



AGENDA

ATHENS PLANNING COMMISSION

THURSDAY, SEPTEMBER 7, 2023 - 12:00 PM

Streaming is available at www.ci.athens.oh.us/video

***PUBLIC HEARING* (prior to Regular Meeting)**

- University Estates Planned Unit Development (PUD) Homestead Court and Broadmoor

REGULAR MEETING

Establish Quorum

Disposition of Minutes

- August 3, 2023

Cases

Case #23-02: University Estates P.U.D./Homestead Court & Broadmoor
Affordable Housing Development

Communications

- None

Reports

Opportunity for citizens to speak about items not covered on agenda

Announcements & Other Business

- Next Meeting: September 21, 2023

Adjournment

The City of Athens supports the Americans with Disabilities Act. Requests for reasonable accommodation may be made with the ADA Coordinator in the City Building or by calling 592-3367.

**Athens City Planning Commission
Minutes of Regular Meeting
Thursday, August 3, 2023 12:00 p.m.**

The regular meeting of the Athens City Planning Commission was held in City Council Chambers, third floor of City Hall, on August 3, 2023.

Attendees: John Wharton, Pat Lawson, Bret Howard, Rob Delach, Jim McDonald, Hoy Seckinger

1. Call to Order

Steve Patterson called the regular meeting of the Planning Commission to order at 12:00 p.m. and administered the oath to those in attendance planning to speak before the commission. Quorum was established with four members present.

PLANNING COMMISSION MEMBERS:

Steve Patterson, Chair	Present
John Kotowski, Vice Chair	Present
Nancy Bain	Present
Austin Phillips	Absent
Andy Stone, Service-Safety Director	Present

STAFF:

David Riggs, Code Enforcement Director	Present
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2. Disposition of Minutes

John Kotowski moved to approve the July 6, 2023 minutes. Nancy Bain seconded. All present voted aye, motion passed 4:0.

3. Cases

**Case #23-02 University Estates P.U.D.
 Homestead Court
 Affordable Housing Development**

David Riggs

- The purpose of the PUD is that if the city has a project they want to move forward, the PUD process enables the city to vary from the strict interpretation of the code that is set before other types of developments. There are a lot of extra steps. The Planning Commission will review and make a recommendation to City Council.
- This proposal has 163 non-conformities to the bulk controls (ACC 23.10), 6 non-conformities to the total lot coverage, and 6 non-conformities to the depth setback. Additionally the Planning Commission will look at non-conformity to 21.09.05 & 06 open space, non-conformity to 21.07.05 street tree plan, and non-conformity to 27.02.04 storm water retention.

Andy Stone

- The PC must establish four findings of fact as part of this process:
 1. The development can proceed within two years of approval
 2. The streets are adequate to handle the increased traffic
 3. Exceptions from code
 4. That the existing/proposed utilities will serve the development (TIF will offset)

Discussion

- John K: Two concerns are 1. The way the sidewalks are being put in and if they will be continuous, 2. Street lighting concerns. Observed that most of the mailboxes in UE have light posts on them. As you get deeper into UE the street lighting becomes sporadic and he has safety concerns about that.
- John Wharton/UE HOA Board: The lights on mailboxes are set dusk to dawn but aren't enough to illuminate the streets. The UE HOA have approached the city and AEP about their desire to install additional street lighting.
- John K: Inquired about the mailboxes and if they could be grouped together.
- Andy S: Suggested that the mailboxes be installed on the building/doors because they would be crowded if they were placed along the street.
- Pat Lawson/Cornerstone: The sidewalks will be put in as each lot is developed and they will fill in the gaps as they go.
- John K: The sidewalks on Walnut Court are not continuous and they don't tie in to anything. It is important for the residents to feel connected and able to walk on the sidewalks safely.
- Pat L: They estimate that the development will be built out in 4-5 years so at that time all the sidewalk gaps will be filled in.
- John K: For the lots where the gas lines cross, will the sidewalks be built over the gas lines?
- Pat L: The sidewalks will be built over the gas line and the gas company is aware. The developer pays for the sidewalks.
- John K: There are a lot of variances being requested. The sidewalks are important, especially with the senior demographic that is expressing interest in these lots.
- Pat L: This project is the first of its kind in Athens. There will be problems but they can be worked through.
- Andy S: Regarding the street tree plan, there is not enough room in front of the properties for trees. Suggested that trees could be added in the ROW along Broadmoor.
- Pat L: Planting additional trees there will be no problem. The existing large white oaks will not be disturbed.
- Andy S: The TIF agreement has a universal design requirement. Will the steps out of a car and into the unit be on one level and accessible?
- Bret Howard/Cornerstone: The accessibility is lot-dependent. Some of the lots are straight slabs, some in the cul-de-sac will be trickier to engineer the access.

- David R: the TIF requirement is only for 3 bedroom units. The 3 bedrooms all have the master and kitchen on the 1st floor, have 36" entry ways and are all open floor plan. For some they have a step up to the porch but ramps can be installed.
- Bret H: the 3 bedroom units have their utility rooms on the 1st floor.

Questions/comments from audience

- Hoy Seckinger/11 Walnut Court: Expressed concerns that Route 682 will be an issue, especially turning left from UE.
- Jim McDonald/ UE Blvd Renter: Currently renting his former home on UE Blvd. and waiting for his purchased unit to be built at Woods Edge. Suggested a bank off mailboxes for the development. Supports the addition of more street lights further back into the development.
- Andy S: A bank of mailboxes requires common ownership. The developers are making this a fee simple development, but there should also be a governing document to address things like mailboxes, rear access, etc. This was discussed at the last meeting and wanted to know if they have worked something out.
- John W: Would like to see the HOA extend to Homestead Court which would address this. They did this with Walnut Court after they petitioned to become part of the HOA. Access to back for mowing will only be an issue for the triplexes and the plan is to have an easement. He doesn't feel that we should worry about issues that come up 20 years from now.
- Andy S: Two neighbors with a dispute always go through Code. Being proactive now about future issues is important and these items can be written in the deed.
- Jim M: Does not want to be part of an HOA. He purchased the unit partly based on not being required to be part of an HOA.
- Steve P: the Planning Commission is not going to make being part of the HOA a requirement. This is up to the residents. The city is aware of the traffic issues on Rt 682 and this will continue to be monitored. The speed limit was recently reduced to 35 mph there.
- Hoy S: Already know what is going to happen traffic wise there with the apartments going in across the street and these 43 units. Even today a train crossing already backs up traffic to the UE entrance.

David Riggs commented that he is still waiting on all the staff comments to the updated plans. Steve Patterson suggested that the Planning Commission vote contingent on receiving the additional staff comments.

Andy Stone moved to approve Case #23-02, approving the non-conformities, validating the four findings of fact, and contingent upon receipt of the additional staff comments. Nancy Bain seconded. All present voted aye. Motion passed 4:0. This will now go to City Council as a Recommendation from the Planning Commission.

4. **Communications**

Proposed Zoning Amendments/Chickens

- David R: Continuing the discussion from the last meeting in regards to allowing poultry/chickens in residential zones, the suggested language changes to 23.04.01 (attached for reference) was included in the commissioner's packets. The change is allowing up to four chickens in residential areas and no roosters.
- Andy S: Read through the suggested changes to 23.04.01. With Planning Commission approval, this will go to City Council as a recommendation for their consideration.
- David R: Title 9 (09.01.01 and .07) currently exists and contains language to control at large and nuisance animals.
- John K: Commented that there wasn't any language outlining what a predator-proof structure is.
- Steve P: This will be on the agenda at the next meeting for a vote.

5. **Reports from City Planner and Director of Development & Code Enforcement**

David Riggs

- Provided an update on the Chipotle/Starbucks development on E. State St. The developers are working on a few minor changes to the site plan that he will review.

6. **Opportunity for Citizens to Speak**

None

7. **Announcements & Other Business**

- Next meeting August 17, 2023

8. **Adjournment**

John Kotowski moved to adjourn, Nancy Bain seconded, all present voted aye. The meeting was adjourned at 12:39 p.m.

23.04.01. - R-1 Residential Zone (One-Family).

The following regulations shall apply in all R-1 Zones:

(A) Principal permitted uses:

- (1) Residential—One-family or one "housekeeping" unit detached dwellings.
- (2) Institutional and cultural—Churches and other places of worship and Sunday school buildings located not less than 20 feet from any other lot in any R-Zone, schools and colleges for academic instruction, located not less than 40 feet from any other lot, public libraries, public museums, public art galleries and similar public cultural uses, located not less than 20 feet from any other lot in any R-Zone cemeteries.
- (3) Recreational—Public parks, playgrounds, recreational and community center buildings and grounds and golf courses, country clubs, tennis courts and similar recreational uses, all of a noncommercial nature; provided that any principal building used thereon shall be located not less than 40 feet from any other lot in any R-Zone.
- (4) Essential services—(See Chapter 23.10.)
- (5) Planned Unit Development (PUD) (See Title 21).
- (6) Residential health care facilities—Residential care facilities for the developmentally disabled, provided that such facilities comply with all federal, state and local laws and regulations.

(B) Permitted accessory uses: Accessory uses, buildings or other structures customarily incidental to any aforesaid permitted or conditionally permitted uses may be established; erected or constructed; provided, that such accessory uses shall not involve the conduct of any business, trade or industry, unless otherwise authorized herein, or any private way or walk giving access to such activity, or any sign other than authorized herein and not including the board of animals or the keeping of ~~fowl or~~ farm animals except in a building at least 100 feet distant from every lot line adjacent home. **Female chickens (no roosters) may be kept for personal enjoyment in an outdoor, predator proof structure. No more than four (4) chickens may be kept at any time. All other types of fowl shall be considered to be farm animals.** Accessory uses may include the following:

9.01.01. - Animals at large.

(A) No person, being the owner of any animal or fowl, excepting unleashed domestic cat(s), or harboring or having charge or control of the same, shall permit such animal or fowl to run at large in any street, lane, alley, market space or public ground, or shall permit such animal or fowl to go upon or enter any private yard, lot or enclosure, without consent of the owner of such yard, lot or enclosure.

(B) For purposes of this section, it shall be unlawful for any owner, harborer, or person in charge of any dog to take or allow said dog to go onto public property or in a public place without being on a leash.

(C) No person, being the owner, harborer or having charge or control of a dog shall permit such dog to cause physical harm to any person. For purposes of this section, "physical harm" shall mean any injury or other physiological impairment regardless of its gravity or duration, provided that no person engaged in illegal activity shall be protected under this section.

(D) The owner, harborer, or person having charge of any animal or fowl, excepting unleashed domestic cat(s), shall have in their possession necessary implements to remove any excrement or objectionable wastes deposited on public or private property other than their own within the municipality or in any area under the jurisdiction of the municipality, and shall remove such excrement immediately.

9.01.07. - Harboring animals deemed a nuisance, when.

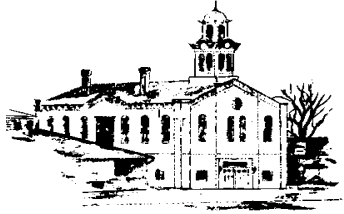
(A) No person shall permit any animal or fowl to be kept in any yard, pen, sty, stationary or moving vehicle, or in any other place which is unclean, unsanitary, or productive of offensive odors.

(B) No person shall permit or suffer any animal or fowl harbored by them to become noisy so as to cause disturbance of the peace and quiet of the neighborhood.

AKRON OHIO Ordinance 92.18

A. No person shall keep chickens or other poultry in any dwelling or within one hundred feet thereof.

92.06 Coloring rabbits and baby poultry--Sale or display. No person shall dye or otherwise color any rabbit or baby poultry, including, but not limited to, chicks and ducklings. No person shall sell, offer for sale, expose for sale, raffle or give away any rabbit or baby poultry which has been dyed or otherwise colored. No poultry younger than four weeks of age may be sold, given away, or otherwise distributed to any person in lots of less than six. Stores, shops, vendors and others offering young poultry for sale or other distribution shall provide and operate brooders or other heating devices that may be necessary to maintain poultry in good health, and shall keep adequate food and water available to the poultry at all times.



*City of Athens
Engineering and Public Works
Department
30 Curran Drive
Athens, Ohio 45701
(740) 593-7636 fax 592-4907*

**City of Athens Engineering and Public Works
Private Development Plan Review Response Summary**

Review Date: July 10, 2023

Property Name: University Estates, Broadmoor Court Extension, Homestead Court Extension

Property Location: Broadmoor Court and Homestead Court

Property Status (circle one): PUD Title 41 Other

Check one:

 X Preliminary (Prior to Planning Commission Hearing)

 Preliminary / In-Progress Review (revised plans with these changes will require another review prior to final approval)

 Final Review (developer can generally expect plan approval and issuance of the building permit once these changes are made)

Plan Review Notes:

Streets

1. Have geotechnical reports or pavement designs been completed? At a minimum the typical section should be increased to 4-1/2" of 301 and 1-1/2" of 448 material.
Typical Section amended.
2. Please provide details on who will be completing compaction testing and proof-rolling.
PSI or GCI to be compaction testing and proof-rolling consultant.
3. The contractor/developer should provide 48 hours of advance notice to the City Engineering and Public Works Department to witness proof-rolls, aggregate installation, and paving. Inspection reports for compaction and materials should be provided to the City.
Note added to typical section.

Storm Drainage

1. Please review the storm outfall on Sheet C-13. There appears to be a steep grade below the storm outlet.
Vertical Exaggeration is 5:1 on the profile. Discharge point is on the opposite side of the ravine of the Homestead Ct development. This is the only place to discharge within the boundaries of the owner's property and maintain space for construction of the density of structures required for this project.

2. A post-construction storm BMP is needed.
Existing post-construction BMP designed for UE Phase II (including Homestead Ct) is located at the bottom of the ravine. See original UE Phase II drawings.
3. The contractor/developer should provide 48 hours of advance notice to the City Engineering and Public Works Department to witness installation of the storm lines.
Note added to Storm Details Sheet.

Water

1. Provide additional information on the location of the water meters. Will these be installed in a mechanical room?
Plans updated to show water meters.
Please provide an updated meter detail with the standard setter.
Coordinating with EPW.
2. Provide backflow prevention details.
Coordinating with EPW.
3. One physical tap will be allowed per unit. A 4" tap can be made and reduced to 2" behind the curb. Curb valves are needed for the service lines that are installed under the street.
Detail provided that shows curb valves.
4. Please see updated waterline specifications. Mechanical restraints can be used in addition to thrust blocking.
Notes added to Water General Notes sheet.
5. Please confirm material of water line main line. If C900 is requested, a tracer wire shall be installed with the main line and with each service line. If C900 is requested, please coordinate directly with Brian Dupler, Water Services Supervisor, for clamp requirements.
C900 is requested, coordinating with EPW for clamp requirements. Tracer wire note added to Water General Notes sheet.
6. Please provide copies of the OEPA Plan Approval for city records.
Will provide upon OEPA approval.
7. The contractor/developer should provide 48 hours of advance notice to the City Engineering and Public Works Department to witness installation and testing of the waterline.
Note added to Water General Notes sheet.

Sanitary Sewer

1. Please review depth of the proposed sewer to determine if it can be shallower.
Sanitary sewer shallowed where possible, see revised plan and profile.
2. Please change the external drop manhole detail to an internal bowl drop manhole.
Detail changed.
3. Provide copies of the OEPA Permit to Install Approval for city records.
Will provide upon OEPA approval.
4. The contractor/developer should provide 48 hours of advance notice to the City Engineering and Public Works Department to witness installation and testing of the sewer line.
Note Added to Sanitary General Notes sheet and sanitary sewer plan and profile sheet.

Pump Station / Lift Station

No comments.

Other

1. Preliminary capacity fees are pending.
2. Please provide geotechnical report.
No geotechnical investigation performed.
3. Are street lights included in this development?
No.

**Office of Code Enforcement and
Community Development**

28 Curran Drive
Athens, OH 45701
(740)592-3306
(740)594-6304 Fax
<http://www.ci.athens.oh.us>



City of Athens
ATHENS, OHIO

August 2, 2023

Memorandum

To: Athens Planning Commission
From: David Riggs, Code Director
RE: Planning Commission Case #23-02: Homestead Court and Broadmoor PUD

The developer is requesting approval of the above Planned Unit Development of 43 low to moderate income single family units in the University Estates Subdivision. The Planning Commission must establish the following findings of fact as part of the PUD approval:

- The proposed development can be initiated within two years of approval in accordance with the law.
- The streets proposed are suitable and adequate to carry anticipated traffic and increased densities will not generate traffic in such amounts as to overload the street network outside the PUD.
- Any exception from requirements is warranted by design and other amenities incorporated in the final plan, in accordance with the PUD requirements and the need to provide a variety of housing opportunities with regard to type and price.
- The existing and proposed utility services are adequate for the population densities and nonresidential uses proposed.

The proposed subdivision contains the following code non-conformities:

- 163 ACC 23.10 Table "A" bulk control non-conformities for lot size, lot width, setbacks and impervious lot coverage as detailed in the table of sheet SV-2
- 6 ACC 23.10 Table "A" bulk control total lot coverage non-conformities
- 6 ACC 23.03.11(B) deck setback non-conformities
- A non-conformity from ACC 21.09.05 and 21.09.06 requiring common open space of at least 20%
- A non-conformity from ACC 21.07.05 requiring a street tree plan
- A non-conformity from ACC 27.02.04 requiring storm water retention

Additional comments from staff are not yet available. If Planning Commission chooses to approve the PUD plan, staff recommends that they do so contingent on the developer adequately addressing future staff review comments.

Line #	Bearing	Length
L1	S44°31'33"E	217.20
L2	S41°10'30"E	232.60
L3	S44°31'33"E	255.86
L4	S41°10'30"E	6.27
L5	S41°10'30"E	140.78
L6	S41°10'30"E	98.61
L7	S24°43'19"W	63.60
L8	S23°59'44"E	3.85
L9	S66°01'30"W	173.31
L10	N23°59'46"W	20.12
L11	N66°01'48"E	146.37
L12	N24°43'19"E	94.62
L13	N41°10'30"N	123.05
L14	N66°01'58"E	20.94
L16	N21°02'00"E	35.40
L47	S68°58'00"E	35.30

Curve Table				
Curve #	Length	Radius	Chord Direction	Chord Length
C1	19.33'	21.00'	N87° 37' 12"W	18.66'
C2	67.10'	55.00'	S83° 26' 06"W	63.02'
C3	46.72'	55.00'	S24° 08' 58"W	45.33'
C4	43.35'	55.00'	S22° 45' 52"E	42.24'
C5	45.73'	55.00'	S89° 09' 55"E	44.43'
C6	61.13'	55.00'	N55° 10' 15"E	58.03'
C7	9.67'	55.00'	N18° 17' 24"E	9.66'
C8	19.33'	21.00'	N39° 37' 40"E	18.66'

Line #	Length
D15	53.75
D16	77.77
D17	132.32
D18	71.48
D19	54.54
D20	48.26
D21	71.47
D22	71.47
D23	85.09
D24	113.80
D25	79.50
D26	102.46
D27	124.73
D28	7.25
D29	73.20
D30	73.20
D31	112.72
D32	46.04
D33	118.45
D34	51.83
D35	49.48
D36	47.54
D37	41.47
D38	51.56
D39	85.02
D40	19.72
D41	52.11
D42	71.47
D43	71.47
D44	146.82
D45	76.93

CITY OFFICIALS

APPROVED

DATE _____ STEVE PATTERSON, MAYOR

APPROVED

DATE _____ ANDREW B. STONE, P.E.,
SERVICE-SAFETY DIRECTOR

LISA ELIASON.....LAW DIRECTOR

KATHY HECHT.....AUDITOR

JOSH THOMAS.....TREASURER

PLANNING COMMISSION

STEVE PATTERSON

ANDREW B. STONE, P.E.

NANCY BAIN

JOHN KOTOWSKI

AUSTIN PHILLIPS

APPROVED

DATE _____

COUNCIL MEMBERS

CHRISTINE KNISELY, PRESIDENT

SARAH GRACE

JEFFREY RISNER

MICAH MCCAREY

DEBBIE WALKER, CLERK

SOLVEIG SPJELDNES

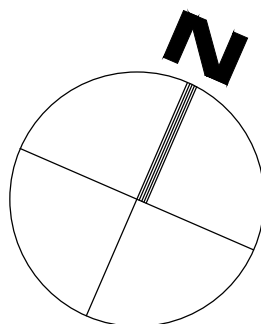
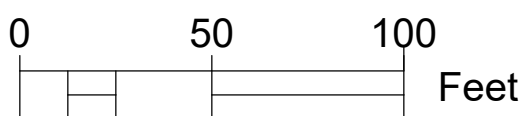
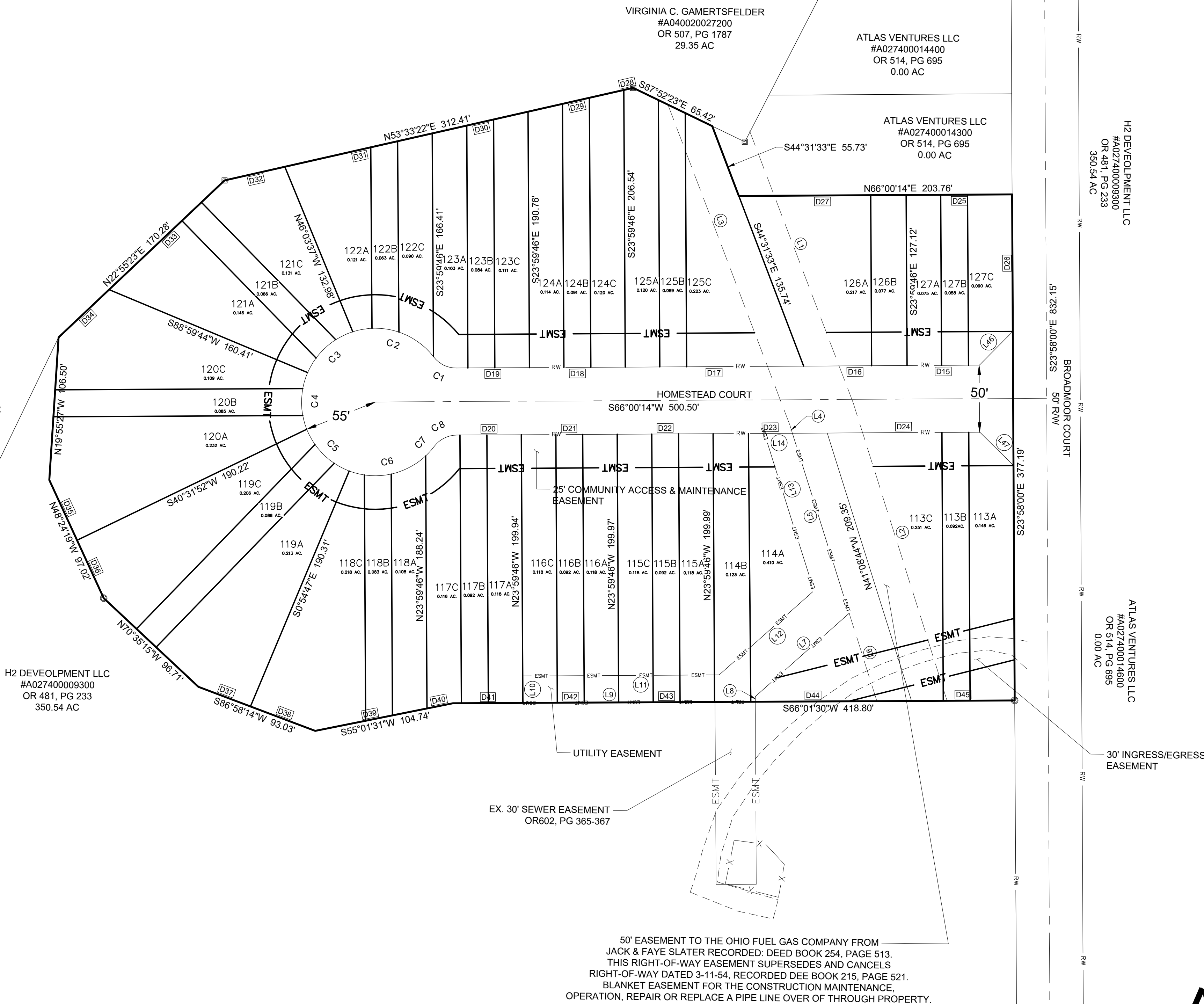
ALAN SWANK

SAM CROWL

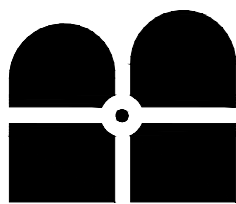
BEN ZIFF

APPROVED

DATE _____

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CITY OF ATHENS
ATHENS COUNTY, OHIO



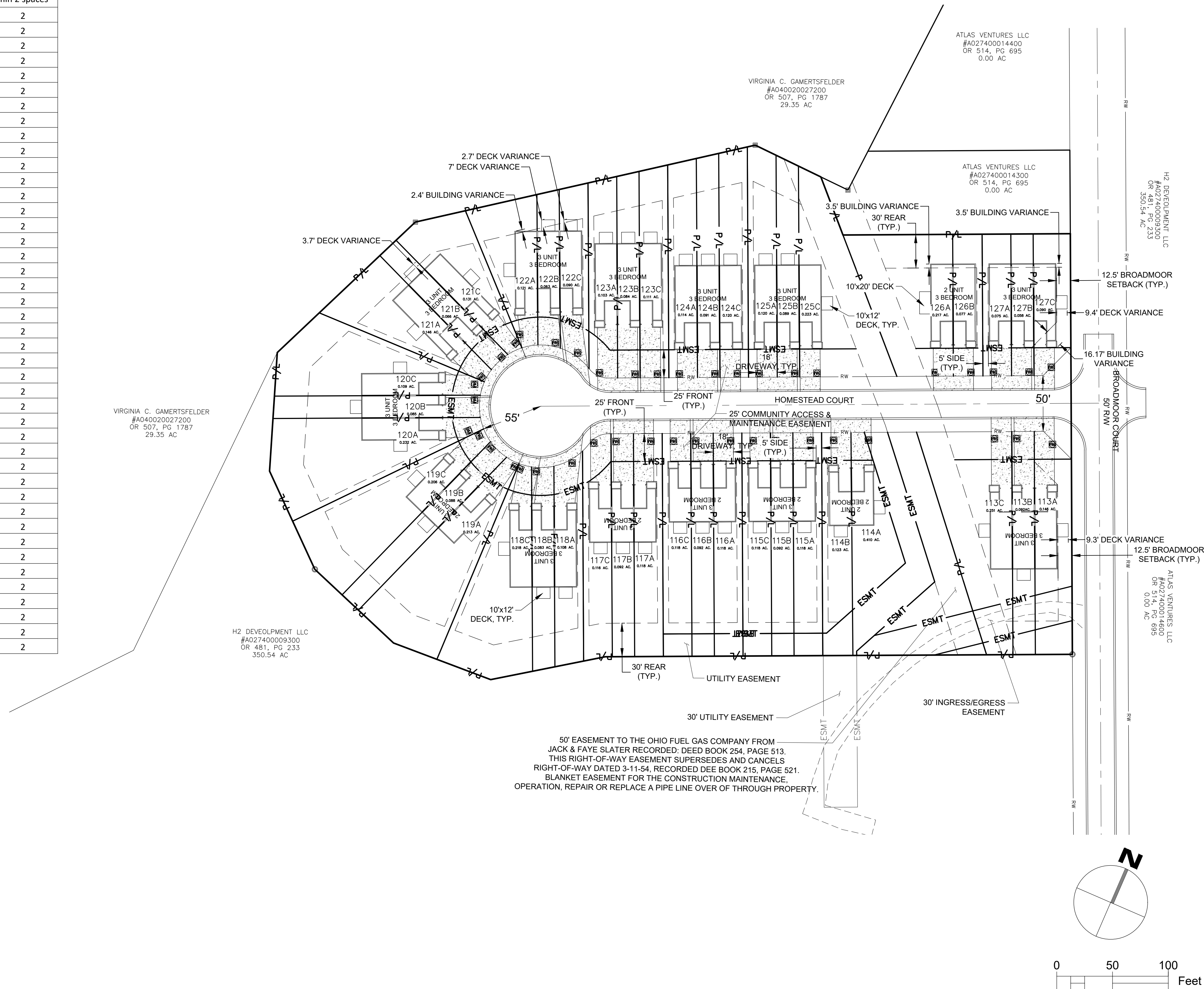
6801 STATE ROUTE 56, ATHENS, OH 45701 (740) 589-5001 - www.buckley.group

UNIVERSITY ESTATES PHASE II
BROADMOOR CT & HOMESTEAD CT
BOUNDARY PLAT

DATE		07/31/2023	
SCALE			
DRWN.	CDK	CHCK.	CDK
JOB NO.	201656		
SHEET NO.	CV 1		

NOTE: LOT LINES ALONG PARTY WALLS ARE APPROXIMATE AND SHALL BE ESTABLISHED AND RECORDED UPON CONSTRUCTION.

	Lot Size	Lot Width	Front Setback	Rear Setback	Side Yard Setback	Lot Coverage	On-site Parking
Lot #	min 8,000 sf	min 66 ft	min 25 ft	min 30 ft	min 8/20	max 30%	min 2 spaces
113A	6348	33	48	77	3.2/0	39%	2
113B	4010	20	48	66	0/0	62%	2
113C	10923	74	48	66	0/25	23%	2
114A	17861	67	29	116	45/0	10%	2
114B	5337	26	29	106	0/5	33%	2
115A	5144	26	25	110	5/0	32%	2
115B	4008	20	25	110	0/0	42%	2
115C	5140	26	25	110	0/5	32%	2
116A	5143	26	25	110	5/0	32%	2
116B	4007	20	25	110	0/0	42%	2
116C	5140	26	25	110	0/5	32%	2
117A	5143	26	43	92	5/0	39%	2
117B	4007	20	43	92	0/0	50%	2
117C	5056	26	25	92	0/5	39%	2
118A	4702	26	35	57	5/0	52%	2
118B	3627	20	32	61	0/0	59%	2
118C	9476	21	32	75	0/5	23%	2
119A	9283	22	35	102	5/0	19%	2
119B	3818	20	33	92	0/0	49%	2
119C	8970	22	33	101	0/5	20%	2
120A	10127	21	33	80	5/0	21%	2
120B	3701	20	30	68	0/0	59%	2
120C	4766	22	31	76	0/5	46%	2
121A	6338	23	32	37	5/0	35%	2
121B	2857	20	31	26	0/0	78%	2
121C	5707	23	31	32	0/5	38%	2
122A	5272	25	27	27	5/0	40%	2
122B	2765	20	27	23	0/0	79%	2
122C	3931	25	28	27	0/5	61%	2
123A	4520	25	30	45	5/0	54%	2
123B	3667	20	45	49	0/0	67%	2
123C	4840	25	45	53	0/5	51%	2
124A	4981	25	25	80	5/0	42%	2
124B	3981	20	25	84	0/0	52%	2
124C	5237	25	25	88	0/5	40%	2
125A	5261	25	25	80	5/0	40%	2
125B	3889	20	25	72	0/0	54%	2
125C	9714	77	25	70	0/28	22%	2
126A	9468	60	25	26	38/0	23%	2
126B	3362	26	25	26	0/5	60%	2
127A	3269	25	25	26	5/0	60%	2
127B	2547	20	25	26	0/0	77%	2
127C	3911	33	8	26	0/3	52%	2



FILE NAME	
COA INITIAL	06/19/23
LOT REV. 1	07/05/23
COA REVIEW	07/31/23
REVISION DATES	

CITY OF ATHENS
ATHENS COUNTY, OHIO



buckleygroup
engineering + surveying

6801 STATE ROUTE 56, ATHENS, OH 45701 (740) 589-5001 — www.buckleygroup.com

UNIVERSITY ESTATES PHASE II
BROADMOOR CT & HOMESTEAD CT
BUILDING VARIANCE EXHIBIT

DATE	
07/31/2023	
SCALE	
DRWN. CDK	CHCK. CDK
JOB NO. 201656	
SHEET NO.	
SV-2	

HOWARD AND LAWSON, LTD.

UNIVERSITY ESTATES - PHASE II

BROADMOOR CT AND HOMESTEAD CT

ATHENS, OH

OWNER

HOWARD & LAWSON LTD
39403 STATE ROUTE 689
ALBANY, OH 45710
CONTACT: PATRICK LAWSON
PHONE: 740-591-8547

FUTURE OWNER

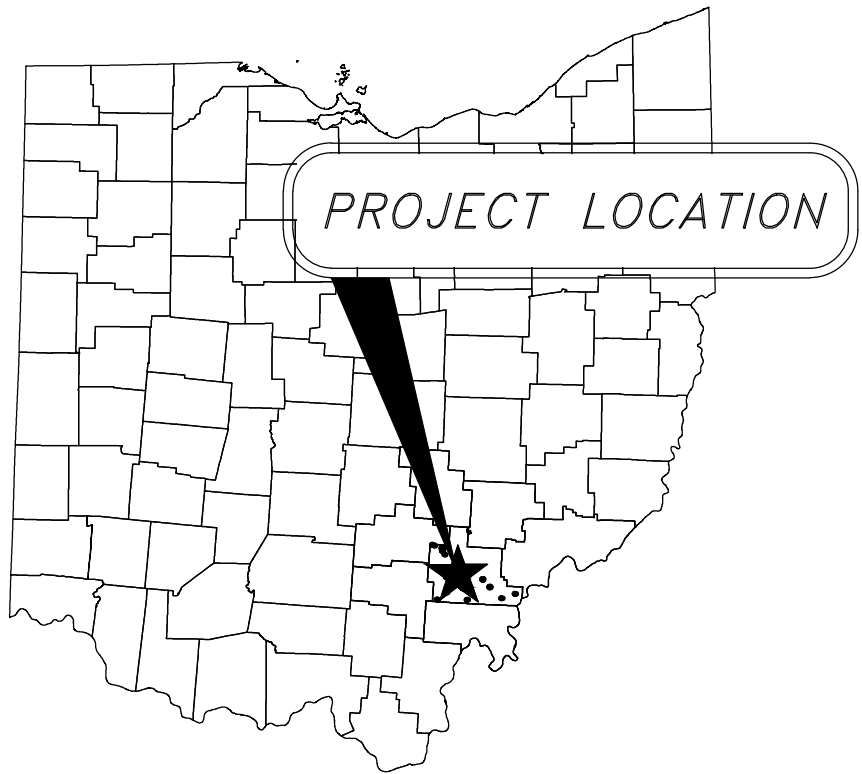
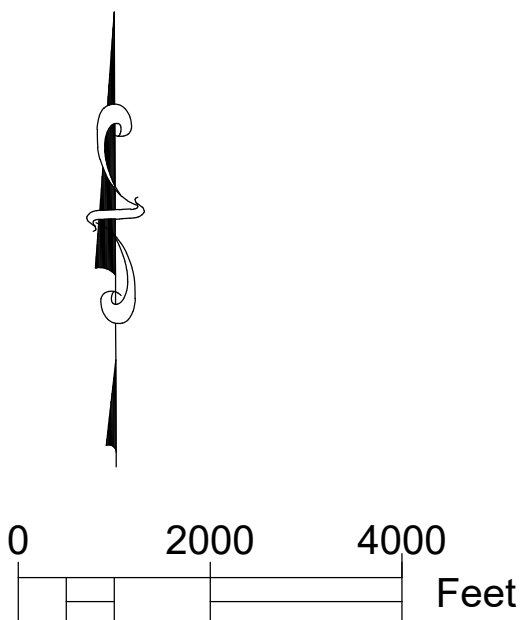
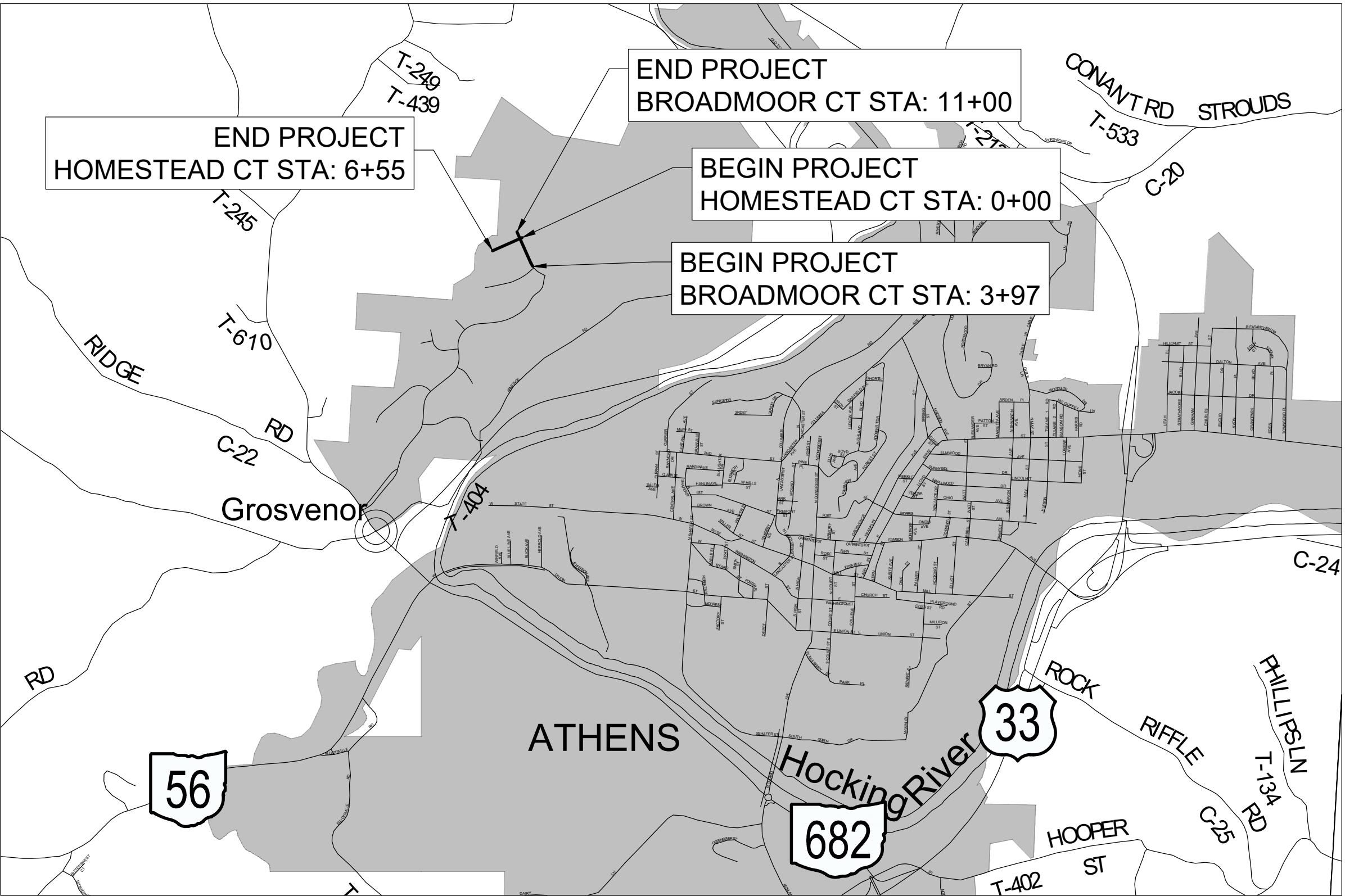
CITY OF ATHENS
ENGINEERING & PUBLIC WORKS
30 CURRAN DR.
ATHENS, OHIO, 45701
PHONE: (740) 593-7636
CONTACT: SALEH ELDABAJA, P.E.

CITY OFFICIALS
STEVE PATTERSON.....MAYOR
ANDREW B. STONE, P.E.....SERVICE-SAFETY DIRECTOR
LISA ELIASON.....LAW DIRECTOR
KATHY HECHT.....AUDITOR
JOSH THOMAS.....TREASURER

COUNCIL MEMBERS
CHRISTINE KNISELY, PRESIDENT
SARAH GRACE
JEFFREY RISNER
MICAH MCCAREY
DEBBIE WALKER, CLERK
SOLVEIG SPJELDNES
ALAN SWANK
SAM CROWL
BEN ZIFF

ENGINEER / SURVEYOR

BUCKLEY GROUP, LLC
6801 STATE ROUTE 56
ATHENS, OH 45701
PHONE:(740) 589-5001
FAX: (740) 592-5817
CONTACT: CLINTON KUENZLI, P.E.



LOCATION MAP
NOT TO SCALE

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF CONSTRUCTION OF THE EXTENSION OF BROADMOOR CT. AND HOMESTEAD CT. IN THE UNIVERSITY ESTATES SUBDIVISION IN THE CITY OF ATHENS, OHIO.

SPECIFICATIONS

THE CITY OF ATHENS DIVISION OF SEWER CONSTRUCTION SPECIFICATIONS FOR SEWER LINE INSTALLATION, CITY OF ATHENS WATER CONSTRUCTION SPECIFICATIONS, AND OHIO DEPARTMENT OF TRANSPORTATION 2019 CONSTRUCTION AND MATERIAL SPECIFICATIONS AND ASSOCIATED STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS SHALL GOVERN THIS IMPROVEMENT.

UNDERGROUND UTILITIES

OHIO
Utilities Protection
SERVICE
Click, Call or Tap Before You Dig

TWO WORKING DAYS
BEFORE YOU DIG
CALL 811 OR
(TOLL FREE) 1-800-362-2764
NON-MEMBERS MUST BE
CALLED DIRECTLY

SHEET NO.	SHEET INDEX DESCRIPTION
C-1	TITLE SHEET
C-2	TYPICAL SECTION
C-4 TO C-7	GENERAL NOTES
C-8	SITE OVERVIEW
C-9	GRADING PLAN
C-10	EROSION CONTROL PLAN
C-11 & C-12	BROADMOOR CT PLAN AND PROFILE & ESTIMATED QUANTITIES
C-13 & C-14	HOMESTEAD CT PLAN AND PROFILE & ESTIMATED QUANTITIES
C-15 & C-16	SANITARY SEWER PLAN AND PROFILE & ESTIMATED QUANTITIES
C-17 & C-18	STORM SEWER PLAN AND PROFILE & ESTIMATED QUANTITIES
C-19	STORM SEWER DETAILS
C-20	INTERSECTION DETAILS

FILE NAME

COA INITIAL 06/19/23
LOT REV. 1 07/05/23
COA REVIEW 07/31/23

REVISION DATES

CITY OF ATHENS

ATHENS COUNTY, OHIO

buckleygroup

engineering+surveying

6801 STATE ROUTE 56, ATHENS, OH 45701 (740) 589-5001 - www.buckleygroup

UNIVERSITY ESTATES PHASE II

BROADMOOR CT & HOMESTEAD CT

TITLE SHEET

DATE 07/31/2023

SCALE

DRWN. CDK | CHCK. CDK
JOB NO. 201656
SHEET NO. C-1

The diagram illustrates a cross-section of a curb ramp. Key components and their specifications are as follows:

- Sidewalk:** The elevated surface on either side of the ramp.
- Buffer:** The area between the sidewalk and the ramp.
- Ramp Surface:** The sloped area connecting the sidewalk to the street. It is divided into two sections:
 - Top Section:** A flat area with a maximum slope of 64:1.
 - Bottom Section:** A sloped area with a maximum slope of 13:1, indicated by a dashed line and a stippled texture.
- Street:** The road surface at the bottom of the ramp.
- Curb Height:** The vertical distance from the street surface to the top of the curb.
- Dimensions and Slopes:**
 - 64:1 max.:** Maximum slope for the top section of the ramp.
 - 13:1 max.:** Maximum slope for the bottom section of the ramp.
 - 4'-0" min. 5'-0" pref.:** Minimum and preferred width for the buffer and the top section of the ramp.
 - 1'-0" min.:** Minimum width for the bottom section of the ramp.

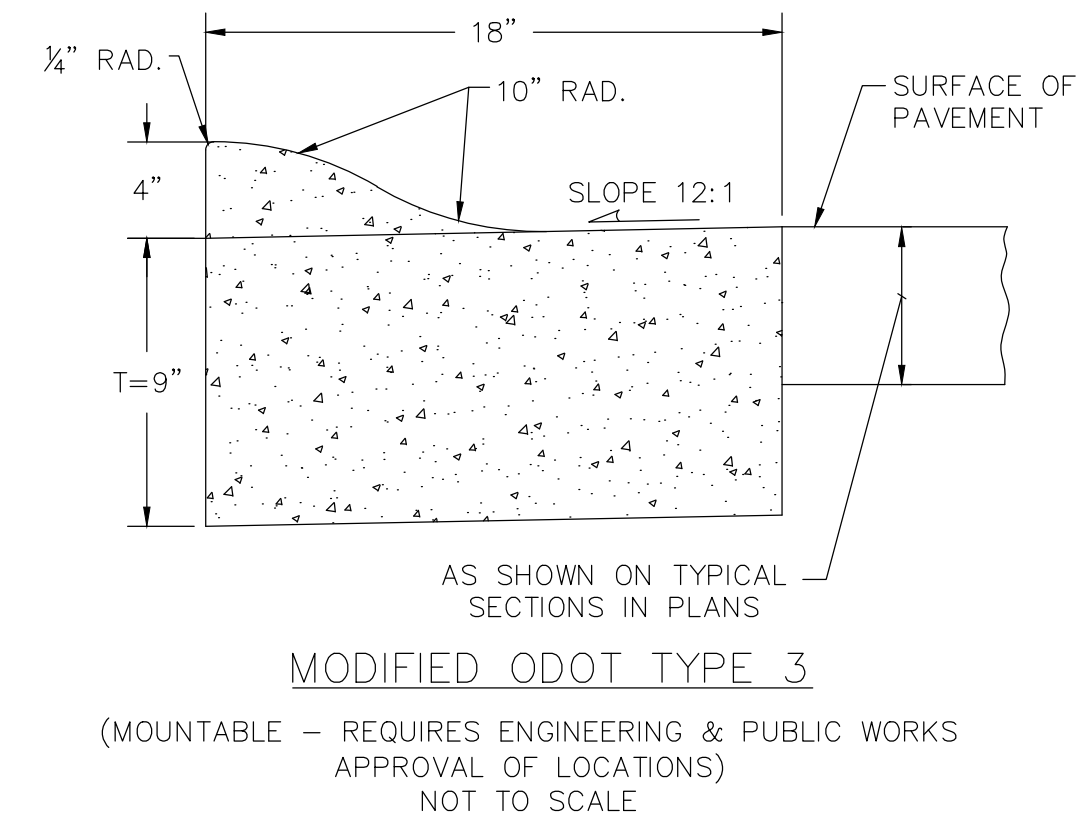
NOTES

The running slope of the curb ramp shall be a 13:1 maximum or flatter. In existing sidewalks, where the maximum ramp slope is not feasible due

$\frac{1}{2}$ " Item 705.03
 20:1 max.
 13:1 max. Slope
 4" min.
 24" Wide
 4" Thick*
 Concrete
 1'-6"
 2'-6" Gutter
 Ramp
 Landing
 New gutter shown.

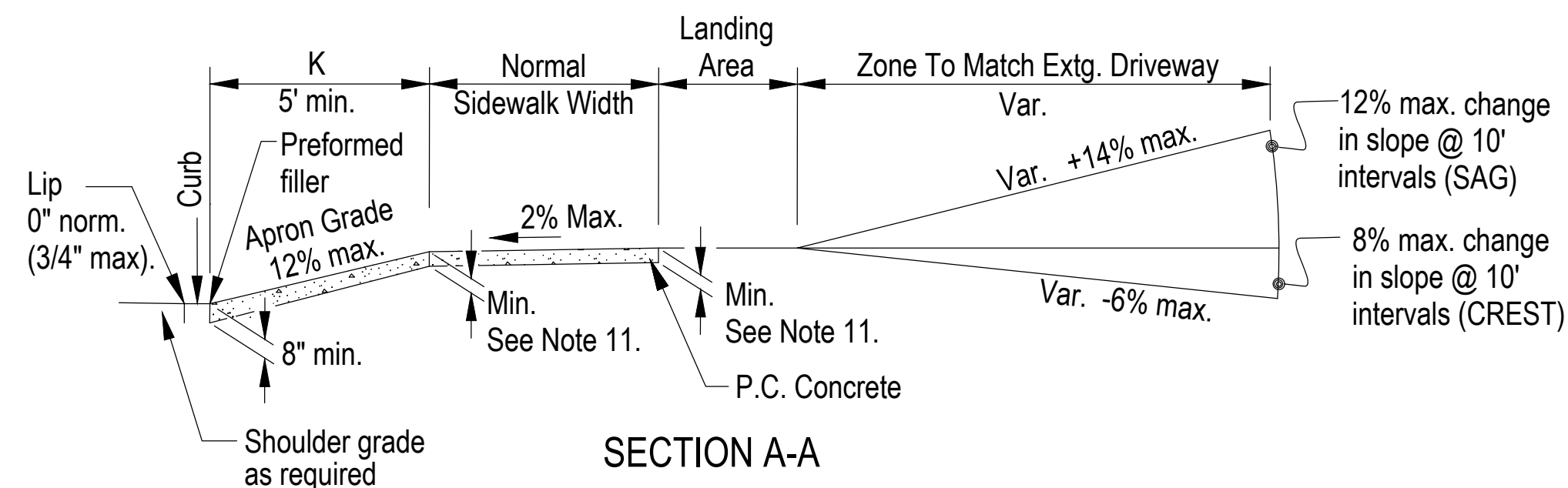
New gutter shown.

TRUNCATED DOMES DETAILS

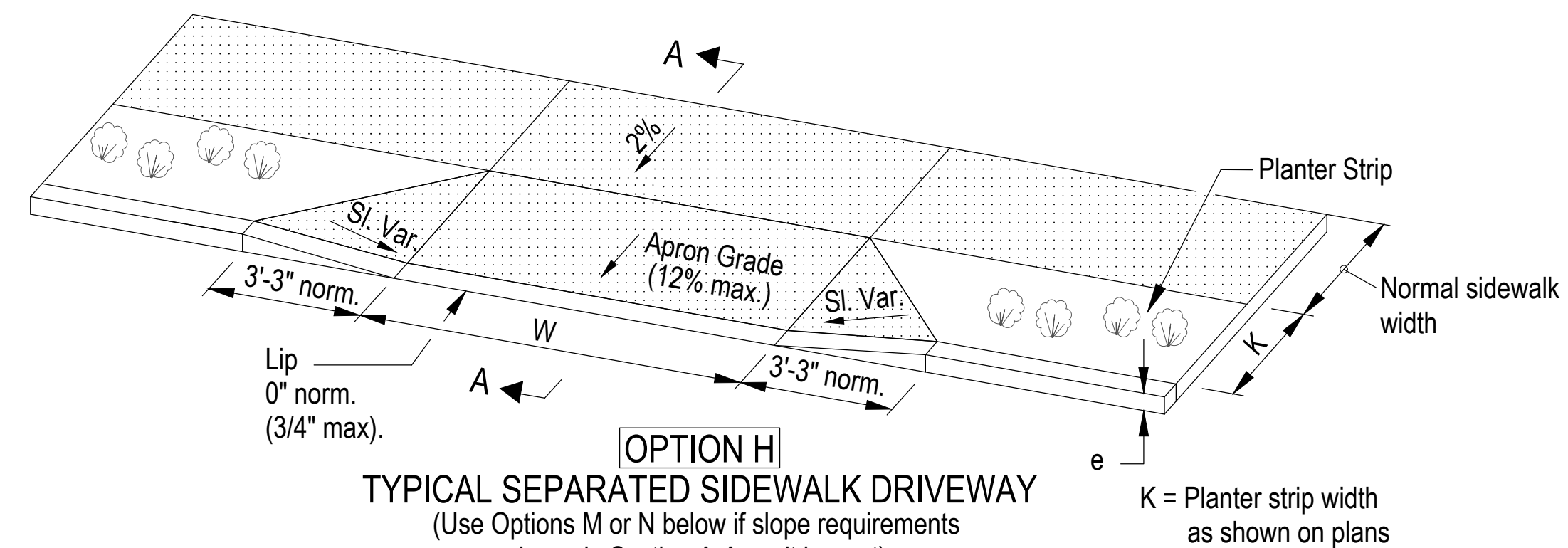


MODIFIED ODOT TYPE 3

(MOUNTABLE - REQUIRES ENGINEERING & PUBLIC WORKS
APPROVAL OF LOCATIONS)
NOT TO SCALE



SECTION A-A



TYPICAL SEPARATED SIDEWALK DRIVEWAY

(Use Options M or N below if slope requirements shown in Section A-A can't be met)

1. **CONTRACT SPECIFICATIONS**
THE CITY OF ATHENS DIVISION OF SEWER CONSTRUCTION SPECIFICATIONS FOR SEWER LINE INSTALLATION, CITY OF ATHENS WATER CONSTRUCTION SPECIFICATIONS, AND THE JANUARY 1, 2019 VERSION OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AS PUBLISHED BY THE OHIO DEPARTMENT OF TRANSPORTATION, AND ASTM SHALL GOVERN ALL APPLICABLE ASPECTS OF THE CONTRACT WORK. THE CONTRACTOR SHOULD BE FAMILIAR WITH THESE SPECIFICATIONS AND THEIR PROCEDURAL REQUIREMENTS.

2. **SAFETY**
THE CONTRACTOR AND SUB-CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE FOR ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTOR(S) TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THIS WORK. COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 IS REQUIRED OF ALL CONTRACTORS ON THE PROJECT.

3. **OUPS CALL**
THE CONTRACTOR IS RESPONSIBLE FOR CALLING THE OHIO UTILITIES PROTECTION SERVICE AT LEAST TWO DAYS BEFORE DIGGING. THE TOLL-FREE NUMBER IS (800) 362-2764.

4. **UTILITIES**
THE FOLLOWING UTILITIES ARE LOCATED IN THE VICINITY OF THE PROJECT WHERE CONSTRUCTION IS TO TAKE PLACE:

1) AEP OHIO 9135 SR 682 ATHENS, OH 45760 CONTACT: CLARK SAUNDERS PHONE: 740-985-3054	2) CITY OF ATHENS (SEWER) 30 CURRAN DR. ATHENS, OH 45701 CONTACT: SALEH ELDABAJA PHONE: 740-593-7636
3) CITY OF ATHENS (WATER) 30 CURRAN DR. ATHENS, OH 45760 CONTACT: SALEH ELDABAJA PHONE: 740-593-7636	4) COLUMBIA GAS TRANSMISSION 700 LOUISIANA STREET, SUITE 700 HOUSTON, TX 77002 US_CROSSING@TRANSCANADA.COM 800-562-8931 ATTN: JOSHUA WILLIAMS 740-688-9466

LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL UTILITY LINES, SERVICES, AND APPURTENANCES, WHETHER SHOWN ON THESE PLANS OR NOT, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. WHERE POTENTIAL GRADE CONFLICTS MIGHT OCCUR WITH EXISTING UTILITIES, THE CONTRACTOR SHALL UNCOVER SUCH UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION IN ORDER THAT THE EXACT ELEVATION MAY BE DETERMINED AND THE NECESSARY ADJUSTMENTS MADE. COST OF THE ABOVE WORK SHALL BE INCLUDED WITH THE PRICE BID FOR THE PERTINENT ITEM. ANY EXISTING UTILITY OR APPURTENANCE DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR, OR AT THE CONTRACTOR'S EXPENSE.

5. **ENGINEER'S LIABILITY**
BUCKLEY GROUP, LLC, HEREIN CALLED "THE ENGINEER," SHALL NOT BE RESPONSIBLE FOR THE MEANS, METHODS, PROCEDURES, TECHNIQUES, OR SEQUENCES OF CONSTRUCTION NOT SPECIFIED HEREIN, NOR FOR SAFETY ON THE JOB SITE, NOR SHALL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

6. **DAMAGE TO PUBLIC OR PRIVATE PROPERTY**
CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE THAT IS INCURRED ON PUBLIC OR PRIVATE PROPERTY DUE TO CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL REPAIR OR REPLACE THE DAMAGED PROPERTY AT THE CONTRACTOR'S EXPENSE.

7. **WORK HOURS AND NOISE CONTROL**
IN ORDER TO MINIMIZE ADVERSE CONSTRUCTION NOISE IMPACTS, NO POWER OPERATED CONSTRUCTION TYPE DEVICE SHALL BE OPERATED BETWEEN THE HOURS OF 8:00 P.M. TO 7:00 A.M MONDAY THROUGH SATURDAY, UNLESS COORDINATION OCCURS AND PERMISSION IS GRANTED BY THE SERVICE-SAFETY DIRECTOR. IN ADDITION, NO POWER-OPERATED CONSTRUCTION TYPE DEVICE SHALL BE OPERATED IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

8. **NO STEEL TRACK EQUIPMENT ON ROADS**
STEEL TRACK EQUIPMENT SHALL BE USED WHERE FINISH AREAS OF OVERLAID. USE IN OTHER AREAS IS PROHIBITED. EXCEPTIONS MAY BE GRANTED BY THE CITY OF ATHENS FOR SPECIAL SITUATIONS BUT MUST BE IN WRITING WITH THE UNDERSTANDING THAT ANY DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE CITY OF ATHENS.

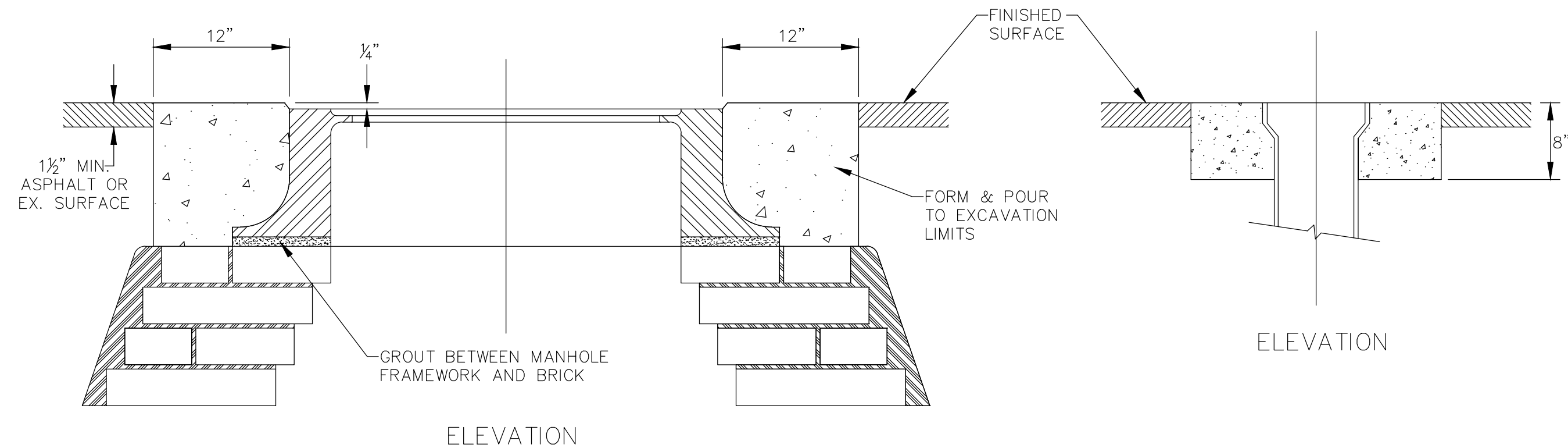
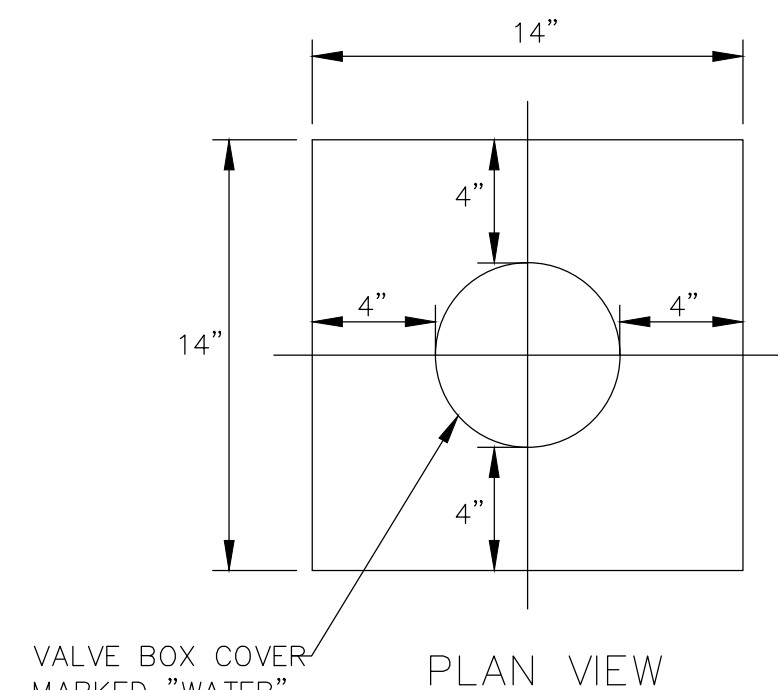
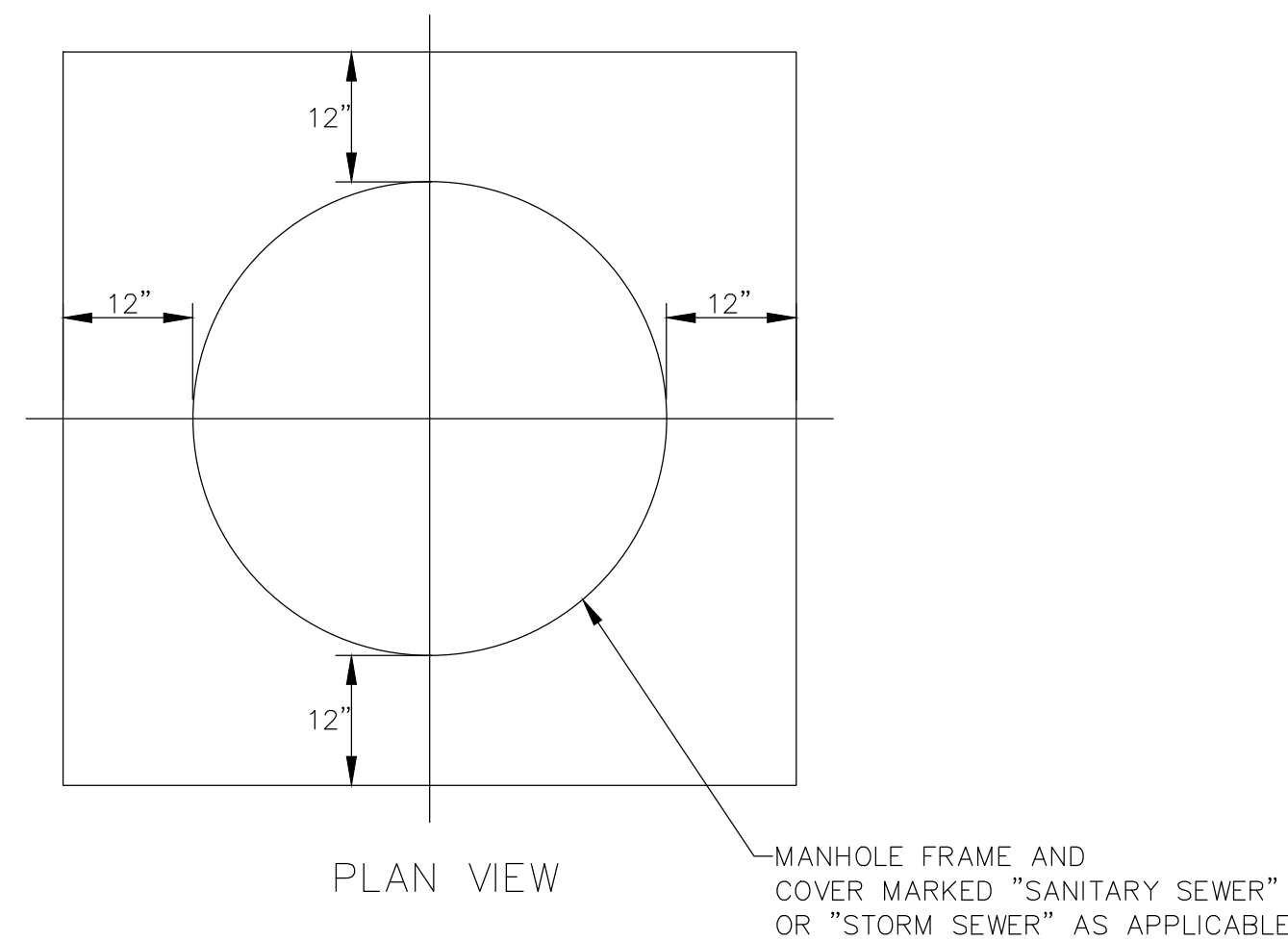
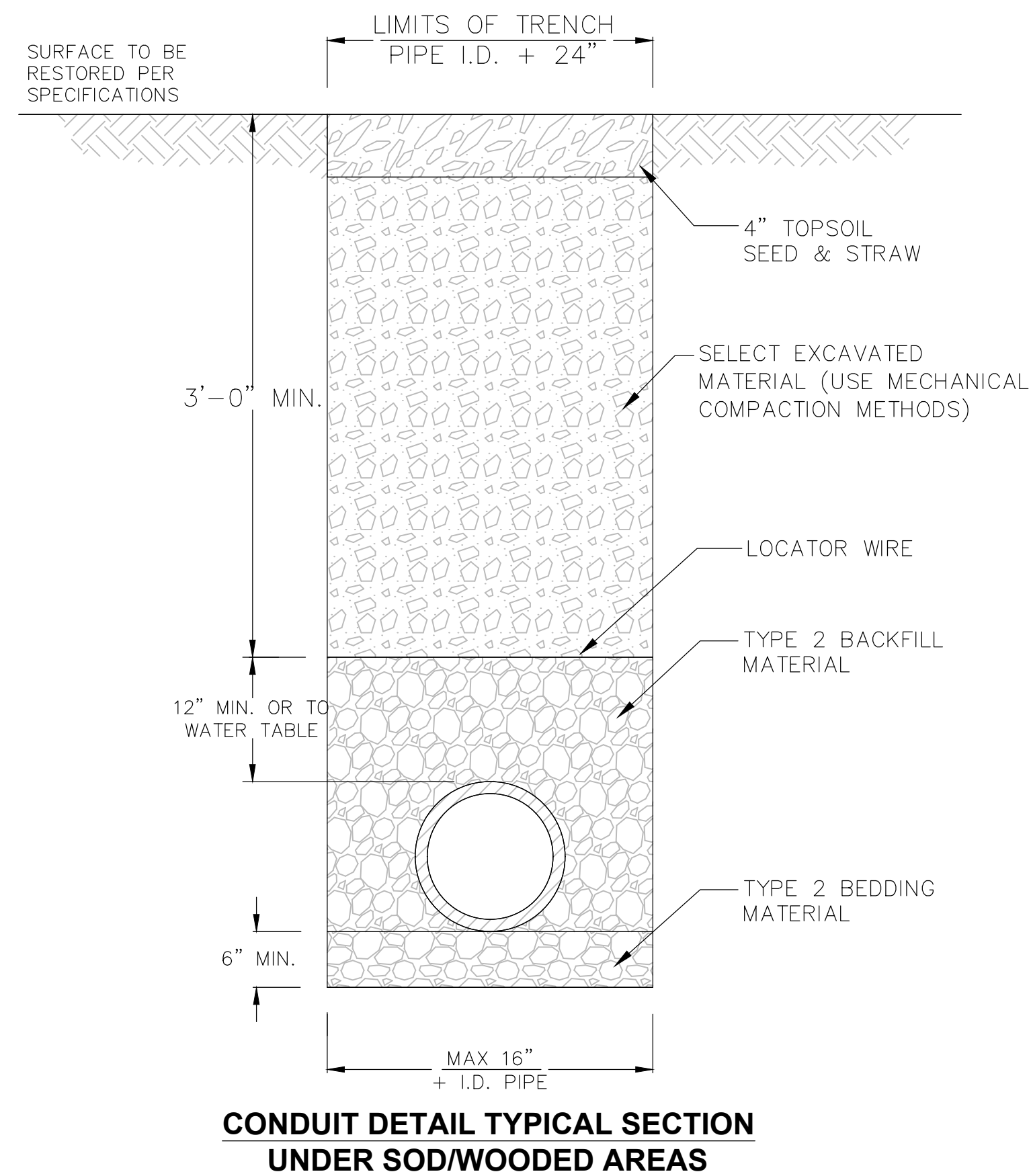
9. **BACKFILLING**
TRENCH BACKFILLING REQUIREMENTS, AS SPECIFIED IN THE CONTRACT DOCUMENTS, SHALL BE STRICTLY ENFORCED. BACKFILLING WITH UNACCEPTABLE MATERIALS OR CONSTRUCTION METHODS WILL RESULT IN NON ACCEPTANCE AND NONPAYMENT OF THE VARIOUS BID ITEMS AFFECTED BY SUCH WORK. ALL BACKFILL UNDER OR WITHIN 2' OF ROADS, DRIVES, AND PARKING LOTS SHALL BE GRANULAR BACKFILL PER SPECIFICATIONS.

10. **LINE CROSSINGS**
A TWELVE INCH (12") THICK SAND ENVELOPE SHALL BE USED AROUND ALL WATER AND GAS LINES TO PROTECT SAID LINES FROM ABRASIVE AND PROTRUDING AGGREGATE. THIS SAND SHALL BE FINE GRADED AGGREGATE PER ODOT 703.02.A AND FREE OF LARGE PARTICLES

11. **PAVEMENT CLEANING**
THE CONTRACTOR IS HEREBY NOTIFIED THAT IT IS HIS/HER RESPONSIBILITY TO KEEP STREETS AND ROADS CLEAR OF ALL MUD, DIRT, GRAVEL, AND/OR STONES OF ANY KIND DEPOSITED AS A RESULT OF HIS/HER OPERATIONS. PAVEMENTS SHALL BE CLEANED AT THE END OF EACH WORK DAY.

12. **STORM SEWER**
STORM SEWER PIPE SHALL BE SMOOTH INTERIOR DUAL WALL CORRUGATED HDPE OR PP PIPE MEETING ASTM F2648 OR ASTM F2881 WITH WATERTIGHT JOINTS MEETING ASTM D3212. GROUT ALL OPENINGS IN MANHOLES AROUND PIPE WITH NONSHRINK GROUT.

13. **CONCRETE COLLARS**
PROVIDE CONCRETE COLLARS AROUND ALL STRUCTURE WITHIN PAVEMENT PER DETAIL PROVIDED.



NOTES:

1. THE MANHOLE FRAME SHALL BE SET TO GRADE AND CONCRETE BASE POURED AHEAD OF RESURFACING OPERATIONS.
2. CONCRETE BASE SHALL BE HIGH EARLY STRENGTH CONCRETE.
3. THE WORK SHALL BE PROTECTED BY BARRIERS, LIGHTS, ETC. AND SHALL NOT BE REMOVED FOR A PERIOD OF 24 HOURS AFTER THE POUR IS MADE.

CONCRETE COLLARS FOR
MANHOLES & VALVE BOXES

FILE NAME	
COA INITIAL 06/19/23	
LOT REV. 1 07/05/23	
COA REVIEW 07/31/23	
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CITY OF ATHENS	
ATHENS COUNTY, OHIO	
buckleygroup engineering+surveying	
6801 STATE ROUTE 56, ATHENS, OH 45701 (740) 589-5001 — www.buckleygroup.com	
UNIVERSITY ESTATES PHASE II	
BROADMOOR CT & HOMESTEAD CT	
GENERAL NOTES	
DATE	07/31/2023
SCALE	
DRWN. CDK	CHKD. CDK
JOB NO.	201656
SHEET NO.	C-3

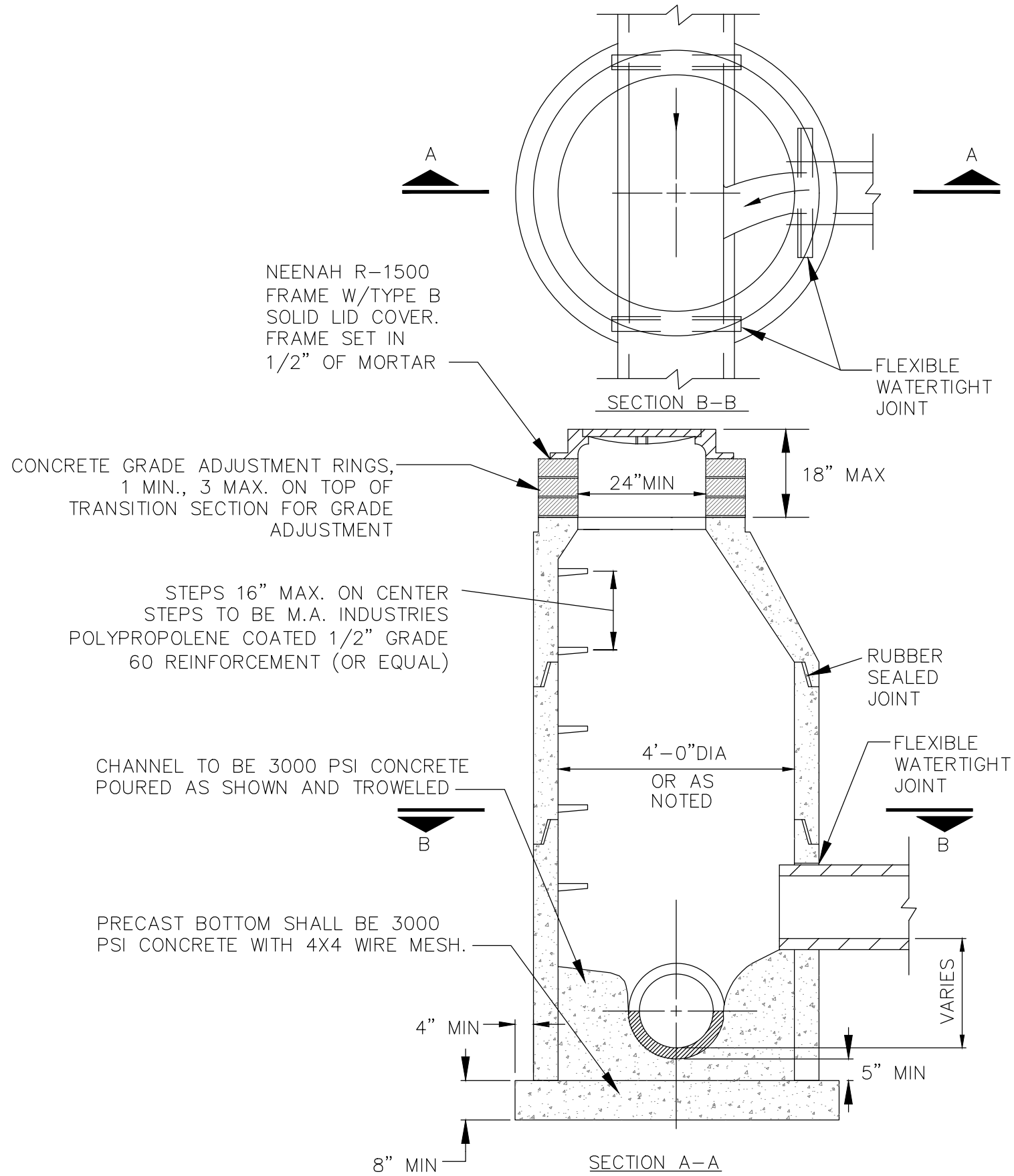
SANITARY NOTES:

- ALL SANITARY SEWER SHALL CONFORM TO ASTM D3034, JOINT SPECIFICATION ASTM D3212, BEDDING CLASSIFICATION ODOT TYPE 2, AND MEET OR EXCEED SDR-35 PVC.
- ALL CONNECTORS AND FITTINGS REQUIRED TO MAKE CONNECTIONS TO EXISTING MANHOLES OR SEWER PIPES SHALL BE FURNISHED BY THE CONTRACTOR AND ALL NECESSARY CONNECTIONS SHALL BE MADE AT NO ADDITIONAL EXPENSE TO THE OWNER. SAID COST SHALL BE INCLUDED IN THE APPLICABLE SEWER LINE ITEMS.
- CONTRACTOR TO LOCATE AND VERIFY LOCATIONS AND ELEVATIONS OF CROSSING UTILITIES PRIOR TO CONSTRUCTION.
- IF SITE CONDITIONS REQUIRE THE INSTALLATION OF THE SYSTEM TO DEVIATE FROM THESE PLANS, ALL SITE WORK SHALL STOP IMMEDIATELY AND THE DESIGNER SHALL BE NOTIFIED. ANY ONGOING WORK SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- NO WET WEATHER INSTALLATION IS PERMITTED.
- ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SYSTEM ARE PROHIBITED.
- MINIMUM COVER OVER SANITARY PIPES SHALL BE 3'.
- INTERNAL SANITARY BOWL DROPS SHALL BE IMPLEMENTED ON ALL INVERTS OF MANHOLES THAT ARE 24" OR MORE ABOVE THE OUTLET INVERT.
- CONTRACTOR SHALL INSTALL DOUBLE CLEANOUTS ON ALL SANITARY SEWER LATERALS.
- SEWERS SHALL MAINTAIN A MINIMUM OF 18 INCHES VERTICAL SEPARATION BELOW WATER LINES AT ALL WATER MAIN CROSSINGS.
- SEWERS SHALL MAINTAIN A MINIMUM OF 10 FEET HORIZONTAL SEPARATION FROM ALL WATERLINES.
- SANITARY SEWER LINES SHALL MAINTAIN REQUIRED HORIZONTAL ISOLATION DISTANCES OF 10' FROM ALL WATER LINES, 50' FROM ALL PRIVATE WATER SOURCES, AND 50' FROM ALL SOURCES OF WATERS OF THE STATE INCLUDING WETLANDS, DITCHES, AND STREAMS.
- ALL PIPE IN THE WORK AREA SHALL HAVE THE ENDS COVERED WITH DUCT TAPE TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING THE PIPE. PRIOR TO FUSING, ALL JOINTS SHALL BE INSPECTED FOR AND CLEARED OF ANY CONSTRUCTION DEBRIS.
- ALL CUTTING OF PVC PIPE SHALL BE ACCOMPLISHED WITH PIPE CUTTERS APPROVED BY MANUFACTURER, NO SAWING OF PVC IS ALLOWED.
- THE INSTALLATION OF THIS SYSTEM SHALL BE IN ACCORDANCE WITH SPECIFICATIONS AND PROCEDURES AS SUPPLIED BY THE MANUFACTURERS OF THE MATERIALS.

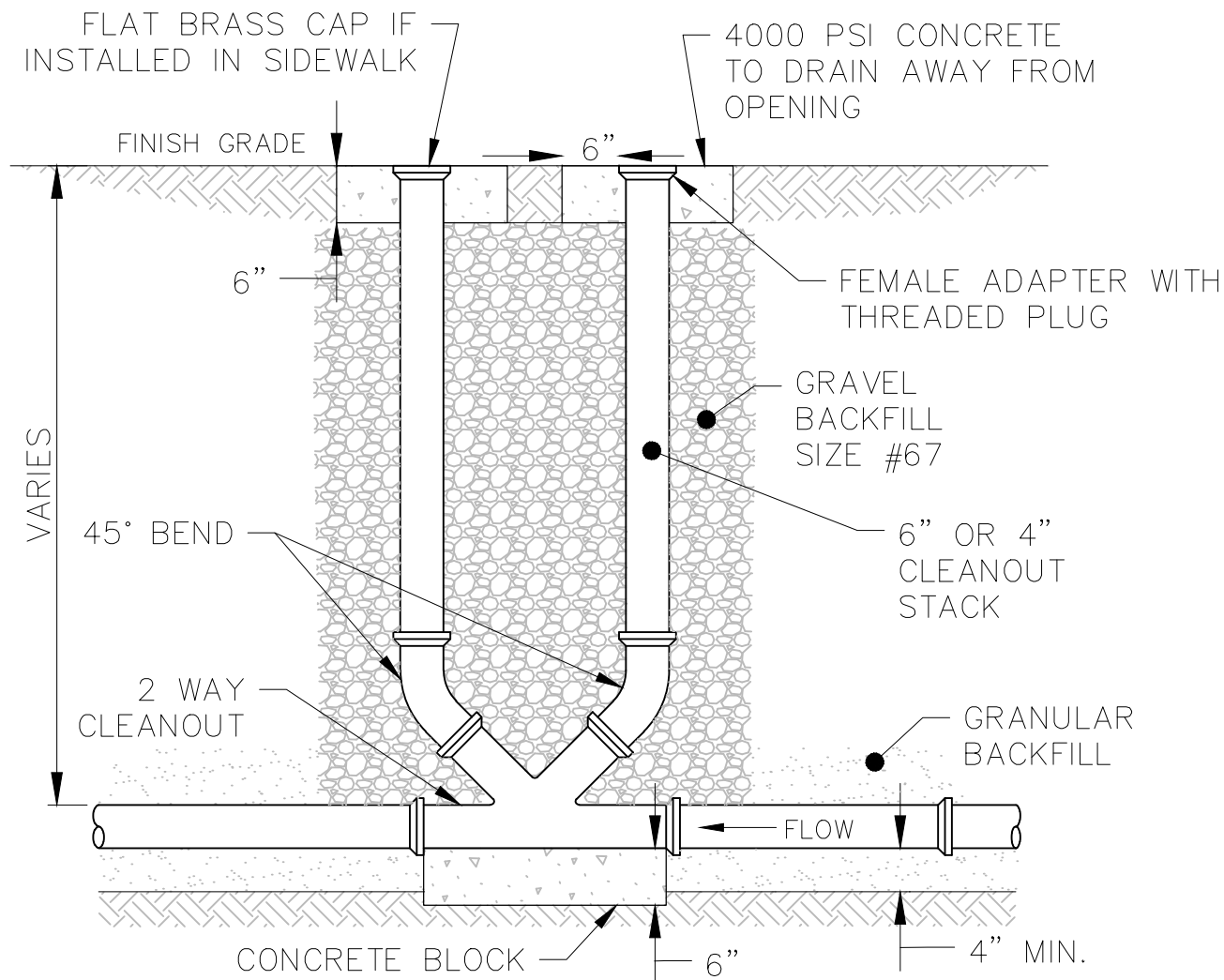
SANITARY CONSTRUCTION & TESTING NOTES

- ALL SANITARY SEWERS SHALL BE SUBJECTED TO AN AIR FILTRATION, OR EXFILTRATION TEST OR COMBINATION OF SAME PRIOR TO ACCEPTANCE. THE AIR TEST SHALL CONFORM TO ASTM F-1417 FOR PLASTIC PIPE. ALL SEWERS OVER 24 INCH DIAMETER SHALL BE SUBJECTED TO INFILTRATION TESTS. ALL SEWERS OF 24 INCH DIAMETER OR LESS, WHERE THE GROUNDWATER LEVEL ABOVE THE TOP OF THE SEWER IS OVER 2 FEET, SHALL BE SUBJECTED TO INFILTRATION TESTS. ALL SEWERS OF 24 INCH DIAMETER OR LESS, WHERE THE GROUNDWATER LEVEL ABOVE THE TOP OF THE SEWER IS 2 FEET OR LESS, SHALL BE SUBJECTED TO AIR TESTS OR EXFILTRATION TESTS. EXFILTRATION OR INFILTRATION LEAKAGE SHALL NOT EXCEED 100 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM. AN EXFILTRATION OR INFILTRATION TEST SHALL BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET.
- CONTRACTOR SHALL PERFORM ALL TESTS AND CCTV INSPECTIONS PER STANDARD ASTM AND NASSCO GUIDELINES UNLESS OTHERWISE NOTED.
- LEAKAGE, DEFLECTION, MANHOLE TESTING, AND POST TELEVISIONING SHALL BE REQUIRED FOR THIS PROJECT AND OBSERVED BY A CITY OF ATHENS REPRESENTATIVE. COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR APPROPRIATE SEWER ITEMS.
- CONTRACTOR SHALL CONDUCT TESTING ON ALL NEW PIPE LINES AS SPECIFIED: ALL WORK SHALL BE INSPECTED, TESTED, AND APPROVED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL RULES AND REGULATIONS. UTILITY INSTALLATIONS THAT FAIL TO MEET THE TEST LIMITS SHALL BE REPAIRED IN A MANNER ACCEPTABLE TO ENGINEER. IN GENERAL, DEFECTIVE PIPE INSTALLATIONS SHOULD BE UNCOVERED AND RE-LAID, WITH NEW PIPE IF NECESSARY, TO REPAIR THE DEFECT. UNDER NO CIRCUMSTANCES SHALL DEFECTS BE SEALED FROM THE INTERIOR OF THE PIPE, AND ONLY WHERE SPECIFICALLY ALLOWED BY ENGINEER, SHALL DEFECTS BE SEALED FROM THE EXTERIOR OF THE PIPE.
- DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE SANITARY PIPE. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM. NO PIPE SHALL EXCEED A DEFLECTION OF 5 PERCENT. IF DEFLECTION EXCEEDS 5 PERCENT, REPLACEMENT OR CORRECTION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH REQUIREMENTS IN THE APPROVED SPECIFICATIONS. THE RIGID BALL OR MANDREL USED FOR THE DEFLECTION TEST SHALL HAVE A DIAMETER NOT LESS THAN 95 PERCENT OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURED. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES. THE TESTING DEVICE SHALL BE CONTROLLED USING CABLES AT BOTH THE UPSTREAM AND DOWNSTREAM MANHOLES. THE TESTING DEVICE MUST PASS FREELY THROUGH THE SEWER WITHOUT THE USE OF UNREASONABLE FORCE ON THE CONTROL CABLES. ANY LINE THAT WILL NOT PASS THE TEST CYLINDER WILL NOT BE ACCEPTED UNTIL THE FAULTY SECTIONS HAVE BEEN REMOVED AND REPLACED AND THE LINE RETESTED.

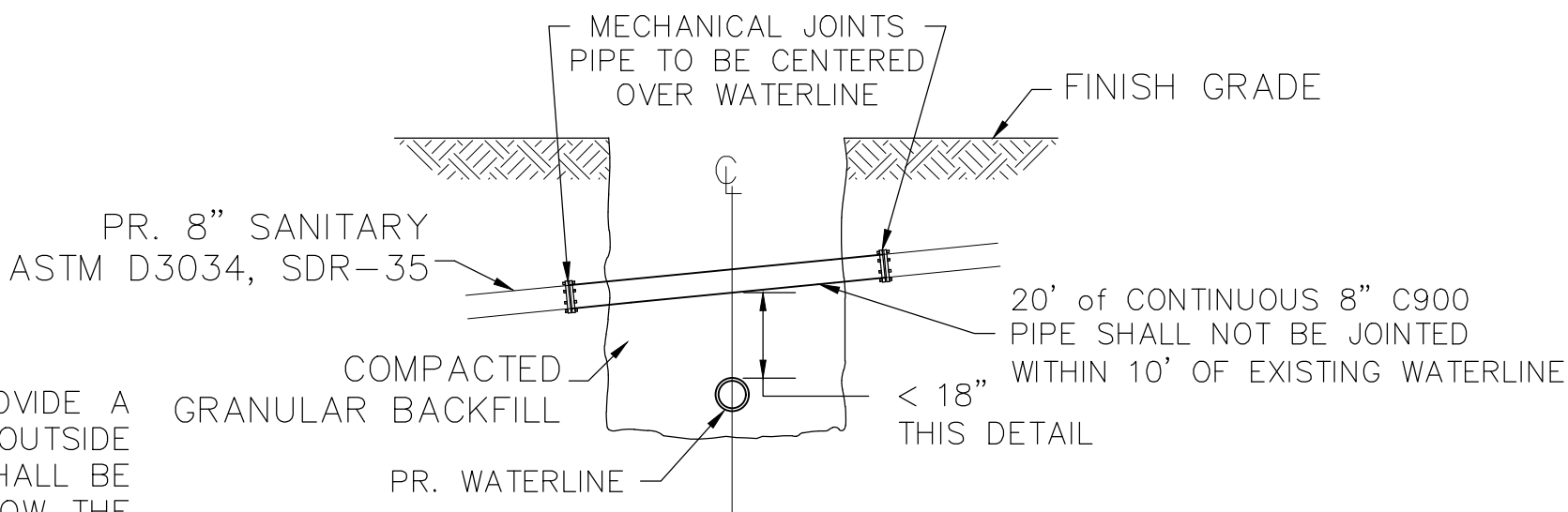
NOTE:
SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF SEWER. THIS SHALL BE THE CASE WHERE WATER MAIN IS EITHER ABOVE OR BELOW THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.



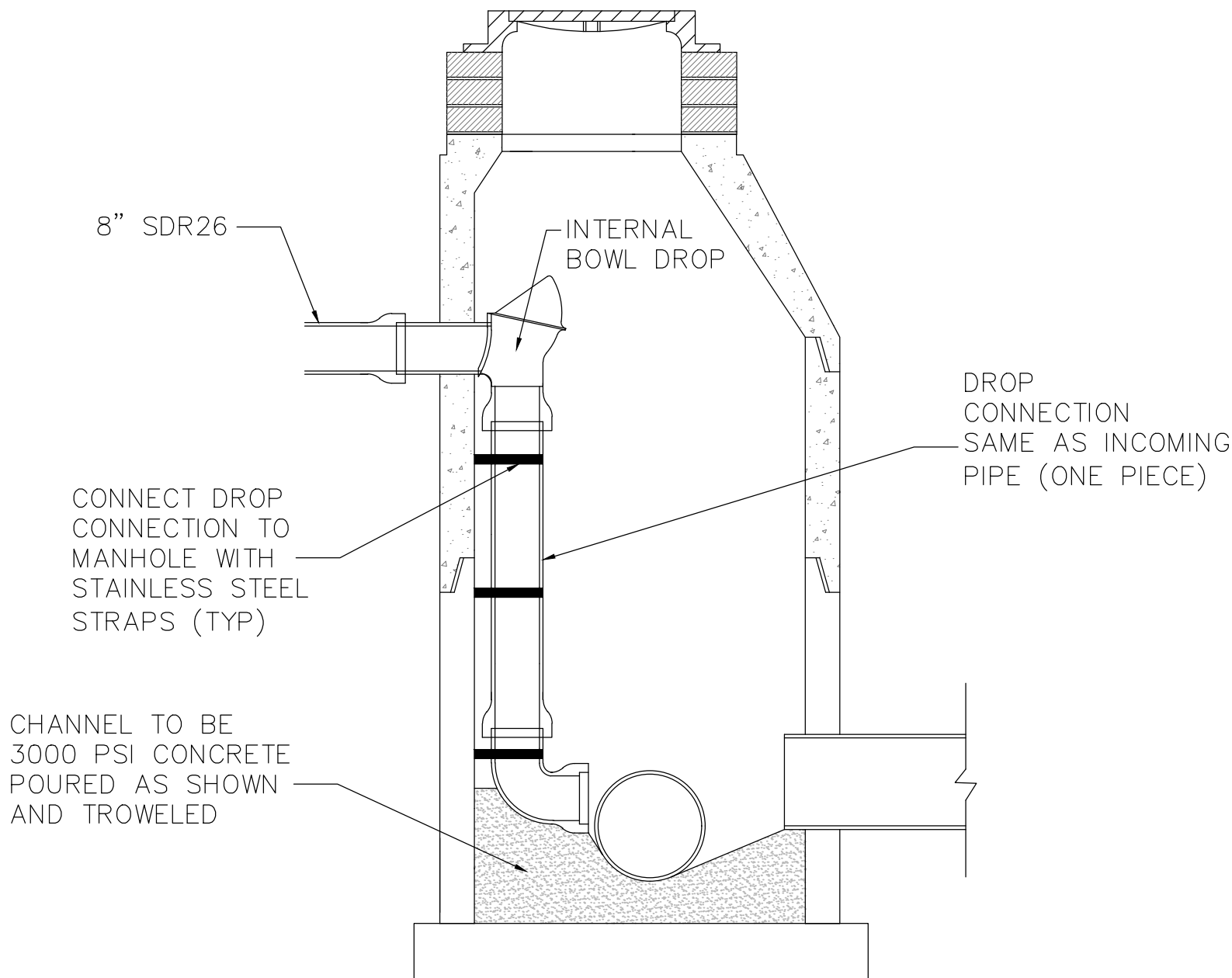
SANITARY MANHOLE W/LEAD
NO SCALE



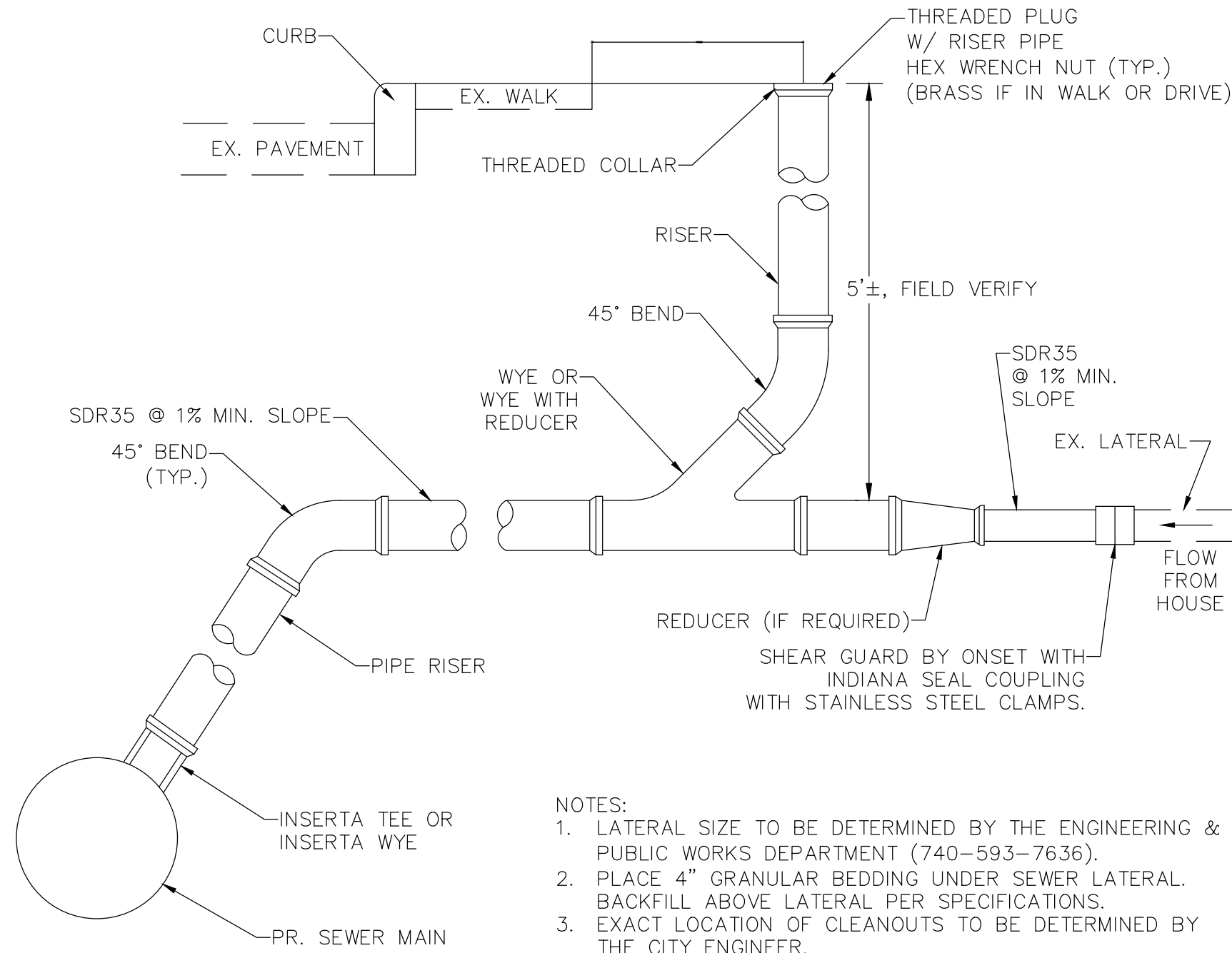
DOUBLE CLEANOUT DETAIL
NO SCALE



SANITARY SEWER
WATERLINE CROSSING DETAIL
NO SCALE



INTERNAL SANITARY BOWL DROP CONNECTION DETAIL
NO SCALE



SEWER LATERAL
CONNECTION DETAIL
NOT TO SCALE

** NOTE: CONTRACTOR SHALL PROVIDE 48 HOURS OF ADVANCE NOTICE TO THE CITY ENGINEERING AND PUBLIC WORKS DEPARTMENT TO WITNESS INSTALLATION AND TESTING OF ALL SANITARY SEWER.

FILE NAME

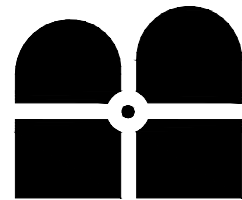
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REVISION DATES

CITY OF ATHENS

ATHENS COUNTY, OHIO

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UNIVERSITY ESTATES PHASE II

BROADMOOR CT & HOMESTEAD CT

GENERAL NOTES

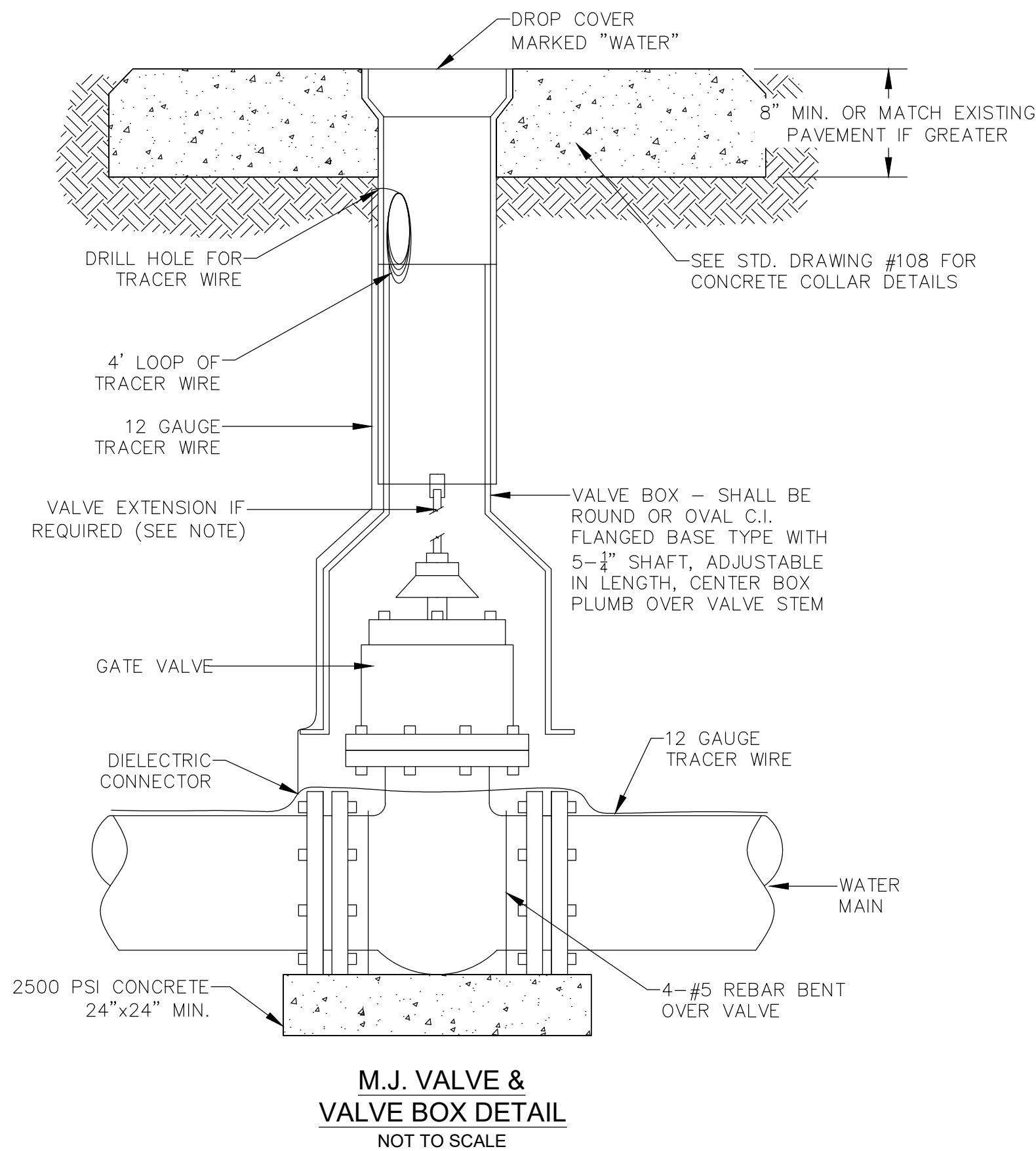
DATE
07/31/2023

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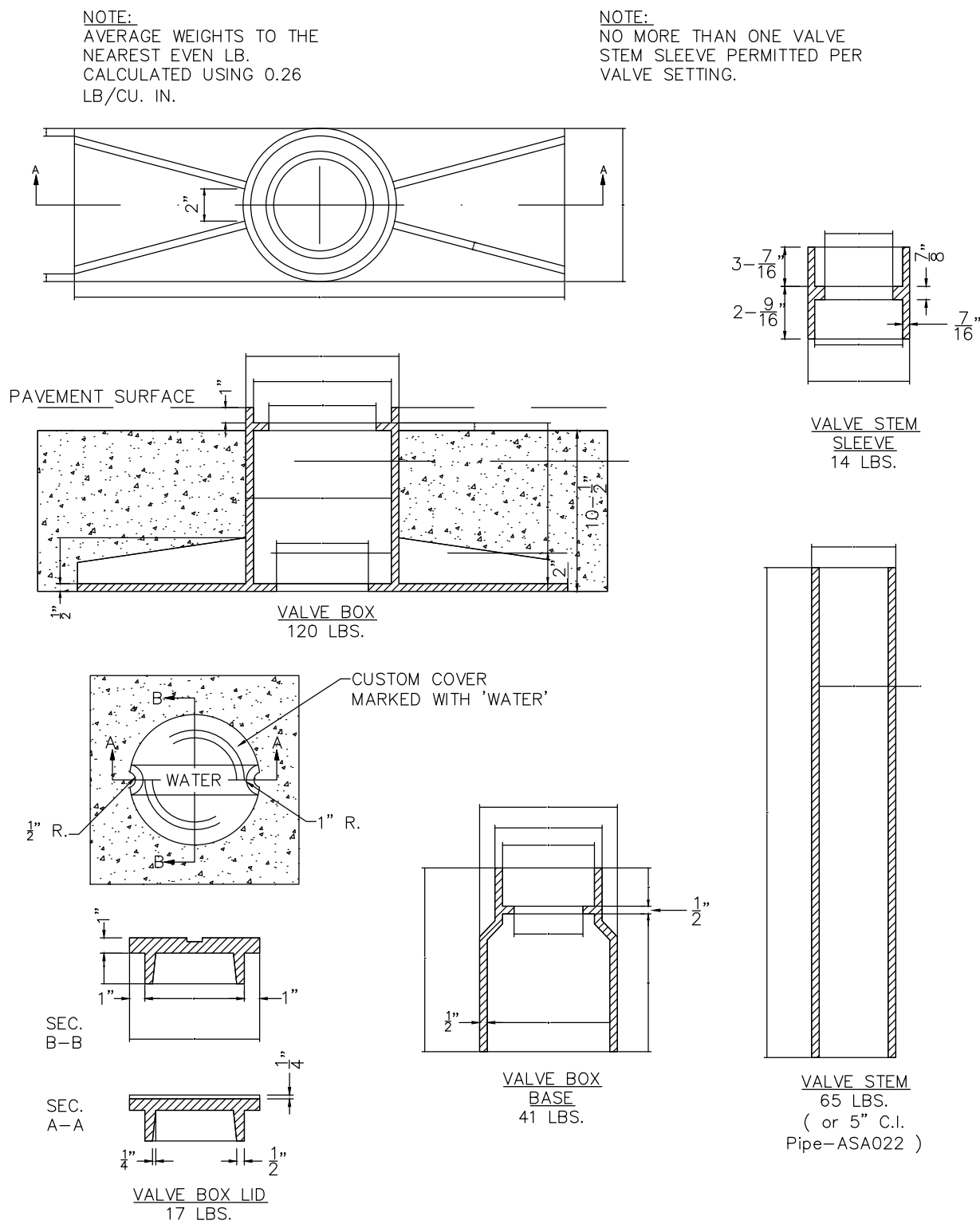
DRWN. CDK CHCK. CDK
JOB NO. 201656
SHEET NO. C-4

WATERLINE NOTES

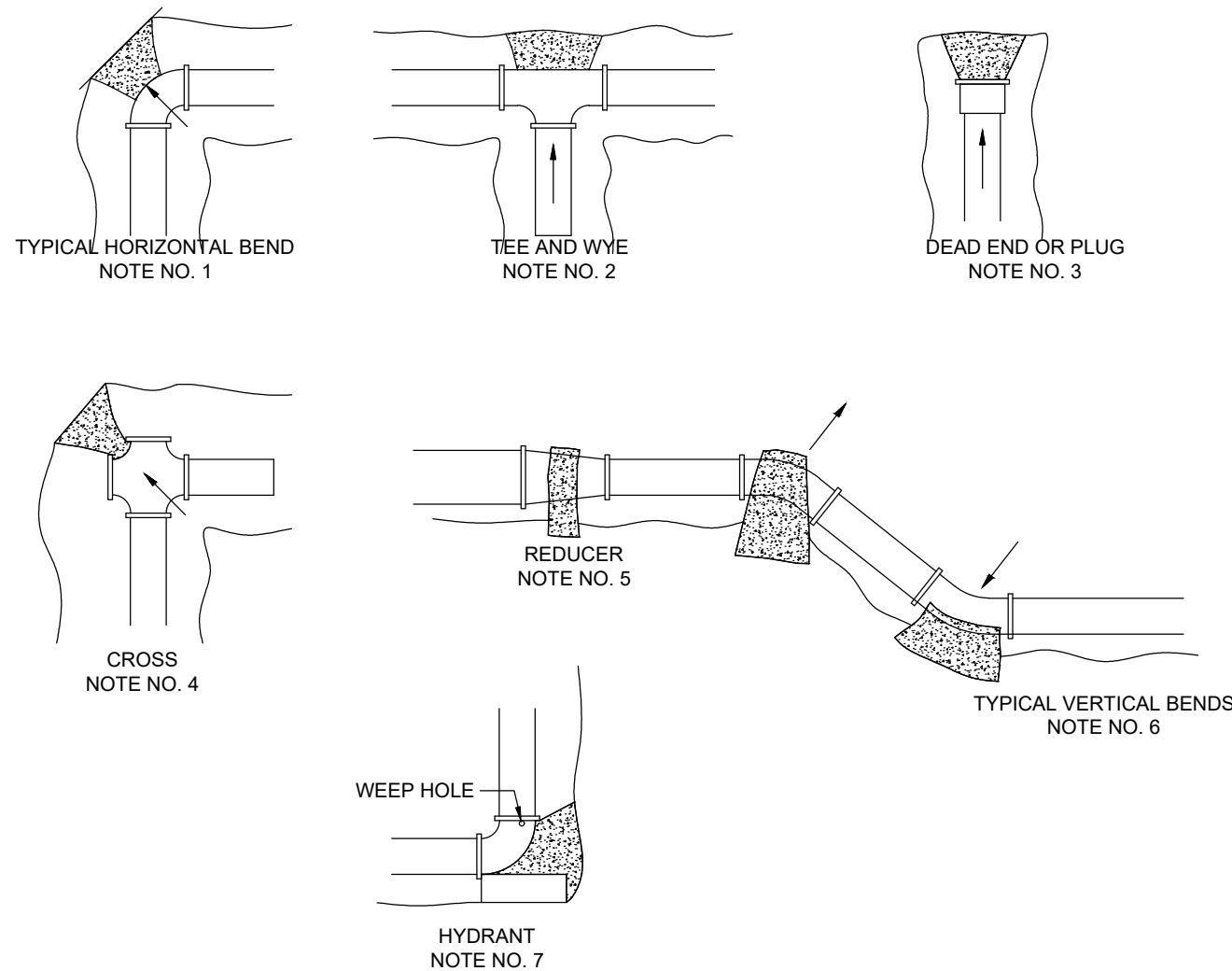
- WATER MAINS SHALL BECOME THE OWNERSHIP OF THE CITY OF ATHENS UPON FINAL ACCEPTANCE.
- CONTRACTOR SHALL PROVIDE 48 HOURS OF ADVANCE NOTICE TO THE CITY ENGINEERING AND PUBLIC WORKS DEPARTMENT TO WITNESS INSTALLATION AND TESTING OF ALL WATERLINE.
- FOR PIPE 4-INCH AND LARGER: USE C-900 CLASS 200 DR 14 PIPE AND MECHANICAL JOINT FITTINGS.
- TRACER WIRE SHALL BE INSTALLED WITH ALL MAIN LINE AND EACH SERVICE LINE.
- ALL 12-INCH DIAMETER AND SMALLER VALVES SHALL BE MECHANICAL JOINT GATE VALVES.
- HEAVY-DUTY VALVE BOXES SHALL BE USED FOR VALVES LOCATED UNDER PAVEMENT.
- PROVIDE CONCRETE THRUST BLOCKING FOR ALL FITTINGS, VALVES AND ANCHOR TEES.
- PROVIDE MECHANICAL RESTRAINTS TO REDUCE CONCRETE THRUST BLOCKING WHEN CHANGING DIRECTION OF THE WATER LINE WITH MECHANICAL FITTINGS OR AT THE END OF A PIPE RUN. WHEN THRUST BLOCKING IS NOT ACCEPTABLE, PIPE JOINTS MUST BE RESTRAINED 60 FEET PRIOR TO THE FITTING AND 60 FEET OF STRAIGHT PIPE AFTER THE FITTING.
- ROMAC GRIP RING RESTRAINT KITS SHALL BE USED AT ALL MECHANICAL FITTINGS, TEES AND BENDS OR WEDGE ACTION RETAINER GLANDS APPROVED BY THE PIPING MANUFACTURER.
- PRIOR TO AND AFTER EACH BEND OR MECHANICAL JOINT FITTING, CLEATED RUBBER GASKETS SHALL BE USED TO LOCK AT A MINIMUM OF 60 FEET OF PIPE TOGETHER (TO KEEP BELL JOINTS FROM SEPARATING). GASKETS ARE PIPE MANUFACTURER SPECIFIC AND CANNOT BE INTERCHANGED.
- ALL VALVES, HYDRANTS, AND WATERLINE COMPONENTS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATIONS.
- WATERLINES SHALL BE BURIED WITH A MINIMUM OF 4 FEET OF COVER TO THE TOP OF THE WATERLINE.
- ALL WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF AWWA C-651. SPECIAL ATTENTION IS DIRECTED TO THE REQUIREMENTS OF FLUSHING AND CHLORINATING VALVES AND HYDRANTS. THE CHLORINATED WATER SHALL BE DE-CHLORINATED AND DISCHARGED INTO SANITARY MANHOLES.
- A HYDROSTATIC TEST AS REQUIRED IN AWWA C-605 SHALL BE APPLIED TO THE WATERMAIN. IF THIS PRESSURE TEST INDICATES THAT LEAKS ARE PRESENT, THE CONTRACTOR SHALL LOCATE AND REPAIR THE LEAKS AT THEIR COST AND EXPENSE AND UNTIL THE LEAKAGE IS WITHIN THE SPECIFIED ALLOWANCE.
- SCHEDULE TEST BETWEEN 8:00 AM AND 2:00 PM WEEKDAYS. NOTIFY CITY OF ATHENS 24 HOURS PRIOR TO TEST.
- OBTAIN WRITTEN APPROVAL OF MATERIAL AND MANUFACTURERS LIST FROM CITY OF ATHENS WATER PRIOR TO BEGINNING CONSTRUCTION.
- A MINIMUM OF 35 PSI SHALL BE SUPPLIED TO ALL SERVICE CONNECTIONS UNDER NORMAL OPERATING CONDITIONS AND A MINIMUM OF 20 PSI UNDER ALL CONDITIONS OF FLOW.
- CONNECTIONS TO EXISTING WATER LINES WILL BE MADE BY CITY OF ATHENS WATER AT THE CONTRACTOR'S EXPENSE, OR PERFORMED BY CONTRACTORS WHO ARE APPROVED FOR MAKING CONNECTIONS.
- DO NOT FILL NEW WATER LINES UNTIL APPROVED BY CITY OF ATHENS WATER.



- GATE VALVE NOTES:
- STEM EXTENSIONS: PROVIDE TO BRING OPERATING NUT TO BETWEEN 30 AND 48 INCHES OF FINISHED GRADE IF VALVE-OPERATING NUT IS GREATER THAN 48 INCHES DEEP
 - USE FOR WATERLINE UP TO 14 INCHES DIAMETER
 - CONFORMANCE AWWA C509 FOR RESILIENT SEATED VALVES.
 - PRESSURE CLASS 250.
 - JOINTS: MECHANICAL JOINT WITH GRIP RING RESISTANT.
 - OPERATION: NON-RISING STEM, 2" SQUARE OPERATING NUT AND OPEN COUNTER CLOCKWISE.
 - APPROVED MANUFACTURERS:
A. AMERICAN FLOW CONTROL
B. WATEROUS
C. CLOW

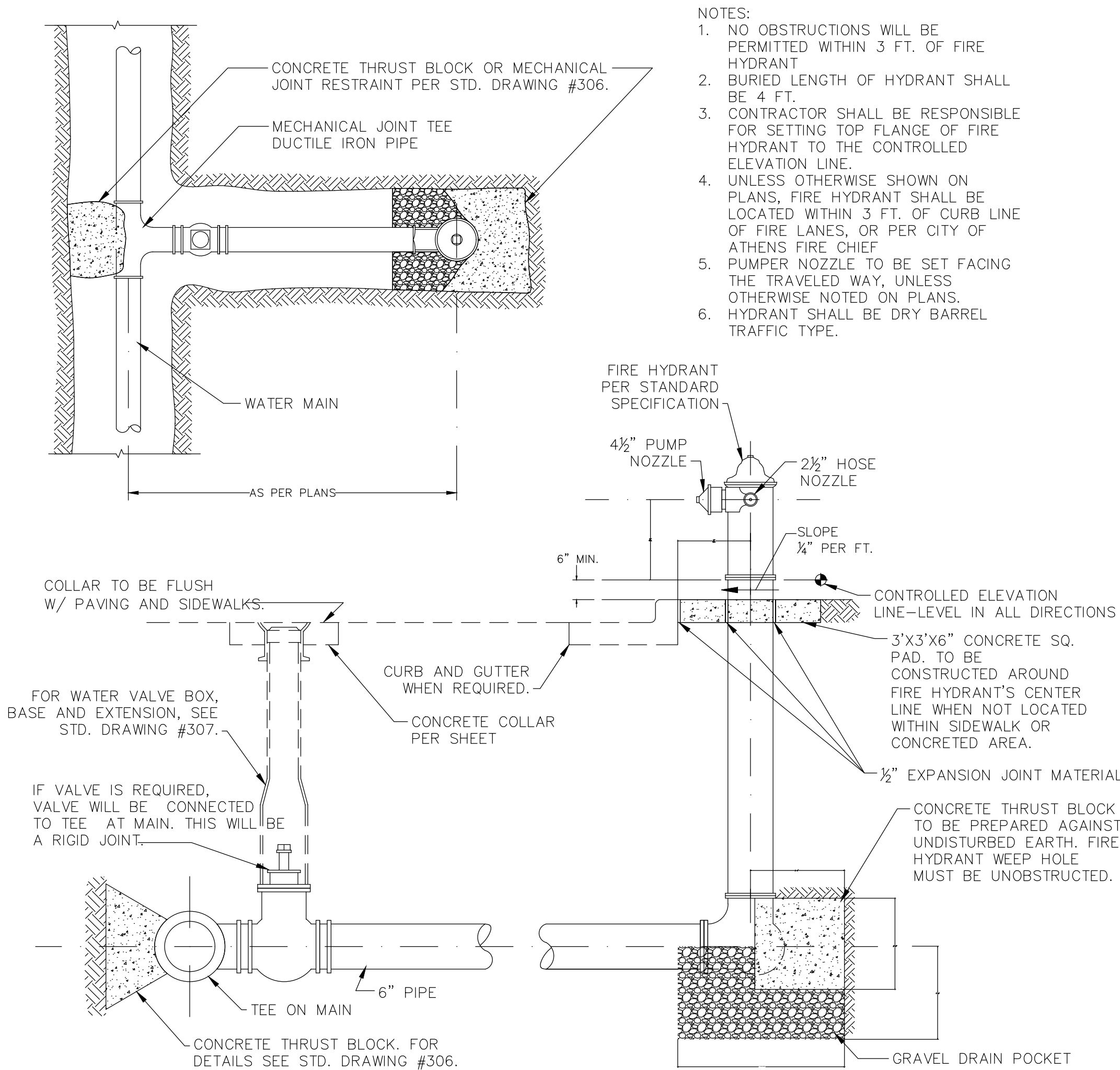


TYPICAL HEAVY DUTY
VALVE BOX
NOT TO SCALE



TYPICAL CONCRETE
THRUST BLOCKING

- NOT TO SCALE
- NOTE NO. 1 BLOCKING OF TYPICAL HORIZONTAL BEND WILL INCLUDE ALL BENDS 11 1/4 (1/32) TO 90 (1/4).
NOTE NO. 2 BLOCK TEE AS SHOWN. IN THE EVENT THAT ONE SIDE OF THE MAIN IS PLUGGED, 2 THRUST BLOCKS WILL BE REQUIRED.
NOTE NO. 3 BLOCKING OF PLUG IS TO INCLUDE PLYBOARD BETWEEN THE PLUG AND THE CONCRETE.
NOTE NO. 4 BLOCKING OF CROSS WITH 2 PLUGS IS AS SHOWN. WITH ONLY ONE PLUG, PROCEED SAME AS TEE.
NOTE NO. 5 INSTALL CONCRETE ANCHOR AS SHOWN IF SIZE IS REDUCED BY 2 PIPE SIZES.
NOTE NO. 6 ALL VERTICAL BENDS TO BE BLOCKED AS SHOWN.
NOTE NO. 7 ALL HYDRANTS TO BE BLOCKED AS SHOWN. KEEP CONCRETE AWAY FROM WEEP HOLES.
NOTE NO. 8 THE END AREA OF CONCRETE THRUST BLOCKS SHALL BE SUBMITTED WITH SOIL BEARING CHARACTERISTICS TO THE ENGINEER FOR APPROVAL.



DETAIL OF FIRE HYDRANT
SETTING WITH BLOCKING

FILE NAME

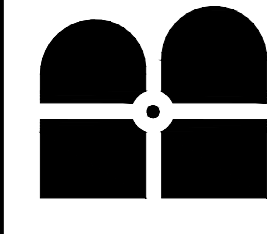
COA INITIAL 06/19/23
LOT REV. 1 07/05/23
COA REVIEW 07/31/23

REVISION DATES

CITY OF ATHENS

ATHENS COUNTY, OHIO

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UNIVERSITY ESTATES PHASE II

BROADMOOR CT & HOMESTEAD CT

GENERAL NOTES

DATE 07/31/2023

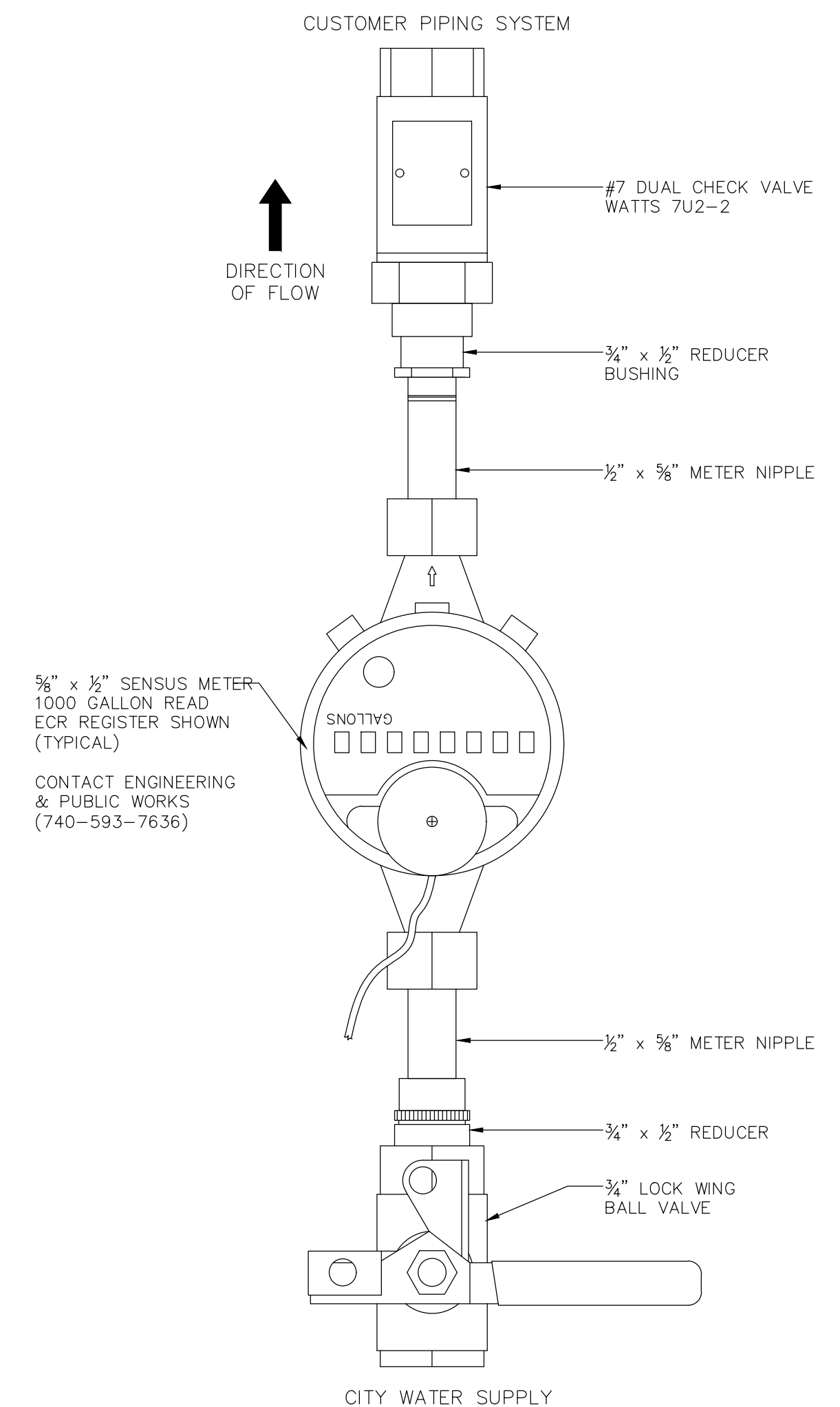
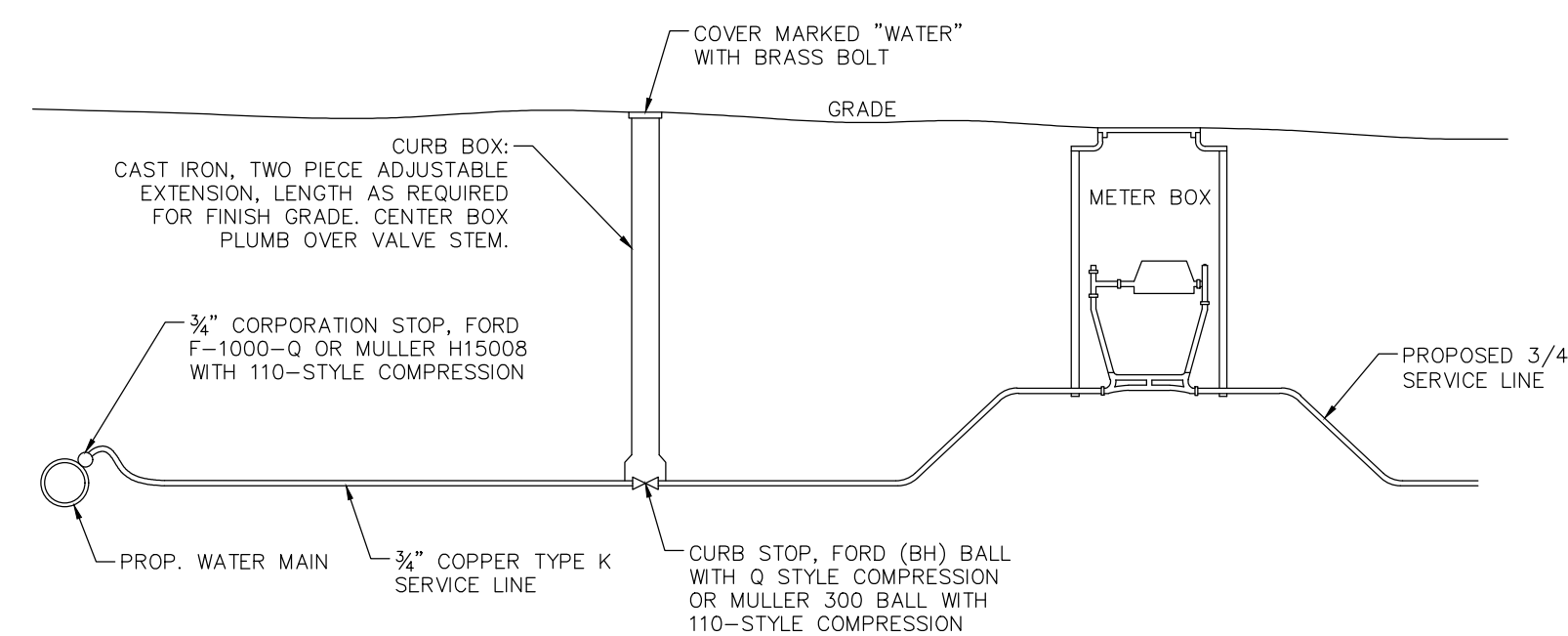
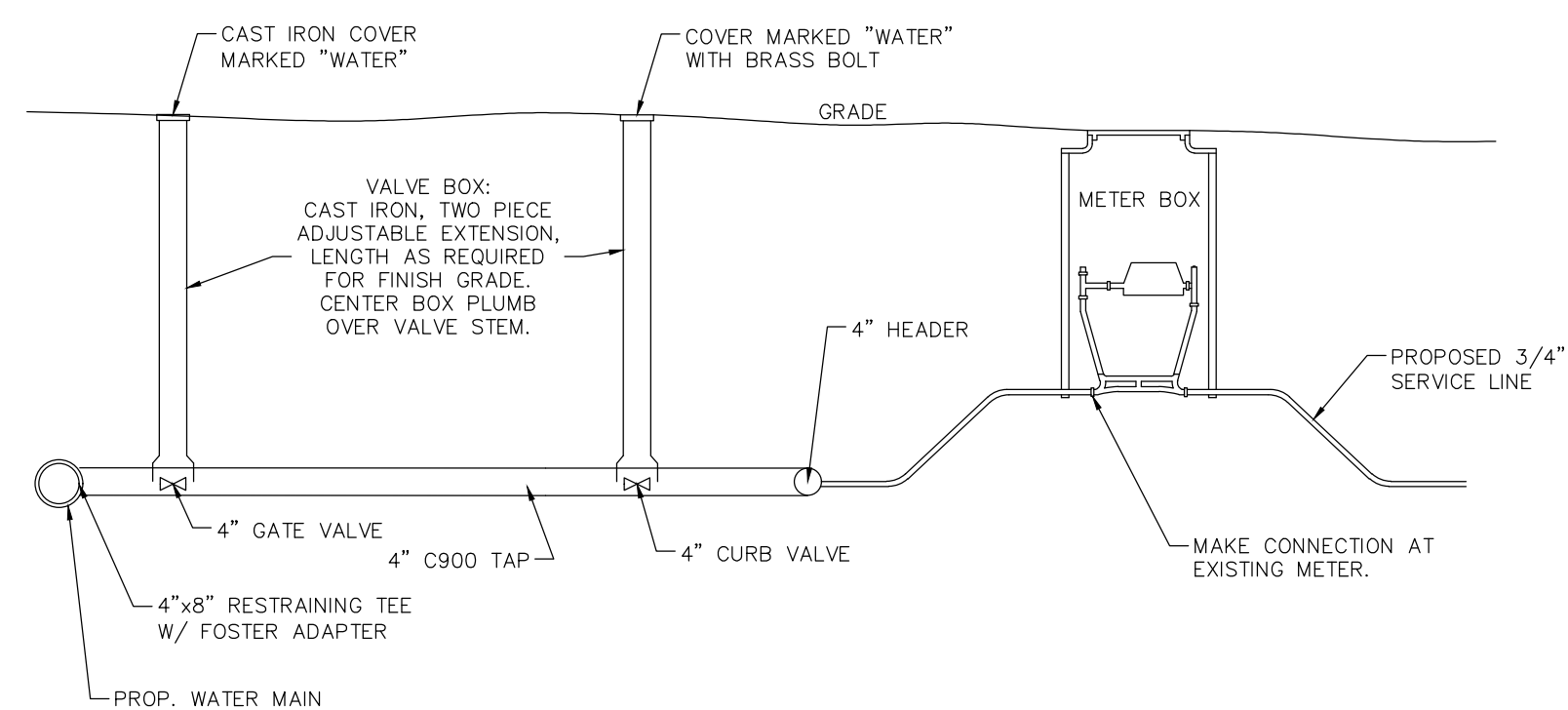
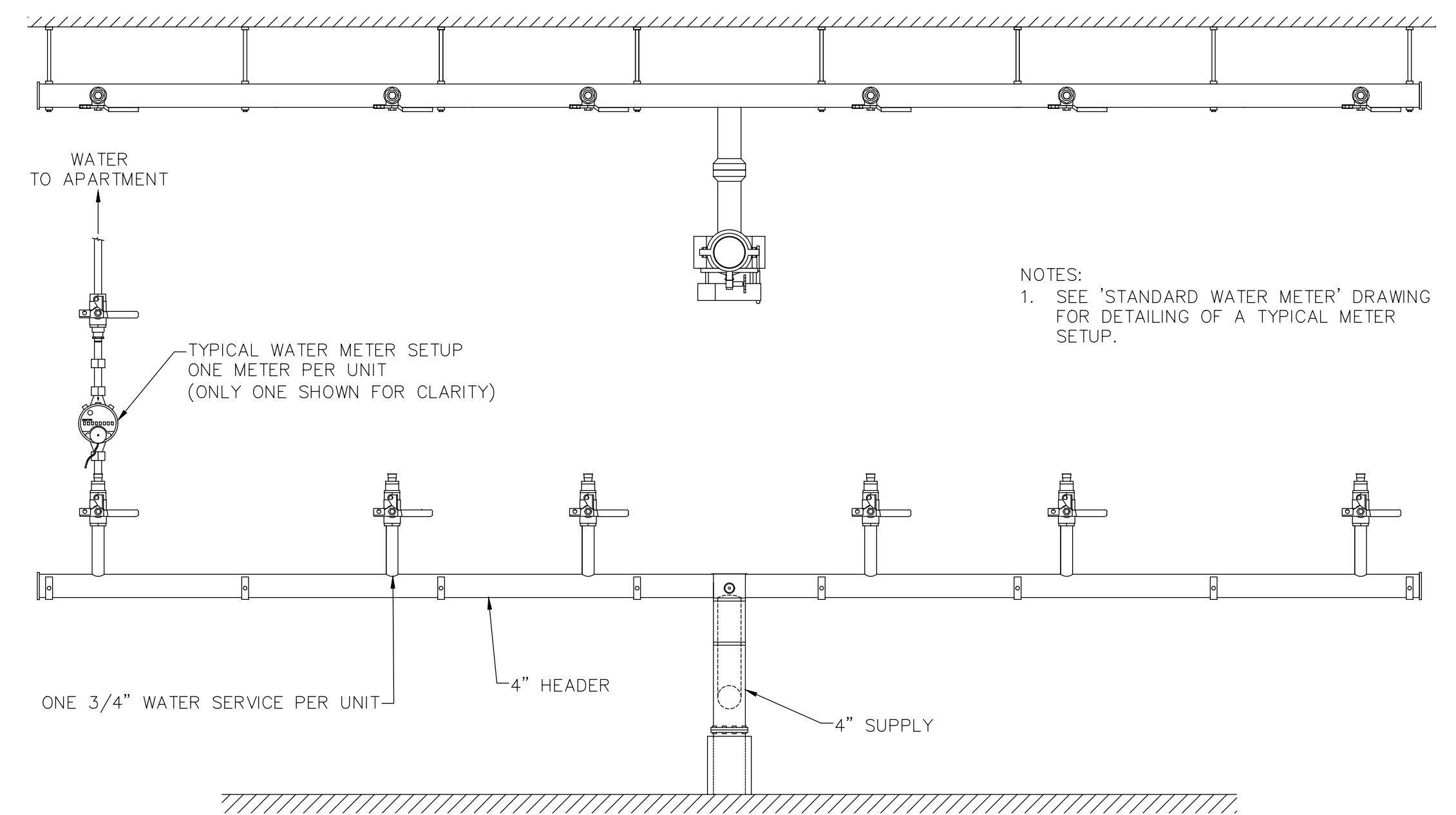
SCALE

DRWN. CDK CHCK. CDK

JOB NO. 201656

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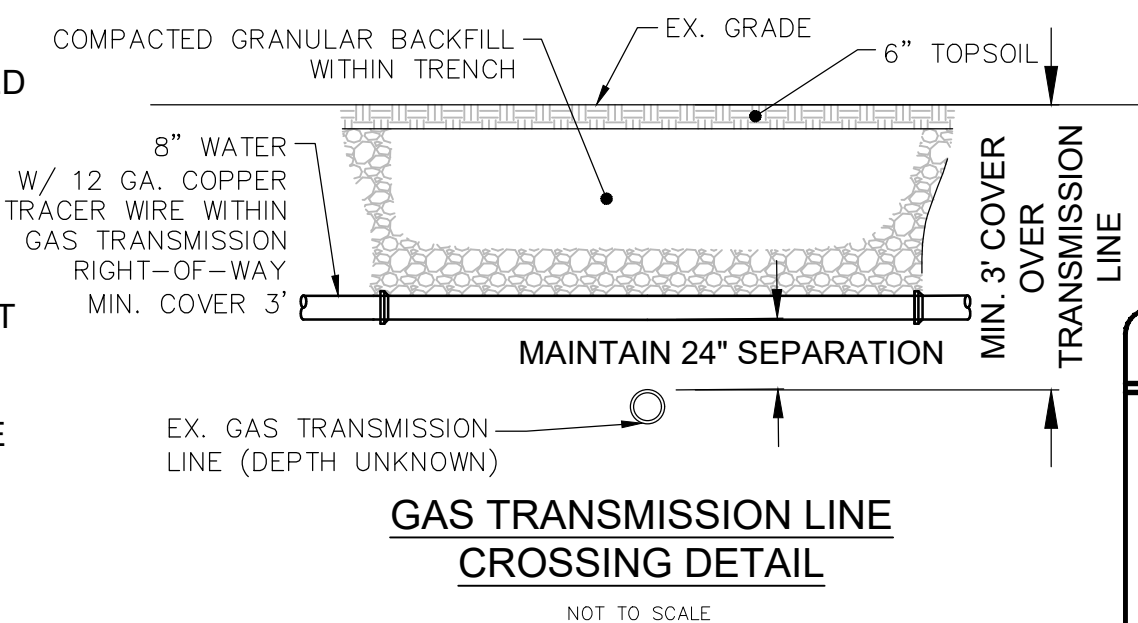
WORK WITHIN COLUMBIA GAS TRANSMISSION/TRANSCANADA RIGHT-OF-WAY:

1. FOLLOW ALL APPLICABLE FEDERAL AND STATE SAFETY REQUIREMENTS AT ALL TIMES.

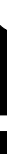
- BEFORE ANY PRELIMINARY FIELD WORK OR CONSTRUCTION BEGINS IN THE VICINITY OF TC ENERGY PIPELINE FACILITIES THE APPROXIMATE LOCATION AND ELEVATION OF THE PIPELINE SHALL BE MADE. BEGIN WITH A CALL TO 811 OR APPROPRIATE STATE "ONE CALL" NOTIFICATION NUMBER. REQUEST BOTH THE APPROXIMATE LOCATION AND DEPTH OF THE PIPELINE TO BE DETERMINED IN ANY AREA OF PROPOSED CONSTRUCTION. THE AREA OF PROPOSED CONSTRUCTION SHALL BE MARKED WITH WHITE PAINT, FLAGS, OR AS REQUIRED BY STATE LAW.
3. WHEN CONDUCTING CONSTRUCTION ACTIVITIES IN OR AROUND TC ENERGY PIPELINE FACILITIES OR RIGHTS-OF-WAY, A TC ENERGY ON-SITE COMPANY REPRESENTATIVE SHALL BE PRESENT UNLESS OTHERWISE PERMITTED BY TC ENERGY. A TC ENERGY REPRESENTATIVE WILL REVIEW THE LOCATION OF PIPELINE FACILITIES PRIOR TO STARTING WORK.
4. NOTICE OF AT LEAST SEVENTY-TWO (72) HOURS IN ADVANCE OF CONSTRUCTION MUST BE PROVIDED. CONTRACTOR MUST CONTACT TRANSCANADA FIELD REPRESENTATIVE AT THE NUMBER PROVIDED BELOW. PLEASE NOTE THAT VOICE MESSAGES DO NOT CONSTITUTE 72 HOUR NOTICE. PERSON TO PERSON CONTACT MUST BE MADE. TRANSCANADA WILL ARRANGE FOR A REPRESENTATIVE TO BE ON SITE WHEN WORK IS OCCURRING ON OR NEAR THE RIGHT-OF-WAY AREA, OR WITHIN 25 FT. OF THE PIPELINES. AFTER HOURS CALL 1-800-447-8066.
NAME: JOSHUA WILLIAMS PHONE: 740-688-9466
5. CONTRACTOR SHALL NOTIFY THE RESPONSIBLE STATE "ONE CALL" CENTER TO REQUEST THAT TC ENERGY RE-MARK A PIPELINE IF THE EXISTING MARKERS ARE INADEQUATE OR NO LONGER VISIBLE FOR ANY REASON, INCLUDING DISTURBANCE DUE TO CONSTRUCTION ACTIVITIES.
6. CONTRACTOR SHALL NOT BURN OR BURY TRASH, BRUSH, OR OTHER ITEMS OR SUBSTANCES WITHIN TC ENERGY PIPELINE RIGHTS-OF-WAY.
7. CONTRACTOR SHALL NOT PARK EQUIPMENT OR STORE MATERIALS ON THE TC ENERGY RIGHT-OF-WAY.
8. USE OF VIBRATORY EQUIPMENT LARGER THAN WALK-BEHIND UNITS SHALL NOT BE PERMITTED WITHIN TWENTY-FIVE (25) FEET OF THE PIPELINE OR RELATED FACILITY.
9. CONTRACTOR SHALL MARK ANY EXCAVATION AREA WITH WHITE PAINT, FLAGS, OR AS REQUIRED BY STATE LAW THAT THE PERMITTEE HAS PROPOSED WITHIN TC ENERGY RIGHTS-OF-WAY.
10. BEFORE EXCAVATION CAN BEGIN NEAR A TC ENERGY RIGHT-OF-WAY, THE EXCAVATION AREA MUST BE LOCATED AND MARKED IN ACCORDING TO THE APPROPRIATE STATE ONE CALL REGULATION. SAFE DIGGING IS NO ACCIDENT. KNOW WHAT'S BELOW. CALL 811 BEFORE YOU DIG. TC ENERGY OR ITS REPRESENTATIVE SHALL LOCATE THE PIPELINE AND DETERMINE THE APPROXIMATE DEPTH OF COVER BEFORE THE PERMITTEE CAN BEGIN EXCAVATION.
11. TC ENERGY SHALL HAVE A COMPANY REPRESENTATIVE PRESENT DURING ALL EXCAVATION ACTIVITIES. THE COMPANY REPRESENTATIVE SHALL HAVE FULL AUTHORITY TO STOP THE WORK IF IT IS DETERMINED THAT THE WORK IS BEING PERFORMED IN AN UNSAFE MANNER RELATIVE TO TC ENERGY FACILITIES OR PERSONNEL.
12. SHOULD IT BE NECESSARY FOR A TC ENERGY EMPLOYEE/REPRESENTATIVE TO ENTER THE EXCAVATION TO INSPECT ITS PIPELINE(S), THE EXCAVATION AT THE CROSSING SHALL BE SLOPED, PERMITTED SAFE WITH TRENCH BOXES, OR SHORED IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
13. NO EQUIPMENT SHALL WORK DIRECTLY OVER THE PIPELINE, UNLESS TC ENERGY GRANTS SPECIFIC WRITTEN PERMISSION. THE PERMITTEE SHALL INSTALL TEMPORARY FENCING ALONG THE TC ENERGY RIGHT-OF-WAY BOUNDARIES SO EQUIPMENT SHALL NOT INADVERTENTLY PASS OVER THE PIPELINE AT LOCATIONS OTHER THAN THOSE ESTABLISHED FOR THE CROSSING.
14. WHEN EXCAVATING WITHIN A TC ENERGY RIGHT-OF-WAY, IN THE PRESENCE OF A LOADED PIPELINE, THE PERMITTEE'S EXCAVATION EQUIPMENT SHALL HAVE A PLATE WELDED OR ATTACHED OVER THE TEETH OF THE EXCAVATOR BUCKET.
15. NO SIDE CUTTERS SHALL BE USED DURING EXCAVATION.
16. NO PART OF POWERED EQUIPMENT SHALL COME WITHIN THREE (3) FEET OF TC ENERGY'S PIPELINES, OR ACCORDING TO APPLICABLE STATE OR FEDERAL REQUIREMENTS.
17. NO BUCKET, ANY ATTACHMENT OR LOAD MAY BE SWUNG OVER TC ENERGY'S PIPELINE(S) WHERE THERE IS LESS THAN TWENTY-FOUR (24) INCHES OF COVER.
18. TC ENERGY REQUIRES POTHOLING TECHNIQUES TO BE USED WHEN DIGGING WITHIN TWENTY-FOUR (24) INCHES OF THE OUTER EDGE OF THE PIPE, UNLESS REQUIREMENTS THAT ARE MORE STRINGENT ARE SET FORTH BY THE APPLICABLE STATE'S ONE CALL SYSTEM. WITHIN THIS "TOLERANCE ZONE" ONLY HAND EXCAVATION, AIR CUTTING, VACUUM EXCAVATION OR OTHER TC ENERGY APPROVED TECHNIQUES ARE PERMITTED.
19. NO EXCAVATION SHALL BE MADE ON LAND ADJACENT TO THE PIPELINE THAT SHALL IN ANY WAY IMPAIR, WITHDRAW LATERAL SUPPORT, CAUSE SUBSIDENCE, CREATE THE ACCUMULATION OF WATER, OR CAUSE DAMAGE TO THE PIPELINE OR RIGHT-OF-WAY.
20. CONTRACTOR SHALL ENSURE ALL EXCAVATION WORK COMPLIES WITH OSHA'S EXCAVATION STANDARDS OUTLINED IN 29 CFR 1926 AND CORRECT ANY NONCOMPLIANT EXCAVATION SITE BEFORE WORK WITHIN TC ENERGY RIGHT-OF-WAY CONTINUES.
21. AT ANY LOCATION WHERE THE PIPELINE IS EXPOSED, THE CONTRACTOR SHALL PROVIDE TC ENERGY THE OPPORTUNITY TO INSPECT THE PIPELINE CONDITION, INSTALL CATHODIC PROTECTION EQUIPMENT, REPAIR ANY PIPE COATING IMPERFECTIONS, AND/OR INSTALL UNDERGROUND WARNING MATERIALS.
22. NO TC ENERGY BURIED PIPELINE SHALL BE LEFT EXPOSED FOR ANY DURATION OF TIME, UNLESS OTHERWISE PERMITTED BY TC ENERGY.
23. BACKFILL AND COMPACTION SHALL BE PERFORMED TO THE SATISFACTION AND IN THE PRESENCE OF A COMPANY REPRESENTATIVE. AT LEAST 6 INCHES OF FINE, LOOSE EARTH OR OTHER PERMITTED BACKFILL MATERIAL WITH NO SHARP GRAVEL, ROCK, HARD CLOUDS, VEGETATION, OR OTHER DEBRIS SHALL BE ADDED ON ALL SIDES OF ANY PIPELINE, AND REMAINING BACKFILL SHALL BE PLACED SO AS NOT TO DISTURB THIS PADDING MATERIAL OR DAMAGE THE PIPELINE AND ITS COATING. BACKFILL OVER THE PIPE SHALL BE COMPACTED BY HAND UNTIL EIGHTEEN (18) INCHES OF COVER IS ACHIEVED.
24. DISTURBED GROUND SHALL BE COMPACTED TO AT LEAST THE SAME DEGREE OF COMPACTION AS SURROUNDING AREAS.

25. THE CONTRACTOR SHALL RESTORE THE SITE TO ITS ORIGINAL CONDITION UNLESS OTHERWISE PERMITTED BY TC ENERGY.
26. WARNING TAPE SHALL BE PLACED OVER THE PIPE WHENEVER A PIPELINE IS BEING INSTALLED OR REPLACED. A MINIMUM SIX (6) INCH WIDE TAPE THAT FOLLOWS A.P.W.A. UNIFORM COLOR CODE SHALL BE PLACED DIRECTLY ABOVE THE BURIED PIPELINE, WHERE POSSIBLE. THE TAPE WILL BE BURIED AT LEAST ONE (1) FOOT BELOW THE SURFACE OF THE GROUND AND AT LEAST ONE (1) FOOT DIRECTLY ABOVE THE PIPELINE.
27. VARIANCE OF THE EXISTING DEPTH OF COVER IS NOT PERMITTED WITHOUT TC ENERGY'S WRITTEN PERMISSION. ALL PROPOSED ROAD CROSSINGS OF BURIED FACILITIES MUST BE EVALUATED BY TC ENERGY. PROTECTIVE MEASURES MAY BE REQUIRED BEFORE CONSTRUCTION ACTIVITY CAN BEGIN OR DURING THE COURSE OF SUCH CONSTRUCTION ACTIVITY.
28. WHERE ADDITIONAL COVER IS PERMITTED, THE FINAL GRADING SHALL MEET A MINIMUM COVER OF 36 INCHES OVER THE PIPELINE BUT SHALL NOT EXCEED FIVE (5) FEET FROM THE TOP OF THE PIPELINE WITHOUT TC ENERGY WRITTEN PERMISSION.
29. ANY MODIFICATIONS TO AN EXISTING DRAINAGE PATTERN SHALL BE DESIGNED SO THERE IS NO EROSION OF THE COVER OVER TC ENERGY RIGHT-OF-WAY.
30. THE PROPOSED ROADWAY IS ONLY PERMITTED IF TC ENERGY'S PIPELINE HAS 3 FT OR GREATER DEPTH OF COVER. IF THE PIPELINE DOES NOT HAVE THIS DEPTH OF COVER, ADDITIONAL FILL WILL BE REQUIRED.
31. ROADS, DRIVEWAYS, OR SIDEWALKS SHALL CROSS THE RIGHT-OF-WAY AT AS NEAR TO NINETY (90) DEGREES AS POSSIBLE, BUT NO LESS THAN FORTY-FIVE (45) DEGREES.
32. CONTINUOUSLY POURED, STEEL REINFORCED CONCRETE IS NOT PERMITTED WITHIN TC ENERGY RIGHT-OF-WAY.
33. CONCRETE SIDEWALKS AND/OR CURBS, SHALL HAVE EXPANSION JOINTS INSTALLED FIVE (5) FEET ON EITHER SIDE OF THE PIPELINE.
34. ASPHALT ROADS SHALL NOT BE GREATER THAN TWENTY-FIVE (25) FEET IN WIDTH.
35. UTILITY CROSSINGS SHALL CROSS THE TC ENERGY RIGHT-OF-WAY AS NEAR NINETY (90) DEGREES AS POSSIBLE, BUT NO LESS THAN FORTY-FIVE (45) DEGREES.
36. UTILITIES SHALL NOT BE INSTALLED LONGITUDINALLY WITHIN THE RIGHT-OF-WAY.
37. UTILITIES SHALL CROSS BENEATH OR ABOVE (DEPENDING ON EXISTING COVER) THE PIPELINE WITH A MINIMUM VERTICAL CLEARANCE OF TWENTY-FOUR (24) INCHES.
38. UNDERGROUND UTILITY CROSSINGS SHALL BE MARKED WITH PROPER SIGNAGE AT THE EDGE OF THE TC ENERGY RIGHT-OF-WAY BOUNDARIES.
39. UTILITY CROSSINGS SHALL BE MARKED ACCORDING TO THE A.P.W.A. UNIFORM COLOR CODE.
40. CORROSION PROTECTION (CP) MATERIALS INCLUDING BUT NOT LIMITED TO BONDS, TEST LEADS, TEST STATIONS, MAGNESIUM ANODE CURRENT DRAINS, AND PERMANENT REFERENCE ELECTRODES SHALL BE INSTALLED AT THE EXPENSE OF THE PERMITTEE.
41. MINIMUM CP MATERIAL REQUIREMENTS SHALL BE:
 - a. INSTALLATION OF TEST LEADS ON BOTH THE TC ENERGY PIPELINE AND THE PERMITTEE'S CROSSING STRUCTURE.
 - b. INSTALLATION OF A PERMANENT COPPER-COPPER SULFATE (CUCUSO4) REFERENCE ELECTRODE BETWEEN THE TC ENERGY PIPELINE AND THE PERMITTEE'S CROSSING STRUCTURE.
42. CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORROSION PROTECTION OF ITS FACILITIES AGAINST TC ENERGY'S CATHODIC PROTECTION SYSTEM. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF FACILITIES ON ITS STRUCTURES. TC ENERGY SHALL PROVIDE PERSONNEL, AT THE EXPENSE OF CONTRACTOR, FOR INSTALLATION OF FACILITIES ON TC ENERGY'S PIPELINES.
43. CONTRACTOR WILL BE RESPONSIBLE TO WORK WITH TC/TC ENERGY TO PERFORM COOPERATIVE INTERFERENCE TESTING OF THE EXISTING AND NEWLY INSTALLED CORROSION PROTECTION SYSTEMS. ANY INTERFERENCE FOUND WILL BE MITIGATED BY THE CONTRACTOR.
44. UTILITIES SHALL BE COATED WITH A NON-CONDUCTIVE COATING FOR THE ENTIRE WIDTH OF THE TC ENERGY RIGHT-OF-WAY.
45. THE CONTRACTOR SHALL SUBMIT A HEAVY EQUIPMENT CROSSING INFORMATION FORM FOR ALL EQUIPMENT THAT WILL OPERATE WITHIN THE TC ENERGY RIGHT-OF-WAY. NO ADDITIONAL EQUIPMENT WILL BE PERMITTED WITHIN THE RIGHT-OF-WAY WITHOUT PRIOR APPROVAL FROM TC ENERGY. THE CONTRACTOR WILL WORK WITH THE ON-SITE REPRESENTATIVE TO COMPLETE THE HEAVY EQUIPMENT CROSSING INFORMATION FORM.
46. WHILE USING A PERMITTED CROSSING AREA (S) WITH HEAVY EQUIPMENT, IF RUTTING, ANY FORM OF GROUND DECAY, OR GROUND PUMPING OCCURS, ADDITIONAL MEASURES WILL BE REQUIRED. THE ADDITIONAL MEASURES WILL INCLUDE BUT ARE NOT LIMITED TO: LOAD CALCULATION REASSESSMENT, MATTING/AIR BRIDGE INSTALLMENT, ADDITIONAL COVER, CONCRETE RELIEF SLABS, ETC.
47. TC ENERGY SHALL LIMIT THE NUMBER OF TEMPORARY CONSTRUCTION ROADS CONSTRUCTED BY THE CONTRACTOR. CROSSINGS SHALL BE LIMITED TO PRE-SELECTED SITES AND SHALL BE CLEARLY DEFINED AND MARKED. RANDOM CROSSINGS ARE NOT PERMITTED.
48. DURING THE USE OF A PERMITTED TEMPORARY CONSTRUCTION ROAD, THE CONTRACTOR SHALL TAKE ALL REASONABLE AND NECESSARY STEPS TO MAINTAIN THE INTEGRITY OF THE PERMITTED CROSSING PROTECTION. TC ENERGY PERSONNEL SHOULD INSPECT CROSSING PERIODICALLY AND MAY REQUIRE THE CONTRACTOR TO PROVIDE ADDITIONAL PROTECTIVE MEASURES DEEMED NECESSARY TO PREVENT DAMAGE TO THE PIPELINE OR RIGHT-OF-WAY.
49. CONTRACTOR MUST HYDRO-VAC OR HAND EXPOSE TRANSCANADA'S BURIED PIPELINE(S) PRIOR TO USE OF MECHANICAL EQUIPMENT WITHIN 15 FT. OF THE PIPELINE(S).

53. CONTRACTOR MUST INSTALL AND BE RESPONSIBLE FOR THE COSTS, INCLUDING THE CROSSING, THE ABOVE GRADE POST SHALL BE LOCATED AT A LOCATION TO MINIMIZE IMPACT TO THE LANDOWNER. THE TEST STATION MUST BE A 4 WIRE BIG FINK MODEL T-3, OR EQUAL MOUNTED ON A 3" DIAMETER YELLOW PE POST. THE TWO TEST LEAD WIRES ON EACH PIPE SHALL BE #10 AWG STRANDED AND BE THERMITE WELDED OR PIN BRAZED TO THE PIPES AND TERMINATED AND CLEARLY LABELED IN THE TEST STATION. TRANSCANADA, OR ITS CONTRACTOR WILL THERMITE WELD THE REQUIRED WIRES TO THE TRANSCANADA PIPE.
54. BORED CROSSINGS ARE AN ACCEPTABLE METHOD FOR CONSTRUCTING A CROSSING OF A TRANSCANADA PIPELINE(S) FOR CABLES, PIPES, DRAINS, ETC. PROVIDED THE FOLLOWING CONDITIONS ARE MET:
- A DRAWING DETAILING THE PROPOSED BORED CROSSING MUST BE SUBMITTED TO TRANSCANADA FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. THE ITEMS TO BE INCLUDED ON THE DRAWING INCLUDE: LOCATION OF BORE PITS, ALIGNMENT OF THE NEW FACILITY, LOCATION OF EXISTING UNDERGROUND FACILITIES, ELEVATION PROFILES, ETC.
 - THE TOP AND SIDE (SIDE CLOSEST TO THE DRILL) OF ALL TRANSCANADA PIPELINES OR BURIED FACILITIES MUST BE EXPOSED BY HAND DIGGING OR HYDROVAC.
 - SIGHT HOLES MUST BE EXCAVATED AT A MINIMUM OF FIVE FEET AND A MAXIMUM OF TEN FEET FROM THE SIDE (NEAREST TO THE DRILL) OF EACH BURIED FACILITY, AND PARALLEL TO THE EXISTING TRANSCANADA BURIED FACILITY.
 - ANY BORE PITS REQUIRED TO SET UP AND STAGE EQUIPMENT SHALL BE OUTSIDE OF TRANSCANADA'S BURIED FACILITY RIGHT-OF-WAY.
 - THE NEW CROSSING FACILITY SHOULD MAINTAIN A CONTINUOUS DEPTH OR CONSISTENT PROFILE AND STRAIGHT HORIZONTAL ALIGNMENT ACROSS THE FULL WIDTH OF THE TRANSCANADA RIGHT-OF-WAY.
 - THE CROSSING FACILITY MUST PASS THE TRANSCANADA FACILITY WITH A MINIMUM CLEARANCE OF THREE (3) FEET.
55. WHEN EXISTING TRANSCANADA BURIED PIPELINES ARE EXPOSED, RESULTING IN AN UNSUPPORTED LENGTH OF 5 TIMES THE DIAMETER OF THE EXISTING PIPELINE, AS A MINIMUM, THE FOLLOWING REQUIREMENTS SHALL BE MET:
- A LAYER OF SELECT BEDDING MATERIAL, SAND OR A MIXTURE OF SAND AND CRUSHED STONE, SHALL BE PLACED ON THE BOTTOM OF THE TRENCH 2 FEET WIDER THAN THE PIPELINE. THIS BEDDING SHALL BE A MINIMUM OF 4 INCHES THICK AND BE COMPACTED.
 - STRUCTURAL BACKFILL SAND SHALL THEN BE CAREFULLY PLACED IN 6 INCH LIFTS AND COMPACTED UP TO THE MIDDLE OF THE TRANSCANADA PIPELINE.
 - THE BACKFILL, SAND OR NATIVE SOIL, ABOVE THE PIPE SHALL BE FREE OF ROCKS, COBBLES AND BOULDERS AND BE COMPACTED ENOUGH TO PREVENT EXCESSIVE SETTLEMENT.
56. THE DESIGN OF OVERHEAD ELECTRICAL CABLES ENERGIZED TO 600 VOLTS OR MORE THAT CROSS OR PARALLEL WITHIN 200 FEET OF TRANSCANADA'S PIPELINE(S) MUST BE REVIEWED AND APPROVED BY TRANSCANADA. THIS REVIEW MAY REQUIRE INSTALLATION OF INDUCED AC MITIGATION FACILITIES, ADDITIONAL AERIAL MARKERS, INCREASED CLEARANCE TO CONDUCTORS, ETC.
57. ALL OVERHEAD POWERLINES REACHING A HEIGHT OF 75 FEET OR MORE MUST HAVE HIGHLY VISIBLE BALL MARKERS INSTALLED ON THE PORTION CROSSING TRANSCANADA'S RIGHT OF WAY.
58. NO POLES, TOWERS OR EXPANSION ANCHORS ARE TO BE LOCATED ON THE PIPELINE RIGHT OF WAY OR WITHIN 25 FEET OF TRANSCANADA'S PIPELINE(S) MEASURED AT RIGHT ANGLES TO THE PIPELINE(S).
59. IN THE EVENT OF EQUIPMENT CROSSINGS OUTSIDE OF AN EXISTING ROAD RIGHT-OF-WAY OR WHEREVER THE TECHNICIAN DETERMINES THAT INADEQUATE COVER EXISTS, THE CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY CROSSINGS OF TRANSCANADA'S PIPELINE(S) AT LOCATION(S) SPECIFIED BY TRANSCANADA AND THAT ARE/IS PERPENDICULAR TO TRANSCANADA'S PIPELINE(S). A MINIMUM OF FIVE (5) FEET OF TOTAL COVER OVER TRANSCANADA'S PIPELINE(S) IS REQUIRED. IF FILL IS REQUIRED TO OBTAIN THE MINIMUM COVER, A SUITABLE MATERIAL (PREFERABLY A BANK RUN GRAVEL MATERIAL, OR A COMBINATION OF WOODEN MATS AND BANK RUN GRAVEL, OR A TRANSCANADA APPROVED "PORTABLE LAND BRIDGE") WILL BE PLACED ON THE EXISTING SURFACE OF THE GROUND OVER THE PIPELINE(S) FROM A POINT FIFTEEN (15) FEET AHEAD OF THE PIPELINE CROSSING TO A POINT FIFTEEN (15) FEET BEYOND THE PIPELINE CROSSING. THE CROSSING AREA SHOULD BE A MINIMUM OF TWENTY (20) FEET WIDE SO AS TO ADEQUATELY BEAR THE CROSSING WEIGHTS OF EQUIPMENT. ALL VEHICULAR TRAFFIC WILL CROSS TRANSCANADA'S PIPELINE(S) AT THESE DESIGNATED LOCATIONS ONLY.
60. IF YOU WILL BE CROSSING ONE OR MORE OF TRANSCANADA'S TRANSMISSION PIPELINE(S) PLEASE BE AWARE THAT THESE PIPELINE(S) ARE COATED WITH A MATERIAL TO PROTECT THEM FROM CORROSION. THE COATING MAY CONTAIN ASBESTOS. IF THE EXCAVATION RESULTS IN EXPOSING TRANSCANADA'S PIPELINE(S) AND THERE IS ANY DAMAGE TO THE COATING, YOU WILL BE RESPONSIBLE FOR ALL COSTS, INCLUDING ANY DISPOSAL COSTS, ASSOCIATED WITH THE COATING REPAIR. IF NECESSARY, YOU WILL ALSO BE REQUIRED TO HALT WORK ACTIVITY WHILE THE COATING MATERIAL IS BEING ANALYZED. THE COATING REPAIR, INCLUDING THE REMOVAL OF THE ORIGINAL MATERIAL, WILL BE PERFORMED BY TRANSCANADA PERSONNEL OR A QUALIFIED THIRD PARTY CONTRACTOR SELECTED BY TRANSCANADA. ALL WORK WILL BE DONE IN ACCORDANCE WITH TRANSCANADA'S CURRENT ENGINEERING AND ENVIRONMENTAL STANDARDS. DURING THE COURSE OF THE EXCAVATION WORK, CONTRACTOR AGREES TO COOPERATE WITH TRANSCANADA TO INSURE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL AND SAFETY REGULATIONS ARE FOLLOWED.
61. SHOULD IT BE NECESSARY FOR A TRANSCANADA EMPLOYEE/REPRESENTATIVE TO ENTER THE EXCAVATION TO INSPECT ITS PIPELINE(S), THE EXCAVATION AT THE CROSSING SHALL BE SLOPED IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.



**** NOTE: IF GAS TRANSMISSION LINE
HAS LESS THAN 5 FT OF COVER, THE
8" WATERLINE SHALL CROSS BELOW
WITH A 24" VERTICAL SEPARATION**

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LEGEND

- CL CENTERLINE
R/W RIGHT OF WAY
PL PROPERTY LINE
--- EX. SAN. SEWER
--- EX. GAS LINE
□ PR. CATCH BASIN
--- PR. SAN. SEWER

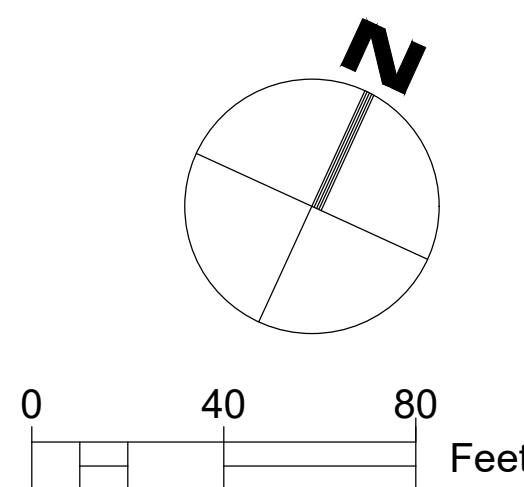
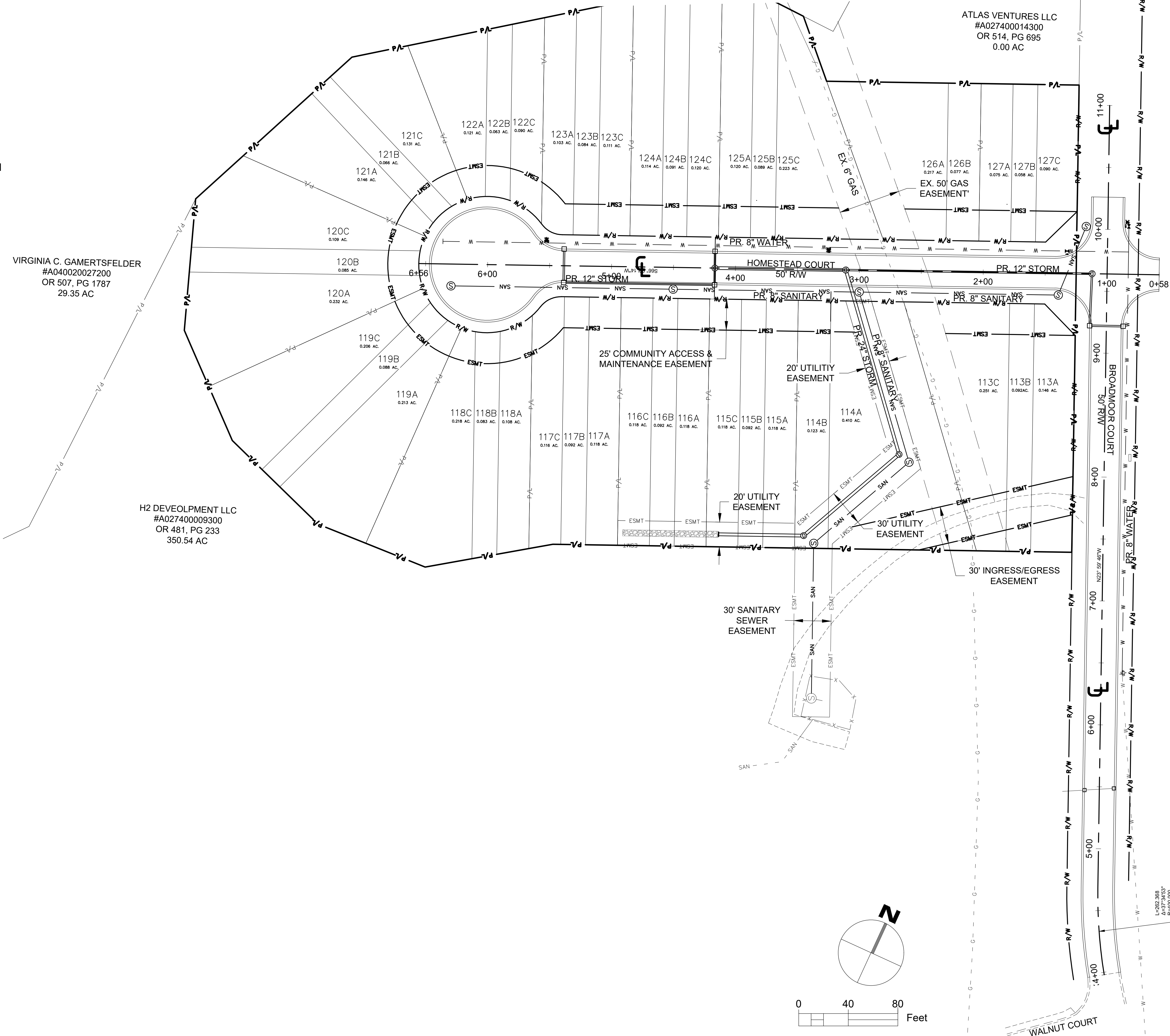
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OR 507, PG 1787
29.35 AC

H2 DEVEOLPMENT LLC
#A027400009300
OR 481, PG 233
350.54 AC

H2 DEVEOLPMENT LLC
#A027400009300
OR 481, PG 233
350.54 AC

ATLAS VENTURES LLC
#A027400014600
OR 514, PG 695
0.00 AC

ATLAS VENTURES LLC
#A027400014300
OR 514, PG 695
0.00 AC



L=262.268
A=27°24'55\"/>

FILE NAME

COA INITIAL 06/19/23
LOT REV. 1 07/05/23
COA REVIEW 07/31/23

REVISION DATES

CITY OF ATHENS

ATHENS COUNTY, OHIO

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UNIVERSITY ESTATES PHASE II

BROADMOOR CT & HOMESTEAD CT

SITE OVERVIEW

DATE

07/31/2023

SCALE

DRWN. CDK

CHCK. CDK

JOB NO. 201656

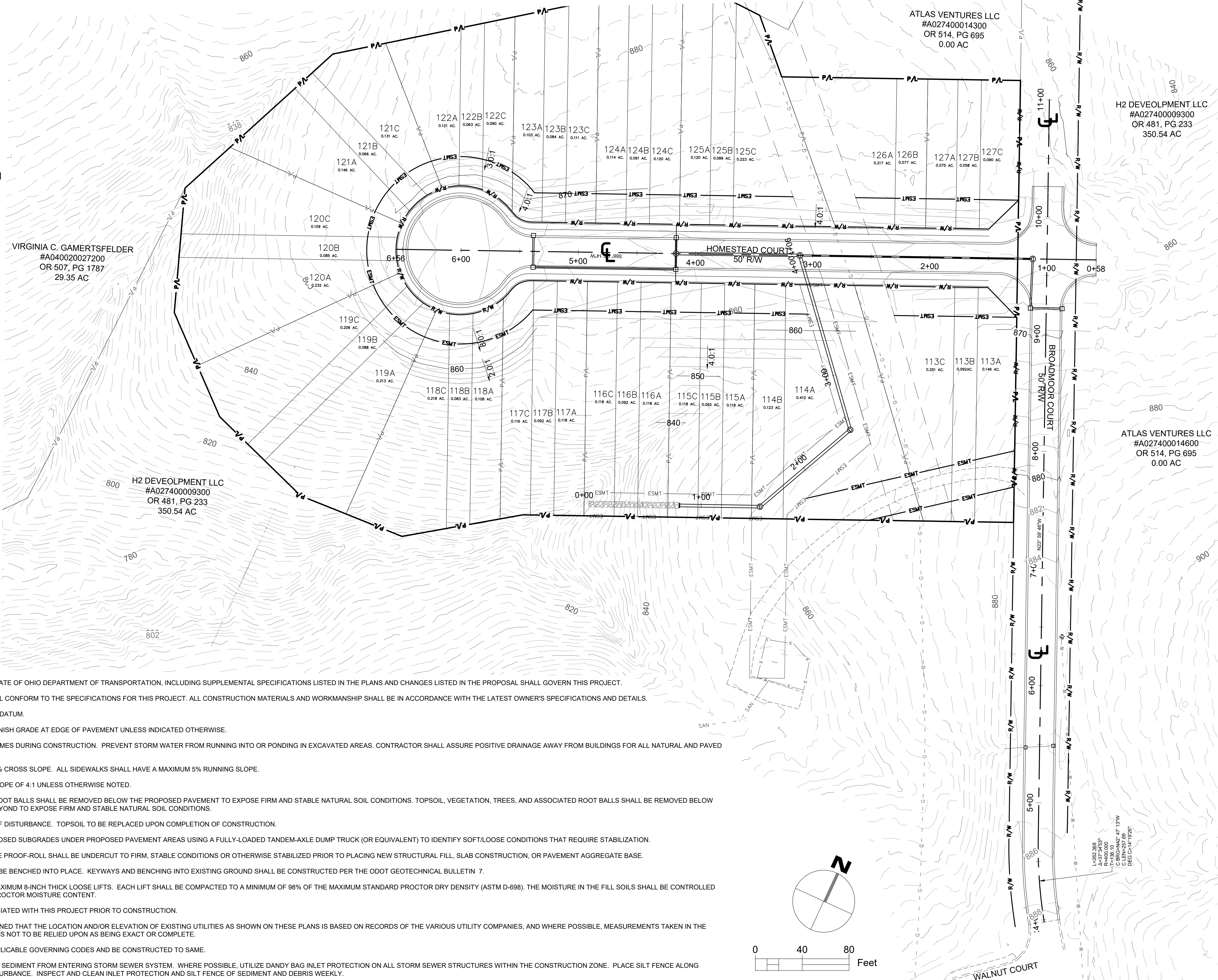
SHEET NO. C-8

LEGEND

- CL CENTERLINE
R/W RIGHT OF WAY
PL PROPERTY LINE
--- EX. SAN. SEWER
--- EX. GAS LINE
-100- EX. CONTOUR
□ PR. CATCH BASIN
--- PR. SAN. SEWER
-100- PR. CONTOUR

GENERAL GRADING NOTES

1. THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS PROJECT.
2. ALL GRADING AND SITE PREPARATION SHALL CONFORM TO THE SPECIFICATIONS FOR THIS PROJECT. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST OWNER'S SPECIFICATIONS AND DETAILS.
3. ALL ELEVATIONS ARE BASED ON NAVD 1988 DATUM.
4. ALL PROPOSED ELEVATIONS ARE TOP OF FINISH GRADE AT EDGE OF PAVEMENT UNLESS INDICATED OTHERWISE.
5. MAINTAIN PROPER SITE DRAINAGE AT ALL TIMES DURING CONSTRUCTION. PREVENT STORM WATER FROM RUNNING INTO OR PONDING IN EXCAVATED AREAS. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
6. ALL SIDEWALKS SHALL HAVE A MAXIMUM 2% CROSS SLOPE. ALL SIDEWALKS SHALL HAVE A MAXIMUM 5% RUNNING SLOPE.
7. ALL CUT AND FILL SLOPES SHALL HAVE A SLOPE OF 4:1 UNLESS OTHERWISE NOTED.
8. TOPSOIL, VEGETATION, AND ASSOCIATED ROOT BALLS SHALL BE REMOVED BELOW THE PROPOSED PAVEMENT TO EXPOSE FIRM AND STABLE NATURAL SOIL CONDITIONS. TOPSOIL, VEGETATION, TREES, AND ASSOCIATED ROOT BALLS SHALL BE REMOVED BELOW ALL FILL AREAS PLUS 5 FEET LATERALLY BEYOND TO EXPOSE FIRM AND STABLE NATURAL SOIL CONDITIONS.
9. STRIP AND STOCKPILE TOPSOIL IN AREAS OF DISTURBANCE. TOPSOIL TO BE REPLACED UPON COMPLETION OF CONSTRUCTION.
10. CONTRACTOR SHALL PROOF ROLL THE EXPOSED SUBGRADES UNDER PROPOSED PAVEMENT AREAS USING A FULLY-LOADED TANDEM-AXLE DUMP TRUCK (OR EQUIVALENT) TO IDENTIFY SOFT/LOOSE CONDITIONS THAT REQUIRE STABILIZATION.
11. SOFT/LOOSE AREAS IDENTIFIED DURING THE PROOF-ROLL SHALL BE UNDERCUT TO FIRM, STABLE CONDITIONS OR OTHERWISE STABILIZED PRIOR TO PLACING NEW STRUCTURAL FILL, SLAB CONSTRUCTION, OR PAVEMENT AGGREGATE BASE.
12. FILL PLACED INTO EXISTING SLOPES SHALL BE BENCHED INTO PLACE. KEYWAYS AND BENCHING INTO EXISTING GROUND SHALL BE CONSTRUCTED PER THE ODOT GEOTECHNICAL BULLETIN 7.
13. CONTROLLED FILLS SHALL BE PLACED IN MAXIMUM 8-INCH THICK LOOSE LIFTS. EACH LIFT SHALL BE COMPACTED TO A MINIMUM OF 98% OF THE MAXIMUM STANDARD PROCTOR DRY DENSITY (ASTM D-698). THE MOISTURE IN THE FILL SOILS SHALL BE CONTROLLED WITHIN ±3% OF THE OPTIMUM STANDARD PROCTOR MOISTURE CONTENT.
14. LOCATE AND PROTECT ALL UTILITIES ASSOCIATED WITH THIS PROJECT PRIOR TO CONSTRUCTION.
15. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE EXISTING UTILITY INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE.
16. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
17. CONTRACTOR TO PREVENT CONSTRUCTION SEDIMENT FROM ENTERING STORM SEWER SYSTEM. WHERE POSSIBLE, UTILIZE DANDY BAG INLET PROTECTION ON ALL STORM SEWER STRUCTURES WITHIN THE CONSTRUCTION ZONE. PLACE SILT FENCE ALONG CONTOUR AT THE EXTENTS OF EARTH DISTURBANCE. INSPECT AND CLEAN INLET PROTECTION AND SILT FENCE OF SEDIMENT AND DEBRIS WEEKLY.



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UNIVERSITY ESTATES PHASE II

BROADMOOR CT & HOMESTEAD CT

GRADING PLAN

DATE

07/31/2023

SCALE

DRWN. CDK

CHCK. CDK

JOB NO. 201656

SHEET NO. C-9

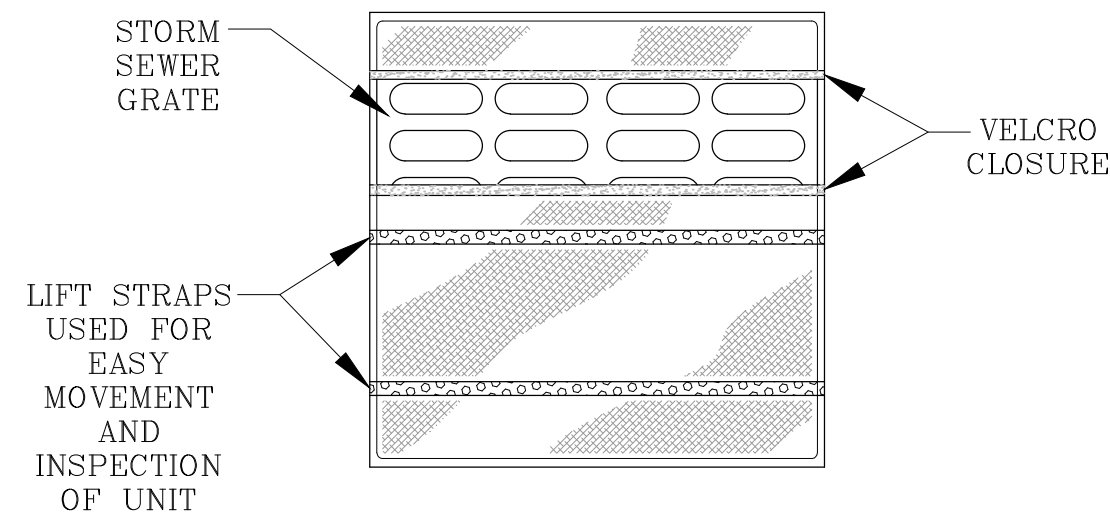
GENERAL EROSION CONTROL NOTES:

1. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS.
2. INSTALL SEDIMENTATION AND EROSION CONTROL MEASURES PRIOR TO CLEARING AND GRADING AND DEMOLITION WORK. MAINTAIN ALL SEDIMENT AND EROSION CONTROL, AND TREE PROTECTION MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
3. ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATIONS AT THE DIRECTION OF THE CITY OF ATHENS ENGINEERING DEPARTMENT.
4. PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH ENTRY TO OR EXIT FROM THE SITE. CONTRACTOR SHALL MAINTAIN CONSTRUCTION ENTRANCE UNTIL SITE PAVING IS COMPLETE.
5. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO THE PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN-OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED BY VEHICLE OFF-SITE ONTO PUBLIC ROADWAY OR INTO STORM DRAINS MUST BE REMOVED.
6. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXITS, ALL PERIMETER EROSION CONTROL DEVICES AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
7. EROSION CONTROL DEVICES SHALL BE INSTALLED BEFORE GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PATTERNS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
8. THE CONSTRUCTION OF THE SITE WILL INITIATE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVES HAVE BEEN PAVED.
9. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES WHILE IMPROVEMENTS ARE BEING MADE. TRAFFIC CONTROL MEASURES TO BE IN ACCORDANCE WITH ODOT AND CITY OF ATHENS.
10. ALL SILT FENCE MUST BE PLACED AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL BE DONE UNTIL SILT FENCE INSTALLATION AND DETENTION FACILITIES, IF REQUIRED, ARE CONSTRUCTED.
11. CONTRACTOR SHALL PERFORM EROSION CONTROL INSPECTIONS REGULARLY AND IMMEDIATELY FOLLOWING HEAVY RAIN STORMS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. REPAIR OR REPLACE FAILED SYSTEMS AT THE EARLIEST POSSIBLE DATE.
12. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING.
13. ALL DISTURBED AREAS WITH NO SPECIFIED GROUND COVER ARE TO BE RESTORED WITH MINIMUM SIX (6) INCHES OF TOPSOIL AND SEEDING.

TEMPORARY & PERMANENT STABILIZATION:

- TEMPORARY SEEDING SHALL BE RYE GRASS APPLIED AT MANUFACTURER'S RECOMMENDATION TO ANY DISTURBED AREAS THAT ARE INACTIVE MORE THAN 14 DAYS.
- MULCHING PRACTICES AND SOD SHALL BE APPLIED TO THE PARKING LOT ISLANDS.
- FILTER FABRIC SHALL BE PLACED UNDER THE ROCK ENTRANCE/EXIT.

DANDY BAG®



DANDY BAG® SPECIFICATIONS

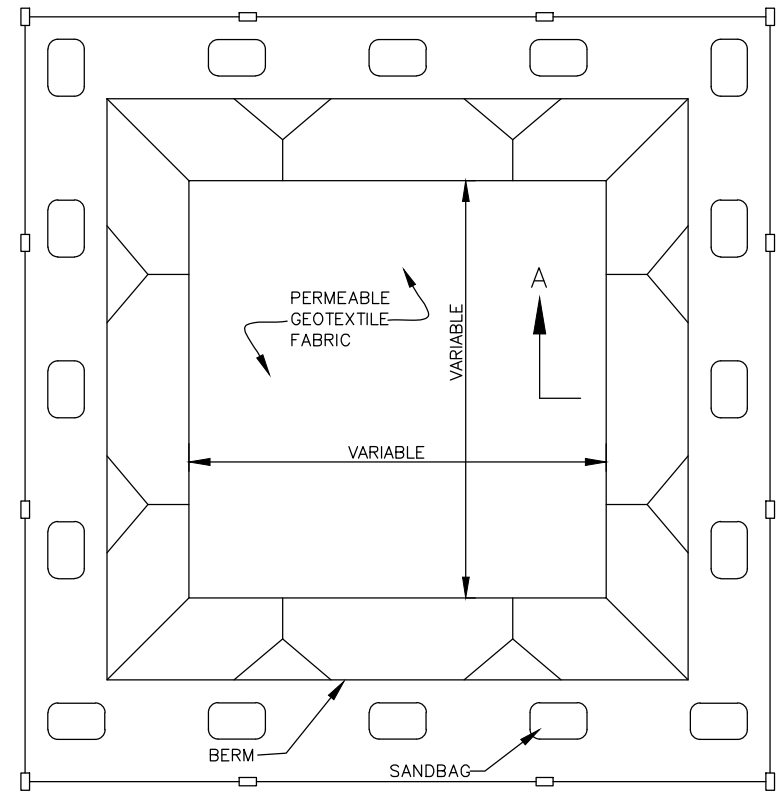
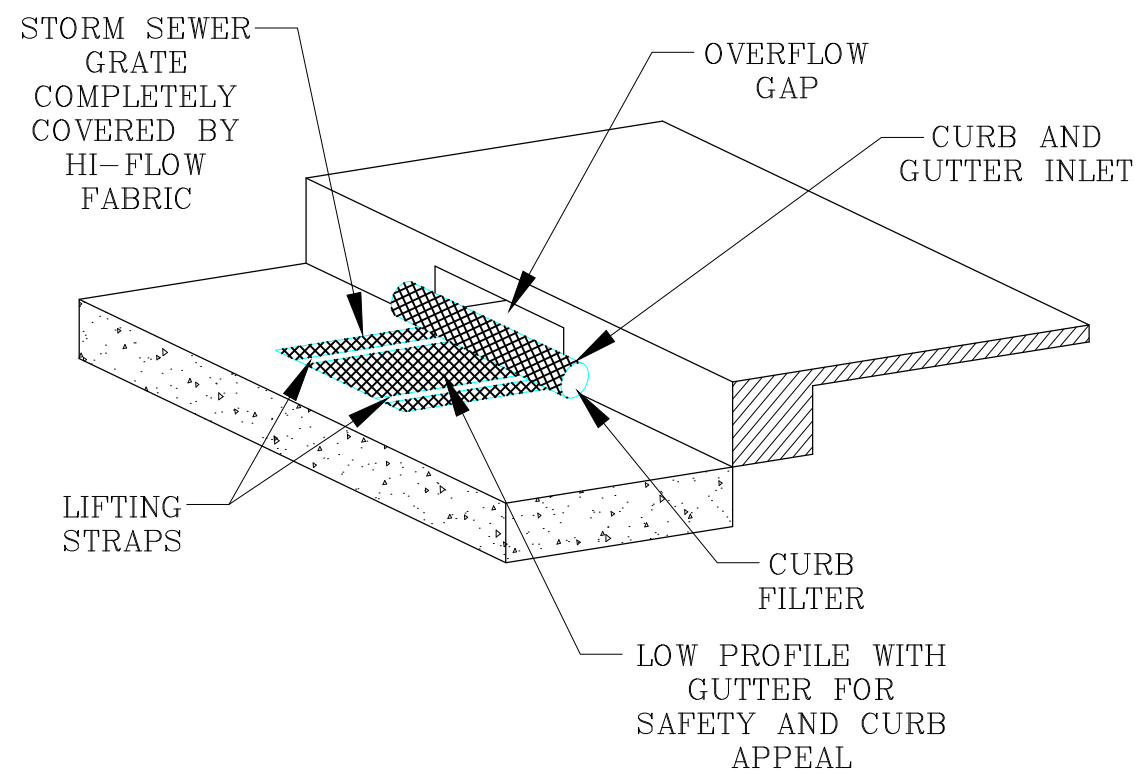
NOTE: THE DANDY BAG® WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

HI-FLOW DANDY BAG® (SAFETY ORANGE)

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.62 (365) X 0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24 X 10
Puncture Strength	ASTM D 4833	kN (lbs)	0.40 (90)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	309.7 (450)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115) X 0.33 (75)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	l/min/m² (gal/min/ft²)	5907 (145)
Permittivity	ASTM D 4491	Sec ⁻¹	2.1

*Note: All Dandy Bags® can be ordered with our optional oil absorbent pillows

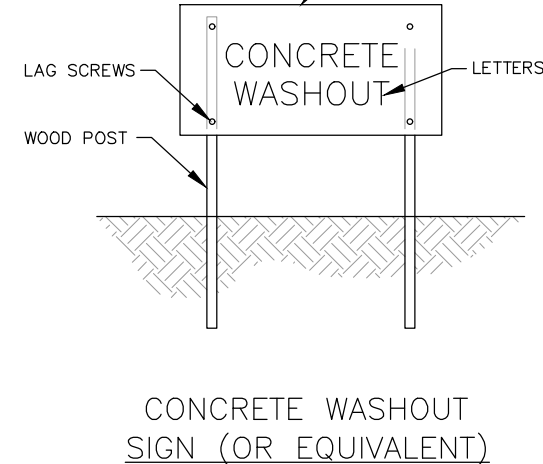
DANDY CURB BAG®



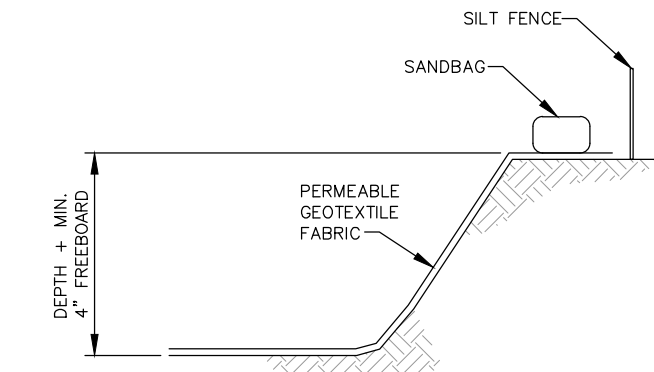
PLAN VIEW

NOT TO SCALE

TYPE "BELOW GRADE"



CONCRETE WASHOUT SIGN (OR EQUIVALENT)



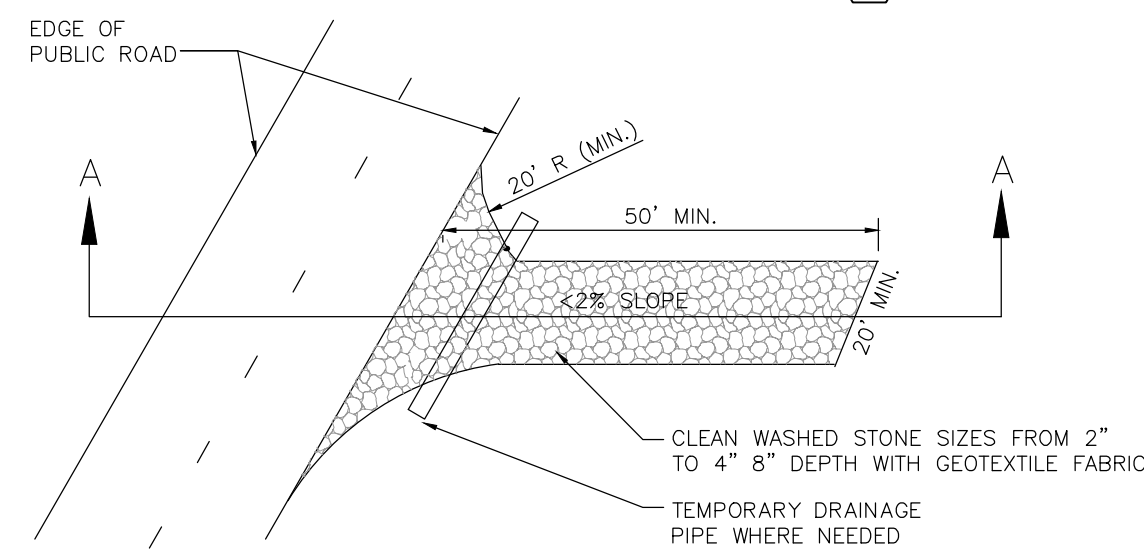
NOTES:

1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. SIGNAGE IDENTIFYING THE CONCRETE WASHOUT AREA SHALL BE INSTALLED WITHIN 5FT. OF THE WASHOUT FACILITY.

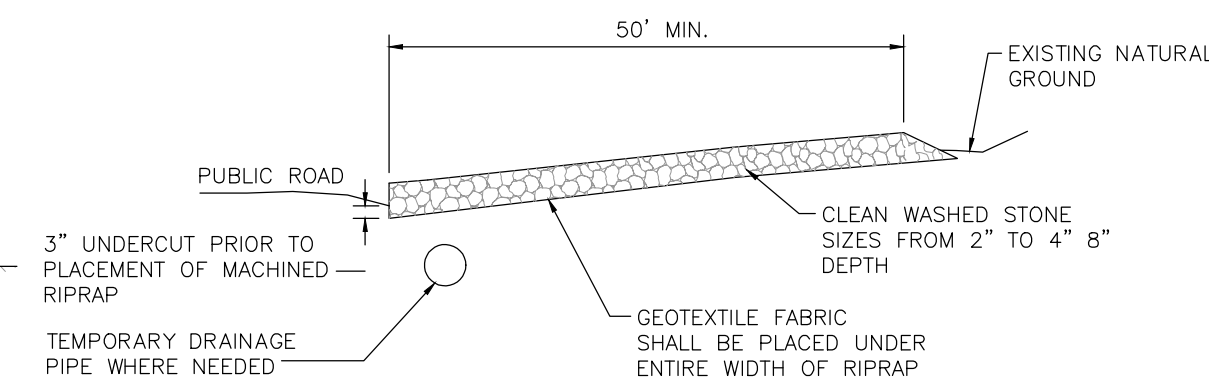
SECTION A-A

NOT TO SCALE

CONCRETE WASHOUT DETAIL



PLAN VIEW OF TEMPORARY CONSTRUCTION ROAD



SECTION A-A

TEMPORARY CONSTRUCTION ENTRANCE DETAIL

POTENTIAL POLLUTANTS DURING CONSTRUCTION:

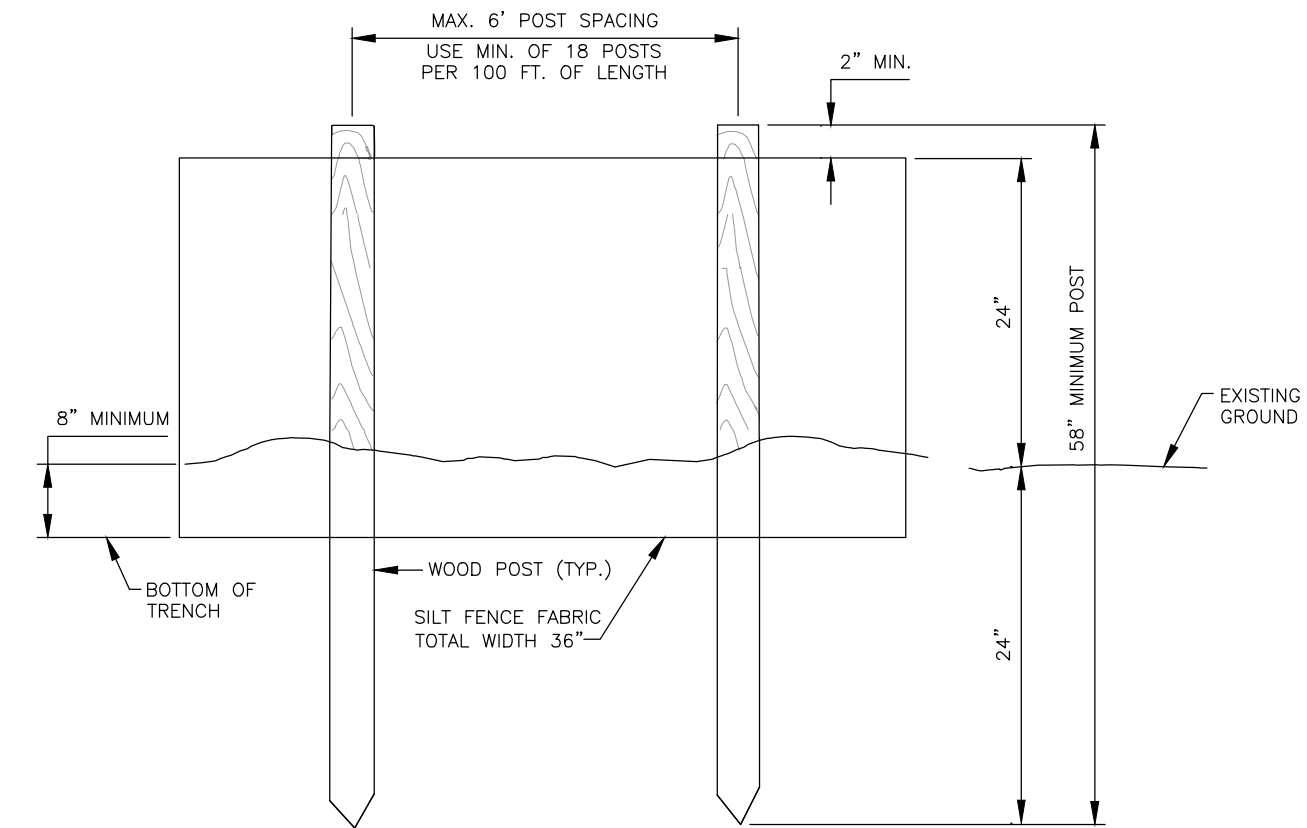
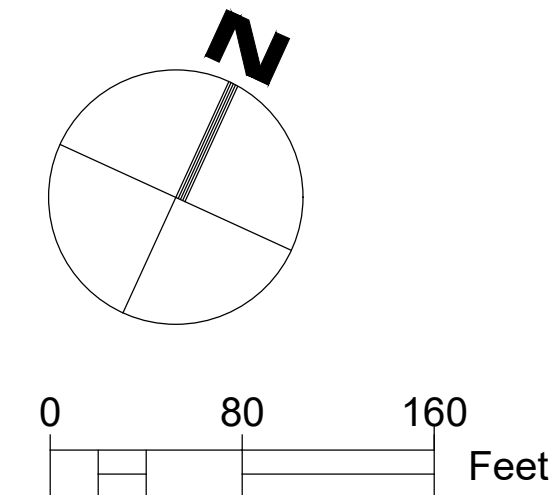
- ALL CONSTRUCTION WASTE AND TRASH (PAPER, PLASTIC, WOOD, SCRAP, METALS, RUBBER, ETC.) SHALL BE COLLECTED AND STORED IN CONTAINERS WITH LIDS OR COVERS THAT CAN BE PLACED OVER THE CONTAINER PRIOR TO RAINFALL. THE WASTE SHALL BE DISPOSED OF ACCORDING TO STATE AND LOCAL SOLID WASTE MANAGEMENT REGULATIONS.
- SANITARY WASTE THAT IS GENERATED ON THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS.
- DUST ON THE SITE SHALL BE CONTROLLED BY ANY OF THE FOLLOWING METHODS: VEGETATIVE COVER, MULCH (INCLUDING GRAVEL MULCH), WATER SPRINKLING, BARRIERS, TILLAGE, AND CALCIUM CHLORIDE APPLICATION BY MECHANICAL SPREADER AS LOOSE DRY GRANULES AT A RATE THAT DOES NOT CAUSE WATER POLLUTION OR PLANT DAMAGE, APPROVED SPRAY ON ADHESIVES OR ANY OTHER APPROVED METHOD. THE USE OF MOTOR OILS AND OTHER TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- OFF-SITE VEHICLE TRACKING OF SEDIMENTS SHALL BE MINIMIZED BY PROVIDING A CONSTRUCTION ENTRANCE AS DETAILED ON THE EROSION CONTROL PLAN.
- FERTILIZERS AND PESTICIDES WILL BE USED AT A MINIMUM AND IN ACCORDANCE WITH MANUFACTURER'S SUGGESTED APPLICATION RATES.
- ALL HAZARDOUS WASTE (PAINTS, ACIDS FOR CLEANING MASONRY SURFACES, CLEANING SOLVENTS, CONCRETE CURING COMPOUNDS, AND ADDITIVES, ETC.) SHALL BE DISPOSED OF ACCORDING TO LOCAL, STATE, AND FEDERAL REGULATIONS.
- ALL CONTRACTORS AND SUBCONTRACTORS AFFILIATED WITH THE CONSTRUCTION PROJECT SHALL ABIDE BY FEDERAL EPA, STATE, AND LOCAL REQUIREMENTS FOR THE CONSTRUCTION, WASTE DISPOSAL, SANITARY SEWER, AND SEPTIC SYSTEM REGULATIONS.

EROSION CONTROL KEYNOTES

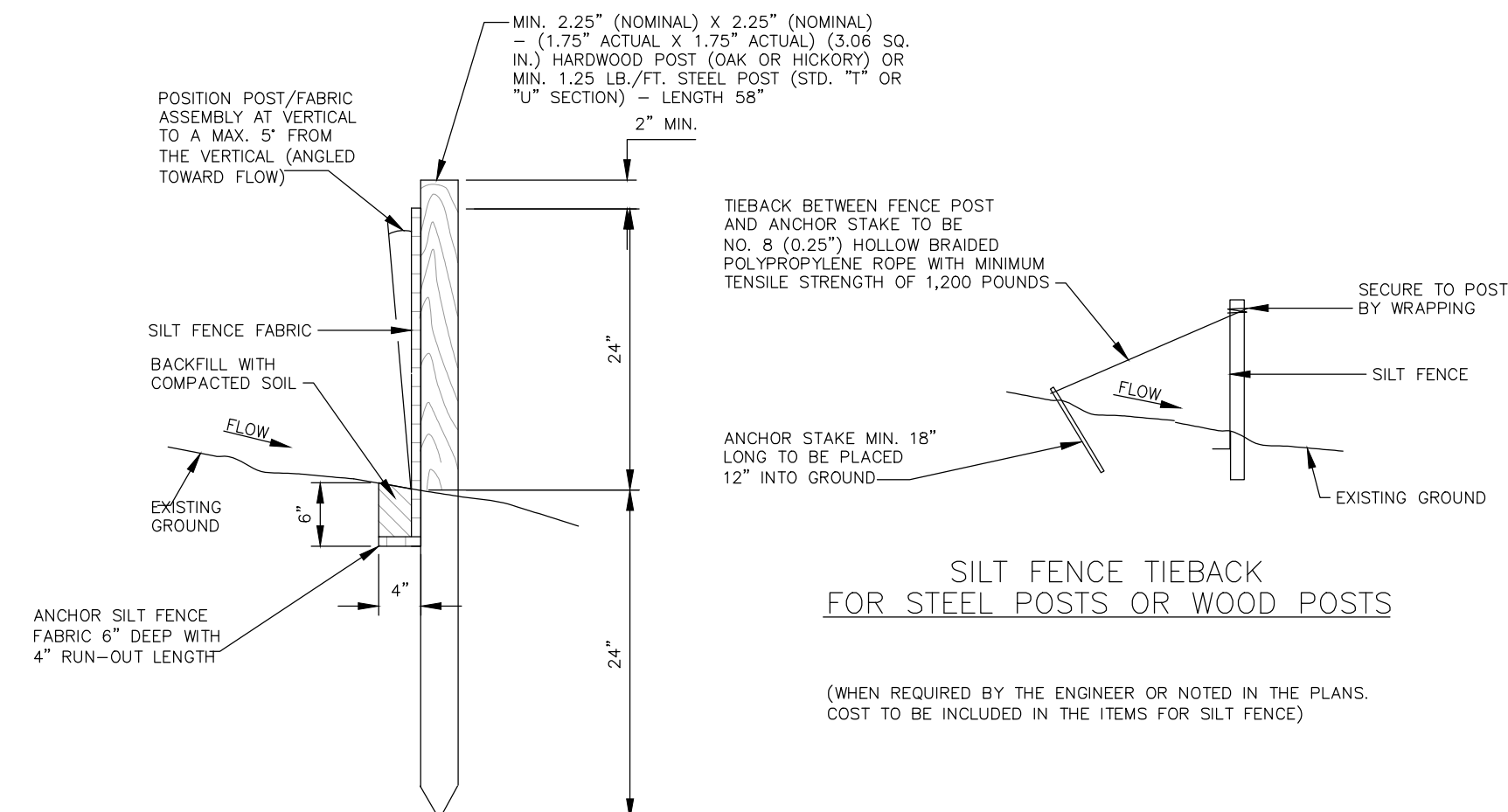
- E1 PROPOSED SILT FENCE (TYPICAL)
- E2 PROPOSED DANDY CURB BAG INLET PROTECTION
- E3 PROPOSED TEMPORARY CONSTRUCTION ENTRANCE
- E4 PROPOSED CONCRETE WASHOUT
- E5 PROPOSED EROSION CONTROL MATTING

LEGEND

- EXISTING DRAINAGE STRUCTURES
- PROPOSED DRAINAGE STRUCTURES
- PROPOSED STORM SEWER PIPE
- PROPOSED SILT FENCE
- PROPOSED TEMPORARY CONSTRUCTION ENTRANCE
- PROPOSED CONCRETE WASHOUT
- PROPOSED EROSION CONTROL MATTING



ELEVATION VIEW



SECTIONAL VIEW

SILT FENCE DETAIL

FILE NAME

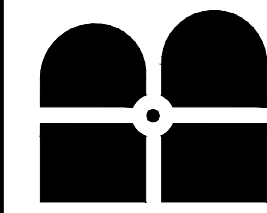
COA INITIAL 06/19/23
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UNIVERSITY ESTATES PHASE II

BROADMOOR CT & HOMESTEAD CT

EROSION CONTROL PLAN

DATE

07/31/2023

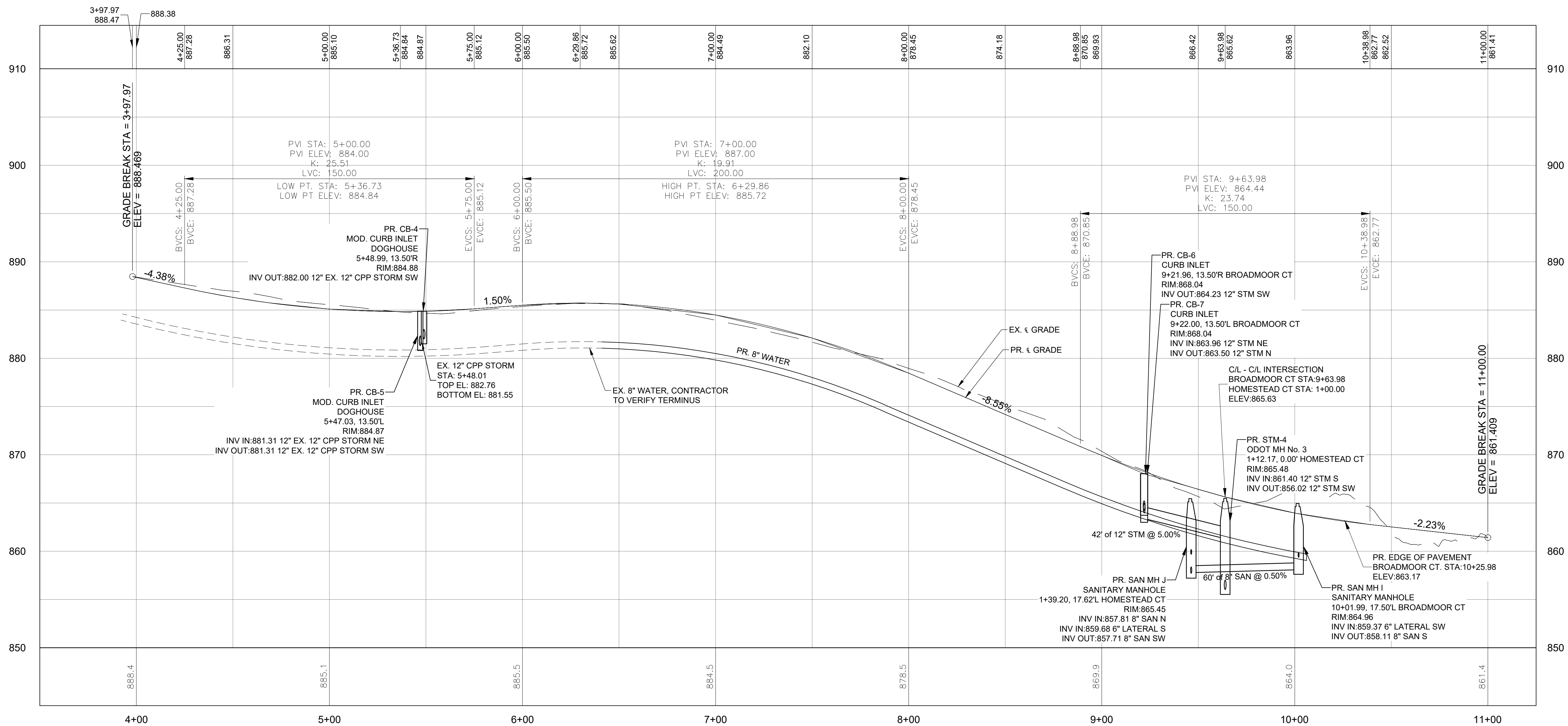
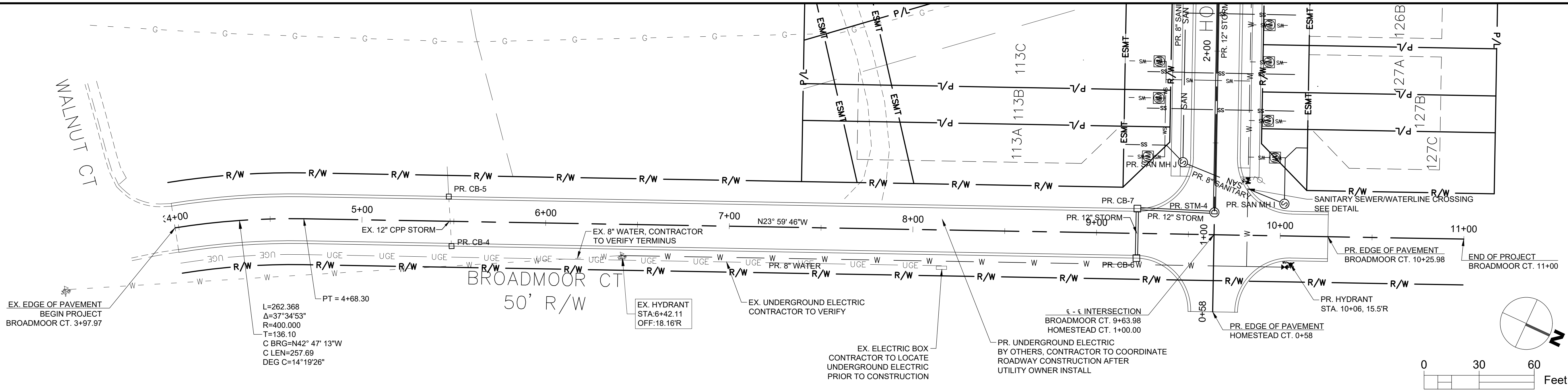
SCALE

DRWN. CDK CHCK. CDK

JOB NO. 201656

SHEET NO.

C-10



BROADMOOR CT (STA 3+50 TO 11+25)
VERT. EXAGGERATION:5:1

FILE NAME

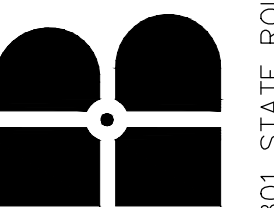
COA INITIAL 06/19/23
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UNIVERSITY ESTATES PHASE II

BROADMOOR CT

PLAN AND PROFILE
STA. 3+97.97 - 10+05.98

DATE
07/31/2023

SCALE
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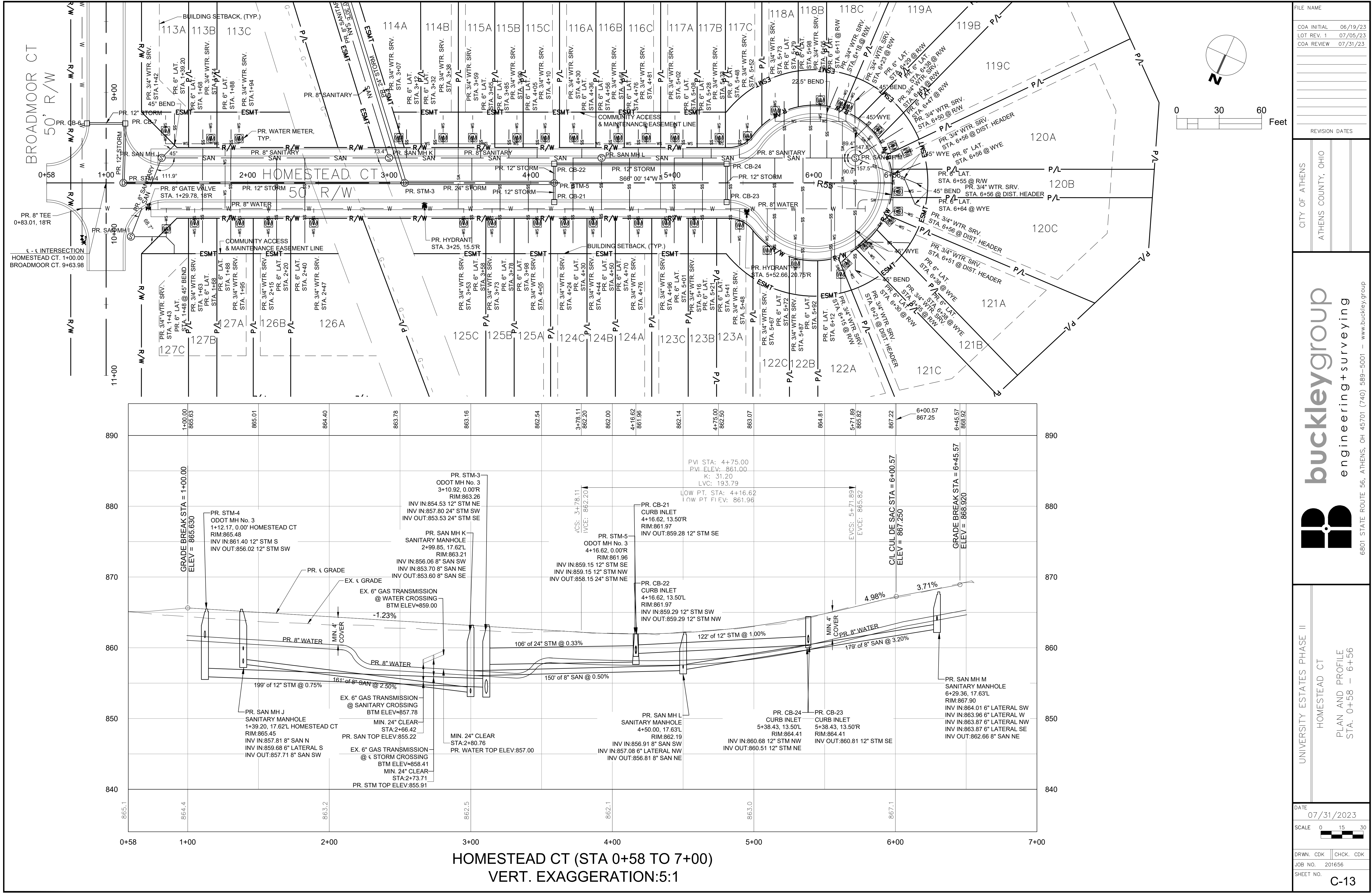
DRWN. CDK

CHKD. CDK

JOB NO. 201656

SHEET NO.

C-11



FILE NAME

COA INITIAL 06/19/23
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UNIVERSITY ESTATES PHASE II

HOMESTEAD CT

PLAN AND PROFILE

STA. 0+58 - 6+56

DATE

07/31/2023

SCALE

0 15 30

DRWN. CDK

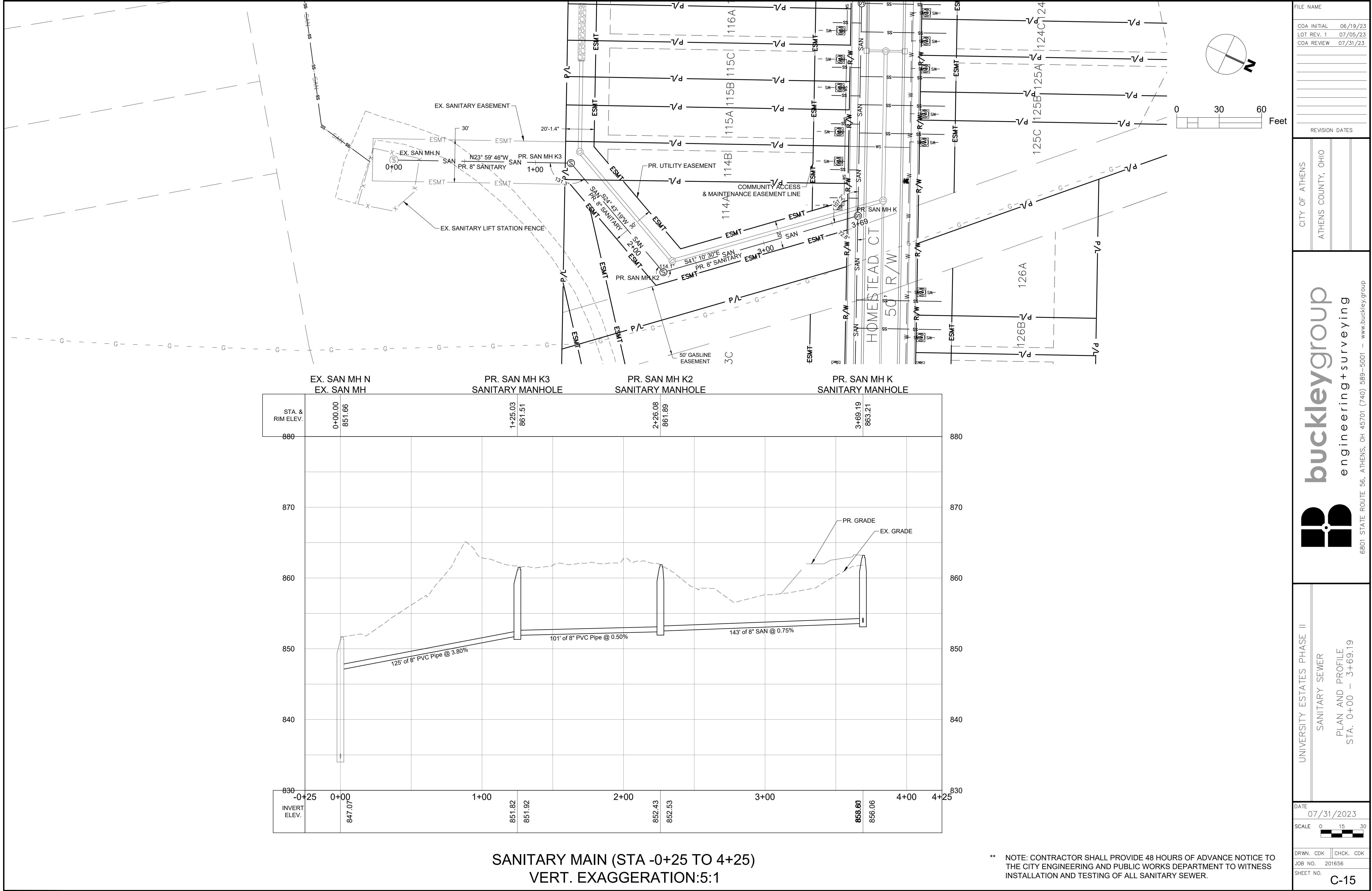
CHCK. CDK

JOB NO.

201656

SHEET NO.

C-13



FILE NAME

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UNIVERSITY ESTATES PHASE II

SANITARY SEWER

PLAN AND PROFILE

STA. 0+00 - 3+69.19

DATE

07/31/2023

SCALE

0 15 30

DRWN. CDK

CHCK. CDK

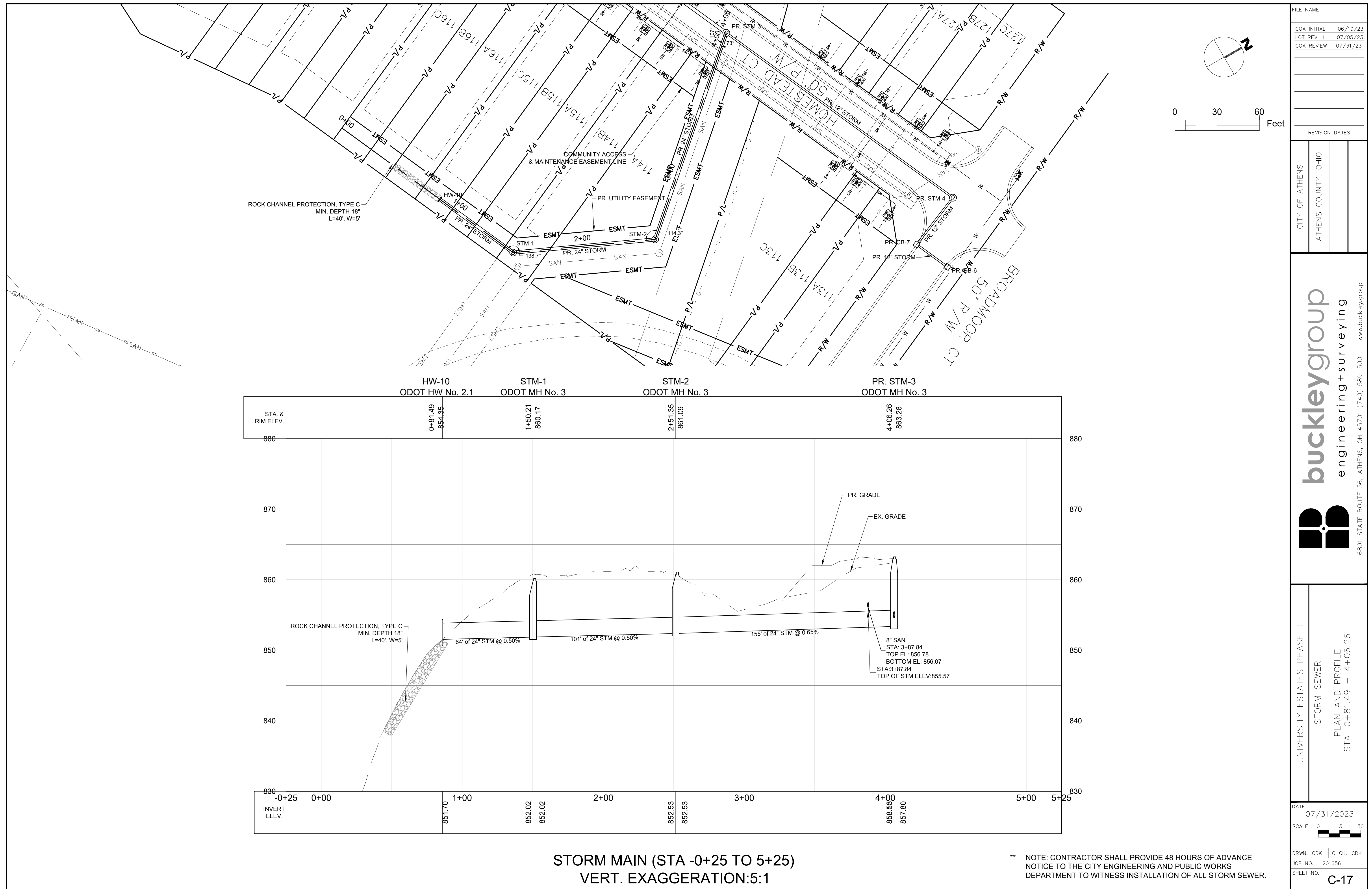
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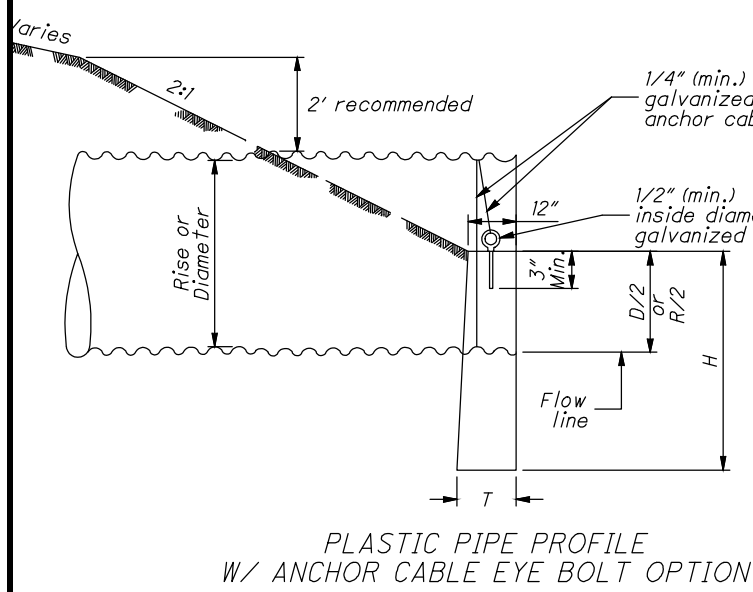
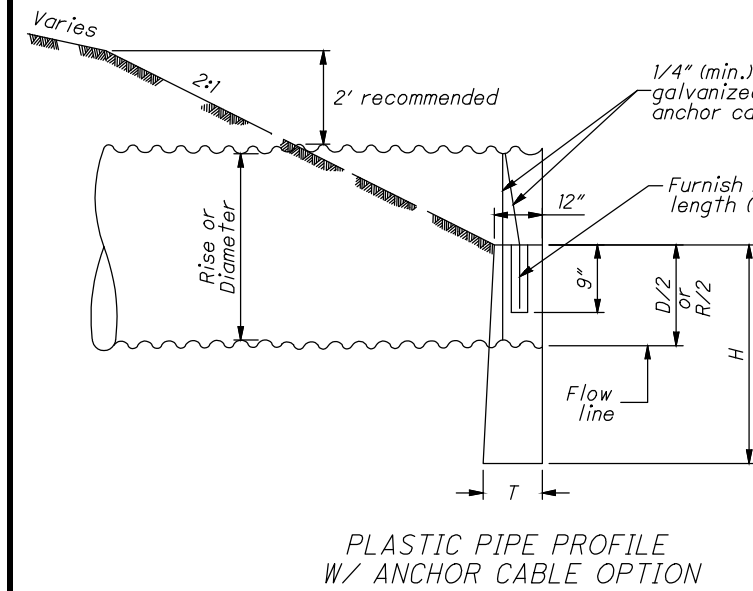
SHEET NO.

C-15

** NOTE: CONTRACTOR SHALL PROVIDE 48 HOURS OF ADVANCE NOTICE TO THE CITY ENGINEERING AND PUBLIC WORKS DEPARTMENT TO WITNESS INSTALLATION AND TESTING OF ALL SANITARY SEWER.



CAST-IN-PLACE HW FOR CORRUGATED PLASTIC PIPE				
CIRCULAR				
D	W	H	T	CONC. cu. yds.
12"	2'-0"	3'-0"	12"	0.21
15"	2'-6"	3'-2"	12"	0.27
18"	3'-0"	3'-3"	12"	0.33
21"	3'-6"	3'-4"	12"	0.39
24"	4'-0"	3'-6"	12"	0.46
27"	4'-6"	3'-8"	12"	0.53
30"	5'-0"	3'-9"	12"	0.60
33"	5'-6"	3'-10"	12"	0.68
36"	6'-0"	4'-0"	12"	0.76
39"	6'-6"	4'-2"	12"	0.84
42"	7'-0"	4'-3"	12"	0.92
48"	8'-0"	4'-6"	12"	1.10



NOTES

GENERAL: Provide a riprap reinforced concrete slab according to SCD QM-1.1 if the pipe is depressed or if it is specified in the plan. Payment for the slab is made per square yard of Item 601 Riprap Using 6" Reinforced Concrete Slab and includes the cost of the cutoff wall.

This drawing is for cast-in-place half-height concrete headwalls. When furnishing precast half-height headwalls, conform to pre-approved designs on file with the Office of Materials Management. Precast half-height headwalls are only approved for round conduits with a maximum conduit diameter of 18". When precast headwalls are furnished, provide openings for the anchor cable as shown and fill with grout after placement of the anchor cable. If anchor bolts are to be used with a precast headwall, fill the anchor cable openings with grout.

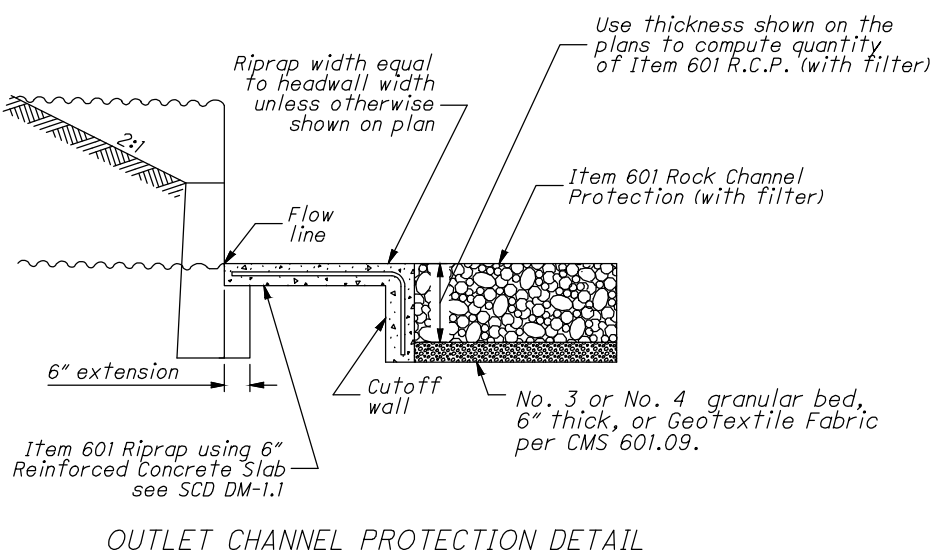
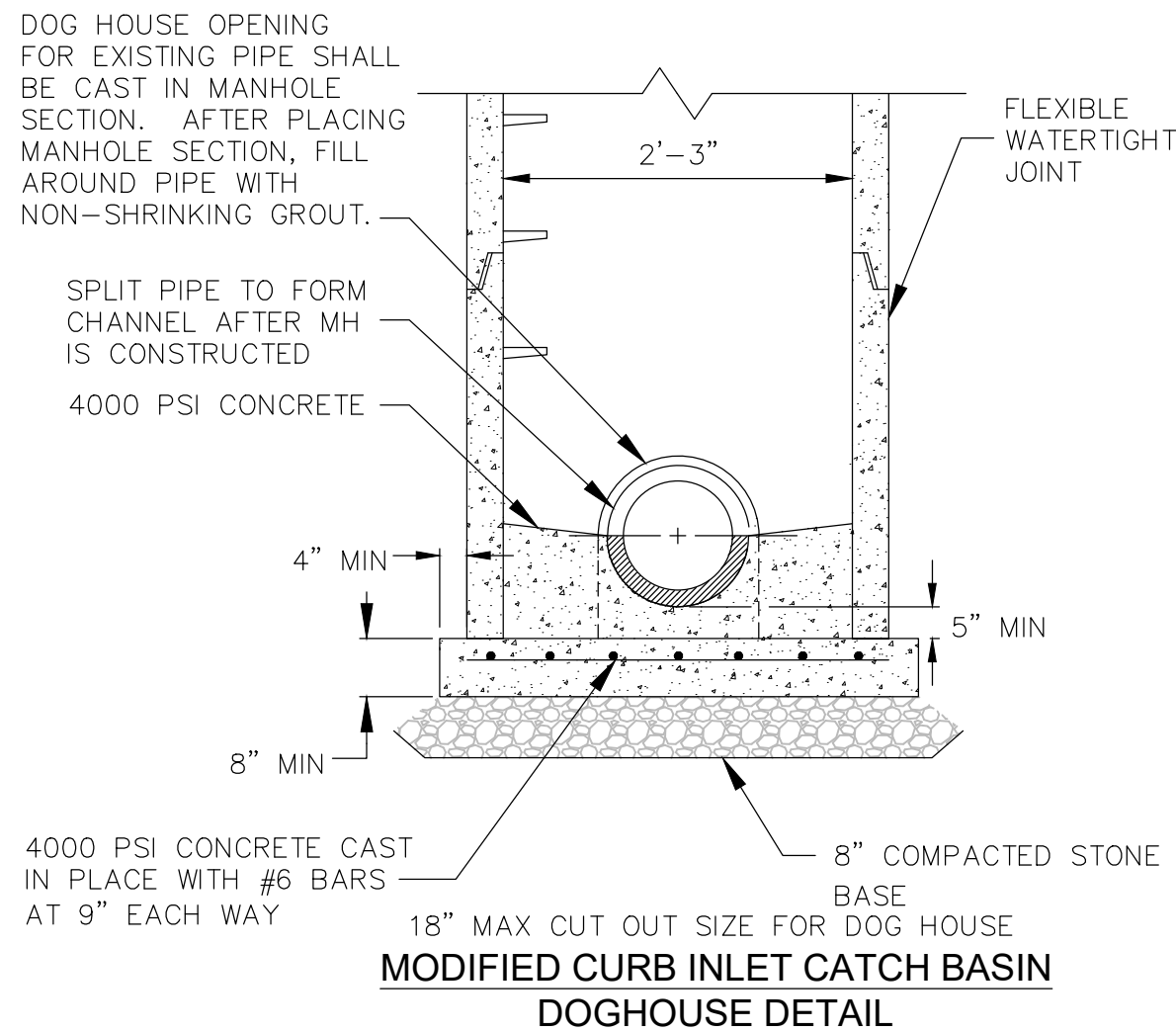
CONCRETE: Use 4000 psi compressive strength concrete for headwall. Concrete quantities are based on headwalls without the 6" extension under the channel protection.

PLASTIC PIPE: Plastic pipe may not be available in all the sizes specified on this drawing.

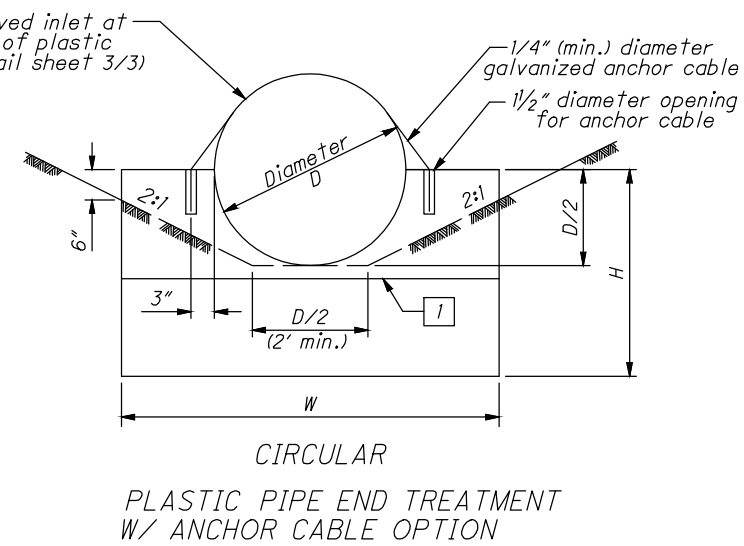
ANCHOR CABLES: Furnish galvanized anchor cable (see detail sheet 2/4 & 3/4) that meets ASTM A 1023 for anchoring both ends of plastic or metal pipe. Wire rope clip must be galvanized according to ASTM A 153. Cost of anchor cable and wire rope clip is included in the unit price bid per foot of Item 611.

EYEBOLTS: Furnish eyebolts (see detail sheet 3/4) that meet ASTM A 489 for anchoring both ends of metal or plastic pipe. The eyebolts must be galvanized according to ASTM A 153. Furnish eyebolts with a min. I.D. eye of 1/2" and a min. shank length of 3". Cost of eyebolts is included in the price bid per foot of Item 611.

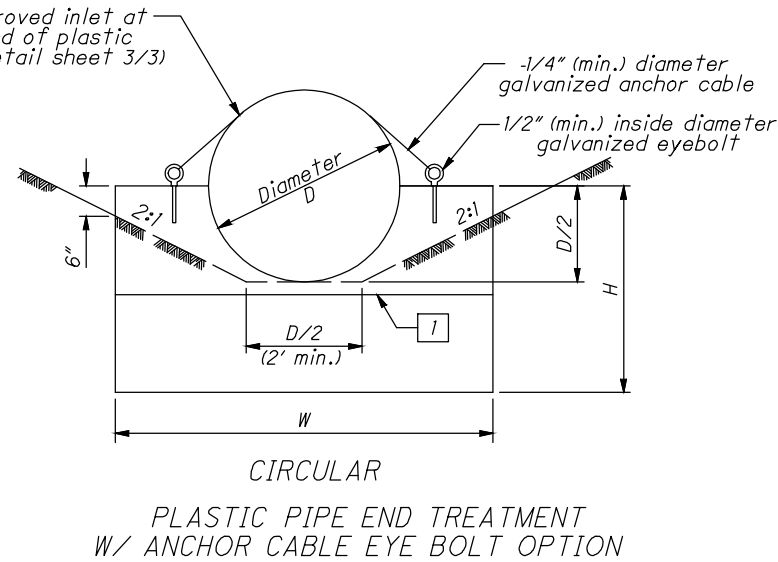
**** NOTE: CONTRACTOR SHALL PROVIDE 48 HOURS OF ADVANCE NOTICE TO THE CITY ENGINEERING AND PUBLIC WORKS DEPARTMENT TO WITNESS INSTALLATION OF ALL STORM SEWER.**



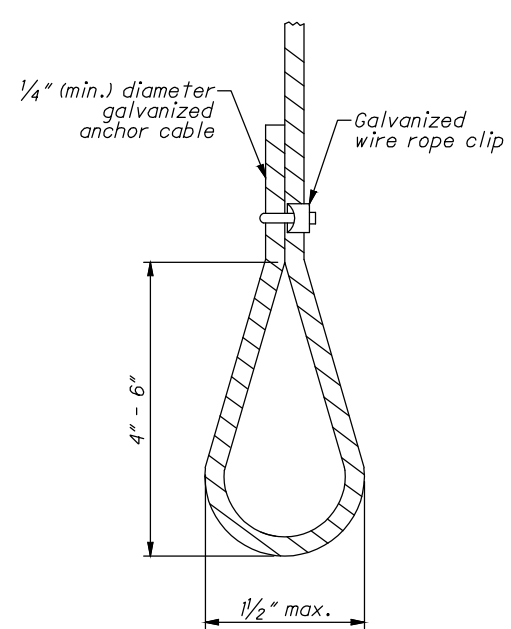
OUTLET CHANNEL PROTECTION DETAIL



1 Top surface of 6" inlet headwall extension



ODOT HW-2.1
HALF-HEIGHT HEADWALL DETAILS
NOT TO SCALE



ANCHOR CABLE DETAIL

NOTES

Tightly wrap galvanized anchor cable one time completely around the circumference of the conduit. Furnish hook at least 4" long as shown above.

Cut galvanized anchor cable to length required.

Form or drill 1 1/2" diameter openings for anchor cable at locations shown. Alternatively, place anchor cable in wet concrete at the dimensions shown above to secure conduit to headwall.

Fill any openings made for anchor cables with grout after the cables are placed to a taut fit.

Secure cables such that they are taut after the grout or concrete hose cured.

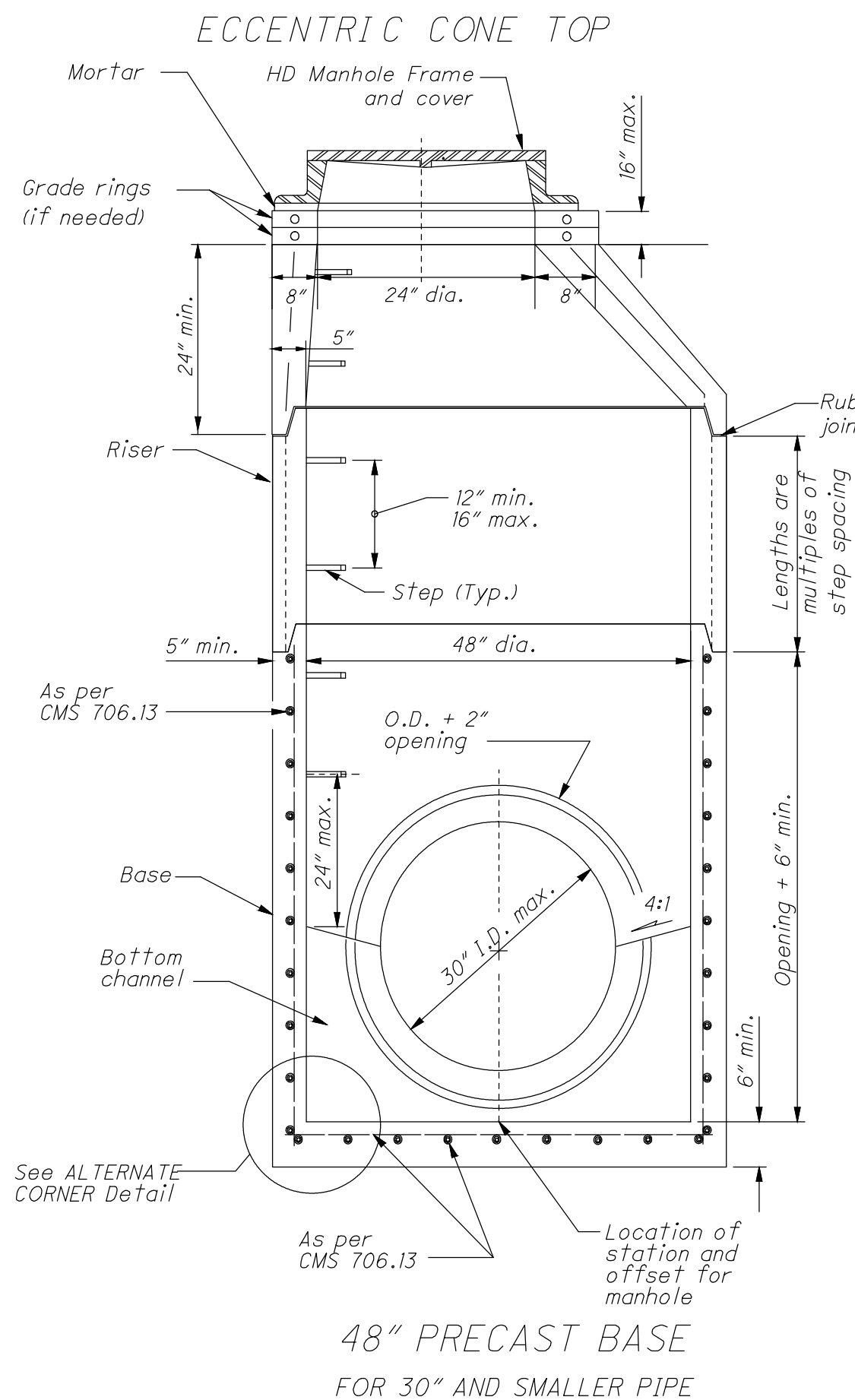
NOTES

Drill openings a min. of 3" deep for eyebolts at the locations shown. Insert entire length of bolt shank into opening. Fill openings with grout and allow to harden before securing anchor cable. Alternatively, place eyebolts in wet concrete at locations shown above.

Tightly wrap galvanized anchor cable one time completely around the circumference of the conduit.

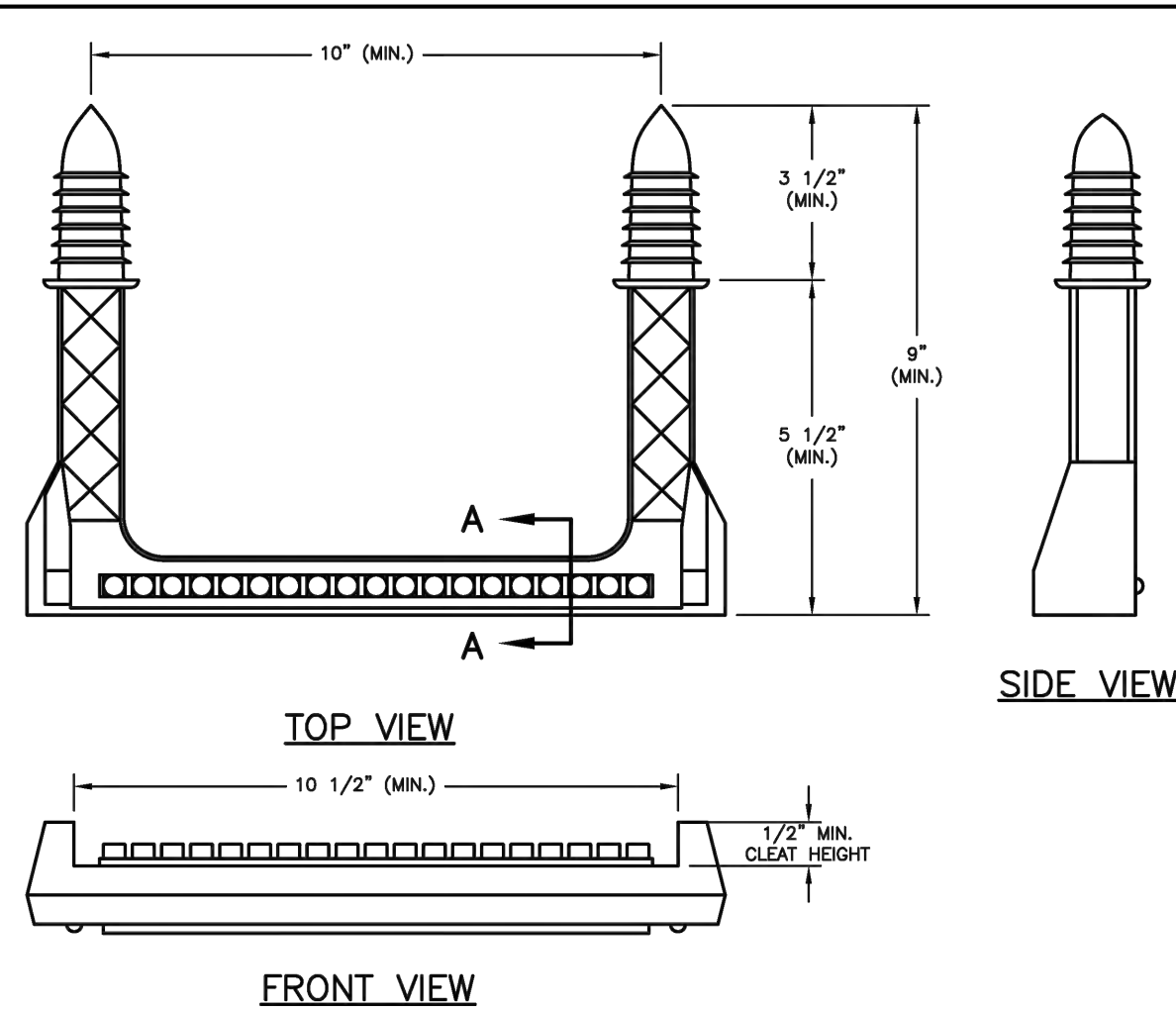
Cut galvanized anchor cable to length required.

Place cable through eyebolt and form a loop as shown in the above detail. Ensure the cable is pulled to a tight fit and secured with a galvanized wire rope clip.

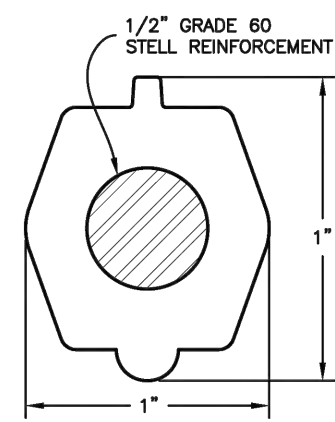


48" PRECAST BASE
FOR 30" AND SMALLER PIPE

ODOT MANHOLE NO. 3 DETAIL
N.T.S.



- NOTES:**
- STEPS SHALL MEET THE REQUIREMENTS OF ASTM C478, AND SHALL BE INSTALLED WITH A UNIFORM VERTICAL SPACING OF 12" TO 18"
 - STEPS INSTALLED IN EXISTING STRUCTURES SHALL BE SET IN A QUICK SETTING NON-SHRINK EPOXY.
 - STEPS SHALL CONFORM TO MATERIAL REQUIREMENTS OF CMS 711.31. ALL STEPS SHALL HAVE A DEPRESSED TREAD OR 1/2" MINIMUM CLEAT HEIGHT AT THE ENDS.
 - THE ENGINEER MAY REQUIRE THE CONTRACTOR TO TEST LOAD A MAXIMUM OF ONE STEP PER STRUCTURE PER ASTM C478. IF THE SELECTED STEP FAILS THE ASTM TEST, THE REMAINING STEPS IN THAT STRUCTURE SHALL ALSO BE TESTED. ALL STEPS NOT PASSING THE ASTM TEST SHALL BE REMOVED. ALL NEW STEPS SHALL BE TESTED PER ASTM C478. THE COST OF TESTING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR SAID STRUCTURE.



SECTION A-A

SSES MANAGER	CITY OF COLUMBUS, OHIO DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE & DRAINAGE <i>John H. Henshaw</i>	MANHOLE STEP	STANDARD DRAWING AA-S119 REVISED 8/8/14 PAGE 1/1

NOTES

GENERAL: With normal soil and site conditions, this standard precast manhole may be used for any required manhole depth. Cast and assemble sections of the precast manhole with either all tongue or all groove ends up. Lift holes may be provided in each section for handling. Leave handling device for the flat slab in place.

TRANSITION (OR REDUCER): This section can be either eccentric cone or flat slab.

BASE: Manhole No. 3 is shown with a monolithic floor and riser which may be cast in one or two operations. A permissible alternate is to cast and ship the floor and barrel separately. Provide openings for inlet and outlet pipes, either when the unit is cast or later, to meet project requirements. Bottom channels may be formed of concrete, precast in the base or field constructed as shown on SCD MH-1.1 and MH-3.1.

RISER SECTIONS: Openings for 18" and smaller inlet pipes may be either prefabricated or cut in the field provided the sides of the pipe at the springline do not project into the manhole.

CONNECTIONS: Connections between precast manhole sections and pipes on sanitary sewers may be sealed with resilient connectors conforming to ASTM C 923.

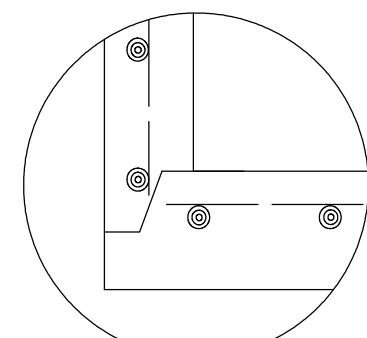
JOINT SEAL: Furnish resilient seal between precast manhole sections on sanitary sewers and flexible gasket joints per CMS 706.11.

OPENINGS: Ensure pipe openings are the O.D. of the pipe being supplied plus 2" when fabricated or field cut. Fill any voids per CMS 611.

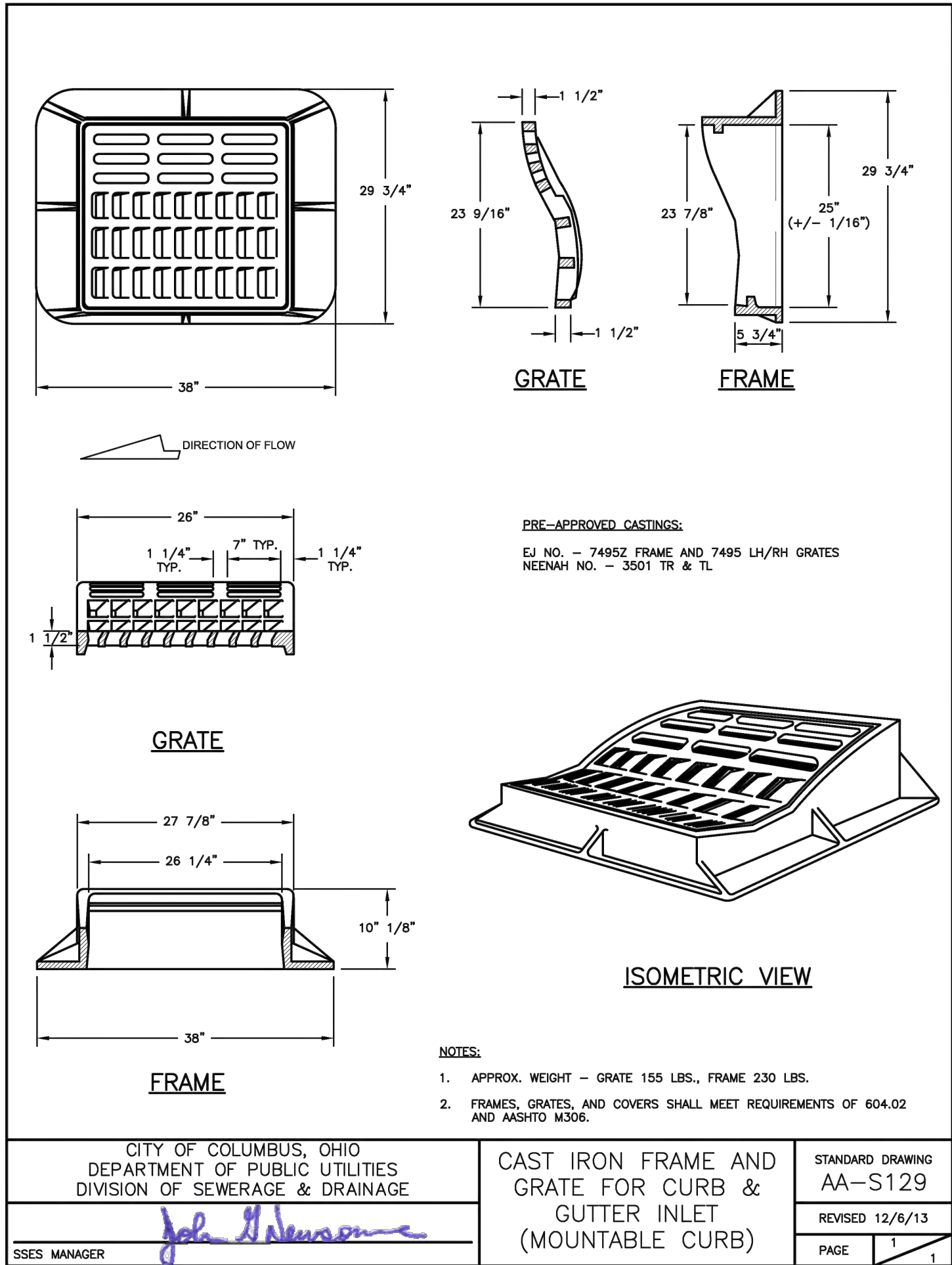
MATERIALS: Provide materials for bases and other precast sections, including reinforcement not specified here, that meet the requirements of CMS 706.13.

DROP PIPE: When specified on the plans, construct drop pipe as shown on SCD MH-3.1.

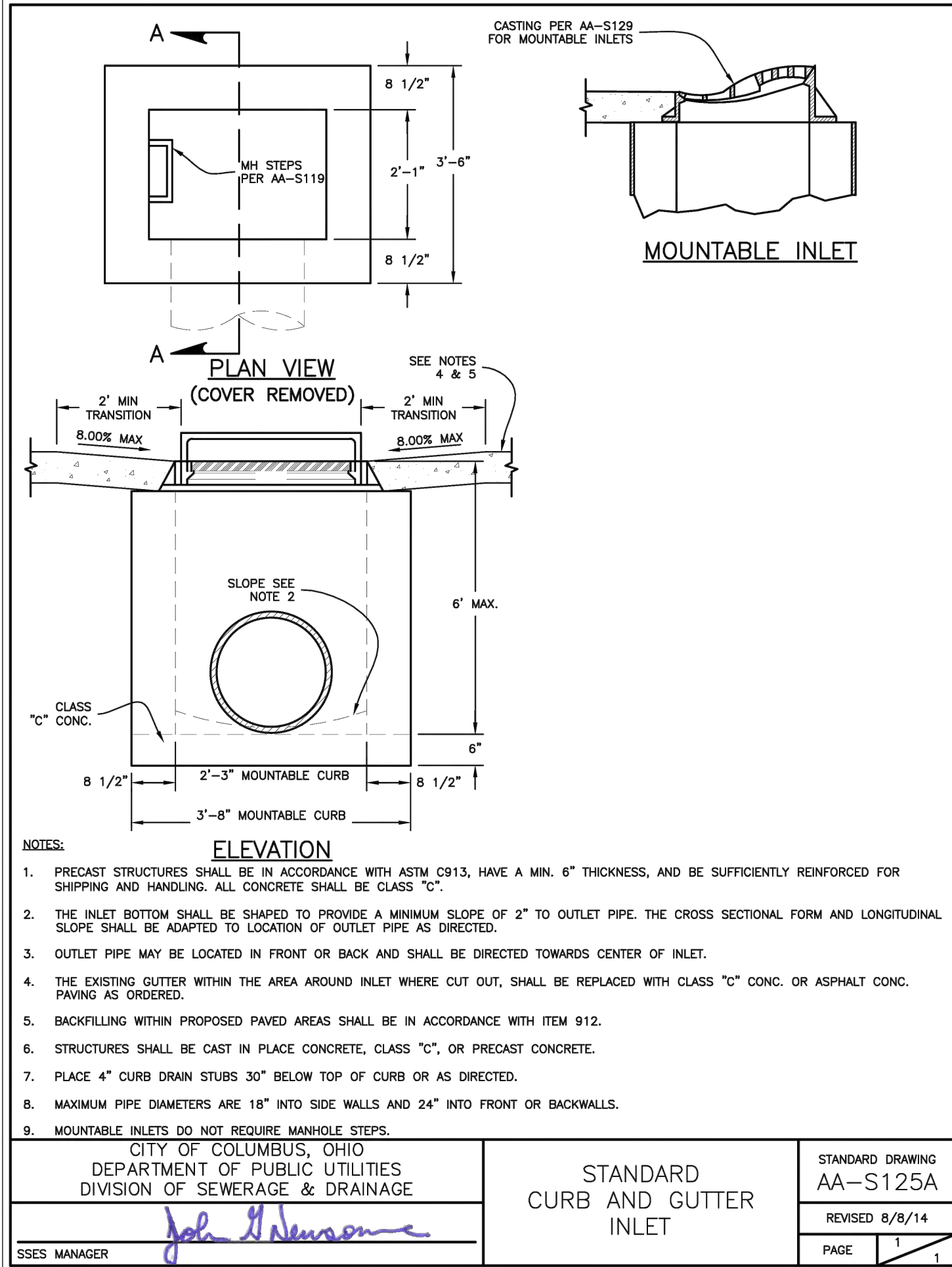
STEPS, FRAMES AND COVERS: Meet the requirements shown on SCD MH-1.1.



ALTERNATE CORNER
DETAIL



SSES MANAGER	CITY OF COLUMBUS, OHIO DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE & DRAINAGE <i>John H. Henshaw</i>	CAST IRON FRAME AND GRATE FOR CURB & GUTTER INLET (MOUNTABLE CURB)	STANDARD DRAWING AA-S129 REVISED 12/6/13 PAGE 1/1



- NOTES:**
- PRECAST STRUCTURES SHALL BE IN ACCORDANCE WITH ASTM C913, HAVE A MIN. 6" THICKNESS, AND BE SUFFICIENTLY REINFORCED FOR SHIPPING AND HANDLING. ALL CONCRETE SHALL BE CLASS "C".
 - THE INLET BOTTOM SHALL BE SHAPED TO PROVIDE A MINIMUM SLOPE OF 2" TO OUTLET PIPE. THE CROSS SECTIONAL FORM AND LONGITUDINAL SLOPE SHALL BE ADAPTED TO LOCATION OF OUTLET PIPE AS DIRECTED.
 - OUTLET PIPE MAY BE LOCATED IN FRONT OR BACK AND SHALL BE DIRECTED TOWARDS CENTER OF INLET.
 - THE EXISTING GUTTER WITHIN THE AREA AROUND INLET WHERE CUT OUT, SHALL BE REPLACED WITH CLASS "C" CONC. OR ASPHALT CONC. PAVING AS ORDERED.
 - BACKFILLING WITHIN PROPOSED PAVED AREAS SHALL BE IN ACCORDANCE WITH ITEM 912.
 - STRUCTURES SHALL BE CAST IN PLACE CONCRETE, CLASS "C", OR PRECAST CONCRETE.
 - PLACE 4" CURB DRAIN STUBS 30" BELOW TOP OF CURB OR AS DIRECTED.
 - MAXIMUM PIPE DIAMETERS ARE 18" INTO SIDE WALLS AND 24" INTO FRONT OR BACK WALLS.
 - MOUNTABLE INLETS DO NOT REQUIRE MANHOLE STEPS.

SSES MANAGER	CITY OF COLUMBUS, OHIO DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE & DRAINAGE <i>John H. Henshaw</i>	STANDARD CURB AND GUTTER INLET	STANDARD DRAWING AA-S125A REVISED 8/8/14 PAGE 1/1

FILE NAME	
COA INITIAL	06/19/23
LOT REV. 1	07/05/23
COA REVIEW	07/31/23
REVISION DATES	

CITY OF ATHENS	ATHENS COUNTY, OHIO
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engineering+surveying

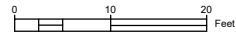
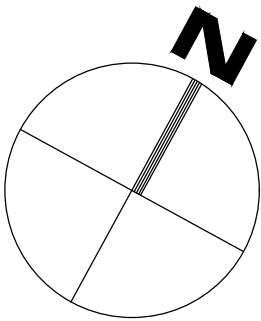
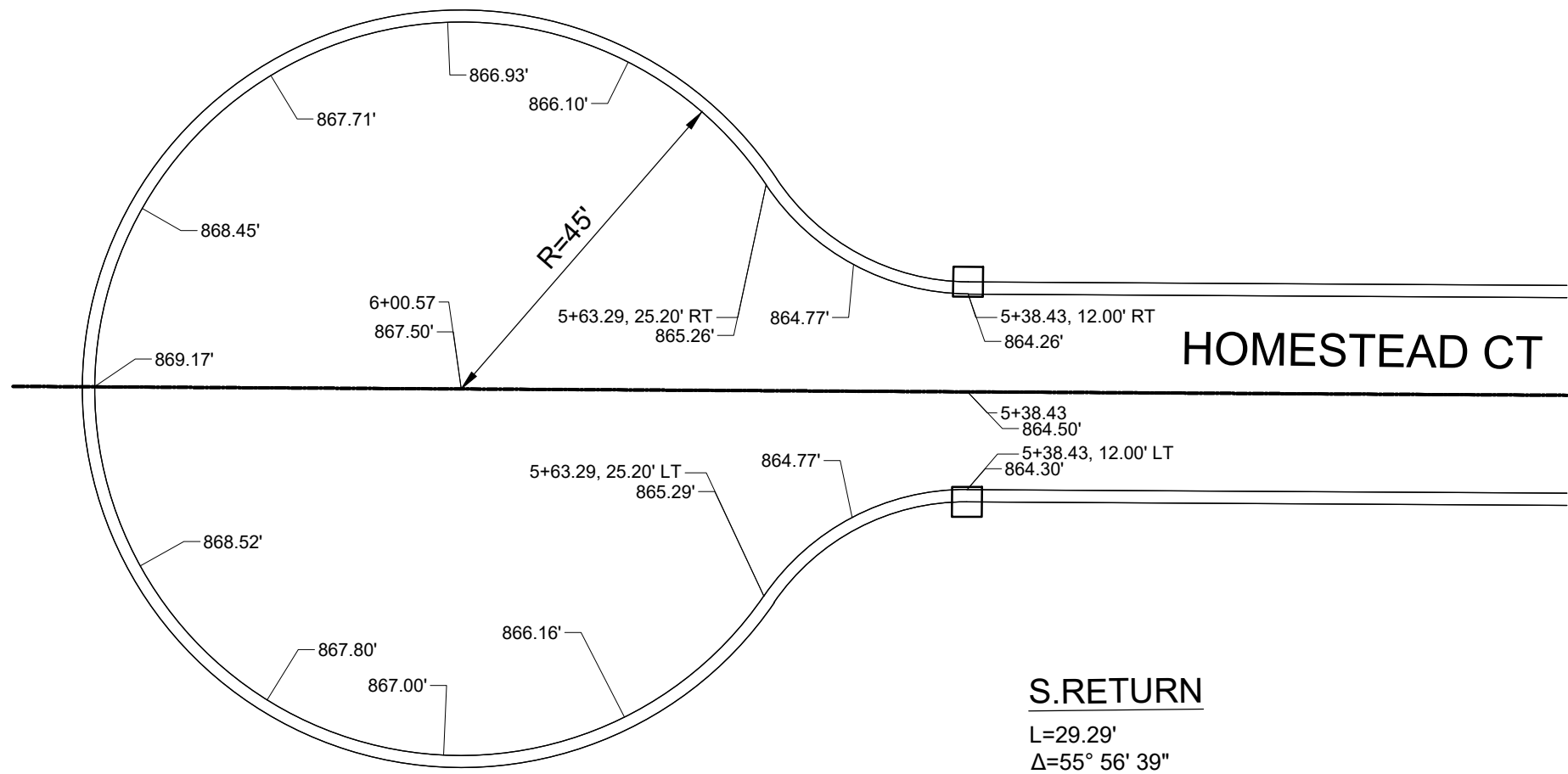
6801 STATE ROUTE 56, ATHENS, OH 45701 (740) 589-5001

www.buckleygroup

UNIVERSITY ESTATES PHASE II		BROADMOOR CT & HOMESTEAD CT	
STORM DETAILS		DATE	
		07/31/2023	
		SCALE	
		DRWN. CDK	
		CHKD. CDK	
		JOB NO. 201656	
		SHEET NO.	
		C-19	

CUL-DE-SAC

L=236.89'
Δ=291° 53' 18"
R=46.50'
C LEN=52.08'
BRG=S23° 59' 46"E

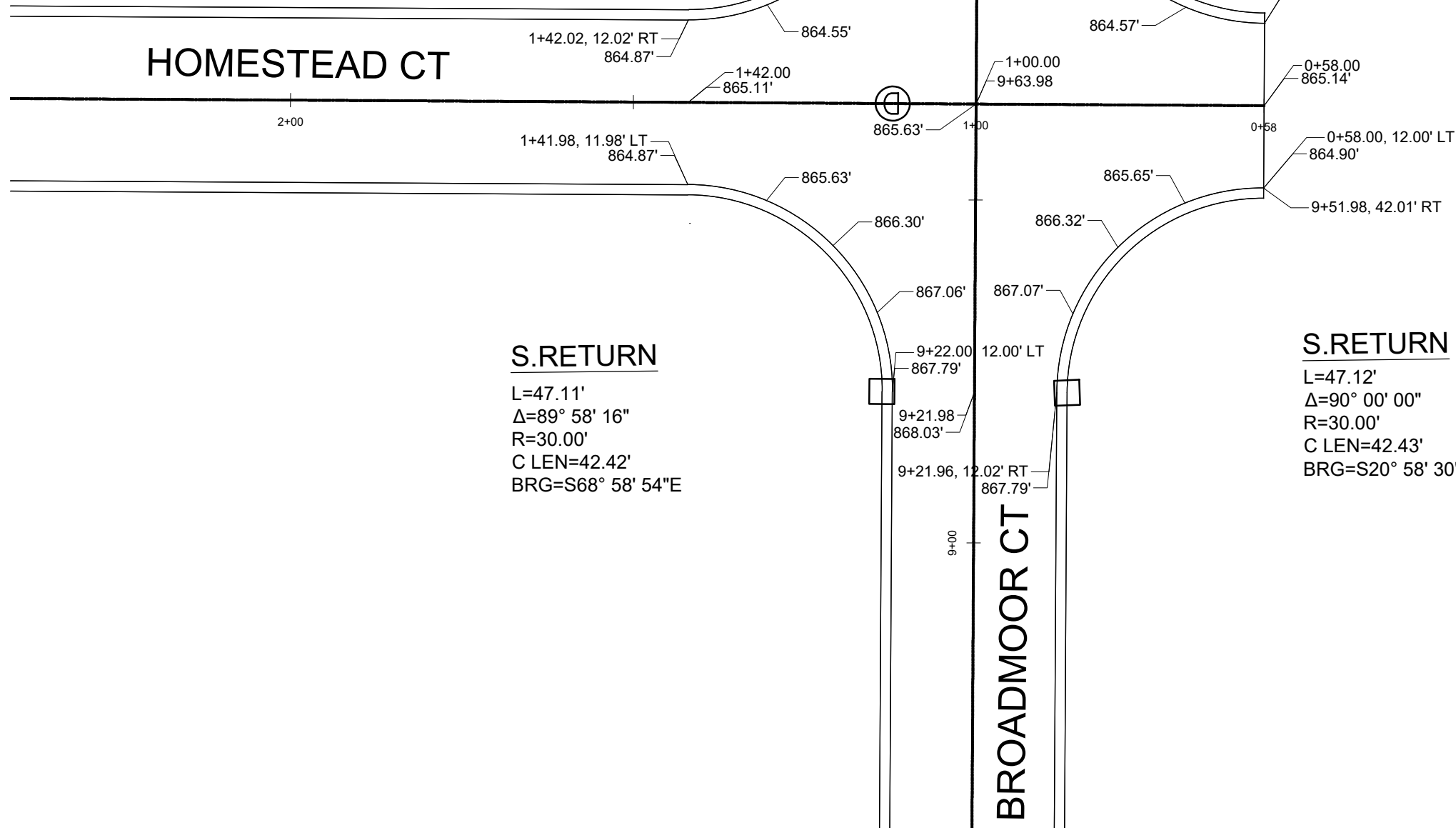


N. RETURN

L=47.14'
Δ=90° 01' 44"
R=30.00'
C LEN=42.44'
BRG=S21° 01' 06"W

N. RETURN

L=47.11'
Δ=89° 58' 16"
R=30.00'
C LEN=42.42'
BRG=N69° 00' 38"W



FILE NAME

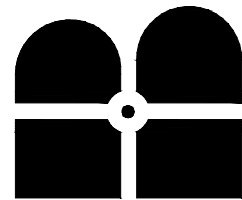
COA INITIAL 06/19/23
LOT REV. 1 07/05/23
COA REVIEW 07/31/23

REVISION DATES

CITY OF ATHENS

ATHENS COUNTY, OHIO

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UNIVERSITY ESTATES PHASE II

BROADMOOR CT & HOMESTEAD CT

INTERSECTION DETAILS

DATE
07/31/2023

SCALE

DRWN. CDK CHCK. CDK

JOB NO. 201656

SHEET NO.

C-20