University of Kentucky
Procurement Services

INVITATION FOR BIDS

CCK-2874.00-2-25
Construct Support Services Building
New Environmental Quality Management Center
ADDENDUM #3
04/11/2025

IMPORTANT: BID AND ADDENDUM MUST BE RECEIVED BY: 04/18/2025 @ 3:00 P.M. LEXINGTON, KY TIME

Bidder must acknowledge receipt of this and any addendum as stated in the Invitation for Bids.

ITEM #1: BIDDER NOTICES

- To clarify, the bids are due on 04/18/2025.

ITEM 2: REVISIONS TO ORIGINAL BID DOCUMENTS

- Refer to and incorporate within the offer the enclosed additional information and questions and answers (to date) from the project team.

OFFICIAL APPROVAL
UNIVERSITY OF KENTUCKY

04/11/2025

Ken Scott

Ken Scott / (859) 257-9102

SIGNATURE

Typed or Printed Name

University of Kentucky
Procurement Services
322 Peterson Service Building
Lexington, KY 40506-0005

ADDENDUM NUMBER THREE

Bidders shall conform to the following changes, as same shall become binding to the Bid Documents for the purpose of bidding.

CORRECTIONS AND CHANGES:

1. **Reference attached replacement specification Section 31 1000 "Site Clearing and Grubbing":** Added note concerning KYR10 permit.
2. **Reference attached replacment specification Section 31 2140 "Dewatering":** Added note regarding dewatering discharge requirements.
3. **Reference attached replacement specification Section 31 2500 "Erosion Prevention and Sediment Control":** Revised per UK review comments.
4. **Reference attached replacement specification Section 32 9200 "Lawns and Grasses":** Removed temporary seeding information. Information included on erosion and sediment control plans.
5. **Reference attached replacement specification Section 33 4213 "Storm Sewer":** Added note regarding water quality units subject to outlets being submerged.
6. **Reference replacement sheet C-10 Erosion and Sediment Control Plan – Initial Phase.** Note the following revisions:
   - Removed sediment traps.
   - Revised silt fence locations.
   - Revised construction exits.
   - Added inlet protection to existing inlets.
   - Revised Construction Sequence Notes.
   - Revised Erosion and Sediment Control Notes.
   - Removed diversion ditch along west side of site.
   - Added fueling station location.
   - Revised Erosion Control Legend to add erosion control blankets and turf reinforcement matting reference.
   - Added note for existing culvert.
7. **Reference replacement sheet C-11 Erosion and Sediment Control Plan – Intermediate Phase.** Note the following revisions:
   - Revised silt fence locations.
   - Revised construction exits.
   - Added inlet protection to existing inlets.
   - Added Construction Sequence Notes from C-10.
   - Added Revised Erosion and Sediment Control Notes from C-10.
   - Added turf reinforcement matting to west ditch.
   - Added temporary erosion control blanket to basin slopes.
   - Added fueling station location.
   - Added concrete washout.
   - Revised Erosion Control Legend to add erosion control blankets and turf reinforcement matting reference.
   - Added note for existing culvert.
8. **Reference replacement sheet C-13 Erosion and Sediment Control Details.** Note the following revisions:
   - Removed sediment trap detail.
   - Added seeding information.
   - Added ECB and TRM symbols to erosion control blankets and turf reinforcement details.
9. **Reference replacement sheet Sheet C-20 Demolition Plan.** Note the following revisions:

- Added note requiring video inspection of the existing culvert pre and post construction.
- Added note addressing removal of existing entrances.
- Added note concerning existing culvert during construction.

10. **Reference replacement sheet C-21 Utility Relocation Plan.** Note the following revisions:

- Added note concerning erosion control measures.
- Added note requiring vacuum testing for existing sewer manholes to be modified.

11. **Reference replacement sheet C- 40 Grading and Drainage Plan.** Note the following revisions:

- Added information regarding water quality units.
- Added detail labels for addressing new and existing openings in the existing box culvert.
- Added base line for existing culvert.
- Added inverts for roof drainage leaders on west end of building.
- Revised erosion control legend.
- Revised routing of roof drainage piping from the south side of the building.

12. **Reference replacement sheet C- 42 Grading and Drainage Details.** Note the following revisions:

- Added detail labels for addressing new and existing openings in the existing box culvert.
- Added not to triple surface inlet Type B detail.

13. **Reference replacement sheet C- 44 Storm Profiles.** Note the following revisions:

- Revised line A.

End of Addendum #3. Refer to attachments.

SECTION 31 1000

SITE CLEARING AND GRUBBING

PART 1 GENERAL

1.01 WORK INCLUDED

A. Furnish all labor and equipment required and perform all clearing, grubbing, and stripping of topsoil complete as shown on the Drawings and as specified herein.

1.02 RELATED WORK

A. Earth and rock work are included in Section 31 2000.

1.03 SUBMITTALS

A. Work cannot begin until KYR10 permit coverage has been obtained and an approved EPSC Plan and SWPPP are in place.

PART 2 PRODUCTS

None in this Section.

PART 3 EXECUTION

3.01 GENERAL

A. The proposed building sites, paved areas, areas designated for ditches and channel changes, borrow pits, etc., (except any portions thereof that may be reserved) shall be cleared of all trees, timber, brush, stumps, rubbish, and other debris. All this material, unless otherwise specified, shall be removed and disposed of away from the site.

B. Open burning is not allowed in Fayette County except for agricultural operations.

C. Where clearing is to be done, stumps shall be grubbed where embankments are less than 5 feet in height, where the profile indicates excavation, in all areas designated for the construction of other facilities and in borrow areas. In all other areas the stumps may be cut off even with the ground. In areas to be grubbed, all stumps and roots must be removed.

D. No debris will be allowed to be left under or in the embankments.

E. In felling trees near tracks, structures and wire lines, necessary precaution must be exercised in order to prevent damage to wire lines, structures, the facilities of others, or obstruct tracks.

F. No extra payment for clearing and grubbing shall be included in the lump sum bid.

3.02 TREES

A. Trees (3-inch caliper and larger) shall not be disturbed by construction without written permission from the OWNER, except in those areas to be cleared. Trees disturbed by construction shall be replaced by the CONTRACTOR with same size and type at no additional cost to the OWNER.

END OF SECTION

***

SECTION 31 2140

DEWATERING

PART 1 GENERAL

1.01 WORK INCLUDED

A. Furnish all labor and equipment required to dewater all excavations. Dewatering of all excavations shall be the responsibility of the CONTRACTOR, and no additional compensation will be allowed for same unless specifically included as a bid item.

B. Leaking pipes and structures are to be anticipated on this project. For this reason, no additional payment will be made for dewatering associated with leakage from any existing facility.

1.02 RELATED WORK

A. Earth and Rock Work is included in Section 31 2000.

B. Crushed stone and DGA are included in Section 32 1123.

C. Erosion and sedimentation control is included in Section 31 2513.

1.03 SUBMITTALS

A. None.

PART 2 PRODUCTS

None in this Section.

PART 3 EXECUTION

3.01 GENERAL

A. Dewatering equipment shall be of adequate size and quantity to assure maintaining proper conditions for installing pipe, concrete, backfill or other material or structure in the excavation. Dewatering shall include proper removal of any and all liquid, regardless of source, from the excavation and the use of all practical means available to prevent surface runoff from entering any excavation.

B. <u>Discharge from dewatering operations shall go through a BMP to prevent discharge of sediment.</u>

END OF SECTION

***

SECTION 31 2500

EROSION PREVENTION AND SEDIMENT CONTROL

PART 1 GENERAL

1.01 SUMMARY

A. This section specifies Erosion Prevention and Sedimentation Control (EPSC) during construction.

1.02 RELATED SECTIONS

A. Section 31 1000–Clearing and Grubbing

B. Section 31 2000–Earth and Rock Work

C. Section 31 0519–Geotextiles

D. Section 32 9200–Lawns and Grasses

1.03 SUBMITTALS

A. Where CONSTRUCTION MANAGER is referenced in this section it can also mean a SUBCONTRACTOR or SUBCONTRACTORS as designated by the CONSTRUCTION MANAGER.

B. The CONSTRUCTION MANAGER shall submit a copy of the NOI to the University of Kentucky and the Kentucky Division of Water.

C. The CONSTRUCTION MANAGER shall prepare the Storm Water Pollution Prevention Plan (SWPPP) utilizing the Erosion and Sediment Control Plans and Details prepared by the Engineer and, as outlined in this Section. Adjustments to the plans and SWPPP will be made as needed and as stated therein for the actual site conditions. This Section is intended to serve as a guide for aiding the CONSTRUCTION MANAGER in his preparation of the SWPPP plan.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Protect material from the weather during transit and storage.

PART 2 PRODUCTS

2.01 MATERIALS

A. Kentucky Erosion Prevention and Sediment Control Field Guide (KEPSCFG).

B. Best Management Practices Plan.

2.02 STORM WATER POLLUTION PREVENTION PLAN

A. University of Kentucky—Environmental Quality Management Center

1. The Storm Water Pollution Prevention Plan (SWPPP) is to be developed in accordance with EPA requirements, the Kentucky Erosion Prevention and Sediment Control Field Guide (KEPSCFG) and good engineering practices for the University of Kentucky Environmental Quality Management Center Project. A copy of the Kentucky Erosion Prevention and Sediment Control Field Guide can be downloaded from the Kentucky Division of Water website: www.water.ky.gov/permitting/wastewaterpermitting/kpdes/storm/. The SWPPP plan identifies the potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the project. The SWPPP plan provides the proper guidance for the CONSTRUCTION MANAGER to ensure the implementation of practices that are to be used to reduce the pollutants in storm water discharges and to assure compliance with the terms and conditions of the KPDES permit. The CONSTRUCTION MANAGER must implement the SWPPP as a condition of the KPDES permit.

B. Site Description

1. The construction of the University of Kentucky Environmental Quality Management Center Project is the cause of the site disturbance. When complete, the project will provide improved water quantity control.

2. The sequencing of major soil disturbing operations will proceed as follows:

   a. Installation of perimeter erosion and sediment controls, stone construction exits, and silt gates at openings in existing box culvert. Due to construction activities and sequencing, these measures will be subject to modification and/or relocation.

   b. Clearing and grubbing of proposed disturbed areas. Demolition of existing features to be removed, including existing pavement areas and utilities which are to be relocated.

   c. Excavation and site grading to construct new storm water control facilities and installation of new storm drainage piping and structures.

   d. Site grading for building pad and parking lot subgrade construction.

   e. Building construction, site paving and utility installation.

   f. Existing vegetation will be preserved where possible.

g. Stabilization shall begin within 14 days on areas that have been disturbed and construction activity has ceased, whether temporarily or permanently.

3. The site construction activities will result in the disturbance of approximately 2.9 acres. All construction is on University of Kentucky property.

4. The present project site consists of residential buildings (recently removed), paved parking, gravel parking, green space, and utilities. The northern portion of the site serves as a stormwater detention facility. The project site is approximately 3 acres and is located at the outlet of an approximate 247-acre watershed. The site drains to the existing box culvert traversing the site east to west through the north end of the site. The culvert then passes under an existing railroad embankment that adjoins the west edge of the site.

C. Sediment and Erosion Control Measures

1. The SWPPP shall include a clear description of what sediment and erosion control measures will be used and when they will be implemented. The following list of control measures represent the basic measures to be implemented. Additional measures may be required as construction sequencing and activities require. The Erosion and Sediment Control Plan (ESCP) included in the project Drawings represent the minimum measures and procedures required for erosion prevention and sediment control. Changes to the ESCP may be required as construction activities and site conditions warrant. All major changes to the ESCP must be approved by the Engineer of Record and the University of Kentucky prior to implementation. Minor changes may be made by the CONSTRUCTION MANAGER. The Engineer of Record and/or the University of Kentucky will make the determination of major or minor changes. Reference details and specification found in the KEPSCFG.

2. Structural Practices for Soil Stabilization

a. Mulch: Mulch may be used for temporary stabilization for any disturbed area inactive for 14 days or longer for dust control and to reduce impact of rain on bare surfaces. Mulch is also used with Temporary and Permanent Seeding.

b. Temporary Seed: Use rye grain or annual rye grass seed for temporary seeding in disturbed areas not ready for permanent seeding when area is inactive for 14 days. Comply with the KEPSCFG for seed, fertilizer, and mulch specifications.

c. Permanent Seed: See project specifications for installation of permanent seeding.

d. Construction Entrance: Install stone construction entrance at all locations where equipment and vehicles access paved surfaces from non-paved construction areas where there is risk of transporting mud or sediment onto paved surfaces.

e. Dust Control: Utilize watering of construction roads, mulching and vegetative cover to minimize dust.

f. Temporary Diversion Ditch: Install temporary diversion ditches with supporting berm on lower side to divert storm runoff to divert sediment from unprotected slopes to a stabilized outlet, to divert sediment-laden runoff from a disturbed area to a sediment trap, and to shorten the flow length within a long, sloping drainage area.

3. Structural Practices for Sediment Control

a. Check Dam: Install temporary rock check dams in newly constructed vegetated, open channels that drain 10 acres or less. Use KYTC Class II channel lining with check dams spaced such that the top of the downstream dam is at the toe elevation of the upstream dam. The stone at the center of dam is to be a minimum of 1 foot below the stone at the edge. Alternate manufactured products may be used.

b. Silt Fence: Install silt fencing around the perimeter of disturbed areas, including soil stockpile areas to control sediment from non-concentrated runoff. Install silt fencing prior to any further land disturbing activities.

c. Storm Drain Inlet Protection: Install sediment filters around storm surface and culvert inlets. Use measures appropriate for inlet conditions.

d. <u>Storm Drain Outlet Protection: Install rip rap outlet protection measures at storm outlets. Rip rap shall be Type II and placed over geotextile fabric.</u>

e. The <u>CONSTRUCTION</u> <u>MANAGER</u> will assume the responsibility for proper selection, application, and maintenance of appropriate soil stabilization and sediment control practices.

D. Other Control Measures

1. No solid materials, including building materials, shall be discharged to waters of the Commonwealth, except as authorized by a Section 404 permit.

2. Off-site vehicle sediment tracking and dust generation shall be minimized.

3. Waste disposal methods and sanitary sewer or septic systems shall comply with applicable state or local regulations.

4. The CONSTRUCTION MANAGER will assume the responsibility for taking the actions necessary to comply with the requirements listed in this section.

E. Other State or Local Plans

1. Compliance with the SWPPP plan shall include satisfying any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in the SWPPP). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials.

2. The University of Kentucky will supply copies of any other applicable permits/plans and their requirements that must also meet compliance, and make the CONSTRUCTION MANAGER aware of the conditions of this section.

F. Maintenance

1. The requirements of this SWPPP include utilizing proper maintenance procedures necessary to keep the control measures in good and effective operating condition. The CONSTRUCTION MANAGER shall refer to the project plans and specifications for erosion and sediment control, and the manufacturer's specifications for guidance related to maintenance.

2. Structural Practices for Soil Stabilization

a. Mulch: Mulched areas shall be inspected at least weekly and after every rainfall of one-half inch or more. When mulch is found loosened or removed, replace mulch within 48 hours.

b. Temporary Seed: New seed shall have adequate water for growth until plants are firmly established. Inspect seeded areas every two weeks after planting and after each rainfall of 0.5 inches or more. Areas requiring seed and mulch will be repaired within 48 hours. If vegetative cover is not established within 21 days, the area shall be reseeded.

c. Permanent Seed: New seed shall have adequate water for growth until plants are firmly established. Inspect seeded areas every two weeks after planting and after each rainfall of 0.5 inches or more. Areas requiring seed and mulch will be repaired within 48 hours. If

vegetative cover is not established within 21 days, the area shall be reseeded. Reseed as needed to obtain groundcover density established in project specifications.

d. Construction Entrance: Inspect construction entrance once each week and after there has been a high volume of traffic or rainfall of 0.2 inches or more. Construction entrance shall be maintained in a condition that will prevent tracking or flow of sediments onto paved surfaces.

(1) Provide periodic top dressing with additional stone, as conditions demand, and repair and/or cleanout of any structures used to trap sediment. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately.

e. Dust Control: Observe site daily for evidence of windblown dust and take reasonable steps to reduce dust whenever possible. Inspect site weekly when site is inactive.

f. Temporary Diversion Ditch: Bare and vegetated diversion channels shall be inspected regularly to check for points of scour or bank failure; rubbish or channel obstruction; breaching or settlement of ridge. Damaged channels shall be repaired immediately. Sediment deposits are to be removed. Reseed and fertilize channels as needed to establish vegetative cover.

3. Structural Practices for Sediment Control

a. Check Dam: Inspect check dams regularly to ensure the measure is in good working order and that the center of the dam is lower than the edges. Inspect after each rainfall and remove accumulated sediment. Remove temporary check dams after channel has been completely vegetated. Repair area disturbed by dam removal.

b. Silt Fence: Inspect silt fences after each rainfall event and daily during prolonged rainfalls. Repair damaged or downed silt fencing immediately. Remove accumulated sediment.

c. Storm Drain Inlet Protection: Inspect storm drain inlet protection measures periodically and after each rainfall event. Remove accumulated sediment. Repair or replace filter fabric and filter stone as needed. Remove inlet protection measures after all areas of the watershed have been stabilized. Repair damage to areas cause by inlet protection removal.

G. Inspections

1. Qualified personnel shall inspect all storm water control measures, discharge locations, vehicle exits, disturbed areas of the construction

site, and material storage areas at least once every 7 days, and within 24 hours of the end of a storm that is 0.5 inches; and areas that have been temporarily or finally stabilized at least once a month. Revisions to the SWPPP based on the results of the inspection shall be implemented within 7 days.

2. Control measures shall be inspected to ensure correct operation. Accessible discharge locations shall be inspected to ensure that velocity dissipation devices are effective in preventing significant impacts to receiving waters. Vehicle exits shall be inspected for evidence of, or the potential for, off-site sediment tracking. Disturbed areas and material storage areas that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system.

3. A report summarizing the scope of the inspection, names and qualifications of personnel making the inspection, the date of the inspection, major observations relating to the implementation of the BMP plan, and any corrective actions taken shall be made and kept as part of the SWPPP for at least 3 years after the date of inspection, or until 1 year after coverage under this permit ends. The person conducting the inspection must sign the inspection form.

4. Inspection reports to be posted or stored at the job site for review. The SWPPP plan and the KYR10 Coverage acknowledgement letter shall also be kept on site.

H. Non-Storm Water Discharges

1. All discharges from this construction site are storm water related and do not mix with storm water discharges from other industrial activities.

I. Contractors and Subcontractors

1. This specification is included in the contract documents for the CONSTRUCTION MANAGER use during bidding this project. The CONSTRUCTION MANAGER are hereby made aware that they must clearly state the CONTRACTOR or SUBCONTRACTORS that will implement each control measure identified in the SWPPP after the contract has been awarded. All CONTRACTOR or SUBCONTRACTORS identified in the SWPPP must sign a copy of the certification statement included in the SWPPP in accordance with PART II of the KPDES permit before conducting any professional service at the site.

J. Other Activities That Have Potential to Pollute Groundwater or Surface Runoff

1. Below are a series of activities that create the potential for groundwater or storm water runoff contamination.

a. Tank Storage

(1) Not applicable.

b. Transfer, Loading, and Unloading

(1) Transfer, loading, and unloading areas for fuel (gasoline and diesel), oil, and hydraulic fluid.

K. Practices Selected to Protect Groundwater and Storm Water Runoff from Pollution

1. <u>The SWPPP shall address practices to be in place for each general activity listed above. The following practices are the minimum required with those activities.</u>

a. Tank Storage Protection Practices (Storage of fuel, oil, and hydraulic fluid)

(1) Notify Site Superintendent upon discovery of the problem. Notify other officials and/or agencies as necessary dependent on the nature of the situation.

(2) All fuel, fluid and oil tanks have secondary containment structures.

(3) Rainwater built up in secondary containment structures must be checked for presence of sheen prior to release. If sheen is present, the water must be considered hazardous waste, pumped into a compatible container and disposed of via a certified hazardous waste disposal company.

(4) Personnel are trained to exercise due caution when filling or dispensing of fuels and oils to avoid spillage. Personnel are to be instructed to avoid overfilling tanks. Spills are to be cleaned up immediately upon occurrence or notification that one has occurred.

(5) Spills shall be cleaned up using absorbent materials such as Oil Pickup (a dry powder). Contaminated soil will be removed and disposed of at a landfill approved for disposal of such waste or contacting an environmental remediation company for advice on disposal.

b. Transfer, Loading, and Unloading Protection Practices

(1) Notify Site Superintendent upon discovery of the problem. Notify other officials and/or agencies as necessary dependent on the nature of the situation.

(2) All oil and fuel locations have secondary containment structures.

(3) Personnel are trained in proper containment, clean-up, and disposal procedures in the event of an accidental spill. If the spill is large enough an earthen berm will be constructed to contain the spill. Phone calls to the Project Manager and the KY Environmental Response Center shall be made in the event of a significant spill. Contaminated soil will be removed and disposed of at a landfill approved for disposal of such waste or contacting an environmental remediation company for advice on disposal.

(4) Small spills cleaned with rags or other absorbent material (Oil Pickup) require proper disposal of the contaminated material by placing it in a plastic bag prior to disposal in the dumpster.

(5) Personnel are trained to exercise due caution when filling or dispensing from fuel and oil tanks to avoid spillage. Personnel are to be instructed to avoid overfilling tanks. Spills are to be cleaned up immediately upon occurrence or notification that one has occurred.

L. Emergency Contacts

1. An Emergency Contact List shall be located in the construction trailer and kept on file as part of the Emergency Response Plan. The list is updated on an as-needed basis when contact names and agencies may change.

M. Employee Training

1. This site is located in a karst region. Groundwater in this topography is highly sensitive to pollution. Even though the residents are on “city” water, failure to follow the protective practices described above may potentially pollute wells and springs being used as water sources by individuals living in rural areas. All employees will receive hands-on training in proper procedures required to comply with the SWPPP. All employees will go through a review of proper spill response techniques and general inspection protocol. Employees will receive training when new or modified protection measures are implemented, or when new equipment/unit processes are installed that has the potential to contaminate groundwater or storm water runoff in the event of a spill.

N. Signature and Plan Review

1. The SWPPP shall be signed by the CONSTRUCTION MANAGER and designated SUBCONTRACTORS and shall be kept onsite available for review.

2. The CONSTRUCTION MANAGER shall make the SWPPP available upon request to the DOW Director or other authorized DOW agent.

3. After a review by authorized DOW agent, the CONSTRUCTION MANAGER may be notified that the SWPPP does not meet the minimum requirements. At that point, the CONSTRUCTION MANAGER shall modify the SWPPP plan within 7 days of notification and shall submit a written certification that the requested changes have been made.

4. SWPPP required by the KPDES permit are considered reports that shall be made available to the public, upon written request by the public, in accordance with Section 308(b) of the Clean Water Act (CWA). However, the University of Kentucky may claim any portion of the BMP plan as confidential, in accordance with 40 CFR Part 2.

O. Plan Modification

1. The CONSTRUCTION MANAGER shall modify the SWPPP when there is a change in design, construction, operation, or maintenance of the site which has a significant effect on the potential for the discharge of pollutants to waters of the Commonwealth and shall implement the changes within 7 days. The modifications must be reviewed and approved by the UK EQM and the Engineer of Record.

P. Modification for Ineffectiveness

1. The CONSTRUCTION MANAGER shall amend the SWPPP if it proves to be ineffective in controlling the discharge of pollutants to waters of the Commonwealth and shall implement the changes within 7 days. The CONSTRUCTION MANAGER is responsible for the plan, its implementation, and maintenance.

Q. Certification Statement

The SWPPP shall provide a certification statement such as the following and provide signature spaces for construction manager and subcontractors

"I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification."

PART 3 EXECUTION

3.01 EXECUTION

A. The CONSTRUCTION MANAGER shall implement the approved Storm Water Pollution Prevention Plan. It shall be adjusted as needed and as stated therein for the actual site conditions. A copy of the SWPPP shall be kept on the project site. For questions regarding SWPPP implementation requirements, etc., refer to

the latest edition of the Kentucky Erosion Prevention and Sediment Control Field Guide, which may be obtained at the Division of Water website, www.water.ky.gov/permitting/wastewaterpermitting/KPDES/storm.

B. The CONSTRUCTION MANAGER shall submit a Notice of Intent (NOI) to the **Kentucky Division of Water** at least 48 hours before any construction begins.

C. All storm drains that discharge into a drainage channel, stream, lake, etc., and not onto an open field shall have an inlet sediment control device similar to the Siltsack as manufactured by ACF Environmental or Dandy Bag II by Dandy Products, or equal.

D. Rock checks or approved manufactured products shall be used to trap sediment traveling along drainage channels, etc., straw bales are not acceptable.

E. Any construction access road, etc., that joins any paved driveway, or road shall have a crushed stone entrance created according to the drawings and the Kentucky Erosion Prevention and Sediment Control Field Guide.

F. Storm water runoff from undisturbed areas shall be diverted around construction sites by the use of diversion berms or diversion ditches.

G. When silt fences and other sediment trapping devices become half full they shall be cleaned out to near new installation condition and put back into service.

H. The University of Kentucky Construction Site Stormwater Inspection Report shall be included in the SWPPP.

END OF SECTION

Attachment: University of Kentucky Construction Site Stormwater Inspection Report

***

University of Kentucky Construction Site Stormwater Inspection Report

General Information		
Project Name		
Facility Operator (Name on KPDES form NOI-SW)		
KPDES Tracking No.		**Location:**
Date of Inspection		
Inspector's Name(s)		
Inspector's Contact Info		
Describe present work phase		

Type of Inspection:
❑ Regular Weekly ❑Regular Bi-Weekly ❑Pre-Storm Event ❑During Storm ❑Post-Storm Event

Weather Information

Has there been a storm event since the last inspection? ❑Yes ❑No
If Yes, provide: Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Stormwater Pollution Prevention Plan on site and available for review

Weather at time of this inspection?
❑Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds ❑ Other Temperature:

Have any discharges of sediment or other pollutants occurred since the last inspection? ❑ Yes ❑ No
If yes, describe:

Are there any discharges of sediment of pollutants at the time of inspection? ❑ Yes ❑ No
If Yes, describe:

Site Specific BMPS
Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below. Add as many BMPs as necessary. Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.

	BMP Type or Name	BMP Installed?	Maintenance Required?	Corrective Action Needed and Notes
1	Engineer's Erosion and Sediment Control Plan is on site	❑ Yes ❑ No	❑ Yes ❑ No	
2	Engineer's Erosion and Sediment Control Plan is being followed	❑ Yes ❑ No	❑ Yes ❑ No	
3	Construction entrance and parking areas are stabilized with stone	❑ Yes ❑ No	❑ Yes ❑ No	
4	Disturbed areas inactive for 14 days are seeded and mulched	❑ Yes ❑ No	❑ Yes ❑ No	
5	Silt fence is installed and maintained	❑ Yes ❑ No	❑ Yes ❑ No	
6	Sediment ponds/traps are installed and maintained	❑ Yes ❑ No	❑ Yes ❑ No	
7	Diversion channels are installed and stabilized	❑ Yes ❑ No	❑ Yes ❑ No	
8	Checked dams are installed and maintained	❑ Yes ❑ No	❑ Yes ❑ No	
9	Soil stockpiles are stabilized	❑ Yes ❑ No	❑ Yes ❑ No	
10	Erosion control blanket is installed	❑ Yes ❑ No	❑ Yes ❑ No	
11	Channels are stabilized with proper channel lining	❑ Yes ❑ No	❑ Yes ❑ No	
12	Dewatering operations are filtered before discharging to stream	❑ Yes ❑ No	❑ Yes ❑ No	

	BMP Type or Name	BMP Installed?	Maintenance Required?	Corrective Action Needed and Notes
13	Are all slopes and disturbed areas not being worked properly stabilized?	❑ Yes ❑ No	❑ Yes ❑ No	
14	Are discharge points and receiving waters free of any sediment deposits?	❑ Yes ❑ No	❑ Yes ❑ No	
15	Are storm drain inlets properly protected?	❑ Yes ❑ No	❑ Yes ❑ No	
16	Is the construction exit preventing sediment from being tracked into the street?	❑ Yes ❑ No	❑ Yes ❑ No	
17	Is trash/litter from work areas collected and placed in covered waste containers?	❑ Yes ❑ No	❑ Yes ❑ No	
18	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	❑ Yes ❑ No	❑ Yes ❑ No	
19	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other material?	❑ Yes ❑ No	❑ Yes ❑ No	
20	Are materials that are potential stormwater contaminants stored inside or under cover?	❑ Yes ❑ No	❑ Yes ❑ No	
21	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	❑ Yes ❑ No	❑ Yes ❑ No	

Non-Compliance

Describe any incidents of non-compliance not described above:

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction of supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: _____

Signature: _____ **Date:** _____

SECTION 32 9200

LAWNS AND GRASSES

PART 1 GENERAL

1.01 SCOPE OF WORK

A. Provide all labor, materials, equipment, and services required to perform sodding and seeding as shown on the Contract Drawings and as specified herein.

B. All areas disturbed by construction operations shall receive a protective cover of vegetation. The work shall consist of preparing the area for treatment, furnishing, and placing soil amendments, fertilizer, sod, seed, inoculants, mulch, and plantings as specified in the designated areas.

1.02 QUALIFICATIONS

A. The work shall be done by a provider who is experienced, reputable, and qualified in the tasks required.

1.03 SUBMITTALS

A. Shop Drawings and other items needed to establish compliance with the Drawings and these Specifications shall be submitted to the ENGINEER.

B. Where fertilizer is furnished from bulk storage, the CONTRACTOR shall furnish a supplier's certification of analysis and weight. When required by the Contract, a representative sample of the fertilizer shall be furnished the OWNER for chemical analysis.

1.04 WARRANTY

A. Refer to Division 0 and 1 for warranty requirements.

PART 2 PRODUCTS

2.01 SOD

A. The sod to be used shall be Kentucky Bluegrass comparatively free from weeds or heavy root structure, cut in strips of 10 inches to 12 inches wide, 18 inches to 24 inches long, with a thickness of 1-1/2 inches to 2 inches.

2.02 SEED

A. All seed shall conform to the current rules and regulations of the state where it is being used and from the latest crop available. It shall meet or exceed the standards for purity and germination listed herein.

B. Seed shall be labeled in accordance with the state laws and the U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act in effect on the date of invitations for bids. Bag tag figures will be evidence of purity and germination. No seed will be accepted with a date of test of more than 9 months prior to the date of delivery to the site.

C. The seed for use on this project shall be of the type as listed below with the listed germination and purity qualifications.

Species	% Purity	% Germination
Tall fescue (KY-31) (*Festuca arundinacea*)	98.5	80
Ryegrass (*Lolium multiflorium*)	98.0	90
Oats (*Avena sativa*)	98.0	90
Rye, grain (*Secale cereale*)	97.0	85
Redtop (*Agrostis alba*)	90.0	80
Kentucky Bluegrass (*Poa pratensis*)	81.0	70

2.03 FERTILIZER

A. Unless otherwise specified the fertilizer shall be a commercial grade fertilizer or as specified herein. The fertilizer shall meet the standard for grade and quality specified by state law.

2.04 INOCULANTS

A. The inoculant for treating legume seeds shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species and shall not be used later than the date indicated on the container or as otherwise specified. A mixing medium, as recommended by the manufacturer, shall be used to bond the inoculant to the seed. Two times the amount of the inoculant recommended by the manufacturer shall be used, except when seed is applied by use of hydraulic seeder, in which case 4 times the amount of inoculant recommended by the manufacturer shall be used. Seed shall be sown within 24 hours of treatment and shall not remain in the hydraulic seeder longer than 4 hours.

2.05 SOIL AMENDMENTS

A. Lime shall consist of standard ground agricultural limestone, or equal. Standard ground agricultural limestone is defined as ground limestone meeting current requirements of the State Department of Agriculture. Agricultural lime or other needed soil amendments will be uniformly applied at the rate specified herein.

2.06 ASPHALT EMULSION

A. Asphalt emulsion shall conform to the requirements of ASTM D 977-80, "Emulsified Asphalt." The emulsified asphalt may be rapid, medium, or slow cure materials.

2.07 STRAW MULCH MATERIALS

A. Straw mulch materials shall consist of wheat, oat, or rye straw, hay, grass clippings cut from any native grasses or other plants acceptable to the ENGINEER. The mulch material shall be air dry, reasonably light in color, and shall not be musty, moldy, caked, or otherwise of low quality. The use of mulch that contains noxious weeds will not be permitted. The CONTRACTOR shall provide a method satisfactory to the ENGINEER for determining weight of mulch furnished.

2.08 OTHER MULCH MATERIALS

A. Mulching materials, such as wood cellulose fiber mulch, emulsion type, synthetic fiber mulch, netting, mesh, and other mulching materials that may be required for specialized locations and conditions, when specified, must be accompanied by the manufacturer's recommendations for methods of application.

PART 3 EXECUTION

3.01 EXTENT

A. Lump Sum Contracts

1. Sodding

a. All sodded areas within the construction site steeper than 1 foot vertical to 4 feet horizontal, and berms less than 4 feet wide at all structures shall be sodded, unless otherwise shown on the Drawings or herein specified.

2. Seeding

a. Except for areas occupied by structures, roadways, walkways, and sodded areas specified above, the entire area disturbed by construction operations shall be seeded.

3.02 SOIL PREPARATION

A. All areas to be seeded or sodded shall be thoroughly cleaned, removing all debris of whatever nature. After the area has been cleaned, the soil for seeding and sodding shall be prepared as follows:

1. Loosen the soil to a depth of not less than 4 inches.

2. Work the soil until it is in good condition, raking with hand rake to complete the soil preparation and make final finished grade.

3. Broadcast 15 pounds of 8-8-8 or better fertilizer on each 1,000 square feet of area (for sodded areas only).

4. Rake area to receive sod, to spread fertilizer and work into soil.

5. On areas to be seeded, the raking in of fertilizer may be done concurrently with raking in of seed as hereinafter specified.

3.03 SODDING

A. The timing of resodding shall be controlled by the ENGINEER. Ground shall be prepared and fertilized as previously specified under Article 3.02 of this Specification Section. In small patches, supplying of 3 inches of topsoil and raking may be substituted for disking.

B. The strips of sod are to be laid so the joints will be broken. After the sod has been laid, it is to be watered thoroughly then rolled with a roller weighing 300 to 400 pounds, supplemented by hand tamping of sections inaccessible by roller.

C. After the sod has been put down, as described above, each piece is to have a minimum of 2 stakes to hold it in place, the stakes to be 1/2-inch square, 10 inches long, and driven into the ground with 2 inches of the stake left above the sod.

D. Sod shall be kept moist by watering for at least one month or until the Contract is completed and the facilities accepted by the OWNER for operation.

3.04 SEEDING

A. Seeding (Permanent Cover)

1. This item consists of seeding all areas disturbed during construction. All grading and/or filling of rills and gullies to a cross section acceptable to the ENGINEER shall be included in the seed bed preparation.

a. Lawns and Yards

(1) This item consists of seeding all areas equivalent to residence lawns or yards disturbed during construction. All grading and filling shall be accomplished in a manner acceptable to the ENGINEER prior to the placement of seed and materials. Seed shall consist of a mixture of one part Red Top and 3 parts high grade Kentucky Bluegrass seed mixed together and broadcast at the rate of 2 lbs to each 1,000 square feet of surface, to be seeded. Apply 2 tons of lime per acre. Apply 1500 pounds of 10-20-20 fertilizer per

acre. Apply mulch at the rate of 2 tons per acre. Mulch shall be applied to all lawn areas regardless of the time seeded.

3.05 MULCHING

A. Mulch materials, meeting the requirements of Part 2 of this Specification Section, shall be applied at the rate of 2 tons per acre.

B. The mulch shall be stabilized by running a "weighted" disk harrow with disks set straight, over the area on the contour, after the mulch has been applied, so as to imbed or press a part of the straw into the soil sufficiently to hold it in place. On earth embankments or areas too steep for use of mechanized equipment, the mulch shall be held in place by using small stakes and twine or other method acceptable to the ENGINEER. The blown-on bituminous-treated straw mulch method of placing the mulch, as specified in Section 212.06.03, Method 2 of the Standard Specifications for Road and Bridge Construction of the Kentucky Transportation Cabinet Department of Highways, will be an acceptable placing method.

C. Mesh, netting, or other special protective cover shall be at locations as shown on the Drawings and shall be installed according to the manufacturer's recommendations.

END OF SECTION

***

SECTION 33 4213

STORM SEWER

PART 1 GENERAL

1.01 SUMMARY

A. The work covered by this section shall consist of furnishing, laying, jointing storm sewer pipe and fittings, and furnishing and installation of manholes, catch basins, area drains, and other structures incidental to the construction of storm sewers.

1.02 RELATED SECTIONS

A. Section 31 2000—Earth and Rock Work

B. Section 03 3001—Cast-in-Place Concrete (Minor Structures)

C. Section 33 0101—Sewer and Drain Pipe

1.03 PERFORMANCE CRITERIA

A. Provided water quality units shall meet Lexington-Fayette Urban County Government (LFUCG) requirements for total suspended solids removal.

1. Unit 1 shall treat 0.25 acres of impervious area with a design flow of 0.8 cfs and peak flow of 1.6 cfs.

2. Unit 2 shall treat 0.25 acres of impervious area with a design flow of 0.8 cfs and peak flow of 1.6 cfs.

PART 2 PRODUCTS

2.01 GENERAL

A. The diameter of pipe culverts and storm drains shown on the project drawings and bid schedule are based on Manning's formula for pipe flowing full, and the slopes shown on the drawings and profiles. Any alternative materials and types of pipe culverts and storm drains will be indicated on project drawings or shall be approved by ENGINEER during the bid phase of project by written addendum.

B. Storm drains shall have a Manning’s roughness coefficient (n-value) not greater than 0.013.

2.02 STORM PIPE MATERIALS

A. Storm drain pipe extending from buildings shall match the pipe material from inside the building to a point 20-feet outside of the building. See Division 22 for plumbing pipe materials.

B. Reinforced Concrete Pipe (RCP): All concrete sewer pipe with an internal diameter of 12 inches or less shall be extra strength sewer pipe conforming to ASTM C14. All concrete pipe with an internal diameter of 15 inches or more shall be Class III (unless otherwise noted on plans) reinforced concrete pipe conforming to ASTM C76. Horizontal elliptical shall conform to C-507 Class HE-III.

C. The CONTRACTOR shall require the manufacturer or supplier furnish a certification that all materials furnished meet the above listed standards and materials specifications. A copy of this certification shall be provided to the ENGINEER.

D. For pipe sizes smaller than 12 inches in diameter, see Section 33 0101, Sewer and Drain Pipe.

2.03 STORM PIPE ACCESSORIES

A. Joint Materials

1. Butyl Mastic Joints or Rubber Gasket for RCP: “Soil-Tight” joints for RCP may be accomplished by using a butyl mastic sealant or a rubber gasket in the joint. The butyl mastic joint material shall meet the requirements of AASHTO M 198 (Type B). The rubber gasket joint material shall meet the physical property requirements set forth in ASTM 443.

2. Rubber “O” Ring or Profile Gasket Joints for RCP: The bell and spigot or the tongue and groove of the pipe shall be specially manufactured and prepared for the type of joint selected. The rubber gaskets shall meet the requirements of ASTM C443. Rubber gasket joints per ASTM C 443 will only be required in installations that require a watertight joint. RCP will be used on all watertight systems.

2.04 STRUCTURES AND APPURTENANCES

A. Catch basins, manholes, and area drains shall be precast or cast-in-place concrete as shown on the Plans or as otherwise directed by the ENGINEER. Round Precast concrete structures shall meet the applicable requirements of ASTM C478 with a minimum f’c= 4,000 psi. Square and or Rectangular precast concrete structures shall meet ASTM C 913. Cast-in-place structures shall be minimum f’c=4,000 psi.

B. Grates, Frames, And Curb Castings: Conforming to the requirements of ASTM A-48, Class 30. Machining of contact surfaces will be required so that covers and grates rest securely on the frames.

C. Ladder Bars: Shall be made of aluminum alloy conforming to Federal Specification QQ-A-200/8.

D. Steps for Storm Manholes and Catch Basins: Steps shall conform to ASTM C 478 and shall be steel reinforced copolymer polypropylene with the materials conforming to the following:

1. The deformed steel reinforcing bar shall be 1/2-inch conforming to ASTM A-615 Grade 60.

2. The copolymer polypropylene shall conform to ASTM D4101 PP0344B33534Z02.

E. Mortar: Shall be composed of one part Portland cement and 2 parts sand (volumetric measure). Mortar that has been mixed for more than 30 minutes which has been retempered or which has "set" shall not be used in the work.

F. Headwalls and End Sections: Shall be precast concrete as shown on the Plans or as otherwise directed by the ENGINEER.

2.05 STORM WATER QUALITY UNITS

A. Provide storm water quality units compatible with system selections and of materials complying with those used for storage chambers. Units shall have necessary access points to allow for ease of maintenance, cleaning, and monitoring.

B. Storm water quality units shall have documented results in meeting the total suspended solids removal requirements. Supplier shall document suitability for the proposed use and ability to meet water quality removal requirements.

C. <u>The units are subject to having the outlets submerged and thus must be able to handle potential backflow through the unit without releasing pollutants.</u>

PART 3 EXECUTION

3.01 PIPELINE CONSTRUCTION

A. Carefully protect all existing sewers, water lines, gas lines, sidewalks, curbs, gutters, pavements, electric lines, or other utilities or structures in the vicinity of the work from damage at all times. Wherever it is necessary for the proper accomplishment of the work to repair, remove, and/or replace any utility or structure, do so in accordance with the provisions set forth in the General and Supplementary Conditions and in Division 1, General Requirements.

B. Before constructing or placing joints, demonstrate to the ENGINEER, by completing at least one sample joint, that the methods employed conform to the specifications and will provide a watertight joint if a watertight system is specified on the plans, and further that the workmen intended for use on this phase of the work are thoroughly familiar and experienced with the type of joint proposed.

C. Before placing sewer pipe in position in the trench, carefully prepare the bottom and sides of the trench, and install any necessary bracing and sheeting as provided in Section 31 2000, Earthwork.

D. Tightly stretch a mason's line or wire above the ground level, parallel to and directly above the axis of the pipe to be installed; this line is to be supported at intervals of no more than 50 feet on sewers being laid on a grade of 2 percent or more and not exceeding 25 feet for grades of less than 2 percent. Determine the exact line and grade for each section of pipe by measuring down from this line to the invert of the pipe in place. Accurately place each pipe to the exact line and grade called for on the drawings. Furnish all labor and materials necessary for erecting batter boards. The use of laser beams will be allowed.

E. Do not allow water to run or stand in the trench while pipe laying is in progress, before the joint has completely set, or before the trench has been backfilled. Do not at any time open up more trench than the available pumping facilities are able to dewater.

F. Correct trench bottoms found to be unsuitable for foundations after pipe laying operations have been started, and bring them to exact line and grade with compacted earth as necessary.

G. Carefully inspect each piece of pipe and special fitting before it is placed, and lay no defective pipe in the trench. Pipe laying shall proceed upgrade, starting at the lower end of the grade and with the bells or grooves upgrade.

H. When bell and spigot pipe is utilized bell holes shall be excavated and be large enough to allow ample room for the pipe joints to be properly made. Cut bell holes out not more than 10 joints ahead of the pipe laying. Carefully grade the bottom of the trench between bell holes so that each pipe barrel will rest on a solid foundation for its entire length. Lay each pipe joint so as to form a close concentric joint with adjoining pipe and to avoid sudden offsets or inequalities in the flow line.

I. Jointing operations shall follow pipe laying very closely; failure to comply with this provision will result in the ENGINEER stopping all pipe laying operations until jointing operations catch up.

J. (For watertight installations only) After the joints have been completed, they shall be inspected, tested, and accepted by the ENGINEER before they can be covered. The CONTRACTOR shall immediately repair any leaks or defects discovered at any time after completion of the work. Take up any pipe that has been disturbed after joints were formed; clean and remake the joints; and relay the pipe at the CONTRACTOR'S expense. Carefully protect all pipe in place from damage until backfill operations are completed.

K. Required trench widths, bedding materials, structural backfill materials, and compaction requirements for trench backfill and structural backfill for the various piping products called for in the plan documents are set forth on the

project drawing detail sheet or are included and attached at the end of this section of specifications.

L. Do not begin the backfilling of trenches until the pipe in place has been inspected and approved by the ENGINEER.

M. As the work progresses, thoroughly clean the interior of all pipe in place. On small pipe, keep a swab or drag in the pipeline, and pull forward past each joint immediately after it has been made. After laying each line of pipe, carefully inspect it, and remove all earth, trash, rags, and other foreign matter from its interior.

3.02 JOINT CONSTRUCTION

A. Butyl Mastic Joints: Apply butyl mastic material on spigot or tongue of pipe section installed prior to homing bell or groove end of next pipe section.

B. Rubber “O” Ring and Profile Joints (for Watertight Installations with RCP): Rubber gaskets and the method of joint construction shall form a flexible watertight seal and shall be in strict compliance with the manufacturer's directions and requirements. Adequately lubricate the gaskets with lubricant provided for this purpose. Pipe joints shall be adequately and thoroughly homed until gasket has seated.

3.03 CONNECTIONS

A. Make connections to all existing sewer lines as shown on the Plans or as directed by the ENGINEER. Make connections either by removing a section of the sewer from the existing line and inserting in the space a wye branch of the proper size or by constructing a manhole, junction box, regulator chamber, or other structure as shown on the Plans.

B. Make connections to existing manholes or inlets by cutting a hole in the wall of the existing structure, inserting a length of pipe into the hole, filling around the pipe with concrete or mortar, and troweling the inside and outside surfaces of the joint to a neat finish, without excessive projection of pipe which may impair hydraulic performance. Shape or reshape the bottoms of manholes as necessary to fit the invert of the sewer pipe.

3.04 PIPE PROTECTION

A. If pipe sewer has less than 1 foot of cover when completed, provide concrete protection as shown on the drawings or required by the ENGINEER. Place the protection in accordance with the Plans.

3.05 INSTALLATION OF STRUCTURES AND APPURTENANCES

A. Construct inlets to the sizes, shapes, and dimensions shown on the drawings or as directed by the ENGINEER to meet special conditions. Excavate for structures in accordance with the applicable provisions of Section 31 2000, Earth and Rock Work.

B. Where inlets are to be constructed in existing pavements and/or curbs and gutters, cut such pavements and/or curbs and gutters to a neat line with an air hammer or other suitable equipment, removing no more pavement and/or curb and gutter than is essential.

C. Protect inlet foundations from damage by water and/or other causes. Place no concrete until the trench has been freed from water and/or mud, and maintain the trench in a reasonably dry condition during the progress of construction on structures.

D. When the foundation has been prepared and is approved by the ENGINEER, construct the bottom to the required line and grade. After the bottom has been allowed to set for a period of no less than 24 hours, construct the inlet thereon, taking care to form the pipe or pipes into the walls at the required elevations.

E. Set all castings accurately to line and grade in full cement mortar beds. Unless otherwise shown on the Plans and/or directed by the ENGINEER, set all grate frames no less than 1 inch below the normal grade of surrounding pavement and no less than 3 inches below the normal surface of unpaved areas; then slope the surrounding area to the grates on an approximate slope of 12:1. Mount frame in grout, secured to the top cone section to the elevation as indicated on the Plans.

F. After the frames have time to set, but in no case less than 24 hours, the space around the drainage structure shall be backfilled and compacted to the required grade and as specified in Section 31 2000, Earthwork.

G. Install headwalls and/or end sections as shown on the Plans and in accordance with the manufacturer's specifications.

3.06 SUBMITTALS AND FIELD QUALITY CONTROL

A. The CONTRACTOR shall submit to the ENGINEER certification and test data to assure all pipes supplied will meet the following criteria:

B. Pipe Materials: Manufacturer shall provide certification that all materials meet or exceed Part 2 Products, Article 2.02 Sewer Pipe Materials. Test data regarding pipe materials and or pipe strength may be requested by the ENGINEER or OWNER.

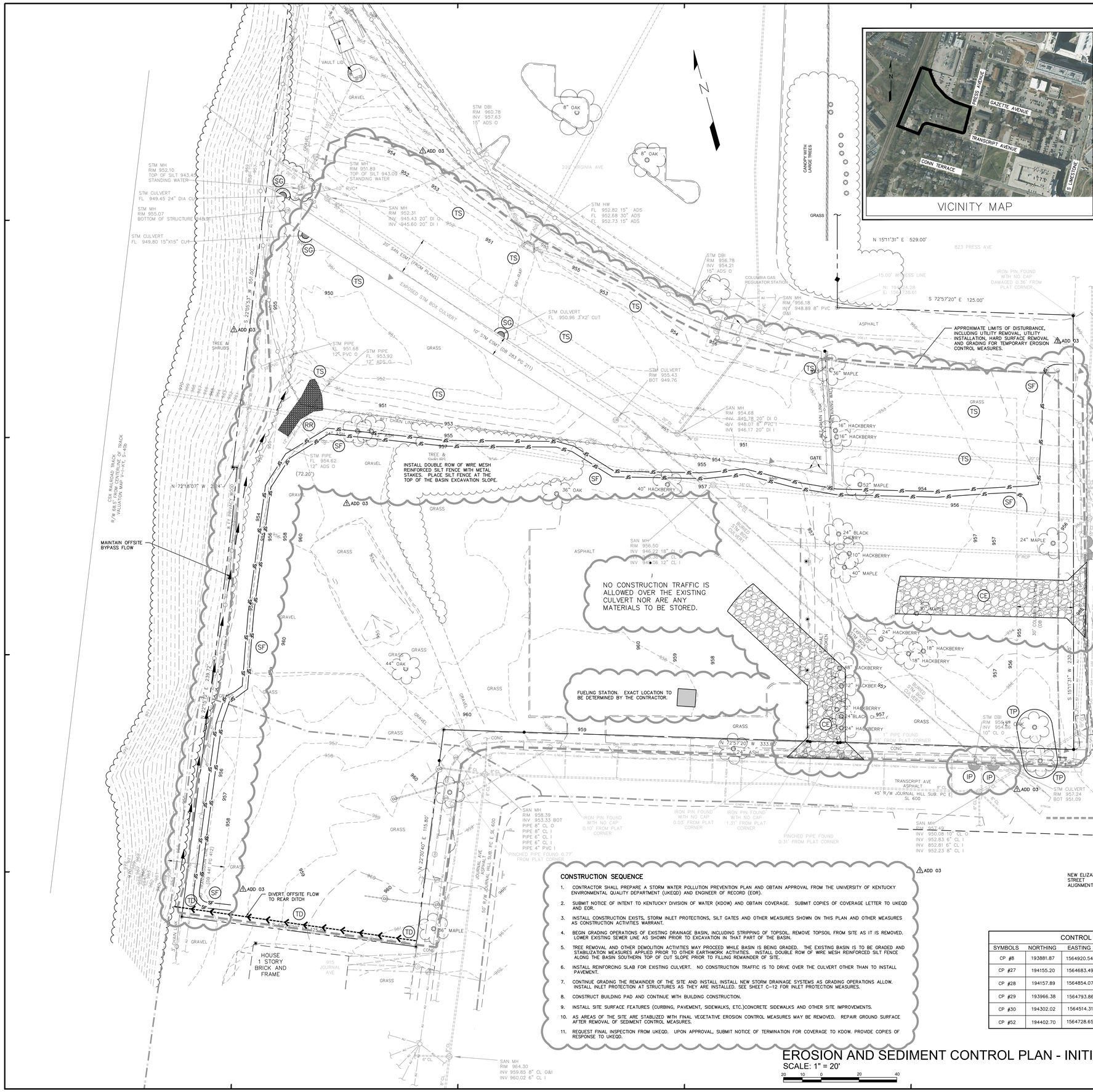
3.07 CLEANUP

A. After completing each section of sewer line, remove all debris and construction materials and equipment from the site of the work, grade and smooth over the surface on both sides of the line, and leave the entire right-of-way in a clean, neat, and serviceable condition.

B. The interior of catch basins, area drains, and manholes shall be cleaned of debris and excess material, the grating or cover placed, and all unused material, equipment, tools, and debris removed from the area.

END OF SECTION

***



EROSION AND SEDIMENT CONTROL NOTES

1. PROJECT LIMITS OF DISTURBANCE 2.9 ACRES. ADD 03
2. CONTRACTOR SHALL INSTALL, MAINTAIN, AND REMOVE EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THESE DRAWINGS, AS REQUIRED BY THE GENERAL STORMWATER PERMIT ISSED BY THE KENTUCKY DIVISION OF WATER (KDOW) AND AS REQUIRED BY SITE CONDITIONS AN CONSTRUCTION ACTIVITIES.
3. CONTRACTOR SHALL PREPARE THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMIT TO THE UNIVERSITY OF KENTUCKY ENVIRONMENTAL QUALITY MANAGER (UK EQM) AND THE ENGINEER OF RECORD (EOR) FOR APPROVAL.
4. THE CONTRACTOR SHALL SUBMIT THE REQUIRED NOTICE OF INTENT FORM TO KDOW AND OBTAIN COVERAGE PER KYR10 PRIOR TO ANY LAND DISTURBANCE ACTIVITIES. CONTRACTOR SHALL PROVIDE COPIES OF THE LETTER OF COVERAGE TO UK EQM AND EOR.
5. EROSION AND SEDIMENT CONTROL MEASURES AND PROCEDURES INCLUDED IN THESE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT THE MINIMUM WORK REQUIRED FOR EROSION PREVENTION AND SEDIMENT CONTROL. CHANGES MAY BE REQUIRED DUE TO CONSTRUCTION ACTIVITIES AND CHANGES IN SITE CONDITIONS. CONTRACTOR SHALL PRESENT ANY REQUESTED CHANGES TO THE EOR AND UK EQM FOR REVIEW AN APPROVAL.
6. DIRECTIVES NOTED IN THESE PLANS AND SPECIFICATIONS ARE NOT INTENDED TO DICTATE CONSTRUCTION SCHEDULE.
7. NOTE THAT MANY EROSION AND SEDIMENT CONTROL BMPs REQUIRE PERIODIC INSPECTION AND MAINTENANCE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THESE BMPs THROUGHOUT THE COURSE OF THE PROJECT. MEASURES ARE TO BE INSPECTED WEEKLY AND AFTER ANY RAIN EVENT OF 0.5" OR MORE.
8. THE CONTRACTOR SHALL REQUEST A FINAL INSPECTION BY UK EQM PRIOR TO SUBMITTING THE NOTICE OF TERMINATION (NOT) TO KDOW.
9. ROCK CHECKS (OR SUITABLE MANUFACTURED DEVICE) SHALL BE USED TO TRAP SEDIMENT TRAVELING ALONG DRAINAGE CHANNELS, ETC., STRAW BALES ARE NOT ACCEPTABLE.
10. STABILIZED CONSTRUCTION ENTRANCES ARE REQUIRED AT ALL POINTS OF ACCESS FOR CONSTRUCTION ACTIVITY. THEY ARE TO BE PLACED IN ORDER TO MINIMIZE DISTURBANCE FOR DRIVERS AND RESIDENTS NEAR THE CONSTRUCTION SITE. CONSTRUCTION ENTRANCES ARE REQUIRED WHEREVER VEHICLES ARE LEAVING A CONSTRUCTION SITE AND ENTER ONTO A PUBLIC ROAD AND AT ANY UNPAVED ENTRANCE/EXIT LOCATION WHERE THIS IS RISK OF TRANSPORTING MUD OR SEDIMENT ONTO PAVED ROADS. THEY ARE TO BE CONSTRUCTED OF A MINIMUM OF 6" THICKNESS OF #2 CRUSHED STONE LAID OVER KYTC TYPE III FILTER FABRIC. THEY ARE TO BE A LEAST AS WIDE AS THE ENTIRE WIDTH OF THE ACCESS (20' MINIMUM) AND A MINIMUM OF 100' LONG. THE ENTRANCE SHALL BE INSPECTED WEEKLY AND AFTER THERE HAS BEEN A HIGH VOLUME OF TRAFFIC OR STORM EVENT GREATER THAT 0.2 INCHES. THE ENTRANCE SHALL BE MAINTAINED TO PREVENT SEDIMENTS BEING DEPOSITED ONTO PUBLIC RIGHTS-OF-WAY, WHICH MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR OTHER MINIMIZERS AS NEEDED. ADD 03

   THE PUBLIC ROAD IS TO BE INSPECTED DAILY FOR DIRT OR SEDIMENT THAT MAY HAVE BEEN TRACKED ONTO THE PAVEMENT. SOLID MATERIAL IS TO BE SCRAPED OFF OF THE PAVEMENT SURFACE. WHERE SEDIMENT OR DUST IS PRESENT, THE MATERIAL IS TO BE SWEPT UP EITHER MANUALLY OR WITH EQUIPMENT SUITABLE FOR THE TASK.
11. ALL STORM INLETS POTENTIALLY IMPACTED BY SEDIMENT LADEN RUNOFF FROM THE CONSTRUCTION SITE SHALL HAVE INLET PROTECTION MEASURE ACCORDING TO THE DRAWINGS. THE PURPOSE OF THE INLET PROTECTION IS TO PREVENT SEDIMENT FROM ENTERING STORM DRAINAGE SYSTEMS PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEANOUT AND DISPOSAL OF TRAPPED SEDIMENT AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES.
12. STORM WATER RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AROUND CONSTRUCTION SITES BY THE USE OF DIVERSION BERMS OR DIVERSION DITCHES.
13. SILT FENCES SHALL BE USED TO TRAP SEDIMENT FROM SEDIMENT LADEN STORM WATER ROLLING DOWN HILLS, ETC., ACCORDING TO THE DRAWINGS. SILT FENCES ARE TO BE INSTALLED PRIOR TO DISTURBANCE IN AN AREA. THEY MAY BE REMOVED ONCE ALL OF THE DISTURBED AREAS LYING UPSTREAM HAVE BEEN STABILIZED. CONTRACTOR IS RESPONSIBLE FOR PERIODIC INSPECTION AND ENSURING THAT THEY ARE IN GOOD WORKING ORDER THROUGHOUT THE PROJECT. WHERE SILT CONTROL IS REQUIRED ALONG PAVEMENT AREAS, USE SAND BAG SILT BARRIERS WHEN SILT FENCING CANNOT BE USED.
14. EROSION CONTROL BLANKETS SHALL BE USED ON RECENTLY PLANTED SLOPES TO PROTECT SEEDLINGS UNTIL THEY BECOME ESTABLISHED. ACCEPTABLE PRODUCTS INCLUDE MULCH NETTING AND EROSION CONTROL MATTING. IN ALL CASES, THE CONTRACTOR SHALL PERFORM PERIODIC INSPECTION TO ENSURE PROPER PERFORMANCE AND SHALL COMPLETE ANY NECESSARY REPAIRS. LFUCG FIGURES 11-1, 5, 6 AND 7 PROVIDE GUIDANCE FOR USING EROSION CONTROL MATTING ON SLOPES.
15. THE CONTRACTOR SHALL SCHEDULE AND CONDUCT HIS OPERATIONS IN A MANNER TO AVOID OR MINIMIZE SOIL EROSION AND SILTATION FOR ALL CONSTRUCTION ACTIVITIES. ADD 03
16. ANY CONTRACTOR OR SUBCONTRACTOR STORING FUEL, CHEMICALS OR OTHER POTENTIAL POLLUTION SOURCES ON-SITE ARE RESPONSIBLE FOR PROVIDING THE NECESSARY CONTAINMENT AND SPILL PREVENTION MEASURES, INCLUDING RESPONSE PLAN IN THE EVENT A SPILL OCCURS. FUELING FACILITIES ARE NOT TO BE PLACED WITHIN 25 FEET OF ANY WATER BODY, STORM CONTROL STRUCTURE OR STORM WATER CONVEYANCE.
17. ALL TRASH AND CONSTRUCTION WASTE MATERIALS WILL BE COLLECTED AND DISPOSED IN METAL DUMPSTER(S) WITH COVER. COVER SHALL BE CLOSED AT THE END OF THE DAY AND WHEN NOT IN USE. THE DUMPSTER(S) WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER(S) WILL BE EMPTIED AS NECESSARY BY A LICENSED SOLID WASTE MANAGEMENT COMPANY AND THE WASTE DISPOSED OF AT THE APPROPRIATE LANDFILL. NO CONSTRUCTION WASTE WILL BE BURIED ONSITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL.
18. PROVIDE CONCRETE WASHOUT FACILITY. FACILITY SHALL NOT BE WITHIN 25 FEET OF ANY WATER BODY, STORM CONTROL STRUCTURE OR STORM WATER CONVEYANCE. THEY SHALL BE SIZED APPROXIMATELY 20' X 20' X 5' AND PROVIDED IN SUFFICIENT QUANTITIES ACCORDING TO CONCRETE PLACEMENT WITHIN AN AREA. THEY ARE TO BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR THROUGHOUT THE PROJECT AND BE CLEANED WHEN THEY REACH APPROXIMATELY 75% OF THEIR VOLUME.
19. ALL HAZARDOUS MATERIALS AND WASTE WILL BE STORED AND DISPOSED OF IN A MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. ALL PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE JOB SITE SUPERINTENDENT WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.
20. ALL SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS BY LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR PROVIDED AT THE JOB SITE.
21. ALL SEDIMENT RETAINING MEASURES (INLET PROTECTION, CHECK DAMS, SILT FENCE, ETC.) ARE TO HAVE SEDIMENT REMOVED WHEN BUILDING UP IS ONE THIRD THE DEPTH OR HEIGHT OF THE MEASURE FULL. DISPOSE OF SEDIMENT OFFSITE.
22. ALL DISCHARGE FROM DEWATERING OPERATIONS IS TO BE DIRECTED TO TEMPORARY SEDIMENT TRAPS OR OTHER SILT RETAINING MEASURES.
23. TOPSOIL STRIPPED FOR EARTHWORK OPERATIONS IS NOT TO BE STOCKPILED ONSITE AND IS TO BE REMOVED FROM THE SITE. ANY TEMPORARY SOIL STOCKPILES REMAINING LESS THAN A WEEK ARE TO BE STABILIZED WITH TEMPORARY SEEDING AND HAVE SILT FENCE PLACED AROUND THE BASE ON THE DOWN GRADE SIDE.
24. SITE SHALL BE OBSERVED DAILY FOR EVIDENCE OF WINDBLOWN DUST AND TAKE STEPS (SUCH AS WATER AREA) TO REDUCE DUST. WHEN USING WATER FOR DUST CONTROL, CAUTION IS TO BE USED TO PREVENT WATER FROM WASHING SEDIMENT INTO THE PUBLIC RIGHT-OF-WAY OR INTO AREAS OF THE SITE THAT DO NOT HAVE SEDIMENT CONTROL MEASURES.
25. CONTRACTOR SHALL PHASE CONSTRUCTION TO MINIMIZE THE AMOUNT OF DISTURBED AREA AT ANY ONE TIME. IF AN AREA THAT HAS BEEN DISTURBED IS TO BE INACTIVE FOR MORE THAN 14 DAYS, THE CONTRACTOR SHALL SUPPLY STABILIZATION BY MEANS OF TEMPORARY SEEDING AND MULCHING, SODDING, COVERING, OR OTHER EQUIVALENT EROSION CONTROL MEASURES AS SOON AS PRACTICAL. IN NO CASE SHALL AN AREA REMAIN UNTREATED FOR MORE THAN 14 DAYS AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY STABILIZATION CAN BE ACCOMPLISHED THROUGH SEEDING RYE (GRAIN) OR OTHER UNIVERSITY-APPROVED SEED MIXTURE APPLIED AT A RATE OF 120 POUNDS PER ACRE AND OR STRAW MULCH AT A RATE OF 4,000 POUNDS OF STRAW PER ACRE. SEEDED SLOPES GREATER THAN 4:1 SHALL BE TREATED WITH EROSION CONTROL BLANKET. ADD 03

CONSTRUCTION SEQUENCE

1. CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN AND OBTAIN APPROVAL FROM THE UNIVERSITY OF KENTUCKY ENVIRONMENTAL QUALITY DEPARTMENT (UKEQD) AND ENGINEER OF RECORD (EOR).
2. SUBMIT NOTICE OF INTENT TO KENTUCKY DIVISION OF WATER (KDOW) AND OBTAIN COVERAGE. SUBMIT COPIES OF COVERAGE LETTER TO UKEQD AND EOR.
3. INSTALL CONSTRUCTION EXISTS, STORM INLET PROTECTIONS, SILT GATES AND OTHER MEASURES SHOWN ON THIS PLAN AND OTHER MEASURES AS CONSTRUCTION ACTIVITIES WARRANT.
4. BEGIN GRADING OPERATIONS OF EXISTING DRAINAGE BASIN, INCLUDING STRIPPING OF TOPSOIL. REMOVE TOPSOIL FROM SITE AS IT IS REMOVED. LOWER EXISTING SEWER LINE AS SHOWN PRIOR TO EXCAVATION IN THAT PART OF THE BASIN.
5. TREE REMOVAL AND OTHER DEMOLITION ACTIVITIES MAY PROCEED WHILE BASIN IS BEING GRADED. THE EXISTING BASIN IS TO BE GRADED AND STABILIZATION MEASURES APPLIED PRIOR TO OTHER EARTHWORK ACTIVITIES. INSTALL DOUBLE ROW OF WIRE MESH REINFORCED SILT FENCE ALONG THE BASIN SOUTHERN TOP OF CUT SLOPE PRIOR TO FILLING REMAINDER OF SITE.
6. INSTALL REINFORCING SLAB FOR EXISTING CULVERT. NO CONSTRUCTION TRAFFIC IS TO DRIVE OVER THE CULVERT OTHER THAN TO INSTALL PAVEMENT.
7. CONTINUE GRADING THE REMAINDER OF THE SITE AND INSTALL INSTALL NEW STORM DRAINAGE SYSTEMS AS GRADING OPERATIONS ALLOW. INSTALL INLET PROTECTION AT STRUCTURES AS THEY ARE INSTALLED. SEE SHEET C-12 FOR INLET PROTECTION MEASURES.
8. CONSTRUCT BUILDING PAD AND CONTINUE WITH BUILDING CONSTRUCTION.
9. INSTALL SITE SURFACE FEATURES (CURBING, PAVEMENT, SIDEWALKS, ETC.)CONCRETE SIDEWALKS AND OTHER SITE IMPROVEMENTS.
10. AS AREAS OF THE SITE ARE STABLIZED WITH FINAL VEGETATIVE EROSION CONTROL MEASURES MAY BE REMOVED. REPAIR GROUND SURFACE AFTER REMOVAL OF SEDIMENT CONTROL MEASURES.
11. REQUEST FINAL INSPECTION FROM UKEQD. UPON APPROVAL, SUBMIT NOTICE OF TERMINATION FOR COVERAGE TO KDOW. PROVIDE COPIES OF RESPONSE TO UKEQD.

CONTROL POINT TABLE

SYMBOLS	NORTHING	EASTING	ELEV.	DESCRIPTION
CP #8	193881.87	1564920.54	956.16	MAG NAIL IN SIDEWALK
CP #27	194155.20	1564683.49	953.77	IRON PIN SET W/ CAP
CP #28	194157.89	1564854.07	958.39	IRON PIN SET W/ CAP
CP #29	193966.38	1564793.86	956.39	MAG NAIL IN SIDEWALK
CP #30	194302.02	1564514.31	954.74	MAG NAIL IN CULVERT
CP #52	194402.70	1564728.65	963.17	MAG NAIL IN CURB

EROSION CONTROL LEGEND

SEE SHEETS C-12 AND C-13 FOR DETAILS

SYMBOLS	DESCRIPTION
SF	TEMPORARY SILT FENCE
IP	TEMPORARY INLET PROTECTION
TP	TREE PROTECTION
CE	CONSTRUCTION ENTRANCE
SG	SILT GATE
TS	TEMPORARY SEEDING (SEE NOTE 25)
TD	TEMPORARY DIVERSION DITCH
SB	SILT BARRIER
OP	OUTLET PROTECTION
CD	CHECK DAM
PS	PERMANENT SEEDING (SEE SPECIFICATIONS)
RR	RIP RAP LINED DITCH
ECB	TEMPORARY EROSION CONTROL BLANKET
TRM	TURF REINFORCEMENT MATTING

EROSION AND SEDIMENT CONTROL PLAN - INITIAL PHASE

SCALE: 1" = 20'

20 10 0 20 40

Omni ARCHITECTS
212 North Upper Street
Lexington, Kentucky 40507
p. 859.252.6664
www.omniarchitects.com

BROWN+KUBICAN STRUCTURAL ENGINEERS

CMTA

Bell

STATE OF KENTUCKY THOMAS P. HARPER III 17315 LICENSED PROFESSIONAL ENGINEER 4/10/25

UNIVERSITY OF KENTUCKY
ENVIRONMENTAL QUALITY MANAGEMENT CENTER
BID PACKAGE #1

UK PROJECT NUMBER	2874.0
OMNI PROJECT NUMBER	2406
DATE	03/10/2025
	BP#1

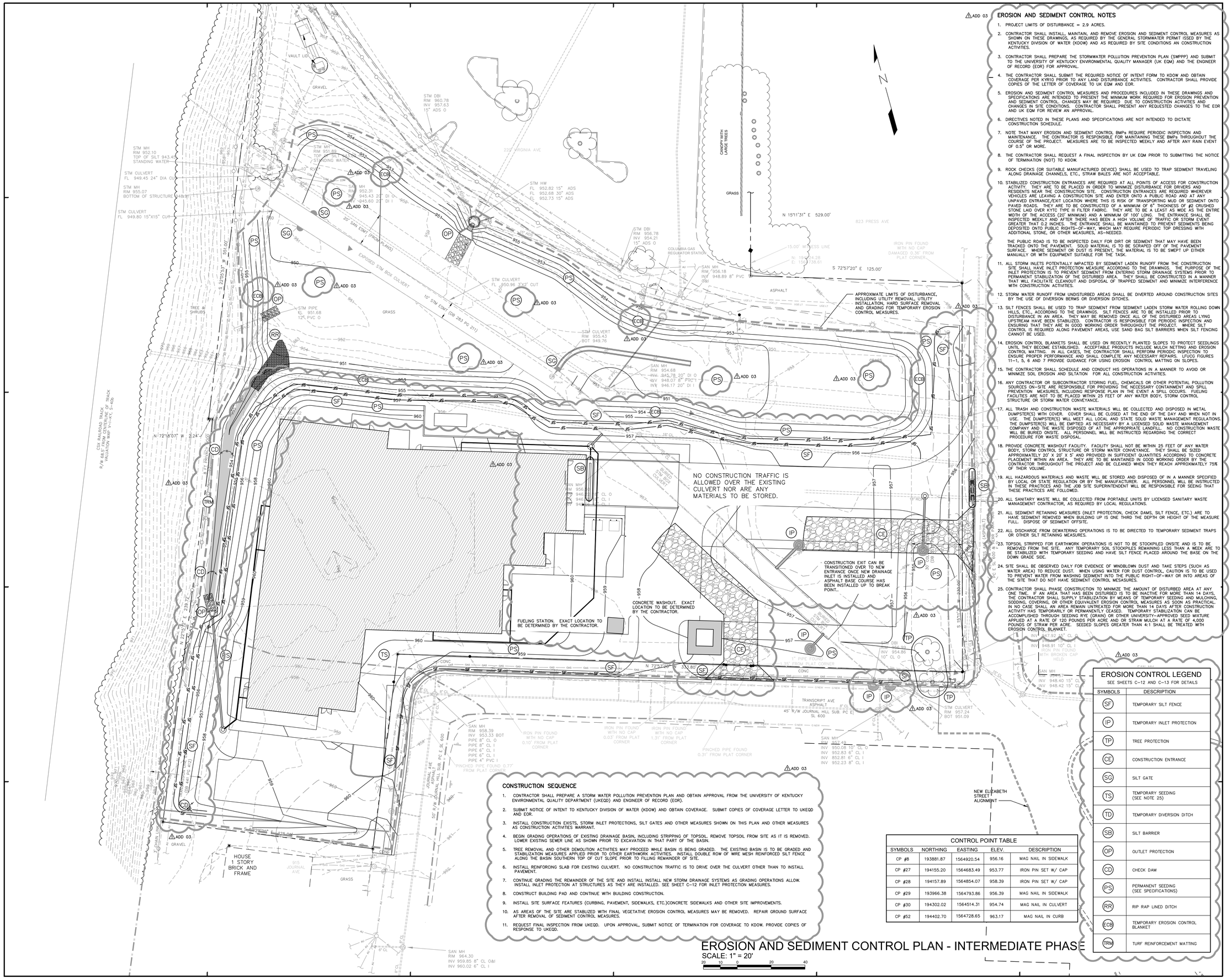
REVISIONS

1 BP#1	ADDENDUM #3	04/10/2025

EROSION & SEDIMENT CONTROL PLAN - INITIAL PHASE

C-10

PRINT DATE: 3/10/2025 9:15:29 AM



EROSION AND SEDIMENT CONTROL NOTES

1. PROJECT LIMITS OF DISTURBANCE = 2.9 ACRES.
2. CONTRACTOR SHALL INSTALL, MAINTAIN, AND REMOVE EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THESE DRAWINGS, AS REQUIRED BY THE GENERAL STORMWATER PERMIT ISSED BY THE KENTUCKY DIVISION OF WATER (KDOW) AND AS REQUIRED BY SITE CONDITIONS AN CONSTRUCTION ACTIVITIES.
3. CONTRACTOR SHALL PREPARE THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMIT TO THE UNIVERSITY OF KENTUCKY ENVIRONMENTAL QUALITY MANAGER (UK EQM) AND THE ENGINEER OF RECORD (EOR) FOR APPROVAL.
4. THE CONTRACTOR SHALL SUBMIT THE REQUIRED NOTICE OF INTENT FORM TO KDOW AND OBTAIN COVERAGE PER KYRIO PRIOR TO ANY LAND DISTURBANCE ACTIVITIES. CONTRACTOR SHALL PROVIDE COPIES OF THE LETTER OF COVERAGE TO UK EQM AND EOR.
5. EROSION AND SEDIMENT CONTROL MEASURES AND PROCEDURES INCLUDED IN THESE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT THE MINIMUM WORK REQUIRED FOR EROSION PREVENTION AND SEDIMENT CONTROL. CHANGES MAY BE REQUIRED DUE TO CONSTRUCTION ACTIVITIES AND CHANGES IN SITE CONDITIONS. CONTRACTOR SHALL PRESENT ANY REQUESTED CHANGES TO THE EOR AND UK EQM FOR REVIEW AN APPROVAL.
6. DIRECTIVES NOTED IN THESE PLANS AND SPECIFICATIONS ARE NOT INTENDED TO DICTATE CONSTRUCTION SCHEDULE.
7. NOTE THAT MANY EROSION AND SEDIMENT CONTROL BMPs REQUIRE PERIODIC INSPECTION AND MAINTENANCE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THESE BMPs THROUGHOUT THE COURSE OF THE PROJECT. MEASURES ARE TO BE INSPECTED WEEKLY AND AFTER ANY RAIN EVENT OF 0.5" OR MORE.
8. THE CONTRACTOR SHALL REQUEST A FINAL INSPECTION BY UK EQM PRIOR TO SUBMITTING THE NOTICE OF TERMINATION (NOT) TO KDOW.
9. ROCK CHECKS (OR SUITABLE MANUFACTURED DEVICE) SHALL BE USED TO TRAP SEDIMENT TRAVELING ALONG DRAINAGE CHANNELS, ETC., STRAW BALES ARE NOT ACCEPTABLE.
10. STABILIZED CONSTRUCTION ENTRANCES ARE REQUIRED AT ALL POINTS OF ACCESS FOR CONSTRUCTION ACTIVITY. THEY ARE TO BE PLACED IN ORDER TO MINIMIZE DISTURBANCE FOR DRIVERS AND RESIDENTS NEAR THE CONSTRUCTION SITE. CONSTRUCTION ENTRANCES ARE REQUIRED WHEREVER VEHICLES ARE LEAVING A CONSTRUCTION SITE AND ENTER ONTO A PUBLIC ROAD AND AT ANY UNPAVED ENTRANCE/EXIT LOCATION WHERE THIS IS RISK OF TRANSPORTING MUD OR SEDIMENT ONTO PAVED ROADS. THEY ARE TO BE CONSTRUCTED OF A MINIMUM OF 6" THICKNESS OF #2 CRUSHED STONE LAID OVER KYTC TYPE III FILTER FABRIC. THEY ARE TO BE A LEAST AS WIDE AS THE ENTIRE WIDTH OF THE ACCESS (20' MINIMUM) AND A MINIMUM OF 100' LONG. THE ENTRANCE SHALL BE INSPECTED WEEKLY AND AFTER THERE HAS BEEN A HIGH VOLUME OF TRAFFIC OR STORM EVENT GREATER THAT 0.2 INCHES. THE ENTRANCE SHALL BE MAINTAINED TO PREVENT SEDIMENTS BEING DEPOSITED ONTO PUBLIC RIGHTS-OF-WAY, WHICH MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE, OR OTHER MEASURES, AS-NEEDED.

    THE PUBLIC ROAD IS TO BE INSPECTED DAILY FOR DIRT OR SEDIMENT THAT MAY HAVE BEEN TRACKED ONTO THE PAVEMENT. SOLID MATERIAL IS TO BE SCRAPED OFF OF THE PAVEMENT SURFACE. WHERE SEDIMENT OR DUST IS PRESENT, THE MATERIAL IS TO BE SWEPT UP EITHER MANUALLY OR WITH EQUIPMENT SUITABLE FOR THE TASK.
11. ALL STORM INLETS POTENTIALLY IMPACTED BY SEDIMENT LADEN RUNOFF FROM THE CONSTRUCTION SITE SHALL HAVE INLET PROTECTION MEASURE ACCORDING TO THE DRAWINGS. THE PURPOSE OF THE INLET PROTECTION IS TO PREVENT SEDIMENT FROM ENTERING STORM DRAINAGE SYSTEMS PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEANOUT AND DISPOSAL OF TRAPPED SEDIMENT AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES.
12. STORM WATER RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AROUND CONSTRUCTION SITES BY THE USE OF DIVERSION BERMS OR DIVERSION DITCHES.
13. SILT FENCES SHALL BE USED TO TRAP SEDIMENT FROM SEDIMENT LADEN STORM WATER ROLLING DOWN HILLS, ETC., ACCORDING TO THE DRAWINGS. SILT FENCES ARE TO BE INSTALLED PRIOR TO DISTURBANCE IN AN AREA. THEY MAY BE REMOVED ONCE ALL OF THE DISTURBED AREAS LYING UPSTREAM HAVE BEEN STABILIZED. CONTRACTOR IS RESPONSIBLE FOR PERIODIC INSPECTION AND ENSURING THAT THEY ARE IN GOOD WORKING ORDER THROUGHOUT THE PROJECT. WHERE SILT CONTROL IS REQUIRED ALONG PAVEMENT AREAS, USE SAND BAG SILT BARRIERS WHEN SILT FENCING CANNOT BE USED.
14. EROSION CONTROL BLANKETS SHALL BE USED ON RECENTLY PLANTED SLOPES TO PROTECT SEEDLINGS UNTIL THEY BECOME ESTABLISHED. ACCEPTABLE PRODUCTS INCLUDE MULCH NETTING AND EROSION CONTROL MATTING. IN ALL CASES, THE CONTRACTOR SHALL PERFORM PERIODIC INSPECTION TO ENSURE PROPER PERFORMANCE AND SHALL COMPLETE ANY NECESSARY REPAIRS. LFUCG FIGURES 11-1, 5, 6 AND 7 PROVIDE GUIDANCE FOR USING EROSION CONTROL MATTING ON SLOPES.
15. THE CONTRACTOR SHALL SCHEDULE AND CONDUCT HIS OPERATIONS IN A MANNER TO AVOID OR MINIMIZE SOIL EROSION AND SILTATION FOR ALL CONSTRUCTION ACTIVITIES.
16. ANY CONTRACTOR OR SUBCONTRACTOR STORING FUEL, CHEMICALS OR OTHER POTENTIAL POLLUTION SOURCES ON-SITE ARE RESPONSIBLE FOR PROVIDING THE NECESSARY CONTAINMENT AND SPILL PREVENTION MEASURES, INCLUDING RESPONSE PLAN IN THE EVENT A SPILL OCCURS. FUELING FACILITIES ARE NOT TO BE PLACED WITHIN 25 FEET OF ANY WATER BODY, STORM CONTROL STRUCTURE OR STORM WATER CONVEYANCE.
17. ALL TRASH AND CONSTRUCTION WASTE MATERIALS WILL BE COLLECTED AND DISPOSED IN METAL DUMPSTER(S) WITH COVER. COVER SHALL BE CLOSED AT THE END OF THE DAY AND WHEN NOT IN USE. THE DUMPSTER(S) WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER(S) WILL BE EMPTIED AS NECESSARY BY A LICENSED SOLID WASTE MANAGEMENT COMPANY AND THE WASTE DISPOSED OF AT THE APPROPRIATE LANDFILL. NO CONSTRUCTION WASTE WILL BE BURIED ONSITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL.
18. PROVIDE CONCRETE WASHOUT FACILITY. FACILITY SHALL NOT BE WITHIN 25 FEET OF ANY WATER BODY, STORM CONTROL STRUCTURE OR STORM WATER CONVEYANCE. THEY SHALL BE SIZED APPROXIMATELY 20' X 20' X 5' AND PROVIDED IN SUFFICIENT QUANTITIES ACCORDING TO CONCRETE PLACEMENT WITHIN AN AREA. THEY ARE TO BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR THROUGHOUT THE PROJECT AND BE CLEANED WHEN THEY REACH APPROXIMATELY 75% OF THEIR VOLUME.
19. ALL HAZARDOUS MATERIALS AND WASTE WILL BE STORED AND DISPOSED OF IN A MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. ALL PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE JOB SITE SUPERINTENDENT WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.
20. ALL SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS BY LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR, AS REQUIRED BY LOCAL REGULATIONS.
21. ALL SEDIMENT RETAINING MEASURES (INLET PROTECTION, CHECK DAMS, SILT FENCE, ETC.) ARE TO HAVE SEDIMENT REMOVED WHEN BUILDING UP IS ONE THIRD THE DEPTH OR HEIGHT OF THE MEASURE FULL. DISPOSE OF SEDIMENT OFFSITE.
22. ALL DISCHARGE FROM DEWATERING OPERATIONS IS TO BE DIRECTED TO TEMPORARY SEDIMENT TRAPS OR OTHER SILT RETAINING MEASURES.
23. TOPSOIL STRIPPED FOR EARTHWORK OPERATIONS IS NOT TO BE STOCKPILED ONSITE AND IS TO BE REMOVED FROM THE SITE. ANY TEMPORARY SOIL STOCKPILES REMAINING LESS THAN A WEEK ARE TO BE STABILIZED WITH TEMPORARY SEEDING AND HAVE SILT FENCE PLACED AROUND THE BASE ON THE DOWN GRADE SIDE.
24. SITE SHALL BE OBSERVED DAILY FOR EVIDENCE OF WINDBLOWN DUST AND TAKE STEPS (SUCH AS WATER AREA) TO REDUCE DUST. WHEN USING WATER FOR DUST CONTROL, CAUTION IS TO BE USED TO PREVENT WATER FROM WASHING SEDIMENT INTO THE PUBLIC RIGHT-OF-WAY OR INTO AREAS OF THE SITE THAT DO NOT HAVE SEDIMENT CONTROL MESASURES.
25. CONTRACTOR SHALL PHASE CONSTRUCTION TO MINIMIZE THE AMOUNT OF DISTURBED AREA AT ANY ONE TIME. IF AN AREA THAT HAS BEEN DISTURBED IS TO BE INACTIVE FOR MORE THAN 14 DAYS, THE CONTRACTOR SHALL SUPPLY STABILIZATION BY MEANS OF TEMPORARY SEEDING AND MULCHING, SODDING, COVERING, OR OTHER EQUIVALENT EROSION CONTROL MEASURES AS SOON AS PRACTICAL. IN NO CASE SHALL AN AREA REMAIN UNTREATED FOR MORE THAN 14 DAYS AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY STABILIZATION CAN BE ACCOMPLISHED THROUGH SEEDING RYE (GRAIN) OR OTHER UNIVERSITY-APPROVED SEED MIXTURE APPLIED AT A RATE OF 120 POUNDS PER ACRE AND OR STRAW MULCH AT A RATE OF 4,000 POUNDS OF STRAW PER ACRE. SEEDED SLOPES GREATER THAN 4:1 SHALL BE TREATED WITH EROSION CONTROL BLANKET.

CONSTRUCTION SEQUENCE

1. CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN AND OBTAIN APPROVAL FROM THE UNIVERSITY OF KENTUCKY ENVIRONMENTAL QUALITY DEPARTMENT (UKEQD) AND ENGINEER OF RECORD (EOR).
2. SUBMIT NOTICE OF INTENT TO KENTUCKY DIVISION OF WATER (KDOW) AND OBTAIN COVERAGE. SUBMIT COPIES OF COVERAGE LETTER TO UKEQD AND EOR.
3. INSTALL CONSTRUCTION EXISTS, STORM INLET PROTECTIONS, SILT GATES AND OTHER MEASURES SHOWN ON THIS PLAN AND OTHER MEASURES AS CONSTRUCTION ACTIVITIES WARRANT.
4. BEGIN GRADING OPERATIONS OF EXISTING DRAINAGE BASIN, INCLUDING STRIPPING OF TOPSOIL. REMOVE TOPSOIL FROM SITE AS IT IS REMOVED. LOWER EXISTING SEWER LINE AS SHOWN PRIOR TO EXCAVATION IN THAT PART OF THE BASIN.
5. TREE REMOVAL AND OTHER DEMOLITION ACTIVITIES MAY PROCEED WHILE BASIN IS BEING GRADED. THE EXISTING BASIN IS TO BE GRADED AND STABILIZATION MEASURES APPLIED PRIOR TO OTHER EARTHWORK ACTIVITIES. INSTALL DOUBLE ROW OF WIRE MESH REINFORCED SILT FENCE ALONG THE BASIN SOUTHERN TOP OF CUT SLOPE PRIOR TO FILLING REMAINDER OF SITE.
6. INSTALL REINFORCING SLAB FOR EXISTING CULVERT. NO CONSTRUCTION TRAFFIC IS TO DRIVE OVER THE CULVERT OTHER THAN TO INSTALL PAVEMENT.
7. CONTINUE GRADING THE REMAINDER OF THE SITE AND INSTALL INSTALL NEW STORM DRAINAGE SYSTEMS AS GRADING OPERATIONS ALLOW. INSTALL INLET PROTECTION AT STRUCTURES AS THEY ARE INSTALLED. SEE SHEET C-12 FOR INLET PROTECTION MEASURES.
8. CONSTRUCT BUILDING PAD AND CONTINUE WITH BUILDING CONSTRUCTION.
9. INSTALL SITE SURFACE FEATURES (CURBING, PAVEMENT, SIDEWALKS, ETC.)CONCRETE SIDEWALKS AND OTHER SITE IMPROVEMENTS.
10. AS AREAS OF THE SITE ARE STABLIZED WITH FINAL VEGETATIVE EROSION CONTROL MEASURES MAY BE REMOVED. REPAIR GROUND SURFACE AFTER REMOVAL OF SEDIMENT CONTROL MEASURES.
11. REQUEST FINAL INSPECTION FROM UKEQD. UPON APPROVAL, SUBMIT NOTICE OF TERMINATION FOR COVERAGE TO KDOW. PROVIDE COPIES OF RESPONSE TO UKEQD.

CONTROL POINT TABLE

SYMBOLS	NORTHING	EASTING	ELEV.	DESCRIPTION
CP #8	193881.87	1564920.54	956.16	MAG NAIL IN SIDEWALK
CP #27	194155.20	1564683.49	953.77	IRON PIN SET W/ CAP
CP #28	194157.89	1564854.07	958.39	IRON PIN SET W/ CAP
CP #29	193966.38	1564793.86	956.39	MAG NAIL IN SIDEWALK
CP #30	194302.02	1564514.31	954.74	MAG NAIL IN CULVERT
CP #52	194402.70	1564728.65	963.17	MAG NAIL IN CURB

EROSION CONTROL LEGEND

SEE SHEETS C-12 AND C-13 FOR DETAILS

SYMBOLS	DESCRIPTION
SF	TEMPORARY SILT FENCE
IP	TEMPORARY INLET PROTECTION
TP	TREE PROTECTION
CE	CONSTRUCTION ENTRANCE
SG	SILT GATE
TS	TEMPORARY SEEDING (SEE NOTE 25)
TD	TEMPORARY DIVERSION DITCH
SB	SILT BARRIER
OP	OUTLET PROTECTION
CD	CHECK DAM
PS	PERMANENT SEEDING (SEE SPECIFICATIONS)
RR	RIP RAP LINED DITCH
ECB	TEMPORARY EROSION CONTROL BLANKET
TRM	TURF REINFORCEMENT MATTING

EROSION AND SEDIMENT CONTROL PLAN - INTERMEDIATE PHASE

SCALE: 1" = 20'

20 10 0 20 40

Omni ARCHITECTS
212 North Upper Street
Lexington, Kentucky 40507
p. 859.252.6664
www.omniarchitects.com

BROWN+KUBICAN STRUCTURAL ENGINEERS

CMTA

Bell

STATE OF KENTUCKY THOMAS F. HARPER III 17315 LICENSED PROFESSIONAL ENGINEER
4/09/25

UNIVERSITY OF KENTUCKY ENVIRONMENTAL QUALITY MANAGEMENT CENTER

BID PACKAGE #1

UK PROJECT NUMBER	2874.0
OMNI PROJECT NUMBER	2406
DATE	03/10/2025
	BP#1

REVISIONS

⚠PB#1	ADDENDUM #3	04/10/2025

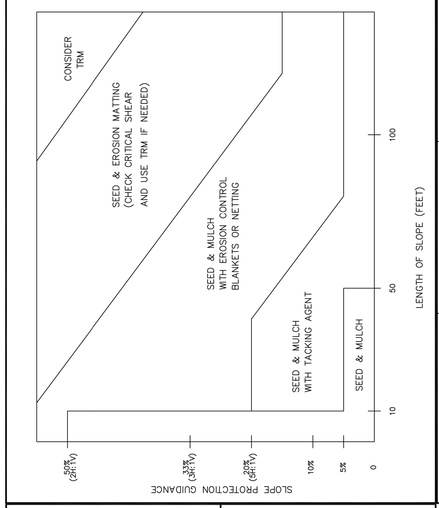
EROSION & SEDIMENT CONTROL PLAN - INTERMEDIATE PHASE

C-11

PRINT DATE: 3/10/2025 9:16:08 AM

STORMWATER MANUAL

FIGURE 11-1
SLOPE PROTECTION GUIDANCE
(OCTOBER 1, 2020)



STORMWATER MANUAL

FIGURE 11-5
STAPLE PATTERN FOR STRAW OR EXCELSIOR MATS
(OCTOBER 1, 2020)
ECB

SLOPES UP TO 1.5H:1V

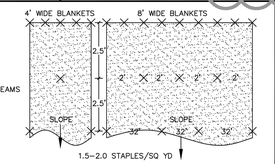
- INSTALL BLANKET VERTICALLY OR HORIZONTALLY
- USE 12" STAPLE SPACING ON STARTER ROW.

COHESIVE SOILS:

- NO OVERLAP REQUIRED ON SIDE SEAMS
- USE 6" STAPLE LENGTH

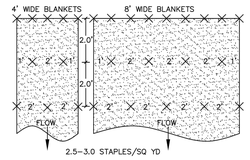
NON-COHESIVE SOILS:

- USE 6" SIDE SEAM OVERLAP
- USE 8" STAPLE LENGTH
- USE 6" ANCHOR TRENCH AT TOP OF SLOPE



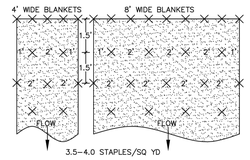
CHANNELS IN COHESIVE SOILS

- USE 6" SIDE SEAM OVERLAP
- USE 6" STAPLE LENGTH
- USE 6" TRANSVERSE ANCHOR TRENCH AT 100-FT. INTERVALS
- USE 12" STAPLE SPACING ON STARTER ROW.
- UPSTREAM BLANKET SHOULD OVERLAP DOWNSTREAM BLANKET A DISTANCE OF 12" IN A "SHINGLE" FASHION AND BURY THE FINISHED TOE AT LEAST 6".



CHANNELS IN NON-COHESIVE SOILS

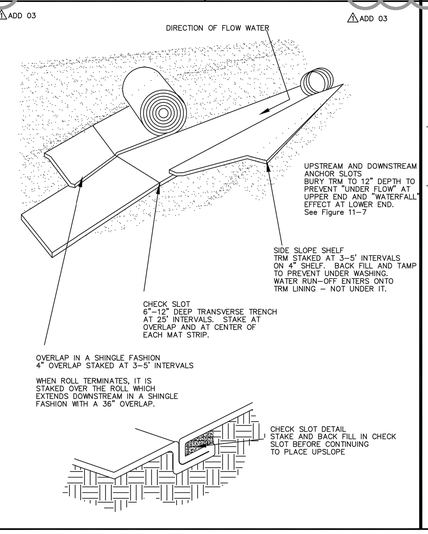
- USE 6" SIDE SEAM OVERLAP
- USE 8" STAPLE LENGTH
- USE 6" TRANSVERSE ANCHOR TRENCH AT 50-FT. INTERVALS
- USE 12" STAPLE SPACING ON STARTER ROW.
- UPSTREAM BLANKET SHOULD OVERLAP DOWNSTREAM BLANKET A DISTANCE OF 12" IN A "SHINGLE" FASHION AND BURY THE FINISHED TOE AT LEAST 6".



STORMWATER MANUAL

FIGURE 11-6
PLACEMENT OF TRM IN CHANNEL
(OCTOBER 1, 2020)
TRM

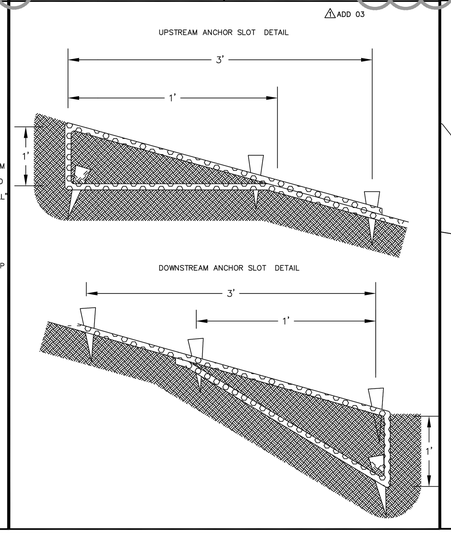
ADD 03



STORMWATER MANUAL

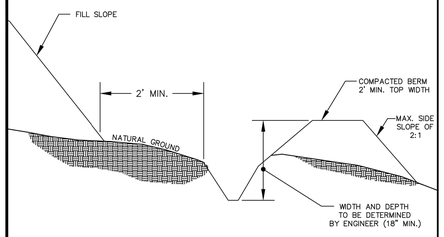
FIGURE 11-7
ANCHOR SLOT DETAILS FOR TRM
(OCTOBER 1, 2020)
TRM

ADD 03



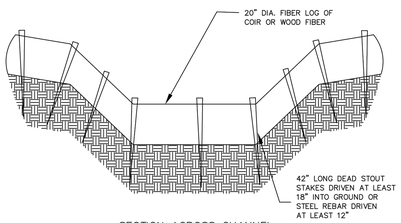
STORMWATER MANUAL

FIGURE 11-12
TEMPORARY DIVERSION DITCH
(OCTOBER 1, 2020)
TD



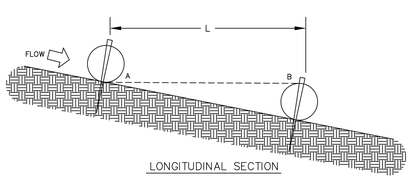
STORMWATER MANUAL

FIGURE 11-17
FIBER LOG CHECK DAM
(OCTOBER 1, 2020)
CD



SECTION ACROSS CHANNEL

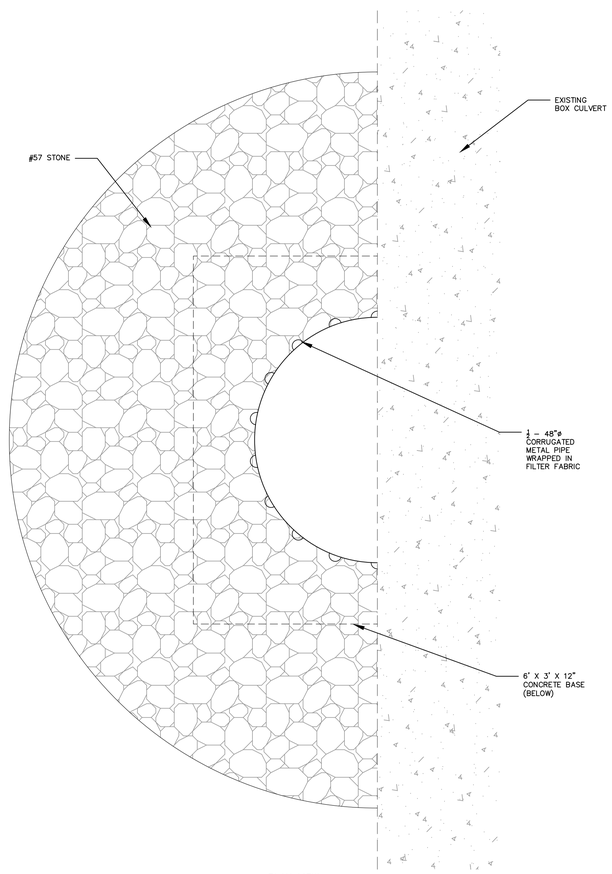
STAKES SHALL BE SPACED NO FURTHER THAN 24" AND SHALL BE DRIVEN AT EACH SIGNIFICANT SLOPE BREAK AND WITHIN 6" OF EACH END.



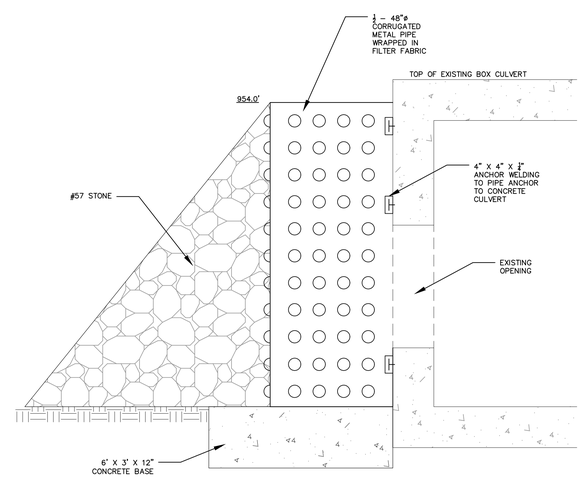
LONGITUDINAL SECTION

L = DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

ADD 03



PLAN VIEW



ELEVATION VIEW

SG SILT GATE
NO SCALE

EROSION AND SEDIMENT CONTROL DETAILS
SCALE: AS NOTED

Omni ARCHITECTS
212 North Upper Street
Lexington, Kentucky 40507
p. 859.252.6664
www.omniarchitects.com

BROWN+KUBICAN STRUCTURAL ENGINEERS

CMTA

Bell

STATE OF KENTUCKY THOMAS F. HARPER III 17315 LICENSED PROFESSIONAL ENGINEER 4/10/25

UNIVERSITY OF KENTUCKY
ENVIRONMENTAL QUALITY MANAGEMENT CENTER
BID PACKAGE #1

UK PROJECT NUMBER	2874.0
OMNI PROJECT NUMBER	2406
DATE	03/10/2025
	BP#1

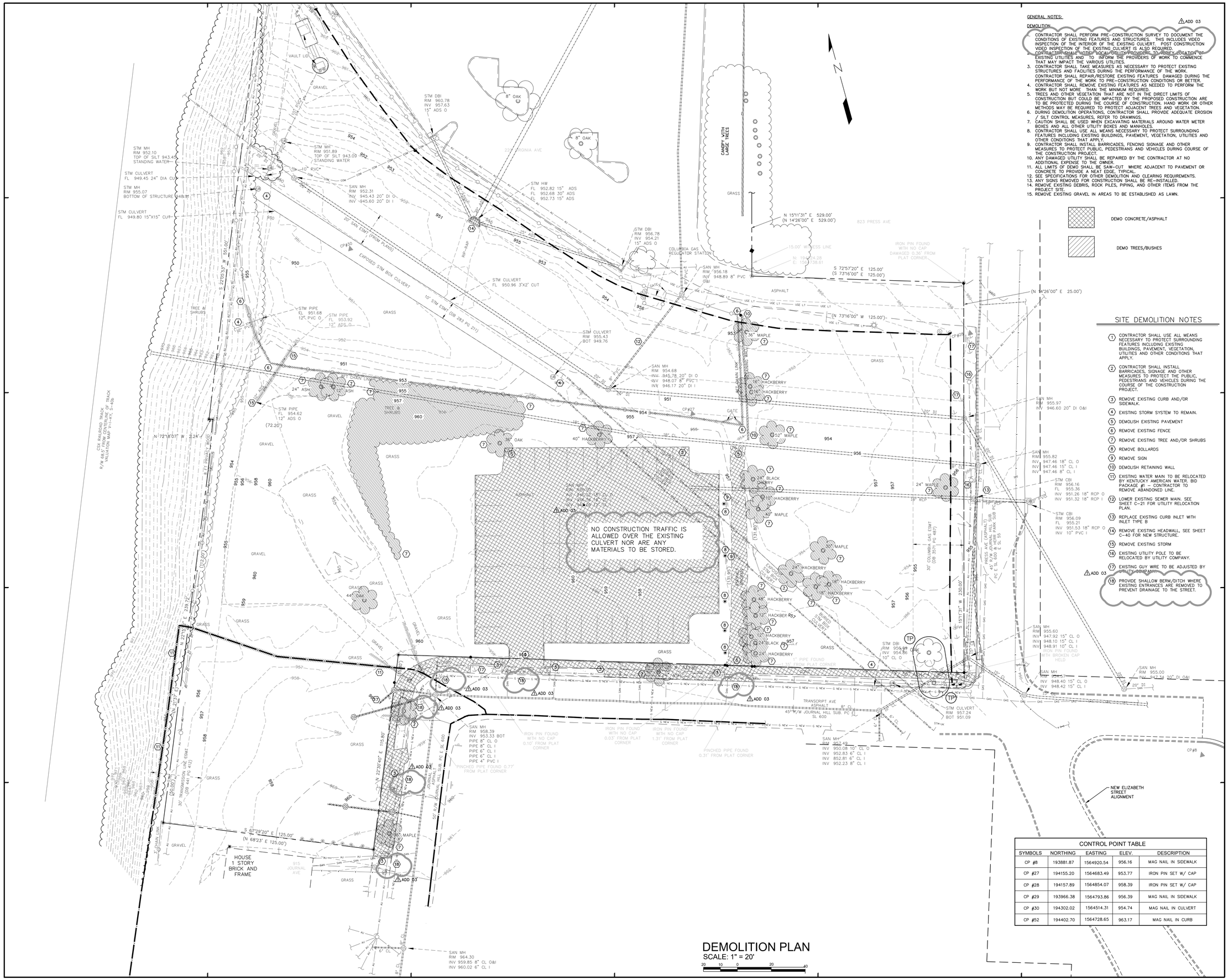
REVISIONS

PB#1	ADDENDUM #3	04/10/2025

EROSION & SEDIMENT CONTROL DETAILS

C-13

PRINT DATE: 3/10/2025 9:18:09 AM



GENERAL NOTES:

DEMOLITION:

1. CONTRACTOR SHALL PERFORM PRE-CONSTRUCTION SURVEY TO DOCUMENT THE CONDITIONS OF EXISTING FEATURES AND STRUCTURES. THIS INCLUDES VIDEO INSPECTION OF THE INTERIOR OF THE EXISTING CULVERT. POST CONSTRUCTION VIDEO INSPECTION OF THE EXISTING CULVERT IS ALSO REQUIRED.
2. CONTRACTOR SHALL NOTIFY LOCAL UTILITY PROVIDERS TO VERIFY LOCATION OF EXISTING UTILITIES AND TO INFORM THE PROVIDERS OF WORK TO COMMENCE THAT MAY IMPACT THE VARIOUS UTILITIES.
3. CONTRACTOR SHALL TAKE MEASURES AS NECESSARY TO PROTECT EXISTING STRUCTURES AND FACILITIES DURING THE PERFORMANCE OF THE WORK. CONTRACTOR SHALL REPAIR/RESTORE EXISTING FEATURES DAMAGED DURING THE PERFORMANCE OF THE WORK TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
4. CONTRACTOR SHALL REMOVE EXISTING FEATURES AS NEEDED TO PERFORM THE WORK BUT NOT MORE THAN THE MINIMUM REQUIRED.
5. TREES AND OTHER VEGETATION THAT ARE NOT IN THE DIRECT LIMITS OF CONSTRUCTION BUT COULD BE IMPACTED BY THE PROPOSED CONSTRUCTION ARE TO BE PROTECTED DURING THE COURSE OF CONSTRUCTION. HAND WORK OR OTHER METHODS MAY BE REQUIRED TO PROTECT ADJACENT TREES AND VEGETATION.
6. DURING DEMOLITION OPERATIONS, CONTRACTOR SHALL PROVIDE ADEQUATE EROSION / SILT CONTROL MEASURES, REFER TO DRAWINGS.
7. CAUTION SHALL BE USED WHEN EXCAVATING MATERIALS AROUND WATER METER BOXES AND ALL OTHER UTILITY BOXES AND MANHOLES.
8. CONTRACTOR SHALL USE ALL MEANS NECESSARY TO PROTECT SURROUNDING FEATURES INCLUDING EXISTING BUILDINGS, PAVEMENT, VEGETATION, UTILITIES AND OTHER CONDITIONS THAT APPLY.
9. CONTRACTOR SHALL INSTALL BARRICADES, FENCING SIGNAGE AND OTHER MEASURES TO PROTECT PUBLIC, PEDESTRIANS AND VEHICLES DURING COURSE OF THE CONSTRUCTION PROJECT.
10. ANY DAMAGED UTILITY SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
11. ALL LIMITS OF DEMO SHALL BE SAW-CUT WHERE ADJACENT TO PAVEMENT OR CONCRETE TO PROVIDE A NEAT EDGE, TYPICAL.
12. SEE SPECIFICATIONS FOR OTHER DEMOLITION AND CLEARING REQUIREMENTS.
13. ANY SIGNS REMOVED FOR CONSTRUCTION SHALL BE RE-INSTALLED.
14. REMOVE EXISTING DEBRIS, ROCK PILES, PIPING, AND OTHER ITEMS FROM THE PROJECT SITE.
15. REMOVE EXISTING GRAVEL IN AREAS TO BE ESTABLISHED AS LAWN.

SITE DEMOLITION NOTES

1. CONTRACTOR SHALL USE ALL MEANS NECESSARY TO PROTECT SURROUNDING FEATURES INCLUDING EXISTING BUILDINGS, PAVEMENT, VEGETATION, UTILITIES AND OTHER CONDITIONS THAT APPLY.
2. CONTRACTOR SHALL INSTALL BARRICADES, SIGNAGE AND OTHER MEASURES TO PROTECT THE PUBLIC, PEDESTRIANS AND VEHICLES DURING THE COURSE OF THE CONSTRUCTION PROJECT.
3. REMOVE EXISTING CURB AND/OR SIDEWALK.
4. EXISTING STORM SYSTEM TO REMAIN.
5. DEMOLISH EXISTING PAVEMENT
6. REMOVE EXISTING FENCE
7. REMOVE EXISTING TREE AND/OR SHRUBS
8. REMOVE BOLLARDS
9. REMOVE SIGN
10. DEMOLISH RETAINING WALL
11. EXISTING WATER MAIN TO BE RELOCATED BY KENTUCKY AMERICAN WATER. BID PACKAGE #1 - CONTRACTOR TO REMOVE ABANDONED LINE.
12. LOWER EXISTING SEWER MAIN. SEE SHEET C-21 FOR UTILITY RELOCATION PLAN.
13. REPLACE EXISTING CURB INLET WITH INLET TYPE B
14. REMOVE EXISTING HEADWALL, SEE SHEET C-40 FOR NEW STRUCTURE.
15. REMOVE EXISTING STORM
16. EXISTING UTILITY POLE TO BE RELOCATED BY UTILITY COMPANY.
17. EXISTING GUY WIRE TO BE ADJUSTED BY UTILITY COMPANY. ADD 03
18. PROVIDE SHALLOW BERM/DITCH WHERE EXISTING ENTRANCES ARE REMOVED TO PREVENT DRAINAGE TO THE STREET.

CONTROL POINT TABLE

SYMBOLS	NORTHING	EASTING	ELEV.	DESCRIPTION
CP #8	193881.87	1564920.54	956.16	MAG NAIL IN SIDEWALK
CP #27	194155.20	1564683.49	953.77	IRON PIN SET W/ CAP
CP #28	194157.89	1564854.07	958.39	IRON PIN SET W/ CAP
CP #29	193966.38	1564793.86	956.39	MAG NAIL IN SIDEWALK
CP #30	194302.02	1564514.31	954.74	MAG NAIL IN CULVERT
CP #52	194402.70	1564728.65	963.17	MAG NAIL IN CURB

DEMOLITION PLAN
SCALE: 1" = 20'

Omni ARCHITECTS
212 North Upper Street
Lexington, Kentucky 40507
p. 859.252.6664
www.omniarchitects.com

BROWN+KUBICAN STRUCTURAL ENGINEERS

CMTA

Bell

STATE OF KENTUCKY THOMAS H. HARPER III 17315 PROFESSIONAL ENGINEER
4/10/25

UNIVERSITY OF KENTUCKY
ENVIRONMENTAL QUALITY MANAGEMENT CENTER
BID PACKAGE #1

UK PROJECT NUMBER	2874.0
OMNI PROJECT NUMBER	2406
DATE	03/10/2025
	BP#1

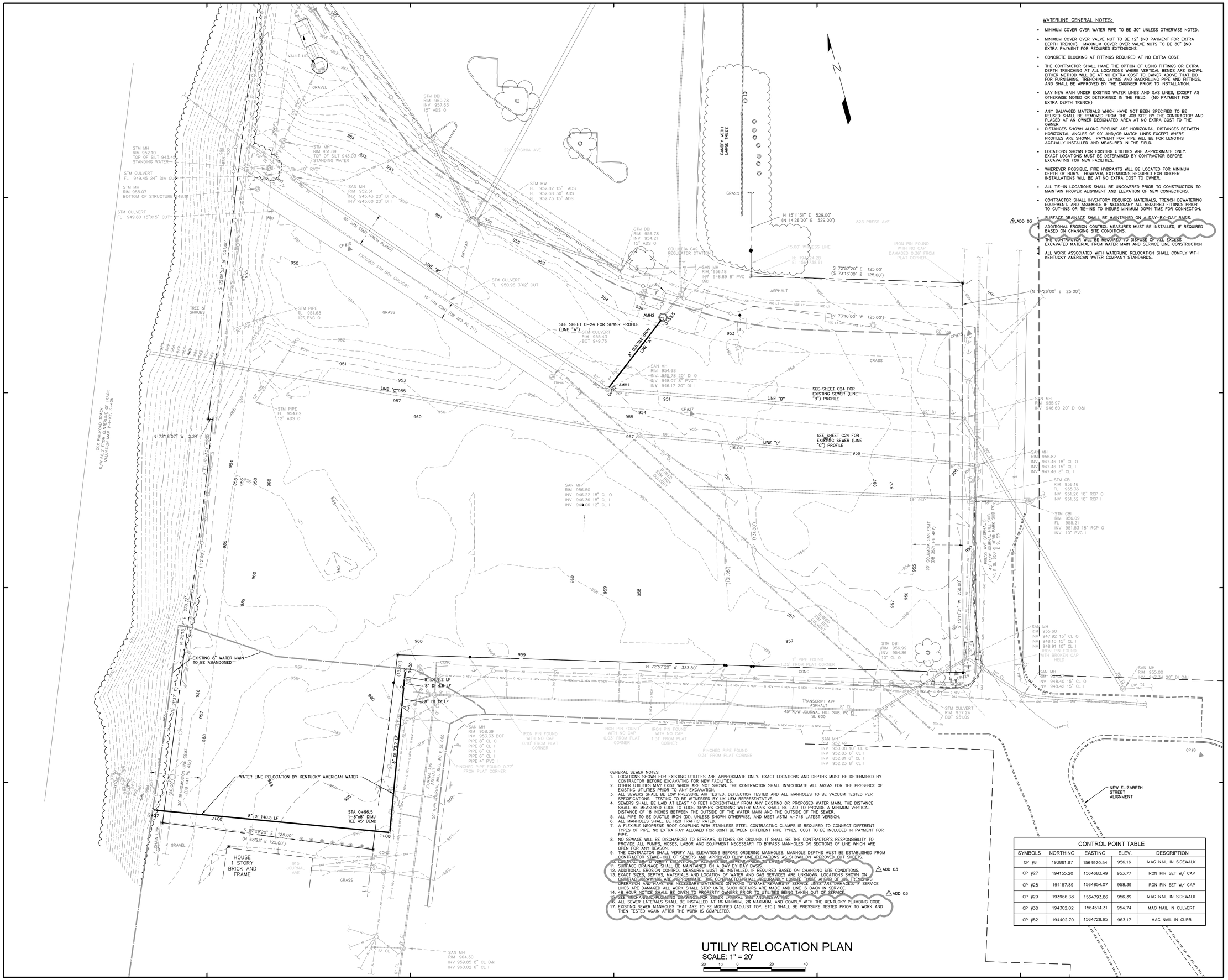
REVISIONS

BP#1	ADDENDUM #3	04/10/2025

DEMOLITION PLAN

C-20

PRINT DATE: 3/10/2025 9:18:59 AM



WATERLINE GENERAL NOTES:

- MINIMUM COVER OVER WATER PIPE TO BE 30" UNLESS OTHERWISE NOTED.
- MINIMUM COVER OVER VALVE NUT TO BE 12" (NO PAYMENT FOR EXTRA DEPTH TRENCH). MAXIMUM COVER OVER VALVE NUTS TO BE 30" (NO EXTRA PAYMENT FOR REQUIRED EXTENSIONS.
- CONCRETE BLOCKING AT FITTINGS REQUIRED AT NO EXTRA COST.
- THE CONTRACTOR SHALL HAVE THE OPTION OF USING FITTINGS OR EXTRA DEPTH TRENCHING AT ALL LOCATIONS WHERE VERTICAL BENDS ARE SHOWN. EITHER METHOD WILL BE AT NO EXTRA COST TO OWNER ABOVE THAT BID FOR FURNISHING, TRENCHING, LAYING AND BACKFILLING PIPE AND FITTINGS, AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- LAY NEW MAIN UNDER EXISTING WATER LINES AND GAS LINES, EXCEPT AS OTHERWISE NOTED OR DETERMINED IN THE FIELD. (NO PAYMENT FOR EXTRA DEPTH TRENCH)
- ANY SALVAGED MATERIALS WHICH HAVE NOT BEEN SPECIFIED TO BE REUSED SHALL BE REMOVED FROM THE JOB SITE BY THE CONTRACTOR AND PLACED AT AN OWNER DESIGNATED AREA AT NO EXTRA COST TO THE OWNER.
- DISTANCES SHOWN ALONG PIPELINE ARE HORIZONTAL DISTANCES BETWEEN HORIZONTAL ANGLES OF 90° AND/OR MATCH LINES EXCEPT WHERE PROFILES ARE SHOWN. PAYMENT FOR PIPE WILL BE FOR LENGTHS ACTUALLY INSTALLED AND MEASURED IN THE FIELD.
- LOCATIONS SHOWN FOR EXISTING UTILITIES ARE APPROXIMATE ONLY. EXACT LOCATIONS MUST BE DETERMINED BY CONTRACTOR BEFORE EXCAVATING FOR NEW FACILITIES.
- WHEREVER POSSIBLE, FIRE HYDRANTS WILL BE LOCATED FOR MINIMUM DEPTH OF BURY. HOWEVER, EXTENSIONS REQUIRED FOR DEEPER INSTALLATIONS WILL BE AT NO EXTRA COST TO OWNER.
- ALL TIE-IN LOCATIONS SHALL BE UNCOVERED PRIOR TO CONSTRUCTION TO MAINTAIN PROPER ALIGNMENT AND ELEVATION OF NEW CONNECTIONS.
- CONTRACTOR SHALL INVENTORY REQUIRED MATERIALS, TRENCH DEWATERING EQUIPMENT, AND ASSEMBLE IF NECESSARY ALL REQUIRED FITTINGS PRIOR TO CUT-INS OR TIE-INS TO INSURE MINIMUM DOWN TIME FOR CONNECTION.
- SURFACE DRAINAGE SHALL BE MAINTAINED ON A DAY-BY-DAY BASIS.
- ADDITIONAL EROSION CONTROL MEASURES MUST BE INSTALLED, IF REQUIRED BASED ON CHANGING SITE CONDITIONS.
- THE CONTRACTOR WILL BE REQUIRED TO DISPOSE OF ALL EXCESS EXCAVATED MATERIAL FROM WATER MAIN AND SERVICE LINE CONSTRUCTION
- ALL WORK ASSOCIATED WITH WATERLINE RELOCATION SHALL COMPLY WITH KENTUCKY AMERICAN WATER COMPANY STANDARDS.

GENERAL SEWER NOTES:

1. LOCATIONS SHOWN FOR EXISTING UTILITIES ARE APPROXIMATE ONLY. EXACT LOCATIONS AND DEPTHS MUST BE DETERMINED BY CONTRACTOR BEFORE EXCAVATING FOR NEW FACILITIES.
2. OTHER UTILITIES MAY EXIST WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL INVESTIGATE ALL AREAS FOR THE PRESENCE OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION.
3. ALL SEWERS SHALL BE LOW PRESSURE AIR TESTED, DEFLECTION TESTED AND ALL MANHOLES TO BE VACUUM TESTED PER SPECIFICATIONS. TESTING TO BE WITNESSED BY UK UEM REPRESENTATIVE.
4. SEWERS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER.
5. ALL PIPE TO BE DUCTILE IRON (DI), UNLESS SHOWN OTHERWISE, AND MEET ASTM A-746 LATEST VERSION.
6. ALL MANHOLES SHALL BE H20 TRAFFIC RATED.
7. A FLEXIBLE NEOPRENE BOOT COUPLING WITH STAINLESS STEEL CONTRACTING CLAMPS IS REQUIRED TO CONNECT DIFFERENT TYPES OF PIPE. NO EXTRA PAY ALLOWED FOR JOINT BETWEEN DIFFERENT PIPE TYPES. COST TO BE INCLUDED IN PAYMENT FOR PIPE.
8. NO SEWAGE WILL BE DISCHARGED TO STREAMS, DITCHES OR GROUND. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL PUMPS, HOSES, LABOR AND EQUIPMENT NECESSARY TO BYPASS MANHOLES OR SECTIONS OF LINE WHICH ARE OPEN FOR ANY REASON.
9. THE CONTRACTOR SHALL VERIFY ALL ELEVATIONS BEFORE ORDERING MANHOLES. MANHOLE DEPTHS MUST BE ESTABLISHED FROM CONTRACTOR STAKE-OUT OF SEWERS AND APPROVED FLOW LINE ELEVATIONS AS SHOWN ON APPROVED CUT SHEETS.
10. CONTRACTOR TO VERIFY LOCATION OF EXISTING SEWER PRIOR TO LAYING PIPE.
11. SURFACE DRAINAGE SHALL BE MAINTAINED ON A DAY BY DAY BASIS.
12. ADDITIONAL EROSION CONTROL MEASURES MUST BE INSTALLED, IF REQUIRED BASED ON CHANGING SITE CONDITIONS. ADD 03
13. EXACT SIZES, DEPTHS, MATERIALS AND LOCATION OF WATER AND GAS SERVICES ARE UNKNOWN. LOCATIONS SHOWN ON CONTRACT DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL ACCURATELY LOCATE THESE AHEAD OF LINE TRENCHING OPERATION AND HAVE THE NECESSARY MATERIALS ON HAND TO MAKE REPAIRS IF SERVICE LINES ARE DAMAGED. IF SERVICE LINES ARE DAMAGED ALL WORK SHALL STOP UNTIL SUCH REPAIRS ARE MADE AND LINE IS BACK IN SERVICE.
14. 48 HOUR NOTICE SHALL BE GIVEN TO PROPERTY OWNERS PRIOR TO UTILITIES BEING TAKEN OUT OF SERVICE. ADD 03
15. SEE MECHANICAL/PLUMBING DRAWINGS FOR SEWER DISPOSAL SYSTEM AND INSTALLATION.
16. ALL SEWER LATERALS SHALL BE INSTALLED AT 1% MINIMUM, 2% MAXIMUM, AND COMPLY WITH THE KENTUCKY PLUMBING CODE.
17. EXISTING SEWER MANHOLES THAT ARE TO BE MODIFIED (ADJUST TOP, ETC.) SHALL BE PRESSURE TESTED PRIOR TO WORK AND THEN TESTED AGAIN AFTER THE WORK IS COMPLETED.

CONTROL POINT TABLE

SYMBOLS	NORTHING	EASTING	ELEV.	DESCRIPTION
CP #8	193881.87	1564920.54	956.16	MAG NAIL IN SIDEWALK
CP #27	194155.20	1564683.49	953.77	IRON PIN SET W/ CAP
CP #28	194157.89	1564854.07	958.39	IRON PIN SET W/ CAP
CP #29	193966.38	1564793.86	956.39	MAG NAIL IN SIDEWALK
CP #30	194302.02	1564514.31	954.74	MAG NAIL IN CULVERT
CP #52	194402.70	1564728.65	963.17	MAG NAIL IN CURB

UTILIY RELOCATION PLAN

SCALE: 1" = 20'

20 10 0 20 40

PRINT DATE: 3/10/2025 9:19:43 AM

Omni ARCHITECTS
212 North Upper Street
Lexington, Kentucky 40507
p. 859.252.6664
www.omniarchitects.com

BROWN+KUBICAN STRUCTURAL ENGINEERS

CMTA

Bell

STATE OF KENTUCKY THOMAS F. HARPER III 17315 PROFESSIONAL ENGINEER
4/10/25

UNIVERSITY OF KENTUCKY
ENVIRONMENTAL QUALITY
MANAGEMENT CENTER
BID PACKAGE #1

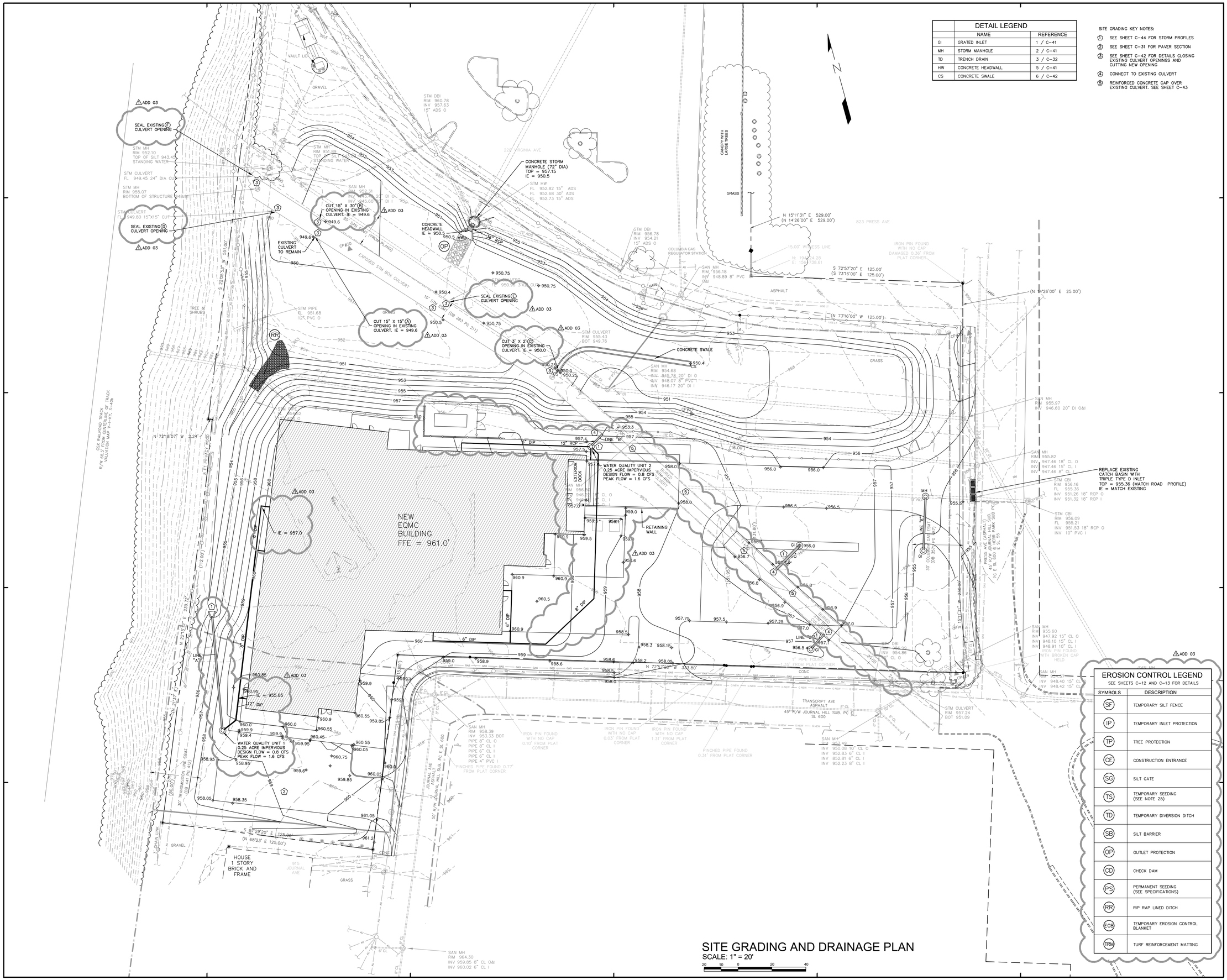
UK PROJECT NUMBER	2874.0
OMNI PROJECT NUMBER	2406
DATE	03/10/2025
	BP#1

REVISIONS

BP#1	ADDENDUM #3	04/10/2025

UTILITY RELOCATION PLAN

C-21



DETAIL LEGEND

	NAME	REFERENCE
GI	GRATED INLET	1 / C-41
MH	STORM MANHOLE	2 / C-41
TD	TRENCH DRAIN	3 / C-32
HW	CONCRETE HEADWALL	5 / C-41
CS	CONCRETE SWALE	6 / C-42

SITE GRADING KEY NOTES:

1. SEE SHEET C-44 FOR STORM PROFILES
2. SEE SHEET C-31 FOR PAVER SECTION
3. SEE SHEET C-42 FOR DETAILS CLOSING EXISTING CULVERT OPENINGS AND CUTTING NEW OPENING
4. CONNECT TO EXISTING CULVERT
5. REINFORCED CONCRETE CAP OVER EXISTING CULVERT. SEE SHEET C-43

EROSION CONTROL LEGEND

SEE SHEETS C-12 AND C-13 FOR DETAILS

SYMBOLS	DESCRIPTION
SF	TEMPORARY SILT FENCE
IP	TEMPORARY INLET PROTECTION
TP	TREE PROTECTION
CE	CONSTRUCTION ENTRANCE
SG	SILT GATE
TS	TEMPORARY SEEDING (SEE NOTE 25)
TD	TEMPORARY DIVERSION DITCH
SB	SILT BARRIER
OP	OUTLET PROTECTION
CD	CHECK DAM
PS	PERMANENT SEEDING (SEE SPECIFICATIONS)
RR	RIP RAP LINED DITCH
ECB	TEMPORARY EROSION CONTROL BLANKET
TRM	TURF REINFORCEMENT MATTING

SITE GRADING AND DRAINAGE PLAN

SCALE: 1" = 20'

20 10 0 20 40

Omni ARCHITECTS
212 North Upper Street
Lexington, Kentucky 40507
p. 859.252.6664
www.omniarchitects.com

BROWN+KUBICAN STRUCTURAL ENGINEERS

CMTA

Bell

STATE OF KENTUCKY THOMAS F. HARPER III 17315 LICENSED PROFESSIONAL ENGINEER 4/10/25

UNIVERSITY OF KENTUCKY ENVIRONMENTAL QUALITY MANAGEMENT CENTER

BID PACKAGE #1

UK PROJECT NUMBER	2874.0
OMNI PROJECT NUMBER	2406
DATE	03/10/2025
	BP#1

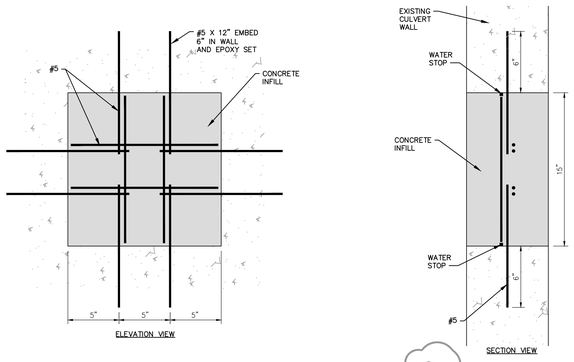
REVISIONS

⚠PB#1	ADDENDUM #3	04/10/2025

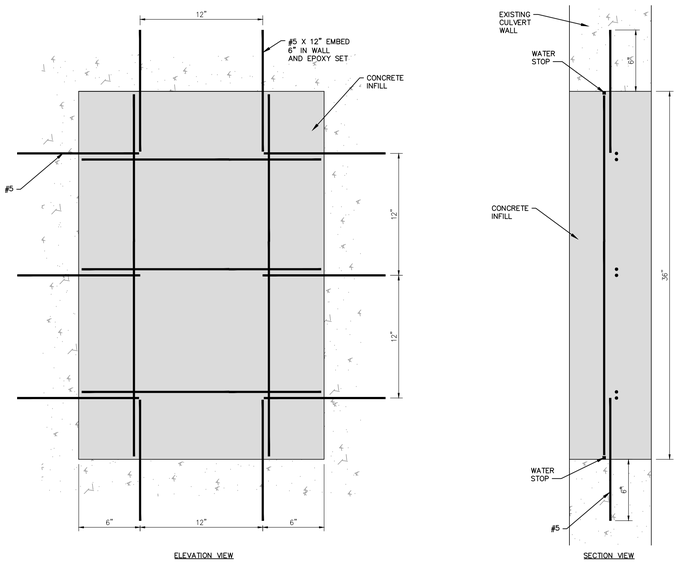
GRADING AND DRAINAGE PLAN

C-40

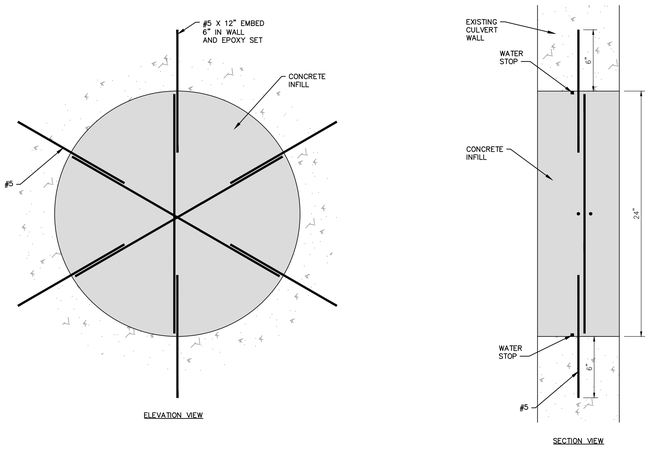
PRINT DATE: 3/10/2025 9:25:21 AM



EXISTING 15" X 15" OPENING (D) ADD 03

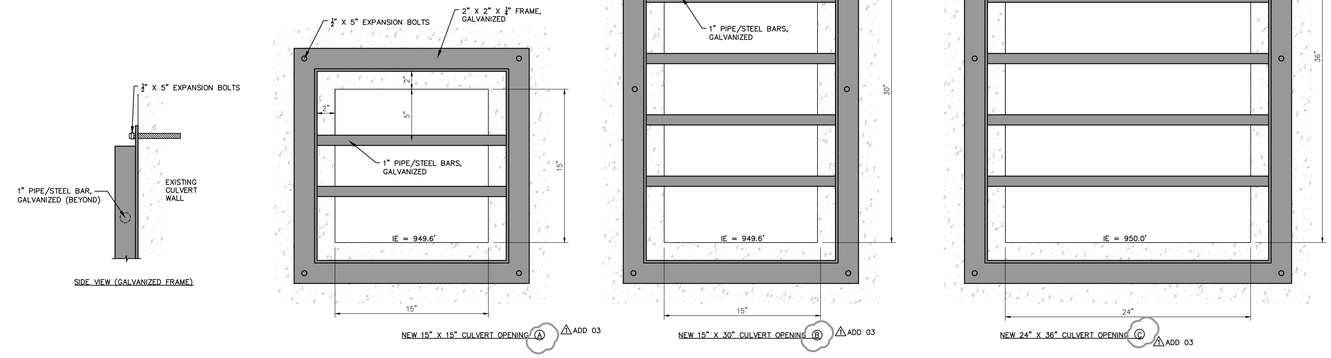


EXISTING 24" X 36" OPENING (E) ADD 03

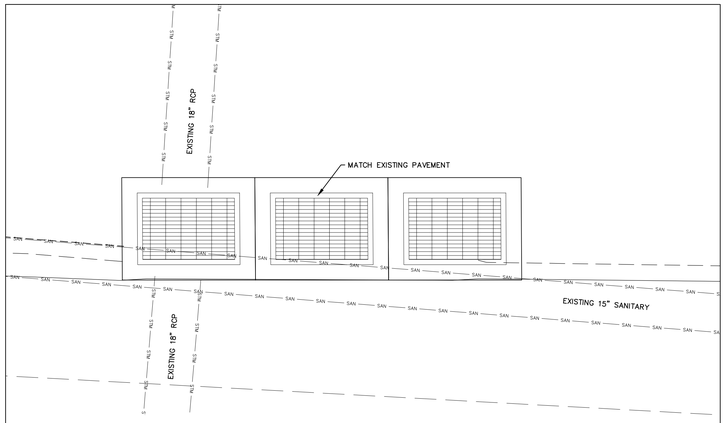


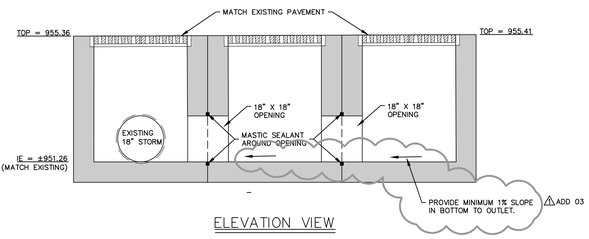
EXISTING 24" DIAMETER OPENING (F) ADD 03

EXISTING CULVERT OPENING (SEALED)



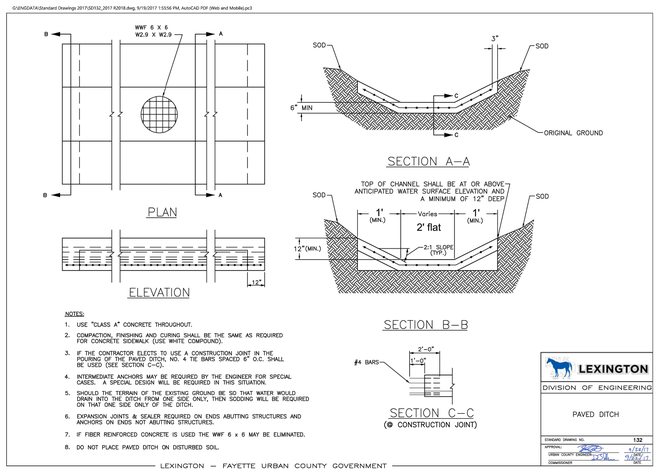
NEW CULVERT OPENINGS





ELEVATION VIEW

TRIPLE SURFACE INLET TYPE B



NOTES:

1. USE "CLASS A" CONCRETE THROUGHOUT.
2. COMPACTION, FINISHING AND CURING SHALL BE THE SAME AS REQUIRED FOR CONCRETE SIDEWALK (USE WHITE COMPOUND).
3. IF THE CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT IN THE POURING OF THE PAVED DITCH, NO. 4 TIE BARS SPACED 6" O.C. SHALL BE USED (SEE SECTION C–C).
4. INTERMEDIATE ANCHORS MAY BE REQUIRED BY THE ENGINEER FOR SPECIAL CASES. A SPECIAL DESIGN WILL BE REQUIRED IN THIS SITUATION.
5. SHOULD THE TERRAIN OF THE EXISTING GROUND BE SO THAT WATER WOULD DRAIN INTO THE DITCH FROM ONE SIDE ONLY, THEN SODDING WILL BE REQUIRED ON THAT ONE SIDE ONLY OF THE DITCH.
6. EXPANSION JOINTS & SEALER REQUIRED ON ENDS ABUTTING STRUCTURES AND ANCHORS ON ENDS NOT ABUTTING STRUCTURES.
7. IF FIBER REINFORCED CONCRETE IS USED THE WWF 6 x 6 MAY BE ELIMINATED.
8. DO NOT PLACE PAVED DITCH ON DISTURBED SOIL.

Omni ARCHITECTS
212 North Upper Street
Lexington, Kentucky 40507
p. 859.252.6664
www.omniarchitects.com

BROWN+KUBICAN STRUCTURAL ENGINEERS

CMTA

Bell

STATE OF KENTUCKY
THOMAS H. HARPER III
17315
PROFESSIONAL ENGINEER
4/14/25

UNIVERSITY OF KENTUCKY
ENVIRONMENTAL QUALITY
MANAGEMENT CENTER
BID PACKAGE #1

UK PROJECT NUMBER	2874.0
OMNI PROJECT NUMBER	2406
DATE	03/10/2025
	BP#1

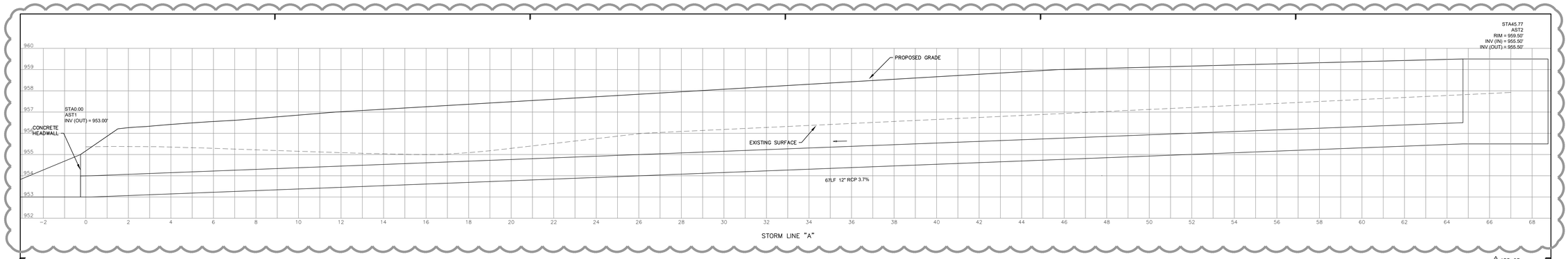
REVISIONS

PB#1	ADDENDUM #3	04/10/2025

GRADING AND DRAINAGE DETAILS

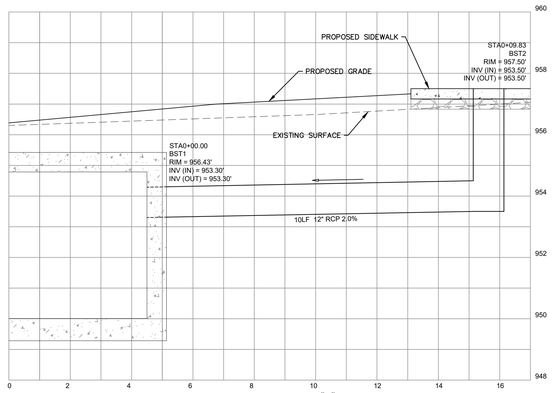
C-42

PRINT DATE: 3/11/2025 2:05:02 PM

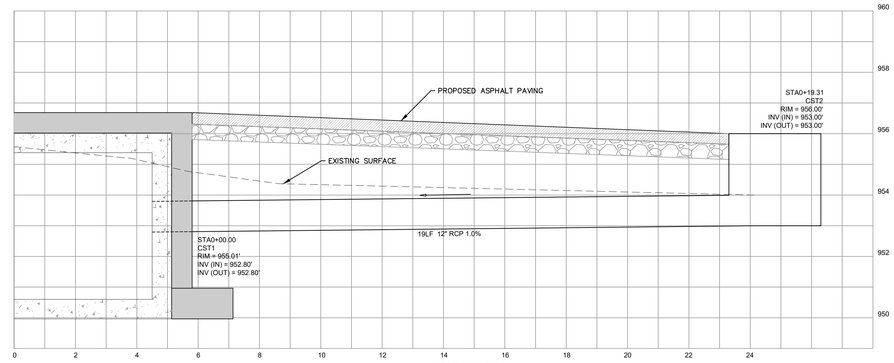


STORM LINE "A"

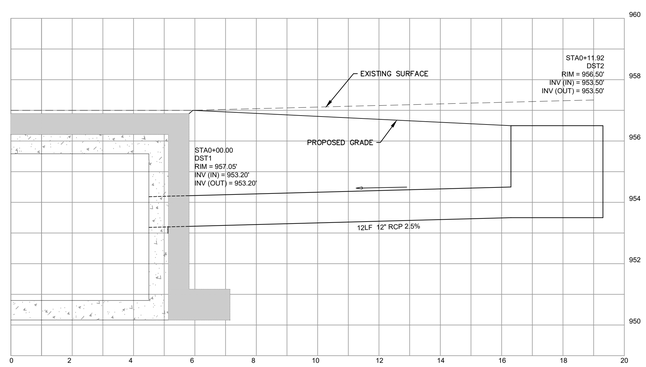
ADD 03



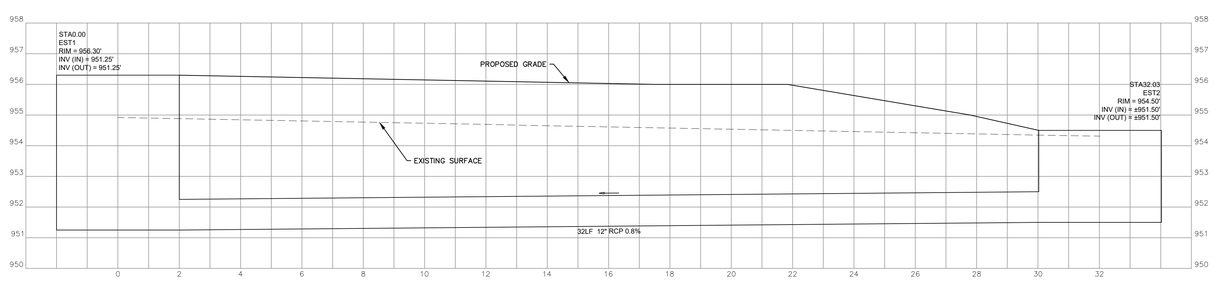
STORM LINE "B"



STORM LINE "C"



STORM LINE "D"



STORM LINE "E"

STORM PROFILES
SCALE: 1" = 2"

Omni ARCHITECTS
212 North Upper Street
Lexington, Kentucky 40507
p. 859.252.6664
www.omniarchitects.com

BROWN+KUBICAN STRUCTURAL ENGINEERS

CMTA

Bell

STATE OF KENTUCKY
THOMAS F. HARPER III
17315
LICENSED PROFESSIONAL ENGINEER
4/09/25

UNIVERSITY OF KENTUCKY
ENVIRONMENTAL QUALITY
MANAGEMENT CENTER

BID PACKAGE #1

UK PROJECT NUMBER	2874.0
OMNI PROJECT NUMBER	2406
DATE	03/10/2025
	BP#1

REVISIONS

1 PB#1	ADDENDUM #3	04/10/2025

STORM PROFILES

C-44

PRINT DATE: 3/7/2025 5:02:21 PM