

PRAIRIE ROSE DEVELOPMENT

PRAIRIE ROSE DRIVE

ROSCOE, IL

GENERAL NOTES

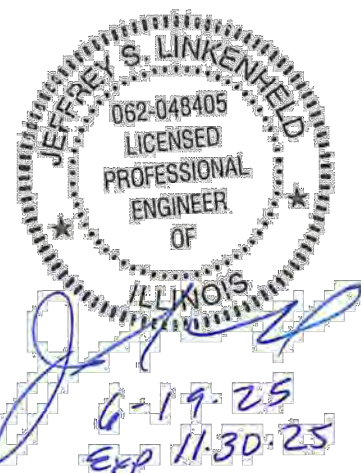
- The designs represented in these plans are in accordance with established practices of civil engineering for the design functions and uses intended by the owner at this time. Neither the engineer nor its personnel can or do warrant these designs or plans as constructed except in the specific cases where the engineer inspects and controls the physical construction on a contemporary basis at the site.
- The contractor, by agreeing to perform the work, agrees to indemnify and hold harmless the owner, the engineer, the city, and all agents and assigns of those parties, from all suits and claims arising out of the performance of said work, and further agrees to defend or otherwise pay all legal fees arising out of the defense of said parties.
- In accordance with generally accepted construction practices, the contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. Any construction observation by the engineer of the contractor's performance is not intended to include review of the adequacy of the contractors safety measures, in, or near the construction site. The contractor is responsible for maintaining adequate signs, barricades, fencing, traffic control devices and measures, and all other measures that are necessary to protect the safety of the site at all times.
- Maintain access for vehicular and pedestrian traffic as required for other construction activities. Use traffic control devices to include temporary striping, flagmen, barricades, warning signs, and warning lights shall be in accordance with current MUTCD and IDOT standards.
- All phases of the site work for this project shall meet or exceed industry standards and requirements set forth by the Village of Roscoe, the State of Illinois, and this plan set.
- The Village of Roscoe must be notified at least two (2) working days prior to the commencement or resumption of any work.
- The contractor shall coordinate all permit and inspection requirements with responsible local, state, and federal agencies. The contractor shall include the costs of this coordination and all inspection fees in the bid price.
- All work performed by the contractor shall come with a warranty against defects in workmanship and materials. This warranty period shall run concurrent with the required warranty periods the owner must provide to each local government agency, as a condition of the permit.
- The contractor will be held solely responsible for and shall take precautions necessary to avoid property damage to adjacent properties during the construction of this project.
- All structures, inlets, pipes, swales, roads and public egresses must be kept clean and free of dirt and debris at all times.
- Any field tiles encountered during construction shall be recorded showing size, location, and depth by the contractor, and either reconnected and rerouted or connected to the storm sewer system. The owner and village shall be notified immediately upon encountering any tile. Village approval required prior to connection to storm system.
- The contractor shall field verify the elevations of the benchmarks prior to commencing work. The contractor shall also field verify the location and elevation of existing pipe inverts, curb or pavement where matching into existing work. The contractor shall field verify horizontal control by referencing property corners to known property lines. Notify the engineer of discrepancies in either vertical or horizontal control prior to proceeding.
- All elevations are on WinGIS Datum, using monument #38 (WIN 18.1 N, 07.1 E)
- Parking areas designated as A.D.A. and all sidewalk shall be compliant with state and local A.D.A. requirements.
- Tactile warning plates per IDOT specifications shall be placed at all locations where sidewalk that is to be replaced intersects public roads and at locations indicated in this plan set.
- The contractor shall verify the location of all utilities in the field prior to construction. This includes sanitary sewer, water main, storm sewer, General Telephone, Commonwealth Edison, Northern Illinois Gas and cable television, if any. The J.U.L.I.E. number is 1-800-892-0123.
- Property corners shall be carefully protected until they have been referenced by a Professional Land Surveyor.
- The contractor shall keep careful measurements and records of all construction and shall furnish the Engineer, the Owner and the City with record drawings in a digital format compatible with AutoCAD Release 14 upon completion of his work.
- Any excess dirt or materials shall be placed by the contractor onsite at the owner's direction or as indicated on the plans.
- Notify the owner and Village of Roscoe of any existing wells. Obtain permit form the Illinois Bureau of Minerals and the State Water Survey. Cap and abandon wells in accordance with local, state, and federal regulations.
- Finish grade shall in all areas not specifically reserved for storm water management shall drain freely. No ponding shall occur. Tolerances to be observed will be measured to the nearest 0.04 of a foot for paved surfaces and 0.10 of a foot for unpaved areas.

VICINITY MAP



DIAL 811 OR (800)
892-0123

Call
Before
You Dig



OWNER:

LITTLE MARIANO, INC.

P.O. BOX 66
ROCKTON, IL 61072
(815) 543-8801

ENGINEER:



Sheet List Table

SHEET NUMBER	SHEET TITLE
C01	COVER
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C03	GENERAL NOTES, TYPICAL SECTION & SUMMARY OF QUANTITIES
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C05	SWPPP SITE MAP
C06	SWPPP DETAILS
C07	EXISTING CONDITIONS & REMOVAL PLAN WEST
C08	EXISTING CONDITIONS & REMOVAL PLAN EAST
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C11	GRADING PLAN WEST
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L03	LANDSCAPE DETAILS

APPROVAL

CITY
COUNTY
STATE

DATE

PENDING
PENDING
PENDING

UTILITY OFFICIALS

PUBLIC WORKS DEPARTMENT:

VILLAGE OF ROSCOE
5402 SWANSON ROAD
ROSCOE, IL 61073
WADE KRETSINGER
SUPERVISOR
(815) 877-0746

WATER DEPARTMENT:

NORTH PARK PUBLIC WATER DEPARTMENT
1350 TURRET DRIVE
MACHESNEY PARK, IL 61115
(815) 633-5461

SEWER DISTRICT:

FOUR RIVERS SANITATION AUTHORITY
3501 KISHWAUKEE STREET
ROCKFORD, IL 61109
CHRISTOPHER T. BAER, P.E.
DIRECTOR OF ENGINEERING
(815) 387-7660

CABLE TELEVISION:

COMCAST
4450 KISHWAUKEE STREET
ROCKFORD, IL 61101
THOMAS YUCCAS
(815) 395-8977

TELEPHONE:

AT&T MIDWEST
2404 8TH AVENUE
ROCKFORD, IL 61108
HECTOR GARCIA
(630) 639-8372

GAS:

NICOR GAS
1844 FERRY ROAD
NAPERVILLE, IL 60563
(708) 878-1242

ELECTRIC:

COM ED
123 ENERGY DRIVE
ROCKFORD, IL 61109
(815) 490-2335



PROJECT NAME
OWNER'S NAME

PRAIRIE ROSE DEVELOPMENT

PRAIRIE ROSE DRIVE
ROSCOE, IL
WINNEBAGO COUNTY

LITTLE MARIANO, INC.
P.O. BOX 66
ROCKTON, IL 61072
(815) 543-8801

CONSULTANTS

ISSUED FOR

1. AGENCY REVIEW	DATE
2. ---	---
3. ---	---
4. ---	---
5. ---	---
6. ---	---
7. ---	---
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REVISIONS

ITEM	DATE
1. ---	---
2. ---	---
3. ---	---
4. ---	---
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SHEET TITLE

COVER

DRAWN

RMG

CHECKED

JSL

PM

JSL

PROJECT NUMBER
SHEET NUMBER

25012

C01

GENERAL WATER UTILITY NOTES

1. All watermains shall be constructed in accordance with the "Standard Specifications for Water and Sewer Main construction in Illinois", current edition, as well as the North Park Public Water District's Standard Watermain Specifications current edition, on file with the Illinois EPA Division of Public Water Supplies.
2. Refer to North Park Public Water District "Standard Specifications of Water Main Construction" updated March 2025 for additional information and requirements.
3. All watermain shall be Ductile Iron pipe conforming to AWWA Standard C151 & C111 and be constructed of Class 52 Ductile Iron pipe for all sizes through twelve (12) inch, and Class 51 Ductile Iron pipe for all sizes larger. The minimum cover for all watermain, hydrant lead piping, and water service pipe is 7 feet 0 inches (7'-0") from finished grade to top of pipe.
4. All watermains under and within two feet of any existing or proposed street pavement or curb shall be backfilled with granular backfill material. Trench and backfill shall be placed in lifts not to exceed 12 inches compacted to 95% of maximum standard proctor density.
5. All gate valves shall be reduced wall, resilient-seated gate valve, meeting all specifications of AWWA C515. All gate valves shall be approved equal to those named. Both valve ends shall be mechanical-joint, underground, or flanged which will meet requirements in AWWA C110. Accessories (bolts, glands, and gaskets) shall be supplied by the valve manufacturer.
6. After the pressure test has been accepted, the contractor shall chlorinate the watermains in accordance with the requirements of AWWA, the Illinois EPA, and the North Park Public Water District. HTH tablets shall not be glued to PVC watermain.
7. Watermains and services shall be separated from or protected from sanitary and storm sewers in accordance with Section 41-2.01 of the "Standard Specifications for Water and Sewer Construction in Illinois", current edition.
8. Water service materials shall consist of copper pipe, or minimum PC160 polyethylene, brass corporation and curb stops, with curb boxes.
9. No object may be constructed, maintained, or installed within 48 inches of a fire hydrant. Trees, bushes, walls, or other obstacles which may hide or impede the use of a fire hydrant will not be permitted.
10. Fire hydrants shall comply with standards specified in AWWA C502 for Dry Barrel Fire Hydrants. Only the following manufacturers and models are accepted by the District:
- a. Kennedy Guardian K-81A
- b. Mueller Super Centurion A-421
- No fire hydrants shall be located in cut-de-sac islands. Hydrants shall be painted in conformity to AWWA Std. C502, Traffic Yellow.
- The inlet connection shall be six (6) inch oversized mechanical joint type, which is designed to be installed on Class D PI Cast or Class 250 Cast Iron pipe and Class 52 Ductile Iron pipe by using two (2) types of available gaskets furnished with the hydrant. Gaskets for oversized cast iron and ductile iron are to be color coded to identify which gasket is to be used on which pipe. The interior shoe and lower valve plate shall be coated with an epoxy at a minimum of four (4)

- mils thickness. Ductile iron restrained retainer glands, bolts (COR-Blue), nuts, and gaskets, shall conform to AWWA Standard C111.
- Hydrant installation: Hydrants shall be installed in strict accordance with AWWA C600 and recommendations of the manufacturer. All hydrants shall stand plumb and shall have their nozzles parallel with or at right angles to the curb, with pumper nozzle facing the curb. Hydrants shall be set to the established grade, and have a minimum bury depth of 7 feet 0 inches, with the center of the pumper nozzle being 18 to 24 inches above grade. Precautions must be taken to provide adequate drainage of hydrants where natural soils will not provide drainage. Hydrant drains shall not be connected to or located within 10 feet of sanitary sewers or storm drains. Hydrants will be spaced as directed by the District. In general, hydrant spacing will be based upon the area being served and as recommended by the State Insurance Services Office.
11. Record drawings along with a digital copy in AutoCAD format, are required by the North Park Public Water District. The contractor shall record measurements from property pins to the centers of the valve lids and curb boxes. Each measurement shall be parallel or perpendicular to the property line. GIS shapefiles and with GPS points provided during construction, not during design, shall be provided along with asbuilts. Refer to section 1.03 of North Park Public Water District "Standard Specifications of Water Main Construction" for digital submittal standards.
12. All bends of eleven and one fourth (11 ¼) degrees or greater, and all tees and plugs shall be thrust protected to prevent movements of lines under pressure as per NPPWID detail and specifications.
13. The contractor shall contact the NPPWID at least 48 hours prior to beginning work on the water main and/or service installations and should make the site available for inspection by the NPPWID at regular intervals during construction.

14. A contingency quantity has been included in the plans for Removal & Disposal of Unsuitable Material as well as Rock Fill and shall be used as needed. Quantities will be measured in the field.
15. Tie bars shall be installed to tie PCC appurtenance to adjacent existing concrete pavement. Tie bars to be installed in accordance with the applicable portions of Article 420.05 of the Standard Specifications. See Highway Standard 420001-08 for detail on longitudinal construction joint grouted-in-place tie bar. The cost of the tie bars to be included in the cost of the PCC appurtenance adjacent to the existing pavement.
16. See cross sections for special ditches and back slopes.
17. The removal of bituminous surfacing on a rigid type base removed in conjunction with the base shall be included in the contract unit price for pavement removal of the type specified.
18. Placement and compaction of the backfill for proposed across road culverts and existing across road culverts that are removed shall conform to Section 502.10 of the standard specifications, except that the material shall conform to Article 208.02 of the standard specifications, and shall be compacted to a minimum of 95% of the stand laboratory density. Any material conforming to the requirement of Article 1003.04 or 1004.05 which has been excavated from the trenches shall be used for backfilling the trenches. The entire excavation, within 2 feet outside of each curb or pavement shall be backfilled with trench backfill material to the bottom of the proposed subgrade.
19. All embankment constructed of cohesive soil shall be constructed with not more than 110% of optimum moisture content, determined by the standard proctor test. Cohesive soil shall be defined as any soil which contains greater than 10% particles by weight passing the #200 sieve. The 110% of optimum moisture limit may be waived in free-draining granular material when approved by the engineer.
20. The contractor shall place temporary hot-mix asphalt tapers along all sides of the utility structures protruding above the final surface. The temporary tapers shall extend 2' outside of the castings, except for the approach side to traffic shall have a 4' taper length. Hot-mix asphalt meeting the approval of the engineer shall be used. No cold millings will be allowed.. The cost of the material, placement, maintenance, remove, and disposal of said work will be incidental to the project.
21. The temporary sheet piling necessary for the placement of storm sewer, sanitary sewer, and watermain shall be included in the cost of the item being installed.
22. Culvert flows must be maintained throughout the project. Normal flow shall be allowed to pass at the rate it enters the jobsite. High flows shall be allowed to pass without causing damage to upstream properties.
23. All frames and grates of drainage structures to be removed or filled shall be carefully salvaged and shall remain the property of the contractor.
24. The new manhole lids on this project shall have the word "STORM", or "WATER" on the lid. The word to be used is noted on the plans. It will be the contractor's responsibility to determine the word to be used on other lids not noted on the plans. No additional compensation will be allowed for this work.
25. All proposed manholes on this project shall be cast in place or precast. This work will be paid for at the contract unit price each for manhole of the type and size specified.
26. The contractor shall determine flow lines of existing sewer lines which are shown on the plans as estimated or unknown. This information is necessary before ordering inlets and manholes.
27. Pavement marking shall be done according to standard 780001, expect as follows:
- 27.A. All words, such as "ONLY", shall be 8 feet high.
- 27.B. All non-freeway arrows shall be large size text.
28. Expect as noted on the plans, pavement grades shown are at the top of pavement surfaces.
29. For stabilization, all type III barricades shall require a minimum of four sand bags per barricade.
30. The work required to connect any sewer to an existing drainage structure or pipe will not be paid for separately, but shall be considered as included in the contract unit price bid for the sewer item.
31. Seeding shall not be permitted at any time when the ground is frozen, wet, or in an unilliable condition. Locations to be seeded will be determined by the engineer.
32. Only those trees designated by the engineer or listed in the tree removal schedule shall be removed. The contractor shall protect all remaining trees from damage due to his operations.
33. Abandoned underground utilities that conflict with construction shall be disposed of outside the limits of the right-of-way according to Article 202.03 of the standard specifications and as directed by the engineer. This work will not be paid for separately, but shall be included in the cost of earth excavation.
34. Any reference to a standard in these plans shall be interpreted to mean the most current edition.
35. The following rates of application have been used in calculating plan quantities:

Granular Materials	2.05	TONS / CU YD
Bituminous Materials Tack Coat	0.03	LBS / SQ FT
Aggregate Prime Coat	0.25	LBS / SQ FT
HMA Paving	112	LBS / SQ YD / IN
Short Term Pavement Marking	10	FT / 100 FT OF APPLICATION
Mix for Cracks, JTS, & FLGWYS	0.0003	TONS / SQ YD
Level Binder (Hand Method)	0.0005	TONS / SQ YD
Supplemental Watering	3	GAL / SQ YD / APPLICATION
Calcium Chloride	2	LB / SQ YD / APPLICATION

36. Any existing field tiles crossing under the roadway, as shown in the plans or discovered during exploration trenching, shall be replaced according to Section 611 of the standard specifications and paid for under the various sub items for storm sewer work.
37. All sanitary sewer work (including manhole adjustment, sewer crossing, etc.) shall be constructed in the presence of a FRSA Inspector. The Contractor shall coordinate this work with District Survey and Field Operations Mgr. Ben Christiansen, cell 815-209-7952
38. All sanitary sewer work shall conform to all standards and specifications of the Four Rivers Sanitation Authority.

GENERAL NOTES AND CONDITIONS

1. All earthwork, grading and paving shall be performed in accordance with Standard Specifications for Road and Bridge Construction in Illinois, State of Illinois Department of Transportation, (current edition), the "Supplemental Specifications and Recurring Special Provision" (current edition), and all revisions and supplements thereto, and the requirements and specifications of Village of Roscoe (where applicable).
2. Notify the following at least 48 hours prior to start of construction:
- A. Village of Roscoe Dept. of Public Works - (815) 654-5040
- B. Arc Design Resources, Inc. - (815) 484-4300
3. The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. The J.U.I.E. number is 800-892-0123. A minimum of 48 hours advance notice is required for non-emergency work.
4. The Contractor shall contact the Village of Roscoe Department of Public Works Water Division for all water main shutoffs required due to construction operations. The Contractor shall not operate any valves or shutoffs without prior notification.
5. The Contractor shall provide and install two weighted sand bags on the bottom cross member of each type I barricade used.
6. If during paving or grading operations the existing mailboxes or street signs, which are to remain in place, become a hindrance, the Contractor shall be required to carefully remove and reinstall them and shall be included in the cost of the paving or grading pay items.
7. The top four inches of soil in any right of way area disturbed by the Contractor must be capable of supporting vegetation.
8. Out or fill slopes shall have a maximum ratio of 4 horizontal to one vertical unless noted otherwise. These slope constraints apply to temporary stock piles as well as finished slope conditions.
9. The Contractor is responsible for maintaining positive drainage at the conclusion of each working day.
10. Depressed curb shall be provided for handicapped ramps at all sidewalks abutting the curb and gutter and for future sidewalk locations. Follow IDOT ADA Standards.
11. See cross sections for special slopes, including driveway slopes.
12. Embankment will not be measured for payment and shall be included in the Earth Excavation cost.
13. Except for the top 3", all aggregate bases and subbases 12" in thickness shall be constructed of aggregate gradation CA-2. If the specified thickness exceeds 12", the bases or subbases shall be constructed of topsize 0" breaker-run crushed stone with 70% to 90% by weight, passing the 4" sieve and 15% to 40% by weight, passing the 2" size sieve, except the top 3". The breaker-run crushed stone shall be reasonably uniformly graded from coarse to fine and be taken from a quarry ledge capable of producing Class "D" quality aggregate. The top 3" shall be gradation CA-6 or CA-10 regardless of thickness. The water necessary to achieve compaction in all but the top 3" layer may be added after the subbase or base course is placed on the grade.
14. A contingency quantity has been included in the plans for Removal & Disposal of Unsuitable Material as well as Rock Fill and shall be used as needed. Quantities will be measured in the field.
15. Tie bars shall be installed to tie PCC appurtenance to adjacent existing concrete pavement. Tie bars to be installed in accordance with the applicable portions of Article 420.05 of the Standard Specifications. See Highway Standard 420001-08 for detail on longitudinal construction joint grouted-in-place tie bar. The cost of the tie bars to be included in the cost of the PCC appurtenance adjacent to the existing pavement.
16. See cross sections for special ditches and back slopes.
17. The removal of bituminous surfacing on a rigid type base removed in conjunction with the base shall be included in the contract unit price for pavement removal of the type specified.
18. Placement and compaction of the backfill for proposed across road culverts and existing across road culverts that are removed shall conform to Section 502.10 of the standard specifications, except that the material shall conform to Article 208.02 of the standard specifications, and shall be compacted to a minimum of 95% of the stand laboratory density. Any material conforming to the requirement of Article 1003.04 or 1004.05 which has been excavated from the trenches shall be used for backfilling the trenches. The entire excavation, within 2 feet outside of each curb or pavement shall be backfilled with trench backfill material to the bottom of the proposed subgrade.
19. All embankment constructed of cohesive soil shall be constructed with not more than 110% of optimum moisture content, determined by the standard proctor test. Cohesive soil shall be defined as any soil which contains greater than 10% particles by weight passing the #200 sieve. The 110% of optimum moisture limit may be waived in free-draining granular material when approved by the engineer.
20. The contractor shall place temporary hot-mix asphalt tapers along all sides of the utility structures protruding above the final surface. The temporary tapers shall extend 2' outside of the castings, except for the approach side to traffic shall have a 4' taper length. Hot-mix asphalt meeting the approval of the engineer shall be used. No cold millings will be allowed.. The cost of the material, placement, maintenance, remove, and disposal of said work will be incidental to the project.
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28. Expect as noted on the plans, pavement grades shown are at the top of pavement surfaces.
29. For stabilization, all type III barricades shall require a minimum of four sand bags per barricade.
30. The work required to connect any sewer to an existing drainage structure or pipe will not be paid for separately, but shall be considered as included in the contract unit price bid for the sewer item.
31. Seeding shall not be permitted at any time when the ground is frozen, wet, or in an unilliable condition. Locations to be seeded will be determined by the engineer.
32. Only those trees designated by the engineer or listed in the tree removal schedule shall be removed. The contractor shall protect all remaining trees from damage due to his operations.
33. Abandoned underground utilities that conflict with construction shall be disposed of outside the limits of the right-of-way according to Article 202.03 of the standard specifications and as directed by the engineer. This work will not be paid for separately, but shall be included in the cost of earth excavation.
34. Any reference to a standard in these plans shall be interpreted to mean the most current edition.
35. The following rates of application have been used in calculating plan quantities:

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HMA Paving	112	LBS / SQ YD / IN
Short Term Pavement Marking	10	FT / 100 FT OF APPLICATION
Mix for Cracks, JTS, & FLGWYS	0.0003	TONS / SQ YD
Level Binder (Hand Method)	0.0005	TONS / SQ YD
Supplemental Watering	3	GAL / SQ YD / APPLICATION
Calcium Chloride	2	LB / SQ YD / APPLICATION

36. Any existing field tiles crossing under the roadway, as shown in the plans or discovered during exploration trenching, shall be replaced according to Section 611 of the standard specifications and paid for under the various sub items for storm sewer work.
37. All sanitary sewer work (including manhole adjustment, sewer crossing, etc.) shall be constructed in the presence of a FRSA Inspector. The Contractor shall coordinate this work with District Survey and Field Operations Mgr. Ben Christiansen, cell 815-209-7952
38. All sanitary sewer work shall conform to all standards and specifications of the Four Rivers Sanitation Authority.

EARTHWORK NOTES

1. Definition for materials
- A. "Organic material" is defined as material having an organic content in excess of 8% or as determined by the project owner's engineer.
- B. Topsoil shall be friable and loamy (loam, sandy loam, silt loam, sandy clay loam, or clay loam). Sand content shall generally be less than 70% by weight, and clay content shall generally be less than 35% by weight. Organic soils, such as peat or muck, shall not be used as topsoil.
- C. Topsoil shall be relatively free from large roots, weeds, brush, or stones larger than 25 mm (1 inch). At least 90% shall pass the 2.00 mm (no. 10) sieve.
- D. Topsoil ph shall be between 5.0 and 8.0. Topsoil organic content shall not be less than 1.5% by weight. Topsoil shall contain no substance that is potentially toxic to plant growth.
- E. Existing on-site material within moisture content limits" is defined as material of such a quality that the specified compact can be met without any additional work other than "densifying" with a roller. Scarification and drying of this material will not need to be done prior to compaction.
- F. "Existing on-site material NOT within moisture content limits" is defined as material with a high moisture content that cannot meet specified compaction requirements without scarification and drying, chemical stabilization, etc. of this material prior to compaction.
- G. "Unsuitable material" is defined as any materials that:
- G.1. Cannot be utilized as "topsoil", (organic) for landscape areas.
- G.2. Cannot be utilized as "engineered fill", regardless of moisture content and/or does not structurally meet the standards of the project owner's engineer's recommendations for "engineered fill".
- G.3. These materials can be defined as natural materials or materials from "demolition" and/or excavated areas; i.e., they are materials that would not be suitable for "engineered fill".
- H. "Off-site material" is defined as any materials that are brought from any area not indicated on this plan set.
- I. "Trench backfill" shall be defined as any materials used for the purposes of backfilling any trench and/or any excavation requiring backfilling. Refer to the section titled "standards for fill areas" for determine acceptable materials and procedures.
- J. The term "stripping" or "strip" as used herein shall be defined as the removal of all "organic materials" from a given area, the term "organic materials" is defined as material having an organic content over 8% based on ASTM test method D-2974 or as defined by the owner's engineer.
3. Standards for cut areas:
- A. A "cut area" is defined as any area where "engineered fill" is not required to bring the site to design subgrade elevation, instead excavation or "cutting" is required to achieve design subgrade elevation. ("Engineered fill" being defined as any material being "offsite material".)
- B. In "cut areas" the site contractor shall perform one of the following procedures at the discretion and in the presence of a representative of the owner's engineer and the project architect:
- B.1. Item 1: for exposed pavement subgrades consisting primarily of granular soils the exposed subgrade should be compacted/identified by at least one (1) pass of a smooth-drummed vibratory roller having a minimum gross weight of 10 tons.
- B.2. Item 2: for exposed pavement subgrades consisting primarily of cohesive soils, the exposed subgrades should be proof-rolled with a fully-loaded six-wheel truck having a minimum gross weight of 25 tons. the maximum allowable deflection under the specified equipment shall be 1/2".
- C. In the event that adequate stability of granular soils subgrades cannot be achieved by the procedures as outlined in Item 1, above, or that deflections of greater than 1/2" are observed during the "proof rolling" of cohesive soils subgrades as outlined in Item 2, above, additional corrective measures will be required. These measures could include, but not necessarily be limited to, scarification, moisture conditioning, and re-compaction; undercutting & replacement with engineered fill and chemical stabilization, etc.; with crushed stone (with or without geotextiles); chemical stabilization, etc.
- D. It shall be considered as part of the scope of these documents and thus part of this contractor's responsibility to perform scarification and allow for drying of the subgrade per Illinois dot standards (scarily a 16" depth for 3 days). If this does not work then additional drying measures shall be an extra to the contract.
- E. Any proposed corrective measures by the contractor should be reviewed by the owner's engineer and the project architect. In the event that in the opinion of the owner's engineer and/or the project architect proof rolling is not a good indicator of the subgrade stability an alternative method shall be specified by the owner's engineer and/or the project architect.
5. Standards for fill areas:
- A. A "fill" area is defined as any area where material is required to adjust the existing elevation to a proposed subgrade elevation. These areas will require the installation of "engineered fill" to achieve design subgrade elevation. "Engineered fill" material can be defined as either "granular" and/or "soil" having their origin for either the construction site and/or "offsite material". Materials having their origin from the construction site is referred to as "borrow". The composition and the compaction standards of the engineered fill for this project will be specified by owner's engineer and the project architect.
- B. In "fill" areas fill borrow materials are allowed to be utilized as engineered fill the site contractor shall compact the borrow to the specified compaction.
6. Compaction standards (for engineered fill and back filled areas)
- A. Prior to placement of fill in areas below design grade, the exposed subgrade should be observed by a representative of the owner's engineer to evaluate that adequate stripping has been performed. Additionally, the proof rolling or compacting procedures outlined in the "standards for cut areas" section of this cpi should be performed. It is typical practice to proof roll, and densify if necessary, exposed subgrades prior to filling. If soft or unstable subgrades are observed, these areas should be stabilized or undercut. minimum compaction standards are based upon a percentage of the fill or backfill material's maximum standard proctor dry density (ASTM specification D-598). All engineered subgrades should meet the following minimum compaction:
- A.1. Areas under pavement sections:
- A.1.A. 95% standard proctor for all fill placed more than 12 inches below passenger car pavement sections and 95% standard proctor for the top 12 inches.
- A.2. Landscaped areas:
- A.2.A. 90% standard proctor for all fill placed in landscape areas. These areas should be brought to grade with "topsoil" to a depth of 12 inches in areas to be seeded, 6 inches in areas to be sodded, and 24 inches for all interior curbed landscape islands.
- A.3. Base course portion of pavement sections:
- A.3.A. 95% standard proctor for all base course materials that are part of a "pavement section".
- B. Place all backfill and fill materials in layers that are not more than 8" in loose depth, before compacting, moisten or aerate each layer as necessary to provide optimum moisture content. Compact each layer to required percentage of maximum density of the area.
7. Finish grading
- A. The term "finish grading" as used herein shall be defined as that condition that areas not receiving a finish product such as parking areas, driveways, roadways, sidewalks, etc. finish graded areas would generally be those areas receiving "landscaping" such as seed, sod, trees, bushes, mulch, etc.
- B. The site contractor is responsible for "finish grading" all areas within the perimeter of the "construction site". The definition of the "construction site" is the area encompassing all disturbed areas that were disturbed as a result of the construction process relating to the general contract which this site contract was part of.

GENERAL PAVING NOTES

1. All pavement shall be constructed in accordance with the following:
- A. Concrete pavement shall be constructed in accordance with the Illinois Department of Transportation (IDOT) "Standard Specifications for Road and Bridge Construction" (Standard Specifications), latest edition, including all updates and standards thereto.
- B. Standards and requirements of Village of Roscoe.
- C. Additional details and requirements provided in the contract documents, including this plan set.
2. All proposed pavement areas shall be stripped of all topsoil and unsuitable material and excavated or filled to within 0.10 feet of design subgrade.
3. The subgrade of pavement areas shall be free of all unsuitable material and shall be compacted to a minimum 95 per cent of Standard proctor density.
4. The subgrade shall be proof rolled, inspected and approved by the Village of Roscoe prior to placing the base material. Notify the engineer at least 48 hours prior to finished subgrade preparation.
5. The earthwork contractor shall be responsible for removal of spoil material from the underground contractors, preparing the roadway subgrade, proof rolled, placing topsoil to a minimum depth of 4 inches to finished grade in the parkways areas only, grading of drainage swales, and all other tasks as directed by the owner or engineer.
6. The quantities contained in these documents are approximate and estimated, and are presented as a guide to the contractor in determining the scope of work. It is the Contractor's responsibility to determine all quantities and to become familiar with the site and soil conditions.
7. The paving Contractor is responsible for the final subgrade preparation, proof rolling, the pavement base, binder, and surface, and all final clean-up and related work associated with the paving operation.
8. The proposed pavement shall be of the type and thickness as specified in the engineering drawings, and constructed in strict conformance with the previously referenced IDOT standard specifications and Village of Roscoe.
9. Areas of deficient paving, including compaction, smoothness, thickness, and asphalt mixture, shall be delineated, removed, and replaced in compliance with Specifications requirements unless corrected otherwise as directed and approved by the owner.
10. Field quality control tests specified herein will be conducted by the owner's Independent Testing Laboratory (ITL) at no cost to the contractor. Any testing and inspection resulting from the requirements of necessary permits by Village of Roscoe or the State of Illinois shall be at the contractor's expense. The contractor shall perform additional testing as considered necessary by the contractor for assurance of quality control. Retesting required as a result of failed initial tests shall be at the contractor's expense.
- A. Field testing, frequency, and methods may vary as determined by and between the owner, the ITL and Village of Roscoe.
- B. Testing shall be performed on finished surface of each asphalt concrete course for smoothness, using 10'-0" straightedge applied parallel with, and at right angles to centerline of paved area. The following tolerances in 10 ft shall not be exceeded: Base Course Surface: 1/4-inch, Wearing Course Surface: 1/8-inch.
- C. No ponding shall occur on paved surfaces.

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Illinois Design Firm License No. 184-001334

PROJECT NAME
OWNER'S NAME

PRAIRIE ROSE
DEVELOPMENT

PRAIRIE ROSE DRIVE
ROSCOE, IL
WINNEBAGO COUNTY

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ROCKTON, IL 61072
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CONSULTANTS

ISSUED FOR

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REVISIONS

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SHEET TITLE

GENERAL NOTES

DRAWN

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PROJECT NUMBER
SHEET NUMBER

25012

C02

ITEM	UNIT	QUANTITY
CLEARING TREES AND BRUSH	L SUM	1
TOPSOIL STRIPPING AND RESPAD (12" ASSUMED WITHIN ROADWAYS)	CU YD	1389
EARTH EXCAVATION, CUT TO FILL	CU YD	7235
SEEDING, CLASS 7 TEMP MIX	ACRE	2.88
SILT FENCE	FOOT	200
INLET AND PIPE PROTECTION	EACH	11
STABILIZED CONSTRUCTION ENTRANCE	SQ YD	133
CURB & GUTTER REMOVAL	FOOT	159
PAVEMENT REMOVAL	SQ YD	190
DRYWELL REMOVAL	EACH	1
STORM PIPE REMOVAL	FOOT	24
SHED REMOVAL	L SUM	1
AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	465
AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	7
AGGREGATE BASE COURSE, TYPE B 10"	SQ YD	4170
CONCRETE BASE COURSE, 7"	SQ YD	27
BITUMINOUS MATERIALS (TACK COAT)	POUND	4170
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50, 2" PATCH	SQ YD	27
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50, 2" (LIFT 1)	SQ YD	4143
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50, 1.5" (LIFT 2)	SQ YD	4143
PAINTED PAVEMENT MARKING, 4" YELLOW	FOOT	72
CONCRETE SIDEWALK, 4"	SQ FT	4183
CONCRETE SIDEWALK, 8" (MAILBOX PAD)	SQ FT	7
COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12	FOOT	156
CONCRETE V-GUTTER, 2" WIDE	FOOT	742
CONCRETE FLUME	CU YD	2
PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	4
STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	546
STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	236
INLET TYPE A W/ TYPE 1 FRAME OPEN LID	EACH	3
INLET TYPE B W/ TYPE 1 FRAME OPEN LID	EACH	1
MANHOLE TYPE A, 4' DIA. W/ TYPE 1 FRAME OPEN LID	EACH	1
CONCRETE DRYWELL, 6' DIA. W/ TYPE 1 FRAME OPEN LID	EACH	3
FIRE HYDRANT ASSEMBLY COMPLETE W/ TEE, VALVE & LEAD	EACH	3
CONNECT TO EX. WATER MAIN W/ HYMAX FITTING	EACH	2
8" VALVE & BOX	EACH	1
ZINC COATED D.I. WATER MAIN, 8", WITH BAG	FOOT	912
TYPE K COPPER WATER SERVICE LINE 1"	FOOT	1287
CORPORATION STOPS 2"	EACH	29
DOMESTIC WATER SERVICE BOX, 1"	EACH	29
11.25-DEGREE BEND, 8"	EACH	1
22.5-DEGREE BEND, 8"	EACH	1
45-DEGREE BEND, 8"	EACH	4
WATER MAIN PROTECTION SLEEVE, 16"	FOOT	100
CONNECT TO EXISTING SANITARY MANHOLE	EACH	1
4' DIA. SANITARY MANHOLE	EACH	4
PVC SDR-26 WMMQ / ASTM D-2241 SANITARY SERVICE, 6"	FOOT	1108
PVC SDR-35 WMMQ / ASTM D-3034 SANITARY SEWER, 8"	FOOT	703
PVC SDR-35 WMMQ / ASTM D-3034 SANITARY SEWER, 10"	FOOT	70
8' X 6" WVE CONNECTION	EACH	15
FOAM BOARD INSULATION	SQ FT	64
SANITARY CLEANOUT, 6"	EACH	15
UNDERCUT (COMPLETE) CONTINGENCY	CU YD	289
LANDSCAPING ALLOWANCE	L SUM	1

1. Storm sewer shall be constructed in accordance with the following:

- A. Standard Specifications for Water Main Construction in Illinois" (Standard Specifications), Seventh Edition dated 2014 (and all revisions and supplements thereto)
- B. Standards and requirements of Village of Roscoe.
- C. Additional details and requirements provided in the contract documents, including this plan set.

2. Where criteria of the aforementioned specifications conflict, the more stringent criteria shall be implemented.

3. All storm sewer pipe shall be reinforced concrete pipe unless otherwise specified in this plan set.

4. Storm sewer system elements shall conform to the following specifications:

- A. Storm pipe:
 - A.1. Sump service connection and storm sewer extension (4" and 6"):
 - a. ABS pipe shall be in accordance with ASTM D2751.
 - b. SDR 35 PVC pipe shall be in accordance with ASTM D3034.
 - A.2. Concrete sewer pipe (10" diameter and smaller) shall be Class III (minimum) in accordance with ASTM C14.
 - A.3. Reinforced concrete concrete pipe (12" diameter and larger) shall be Class III (minimum), wall B, in accordance with ASTM C76.
 - A.4. Reinforced concrete curb culvert pipe shall be double-lined reinforced, Class III (minimum) in accordance with ASTM C506.
 - A.5. Reinforced concrete elliptical culvert pipe shall be Class HE-III or VE-III (minimum) in accordance with ASTM C507.
 - A.6. Underdrain pipe (4" and 6") shall be SDR 35 PVC pipe in accordance with ASTM D2729.
 - A.7. Galvanized corrugated steel culvert pipe shall be type B, with a minimum wall thickness of 14 gauge per AASHTO M426 (shall only be used for culverts).
- B. Joints for storm pipe:
 - B.1. ABS pipe joints shall be in accordance with ASTM D2235.
 - B.2. PVC pipe joints shall be in accordance with ASTM 3121 (push-on type), except underdrain pipe, which shall have sealed welded joints.
- C. Casing Pipes:
 - C.1. 1/4" thick steel in accordance with ASTM A252, grade 2, or ASTM A139, grade B, or approved equal having a minimum yield strength of 35,000 psi.
- D. Manholes and Catch Basins:
 - D.1. Manholes and catch basins shall be precast reinforced concrete in accordance with ASTM C478.
 - D.2. Manholes and catch basins shall be sized as follows:
 - D.2.a. For sewers eighteen inches in diameter or less, manholes shall have a forty-eight inch inside diameter.
 - D.2.b. For sewers twenty-one to thirty-six inches in diameter, manholes shall have a sixty inch inside diameter.
 - D.2.c. For sewers greater than thirty-six inches in diameter, manholes shall have a seventy-two inch inside diameter or as specified in this plan set.
 - D.3. Adjusting rings:
 - D.3.a. No more than 2 precast concrete adjusting rings shall be allowed.
 - D.3.b. Precast concrete adjusting rings shall have a maximum height of 6 inches.
 - D.4. Seals:
 - D.4.a. For pipe and frame seals, all pipe connection openings shall be made watertight with hydraulic cement.
 - D.4.b. The hydraulic cement sealing pipe connections shall extend the full thickness of the structure wall. Hydraulic cement shall also be applied within the structure from the cone section, past all adjustment rings, to the frame.
- E. All bottom sections shall be monolithically precast including bases and invert flowlines.
- F. Inlets:
 - F.1. Inlets shall be precast reinforced concrete in accordance with ASTM C478 and ASTM C443.
 - F.2. Inlets shall have a twenty-four inch inside diameter and a maximum depth of four feet.
 - F.3. Adjusting rings:
 - F.3.a. No more than 2 precast concrete adjusting rings shall be allowed.
 - F.3.b. Precast concrete adjusting rings shall have a maximum height of 6 inches.
 - F.4. Only one pipe connection shall be allowed. The hydraulic cement precast with resilient rubber watertight pipe to manhole sewers or seals. External flexible watertight seals shall also extend from the manhole cone to the manhole frame.
 - F.5. Bottom sections: All bottom sections shall be monolithically precast including bases and invert flowlines.
- G. Castings (Unless otherwise noted within the plans):
 - G.1. Unless otherwise specified as a "closed lid", manhole frames and covers shall be as listed below. Close lid frame and covers shall be R-1916-C embossed "STORM SEWER".
 - G.1.a. Manhole steps shall be Neenah R-1981-N.
 - G.1.b. Six inch curb and gutter inlet shall be Neenah R-327A-6.
 - G.1.c. Yard inlets shall be Neenah R-600-6.
 - G.1.d. Parking lot inlets shall be Neenah R-295S-4.
 - G.2. Crushed Granular Bedding shall be crushed A or crushed stone course aggregate in accordance with ASTM C33 (Size No. 67).
- 5. All inlet sections 24" and greater shall come equipped safety bars per IDOT detail Standard 542411
- 6. Inspect pipe for defects and cracks before being lowered into the trench, piece by piece. Remove and replace defective, damaged or unsound pipe or pipe that has had its grade disturbed after laying. Protect open ends with a stopper and cap. Do not use pipe that is damaged during the pipe laying construction. Remove dirt, excess water, and other foreign materials from the interior of the pipe during the pipe laying progress.
- 6. Install pipe in accordance with manufacturer's written recommendations.
- 7. Compaction installation at the lowest point for each segment of the route. Lay RCP with the groove or bell end up-stream.
- 8. Lay pipe to the required line and slope gradients with the necessary fittings, bends, manhole, risers and other appurtenances placed at the proper locations.
- 9. All storm sewers under and within two feet of any existing or proposed pavement shall be backfilled with granular backfill material IDOT gradation F-A-6 or approved equal (Grade 8 or Grade 9).
- 10. Compact backfill to 98 percent of maximum density in accordance with ASTM D698, (or 95 percent of maximum density, in accordance with ASTM D1557) obtained at optimum moisture as determined by AASHTO T180.
- 11. Do not backfill trenches until required tests are performed and utility systems comply with and are accepted by applicable governing authority.
- 12. Backfill trenches to contours and elevations shown on the drawings.

1. Sanitary sewer notes:

A. The Four Rivers Sanitation Authority (FRSA) shall be notified forty-eight (48) hours before construction of the sanitary sewer can commence. Contact FRSA Survey and Field Operations Mgr. Ben Christiansen, cell 815-209-7952. Any sanitary sewer construction performed in the absence of an FRSA survey shall be rejected.

B. Notice Allowing Connections must be issued by the FRSA before individual service connections will be permitted under the standard FRSA service connection permit process.

C. The permit holder is responsible for the sanitary sewer system workmanship and materials for two (2) years after the FRSA issued Notice Accepting the Sewer, and for the sanitary sewer trench settlement for a period of three (3) years after the completion of the project.

2. Sanitary Sewer shall be constructed in accordance with the following:

A. "Standard Specifications for Water and Sewer Main Construction in Illinois" (Standard Specifications), seventh edition dated 2014, and all revisions and amendments thereto.

B. "General Provisions and Technical Specifications for Sanitary Sewer Construction" in the Four Rivers Sanitation Authority (formerly known as the City of Rockford District of Rockford) dated October 24, 1983, and all standards and revisions adopted by the Board of Trustees for said Sanitary District of Rockford.

C. Additional details and requirements provided in the contract documents, including this plan set. Where criteria of the aforementioned specifications conflict, the more stringent criteria shall be implemented.

3. All PVC sanitary sewer (SDR 26 AND SDR 35) shall meet the requirements of ASTM D-3034 ("4-24") or ASTM F-679 ("18-24") with joints in accordance with ASTM D-2241. All PVC watermain-quality SDR (20) shall meet the requirements of ASTM D-2241 with joints in accordance with ASTM D-3139. Pipe bedding for all PVC pipe shall be Class 1A in accordance with ASTM D-3231-89.

4. Sanitary sewer services shall be 6" PVC Watermain Quality SDR 26 in accordance with ASTM D-2241, and shall extend to the limits shown on the plans. Joints between the drye and end of service riser shall be gasketed in accordance with ASTM D-3139. All services shall be sloped from the main at 1% (1 foot in 100 feet) at a grade of cleanout with a 24" painted green. End of service risers are required in accordance with the FRSA standard details included in these plans.

5. WYE or TEE branches shall be a minimum 7" from the outside of any sanitary manhole and be furnished and installed by the Contractor as shown on the Engineering Drawings.

6. All testing, bedding, granular chad, and trench backfill where necessary shall be included in the unit costs for the installation of the underground facilities unless quantified on plans.

7. PVC pipe shall be installed with proper bedding providing uniform longitudinal support under the pipe. Bedding material should be worked under the sides of the pipe to provide lateral hunching. Initial bedding material should be placed to a minimum depth of one foot over the top of the pipe. All pipe embedment material should be selected and placed carefully, avoiding large stones, frozen lumps, and debris.

8. After placement and compaction of pipe embedment materials, the balance of backfill materials may be machine placed and should contain no large stones or rocks, frozen material or debris. Excavated materials free from spoil may be used in the final trench depth provided they are placed in 9" lifts and compacted to a minimum of 95% maximum standard proctor density.

9. All sanitary sewer manholes shall have eccentric cones with the cone openings centered over the pipe. All manholes shall be guaranteed by the contractor for 3 years after FRSA acceptance.

10. All sanitary sewer manholes shall be 48-inch diameter precast concrete, unless shown otherwise.

11. The allowable infiltration shall not exceed 200 gallons/inch diameter/mile/24 hours.

12. Sanitary sewers shall be air-tested in accordance with FRSA requirements.

13. All new sanitary sewer manholes shall be vacuum tested in accordance with ASTM C 1244.

14. All sanitary sewers under or within two feet of any existing or proposed street, pavement or curb shall be backfilled with IDOT approved granular backfill material. Trench backfill shall be placed in lifts not to exceed 9" compacted to 95% of maximum standard proctor density.

15. Four Rivers Sanitation Authority shall be notified 48 hours prior to the start of construction and air testing of sanitary sewers. Water main, water services, and storm sewer must be installed and FRSA notified soon after installation before sanitary sewer testing can be performed.

16. Trenches must be backfilled to 2' below subgrade and mains and services must have 5' minimum depth of cover over the top of the pipe before sanitary sewer testing can be performed.

17. Manhole frames shall be provided with self sealing lids, FRSA Logo, Neenah 1670-2004 /0358 only. Neenah or East Jordan per FRSA Standard Details Sheet 198-198.

18. Upon completion of construction, all sanitary manhole castings shall be exposed and set to final grade.

19. External manhole seals shall be required on all new manholes including the barrel sections.

20. Deflection testing for flexible conduit.

21. All sanitary sewer lines shall be deflection-tested after 30 days following final pipe installation.

A. If the deflection test is to be run using a rigid bar or mandrel, it shall have a diameter equal to 95% of the base diameter of the pipe as established in proposed ASTM D-3034. The test shall be performed without mechanical pulling devices.

B. Wherever possible and practical, the testing shall initiate at the downstream lines and proceed towards the upstream lines.

C. Maximum allowable pipe deflection is 5% of the deflection found to be in excess of 5% of the original pipe diameter, the Contractor shall excavate to the point of excess deflection and carefully compact around the point excess deflection was found. The line shall then be retested for deflection.

D. However, should after the initial testing the deflected pipe fail to return to the original size (inside diameter) the line shall be replaced.

22. All sanitary sewer lines shall be installed and tested in accordance with the FRSA standard details included in these plans. All sanitary sewer services measured from outside edge to outside edge. The top of proposed sanitary services shall be at least 18" below the bottom of existing and proposed water mains and storm sewers. When sanitary sewer crosses over water main or storm sewer, the bottom of the sanitary sewer shall be at least 18" above the top of water main or storm sewer.

23. When sanitary sewer is installed, the 12" contractor shall use the Alternate Service Riser method to install the sewer service line so that the invert of the service, at the property line, is 10.5' below the proposed centerline grade.

24. Upon completion of construction all sanitary manhole castings shall be exposed and set to final grade. FRSA must inspect this work.

25. All sanitary sewer lines in the area of sanitary sewer manholes and services shall be placed and compacted prior to installation of the sewer mains and services.

26. The Four Rivers Sanitation Authority shall provide the following for manhole adjustment requirements:

A. A minimum of 4" of adjusting rings (4" adjusting ring not required in turf areas or in full curb and gutter roadways)

B. A maximum of 12" of adjusting rings

C. A maximum of 1-12" adjusting ring per manhole.

D. A maximum of 30" from the top of casting to the first step

Notes: Adjustment by grouting is not permitted. Where the roadway agency of jurisdiction allows, rubber adjusting rings shall be used.

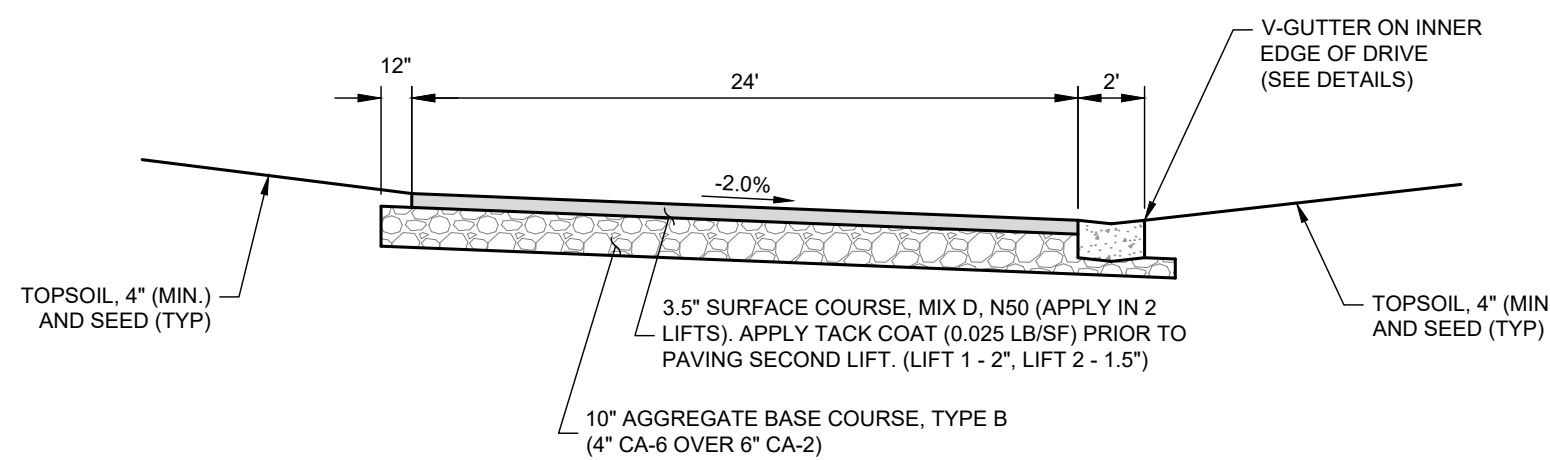
27. The top of the sewer shall be at least 18" below the bottom of the manhole.

28. The length of the public sewer shall be the distance from the center of the downstream manhole to the center of the upstream manhole. The slope of the public sewer and inverts of the sewer at the manholes shall be based on the distance between the outside faces of the manholes.

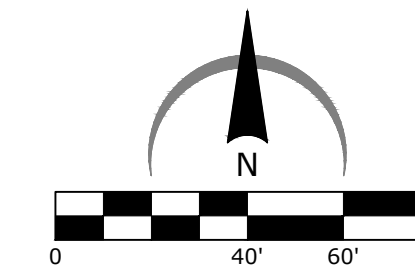
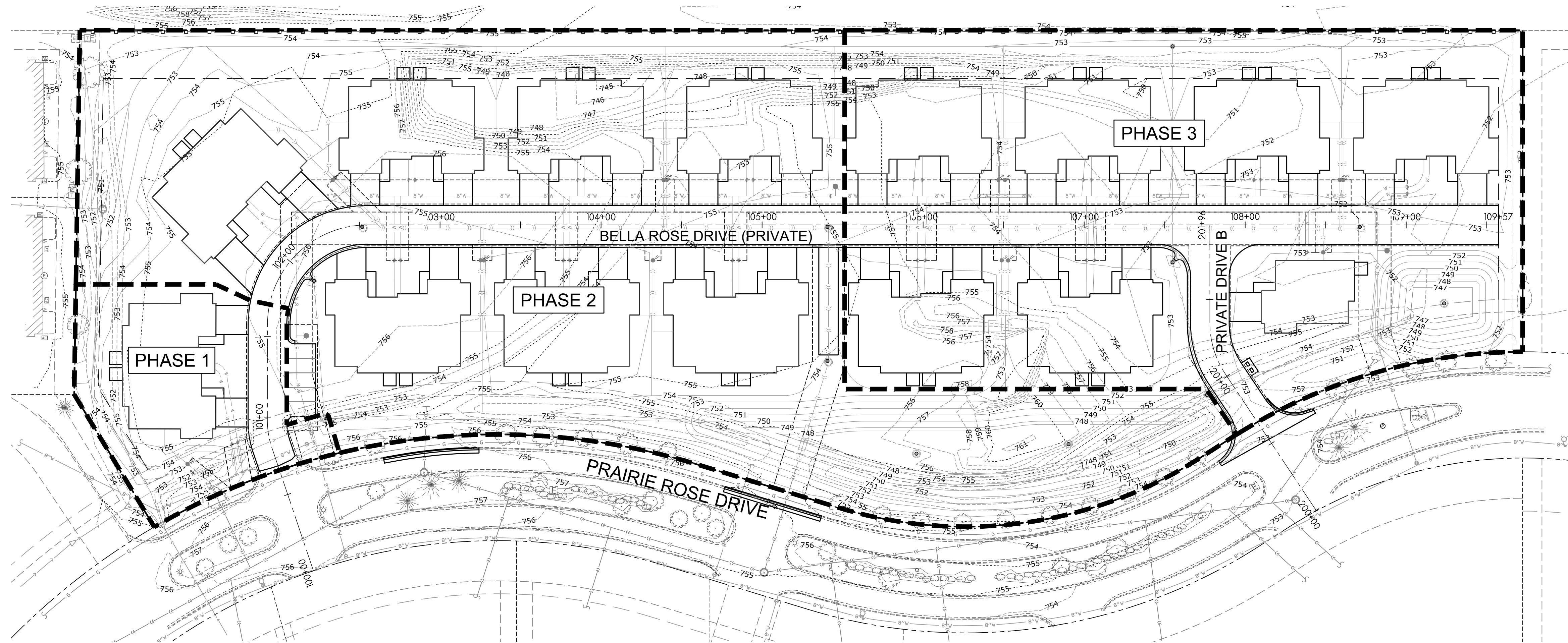
29. All watermain and watermain services shall be installed before the sanitary sewer is air and deflection tested.

30. FRSA must receive a satisfactory utility plan for gas, electricity, cable TV, telephone, etc. in order to ensure that these utilities will not conflict with the proposed sanitary sewer locations.

1. Contractor must complete a standard FSRA (Federal/State/Local/Commercial) (I/C) application and submit to FSRA for approval of the sewers shown as part of the building connection permitting process.
2. If the contractor is not a licensed FSRA fee associated with this project, the contractor shall pay all approval fees, and should be reimbursed by the owner. Contractor shall provide the owner with a written breakdown of all FSRA fees with evidence of payment.
3. WSRA will require inspection of the sewer installation. Contractor shall coordinate this work directly with FSRA. All sewer pay for all inspection fees. All sewer, manholes, and structures shall be inspected by WSRA. Contractor shall coordinate with WSRA for the Owner's contractor responsible for familiarizing himself with the specific requirements for materials and construction for these two agencies.
4. The Village of Roscoe may also require inspection of the building connections, the contractor shall coordinate all Village inspection with the Roscoe Planning Department, if needed.
5. Contractor to install 6" service connection from main to designated point of connection as shown on the plans as part of sewer installation.
6. FSRA services sewer connection permits will not be issued under the Standard FSRA process until after the FSRA has issued a "Notice Allow Connections".



PROJECT NUMBER
SHEET NUMBER
25012
C03



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CONSULTANTS

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SHEET TITLE

PHASING PLAN

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CHECKED	JSL
PM	JSL

PROJECT NUMBER
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25012
C04



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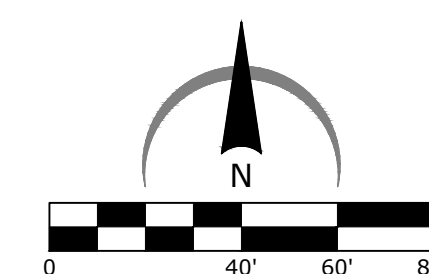
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
SWPPP SITE MAP

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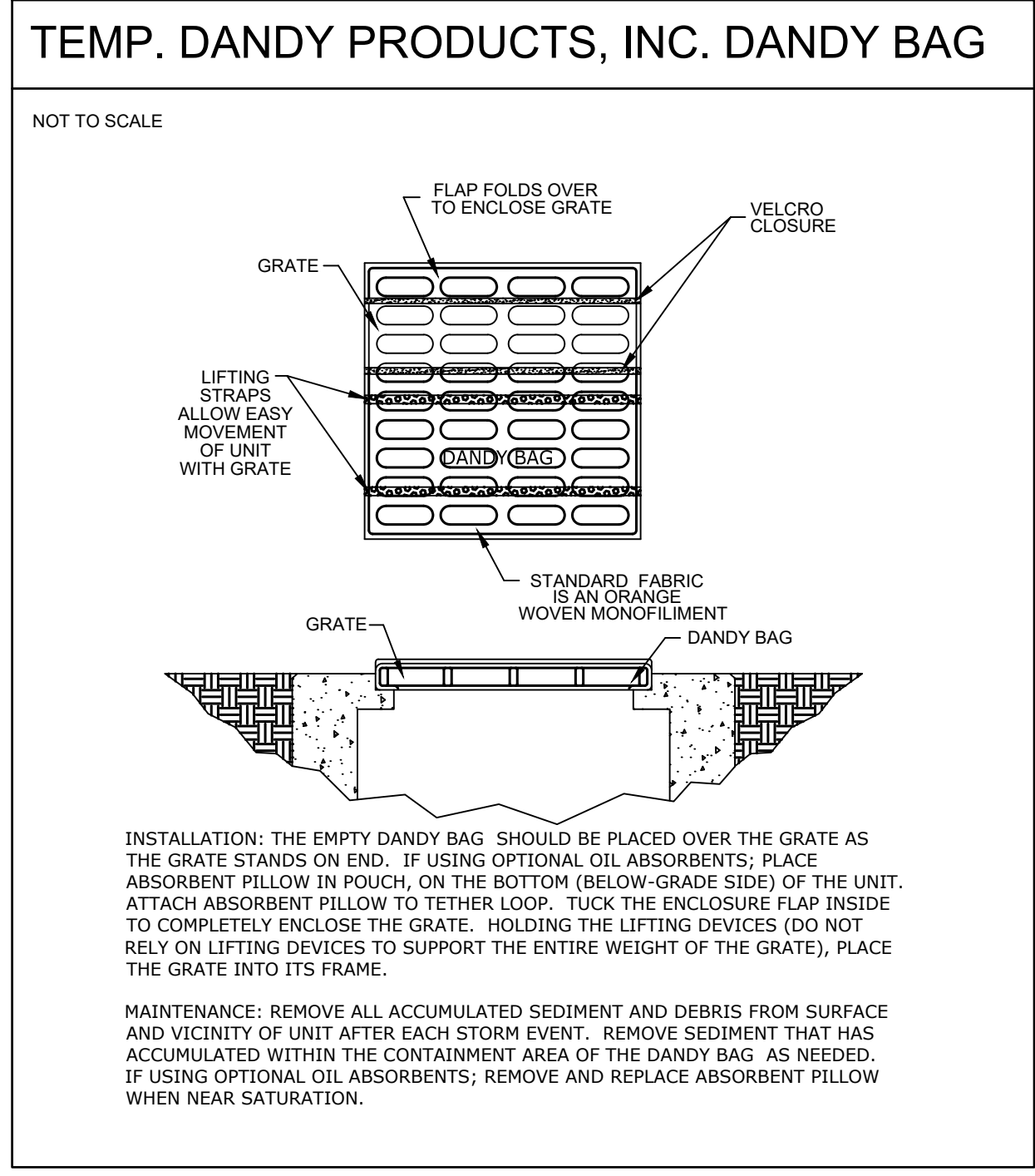
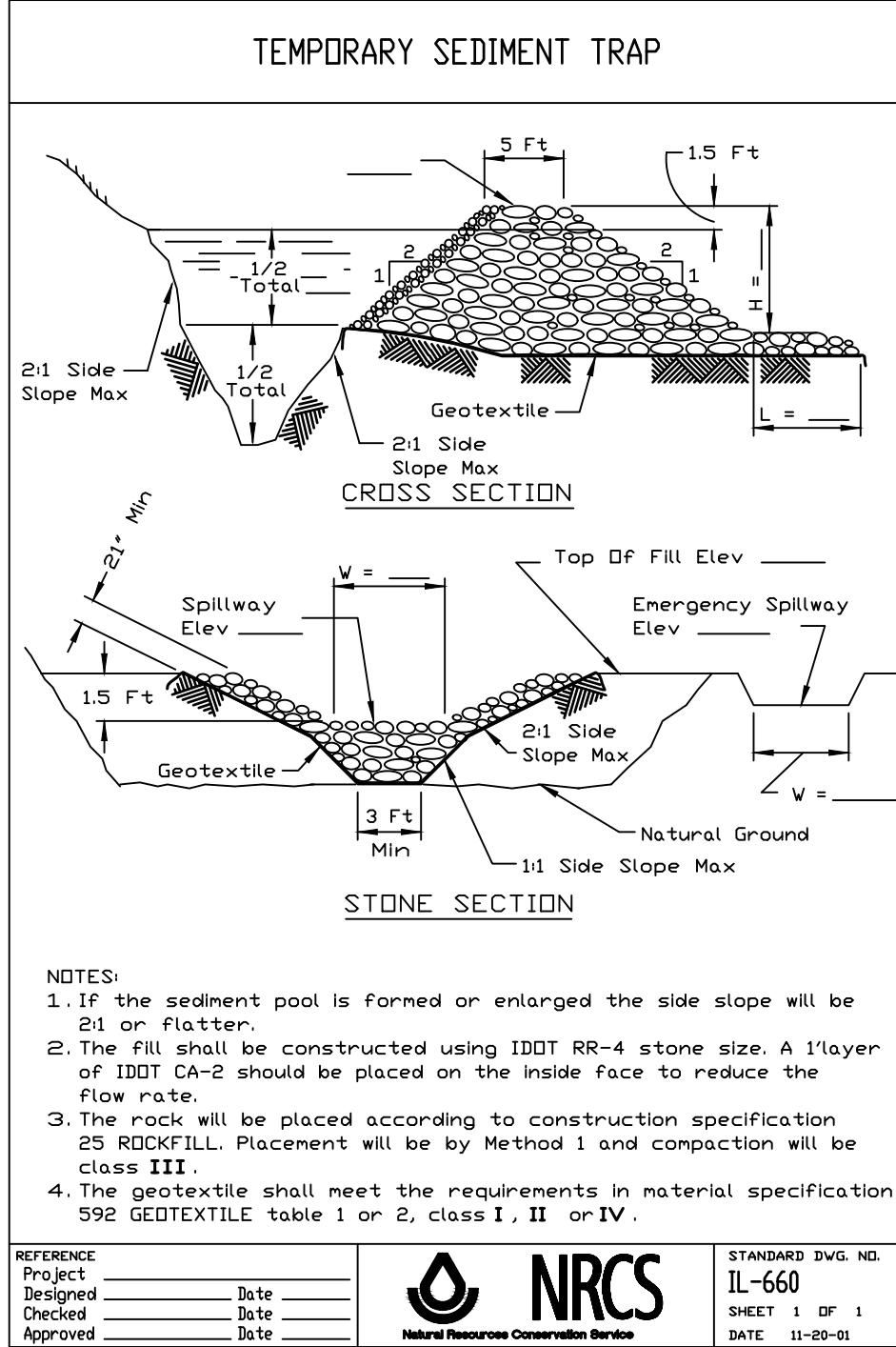
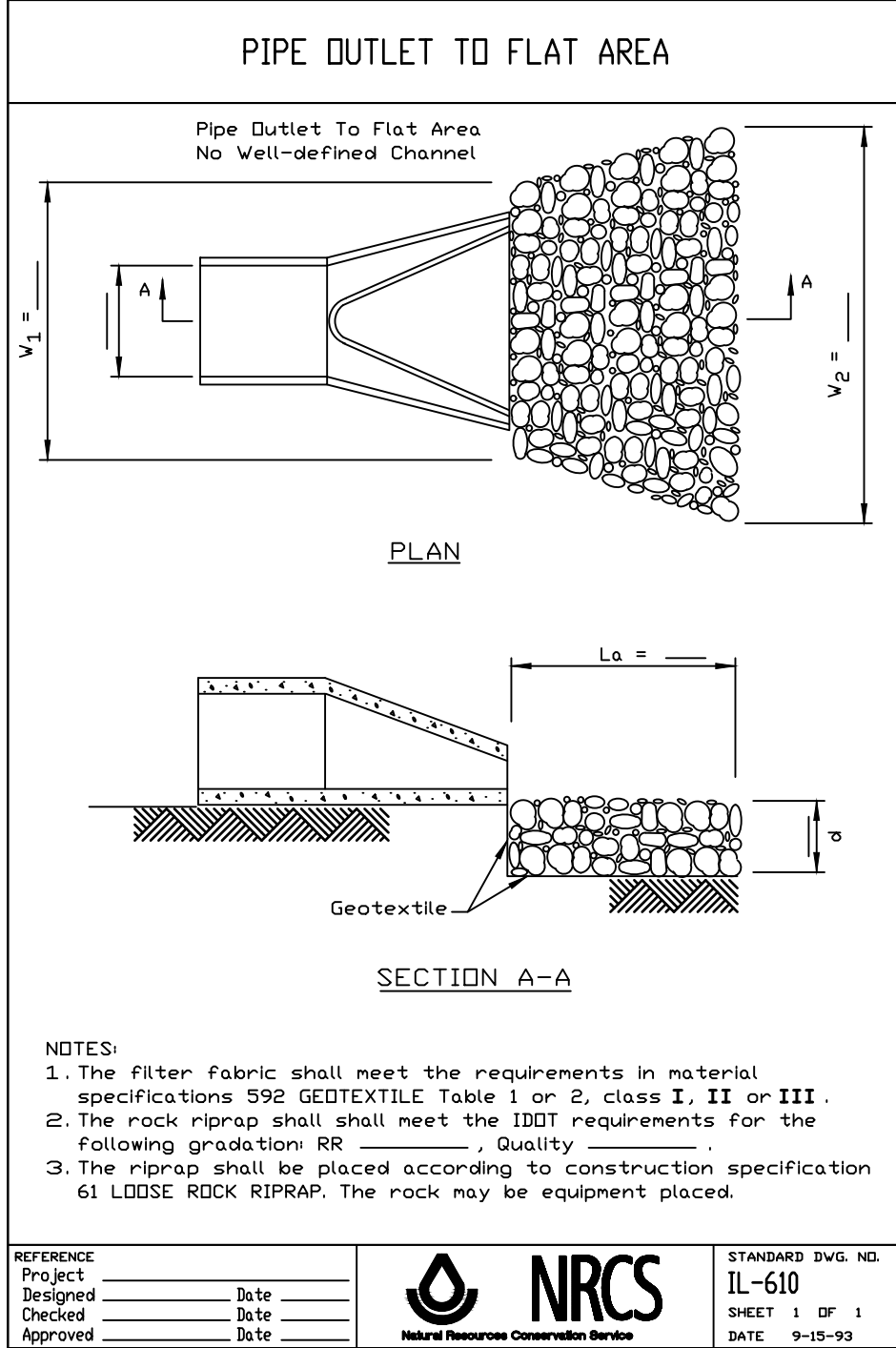
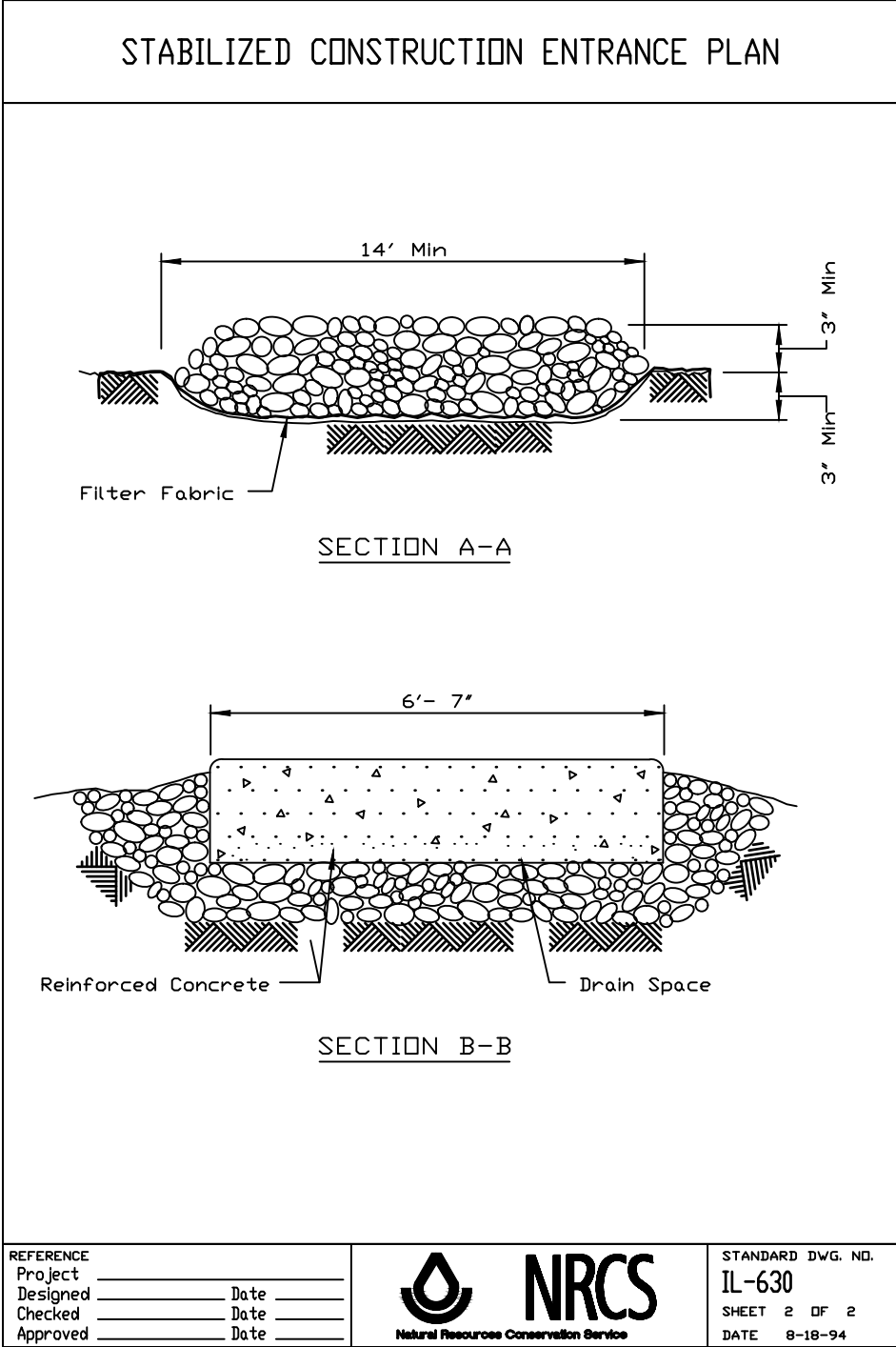
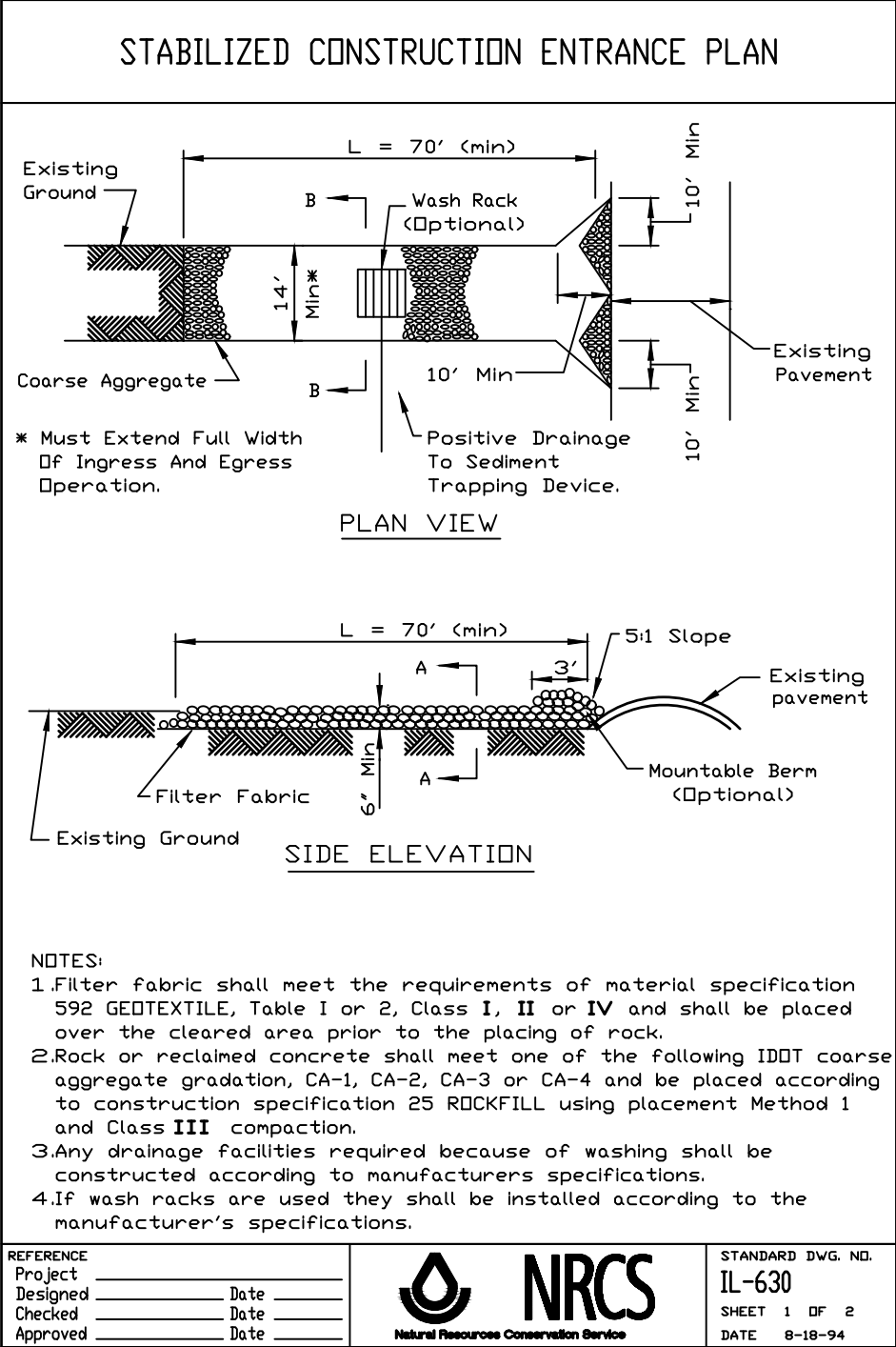
SEE SITE PLAN SET FOR EXISTING SYMBOLS

	PROPOSED CATCH BASIN OR MANHOLE
	DIRECTION OF OVERLAND FLOOD ROUTE
	DIRECTION OF OVERLAND FLOW AND SLOPE
	TURF AREA (SEE LANDSCAPING PLAN FOR T
	SEE SPECIFIC KEY NOTE ON THIS SHEET

EROSION DETAILS (SEE SWPPP DETAILS SHEET FOR ITEMS BELOW)

- EROSION CONTROL REFERENCE NOTES

- 1.01 SEE CONSTRUCTION EXIST DETAIL IL-630 FROM THE ILLINOIS URBAN MANUAL. (THIS DETAIL AND OTHER DETAILS CAN BE FOUND IN THE SWPPP BINDER FOR THIS SITE). THE CONSTRUCTION EXIT SHALL BE A MINIMUM OF 24 IN WIDTH AND 50 FEET IN LENGTH FROM EXISTING PAVED SURFACE. ALL CONSTRUCTION TRENCH PROTECTION SHALL BE INSTALLED PRIOR TO CONSTRUCTION EXIT. THE PUBLIC ROAD, DURING CONSTRUCTION, THE CONSTRUCTION EXITS MAY BE SHIFTED AT THE CONTRACTOR'S DISCRETION TO FACILITATE GRADING OPERATION. EXIT MUST TERMINATE AT EXISTING PAVED SURFACE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE RUNOFF FROM THE CONSTRUCTION EXIT IS DIRECTED BACK TOWARD THE SITE OR THAT THE RUNOFF IS CLEAR OF SEDIMENT.
- 1.02 THE CONTRACTOR MAY PERMANENTLY REMOVE ANY PORTION OF THE PERIMETER SILT FENCE AFTER ESTABLISHMENT OF FINAL GRADE AND/OR FINAL STABILIZATION RENDERS THE RESPECTIVE PORTION OF THE PERIMETER SILT FENCE UPSTREAM OF A DISTURBANCE AND/OR INEFFECTIVE AS A BEST MANAGEMENT PRACTICE. THE CONTRACTOR SHALL BE NOTED ON THE SWPPP SITE MAPS ALONG WITH UPSTREAM STABILIZATION AND GRADING CONDITIONS.
- 1.03 NO STRUCTURE SHALL BE ALLOWED TO BE PROTECTED WITH ANY MEASURE OTHER THAN THOSE DETAILED IN THIS SWPPP SITE MAP FOR MORE THAN 48 HOURS OR IF RAIN IS IMMINENT. STRUCTURES THAT WILL NOT RECEIVE A CASTING WITHIN 48 HOURS OF INSTALLATION SHALL RECEIVE INLET PROTECTION. UPON INSTALLATION OF THE GRATE, INLET PROTECTION SHALL BE INSTALLED PROTECTIVE TO THE EXPOSED PIPE. THE GRATE, STRUTS AND PROTECTIVE SHALL BE REMOVED PROTECTION FOLLOWING INSTALLATION OF LID. CONTRACTOR SHALL NOTE TIME STRUCTURE INSTALLATION (AND PROTECTION INSTALLATION, INCLUDING TYPES OF PROTECTION ARE EMPLOYED). NEVER PIPE INSIDE THE TRENCH. THE TRENCH SHALL BE PROTECTED WITH A 34" SHEET OF PLYWOOD. THE OPEN END SHALL BE PROTECTED WITH A TEMPORARY BULK HEAD. A 34" SHEET OF PLYWOOD THAT EXTENDS 6" BEYOND THE OUTSIDE DIAMETER OF THE PIPE SHALL BE PLACED AGAINST THE EXPOSED PIPE END. GRAVEL SHALL BE PLACED AGAINST THE PLYWOOD IN SUFFICIENT QUANTITY SO AS TO ENSURE THE MOST POSSIBLE SEAL. THE TRENCH SHALL BE DEWATERED PRIOR TO REMOVING THE BULKHEAD.
- 1.04 OCP SHALL BE PLACED TO PROTECT THE UPSTREAM END OF THE PERMANENT OUTTAP PIPE PRIOR TO PIPE INSTALLATION. SEE PLAN FOR FINAL LOCATION AND TOP OF OCP ELEVATION. FOLLOWING BASIN SIDE SLOPE STABILIZATION, THE OCP SHALL BE REPLACED WITH THE PERMANENT RIPRAP PAD SPECIFIED ON THE SITE DRAINAGE PLAN.
- 1.05 SHORT TERM EROSION CONTROL FABRIC NAC SG150 SHALL BE APPLIED TO ALL SLOPES 4:1 OR STEEPER THAN 4:1. AFTER PERMANENT SEEDING, FOLLOW MANUFACTURER SPECIFICATIONS FOR EROSION CONTROL. EROSION CONTROL SHALL BE APPLIED TO AREAS WHERE THE SLOPE HAS BEEN INSTALLED RELATIVE TO ADJUTANT GRADES AND FURNISH THESE BOUNDARIES TO THE CIVIL ENGINEER UPON REQUEST. PERMANENT SEEDING SHOULD BE PLANTED AS SOON AS IT IS PRACTICAL TO ENSURE PROPER GERMINATION PRIOR TO TERMINATION OF PERMIT COVERAGE. THE CONTRACTOR SHALL PLACE PERMANENT SEEDING ON THE LANDSCAPING PLAN AS SOON AS FINAL BASIN GRADES ARE ESTABLISHED AS SPECIFIED ON THE GRADING PLAN. SEE SITE LANDSCAPING PLAN FOR EXACT GROUND COVER TYPE AND LOCATION.
- 1.06 OFFSITE UTILITY TRENCHING SPOILS MUST BE TREATED AS STOCKPILES FOR SWPPP PURPOSES. BMP'S MUST PROTECT THE SIDE OF THE SPOIL STOCKPILE THAT IS FARTHEST AWAY FROM THE TRENCH. INTERMEDIATE BMP'S SHALL BE LOCATED IN THE FIELD TO PREVENT DOWNSTREAM SEDIMENT RUNOFF. NO MORE THAN 10 LBS OF SOIL SHALL BE PLACED IN ANY ONE STOCKPILE. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING GRADE AND VEGETATION THROUGHOUT THE DISTURBED AREA. THE CONTRACTOR SHALL ENSURE THAT THE OFFSITE WORK ZONES POSSE NO PUBLIC SAFETY HAZARDS.
- 1.07 PROVIDE TEMPORARY SEDIMENT TRAP IN LOCATION OF DETENTION UNTIL DETENTION IS CONSTRUCTED. SEE IUM CONSTRUCTION SPECIFICATION AND DEWATERING DETAIL INCLUDED IN SWPPP BINDER.



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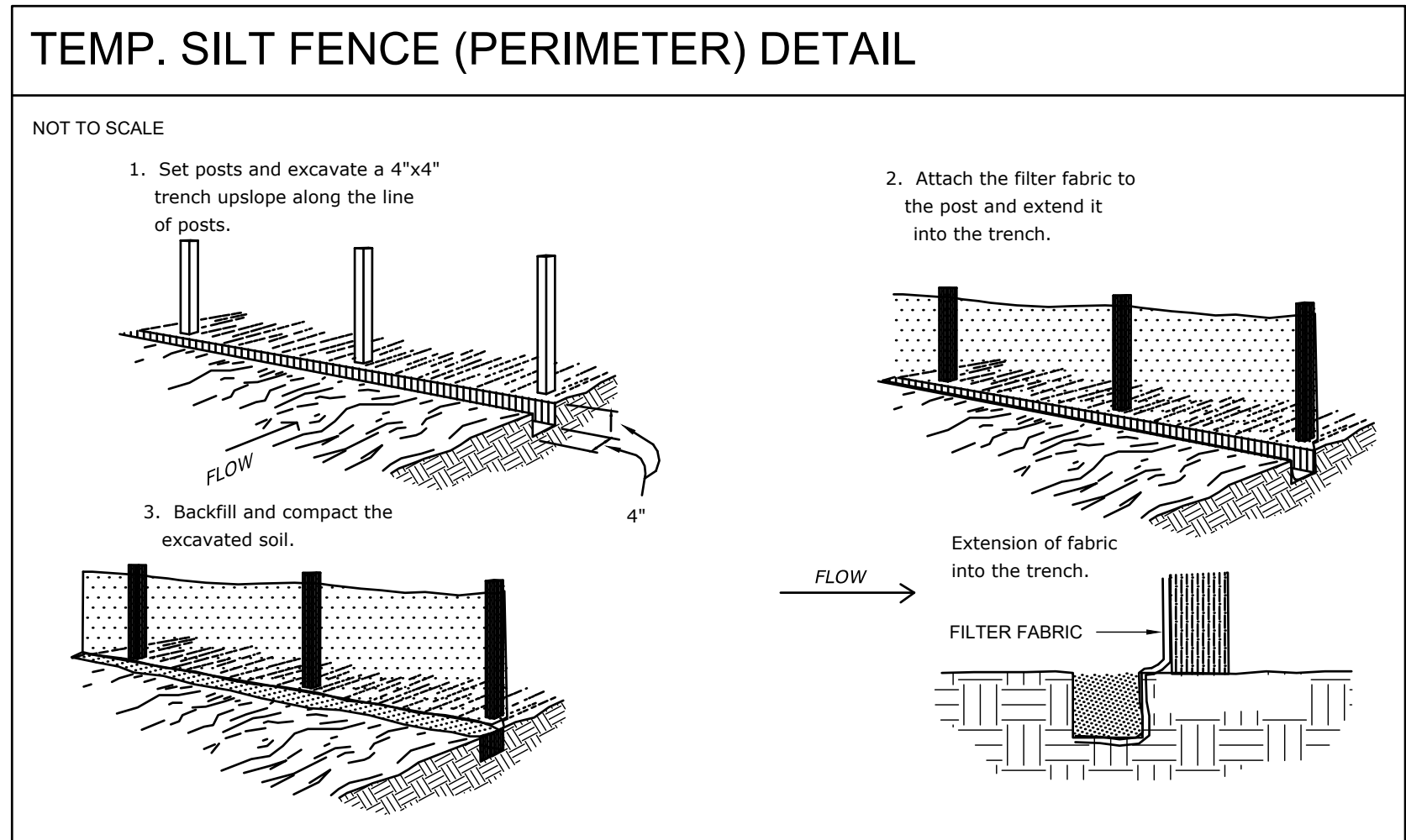
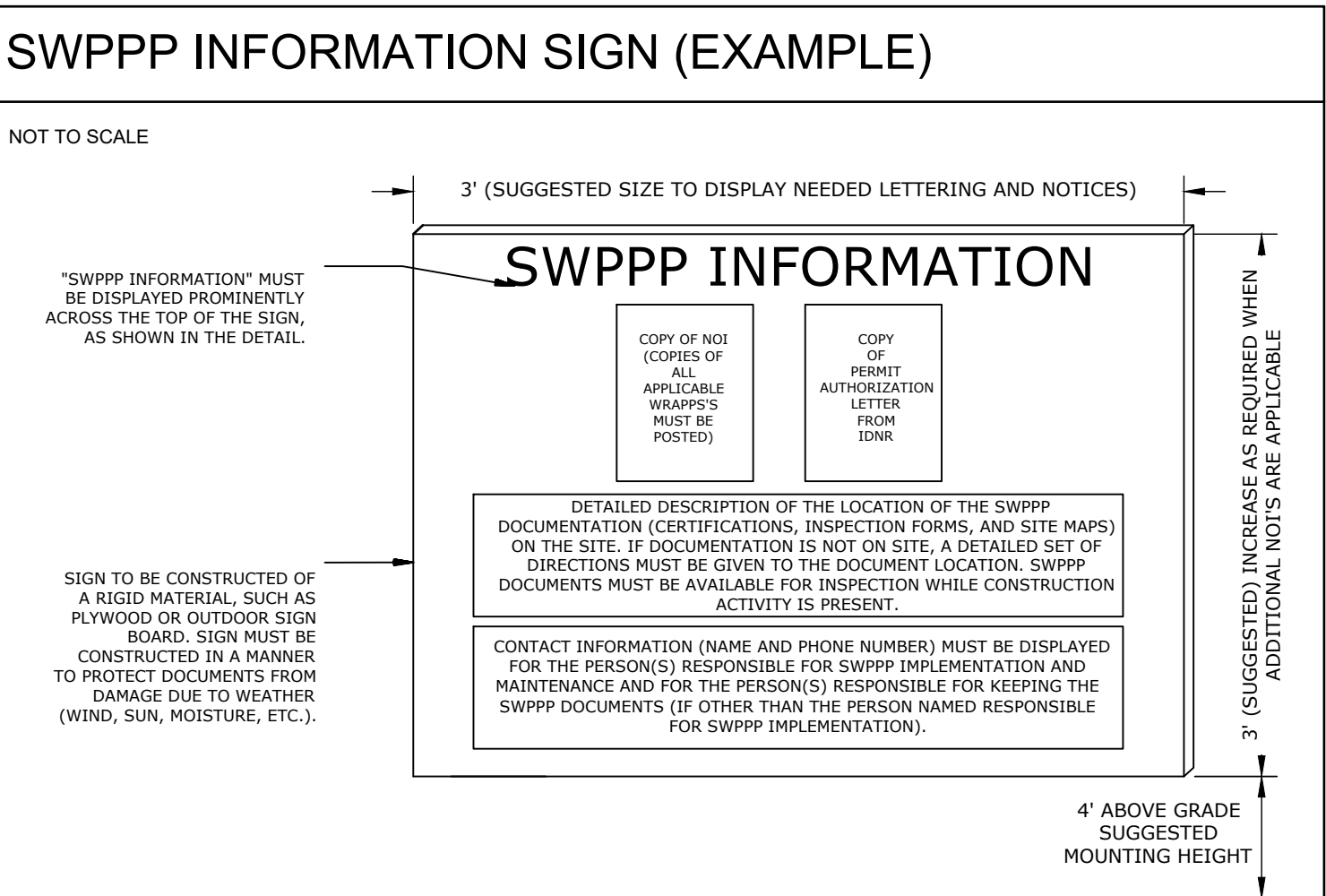
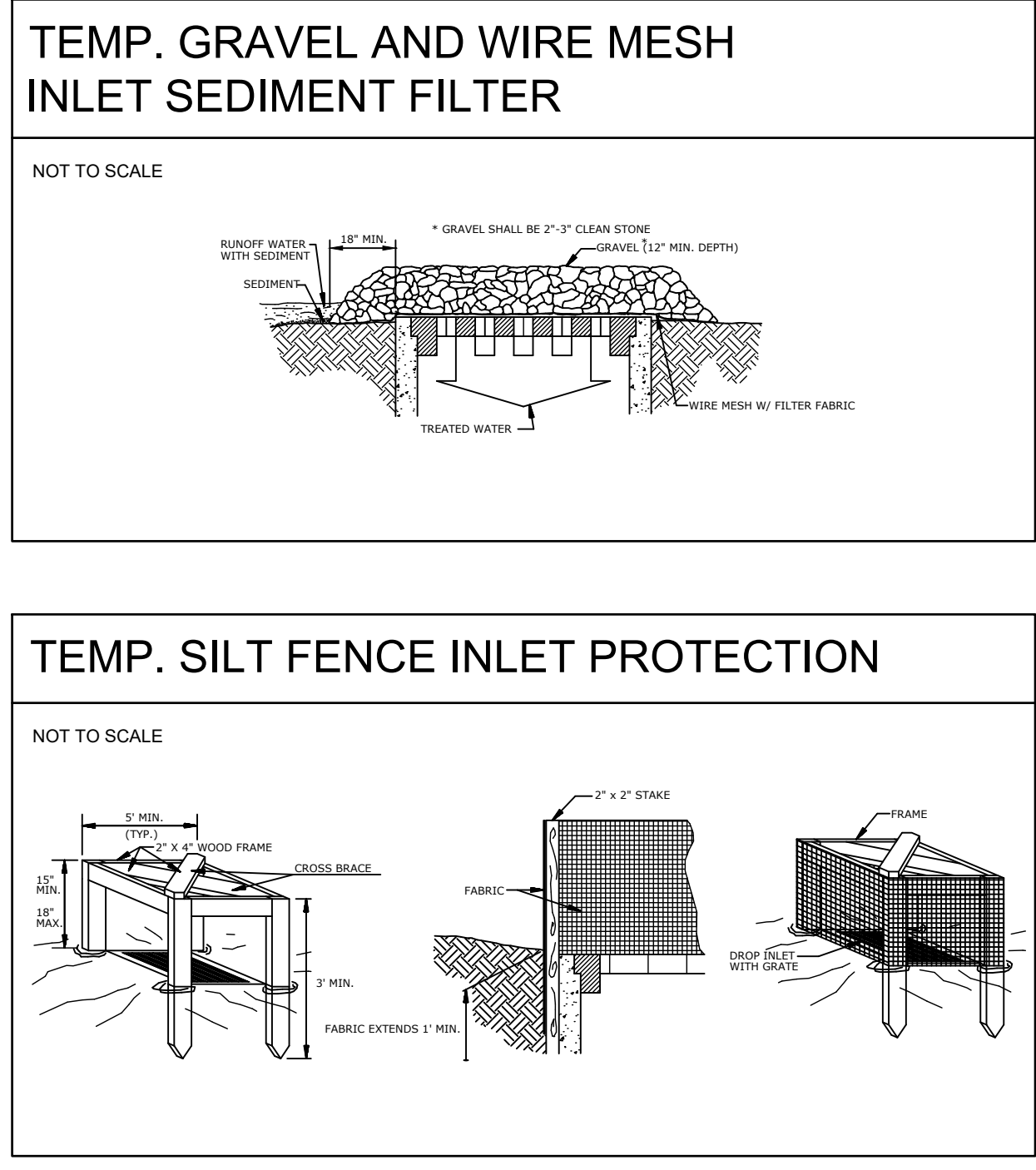
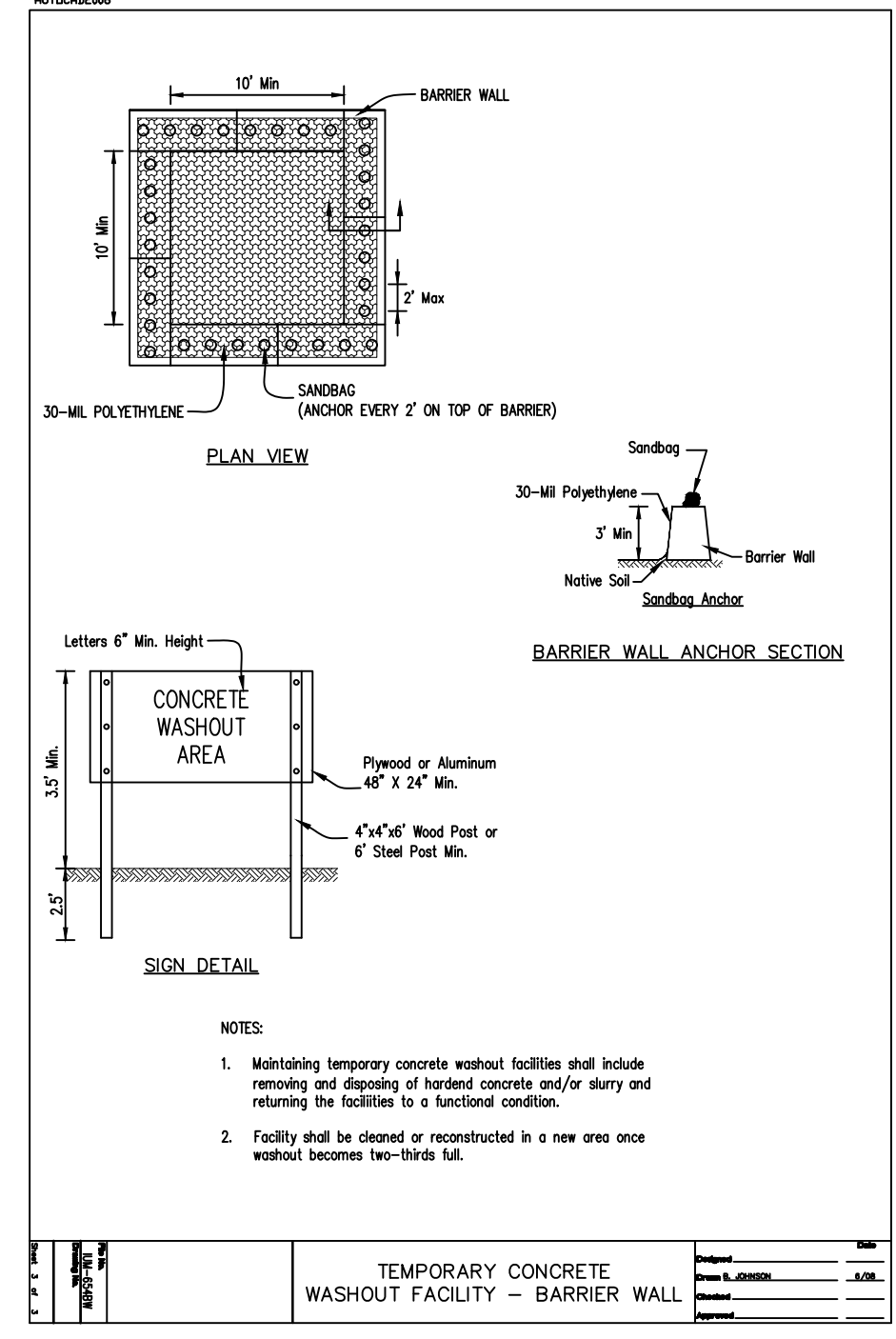
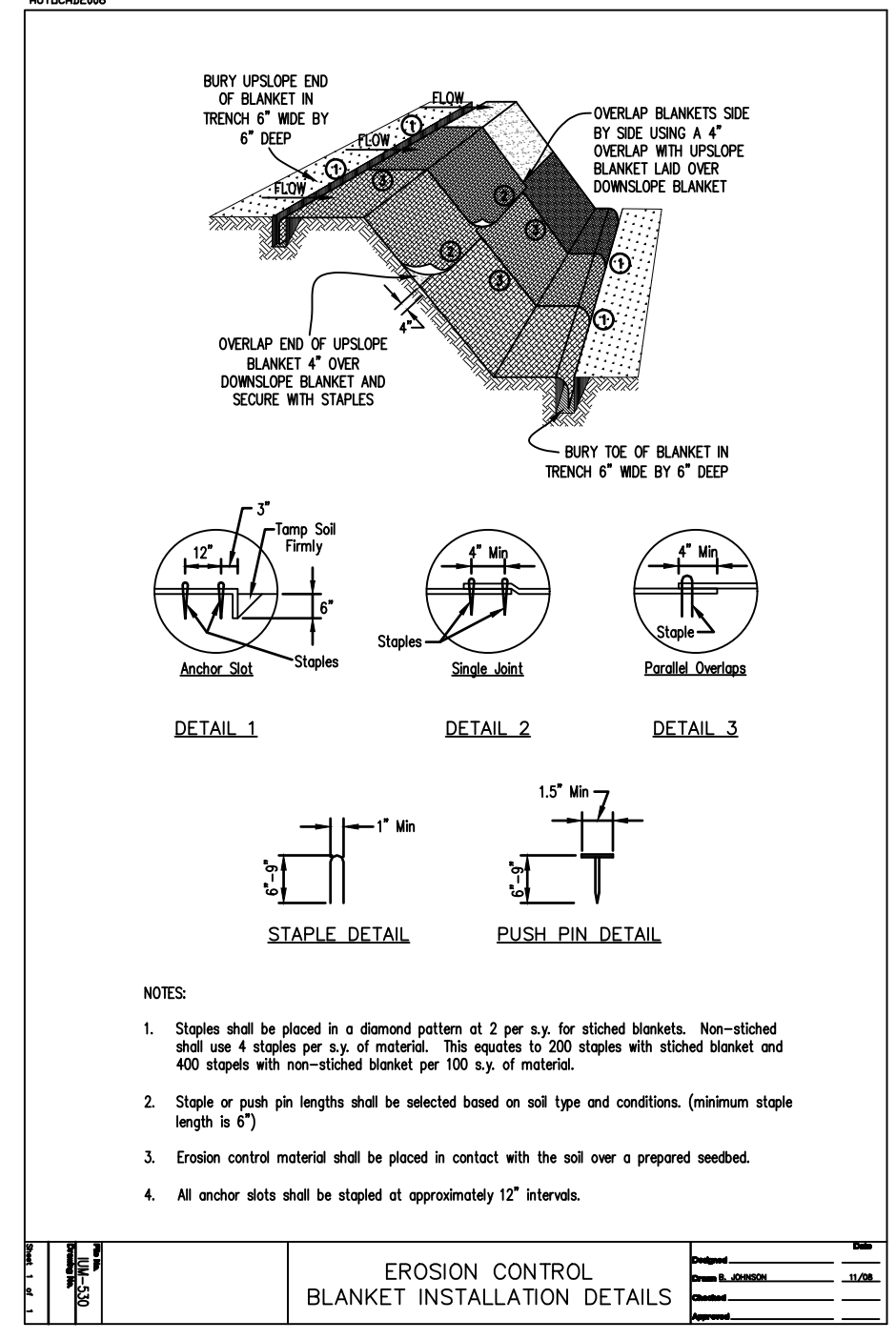
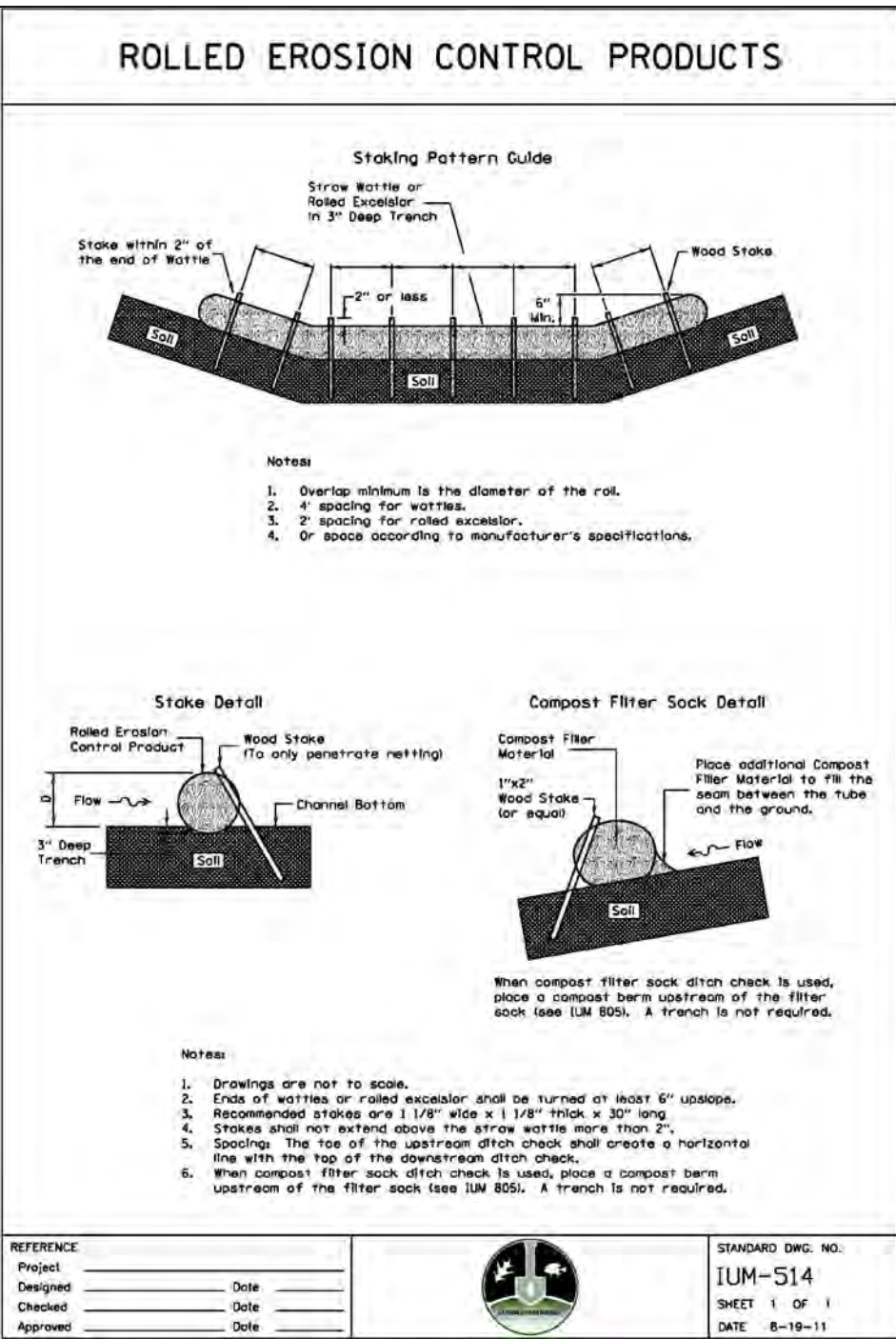
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PROJECT NAME
 OWNER'S NAME

PRAIRIE ROSE DEVELOPMENT

PRAIRIE ROSE DRIVE
 ROSCOE, IL
 WINNEBAGO COUNTY

LITTLE MARIANO, INC.
 P.O. BOX 66
 ROCKTON, IL 61072
 (815) 543-8801



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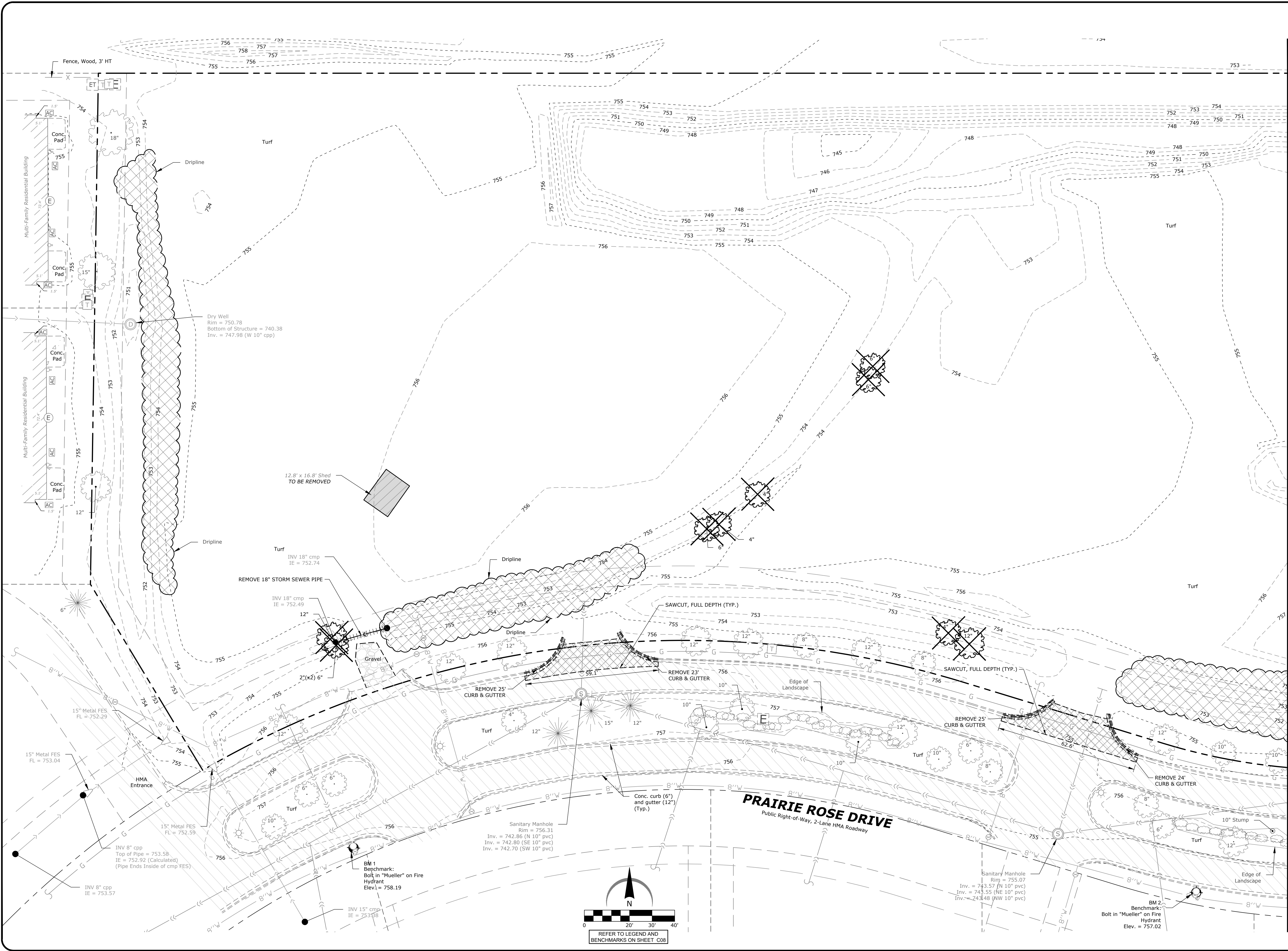
SWPPP DETAILS

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 CHECKED: JSL
 PM: JSL

PROJECT NUMBER
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25012

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**EXISTING
CONDITIONS &
REMOVAL PLAN
WEST**

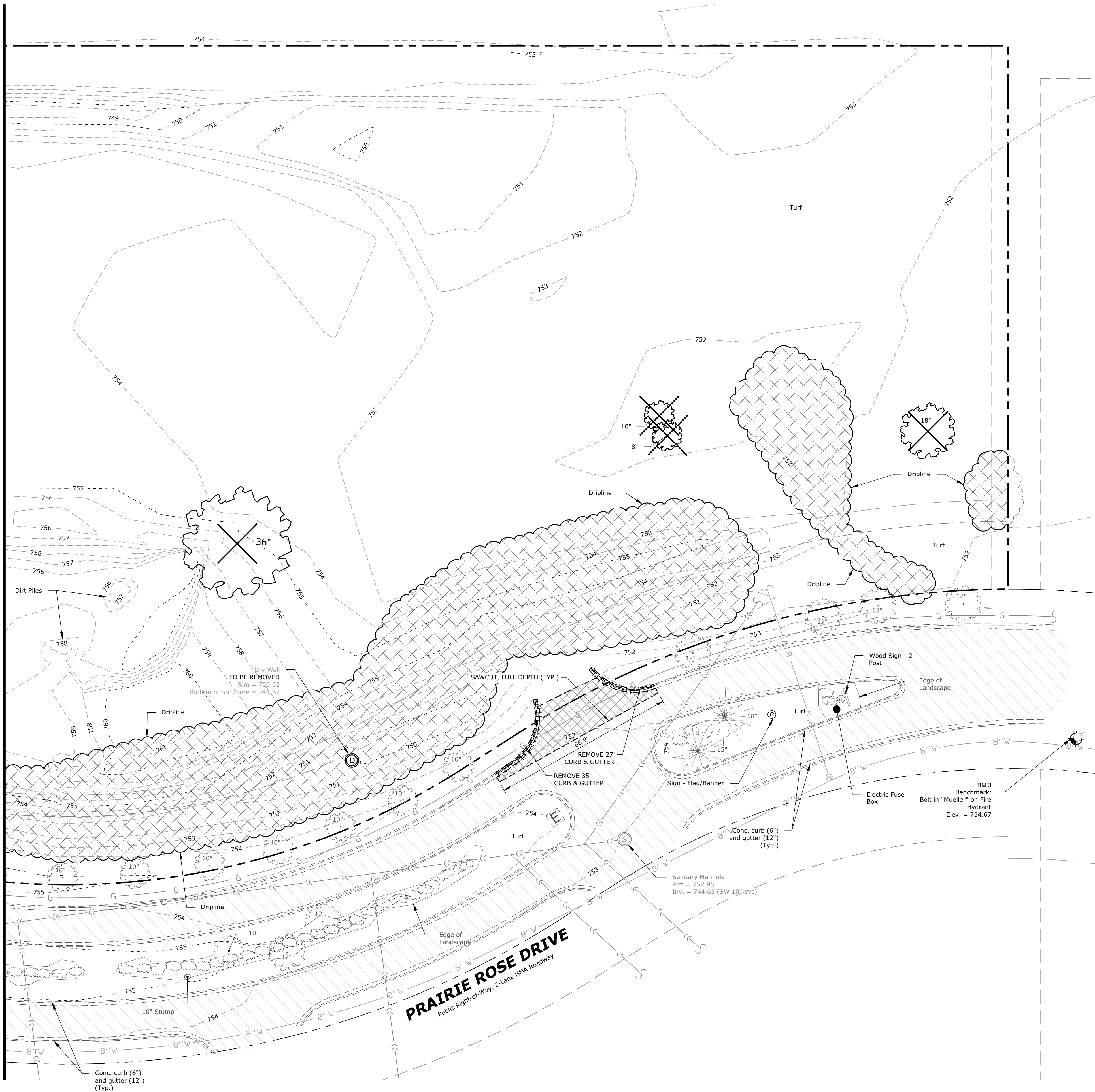
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PROJECT NUMBER
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C07

SEE SHEET C07 FOR CONTINUATION



LEGEND

- PROPERTY LINE
- LOT LINE
- EXISTING RIGHT-OF-WAY
- EXISTING EASEMENT LINE
- EXISTING CURB AND GUTTER
- REMOVE EXISTING CURB AND GUTTER
- EXISTING SANITARY SEWER TO REMAIN
- REMOVE EXISTING SANITARY SEWER
- EXISTING STORM SEWER TO REMAIN
- REMOVE EXISTING STORM SEWER
- EXISTING WATER TO REMAIN
- REMOVE EXISTING WATER
- EXISTING OVERHEAD UTILITIES TO REMAIN
- REMOVE EXISTING OVERHEAD UTILITIES
- EXISTING GAS MAIN TO REMAIN
- REMOVE EXISTING GAS MAIN
- EXISTING FENCE TO REMAIN
- REMOVE EXISTING FENCE
- EXISTING CONTOUR LINE
- REMOVE EXISTING PAVEMENT, CONCRETE SIDEWALKS OR FOUNDATIONS
- REMOVE EXISTING BUILDINGS AND APPURTENANCES
- EXISTING AREA TO BE CLEARED OF VEGETATION AND GRUBBED
- (SVG)
- (TYP)
- EXISTING WATER TO REMAIN
- REMOVE EXISTING WATER
- EXISTING SIGN TO REMAIN
- REMOVE EXISTING SIGN
- EXISTING GAS METER TO REMAIN
- REMOVE EXISTING GAS METER
- EXISTING ELECTRIC METER TO REMAIN
- REMOVE EXISTING ELECTRIC METER
- EXISTING STORM SEWER TO REMAIN
- REMOVE EXISTING STORM SEWER
- EXISTING SANITARY SEWER TO REMAIN
- REMOVE EXISTING SANITARY SEWER
- BENCHMARK
- EXISTING TRAFFIC SIGNAL MAST ARM
- EXISTING SIGNAL CONTROLLER
- EXISTING LIGHT POLE TO REMAIN
- REMOVE EXISTING LIGHT POLE
- REMOVE EXISTING SHRUBS
- REMOVE EXISTING TREE
- EXISTING TREE TO REMAIN

BENCHMARKS

DESCRIPTION	ELEVATION (USGS)
BENCHMARK 1 BOLT IN "MUELLER" ON FIRE HYDRANT	758.19
BENCHMARK 2 BOLT IN "MUELLER" ON FIRE HYDRANT	757.02
BENCHMARK 3 BOLT IN "MUELLER" ON FIRE HYDRANT	754.67

WINGS CONTROL NETWORK WAS USED TO ESTABLISH THE VERTICAL PROJECT BENCHMARK SYSTEM. WINGS MONUMENT 28 WITH AN ELEVATION OF 743.437

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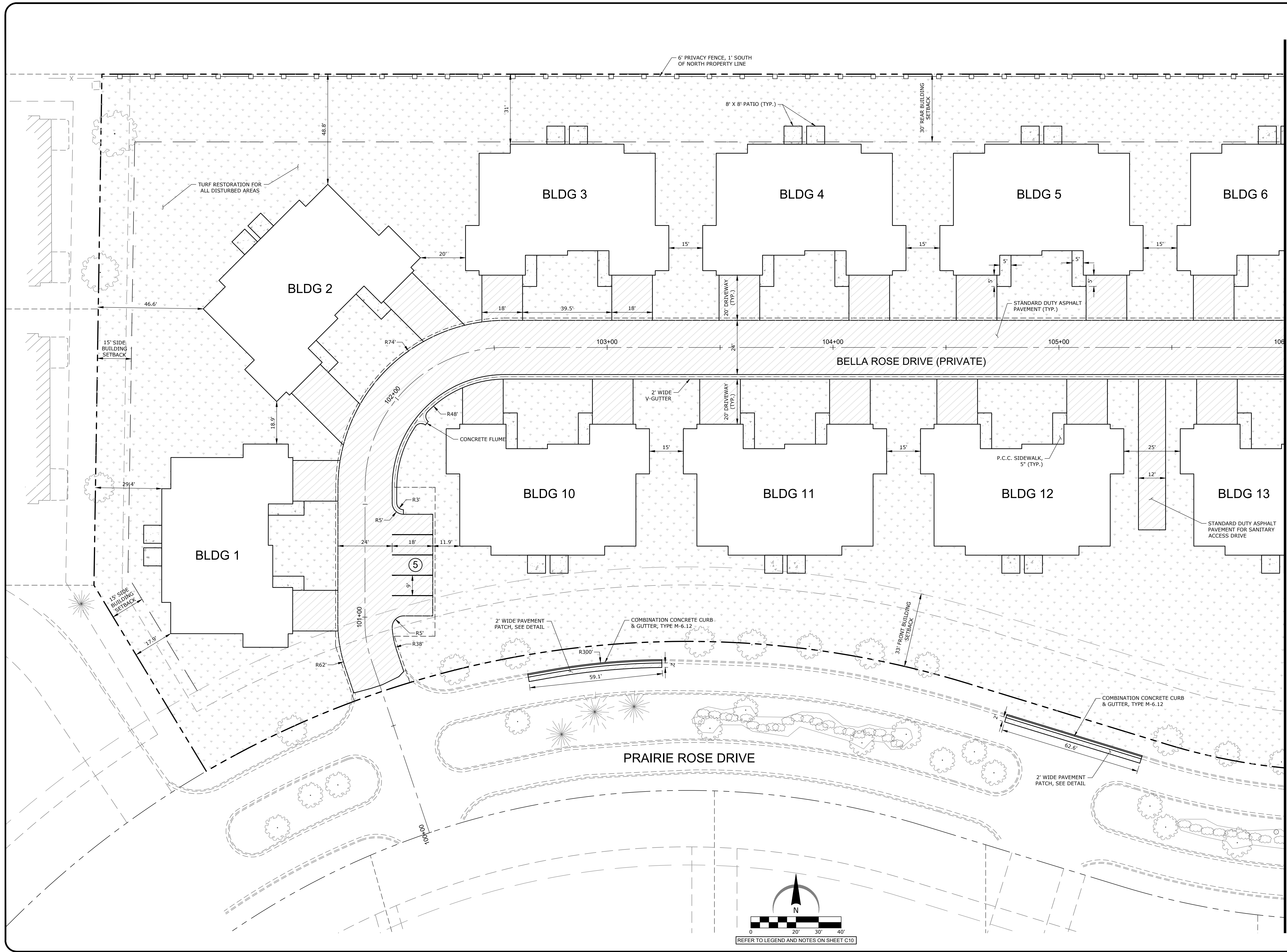
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CONDITIONS &
REMOVAL PLAN
EAST**

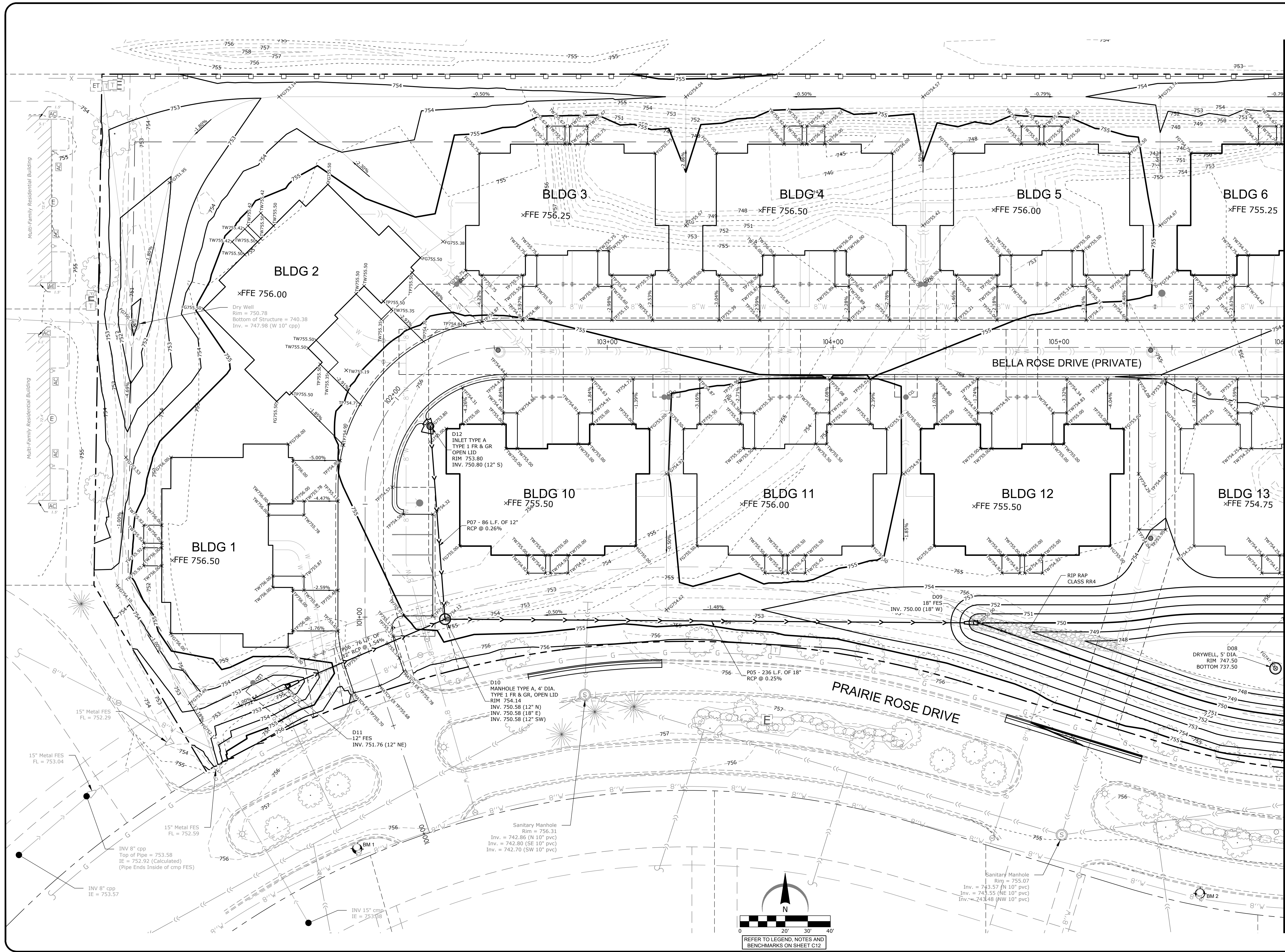
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C08





SEE SHEET C12 FOR CONTINUATION

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GRADING PLAN
WEST

DRAWN RMG

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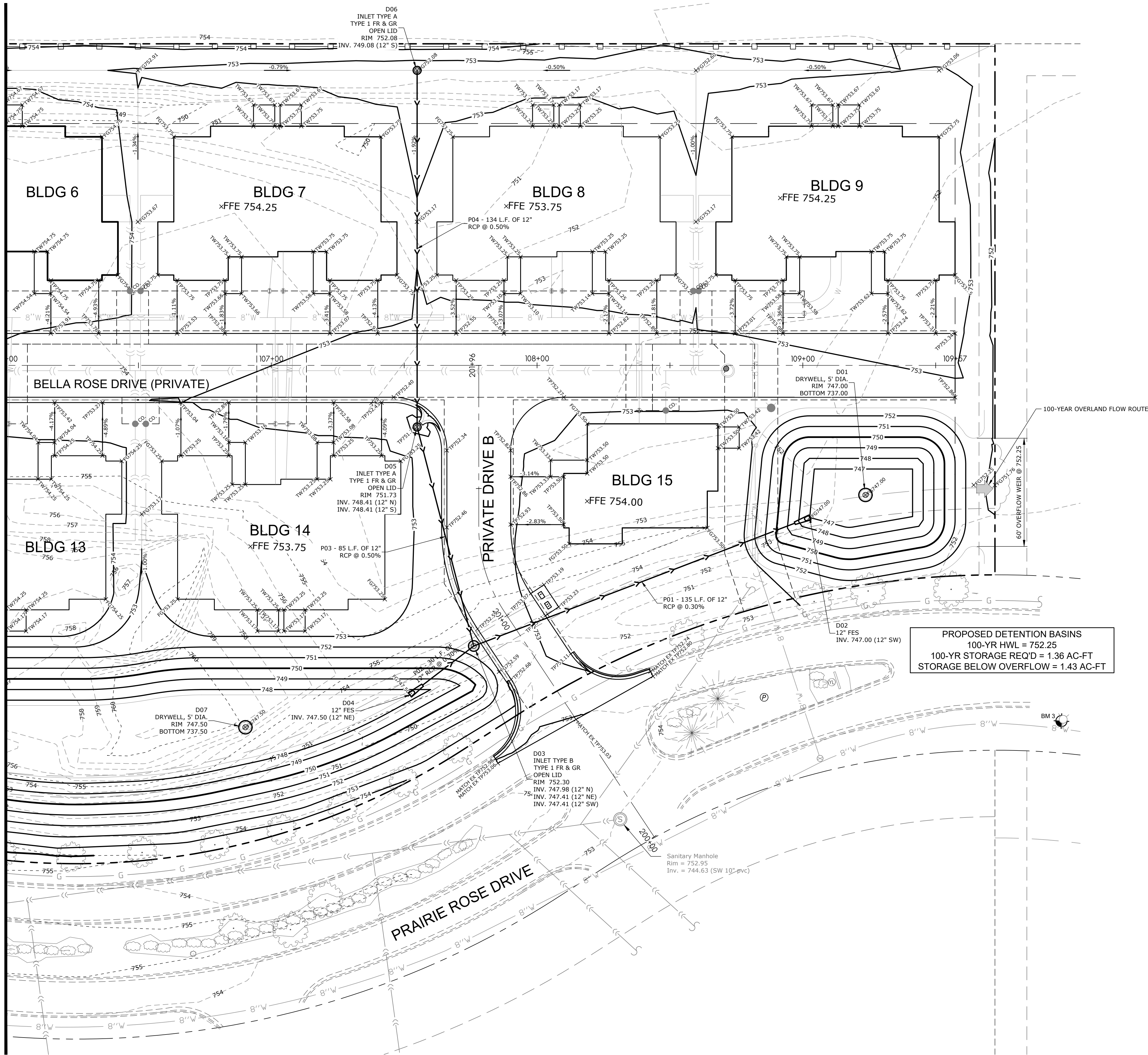
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C11

SEE SHEET C11 FOR CONTINUATION



LEGEND

- PROPERTY LINE
- LOT LINE
- EXISTING RIGHT-OF-WAY
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED GRADE BREAK LINE
- PROPOSED CONTOUR LINE
- EXISTING CONTOUR LINE
- PROPOSED CATCH BASIN OR MANHOLE
- PROPOSED CLEANOUT
- DIRECTION OF SHEET FLOW
- TOP OF WALK ELEVATION
- TOP OF PAVEMENT ELEVATION
- FINISHED GRADE ELEVATION
- TOP OF WALL ELEVATION
- BOTTOM OF WALL ELEVATION
- BENCHMARK
- EMERGENCY OVERLAND FLOW ROUTE

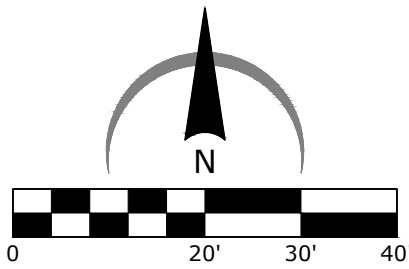
GRADING NOTES

- THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION AND ELEVATION OF EXISTING PIPE INVERTS, FLOOR ELEVATIONS CURB OR PAVEMENT WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL OR VERTICAL CONTROL POINTS PRIOR TO PROCEEDING WITH WORK.
- ALL UNSURFACED AREAS ARE TO RECEIVE SIX INCHES OF TOPSOIL AND SODDED (OR SEEDED WHERE NOTED) AND WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- ALL STORM SEWER PIPE IS TO BE REINFORCED CONCRETE CULVERT PIPE CLASS IV UNLESS OTHERWISE NOTED. WHERE HDPE OR PVC PIPE IS LISTED AS ACCEPTABLE MATERIALS, PVC SDR 25, HDPE DOUBLE WALL (ADS N-12), OR PVC SCHEDULE 40 MAY BE USED AT THE CONTRACTOR'S DISCRETION.
- THE MAXIMUM SLOPE RATIO ON CUT/FILL SLOPES IS 4:0 HORIZONTAL TO 1 VERTICAL.
- PROPERTY CORNERS SHALL BE CAREFULLY PROTECTED UNTIL THEY HAVE BEEN REFERENCED BY A PROFESSIONAL LAND SURVEYOR. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL SET ALL CLEANOUT, MANHOLE AND INLET CASTINGS, FIRE HYDRANTS AND VALVE BOXES TO FINISHED GRADE.
- ALL PROPOSED PAVED AREAS SHALL BE STRIPPED OF ALL TOPSOIL AND UNSUITABLE MATERIAL AND EXCAVATED OR FILLED TO WITHIN 0.10 FEET OF DESIGN SUBGRADE.
- THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE AT THE CONCLUSION OF EACH WORKING DAY.
- ROOF AND CANOPY DRAIN SHALL INCORPORATE BOOT PER DETAIL. 6" PVC PIPE SHALL EXTEND TO A MAIN AS SHOWN ON THE PLAN. POSITIVE DRAINAGE SHALL BE MAINTAINED TOWARD MAIN AT 1.0% MINIMUM SLOPE. 6" PVC CONNECTION TO BE MADE WITH INSERT-A-TIE OR ENGINEER APPROVED EQUIVALENT BETWEEN DISSIMILAR MATERIALS.

BENCHMARKS

DESCRIPTION	ELEVATION (USGS)
BENCHMARK 1 BOLT IN "MUELLER" ON FIRE HYDRANT	758.19
BENCHMARK 2 BOLT IN "MUELLER" ON FIRE HYDRANT	757.02
BENCHMARK 3 BOLT IN "MUELLER" ON FIRE HYDRANT	754.67

WINGIS CONTROL NETWORK WAS USED TO ESTABLISH THE VERTICAL PROJECT BENCHMARK SYSTEM. WINGIS MONUMENT 28 WITH AN ELEVATION OF 743.437



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SHEET TITLE

**GRADING PLAN
EAST**

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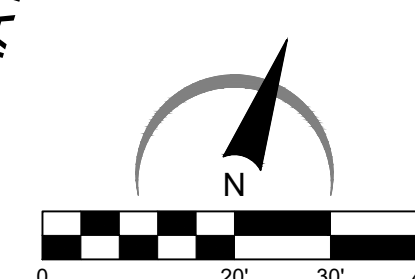
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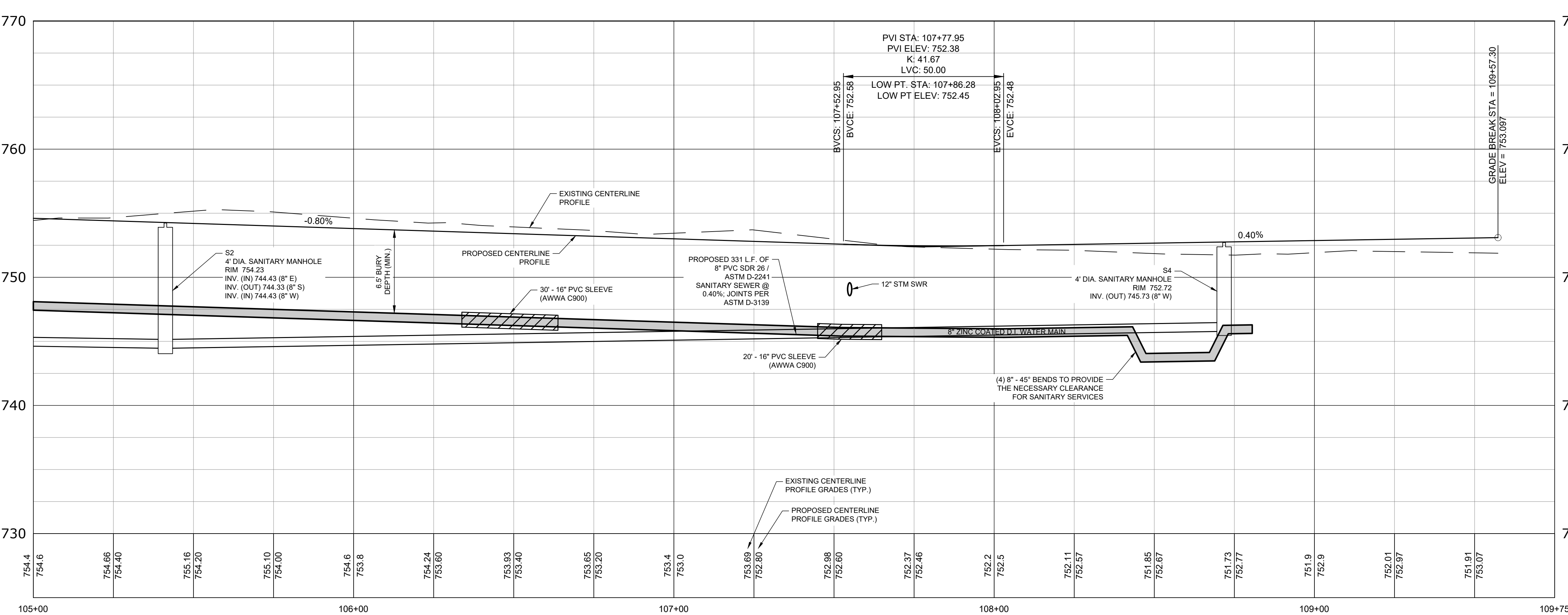
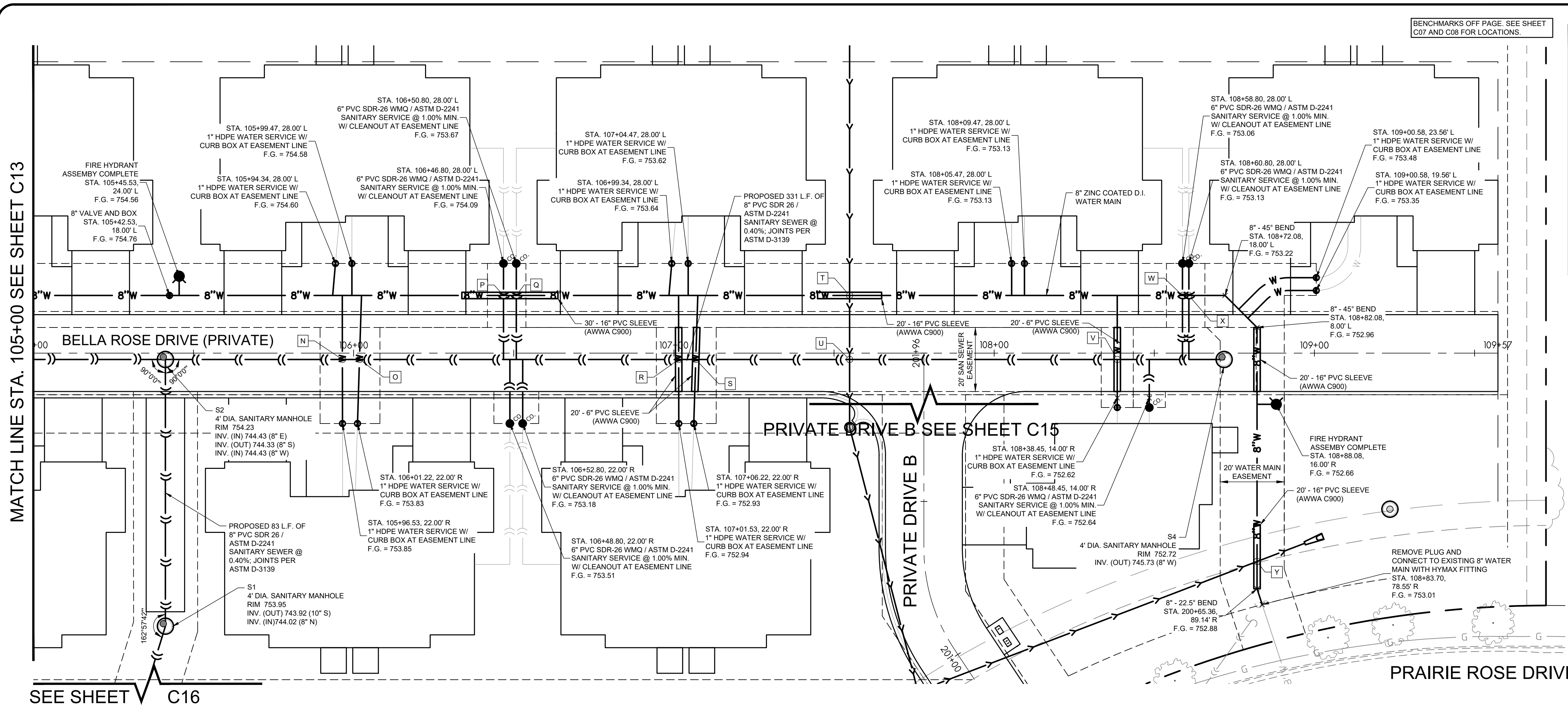
UTILITY CROSSINGS

A*	BTM STM = 751.53, TOP WTR = 747.45, 4.58' CLEARANCE
B*	BTM STM = 751.46, TOP WTR = 748.04, 3.42' CLEARANCE
C*	BTM STM = 750.74, TOP WTR = 747.83, 2.91' CLEARANCE
D	BTM WTR = 747.59, TOP WTR = 746.53, 1.06' CLEARANCE
E	BTM WTR = 747.99, TOP TAN = 746.32, 1.67' CLEARANCE
F	BTM WTR = 748.14, TOP TAN = 746.20, 1.84' CLEARANCE
G	BTM WTR = 748.16, TOP TAN = 746.28, 1.88' CLEARANCE
H	BTM WTR = 748.67, TOP TAN = 745.87, 2.80' CLEARANCE
I	BTM WTR = 748.68, TOP TAN = 745.86, 2.82' CLEARANCE
J	BTM WTR = 748.25, TOP TAN = 745.54, 2.71' CLEARANCE
K	BTM WTR = 748.13, TOP TAN = 745.35, 2.78' CLEARANCE
L	BTM WTR = 748.13, TOP TAN = 745.37, 2.76' CLEARANCE
M	BTM WTR = 748.10, TOP TAN = 745.35, 2.75' CLEARANCE

* DENOTES CROSSINGS WHERE TOP OF WATER MAIN IS TO BE INSULATED 5' (MIN.) TO EACH SIDE OF THE CROSSING



PROJECT NUMBER
SHEET NUMBER
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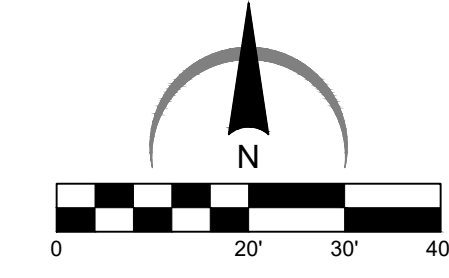


BENCHMARKS	
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WINGIS CONTROL NETWORK WAS USED TO ESTABLISH THE VERTICAL PROJECT BENCHMARK SYSTEM. WINGIS MONUMENT 28 WITH AN ELEVATION OF 743.437

UTILITY CROSSINGS	
N	BTM WTR = 747.21, TOP SAN = 745.32, 1.89' CLEARANCE
O	BTM WTR = 747.19, TOP SAN = 745.34, 1.85' CLEARANCE
P	BTM WTR = 746.78, TOP SAN = 745.55, 1.23' CLEARANCE
Q	BTM WTR = 746.69, TOP SAN = 745.57, 0.92' CLEARANCE
R	BTM WTR = 746.38, TOP SAN = 745.74, 0.64' CLEARANCE
S	BTM WTR = 746.33, TOP SAN = 745.76, 0.57' CLEARANCE
T	BTM STM = 746.82, TOP WTR = 746.32, 2.32' CLEARANCE
U	BTM STM = 746.52, TOP SAN = 745.95, 2.57' CLEARANCE
V	BTM SAN = 745.62, TOP WTR = 746.02, 1.60' CLEARANCE
W	BTM SAN = 745.90, TOP WTR = 744.30, 1.60' CLEARANCE
X	BTM SAN = 745.90, TOP WTR = 744.30, 1.60' CLEARANCE
Y	BTM STM = 747.07, TOP WTR = 745.48, 1.59' CLEARANCE

* DENOTES CROSSING WHERE TOP OF WATER MAIN IS TO BE INSULATED 5' (MIN.) TO EACH SIDE OF THE CROSSING



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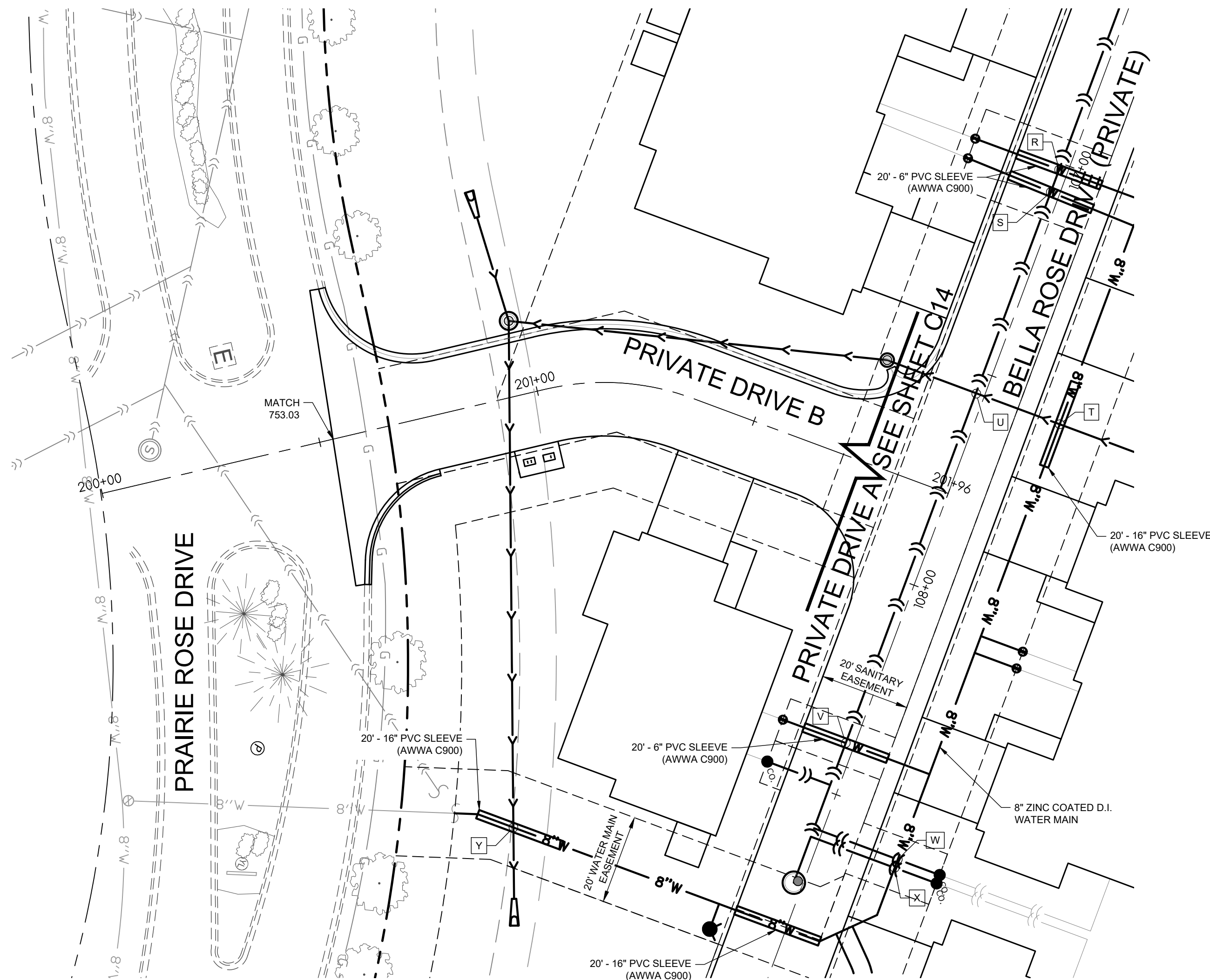
BELLA ROSE DRIVE
PLAN & PROFILE
STA. 105+00 TO
109+57

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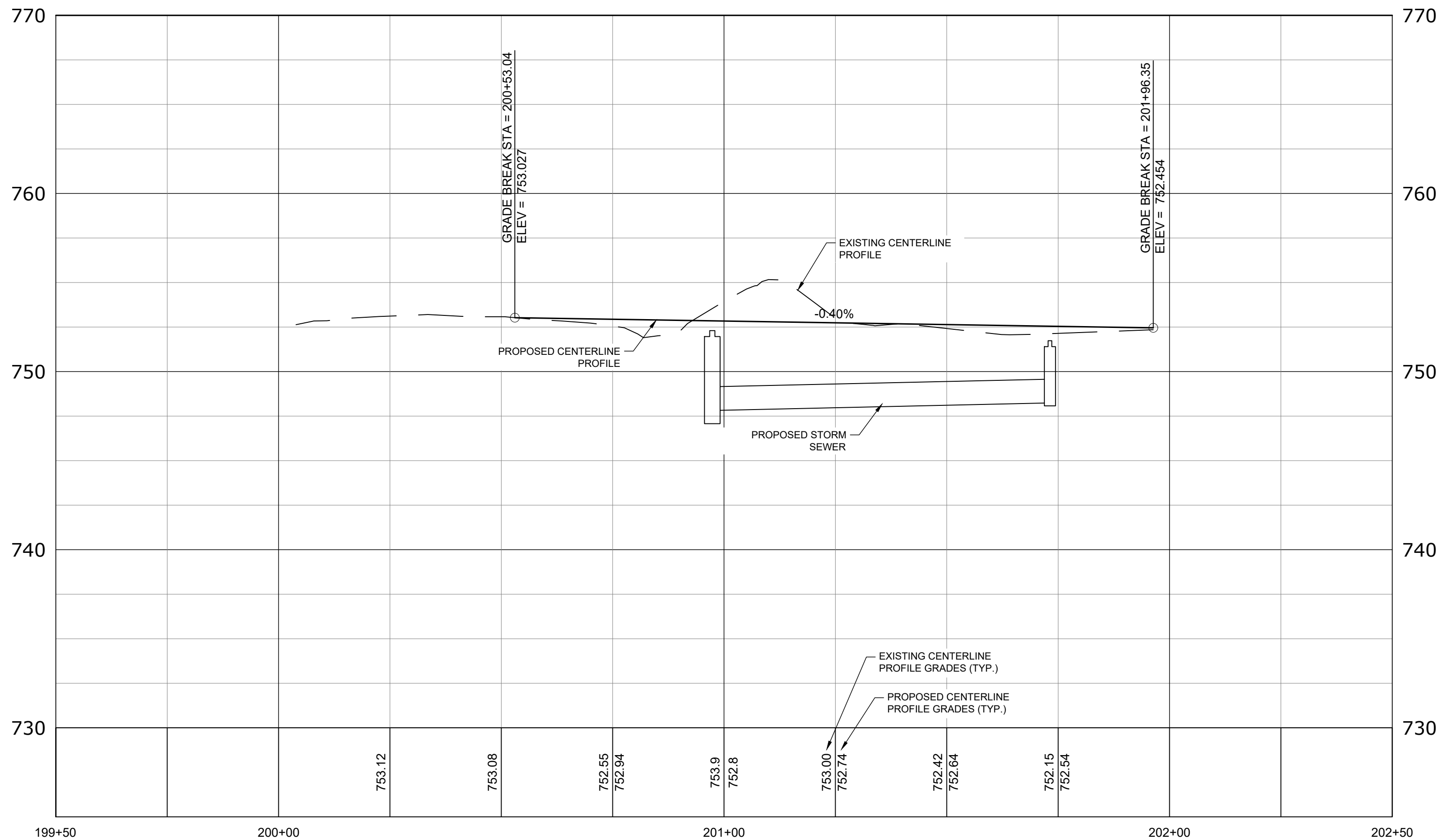
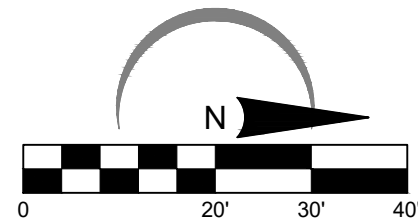
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UTILITY CROSSINGS	
R*	BTM WTR = 746.38, TOP SAN = 745.74, 0.64' CLEARANCE
S*	BTM WTR = 746.33, TOP SAN = 745.76, 0.57' CLEARANCE
T*	BTM STM = 748.62, TOP WTR = 746.32, 2.32' CLEARANCE
U	BTM STM = 748.52, TOP SAN = 745.95, 2.57' CLEARANCE
V*	BTM SAN = 745.62, TOP WTR = 746.02, 1.60' CLEARANCE
W	BTM SAN = 745.90, TOP WTR = 744.30, 1.60' CLEARANCE
X	BTM SAN = 745.90, TOP WTR = 744.30, 1.60' CLEARANCE
Y*	BTM STM = 747.07, TOP WTR = 745.48, 1.59' CLEARANCE

* DENOTES CROSSING WHERE TOP OF WATER MAIN IS TO BE INSULATED 5' (MIN.) TO EACH SIDE OF THE CROSSING



ARC

DESIGN

RESOURCES INC.

5281 ZENITH PARKWAY
LOVES PARK, IL 61111
VOICE: (815) 484-4300
FAX: (815) 484-4303
www.arcdesign.com
Illinois Design Firm License No. 184-001334

PROJECT NAME
OWNER'S NAME

PRAIRIE ROSE
DEVELOPMENT

PRAIRIE ROSE DRIVE
ROSCOE, IL
WINNEBAGO COUNTY

LITTLE MARIANO, INC.
P.O. BOX 66
ROCKTON, IL 61072
(815) 543-8801

CONSULTANTS

ISSUED FOR	
1. AGENCY REVIEW	DATE
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REVISIONS	
ITEM	DATE
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SHEET TITLE

PRAIRIE DRIVE B
PLAN & PROFILE
STA. 200+00 TO
201+96

DRAWN	RMG
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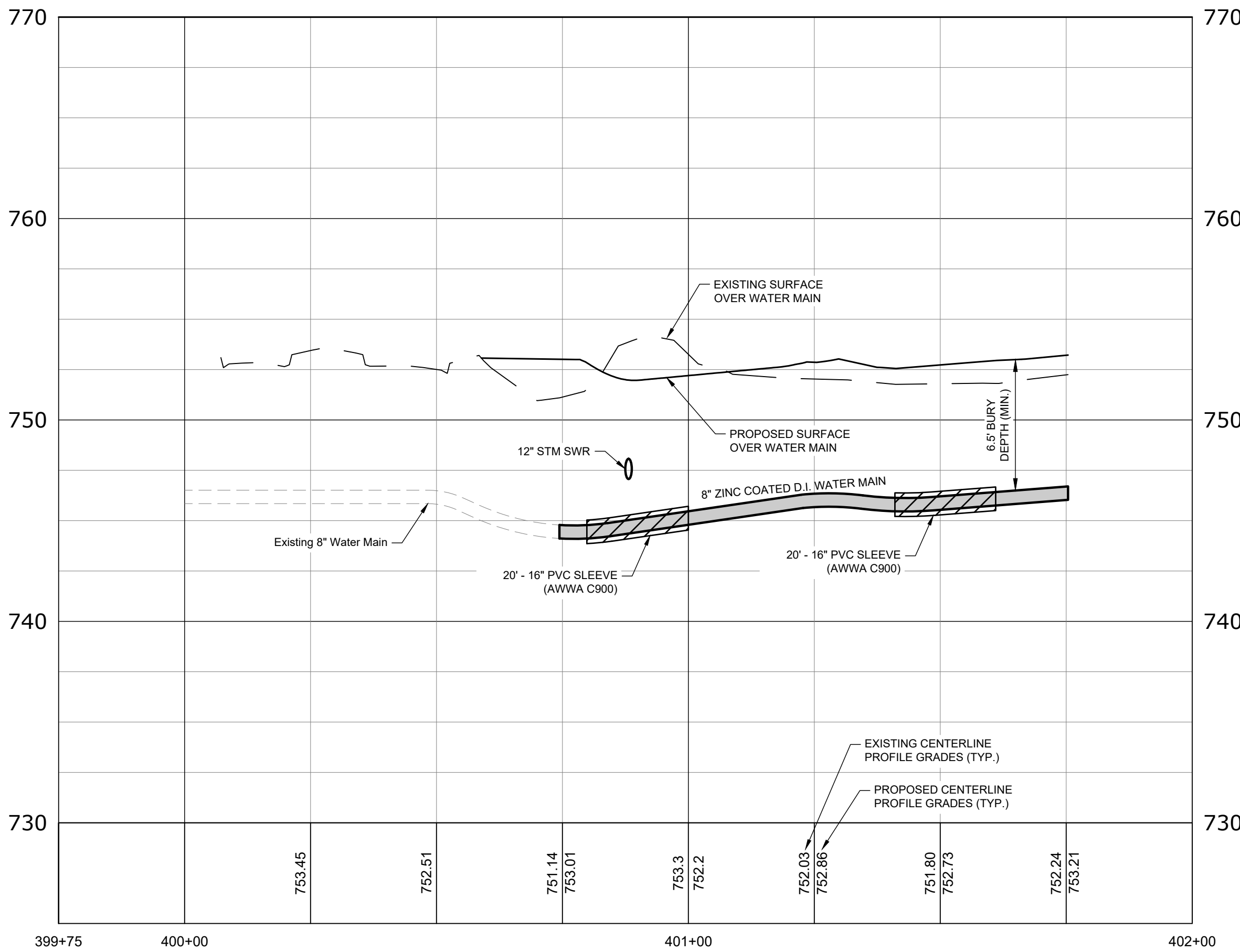
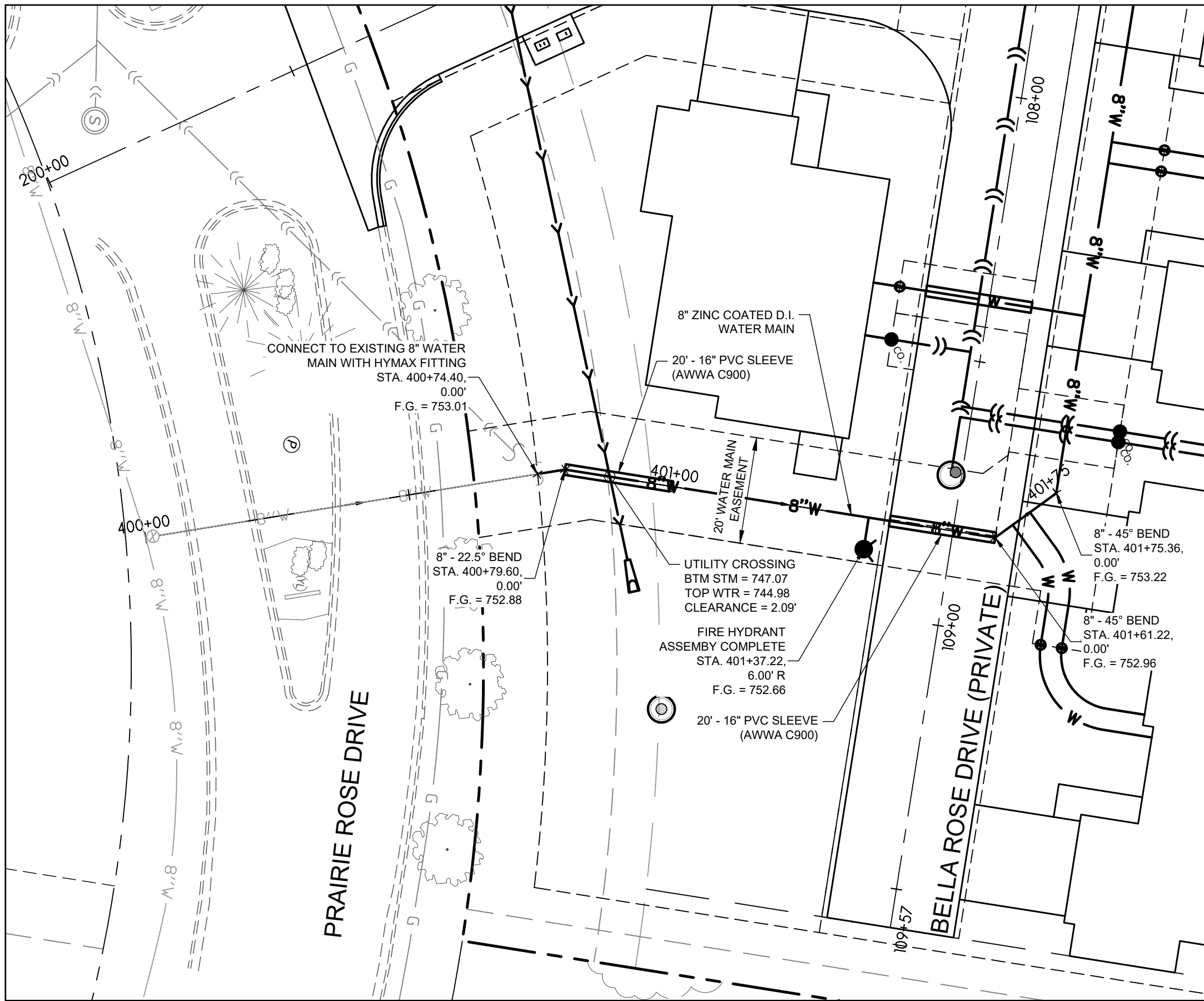
PROJECT NUMBER
SHEET NUMBER

25012
C15

WINGIS CONTROL NETWORK WAS USED TO ESTABLISH THE
VERTICAL PROJECT BENCHMARK SYSTEM. WINGIS
MONUMENT 28 WITH AN ELEVATION OF 743.437

C16

WATER MAIN PLAN & PROFILE



ARC DESIGN
RESOURCES INC.

5281 ZENITH PARKWAY
LOVES PARK, IL 61111
VOICE: (815) 484-4300
FAX: (815) 484-4303
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ROCKTON, IL 61072
(815) 543-8801

CONSULTANTS

ISSUED FOR		DATE
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REVISIONS		DATE
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SHEET TITLE

WATER MAIN PLAN
& PROFILE

DRAWN DB

CHECKED JSL

PM JSL

PROJECT NUMBER
SHEET NUMBER

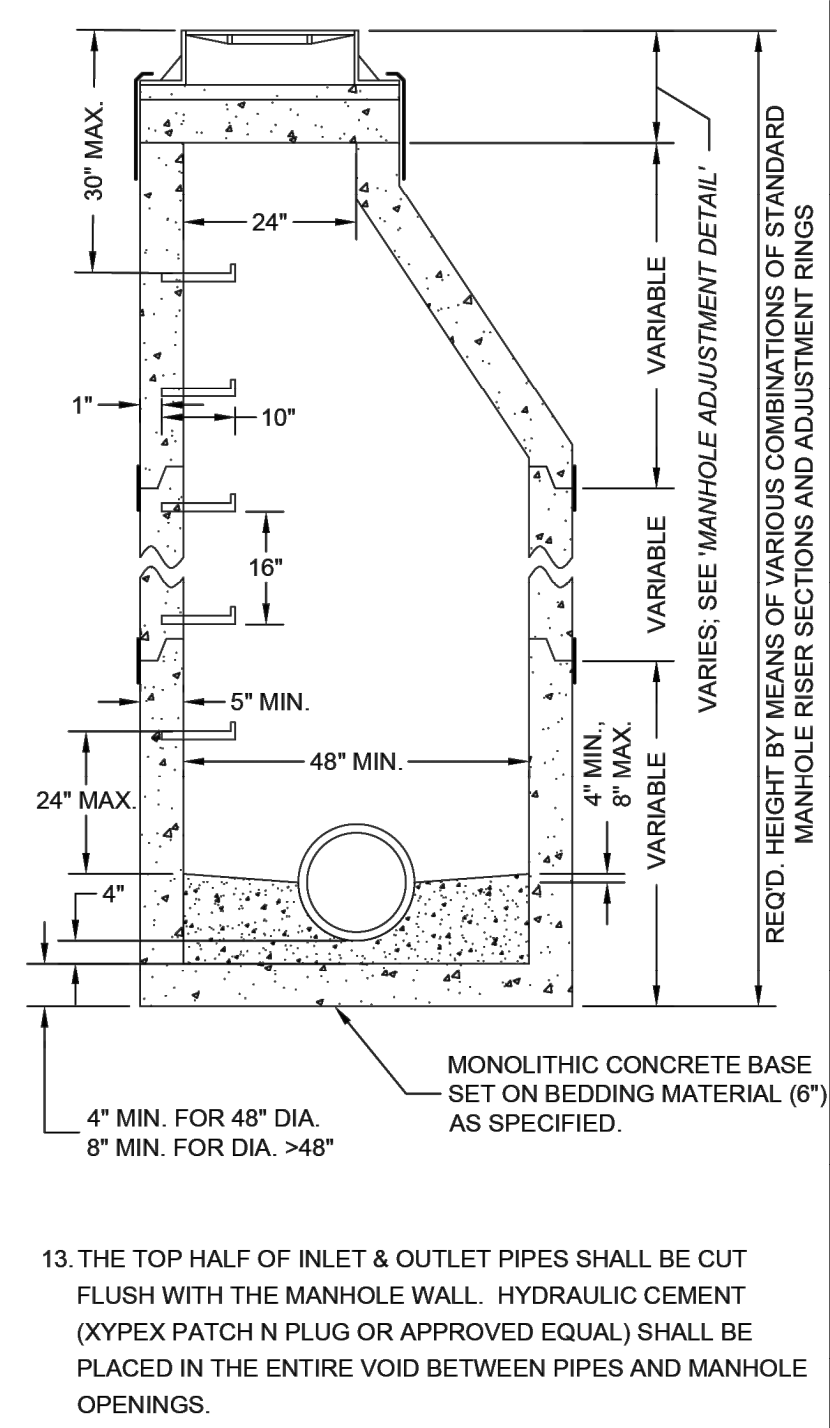
25012

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- NOTES:
1. THE MAX. DROP FROM THE INVERT OF ANY PIPE TO THE CONCRETE CHANNEL UNDER THAT PIPE SHALL BE 8".
 2. MANHOLES LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY SHALL BE MARKED WITH A STEEL FENCE POST AS DIRECTED.
 3. ALL NEW MANHOLES SHALL BE VACUUM TESTED PER A.S.T.M. C-1244 PRIOR TO ACCEPTANCE.
 4. ALL BARREL JOINTS SHALL BE SEALED WITH 3/2" x 3/8" PRE-FORMED RUBBER BUTYL JOINT SEALANT ON THE LOWER SHIPLAP.
 5. ALL BARREL JOINTS SHALL BE SEALED WITH AN EXTERNAL BARREL SEAL CENTERED ON THE JOINT (MAR MAC MACWRAP, OR APPROVED EQUAL).
 6. MANHOLE STRUCTURE SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE MANHOLE RISER SECTIONS IN ACCORDANCE WITH A.S.T.M. C478-90 OR THE LATEST DESIGNATION.
 7. PRECAST FLAT TOPS ARE NOT APPROVED FOR USE.
 8. SEE 'MANHOLE ADJUSTMENT DETAIL' FOR ADJUSTMENT REQUIREMENTS.
 9. PIPE CONNECTIONS TO NEW MANHOLES SHALL BE MADE BY MEANS OF EITHER RUBBER GASKET SEAL (A-LOK OR APPROVED EQUAL) CONFORMING TO ASTM C-923 CAST INTEGRALLY IN MANHOLE WALL, OR RUBBER GASKET SEAL AND STAINLESS STEEL CLAMP (PSX SERIES SIX OR APPROVED EQUAL) CONFORMING TO ASTM C-923. FOR PIPE CONNECTIONS WITH A DEPTH OF >20 FT., A RUBBER GASKET SEAL (A-LOK OR APPROVED EQUAL) CONFORMING TO ASTM C-923 CAST INTEGRALLY IN MANHOLE WALL SHALL BE USED.
 10. PIPE CONNECTIONS TO EXISTING MANHOLES SHALL BE MADE BY MEANS OF CORE DRILLING MANHOLE WALL AND INSTALLING RUBBER GASKET SEAL AND STAINLESS STEEL CLAMP (PSX SERIES SIX OR APPROVED EQUAL) CONFORMING TO ASTM C-923.
 11. THE MAXIMUM DISTANCE FROM ANY INLET PIPE INVERT TO THE OUTLET PIPE INVERT SHALL BE 2'. DISTANCES GREATER THAN 2' WILL REQUIRE AN INSIDE DROP CONNECTION PER 'INSIDE DROP CONNECTION DETAIL'.
 12. MANHOLE STEPS SHALL BE NEENAH R-1982-F OR M.A. INDE. PS-1 OR APPROVED EQUAL INSTALLED AT 16" CENTERS, ORIENTED ABOVE THE OUTLET PIPE UNLESS OTHERWISE SPECIFIED. FOR MANHOLES WITH INSIDE DROP ASSEMBLIES, STEPS IN THE MANHOLE BASE SECTION SHALL BE INSTALLED IN THE FIELD AND NOT CAST IN PLACE. IN THIS CASE, THE ORIENTATION OF THE CONE SHALL BE AS DIRECTED BY FRSA.

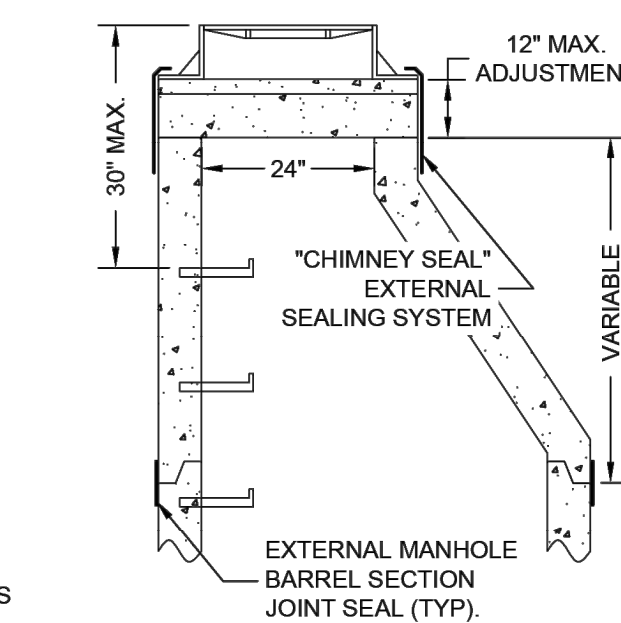


STANDARD MANHOLE DETAIL
(MANHOLE ADJUSTMENT DETAIL SHALL APPLY)

REV. 5/1/23

- NOTES:
1. MANHOLE FRAMES & LIDS SHALL BE PER THE TABLE BELOW.
 2. FOR MANHOLES CONNECTED TO MAINS 18" DIAMETER OR LARGER, OR FOR MANHOLES LOCATED IN FLOOD PRONE AREAS, FRAMES & LIDS SHALL BE THE BOLT DOWN TYPE.
 3. ALLOWABLE TYPES OF ADJUSTING RINGS INCLUDE PRECAST CONCRETE (4" HEIGHT MIN.), & EXPANDED POLYPROPYLENE (EPP). THESE CAN BE USED IN CONJUNCTION WITH EACH OTHER, EXCEPT THAT A PRECAST RING SHALL NOT BE PLACED OVER AN EPP RING.
 4. FOR PRECAST ADJUSTING RINGS, ALL ADJUSTING RING JOINTS AS WELL AS THE FRAME TO ADJUSTING RING JOINT SHALL BE SEALED WITH TWO 1" BEADS OF PRE-FORMED RUBBER BUTYL JOINT SEALANT. WHEN A FRAME REQUIRES PITCHING, EPP TAPER RINGS SHALL BE USED PER NOTE 5.
 5. FOR EPP ADJUSTING RINGS, RINGS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS. WHEN A FRAME REQUIRES PITCHING, THE TOP RING SHALL BE A TAPERED ADJUSTMENT RING PER MANUFACTURER'S INSTRUCTIONS.
 6. NO TARRING OR GROUTING IS ALLOWED ON THE INSIDE OF MANHOLE OR ADJUSTMENT JOINTS.
 7. MAXIMUM MANHOLE ADJUSTMENT IS 12". MINIMUM ADJUSTMENT IS 4" UNLESS OFF-ROAD OR IN CURB & GUTTER ROADWAY.
 8. MANHOLE FRAMES SHALL BE SET 1/2" MIN. TO 3/8" MAX. BELOW PAVED SURFACES, AND AT FINAL GRADE IN TURF AREAS.
 9. WHEN ADJUSTING EXISTING MANHOLES, THE ENTIRE EXISTING ADJUSTMENT SHALL BE REMOVED AND REPLACED.
 10. THE COMBINATION OF NEW ADJUSTING RINGS

APPROVED FRAME & LID TABLE				
TYPE	NEENAH FRAME	NEENAH LID	EAST JORDAN FRAME	EAST JORDAN LID
REGULAR	1670-2004	R-1670-0358	00111711	00111732
LOW PROFILE	1670-2008	R-1670-0358	---	---
BOLT DOWN	---	---	---	---



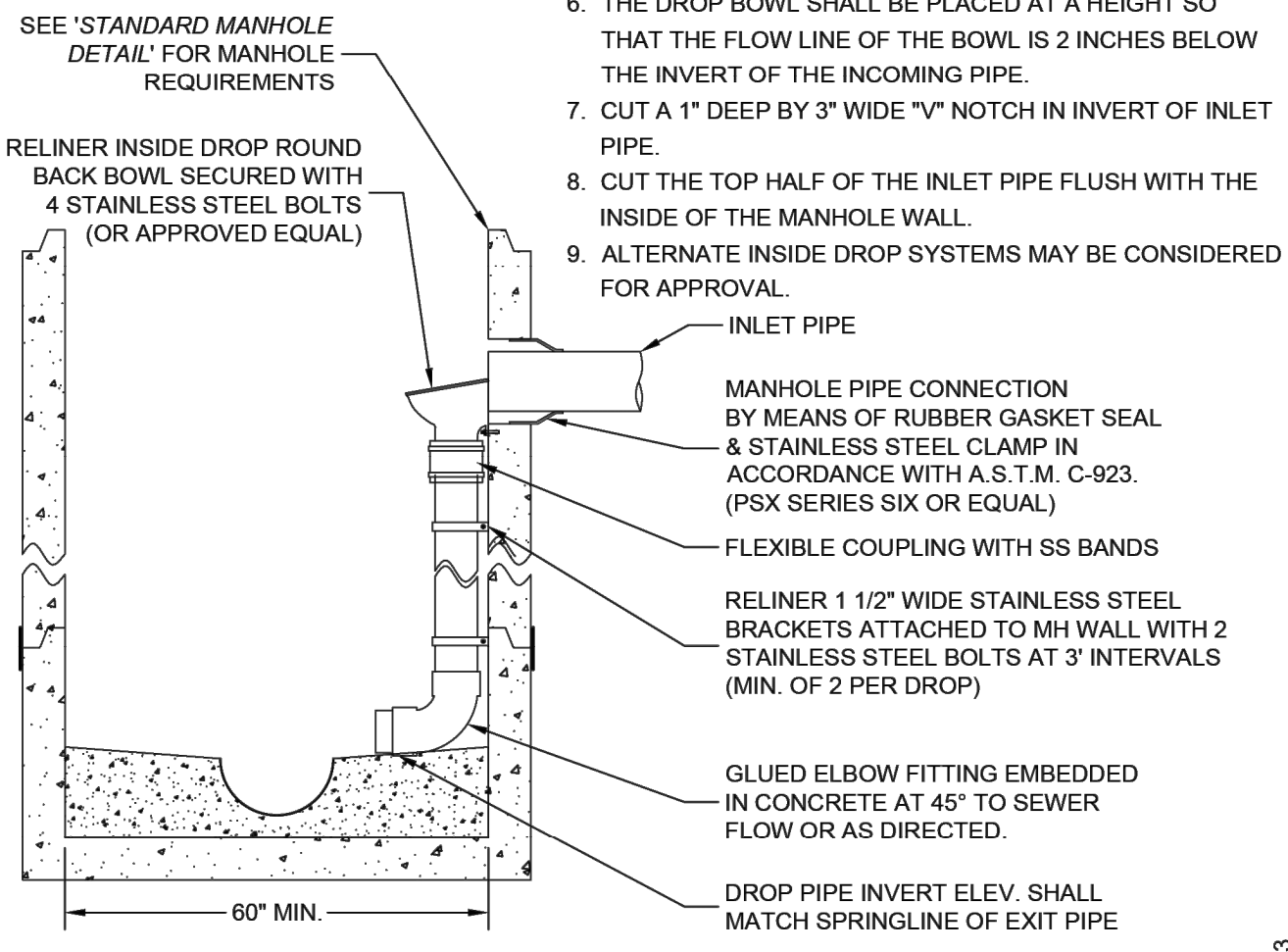
REV. 5/1/23

MANHOLE ADJUSTMENT DETAIL
(FOR ADJUSTMENT OF BOTH NEW & EXISTING MANHOLES)

- SHALL BE SUCH THAT THE MINIMUM NUMBER OF RINGS POSSIBLE ARE USED.
11. FLAT-TOPS ARE NOT PERMITTED ON 4" OR 5" DIA. MANHOLES.
 12. REPLACEMENT OF EXISTING BARREL SECTIONS MAY BE REQUIRED TO MEET THE ABOVE REQUIREMENTS.
 13. MANHOLE ADJUSTMENT INSERT RISER RINGS ARE NOT APPROVED FOR USE.

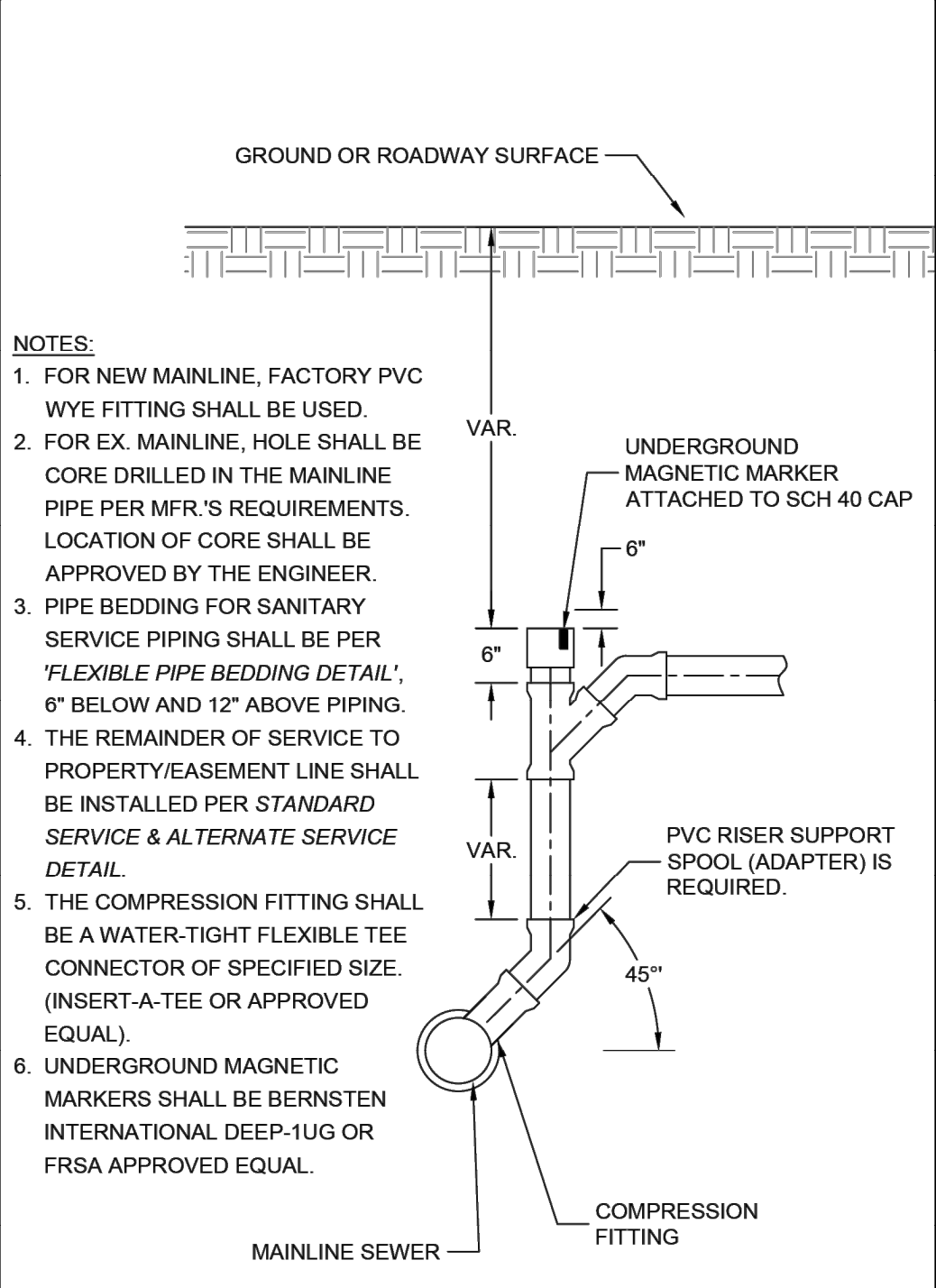
DROP BOWL & DROP PIPE SIZING TABLE	
INLET PIPE DIA.	DROP PIPE DIA. (MIN.)
4-6 INCH	4 INCH
8 INCH	6 INCH
10 INCH	8 INCH
>10 INCH	*

* PER MFG. OR AS DIRECTED BY FRSA



INSIDE DROP CONNECTION DETAIL
(STANDARD MANHOLE DETAIL SHALL APPLY)

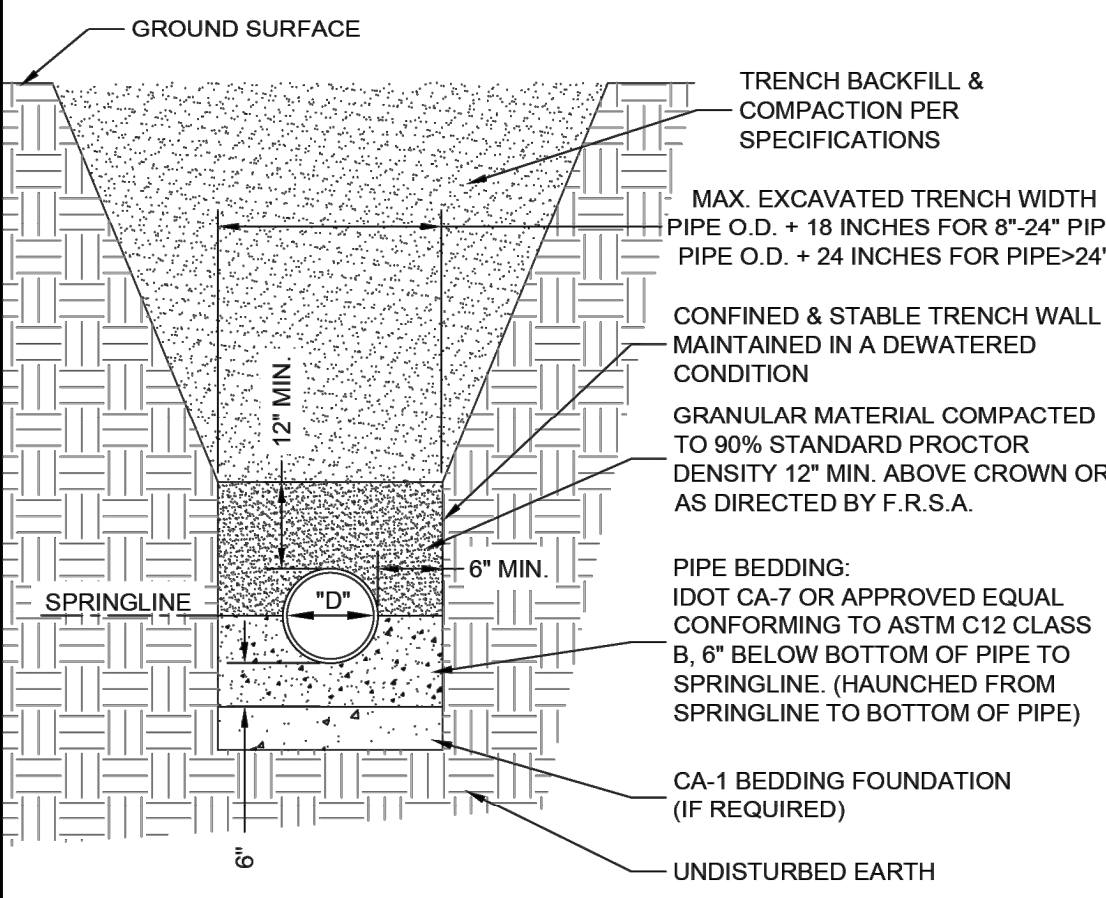
REV. 5/1/23



VERTICAL SERVICE RISER DETAIL
(FOR MAINLINE DIA. 8" - 18"; CONNECTION TO >18" MAIN PROHIBITED)

REV. 5/1/23

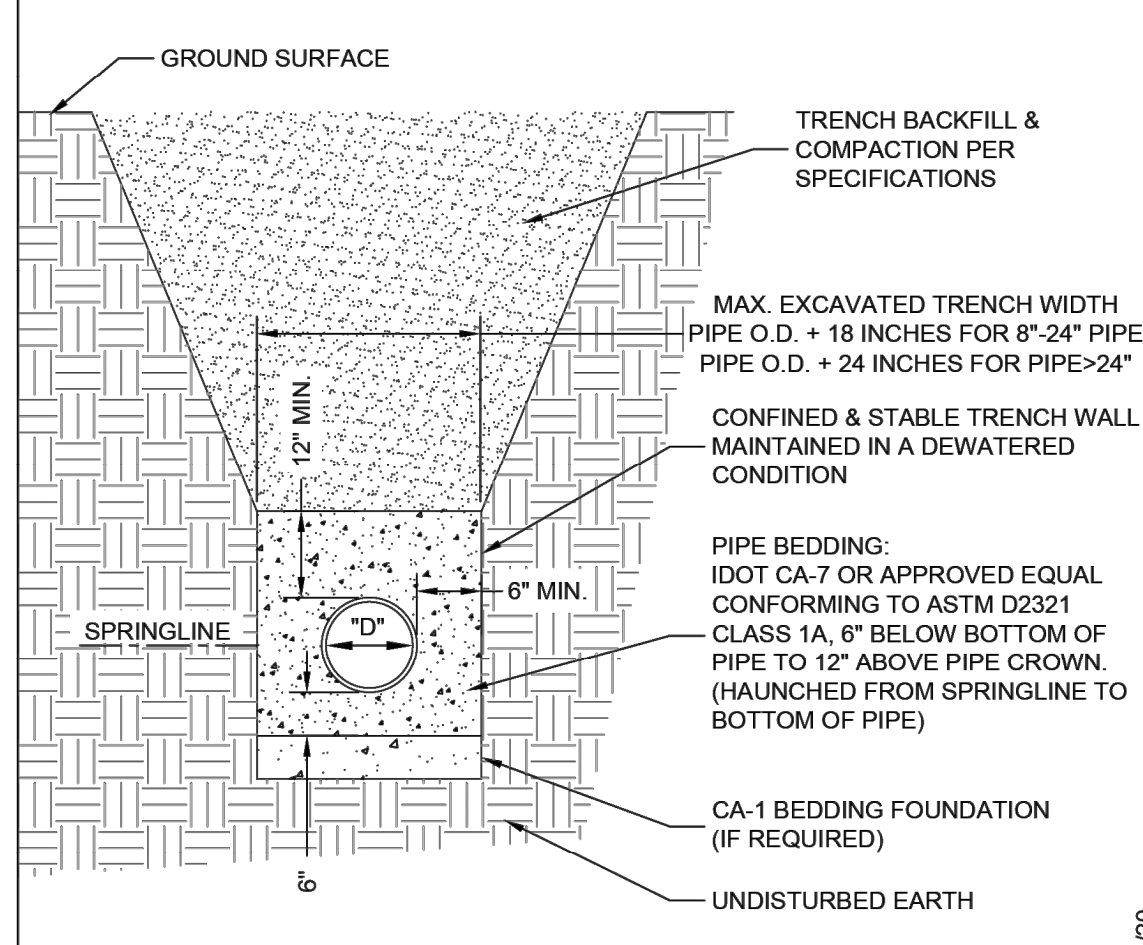
- NOTES:
1. REASONABLE CARE SHALL BE USED WHEN BACKFILLING OVER SEWER. NO MATERIALS SUCH AS ROCKS OR BOULDERS SHALL BE PLACED WITHIN 24" OF THE CROWN OF THE PIPE. NO MATERIAL LARGER THAN 8" DIA. SHALL BE USED IN THE BACKFILL.
 2. LOOSE MATERIAL SHALL BE REMOVED OR COMPACTED PRIOR TO PLACING PIPE BEDDING.
 3. BEDDING SHALL BE WELL HAUNCHED ALONG PIPE TO ENSURE VOIDS ARE ELIMINATED.



RIGID PIPE BEDDING DETAIL

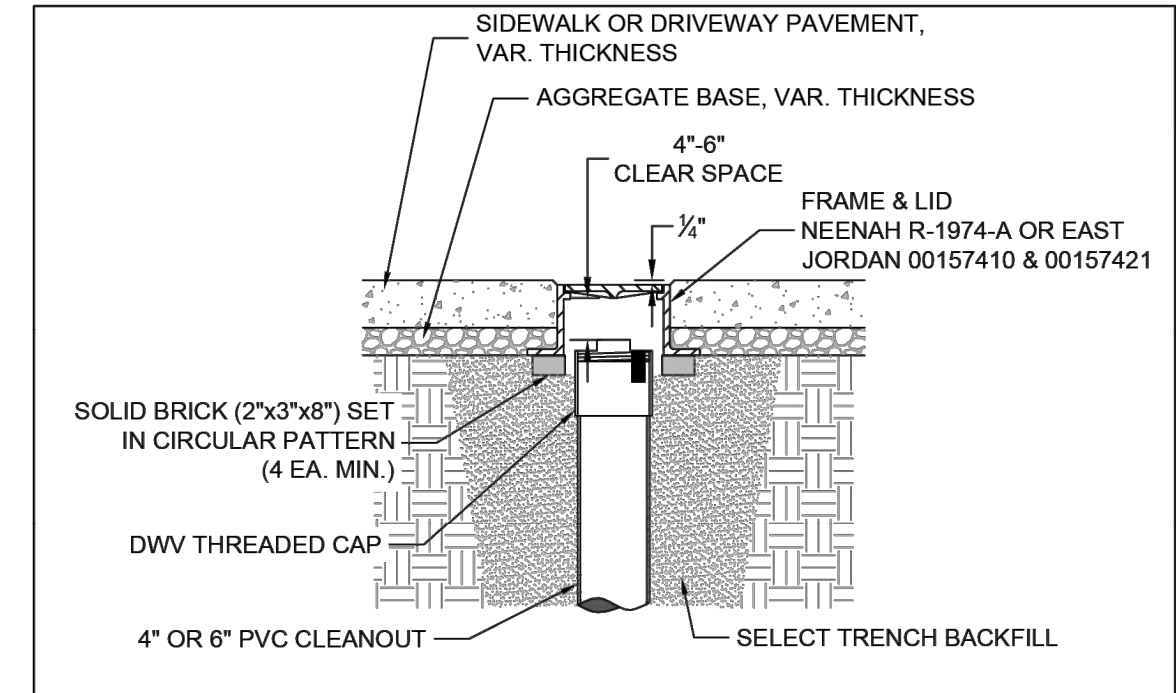
REV. 3/11/20

- NOTES:
1. REASONABLE CARE SHALL BE USED WHEN BACKFILLING OVER SEWER. NO MATERIALS SUCH AS ROCKS OR BOULDERS SHALL BE PLACED WITHIN 24" OF THE CROWN OF THE PIPE. NO MATERIAL LARGER THAN 8" DIA. SHALL BE USED IN THE BACKFILL.
 2. LOOSE MATERIAL TO BE REMOVED OR COMPACTED PRIOR TO PLACING PIPE BEDDING.
 3. BEDDING SHALL BE WELL HAUNCHED ALONG PIPE TO ENSURE VOIDS ARE ELIMINATED.



FLEXIBLE PIPE BEDDING DETAIL

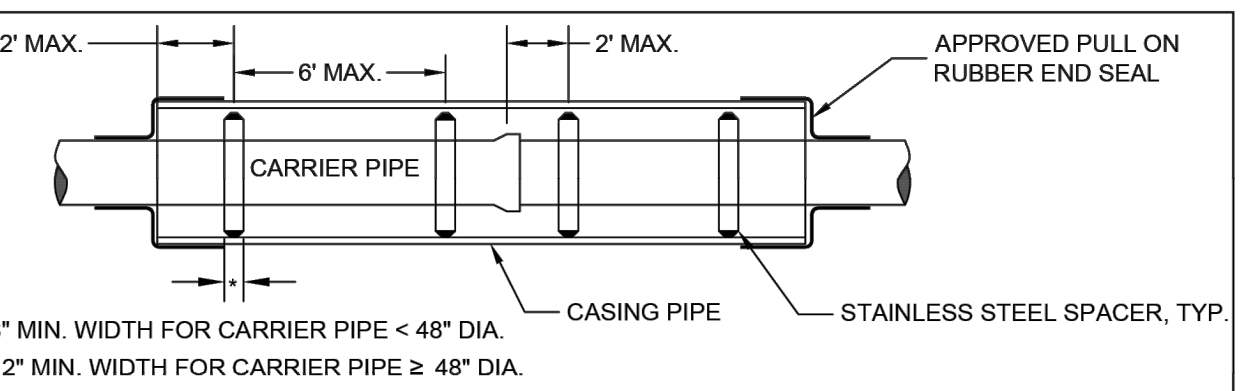
REV. 6/1/22



- NOTES:
1. SERVICE CLEANOUT CASTINGS ARE REQUIRED FOR ALL CLEANOUTS LOCATED IN PAVED AREAS, DRIVEWAYS, OR SIDEWALKS.
 2. THE LOCATION OF THE CLEANOUT SHALL BE APPROVED BY FOUR RIVERS SANITATION AUTHORITY (FRSA).
 3. THE FRAME SHALL BE SET ON BRICKS THAT ARE PLACED IN A CIRCULAR PATTERN THE ENTIRE CIRCUMFERENCE OF THE FRAME. THE BRICKS SHALL BE SET ON COMPACTED TRENCH BACKFILL.
 4. THE FRAME SHALL BE SET ON AN ELEVATION THAT PROVIDES 4"-6" CLEAR SPACE BETWEEN THE TOP OF THE CLEANOUT CAP AND THE BOTTOM OF THE CASTING LID.
 5. THE CONTRACTOR SHALL ENSURE THAT THE CLEANOUT CAP CAN BE UNSCREWED AND REMOVED AND REPLACED WITHOUT HINDRANCE.
 6. THE FRAME SHALL BE SET 1/2" MIN. TO 3/8" MAX. BELOW FINAL PAVEMENT ELEVATION.

SERVICE CLEANOUT CASTING DETAIL

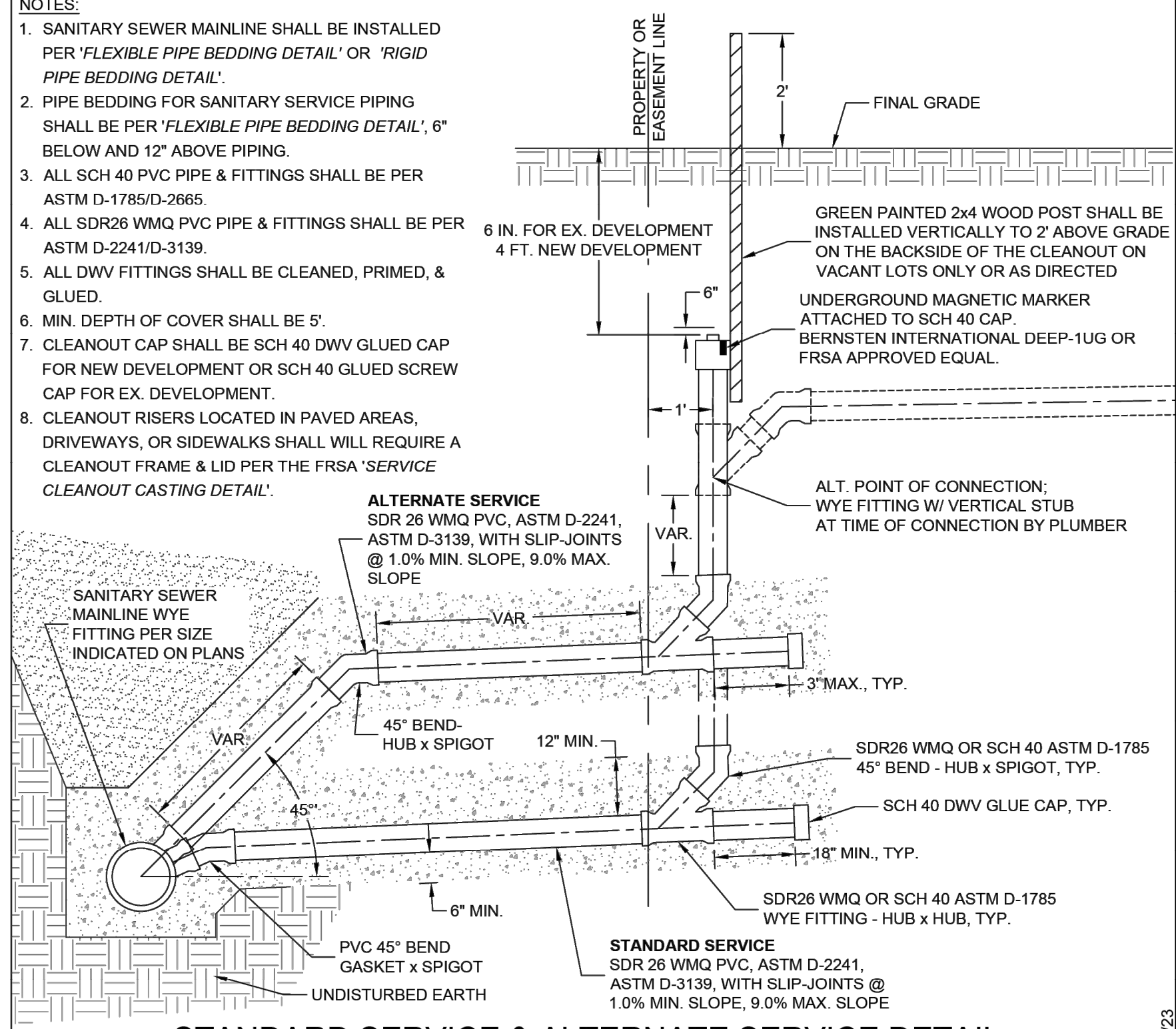
REV. 6/1/22



- NOTES:
1. CASING END SEALS & SPACERS SHALL BE AS MFD. BY CASCADE MFG., OR APPROVED EQUAL.
 2. FOR FLEXIBLE CARRIER PIPE, SPACING OF SPACERS TO BE AS SHOWN, OR PER MFR.'S RECOMMENDATION.
 3. FOR RIGID CARRIER PIPE, SPACING SHALL BE PER MFR.'S RECOMMENDATION.

CASING & SPACER DETAIL

REV. 5/15/18



STANDARD SERVICE & ALTERNATE SERVICE DETAIL
(FOR MAINLINE DIA. 8" - 18"; CONNECTION TO >18" MAIN PROHIBITED)

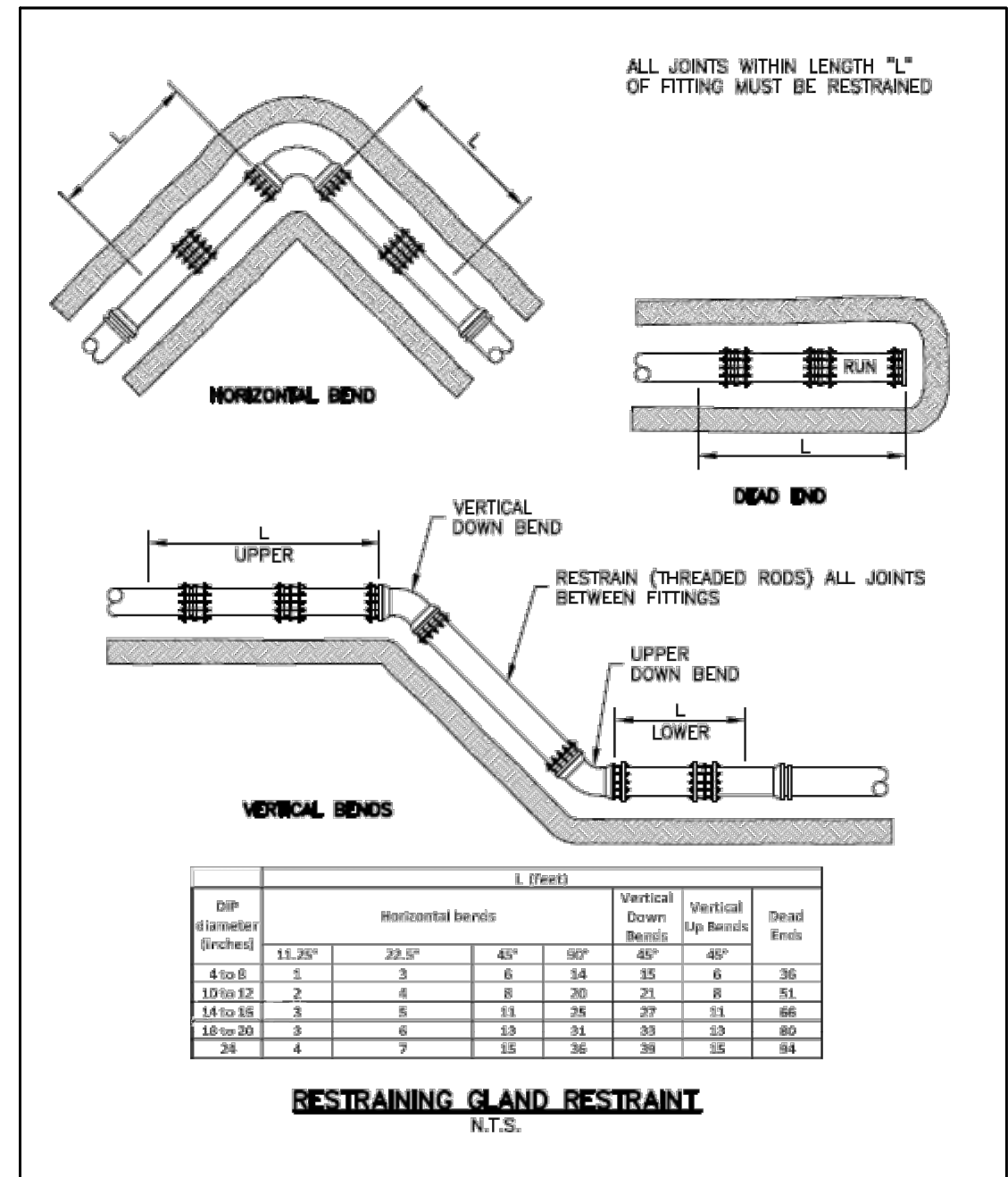
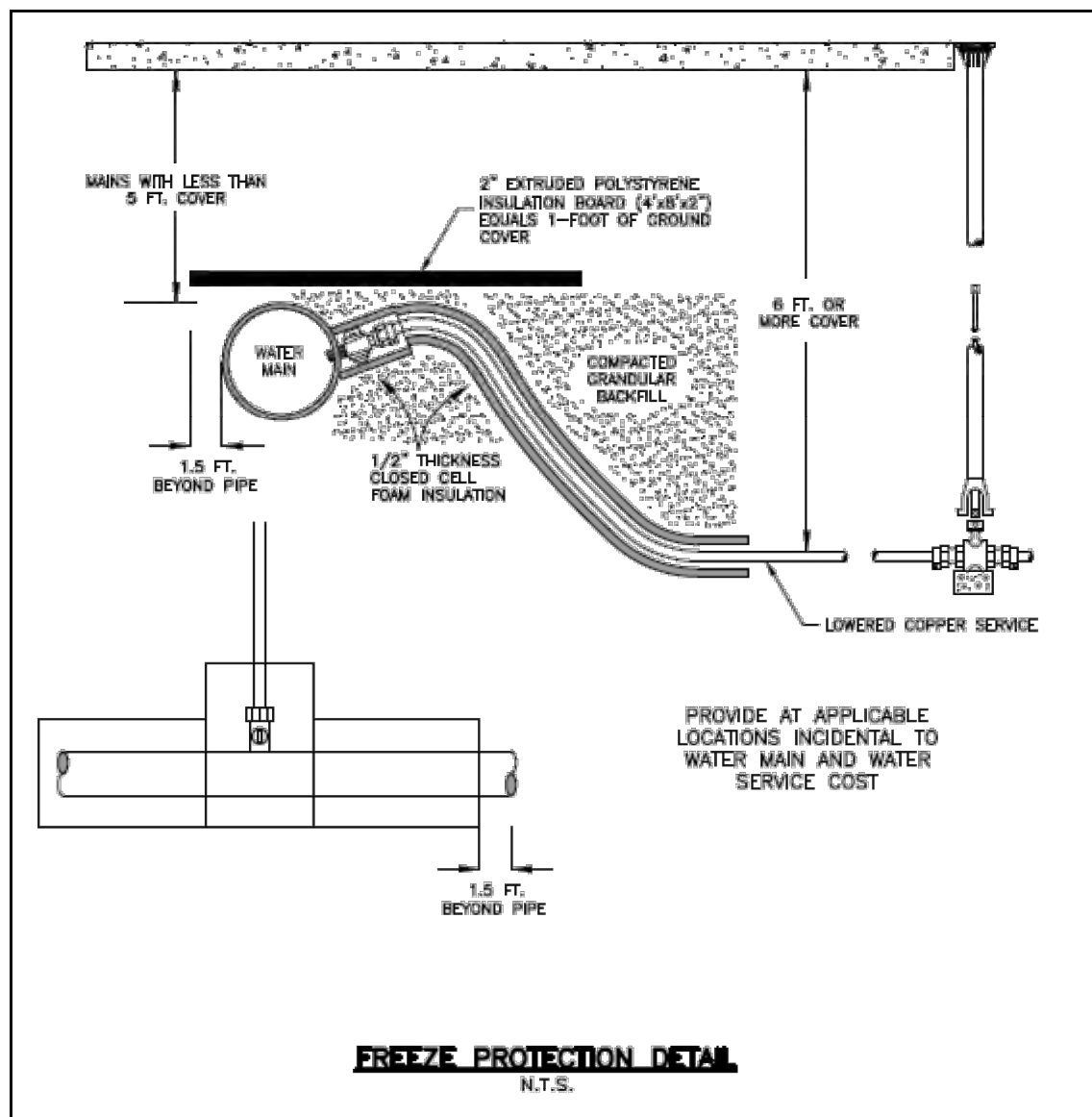
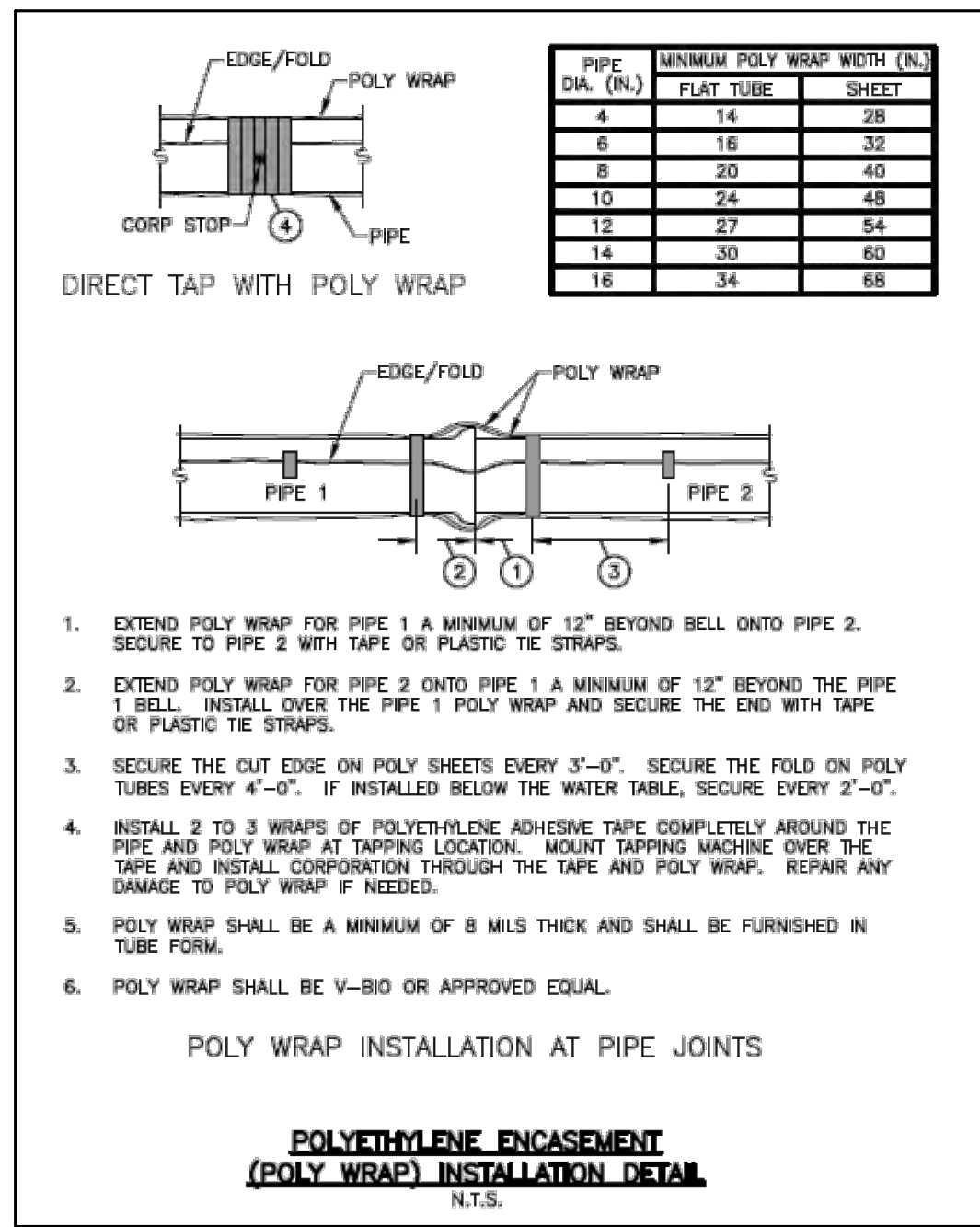
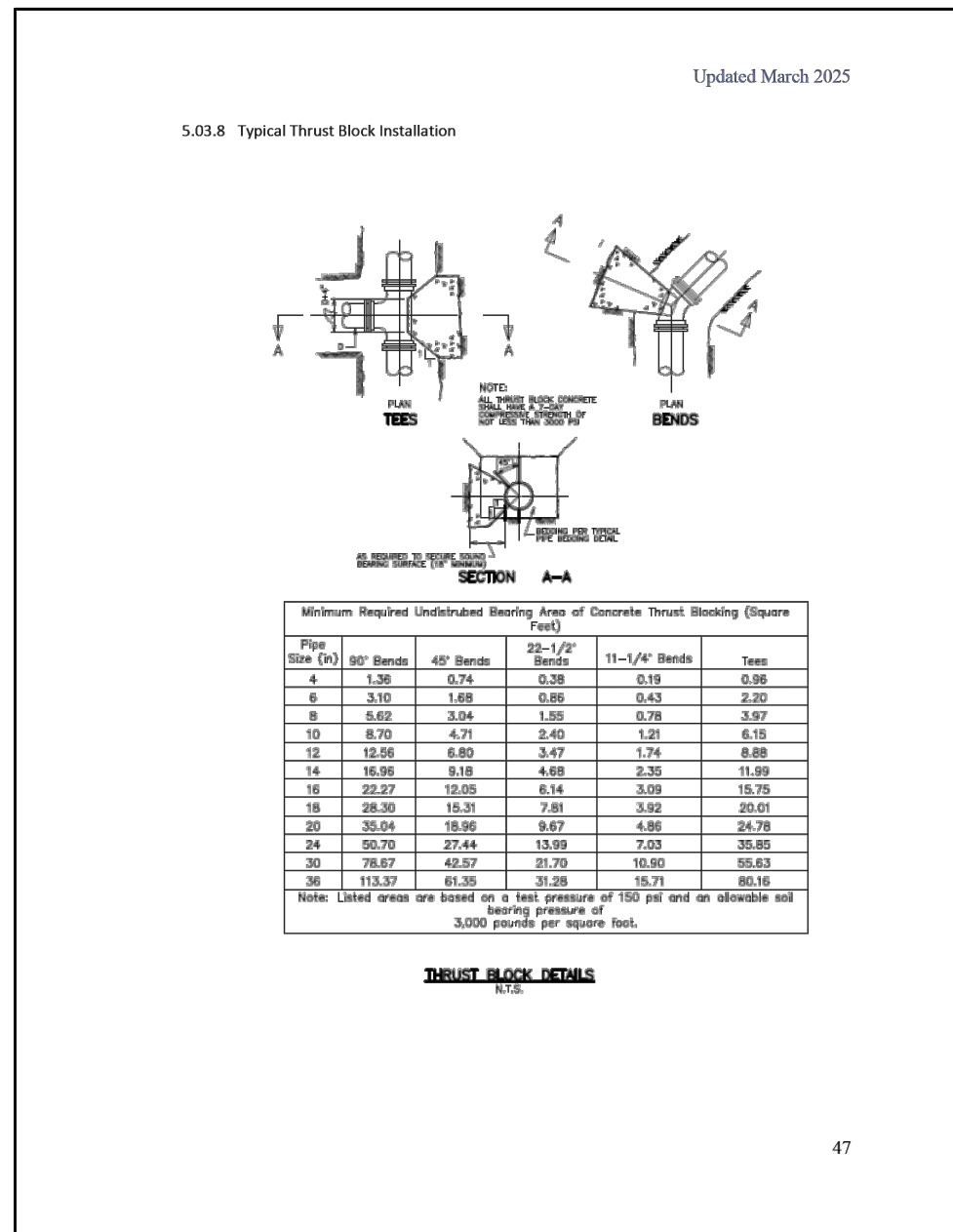
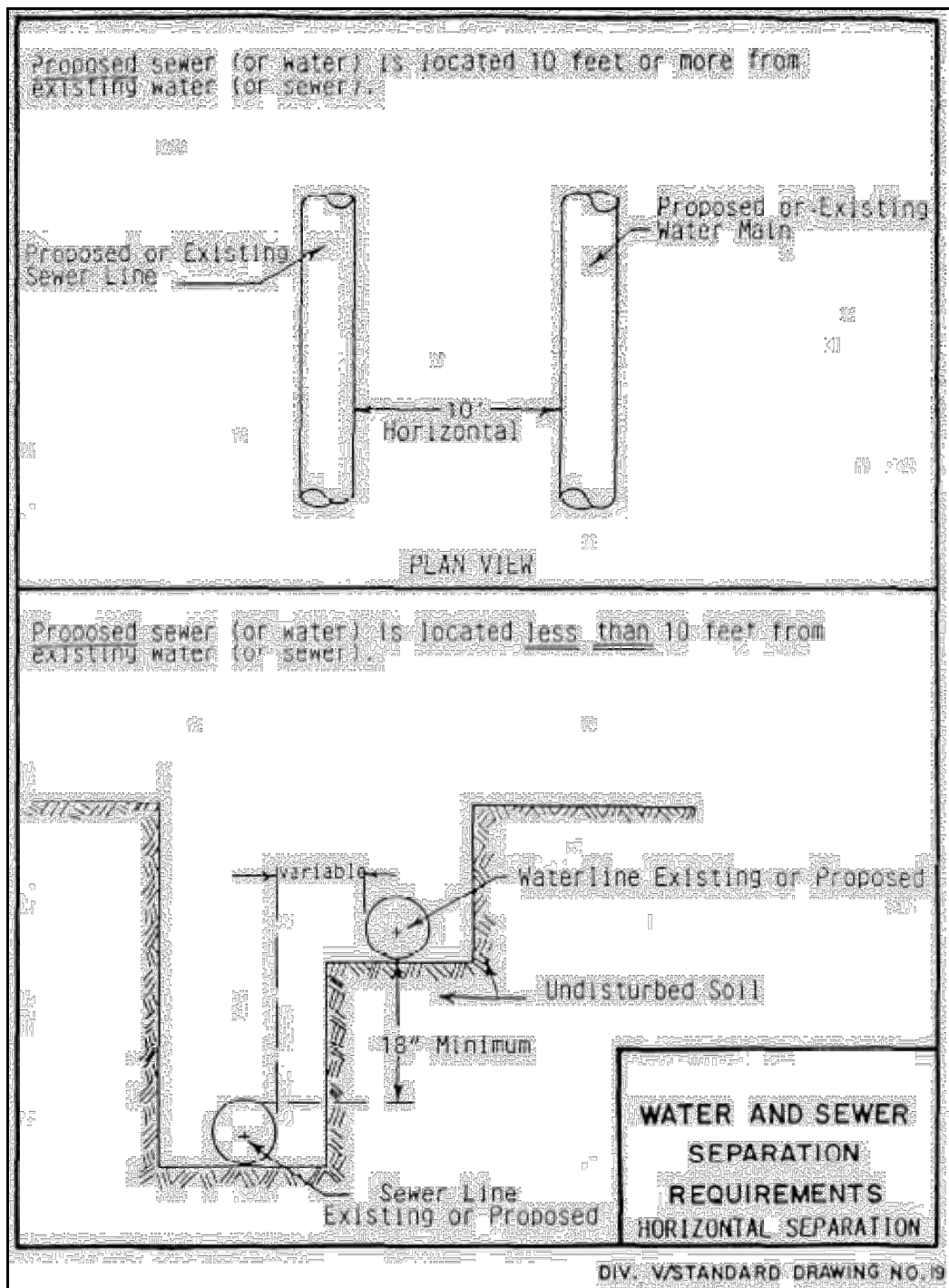
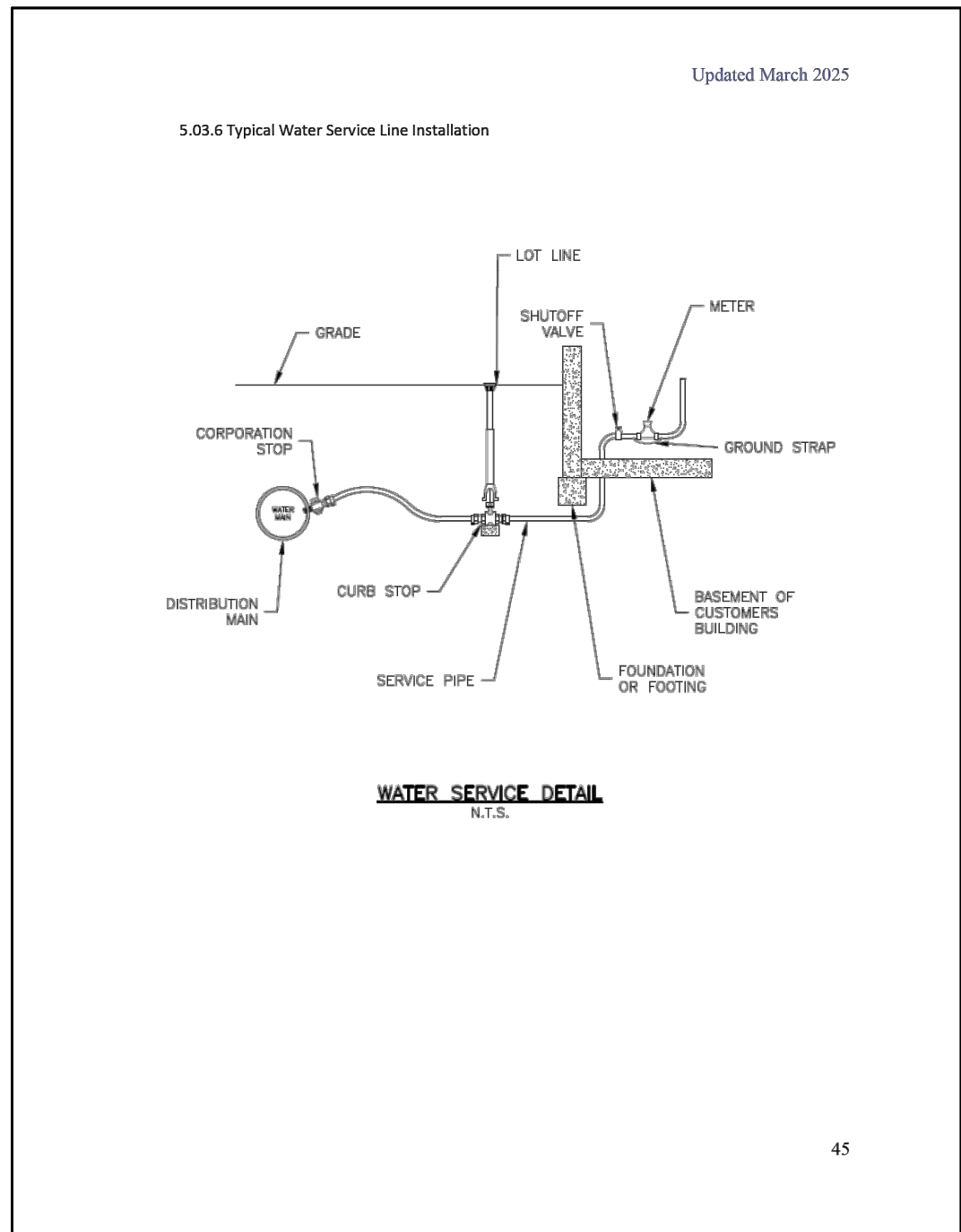
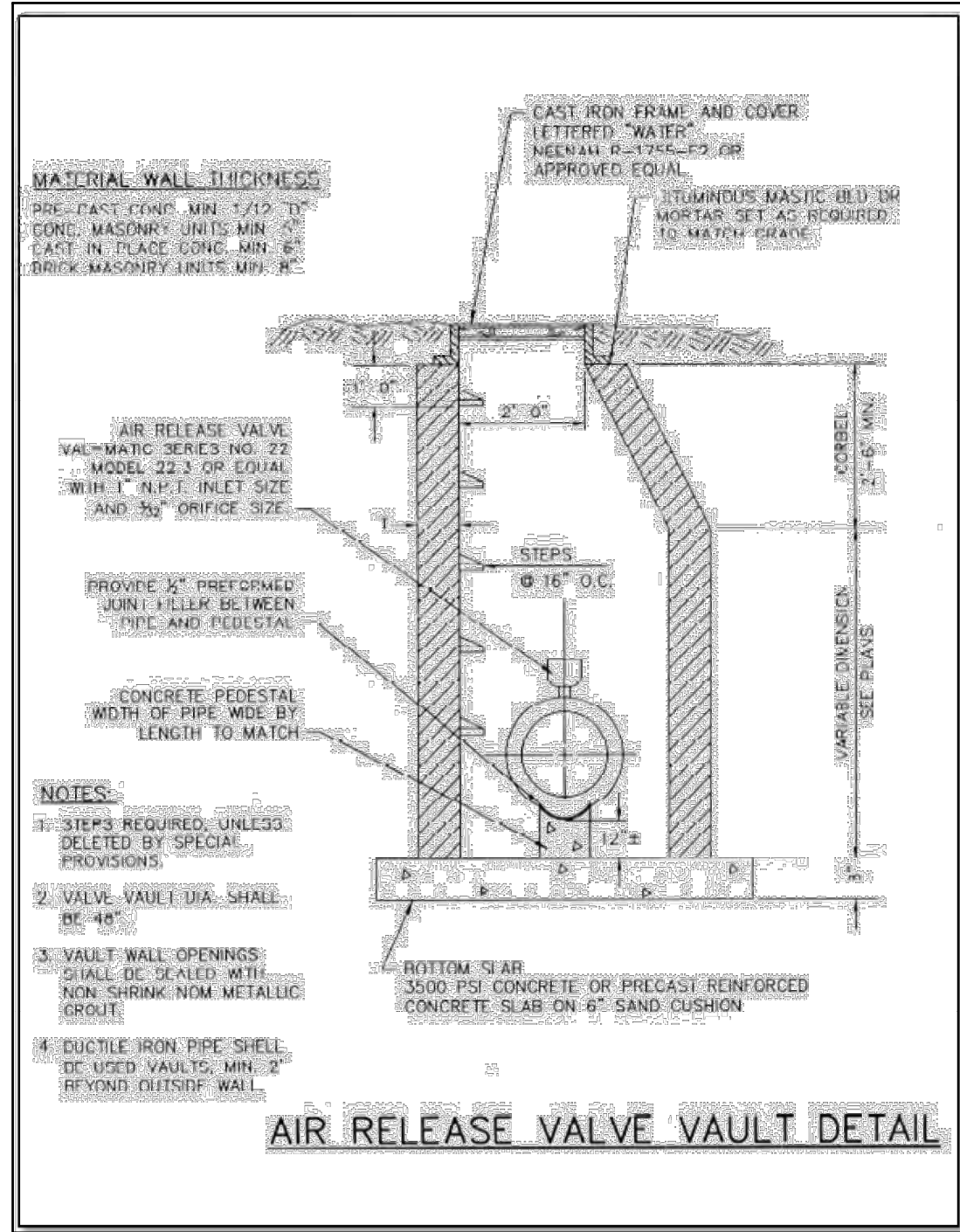
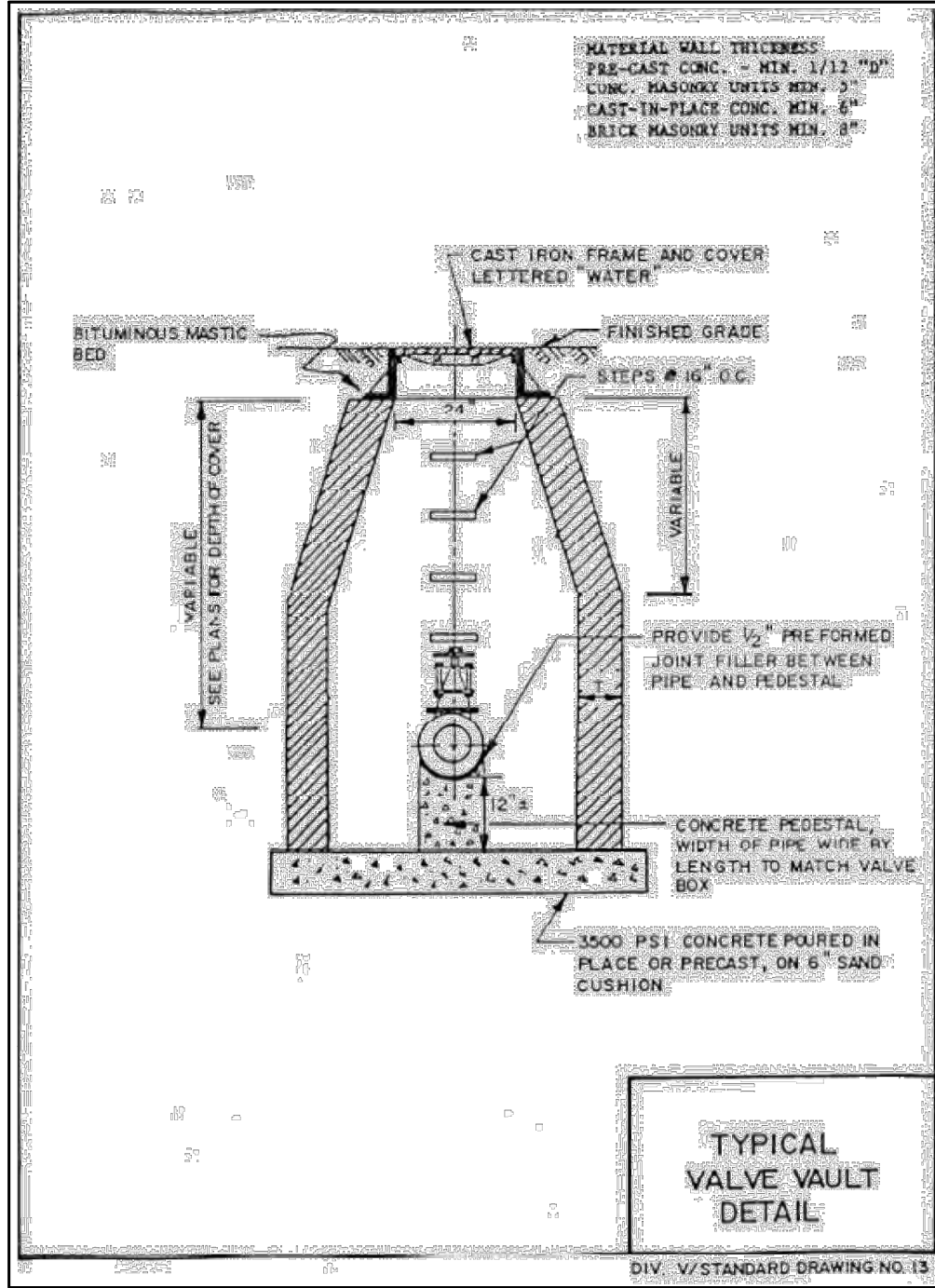
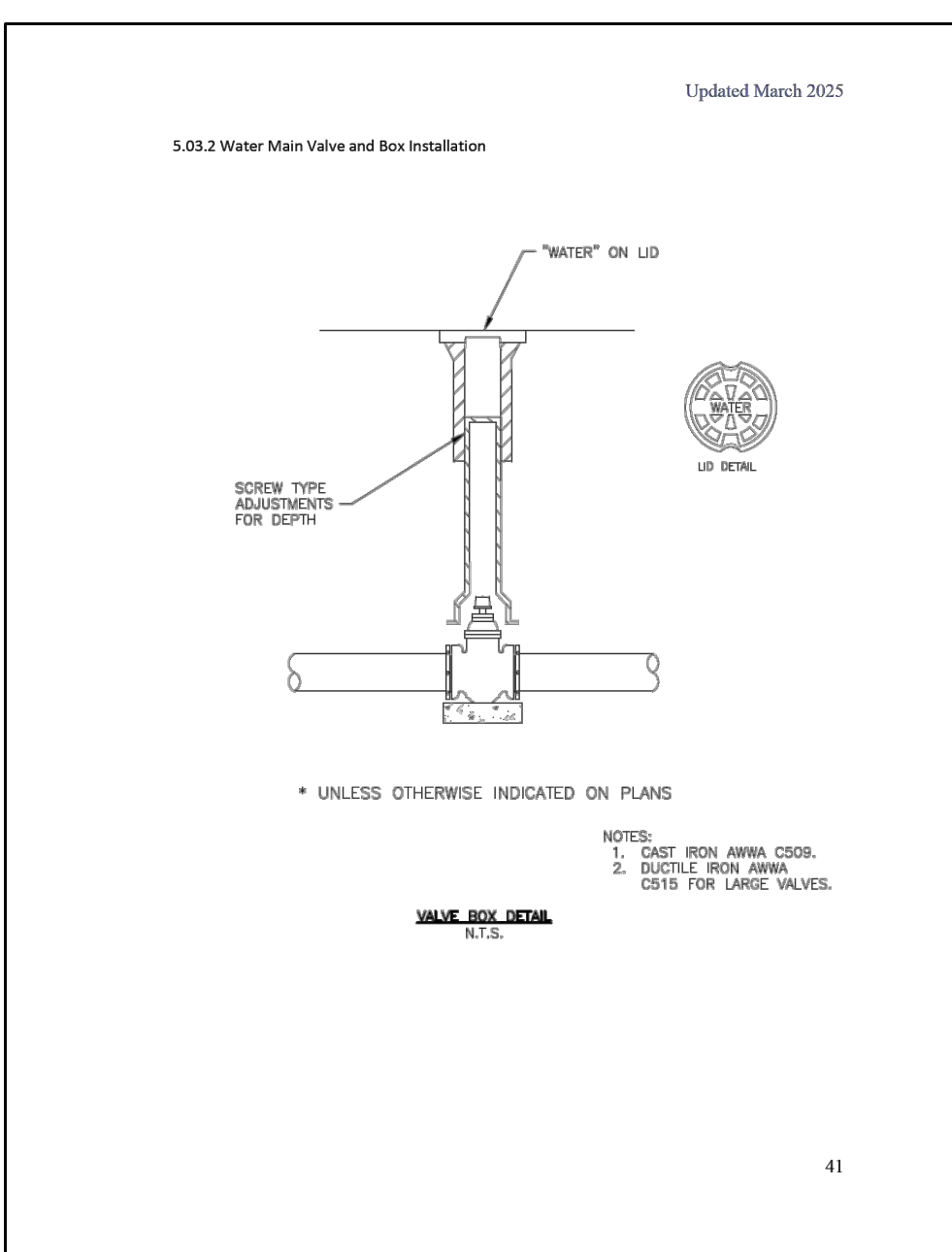
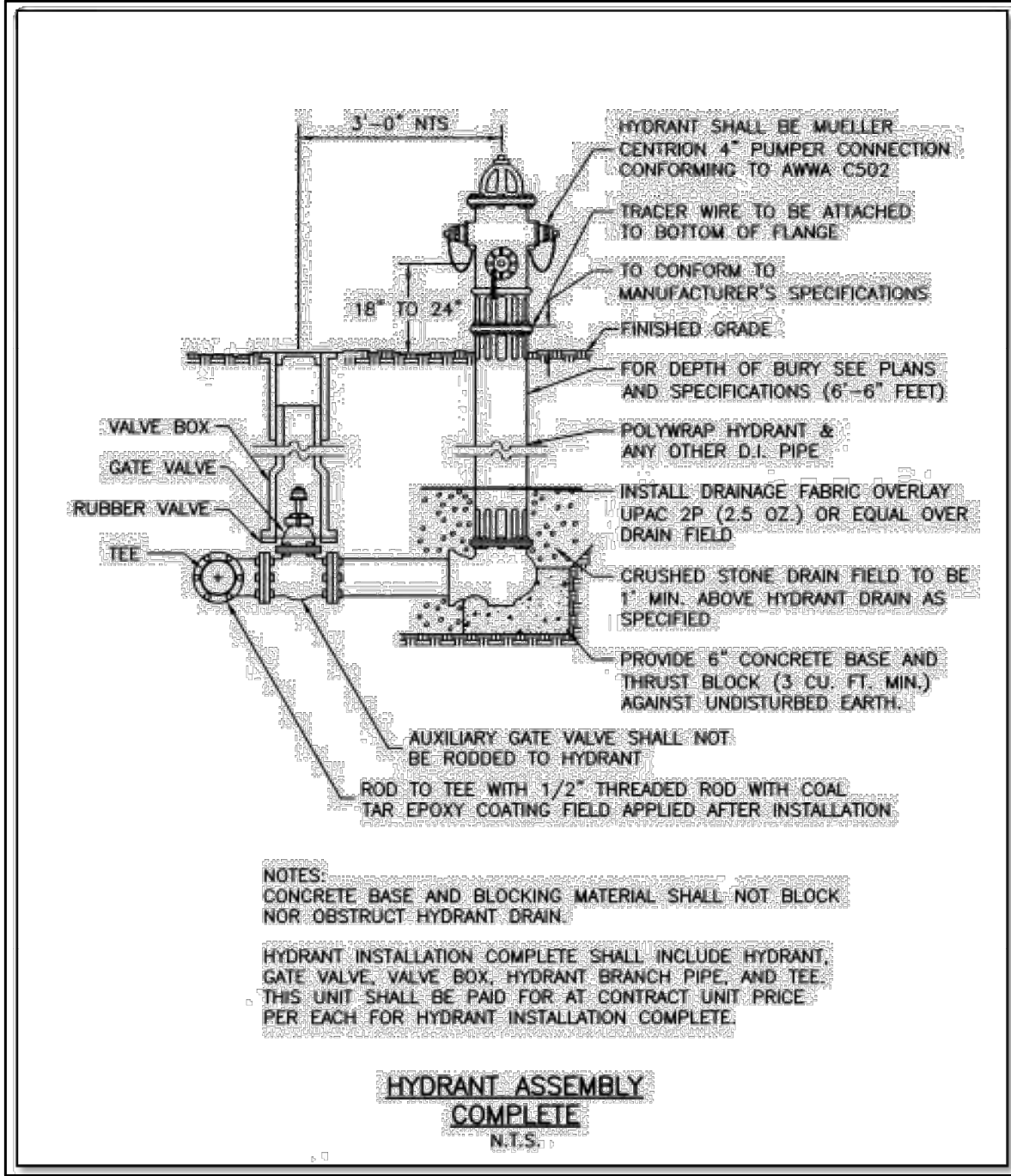
REV. 5/1/23

**FOUR RIVERS SANITATION AUTHORITY
(FRSA) STANDARD DETAIL SHEET**
(NOT TO SCALE)

**3501 KISHWAUKEE ST.
ROCKFORD, ILLINOIS 61109 PH. (815) 387-7660**

ISSUE
05/01/2023

FRSA 05/01/2023 Revision: Manhole Adjustment Detail: Revised notes 1 & 2 with acceptable frames & lids. Modified notes 3, 5, & 7. Added note 8. Revised Rock River Remediation District to Four Rivers Sanitation Authority. Added note 6. Added note 10. Added note 11. Added note 12. Added note 13. Added note 14. Added note 15. Added note 16. Added note 17. Added note 18. Added note 19. Added note 20. Added note 21. Added note 22. Added note 23. Added note 24. Added note 25. Added note 26. Added note 27. Added note 28. Added note 29. Added note 30. Added note 31. Added note 32. Added note 33. Added note 34. Added note 35. Added note 36. Added note 37. Added note 38. Added note 39. Added note 40. Added note 41. Added note 42. Added note 43. Added note 44. Added note 45. Added note 46. Added note 47. Added note 48. Added note 49. Added note 50. Added note 51. Added note 52. Added note 53. Added note 54. Added note 55. Added note 56. Added note 57. Added note 58. Added note 59. Added note 60. 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Illinois Design Firm License No. 184-001334

PROJECT NAME
OWNER'S NAME

PRAIRIE ROSE
DEVELOPMENT

PRAIRIE ROSE DRIVE
ROSCOE, IL
WINNEBAGO COUNTY

LITTLE MARIANO, INC.
P.O. BOX 66
ROCKTON, IL 61072
(815) 543-8801

CONSULTANTS

ISSUED FOR

	DATE
1. AGENCY REVIEW	06-19-2025
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.

REVISIONS

ITEM	DATE
1.
2.
3.
4.
5.
6.

SHEET TITLE

DETAILS

DRAWN RMG
CHECKED JSL
PM JSL

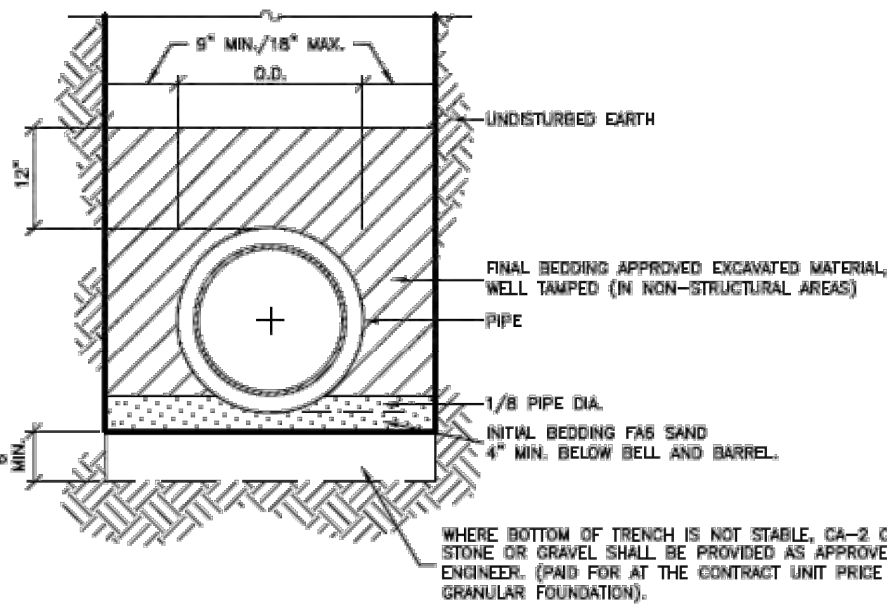
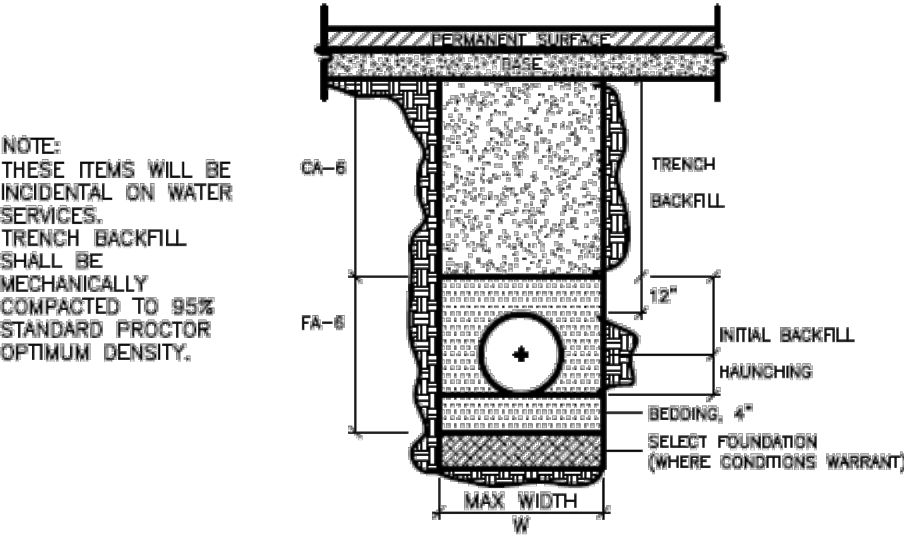
PROJECT NUMBER
SHEET NUMBER

25012

C20

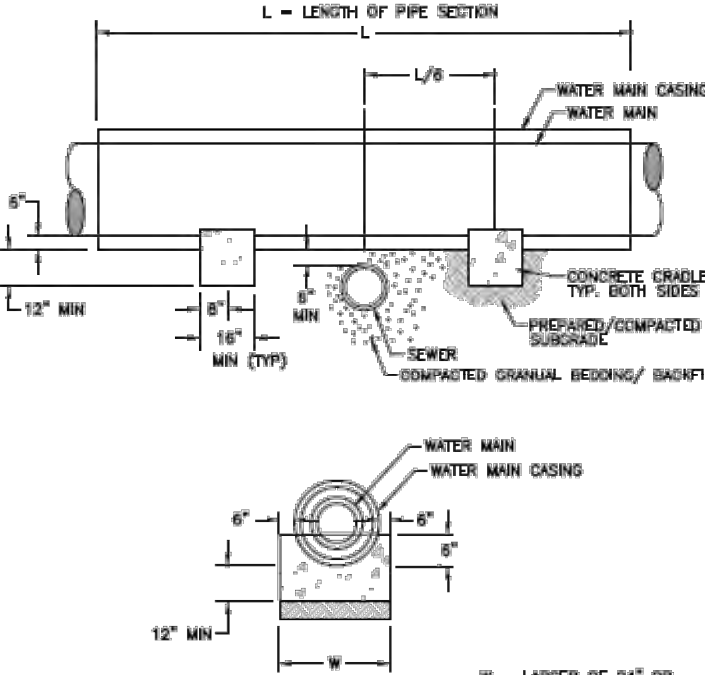
NOTES:

1. THE CONTRACTOR SHALL INSURE THAT ALL TRENCHING OPERATIONS CONFORM TO THE LATEST OSHA REGULATIONS.
2. PIPE BEDDING MATERIAL AND GRANULAR BACKFILL MATERIAL SHALL BE THE SAME AS TRENCH BACKFILL MATERIAL.
3. GRANULAR BACKFILL AND BEDDING MATERIAL SHALL BE INCIDENTAL TO THE CONTRACT.
4. TRENCH BACKFILL MATERIAL SHALL BE COMPACTED AT A MAXIMUM OF 12" INCREMENTS TO 95% STANDARD PROCTOR OPTIMUM DENSITY.
5. APPROVED EXCAVATED MATERIAL SHALL MEET THE REQUIREMENTS OF ARTICLE 1003.04 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. NO COMPENSATION WILL BE ALLOWED AS TRENCH BACKFILL FOR THE PORTION OF THE TRENCH BACKFILLED WITH EXCAVATED MATERIAL.
6. AG-LIME (FA20/FA21) WILL NOT BE ALLOWED FOR TRENCH BACKFILL MATERIAL.
7. BEDDING, HAUNCHING, AND INITIAL BACKFILL SHALL BE SAND. TRENCH BACKFILL SHALL BE CA-6.



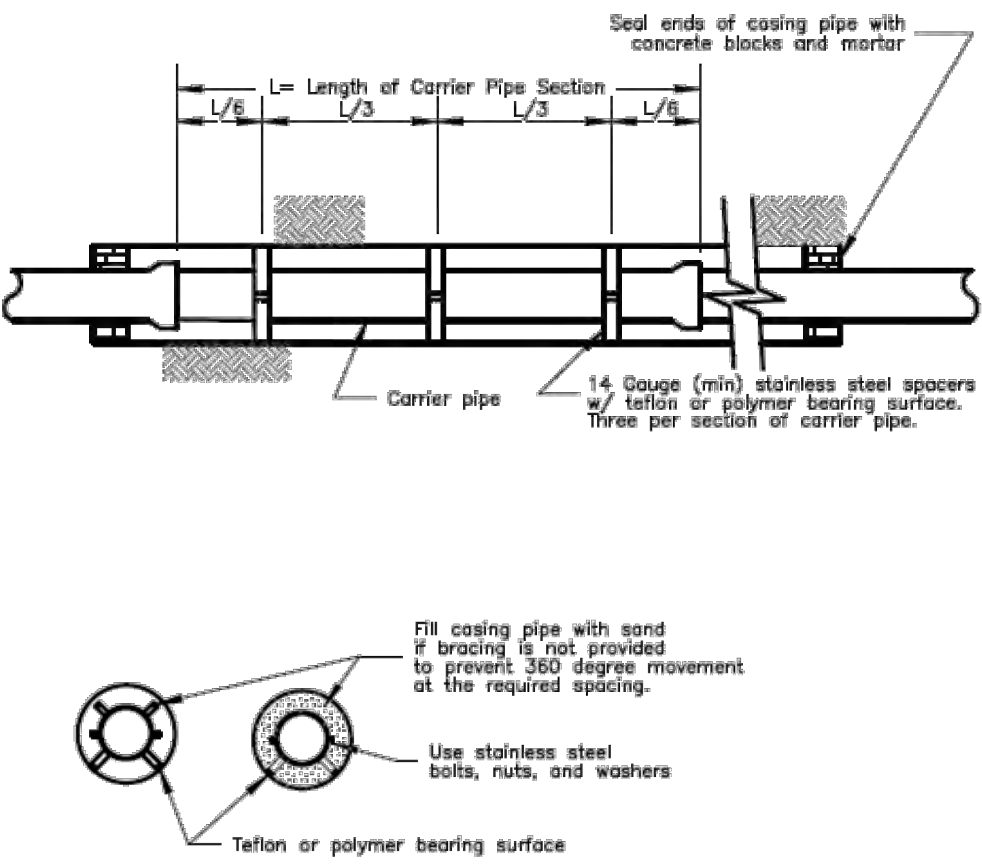
- NOTES:
1. SEE TRENCH BACKFILL DETAIL FOR FINAL BEDDING IN STRUCTURAL AREAS
 2. INITIAL BEDDING SHALL BE INCIDENTAL TO THE CONTRACT.

WATER MAIN PIPE BEDDING DETAIL
N.T.S.



- NOTE:
1. CONCRETE CRADLES ARE REQUIRED WHEN WATER MAIN CROSSES OVER SEWER PIPES WITH A VERTICAL CLEARANCE OF LESS THAN 18\"/>

CONCRETE CRADLE DETAIL
N.T.S.



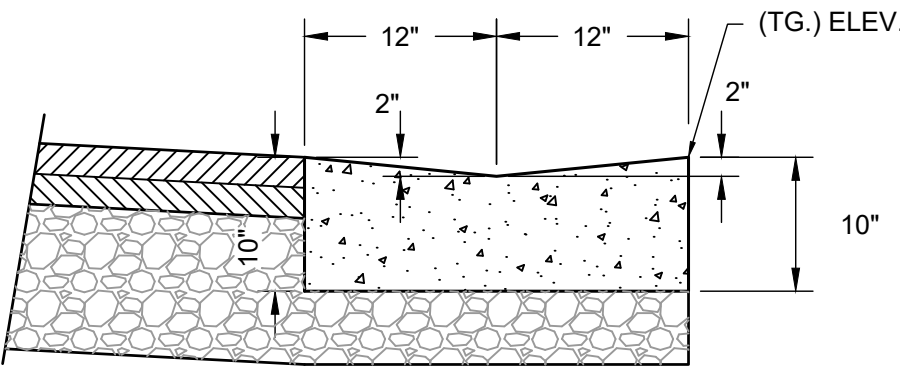
WATER MAIN CASING DETAIL
N.T.S.

"V" GUTTER DETAIL

NOT TO SCALE

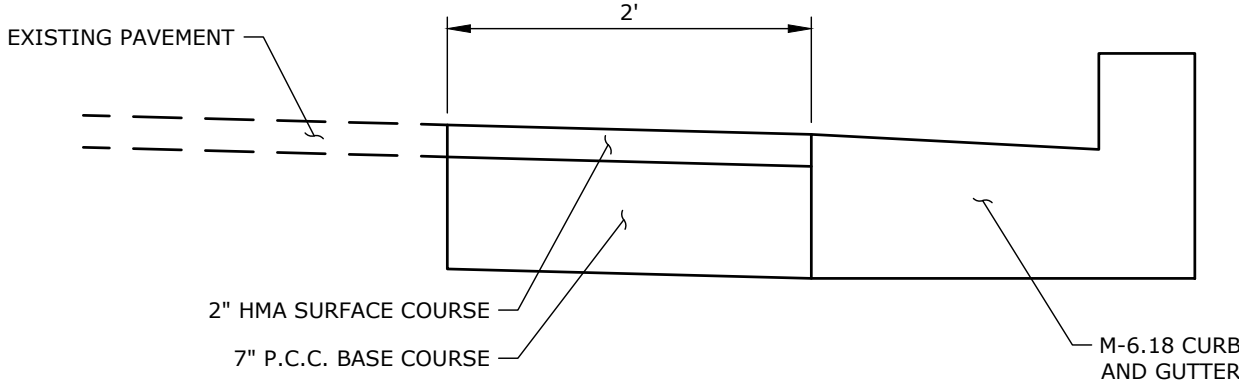
EXPANSION JOINTS AT 100' INTERVALS AND AT CONSTRUCTION JOINTS INCLUDING 1" PREMOULDED JOINT FILLER AND 1" SMOOTH DOWELS (2).

CONSTRUCTION JOINTS AT 25' INTERVALS.



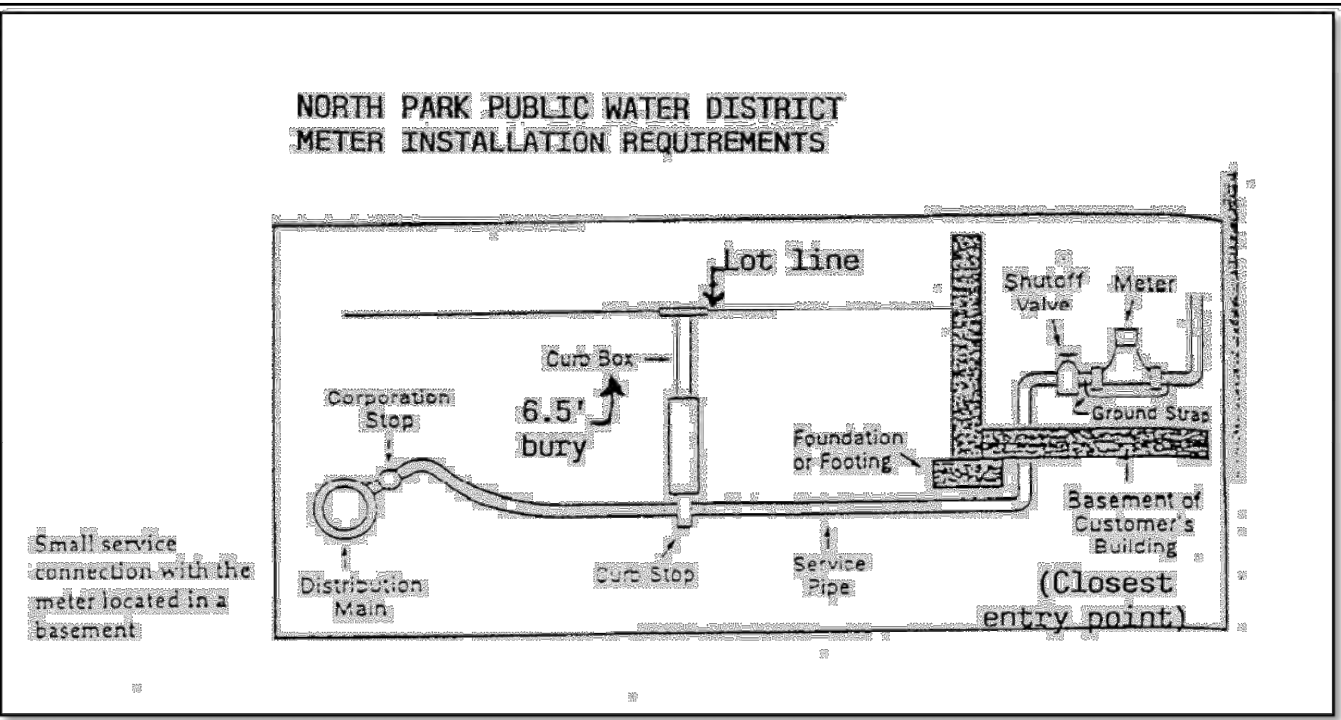
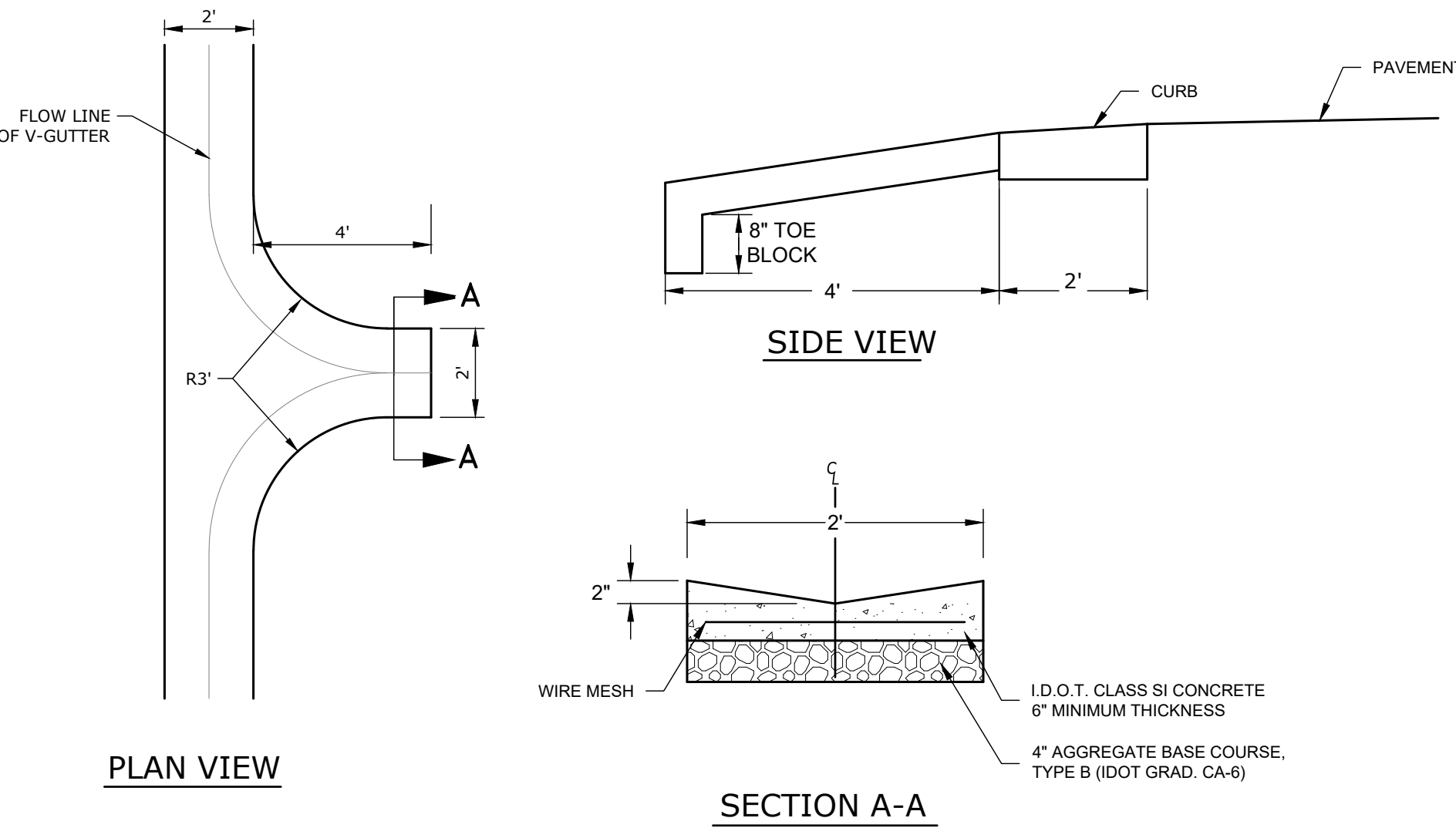
PAVEMENT PATCH AT PRAIRIE ROSE DRIVE

NOT TO SCALE



CONCRETE FLUME DETAIL

NOT TO SCALE



ALTERNATE TOP

FLAT TOP

24"Ø Center Hole

Jointed Top

60"Øx48" Riser

60"Ø

14"

6"

96"

1" Holes

12" O.C. Vertically

12" O.C. Horizontally

Optional Loose Bottom

36"Ø Center Hole

5"Ø Dry Well

CONTRACTOR

JOB

STRUCTURE/L.D.

60"Ø Dry Well

DATE

DRAWN BY

FOR

DRAWING NO.

60DW

WELCH BROS., INC.

PRODUCERS OF QUALITY PRECAST CONCRETE PRODUCTS

ELGIN MAIN OFFICE & CONSTRUCTION SUPPLY

ELGIN, ILLINOIS 60120

(847) 741-6134 Fax (847) 741-6195

PRECAST FACILITIES

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BARTLETT, ILLINOIS 60103

(847) 741-6134 Fax (847) 697-0123

1000 TOWN HALL RD.

BELVIDERE, ILLINOIS 61008

(815) 547-3000 Fax (815) 544-9481

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MEETS

ASTM C-478

THE MINIMUM STRENGTH OF THE CONCRETE IN THE BASE AND RISER SECTIONS SHALL BE 4500 P.S.I. AFTER 28 DAYS. THE MINIMUM WALL THICKNESS SHALL BE ONE-TWELTH OF THE INTERNAL DIAMETER OF THE RISER. THE CIRCUMFERENTIAL REINFORCEMENT IN BASE SECTIONS AND RISERS MAY CONSIST OF EITHER ONE OR TWO LINES OF STEEL. THE TOTAL AREA OF STEEL PER VERTICAL FOOT SHALL BE NOT LESS THAN .0025 TIMES THE INSIDE DIAMETER IN INCHES. BASE SLABS OR FLOORS SHALL BE REINFORCED WITH A LAYER OF STEEL WITH A MINIMUM AREA OF 0.31 IN. SQUARED LINEAR FOOT IN BOTH DIRECTIONS.

Drawing Not To Scale

CONTRACTOR

JOB

STRUCTURE/L.D.

60"Ø Dry Well

DATE

DRAWN BY

FOR

DRAWING NO.

60DW

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UNITED STATES POSTAL SERVICE

Developers & Builders Guide

APPENDIX B – Cluster Box Unit Installation Multiple Unit

NOTES TO A/E:

PLAN

SECTION

DETAIL

CLUSTER BOX UNIT (CBU) INSTALLATION - MULTIPLE UNIT

Exc. Cn. Sect. Form. Detail

G1 - 2 - 0 e1

CAD File: /usps/library/details/G1-2-0.e1

USPS SDI, Issue: 10/1/2016

Last Revised: 10/21/2016

vital™ Cluster Box Units

Pre-configured units include parcel lockers and outgoing mail collection to be used alone or in large groupings. Pedestal included ensures mailboxes and parcel lockers comply with USPS installation regulations. Available in six architectural colors (see page 7).

1570-8XX

1570-12XX

1570-16XX

1570-13XX

1570-4T5XX

1570-8T6XX

MODEL #	CBU TYPE	INSTALLED HEIGHT	INSTALLED WIDTH	INSTALLED DEPTH	PEDestal HEIGHT	WEIGHT (LBS)	STANDARD TENANT COMPARTMENT DIMENSIONS	MAILBOX COMPARTMENTS	PARCEL LOCKERS
1570-8XX	vital™ Type I CBU	62"	30-1/2"	18"	28-1/2"	144	3"H x 12"W x 15"D	8	2
1570-12XX	vital™ Type II CBU	62"	30-1/2"	18"	28-1/2"	144	3"H x 12"W x 15"D	12	1
1570-16XX	vital™ Type III CBU	62"	30-1/2"	18"	14-1/2"	175	3"H x 12"W x 15"D	16	2
1570-13XX	vital™ Type IV CBU	62"	30-1/2"	18"	14-1/2"	167	4-3/4"H x 12"W x 15"D	13	1
1570-4T5XX	vital™ Type V CBU	62"	30-1/2"	18"	28-1/2"	145	6-1/2"H x 12"W x 15"D	4	2
1570-8T6XX	vital™ Type VI CBU	62"	30-1/2"	18"	14-1/2"	176	3"H x 12"W x 15"D	8	4

Note: Exchange "XX" in Model # above for two-digit color reference: Black-BK Dark Bronze-DB Sandstone-SD Postal Grey-PG White - WH Forest Green - FG

CONCRETE DRYWELL DETAIL

NOT TO SCALE

PRECAST CONCRETE TOP SLAB

PRECAST ADJUSTING RING

CAST IRON FRAME AND COVER

NEENAH R-2500 OR EQUIVALENT

2" DIA.

4'

32" SECTIONS

8" MAX DEPTH

6' DIA.

1'±

1'±

SECTION

NOTES:

1. CONCRETE SUBSTRUCTURE SHALL BE CONSTRUCTED WITH 3500 P.S.I. CONCRETE.

2. STEEL REINFORCING IN TOP SLAB SHALL BE #5'S AT 10" ON CENTER EACH WAY TOP AND BOTTOM. USE 2-#5'S TOP AND BOTTOM DIAGONALLY ACROSS OPENING.

LIGHTLY COMPACTED TOPSOIL OVER GEOTEXTILE FABRIC

PLACE SUPAC No. 4 NP GEOTEXTILE FABRIC BARRIER ON ENTIRE PERIMETER, TOP AND BOTTOM OR REVIEWED EQUIVALENT

BACKFILL EXCAVATION WITH 2" - 3" DIAMETER WASHED GRAVEL

SEE PLAN FOR ACTUAL DEPTH OF DRYWELL

PRECAST BARREL SECTIONS WITH 2" DIAMETER HOLES

1" THICK CA-6 BASE SET LEVEL

PLAN

SECTION A-A

END VIEW

PIPE DIA.

APPROX. QTY. LBS.

WALL

A

B

C

D

E

G

R

APPROX. SLOPE

12	530	2	4	24	4'-0 3/4"	6'-0 3/4"	24	2	9	1:2.4
(300)	(240)	(51)	(102)	(610)	(1.241 m)	(1.851 m)	(610)	(51)	(229)	1:2.4
15	740	2 1/2	6	27	3'-10"	6'-1"	30	2 1/2	11	1:2.4
(375)	(335)	(57)	(152)	(686)	(1.168 m)	(1.854 m)	(762)	(57)	(280)	1:2.4
18	990	2 3/4	9	27	3'-10"	6'-1"	36	2 3/4	12	1:2.4
(650)	(450)	(64)	(229)	(686)	(1.168 m)	(1.854 m)	(914)	(64)	(303)	1:2.4
21	1280	2 3/4	9	35	3'-8"	6'-1"	36	2 3/4	13	1:2.4
(525)	(580)	(70)	(229)	(889)	(965)	(1.854 m)	(1.087 m)	(70)	(330)	1:2.5
24	1520	3	9 1/2	3'-7 3/4"	30	6'-1 3/4"	4'-0"	3	14	1:2.5
(600)	(690)	(76)	(241)	(1.105 m)	(762)	(1.867 m)	(1.219 m)	(76)	(356)	1:2.5
27	1930	3 1/2	10 1/2	4'-0"	23 1/2	6'-1 3/4"	4'-4"	3 1/2	14 1/2	1:2.4
(675)	(875)	(83)	(267)	(1.219 m)	(648)	(1.867 m)	(1.372 m)	(83)	(368)	1:2.4
30	2190	3 1/2	12	4'-4"	19 1/2	6'-1 3/4"	5'-0"	3 1/2	15	1:2.5
(750)	(990)	(89)	(305)	(1.375 m)	(502)	(1.874 m)	(1.524 m)	(89)	(381)	1:2.5
33	3200	3 1/2	13 1/2	4'-10 3/4"	39 1/2	8'-1 3/4"	5'-4"	3 1/2	17 1/2	1:2.5
(825)	(1450)	(95)	(345)	(1.486 m)	(997)	(2.483 m)	(1.676 m)	(95)	(445)	1:2.5
36	4100	4	15	5'-3"	34 1/2	8'-1 3/4"	6'-0"	4	20	1:2.5
(900)	(1860)	(102)	(381)	(1.6 m)	(883)	(2.483 m)	(1.829 m)	(102)	(508)	1:2.5
42	5380	4 1/2	21	5'-3"	35	8'-2"	6'-4"	4 1/2	22	1:2.5
(1050)	(2440)	(114)	(533)	(1.6 m)	(889)	(2.489 m)	(1.981 m)	(114)	(559)	1:2.5
48	6550	5	24	6'-0"	36	8'-2"	7'-0"	5	22	1:2.5
(1200)	(2970)	(127)	(610)	(1.829 m)	(660)	(2.489 m)	(2.134 m)	(127)	(559)	1:2.5
54	8240	5 1/2	27	5'-5"	35	8'-4"	7'-6"	5 1/2	24	1:2.0
(1350)	(3740)	(140)	(686)	(1.651 m)	(889)	(2.54 m)	(2.286 m)	(140)	(610)	1:2.0
60	8730	6	30	5'-0"	39	8'-3"	8'-0"	5	+	1:1.9
(1500)	(3960)	(152)	(889)	(1.524 m)	(991)	(2.515 m)	(2.438 m)	(152)	+	1:1.7
66	10710	6 1/2	30	6'-0"	27	8'-3"	8'-6"	5 1/2	6	1:1.8
(1650)	(4860)	(165)	(762)	(1.829 m)	(686)	(2.515 m)	(2.591 m)	(165)	+	1:1.8
72	12530	7	36	6'-4"	21	8'-3"	9'-0"	6	+	1:1.8
(1800)	(5680)	(178)	(914)	(1.981 m)	(533)	(2.514 m)	(2.743 m)	(178)	+	1:1.8
78	14770	7 1/2	36	7'-6"	21	9'-3"	9'-6"	6 1/2	+	1:1.8
(1950)	(6700)	(191)	(914)	(2.266 m)	(533)	(2.819 m)	(2.896 m)	(191)	+	1:1.8
84	18140	8	36	7'-4 3/4"	21	9'-3 3/4"	10'-0"	6 1/2	+	1:1.6
(2100)	(8240)	(203)	(914)	(2.299 m)	(533)	(2.832 m)	(3.048 m)	(203)	+	1:1.6

* Radius as furnished by manufacturer

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise shown.

DATE

REVISIONS

1-1-11

Clarified ref. to pipe dia. on Section A-A. Changed 'inner' to 'outer' cage ref.

1-1-09

Switched units to English (metric).

PRECAST REINFORCED CONCRETE FLARED END SECTION

STANDARD 542301-03

ARC DESIGN RESOURCES INC.

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ROCKTON, IL 61072
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CONSULTANTS

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DATE

1. AGENCY REVIEW

06-19-2025

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SHEET TITLE

DETAILS

DRAWN

RMG

CHECKED

JSL

PM

JSL

PROJECT NUMBER
SHEET NUMBER

25012

C21

PROJECT NAME
OWNER'S NAME

PRAIRIE ROSE
DEVELOPMENT

PRAIRIE ROSE DRIVE
ROSCOE, IL
WINNEBAGO COUNTY

LITTLE MARIANO, INC.
P.O. BOX 66
ROCKTON, IL 61072
(815) 543-8801

CONSULTANTS

ISSUED FOR

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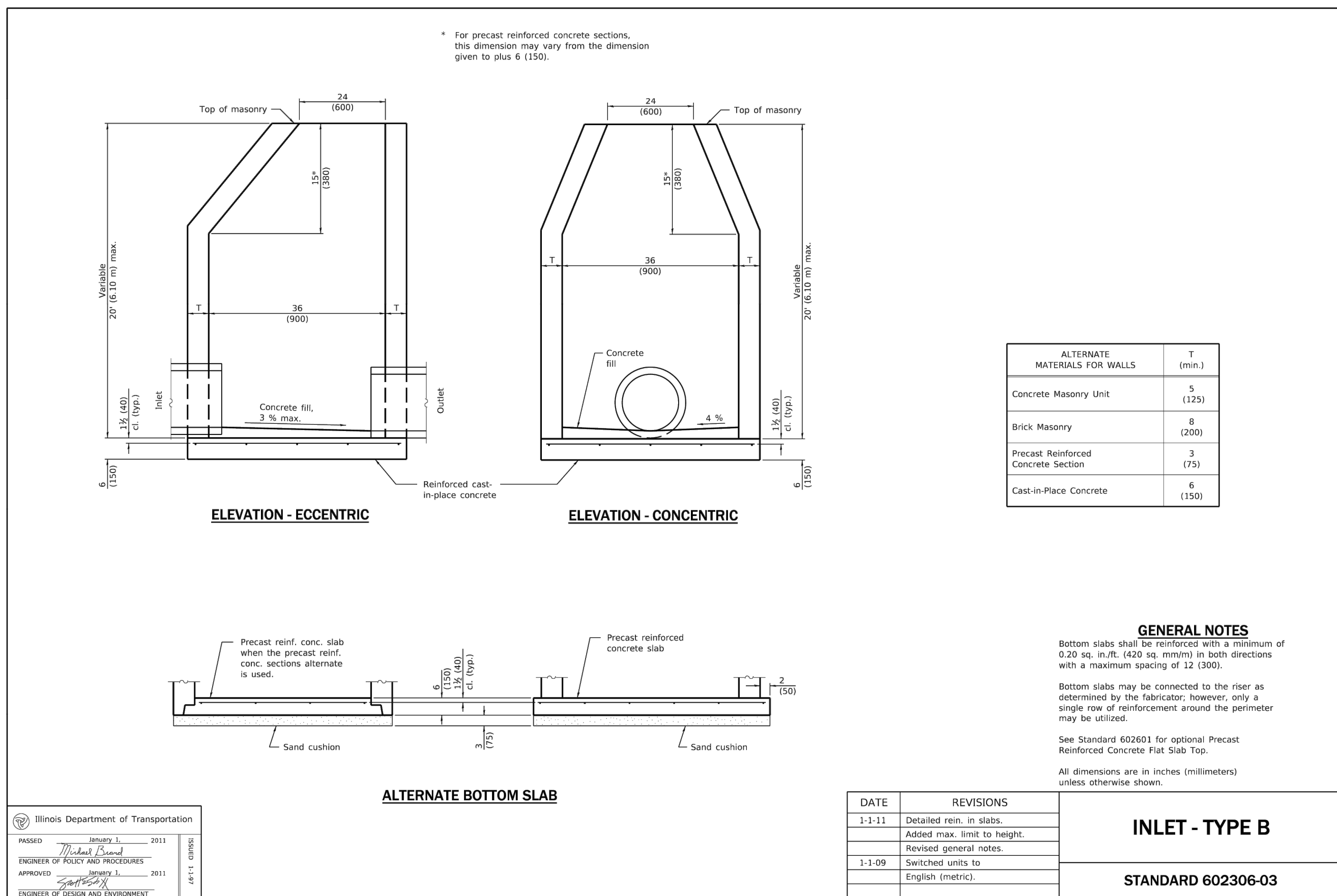
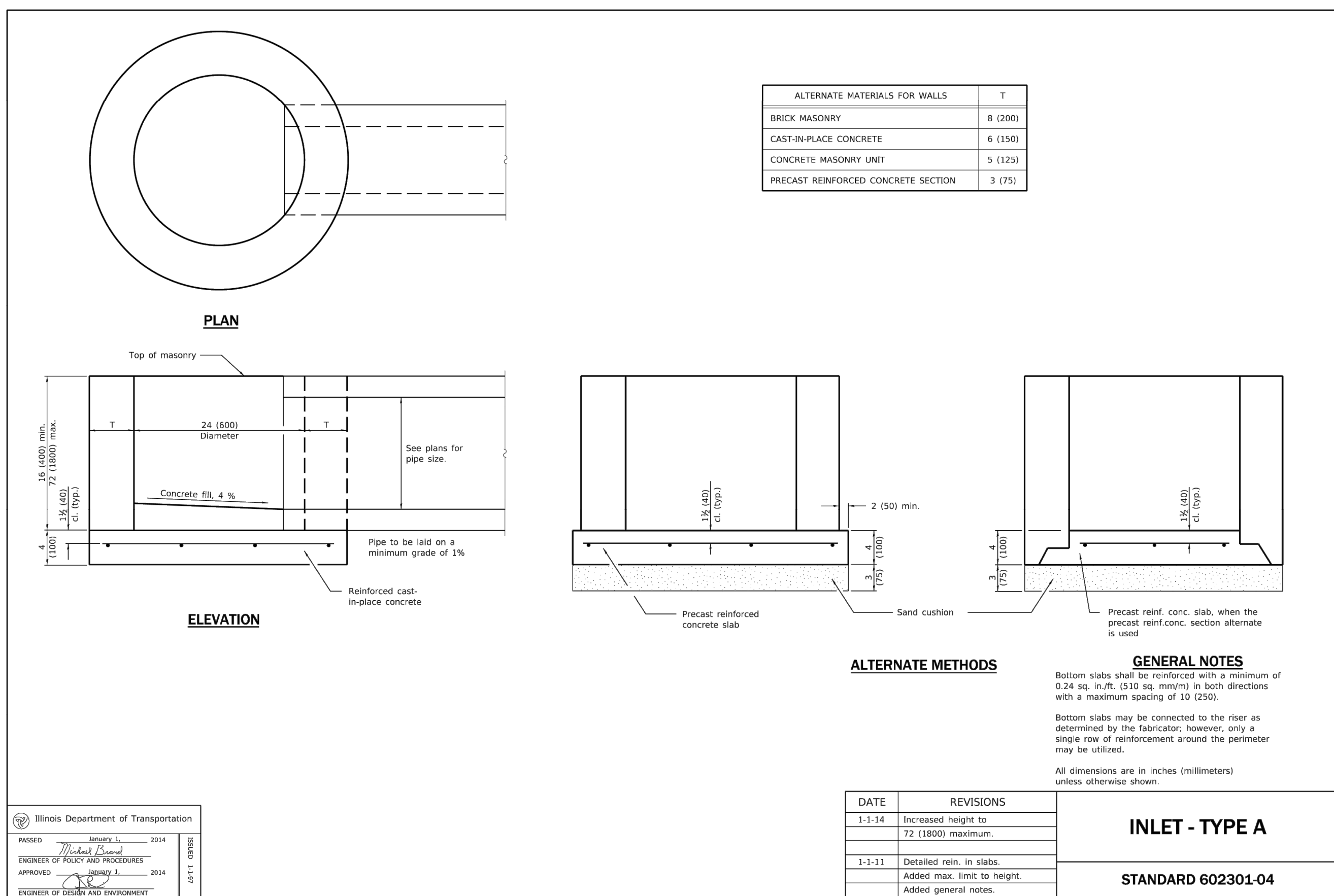
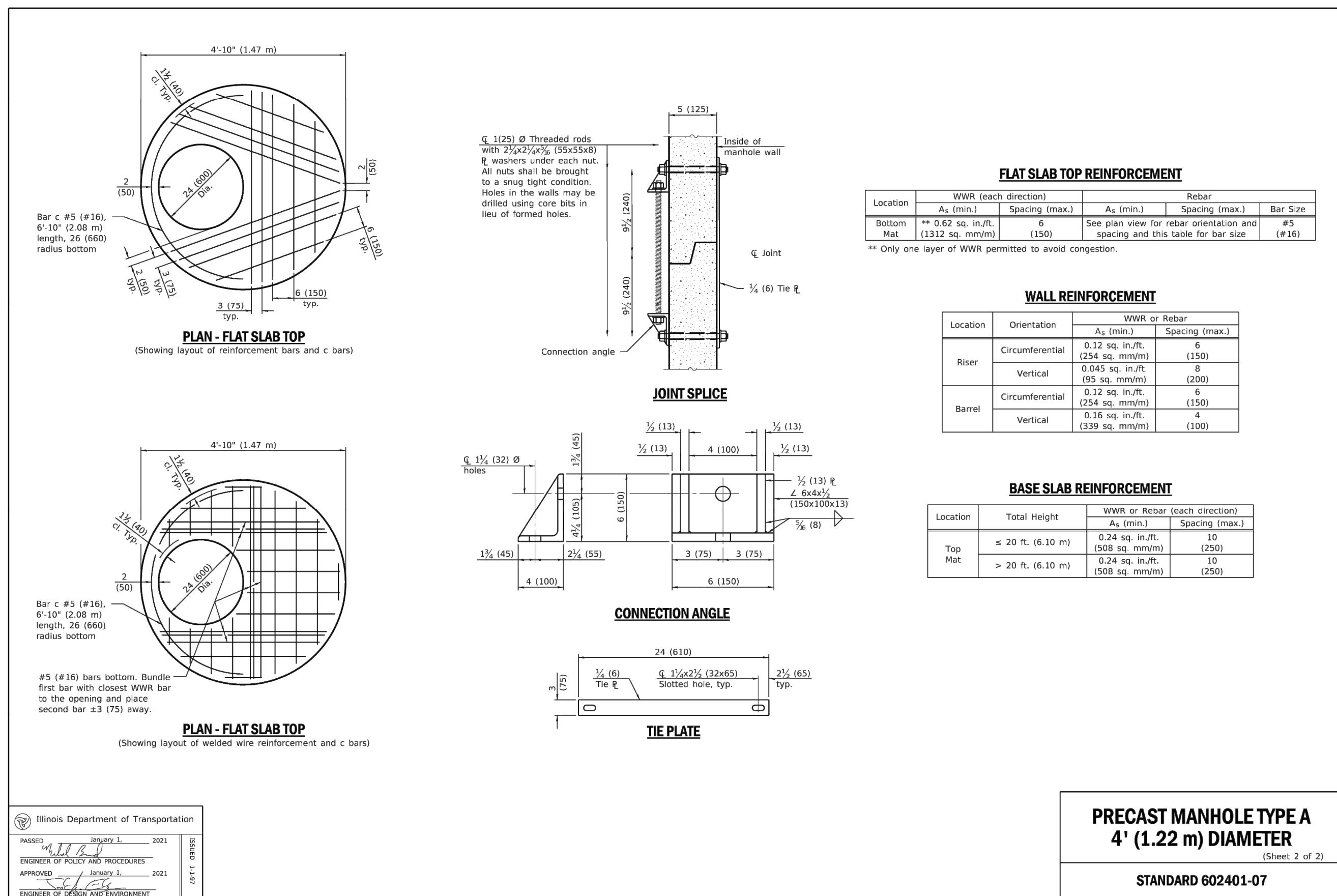
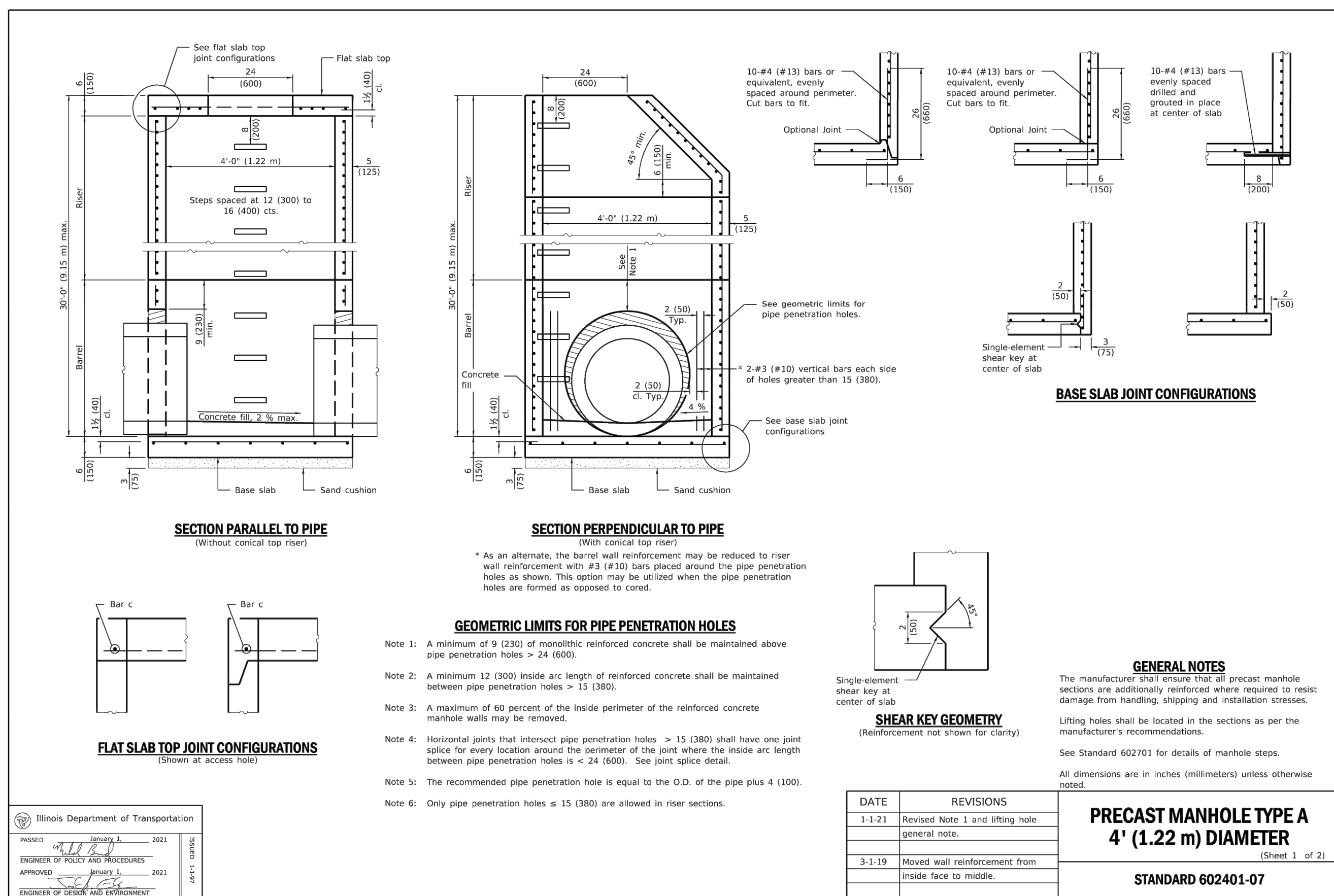
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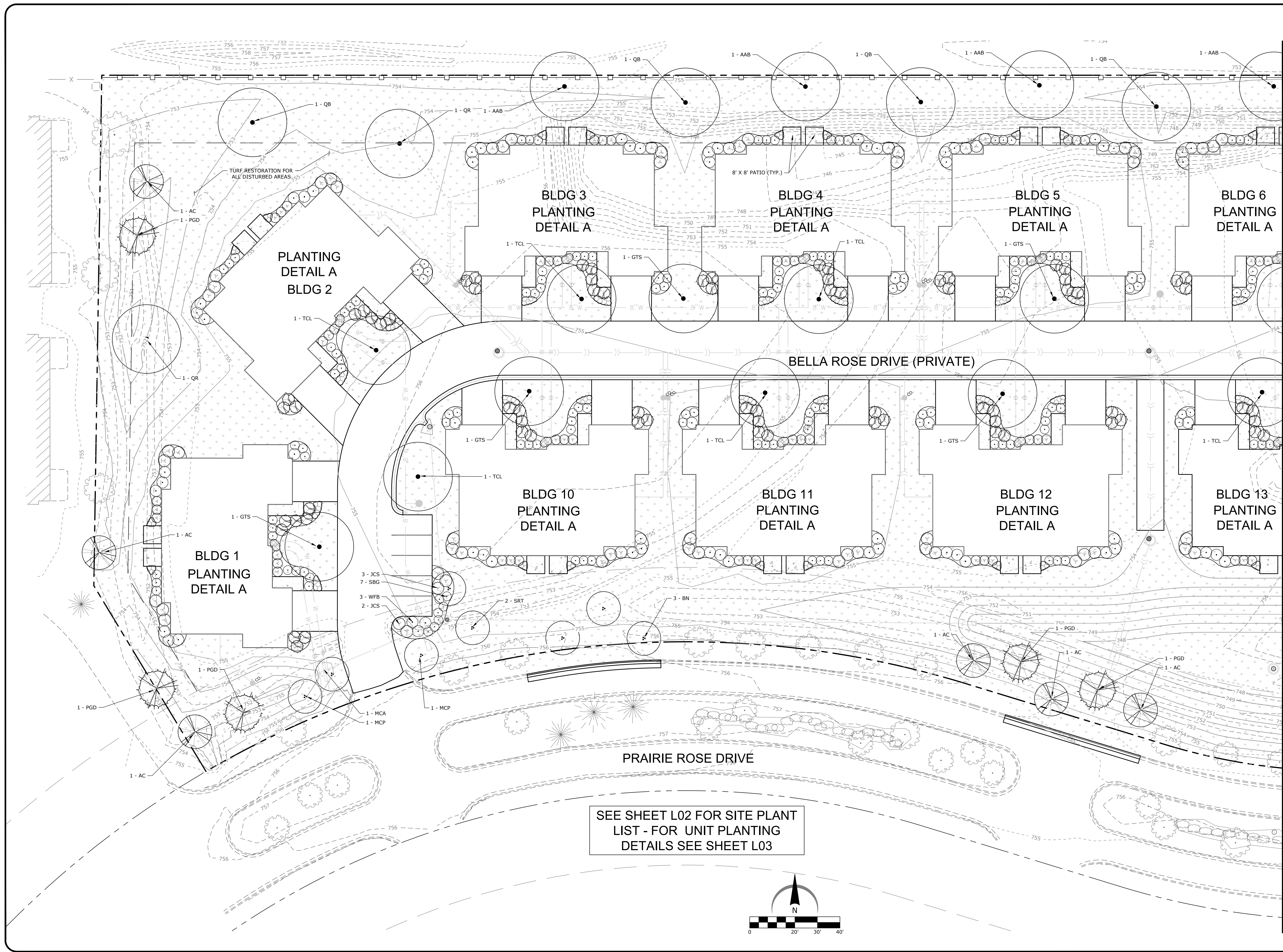
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CHECKED JSL
PM JSL

PROJECT NUMBER
SHEET NUMBER

25012

C22





ARC DESIGN
RESOURCES INC.

5281 ZENITH PARKWAY
LOVES PARK, IL 61111
VOICE: (815) 484-4300
FAX: (815) 484-4303
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Illinois Design Firm License No. 184-001334

PROJECT NAME
OWNER'S NAME

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SHEET TITLE

**LANDSCAPE PLAN
WEST**

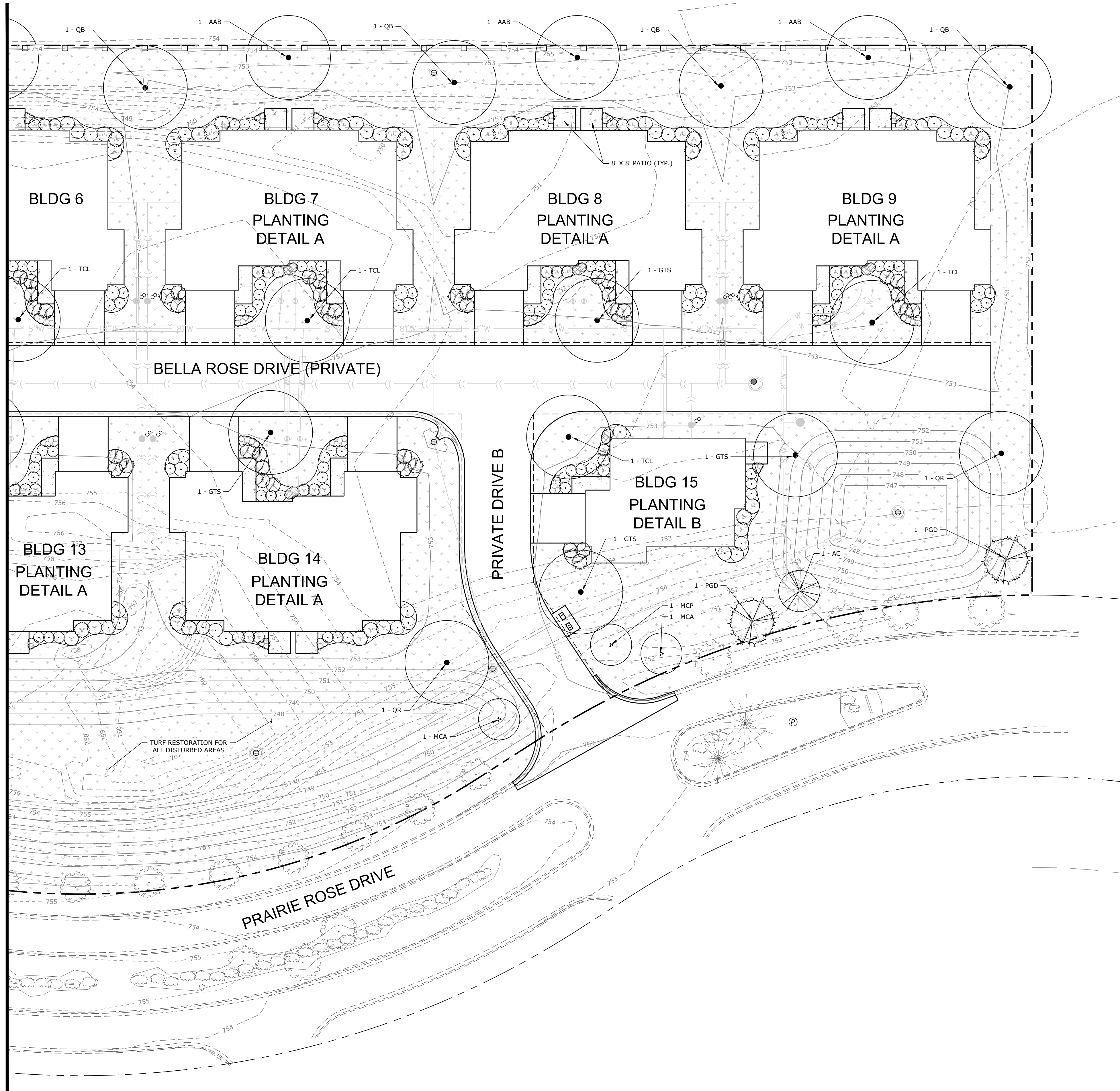
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PROJECT NUMBER
SHEET NUMBER

25012

L01

SEE SHEET L01 FOR CONTINUATION



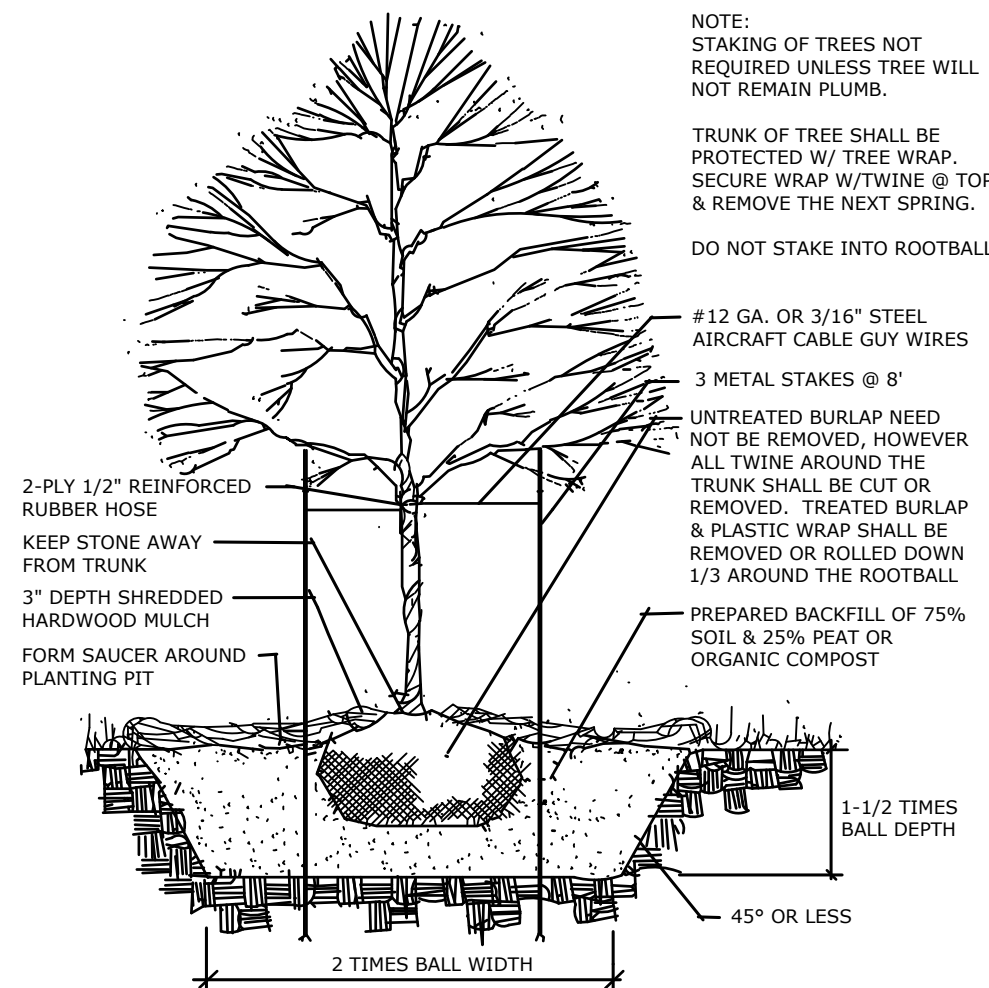
LEGEND

- EXISTING TREES TO REMAIN
- LARGE DECIDUOUS SHADE TREE
- EVERGREEN TREE / ORNAMENTAL TREE
- PROPOSED TURF AREA

FOR UNIT PLANTING DETAILS
SEE SHEET L03

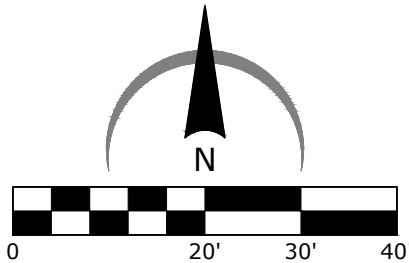
PLANT LIST - SITE TREES

KEY	QTY	Botanical name COMMON NAME	SIZE	REMARKS
AAB	7	Acer freemanii 'Autumn Blaze' AUTUMN BLAZE MAPLE	2.5"	HYBRID RED MAPLE SHADE TREE
AC	7	Abies concolor WHITE FIR	6'	EVERGREEN
BN	3	Betula nigra 'Heritage' RIVER BIRCH	7"	MULTISTEM
GTS	9	Gleditsia triacanthos 'Skyline' SKYLINE HONEYLOCUST	2.5"	SHADE TREE
MCA	3	Malus x 'Adirondack' ADIRONDACK CRABAPPLE	7"	MULTISTEM, UPRIGHT ORNAMENTAL
MCP	3	Malus x 'Prairie Fire' PRAIRIE FIRE CRABAPPLE	7"	MULTISTEM, UPRIGHT ORNAMENTAL
PGD	7	Picea glauca x densata BLACK HILLS SPRUCE	6'	EVERGREEN
QB	8	Quercus bicolor SWAMP WHITE OAK	2.5"	LARGE SHADE TREE
QR	4	Quercus rubrum RED OAK	2.5"	LARGE SHADE TREE
SRT	2	Syringa reticulata JAPANESE TREE LILAC	7"	MULTISTEM ORNAMENTAL
TCL	10	Tilia cordata LITTLELEAF LINDEN	2.5"	SHADE TREE
JCS	5	Juniperus chinensis 'Sargentii' GREEN SARGENT JUNIPER	5 GAL	EVERGREEN SHRUB
SBG	7	Spiraea bumalda 'Goldflame' GOLDFLAME SPIREA	18" / 5 GAL	DECIDUOUS SHRUB
WFB	3	Weigela florida 'Bokrasopin' SONIC BLOOM PINK WEIGELA	24" / 5 GAL	DECIDUOUS SHRUB



TREE PLANTING DETAIL

NOT TO SCALE



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SHEET TITLE

LANDSCAPE PLAN
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DRAWN MA
CHECKED JSL
PM JSL

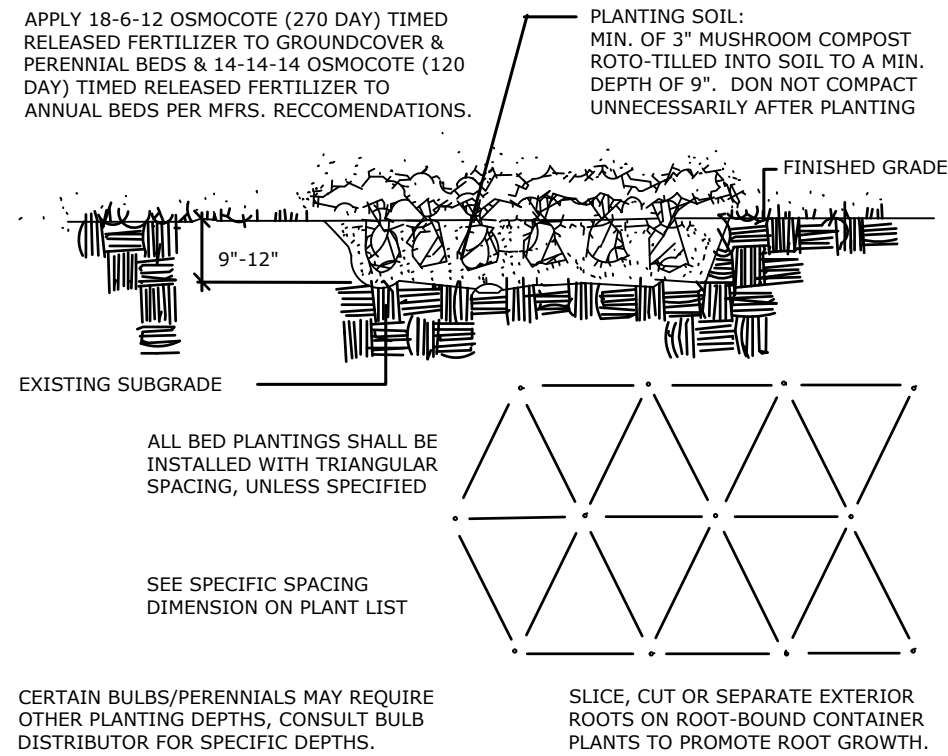
PROJECT NUMBER
SHEET NUMBER

25012

L02

PLANTING NOTES

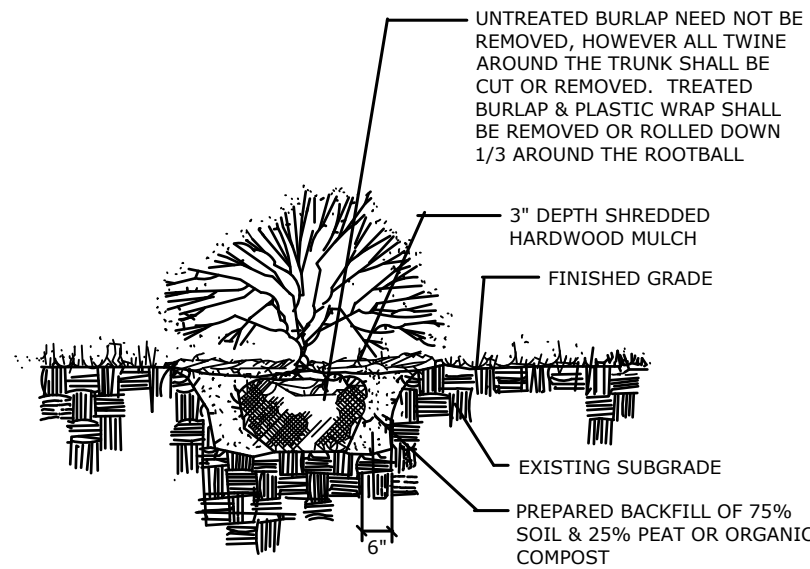
- Contractor shall verify locations of all underground utilities prior to beginning construction on his phase of work. Electric, gas, telephone, and cable television can be located by calling J.U.L.I.E. at '811'. For regional locating, contact "Digger's Hotline". Any damage or interruption of services shall be the responsibility of the contractor. Contractor to coordinate all related activities with other trades on the job and shall report any unacceptable job conditions to owner's representative prior to commencing work.
- Contractor shall grade entire site to correct surface irregularities in preparation for sod/seed. Roto-till, disc, drag, harrow or hand rakes sub grade in all lawn areas and remove construction debris, foreign matter or stones larger than 2". Grading shall provide slopes which are smooth, continuous, free from depressions or ridges. Level, rake and roll as necessary to an even and true condition and obtain positive drainage in all areas. Finish grades shall meet the approval of owner prior to lawn installation.
- All disturbed areas should be brought to grade with "topsoil" to a depth of 6 inches in areas to be seeded or sodded, and 12 inches for all interior (curbed) landscape islands. All lawn areas are to be finished with mulch, straw mulch, seed, sod, etc. or as noted. All lawn areas to be watered until a healthy stand of grass is established. (see seed/sod notes for acceptance details).
- Quantity lists are supplied as a convenience; however, the contractor should verify all quantities. The drawings shall take precedence over the lists.
- Plantings may need to be adjusted in the field to accommodate utilities, easements, drainage ways, downspouts, etc.; however, quantities and sizes shall remain consistent with these plans.
- Size & grading standards of plant material shall conform to the latest edition of ANSI Z66.1 AMERICAN STANDARD OF NURSERY STOCK, by the American Nursery & Landscape Association. Plant material shall be nursery grown and be either balled and burlap or container grown.
- All plant species specified are subject to availability. Material shortages in the landscape industry may require substitutions. All substitutions must be approved by the Landscape Architect and/or Owner.
- Any plant materials with damaged or crooked/disfigured leaders, bark abrasion, sun scald, insect damage, etc. are not acceptable and will be rejected by Landscape Architect and/or Owner. Trees with multiple leaders will be rejected unless called for in the plant list as multi-stem or clump.
- All plant material, especially trees, must be sourced within a fifty (100) mile radius of the subject property or construction site.
- Upon inspection and acceptance of all landscape items by Landscape Architect and/or Owner the contractor shall assume maintenance responsibilities for a period of thirty (30) days, for all plant material, to include: watering, cultivating, weeding, pruning, mulching and spraying as necessary to keep plants free of insects and in a healthy, vigorous condition until responsibility is transferred to the owner (see below).
- All plant material shall be guaranteed for one (1) year after acceptance by landscape architect and/or owner. After the first thirty (30) days, the owner shall assume maintenance responsibilities as described (see above). Contractor shall replace without cost to owner any dead or unacceptable plants, as determined by the landscape architect at the end of one (1) year guarantee period. Contractor shall notify immediately, in writing, any concerns related to maintenance practices.
- All planting beds and tree saucers shall be mulched continuous with 3" depth shredded hardwood mulch, see planting details. All deciduous trees (shade / ornamental) that are not located in in a planting bed shall be mulched with a 3'-0" diameter circle. Evergreen trees and multi-stemmed ornamental trees shall be mulched to outer-most branches at the time of installation.
- Planting edge delineation at all planting bed lines and tree saucers shall require a minimum 4" depth "vee" shaped cultivated, spaded edge with a vertical face abutting all lawn areas and sloped to inside of plant bed continuous between lawn and mulched areas as indicated on plan.
- Contractor to seed all disturbed lawn areas. Seeded lawn to be a combination of bluegrass, perennial rye and red fescue with the suggested following analysis by weight: 30% rugby Kentucky bluegrass, 20% park Kentucky bluegrass, 20% creeping red fescue, 20% scalds hard fescue, and 10% perennial ryegrass. Seed to be applied at a rate of 4 lbs. per 1,000 s.f.. All seeded lawn areas shall be covered with straw mulch or erosion control netting, consisting of hand or machine application at a rate of 2 ton per acre. Mulch shall be compact enough to reduce erosion of seed and topsoil but loose enough to allow air to circulate. Install per Method 1, Section 251, of the Standard Specifications for Road and Bridge Construction.
- All seeded turf areas shall be re-seeded repeatedly until all areas are covered with a satisfactory stand of grass. Minimum acceptance of seeded lawn areas may include scattered bare or dead spots, none of which are larger than one (1) square foot and when combined do not exceed 2% of total lawn area.
- Acceptance and guarantee notes shall apply to all seeded areas.
- Acceptance of grading and seed shall be by landscape architect and/or owner. Contractor shall assume maintenance responsibilities for a minimum of sixty (60) days or until second cutting, whichever is longer. Maintenance shall include watering, weeding, re-seeding (wash-offs) and other operations necessary to keep lawn in a thriving condition. Upon final acceptance, owner shall assume all maintenance responsibilities. After lawn areas have germinated, areas which fail to show a uniform stand of grass for any reason whatsoever shall be re-seeded repeatedly until all areas are covered with a satisfactory stand of grass. Minimum acceptance of seeded lawn areas may include scattered bare or dead spots, none of which are larger than one (1) square foot and when combined do not exceed 2% of total lawn area.



BED PLANTING DETAIL

(GROUND COVER, PERENNIALS & ANNUALS)

NOT TO SCALE



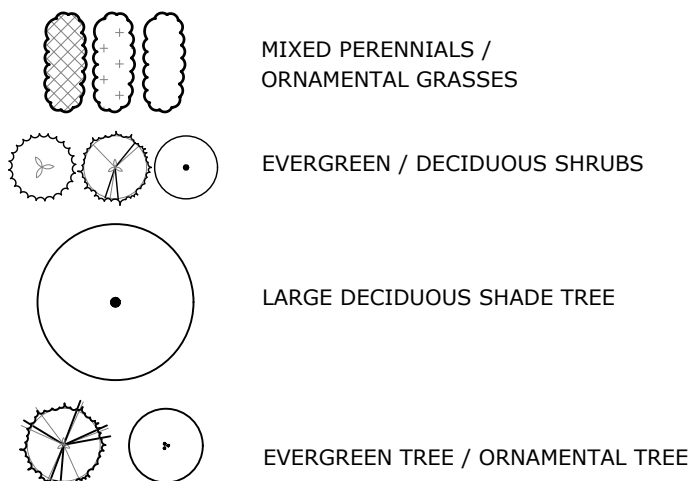
SHRUB PLANTING DETAIL

NOT TO SCALE

ZONING DATA

CATEGORY	QUANTITY	REQUIREMENT	PROVISION
TRANSITION AREA LANDSCAPE PLANTING (BUFFER YARDS)	NORTH PL: 896 L.F. EAST PL: 200 L.F. WEST PL: 226 L.F.	36 TREES (4 / 100 LF) 8 TREES (4 / 100 LF) 8 TREES (4 / 100 LF)	18 TOTAL* - 15 TREES + 1 EXISTING (MIXED VARIETY SHADE / EVERG.) 6 TOTAL* - (MIXED VARIETY SHADE / EVERG.) 8 TOTAL* - 5 TREES + 3 EXISTING (MIXED VARIETY SHADE / EVERG.) *37 ADDITIONAL SITE TREES ARE BEING PROVIDED. AGGREGATELY, THESE EXCEED THE REQUIREMENT.
PARKING PERIMETER LANDSCAPE PLANTING	ALL PARKING AREAS, ONE (1) PROVIDED = 50 L.F.	25 L.F. - MINIMUM OF 50% THE LENGTH OF PARKING PERIMETER	32 L.F. = MIN. 50% OF THE PARKING PERIMETER LENGTH PLANTED
FOUNDATION LANDSCAPE PLANTING	UNIT A TYPE - 198 L.F. UNIT B TYPE = 114 L.F.	158 L.F. - MINIMUM 80% OF FACADE 91 L.F. - MINIMUM 80% OF FACADE	138 L.F. - 70% OF FOUND. 70 L.F. - 62% OF FOUND.
EXISTING TREES	25 TREES - MIXED VARIETIES (DECIDUOUS / EVERGREEN) AND SIZES (CALIPER INCH WIDTH OR HEIGHT) TO BE USED OR CONSIDERED FOR CREDITS TOWARD TREE/PLANT REQUIREMENTS		

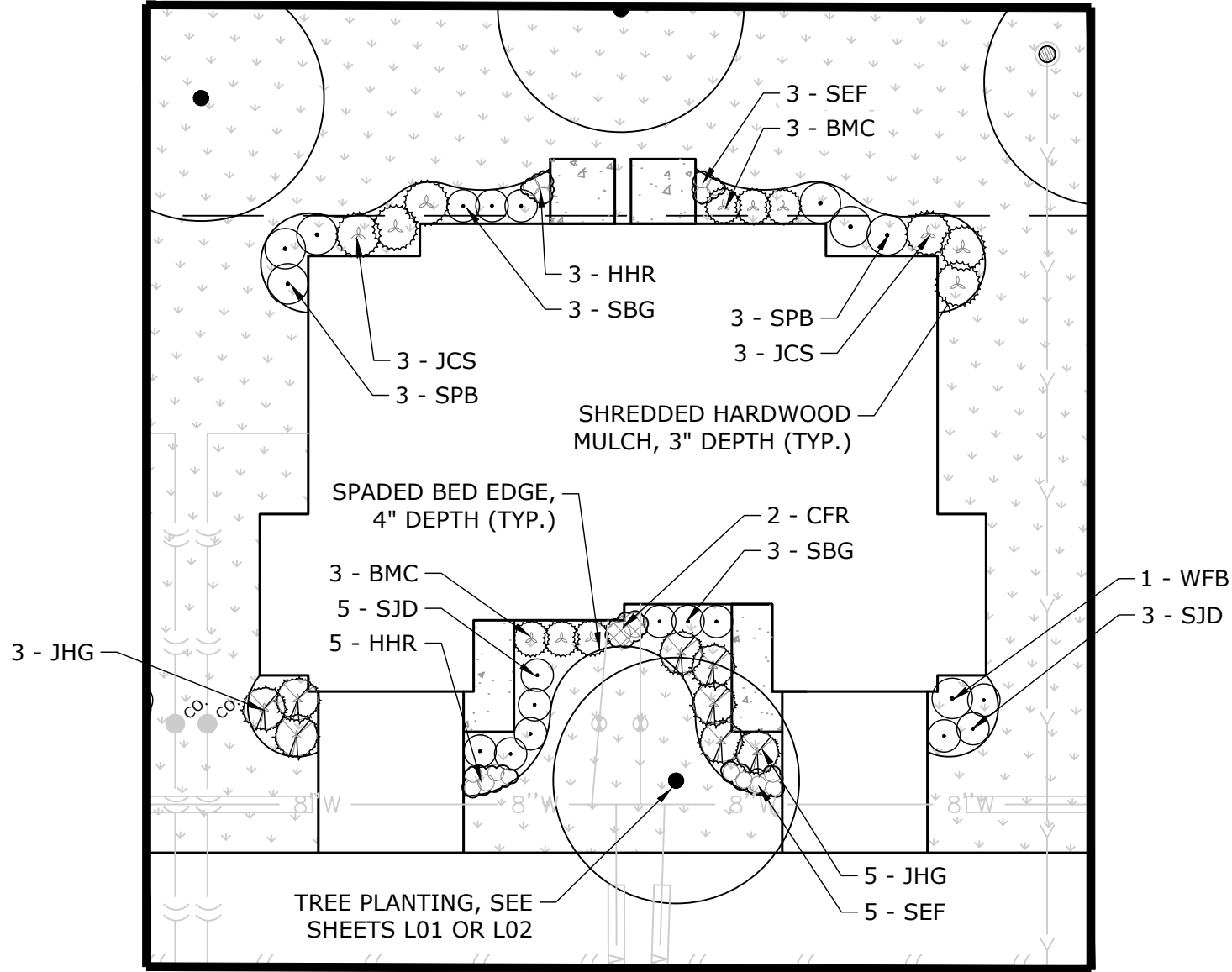
LEGEND



FOR OVERALL SITE TREE PLANTING, SEE SHEETS L01 & L02

PLANTING DETAIL 'A'

SCALE: 1" = 20'



PLANT LIST - PLANTING DETAIL 'A'

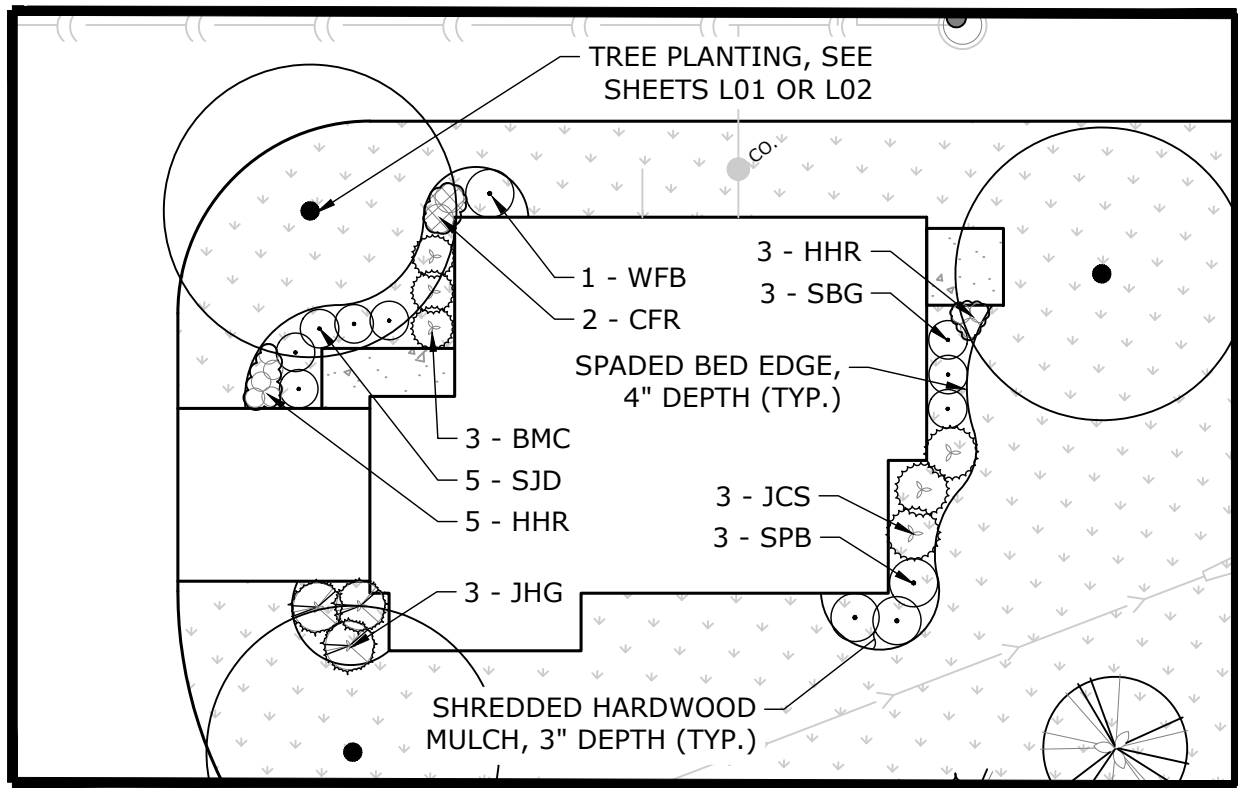
OCCURS 14 TIMES

KEY	QTY	Botanical name COMMON NAME	SIZE	REMARKS
JCS	6	Juniperus chinensis 'Sargentii' GREEN SARGENT JUNIPER	5 GAL	EVERGREEN
JHG	8	Juniperus horizontalis 'Hagedus' GOOD VIBRATIONS GOLD JUNIPER	5 GAL	EVERGREEN
SBG	6	Spiraea bumalda 'Goldflame' GOLDFLAME SPIREA	18" / 5 GAL	
SJD	8	Spiraea japonica 'Double Play' DOUBLE-PLAY ARTISAN SPIREA	18" / 5 GAL	
SPB	6	Syringa patula x 'Bloomerang' DWARF REBLOOMING KOREAN LILAC	24" / 5 GAL	
WFB	1	Weigela florida x 'Bokrasopin' SONIC BLOOM PINK WEIGELA	24" / 5 GAL	
CFR	2	Calamagrostis acutifolia 'Karl Forster' KARL FORSTER FEATHER REED GRASS	2 GAL	3'-0" O.C. - PERENNIAL
HHR	8	Heimerocallis 'Happy Returns' HAPPY RETURNS DAYLILY	GAL	2'-0" O.C. - PERENNIAL
SEF	8	Salvia x 'East Friesland' FRIESLAND MEADOW SAGE	GAL	2'-0" O.C. - PERENNIAL

PLANT COUNTS ARE FOR ONE UNIT,
MULTIPLY BY TOTAL # OF UNITS

PLANTING DETAIL 'B'

SCALE: 1" = 20'



PLANT LIST - PLANTING DETAIL 'B'

OCCURS 1 TIME

KEY	QTY	Botanical name COMMON NAME	SIZE	REMARKS
JCS	3	Juniperus chinensis 'Sargentii' GREEN SARGENT JUNIPER	5 GAL	EVERGREEN
JHG	3	Juniperus horizontalis 'Hagedus' GOOD VIBRATIONS GOLD JUNIPER	5 GAL	EVERGREEN
SBG	3	Spiraea bumalda 'Goldflame' GOLDFLAME SPIREA	18" / 5 GAL	
SJD	5	Spiraea japonica 'Double Play' DOUBLE-PLAY ARTISAN SPIREA	18" / 5 GAL	
SPB	3	Syringa patula x 'Bloomerang' DWARF REBLOOMING KOREAN LILAC	24" / 5 GAL	
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CFR	2	Calamagrostis acutifolia 'Karl Forster' KARL FORSTER FEATHER REED GRASS	2 GAL	3'-0" O.C. - PERENNIAL
HHR	8	Heimerocallis 'Happy Returns' HAPPY RETURNS DAYLILY	GAL	2'-0" O.C. - PERENNIAL

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SHEET TITLE

LANDSCAPE DETAILS

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CHECKED JSL
PM JSL

PROJECT NUMBER
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L03