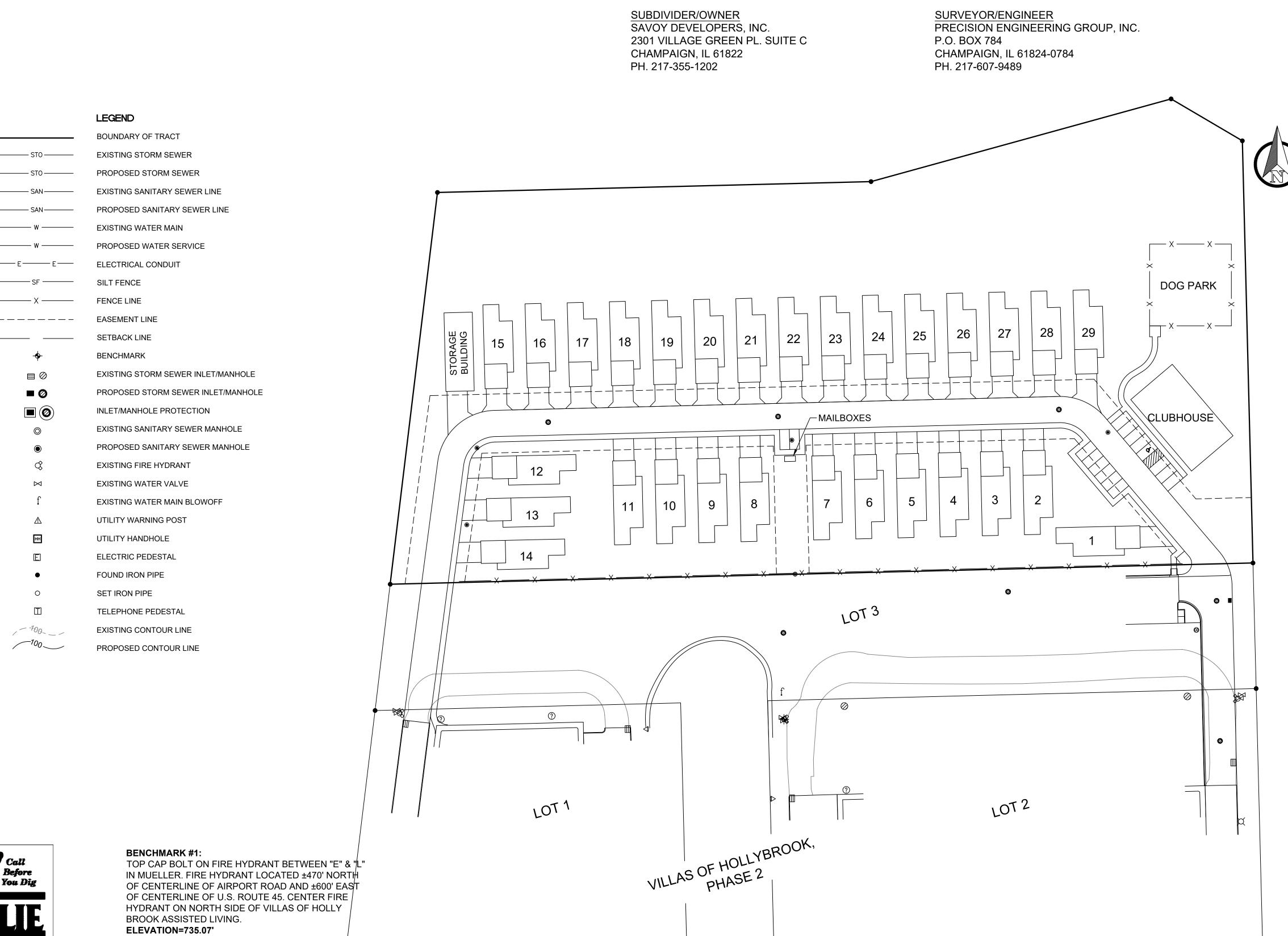
CIVIL ENGINEERING PLANS FOR

THE COTTAGES AT LAKE FALLS

AN ADDITION TO THE VILLAGE OF SAVOY CHAMPAIGN COUNTY, ILLINOIS A PART OF THE SW 1/4 OF SECTION 1, T.18 N, R8E, OF THE 3rd P.M.





- C1.0 COVER & LEGEND
- C1.1 GENERAL NOTES & SPECIFICATIONS
- C2.0 GRADING & EROSION CONTROL PLAN & SUBSIDIARY DRAINAGE PLAT
- C2.1 EROSION CONTROL DETAILS
- C3.0 UTILITY PLAN
- C3.1 UTILITY PROFILES
- C4.0 PAVING PLAN & PROFILE
- C5.0 GENERAL DETAILS
- C5.1 GENERAL DETAILS
- C5.2 GENERAL DETAILS

Signed:

Mark A. Miller Illinois Licensed Professional Engineer No. 062.056290

License Expires 11/30/23

ALL SHEETS SHOWN ABOVE IN SHEET INDEX (C1.0-C5.2)

Village Engineer

REV. # 3	REV. DATE: 07/10/23		REVISION	MADE: WATER CROSSING CASI
DATE:	03/08/23	SCALE:	AS SHOWN	
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FIELD BOOK: 30/p. 39-41 DRAWN BY: MAM CHECKED BY: MAM



COVER & LEGEND

PRECISION ENGINEERING GROUP, INC P.O. BOX 784 CHAMPAIGN, IL 61824-0784 PHONE: 217.202.8049 CIVIL ENGINEERING - LAND SURVEYING LINOIS DESIGN FIRM REGISTRATION NO. 184007585

THE COTTAGES AT LAKE FALLS SIGNATURE HOMES SAVOY, ILLINOIS

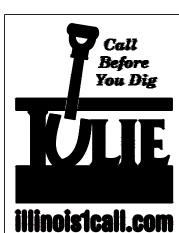
14722003 SHEET C1.0

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- 1. All grading, sewer, pavement work and any other miscellaneous work shall be performed in accordance with the current edition of the Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction" and the current edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", the current municipality's ordinances and any governing utility company's ordinances. In case of conflict, the most stringent shall hold.
- 2. The Contractor is responsible to maintain the vertical grades and the horizontal alignment as shown no the plans for all storm sewers, sanitary sewers, pavement and other site improvements.
- 3. All utility locations shown on these plans are approximate and as supplied by the respective utility companies. The Contractor shall contact J.U.L.I.E. System for precise field verification of all public underground lines and for private services a locating service should be contacted prior to any excavation. All cost incurred for a locating service shall be the sole responsibility of the Contractor. The Contractor shall be responsible for all damage and costs to repair any public or private utilities that are damaged by construction activities.
- 4. Contractors are advised to visit the site prior to submitting bids in order to be familiar with all conditions.
- 5. Manhole and inlet casting numbers used in these plans are from the current edition of the Neenah Foundry Company Catalog. The Contractor shall use new quality castings. An equal may be substituted only with the Owner's written approval.
- 6. It is the intent that all specifications and details adopted by reference in these plans refer to the most current published version of said reference.
- 7. All labor, equipment, and materials called for in these plans or specifications shall be furnished by the selected Contractor as necessary in order to complete all construction of the various improvements.
- 8. All Contractors shall obtain any necessary excavation permits, drive permits, land disturbance permits, necessary bonds from the local municipality and all required insurance coverage prior to beginning any construction activities. Copies shall be provided to the Owner. Attention is called to current municipal, County, State and Federal Safety Regulations and Guidelines. Contractors shall be familiar with these regulations and guidelines and shall strictly adhere to them.
- 9. All existing sanitary sewers, field tiles, drains and utilities damaged during construction shall be replaced. It shall be the responsibility of the Contractor to replace or repair promptly all damaged lines at no additional compensation, unless an individual repair exceeds 50 feet in length. In such case the Contractor shall receive written authorization from Owner agreeing upon cost of each repair. Replacement pipe shall meet current standards.
- 10. Limits of construction are within the lot lines of the tract and immediate right-of-way adjacent to the property unless otherwise specified.
- 11. All trenches for sanitary, storm, and utility conduit located under proposed pavement areas shall be backfilled with compacted granular material to two feet beyond the pavement edge. Trench backfill requirements shall conform to the applicable portions of the "Standard Specifications for Water and Sewer Main Construction in Illinois" and the current municipality's ordinance. Any trench areas requiring compacted granular trench backfill shall be compacted in 6" lifts with a pneumatic tamping machine immediately after pipe installation as per specifications. Compaction density tests shall be done every 2 vertical feet, at 100' horizontal spacing under public pavement (streets and sidewalks). Contractor shall coordinate and provide a schedule to the Owner two (2) days prior to doing the trench backfill work. Controlled low strength material (CLSM), or "Flowable Fill", may be used in lieu of aggregate backfill. Construction of CLSM shall be in accordance with IDOT Specifications and be designed to have a compressive strength between 100 and 200 psi. When CLSM is used the top one (1) foot of the trench shall be a local soil compacted to not less than 95% of the standard density. Jetting or water soaking is not allowed.
- 12. Contractors shall take care to maintain the site and adjacent areas in as clean a condition as possible. Any dirt, mud or construction debris shall be cleaned daily, or as the Owner directs, from any adjoining streets or properties by the responsible contractor as a part of the primary construction work. There shall be no additional compensation to the Contractor.
- 13. The horizontal and vertical separation of water mains and sewers shall be in accordance with Division IV Sec. 41-2.01 A and B of the current edition of "Standard Specifications of Water and Sewer Main Construction in Illinois".
- 14. All shop drawings of manholes or inlets shall be submitted to and reviewed by the Owner's representative prior to fabricating structures. Review of shop drawings does not relieve Contractor of proper construction of structures.
- 15. Horizontal limits of trench backfill for all sewers deeper than 5 feet are based on using a trench box. At any time the Contractor desires not to use a trench box in those areas, the appropriate O.S.H.A. cut back slopes should be used and if any of these cut back lines intersect the 2 foot limit, then extend trench backfill as necessary, at no additional compensation to Contractor.
- 16. The Contractor shall be responsible to notify the Owner, Municipality, and any other agencies at least two days prior to starting or restarting any construction activities.
- 17. All work, including materials, workmanship and methods shall be guaranteed by the Contractor for 12 months after job completion and fully acceptance by the Owner. Any defects discovered during that 12 month period shall be promptly repaired or corrected by the Contractor at no additional cost to the Owner.
- 18. Any trench settlement causing pavement cracking and/or settlement shall be repaired and the pavement properly replaced by the sewer contractor within two weeks of notification by the Owner.
- 19. The Contractor shall dispose of excess excavated material off site.
- 20. Traffic control protecting all work shall be provided in accordance with current local, state and national standards and as directed by the Owner or Owner's representative. Traffic control shall be in place as soon as construction begins.
- 21. If alterations or modifications in quantities change the character or quantity of the work under the original bid and contract, an adjustment may be made to the contract. Owner may alter the work by adding to or deducting from or otherwise modifying the work, without invalidating the Contract. All such changes shall be performed under the conditions of the original contract, except that no extra work of modifications shall be done or paid for by Owner without a written order from Owner signed by the Owner. The work as changed by change order shall be performed for the unit prices set forth in the Contractor's Schedule of Unit Prices. To the extent any element of the work as changed is not subject to unity prices, the amount to be paid to the Contractor shall be agreed to in writing by the parties prior to the commencement of said work. Contractor shall provide adequate proof of cost of each item. Claims for extra work which have not been authorized by a written change order signed by the Owner will be rejected and payment denied.

CONDUIT NOTES

- Refer to the "General Construction Notes".
- . Conduits shall be schedule 40 electrical grade PVC.
- 3. Conduits shall be installed a minimum of 30 inches or a maximum of 36 inches deep unless otherwise specified
- Where electric and gas conduits cross, electric conduits shall be installed deeper.

DEMOLITION NOTES

- 1. Refer to the "General Construction Notes".
- 2. Provide protection to prevent damage and injury to the public and private property associated with or adjacent to the project and to any people located on the premises.
- 3. Underground utilities are to be removed up to the property line unless otherwise specified.
- 4. No work shall be done or prepared on adjacent property, nor shall tools, materials, equipment, vehicles or debris be stored or deposited on adjacent properties.
- 5. Protect adjacent surfaces and other surrounding furnishings from damage of any nature.
- 6. Protect buildings from trespass, weather and any damage.
- 7. No burning of construction material shall be allowed on site.
- 8. Debris and any trash generated on site shall be removed and legally disposed of by the Contractor. Promptly remove material on a daily basis or as soon as practical.
- 9. Remove all equipment from the site as soon as possible.

SITE GRADING NOTES

- 1. Refer to the "General Construction Notes"
- 2. All earth excavation work shall conform to Section 202 of the Standard Specifications for Road and Bridge Construction. Earth quantities are to be paid for as in original state (i.e., compacted condition).
- 3. All borrow and imported material shall conform to Section 204 of the Standard Specifications for Road and Bridge Construction unless otherwise noted.
- 4. All stripped topsoil shall be placed over disturbed or filled areas and graded smooth. No earthen clods larger than 3" in diameter shall be accepted. All organic soil material shall be removed from the pavement subgrade and building pad area.
- 5. All disturbed areas shall be seeded and/or have siltation barriers applied as shown on these plans as soon as final grading has been completed.
- 6. Contractor shall be responsible for any damage to storm and sanitary sewers due to earthwork operations.
- 7. The entire subgrade shall be compacted to not less than 95% of the standard laboratory density.
- 8. In addition to nuclear density testing, subgrade below all street pavement and 3 feet beyond edges shall be DCP tested. The street pavement subgrade shall have sufficient stability to accommodate construction traffic without excessive subgrade rutting or shoving. Prior to commencement of pavement construction, the in-situ subgrade shall have a minimum immediate bearing value (IBV) of 8, provided that the subgrade is within one tenth (0.1) of a foot of final grade. Densities will be determined according to Article 205.06. The IBV will be determined according to Illinois Test Procedure 501 or 502 with one test every 50 feet of roadway, with tests alternating between the two traffic lanes. This shall be a minimum amount of tests, more may be taken if the Village Engineer determines it necessary. The DCP test shall also be conducted to a depth of at least 3 feet below the finished grade of the subgrade to provide the Engineer with knowledge of the stability of the underlying soil.
- 9. All excavation, fine grading, embankment work, seeding, necessary watering and mulching shall be a part of the seeding work and shall be considered in the unit price of seeding.
- 10. Finished grading shall be checked and approved by the Owner before seeding.

STORM SEWER NOTES

- 1. Refer to the "General Construction Notes"
- 2. All storm sewer pipe shall be in accordance with the "Standard Specifications for Road and Bridge Construction" Section 550.
- 3. All manholes, unless otherwise noted, shall be 48" diameter Type A manholes. All inlets, unless otherwise noted, shall be 24" diameter Type A inlets.
- 4. All castings for manholes in open pavement or ground, unless otherwise noted, shall be Neenah R-1713 castings. All grates for manholes in open pavement, unless otherwise noted, shall be Type A open grates. All curb castings, unless otherwise noted, shall be Neenah R-3278-A castings with Type C grates. All manholes shall be constructed in accordance with the manhole details.
- 5. New manholes shall be precast manholes, no "doghouse" style manholes shall be allowed.
- Sanitary sewer crossings with 8" or less of vertical clearance shall have a reinforced concrete cradle. The cost of this crossing shall be incidental to the cost of the sewer construction.
- The Contractor shall account for final vertical adjustments of structures in turf areas and sealing of manhole castings after earthwork is approved. Contractor to leave all street storm structure castings loose. Final adjustment and mortaring of the casting shall be completed by paving contractor. Concrete lids, cones and loose casting shall be checked prior to paving. Loose castings shall be left 0.25 feet lower than planned elevation when possible. Adjustment shall be done with concrete brick or adjustment rings. Absolutely no wood is allowed. Place a cover over opening to prevent soil or debris from falling in structure until project is complete.
- 8. All lifting rings shall be cut off from lids or cones after manholes are constructed.
- Riprap shall in accordance with the "Standard Specifications for Road and Bridge Construction" Section 281 and filter fabric shall conform to Section 282. Cost of riprap shall include bedding material and fabric

STONE BASE NOTES

- 1. Refer to the "General Construction Notes"
- 2. Aggregate base course shall be crushed stone and shall be Type A. Base Course aggregate shall be CA-6 material. All aggregate crushed stone base course construction shall conform to Section 351 of the Standard Specifications for Road and Bridge Construction.
- 3. The base course shall be constructed in layers not more than 4 inches thick. The aggregate shall be deposited directly on the prepared subgrade or on the preceding layer of compacted aggregate with a spreader. When placed, it shall be free from segregation and shall require minimum blading or manipulation. Immediately after the material has been placed, it shall be compacted with a tamping roller or with a pneumatic-tired roller, or with a vibratory machine, or with a combination of any of the three. The top layer shall be given a final rolling with a three-wheel or tandem roller.
- 4. Before the aggregate is deposited on the subgrade, it shall contain the amount of moisture required for compaction.
- 5. If density tests indicate that the base course does not comply with the density requirements, additional wetting if necessary, and rolling will be required until the density is obtained. Moisture shall be added to the material during compaction only when it is necessary to obtain the required density.
- 6. Aggregate used for base course will be measured for payment in square yards of the thickness specified.
- 7. Water required to be added for compaction on the grade will not be measured for payment but shall be considered as incidental to the work.
- 8. Aggregate base courses shall have a minimum in-place density of 95%, with no individual test below

SANITARY SEWER NOTES

- 1. Refer to the "General Construction Notes"
- 2. Pipe material used for sanitary sewers shall conform to the following materials which are expressly manufactured for transmitting sanitary sewage and shall comply with the requirements of the Illinois Environmental Protection Agency. Pipe materials shall meet the following type and specifications:
- a) Solid Wall PVC Pipe (main and services) Polyvinyl Chloride (PVC) service lines shall conform to ASTM D-3034, type PSM with push-on flexible elastomeric seals in accordance with ASTM D-3212. The minimum allowable SDR shall be 26. Sanitary sewer service lines shall be SDR 26 PVC pipe with a minimum slope of 1% for 6" laterals and 2% for 4" laterals.
- 3. Pipe couplings shall be non-shear type and conform to the applicable portions of ASTM C-425, C-443, C-564, C-1173, D-5926 and D-1869. Pipe couplings shall be Fernco 5000 Series Strong Black Couplings or an approved equal. They shall be made of elastomeric polyvinyl chloride with a 0.015-inch thick 300 series stainless steel shear ring, shall be specifically sized to fit the outer diameter of the pipes being joined, and shall have stainless steel take-up clamps to fit the appropriate outer diameter of the coupling. The take-up clamps shall be tightened to the manufacturer's recommended torque value and the joints tested. The entire connection shall be encased in granular fill to a minimum of 6" around coupling.

All sanitary manholes shall comply with the minimum standards in the latest edition of the Standard Specifications for Water and Sewer Main Construction in Illinois. All sanitary manholes shall be 48" diameter Type "A" and shall have Neenah R-1713 castings with Type "B" lids and two Type "F" concealed pickholes. The word "SANITARY" shall be cast in the lids.

- 4. All new manholes shall require an external manhole chimney seal unless not required in the municipality's ordinances.
- 5. New connections made to any existing manhole shall be angled in the direction of flow, and shall be accomplished by core drilling through the wall of the manhole and installing an appropriately sized connector boot, such as KOR-n-SEAL by NPC Inc. or approved equal.
- 6. Allowable materials for pipe bedding, haunching and initial backfill from 4 inches below the pipe to 12 inches above the top of the pipe shall be one of the following gradations: CA-6, CA-9, CA-11, CA-18, FA-1, FA-2, FA-5, FA-6, FA-10 or FA-21. Previously excavated material is not allowed. Bedding for rigid pipe shall be Class B per ASTM C-12 and Class II per ASTM D-2321 for flexible pipe.
- 7. All trenches within 2' of public street pavement areas shall be backfilled with CLSM (flowable fill) to 2' beyond the pavement edge. Construction of CLSM shall be in accordance with IDOT specifications and be designed to have a compressive strength between 100 and 200 psi. When CLSM is used the top one (1) foot of the trench backfill shall be a local soil compacted to not less than 95% of the standard lab density.
- 8. All utility poles, telephone pedestals, monuments, valve boxes, and utility lines shall be braced and
- 9. All inside and outside joints of manholes shall be filled with mortar and brushed smooth.
- 10. All connections to the sanitary sewer shall be a wye connection and shall be as shown on the plans.
- 11. All sanitary sewer service lines shall be installed per plan and profile. All laterals shall have a minimum of 42" of cover.
- 12. Flowline of 6" diameter service lines out of manholes are to be no less than 0.35' or more than 1.9' above the main sewer line's effluent invert. There shall be a concrete channel constructed from the invert of the service connection to the channel of the outlet pipe.
- 13. All stationing of structures or wyes are to the centers of manholes and lengths of pipe shall be measured from the inside of the manhole wall to the inside of the manhole wall.
- 14. The Contractor shall account for final vertical adjustment of sanitary manholes and sealing of manhole castings after earthwork operations and paving work is complete.
- 15. All testing of sewers shall be incidental to the cost of sewer construction and be the contractor's responsibility.
- 16. Leakage testing shall be performed using one of the following methods (Test procedures per Section 31-1.12 of the Standard Specifications):
- a) Infiltration, not to exceed 200 gallons per inch diameter of sewer pipe per mile per day.
- b) Exfiltration, not to exceed 200 gallons per inch diameter of sewer pipe per mile per day.
- c) Air testing, test results shall not be less than the time per inch of pipe diameter per length of sewer pipe as specified in the table entitled "Air Test Table" which can be found in the "Standard Specifications for Water and Sewer Main Construction in Illinois". Test times for pipe lengths greater than 100 feet shall be incremental multiples of the time indicated for the 100 foot length. When groundwater is present, the internal air pressure shall be raised 0.4335 psi per foot of groundwater over the pipe at the downstream manhole.
- 8. Leakage testing of manholes, testing shall be in conformance with ASTM C1244-93 "Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test". For Manholes placed on existing lines, testing shall be performed after the manhole is in place but before the existing line is cut to avoid have to plug a live sewer.
- 19. Deflection testing for flexible thermoplastic pipe:
- a) The pipe line shall be tested for excess deflecting by pulling a "go-no go" mandrel through the pipe from manhole to manhole. A deflectometer may also be used to check and record deflection.
- b) 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 removed and replaced.
- 20. If a sanitary system is laid at less than minimum slopes of 0.4% for 8-inch, 0.28% for 10-inch, 0.21% for 12-inch, etc., the given jurisdictional body reserves the right to require a penalty or full removal and replacement. Full removal and replacement shall include removing the substandard portion of the sewer main system and replacing it in its entirety. This work shall include require manholes, piping, bedding, haunching, backfill, grading, seeding and all appurtenances and requirements associated with a sanitary sewer system installed with the project.
- 21. All new main line sanitary sewers shall be video taped and recorded by the Contractor. The televising shall be recorded and logged by the Contractor and copies submitted to the Village, UCSD and engineer.
- 22. The end of the laterals shall be no deeper than seven feet below the finished grade. The end of the lateral shall be staked with a 2 x 4 wood leader which extends to one foot above the finished grade and the coordinates of the end of the lateral shall be measured using Global Positioning System survey grade equipment using the Illinois State Plane Coordinate System and the coordinates recorded on the as-built drawings for the sanitary sewer.

PAVEMENT AND SIDEWALK NOTES

- 1. Refer to the "General Construction Notes"
- Prior to placing pavement, certain subgrade areas may require some additional grading, compaction, or stabilization by the Contractor. This shall be at no additional compensation to the Contractor unless such area exceeds 24 SY in each case.
- 3. Lime modified soils shall consist of the construction of a 12" thick modified soil layer composed of soil, lime and water. Lime shall not be applied to or mixed with frozen soil. Soils shall be modified in accordance with Article 302 of the Standard Specifications.

Upon pavement completion, the Contractor shall backfill curb lines and walk edges.

- 4. The Contractor shall make all final adjustments and mortaring of castings in paved areas with concrete brick or concrete adjustment rings. Absolutely no wood is allowed. The Contractor shall be responsible for protection of storm structures in paved areas during construction of pavement and
- 5. Matching existing pavement shall be made with either a construction or expansion joint. Matching existing sidewalks shall be done to the nearest panel joint.
- 6. Portland Cement Concrete (PCC):

All Portland Cement Concrete paving shall be constructed in accordance with Article 420 of the IDOT Standard Specifications. Material for PCC shall have a maximum allowable slump of 4 inches. The concrete shall have an air entrainment of not less than 5% or more than 8% by volume. The concrete shall attain a compression strength of 3500 psi at the age of 14 days when tested by standard methods for all pavement and sidewalks.

If the Contractor desires to allow traffic on paving sooner than 14 days, the Contractor shall notify the Owner 2 days prior to paving. The Contractor shall refrain from driving on new pavement until the concrete has reached the required strength.

- 7. PCC Sidewalks (Constructed in accordance with Article 424 IDOT Specifications)
- a) Sidewalks shall typically be 5' wide x 6" thick unless otherwise specified.
- b) Construct a 3/4-inch bituminous expansion joint in the sidewalk where sidewalk abuts pavement and where sidewalks intersect each other. (no dowel bars required)
-) Sidewalk ramps and crosswalks which abut streets shall be ramped with detectable warning surface so that sidewalk and crosswalk merge at a common elevation, enabling a person in a wheelchair to travel freely.
- . PPC Pavement:
- a) All pavement removals shall be accomplished with a full depth saw cut. A minimum 2-foot bench shall be maintained on all sides of an open excavation. Subgrade shall be compacted to the satisfaction of the governing body and if necessary, repaired with granular backfill as necessary.
- b) All concrete patches and repairs of defects shall be made with IDOT Class C patches with the exception of patches on Arterial and Major Collector street. Arterial and Major Collector streets 8 inches or greater in depth shall be repaired with a modified IDOT Class B patch. One-inch deformed reinforcing bars shall be substituted for smooth dowels at any new mid-panel joint. Smooth dowel bars shall be used at any preexisting contraction joint. Preexisting contraction joints shall be replaced with an appropriate grooving tool. Concrete patch width shall coincide with the edge of full panels and shall have a minimum longitudinal distance of 6 feet. In large cuts, full panels shall be removed and replaced.
- c) Construct contraction joints in the pavement and curb and gutter every 12 feet or less. Joint inserts or dummy joints are strictly prohibited. Sawing of all joints shall commence as soon as the concrete has hardened sufficiently to permit sawing without excessive reveling, but no later than 8 hours after concrete is poured in place. All pavement joints shall line up with curb and gutter joints.
- d) Where there are no vertical curves, round off the PVI areas. Transitions in these areas should be (5) five feet in each direction of the PVI point.
- 10. Any undersigned cracks in the payement considered to be a defect but not considered for removal shall be routed and sealed in accordance with the ordinance
- 11. Hot-Mix Asphalt Pavement:

REV. # 3

All asphalt pavement shall be constructed in accordance with Article 406 and 407 for Hot-Mix Asphalt Paving of the Standard Specifications for Road and Bridge Construction and these plans and details. All pavement base courses, binder courses and surface courses shall be field tested for proper compaction.

- a) All trimmings and other loose material shall be removed from the subgrade prior to placing the first lift.
- b) Each compacted lift shall be thoroughly clean of all dust, dirt and foreign materials.

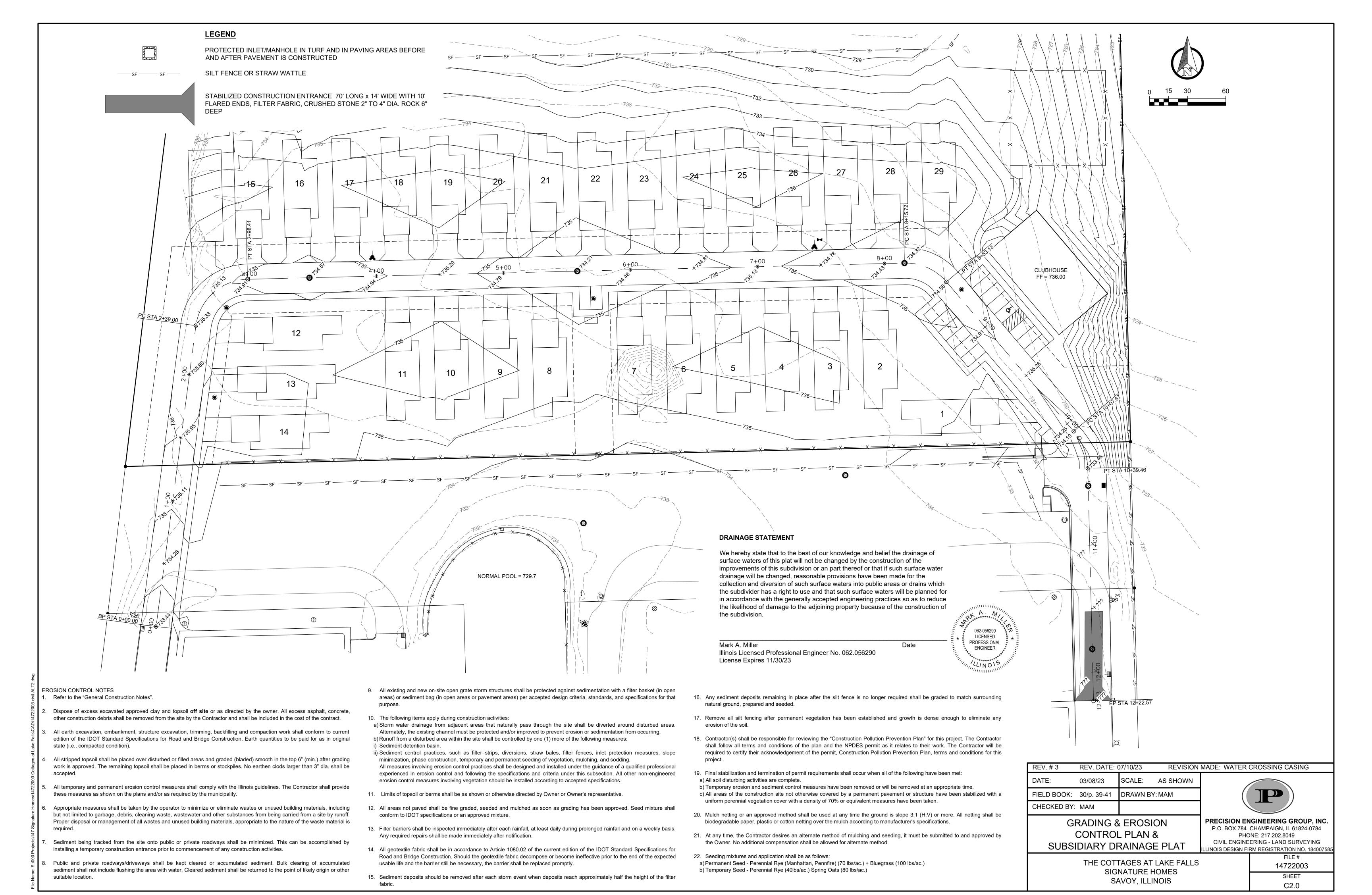
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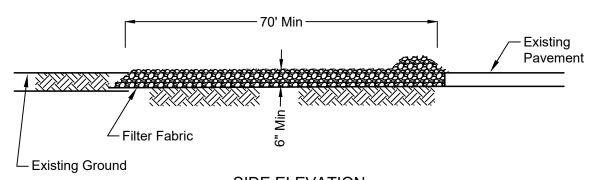
- c) When the binder course has been exposed for an extended period of time or is not free of ALL dust, dirt and foreign materials the Contractor shall clean the surface and apply a light fog tack coat of RC-70 at a rate of approximately 0.05 gallons per SY.
- d) Preparation of the binder course(s) shall be in accordance with Article 406.06 of the Standard Specifications for Road and Bridge Construction.
- e) Construction observers should regularly check variables such as lift thickness, temperature and density following all applicable IDOT and local standards.
- f) Bituminous material must be produced at an Illinois Department of Transportation approved plant.
- g) The Hot-Mix asphalt binder course shall be HMA BC IL-19.0 N50 (thickness as indicated on plans and details).
- h) The Hot-Mix asphalt surface course shall be HMA BC IL-9.5 N50 (thickness as indicated on plans and details).

DATE: 03/08/23 SCALE: AS SHOWN FIELD BOOK: 30/p. 39-41 DRAWN BY: MAM CHECKED BY: MAM PRECISION ENGINEERING GROUP. INC **GENERAL NOTES &** P.O. BOX 784 CHAMPAIGN, IL 61824-0784 PHONE: 217.202.8049 **SPECIFICATIONS** CIVIL ENGINEERING - LAND SURVEYING LINOIS DESIGN FIRM REGISTRATION NO. 184007585 THE COTTAGES AT LAKE FALLS 14722003 SIGNATURE HOMES SHEET SAVOY, ILLINOIS

REVISION MADE: WATER CROSSING CASING

C1.1





SIDE ELEVATION

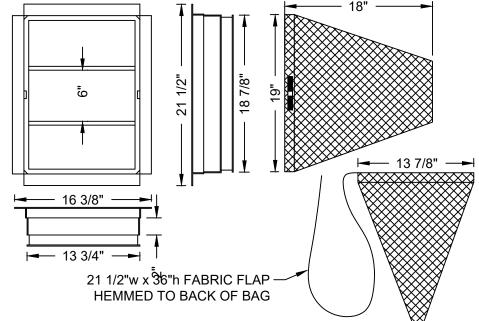
1. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592
GEOTEXTILE, TABLE 1 OR 2, CLASS I, II OR IV AND SHALL BE PLACED OVER THE CLEARED AREA PRIOR TO THE PLACING OF ROCK.

2. ROCK OR RECLAIMED CONCRETE SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGRATE GRADATION, CA-1, CA-2, CA-3 OR CA-4 AND BE PLACED ACCORDING TO CONSTRUCTION SPECIFICATION 25 ROCKFILL USING PLACEMENT METHOD 1 AND CLASS III COMPACTION.

3. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURERS SPECIFICATIONS.

4. IF WASH RACKS ARE USED THEY SHALL BE INSTALLED ACCORDING TO THE MANUFACTURES SPCIFICATIONS.

STABILIZED CONSTRUCTION ENTRANCE PLAN



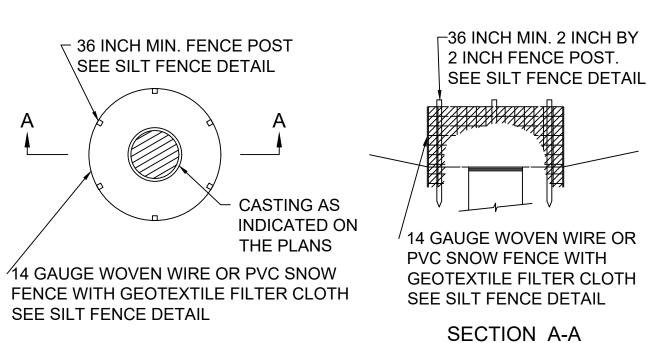
GENERAL NOTES:

1. FRAME: TOP FLANGE FABRICATED FROM 1 $\frac{1}{4}$ " x1 $\frac{1}{4}$ " x $\frac{1}{8}$ " ANGLE. BASE RIM FABRICATED FROM 1 $\frac{1}{2}$ " x $\frac{1}{8}$ " CHANNEL. HANDLES AND SUSPENSION BRACKETS FABRICATED FROM 1 $\frac{1}{4}$ " x $\frac{1}{4}$ " FLAT STOCK. ALL DOMESTIC STELL CONFORMING TO ASTM-A36.

2. SEDIMENT BAG: BAG FABRICATED FROM 4 OZ./SQ. YD. NON-WOVEN POLYPROPYLENE GEOTEXTILE REINFORCED WITH POLYESTER MESH. BAG SECURED TO BASE RIM WITH A STAINLESS STEEL STRAP AND LOCK.

3. ALL FILTER BAGS WILL BE CLEANED ON A WEEKLY BASIS FROM SILT OR REPLACED IF NOT FUNCTIONING PROPERLY.

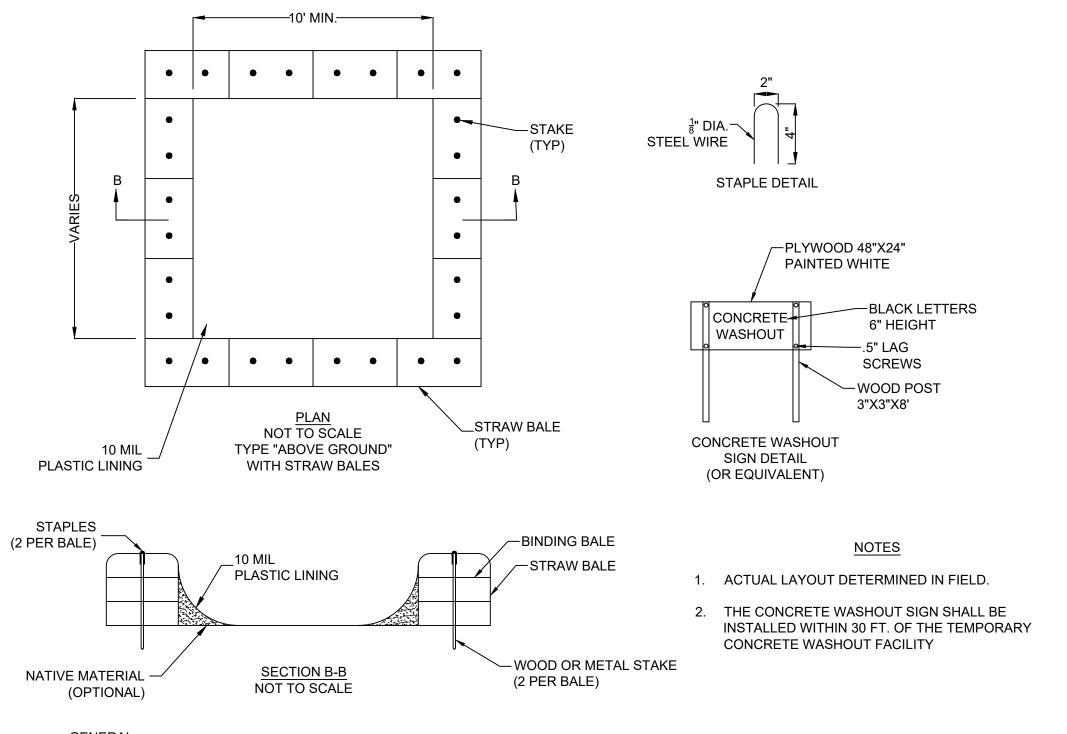
DRAINAGE STRUCTURE INLET FILTER FOR FRAME AND GRATE TYPE 3 IN PAVED AREAS



NOTES:

- 1. EMBED FABRIC 6 INCHES BELOW GROUND SURFACE.
- 2. REMOVE SEDIMENT BUILDUP AFTER EACH RAIN EVENT.
- 3. GEOTEXTILE SHALL BE WRAPPED OVER THE TOP MEMBER OF THE WELDED WIRE BY 6 INCHES AND SECURED WITH FASTENING RINGS AT 6 INCHES ON CENTER. THE FASTENING RING SHALL PENETRATE BOTH LAYERS OF GEOTEXTILE AND SECURELY CLOSE AROUND THE TOP STEEL MEMBER. GEOTEXTILE SHALL BE OVERLAPPED A MINIMUM OF 1 FOOT AND SECURED WITH FASTENING RINGS AT 6 INCHES ON CENTER OR SEWN WITH A TYPE 401 LOCK STITCH TO FORM A SOCK. IN LIEU OF SEWING, THE FASTENING RING SHALL PENETRATE BOTH LAYERS OF GEOTEXTILE AND SECURELY CLOSE AROUND A MEMBER OF THE WOVEN WIRE.

OPEN GRATE FILTER BASKET



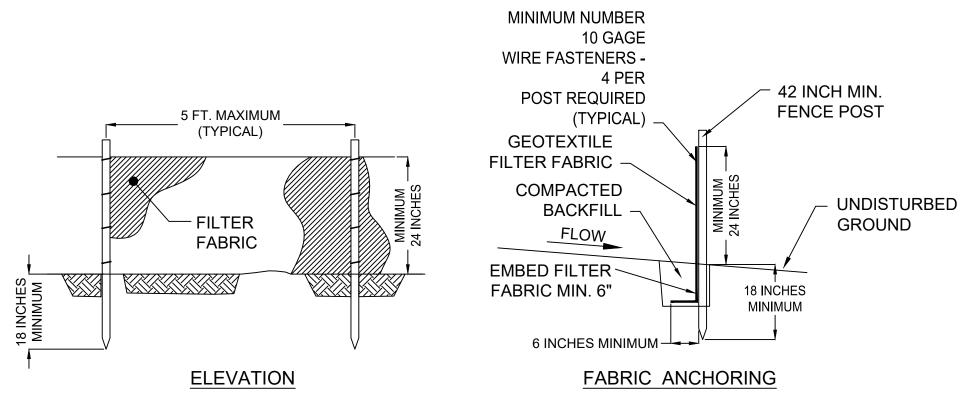
GENERAL

- PCC and AC wastes shall be collected and disposed of or placed in a concrete washout facility. No PCC or AC wastes shall enter the storm sewer system or watercourses.
- Once concrete wastes are discharged to facility and allowed to harden, the concrete waste shall be broken up and disposed of in accordance with state and local law.
- A minimum of 12 inches freeboard is required for below-grade facilities and a minimum of 4 inches freeboard is required for above-grade facilities.

REMOVAL

- When facilities are no longer required for construction work, the materials used to construct the facility shall be removed from the site and disposed of in accordance with state and local law.

CONCRETE WASHOUT FACILITY



NOTES:

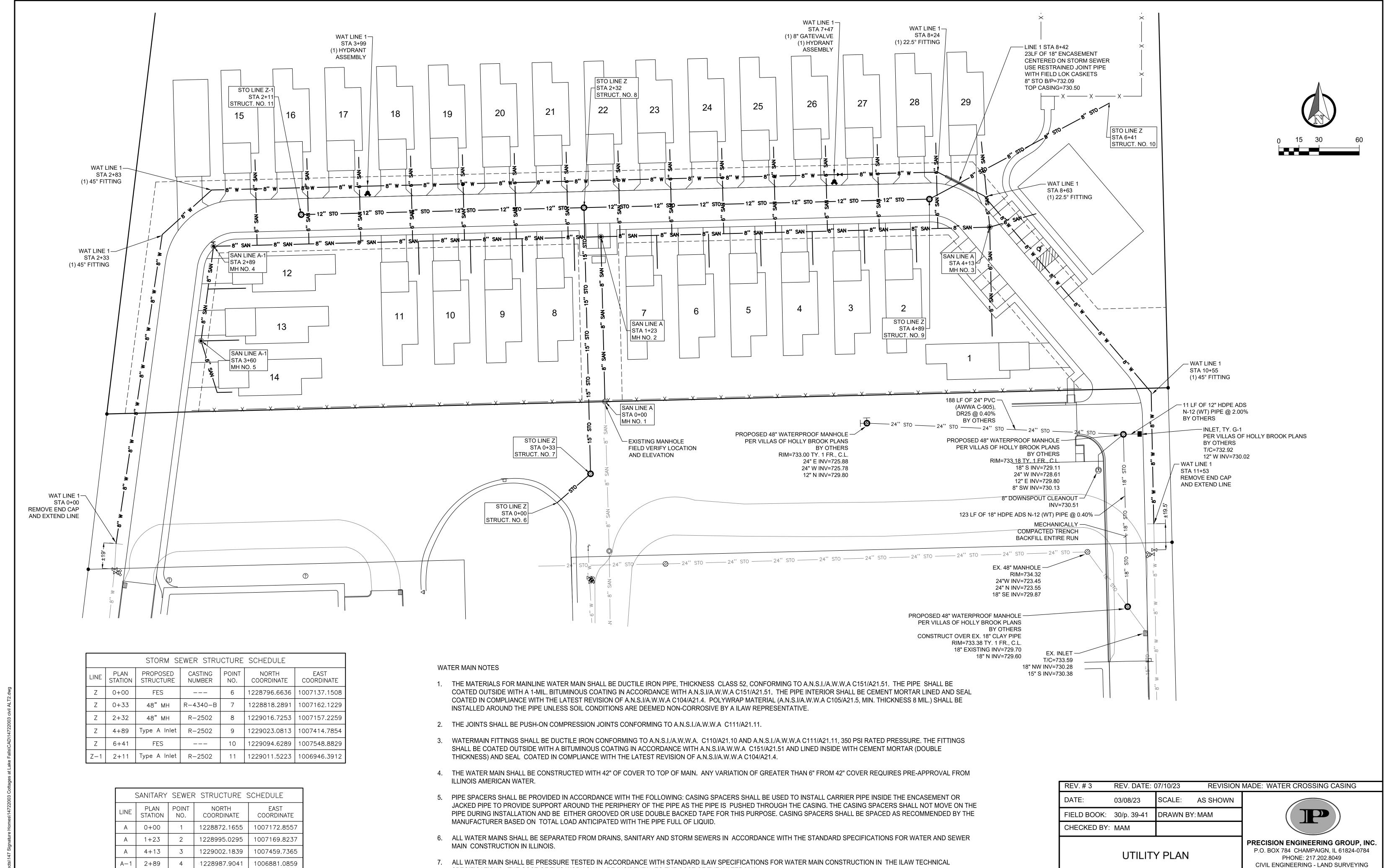
- 1. TEMPORARY SEDIMENT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. THEY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.
- 2. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERILA SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS I WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
- 3. FENCE POSTS SHALL BE EITHER STANDARD STEEL POST OR WOOD POST WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQUARE INCHES.

SILT FENCE BARRIER DETAIL

REV. # 3	REV. DATE: (07/10/23 REVISION MADE: WATER CROSSING CASING				
DATE:	03/08/23	SCALE:	AS SHOWN			
FIELD BOOK:	30/p. 39-41	DRAWN BY: MAM				
CHECKED BY: MAM						
EROSION CONTROL DETAILS			PRECISION ENGINEERING GROUP, INC. P.O. BOX 784 CHAMPAIGN, IL 61824-0784 PHONE: 217.202.8049 CIVIL ENGINEERING - LAND SURVEYING ILLINOIS DESIGN FIRM REGISTRATION NO. 184007588			
THE COTTAGES AT LAKE FALLS					FILE#	

THE COTTAGES AT LAKE FALLS
SIGNATURE HOMES
SAVOY, ILLINOIS

14722003 SHEET C2.1



8. ALL WATER MAIN SHALL BE DISINFECTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS AND THE ILAW

LINOIS DESIGN FIRM REGISTRATION NO. 184007585

14722003

SHEET

C3.0

THE COTTAGES AT LAKE FALLS

SIGNATURE HOMES

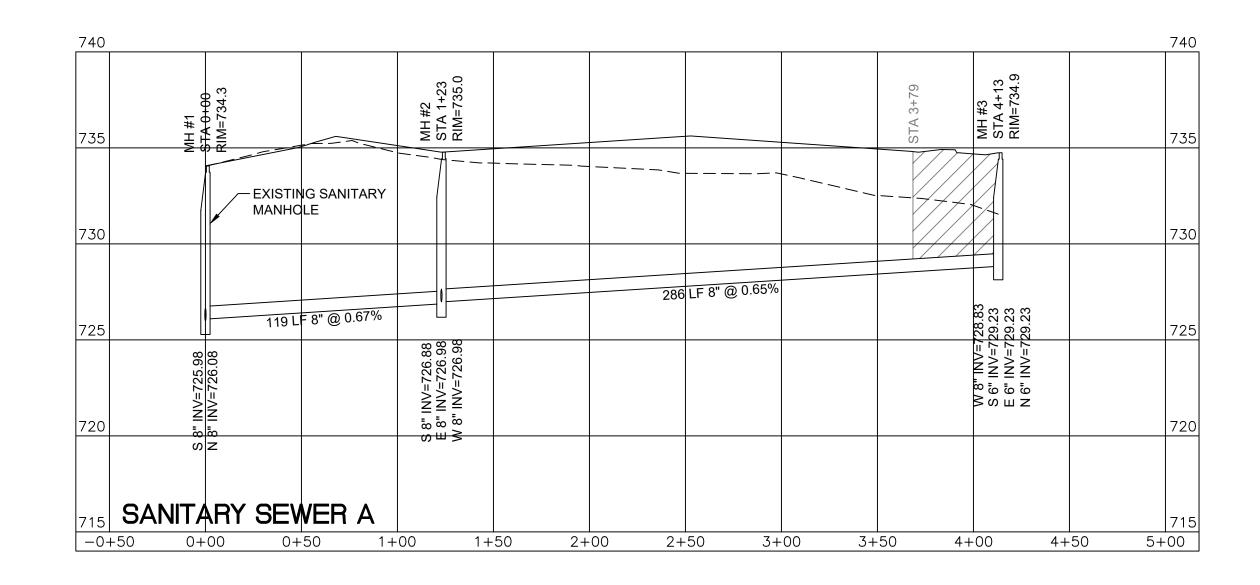
SAVOY, ILLINOIS

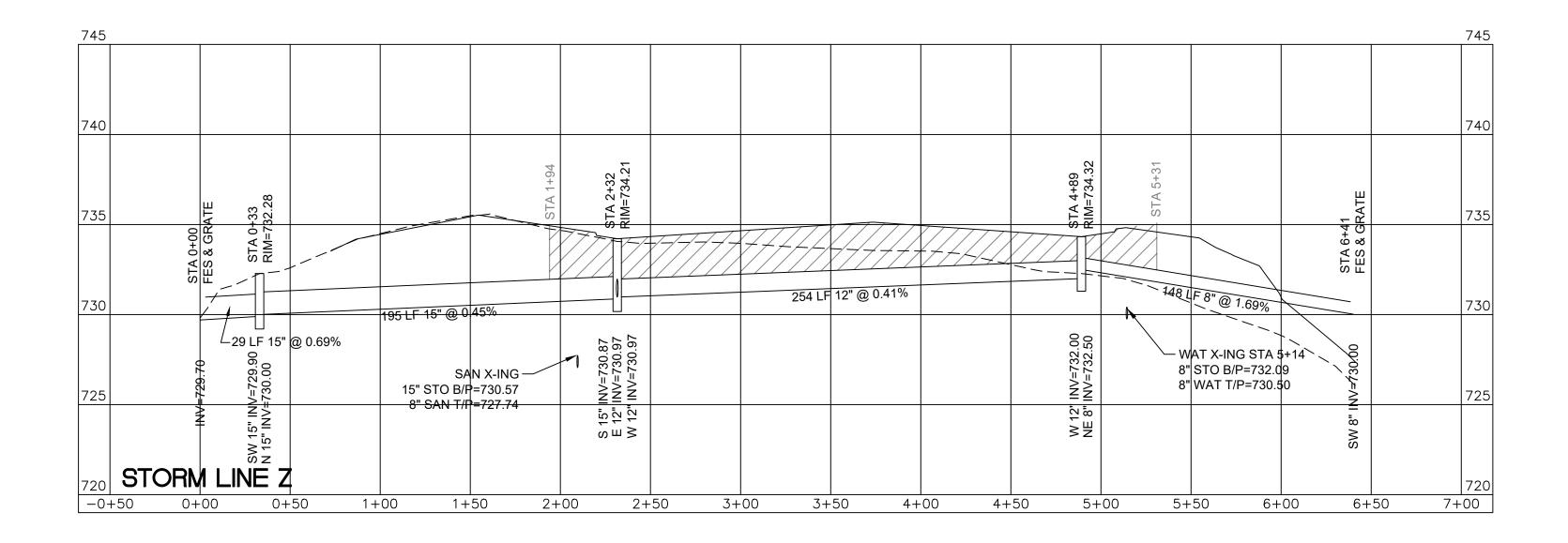
SPECIFICATIONS. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE COST OF THE WATER MAIN.

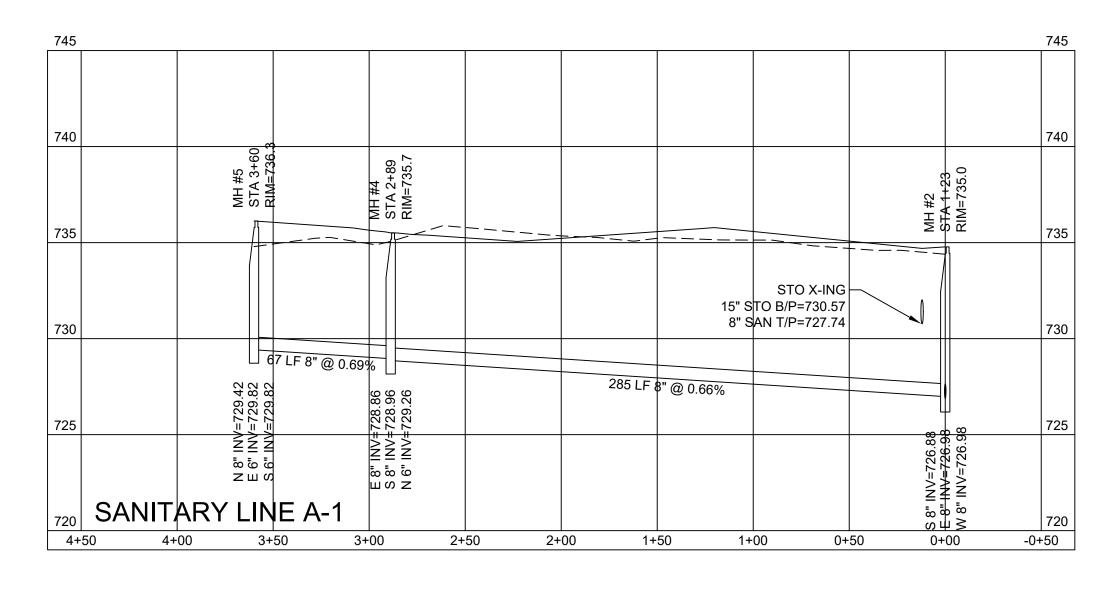
TECHNICAL SPECIFICATIONS. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE COST OF THE WATER MAIN.

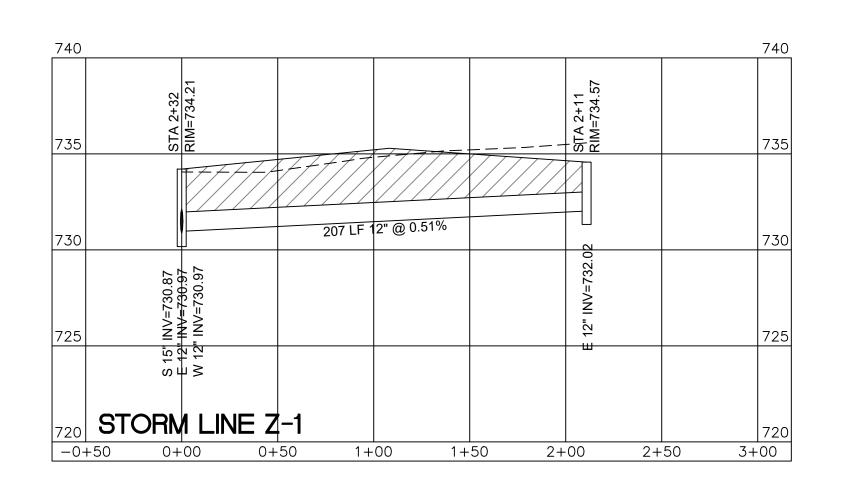
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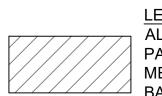








SCALE: HORZ. 1"=50' VERT. 1"=5'



ALL TRENCHES WITHIN 2 FEET OF ANY PAVEMENT SHALL BE BACKFILLED WITH MECHANICALLY COMPACTED TRENCH BACKFILL.

REV. # 3	REV. DATE: 07/10/23		REVISION MADE: WATER CROSSING CASING		
DATE:	03/08/23	SCALE:	AS SHOWN		
FIELD BOOK:	30/p. 39-41	DRAWN BY: MAM			
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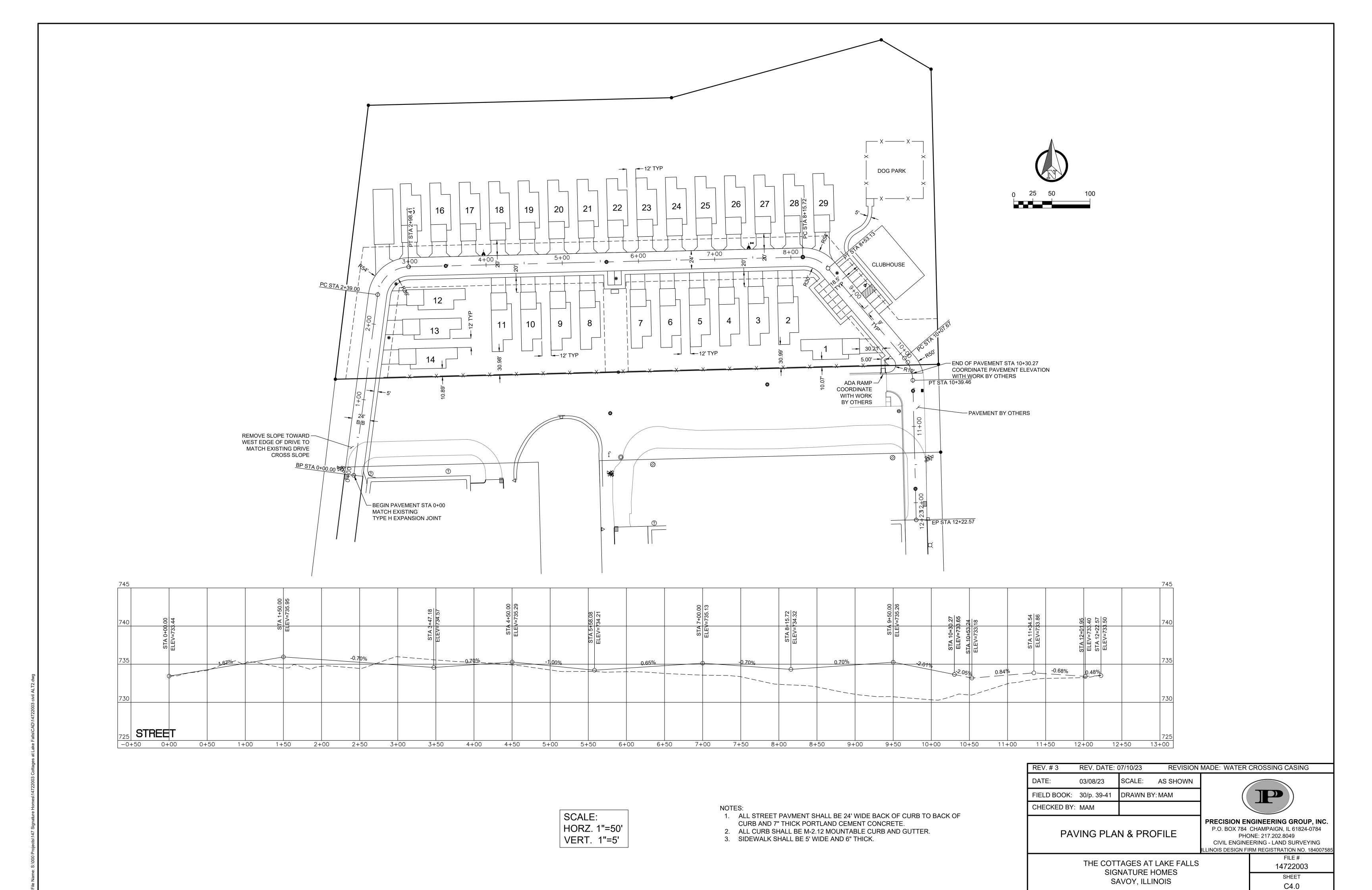


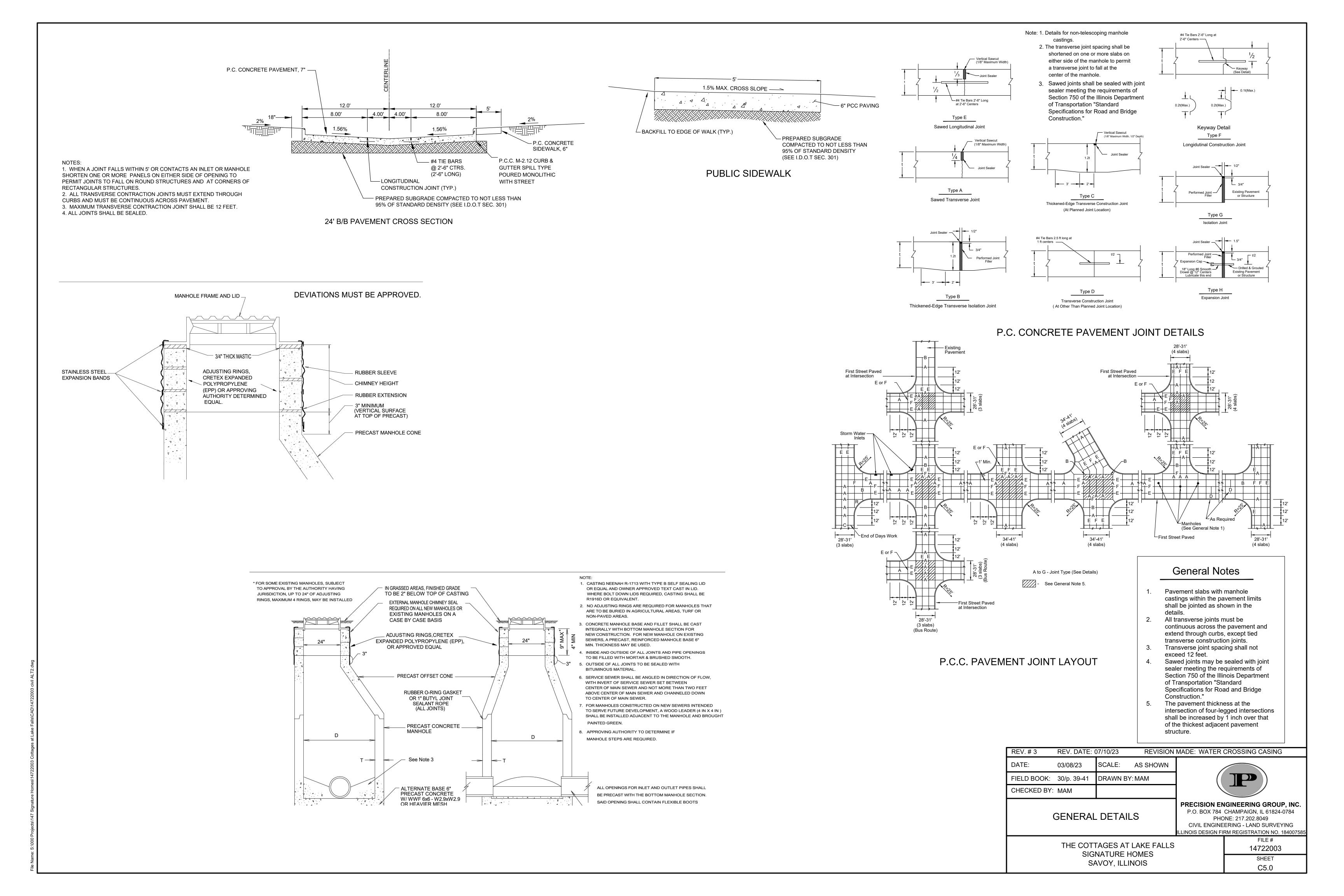
UTILITY PROFILES

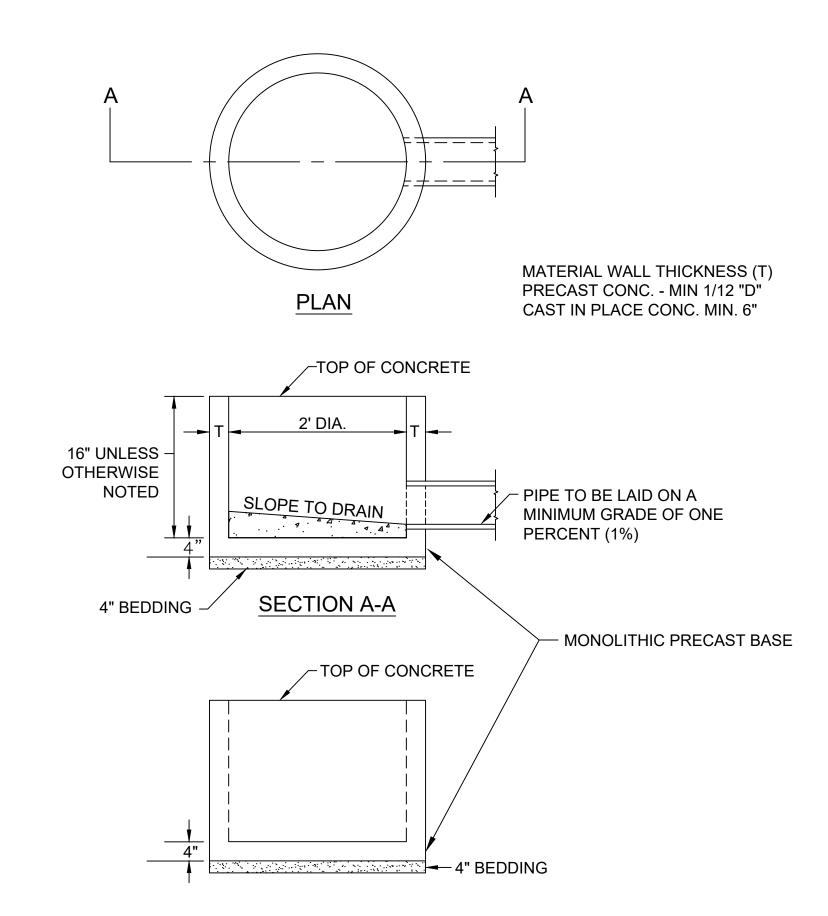
PRECISION ENGINEERING GROUP, INC. P.O. BOX 784 CHAMPAIGN, IL 61824-0784 PHONE: 217.202.8049
CIVIL ENGINEERING - LAND SURVEYING LINOIS DESIGN FIRM REGISTRATION NO. 184007585

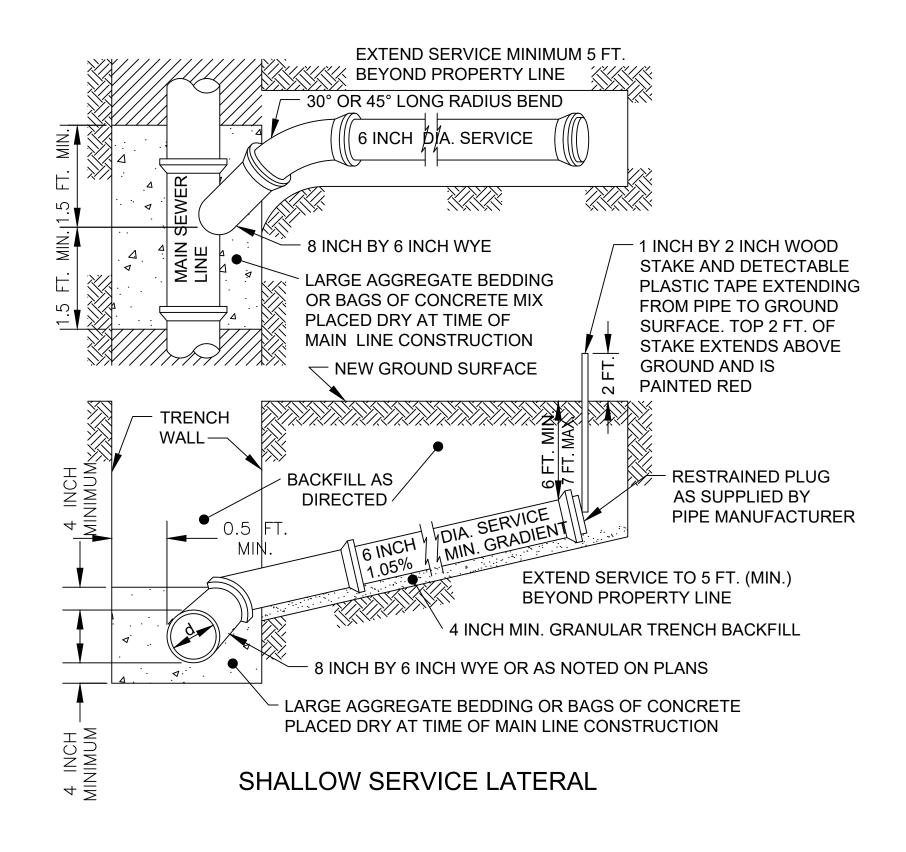
THE COTTAGES AT LAKE FALLS SIGNATURE HOMES SAVOY, ILLINOIS

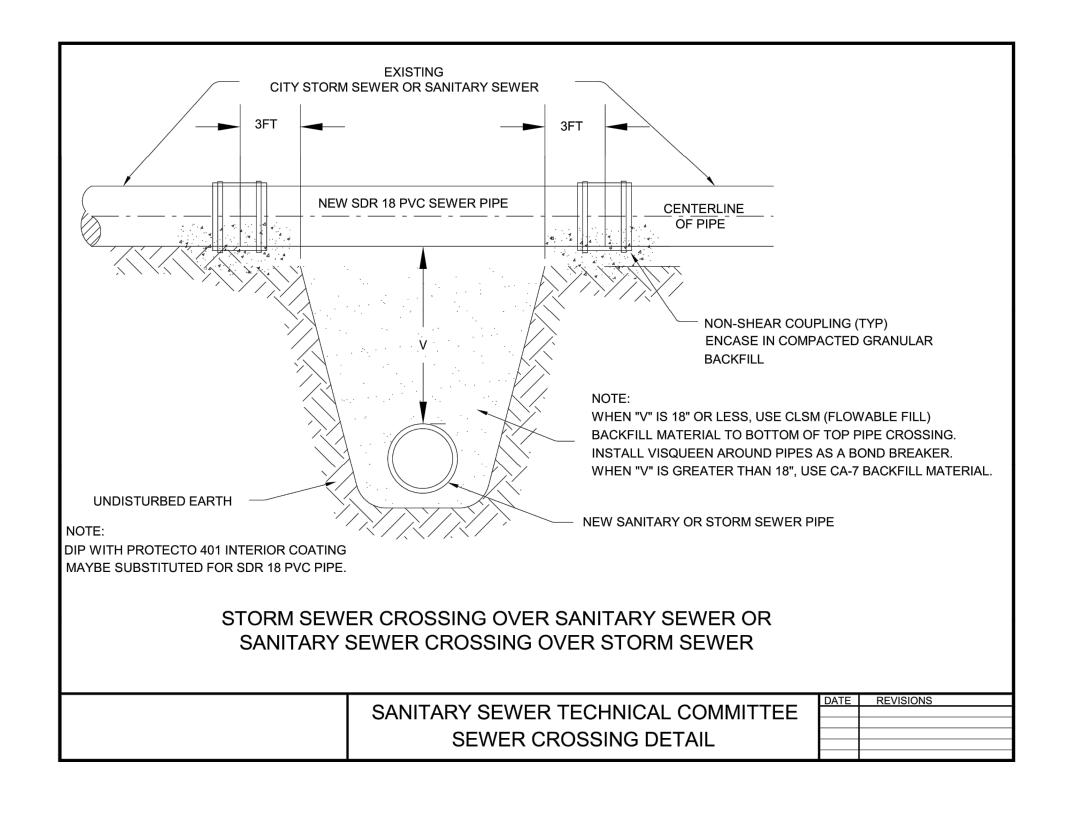
14722003 SHEET C3.1



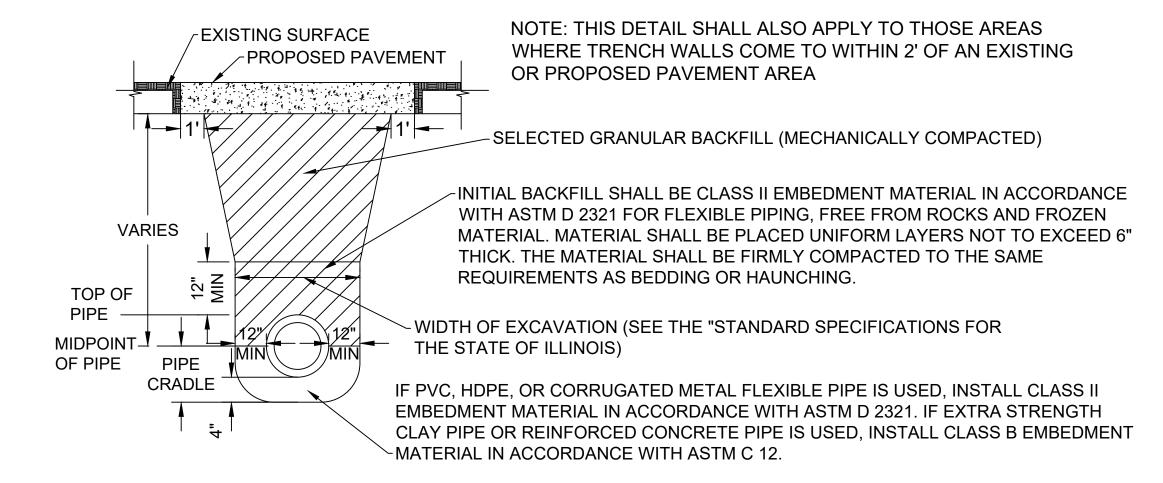




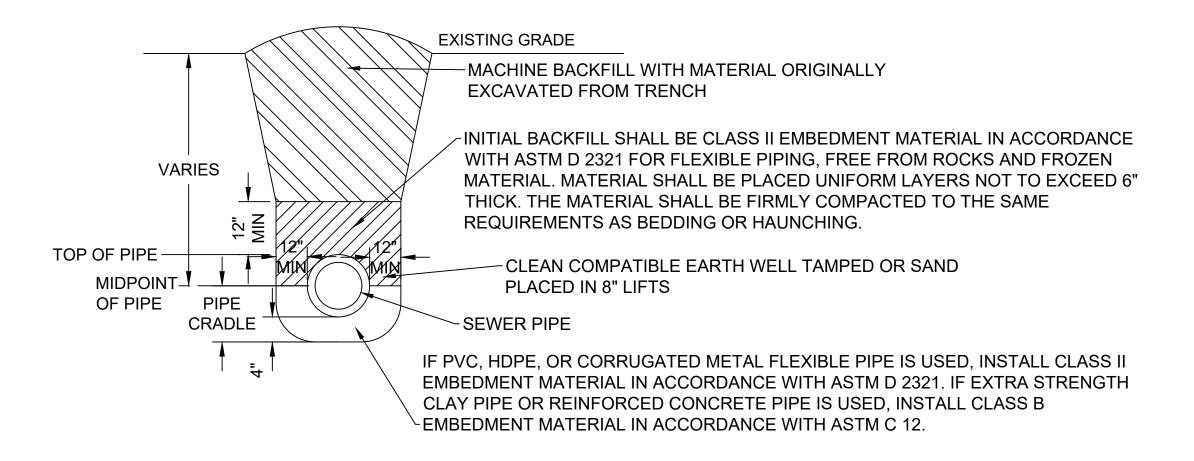




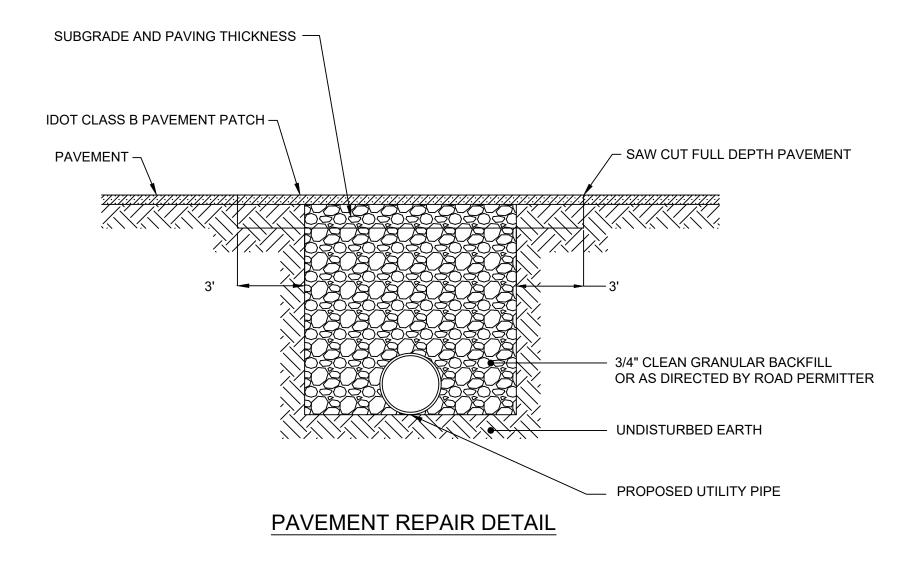
NOTE: ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THOSE OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" (LATEST EDITION)



TRENCH CROSS SECTION FOR SEWER AND WATER UNDER PAVEMENT



TRENCH CROSS SECTION FOR SEWER AND WATER OPEN GROUND



REV. DATE: 07/10/23

SCALE:

SAVOY, ILLINOIS

03/08/23

REV. # 3

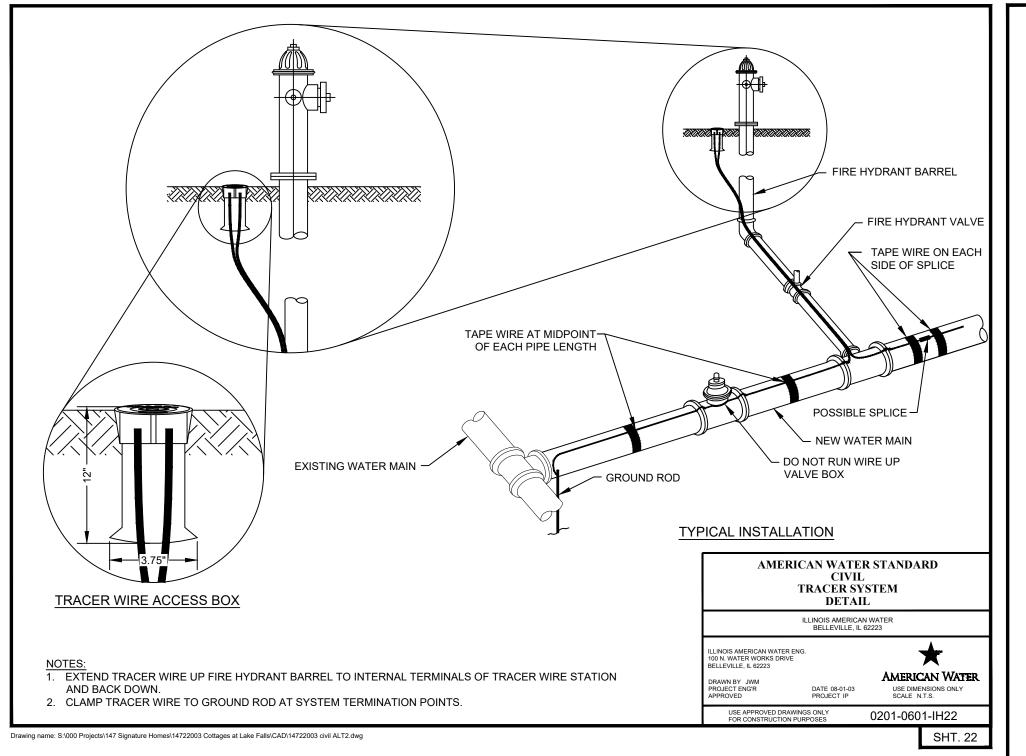
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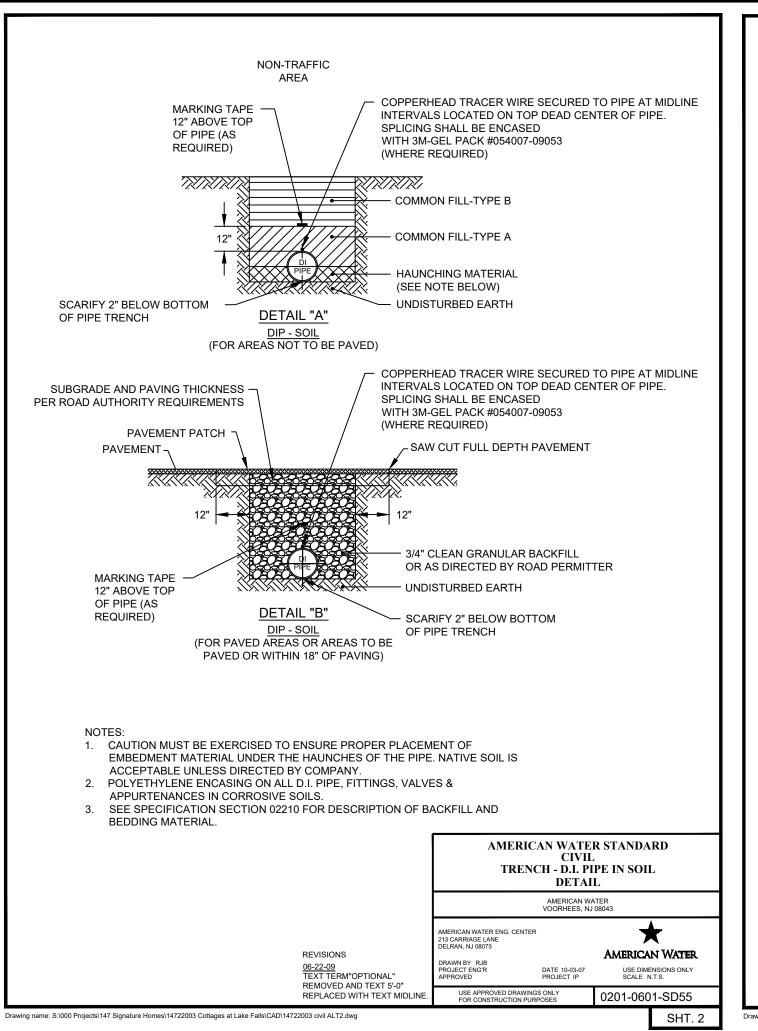
FIELD BOOK: 30/p. 39-41	DRAWN BY: MAM			
CHECKED BY: MAM				
GENERAL	DETAILS	PRECISION ENGINEERING GROUP, INC. P.O. BOX 784 CHAMPAIGN, IL 61824-0784 PHONE: 217.202.8049 CIVIL ENGINEERING - LAND SURVEYING ILLINOIS DESIGN FIRM REGISTRATION NO. 184007585		
	TAGES AT LAKE FALLS NATURE HOMES		FILE # 14722003	
	NATURE HOMES		SHEET	

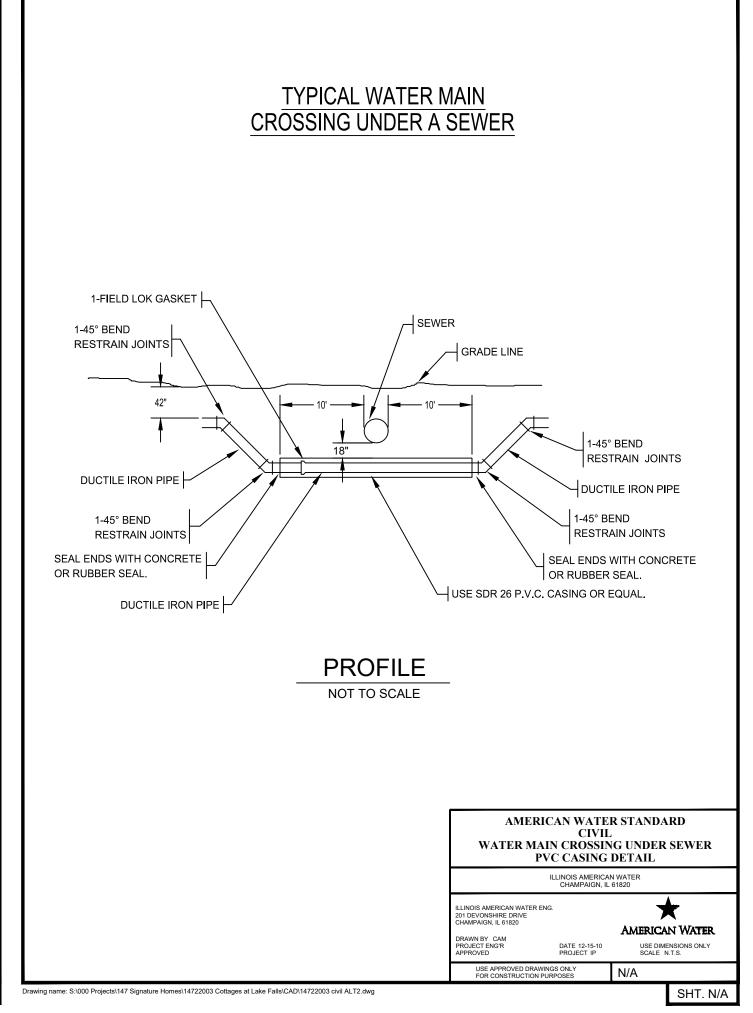
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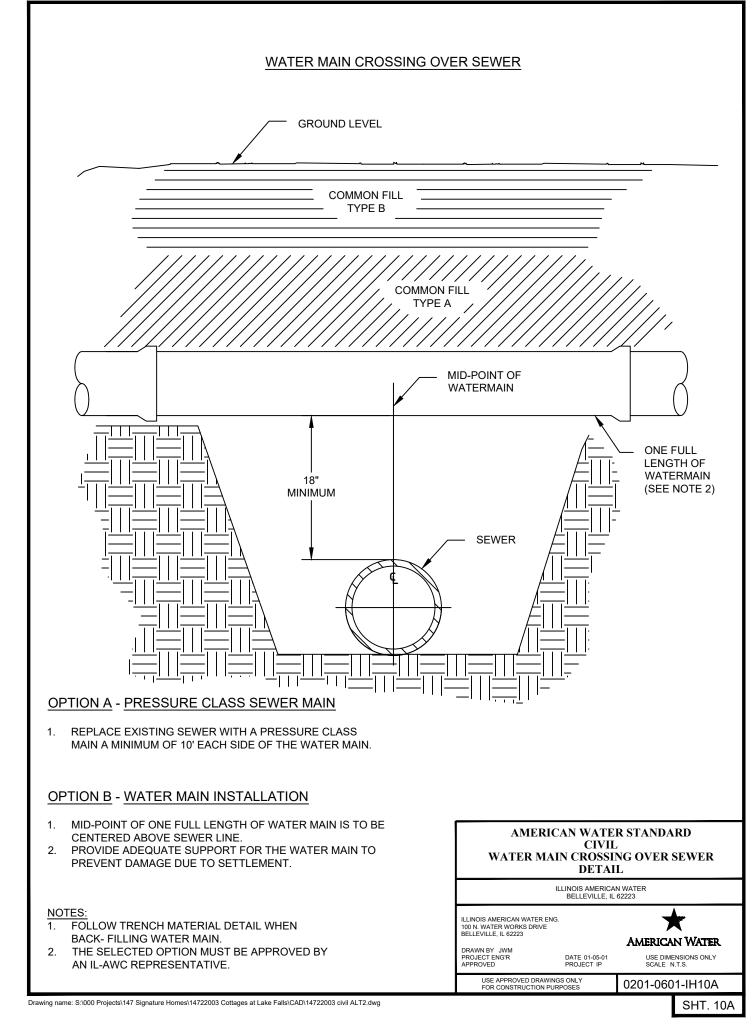
REVISION MADE: WATER CROSSING CASING

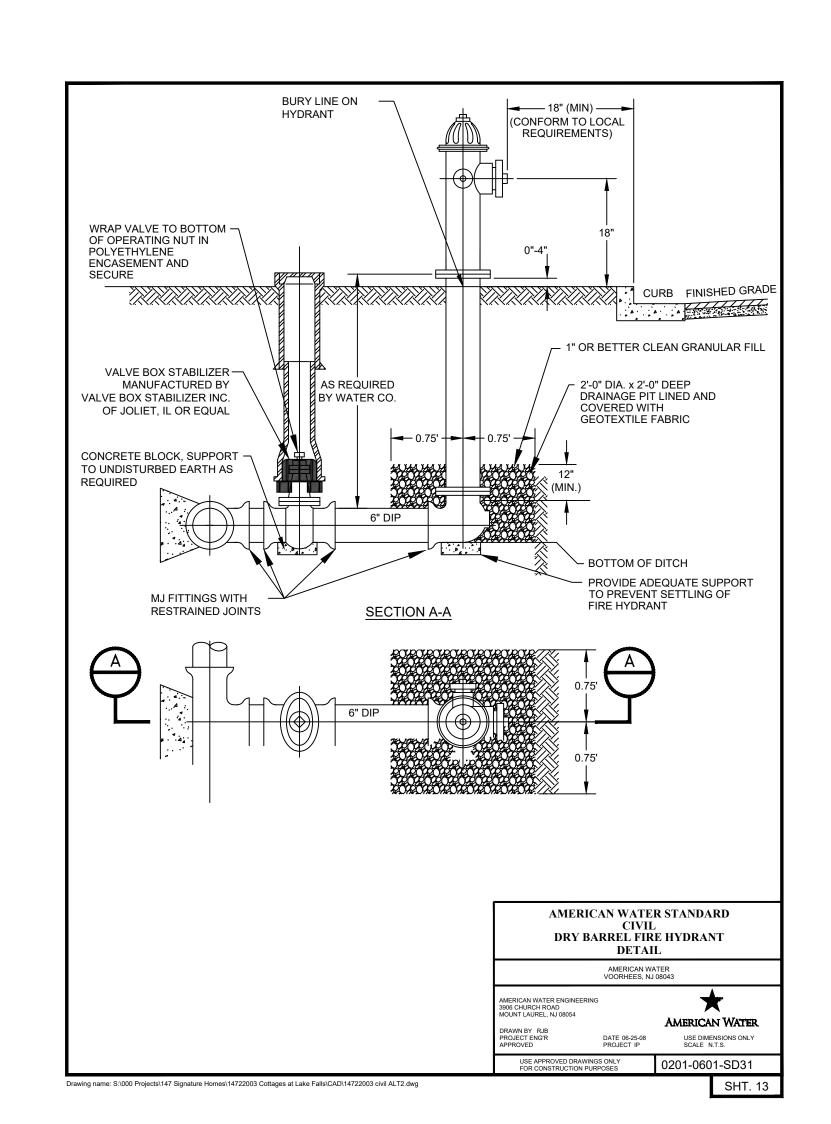
C5.1

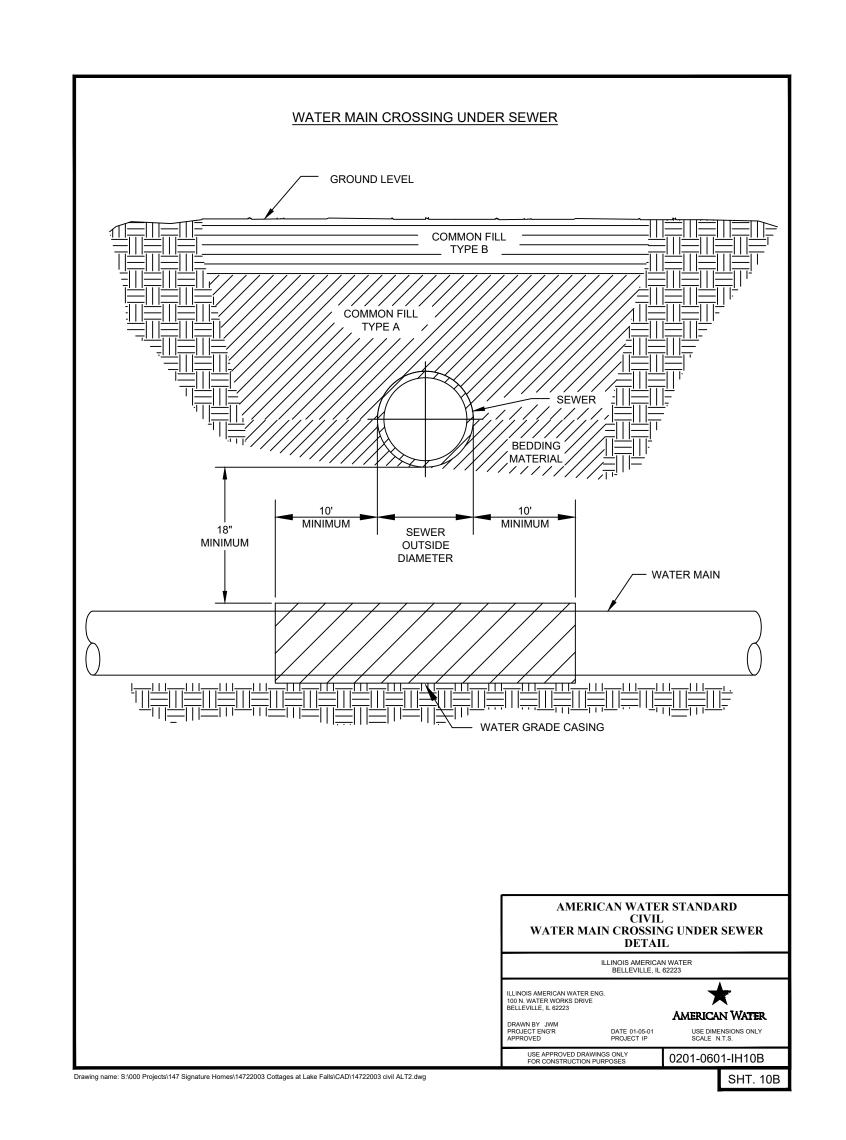


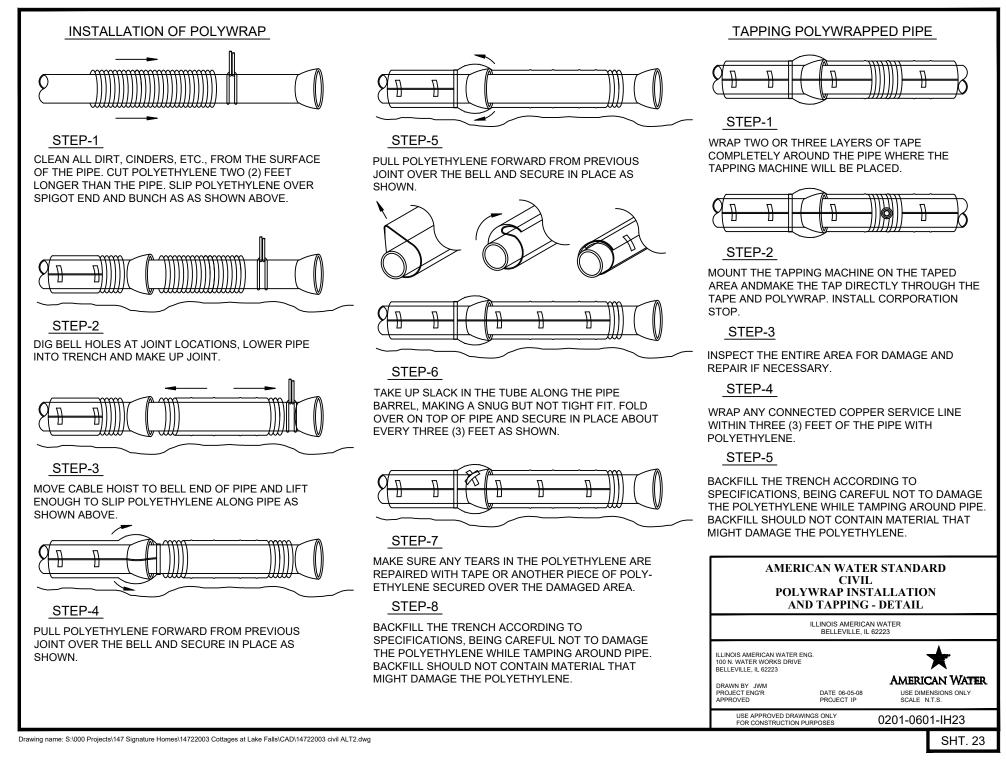


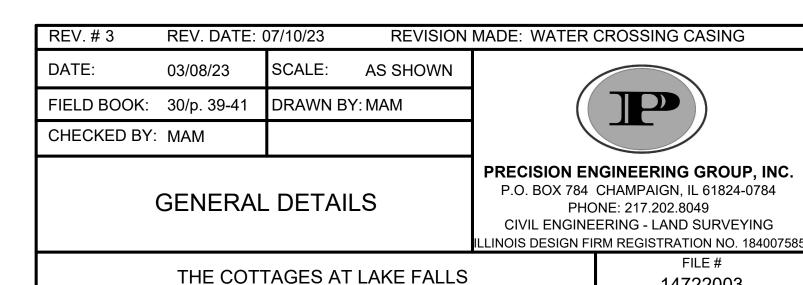












SIGNATURE HOMES SAVOY, ILLINOIS

14722003 SHEET C5.2