

# **ADDENDUM #1**



## **INDIANA UNIVERSITY**

TRUSTEE OF INDIANA UNIVERSITY

**BL000A SITE - CAMPUS RIVER RESTORATION**  
**PROJECT NUMBER – IU 20230520**  
**STABILIZATION AND MAINTENANCE**

PREPARED BY:

**V3 COMPANIES, INC.**  
619 N. PENNSYLVANIA STREET  
INDIANAPOLIS, INDIANA



The Trustees of Indiana University  
1800 North Range Road  
Bloomington, Indiana 47408

April 25, 2025

## Campus River Phase III - Addendum #1

April 22, 2025

Attendees:

Joe Townsend (IU)

Michael Girvin (IU)

Jim Rinehart (V3)

John Cummings (Crider & Crider)

John Simpson (Monroe LLC)

Chris Schaumberg (Williams Creek)

Nolan O'Farrell (Williams Creek)

### Pre-Bid Meeting and Walkthrough

- Discussed of Schedule
  - Questions due – April 23, 2025
  - Responses to questions – NLT April 25, 2025
  - Bids Due – April 30, 2025 at 2pm
  - Notice to Proceed – April 12, 2025
  - Substantial Completion – August 15, 2025
- Will all sidewalks be required to use IU Beige color?
  - The contractor is expected to use IU Beige J177. A more detailed concrete specification has been added to the details.
- There were questions about the limits of the wall reconstruction downstream of the Forest Avenue Bridge.
  - Due to recent repairs of portions of the wall, Addendum #1 includes an updated depiction of the limits of the 100' of repair listed in Alternate 1. Rather than being 1 continuous repair 100 feet in length, the 100 foot repair will be split into 2 segments as described and shown in plan view.
- In previous sections White River Ledge Stone was replaced with Sandstone. Will this segment be constructed with Sandstone?
  - This phase is to be built with sandstone as a replacement for the previously referenced White River Ledge stone as allowed in previous phases.
- Is Chipped wood allowed in place of shredded hardwood mulch?
  - This substitute is acceptable as long as it is understood that the 12" minimum depth is maintained, all material is removed and lawn restored upon completion.
- Will Fencing be required around the construction limits of S1.18?
  - Fencing has been added to the plans to protect the public for the improvements associated with S1.18.
- In Detail Z, #53 stone is the only material listed for the base and top dressing. Is that correct or will a different material be used for top dressing?
  - Detail Z has been modified to depict the use of Course L stone for the top layer.

### Additional Addendum #1 Items

In addition to the questions provided and answered above, Addendum 1 includes an updated plan set intended to provide additional clarity by adding a clear construction limits line, and removal of hatches on the south bank of the stream on Sheet C2.0. With the exception of the added construction limit line, all revisions, including those in direct response to the questions above are clouded.

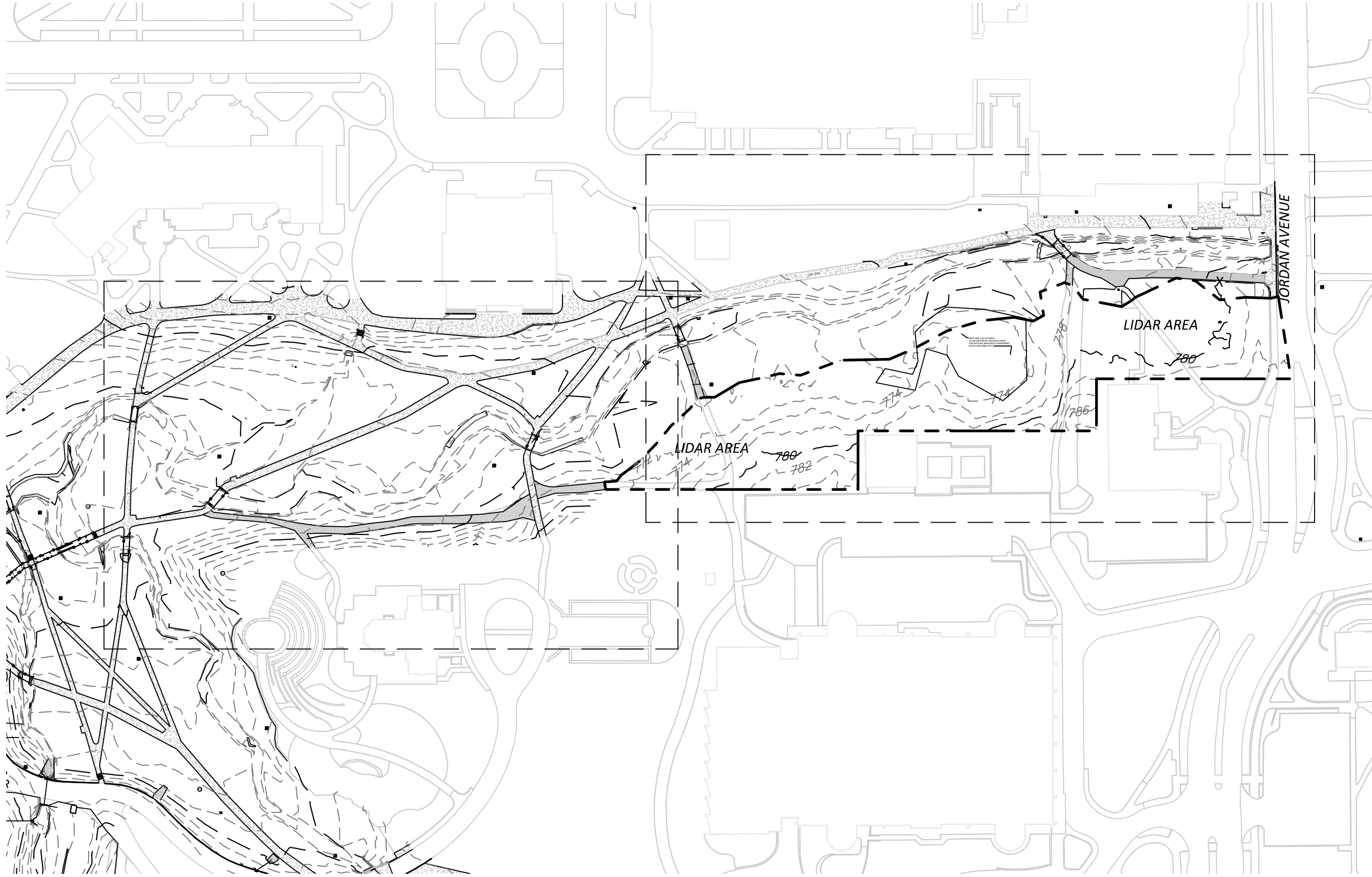
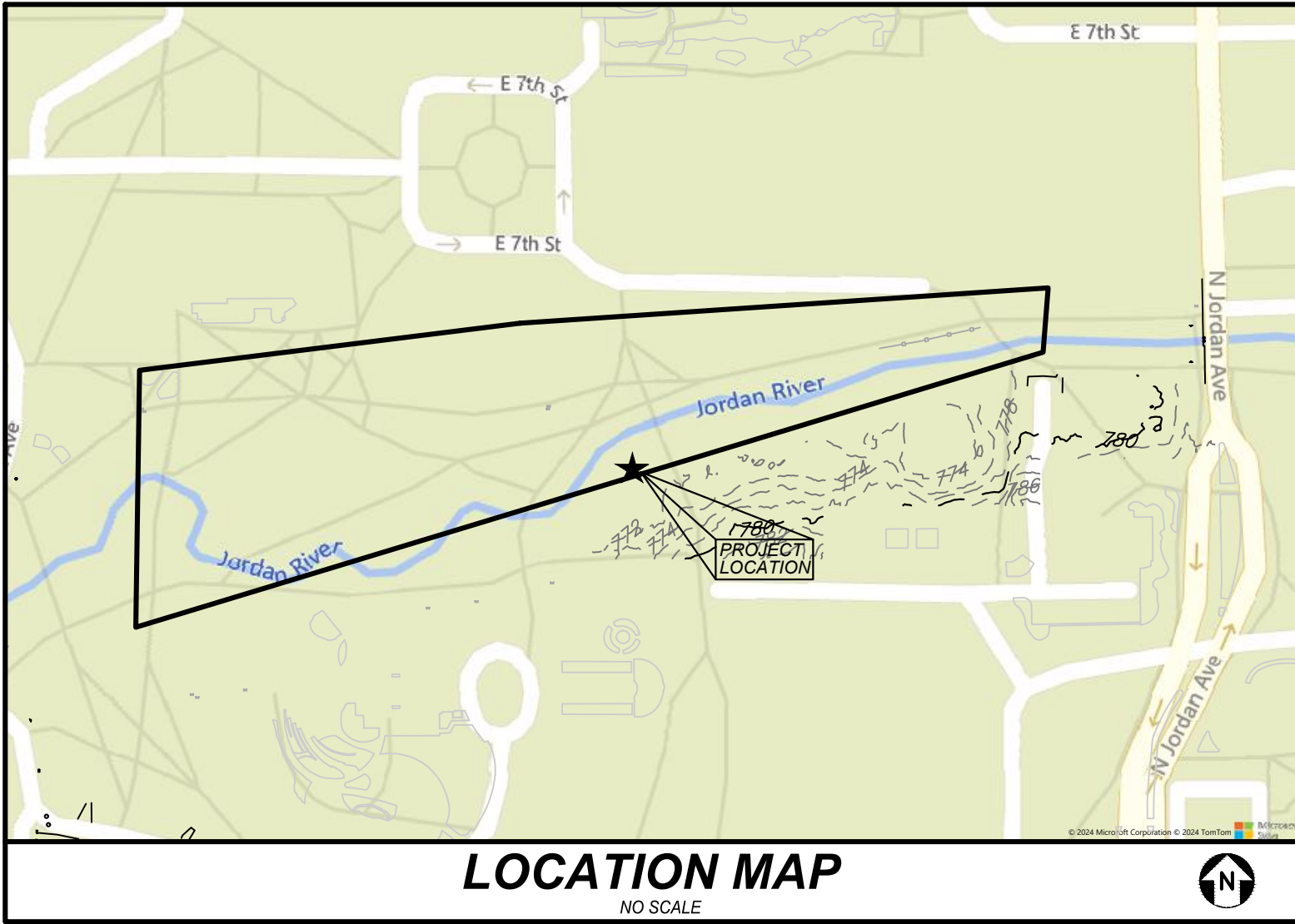
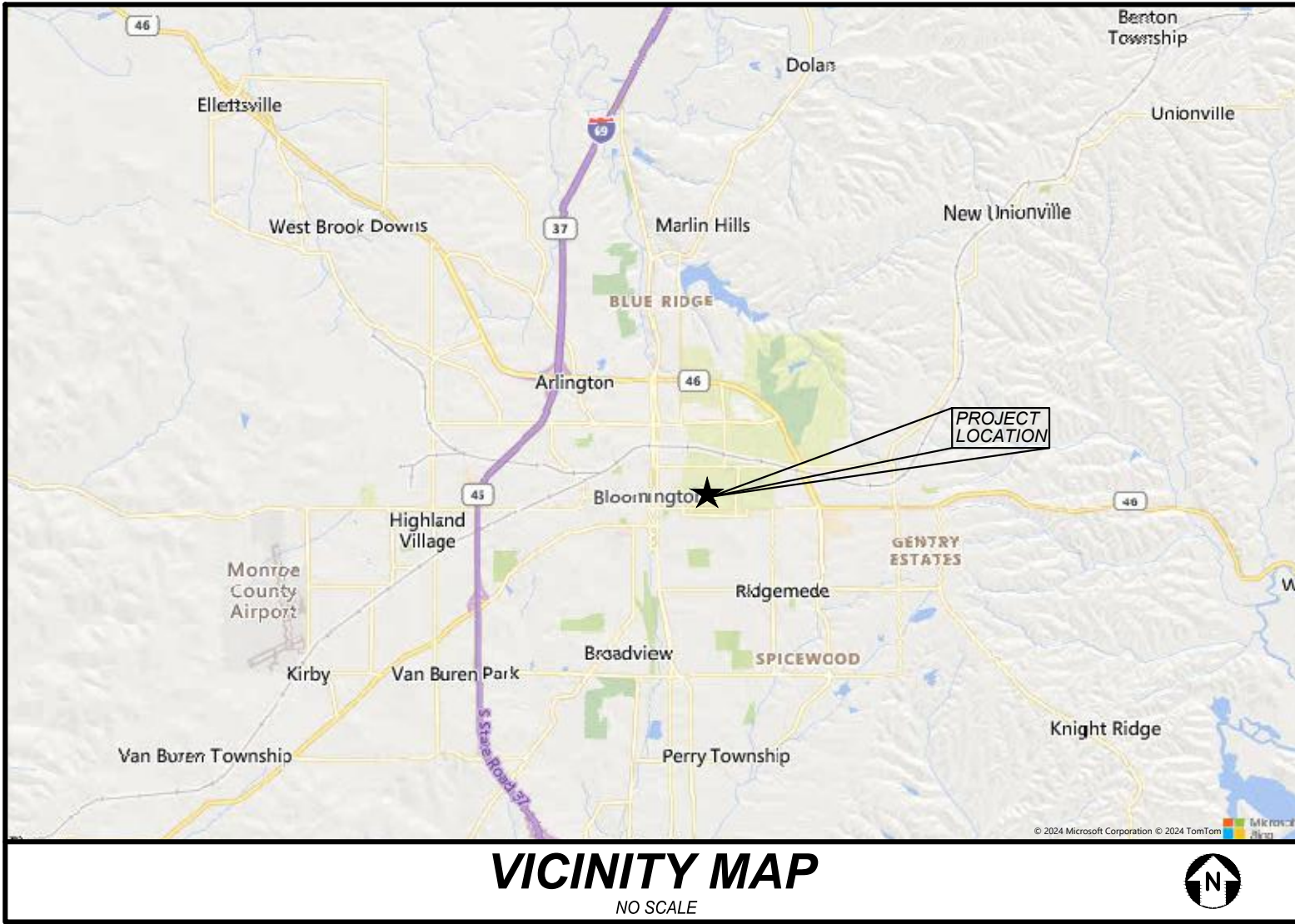


FINAL ENGINEERING PLANS

FOR

# CAMPUS RIVER PHASE 3

BLOOMINGTON, INDIANA



INDEX	
CIVIL ENGINEERING PLANS	
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C1.0 - C01.1	MAINTENANCE ACTION PLAN
C2.0 - C2.3	STABILIZATION ACTION PLAN
C4.0 - C4.3	EROSION CONTROL PLAN
C4.4	SWPPP
C8.0 - C8.1	CONSTRUCTION DETAILS

PROJECT TEAM

OWNER/DEVELOPER

Trustees of Indiana University  
2901 E. Discovery Parkway  
Bloomington, Indiana 47408  
812-855-7030  
Contact: Mia Williams

ENGINEER

V3 Companies, Ltd.  
619 North Pennsylvania Street  
Indianapolis, Indiana 46204  
317-423-0690  
Project Manager: Jim Rinehart, P.E.  
jrinehart@v3co.com  
Project Engineer: Matt Vogel  
mvogel@v3co.com



Know what's below.  
Call before you dig.

PROFESSIONAL ENGINEER'S CERTIFICATION

I, JIM RINEHART, A LICENSED PROFESSIONAL ENGINEER OF INDIANA, HEREBY CERTIFY THAT THE CIVIL ENGINEERING PLANS WERE PREPARED ON BEHALF OF INDIANA UNIVERSITY BY V3 COMPANIES, LTD. UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

DATED THIS 25th DAY OF MARCVH, 2025.

*Jim Rinehart*  
INDIANA LICENSED PROFESSIONAL ENGINEER  
MY LICENSE EXPIRES ON JULY 31, 2026



TITLE SHEET

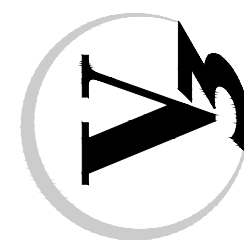
CAMPUS RIVER PHASE 3

BLOOMINGTON

PHASE 3

INDIANA

7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
www.v3co.com



DRAWING NO.

C0.0

ORIGINAL ISSUE DATE: 3/25/2025

REVISIONS

NO. DATE DESCRIPTION

1 2/24/25 REVISIONS PER PRE BID WALK THROUGH

PROJECT NO. 220907P3

PROJECT MANAGER JR

DESIGNED BY MV

DRAWN BY: MV & EP



GENERAL NOTES

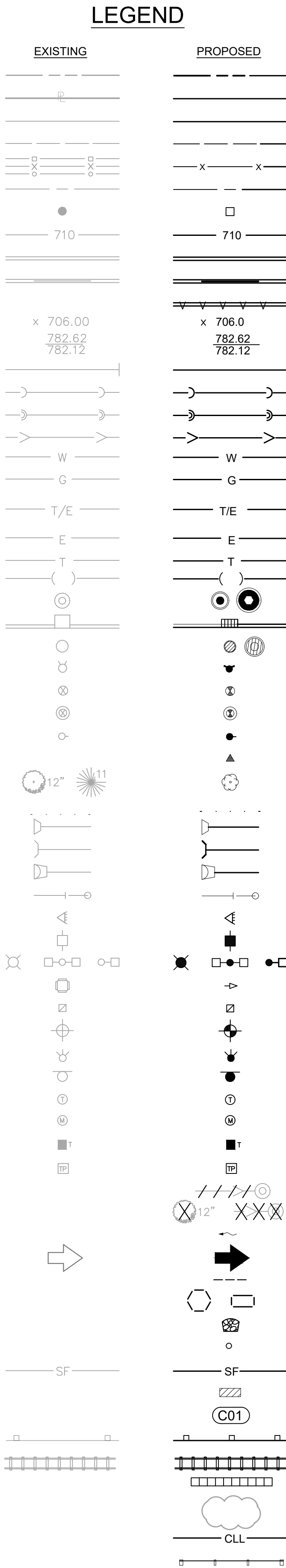
1. EXISTING SITE TOPOGRAPHY, UTILITIES, RIGHT-OF-WAY AND HORIZONTAL CONTROL SHOWN ON THE DRAWINGS WERE OBTAINED FROM A SURVEY PREPARED BY:

BLEDSOE RIGGERT COOPER JAMES  
1351 WEST TAPP ROAD  
BLOOMINGTON, INDIANA 47403  
PH: (812) 336-8277

- COPIES OF THE SURVEY ARE AVAILABLE FROM THE SURVEYOR. SITE CONDITIONS MAY HAVE CHANGED SINCE THE SURVEY WAS PREPARED. CONTRACTORS TO VISIT SITE TO FAMILIARIZE THEMSELVES WITH THE CURRENT CONDITIONS.
2. ALL EXISTING TOPOGRAPHY, UNDERGROUND UTILITIES, STRUCTURES AND ASSOCIATED FACILITIES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEREFORE, THEIR LOCATIONS AND ELEVATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES, THE EXISTENCE OF WHICH ARE NOT PRESENTLY KNOWN.
3. CONTRACTOR IS TO VERIFY ALL EXISTING STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL AND STARTING WORK.
4. ALL APPLICABLE PROVISIONS OF THE CURRENT OCCUPATIONAL SAFETY AND HEALTH ACT ARE HEREIN INCORPORATED BY REFERENCE.
5. THE CONTRACTOR SHALL SUBSCRIBE TO ALL GOVERNING REGULATIONS AND SHALL OBTAIN ALL NECESSARY PUBLIC AGENCY PERMITS PRIOR TO STARTING WORK. THE CONTRACTOR, BY USING THESE PLANS FOR THEIR WORK, AGREE TO HOLD HARMLESS V3 COMPANIES LTD., THE MUNICIPALITY, THEIR EMPLOYEES AND AGENTS AND THE OWNER WHILE ACTING WITHIN THE SCOPE OF THEIR DUTIES FROM AND AGAINST ANY AND ALL LIABILITY, CLAIMS, DAMAGES, AND THE COST OF DEFENSE ARISING OUT OF CONTRACTOR(S) PERFORMANCE OF THE WORK DESCRIBED HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE OWNER, THEIR AGENTS, THE ENGINEER, THEIR EMPLOYEES AND AGENTS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE OWNER OF THE ROADWAY.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION. BARRICADES AND WARNING SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH THE INDOT STANDARD SPECIFICATIONS. ALL TRAFFIC CONTROL WORK SHALL BE DONE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
8. EXCEPT WHERE MODIFIED BY THE CONTRACT DOCUMENTS, ALL WORK PROPOSED HEREON SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS WHICH ARE HEREBY MADE A PART HEREOF:
- a. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AS PREPARED BY INDOT, LATEST EDITION.
- b. "RECOMMENDED STANDARDS FOR WATER WORKS" LATEST EDITION.
- c. "RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES" LATEST EDITION..
- d. THE LATEST EDITIONS OF THE MUNICIPAL CODE AND STANDARDS OF THE CITY OF BLOOMINGTON.
- e. THE NATIONAL ELECTRIC CODE.
- f. THE INDIANA ACCESSIBILITY CODE.
- IN THE EVENT OF CONFLICTING SPECIFICATIONS WITH REGARD TO SITE WORK ISSUES DESIGNED BY THE ENGINEER, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
9. THE CONTRACTOR SHALL NOTIFY THE AUTHORITY HAVING JURISDICTION AT LEAST 48 HOURS PRIOR TO COMMENCING ANY WORK AND FOR ANY NEW CONSTRUCTION REQUIRING INSPECTION.
10. ALL TREES TO BE SAVED SHALL BE IDENTIFIED PRIOR TO CONSTRUCTION AND SHALL BE PROTECTED PER 622-LSPR-05 STANDARDS. THE RIGHT-OF-WAY LINE AND LIMITS OF THE CONTRACTOR'S OPERATIONS SHALL BE CLEARLY DEFINED THROUGHOUT THE CONSTRUCTION PERIOD. ALL TREES IDENTIFIED TO REMAIN SHALL BE PROTECTED FROM DAMAGE INCLUDING TRUNKS, BRANCHES AND ROOTS. NO EXCAVATING, FILLING OR GRADING IS TO BE DONE INSIDE THE DRIP LINE OF TREES UNLESS OTHERWISE INDICATED.
11. CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT ACCUMULATION OF MUD OR SOIL ON PUBLIC THOROUGHFARES. AT THE END OF EACH DAY AND AS OFTEN AS OTHERWISE NECESSARY THE CONTRACTOR SHALL CLEAN UP ALL MUD OR SOIL WHICH HAS BEEN TRACKED ONTO PUBLIC STREETS AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION AND AS DETAILED IN THE STORM WATER POLLUTION PREVENTION PLAN, SHEET C4.3.
12. THE CONTRACTOR SHALL PROVIDE FOR THE SAFE AND ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS WHERE HIS/HER OPERATIONS ABUT PUBLIC THOROUGHFARES AND ADJACENT PROPERTY IN ACCORDANCE WITH THE CITY OF BLOOMINGTON MUNICIPAL CODE AND INDOT REQUIREMENTS.

13. NO HOLES ARE TO BE LEFT OPEN IN THE PAVEMENT OR TRAILS OVER A HOLIDAY, WEEKEND OR AFTER 3:00 P.M. ON THE DAY PRECEDING A HOLIDAY OR A WEEKEND.
14. ALL EXISTING PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAWCUT ALONG LIMITS OF PROPOSED REMOVAL BEFORE COMMENCEMENT OF PAVEMENT REMOVAL.
15. REMOVED PAVEMENT, SIDEWALK, CURB AND GUTTER, ETC. SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR AS PART OF THE BASE CONTRACT.
16. NO BURNING OR INCINERATION OF RUBBISH WILL BE PERMITTED ON SITE.
17. FOR REGULATED UTILITY LOCATIONS, THE CONTRACTOR SHALL CONTACT INDIANA811 AT 811 OR 800-382-5544. LOCAL GOVERNMENT AGENCIES SHOULD BE CONTACTED BY THE CONTRACTOR FOR LOCATION OF ALL NONREGULATED UTILITY LOCATIONS. CALL FOR LOCATES AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION.
18. BEFORE EXCAVATING OVER OR ADJACENT TO ANY EXISTING UTILITIES, CONTRACTOR SHALL NOTIFY THE OWNER OF SUCH UTILITIES TO ENSURE THAT PROTECTIVE WORK WILL BE COORDINATED AND PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER OF THE UTILITY INVOLVED. IF ANY EXISTING SERVICE LINES, UTILITIES AND UTILITY STRUCTURES WHICH ARE TO REMAIN IN SERVICE ARE UNCOVERED OR ENCOUNTERED DURING THIS OPERATION, THEY SHALL BE SAFEGUARDED, PROTECTED FROM DAMAGE AND SUPPORTED IF NECESSARY.
19. THE CONTRACTOR IS RESPONSIBLE FOR HAVING A SET OF "APPROVED" ENGINEERING PLANS WITH THE LATEST REVISION DATE ON THE JOB SITE PRIOR TO THE START OF CONSTRUCTION.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROL.
21. ANY AREAS THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED IN CONFORMANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AND SHALL BE INCIDENTAL TO THE CONTRACT.
22. STREET PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE AND IF DAMAGED, SHALL BE REPLACED PROMPTLY IN CONFORMANCE WITH THE MUNICIPALITY OR INDOT STANDARD SPECIFICATIONS IN MATERIALS AND WORKMANSHIP.
23. PROPOSED ELEVATIONS INDICATE FINISHED CONDITIONS. FOR ROUGH GRADING ELEVATIONS ALLOW FOR THICKNESS OF PROPOSED PAVING (ROADS, WALKS, ETC.) OR TOPSOIL AS INDICATED ON DRAWINGS.
24. CAD FILES ARE AVAILABLE FOR CONSTRUCTION LAYOUT UPON REQUEST.
25. BACKFILL SHALL BE PLACED NEXT TO THE CURB AS SOON AS PERMISSIBLE AFTER CONSTRUCTION TO PREVENT SCOURING AND UNDERCUTTING BY STORM WATER RUNOFF.
26. WHEN AN EXISTING DRAINAGE ROUTE, EITHER A STORM SEWER OR WATERWAY, IS INTERRUPTED DUE TO CONSTRUCTION, THE DRAINAGE ROUTE SHALL BE REESTABLISHED TO ORIGINAL CONDITIONS BY THE END OF THE SAME WORK DAY. POSITIVE DRAINAGE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
27. FINAL ADJUSTMENT OF MANHOLES TO FINISHED GRADE ARE INCIDENTAL TO THEIR COST.
28. ANY EXISTING UTILITY STRUCTURES REQUIRING ADJUSTMENT ARE TO BE ADJUSTED OR RECONSTRUCTED BY THE CONTRACTOR TO THE UTILITY OWNER'S SATISFACTION. ADJUSTMENTS OR RECONSTRUCTIONS NOT CALLED FOR ON THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
29. ALL UTILITY CONNECTIONS TO EXISTING LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATIONS AND TO THE SATISFACTION OF THE UTILITY OWNER.
30. PROVIDE TRENCH BACKFILL IN ACCORDANCE WITH THE CITY OF BLOOMINGTON SPECIFICATIONS. BACKFILL SHALL BE PLACED AND COMPACTED PER THE MUNICIPALITY AND INDOT SPECIFICATIONS. COST OF BACKFILL IS TO BE CONSIDERED INCIDENTAL TO THE UTILITY WORK.
31. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
32. PRIOR TO DEMOBILIZATION, ALL WORK SHALL BE CLEANED AND INSPECTED TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION. THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
33. THE GENERAL CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO PROVIDE CABLE TV, PHONE, ELECTRIC, GAS AND IRRIGATION SERVICES. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING SITE LAYOUTS FOR THESE UTILITIES AND SHALL COORDINATE AND PROVIDE CONDUIT CROSSINGS AS REQUIRED. THIS COORDINATION SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. ANY CONFLICTS IN UTILITIES SHALL BE CORRECTED BY THE GENERAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
34. BAND-SEAL CONNECTORS OR EQUIVALENT SHALL BE USED TO JOIN PIPES OF DISSIMILAR MATERIAL.
35. CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ALL CONSTRUCTION IN CONFORMANCE WITH ALL MUNICIPAL AND CLIENT REQUIREMENTS FOR USE IN PREPARING RECORD DRAWINGS.
36. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING ANY EXCAVATION. ANY DEWATERING REQUIRED SHALL BE INCIDENTAL TO THE CONTRACT.

37. ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE EXTENDED TO OUTLET INTO THE EXISTING DRAINAGE WAY AS DETERMINED BY THE ENGINEER. IF THIS CANNOT BE ACCOMPLISHED, THEN IT SHALL BE REPAIRED WITH NEW PIPE OF SIMILAR SIZE AND MATERIAL TO THE ORIGINAL LINE AND PUT IN ACCEPTABLE OPERATIONAL CONDITION. A RECORD OF THE LOCATION OF ALL FIELD TILE FOR ON-SITE DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE SUBCONTRACTOR AND SUBMITTED TO THE ENGINEER UPON COMPLETION OF THE PROJECT. ALL FIELD TILE REPAIRS SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.
38. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS/HER WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
39. DAMAGE TO THE EXISTING RIGHT-OF-WAY SHALL BE RESTORED/REPAIRED TO THE SATISFACTION OF THE TOWN AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR IS ENCOURAGED TO INSPECT THE RIGHT-OF-WAY WITH THE CITY PRIOR TO THE START OF CONSTRUCTION TO DOCUMENT THE EXISTING CONDITION OF THE RIGHT-OF-WAY.



DESCRIPTION

RIGHT-OF-WAY LINE

PROPERTY LINE (EXTERIOR)

LOT LINE (INTERIOR)

EASEMENT LINE

FENCE LINE

CENTERLINE

PROPERTY CORNER

CONTOUR

CURB & GUTTER

DEPRESSED CURB & GUTTER

REVERSE PITCHED CURB

SPOT ELEVATION

TOP OF CURB ELEVATION

EDGE OF PAVEMENT ELEVATION

UTILITY STUB

SANITARY SEWER

SANITARY FORCE MAIN

STORM SEWER

WATER MAIN

GAS MAIN

UNDERGROUND TELEPHONE & ELECTRIC DUCT BANK

BURIED CABLE-ELECTRIC

BURIED CABLE-TELEPHONE

ATLAS LOCATED UTILITY

UTILITY STRUCTURE WITH CLOSED LID

CURB INLET

DRAINAGE STRUCTURE WITH OPEN LID

FIRE HYDRANT

VALVE IN VALVE BOX

GATE VALVE IN VALVE VAULT

POST INDICATOR VALVE

THRUST BLOCK

TREE

TREE LINE

CONCRETE HEADWALL

SUBMERGED HEADWALL

FLARED END SECTION (F.E.S.)

GUY WIRES

FLOOD LIGHT

UTILITY POLE

LIGHT STANDARD

TRAFFIC SIGNAL POLE

HAND HOLE

SOIL BORING

IRRIGATION HEADS

SIGN

TELEPHONE MANHOLE

MONITORING WELL

TELEPHONE PEDESTAL

TRANSFORMER PAD

UTILITY TO BE ABANDONED

FEATURE TO BE REMOVED

STORMWATER FLOW DIRECTION

STORMWATER OVERFLOW ROUTE

DITCH CHECK

INLET FILTER BASKET

RIP RAP

BOLLARD

SILT FENCE

WATER MAIN PROTECTION

UTILITY CROSSING LABEL

GUARDRAIL

RAILROAD TRACKS

RETAINING WALL

REVISION DELINEATION

CONSTRUCTION LIMIT LINE

TREE PROTECTION FENCE

ABBREVIATIONS

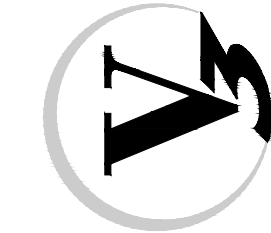
A	ARC LENGTH
B-B	BACK TO BACK OF CURB
B/C	BACK OF CURB
BLDG	BUILDING
BM	BENCHMARK
B/P	BOTTOM OF PIPE
BV/VV	BUTTERFLY VALVE IN VALVE VAULT
C & G	CURB AND GUTTER
CB	CATCH BASIN
CL	CENTERLINE
CL	CLOSED LID
CO	CLEAN OUT
DIP	DUCTILE IRON PIPE
DIA	DIAMETER
DIWM	DUCTILE IRON WATER MAIN
DWG	DRAWING
E	EAST OR ELECTRIC OR EDGE
EJ	EXPANSION JOINT
ELEV	ELEVATION
E/P	EDGE OF PAVEMENT
EX	EXISTING
F & CL	FRAME & CLOSED LID
F & G	FRAME & GRATE
F & OL	FRAME & OPEN LID
FES	FLARED END SECTION
F-F	FACE TO FACE OF CURB
FF	FINISHED FLOOR
F/G	FINISHED GRADE
FG	FIRE HYDRANT
FL	FLOW LINE
G	GAS LINE
GV/VB	GATE VALVE IN VALVE BOX
GV/VV	GATE VALVE IN VALVE VAULT
HDGP	HANDICAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HDW	HEADWALL
HOR	HORIZONTAL
HP	HIGH POINT
HWL	HIGH WATER LEVEL
IE	INVERT ELEVATION
IN	INLET
LF	LINEAL FEET
LP	LOW POINT OR LIGHT POLE
L	LEFT
ME	MATCH EXISTING
MH	MANHOLE
MW	MONITORING WELL
N	NORTH
NIC	NOT IN CONTRACT / NOT INCLUDED
NWL	NORMAL WATER LEVEL
OC	ON CENTER
OL	OPEN LID
PC	POINT OF CURVATURE
PCC	PORTLAND CEMENT CONCRETE
	OR POINT OF COMPOUND CURVE
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PP	POWER POLE
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PUE	PUBLIC UTILITY EASEMENT
PVC	POINT OF VERTICAL CURVATURE
	OR POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS OR RIGHT
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
S	SLOPE OR SOUTH
SAN	SANITARY
SF	SILTATION FENCE
SFM	SANITARY FORCE MAIN
SHT	SHEET
SHW	SUBMERGED HEADWALL
SMH	SANITARY MANHOLE
STA	STATION
ST	STORM STRUCTURE OR STORM SEWER
STMH	STORM MANHOLE
T	TANGENT LENGTH OR TELEPHONE
T/C	TOP OF CURB
T/P	TOP OF PIPE
T/W	TOP OF WALL
TY	TYPE
TYP	TYPICAL
UP	UTILITY POLE
VC	VERTICAL CURVE
VERT	VERTICAL
VCP	VITRIFIED CLAY PIPE
W	WEST
WM	WATER MAIN

GENERAL NOTES, LEGEND AND ABBREVIATIONS

CAMPUS RIVER PHASE 3

INDIANA  
BLOOMINGTON  
PHASE 3

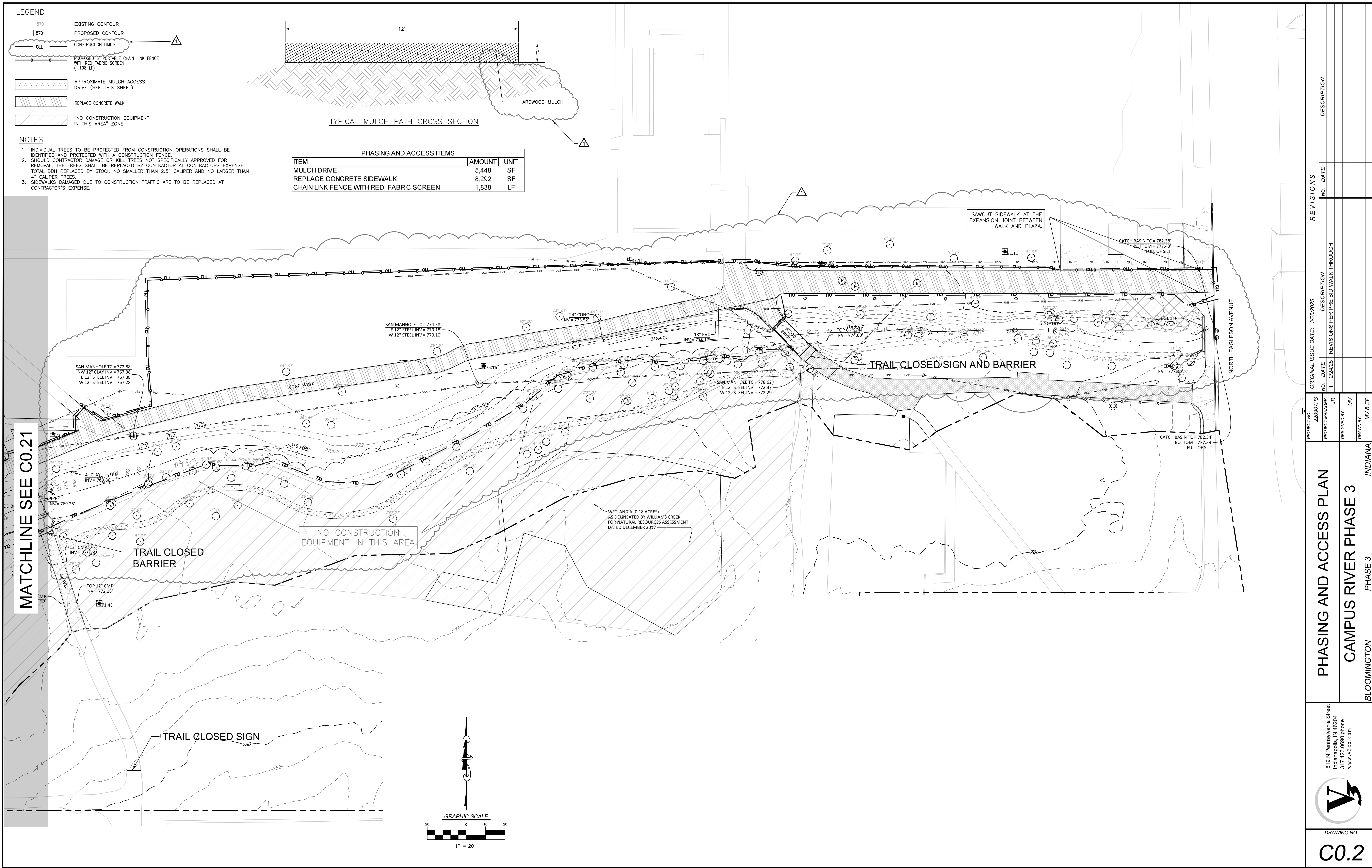
619 N Pennsylvania Street  
Indianapolis, IN 46204  
317.423.0660 phone  
www.v3co.com



DRAWING NO.

C0.1



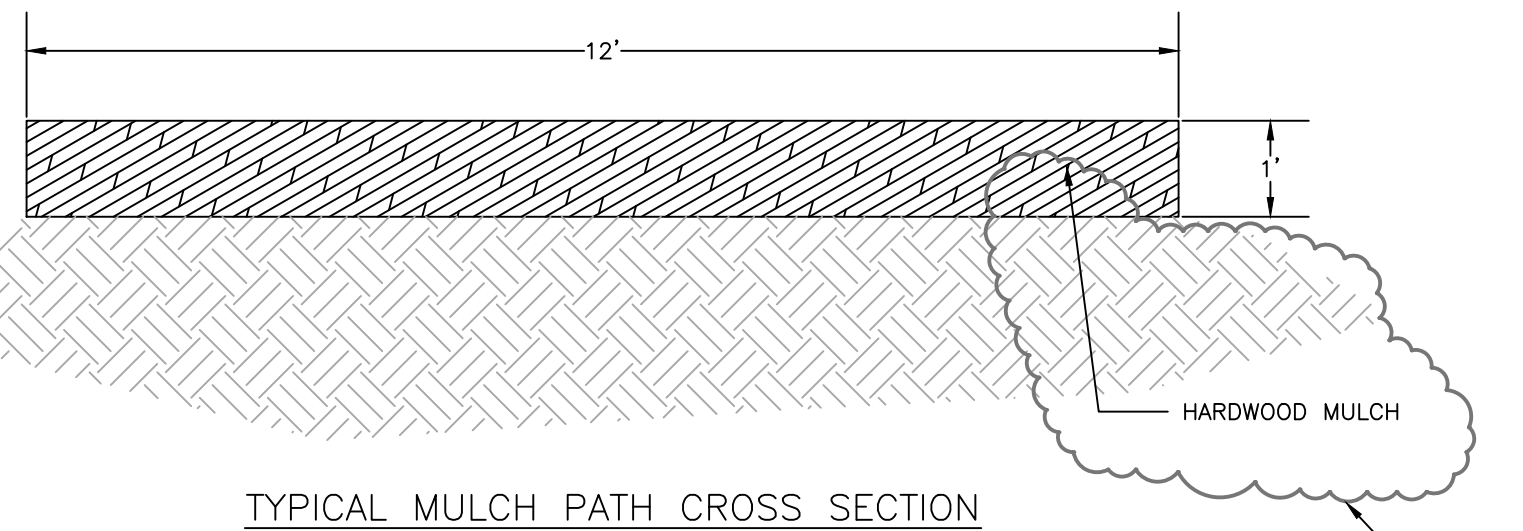


**LEGEND**

- 870 --- EXISTING CONTOUR
- [870] PROPOSED CONTOUR
- CL CONSTRUCTION LIMITS
- PROPOSED 6' PORTABLE CHAIN LINK FENCE WITH RED FABRIC SCREEN (1,198 LF)
- APPROXIMATE MULCH ACCESS DRIVE (SEE THIS SHEET)
- REPLACE CONCRETE WALK
- "NO CONSTRUCTION EQUIPMENT IN THIS AREA" ZONE

- NOTES**
- INDIVIDUAL TREES TO BE PROTECTED FROM CONSTRUCTION OPERATIONS SHALL BE IDENTIFIED AND PROTECTED WITH A CONSTRUCTION FENCE.
  - SHOULD CONTRACTOR DAMAGE OR KILL TREES NOT SPECIFICALLY APPROVED FOR REMOVAL, THE TREES SHALL BE REPLACED BY CONTRACTOR AT CONTRACTORS EXPENSE. TOTAL DBH REPLACED BY STOCK NO SMALLER THAN 2.5" CALIPER AND NO LARGER THAN 4" CALIPER TREES.
  - SIDEWALKS DAMAGED DUE TO CONSTRUCTION TRAFFIC ARE TO BE REPLACED AT CONTRACTOR'S EXPENSE.

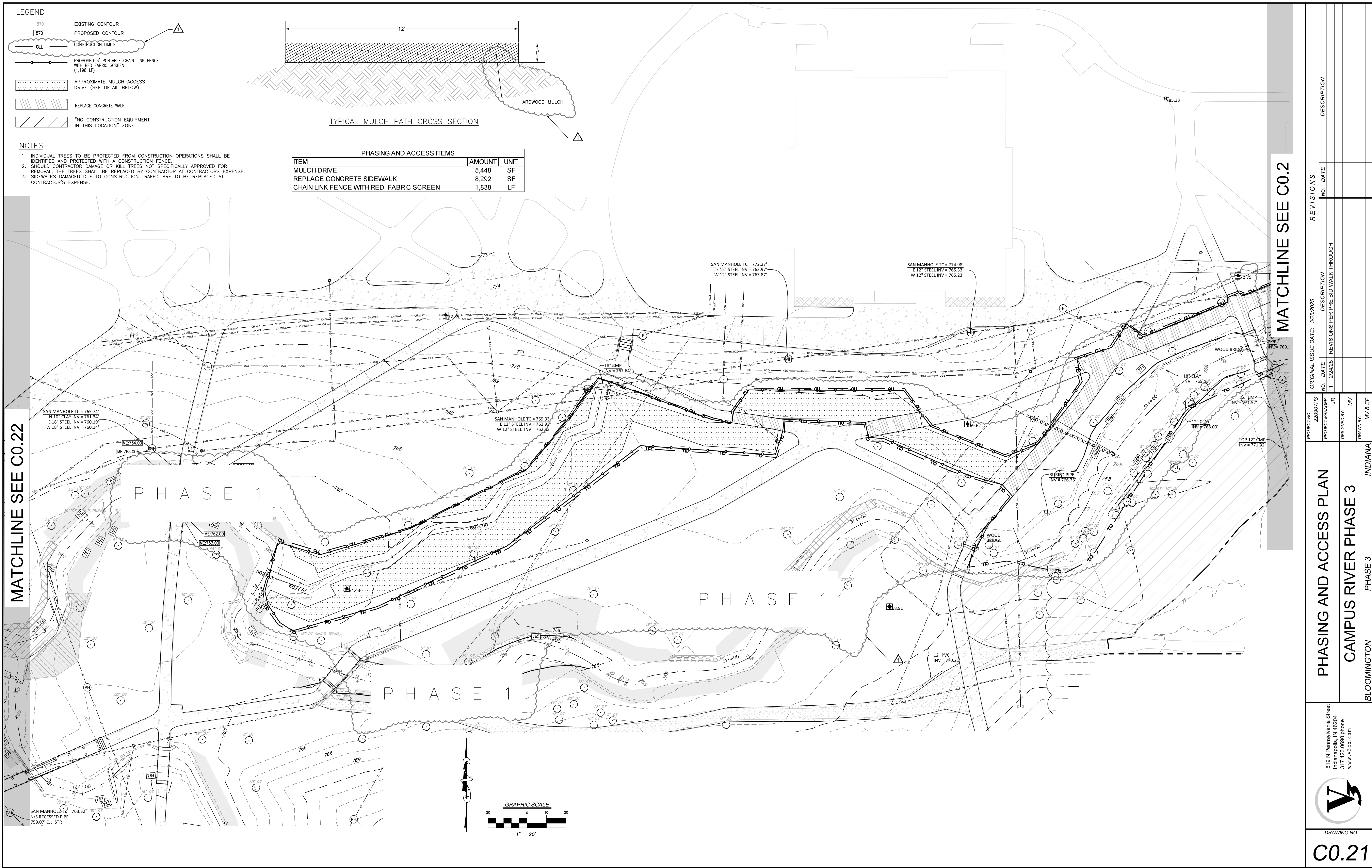
PHASING AND ACCESS ITEMS		
ITEM	AMOUNT	UNIT
MULCH DRIVE	5,448	SF
REPLACE CONCRETE SIDEWALK	8,292	SF
CHAIN LINK FENCE WITH RED FABRIC SCREEN	1,838	LF



MATCHLINE SEE C0.21

<b>PHASING AND ACCESS PLAN</b>	<b>REVISIONS</b>			
	NO.	DATE		
	1	2/24/25		
<b>CAMPUS RIVER PHASE 3</b>	<b>DESCRIPTION</b>			
	REVISED PER PRE BID WALK THROUGH			
	REVISED PER PRE BID WALK THROUGH			
<b>BLOOMINGTON INDIANA</b>	<b>PROJECT NO.</b>			
	220907P3			
	PROJECT MANAGER: JR			
<b>PHASE 3</b>	<b>DESIGNED BY:</b>			
	MV			
	<b>DRAWN BY:</b>			
	MV & EP			
<b>ORIGINAL ISSUE DATE: 3/25/2025</b>				
<b>619 N Pennsylvania Street Indianapolis, IN 46204 317.423.0680 phone www.v3co.com</b>				
<b>DRAWING NO. C0.2</b>				



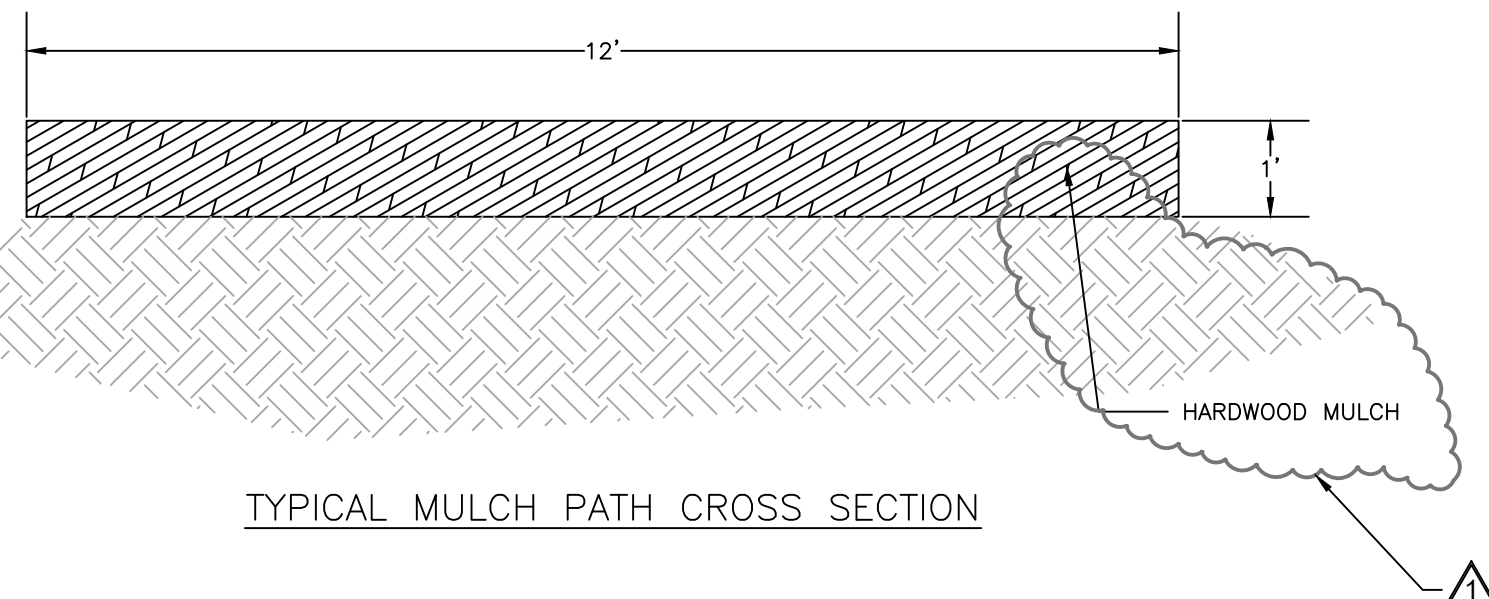


**LEGEND**

- 870 --- EXISTING CONTOUR
- [870] PROPOSED CONTOUR
- CLL --- CONSTRUCTION LIMITS
- PROPOSED 6' PORTABLE CHAIN LINK FENCE WITH RED FABRIC SCREEN (1,198 LF) ---
- [Hatched Box] APPROXIMATE MULCH ACCESS DRIVE (SEE DETAIL BELOW)
- [Hatched Box] REPLACE CONCRETE WALK
- [Hatched Box] "NO CONSTRUCTION EQUIPMENT IN THIS LOCATION" ZONE

- NOTES**
1. INDIVIDUAL TREES TO BE PROTECTED FROM CONSTRUCTION OPERATIONS SHALL BE IDENTIFIED AND PROTECTED WITH A CONSTRUCTION FENCE.
  2. SHOULD CONTRACTOR DAMAGE OR KILL TREES NOT SPECIFICALLY APPROVED FOR REMOVAL, THE TREES SHALL BE REPLACED BY CONTRACTOR AT CONTRACTORS EXPENSE.
  3. SIDEWALKS DAMAGED DUE TO CONSTRUCTION TRAFFIC ARE TO BE REPLACED AT CONTRACTOR'S EXPENSE.

PHASING AND ACCESS ITEMS		
ITEM	AMOUNT	UNIT
MULCH DRIVE	5,448	SF
REPLACE CONCRETE SIDEWALK	8,292	SF
CHAIN LINK FENCE WITH RED FABRIC SCREEN	1,838	LF



MATCHLINE SEE C0.22

MATCHLINE SEE C0.2

<b>PHASING AND ACCESS PLAN</b>	<b>REVISIONS</b>			
	NO.	DATE		
	1	2/24/25		
<b>CAMPUS RIVER PHASE 3</b>	<b>DESCRIPTION</b>			
	REVISED PER PRE BID WALK THROUGH			
<b>BLOOMINGTON INDIANA</b>	<b>PROJECT NO.</b>			
	220907P3			
	<b>PROJECT MANAGER</b>			
<b>PHASE 3</b>	JR			
	<b>DESIGNED BY</b>			
	MV			
<b>INDIANA</b>	<b>DRAWN BY</b>			
	MV & EP			
<b>ORIGINAL ISSUE DATE: 3/25/2025</b>				
<b>619 N Pennsylvania Street Indianapolis, IN 46204 317.423.0680 phone www.v3co.com</b>				
<b>DRAWING NO. C0.21</b>				



LEGEND

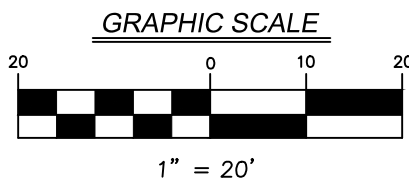
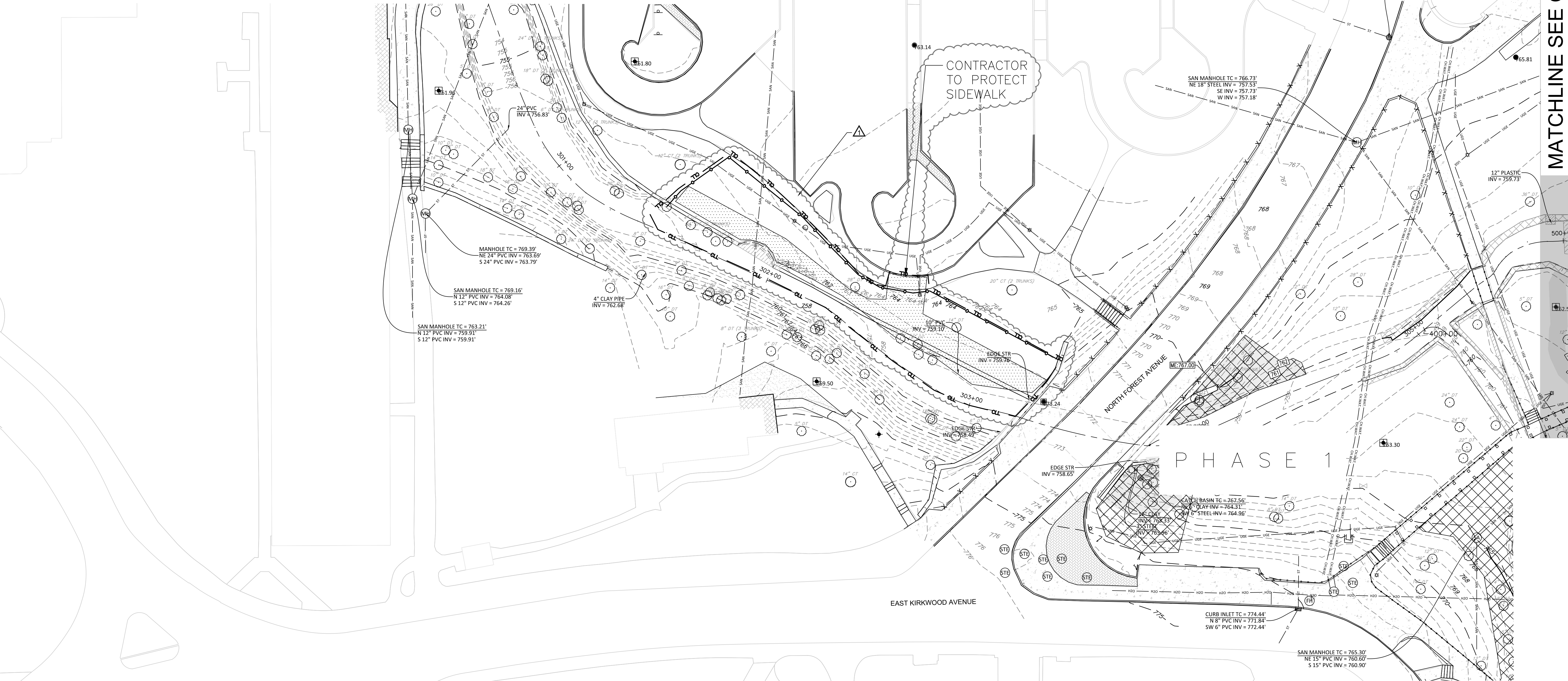
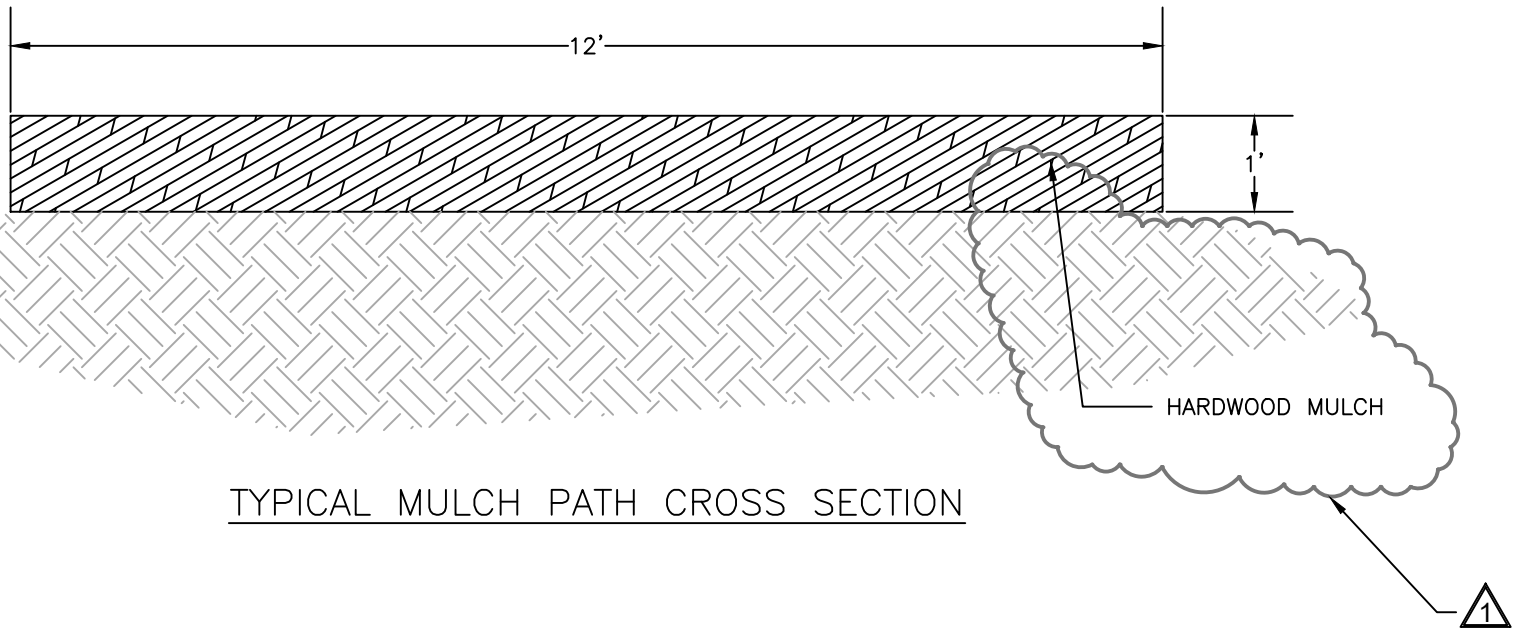
- 870 --- EXISTING CONTOUR  
[870] PROPOSED CONTOUR  
--- CL --- CONSTRUCTION LIMITS  
--- PROPOSED 6' PORTABLE CHAIN LINK FENCE WITH RED FABRIC SCREEN (1,198 LF)  
[ ] APPROXIMATE MULCH ACCESS DRIVE (SEE DETAIL BELOW)  
[ ] REPLACE CONCRETE WALK  
[ ] "NO CONSTRUCTION EQUIPMENT IN THIS LOCATION" ZONE

NOTES

1. INDIVIDUAL TREES TO BE PROTECTED FROM CONSTRUCTION OPERATIONS SHALL BE IDENTIFIED AND PROTECTED WITH A CONSTRUCTION FENCE.
2. SHOULD CONTRACTOR DAMAGE OR KILL TREES NOT SPECIFICALLY APPROVED FOR REMOVAL, THE TREES SHALL BE REPLACED BY CONTRACTOR AT CONTRACTORS EXPENSE.
3. SIDEWALKS DAMAGED DUE TO CONSTRUCTION TRAFFIC ARE TO BE REPLACED AT CONTRACTOR'S EXPENSE.

PHASING AND ACCESS ITEMS		
ITEM	AMOUNT	UNIT
MULCH DRIVE	5,448	SF
REPLACE CONCRETE SIDEWALK	8,292	SF
CHAIN LINK FENCE WITH RED FABRIC SCREEN	1,838	LF

TYPICAL MULCH PATH CROSS SECTION



MATCHLINE SEE C0.21

PHASING AND ACCESS PLAN

CAMPUS RIVER PHASE 3

BLOOMINGTON PHASE 3 INDIANA

619 N Pennsylvania Street  
Indianapolis, IN 46204  
317.423.0680 phone  
www.v3co.com



DRAWING NO.

C0.22

REVISIONS

NO.	DATE	DESCRIPTION
1	2/24/25	REVISIONS PER PRE BID WALK THROUGH

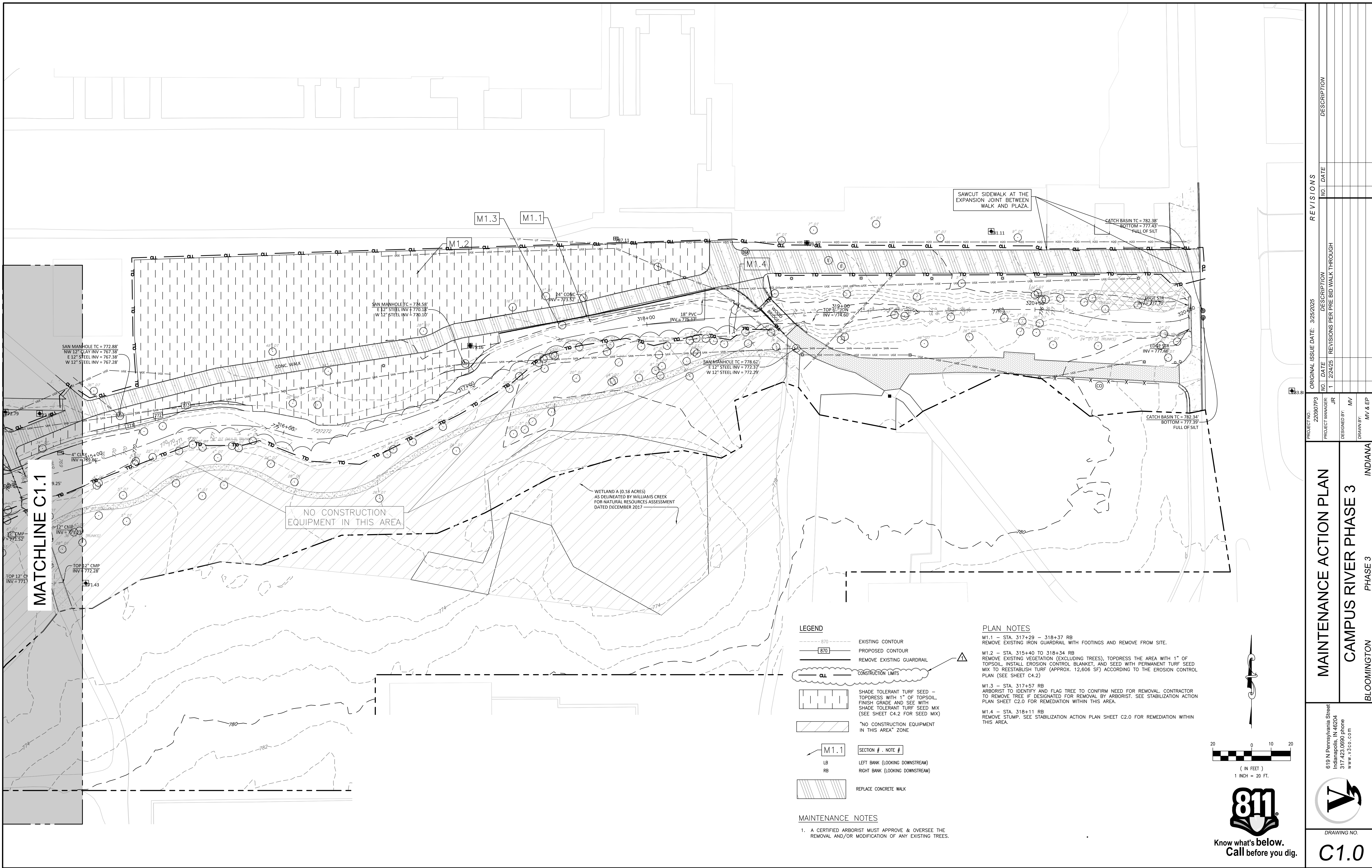
PROJECT NO.  
220907P3

PROJECT MANAGER  
JR

DESIGNED BY  
MV

DRAWN BY  
MV & EP

ORIGINAL ISSUE DATE: 3/25/2025



MAINTENANCE ACTION PLAN

CAMPUS RIVER PHASE 3

BLOOMINGTON PHASE 3

INDIANA

619 N Pennsylvania Street  
Indianapolis, IN 46204  
317.423.0680 phone  
www.v3co.com

DRAWING NO.

C1.0

ORIGINAL ISSUE DATE: 3/25/2025

PROJECT NO. 220907P3

PROJECT MANAGER JR

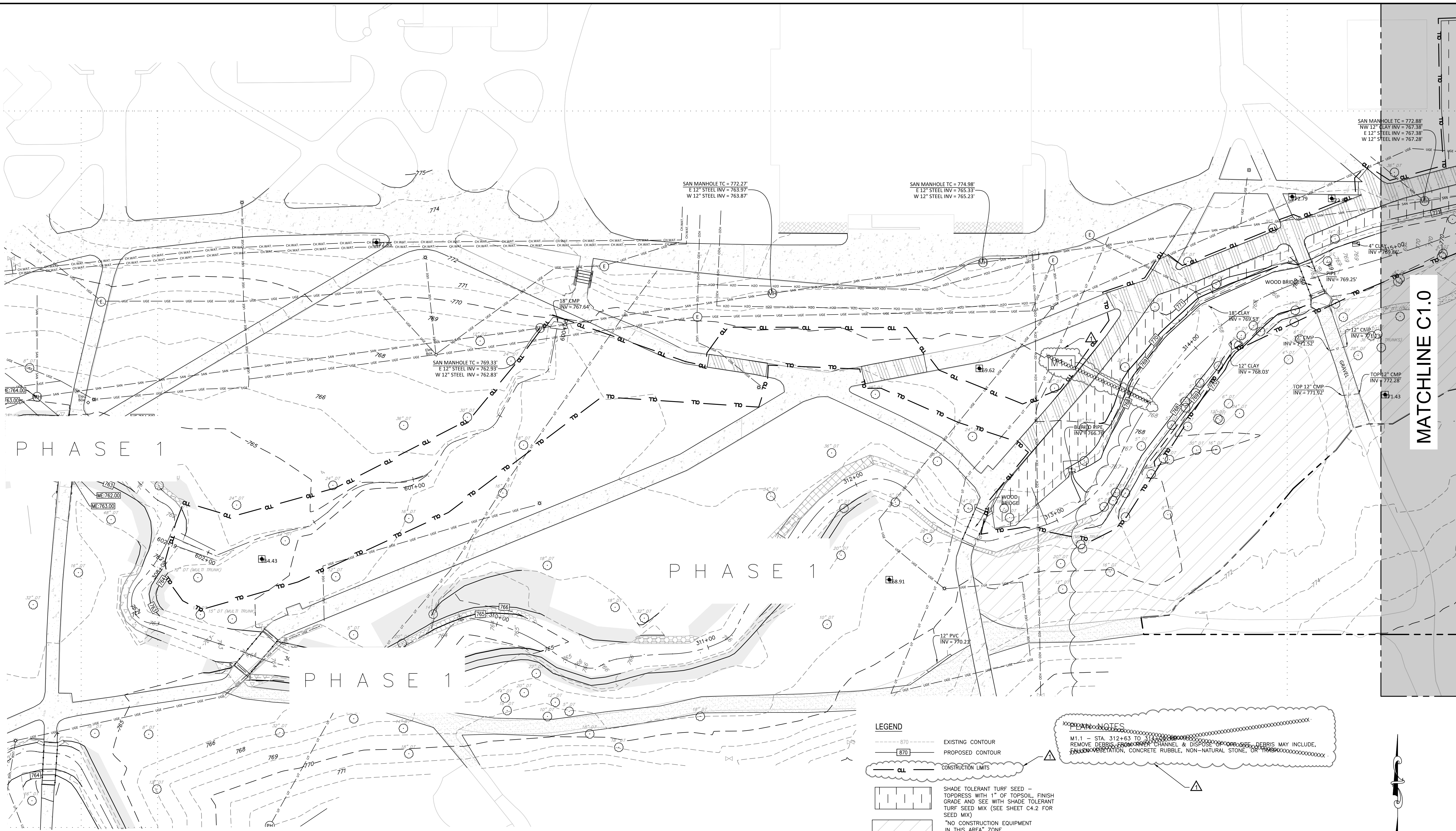
DESIGNED BY MV

DRAWN BY MV & EP

REVISIONS

NO.	DATE	DESCRIPTION
1	2/24/25	REVISIONS PER PRE BID WALK THROUGH





MATCHLINE C1.0

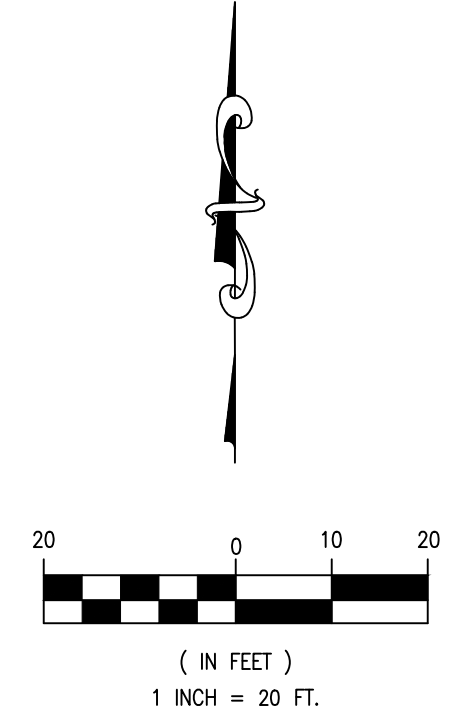
LEGEND

- 870 --- EXISTING CONTOUR
- 870 --- PROPOSED CONTOUR
- CL --- CONSTRUCTION LIMITS
- SHADE TOLERANT TURF SEED - TOPDRESS WITH 1" OF TOPSOIL, FINISH GRADE AND SEE WITH SHADE TOLERANT TURF SEED MIX (SEE SHEET C4.2 FOR SEED MIX)
- "NO CONSTRUCTION EQUIPMENT IN THIS AREA" ZONE
- M1.1 SECTION # - NOTE #
- LB LEFT BANK (LOOKING DOWNSTREAM)
- RB RIGHT BANK (LOOKING DOWNSTREAM)
- REPLACE CONCRETE WALK

MAINTENANCE NOTES

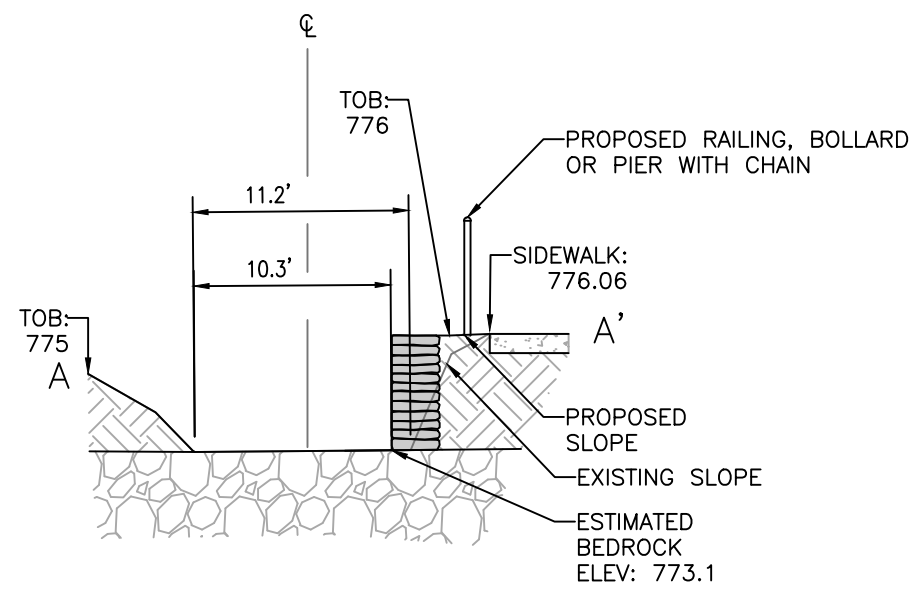
1. A CERTIFIED ARBORIST MUST APPROVE & OVERSEE THE REMOVAL AND/OR MODIFICATION OF ANY EXISTING TREES.

PLAN NOTES  
M1.1 - STA. 312+63 TO 312+63.5, REMOVE DEBRIS FROM EXISTING CHANNEL & DISPOSE OF DEBRIS. DEBRIS MAY INCLUDE, VEGETATION, CONCRETE RUBBLE, NON-NATURAL STONE, OR OTHER.

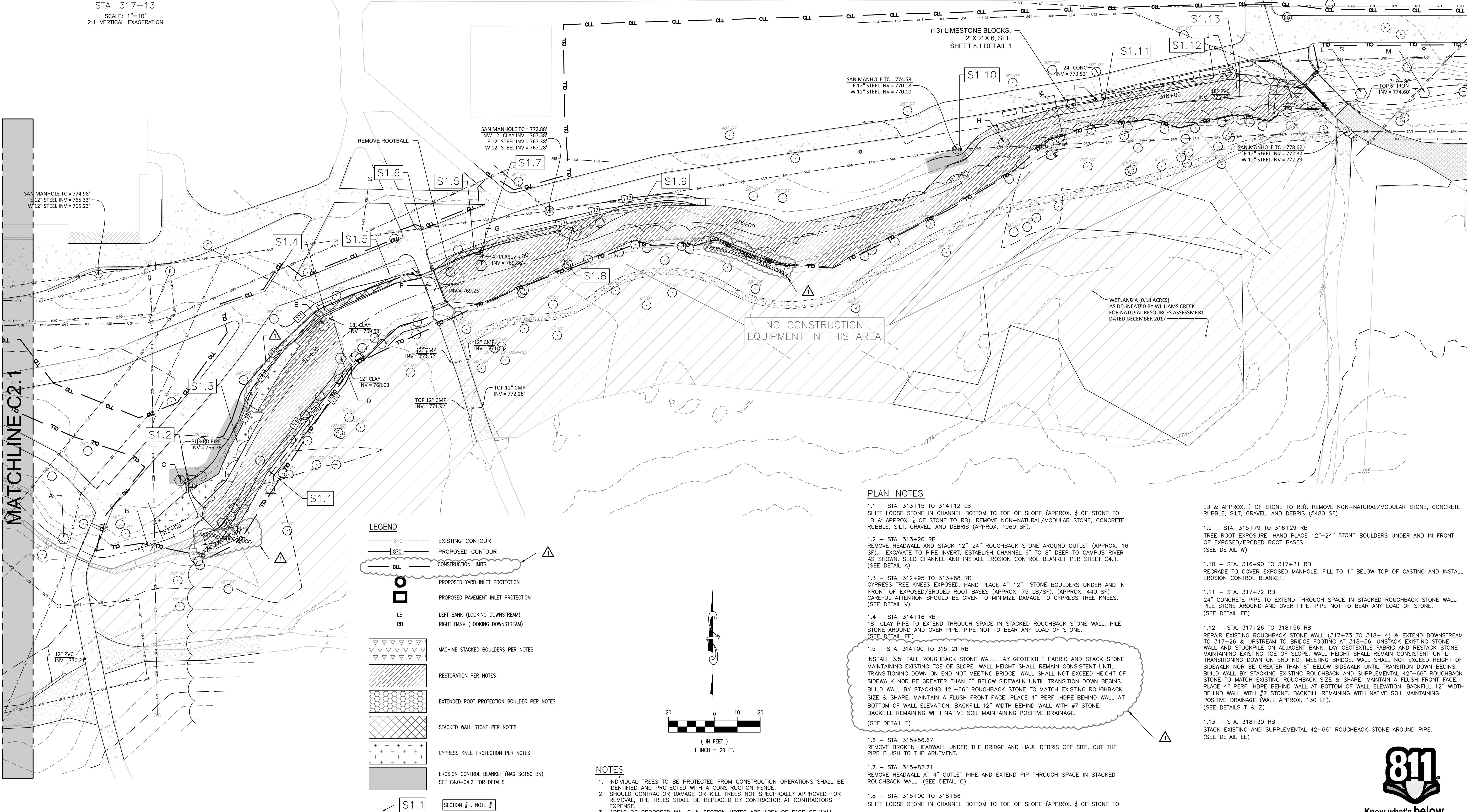


PROJECT NO. 220907P3		ORIGINAL ISSUE DATE: 3/25/2025		REVISIONS	
PROJECT MANAGER: JR		DESIGNER: MV		NO. DATE DESCRIPTION	
DESIGNED BY: MV		DRAWN BY: MV & EP			
INDIANA		BLOOMINGTON		PHASE 3	
MAINTENANCE ACTION PLAN		CAMPUS RIVER PHASE 3			
619 N Pennsylvania Street Indianapolis, IN 46204 317.423.0680 phone www.v3co.com		DRAWING NO.		C1.1	





EXPOSED / PIPE OUTLET TABLE					
LABEL	PIPE	MATERIAL	INVERT / BANK	STATION	TREATMENT
A	UTILITY		CROSSING	312+51	NO CHANGE
B	WATER		CROSSING	312+91	NO CHANGE
C	UNKNOWN			313+20	SEE DETAIL A
D	12" STORM	CLAY	768.03 / LB	314+14	SEE DETAIL C
E	18" STORM	CLAY	769.53 / RB	314+16	SEE DETAIL K
F	UNKNOWN			314+61	NO CHANGE
G	4" STORM	CLAY	769.86 / RB	314+84	SEE DETAIL C
H	12" SANITARY	STEEL	CROSSING	317+27	NO CHANGE
I	24" STORM	RCP	773.52 / RB	317+72	SEE DETAIL T
J	18" STORM	PVC	775.17 / RB	318+30	SEE DETAIL EE
K	ELECTRIC	UNKNOWN	CROSSING	318+54	NO CHANGE
L	6" PIPE	IRON	774.60 / LB	318+86	NO CHANGE
M	ELECTRIC	UNKNOWN	CROSSING	319+09	NO CHANGE



PLAN NOTES

- 1.1 - STA. 313+15 TO 314+12 LB  
SHIFT LOOSE STONE IN CHANNEL BOTTOM TO TOE OF SLOPE (APPROX. 1/3 OF STONE TO LB & APPROX. 1/3 OF STONE TO RB). REMOVE NON-NATURAL/MODULAR STONE, CONCRETE RUBBLE, SILT, GRAVEL, AND DEBRIS (APPROX. 1960 SF).
- 1.2 - STA. 313+20 RB  
REMOVE HEADWALL AND STACK 12"-24" ROUGHBACK STONE AROUND OUTLET (APPROX. 16 SF). EXCAVATE TO PIPE INVERT, ESTABLISH CHANNEL 6" TO 8" DEEP TO CAMPUS RIVER AS SHOWN. SEED CHANNEL AND INSTALL EROSION CONTROL BLANKET PER SHEET C4.1. (SEE DETAIL A)
- 1.3 - STA. 312+95 TO 313+68 RB  
CYPRESS TREE KNEES EXPOSED. HAND PLACE 4"-12" STONE BOULDERS UNDER AND IN FRONT OF EXPOSED/ERODED ROOT BASES (APPROX. 75 LB/SF). (APPROX. 440 SF) CAREFUL ATTENTION SHOULD BE GIVEN TO MINIMIZE DAMAGE TO CYPRESS TREE KNEES. (SEE DETAIL V)
- 1.4 - STA. 314+16 RB  
18" CLAY PIPE TO EXTEND THROUGH SPACE IN STACKED ROUGHBACK STONE WALL. PILE STONE AROUND AND OVER PIPE. PIPE NOT TO BEAR ANY LOAD OF STONE. (SEE DETAIL EE)
- 1.5 - STA. 314+00 TO 315+21 RB  
INSTALL 3.5' TALL ROUGHBACK STONE WALL. LAY GEOTEXTILE FABRIC AND STACK STONE MAINTAINING EXISTING TOE OF SLOPE. WALL HEIGHT SHALL REMAIN CONSISTENT UNTIL TRANSITIONING DOWN ON END NOT MEETING BRIDGE. WALL SHALL NOT EXCEED HEIGHT OF SIDEWALK NOR BE GREATER THAN 6" BELOW SIDEWALK UNTIL TRANSITION DOWN BEGINS. BUILD WALL BY STACKING EXISTING ROUGHBACK AND SUPPLEMENTAL 42"-66" ROUGHBACK STONE TO MATCH EXISTING ROUGHBACK SIZE & SHAPE. MAINTAIN A FLUSH FRONT FACE. PLACE 4" PERF. HDPE BEHIND WALL AT BOTTOM OF WALL ELEVATION. BACKFILL 12" WIDTH BEHIND WALL WITH #7 STONE. BACKFILL REMAINING WITH NATIVE SOIL MAINTAINING POSITIVE DRAINAGE. (SEE DETAIL T)
- 1.6 - STA. 315+56.67  
REMOVE BROKEN HEADWALL UNDER THE BRIDGE AND HAUL DEBRIS OFF SITE. CUT THE PIPE FLUSH TO THE ABUTMENT.
- 1.7 - STA. 315+82.71  
REMOVE HEADWALL AT 4" OUTLET PIPE AND EXTEND PIP THROUGH SPACE IN STACKED ROUGHBACK WALL. (SEE DETAIL G)
- 1.8 - STA. 315+00 TO 318+56  
SHIFT LOOSE STONE IN CHANNEL BOTTOM TO TOE OF SLOPE (APPROX. 1/3 OF STONE TO LB & APPROX. 1/3 OF STONE TO RB). REMOVE NON-NATURAL/MODULAR STONE, CONCRETE RUBBLE, SILT, GRAVEL, AND DEBRIS (5480 SF).
- 1.9 - STA. 315+79 TO 316+29 RB  
TREE ROOT EXPOSURE. HAND PLACE 12"-24" STONE BOULDERS UNDER AND IN FRONT OF EXPOSED/ERODED ROOT BASES. (SEE DETAIL W)
- 1.10 - STA. 316+90 TO 317+21 RB  
REGRADE TO COVER EXPOSED MANHOLE. FILL TO 1" BELOW TOP OF CASTING AND INSTALL EROSION CONTROL BLANKET.
- 1.11 - STA. 317+72 RB  
24" CONCRETE PIPE TO EXTEND THROUGH SPACE IN STACKED ROUGHBACK STONE WALL. PILE STONE AROUND AND OVER PIPE. PIPE NOT TO BEAR ANY LOAD OF STONE. (SEE DETAIL EE)
- 1.12 - STA. 317+26 TO 318+56 RB  
REPAIR EXISTING ROUGHBACK STONE WALL (317+73 TO 318+14) & EXTEND DOWNSTREAM TO 317+26 & UPSTREAM TO BRIDGE FOOTING AT 318+56. UNSTACK EXISTING STONE WALL AND STOCKPILE ON ADJACENT BANK. LAY GEOTEXTILE FABRIC AND RESTACK STONE MAINTAINING EXISTING TOE OF SLOPE. WALL HEIGHT SHALL REMAIN CONSISTENT UNTIL TRANSITIONING DOWN ON END NOT MEETING BRIDGE. WALL SHALL NOT EXCEED HEIGHT OF SIDEWALK NOR BE GREATER THAN 6" BELOW SIDEWALK UNTIL TRANSITION DOWN BEGINS. BUILD WALL BY STACKING EXISTING ROUGHBACK AND SUPPLEMENTAL 42"-66" ROUGHBACK STONE TO MATCH EXISTING ROUGHBACK SIZE & SHAPE. MAINTAIN A FLUSH FRONT FACE. PLACE 4" PERF. HDPE BEHIND WALL AT BOTTOM OF WALL ELEVATION. BACKFILL 12" WIDTH BEHIND WALL WITH #7 STONE. BACKFILL REMAINING WITH NATIVE SOIL MAINTAINING POSITIVE DRAINAGE (WALL APPROX. 130 LF). (SEE DETAILS T & Z)
- 1.13 - STA. 318+30 RB  
STACK EXISTING AND SUPPLEMENTAL 42"-66" ROUGHBACK STONE AROUND PIPE. (SEE DETAIL EE)

NOTES

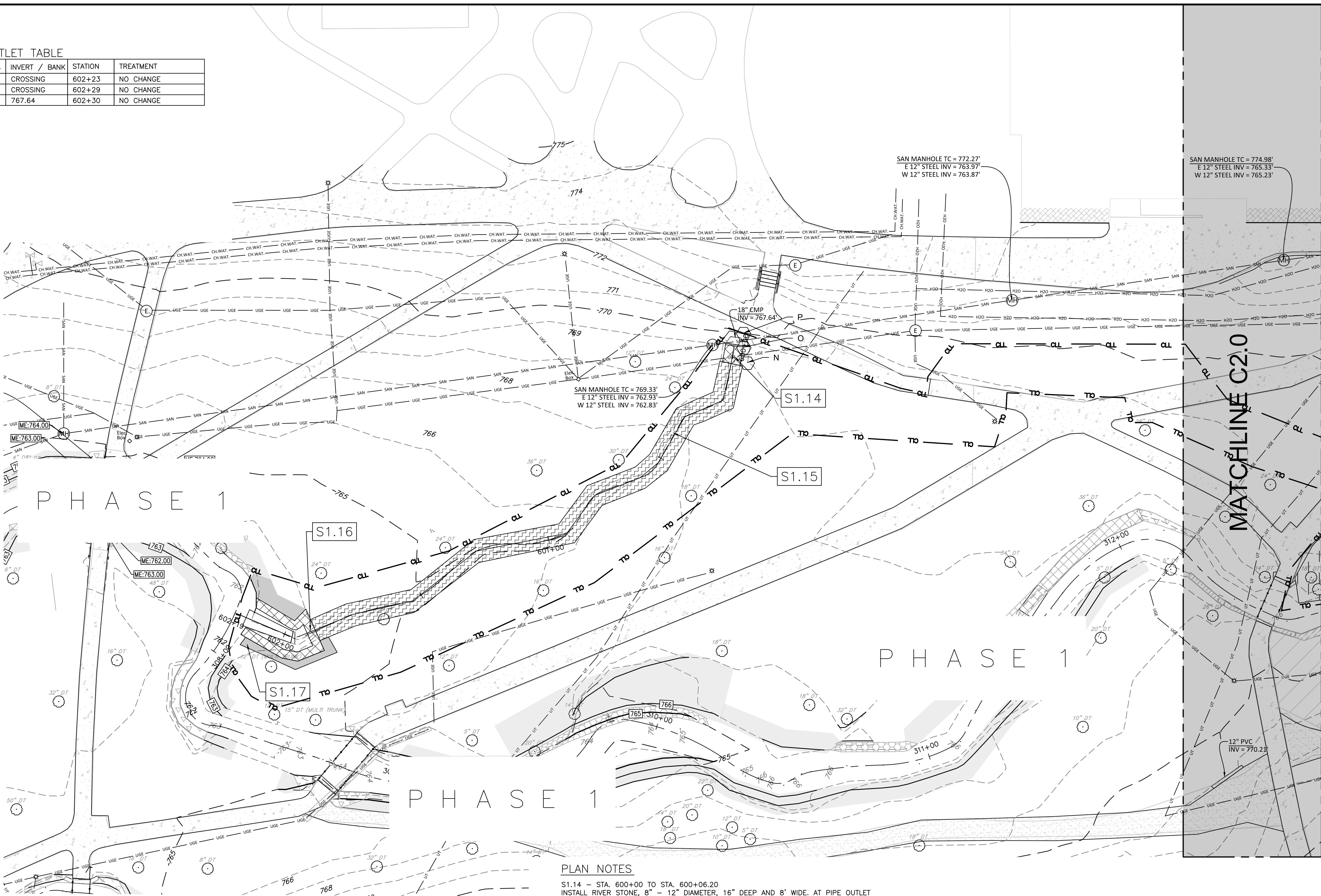
- INDIVIDUAL TREES TO BE PROTECTED FROM CONSTRUCTION OPERATIONS SHALL BE IDENTIFIED AND PROTECTED WITH A CONSTRUCTION FENCE.
- SHOULD CONTRACTOR DAMAGE OR KILL TREES NOT SPECIFICALLY APPROVED FOR REMOVAL, THE TREES SHALL BE REPLACED BY CONTRACTOR AT CONTRACTORS EXPENSE.
- AREAS OF PROPOSED WALLS IN SECTION NOTES ARE AREA OF FACE OF WALL.

STABILIZATION ACTION PLAN		REVISIONS		DESCRIPTION	
PROJECT NO.		NO.		DATE	
220907P3		1		2/24/25	
PROJECT MANAGER		DESIGNED BY		DRAWN BY	
JR		MV		MV & EP	
ORIGINAL ISSUE DATE: 3/25/2025		REVISED PER PRE BID WALK THROUGH			
INDIANA		BLOOMINGTON		PHASE 3	
CAMPUS RIVER PHASE 3		DRAWING NO.		C2.0	
619 N Pennsylvania Street Indianapolis, IN 46204 317.423.0680 phone www.vsc.com		811		Know what's below. Call before you dig.	



EXPOSED / PIPE OUTLET TABLE

LABEL	PIPE	MATERIAL	INVERT / BANK	STATION	TREATMENT
N	ELECTRIC		CROSSING	602+23	NO CHANGE
O	SANITARY	STEEL	CROSSING	602+29	NO CHANGE
P	18" STORM	CMP	767.64	602+30	NO CHANGE



LEGEND

	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED YARD INLET PROTECTION
	PROPOSED PAVEMENT INLET PROTECTION
	LB LEFT BANK (LOOKING DOWNSTREAM)
	RB RIGHT BANK (LOOKING DOWNSTREAM)
	MACHINE STACKED BOULDERS PER NOTES
	RESTORATION PER NOTES
	EXTENDED ROOT PROTECTION BOULDER PER NOTES
	STACKED WALL STONE PER NOTES
	CYPRESS KNEE PROTECTION PER NOTES
	EROSION CONTROL BLANKET (NAG SC150 BN) SEE C4.0-C4.2 FOR DETAILS
	TURF REINFORCEMENT MAT - NORTH AMERICAN GREEN VMAX S 200 OR APPROVED EQUAL

S1.1

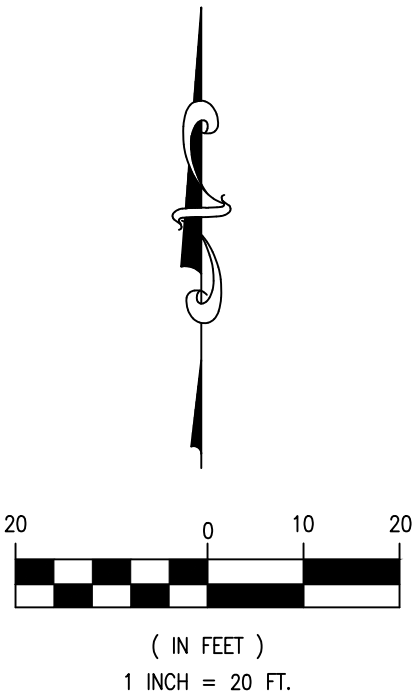
SECTION # . NOTE #

NOTES

- INDIVIDUAL TREES TO BE PROTECTED FROM CONSTRUCTION OPERATIONS SHALL BE IDENTIFIED AND PROTECTED WITH A CONSTRUCTION FENCE.
- SHOULD CONTRACTOR DAMAGE OR KILL TREES NOT SPECIFICALLY APPROVED FOR REMOVAL, THE TREES SHALL BE REPLACED BY CONTRACTOR AT CONTRACTORS EXPENSE.
- AREAS OF PROPOSED WALLS IN SECTION NOTES ARE AREA OF FACE OF WALL.

PLAN NOTES

- S1.14 - STA. 600+00 TO STA. 600+06.20  
INSTALL RIVER STONE, 8" - 12" DIAMETER, 16" DEEP AND 8" WIDE. AT PIPE OUTLET  
STONE HEIGHT NOT TO EXCEED PIPE INVERT IN FRONT OF PIPE OPENING.
- S1.15 - STA. 600+06.20 TO STA. 601+94.56 LB & RB  
REGRADE/FINISH GRADE SWALE AT 3:1 SIDE SLOPES AND CONSISTENT PROFILE OF  
APPROXIMATELY 2% SLOPE FROM THE EXISTING CONCRETE PAD TO TOP OF PROPOSED  
HEADWALL. SEED CHANNEL WITH SHADE TOLERANT TURF SEED AND INSTALL NORTH  
AMERICAN GREEN VMAX S200 TURF REINFORCEMENT MAT OR APPROVED EQUAL.  
(APPROX. 1,435 SF).
- S1.16 - STA. 601+94.56 TO STA. 601+97.23 LB & RB & IN-CHANNEL HEADWALL  
INSTALL 24" TALL STACKED ROUGHBACKED STONE WALL IN SWALE CHANNEL. FIRST  
COURSE TO BE SET ON BEDROCK.
- S1.17 - STA. 601+97.23 TO STA. 602+12.55 LB & RB  
REGRADE/FINISH GRADE SWALE AT 3:1 SIDE SLOPES. SEED SIDE SLOPE AND INSTALL  
EROSION CONTROL BLANKET (NAG SC150 BN) (SEE SHEET C4.2 FOR DETAILS).



STABILIZATION ACTION PLAN

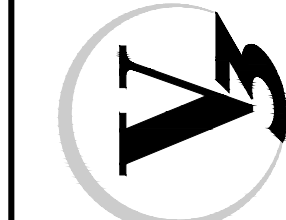
CAMPUS RIVER PHASE 3

PHASE 3

BLOOMINGTON

INDIANA

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Indianapolis, IN 46204  
317.423.0680 phone  
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DRAWING NO.

C2.1

REVISIONS

NO.	DATE	DESCRIPTION
1	2/24/25	REVISIONS PER PRE BID WALK THROUGH

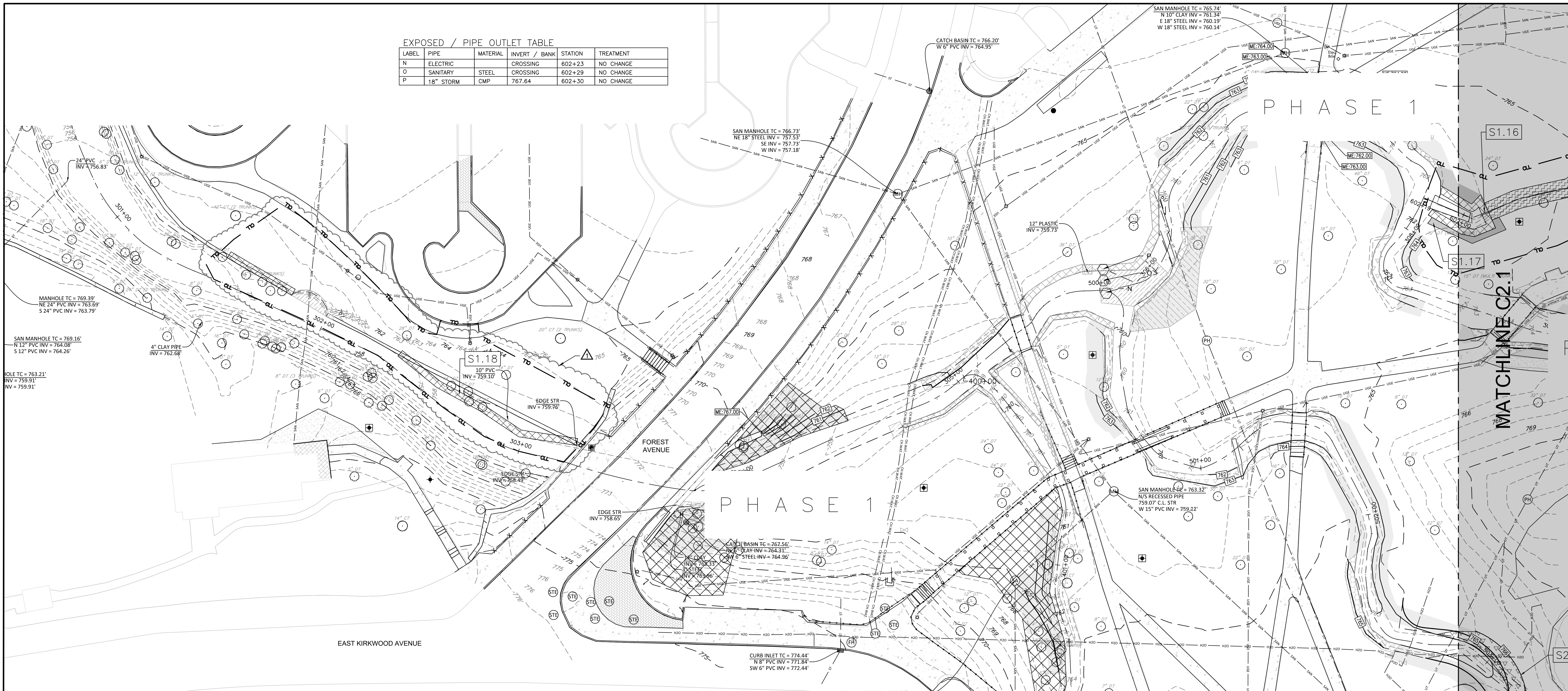
PROJECT NO.	220907P3
PROJECT MANAGER	JR
DESIGNED BY	MV
DRAWN BY	MV & EP

ORIGINAL ISSUE DATE: 3/25/2025



EXPOSED / PIPE OUTLET TABLE

LABEL	PIPE	MATERIAL	INVERT / BANK	STATION	TREATMENT
N	ELECTRIC	CROSSING	602+23	NO CHANGE	
O	SANITARY	STEEL	CROSSING	602+29	NO CHANGE
P	18" STORM	CMP	767.64	602+30	NO CHANGE



LEGEND

- 870 --- EXISTING CONTOUR
- 870 --- PROPOSED CONTOUR
- PROPOSED YARD INLET PROTECTION
- PROPOSED PAVEMENT INLET PROTECTION
- LB LEFT BANK (LOOKING DOWNSTREAM)
- RB RIGHT BANK (LOOKING DOWNSTREAM)
- MACHINE STACKED BOULDERS PER NOTES
- RESTORATION PER NOTES
- EXTENDED ROOT PROTECTION BOULDER PER NOTES
- STACKED WALL STONE PER NOTES
- CYPRESS KNEE PROTECTION PER NOTES
- EROSION CONTROL BLANKET (NAC SC150 BN) SEE C4.0-C4.2 FOR DETAILS
- TURF REINFORCEMENT MAT - NORTH AMERICAN GREEN VMAX S 200 OR APPROVED EQUAL

S1.1

SECTION # - NOTE #

NOTES

- INDIVIDUAL TREES TO BE PROTECTED FROM CONSTRUCTION OPERATIONS SHALL BE IDENTIFIED AND PROTECTED WITH A CONSTRUCTION FENCE.
- SHOULD CONTRACTOR DAMAGE OR KILL TREES NOT SPECIFICALLY APPROVED FOR REMOVAL, THE TREES SHALL BE REPLACED BY CONTRACTOR AT CONTRACTORS EXPENSE.
- AREAS OF PROPOSED WALLS IN SECTION NOTES ARE AREA OF FACE OF WALL.

PLAN NOTES

ALTERNATE #1  
S1.18 - REPAIR EXISTING MASONRY WALL.  
UNSTACK, NUMBER, CATEGORIZE AND CLEAN GROUT FROM STONE FROM EXISTING WALL AND STOCKPILE ON NORTH BANK BETWEEN THE EXISTING WALL AND PARKING LOT. WHEN RECONSTRUCTING, WALL HEIGHT SHALL REMAIN CONSISTENT, AND STONE THAT IS IN NEED OF BEING REPLACED TO BE REPLACED WITH STONE OF SIMILAR SIZE SHAPE, COLOR AND FINISH OF SURROUNDING STONE. DRAINAGE SYSTEM TO BE INSTALLED BEHIND WALL AND DISTURBED AREA TO BE RESTORED WITH CLEAN TRANSITION TO TOP OF WALL UPON COMPLETION.  
WALL REPAIR TO BE COMPLETED IN 2 SEGMENTS, SEGMENT 1 TO EXTEND BETWEEN FOREST AVENUE BREIGE AND WALL REPAIR COMPLETED PREVIOUSLY NEAR STATION 302+00.  
SEGMENT 2 TO EXTEND FROM WEST EDGE OF RECENT REPAIR. (TOTAL LENGTH 100 LF)

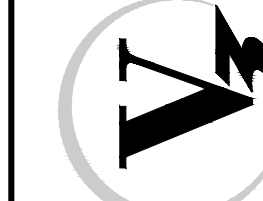
STABILIZATION ACTION PLAN

CAMPUS RIVER PHASE 3

PHASE 3

INDIANA

619 N Pennsylvania Street  
Indianapolis, IN 46204  
317.423.0680 phone  
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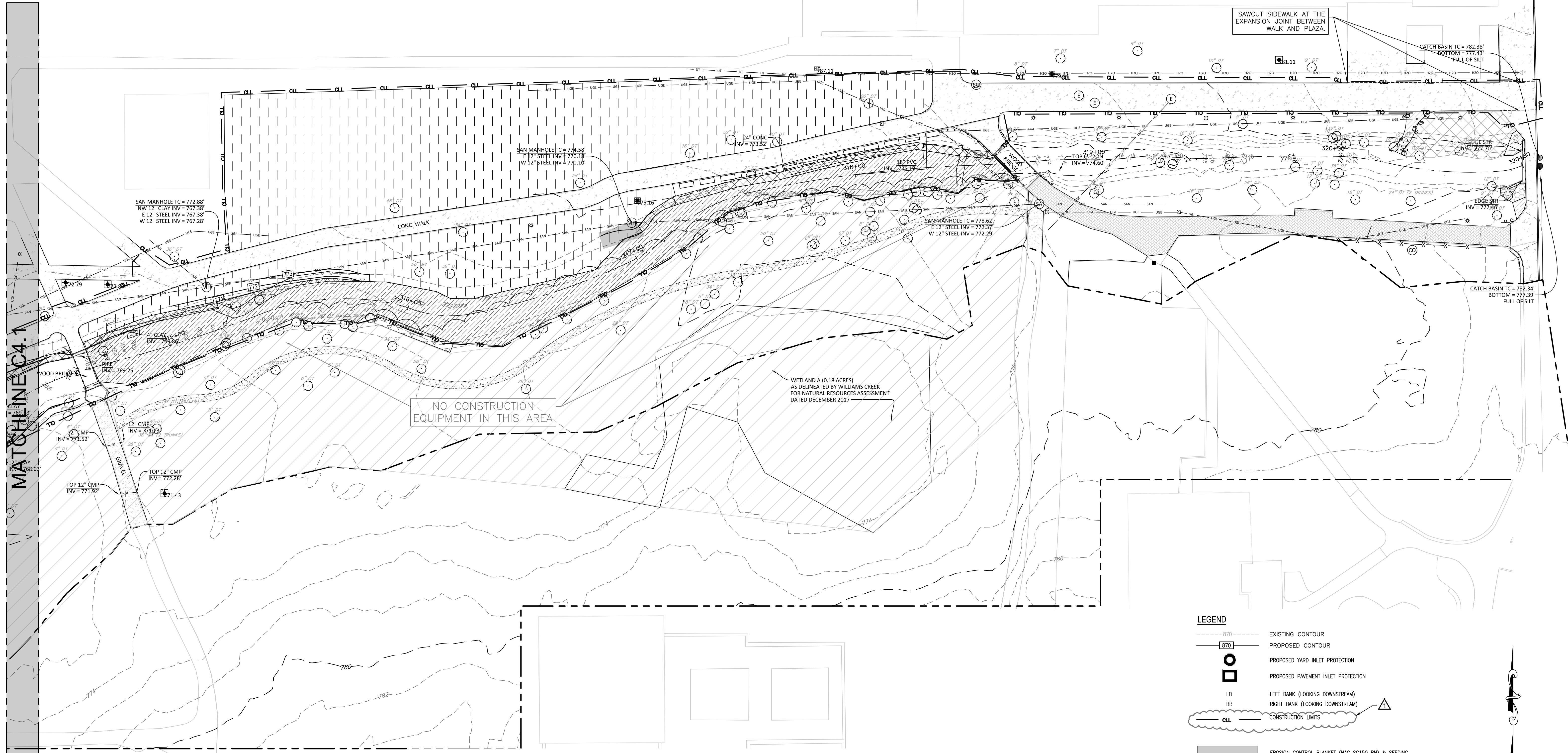
DRAWING NO.

C2.2



Know what's below.  
Call before you dig.





MATCHLINE C4.1

**LEGEND**

	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED YARD INLET PROTECTION
	PROPOSED PAVEMENT INLET PROTECTION
	LEFT BANK (LOOKING DOWNSTREAM)
	RIGHT BANK (LOOKING DOWNSTREAM)
	CONSTRUCTION LIMITS

	EROSION CONTROL BLANKET (NAG SC150 BN) & SEEDING 8820 SF (SEE C4.1 FOR DETAILS)
	PROPOSED STABILIZATION SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)
	PROPOSED STABILIZATION SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)
	PROPOSED STABILIZATION SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)
	PROPOSED STABILIZATION SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)
	PROPOSED STABILIZATION SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)
	SHADE TOLERANT TURF SEED - INSTALL SHADE TOLERANT TURF SEED MIX WITH STRAW MULCH & CRIMP IN PLACE (SEE C4.1 FOR DETAILS)

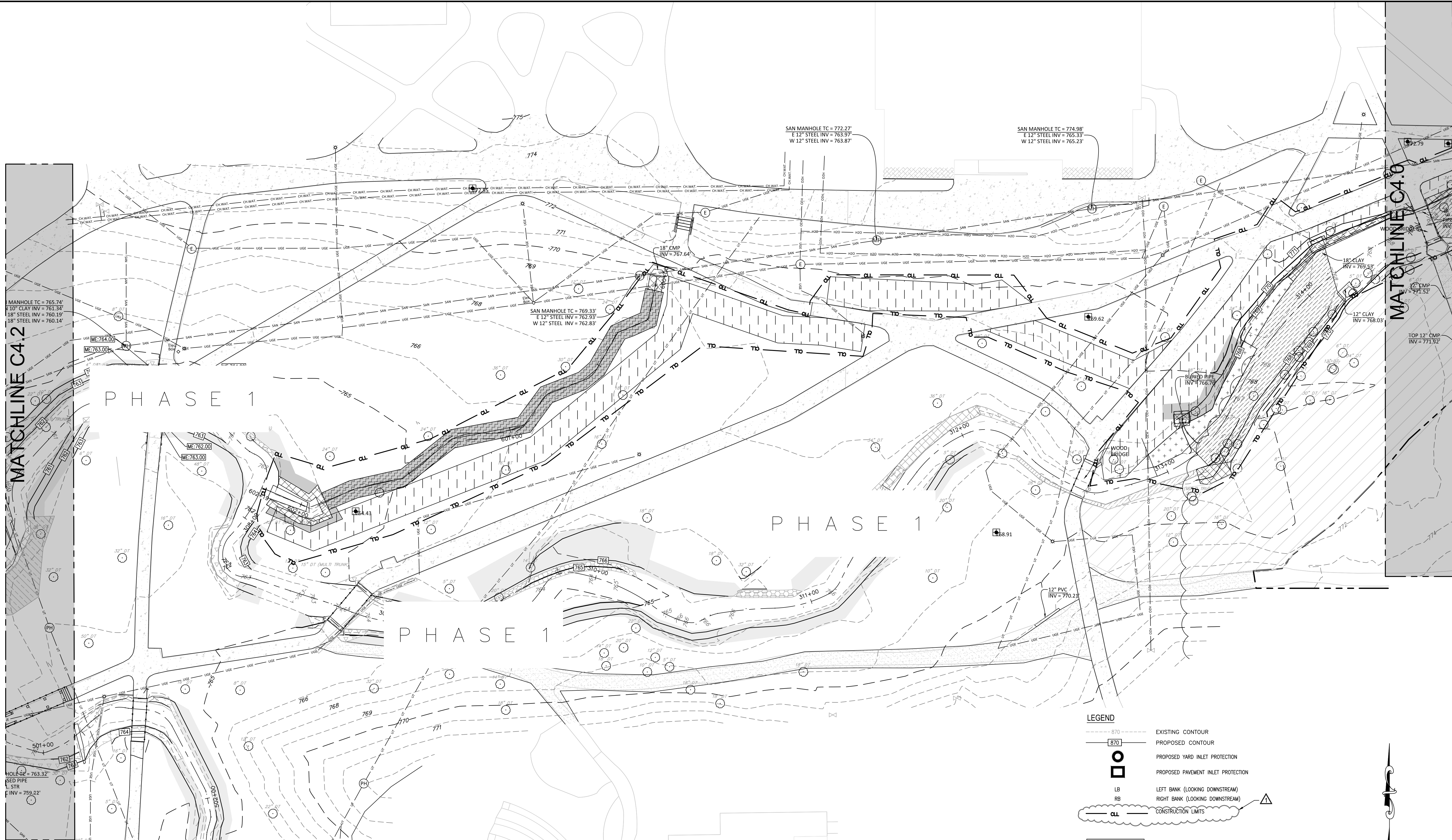
- EROSION CONTROL NOTES**
- ALL DISTURBANCE FROM STONE WALLS OR STONE TOE OR PIPE OUTLET PROTECTION TO BE FINISH GRADED TO BLEND INTO EXISTING GRADE MAINTAINING POSITIVE DRAINAGE TO THE CAMPUS RIVER AND TO RESEED THESE DISTURBED AREAS TO REESTABLISH VEGETATION BEHIND OR AROUND THE STONE. FOR MORE INFORMATION, SEE THE CONSTRUCTION DETAILS (SHEETS CB.0-CB.4) CALLED OUT FOR EACH STONE WALL OR FORM OF STONE PROTECTION IN THE STABILIZATION PLAN (SHEETS C2.0-C2.1).
  - ALL QUANTITIES LISTED IN LEGEND ARE AREAS OF THE MATERIAL FOR THIS SECTION/SHEET.

20 0 10 20  
( IN FEET )  
1 INCH = 20 FT.

**811**  
Know what's below.  
Call before you dig.

<b>EROSION CONTROL PLAN</b>		<b>REVISIONS</b>	
<b>CAMPUS RIVER PHASE 3</b>			
<b>BLOOMINGTON PHASE 3</b>			
<b>INDIANA</b>			
619 N Pennsylvania Street Indianapolis, IN 46204 317.423.0680 phone www.v3co.com		ORIGINAL ISSUE DATE: 3/25/2025	
		PROJECT NO. 220907P3	
<b>DRAWING NO. C4.0</b>		PROJECT MANAGER: JR	
		DESIGNED BY: MV	
		DRAWN BY: MV & EP	
		NO. DATE DESCRIPTION	
		1 2/24/25 REVISIONS PER PRE BID WALK THROUGH	





MATCHLINE C4.2

MATCHLINE C4.0

**LEGEND**

- 870 --- EXISTING CONTOUR
- 870 --- PROPOSED CONTOUR
- PROPOSED YARD INLET PROTECTION
- PROPOSED PAVEMENT INLET PROTECTION
- LB LEFT BANK (LOOKING DOWNSTREAM)
- RB RIGHT BANK (LOOKING DOWNSTREAM)
- CL CONSTRUCTION LIMITS

EROSION CONTROL BLANKET (NAG SC150 BN) & SEEDING  
8820 SF (SEE C4.2 FOR DETAILS)

PROPOSED STABILIZATION  
SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)

PROPOSED STABILIZATION  
SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)

PROPOSED STABILIZATION  
SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)

PROPOSED STABILIZATION  
SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)

PROPOSED STABILIZATION  
SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)

SHADE TOLERANT TURF SEED - INSTALL SHADE  
TOLERANT TURF SEED MIX WITH STRAW MULCH  
& CRIMP IN PLACE (SEE C4.2 FOR DETAILS)

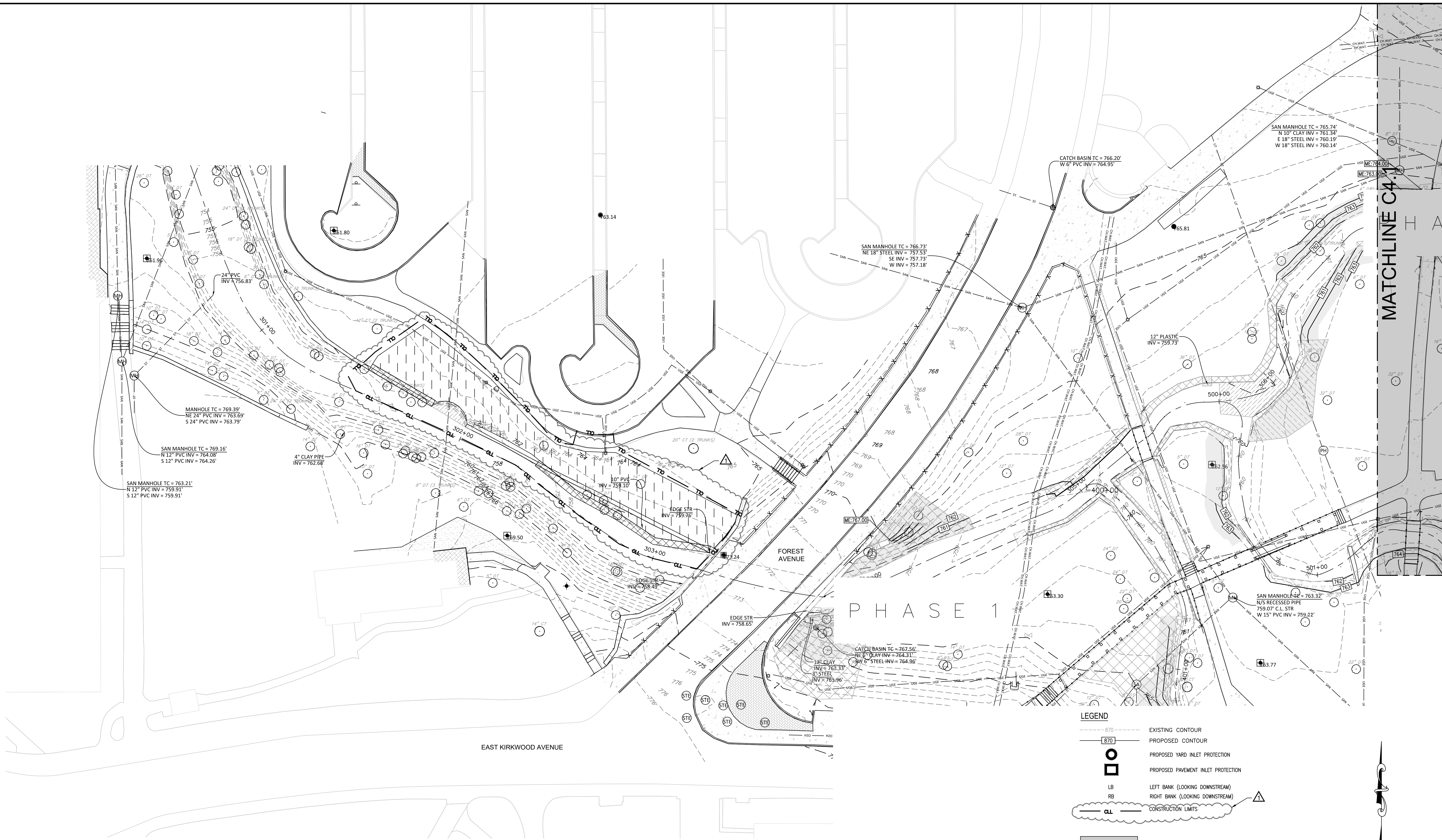
- EROSION CONTROL NOTES**
1. ALL DISTURBANCE FROM STONE WALLS OR STONE TOE OR PIPE OUTLET PROTECTION TO BE FINISH GRADED TO BLEND INTO EXISTING GRADE MAINTAINING POSITIVE DRAINAGE TO THE CAMPUS RIVER AND TO RESEED THESE DISTURBED AREAS TO REESTABLISH VEGETATION BEHIND OR AROUND THE STONE. FOR MORE INFORMATION, SEE THE CONSTRUCTION DETAILS (SHEETS C8.0-C8.4) CALLED OUT FOR EACH STONE WALL OR FORM OF STONE PROTECTION IN THE STABILIZATION PLAN (SHEETS C2.0-C2.1).
  2. ALL QUANTITIES LISTED IN LEGEND ARE AREAS OF THE MATERIAL FOR THIS SECTION/SHEET.

20 0 10 20  
( IN FEET )  
1 INCH = 20 FT.

**811**  
Know what's below.  
Call before you dig.

EROSION CONTROL PLAN		REVISIONS	
CAMPUS RIVER PHASE 3		NO.	DATE
BLOOMINGTON PHASE 3		1	2/24/25
INDIANA		DESCRIPTION	
220907P3		ORIGINAL ISSUE DATE: 3/25/2025	
PROJECT MANAGER: JR		DESIGNER: MV	
DESIGNED BY: MV		DRAWN BY: MV & EP	
DRAWING NO. C4.1		DESCRIPTION: REVISIONS PER PRE BID WALK THROUGH	





EAST KIRKWOOD AVENUE

FOREST AVENUE

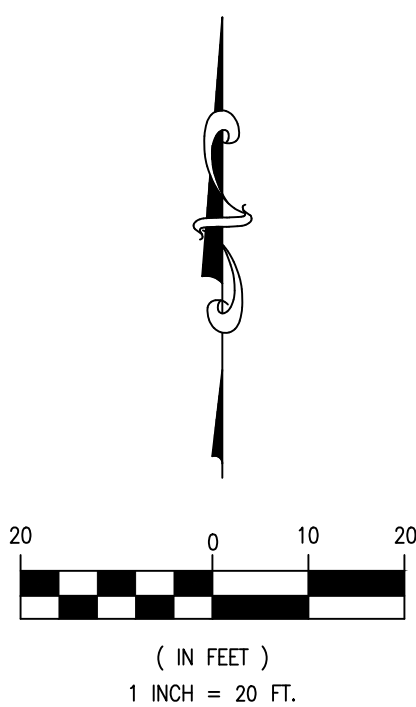
PHASE 1

MATCHLINE C4.1

LEGEND


- 870 --- EXISTING CONTOUR
- 870 --- PROPOSED CONTOUR
- PROPOSED YARD INLET PROTECTION
- PROPOSED PAVEMENT INLET PROTECTION
- LB LEFT BANK (LOOKING DOWNSTREAM)
- RB RIGHT BANK (LOOKING DOWNSTREAM)
- CL CONSTRUCTION LIMITS

- EROSION CONTROL BLANKET (NAG SC150 BN) & SEEDING  
8820 SF (SEE C4.2 FOR DETAILS)
- PROPOSED STABILIZATION  
SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)
- PROPOSED STABILIZATION  
SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)
- PROPOSED STABILIZATION  
SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)
- PROPOSED STABILIZATION  
SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)
- PROPOSED STABILIZATION  
SEE STABILIZATION PLANS FOR DETAILS (SHEETS C2.0-C2.2)
- SHADE TOLERANT TURF SEED - INSTALL SHADE  
TOLERANT TURF SEED MIX WITH STRAW MULCH  
& CRIMP IN PLACE (SEE C4.2 FOR DETAILS)



EROSION CONTROL NOTES

- ALL DISTURBANCE FROM STONE WALLS OR STONE TOE OR PIPE OUTLET PROTECTION TO BE FINISH GRADED TO BLEND INTO EXISTING GRADE MAINTAINING POSITIVE DRAINAGE TO THE CAMPUS RIVER AND TO RESEED THESE DISTURBED AREAS TO REESTABLISH VEGETATION BEHIND OR AROUND THE STONE. FOR MORE INFORMATION, SEE THE CONSTRUCTION DETAILS (SHEETS C8.0-C8.4) CALLED OUT FOR EACH STONE WALL OR FORM OF STONE PROTECTION IN THE STABILIZATION PLAN (SHEETS C2.0-C2.1).
- ALL QUANTITIES LISTED IN LEGEND ARE AREAS OF THE MATERIAL FOR THIS SECTION/SHEET.

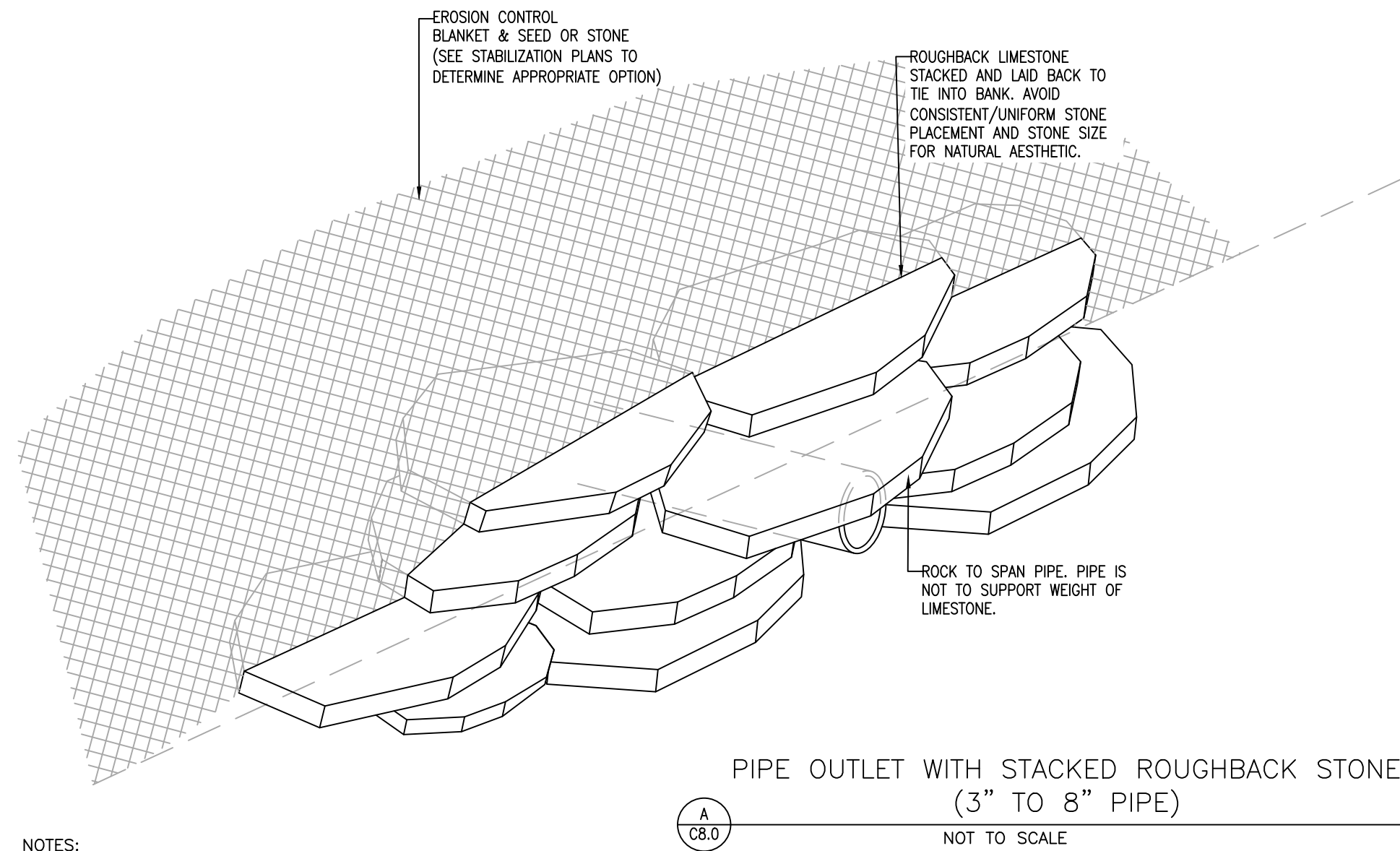
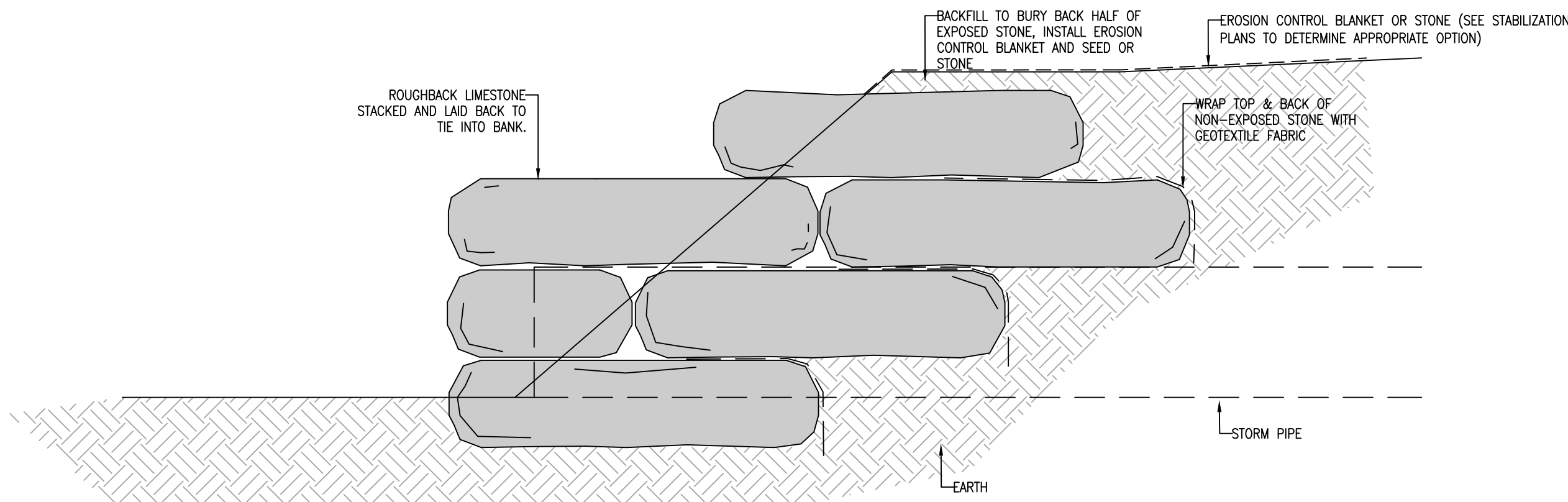
<div></div> <div>619 N Pennsylvania Street Indianapolis, IN 46204 317.423.0680 phone www.v3co.com</div>		<div>EROSION CONTROL PLAN</div> <div>CAMPUS RIVER PHASE 3</div> <div>BLOOMINGTON PHASE 3</div> <div>INDIANA</div>									
		PROJECT NO.		220807P3		ORIGINAL ISSUE DATE: 3/25/2025		REVISIONS			
		PROJECT MANAGER:		JR		NO.		DATE		DESCRIPTION	
		DESIGNED BY:		MV		1		2/24/25		REVISIONS PER PRE BID WALK THROUGH	
		DRAWN BY:		MV & EP							
DRAWING NO.		C4.2									



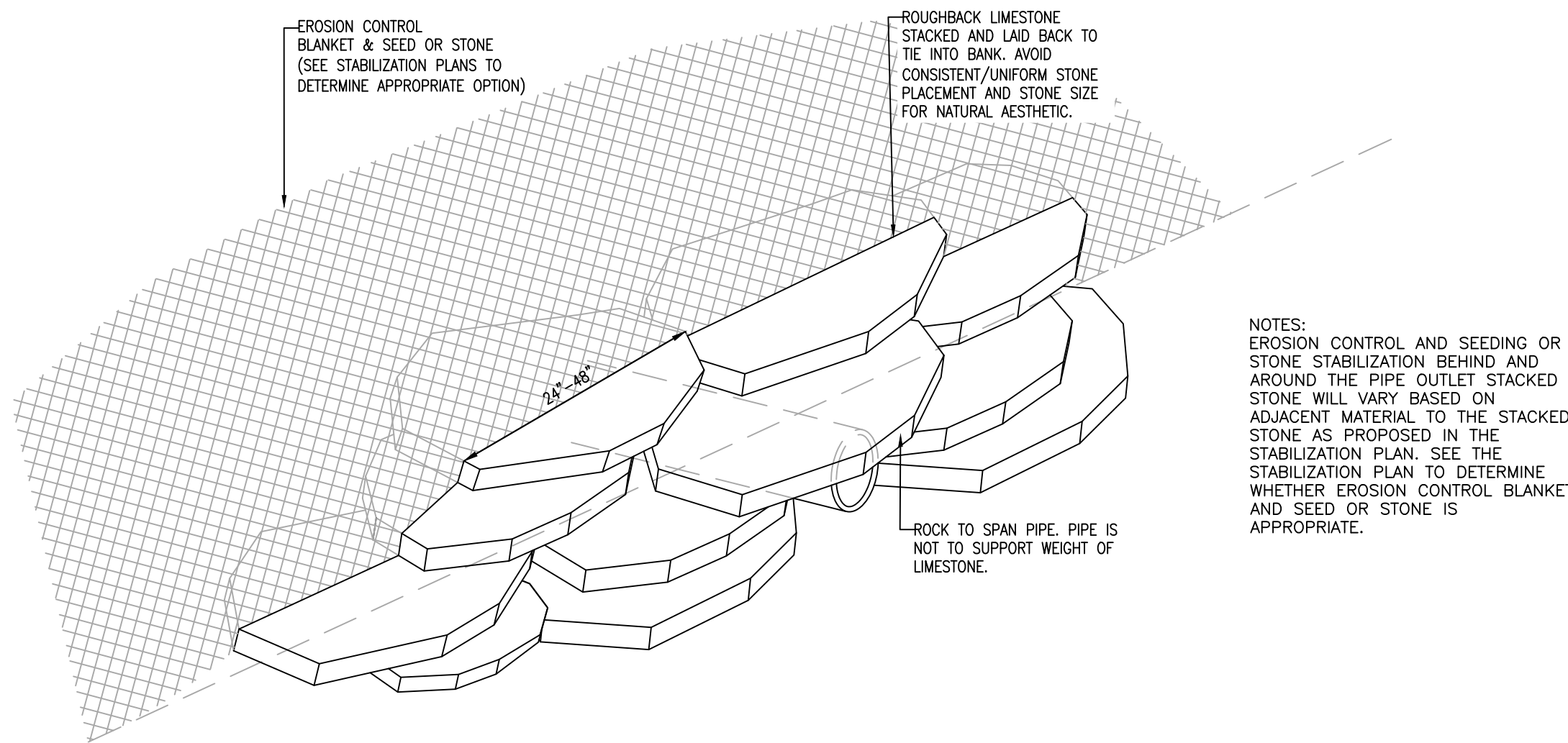




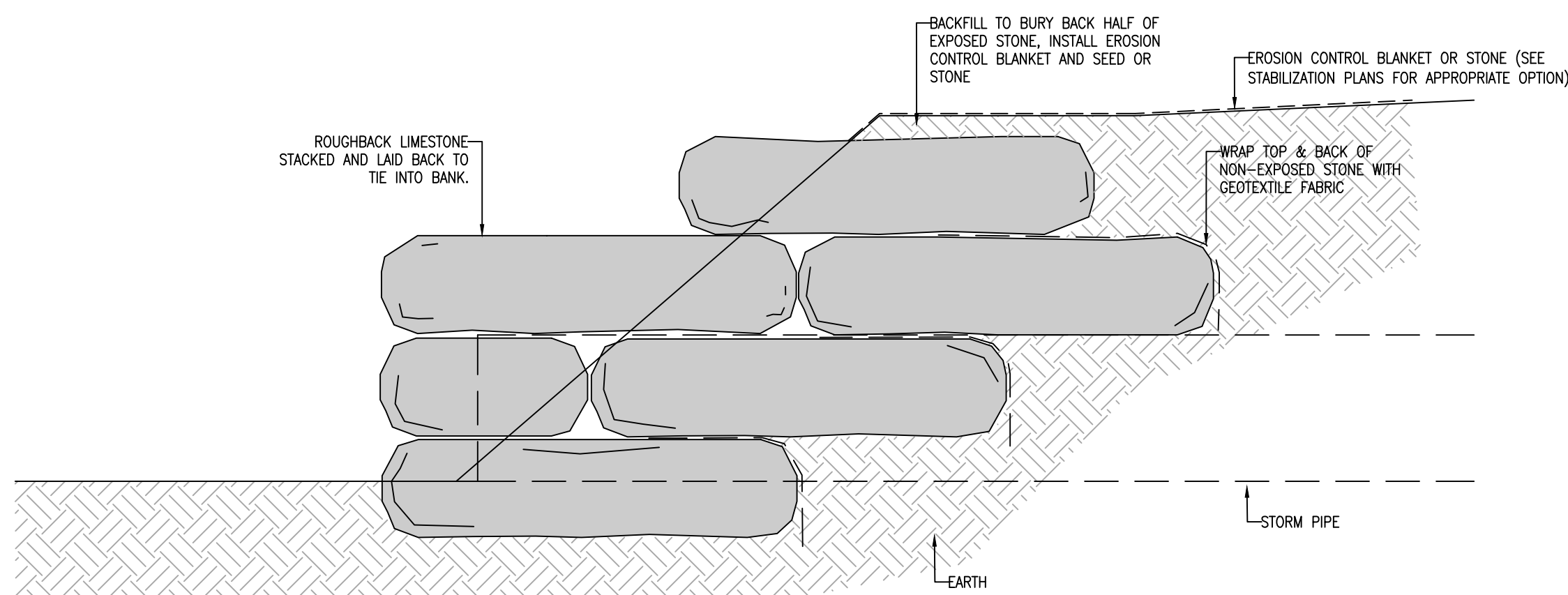
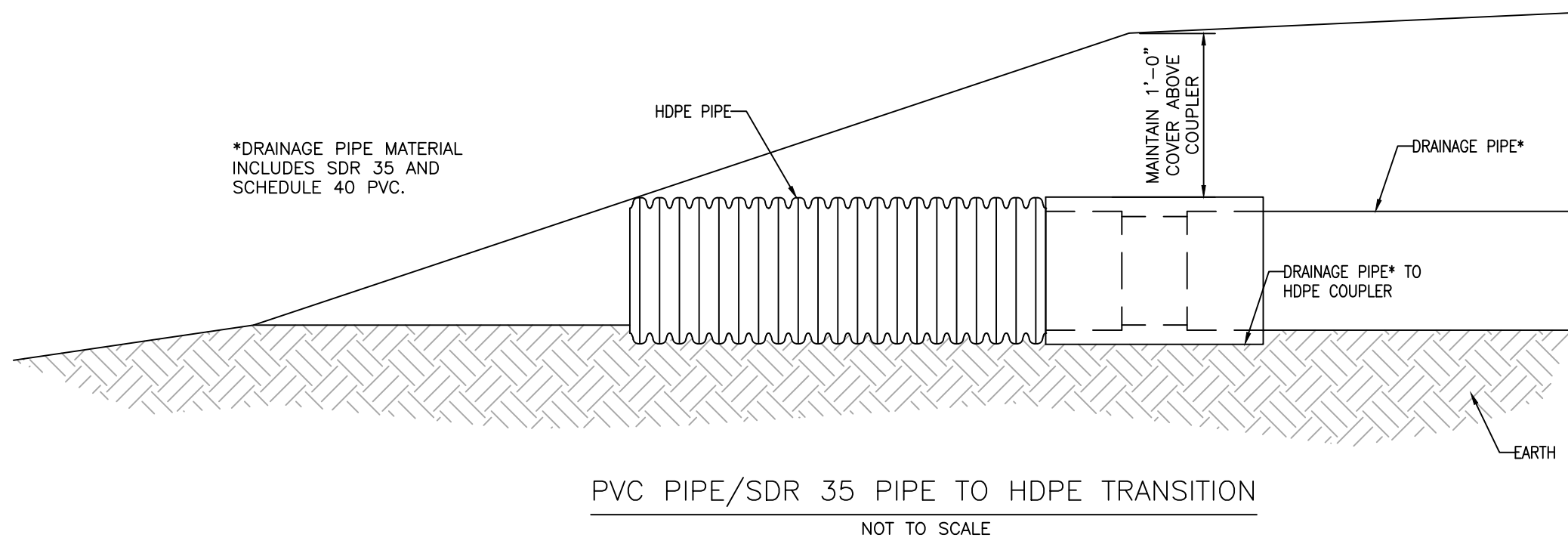
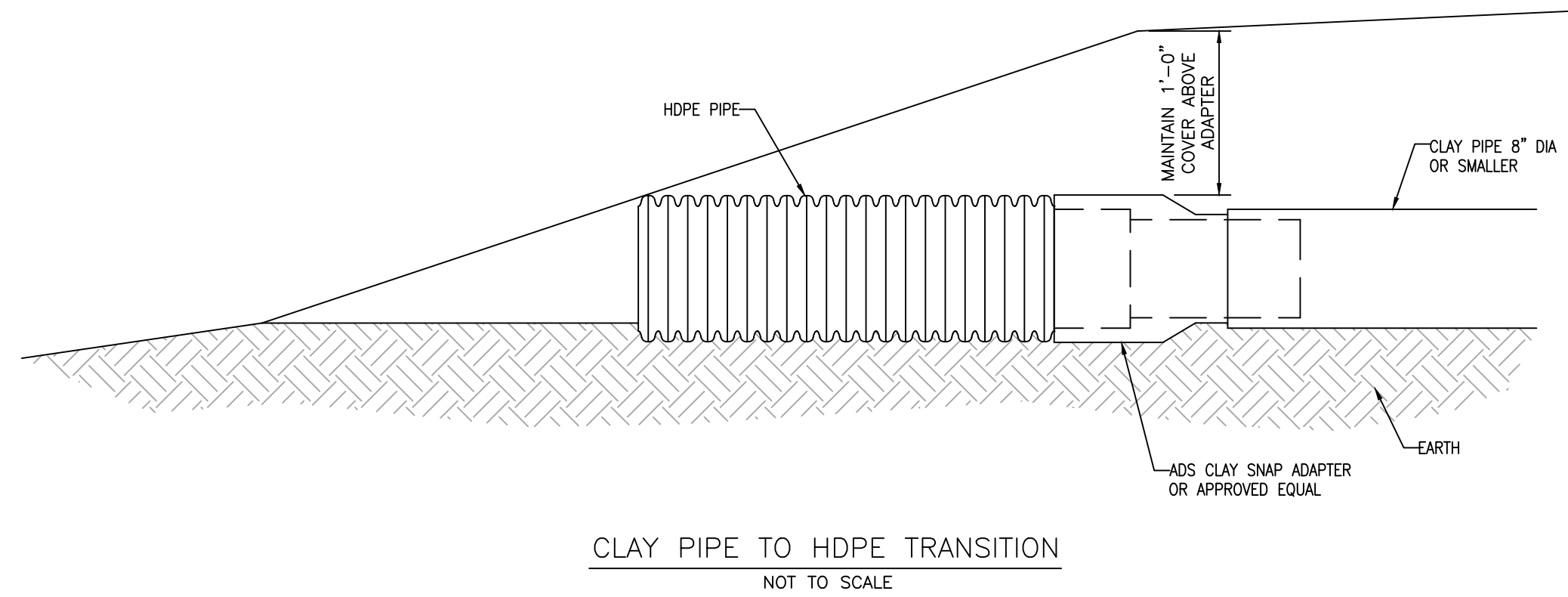
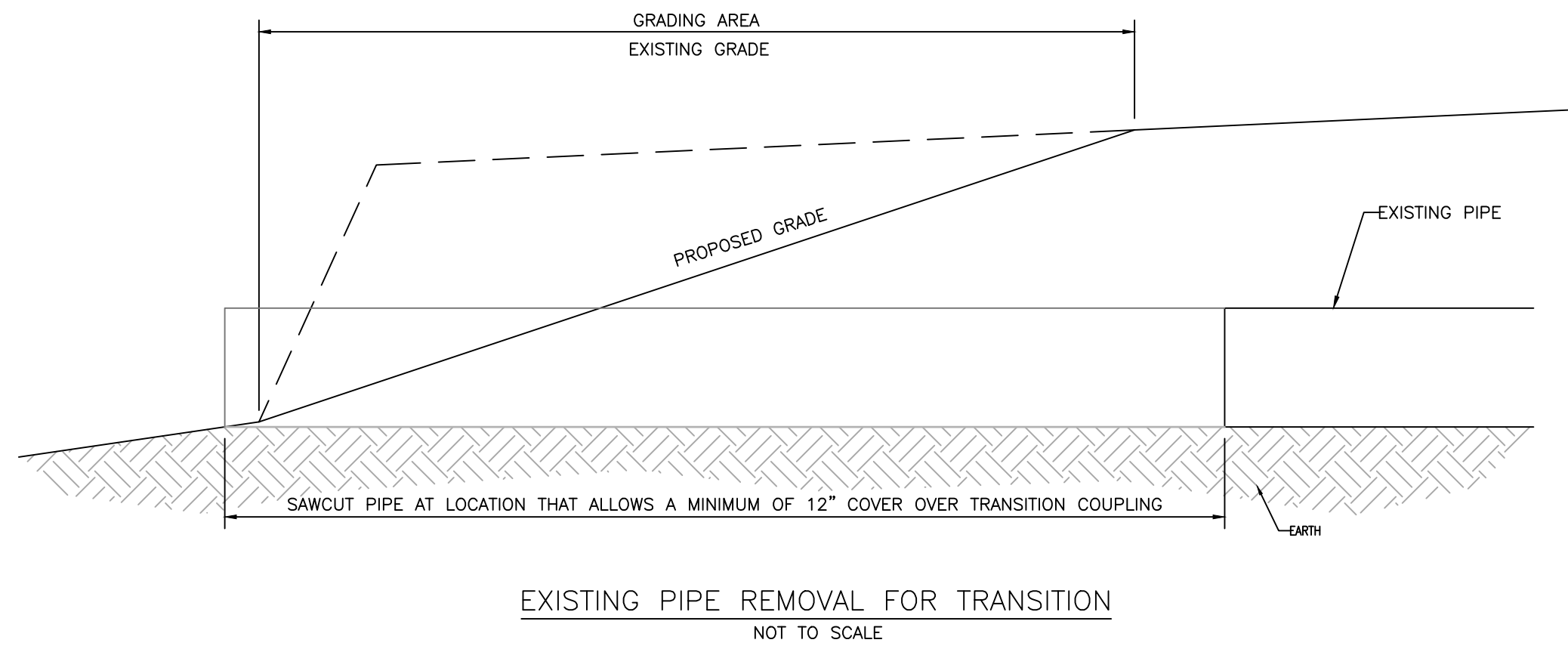




NOTES:  
STONE SIZE AND TYPE VARIES PER  
NOTES ON STABILIZATION PLANS.  
EROSION CONTROL AND SEEDING OR  
STONE STABILIZATION BEHIND AND  
AROUND THE PIPE OUTLET STACKED  
STONE WILL VARY BASED ON  
ADJACENT MATERIAL TO THE STACKED  
STONE AS PROPOSED IN THE  
STABILIZATION PLAN. SEE THE  
STABILIZATION PLAN TO DETERMINE  
WHETHER EROSION CONTROL BLANKET  
AND SEED OR STONE IS  
APPROPRIATE.




PIPE OUTLET WITH STACKED ROUGH BACK STONE  
NOT TO SCALE

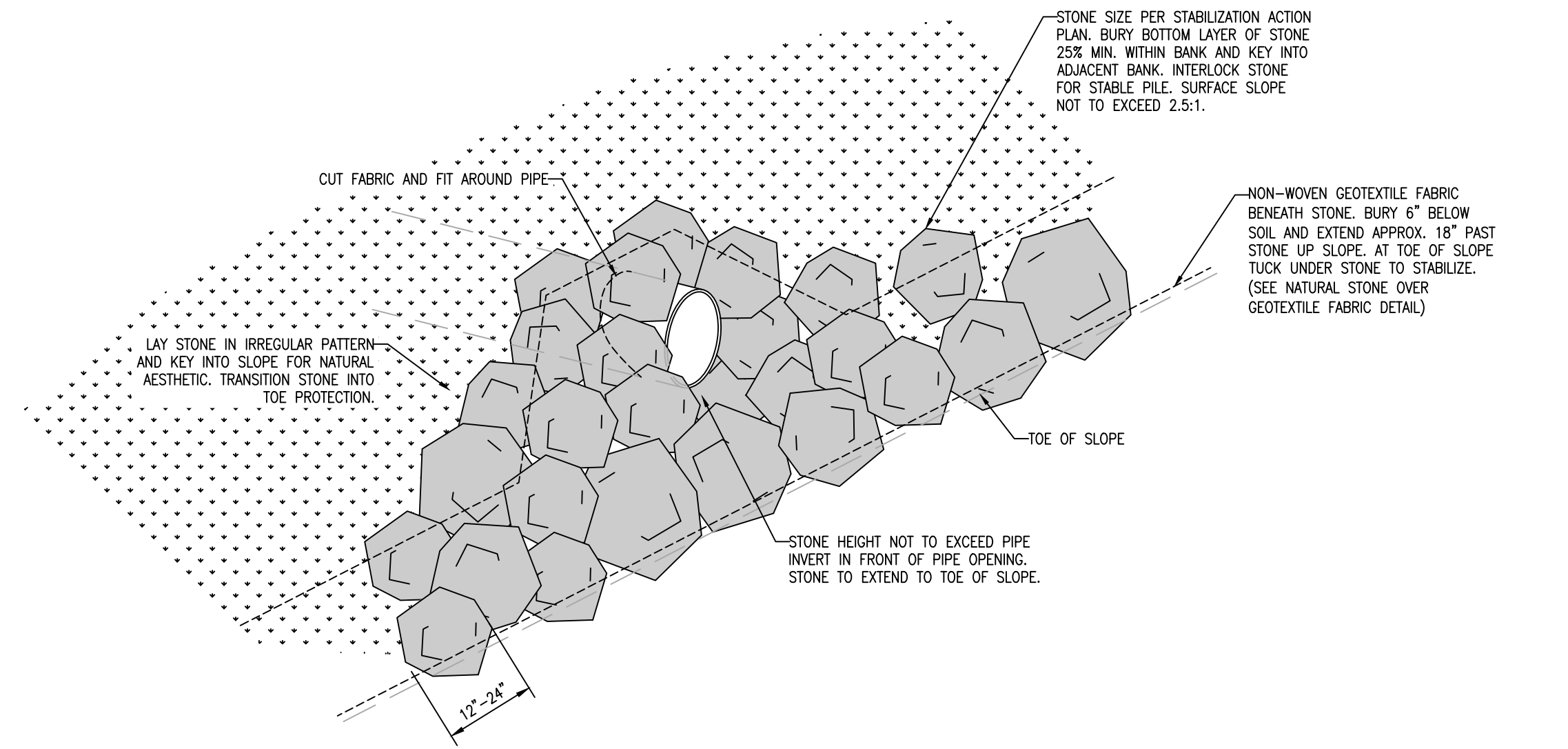


PIPE OUTLET WITH STACKED ROUGHBACK STONE  
NOT TO SCALE

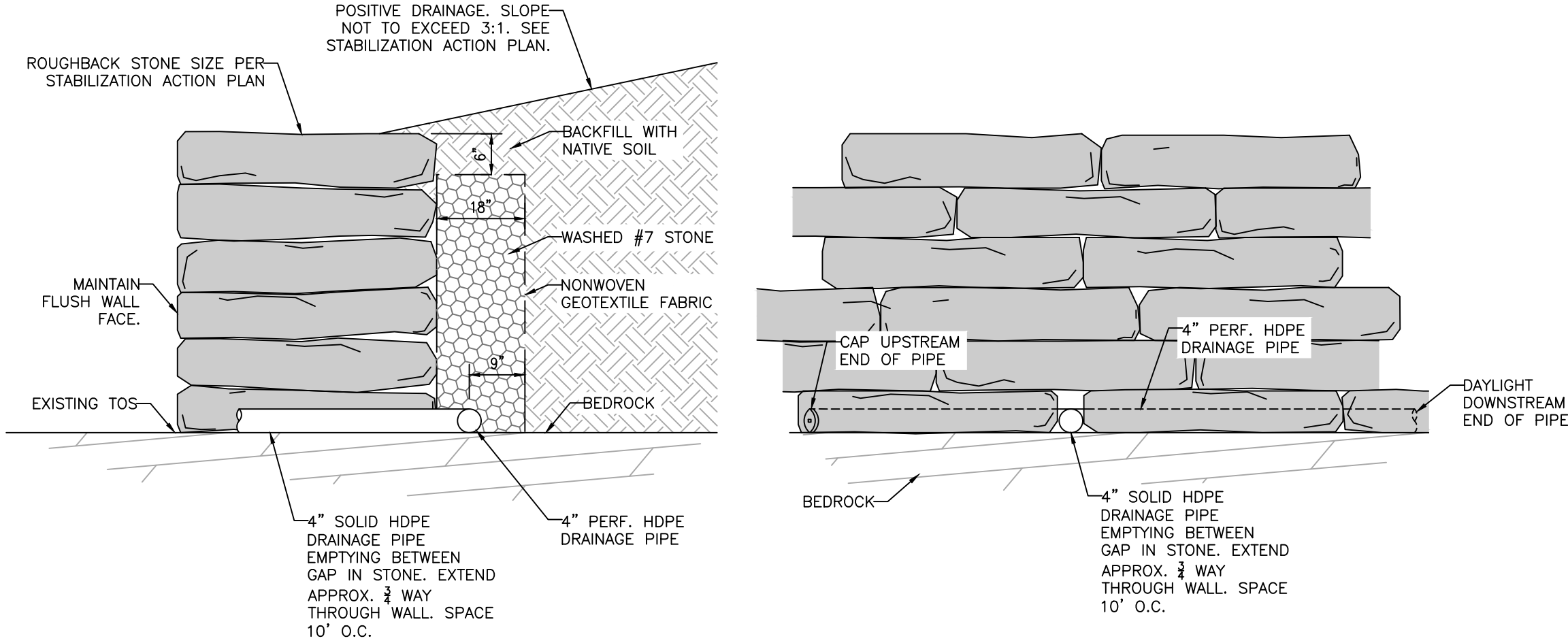
PIPE TRANSITION AND END SECTION TREATMENT  
NOT TO SCALE

<div></div> <div>619 N Pennsylvania Street Indianapolis, IN 46204 317.423.0890 phone www.v3co.com</div>	<div>CONSTRUCTION DETAILS</div> <div>CAMPUS RIVER PHASE 3</div> <div>BLOOMINGTON PHASE 3</div> <div>INDIANA</div>		ORIGINAL ISSUE DATE: 3/25/2025				REVISIONS					
			PROJECT NO: 220907P3		DATE		DESCRIPTION		NO.		DATE	
			PROJECT MANAGER: JR		2/24/25		REVISIONS PER PRE BID WALK THROUGH		1			
			DESIGNED BY: MV									
			DRAWN BY: MV & EP									
DRAWING NO.		C8.0										

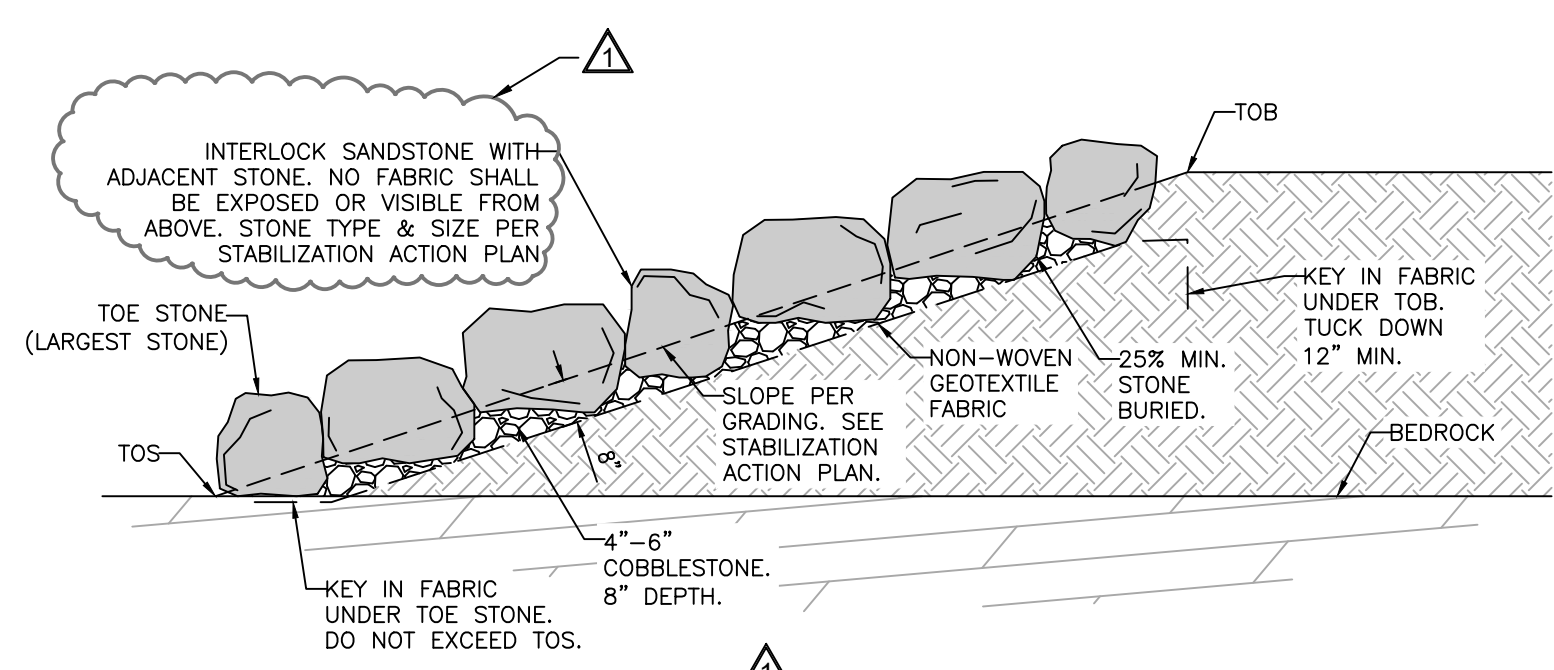




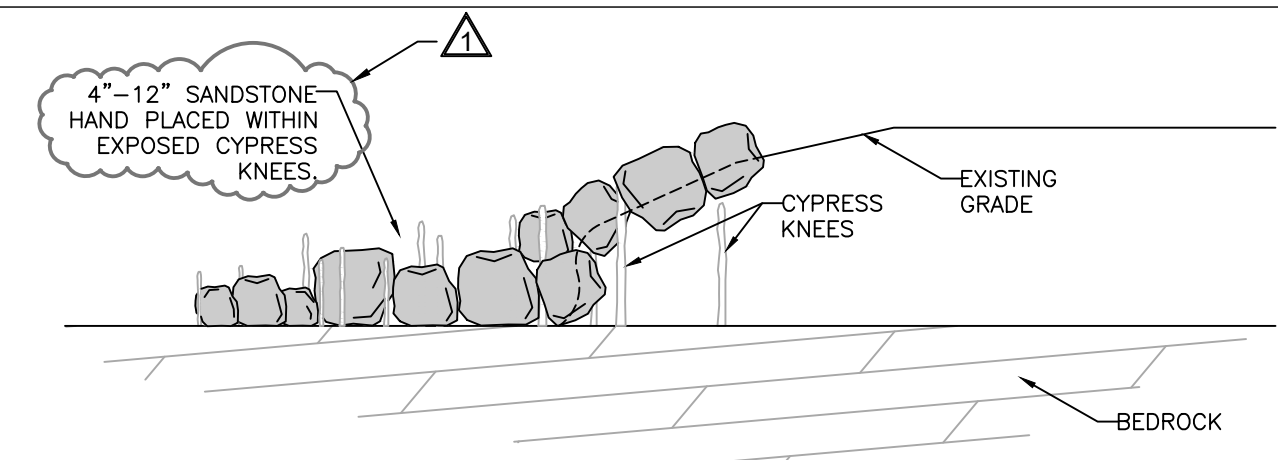
**K**  
C8.3  
PIPE OUTLET WITH SANDSTONE  
NOT TO SCALE



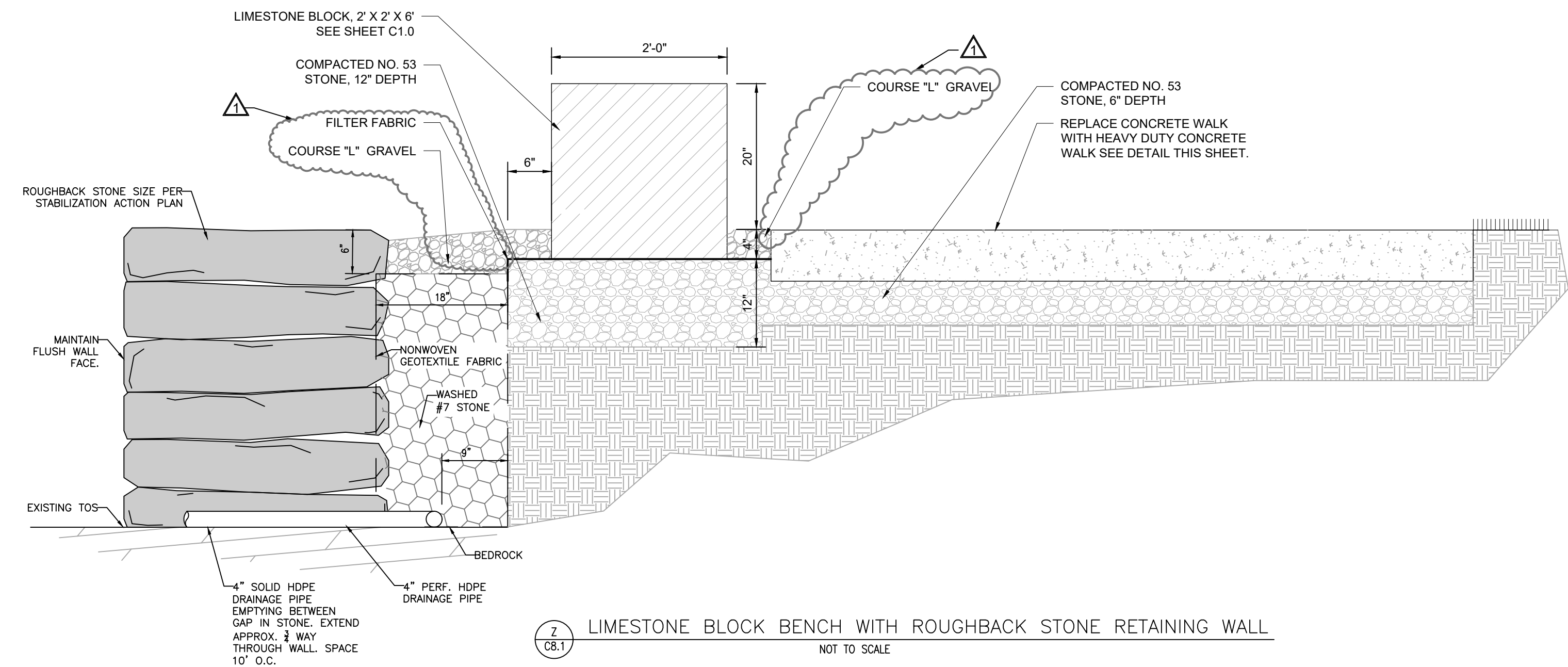
**T**  
C8.5  
STACKED ROUGHBACK WALL WITH DRAINAGE  
NOT TO SCALE



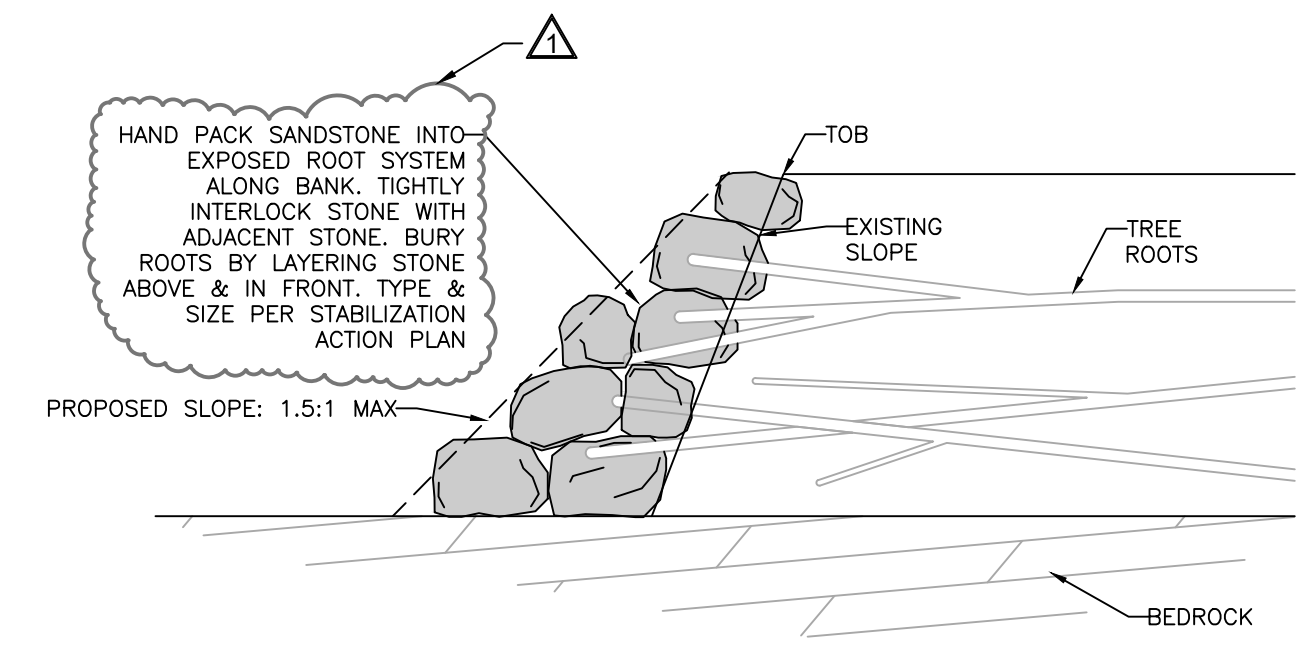
**N**  
C8.1  
SANDSTONE OVER GEOTEXTILE FABRIC  
NOT TO SCALE



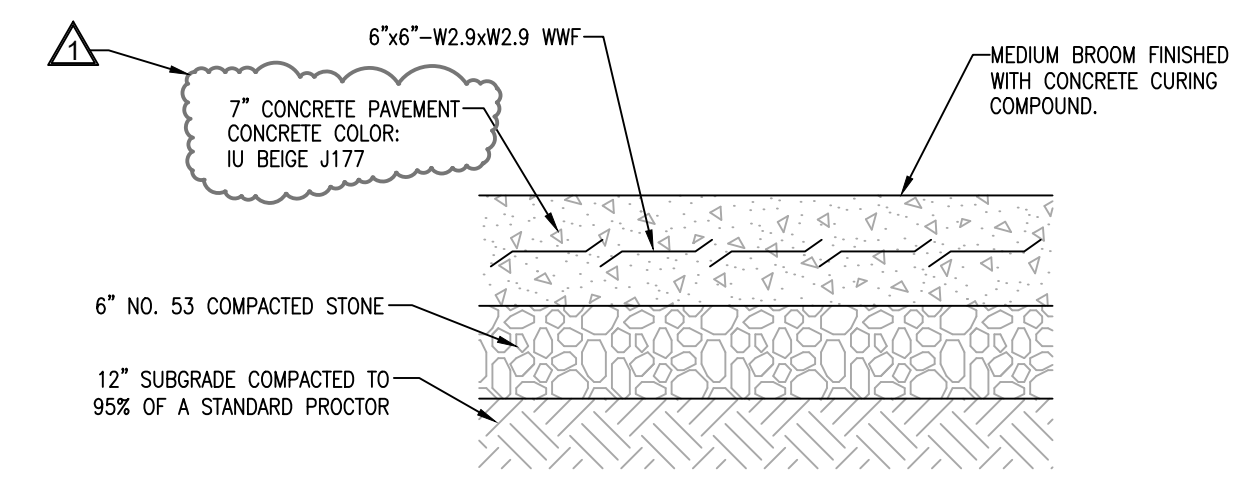
**V**  
C8.5  
CYPRESS KNEE TOE PROTECTION  
NOT TO SCALE



**Z**  
C8.1  
LIMESTONE BLOCK BENCH WITH ROUGHBACK STONE RETAINING WALL  
NOT TO SCALE



**W**  
C8.1  
SANDSTONE EXPOSED ROOT PROTECTION  
NOT TO SCALE



**Y**  
C8.0  
CONCRETE PAVEMENT SECTION  
NOT TO SCALE

REVISIONS		NO.	DATE	DESCRIPTION
1	2/24/25	1	2/24/25	REVISIONS PER PRE BID WALK THROUGH
ORIGINAL ISSUE DATE: 3/25/2025		PROJECT NO.	220907P3	
		PROJECT MANAGER	JR	
		DESIGNED BY	MV	
		DRAWN BY	MV & EP	
CONSTRUCTION DETAILS		INDIANA		
CAMPUS RIVER PHASE 3		BLOOMINGTON PHASE 3		
619 N Pennsylvania Street Indianapolis, IN 46204 317.423.0680 phone www.v3co.com		DRAWING NO. <b>C8.1</b>		