

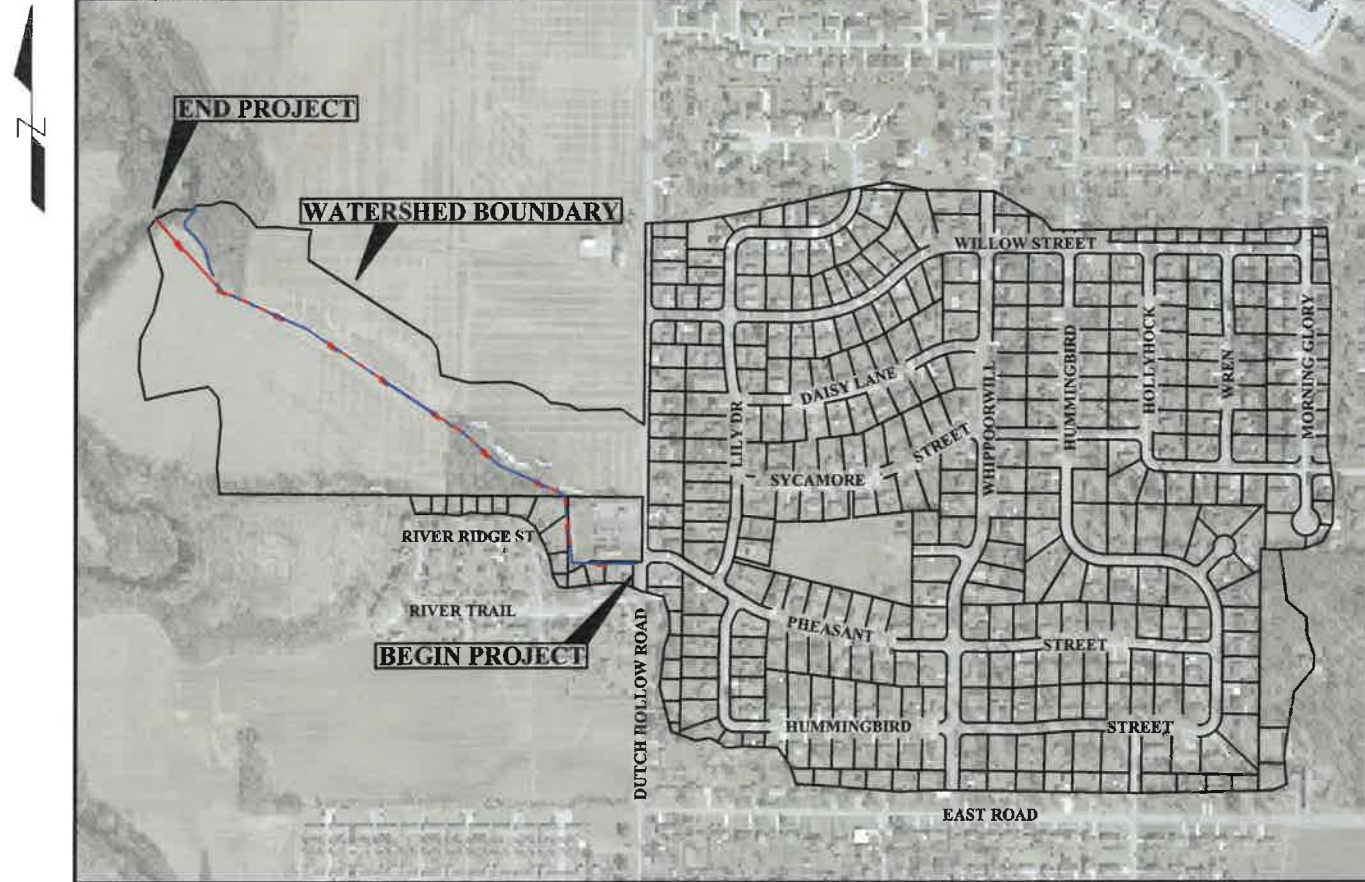
ALLEN COUNTY, OHIO CONSTRUCTION DRAWINGS FOR DUTCH HOLLOW DRAINAGE IMPROVEMENT COUNTY PETITION DITCH #1344

2024

CONVENTIONAL SYMBOLS

	EXISTING	PROPOSED/NEW
FENCE LINE (EX)		
CENTER LINE		
RIGHT OF WAY (EX)		
CHANNEL EASE. (PR)		
UTILITY EASE. (EX)		
GAS LINE (EX)		
WATER LINE (EX)		
STORM LINE (EX)		
SANITARY LINE (EX)		
OVERHEAD ELECTRIC		
DITCH / CREEK (EX)		
DITCH / CREEK (PR)		
TREE LINE (EX)		
CONTOURS (EX)		
CONTOURS (PR)		
PROPERTY LINE SYMBOL		
BREAK LINE SYMBOL		

TREE (PR)		TREE (EX)		SHRUB (EX)	
TREE (REMOVE)		SHRUB (REMOVE)			
EVERGREEN (EX)		STUMP			
EVERGREEN (REMOVE)		STUMP (REMOVE)			
WETLAND (PR)		GRASS (PR)		AERIAL TARGET	
POST (PR)		MAILBOX (EX)		MAILBOX (PR)	
LIGHT (EX)		TELEPHONE MARKER (EX)			
FIRE HYDRANT (EX)		WATER METER (EX)			
WATER VALVE (EX)		UTILITY VALVE UNKNOWN (EX)			
TELEPHONE POLE (EX)		POWER POLE (EX)			
LIGHT POLE (EX)		SAN. MANHOLE (EX)			
CATCH BASIN (EX)		CATCH BASIN (PR)			
BENCHMARK (EX)					



INDEX MAP
NOT TO SCALE

SHEET INDEX

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UNDERGROUND UTILITIES	
CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.	
 OHIO Utilities Protection SERVICE <small>(Non-members must be called directly)</small>	<i>Call Before You Dig</i> 1-800-362-2764
OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE 1-800-925-0988	

STANDARD CONSTRUCTION DRAWINGS (AS NOTED)

ODOT:
CB - 1.1 CB - 2.3-2.4

ODOT SUPPLEMENTAL SPECIFICATIONS (AS NOTED)

832 - 7/21/23

NOTE IN REGARD TO MAINTENANCE EASEMENT: In accordance with Section 6131.14 of the Ohio Revised Code, the County Engineer has established a twenty five (25) foot easement measured at right angles to the top of bank on both sides of the top of bank on all Open Ditches on maintenance. Such easement shall be considered part of the permanent improvement. In regard to WATERWAYS, the permanent easement shall be the FULL WIDTH OF THE WATERWAY AS CONSTRUCTED as according to the plans. The permanent easement shall also apply to a storm sewers as well. The permanent easement for STORM SEWERS shall be TWENTY (20) Feet WIDE centered on each side of the tile. The primary function of this easement is to establish a maintenance access for the purpose of routine maintenance activities. Landowners are not permitted to take action that interferes with the continued existence and usefulness of the maintenance easement and the County may secure the removal of any objects that cause such interference. No permanent fixed objects shall be placed within this easement other than crops or an approved vegetative cover.

ALLEN COUNTY ENGINEER

BRION E. RHODES, P.E., P.S.

P.E., P.S. STAMP

1344 DUTCH HOLLOW DRAINAGE IMPROVEMENTS
OPEN DITCH & SUB-SURFACE DRAINAGE IMPROVEMENTS
 AMERICAN TOWNSHIP SECTION 18, ALLEN COUNTY

TITLE PAGE



ALLEN COUNTY ENGINEERS
1501 N SUGAR ST,
LIMA, OH 45801

DESIGNER

REVIEWER

PROJECT ID

1344

SHEET	TOTAL
1	9

Work Description - Place tile underneath center of swale/ditch and re-grade ground from new ground to existing ditch bank elevation. Remove logjams, woody debris, standing trees as well as clearing and grubbing of areas as noted.

OVERALL LENGTH

Petition Ditch 1344 0.51 Miles

General Notes:

General Requirements - The Ohio Department of Transportation (ODOT) construction and material specification dated January 1, 2023, shall govern this project except when otherwise noted. Items listed shall conform to the State of Ohio Department of Transportation Construction and Material Specifications Manual, to the ODOT Office of Traffic Engineering Standard Construction Drawings, to the county construction specifications and standard drawings, and to any supplemental specifications and/or specific requirements noted.

Benchmarks - The Contractor shall carefully preserve benchmarks, reference points, and stakes. Any benchmark, reference point, or survey marker damaged or disturbed by the Contractor shall be reset by an Ohio Registered Surveyor at the Contractor's expense. The Contractor shall contact the Allen County Engineer's Office two (2) working days before disturbing any Allen County Geodetic Monuments (vertical and/or horizontal for reference and replacement). Should the contractor fail to properly replace these points, the Allen County Engineering Department shall replace these points at the Contractor's expense after three (3) weeks notice. The Contractor is to notify the County Engineer of any conflicts.

Safety Requirements: - The Contractor and all and all Subcontractors shall be solely responsible for complying with all federal, state, and any local safety requirements, together with exercising precautions at all times for the protections of persons (including employees) and property. It is also solely the responsibility of the Contractor and Subcontractor to initiate, maintain, and supervise all safety requirements, precautions, and programs in connection with the work, including all OSHA rules and regulations.

Work Schedule - The Contractor shall submit a tentative work schedule to the County Engineer prior to the pre-construction meeting. This schedule will detail the timing of the work activities for the various aspects of the project improvements. The schedule shall provide sufficient detail to the outline phases of work and any road closures, service connections, and restoration activities. The schedule shall be revised and redistributed throughout the duration of the project. The Contractor shall be responsible for communicating with the Inspector as to their weekly schedule. Every reasonable effort must be made by the Contractor to notify property owners at least 24 hours in advance of any closing of access to their property.

Utilities - Location of existing underground utilities is based on best available field and office information, but the accuracy is not guaranteed. depths of lines are approximate. The Contractor shall contact the Ohio Utilities Protection Service (OUPS) at 800-362-2764 at least two working days prior to planned work. The Contractor must work with the individual companies to reduce or eliminate conflict problems and to avoid unnecessary damage to the utility facilities or the project work.

Utility Ownership - The location of the underground utilities on the plans have been obtained by diligent field checks and searches of available records. They are believed to be correct, but Allen County does not warrant their accuracy or completeness. The following is a list of the owners of utilities known to be within the limits of construction.

Allen Water District 3230 N. Cole Street Lima, OH 45801 419-996-4679	American Township 102 Pioneer Rd Elida, Ohio 45807 419-331-8651	County Sanitary Engineer 3230 N. Cole St Lima, OH 45801 419-996-4670
Dominion East Ohio Gas Dave Cutlip 120 S. Jackson St. Lima, Ohio 45801 1-800-362-7557	AEP Joe Rocca 369 E. O'Connor Ave. Lima, OH 45801 419-998-5126 1-800-672-2231	Brightspeed (Buried Fiber) David Spurgeon II Network Implementation Engineer II 567-242-2882

Notice from Dominion - It is the contractor's responsibility to maintain the lateral and subjacent support of Dominion's pipeline(s), in compliance to 29 CFR, part 1926, subpart P, (safe excavation & shoring). one-foot minimum vertical and horizontal clearance must be maintained between Dominion East Ohio's (DEO) existing pipeline(s) and all other improvements. extreme care should be taken not to harm any DEO facility (pipelines, etc.) or appurtenance (pipe coating, tracer wire, cathodic protection test station wires & devices, valve boxes, etc.). DEO facilities must be protected with a tarp during bridge construction. the contractor will be responsible and liable for ensuring that all DEO existing facilities, above and below ground, remain undamaged, accessible and in working order. the crossing of DEO's pipeline with another steel facility may create a potential corrosion issue for the proposed facility and the existing DEO facility. please contact Dominion's corrosion department: Dave Cutlip (330-266-2121), Rick McDonald (330-266-2122), or Al Humrichouser (330-478-3757).

DEO = The East Ohio Gas Company, DBA Dominion East Ohio, 1-800-362-7557

Construction Layout - Allen County will provide all of the construction layout staking. The contractor shall notify the county engineering division at 419-228-3196 at least 48 hours in advance for any need for staking.

Unrecorded Abandoned Existing Pipes and Utilities - When unrecorded abandoned existing pipes and utilities are encountered by the contractor's work, the engineer shall be notified before proceeding with construction of any portion of the proposed work which would be affected by the interference with the existing facility. Upon direction from the Engineer, the Contractor shall remove and plug the unrecorded abandoned existing pipe or utility or work around it. Payment for the above work shall be included in the unit price bid for Item 203 - Open Ditch Excavation or Item 611 - Conduit.

Storm Sewer Acceptance - Prior to the final acceptance of the project by the County Engineer, all storm sewers installed or repaired shall be thoroughly cleaned and flushed with water. All new catch basins and manholes constructed as part of this project shall be free of all foreign matter and in a clean condition before the project will be accepted by the County Engineer.

Completion Date - Substantial completion of the project shall be on or before **March 31st, 2025.**

Maintaining Local Traffic - The work shall be scheduled so that local traffic can enter and exit the work area with little inconvenience.

- At least one lane of traffic shall be maintained along the travel route to the construction site.
- Access shall be maintained for emergency vehicles at all times.
- No trench shall be left open at the end of the day.
- Any construction equipment or excavation near roads shall be marked with lights or reflectors.
- The Contractor shall provide, erect, and maintain all necessary barricades, warning signs, danger signals, flaggers, watchers, and all other appropriate precautions necessary to the protection of the work and for safety.
- Prior to closing off clear access to any public alley, street, road, avenue, or boulevard, the Contractor shall have consent from the officials and the Engineer.

Waste Disposal - The Contractor and each Subcontractor shall be responsible for collecting and removing all waste materials, debris, etc. resulting from work at the site and disposing of same in compliance with all local, state and federal requirements.

Off-Site Vehicle Tracking - The Contractor shall provide a stabilized construction road at entrance and remove all mud, dirt, etc. tracked on public roadway as it occurs by the end of the day.

Sanitary Facilities - The Contractor shall provide sanitary accommodations in accordance with the requirements of the local and state boards of health.

Temporary Soil Stockpiles - Locate soil stockpiles away from concentrated storm water flows. Soil stock piles must be surrounded with silt fence. Inactive stockpiles should be covered with anchored tarps or protected with soil stabilization measures.

Graffiti and Vandalism - The Contractor shall be responsible for removal and replacement of any concrete or other pay item under this contract which is deemed unacceptable by the Engineer due to graffiti or vandalism.

Site Visit - The Contractor shall perform field reconnaissance to become acquainted with the existing site conditions and the potential effects upon the scope of work.

Rights Of Way - In addition to the direct requirements of the contract specifications, the Contractor shall observe and conform to the specific requirements of all Rights-of-Way, including easements, court entries, rights-of-entry, or action filed in court in accordance with the code of the applicable governing agency. The cost of the operations necessary to fulfill such requirements shall be included in the price bid for the various items of the contract unless specific provision is made in the contract specifications for such cost under specific items of the contract.

Work Limits - The Contractor is responsible for containing all performed work and all equipment, materials, vehicles, etc., used to complete the work within the rights-of-way of the streets, roadways, temporary easements, permanent easements and the property boundaries of the project improvements, as shown on these plans.

The Contractor is responsible for cost of the restoration for any area outside of the right-of-way, permanent easements or project property boundaries to former condition of better and to the satisfaction of the Property Owner and the County Engineer.

Pruning - Branches or growth which interferes with the free construction of the project may be removed from trees/bushes that are to be saved by the use pruning tools with prior approval from the County Engineer. All pruning tools used and methods employed shall meet the approval of the County Engineer. The branches shall be removed with a good clean cut flush with the parent trunk or, if having a good healthy lateral branch, the cut shall be a good clean slanting cut close to and beyond the healthy branch. All pruning cuts shall be painted with an accepted pruning preservative. The cost of all work and expenses connected with tree pruning shall be included in the price bid for Item 201 - Clearing and Grubbing. No Extra payment shall be made.

Structure Adjustment - The Contractor shall field verify the top of casting elevation of all proposed drainage structures. If precast structures are utilized, a minimum of the top 0" and a maximum of 12" shall be field placed either with grade rings or brick and mortar to allow for field adjustment.

Engineer Quantities - The Contractor shall not order materials or perform work for items designated by plan note to be used "As Directed By the County" unless authorized by the County Engineer. The actual work locations and quantities used for such items shall be incorporated into the final change order governing completion of this project.

Cleanup - The Contractor shall be responsible for the immediate cleanup of any debris, mud or dirt tracked or spilled on the public streets or private drives whether inside or outside the project area. The Contractor is responsible for the cost of any services contracted and/or completed by the County Engineer in the cleanup of any tracking or spillage anytime during project construction. The Engineer may require the Contractor to perform weekly street cleaning if excessive amounts of dirt and mud are left along the street. This may include removal by sweeping, power cleaning, or manual methods. The cost of this work shall be included in the various contract items, unless otherwise specified.

Construction Debris - All debris, rubble, unusable materials, and items not salvaged by the Owner shall become the property of the Contractor and shall be removed from the site by the Contractor and disposed of properly.

Elevation Datum - Elevations are based on North American Vertical Datum of 1988 (NAVD 88)

Access - Access to adjoining properties shall be maintained at all times.

Access to the Work Area - During construction of the project, Contractor shall minimize vehicular travel along unstabilized sloped areas. Contractor shall maintain a minimal number of access points for construction vehicles to enter the offroad work areas.

Complete Project - The Contractor shall be required to construct a complete project, meeting the intent of these drawings and specifications. Any items required to complete the work that do not have a specific method of payment described shall be performed by the Contractor, the cost of the work shall be included in the price for the various related items.

108.07 Failure to Complete on Time - For each working day that any work shall remain uncompleted after the contract completion date, the sum specified herein will be deducted from any money due to the Contractor, not as a penalty, but as liquidated damages; provided, however, that due account shall be taken of any adjustment of the completion date granted under the provisions of 108.06.

Permitting the Contractor to continue and finish the work or any part of it after the date fixed for its completion, or after the date to which completion may have been extended, will in no way operate as a waiver on the part of the county of any rights under the contract.

Schedule of Liquidated Damages		
Original contract amount from more than	to and including	Liquidated damages each calendar day
\$0	\$500,000	\$400
\$500,000	\$2,000,000	\$600
\$2,000,000	\$10,000,000	\$900
\$10,000,000	\$50,000,000	\$1,650
over \$50,000,000		\$3,970

"As Constructed Drawings" - The Contractor shall keep an accurate record of all elevation deviations from the drawings and make this information available during working hours. At the completion of work, the Contractor shall give to the Owner a marked-up set of drawings showing all deviations of locations and elevations as shown on the drawings.

Supplemental Specifications:

Item 201 - Clearing and Grubbing - All trees, stumps, brush, saplings, flood wood, fallen timber, logjams, branches, or other obstructions on this project, within the riparian wooded corridor created for point access, shall be disposed of by the Contractor as designated below. All trees that are leaning in the direction of the ditch may need to be removed, based upon the decision of the County Engineer or Project Inspector. The Project Inspector may choose to designate trees to be removed with bright paint. Select trees may be left along the berm and will be designated prior to construction by the Project Inspector. Trees to be left will be designated with a bright ribbon. Payment for all trees to be removed less than 12" diameter shall be included in the lump sum price bid for Item 201 - Clearing & Grubbing. All debris shall be disposed of by one of the following methods:

- A: Chip and mulch all materials in place and in a location as approved by the County Engineer or the Project Inspector. The chipped materials may be either worked into the soil adjacent to the ditch within the work limits or hauled outside of the watershed to an approved site, unless requested to be left by the Parcel Owner. If a wooded riparian corridor exists, the chips may be spread within the wooded area.
- B: Place the logged trees outside of the temporary right-of-way of the project in a location that has been designated by the landowner adjacent to that section of the project. These logs shall be neatly piled and also free of any excavated material. Written permission shall be obtained by the landowner for this operation. No stumps or brush shall be left on site.
- C: Place the material in any other place as designated by the County Engineer. This does not mean that the County Engineer will always designate such a place. If the County Engineer chooses not to designate such a place, then the Contractor shall exercise one of the above two options.

Problem Area Identification

Tree Removal Classifications: All living trees that are to be removed shall be designated as follows:
Tree Removal (TR): Identify areas where living trees and/or stumps are to be removed at the edge of the channel to the top of the bank. The living tree/stump removal shall be necessary due to flow restriction or classified as being in poor health as determined under the direction of the Allen County Drainage Engineer. Size of living tree/stump removals to be designated by size (measured at 54" height for trees) denoted in the plans by:
 TR18 - over 12"-24" diameter
 TR30 - over 24"-36" diameter
 TR48 - over 36"-60" diameter
 TR60 - over 60" diameter.

Locate pipes and farm drains outletting into the ditch. Note the condition and size of the drain outlets and whether they need to be replaced. Where the ditch is open enough to locate pipe outlets with GPS, we will utilize GPS. Where cover is too dense for GPS, the outlets will be located by approximate methods. If Where outlets are damaged/rusted thru, they are shown on the plans as p/re (pipe replace end). If flows from tile are erosive and show erosive qualities, use Rock Channel Protection, Type "C", W/Filter at these areas to correct these qualities.

Other items: The Engineer shall locate any other items or area that may be hindering the flow of storm water through the channel. A description and plan designation shall be assigned to each item.

Trees / Vegetation Protection

- Tree removal shall be limited to that necessary for construction and shall be limited to the permanent easement unless explicitly permitted by the Engineer.
- No tree removal shall be permitted outside the temporary easement without permission of the Engineer.
- Trees which are not to be removed shall be protected from injury by trees being felled.
- Prior to clearing, the Contractor and Engineer shall walk the acquired easements and designate the trees that are to be saved. Trees to be cut down shall be clearly marked by paint with the letter "x".
- Soil and other material shall not be stored next to or within the drip-line of trees.
- Preservation of landscaping should take precedence over removal. If removal or damage is unavoidable, existing vegetation shall be repaired or replaced "in-kind" unless the land owner specifies otherwise.
- If trees/shrubs cannot be replaced in the same location due to installation of the storm sewer, relocation of the trees/shrubs shall be considered.
- The Contractor shall repair all injuries to bark, trunks, limbs, and roots of remaining vegetation by properly dressing, cutting, and bracing, using only approved tree surgery methods, tools, and materials. When roots are damaged during excavation, the above-ground portion of the tree shall be pruned to compensate.
- Selective pruning of tree limbs prior to construction shall only be done within established easements where removal is necessary for operation of equipment.
- Limit the use of rip-rap to areas where stream flow conditions preclude vegetative stabilization.

Item 202 - Pine Removed, As Per Plan - The Contractor shall remove existing storm pipe that is encountered, within proposed storm sewer trench, throughout the project. Where catch basins and manholes are shown for removal and the inlet and/or outlet pipe is not shown to be used, the pipe may be abandoned in place. The ends of the pipe shall be sealed with precast stoppers or with masonry of a type and thickness acceptable to the Engineer. Payment for the work shall be included in the unit price bid for Item 611 - Conduit.

General Notes continue on Sheet 3...

**1344 DUTCH HOLLOW DRAINAGE IMPROVEMENTS
OPEN DITCH & SUB-SURFACE DRAINAGE IMPROVEMENTS
AMERICAN TOWNSHIP SECTION 18, ALLEN COUNTY**

GENERAL NOTES



ALLEN COUNTY ENGINEERS
1501 N SUGAR ST.
LIMA, OH 45801

DESIGNER

REVIEWER

PROJECT ID

1344

SHEET TOTAL

2

9

Item 203 - Embankment - Spoil from the excavation process shall be leveled not to exceed one (1) foot in depth and shall not be placed in such a manner as to restrict surface water flow. The entire temporary right-of-way may be utilized to accomplish this operation. All excavated material not needed in the construction of this improvement, or establishment of the filtration/maintenance drives, shall be spread or disposed of so it will not interfere with the flow of water into the drainage ditch. If necessary, the Contractor shall be required to remove the material from the project site (residential areas) or to an approved location within the project site (requires the County Engineer's and Property Owner's approval). Permission from property owners shall be in writing and a copy of this document shall be provided to the Allen County Engineer's Office.

The temporary right-of-way shall be a total of seventy-five (75) feet centered over the tile. The Contractor shall have full use of this right-of-way during the construction of this project. The permanent easement for maintenance shall be twenty five (25) feet centered over the tile.

Full depth raking shall be completed a minimum of twice with the second raking perpendicular (90 degrees) to the first. Debris shall be picked up by the contractor. All material, including but not limited to, concrete, trash, solid waste, and rubbish, other than the Clearing & Grubbing related items, that is encountered within the seeding limits must be hauled away and disposed of outside of the watershed by the Contractor. Payment is included in the unit price bid for Item 203 - Embankment. The Contractor is responsible for inspecting the entire limits of the project before submitting the bid.

All rocks encountered during the project, which are three (3) inches in diameter or larger, must be removed from the site by the Contractor. If required, a rock picker must be utilized in dense areas. It may be necessary to go over an area more than once to adequately pick up the rocks. If directed by the County Engineer or Project Inspector, the Contractor may be required to disk the area and pick up the rocks several times until the work is approved. Payment for this work is included in the unit price bid for Item 203 - Embankment.

All residential properties, as well as other non-agricultural areas that may be indicated on the plans, shall be free of all stones 1 inch or greater in any dimension and shall have a smooth surface. In such areas, hand raking will be required if inaccessible to machines, and may be required if machines do not provide results equivalent to hand raking. Payment for the work necessary for proper preparation of the seedbed shall be included in the unit price bid for Item 203 - Embankment.

It shall be the responsibility of the Contractor to maintain all surface and subsurface drainage facilities in the proper working order during all phases of construction.

For this project, there will be no soil moved onto or from the site. As excavation and embankment quantities are the same, all soil and spoils to be excavated within the tile placement and the tying back of the surface into existing adjacent grade, will be spread outside of the floodway while staying on site.

Item 601 - Rock Channel Protection, Type "C" or "D", W/ Filter - Furnish material conforming to ODOT CMS 703.19. When specified with a filter, provide a filter consisting of filter fabric or a 6-inch (150 mm) bed of aggregate conforming to ODOT CMS 703.19. When placing rock, exercise reasonable care to ensure that the finished surface of the protected channel conforms to the channel cross-sections shown on the plans.

Locations for Item 601 - Rock Channel Protection, Type "C" or "D" W/ Filter to be placed within this project is as follows:

1. It is a labeled location on the plans. All locations shall conform to any dimensions as shown within the plans to slow erosion from corrosive flows. (Ex: 117/S Copus Amendment Outlet into Ditch)
2. Misc. tile outlets in the ditch that are showing corrosive flows as designated by the Project Inspector or the Drainage Engineer on site. The placement of this protection shall be adequate to slow the erosion from corrosive flows.

Item 607 - Fence Removed and Replaced - The Contractor shall be responsible for restoring all fences disturbed or damaged during construction, whether shown on the plans or not, to their original or better condition and location to the satisfaction of the Property Owner and the County Engineer.

Item 611 - Conduit, As Per Plan - All conduit placed under the roadway shall conform to the State of Ohio, Department of Transportation, Construction and Material Specifications item 707.33. The size of the conduit shall be as shown on the plans. Where the plans call for proposed conduit to cross either over or under an existing sewer, it shall be the responsibility of the Contractor to locate the existing pipe, both as to line and grade before starting to lay the proposed conduit for possible conflicts. All rigid material including, but not limited to asphalt, concrete, brick, curb & gutter, drive approaches, pipe, stone and soil necessary to be removed to obtain the proper elevations is to be included in the unit price bid for Item 611 - Conduit. Prior to excavation of rigid material, the Contractor shall saw cut, full depth of material to create a straight edge for new material connection. When plans call for placement of new conduit into an existing structure, Contractor shall core existing structure using a circular bit. When connection of an existing pipe is necessary, Contractor shall make the connection of the two (2) pipes with a fernco or approved gasket. Concrete and/or mortar is not an acceptable way to connect two (2) pipes. Payment for the above material and labor necessary to install and backfill the conduit shall be included in the unit price bid for Item 611 - Conduit.

Item 611 - Catch Basin, As Per Plan

This work included all labor, material, and equipment required to construct or reconstruct manholes and catch basins of the type and sizes specified. Used removed or excavated materials in the work when the material conforms to the specifications; if not, the recycle or dispose of the material.

Construct the specified structures according to the plans. Place catch basins at the locations and elevations shown in the plans according to the Standard Drawings or as directed by the Engineer. Place manhole castings at the elevation and station with offset to the center of the casting or as directed by the Engineer. Place the manhole base at the elevation and station with offset to agree with the pipe station, offset and pipe invert elevation according to the Standard Drawings or as directed by the Engineer. Use flat slab top manholes as shown on the Standard Drawings. Do not remove the flat slab top manhole lifting devices.

Furnish and place lateral sewer connections including drops and leads.

Locate or cut conduits as shown on the standard construction drawings so they do not protrude inside the structure walls.

Prevent earth or debris resulting from construction operations from entering the manholes and catch basins. Remove any debris.

Excavation and Backfill.

Excavate to dimensions that provide ample room for construction. The Engineer will require that the removal of unsuitable material below the structure bedding. Replace unsuitable material with CMS Item 603 - Structural Backfill. When the Engineer requires the removal and replacement of unsuitable material below the bedding for precast structures and below the structure for cast-in-place structures, the County will provide compensation according to the Contract or by Supplemental Agreement. Ensure that the backfill in follows the completion of the work as closely as the type of construction will permit. Do not disturb the structure while backfilling. Backfill structures located within the pavement area with structural backfill to the subgrade. Backfill structures outside of the pavement area with excavated spoil material.

Precast Concrete Modular Construction.

Furnish precast bases on a compacted structural backfill bed having a minimum thickness of three (3) inches (75mm). Ensure that the structural backfill bed is level and uniformly support the entire area of the base. After placing the pipe, grout all openings between the pipe and structure less than four (4) inches (100 mm) with mortar and grout all openings between the pipe and structure greater than four (4) inches (100 mm) with non-shrink mortar. Seal all joints between modules.

Concrete (Cast-In-Place): Place and furnish structure concrete as shown on the plans.

Item 659 - Seeding and Mulching - Seeding and Mulching shall conform to the notes contained herein, the requirements of the County Engineer and CMS Section 659.

Waterway Seeding and Fertilizer are to be placed within the extents of the proposed top of banks of the petition ditch using ODOT 3B Slope Lawn Seed Mixture.

Residential Seeding and Mulching are to be placed at a minimum of twenty (20) feet offset of the top of banks and the extent of the Waterway Seeding and Fertilizer mix to all disturbed residential areas and is to be placed utilizing the hydroseeding method using ODOT Lawn Seed Mixture

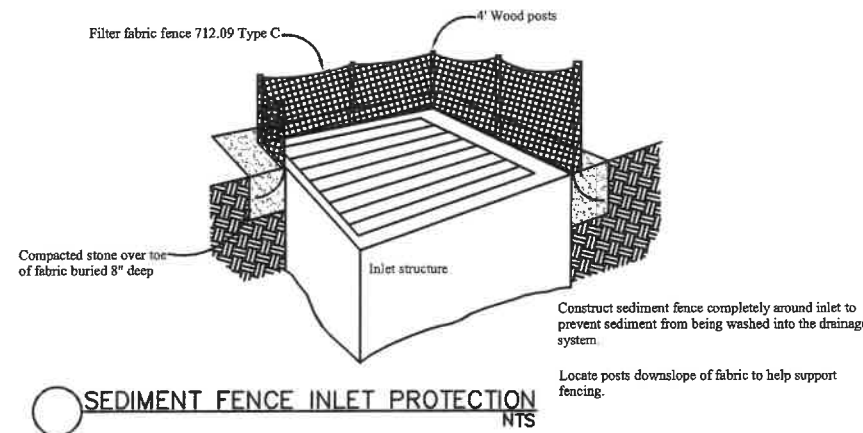
In the event of a conflict, the more stringent requirement, determined at the sole discretion of the County Engineer shall apply. In addition to these requirements, the seeding and mulching shall conform to the following:

Permanent seeding: disturbed areas that are at final grade must be permanently stabilizes within seven days of the most recent disturbance. Disturbed areas within fifty (50) feet of a surface water must be permanently stabilized within two (2) days of reaching final grade.

Temporary seeding: disturbed areas that are at not at final grade and that will be dormant for more the fourteen (14) days shall be temporarily stabilized within seven (7) days of the most recent disturbance. Disturbed areas within fifty (50) feet of a surface water and that will be dormant for more than fourteen (14) days shall be temporarily stabilized within two (2) days of the most recent disturbance.

All topsoil shall be of the highest quality and free of all stones, trash, and other deleterious materials greater than 1/4". Before placing topsoil, the disturbed areas shall be free of larger rocks and debris (greater than 3" in size). Organic content shall be tested by an approved lab and certified to be between 4-20% by weight. All topsoil shall be saturated with water and allowed to settle prior to seeding. Settled areas shall be refilled and saturated again prior to seeding. The grades shall match all existing landscape and any improvements completed under this plan. The Contractor shall scarify the soil surface to open the soil prior to seeding. All seeding, fertilizer, and mulch shall be placed within five (5) working days of placing topsoil.

Item 832 - Inlet Protection - The Contractor is responsible to keep all storm sewer inlets protected from excessive amounts of sediments using adequate filtering devices as approved by the County Engineer. Use specified detail below or other approved device for Sediment Fence Inlet Protection.



Special Conditions

Any drainage pipe, not shown on plans, that is discovered during excavation, shall be into the proposed improvements. If existing pipe is to be tied into proposed pipe. This be done with a standard wye, tee, or inserta tee for the appropriate pipe size.

Contractor shall fix any rutting that may occur due to operations performed. area shall be seeded and mulched to restore area to original condition.

Damages to any private property shall be the responsibility of the Contractor and replaced or repaired at the Contractor's expense and at no expense to the owner or Allen County.

Erosion & Sedimentation Control - The Contractor shall provide sediment control at all points where stormwater runoff leaves the project including waterways, overlaid sheet flow and storm sewer. Erosion and sediment control shall be provided as per the requirements of the County Engineer and the Standards and Specifications of the "Rainwater and Land Development" manual of the ODNR.

The Allen County Engineers Office has prepared a Stormwater Prevention Protection Plan (SWP3) for proposed improvements resulting in the land disturbance or one acre or more for this site. The SWP3 is prepared in accordance with the general and specific requirements of Allen County and the OEPA's permit for stormwater discharges associated with construction activity or its subsequent OEPA-issued revision. A copy of the OEPA Notice of Intent (NOI) submission will be made available from the County Engineer.

Erosion control measures are to be installed per NPDES permit regulations or as directed by the County Engineer, and are to be maintained until such time that they are no longer required by the permit and the County Engineer.

All land disturbing activities shall be subject to inspection and site investigation by the County Engineer and/or the Ohio EPA. Failure to comply with these regulations is subject to legal enforcement action.

The Contractor is responsible to notify the County Engineer 48 hours prior to commencement of initial site land disturbance on any site of one (1) or more acres. This includes site clearing, grubbing and any earth moving, primary erosion and sediment control practices are mandated by regulations to be in place from the beginning of the construction activity.

It is the Contractor's responsibility to maintain the sediment and erosion control features used on this project. The site shall be inspected at least once every seven calendar days and within 24 hours after any storm event greater than one-half inch of rain per 24 hour period. Records of these inspections shall be kept and made available to jurisdictional agencies if requested. Any Sediment or debris which has reduced the efficiency of Structure shall be removed immediately. Should a structure or feature become damaged, the Contractor shall repair or replace it at no additional cost to the Owner.

Air Pollution / Noise Control

1. Construction shall be limited to daytime hours.
2. Construction equipment shall be provided with intake silencers and mufflers, as required by safety standards.
3. All construction vehicles shall be equipped with proper emissions control equipment.
4. All equipment and machinery shall be maintained to minimize exhaust emissions and noise.

Prohibited Construction Activities

1. Disposing of excess or unsuitable material or trees, brush, and other debris in any stream corridor, any wetland, any surface waters, or at unspecified locations.
2. Stockpiling materials or storing construction equipment and vehicles on property not specified on the plans by the Engineer for such purposes.
3. Indiscriminate, arbitrary, or capricious operation of equipment in any stream corridors, any wetlands, any surface waters, or outside the easement limits.
4. Pumping of sediment-laden water from trenches or other excavations directly into any surface waters, any stream corridors, any wetlands, or storm sewers; all such water shall be properly filtered or settled to remove silt prior to release.
5. Discharging pollutants such as chemicals, fuels, lubricants, bituminous materials, raw sewage, or other harmful waste into or alongside of rivers, streams, impoundments, or into any natural or man-made channels.
6. Permanent or unspecified alteration of the flow line of any stream.
7. Damaging vegetation outside of the construction area.
8. Open burning of project debris without a permit.
9. Discharging injurious silica dust concentrations into the atmosphere resulting from breaking, cutting, chipping, drilling, buffing, grinding, polishing, shaping or surfacing closer than 200 feet to places of residences or commercial, professional, quasi-public, or public places of human occupation.
10. Running well point or pump discharge lines through private property or public property and right-of-ways without the written permission of the Property Owner and the consent of the Engineer.
11. Operations entailing the use of vibratory hammers or compactors outside the hours of 7:30 a.m. and 5:30 p.m. or outside the hours allowed for construction by local ordinances or regulations.
12. Closing off clear access to any public alley, street, road, avenue, or boulevard without the prior consent of municipal officials and the Engineer, and closing clear access:
 - By fire protection equipment and emergency vehicles;
 - By the public to any commercial or professional place or business, quasi-public or public establishment, or residence; or
 - By vehicles to driveways without providing alternate access.

Environmental Commitments - Construction activities will be performed during low flow conditions to the greatest extent practicable.

The Contractor shall not stockpile soil or any other materials/equipment in the vicinity of any identified wetlands.

The Contractor shall not remove trees measuring greater than three (3) - inches DBH under this project from April 1st through September 30. All necessary tree removal shall occur from October 1st through March 31st. This requirement is necessary to avoid impacts to bat species as required by the Endangered Species Act.

GENERAL NOTES



ALLEN COUNTY ENGINEERS
1501 N SUGAR ST.
LIMA, OH 45801

DESIGNER

REVIEWER

PROJECT ID

1344

SHEET TOTAL

3

9

1344 DUTCH HOLLOW DRAINAGE IMPROVEMENTS
OPEN DITCH & SUB-SURFACE DRAINAGE IMPROVEMENTS
 AMERICAN TOWNSHIP SECTION 18, ALLEN COUNTY

ESTIMATE OF QUANTITIES			
ITEM NO.	GRAND TOTAL	UNIT	DESCRIPTION
201	1	LS	Clearing and Grubbing
201	18	EACH	TR18 -> 12" to 24" Tree Removal
201	6	EACH	TR30 -> 24" to 36" Tree Removal
203	2,050	CY	Excavation
203	2,050	CY	Embankment
601	6.5	CY	Rock Channel Protection, Type "C" With Filter
601	4	CY	Rock Channel Protection, Type "D" With Filter (Laurel Oaks Outlet
611	5	EACH	Catch Basin 2-2
611	3	EACH	Catch Basin 2-3
611	2,685	LF	18" HDPE, Type C
611	35	EACH	Misc. Tile Connections
659	13,200	SY	ODOT 3B Slope Lawn Seed Mixture
659	1,625	SY	ODOT Lawn Seed Mixture
832	8	EACH	Inlet Protection
832	306	LF	12" Diameter Compost Filter Sock Check Dam

ENGINEER QUANTITIES			
ITEM NO.	GRAND TOTAL	UNIT	DESCRIPTION
607	50	LF	Fence Removal and Replace
611	25	EACH	4" Inserta Tee Service Connection or Approved Equal
611	25	EACH	6" Inserta Tee Service Connection or Approved Equal

ESTIMATE OF QUANTITIES



ALLEN COUNTY
 ENGINEERS
 1501 N SUGAR ST.
 LIMA, OH 45801

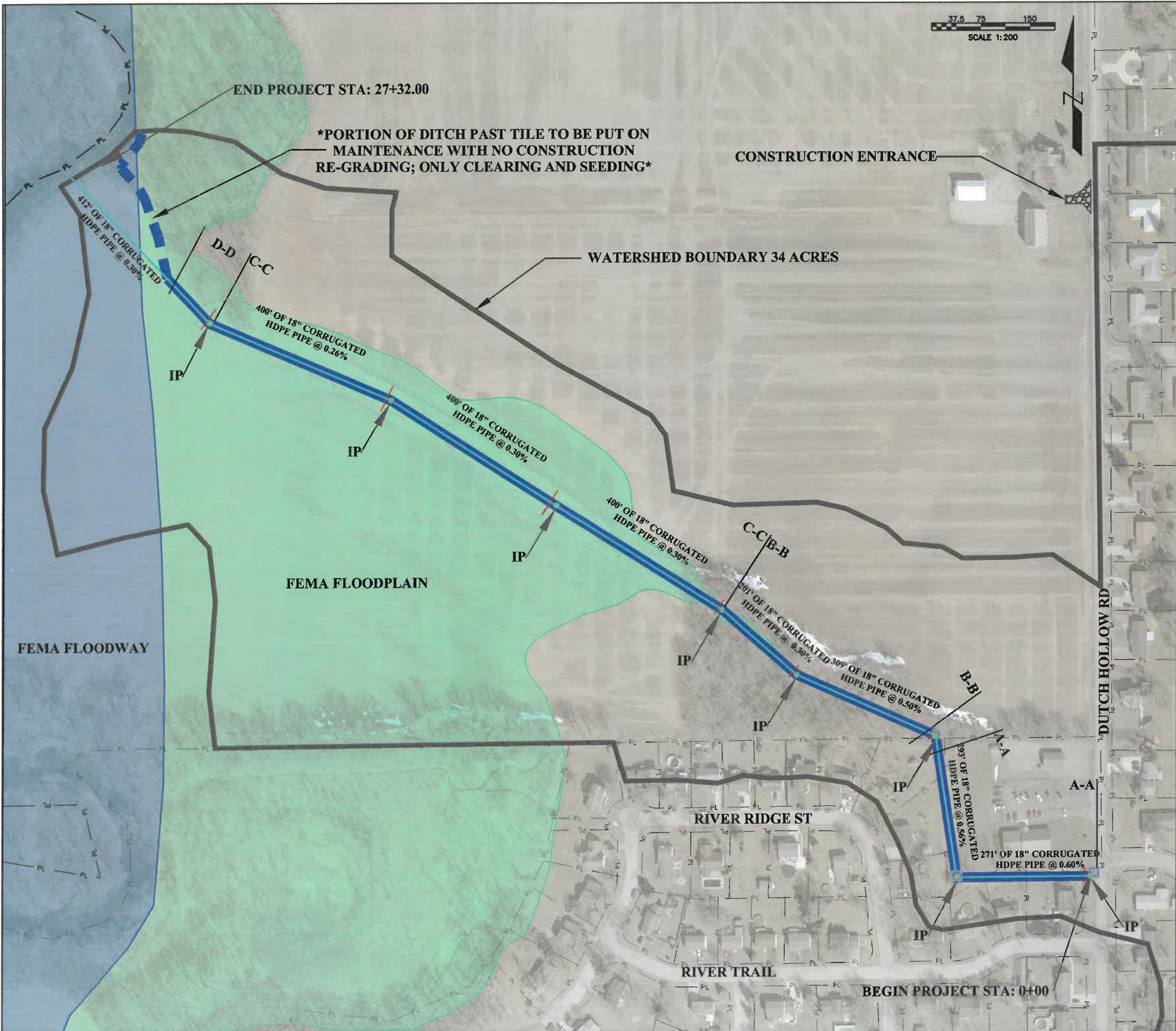
DESIGNER

REVIEWER

PROJECT ID

1344

SHEET	TOTAL
4	9



BENCHMARK DESCRIPTIONS:
 BM1 - NORTHEAST CORNER HEADWALL
 DATUM ELEVATION = 799.68

BM2 - SOUTHWEST CORNER BASKETBALL COURT
 DATUM ELEVATION = 800.51

SOIL TYPE DESCRIPTIONS:

Blg1A1 - BLOUNT SILT LOAM, GROUND MORaine, 0 TO 2 PERCENT SLOPES

KnA - KNOXDALE SILT LOAM, 0 TO 2 PERCENT SLOPES, OCCASIONALLY FLOODED

ShA - SHOALS SILT LOAM, 0 TO 2 PERCENT SLOPES, OCCASIONALLY FLOODED

MbA - MEDWAY SILT LOAM, 0 TO 2 PERCENT SLOPES, OCCASIONALLY FLOODED

HuC2 - HOUCTOWN-GLYNWOOD COMPLEX, 6 TO 12 PERCENT SLOPES, ERODED

SfB - SHAWTOWN LOAM, 2 TO 6 PERCENT SLOPES

Gwg5C2 - GLYNWOOD CLAY LOAM, GROUND MORaine, 6 TO 12 PERCENT SLOPES, ERODED

GuB - GLYNWOOD-URBAN LAND COMPLEX, 2 TO 6 PERCENT SLOPES

LEGEND:

- IP - INLET PROTECTION
- 12" COMPOST FILTER SOCK CHECK DAM
- CONSTRUCTION ENTRANCE

1344 DUTCH HOLLOW DRAINAGE IMPROVEMENTS
 OPEN DITCH & SUB-SURFACE DRAINAGE IMPROVEMENTS
 AMERICAN TOWNSHIP SECTION 18, ALLEN COUNTY

PROJECT OVERVIEW

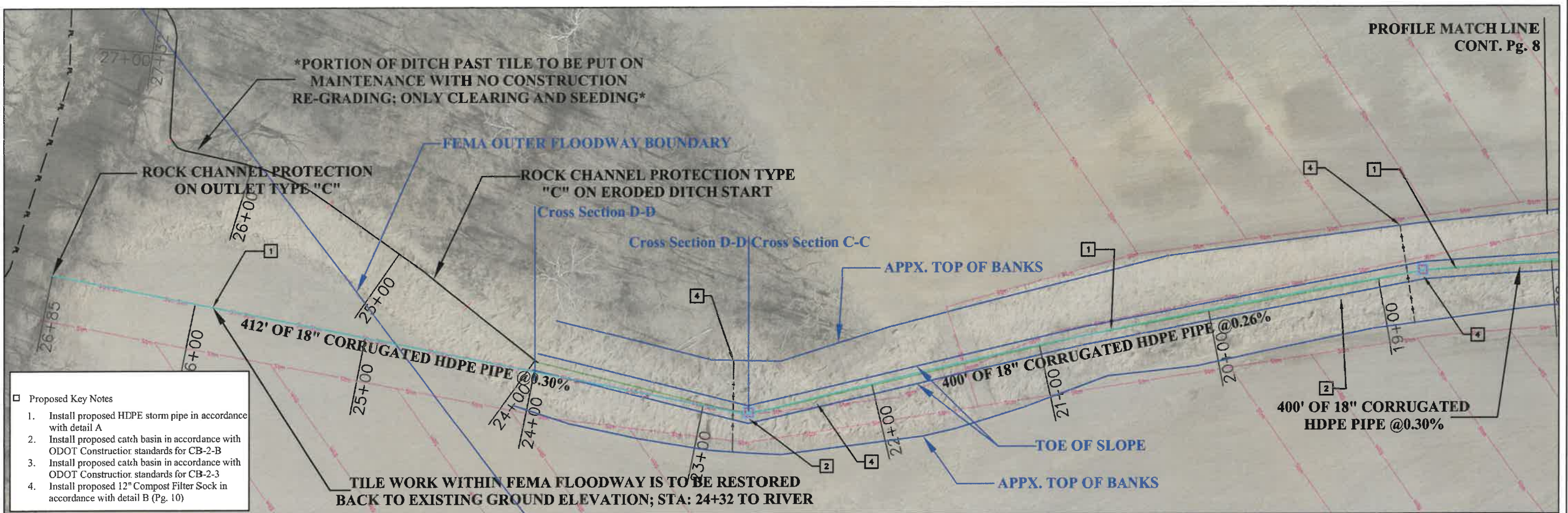


ALLEN COUNTY
 ENGINEERS
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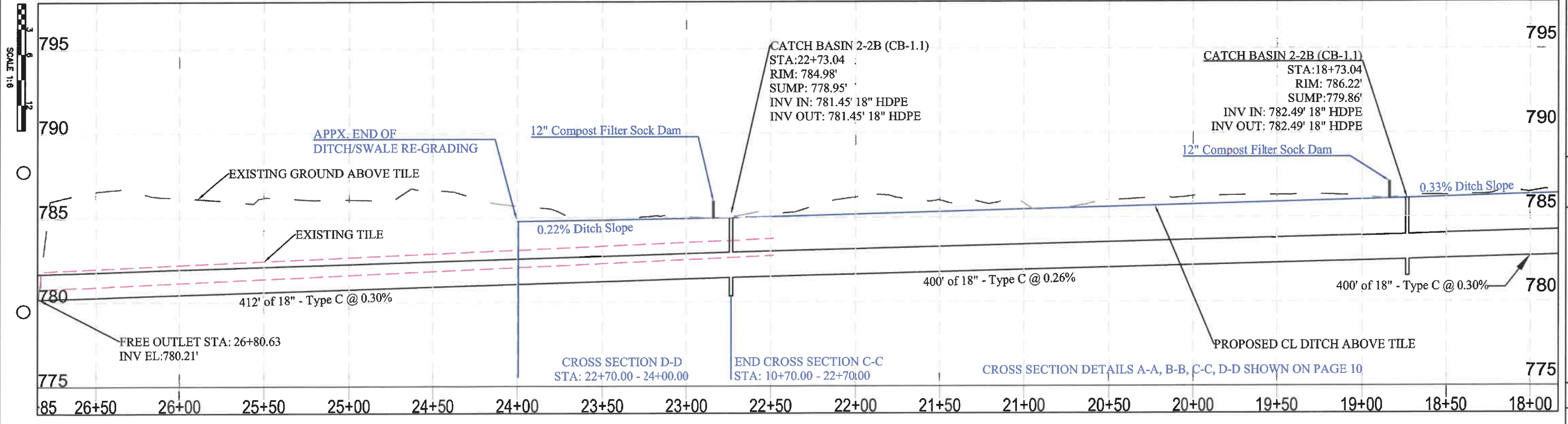
DESIGNER	
REVIEWER	
PROJECT ID	
1344	
SHEET	TOTAL
5	9

1344 DUTCH HOLLOW DRAINAGE IMPROVEMENTS
OPEN DITCH & SUB-SURFACE DRAINAGE IMPROVEMENTS
 AMERICAN TOWNSHIP SECTION 18, ALLEN COUNTY

PROFILE MATCH LINE
 CONT. Pg. 8



- Proposed Key Notes
1. Install proposed HDPE storm pipe in accordance with detail A
 2. Install proposed catch basin in accordance with ODOT Constructor standards for CB-2-B
 3. Install proposed catch basin in accordance with ODOT Constructor standards for CB-2-3
 4. Install proposed 12" Compost Filter Sock in accordance with detail B (Pg. 10)

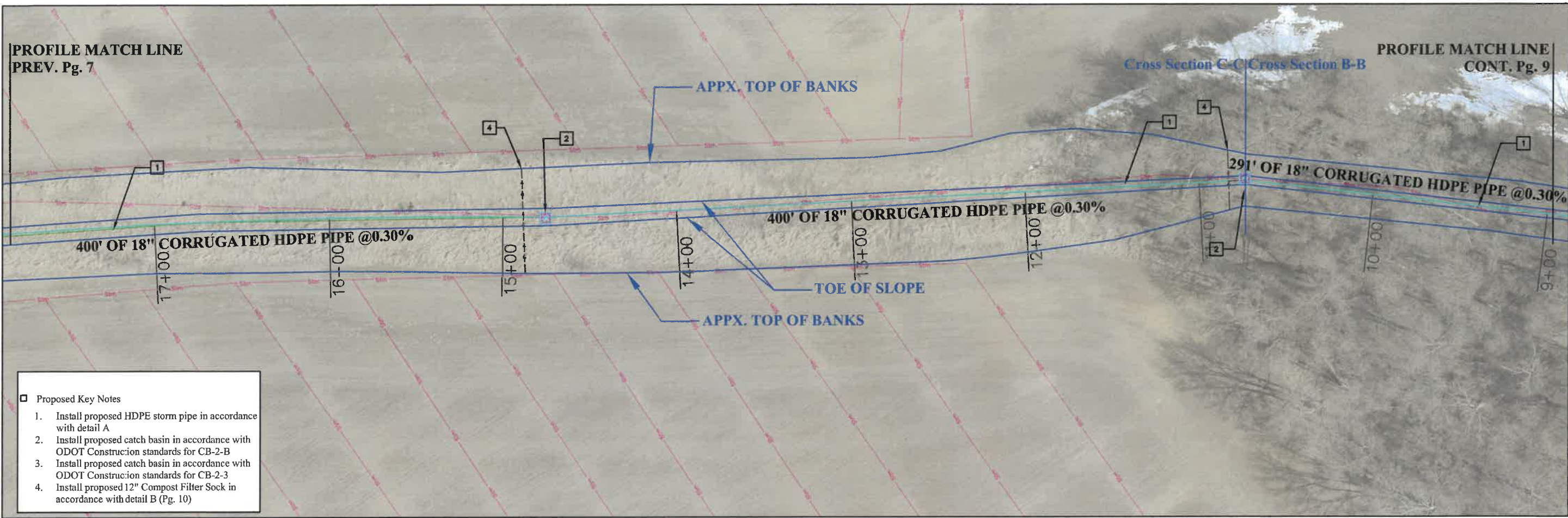


PLAN AND PROFILE

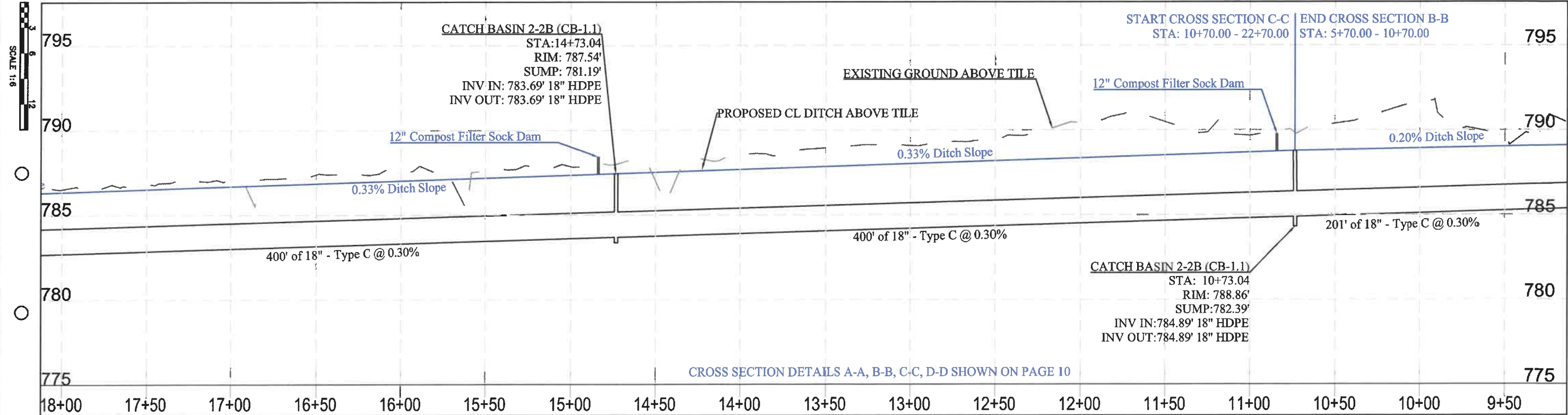


ALLEN COUNTY ENGINEERS
 1501 N SUGAR ST,
 LIMA, OH 45801

DESIGNER	
REVIEWER	
PROJECT ID	1344
SHEET	TOTAL
6	9



- Proposed Key Notes
1. Install proposed HDPE storm pipe in accordance with detail A
 2. Install proposed catch basin in accordance with ODOT Construction standards for CB-2-B
 3. Install proposed catch basin in accordance with ODOT Construction standards for CB-2-3
 4. Install proposed 12" Compost Filter Sock in accordance with detail B (Pg. 10)



1344 DUTCH HOLLOW DRAINAGE IMPROVEMENTS
OPEN DITCH & SUB-SURFACE DRAINAGE IMPROVEMENTS
 AMERICAN TOWNSHIP SECTION 18, ALLEN COUNTY

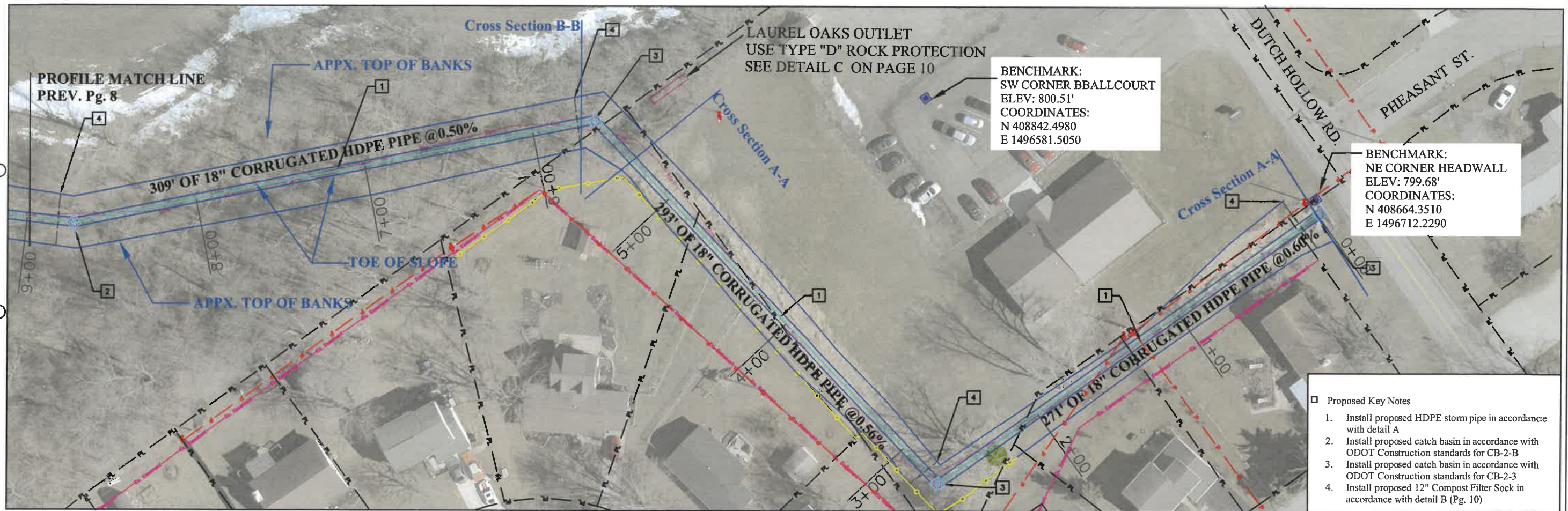
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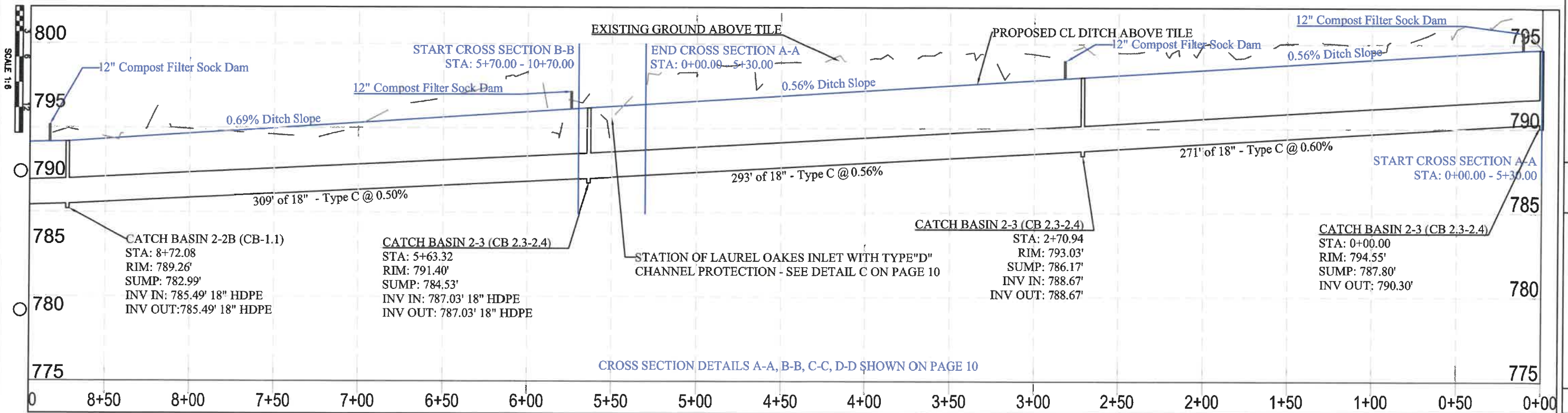
ALLEN COUNTY ENGINEERS
 1501 N SUGAR ST.
 LIMA, OH 45801

DESIGNER	
REVIEWER	
PROJECT ID	1344
SHEET	TOTAL
7	9

1344 DUTCH HOLLOW DRAINAGE IMPROVEMENTS
OPEN DITCH & SUB-SURFACE DRAINAGE IMPROVEMENTS
 AMERICAN TOWNSHIP SECTION 18, ALLEN COUNTY



- Proposed Key Notes
1. Install proposed HDPE storm pipe in accordance with detail A
 2. Install proposed catch basin in accordance with ODOT Construction standards for CB-2-B
 3. Install proposed catch basin in accordance with ODOT Construction standards for CB-2-3
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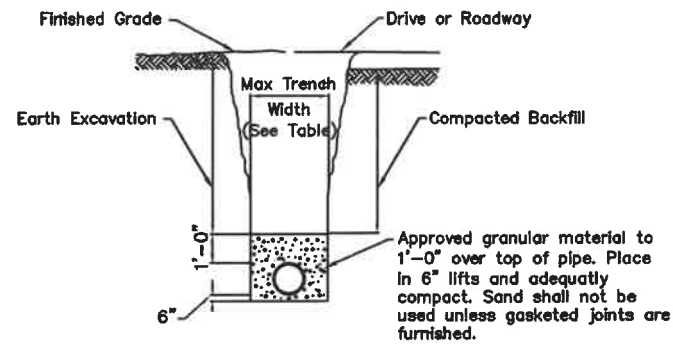


PLAN AND PROFILE



ALLEN COUNTY
 ENGINEERS
 1501 N SUGAR ST,
 LIMA, OH 45801

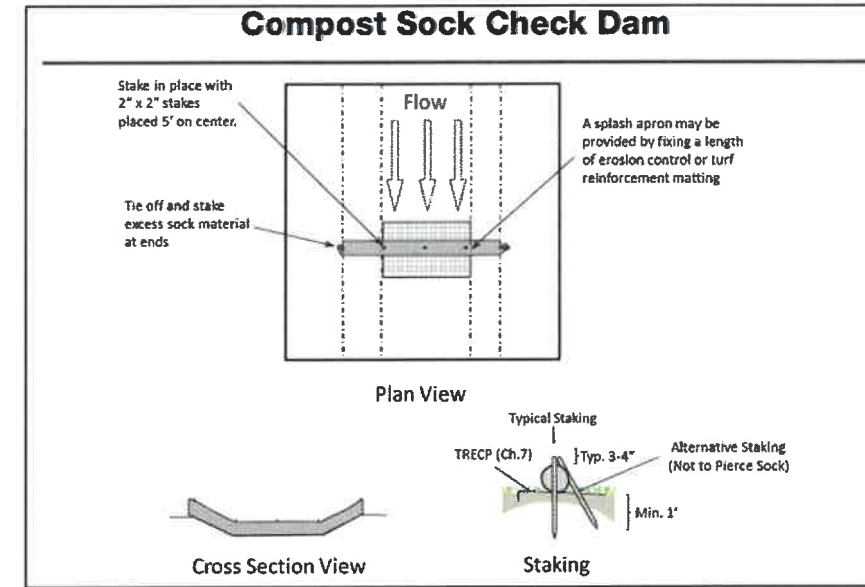
DESIGNER	
REVIEWER	
PROJECT ID	1344
SHEET	8
TOTAL	9



**STORM/SANITARY SEWER
TYPICAL TRENCH DETAILS**

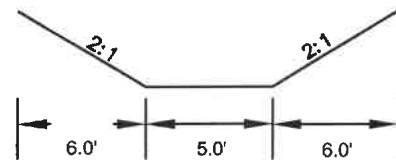
MAXIMUM TRENCH WIDTHS	
PIPE SIZE	WIDTH
6" - 24"	O.D. + 2'-0"
27" - 30"	O.D. + 2'-6"
36" & OVER	O.D. + 3'-0"

A **DETAIL**
Pg10 TYP. TRENCH



B **DETAIL**
Pg10 12" DIAMETER COMPOST FILTER SOCK CHECK DAM Not to Scale

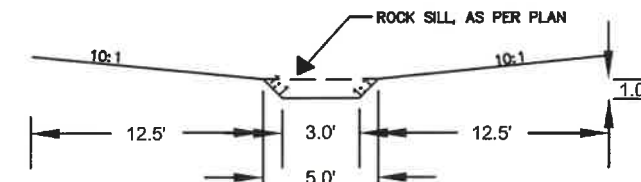
2:1 GRADE OR CLOSEST TO MATCH EXISTING GROUND



SCALE: 1:20
CROSS SECTION A-A
FROM STA: 0+00.00 TO 5+30.00

A-A **DETAIL**
Pg10 CROSS SECTION

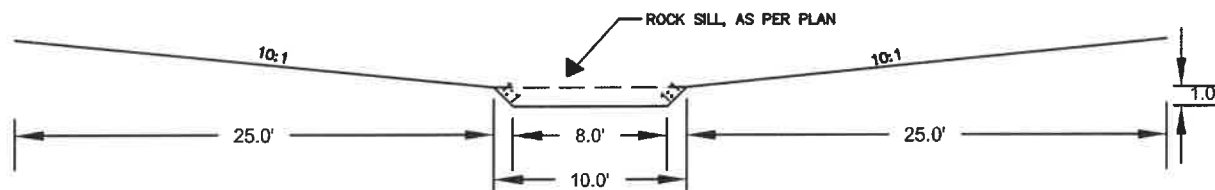
10:1 GRADE OR CLOSEST TO MATCH EXISTING GROUND



SCALE: 1:10
CROSS SECTION B-B
FROM STA: 05+70.00 TO 10+70.00

B-B **DETAIL**
Pg10 CROSS SECTION

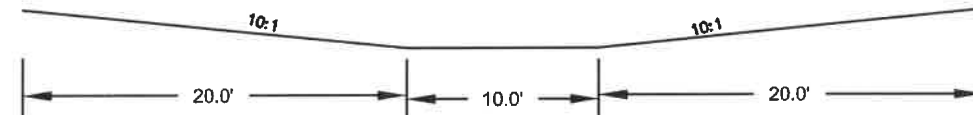
10:1 GRADE OR CLOSEST TO MATCH EXISTING GROUND



SCALE: 1:10
CROSS SECTION C-C
FROM STA: 10+70.00 TO 22+70.00

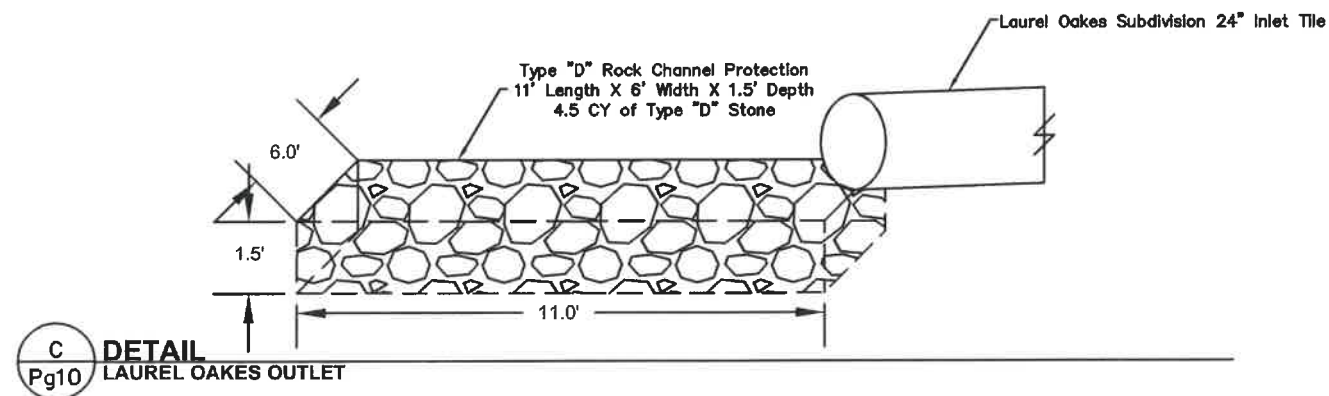
C-C **DETAIL**
Pg10 CROSS SECTION

10:1 GRADE OR CLOSEST TO MATCH EXISTING GROUND



SCALE: 1:10
CROSS SECTION D-D
FROM STA: 22+70.00 TO 24+00.00

D-D **DETAIL**
Pg10 CROSS SECTION



C **DETAIL**
Pg10 LAUREL OAKES OUTLET

**1344 DUTCH HOLLOW DRAINAGE IMPROVEMENTS
OPEN DITCH & SUB-SURFACE DRAINAGE IMPROVEMENTS
AMERICAN TOWNSHIP SECTION 18, ALLEN COUNTY**

CONSTRUCTION
DETAILS



ALLEN COUNTY
ENGINEERS
1501 N SUGAR ST.
LIMA, OH 45801

DESIGNER

REVIEWER

PROJECT ID

1344

SHEET TOTAL
9 9