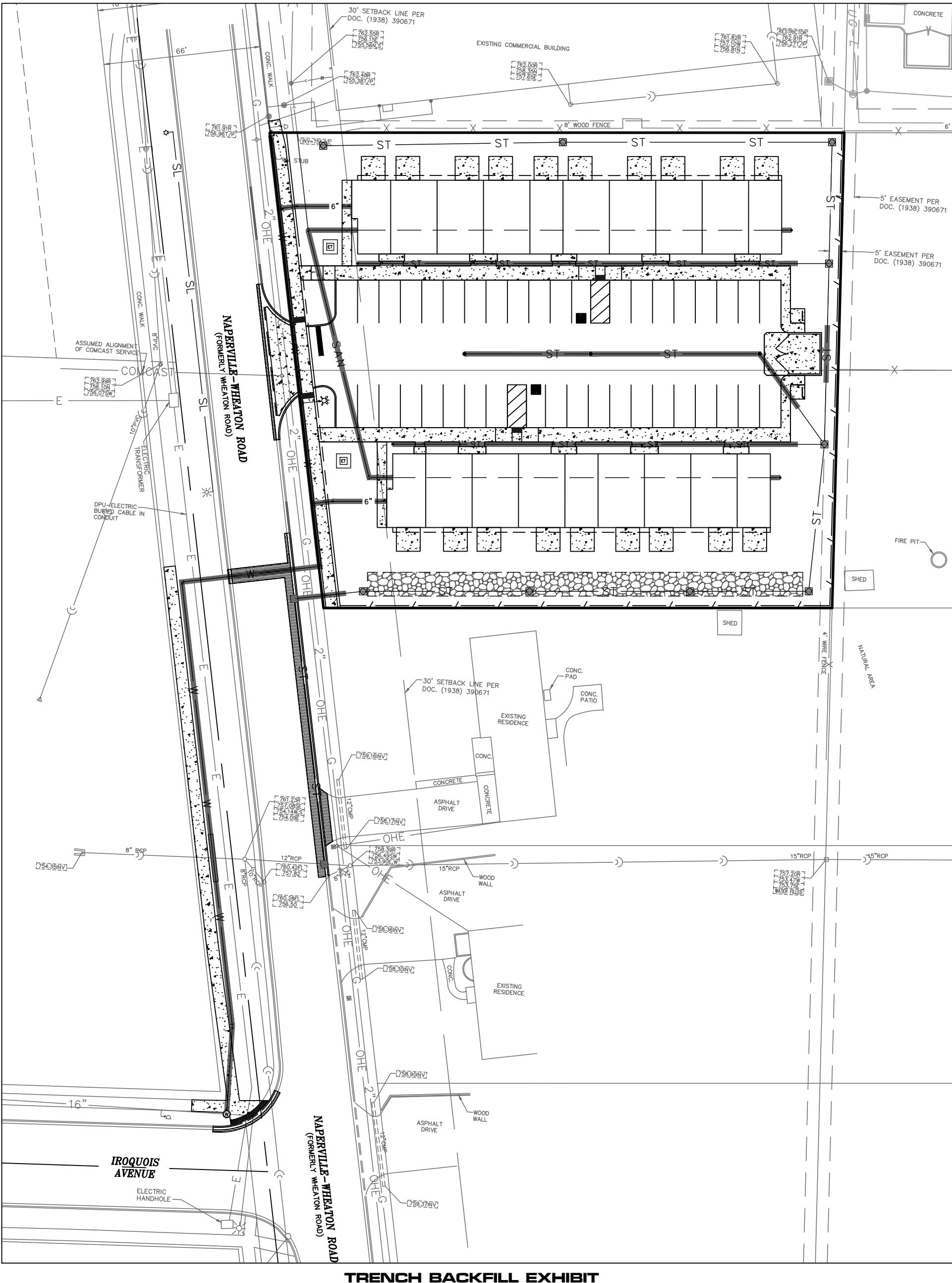
DRAWING NO: C500
SHEET 10 OF 17

REVISION RECORD	
NO. DATE	DESCRIPTION

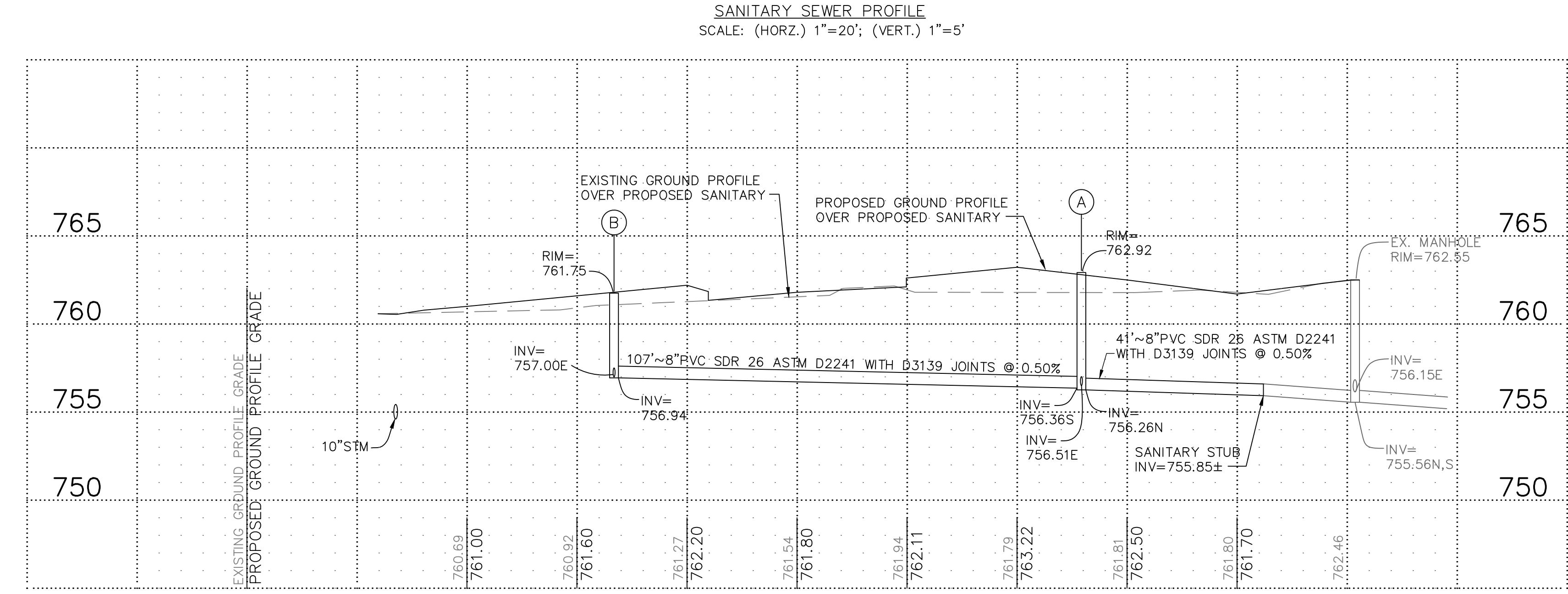
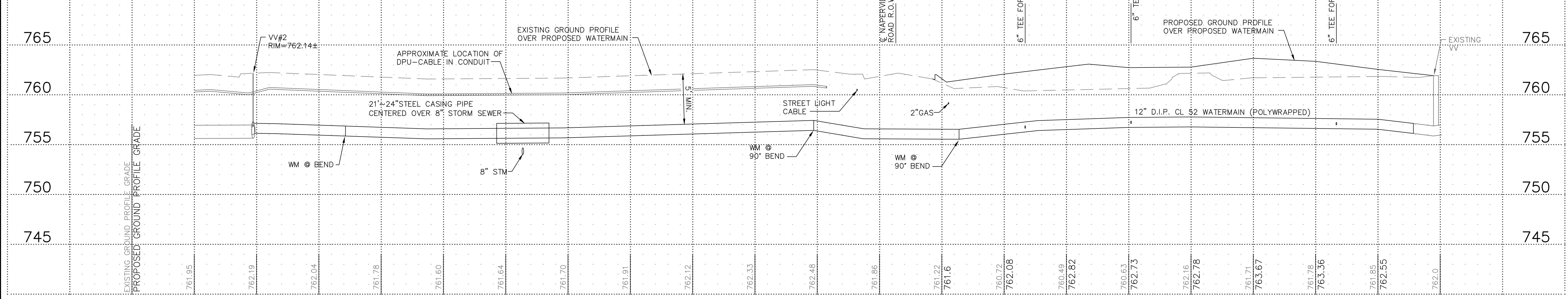
△ 02-15-2020 REvised per City Review dated 02-09-23



NORTH



TRENCH BACKFILL EXHIBIT



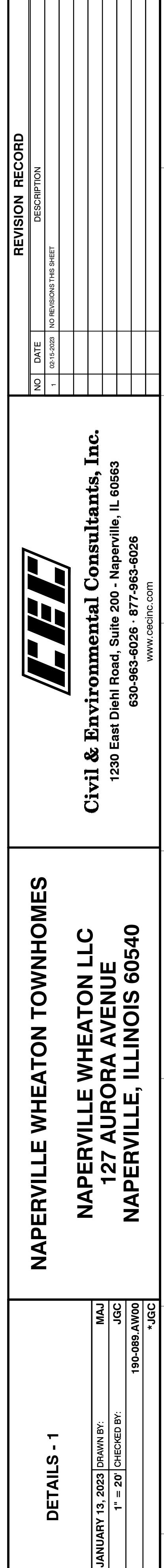
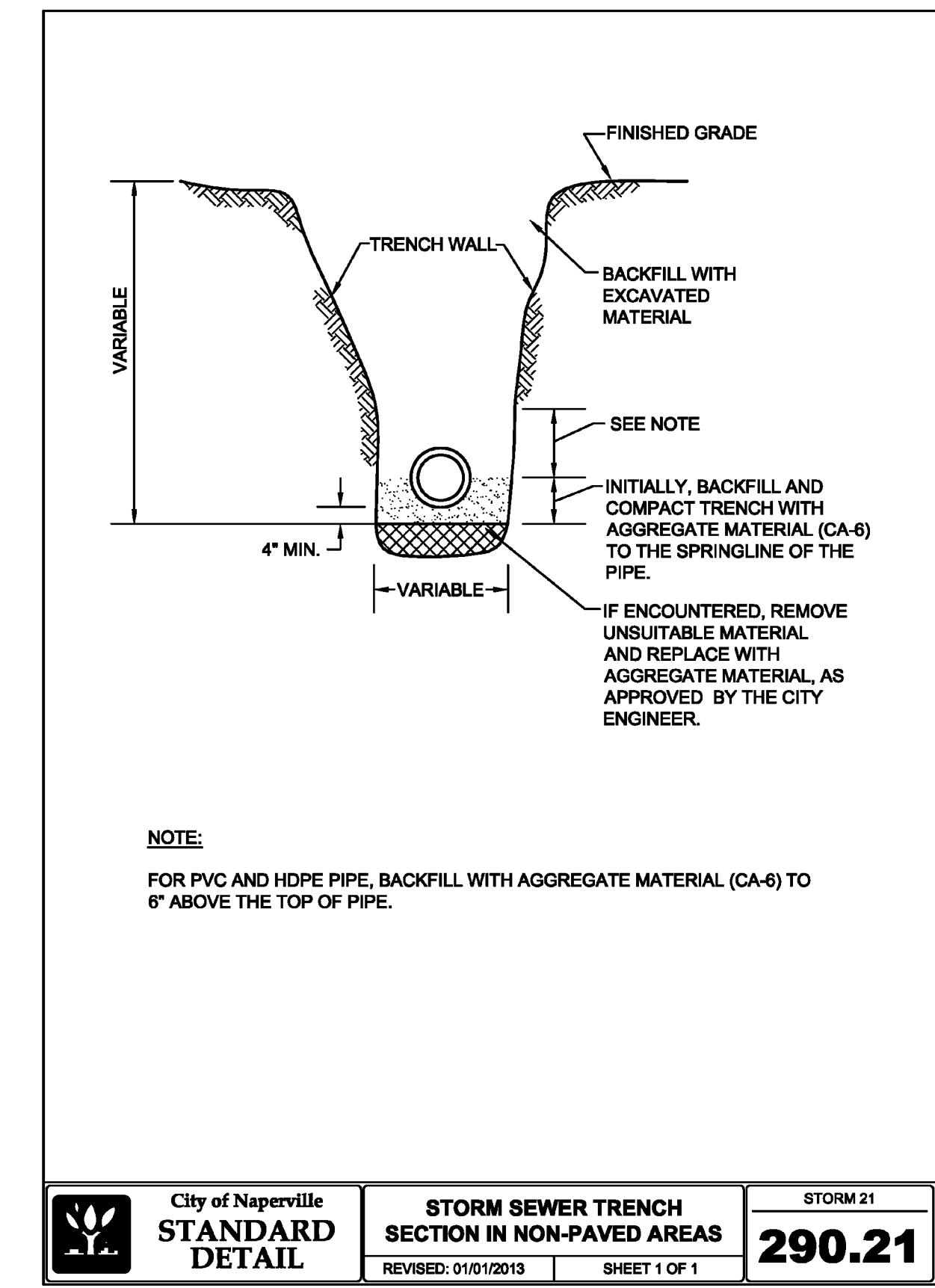
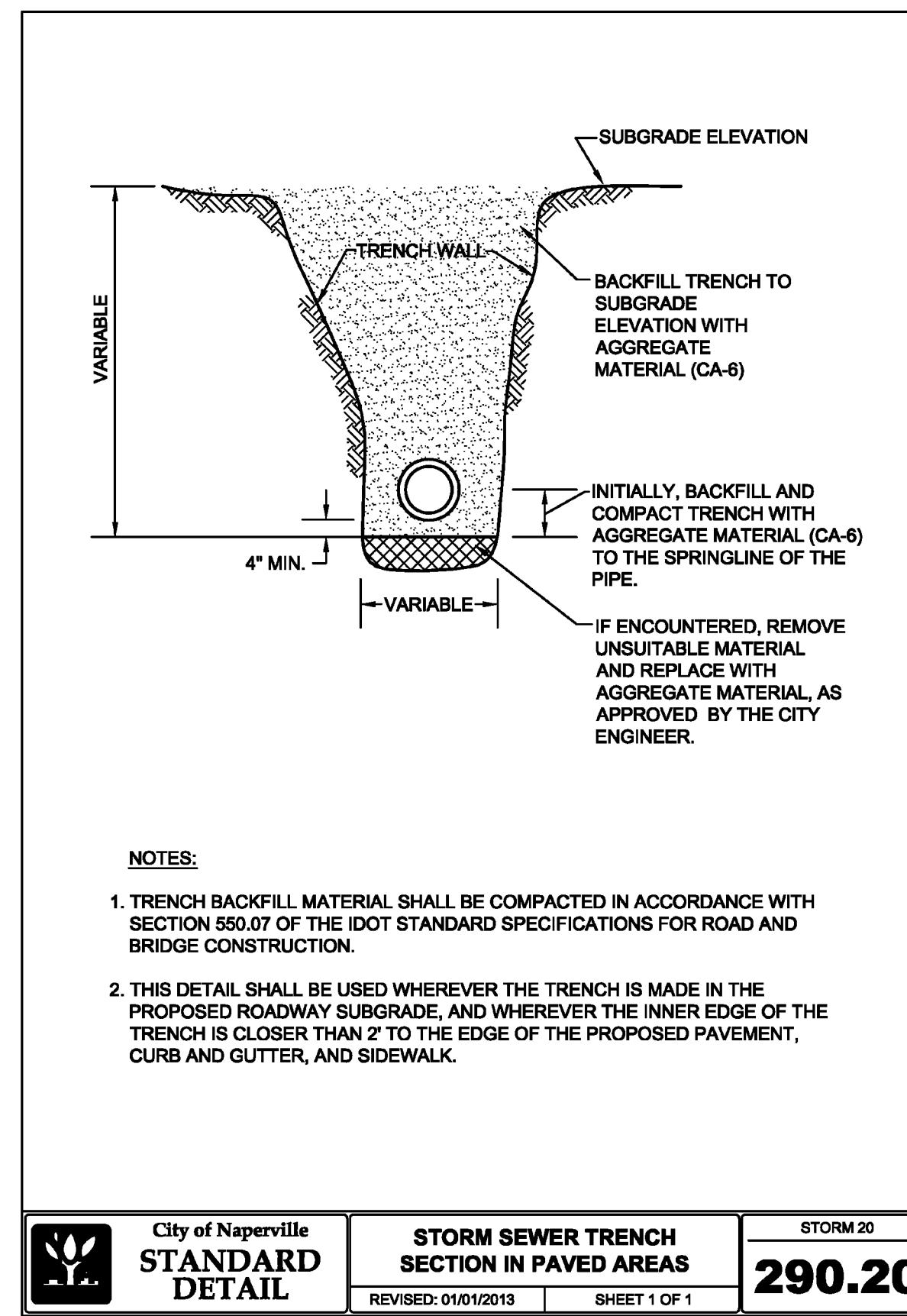
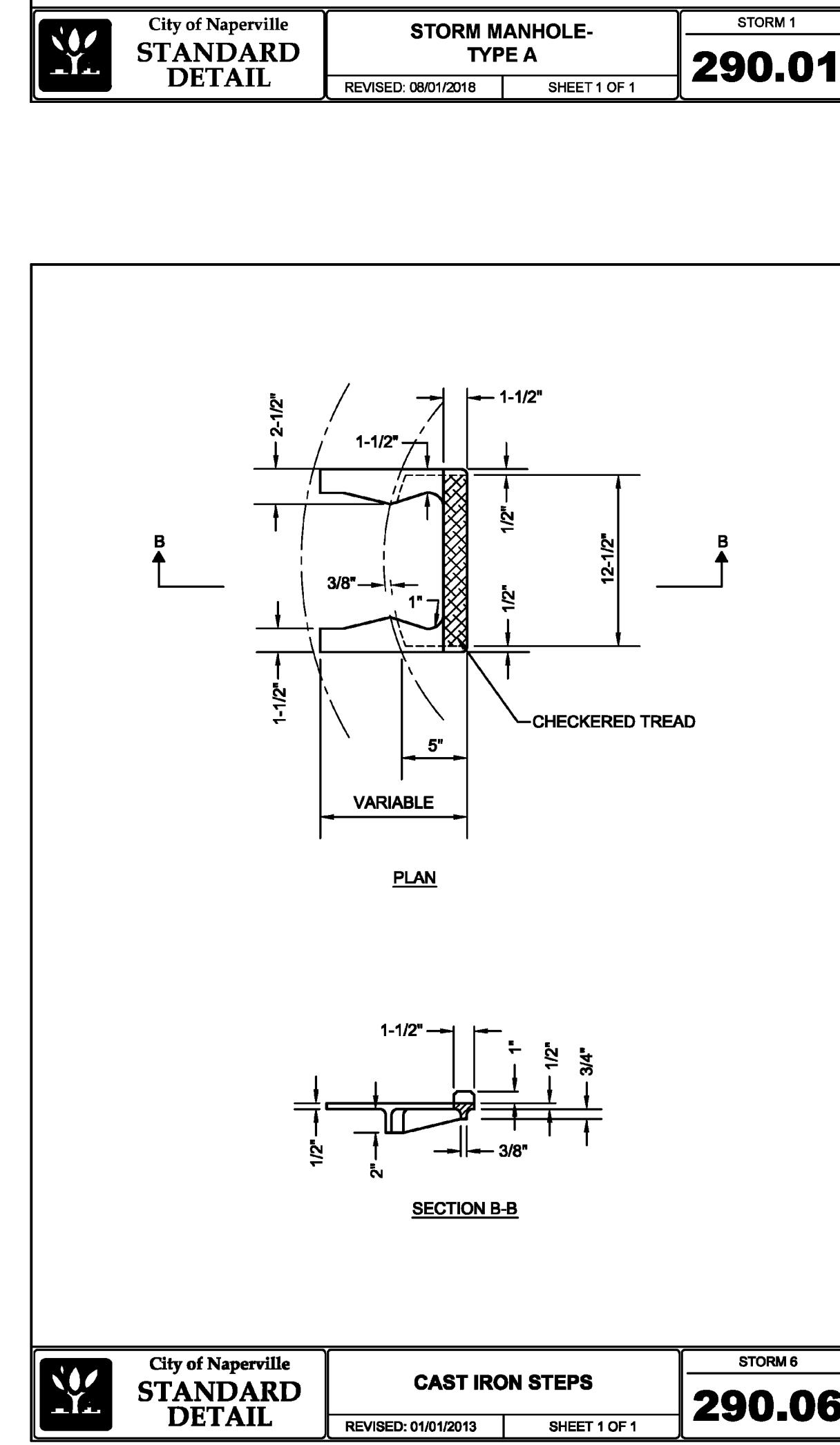
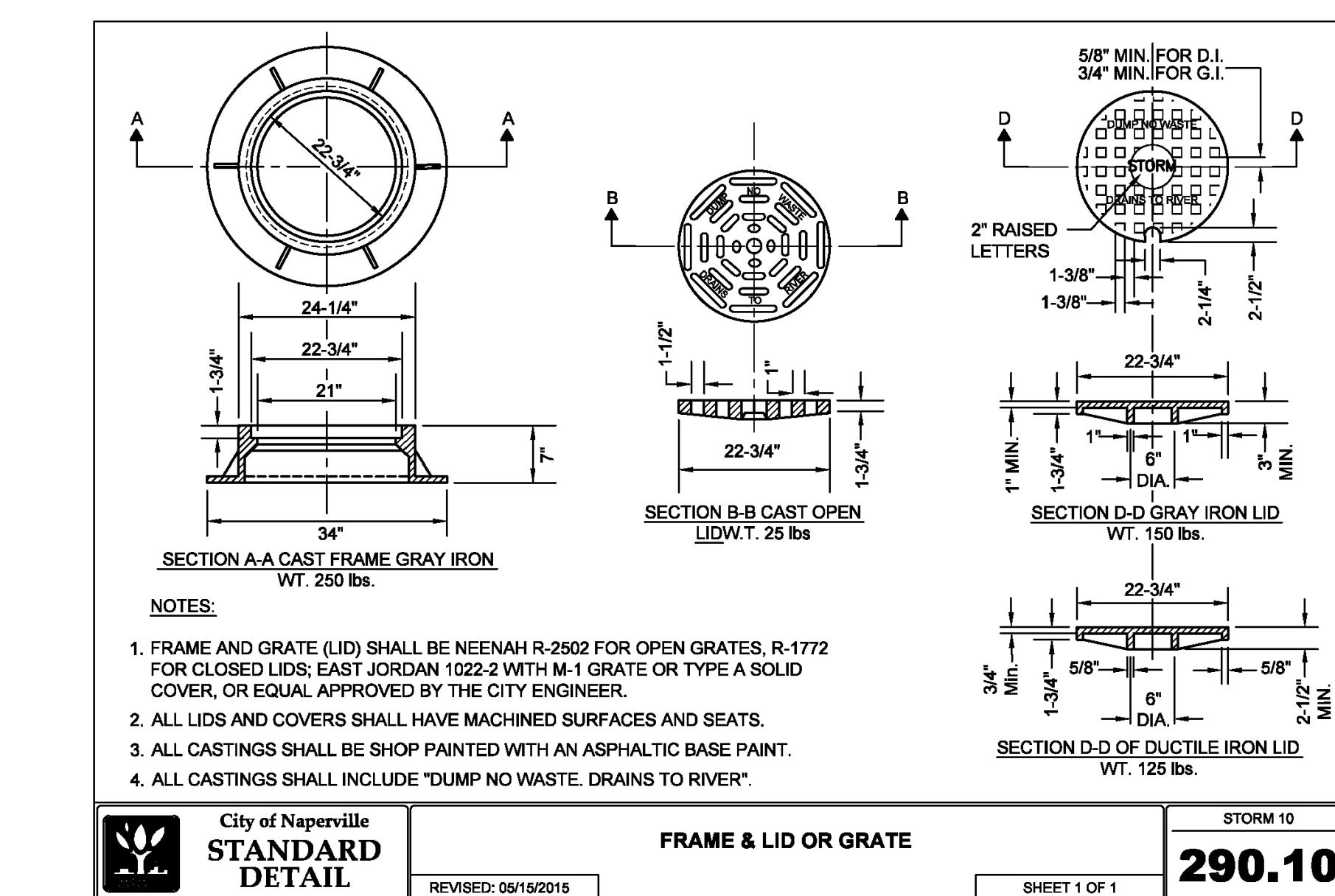
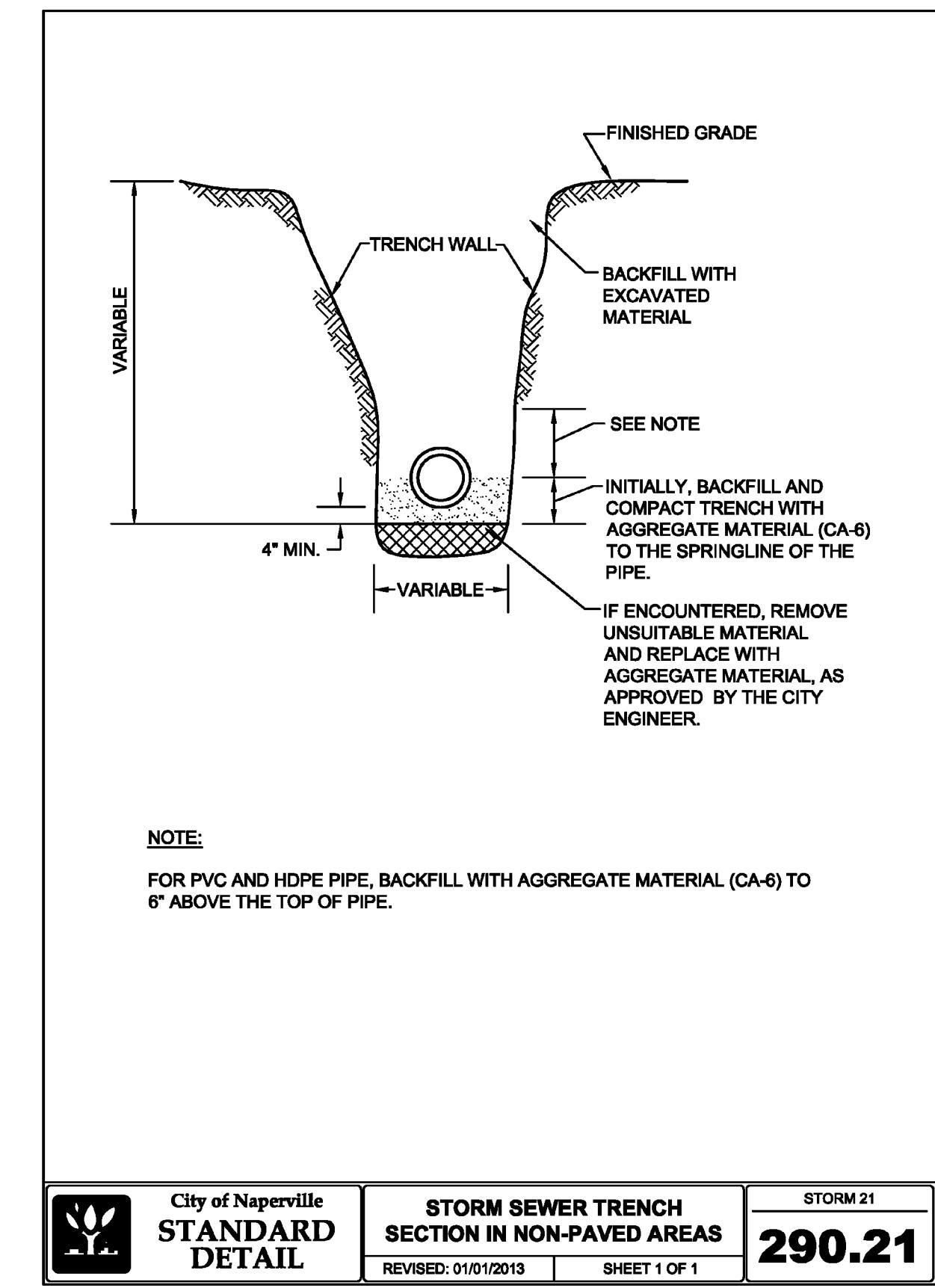
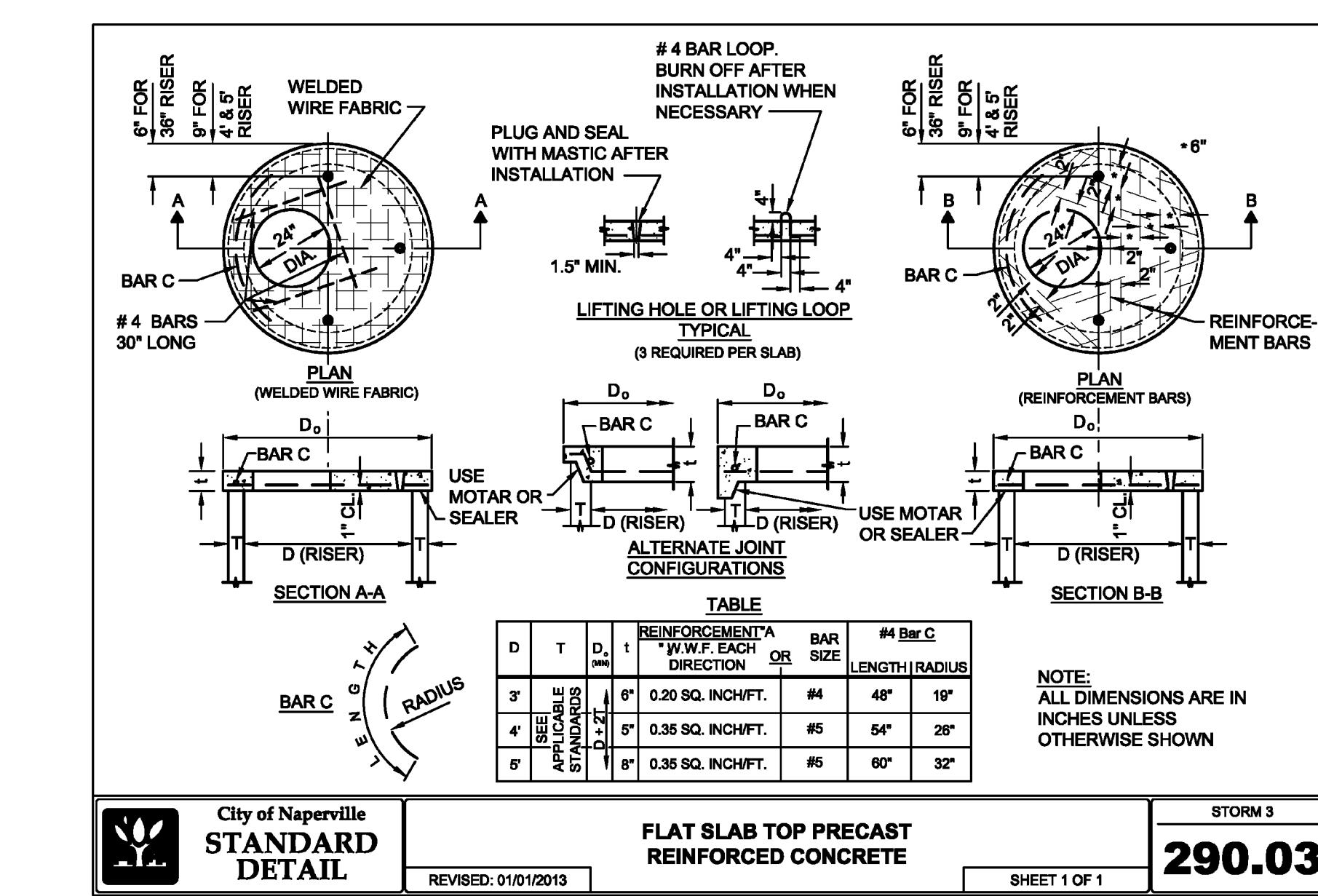
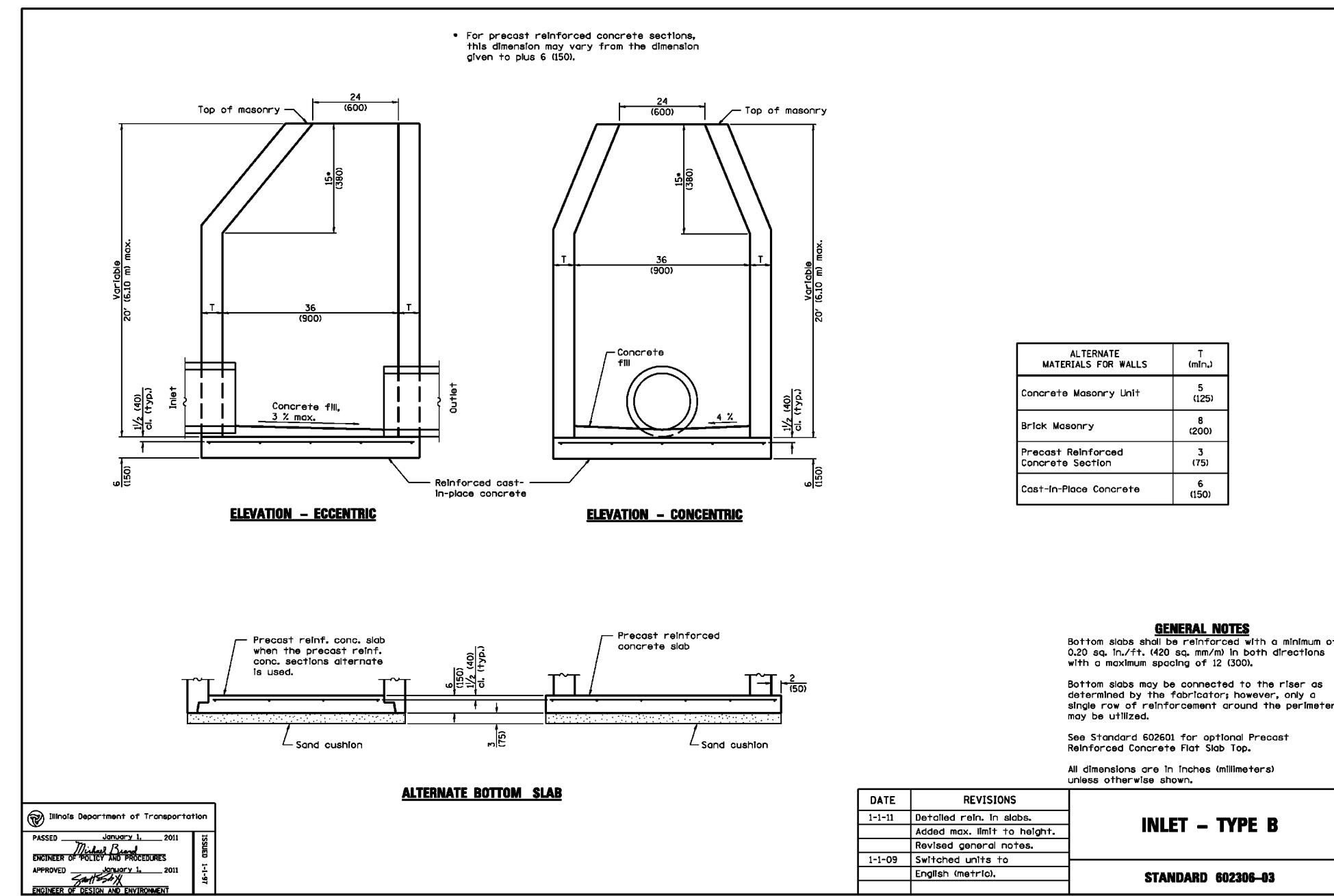
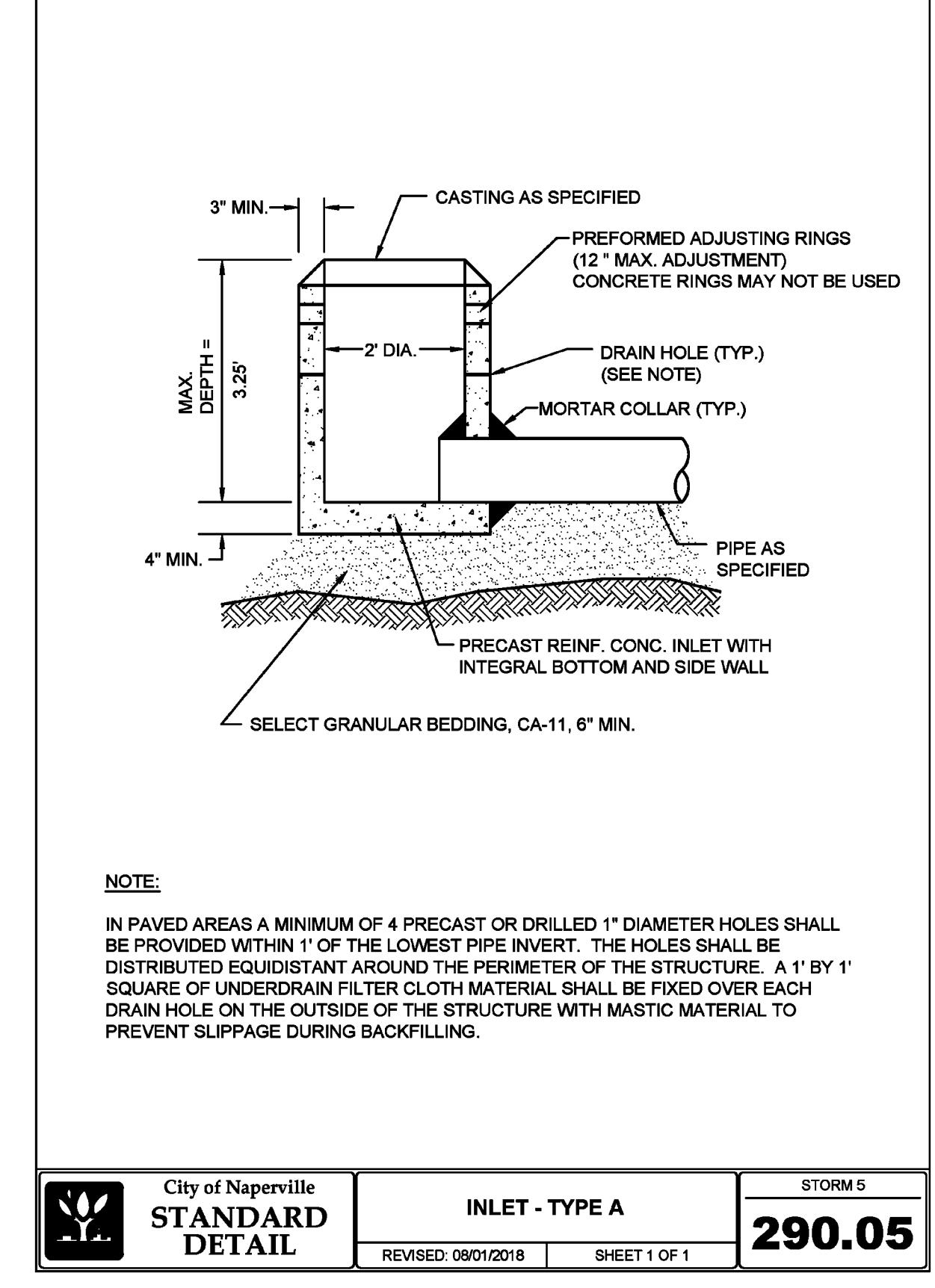
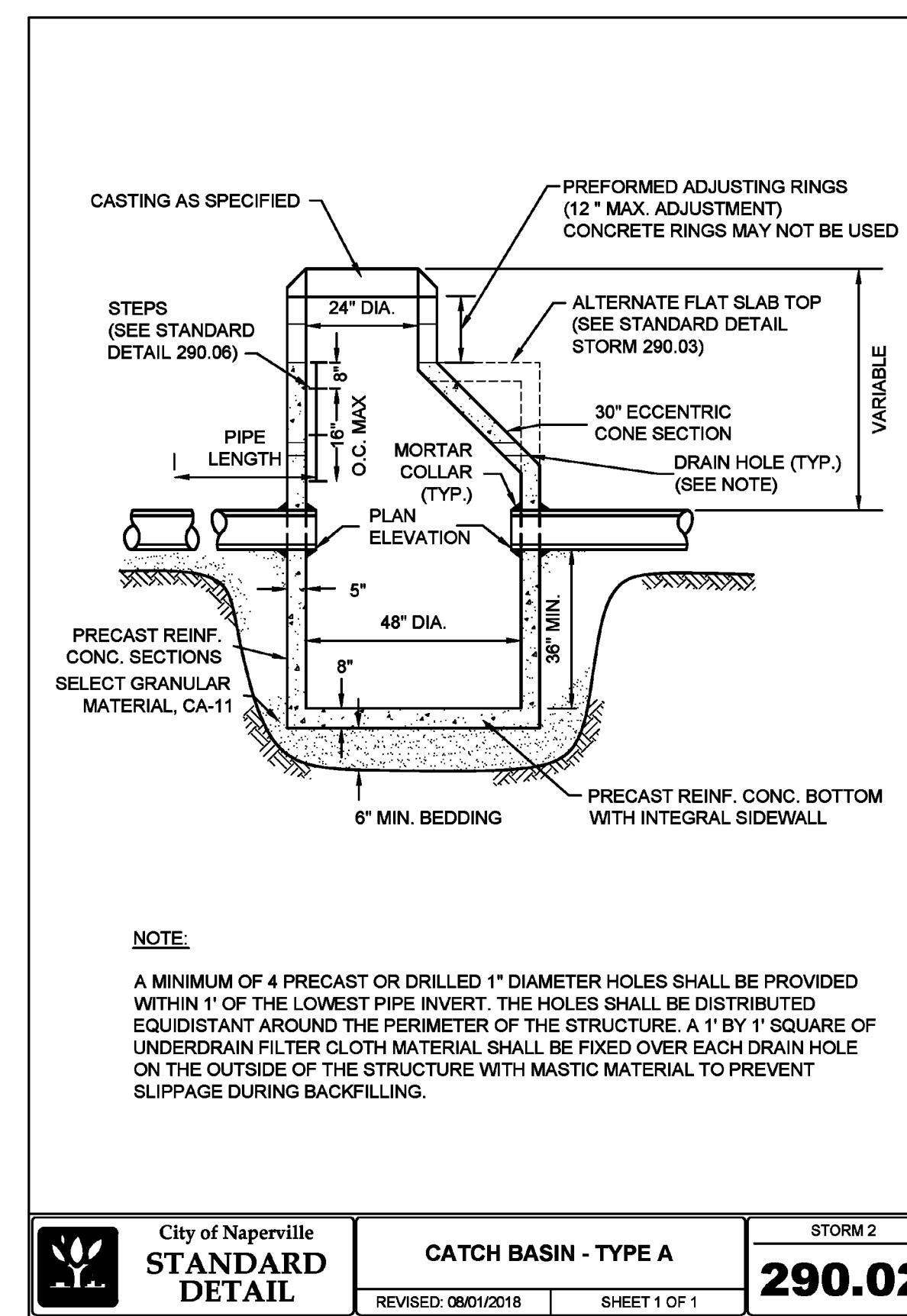
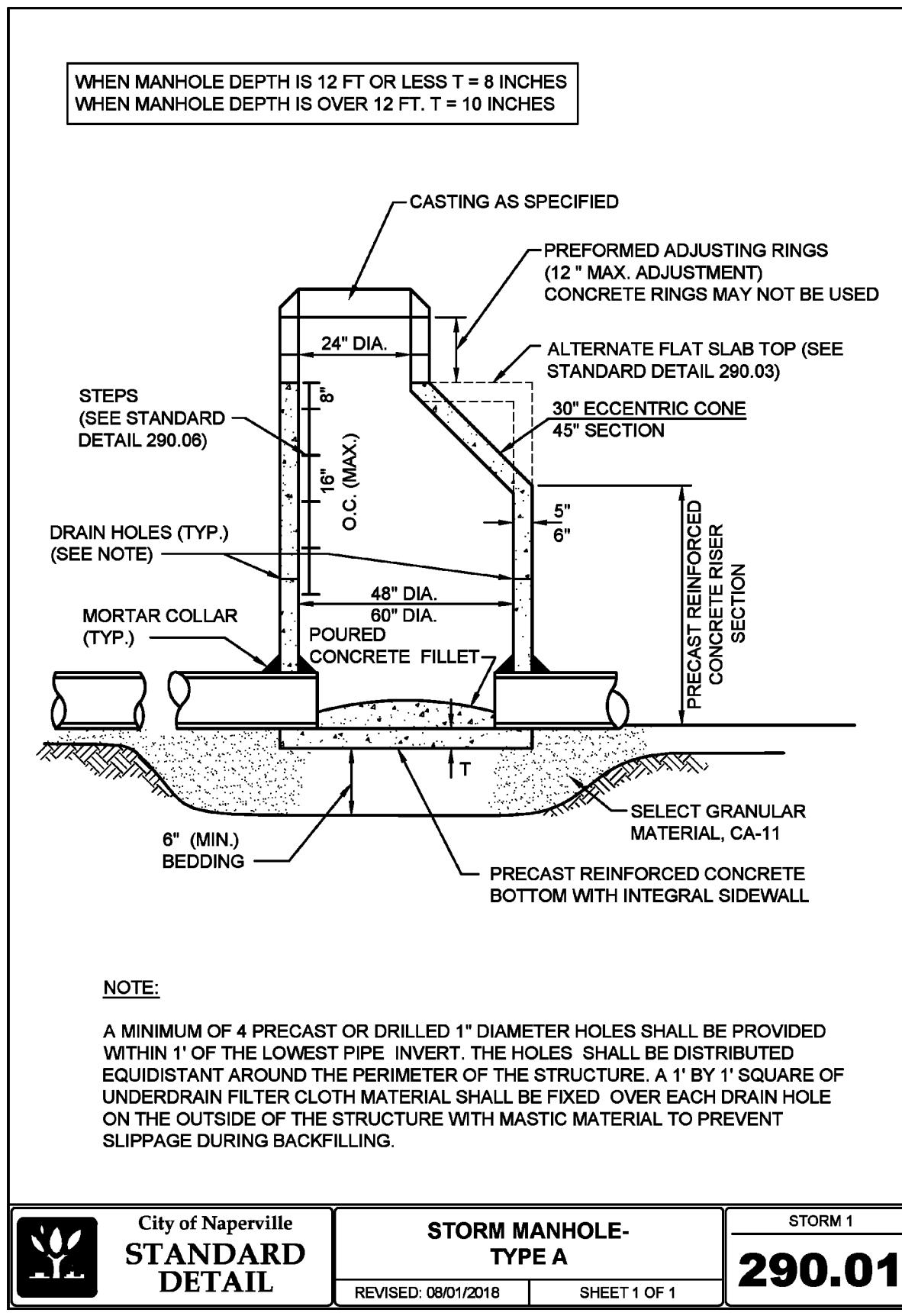
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APPROVED BY: A
PROJECT NO.: 190-086-AW00
DWG SCALE: *JGC
DRAWN: JANUARY 13, 2023
DRAWN BY: MAJ
CHECKED BY: AS SHOWN
CHECKED BY: JGC

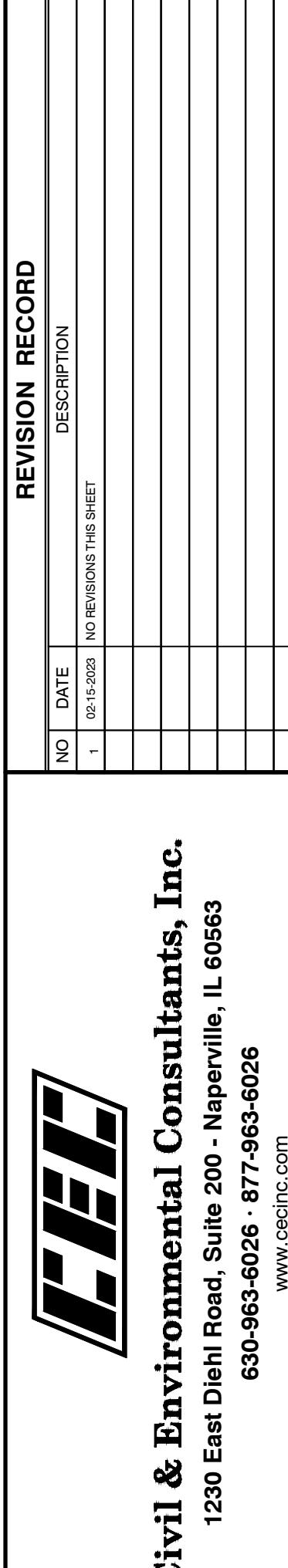
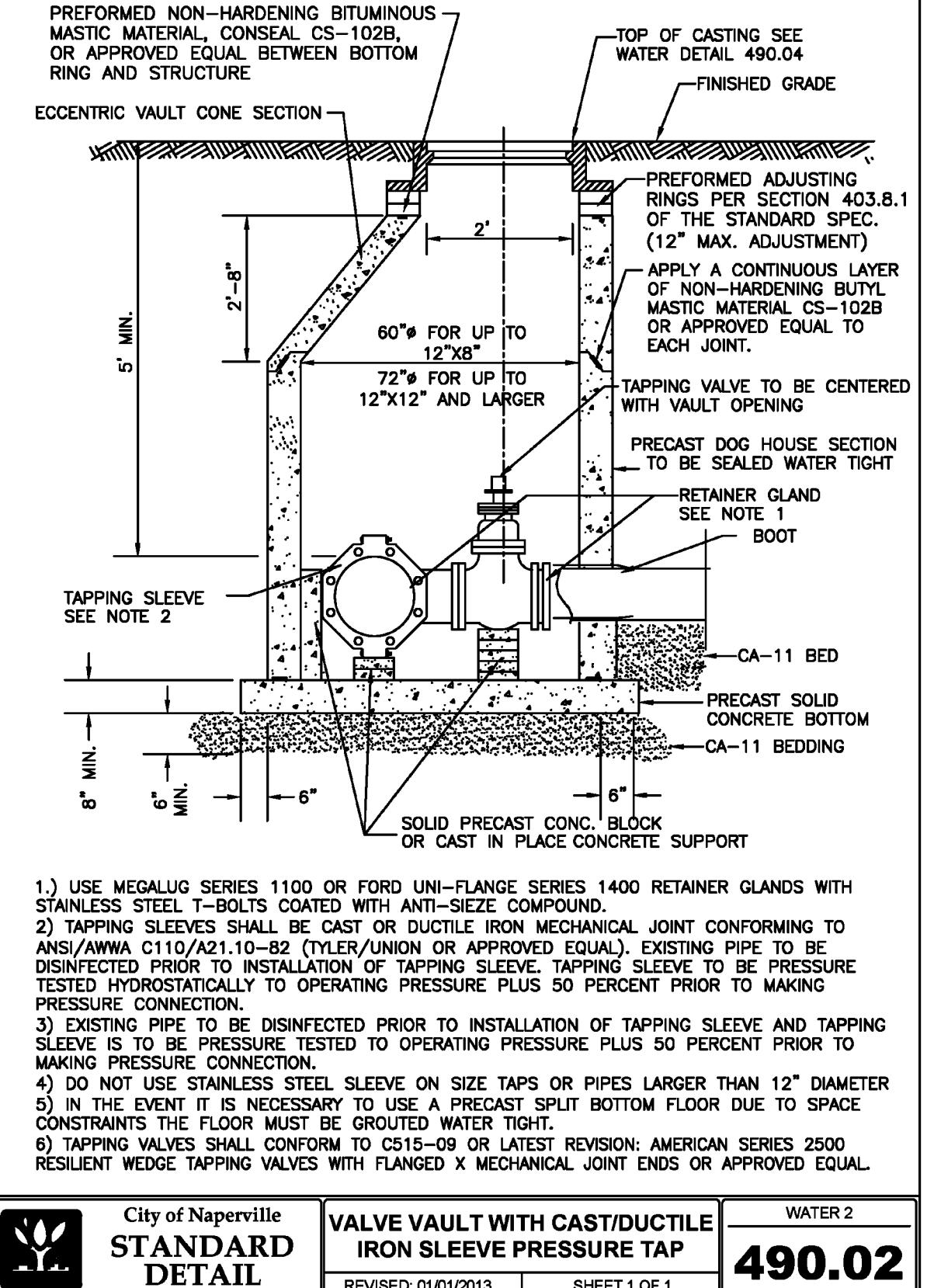
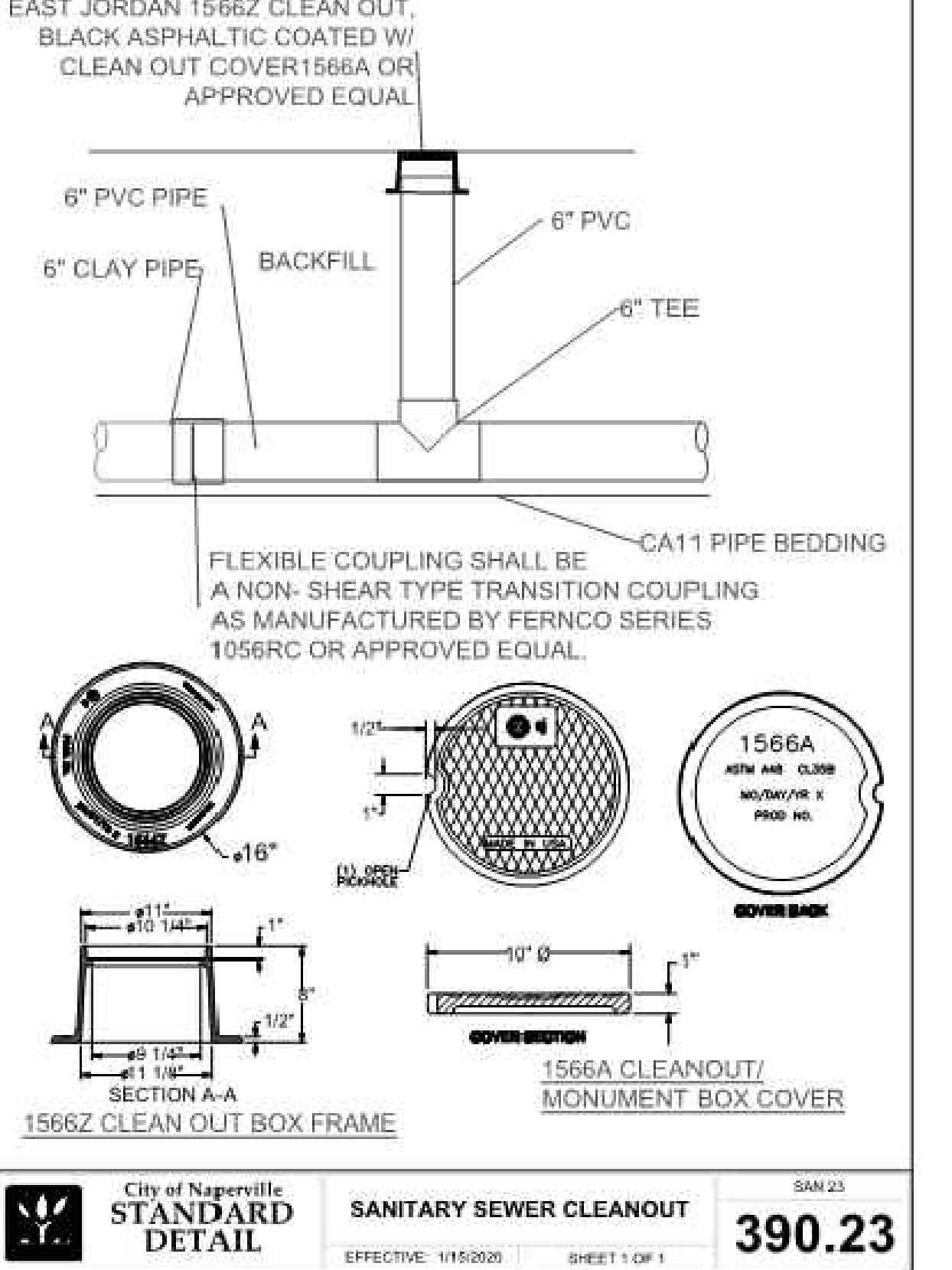
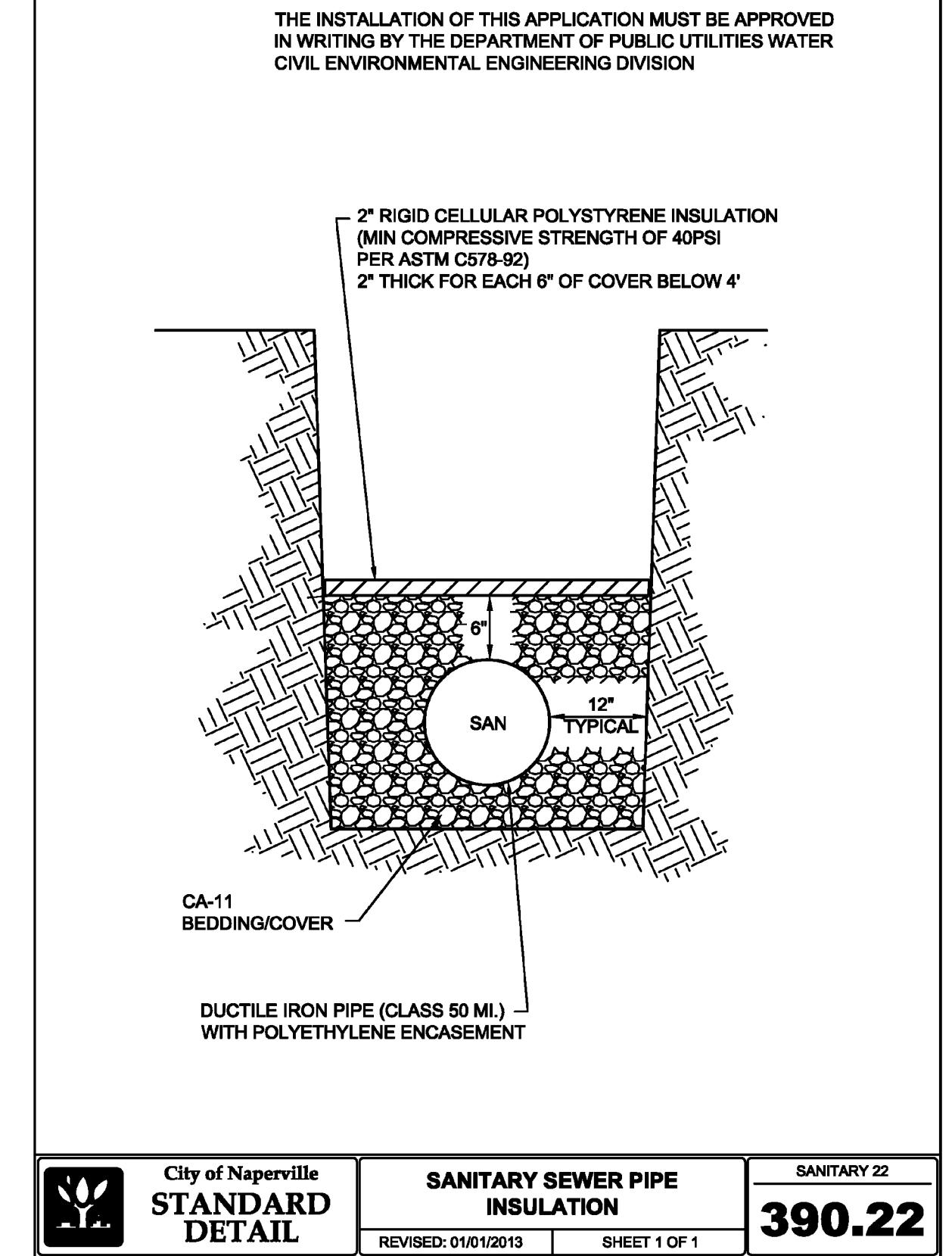
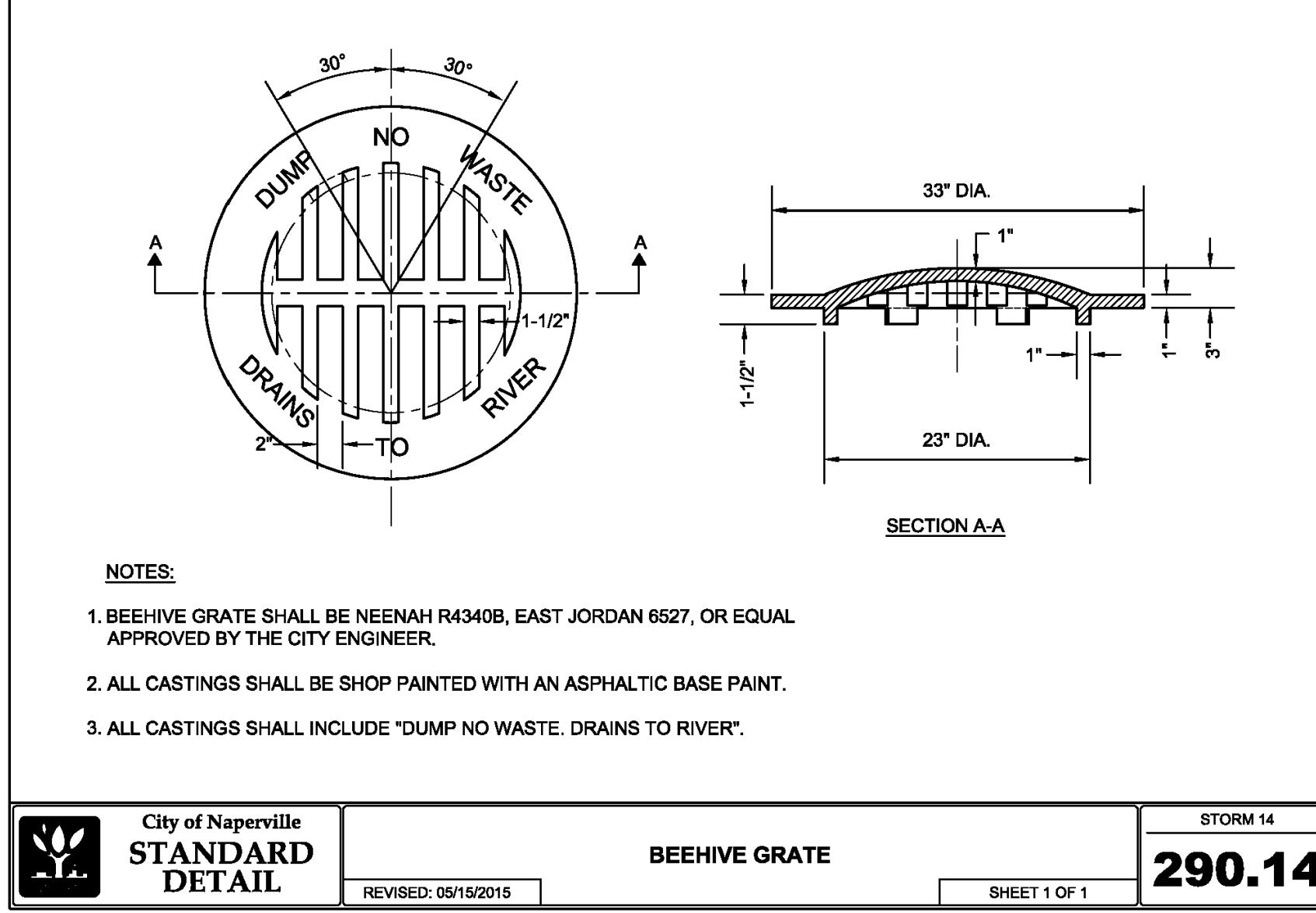
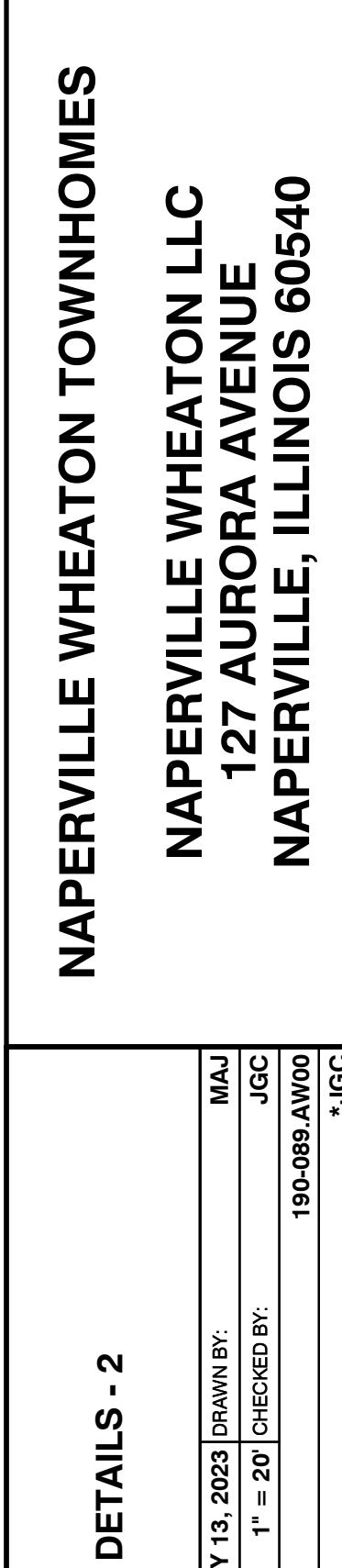
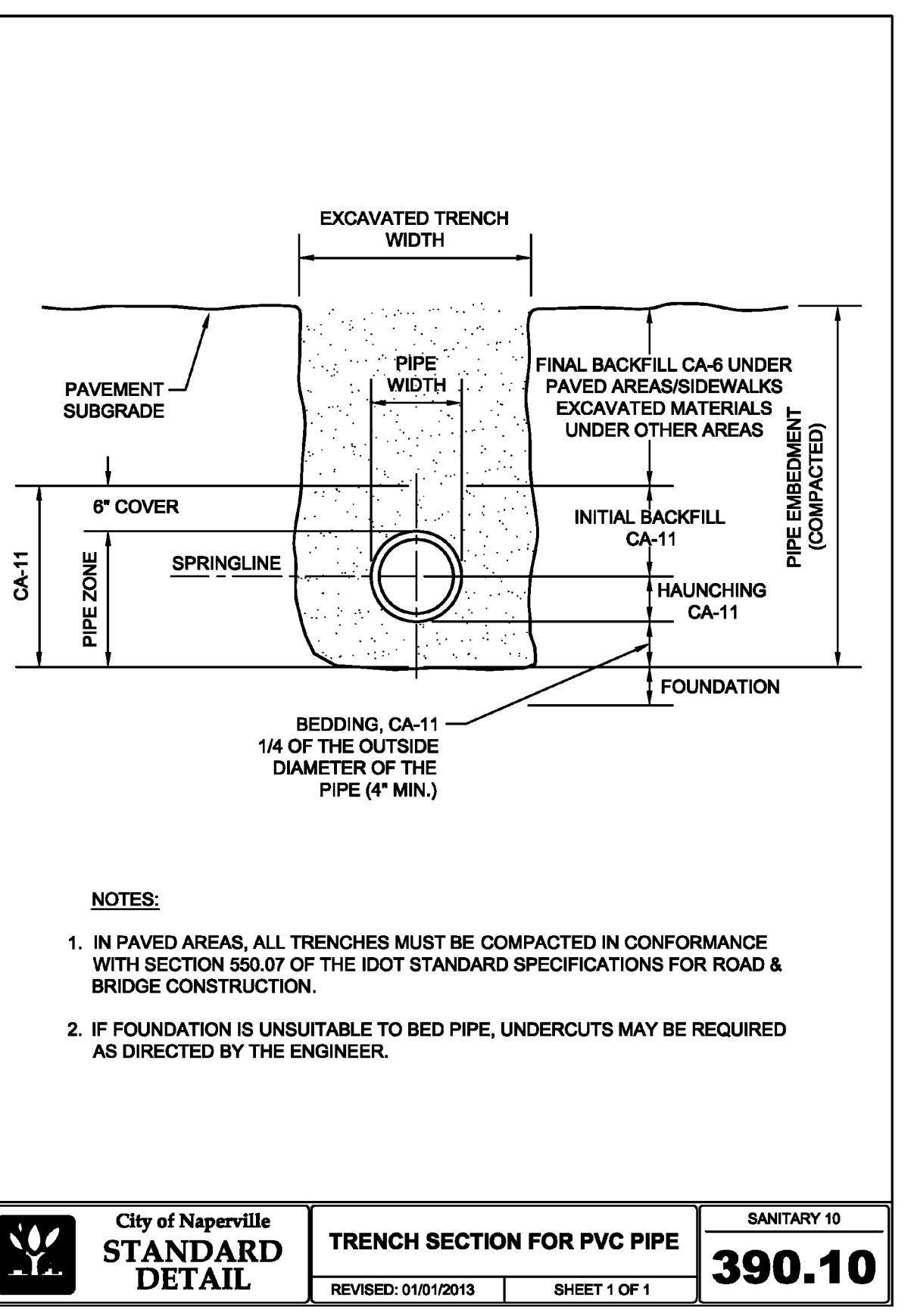
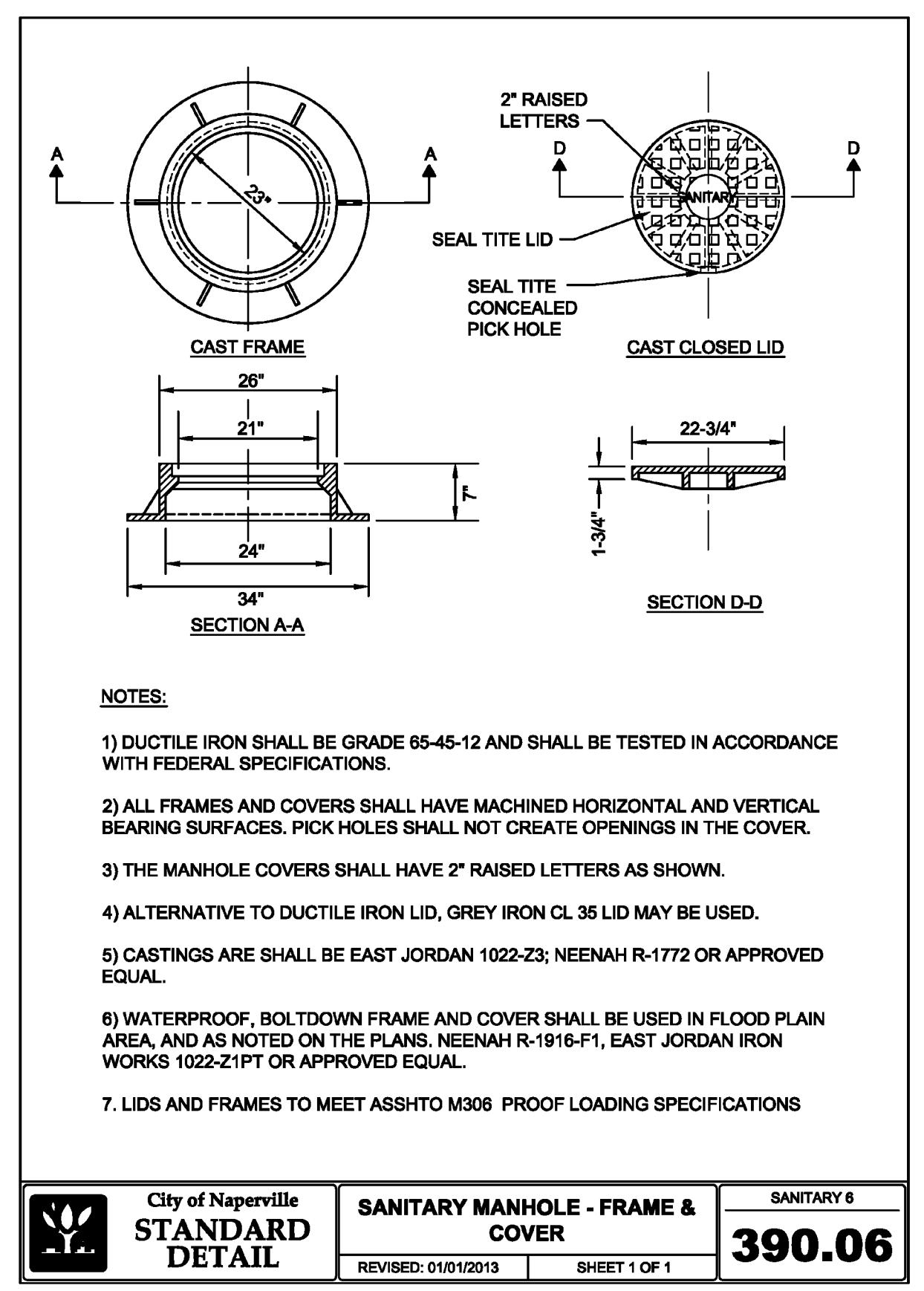
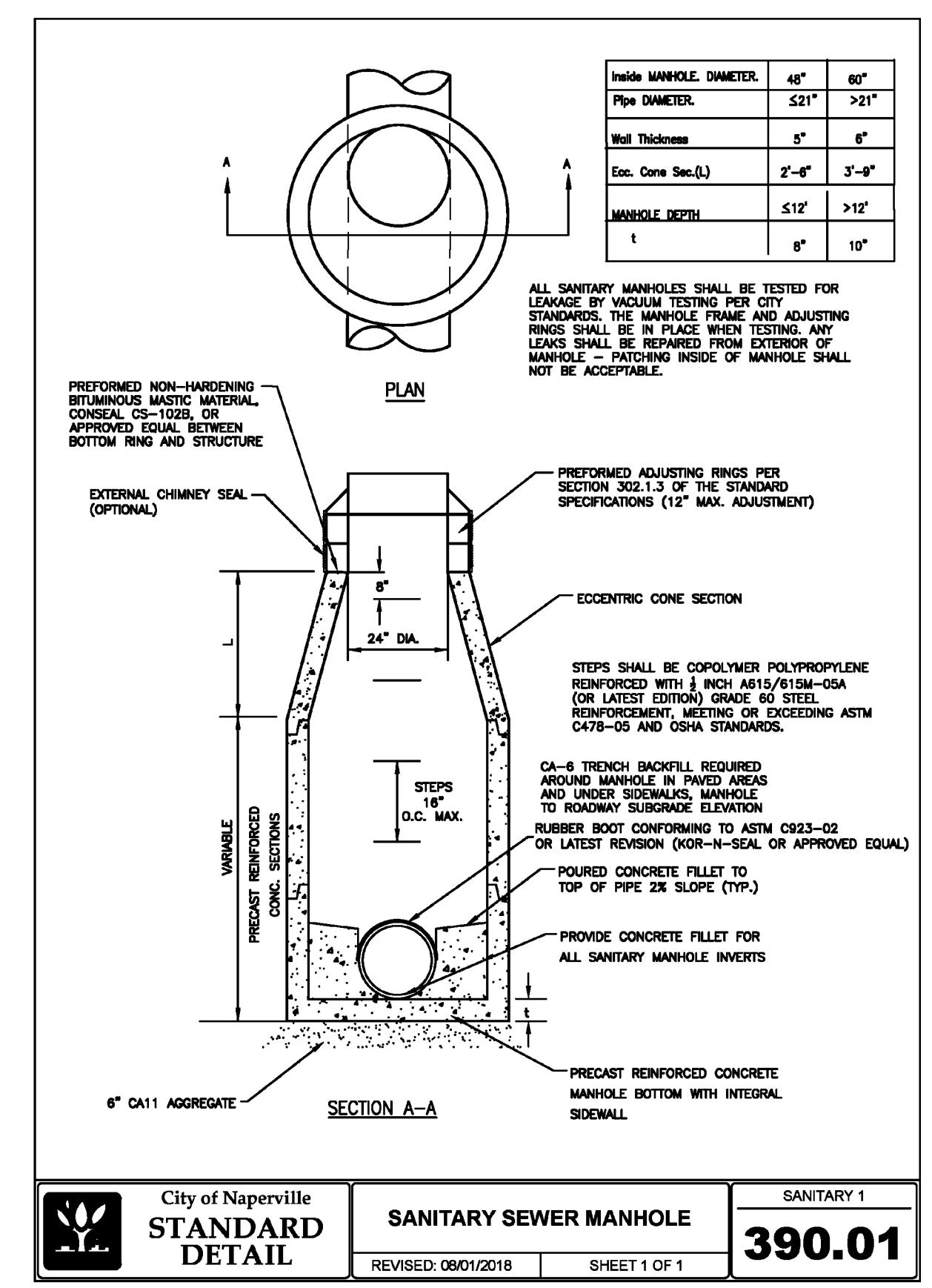
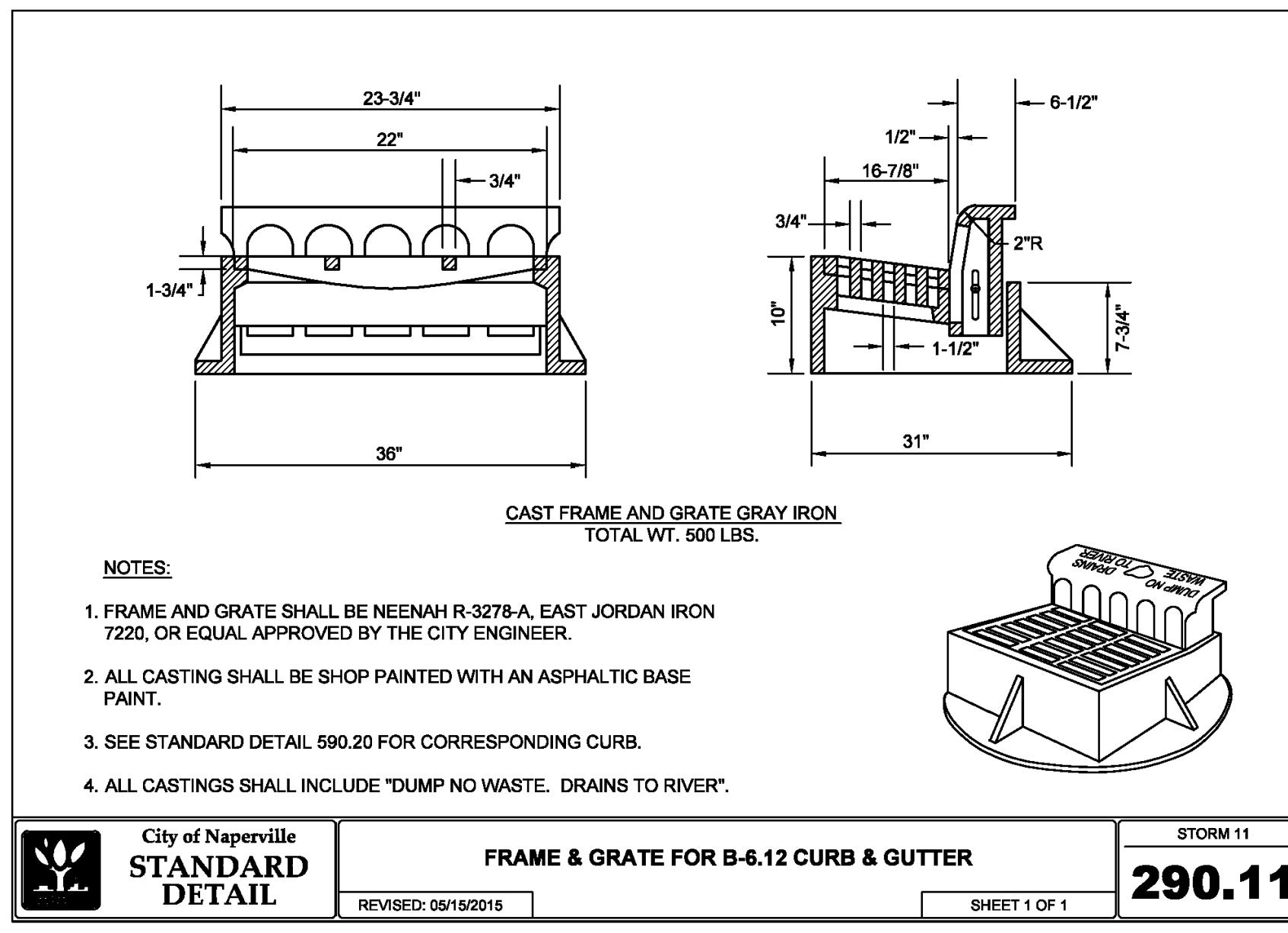
NAPERVILLE WHEATON TOWNHOMES
127 AURORA AVENUE
NAPERVILLE, ILLINOIS 60540

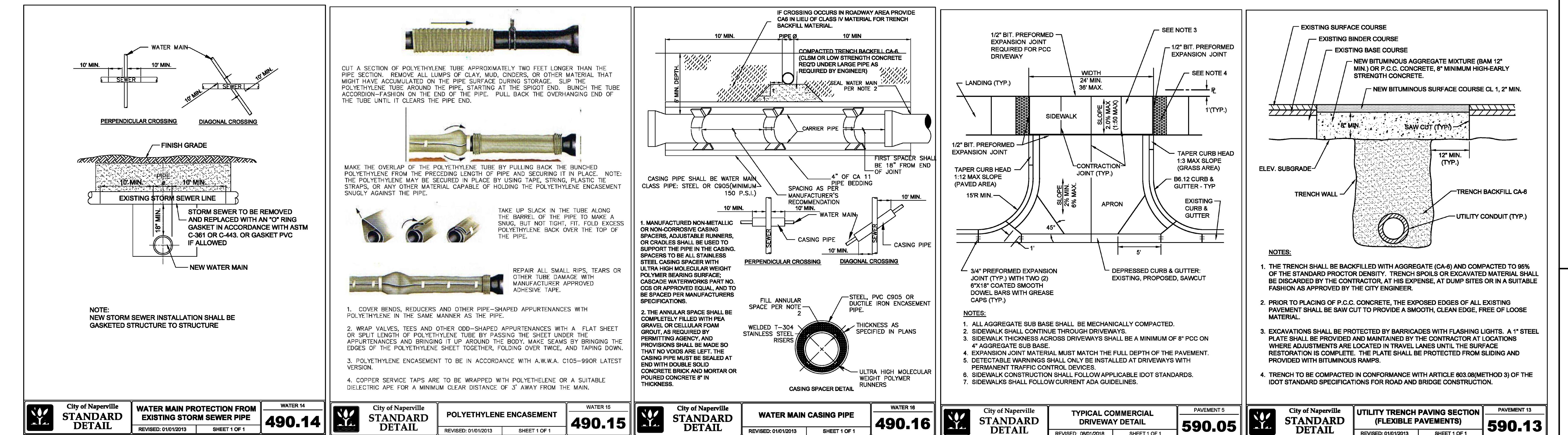
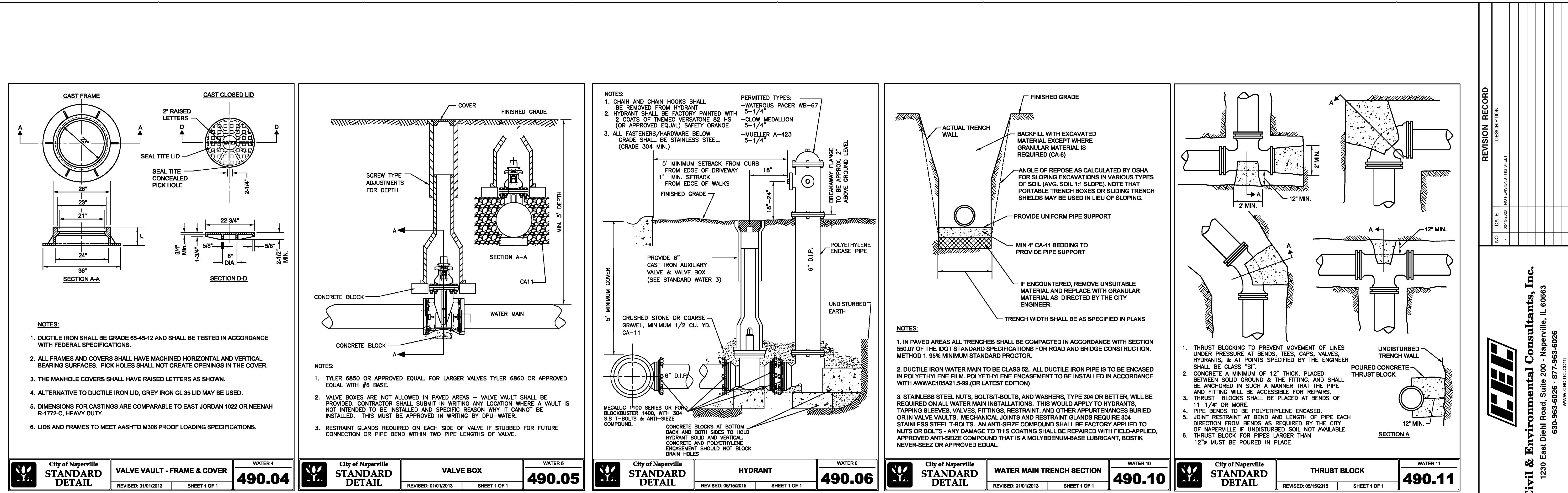


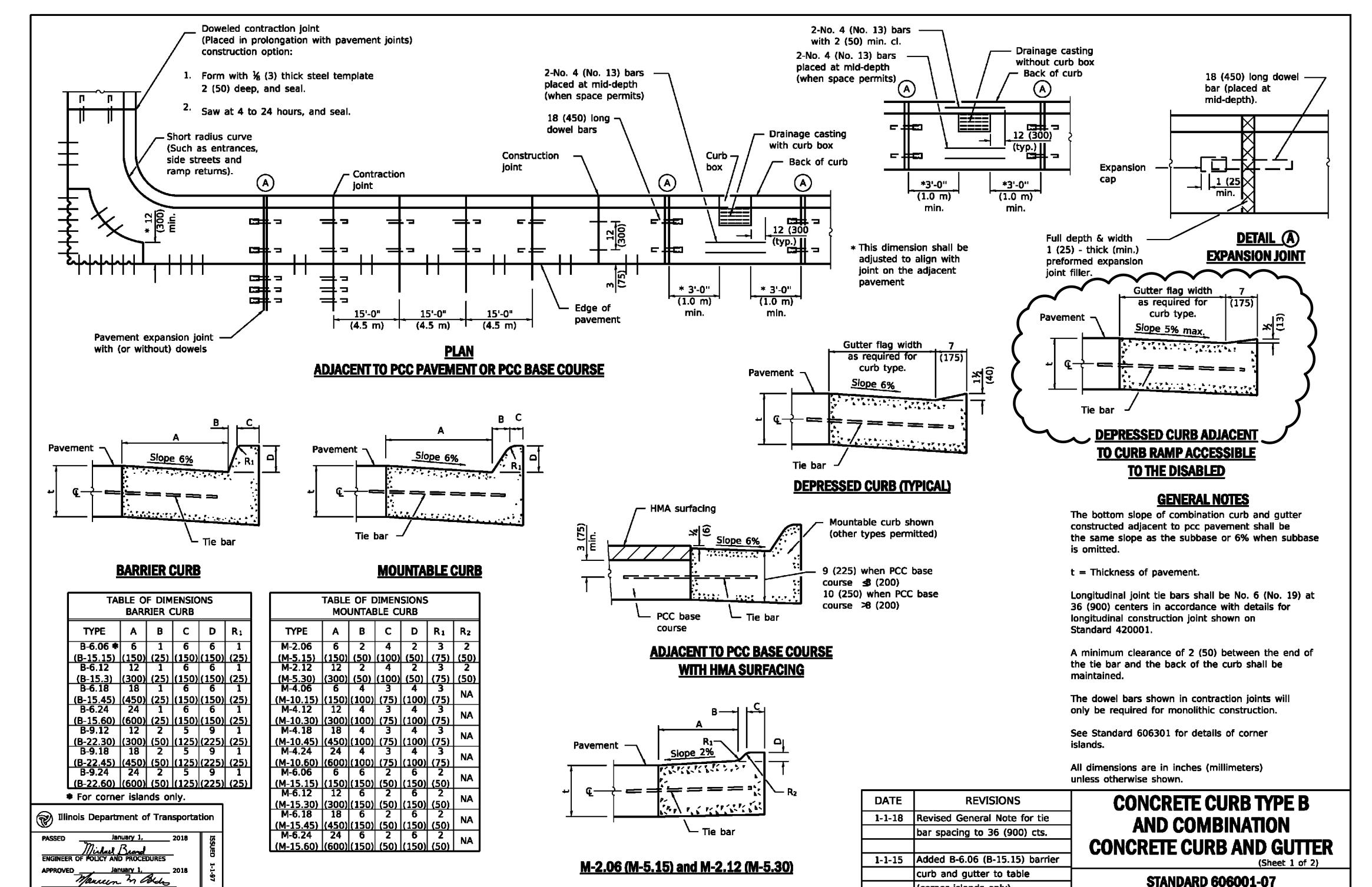
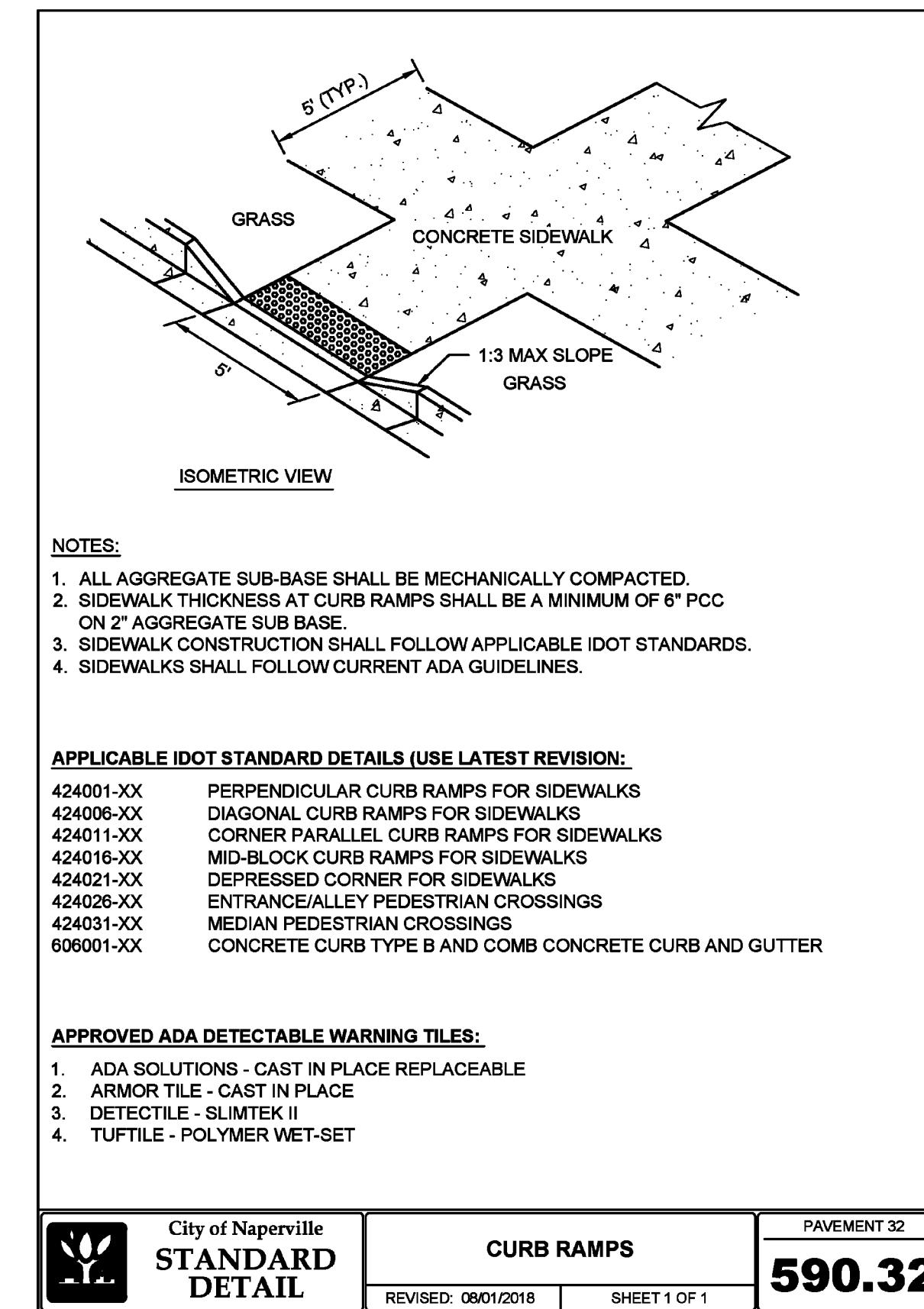
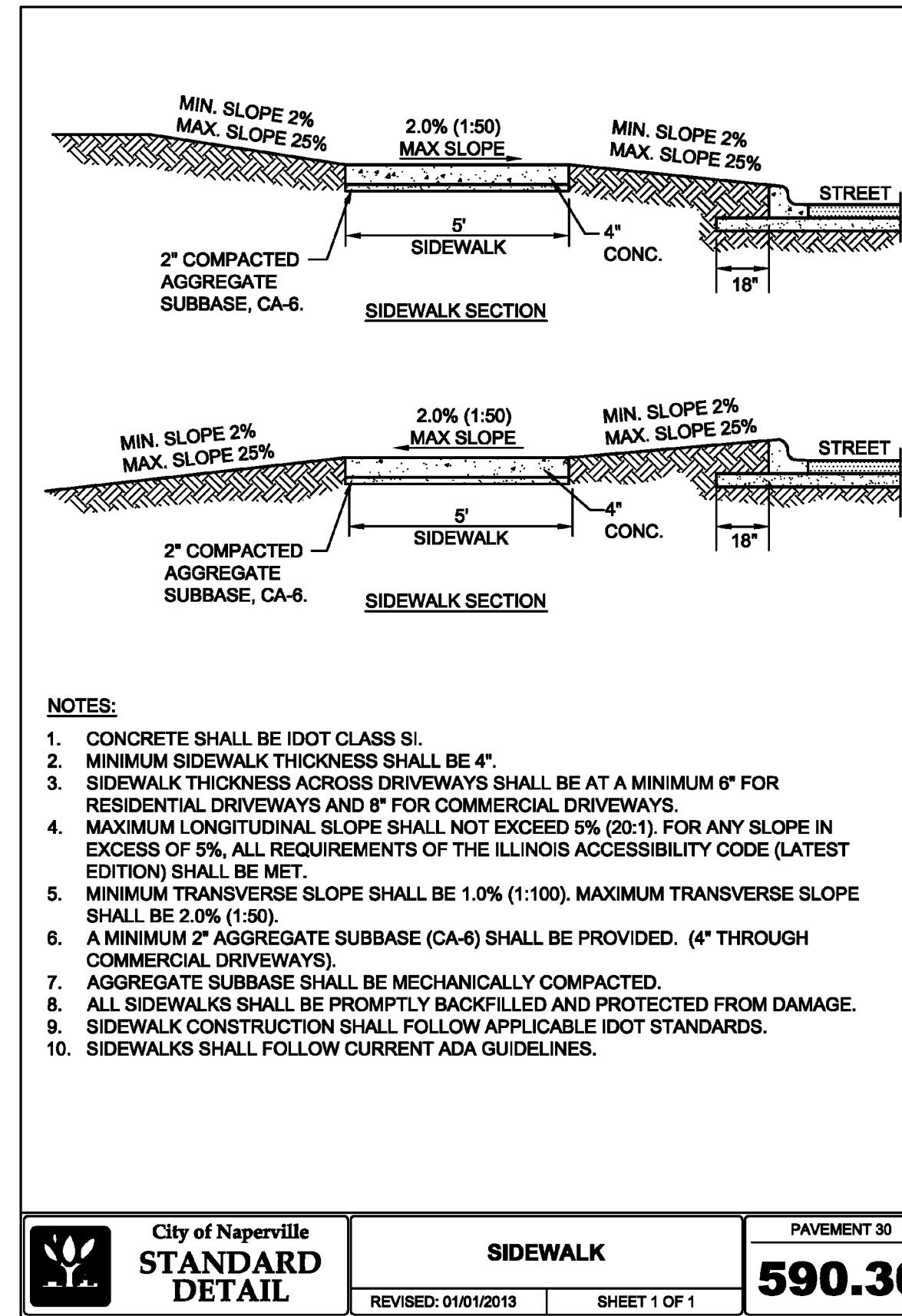
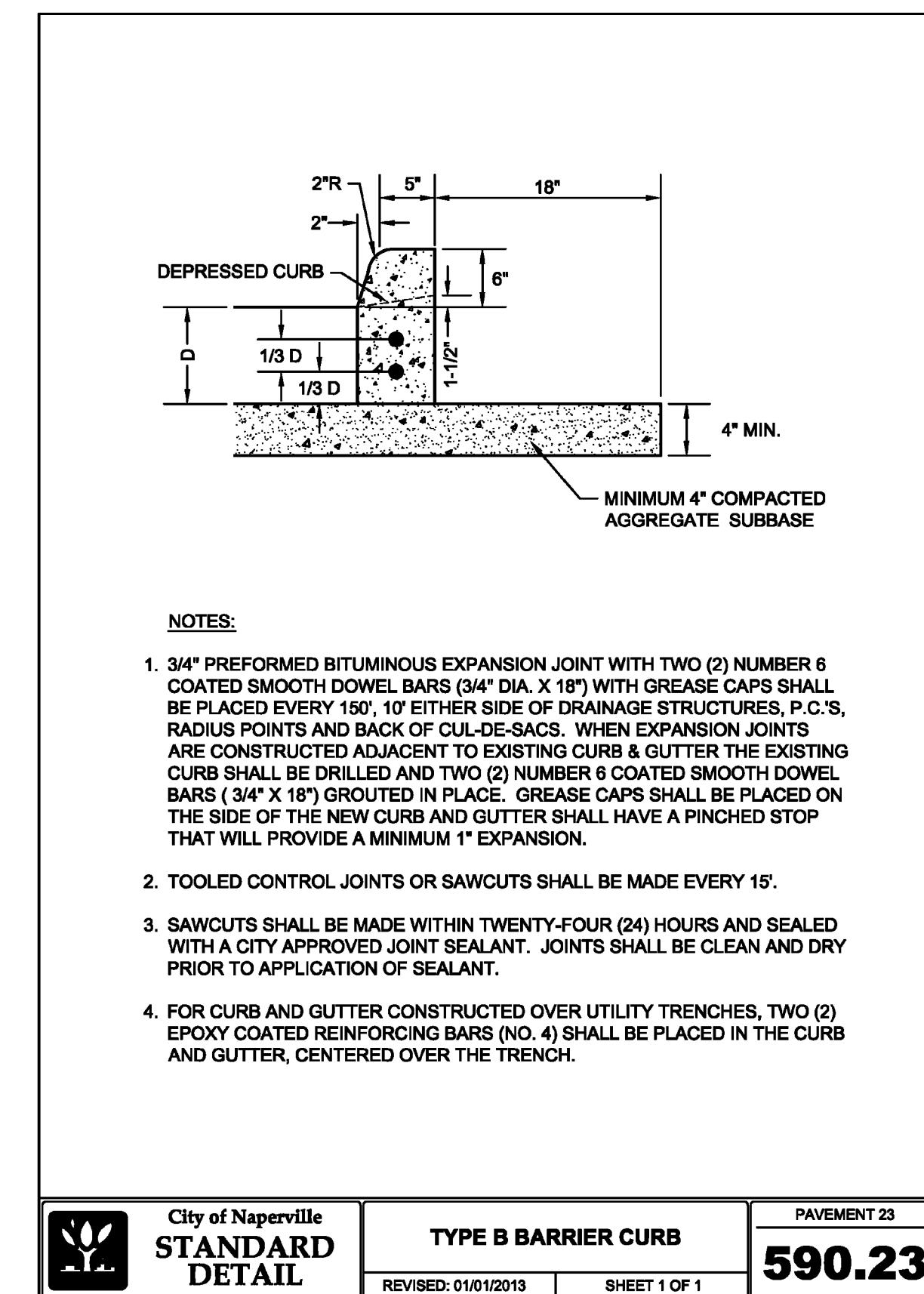
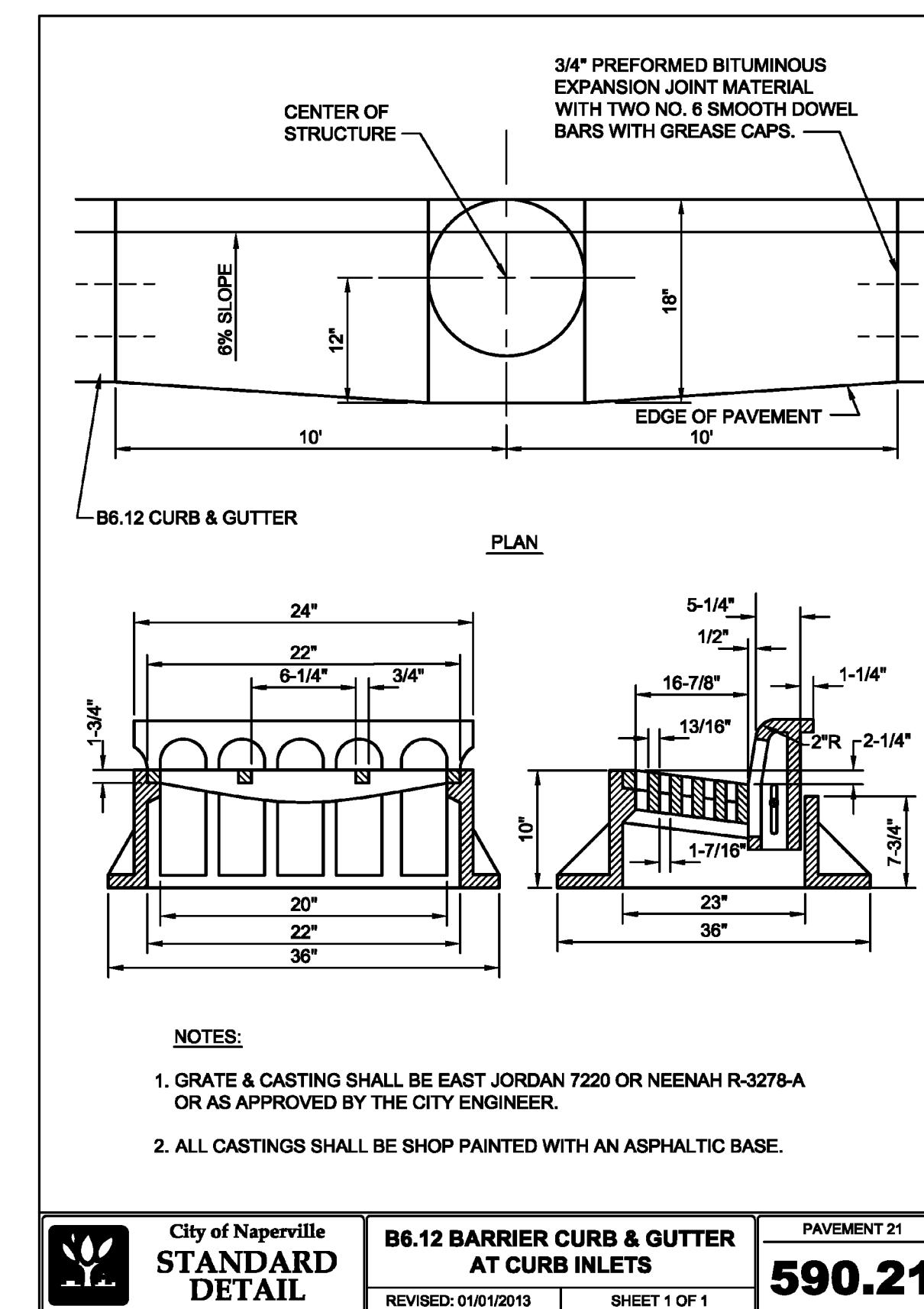
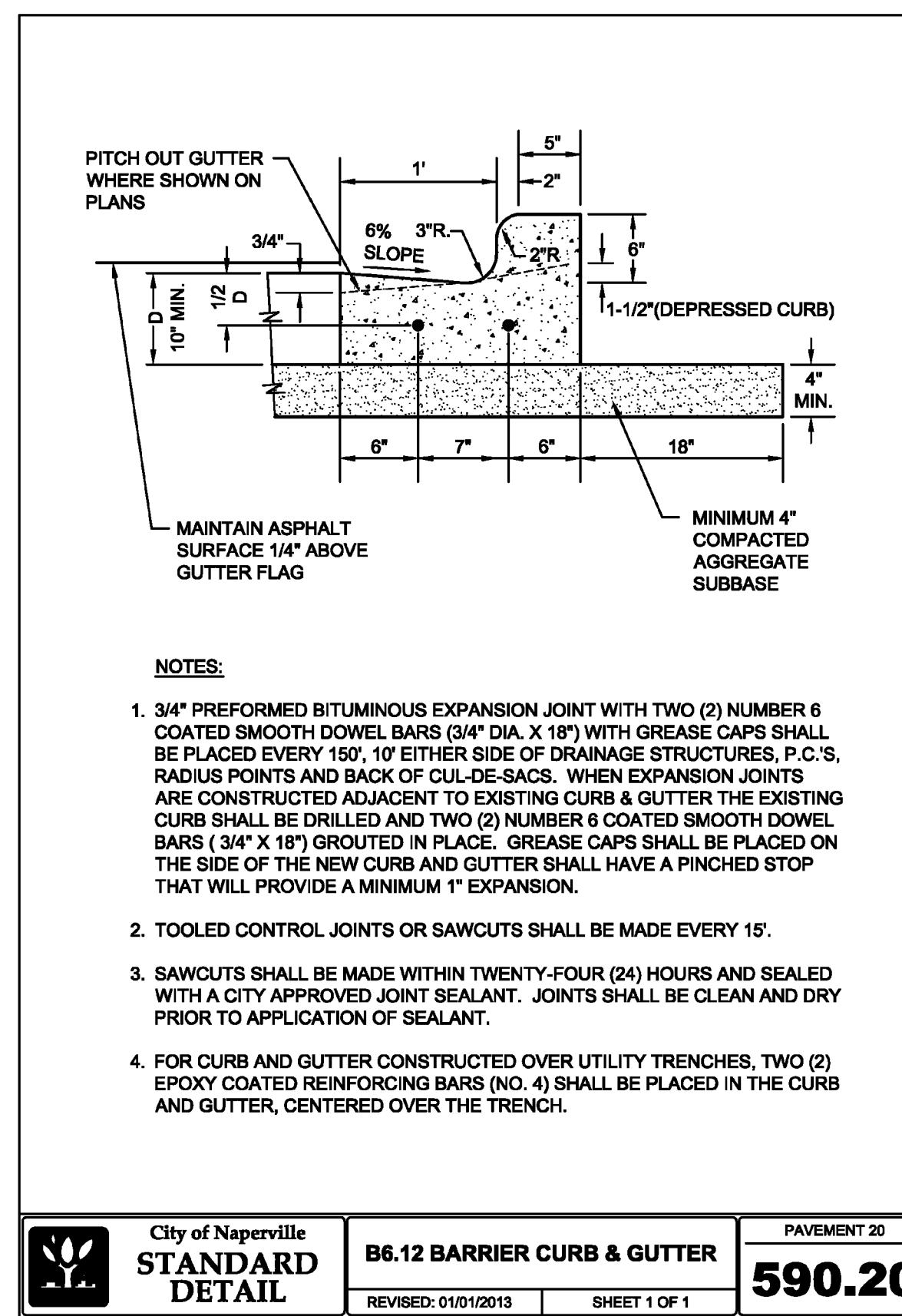
Civil & Environmental Consultants, Inc.
1230 East Diehl Road, Suite 200 - Naperville, IL 60563
630-563-0026 • 877-363-6026
www.cecinc.com

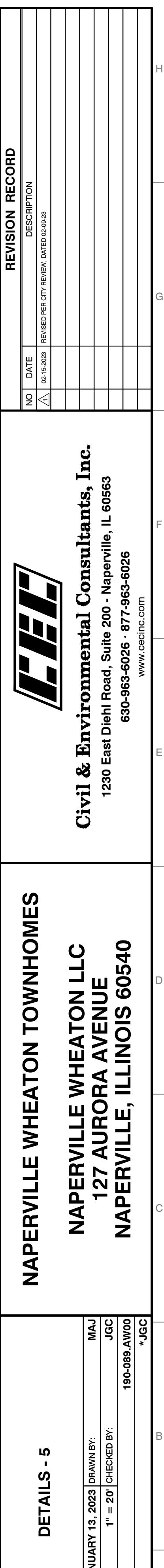
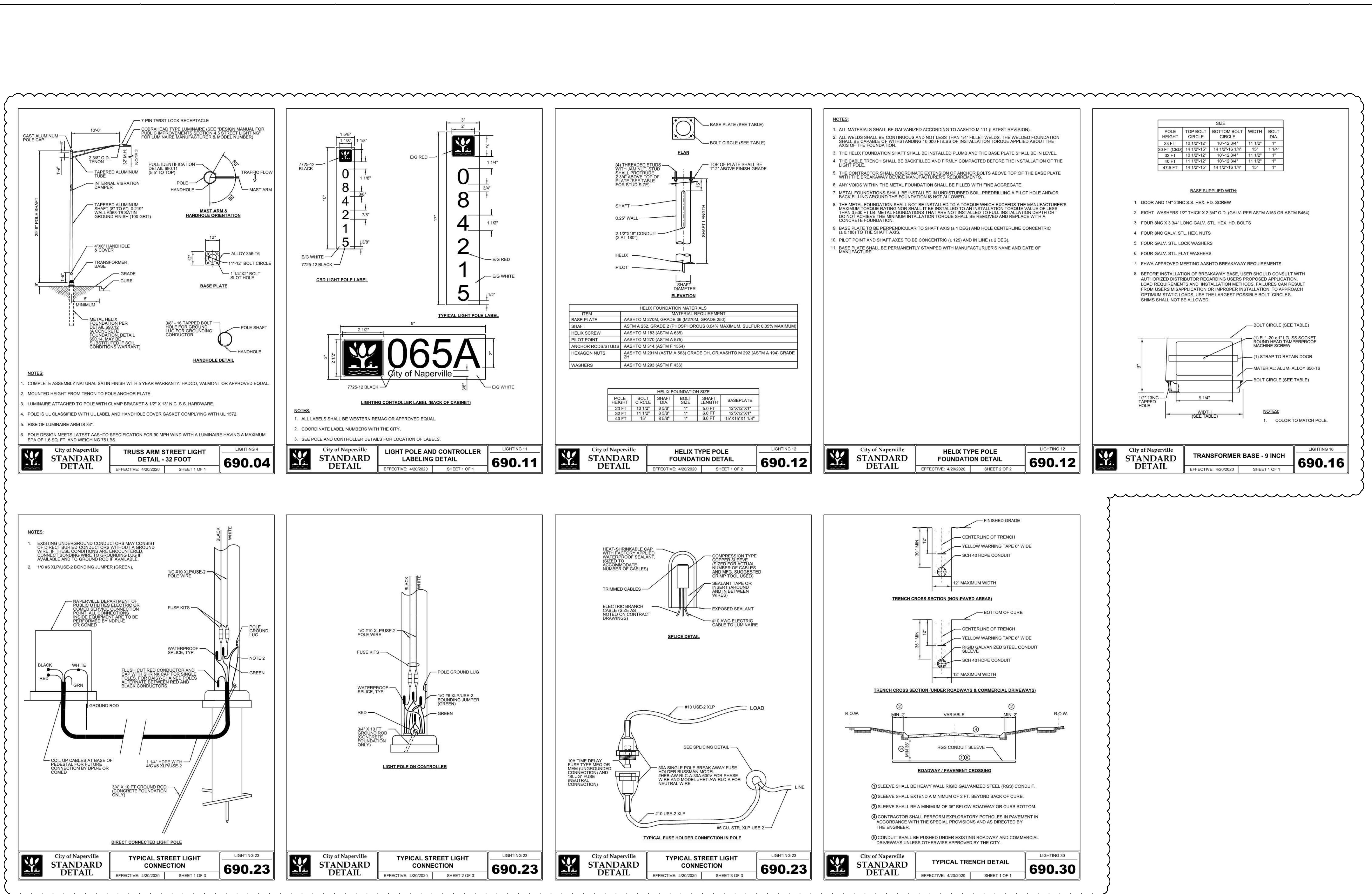
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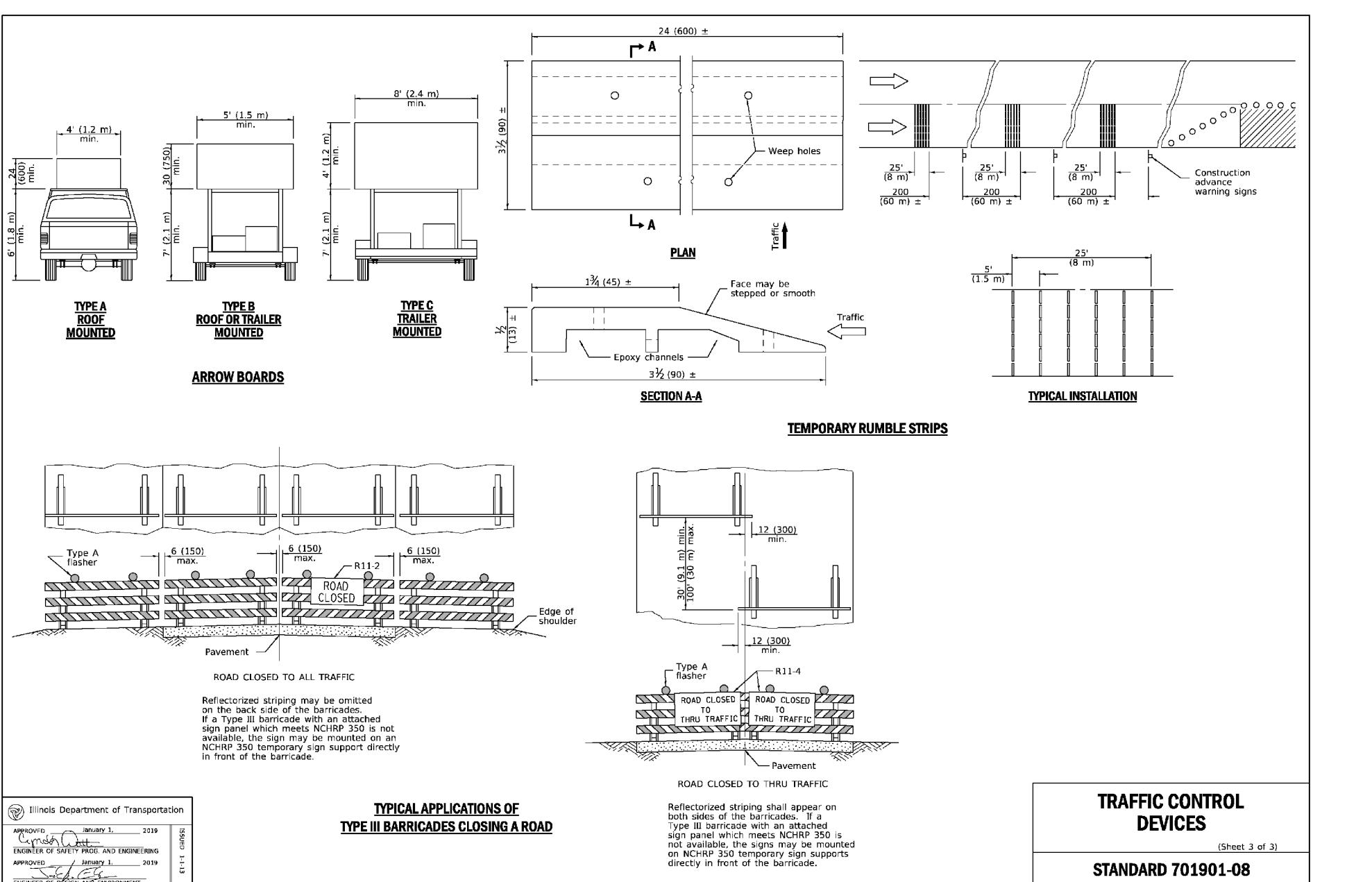
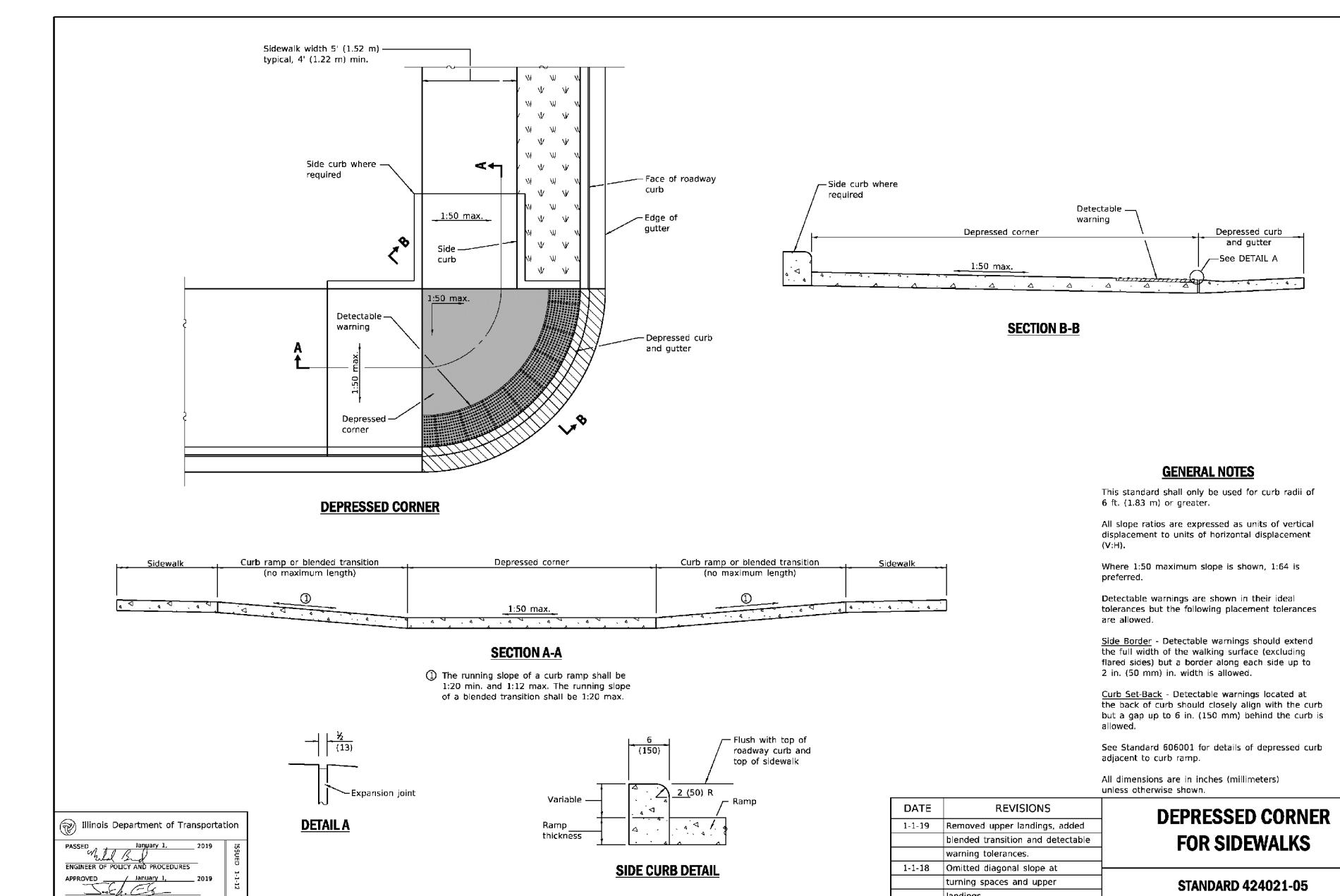
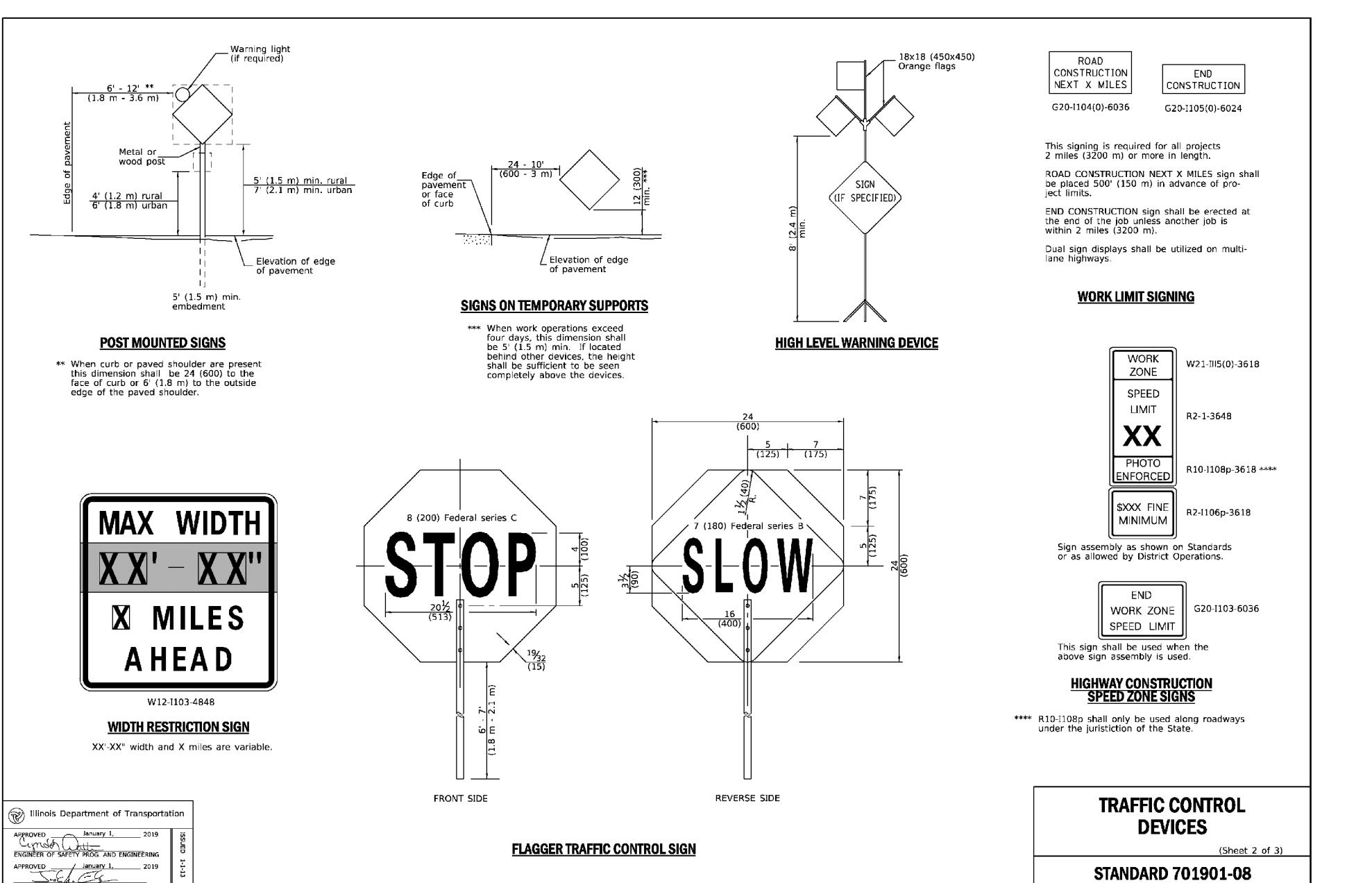
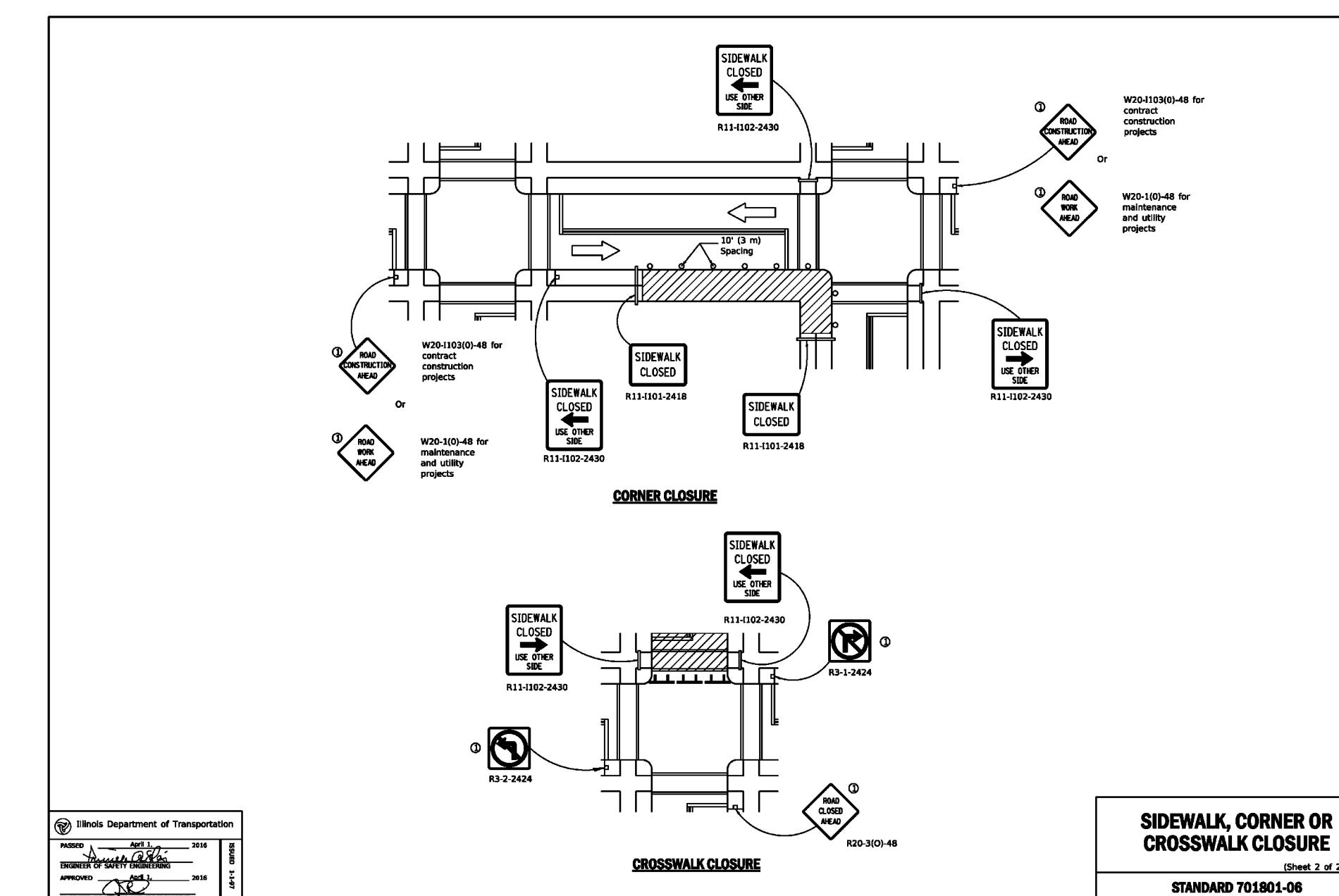
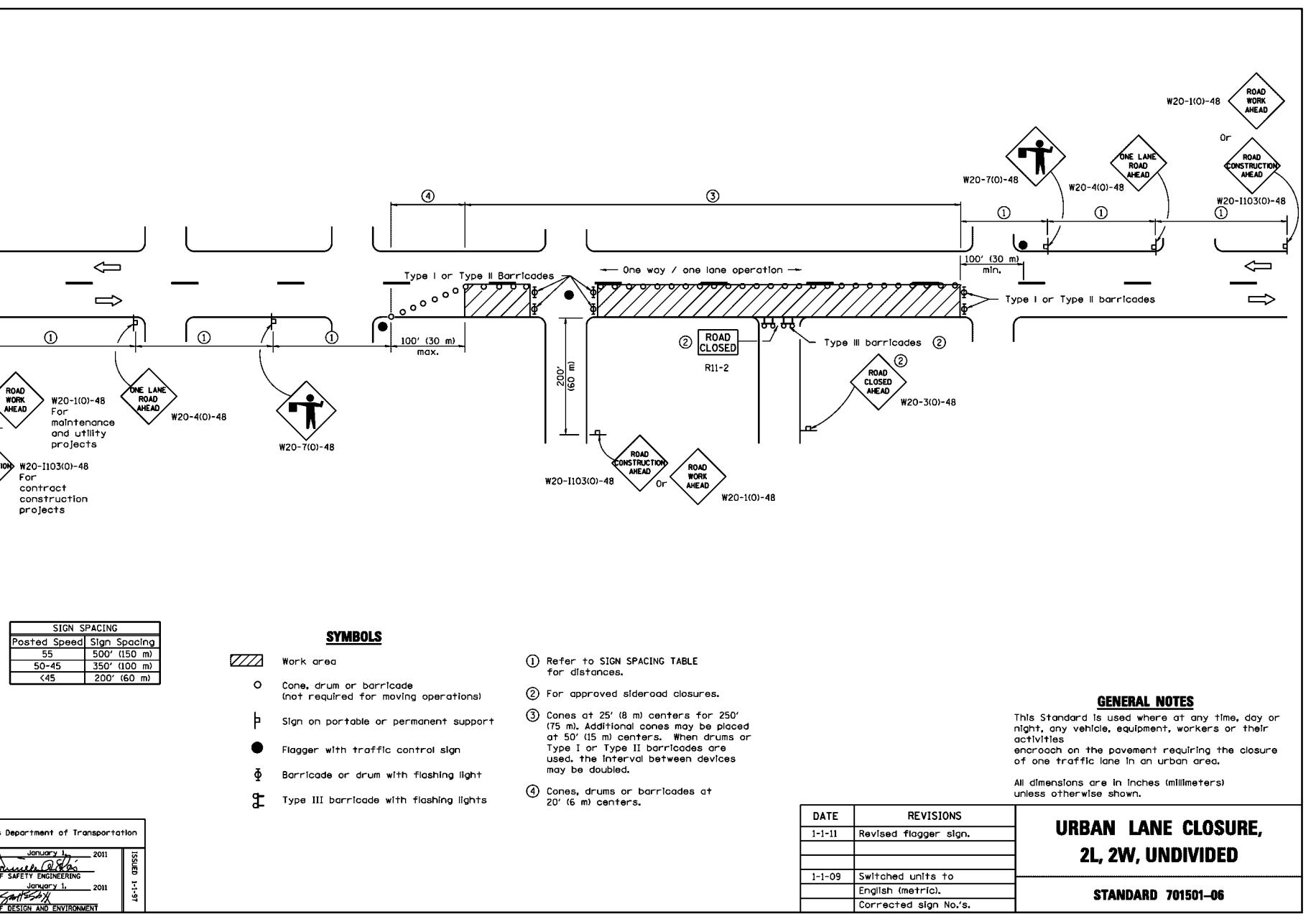
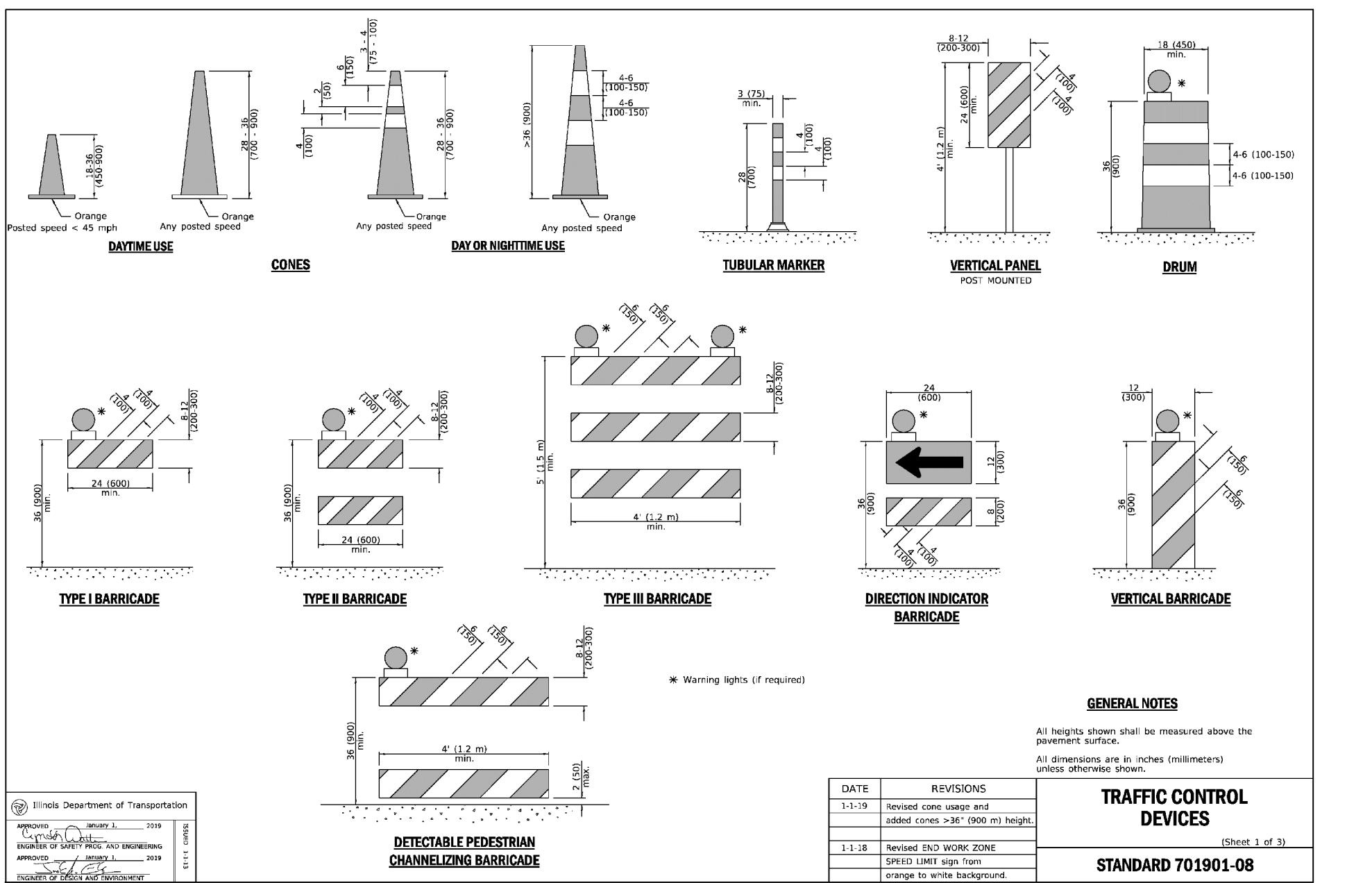
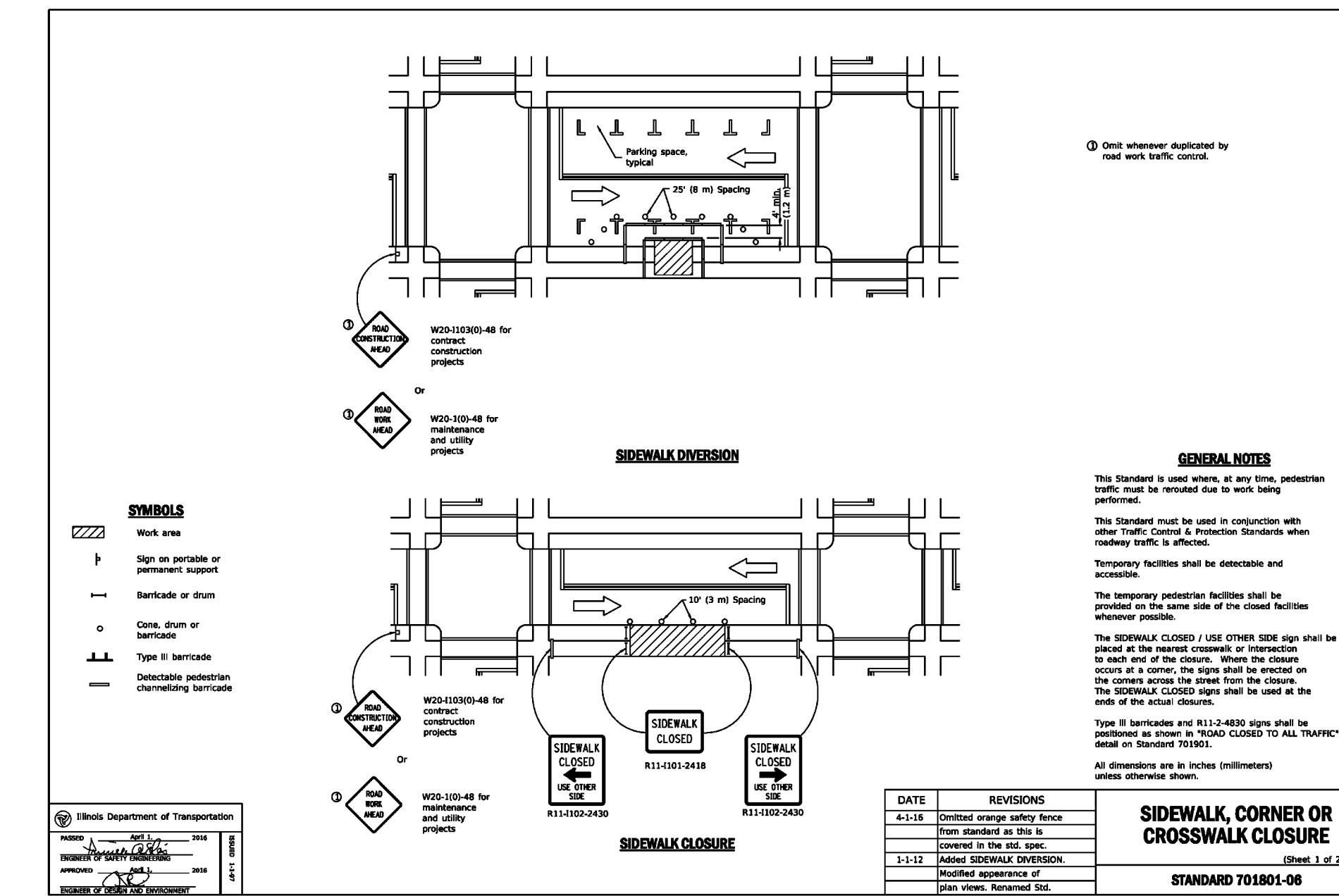












DETAILS - 6		NAPERVILLE WHEATON TOWNHOMES		NAPERVILLE WHEATON LLC	
				127 AURORA AVENUE NAPERVILLE, ILLINOIS 60540	
		Civil & Environmental Consultants, Inc.		1230 East Diehl Road, Suite 200 - Naperville, IL 60563	
DATE	JANUARY 13, 2023	DRAWN BY:	MAJ		
DWG SCALE:	1" = 20'	CHECKED BY:	JGC		
PROJECT NO.:	190-089-AW00				
APPROVED BY:			*JGC		
DRAWING NO.:	C805				
SHEET	17	OF	17		