

LOCATION MAP



STATE OF OHIO, DELAWARE COUNTY
DELAWARE COUNTY ENGINEER

RIBOV #620
DRAINAGE IMPROVEMENT PROJECT
DELAWARE COUNTY
KINGSTON TOWNSHIP

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PROJECT DESCRIPTION

This project will consist of the improvement of surface drainage, the installation of subsurface drain, the destruction of existing subsurface drain tile, and the creation of permanent and temporary easements.
This project/improvement is being done pursuant to Ohio Revised Code Sections 6131 and 6137.

2016 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement. English units shall govern. Where noted, specifications of the USDA Natural Resources Conservation Service shall supplement the ODOT specifications.

BENCHMARK DESCRIPTION

- BM#1**
Northing: 248896.8740'
Easting: 1858648.9850'
Elevation: 977.99'
Description: TDC of Railroad spike in electric pole #22674T
- BM#2**
Northing: 248851.3900'
Easting: 1859364.2000'
Elevation: 978.26'
Description: TDC of Railroad spike in electric pole #22679
- BM#3**
Northing: 248753.34'
Easting: 1857748.16'
Elevation: 986.548'
Description: NGS Survey control point NORTHWEST CORNER OF A PASTURE, ABOUT 75 YARDS EAST OF THE FARM RESIDENCE. IT IS 30 FEET SOUTH OF THE CENTER LINE OF THE ROAD, 12 FEET SOUTH OF THE RIGHT-OF-WAY FENCE, 25 FEET EAST OF FENCE BETWEEN PASTURE AND GARDEN, AND 35 FEET EAST-SOUTHEAST OF AN 18-INCH ELM TREE ON RIGHT-OF-WAY FENCE LINE. SURFACE MARK IS ABOUT 10 INCHES BELOW THE SURFACE OF THE GROUND.

ESTIMATED QUANTITIES

RIBOV #620 Main A			
Item	Description	Quantity	Unit
NRCS 326	Clearing & Snagging	LUMP	N/A
NRCS 382	Fence Gate	2	Each
NRCS 410	Grade Stabilization Structure	1	Each
NRCS 410	Side Inlet Structure	3	Each
NRCS 582	Open Channel - New Construction	580	Lineal Feet
NRCS 582	Open Channel Restoration	2180	Lineal Feet
NRCS 606	12" Pipe (ODOT 707.33), non-perforated	20	Lineal Feet
NRCS 606	15" Pipe (ODOT 707.33), non-perforated	40	Lineal Feet
NRCS 606	12" Animal Guard	1	Each
NRCS 606	15" Animal Guard	2	Each
ODOT 202	Headwall Removal	1	Each
ODOT 202	Fence Removal for Reuse	250	Lineal Feet
ODOT 601	Rock Channel Protection, Type C without filter	3.9	Cubic Yards
ODOT 611	36" Pipe (707.33), non-perforated, Type B (Gravel) Installation	40	Lineal Feet
ODOT 659	Seeding & Mulching	9500	Square Yards
RIBOV #620 Lateral #1			
NRCS 606	4" Pipe (ODOT 707.33), perforated	570	Lineal Feet
NRCS 606	8" Pipe (ODOT 707.33), non-perforated	10	Lineal Feet
NRCS 606	12" Pipe (ODOT 707.33), non-perforated	610	Lineal Feet
NRCS 606	Tile Inspection Well	1	Each
ODOT 202 Supplemental	Tile Removal, Disposal in Place	689	Lineal Feet
ODOT 659	Seeding & Mulching	1360	Square Yards
RIBOV #620 Lateral #3			
NRCS 326	Clearing & Snagging	LUMP	N/A
NRCS 410	Grade Stabilization Structure	1	Each
NRCS 606	8" Pipe (ODOT 707.33), perforated	1000	Lineal Feet
NRCS 606	8" Pipe (ODOT 707.33), non-perforated	750	Lineal Feet
NRCS 606	12" Pipe (ODOT 707.33), non-perforated	1000	Lineal Feet
NRCS 606	12" Animal Guard	1	Each
NRCS 608	Surface Drain - Swale	1710	Lineal Feet
ODOT 202 Supplemental	Tile Removal, Disposal in Place	1470	Lineal Feet
ODOT 659	Seeding & Mulching	5700	Square Yards

*Quantities may be modified on-site at the discretion of the construction supervisor.

CONSTRUCTION & MATERIAL SPECIFICATIONS

OHIO DEPARTMENT OF TRANSPORTATION DELAWARE COUNTY ENGINEER		USDA NATURAL RESOURCES CONSERVATION SERVICE		SUPPLEMENTAL SPECIFICATIONS
Item	Description	CONSTRUCTION	Material	
202 Supplemental	Tile Destruction in Place	326	Clearing & Snagging	
202	Tile Removal	410	Grade Stabilization Structure	
611	Pipe Culverts, Sewers, Drains, & Drainage Structures	484	Mulching	
659	Seeding & Mulching	582	Open Channel Construction	
707	Steel, Aluminum, and Plastic Pipe	606	Subsurface Drain	
		610	Surface Drain	
				SPECIAL PROVISIONS
				Tile Connection

UNDERGROUND UTILITIES
TWO WORKING DAYS BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

PLAN JOINTLY PREPARED BY:
DELAWARE SOIL AND WATER CONSERVATION DISTRICT
557-A SUNBURY RD
DELAWARE, OHIO 43015
PHONE: (740)368-1921 EXT.4 FAX: (740)369-8321

DELAWARE COUNTY ENGINEER'S OFFICE
50 CHANNING STREET
DELAWARE, OHIO 43015
PHONE:(740) 833-2400 FAX: (740)833-2399

PROJECT NAME
DRAINAGE IMPROVEMENT PROJECT
DELAWARE COUNTY ENGINEER
DELAWARE COUNTY, OH

APPROVED *[Signature]*
DATE 3-9-20 COUNTY ENGINEER

APPROVED *[Signature]*
DATE 4-11-22 COUNTY COMMISSIONER

APPROVED *[Signature]*
DATE 4-11-22 COUNTY COMMISSIONER

APPROVED _____
DATE _____ COUNTY COMMISSIONER

DESIGNED DJB 10/18 CHECKED _____
DRAWN DJB 10/18 REVIEWED _____
CONSTRUCTION PROJECT NO. _____
RAILROAD INVOLVEMENT
NONE
RIBOV #620
1/10

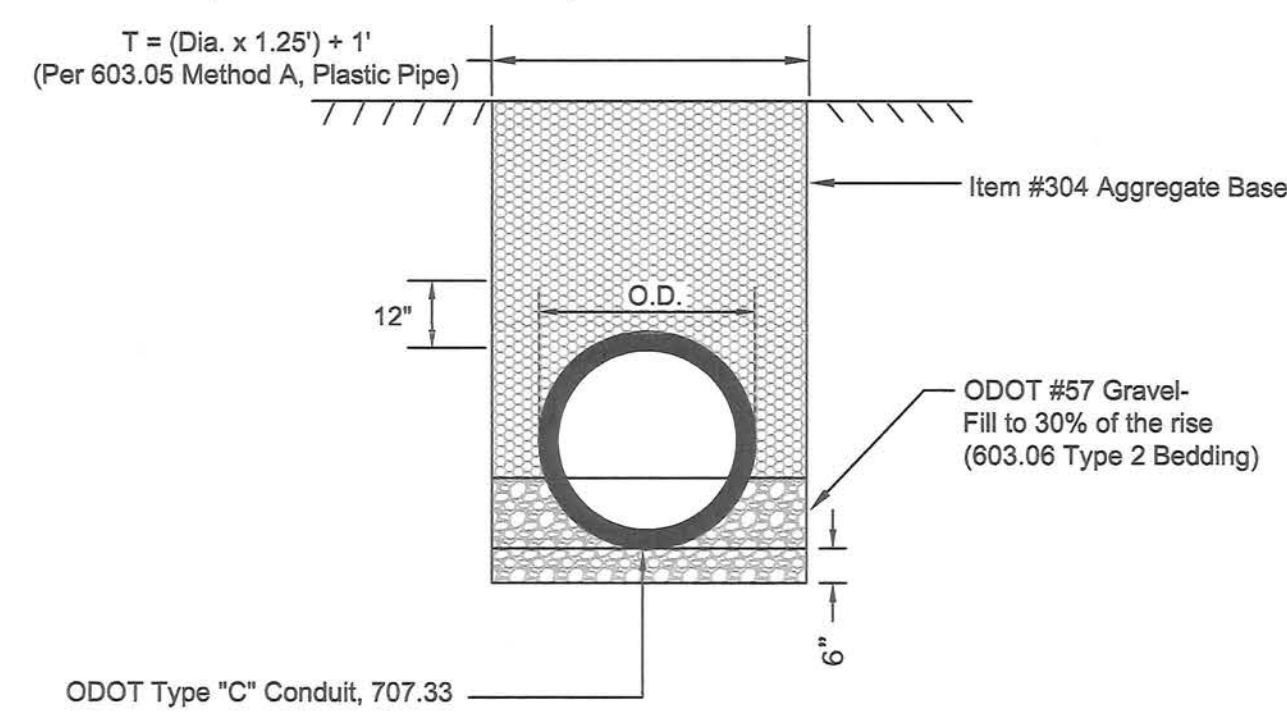
DETAILS & NOTES

GENERAL CONSTRUCTION NOTES

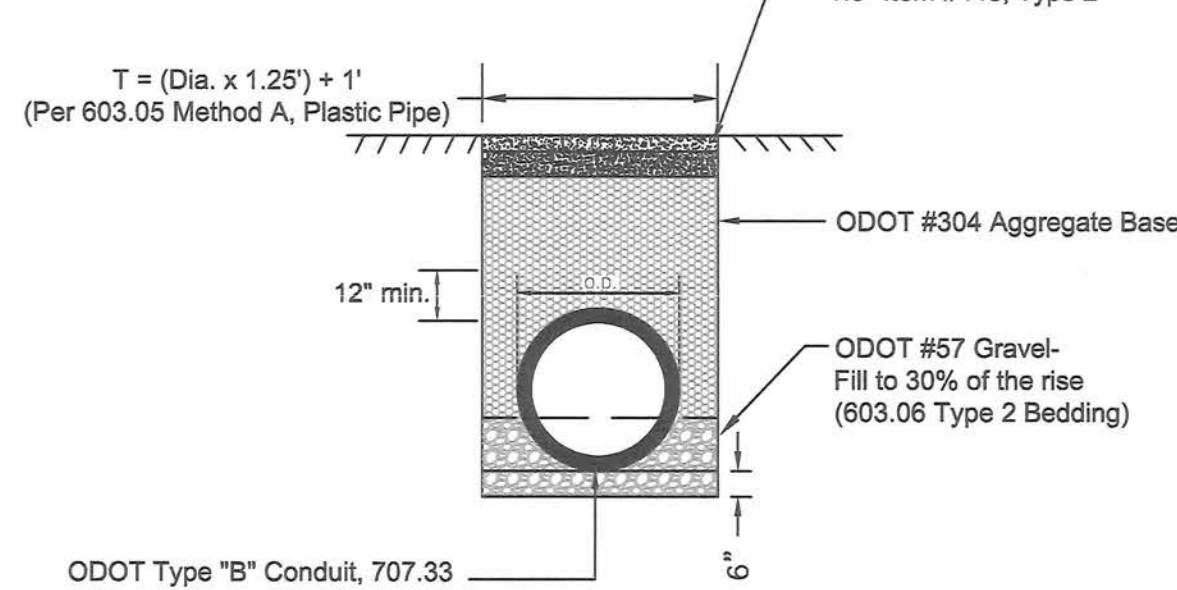
- The construction right-of-way for this project will be 75' right and left of the project centerline unless otherwise marked by the Construction Inspector. Certain items of work may require an extended right-of-way in order to properly complete them. This work should not be done without prior consent of the construction inspector, and any consent given will be specific to a particular item of work. Additional right-of-way for construction access may be identified and approved by the construction inspector as deemed necessary for the completion of the project. All areas disturbed by the construction activities which are outside of the critical path including but not limited to area used for staging, stockpiling of materials, and access will be cleaned and returned to its pre-construction state at the sole responsibility of the contractor as per the requirements of ODOT CMS 104.04.
- The contractor will be responsible for ensuring that all relevant OSHA regulations are met prior to beginning any construction activities.
- Temporary easements for construction access may be identified and approved by the construction inspector as deemed necessary for the completion of the project. Any access easement not connected to the work limits of the project will be returned to its pre-construction state at the sole responsibility of the contractor.
- All ground disturbed by excavation shall be returned to a vegetative state and grade unless otherwise directed by the plans and/or the construction inspector.
- Spill from excavation of the surface drain (NRCS #608) and open channel (NRCS #582) construction shall be exported from the site at the expense of the contractor. Payment for spill and debris disposal will be considered as included in payment for NRCS #608 and NRCS #582 items. The contractor is free to negotiate with landowners to dispose of spill and debris materials on-site provided that any disposal site is outside of the work limits for this project. Delaware County will not be considered party to any such agreements made between the contractor and landowners.
- Unless otherwise noted on these plans or instructed by the construction inspector, debris from clearing and snagging within the typical cross sections is to be disposed of off-site by the contractor unless permission to place brush or logs adjacent to the construction right-of-way is granted by the landowners. Payment for hauling and disposal shall be considered part of payment for NRCS #326-Clearing and Snagging. For the purposes of on-site disposal, a log will be defined as "a section of a tree bole (the main trunk of the tree) at least 8 feet long, not containing a fork, sufficiently straight and sound enough to yield at least an 8-foot board. Anything not considered a log by the above definition will be considered brush.
- Pipe quantities listed on the Plan and Profile views represent cumulative quantities for both perforated and non-perforated pipe. The quantity table shall be the reference for the specific amounts of perforated and non-perforated pipe. The applicable specification and the instructions of the construction inspector will govern the placement of each type of pipe. All lineal quantities of pipe shall be considered to be inclusive of all necessary elbows, couplers, and other fittings unless otherwise stated by these plans and/or the bid documents.
- All lateral pipe cut by the installation of the new tile shall be reconnected to the new pipe at the point where they are cut or collected with a submain (size to be determined) and outletted into the new pipe at the next downstream breather as specified by the construction inspector and per the requirements of NRCS #606-Subsurface Drain. Any connections made to any pipe included on the Drainage Maintenance Program after completion of the project will require the approval of the Drainage Maintenance Department.
- Seeding and Mulching will be done as per the specifications of ODOT #659 with the following stipulations/exceptions:
 - Seed mixture to be used will be Class-Type #1.
 - Soil testing will not be required.
 - Liming will not be required.
 - Compost will not be required.
 - The use of straw mulch will be acceptable for the entire project.
 - Watering will not be required.
 - Mulch anchoring will not be required except where specified.
- Linear alignments and profiles of all surface and subsurface features may be modified to fit site specific conditions at the discretion of the construction inspector.
- The contractor shall contact the Delaware County Engineer's Office a minimum of seven (7) working days prior to beginning any work within the road right-of-way. It will be the sole responsibility of the contractor to secure any permits necessary for work within the road right-of-way.
- All trees to be saved will be marked prior to the start of construction by the construction inspector. Markings will be done in the manner requested by the contractor. Unless specifically designated as "Save" or "Do not disturb" in the plans or by the construction inspector, remove all trees and stumps within the cross section under the lump sum bid for NRCS Item #326-Clearing and Snagging. Trees marked to be saved shall be protected with protective cover such as filter fabric or other suitable material. Replacement of any tree damaged or removed that was otherwise marked to be saved will be the responsibility of the contractor.
- Scale bars as shown on the Plan Views shall be considered to be accurate for surveyed features including, but not necessarily limited to, project centerline, tile lines, and benchmark locations. Property lines, drive centerlines, building footprints, and road centerlines as shown on the Plan Views were derived from other sources and are shown for general reference only and should not be used to scale the location of any constructed feature.
- Excavation will/may be required to verify design elevations including, but not limited to, existing subsurface drain inverts. These excavations will be considered incidental to the overall construction of the project per ODOT CMS 105.02.

SUBSURFACE DRAIN (NRCS #606)

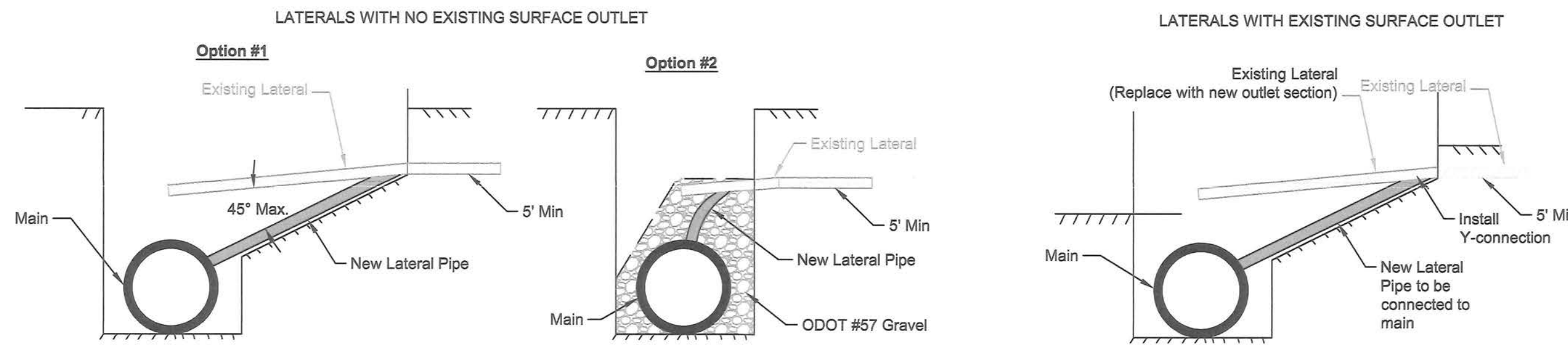
STONE DRIVE, SINGLE PIPE ODOT 611, TYPE "B" Gravel Drive, 707.33 INSTALLATION



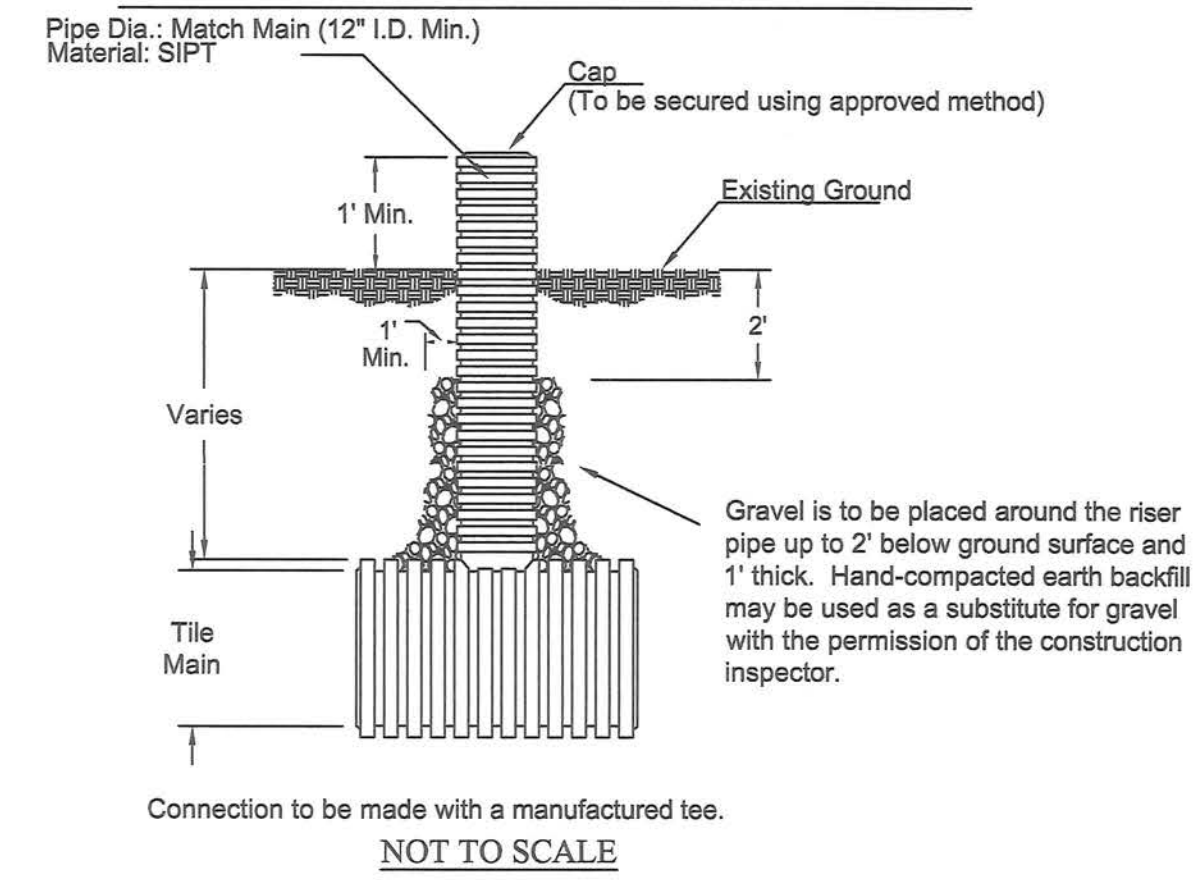
DRIVE CUT INSTALLATION DETAIL ODOT 611, TYPE "B", 707.33 INSTALLATION



TYPICAL SUBSURFACE DRAIN LATERAL CONNECTION DETAILS (NRCS #606) NOT TO SCALE

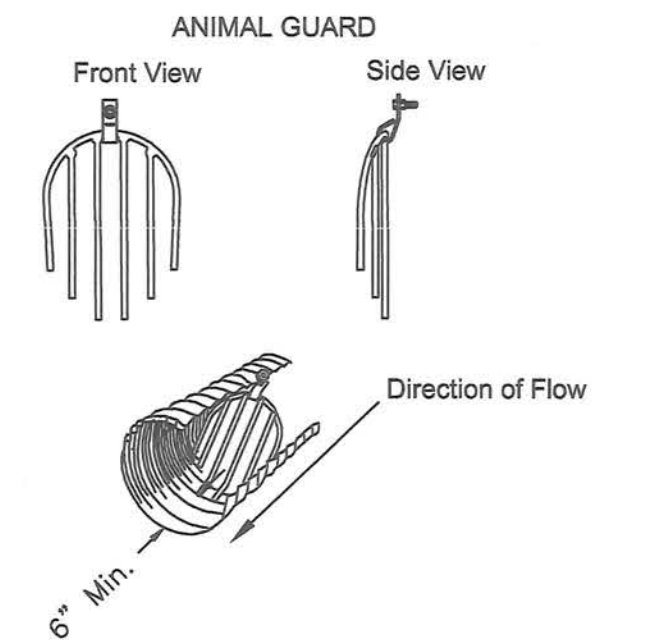


INSPECTION WELL DETAIL



Ribov 620 DRAINAGE IMPROVEMENT PROJECT DETAILS & NOTES

2
10



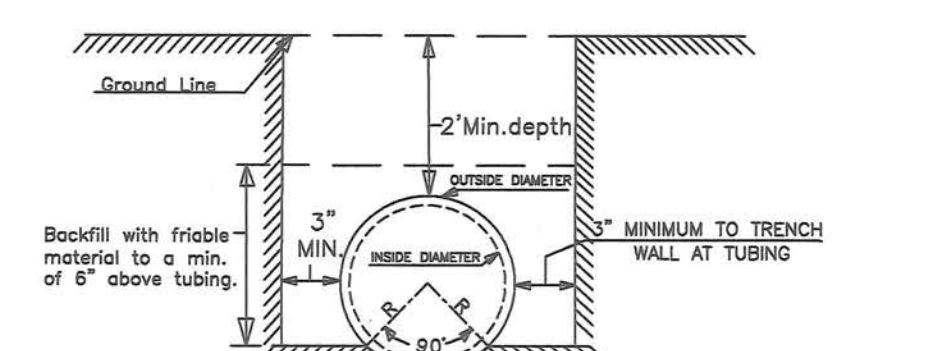
NOTES

- All pipe shall be placed according to the Typical Subsurface Drain Installation Detail and the requirements of NRCS Specification #606.
- Removal of residual lateral pipe regardless of size and/or material shall be considered part of the payment for this item.
- All connections shall be done using manufactured connectors.
- Any quantity of gravel used to make connections utilizing Option #2 shall be considered part of the payment for this item. Determining the quantity of gravel needed for making connections using this option shall be the sole responsibility of the contractor. Cleanup of gravel stockpile areas shall be as per the requirements of ODOT CMS 104.04.
- The contractor shall note on a dedicated copy of the plans, as provided by the construction inspector, the station, size, material, and connection option used to make all lateral connections.
- Lateral types regarding having or not having a surface outlet will be marked by the construction inspector.

Note:

Tile Main Breather shall have 20 evenly spaced 1 inch perforations per foot in the riser section. The surrounding ground will be graded to drain to the structure as per the instructions of the Construction Supervisor.

NRCS 606 PIPE INSTALLATION DETAIL



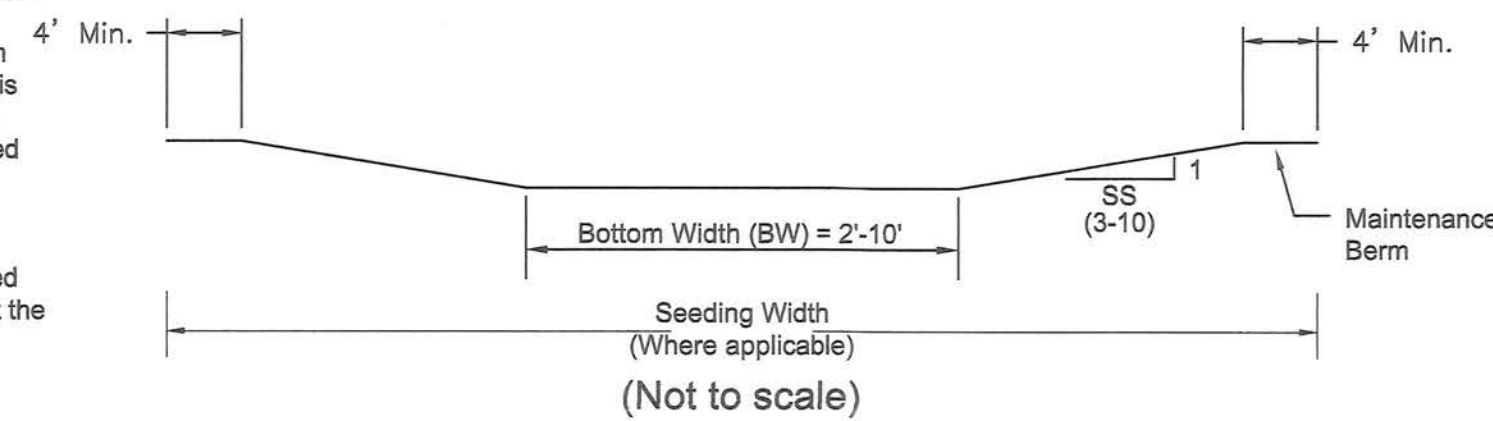
Note: Use trapezoidal or semi-circular groove for tubing greater than 8" diameter. Trenching shall comply with OSHA Std.1926 Subpart P

SURFACE DRAIN (NRCS #608)

NOTES:

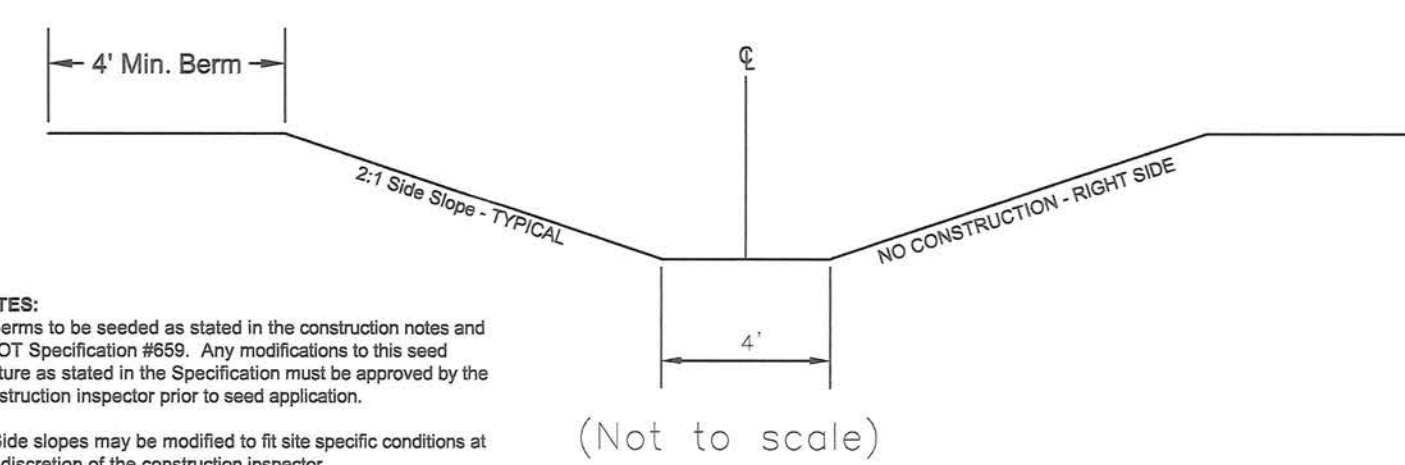
- Where specified on the plans, the surface drain is to be seeded as stated in the construction notes and ODOT Specification #659. Any modifications to this seed mixture as stated in this Specification must be approved by the construction inspector prior to seed application.
- Side slopes may be modified to fit site specific conditions at the discretion of the construction inspector.
- All spoil from within the typical surface drain cross section shall be disposed of according to the specifications of NRCS #608 - Surface Drainage Main.

TYPICAL SURFACE DRAIN SWALE CROSS SECTION

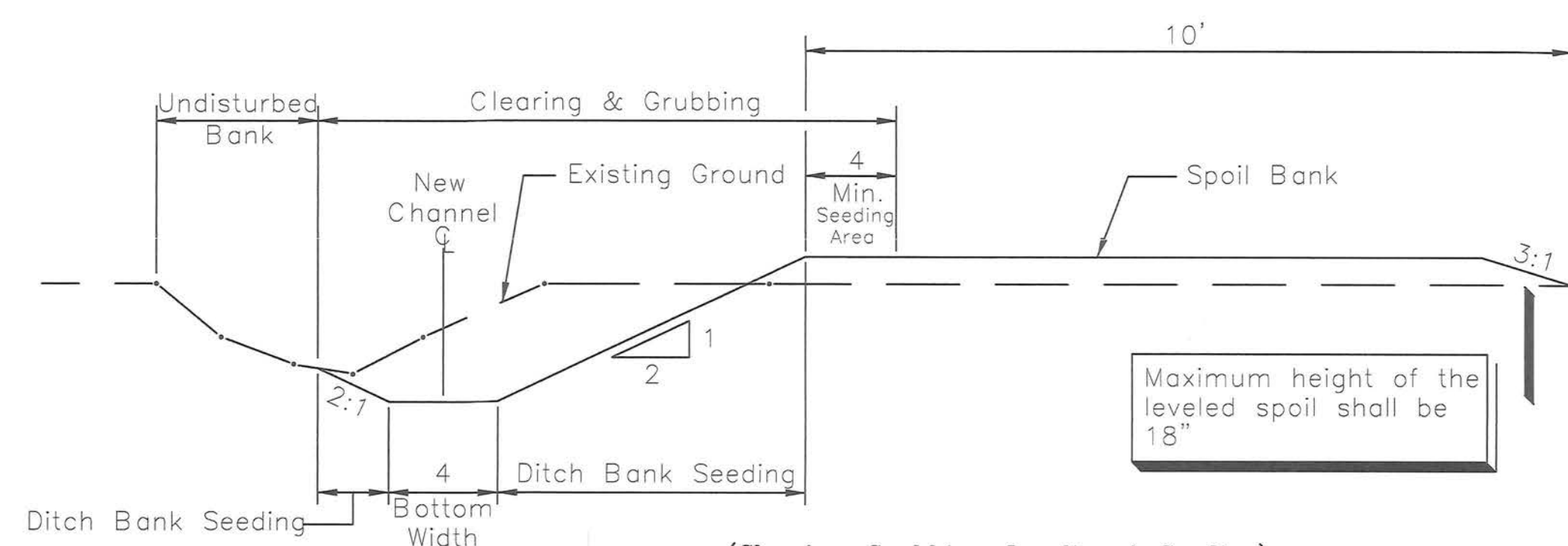


Open Channel (NRCS #582)

TYPICAL OPEN CHANNEL CROSS SECTION



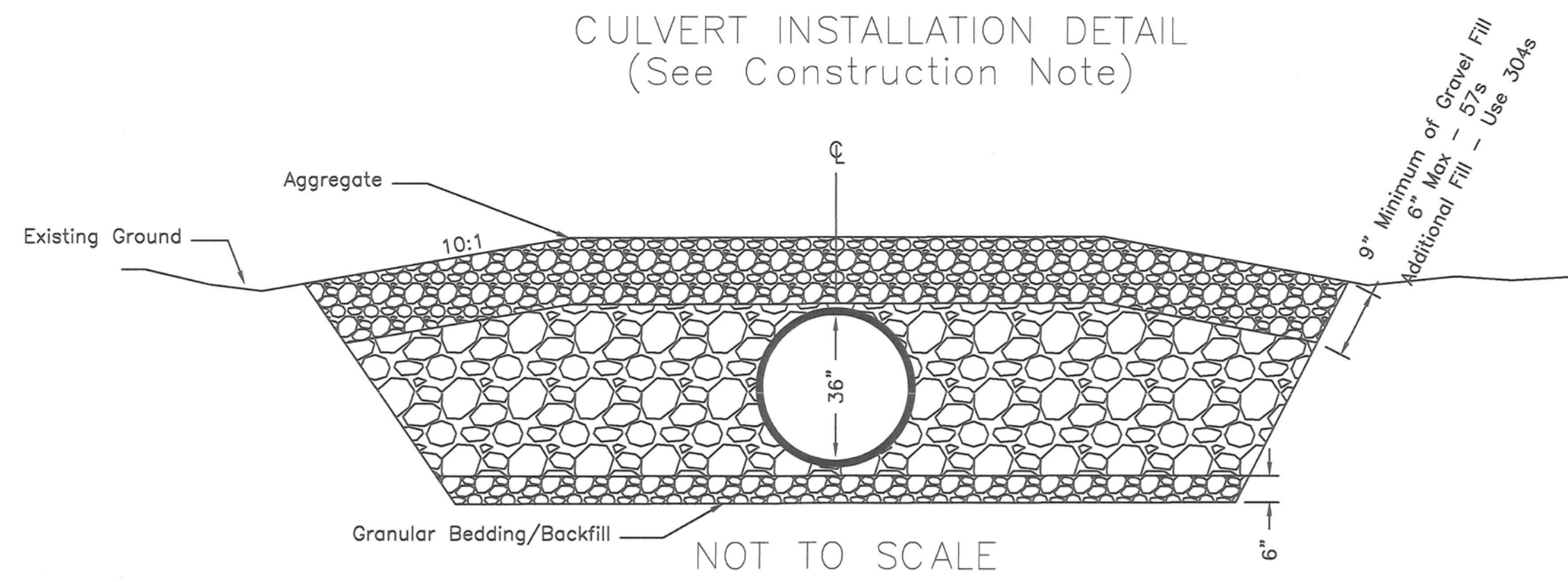
- Berms to be seeded as stated in the construction notes and ODOT Specification #659. Any modifications to this seed mixture as stated in the Specification must be approved by the construction inspector prior to seed application.
- Side slopes may be modified to fit site specific conditions at the discretion of the construction inspector.



(Clearing, Grubbing, Leveling & Seeding)

Typical One-Sided Construction Cross Section

Not to Scale



CONSTRUCTION NOTE

Materials
 1. Conduit - corrugated HDPE plastic smooth lined pipe (double-wall) conforming to ODOT CMS 707.33.
 2. Granular bedding and backfill - coarse aggregate meeting AASHTO/ODOT #57 or #67 size or crushed limestone aggregate meeting ODOT CMS item 304 or 411.

Excavation
 The existing culvert shall be removed in its entirety, and included in this item for payment. The trench for the proposed culvert shall be excavated to a minimum width of 2 feet greater than the outside span of the culvert. The trench shall be excavated a minimum of 6 inches below the proposed elevation of the bottom of the culvert.

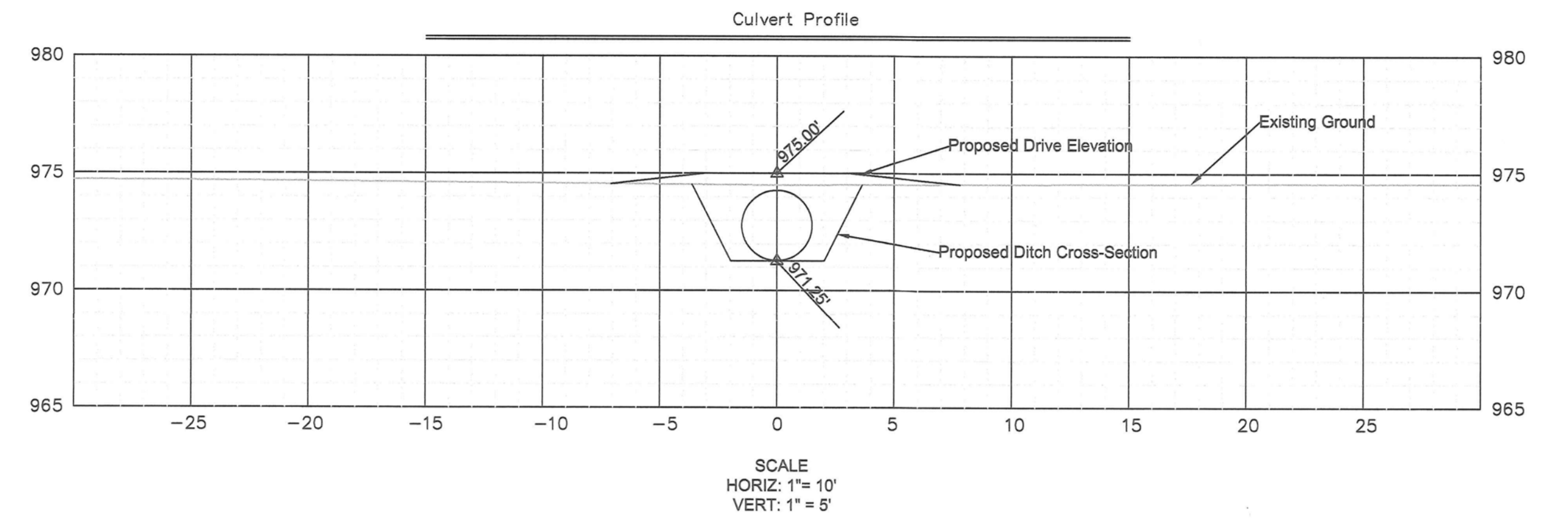
Bedding
 Bedding for the culvert shall be 6 inches of granular material, and shall extend to the limits of the trench.

Laying Culvert
 Except where otherwise directed by the Engineer for special conditions, the culvert shall be laid starting at the outlet end. For multiple barrel culverts, the minimum distance between the outside of adjacent barrels shall be 24"

Joining Culvert Sections
 The method of joining culvert sections shall be such that the ends are fully entered and the inner surfaces are reasonably flush and even. Bands or gasket joints shall be used according to manufacturer's recommendations. Conduit shall be inspected before any backfill is placed. Any sections found to be out of alignment, unduly settled, or damaged shall be taken up and relaid or replaced.

Backfilling
 Granular backfill shall be placed in lifts not to exceed 8 inches up the sides of the culvert. Backfill shall be carefully compacted under the haunches of the pipe using mechanical compactors, spud bars or any other means approved by the Engineer.

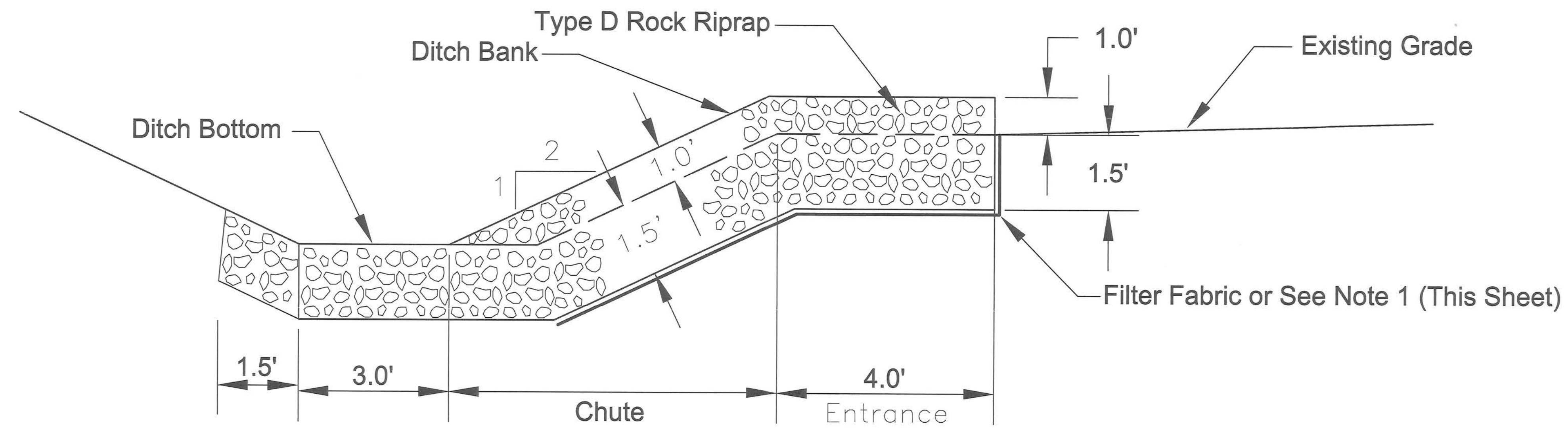
When using #57 or #67 granular backfill, the material shall be compacted to approximately 85% of the original thickness. When using stabilized crushed aggregate, water shall be added as necessary to maintain optimum moisture content. Compaction shall be done by mechanical tampers, jumping-jacks, hand tools, or any other means approved by the Engineer, and shall be considered sufficient when 98-100 percent of AASHTO T 99 (Standard Proctor) has been achieved or the Engineer approves the backfill.



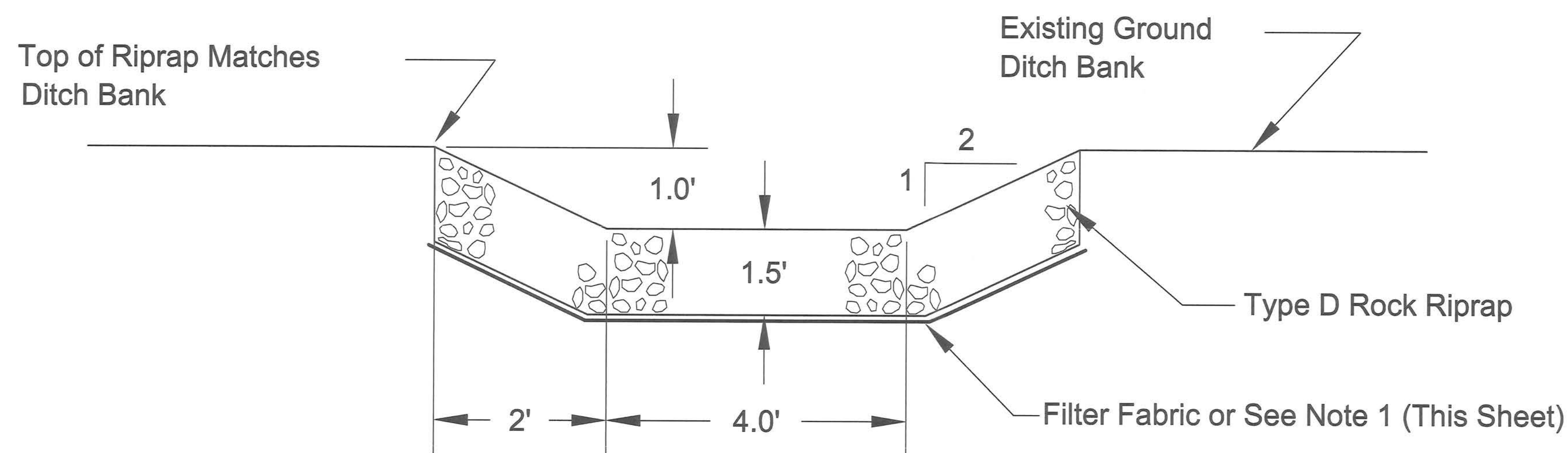
Culvert Design Table

STA Entrance	STA Exit	Entrance Inv.	Exit Inv.	Size	Qty.	Material	Length
111+70	112+20	971.25'	971.23'	36"	1	ODOT 707.33	40'

NOTE: Rock Channel Protection at Culvert Exit (ODOT 601.09) without filter = 10' L x 7' W x 1.5' D Type C Riprap

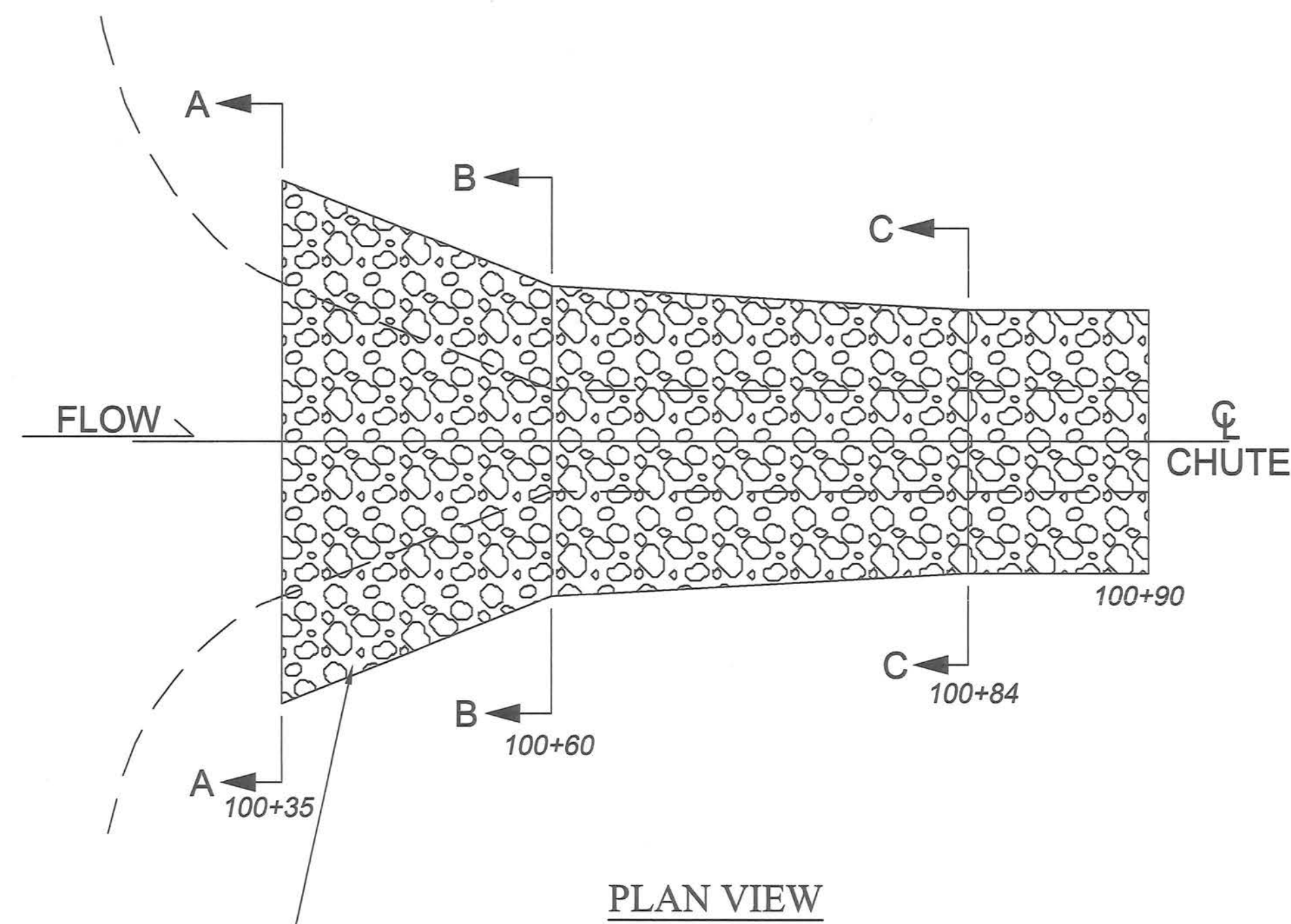


Profile Along Centerline

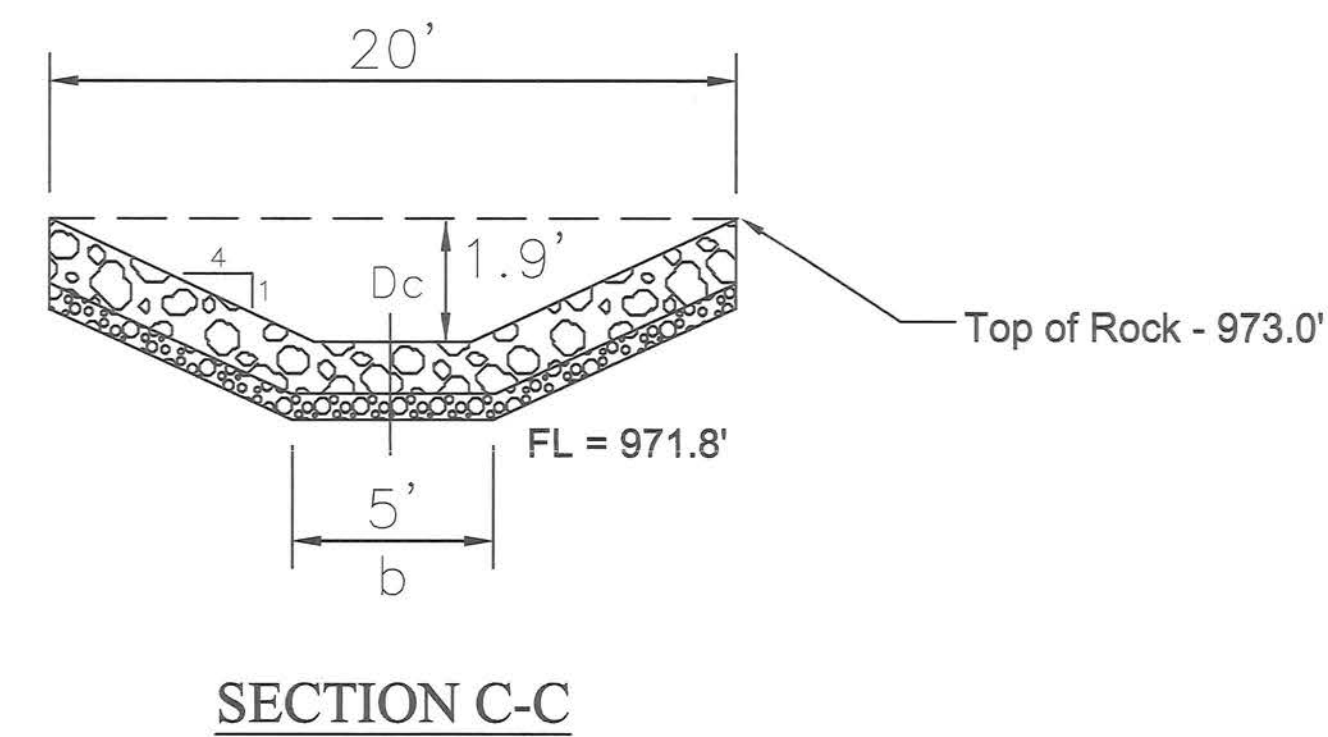
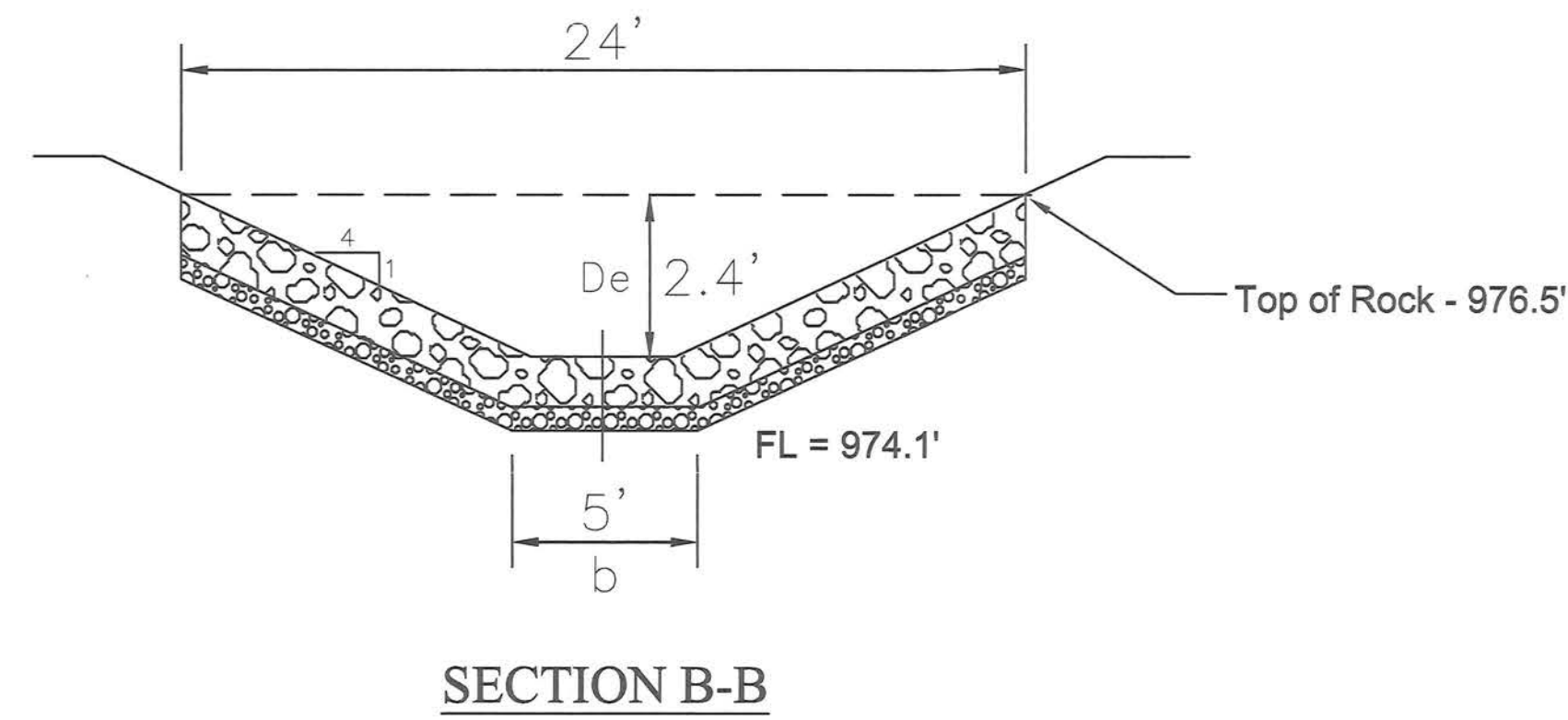
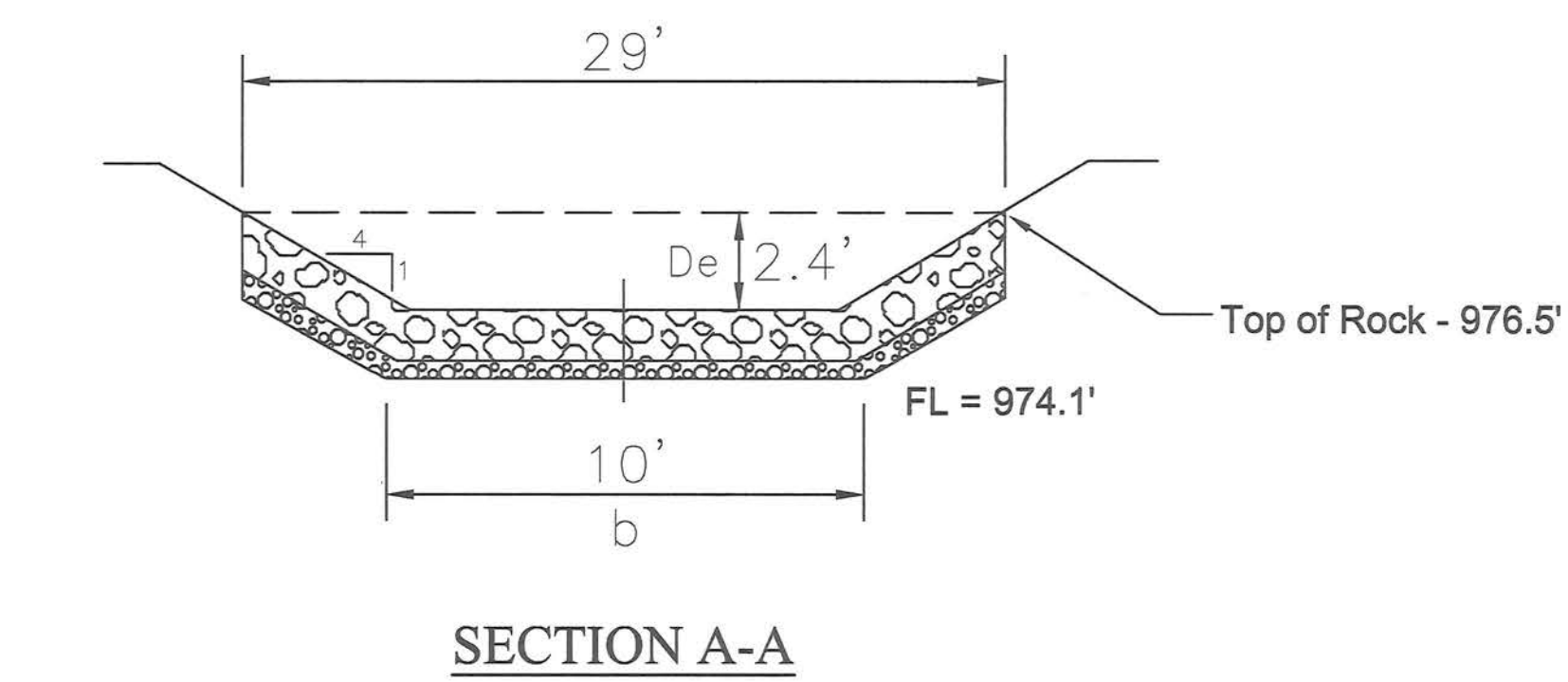
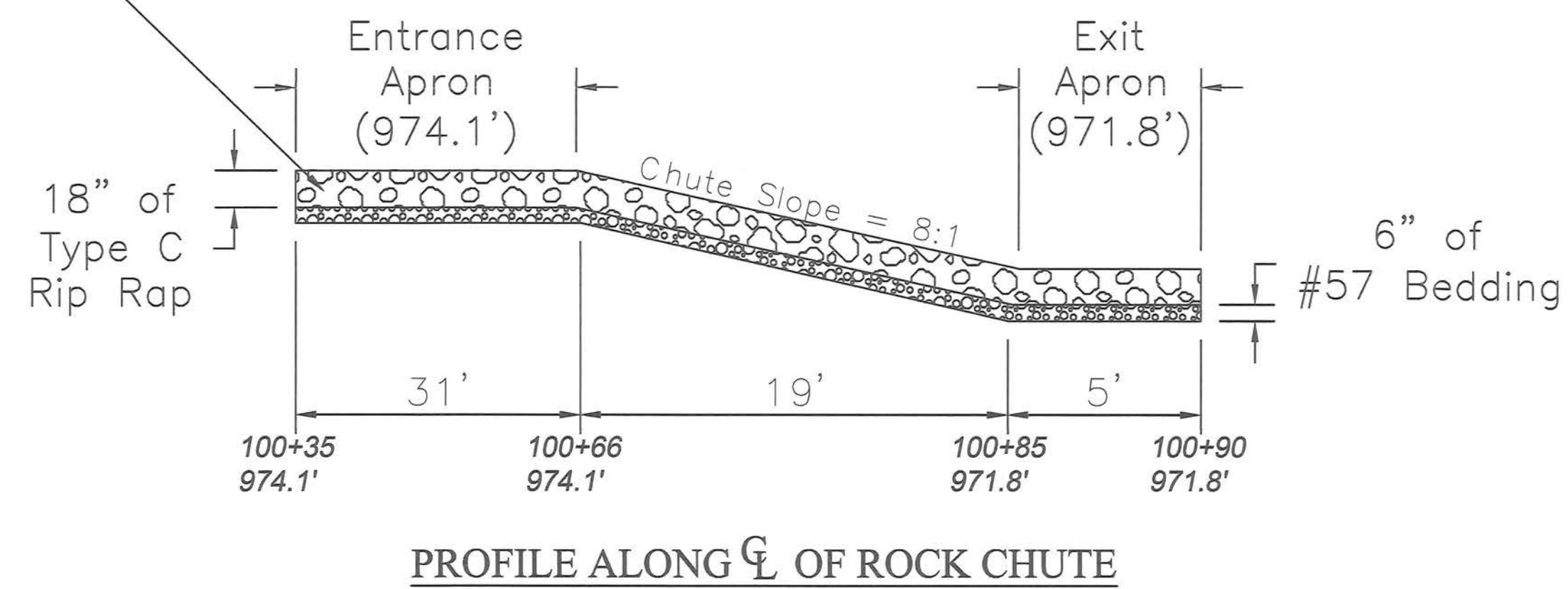


Entrance & Chute Cross-Section

- FILTER FABRIC INSTALLATION NOTES**
1. The filter fabric shall be non-woven and meet the requirements of O.D.O.T. specification 712.09, Type B, "Filter Blankets for Rock Channel Protection" or Class I requirements according to NRCS Material Specification 592- "Geotextile".
 2. The filter fabric shall be fastened along all edges with securing pins approved and provided by the manufacturer. Additional pins shall be installed as necessary and where appropriate to prevent any undue slippage or movement of the fabric.
 3. Joints of the fabric shall be overlapped a minimum of 18" in the direction of flow.
 4. When riprap is placed on top of the fabric, the height that it may be dropped onto the material shall not exceed 3 feet.

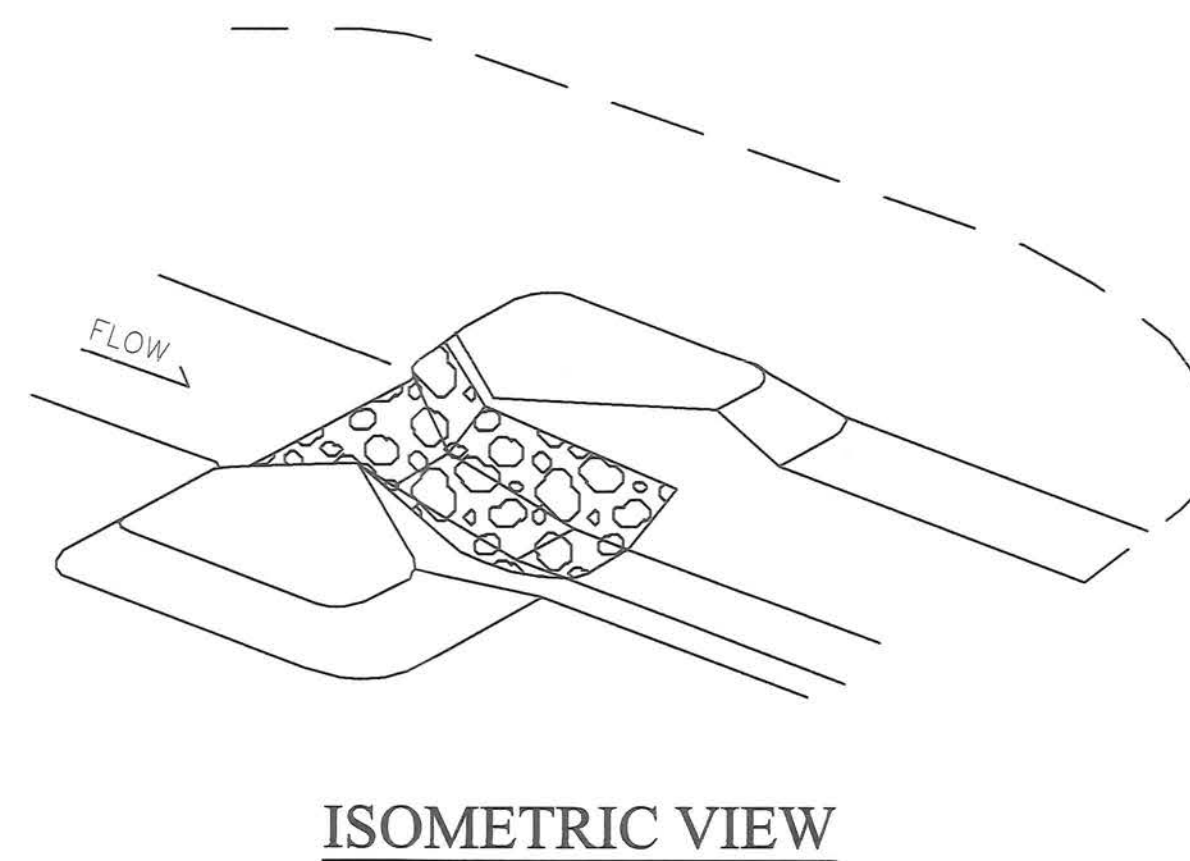


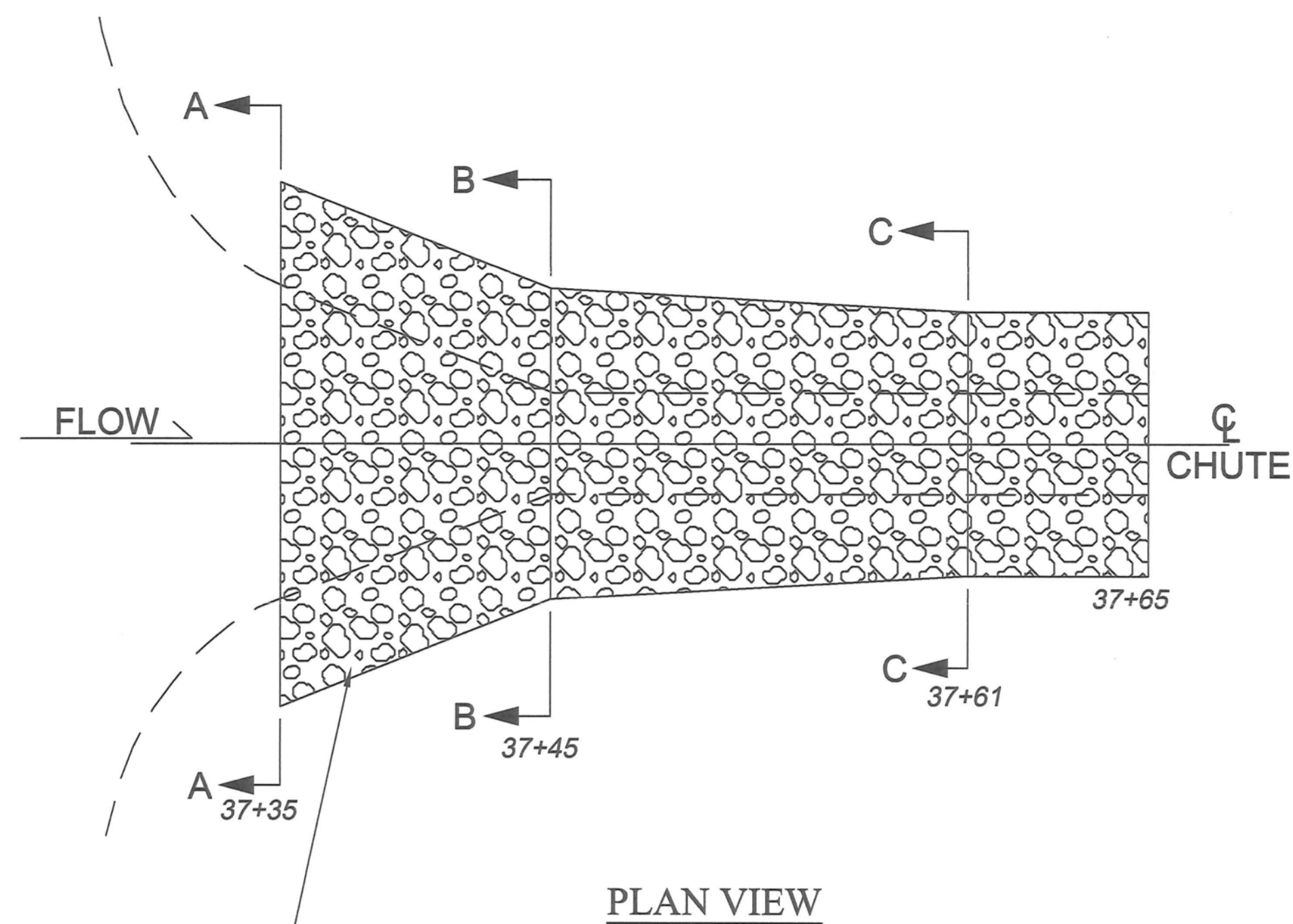
Type C shall consist of sizes such that at least 85 percent of the total material by weight shall be larger than an 6 inch (150 mm) but less than a 18 inch (0.5 m) square opening. At least 50 percent of the total material by weight shall be larger than a 12 inch (0.3 m) square opening. The material smaller than a 6 inch (150 mm) square opening shall consist predominantly of rock spalls and rock fines and shall be free of soil.



Design Data

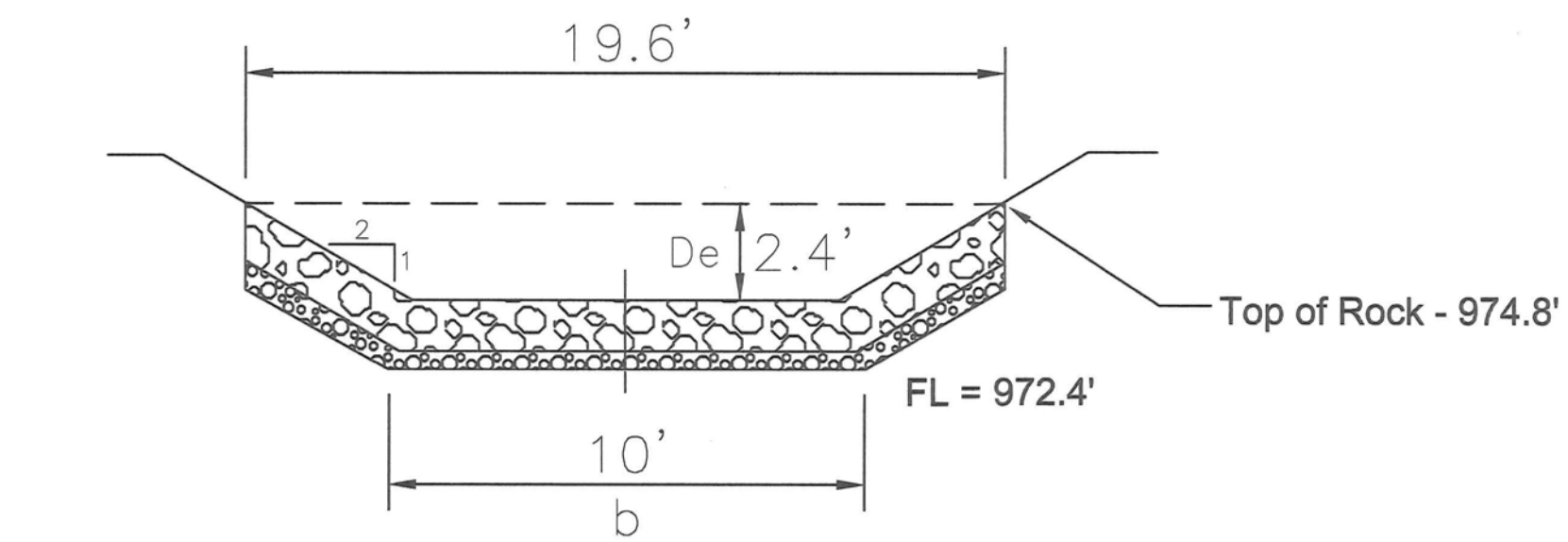
Acres Drained	75
Chute Slope	8:1
Bottom Width (b) Varies	5'
Side Slopes	4:1
De	2.4'
Dc	1.9
V	9.7 fps
Entrance Elevation	974.1'
Exit Apron Elevation	971.8'
Overfall	2.3
Entrance Apron Length	31'
Exit Apron Length	5'
Type "C" Stone (Tons)	116.6
#57 Gravel Bedding (Tons)	38.9



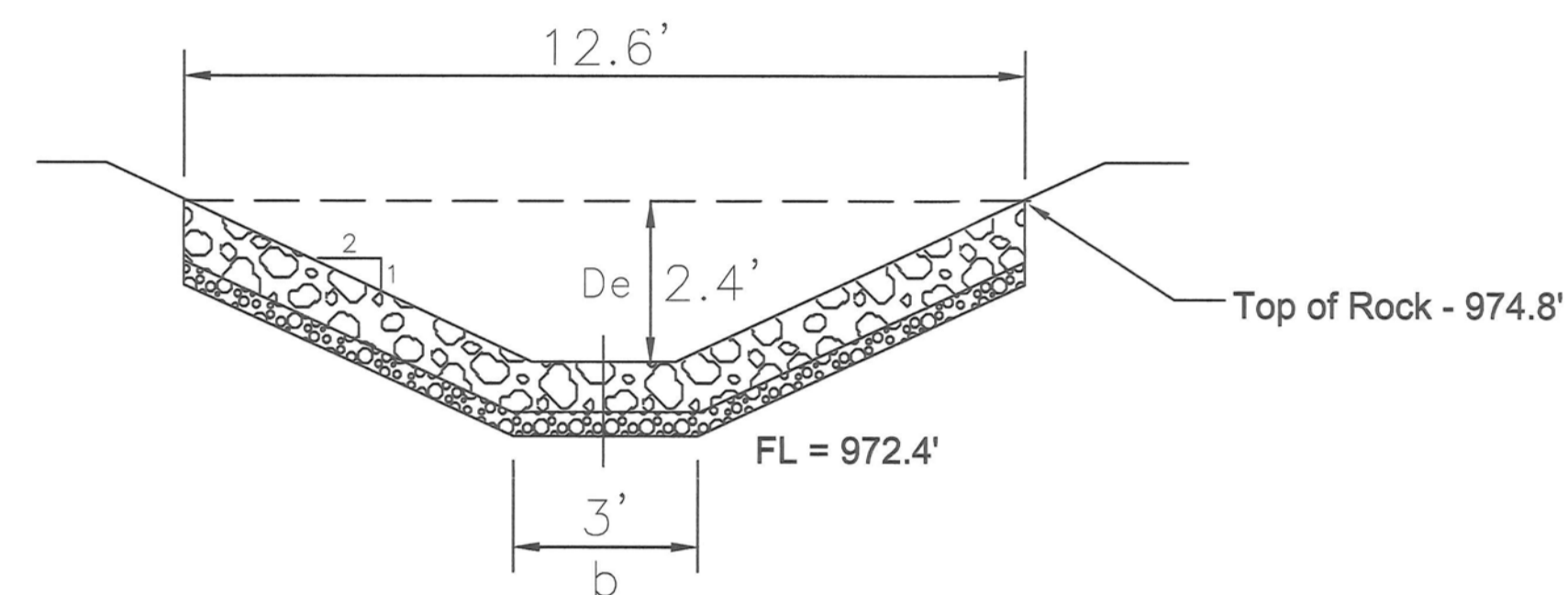


PLAN VIEW

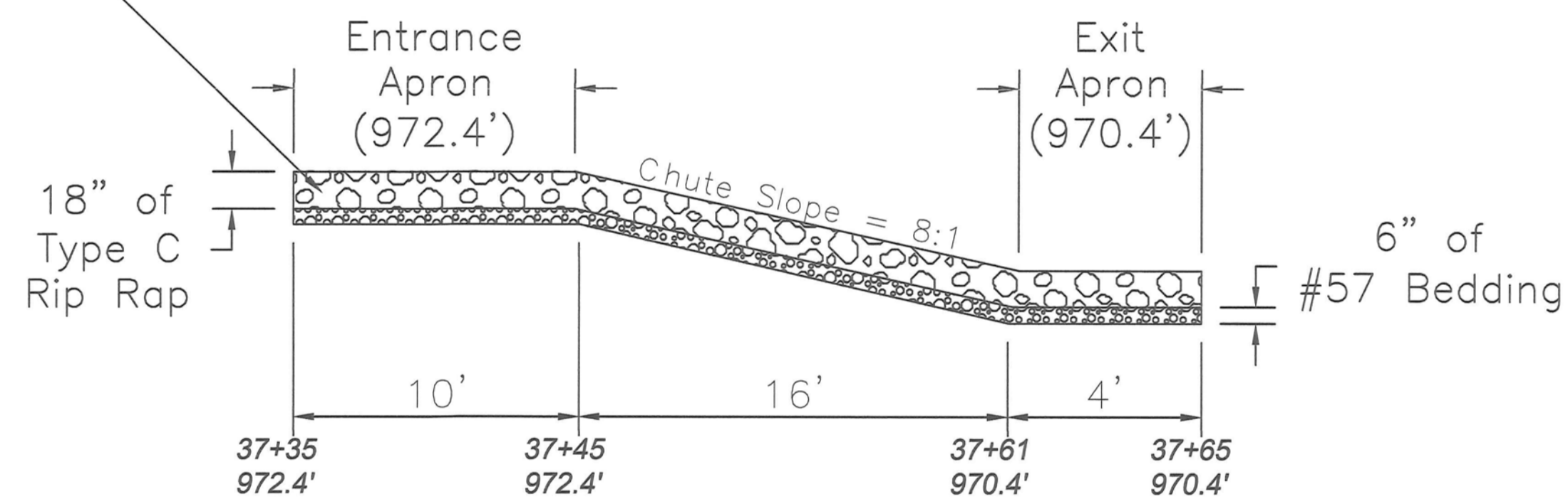
Type C shall consist of sizes such that at least 85 percent of the total material by weight shall be larger than an 6 inch (150 mm) but less than a 18 inch (0.5 m) square opening. At least 50 percent of the total material by weight shall be larger than a 12 inch (0.3 m) square opening. The material smaller than a 6 inch (150 mm) square opening shall consist predominantly of rock spalls and rock fines and shall be free of soil.



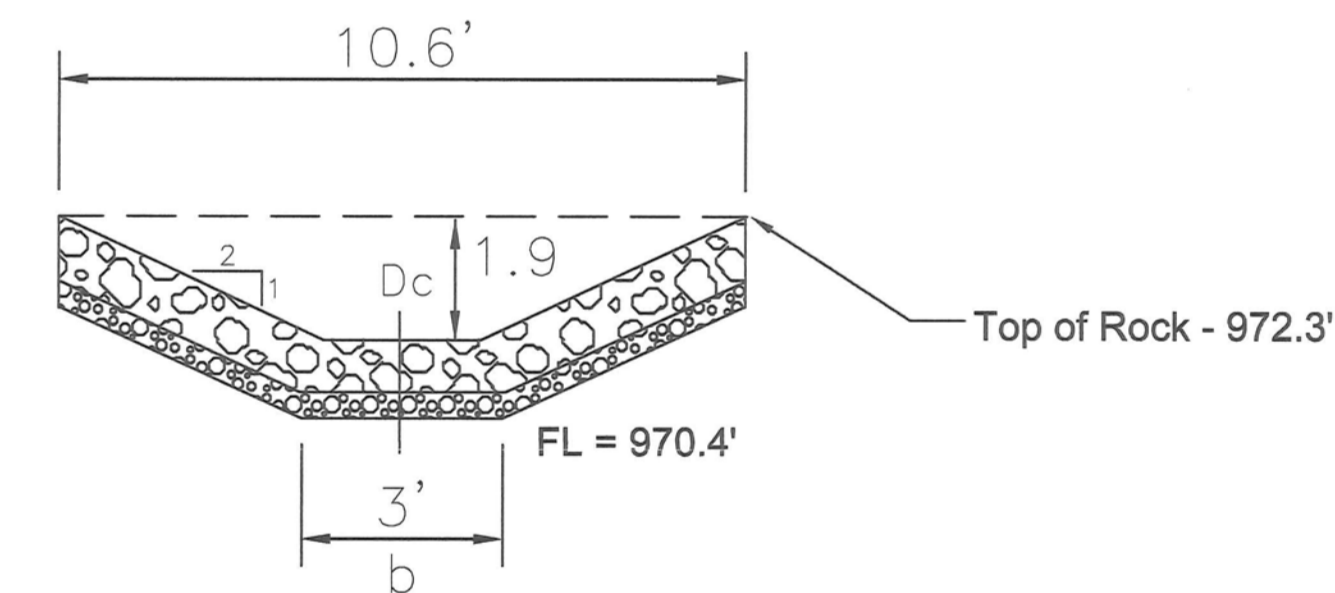
SECTION A-A



SECTION B-B



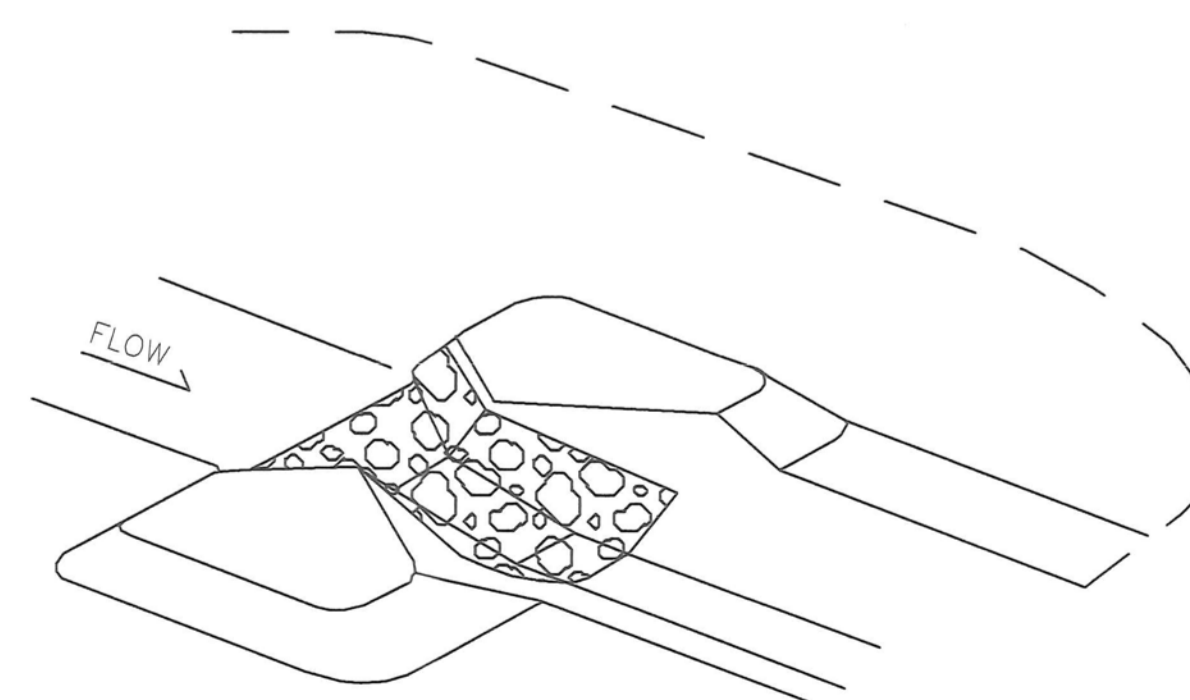
PROFILE ALONG C-C OF ROCK CHUTE



SECTION C-C

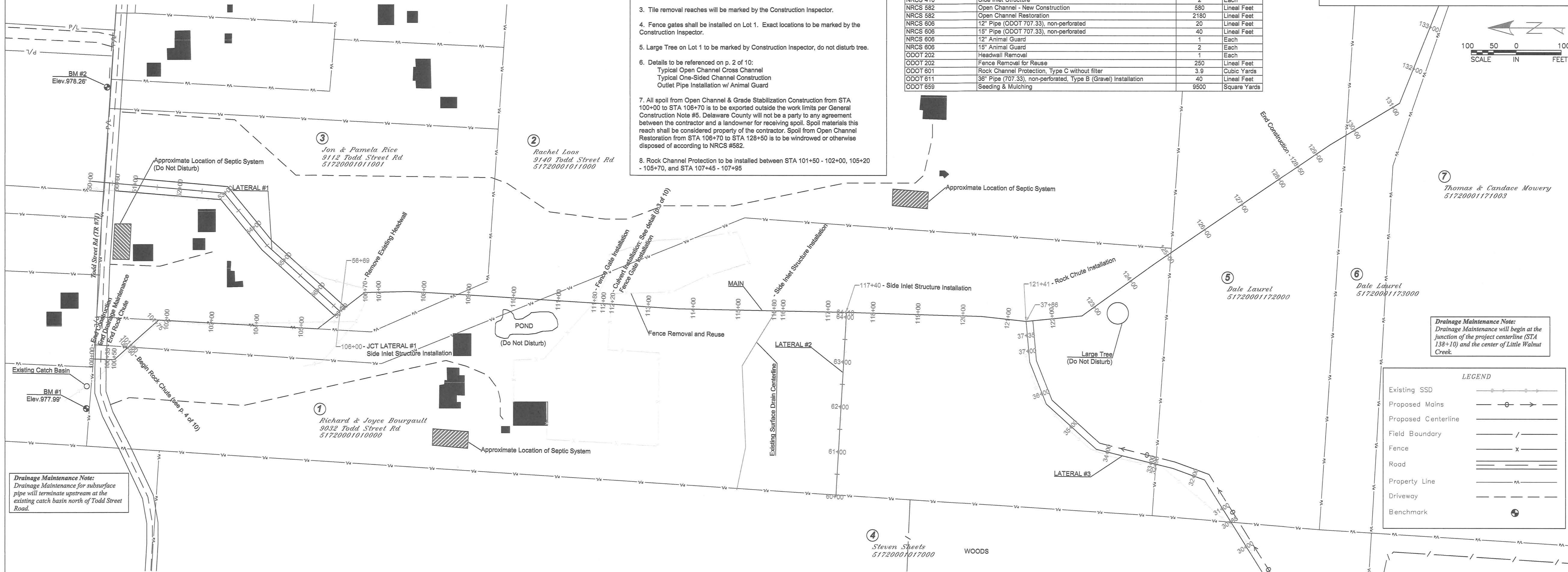
Design Data

Acres Drained	76
Chute Slope	8:1
Bottom Width (b) Varies	3
Side Slopes	2:1
De	2.4
Dc	1.9
V	9.8
Entrance Elevation	972.4'
Exit Apron Elevation	970.4'
Overfall	2.0'
Entrance Apron Length	10
Exit Apron Length	4
Type "C" Stone (Tons)	35.1
#57 Gravel Bedding (Tons)	11.7



ISOMETRIC VIEW

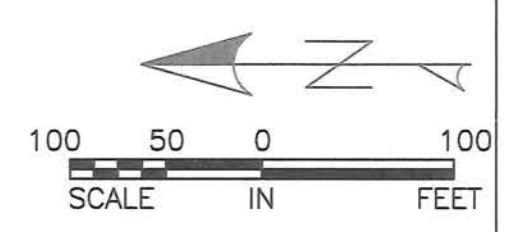
PLAN VIEW - RIBOV MAIN



- CONSTRUCTION NOTES**
- All General Construction Notes on P. 2 of 10 shall apply.
 - Clearing and snagging will be performed within the limits of the channel and swale construction as per the instructions in the General Construction Notes.
 - Tile removal reaches will be marked by the Construction Inspector.
 - Fence gates shall be installed on Lot 1. Exact locations to be marked by the Construction Inspector.
 - Large Tree on Lot 1 to be marked by Construction Inspector, do not disturb tree.
 - Details to be referenced on p. 2 of 10:
 Typical Open Channel Cross Channel
 Typical One-Sided Channel Construction
 Outlet Pipe Installation w/ Animal Guard
 - All spoil from Open Channel & Grade Stabilization Construction from STA 100+00 to STA 106+70 is to be exported outside the work limits per General Construction Note #5. Delaware County will not be a party to any agreement between the contractor and a landowner for receiving spoil. Spoil materials this reach shall be considered property of the contractor. Spoil from Open Channel Restoration from STA 106+70 to STA 128+50 is to be windrowed or otherwise disposed of according to NRCS #582.
 - Rock Channel Protection to be installed between STA 101+50 - 102+00, 105+20 - 105+70, and STA 107+45 - 107+95

RIBOV #620 Main A			
Item	Description	Quantity	Unit
NRCS 326	Clearing & Snagging	LUMP	N/A
NRCS 382	Fence Gate	2	Each
NRCS 410	Grade Stabilization Structure	1	Each
NRCS 410	Side Inlet Structure	2	Each
NRCS 582	Open Channel - New Construction	560	Lineal Feet
NRCS 582	Open Channel Restoration	2180	Lineal Feet
NRCS 606	12" Pipe (ODOT 707.33), non-perforated	20	Lineal Feet
NRCS 606	15" Pipe (ODOT 707.33), non-perforated	40	Lineal Feet
NRCS 606	12" Animal Guard	1	Each
NRCS 606	15" Animal Guard	2	Each
ODOT 202	Headwall Removal	1	Each
ODOT 202	Fence Removal for Reuse	250	Lineal Feet
ODOT 601	Rock Channel Protection, Type C without filter	3.9	Cubic Yards
ODOT 611	36" Pipe (707.33), non-perforated, Type B (Gravel) Installation	40	Lineal Feet
ODOT 659	Seeding & Mulching	9500	Square Yards

RIBOV #620 DRAINAGE IMPROVEMENT PROJECT MAIN A

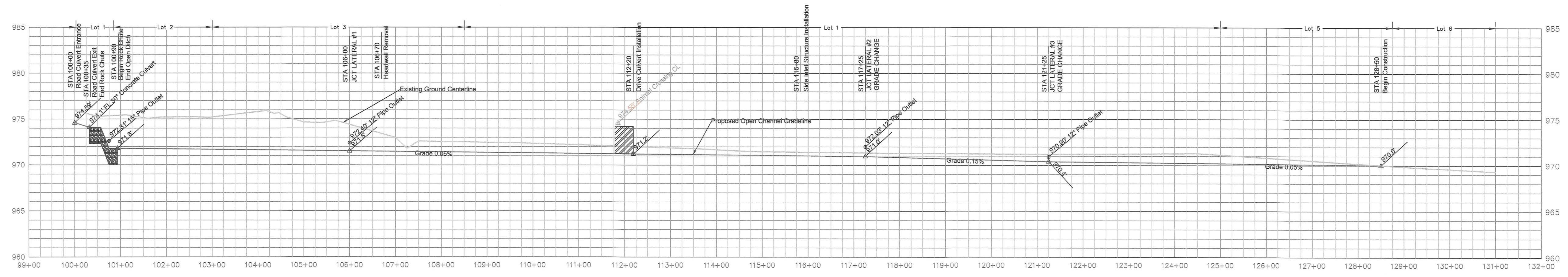


Drainage Maintenance Note:
 Drainage Maintenance will begin at the junction of the project centerline (STA 138+10) and the center of Little Walnut Creek.

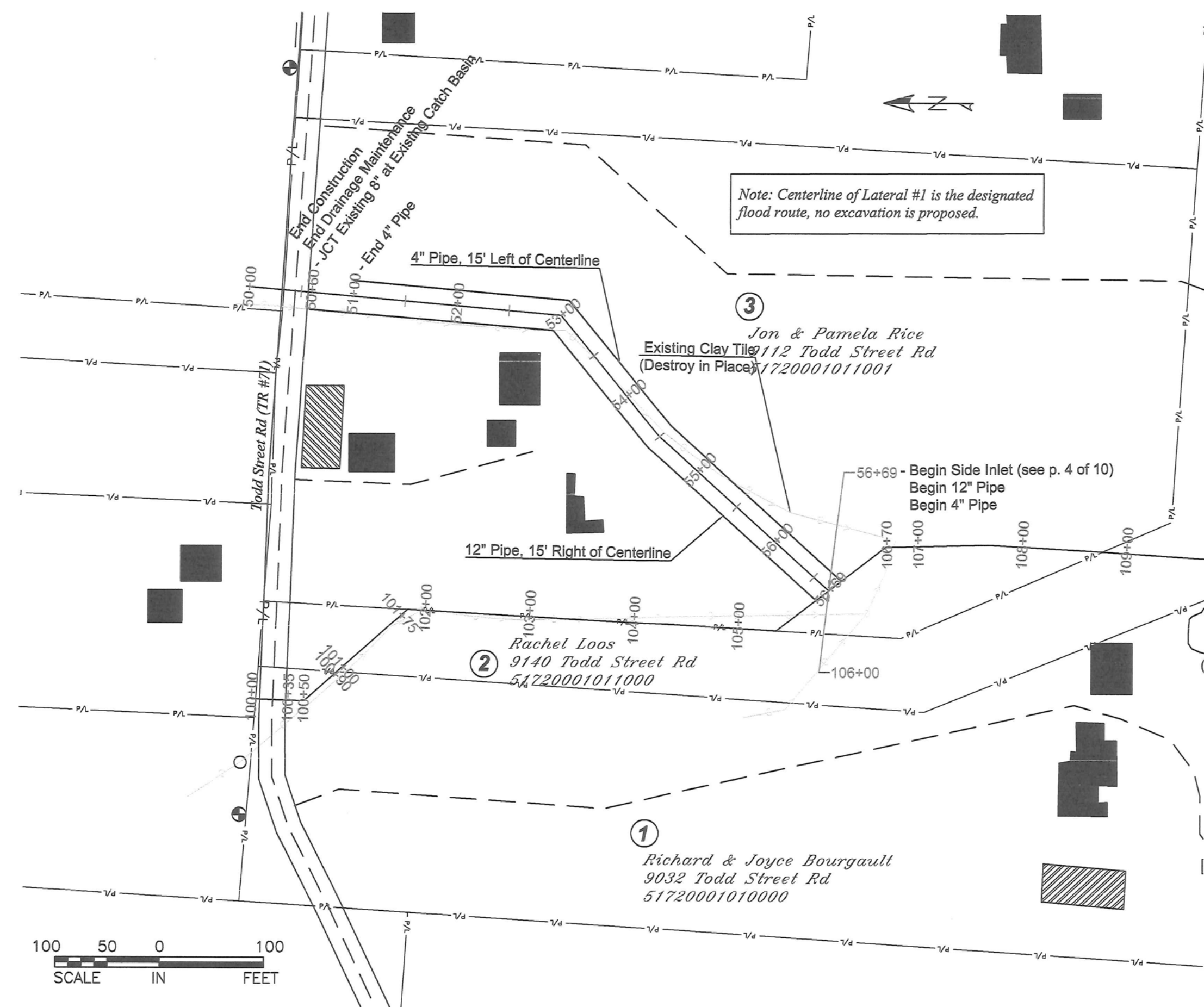
LEGEND

- Existing SSD
- Proposed Mains
- Proposed Centerline
- Field Boundary
- Fence
- Road
- Property Line
- Driveway
- Benchmark

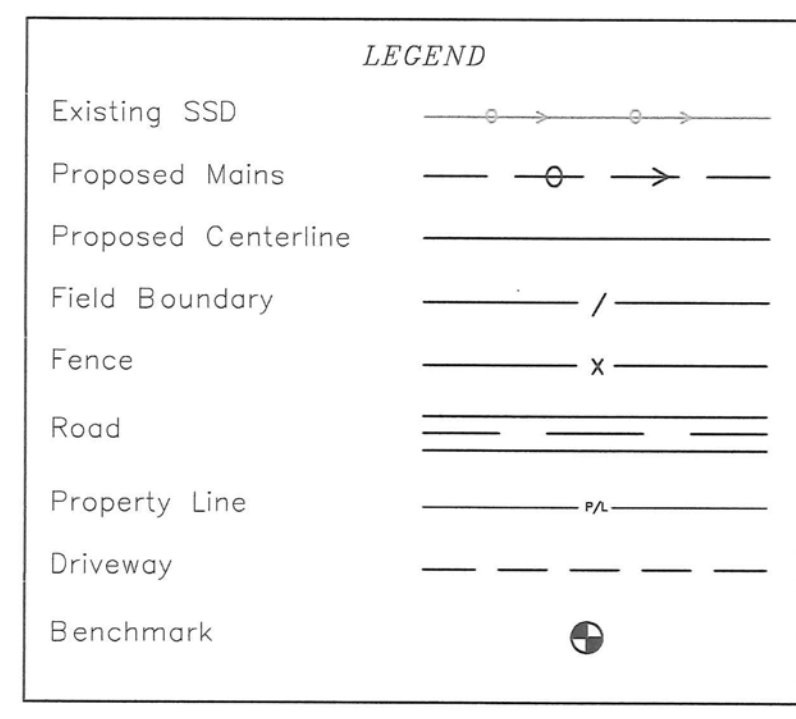
RIBOV MAIN PROFILE



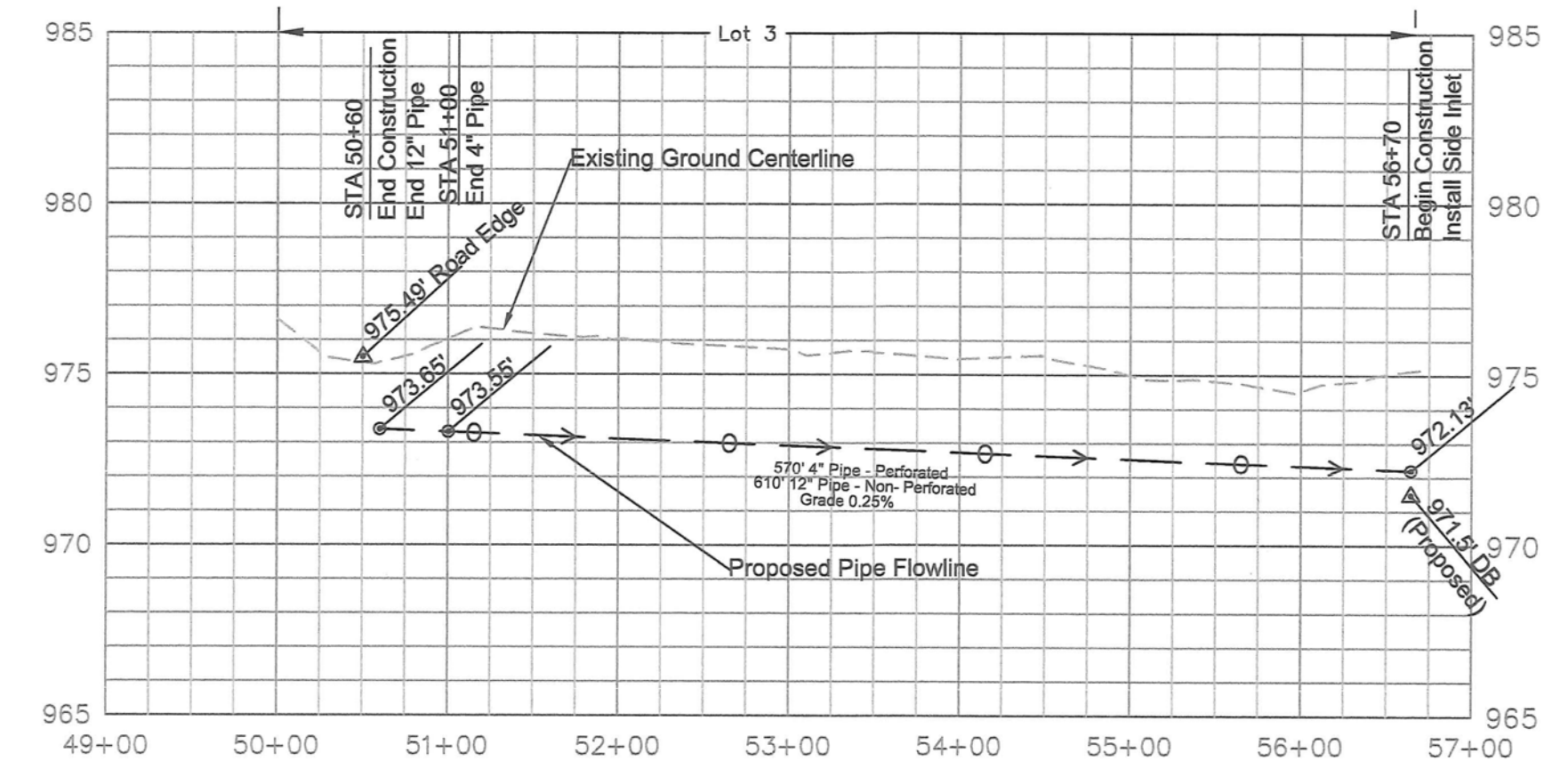
PLAN VIEW - LATERAL #1



- CONSTRUCTION NOTES**
- All General Construction Notes on P. 2 of 10 shall apply.
 - Clearing and snagging will be performed within the limits of the channel and swale construction as per the instructions in the General Construction Notes.
 - Tile removal reaches will be marked by the Construction Inspector.
 - Details to be referenced on p. 2 of 10:
 Typical Surface Drain Cross Section
 Typical Subsurface Drain Installation
 Typical Subsurface Drain Lateral Connection
 Outlet Pipe Installation w/ Animal Guard
 Inspection Well Installation

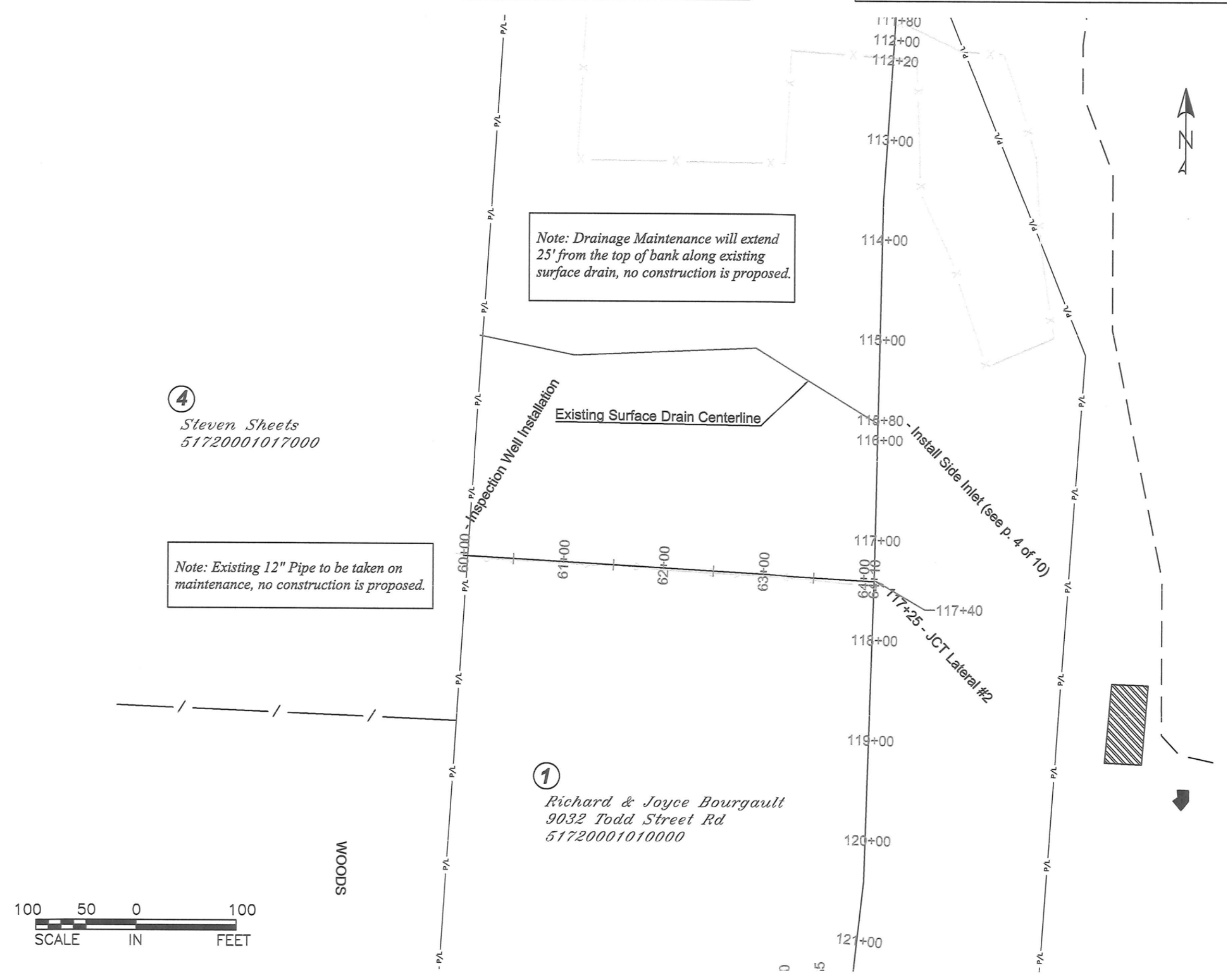


LATERAL #1 PROFILE

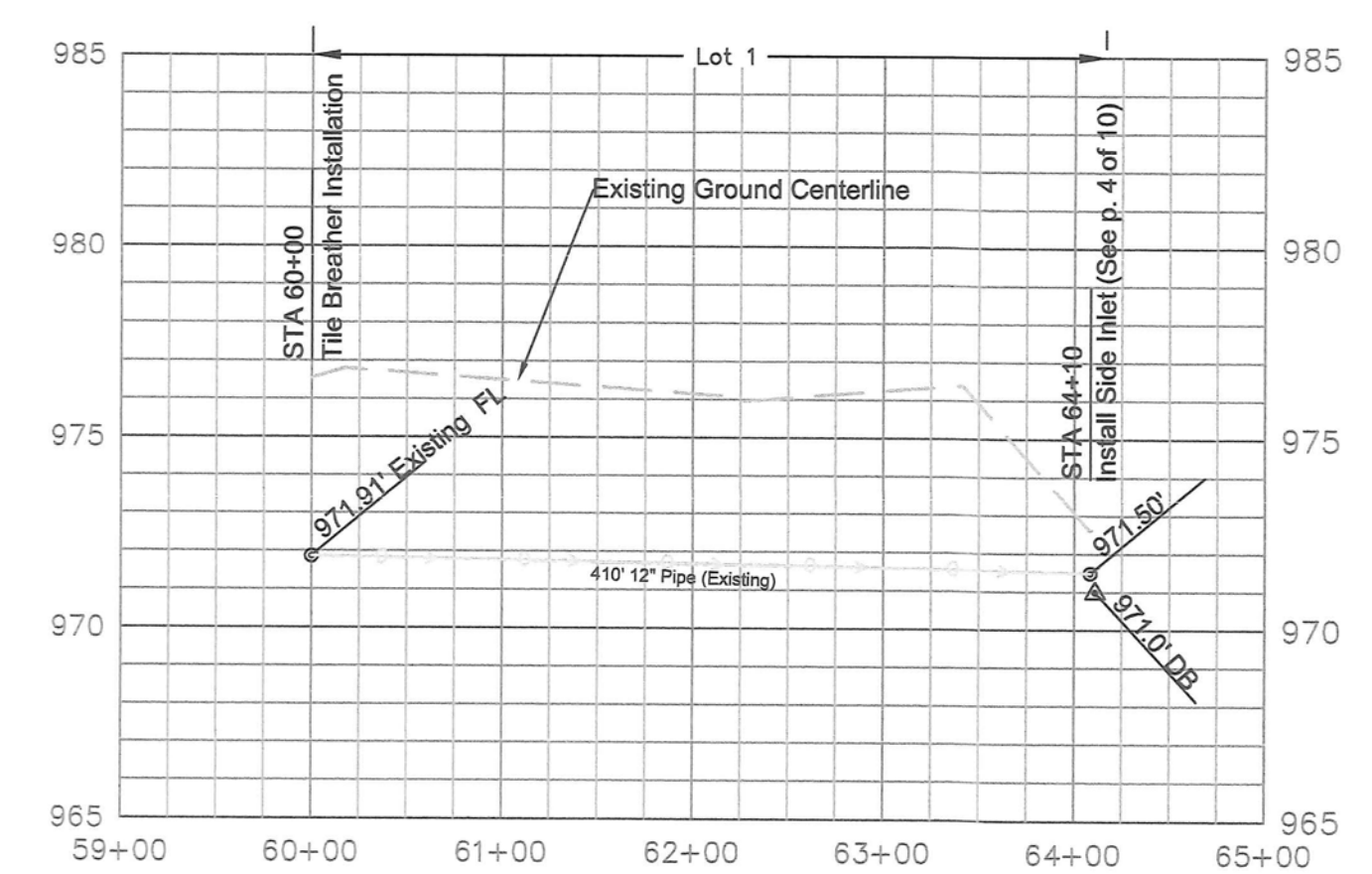


RIBOV #620 Lateral #1			
NRCS 606	4" Pipe (ODOT 707.33), perforated	570	Lineal Feet
NRCS 606	8" Pipe (ODOT 707.33), non-perforated	10	Lineal Feet
NRCS 606	12" Pipe (ODOT 707.33), non-perforated	610	Lineal Feet
NRCS 606	Tile Inspection Well	1	Each
ODOT 202 Supplemental	Tile Removal, Disposal in Place	689	Lineal Feet
ODOT 659	Seeding & Mulching	1360	Square Yards

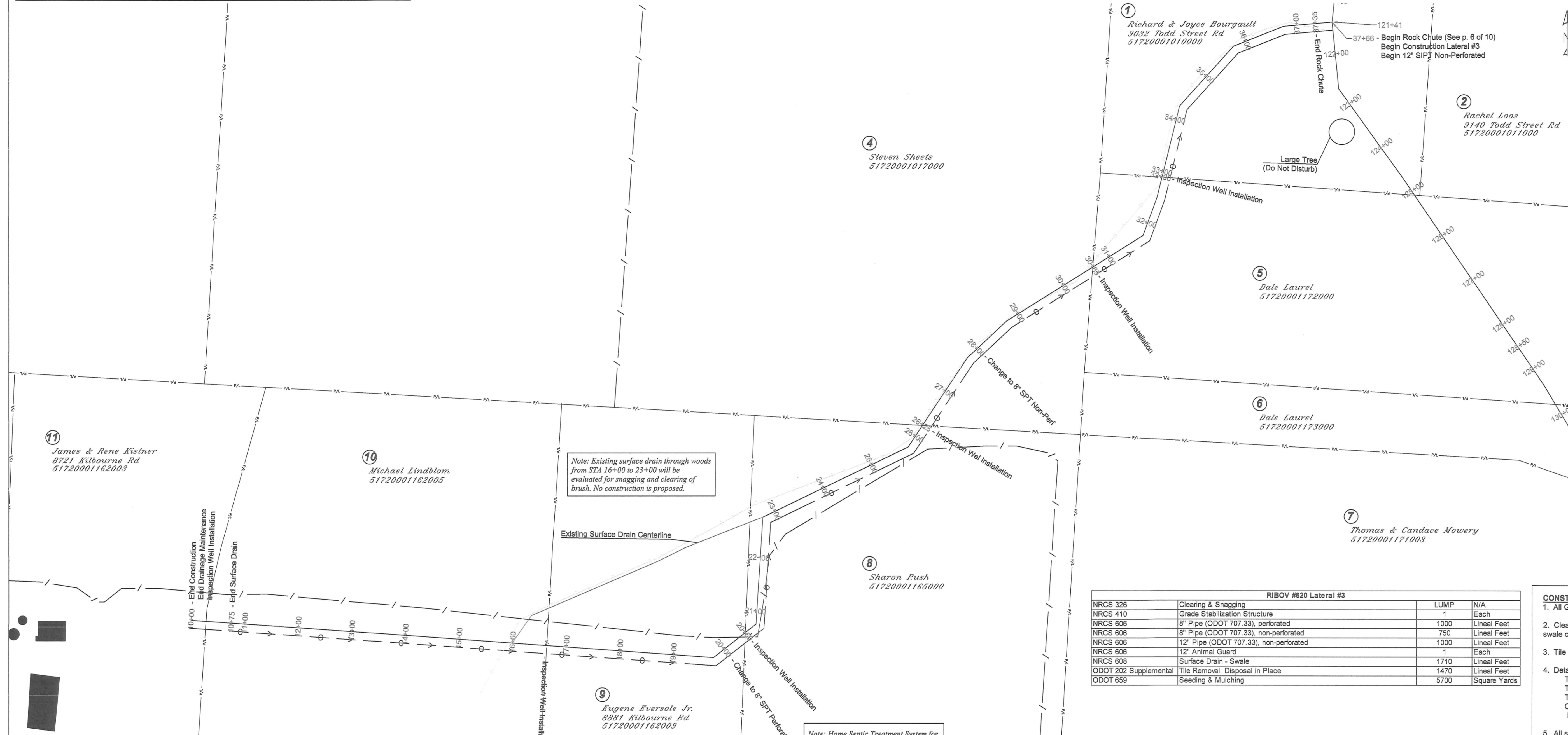
PLAN VIEW - LATERAL #2



LATERAL #2 PROFILE

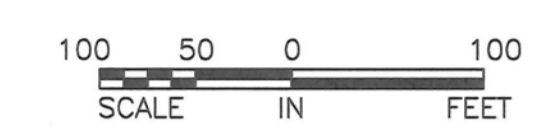


PLAN VIEW - RIBOV LATERAL #3



LEGEND

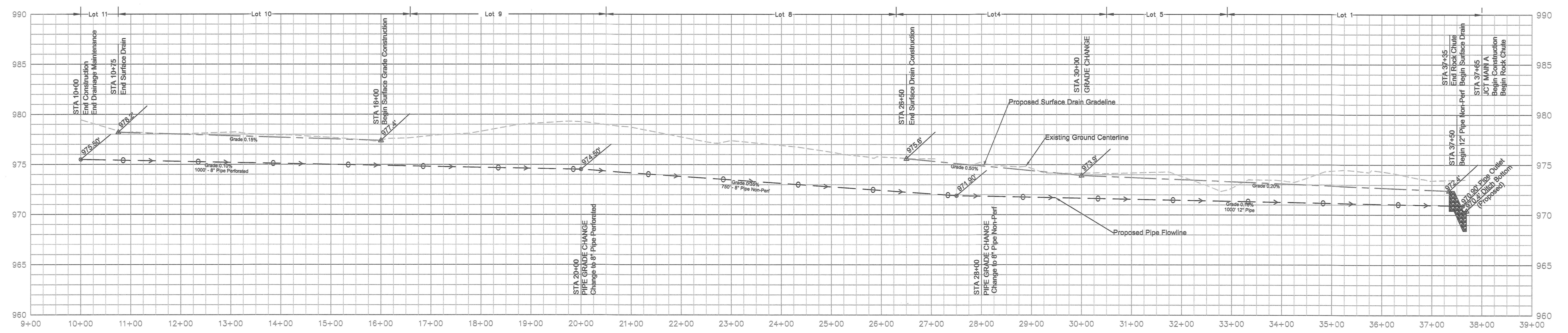
- Existing SSD
- Proposed Mains
- Proposed Centerline
- Field Boundary
- Fence
- Road
- Driveway
- Benchmark



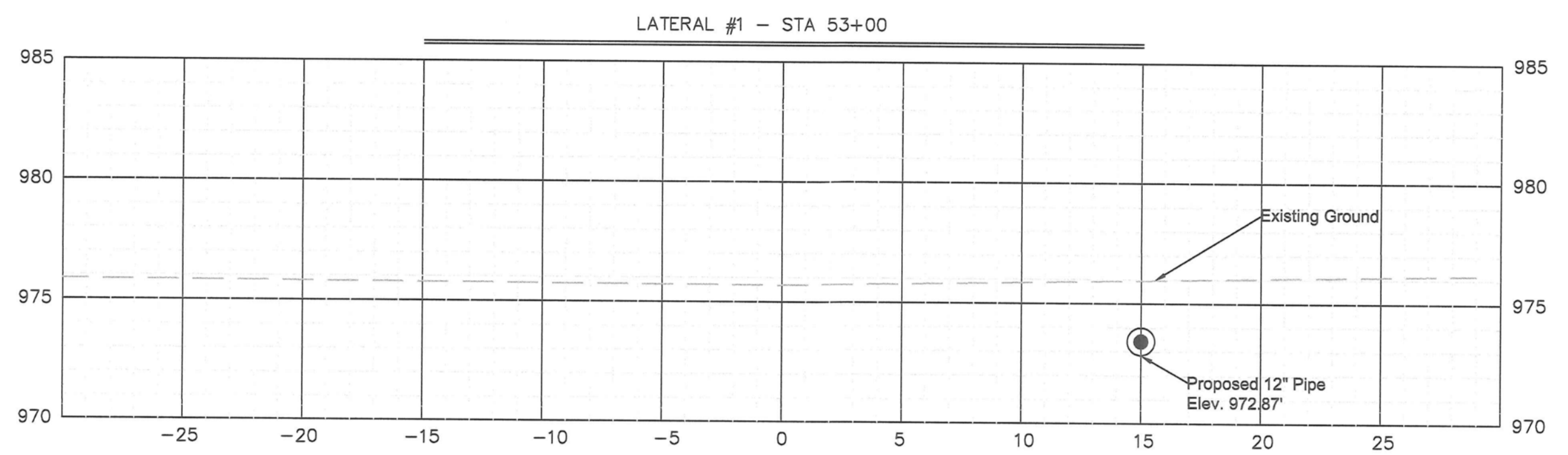
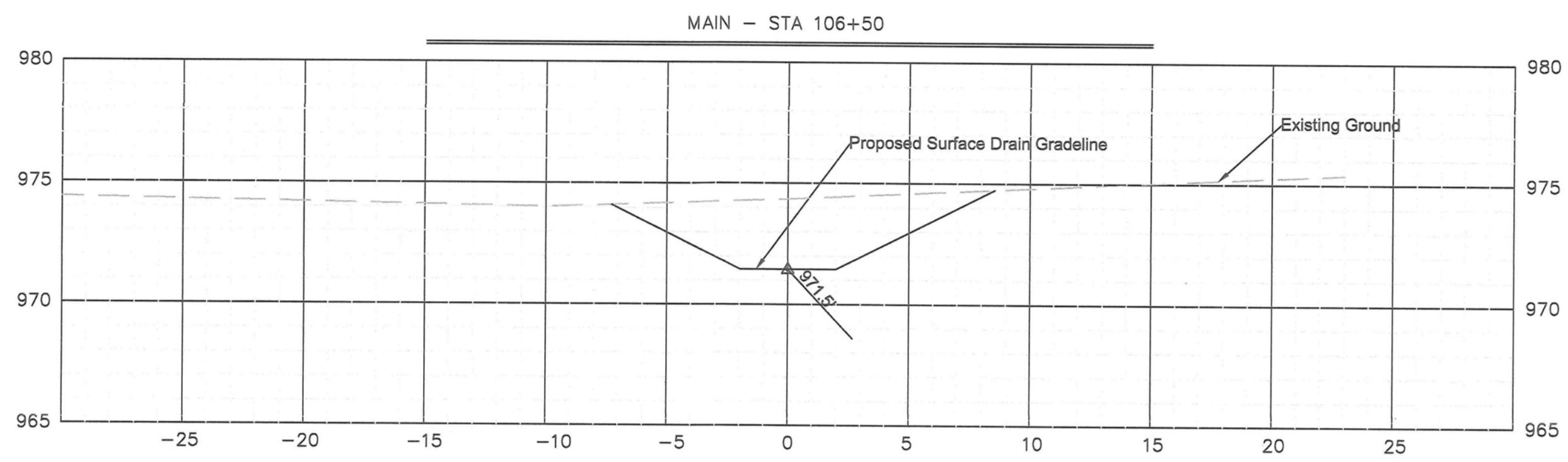
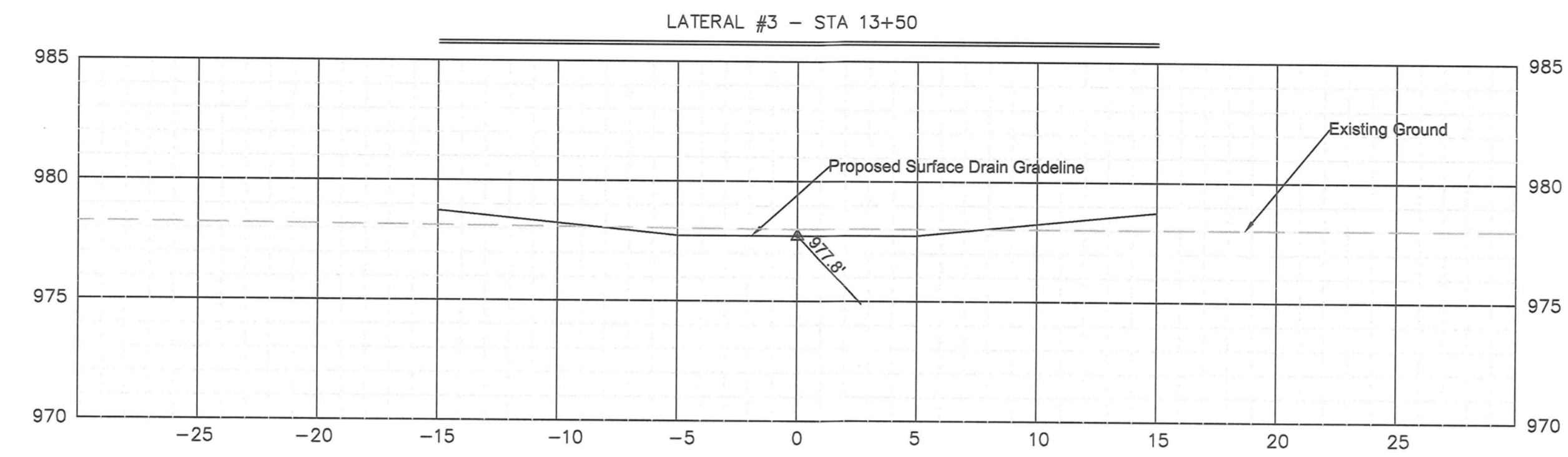
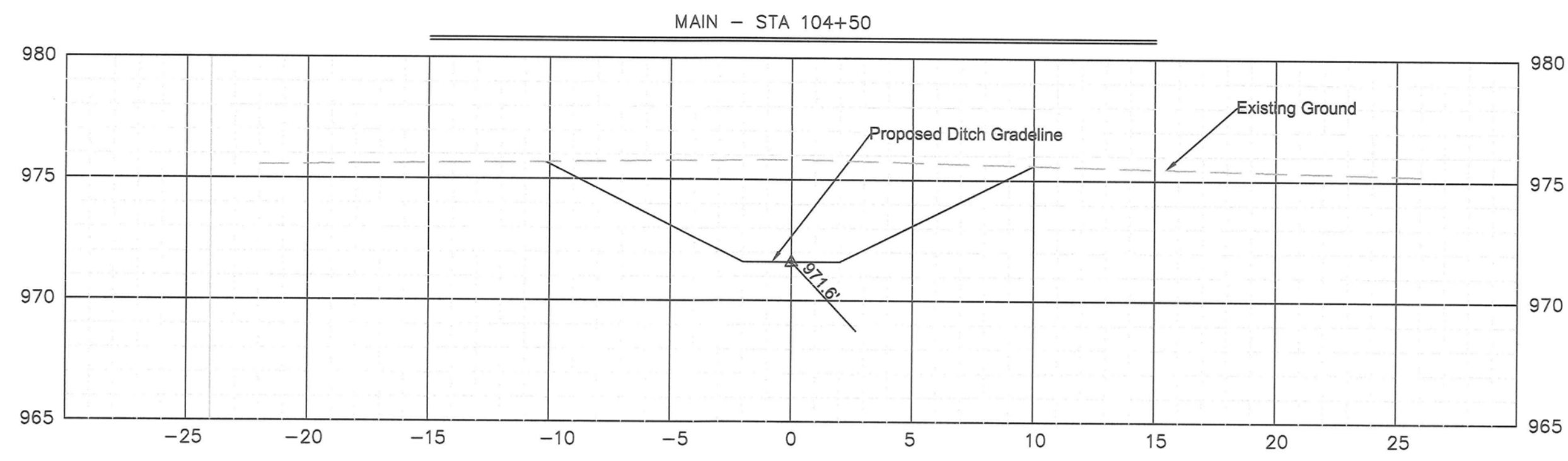
RIBOV #620 Lateral #3		
NRCS 326	Cleaning & Snagging	LUMP / N/A
NRCS 410	Grade Stabilization Structure	1 / Each
NRCS 606	8" Pipe (ODOT 707.33), perforated	1000 / Linear Feet
NRCS 606	8" Pipe (ODOT 707.33), non-perforated	750 / Linear Feet
NRCS 606	12" Pipe (ODOT 707.33), non-perforated	1000 / Linear Feet
NRCS 606	12" Animal Guard	1 / Each
NRCS 608	Surface Drain - Swale	1710 / Linear Feet
ODOT 202 Supplemental	Tile Removal, Disposal in Place	1470 / Linear Feet
ODOT 659	Seeding & Mulching	5700 / Square Yards

- CONSTRUCTION NOTES**
- All General Construction Notes on P. 2 of 10 shall apply.
 - Clearing and snagging will be performed within the limits of the channel and swale construction as per the instructions in the General Construction Notes.
 - Tile removal reaches will be marked by the Construction Inspector.
 - Details to be referenced on p. 2 of 10:
 Typical Surface Drain Cross Section
 Typical Subsurface Drain Installation
 Typical Subsurface Drain Lateral Connection
 Outlet Pipe Installation w/ Animal Guard
 Inspection Well Installation
 - All spoil is to be exported from the site per General Construction Note #5. Payment for spoil export shall be considered as incidental to payment for NRCS items #562 and #606.

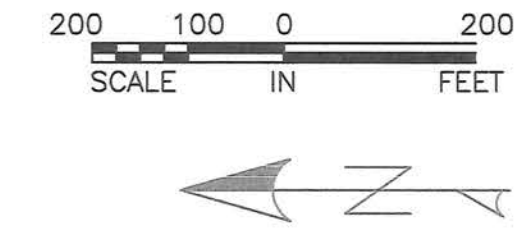
LATERAL #3 PROFILE



CROSS-SECTIONS



SCALE
HORIZ: 1" = 10'
VERT: 1" = 5'



LEGEND

Proposed Centerline	—
Road	====
Property Line	- - - -
Driveway	- - - -
Building	■

NOTE: All areas disturbed within the construction and maintenance easement area shall be returned to their pre-construction condition at the expense of the contractor. Payment for any remediation will be considered incidental to the listed items of work. The contractor shall take extra care to ensure the minimal disruption of any access easement and shall perform any necessary remediation work at the earliest possible convenience.

