

CONSTRUCTION DOCUMENTS

ENGINEER'S PROJECT NO. 11245
DATE: 10-06-2023

MOORES PIKE/SE PARK TRAIL IMPROVEMENTS

SHEET INDEX

- C100 TITLE SHEET
- C101 EXISTING SITE CONDITION PLAN
- C201 MAINTENANCE OF TRAFFIC PLAN
- C301 SELECTIVE SITE DEMOLITION & PREPARATION PLAN
- C401 SITE IMPROVEMENT PLAN
- C501 SITE GRADING PLAN & PROFILE
- C601 DRAINAGE IMPROVEMENT PLAN
- C602 TRAIL CROSS-SECTIONS
- C701 SITE DETAILS

OWNER'S ADDRESS:

City of Bloomington
401 N Morton St
Bloomington, IN 47404

PROJECT ADDRESS:

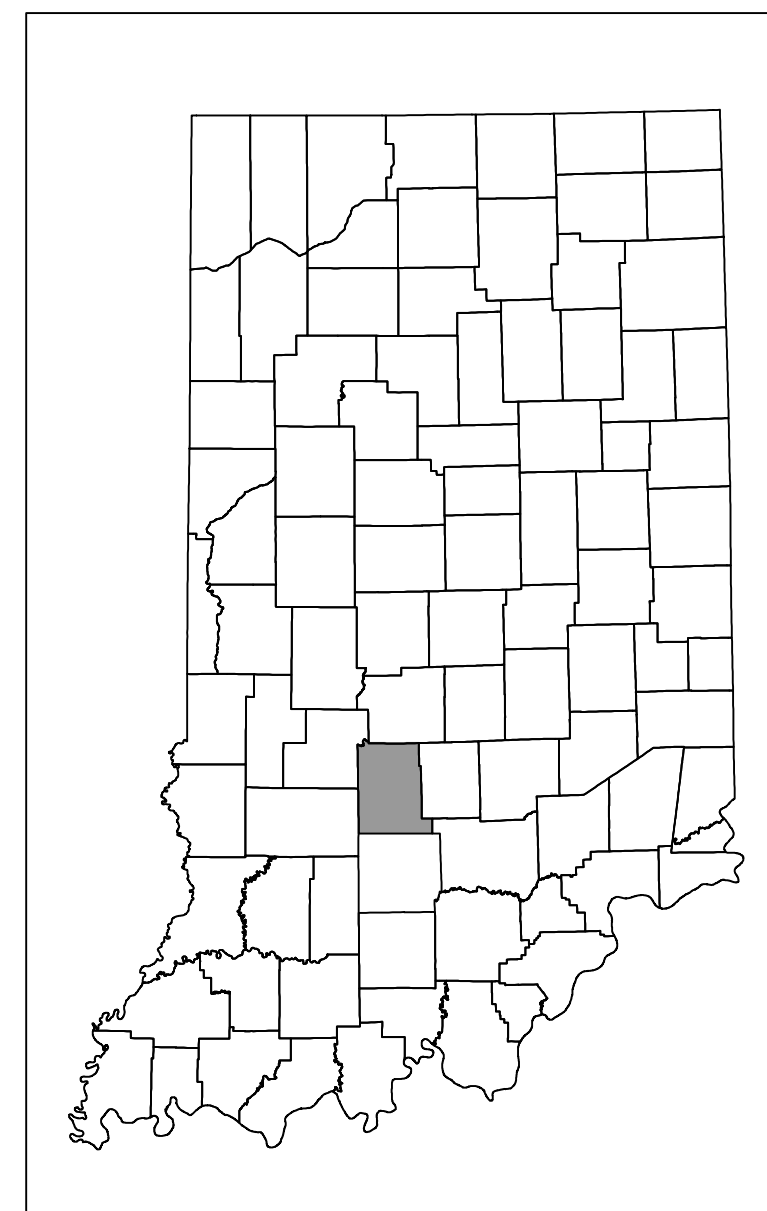
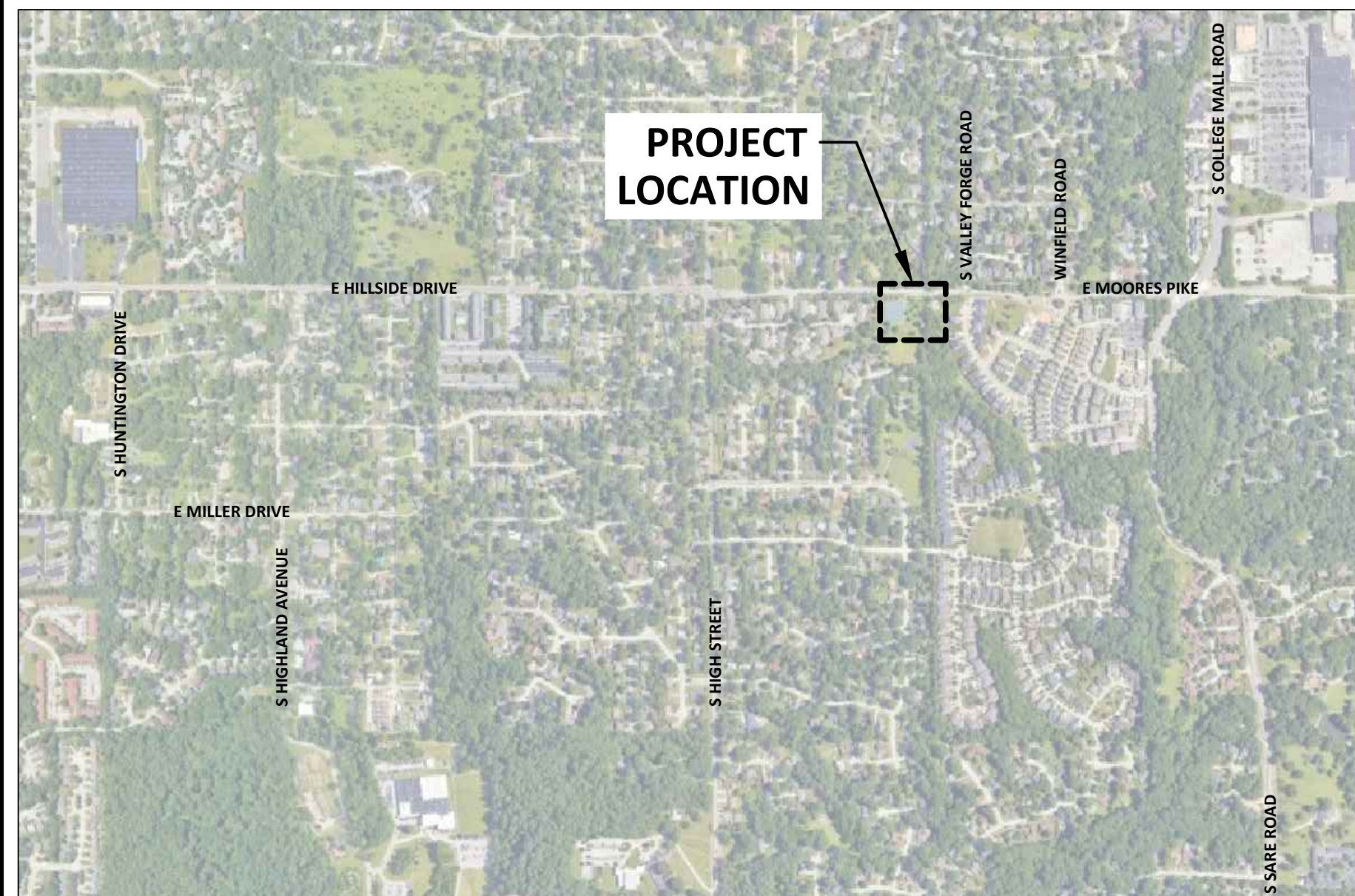
East Moores Pike & Renwick Trail
Bloomington, IN 47401

STAMPS & APPROVALS:

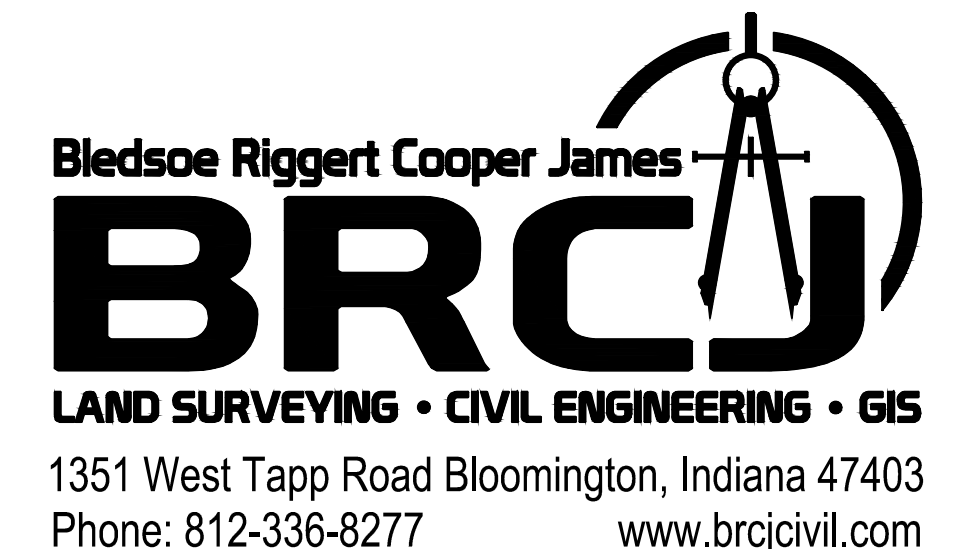
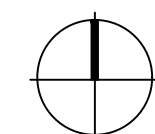


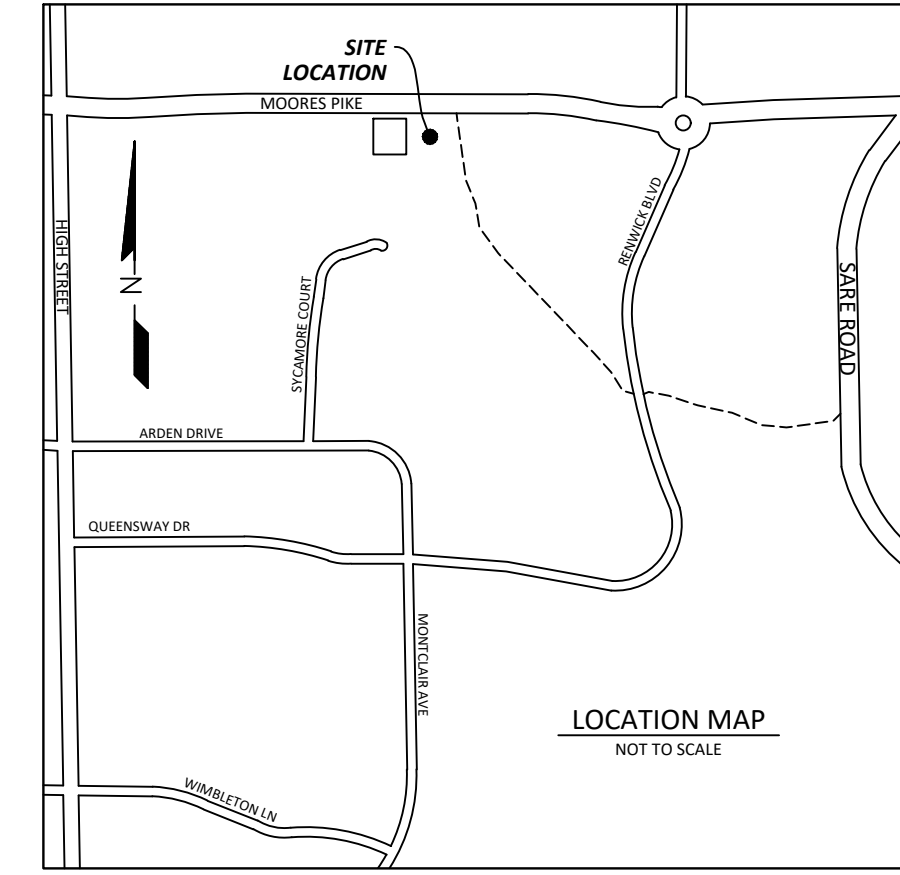
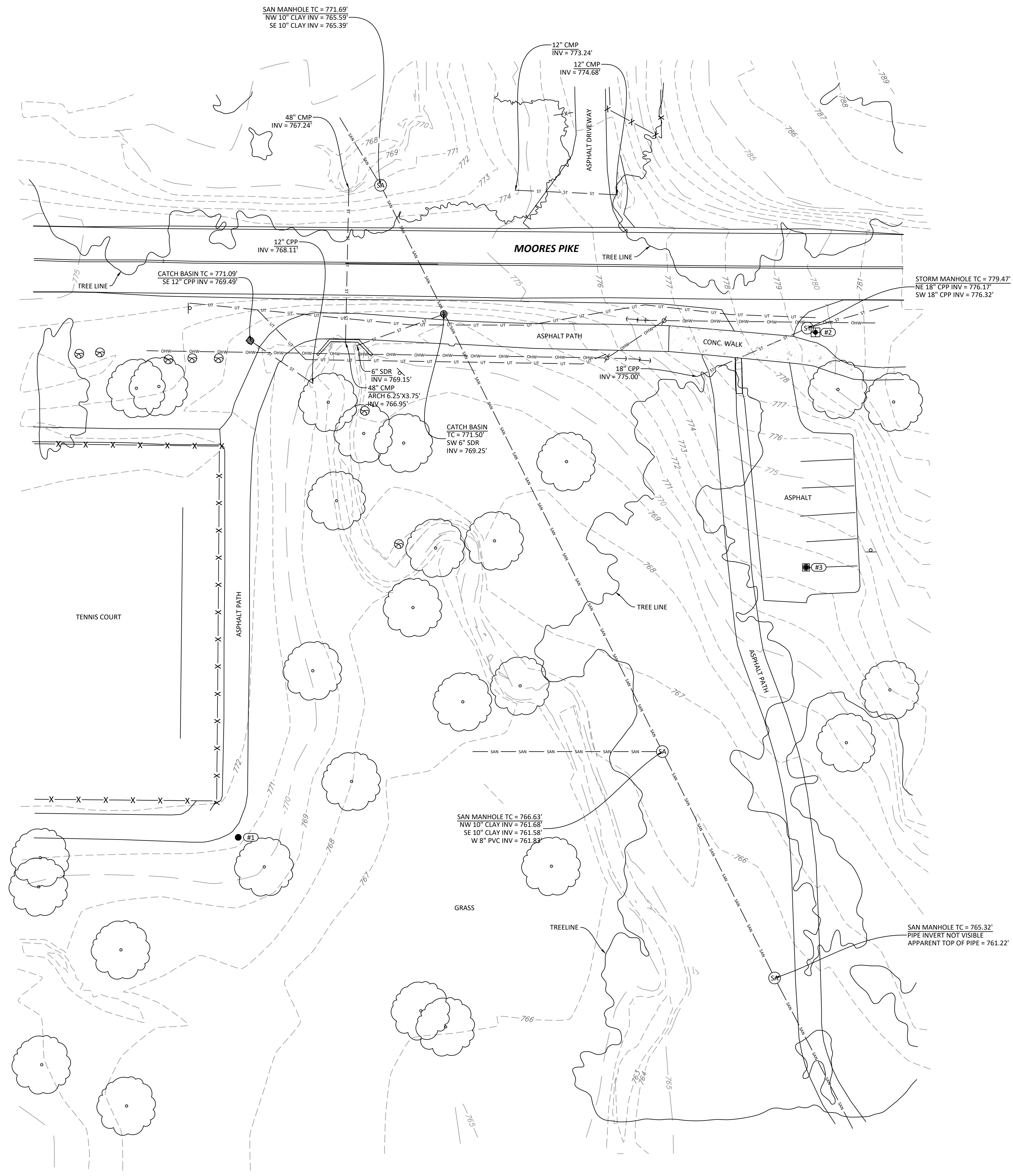
SPECIFICATIONS

REFER TO: PROJECT MANUAL
CITY OF BLOOMINGTON CONSTRUCTION SPECIFICATIONS



PROJECT LOCATION MAPS
NTS





- LEGEND:**
- | | | |
|----------------|--------------------------|-----------------------------|
| ▲ YARD LIGHT | —X—X— FENCE | ⊗ FD AXLE |
| ⊗ LIGHT POLE | —CH— CH GUARDRAIL | ○ FD BRASS DISK |
| ⊗ SIGNAL POLE | —OH— OVERHEAD WIRES | ○ FD COT GIN SPDL |
| ⊗ UTILITY POLE | —USE— UNDER ELEC. | ⊗ FD CHISELED X |
| ⊗ GUY WIRE | —GAS— GAS LINE | ⊗ SET CHISELED X |
| ⊗ CATCH BASIN | —SAN— SAN SEWER LINE | ⊗ SET DRILL HOLE |
| ⊗ CURB INLET | —ST— STORM SEWER LINE | ⊗ FD HARRISON MON. |
| ⊗ ELECTRIC MH | —COM— UNDER COMM. | ⊗ SET HARRISON MON. |
| ⊗ MANHOLE | —EX— EXISTING WATER LINE | ⊗ SET HUB/TACK |
| ⊗ COMM. MH | —CHW— CHILLED WATER LINE | ○ FD REBAR |
| ⊗ SANITARY MH | —SIGN— SIGN | ● SET REBAR |
| ⊗ SIGNAL MH | ⊗ R.O.W. MON. | ● FD MAG NAIL |
| ⊗ STEAM MH | ⊗ MONITORING WELL | ● SET MAG NAIL |
| ⊗ STORM MH | ⊗ BOLLARD | ● FD NAIL |
| ⊗ WATER METER | ⊗ BORE HOLE | ● SET NAIL |
| ⊗ ELEC. METER | ⊗ DOWNSPOUT | ● FD PIPE |
| ⊗ CLEANOUT | ⊗ GATE POST | ⊗ FD RR SPIKE |
| ⊗ GAS METER | ⊗ POLE | ⊗ SET RR SPIKE |
| ⊗ GAS VALVE | ⊗ PARKING METER | ⊗ FD STONE |
| ⊗ WATER MH | ⊗ SPICOT | ⊗ RECORDED B&D |
| ⊗ FIRE HYDRANT | ⊗ T-POST | ⊗ MEASURED B&D |
| ⊗ SPR. HOOKUP | ⊗ WOOD POST | ⊗ CALCULATED B&D |
| ⊗ SPRINKLER | ⊗ TRANSFORMER | ⊗ (PROP) PROPORTIONAL DIST. |
| | ⊗ ELEC. VAULT | ⊗ A.G. ABOVE GROUND |
| | ⊗ PHONE VAULT | ⊗ B.G. BELOW GROUND |
| | ⊗ STEAM VAULT | ⊗ CONIF. TREE |
| | ⊗ VALVE VAULT | ⊗ DECID. TREE |
| | ⊗ AC UNIT | ⊗ SHRUB |
| | ⊗ WATER VALVE | ⊗ PHONE RISER-BOX |
| | ⊗ FIRE MAIN POST | ⊗ TV RISER-BOX |
| | ⊗ MAILBOX | ⊗ ELEC. RISER-BOX |
| | ⊗ PROP. TANK | ⊗ GAS RISER-BOX |
| | ⊗ PARKING BLOCK | |
| | ⊗ POST | |

- NOTES:**
- FIELD WORK PERFORMED FEBRUARY 1 - 6, 2023.
 - LIDAR DATA COLLECTED FEBRUARY 5, 2023.
 - CONTOURS REPRESENT 1-FOOT INTERVALS.
 - UTILITIES SHOWN HEREON ARE PER OBSERVED ABOVE GROUND EVIDENCE AND FROM UTILITY MARKINGS PLACED ON THE GROUND BY INDIANA 811 MEMBER UTILITIES (SEE TICKETS BELOW). MEMBER UTILITIES DO NOT LOCATE PRIVATE LINES OR FACILITIES. MEMBER UTILITIES DO NOT LOCATE SERVICE LINES NOR ALL UTILITIES WHEN A SURVEY IS THE PURPOSE OF THE TICKET. OVERHEAD UTILITIES ARE IDENTIFIED AS OVERHEAD WITHOUT SPECIAL INVESTIGATION AS TO THE TYPE OR NATURE. STORM AND SANITARY INVERT ELEVATIONS, PIPE SIZES, AND MATERIALS ARE ALL APPROXIMATE BASED ON LIMITED INFORMATION AVAILABLE FROM THE SURFACE. NO STRUCTURES WERE ENTERED TO ACCURATELY MEASURE PIPE SIZES OR TO VERIFY PIPE TYPE AND MATERIAL. STRUCTURE GRATES AND COVERS SHOWN SHOULD NOT BE ASSUMED TO BE THE CENTER OF THE BELOW GROUND STRUCTURE. ALL UTILITIES INCLUDING LOCATIONS AND SIZES NEED TO BE VERIFIED PRIOR TO CONSTRUCTION EFFORTS.
 - THE FOLLOWING ARE THE INDIANA 811 TICKET NUMBERS FOR THIS PROJECT: 2302010716, 2302010749, 2302010766, 2302020586, 2302020594, 2302020599
 - THE FOLLOWING ARE THE MEMBER UTILITIES NOTIFIED BY INDIANA 811:
 DUKE ENERGY
 COMCAST CABLE (SOUTH)
 CENTERPOINT ENERGY (SOUTH) (FORMERLY VECTREN)
 BLOOMINGTON TRAFFIC DIVISION, CITY OF
 ZAYO BANDWIDTH
 BLOOMINGTON UTILITIES, CITY OF
 SMITHVILLE TELEPHONE
 AT&T - DISTRIBUTION
 ELECTRIC
 CABLE TV
 GAS
 TRAFFIC LIGHTS
 FIBER OPTIC
 SEWER, WATER
 COMMUNICATIONS, FIBER OPTIC
 COMMUNICATIONS
 - The utilities shown on this survey represent Quality Level B standard of care. The American Society of Civil Engineers (ASCE) has developed an important standard of care guideline, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, CI/ASCE 38-02. This standard guideline describes four quality levels of utility depiction:
 Quality Level D - information derived from existing records or oral recollections.
 Quality Level C - information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to Quality Level D.
 Quality Level B - information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities.
 Quality Level A - Precise horizontal and vertical location of utilities obtained by the actual exposure and subsequent measurements of subsurface utilities, usually at a specific point.
 To order a copy of ASCE Standard 38-02, please go to the ASCE bookstore: <http://www.pubs.asce.org/> or call 1-800-548-2723.
 - THIS DRAWING IS NOT INTENDED TO BE REPRESENTED AS A RETRACEMENT OR ORIGINAL BOUNDARY SURVEY, A ROUTE SURVEY, OR A SURVEYOR LOCATION REPORT.

CONTROL POINTS:

HORIZONTAL DATUM: Reference Frame NAD 83(2011) Epoch 2010.0000, Indiana State Plane Coordinates West Zone, U.S. Survey Feet.
 VERTICAL DATUM: NAVD88 (Computed using Geoid 12A), U.S. Survey Feet.

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1421596.0288	3116963.8177	771.28	5/8" REBAR W/ CAP
2	1421766.5864	3117158.7298	779.47	NAIL SET
3	1421687.2061	3117155.5784	772.59	MAG NAIL

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MOORES PIKE/SE PARK TRAIL IMPROVEMENTS

EAST MOORES PIKE & RENWICK TRAIL
 BLOOMINGTON, IN 47401
 BRCJ Project No: 11245

EXISTING SITE CONDITION PLAN

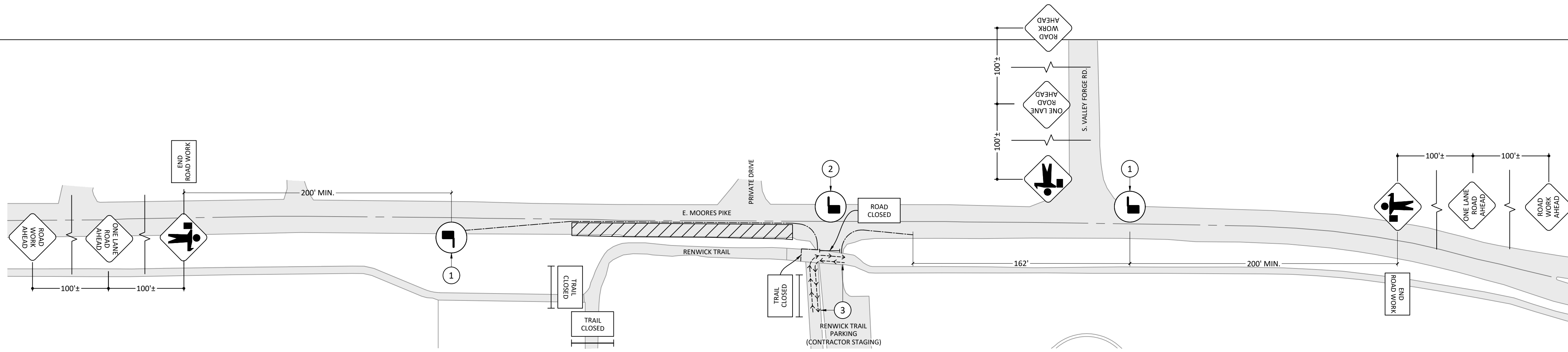
SCALE: 1" = 20'

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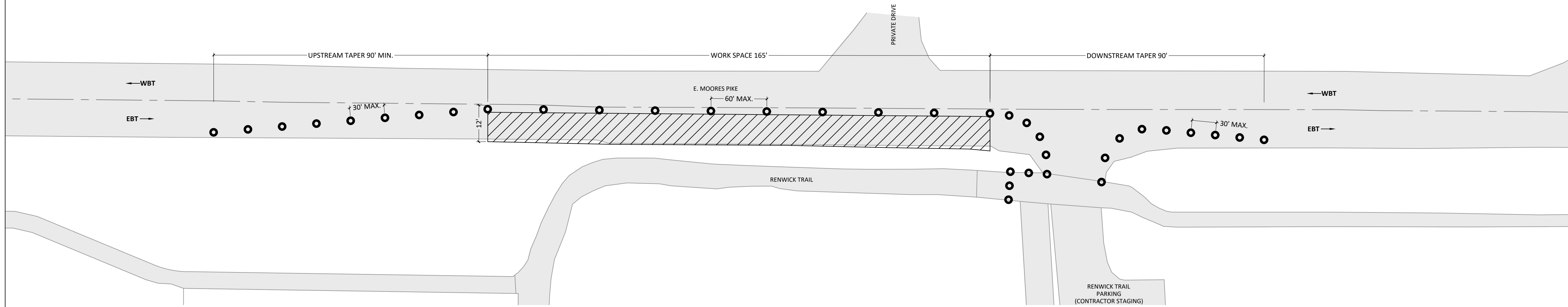
REVISION SCHEDULE		
Rev. #	Rev. Description:	Issue Date

Drawn By: BDB
 Designed By: AEK
 Checked By: WSR

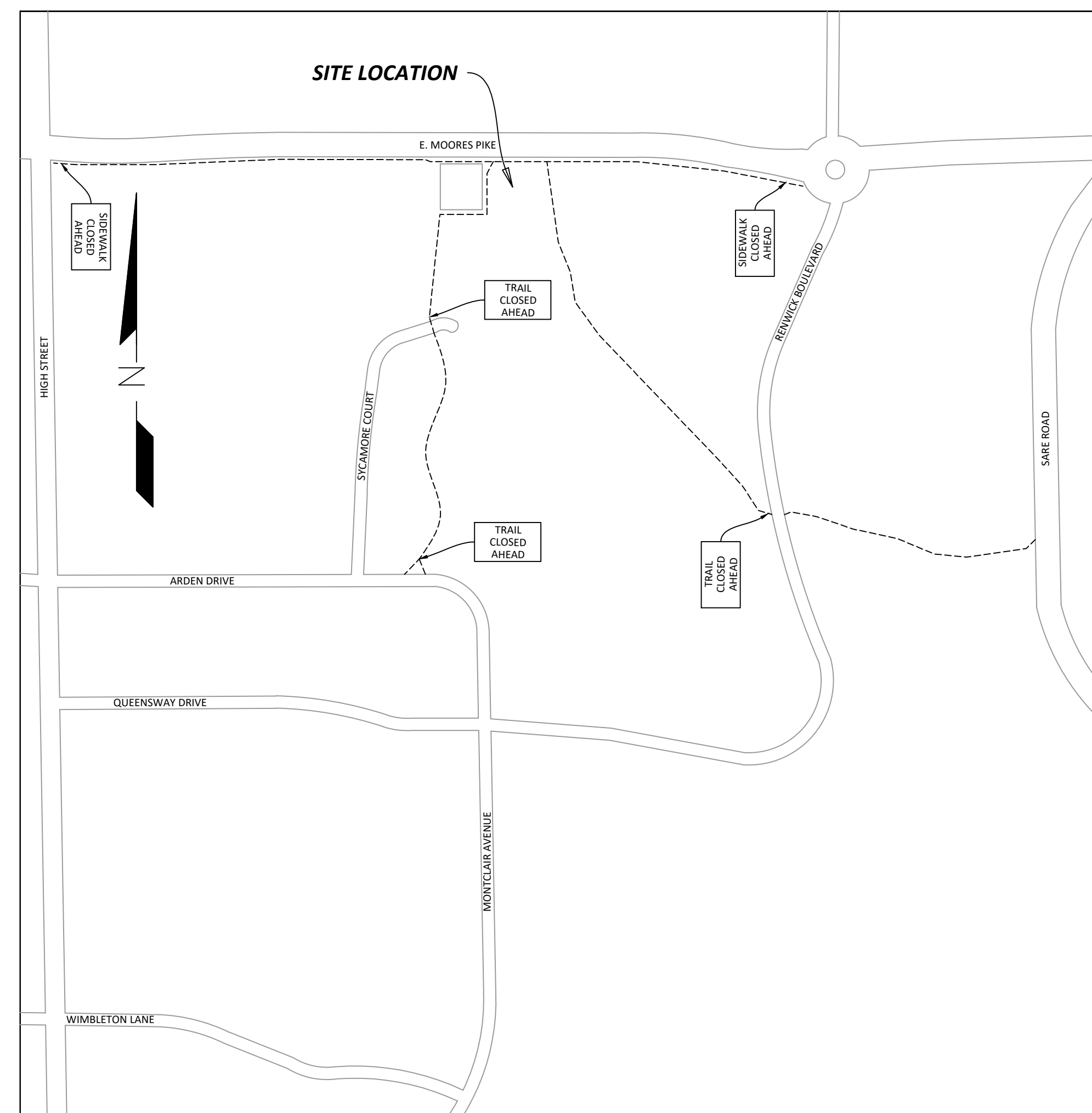
C101



MAINTENANCE OF TRAFFIC PLAN - SIGNAGE PLACEMENT



MAINTENANCE OF TRAFFIC PLAN - BARREL PLACEMENT



MAINTENANCE OF TRAFFIC PLAN - ADVANCED SIGNAGE PLACEMENT N.T.S

GENERAL NOTES

- A. CONTRACTOR SHALL PROVIDE ADVANCE WARNING SIGNAGE, BARRICADES AND FLAGGERS AS REQUIRED WHEN WORKING ALONG, NEAR, OR WITHIN THE CITY OF BLOOMINGTON'S STREETS. ALL TRAFFIC CONTROLLING AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE INDIANA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL TTC DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED. WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME, TTC DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR COVERED.
- B. TWO-WAY TRAFFIC MUST BE MAINTAINED DURING CONSTRUCTION WITH THE USE OF FLAGGERS AS NEEDED.
- C. TRENCHES SHALL BE FILLED DAILY OR COVERED WITH METAL PLATES TO PREVENT ACCESS DURING NON-WORK HOURS.
- D. CONSTRUCTION WORK AREA SHALL BE PULLED BACK EACH EVENING SO THAT MOORES PIKE CAN BE OPEN TO TWO-WAY TRAFFIC DURING NON-WORK HOURS.
- E. POSTED SPEED LIMIT ALONG THIS STRETCH OF MOORES PIKE IS 30 MPH.

MOT PLAN NOTES

- 1. PRIMARY FLAGGERS TO MAINTAIN MOORES PIKE AND VALLEY FORGE ROAD TRAFFIC.
- 2. SECONDARY FLAGGER TO MAINTAIN PARKING (CONTRACTOR STAGING) AND PRIVATE DRIVE EGRESS AS REQUIRED.
- 3. CONTRACTOR MAY USE THE RENWICK TRAIL PARKING AREA FOR STAGING, HOWEVER, PEDESTRIAN ACCESS BETWEEN THE EASTBOUND MOORES PIKE SIDEWALK AND SOUTHBOUND RENWICK TRAIL MUST BE MAINTAINED FOR THE DURATION OF CLOSURE.

LEGEND

- WBT WEST BOUND TRAFFIC
- EBT EAST BOUND TRAFFIC
- CHANNELIZATION DEVICE, BARREL - INDOT STANDARD
- ▨ LIMITS OF WORK ZONE
- ⚠ SIGN, FLAGGER W20-7 - REFER TO MUTCD FOR STANDARD AND DIMENSIONS
- ◇ ONE LANE ROAD AHEAD SIGN, ONE LANE ROAD AHEAD W20-4 - REFER TO MUTCD FOR STANDARD AND DIMENSIONS
- ◇ ROAD WORK AHEAD SIGN, ROAD WORK AHEAD W20-1 - REFER TO MUTCD FOR STANDARD AND DIMENSIONS
- ⊠ FLAGGER POSITION
- END ROAD WORK SIGN, END ROAD WORK G20-2 - REFER TO MUTCD FOR STANDARD AND DIMENSIONS
- TRAIL CLOSED SIGN, TRAIL CLOSED
- TRAIL CLOSED AHEAD SIGN, TRAIL CLOSED AHEAD
- SIDEWALK CLOSED AHEAD SIGN, SIDEWALK CLOSED AHEAD
- ROAD CLOSED SIGN, ROAD CLOSED R11-2 - REFER TO MUTCD FOR STANDARD AND DIMENSIONS
- INDOT TYPE II BARRICADE



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MAINTENANCE OF TRAFFIC PLAN

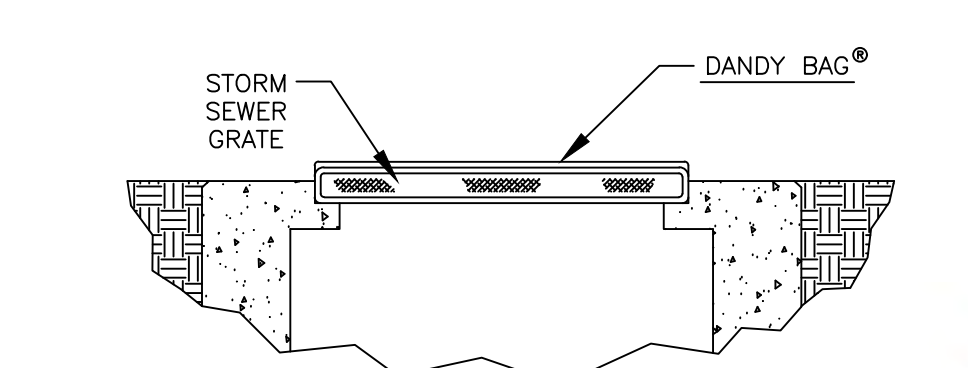
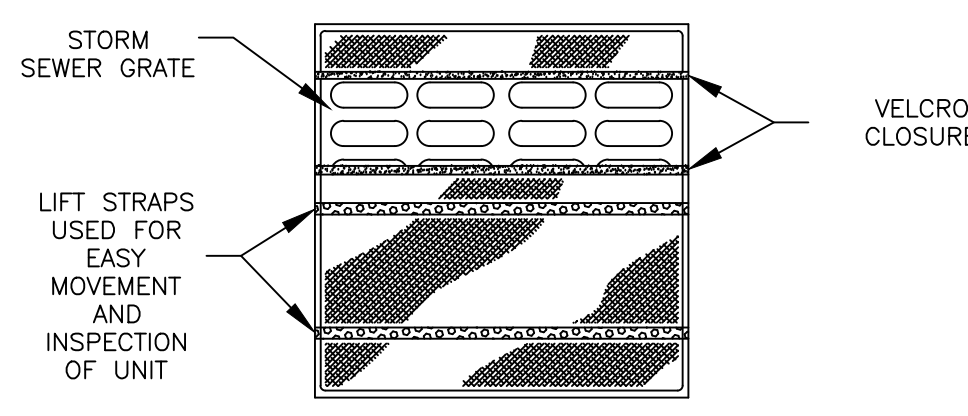
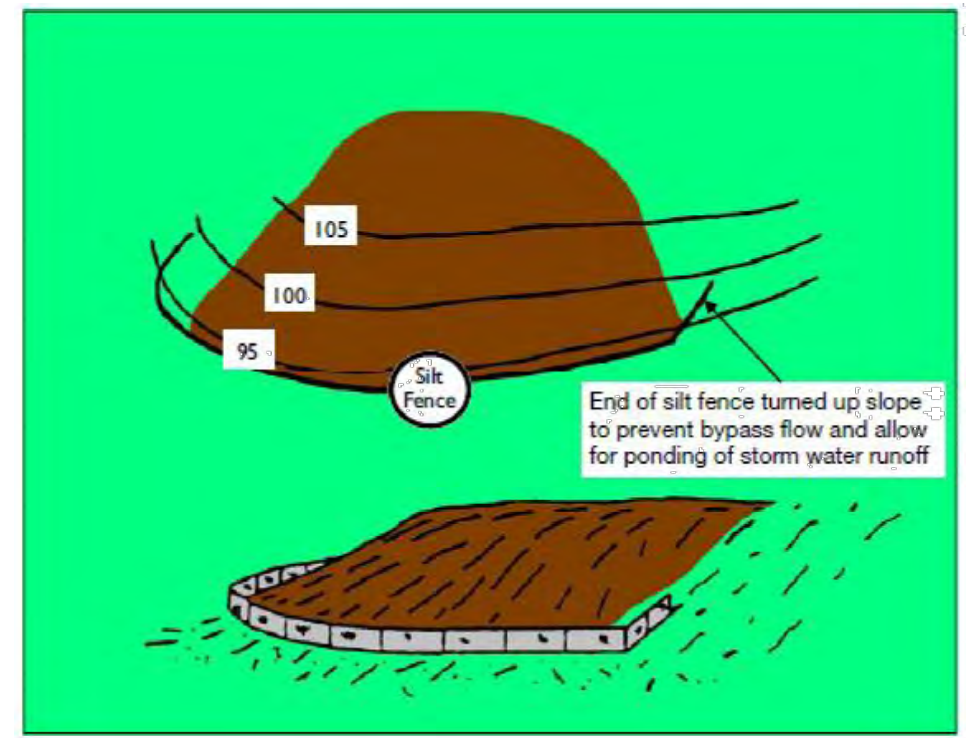
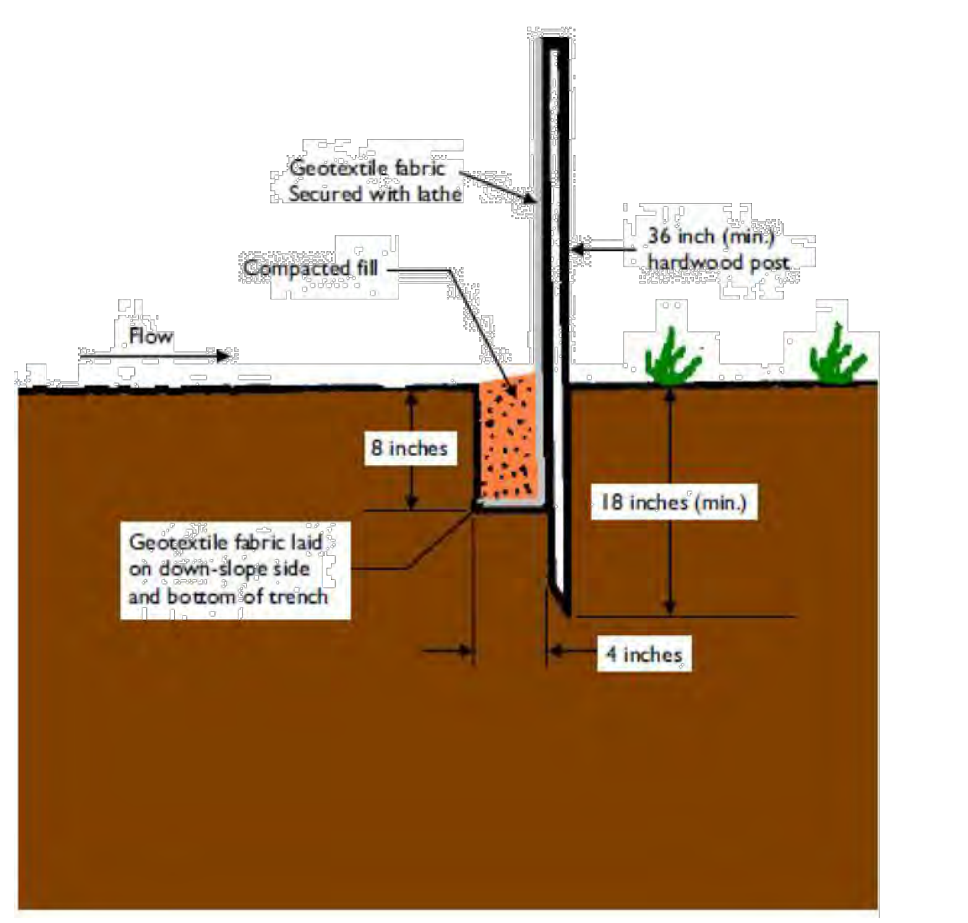
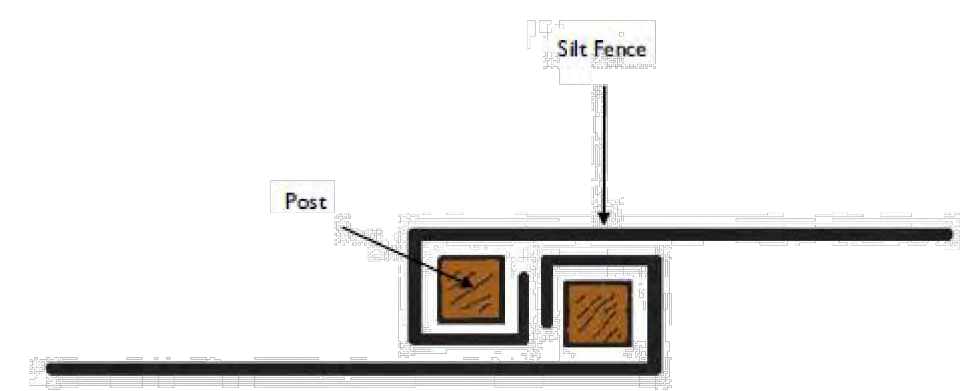
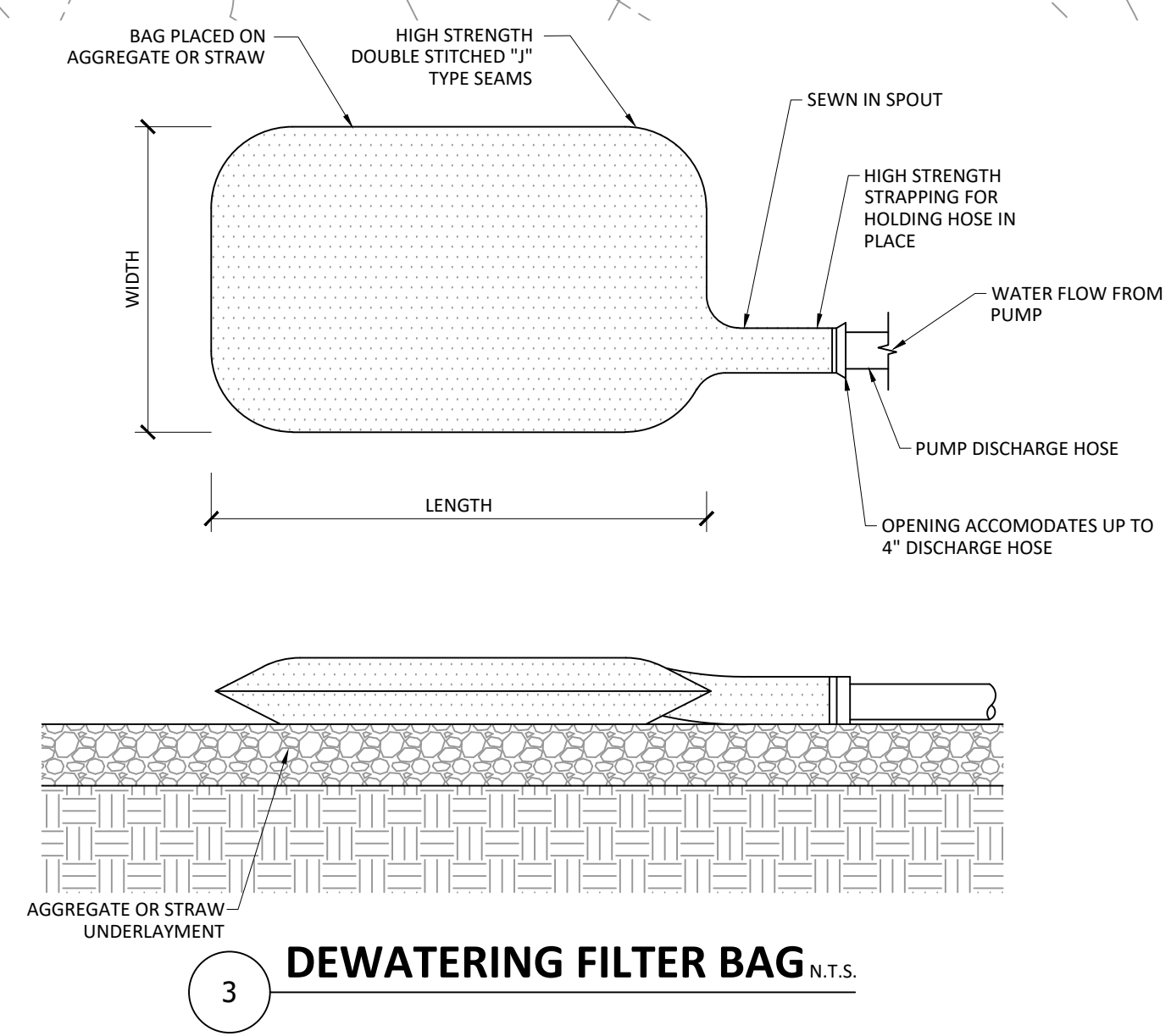
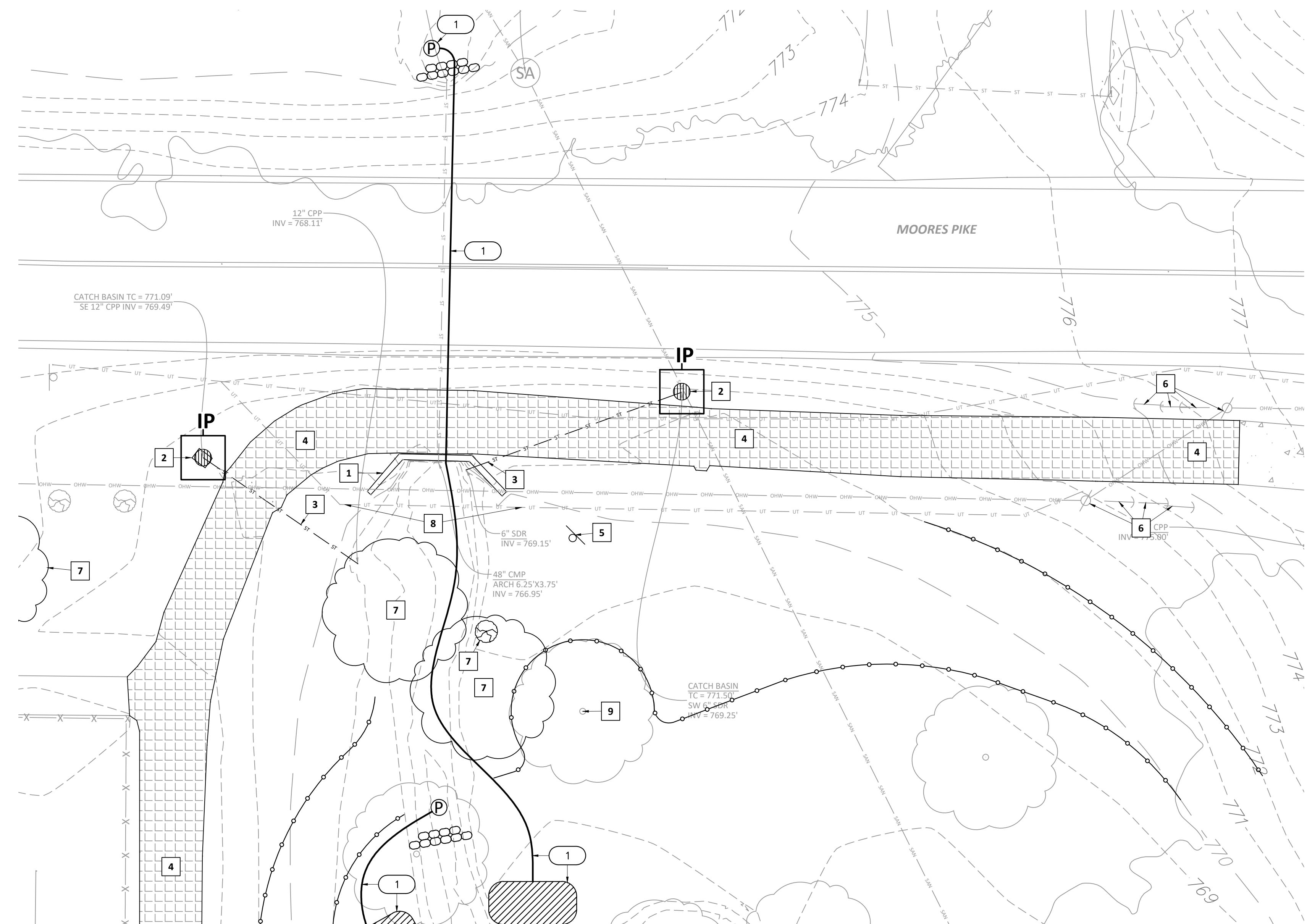
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REVISION SCHEDULE

Rev. #	Rev. Description:	Issue Date

Drawn By: BDB
 Designed By: AEK
 Checked By: AEK

C201



GENERAL NOTES

- A. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF WORK.
- B. THE LOCATION OF UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE EXACT UTILITY LOCATIONS WITH THE LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK. CONTACT THE INDIANA 811 AT 1-800-382-5544.
- C. CONTRACTOR SHALL IMPLEMENT THE CONSTRUCTION OF STORMWATER POLLUTION PREVENTION MEASURES NECESSARY PRIOR TO START OF WORK TO ENSURE SEDIMENT DOES NOT LEAVE THE SITE.
- D. THIS PLAN SHOWS THE OVERALL AREAS OF DEMOLITION TO ALLOW CONSTRUCTION OF IMPROVEMENTS. THE EXACT AREAS OF DEMOLITION SHALL BE ESTABLISHED AND RESTORED BY THE CONTRACTOR. CONTRACTOR SHALL REMOVE ALL DEMOLISHED MATERIAL FROM THE SITE UNLESS NOTED OTHERWISE.
- E. REMOVE EXISTING STRUCTURES, ASPHALT, CONCRETE, GRAVEL, SOIL, LANDSCAPING AND OTHER MATERIALS AS REQUIRED TO CONSTRUCT DESIGNED IMPROVEMENTS UNLESS NOTED OTHERWISE.
- F. CONTRACTOR SHALL SAW CUT ALONG PAVEMENTS AND OTHER ADJOINING SURFACES TO REMAIN. SIDEWALKS AND CURBS SHALL BE REMOVED TO THE NEXT CLOSEST JOINT BEYOND.
- G. AREAS DISTURBED DURING DEMOLITION, CONSTRUCTION, AND GRADING ACTIVITIES SHALL BE RESTORED TO PRE-EXISTING CONDITIONS OR BETTER, UNLESS NOTED OTHERWISE.
- H. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION WORK NECESSARY IN ORDER TO COMPLETE THE PROJECT AS DESIGNED.
- I. CONTRACTOR TO PROTECT ALL EXISTING VEGETATION NOT SCHEDULED FOR REMOVAL.
- J. ANY REQUIRED DRIVEWAY/ACCESS CLOSURES SHALL BE SCHEDULED WITH THE OWNER A MINIMUM OF 7 DAYS IN ADVANCE.
- K. CONTRACTOR SHALL PROVIDE ADVANCE WARNING SIGNAGE, BARRICADES AND FLAGGERS AS REQUIRED WHEN WORKING ALONG, NEAR, OR WITHIN MOORES PIKE. ALL TRAFFIC CONTROLLING AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE INDIANA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

SITE DEMO PLAN NOTES

1. REMOVE EXISTING CONCRETE HEADWALL.
2. REMOVE EXISTING STORM INLET.
3. ABANDON-IN-PLACE EXISTING STORM PIPE OR REMOVE AS REQUIRED. FILL ABANDONED-IN-PLACE PIPE WITH REMOVABLE FLOW-FILL.
4. REMOVE EXISTING ASPHALT PAVING.
5. REMOVE AND SALVAGE EXISTING SIGN. REINSTALL IN NEW LOCATION - REFER TO C401 SITE IMPROVEMENT PLAN.
6. EXISTING UTILITY POLE AND GUY WIRES TO REMAIN.
7. REMOVE EXISTING TREE.
8. EXISTING BURIED FIBER OPTIC - TO BE RELOCATED. COORDINATE WITH ZAYO GROUP.
9. PROTECT EXISTING OAK TREE - TO REMAIN.

EROSION CONTROL NOTES AND LEGEND

1. TEMPORARY PUMP-AROUND FOR DIVERSION OF STREAMFLOW DURING ACTIVE WORK IN CHANNEL. INSTALL SANDBAG COFFERDAMS AT MOUTH OF CULVERT AND AT DOWNSTREAM END OF WORK AREA. PROVIDE PUMPS WITH ADEQUATE CAPACITY TO HANDLE OBSERVED STREAMFLOW. RUN PUMP DISCHARGE LINE THROUGH CULVERT TO DEWATERING FILTER BAG POSITIONED DOWNSTREAM OF WORK AREA. REMOVE PUMPS AND DECONSTRUCT COFFERDAMS AT THE END OF EACH WORK DAY AND AT ANY TIME RAIN OR FORECAST. CONTRACTOR IS RESPONSIBLE FOR MANAGING PUMP-AROUND AND DEWATERING OPERATIONS TO MINIMIZE RISK OF CONSTRUCTION SEDIMENT POLLUTION IN WATERWAYS.

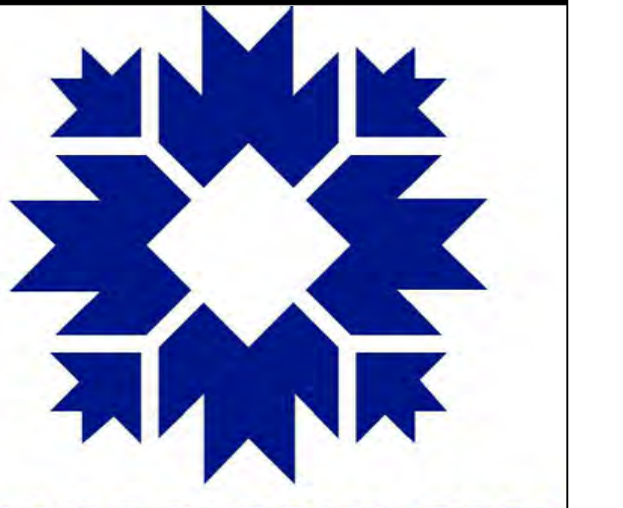
- (P) LIMITS OF SILT FENCE - REFER TO DETAIL 1/C301
- (P) DEWATERING PUMP
- (Hatched box) DEWATERING FILTER BAG - REFER TO DETAIL 3/C301
- (S) SANDBAG COFFER DAM
- (IP) INLET PROTECTION - REFER TO DETAIL 2/C301

LEGEND

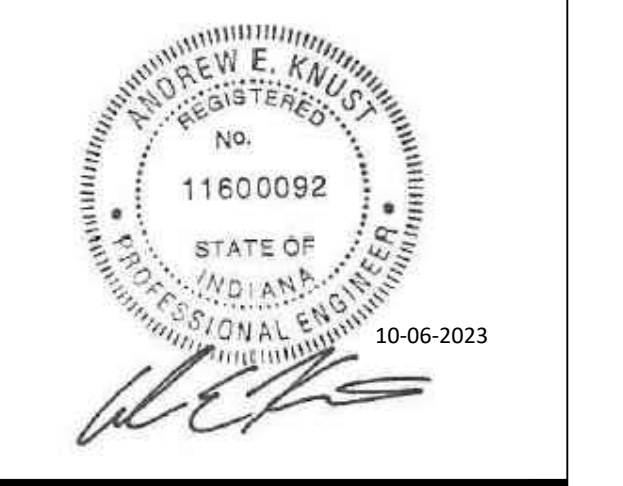
- | | | |
|---|--|--|
| <ul style="list-style-type: none"> YARD LIGHT GUARDRAIL SIGNAL POLE UTILITY POLE GUY WIRE CATCH BASIN CURB INLET ELECTRIC MH MANHOLE PHONE MH SANITARY MH SIGNAL MH STEAM MH STORM MH WATER MH ELEC. METER CLEANOUT GAS METER GAS VALVE WATER VALVE FIRE HYDRANT SPR. HOOKUP SPRINKLER | <ul style="list-style-type: none"> FENCE OVERHEAD WIRES UNDER ELEC. GAS LINE SAN SEWER LINE STORM SEWER LINE UNDER TELEPHONE EXISTING WATER LINE CHILLED WATER LINE SIGN R.O.W. MON. MONITORING WELL BOLLARD BORE HOLE DOWNSPOUT GATE POST PARKING METER SPIGOT T-POST WOOD POST PARKING SPACES TRANSFORMER ELEC. VAULT PHONE VAULT STEAM VAULT VALVE VAULT AC UNIT PHONE BOOTH BIRD FEEDER MAILBOX PROP. TANK PARKING BLOCK | <ul style="list-style-type: none"> FD AXEL FD BRASS DISK FD COT GIN SPDL FD CHISELED X SET CHISELED X SET DRILL HOLE FD HARISON MON. SET HARISON MON. SET HUB/TACK FD REBAR SET REBAR FD MAG NAIL SET MAG NAIL FD NAIL SET NAIL FD PIPE FD RR SPIKE SET RR SPIKE FD STONE RECORDED B&D (M) MEASURED B&D (C) CALCULATED B&D (P/C/P) PROPORTIONAL DIST. A.G. ABOVE GROUND B.G. BELOW GROUND CONIF. TREE DECID. TREE SHRUB PHONE RISER-BOX TV RISER-BOX ELEC. RISER-BOX GAS RISER-BOX |
|---|--|--|

UTILITY CONTACTS

- | | |
|---|---|
| <ul style="list-style-type: none"> AT&T
Zach Deckard - (812) 955-9437 DUKE ENERGY
Brandon Wilson - (812) 337-3023 CITY OF BLOOMINGTON UTILITIES (CBU)
Jane Filing - (812) 349-3631 | <ul style="list-style-type: none"> CENTERPOINT
Jon Eastham - (765) 287-2119 COMCAST
Steve McArthur - (812) 366-3090 ZAYO
Waylon Higgins - (765) 341-1199 |
|---|---|



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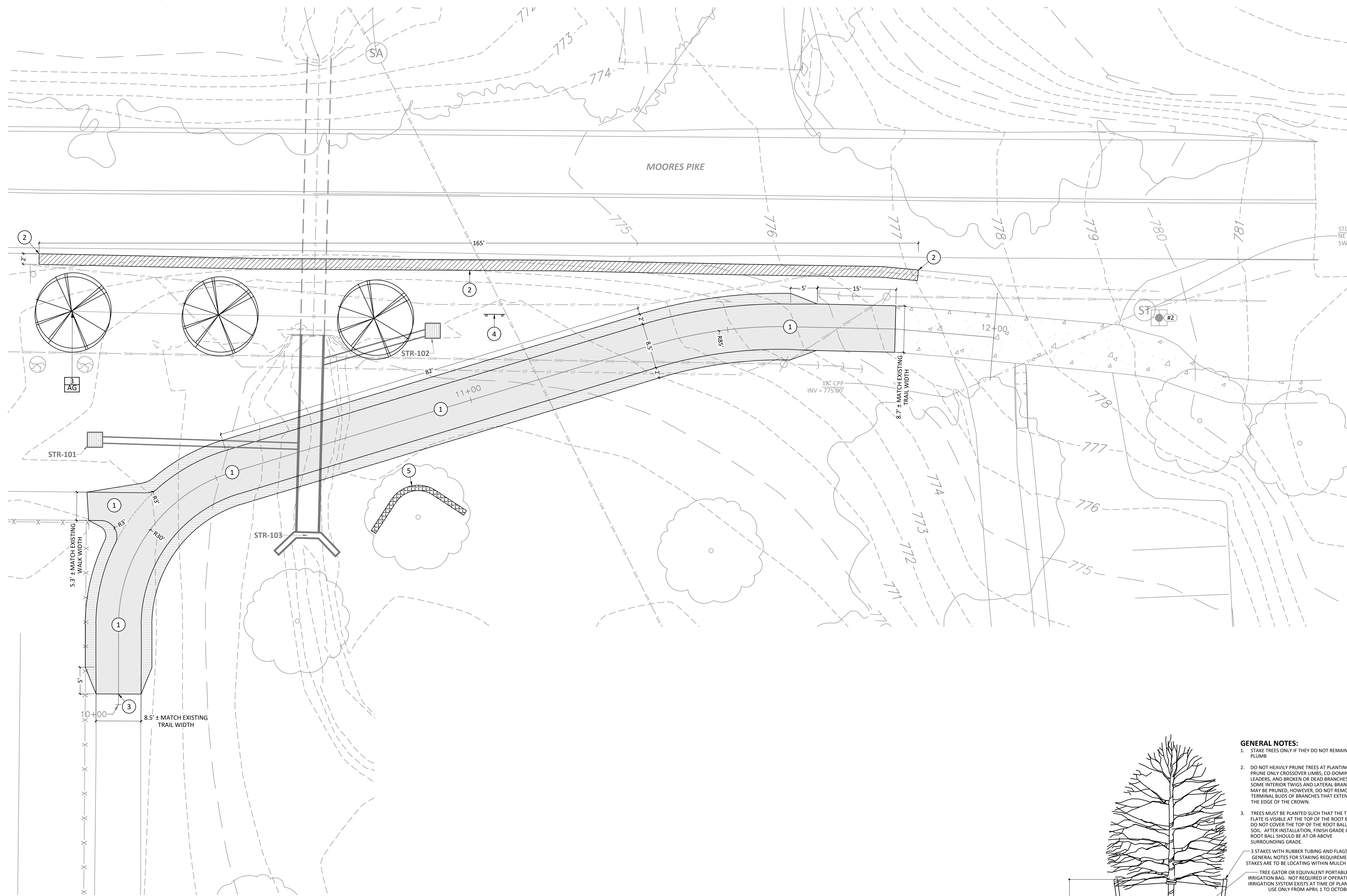
SELECTIVE SITE DEMOLITION & PREPARATION PLAN
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Checked By: AEK

C301





GENERAL NOTES

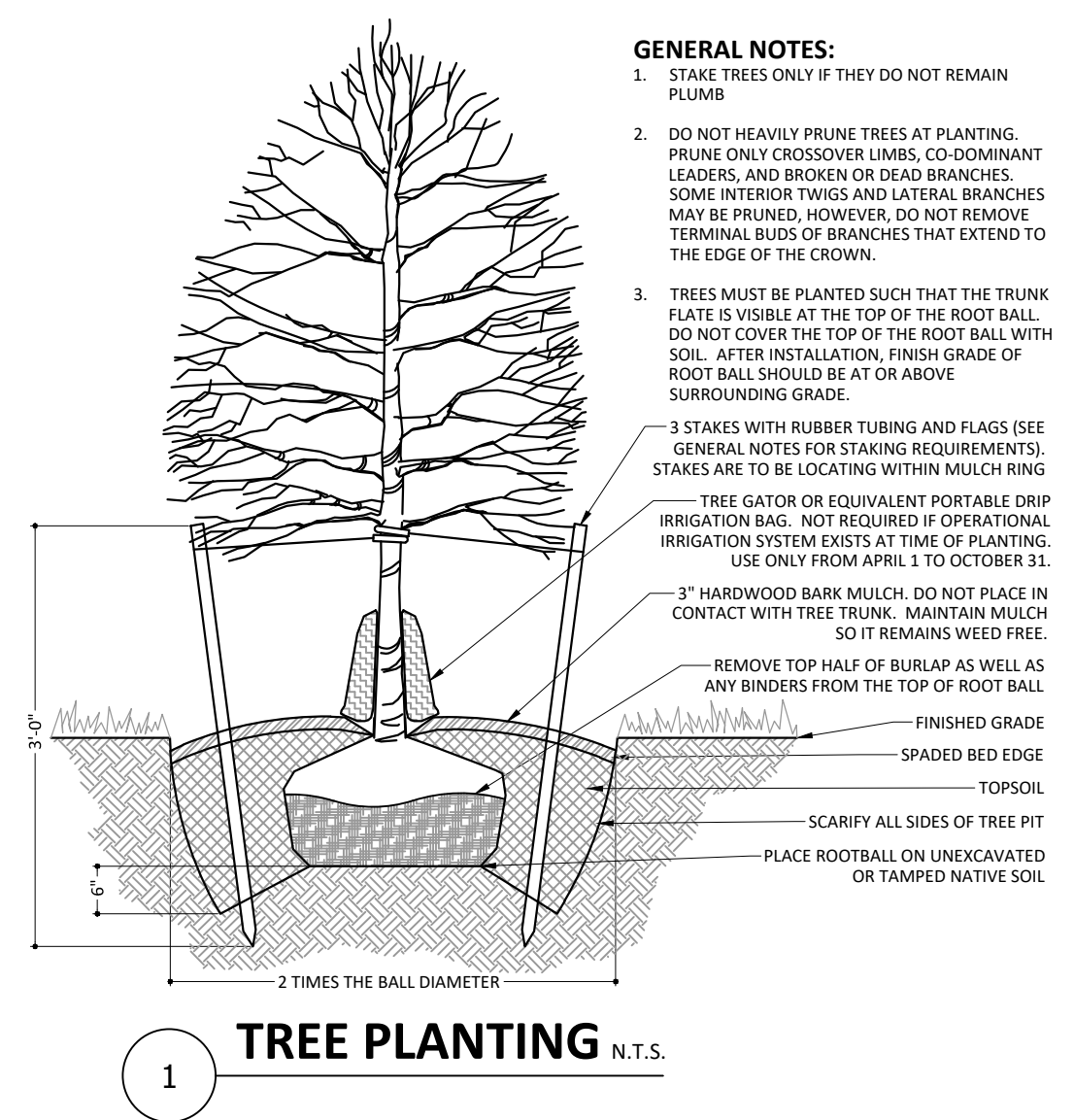
- A. ALL DIMENSIONS ARE TO FACE OF CURB, POINT OF TANGENCY, EDGE OF PAVEMENT, EDGE OF WALK, FACE OF BUILDING OR FENCELINE, UNLESS OTHERWISE NOTED. CURB RETURN RADI ARE TO FACE OF CURB. COORDINATE DIMENSIONS WITH ARCHITECTURAL WORK.
- B. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.
- C. ALL DISTURBED AREAS SHALL RECEIVE 6" OF TOP SOIL, SEED AND MULCH OR BE IMPROVED AS NOTED OTHERWISE.

SITE IMP. PLAN NOTES

- 1. ASPHALT TRAIL - REFER TO DETAIL 2/C701.
- 2. ROADWAY SHOULDER, COMPACTED NO. 53 STONE - REFER TO DETAIL 3/C701.
- 3. NEW PAVEMENT TO EXISTING PAVEMENT - REFER TO DETAIL 5/C701.
- 4. REINSTALL SIGN - REFER TO DETAIL 6/C701.
- 5. TREE WELL - REFER TO DETAIL 7/C701.

PLANTING SCHEDULE

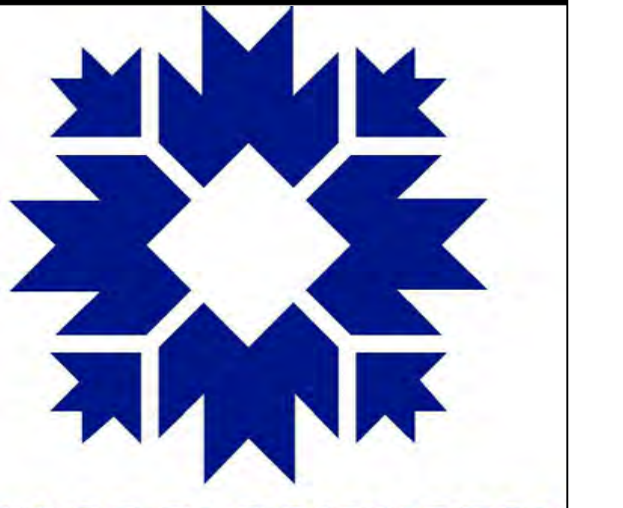
KEY	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SIZE	CONDITION
OVERSTORY TREES					
AG 3		Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Apple Serviceberry	8' High multi-stem	B & B



- GENERAL NOTES:**
- 1. STAKE TREES ONLY IF THEY DO NOT REMAIN PLUMB
 - 2. DO NOT HEAVILY PRUNE TREES AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED, HOWEVER, DO NOT REMOVE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
 - 3. TREES MUST BE PLANTED SUCH THAT THE TRUNK FLATS IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL. AFTER INSTALLATION, FINISH GRADE OF ROOT BALL SHOULD BE AT OR ABOVE SURROUNDING GRADE.
 - 3 STAKES WITH RUBBER TUBING AND FLAGS (SEE GENERAL NOTES FOR STAKING REQUIREMENTS). STAKES ARE TO BE LOCATED WITHIN MULCH RING
 - TREE GATOR OR EQUIVALENT PORTABLE DRIP IRRIGATION BAG. NOT REQUIRED IF OPERATIONAL IRRIGATION SYSTEM EXISTS AT TIME OF PLANTING. USE ONLY FROM APRIL 1 TO OCTOBER 31.
 - 3" HARDWOOD BARK MULCH. DO NOT PLACE IN CONTACT WITH TREE TRUNK. MAINTAIN MULCH SO IT REMAINS WEED FREE.
 - REMOVE TOP HALF OF BURLAP AS WELL AS ANY BINDERS FROM THE TOP OF ROOT BALL
 - FINISHED GRADE
 - SPADED BED EDGE
 - TOPSOIL
 - SCARIFY ALL SIDES OF TREE PIT
 - PLACE ROOTBALL ON UNEXCAVATED OR TAMPED NATIVE SOIL.

LEGEND

- [Solid Grey Box] LIMITS OF NEW ASPHALT PAVEMENT
- [Hatched Box] LIMITS OF COMPACTED SHOULDER - NO. 53 STONE
- [Dotted Box] LIMITS OF GRASS SHOULDER
- [Circle with Spokes] NEW TREE PLANTING - REFER TO DETAIL 1/C401, THIS SHEET



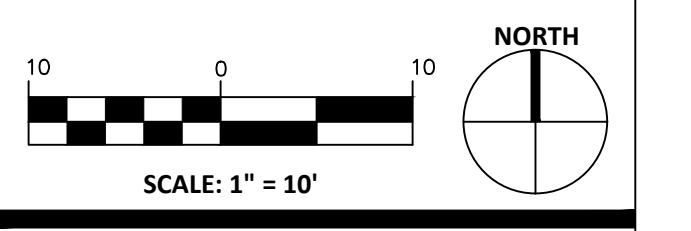
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MOORES PIKE/SE PARK TRAIL IMPROVEMENTS

EAST MOORES PIKE & RENWICK TRAIL
 BLOOMINGTON, IN 47401
 BRCJ Project No: 11245

SITE IMPROVEMENT PLAN



Date: 10-06-2023 Issue: CONSTRUCTION DOCUMENTS

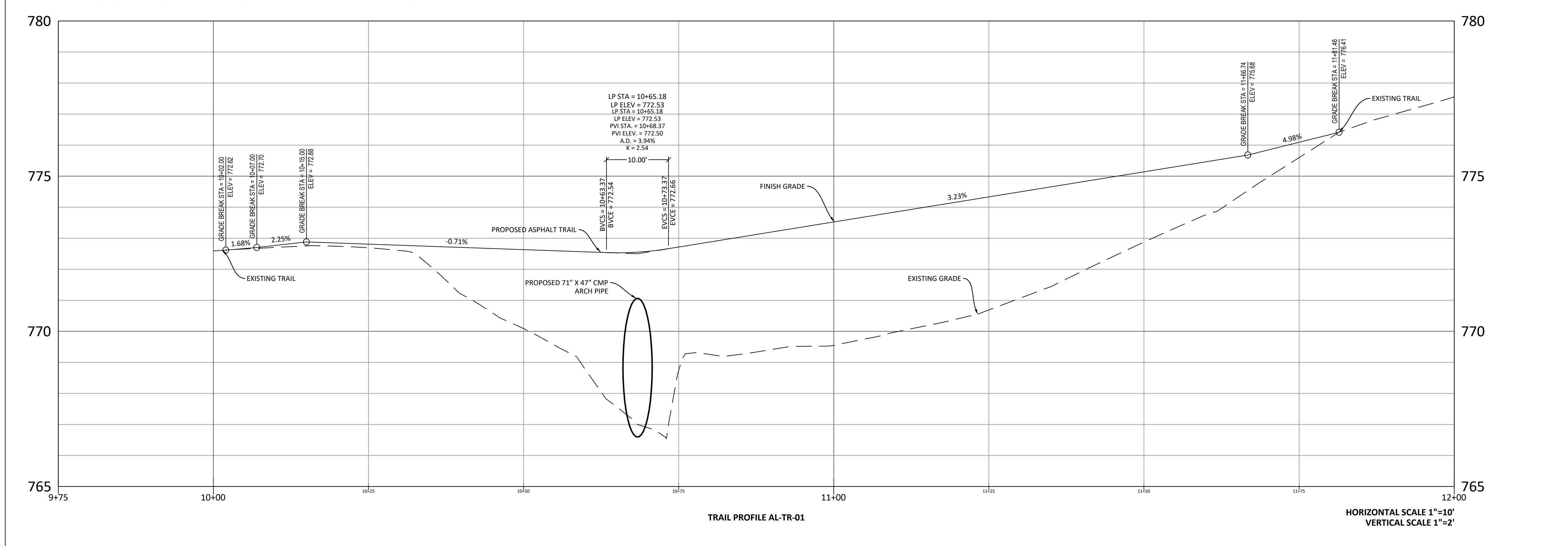
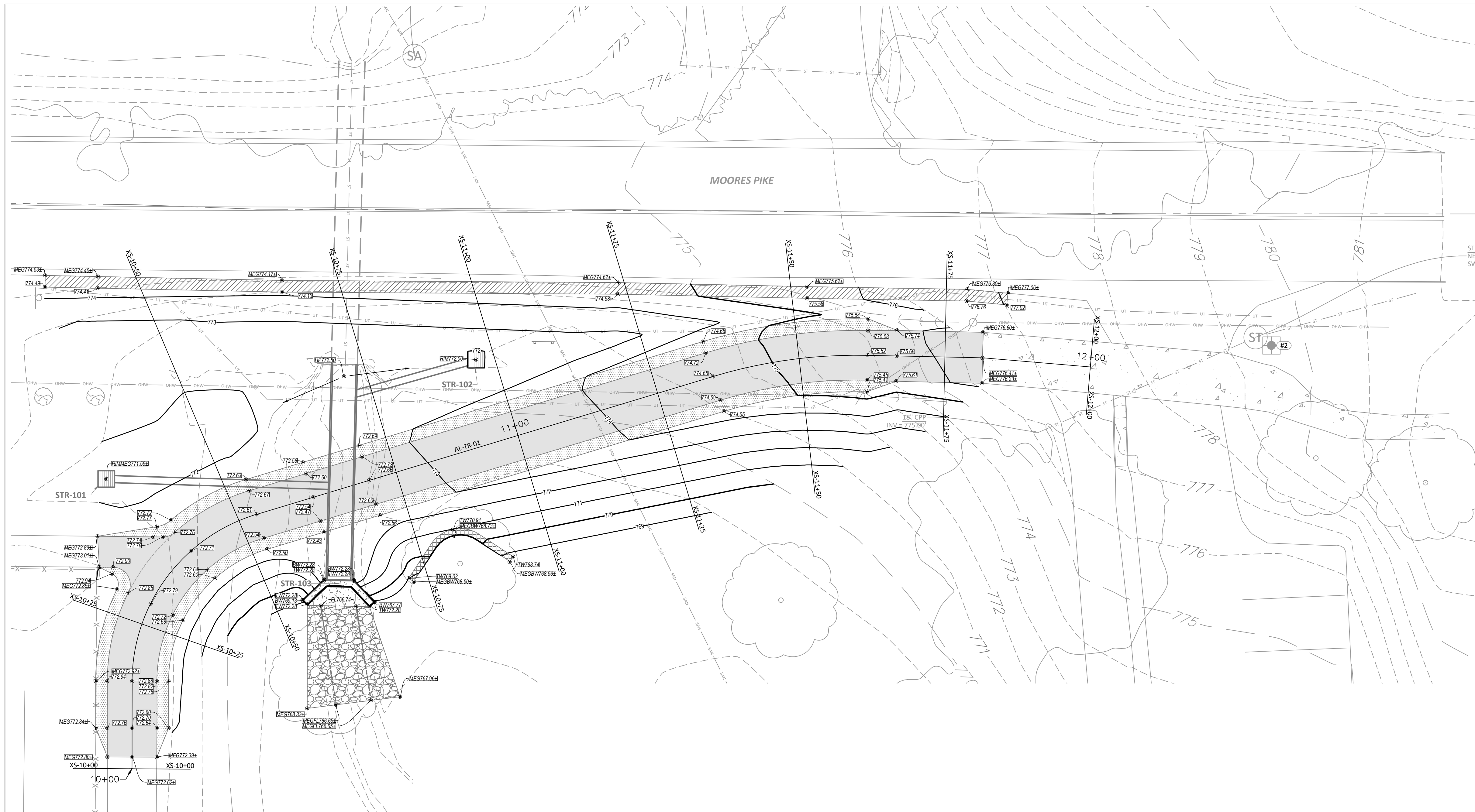
REVISION SCHEDULE

Rev. #	Rev. Description:	Issue Date



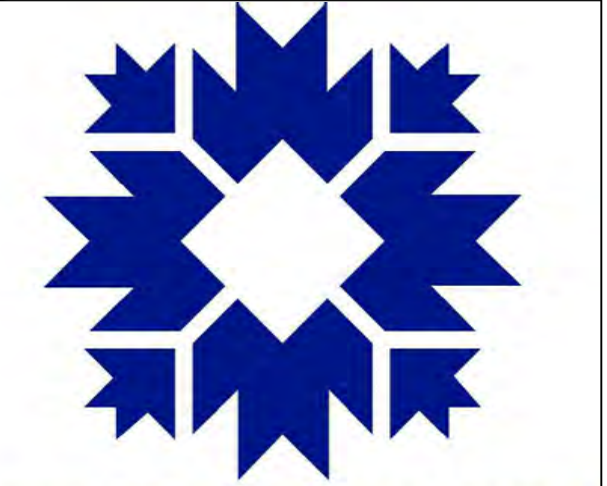
Drawn By: BDB
 Designed By: AEK
 Checked By: AEK

C401



GENERAL NOTES

- GRADE ALL AREAS TO THE FINISH GRADES SHOWN.
- CONTRACTOR TO VERIFY FIELD CONDITIONS WITH RESPECT TO THE PROPOSED GRADING PLANS AND NOTIFY ENGINEER OF ANY AND ALL DISCREPANCIES PRIOR TO BEGINNING WORK.
- INSTALL AND MAINTAIN EROSION CONTROL DEVICES AS REQUIRED AND WHERE NECESSARY TO CONTROL SEDIMENT.
- CONTRACTOR SHALL PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES AND FROM FLOODING PROJECT SITE AND SURROUNDING AREAS. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT AND DAMAGE BY RAIN OR WATER ACCUMULATION. THIS WILL REQUIRE SUPPLEMENTAL GRADING ABOVE AND BEYOND THAT SHOWN.
- CONTRACTOR SHALL ADJUST ALL CASTINGS TO FINISHED GRADE.
- CONTRACTOR SHALL ESTABLISH FINISH GRADES TO ENSURE POSITIVE DRAINAGE WITH NO PONDING.
- SPOT GRADES GIVEN AT BOTTOM OF WALL ELEVATIONS INDICATE WHERE FINISH GRADE AND WALL MEET.
- ALL SLOPES 3:1 OR GREATER TO BE COVERED WITH NORTH AMERICAN GREEN S8150N EROSION CONTROL BLANKET OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
- REFER TO SHEET C502 TRAIL PROFILE & CROSS-SECTIONS.
- ALL DISTURBED AREAS SHALL RECEIVE 6" OF TOP SOIL, SEED AND MULCH OR BE IMPROVED AS NOTED OTHERWISE.



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MOORES PIKE/SE PARK TRAIL IMPROVEMENTS

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SITE GRADING PLAN & PROFILE

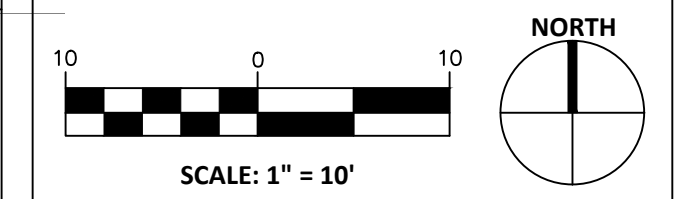
Know what's below.
 Call before you dig.
 CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544 CALL TOLL FREE
 PER INDIANA STATE LAW ICS-1-26.
 IT IS AGAINST THE LAW TO EXCAVATE
 WITHOUT NOTIFYING THE UNDERGROUND
 LOCATION SERVICE TWO (2) WORKING DAYS
 BEFORE COMMENCING WORK.

SEED MIX REQUIREMENTS

SEED MIX REQUIREMENTS:
 SEED MIXTURE SHALL BE 50 LBS/ACRE OF PERENNIAL RYEGRASS, 50 LBS/ACRE OF CERTIFIED COMMON KENTUCKY BLUEGRASS, AND 50 LBS/ACRE OF MERIT KENTUCKY BLUEGRASS. CONTRACTOR SHALL SEED AT A RATE OF 150 LBS/ACRE. EQUIVALENT SEED MIXTURES MAY BE APPROVED, BUT SHALL NOT CONTAIN ANY PROHIBITED PLANT SPECIES AS LISTED IN BLOOMINGTON MUNICIPAL CODE 20.04.080.
 CONTRACTOR SHALL NOT USE PLASTIC LANDSCAPE NETTING OR MESH FOR ANY TYPE OF PERMANENT LANDSCAPING OR EROSION CONTROL.

LEGEND

- PROPOSED CONTOURS
- EXISTING CONTOURS
- SPOT ELEVATION
- MATCH EXISTING GRADE
- TOP OF WALL
- BOTTOM OF WALL
- RIM ELEVATION
- HIGH POINT
- FLOW LINE
- LIMITS OF NEW ASPHALT PAVEMENT
- LIMITS OF ROADWAY SHOULDER - COMPACTED NO. 53 STONE
- LIMITS OF GRASS SHOULDER
- TREE WELL



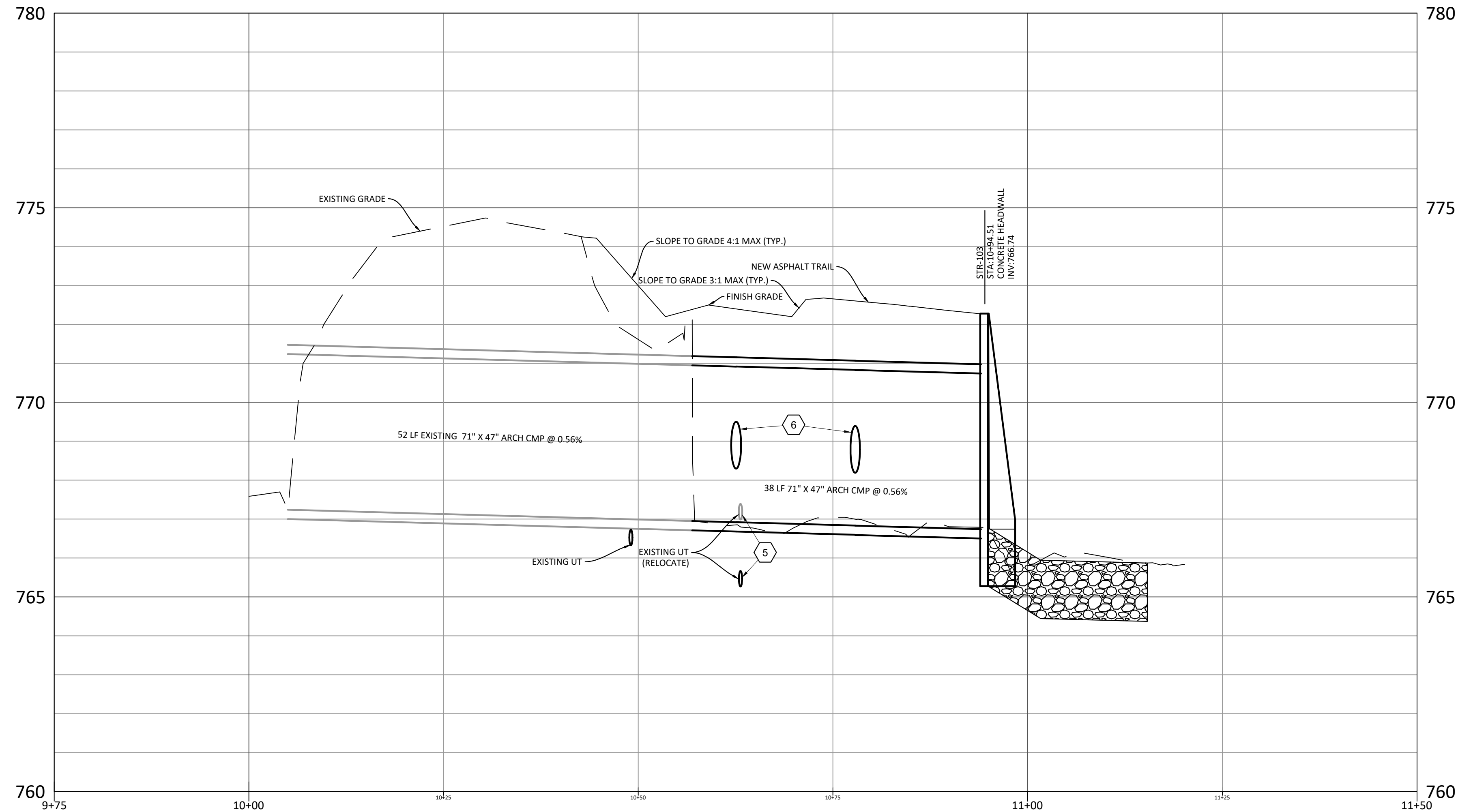
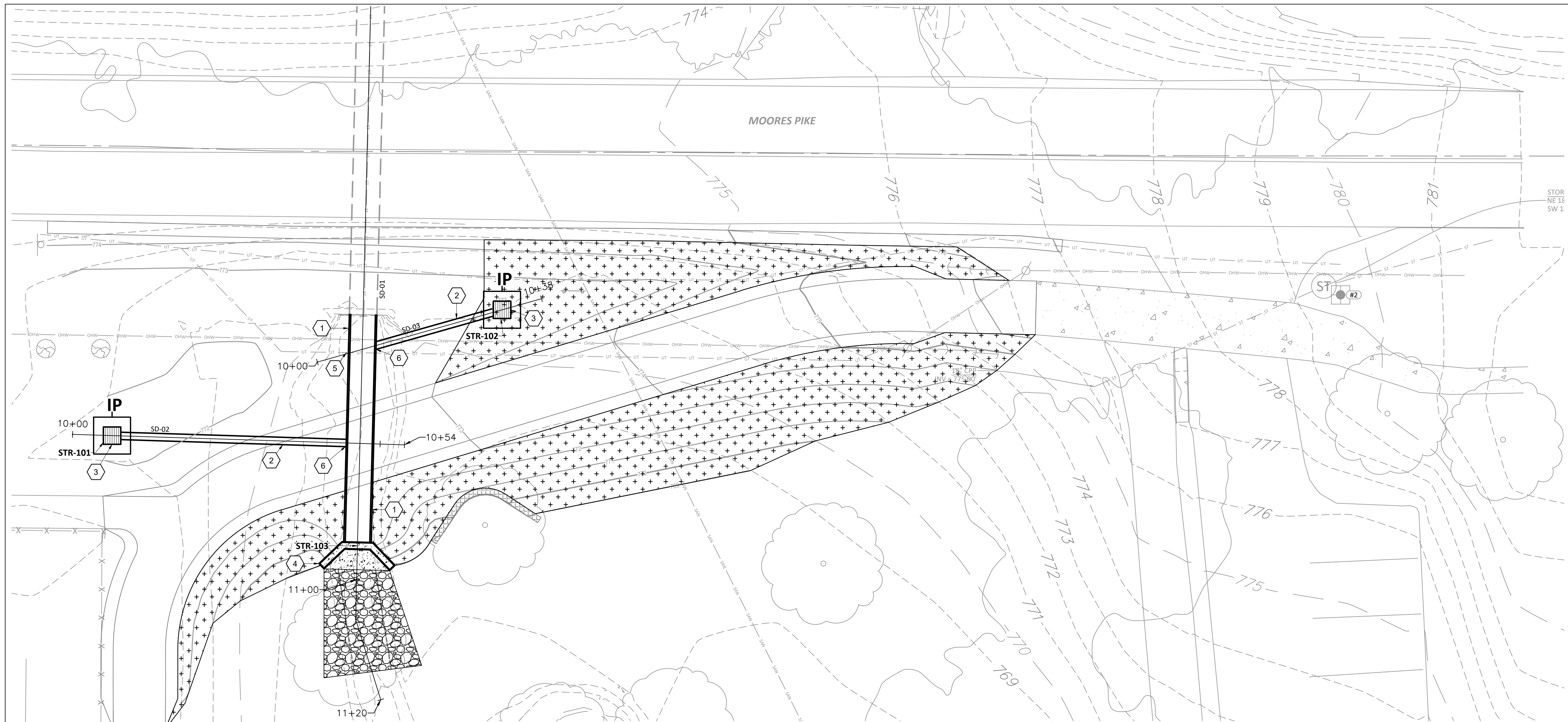
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C501



STORM PROFILE SD-01

HORIZONTAL SCALE 1"=10'
VERTICAL SCALE 1"=2'

GENERAL NOTES

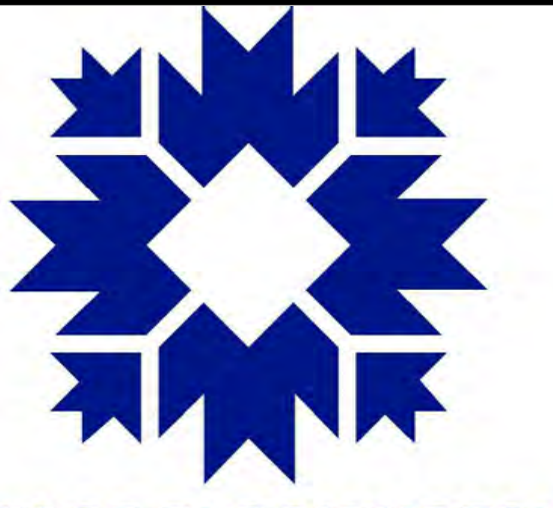
- A. REFER TO DEMOLITION PLANS FOR SEQUENCE OF UTILITY REPLACEMENT TO ENSURE CONTINUOUS SERVICE OF ALL UTILITIES.
- B. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING AS REQUIRED TO COMPLETELY INSTALL THE WORK INDICATED.
- C. CONTRACTOR SHALL COORDINATE EXACT UTILITY LOCATIONS WITH THE OWNER AND LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK. CONTACT THE INDIANA 811 AT 1-800-382-5544 AND OTHER UTILITIES PRIOR TO ANY EXCAVATION ON THE SITE.
- D. ALL WORK ASSOCIATED WITH WATER AND SEWER SYSTEMS SHALL COMPLY WITH THE STANDARDS & REQUIREMENTS OF THE INDIANA DEPT. OF ENVIRONMENTAL MANAGEMENT (IDEM), THE INDIANA STATE DEPARTMENT OF HEALTH (ISDH), THE AMERICAN WATER WORKS ASSOCIATION (AWWA), THE GREAT LAKES UPPER MISSISSIPPI BOARD OF STATE PUBLIC HEALTH AND ENVIRONMENTAL MANAGERS (GLUMRB), THE INDIANA PLUMBING CODE AND THE CITY OF BLOOMINGTON UTILITIES CONSTRUCTION SPECIFICATIONS.
- E. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.
- F. CONTRACTOR SHALL SET ALL EXISTING AND PROPOSED CASTINGS AND CLEANOUT COVERS TO FINAL FINISHED GRADE.
- G. ALL STORM LATERALS SHALL HAVE A MINIMUM COVER OF 24" UNLESS NOTED OTHERWISE.
- H. ALL STORM LATERALS SHALL HAVE A MINIMUM SLOPE OF 1/8" PER FOOT UNLESS NOTED OTHERWISE.
- I. WHERE DISSIMILAR PIPING MATERIALS ARE JOINED TOGETHER ALONG GRAVITY SANITARY AND STORM LATERALS, THE CONTRACTOR SHALL USE A NON-SHEAR COUPLING EQUAL TO FERROD.
- J. PRE-CONSTRUCTION MEETING: EFFECTIVE MARCH 1, 2010, ALL PROJECTS WILL REQUIRE A PRE-CONSTRUCTION MEETING WITH THE CITY OF BLOOMINGTON UTILITIES (CBU) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR AND/OR DEVELOPER MUST CONTACT THE UTILITIES TECHNICIAN AT (812)349-3676 TO SCHEDULE THE MEETING.
- K. UTILITIES INSPECTION: CONTRACTOR SHALL NOTIFY THE CITY OF BLOOMINGTON UTILITIES ENGINEERING DEPARTMENT ONE (1) WORKING DAY PRIOR TO CONSTRUCTION OF ANY WATER, STORM OR SANITARY SEWER UTILITY WORK. A CBU INSPECTOR MUST HAVE NOTICE SO WORK CAN BE INSPECTED, DOCUMENTED, AND A PROPER AS-BUILT MADE. WHEN A CONTRACTOR WORKS ON WEEKENDS, A CBU DESIGNATED HOLIDAY, OR BEYOND NORMAL CBU WORK HOURS, THE CONTRACTOR WILL PAY FOR THE INSPECTOR'S OVERTIME. FOR CBU WORK HOURS AND HOLIDAY INFORMATION, PLEASE CONTACT THE CITY OF BLOOMINGTON UTILITIES DEPARTMENT AT (812)349-3660.
- L. ALL DISTURBED AREAS SHALL RECEIVE 6" OF TOP SOIL, SEED AND MULCH OR BE IMPROVED AS NOTED OTHERWISE.

PLAN NOTES

- 1. EXTEND 71" X 47" ALUMINIZED CORRUGATED METAL ARCH PIPE WITH MANUFACTURER RECOMMENDED BAND COUPLING.
- 2. 12" ALUMINIZED CORRUGATED METAL PIPE.
- 3. TYPE E BOX WITH EJIW 6610 DITCH GRATE - REFER TO PROFILES SD-02 AND SD-03, SHEET C602 TRAIL CROSS-SECTIONS.
- 4. CONCRETE HEADWALL - REFER TO DETAIL 8/C701.
- 5. EXISTING TELECOM CONDUIT EXPOSED IN CHANNEL BED. COORDINATE WITH ZAYO FOR RELOCATION.
- 6. CONNECT 12" CMP LATERALS WITH 12" MANUFACTURED TEE, SEALED WITH FLAT GASKET OR O-RING GASKET.

LEGEND

- PROPOSED STORM INLET - REFER TO DETAIL 4/C701.
- PROPOSED CONCRETE HEADWALL - REFER TO DETAIL 8/C701.
- LIMITS OF RIPRAP OUTFALL PROTECTION - REFER TO DETAIL 9/C701.
- EROSION CONTROL BLANKET, FULLY BIODEGRADABLE NA GREEN S150BN OR APPROVED EQUAL.
- INLET PROTECTION - REFER TO DETAIL 2/C301.



CITY OF BLOOMINGTON

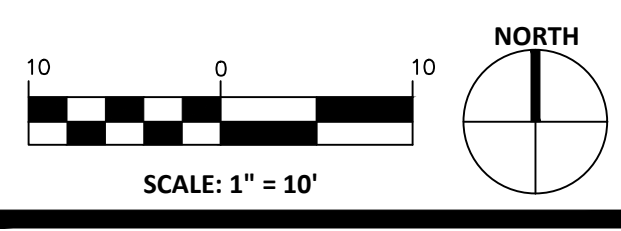
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MOORES PIKE/SE PARK TRAIL IMPROVEMENTS

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DRAINAGE IMPROVEMENT PLAN



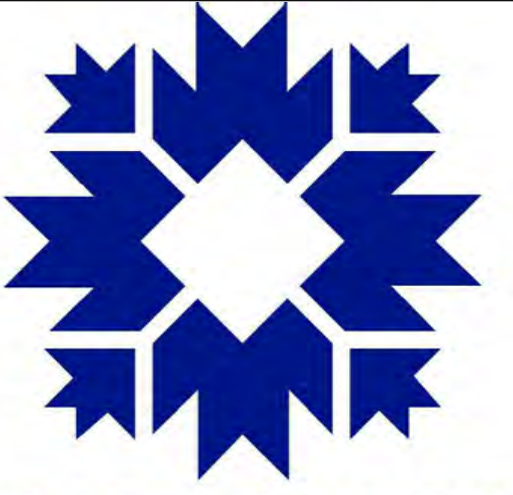
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C601



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TRAIL CROSS-SECTIONS

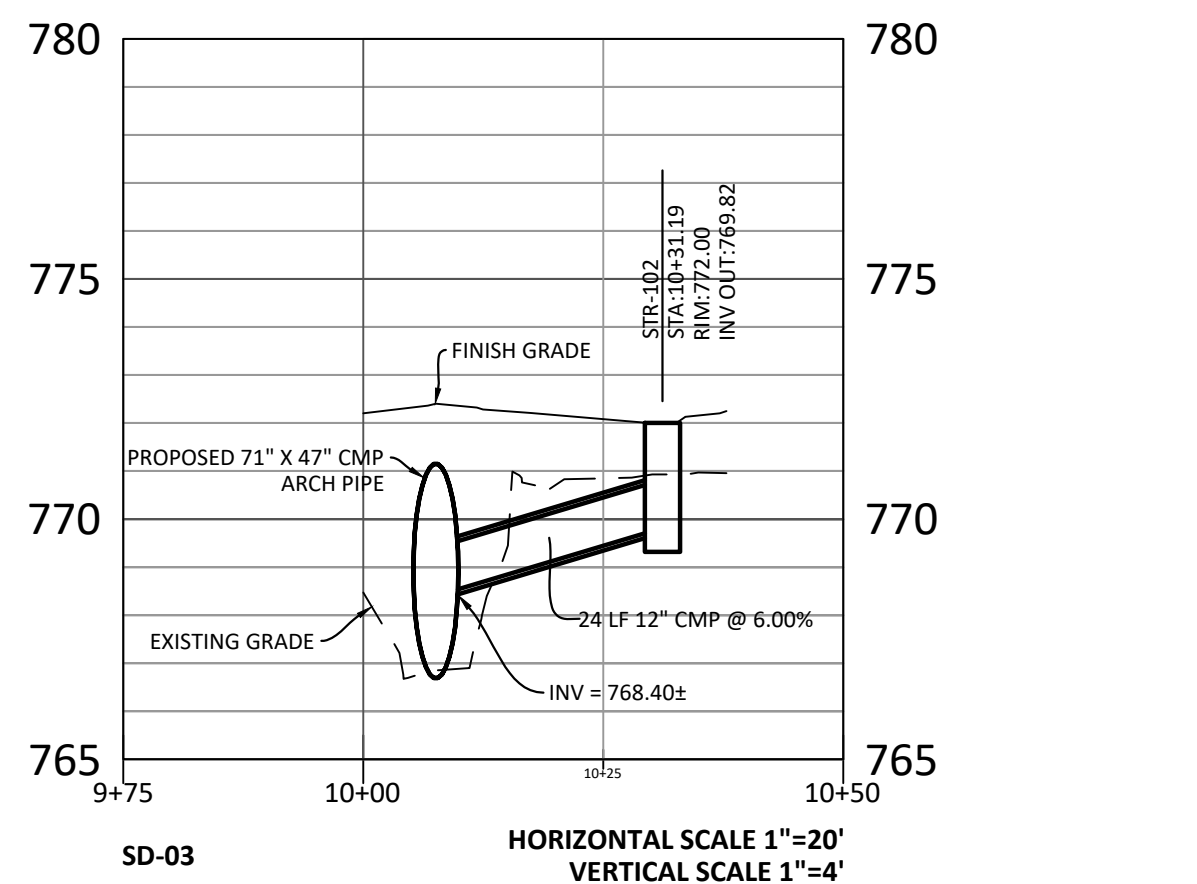
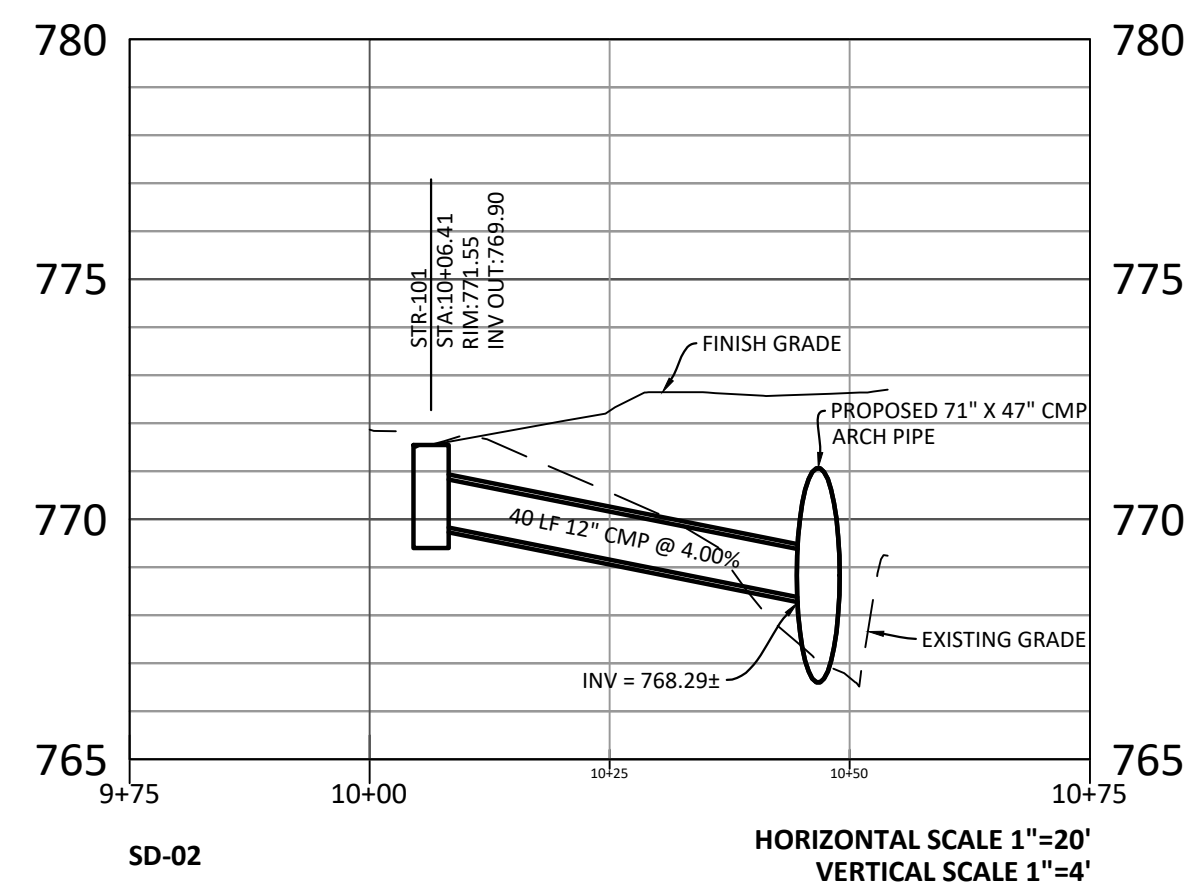
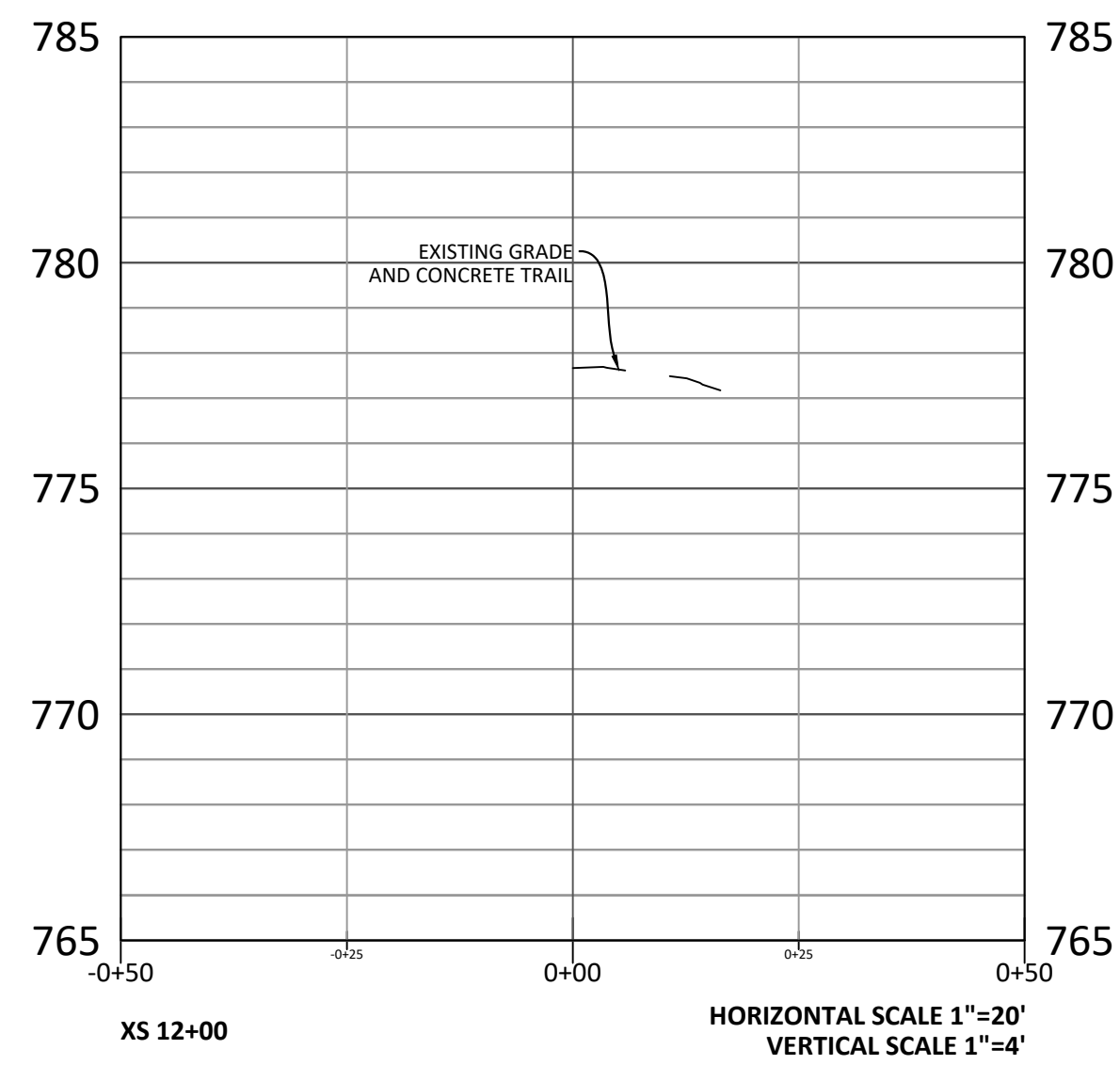
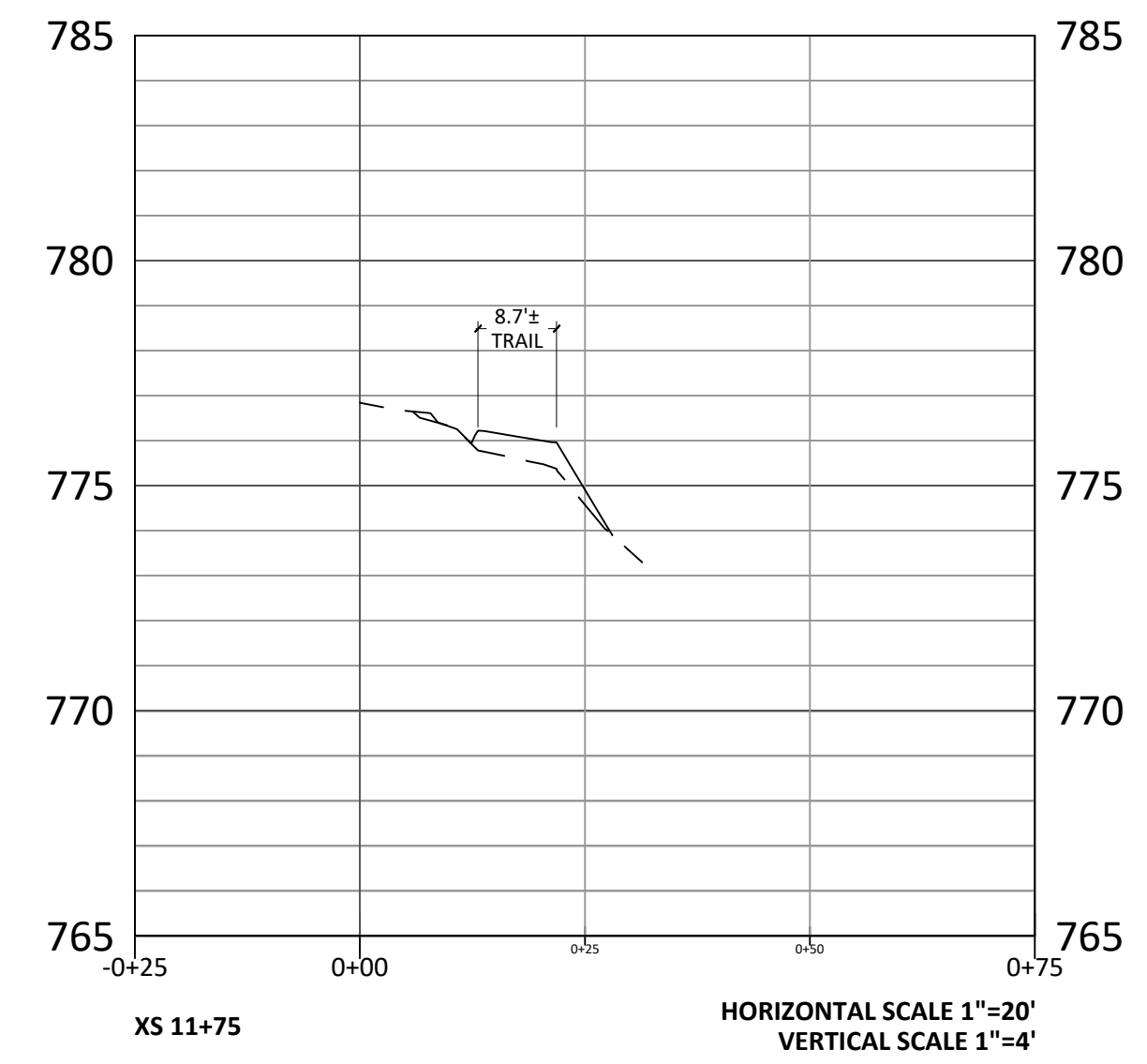
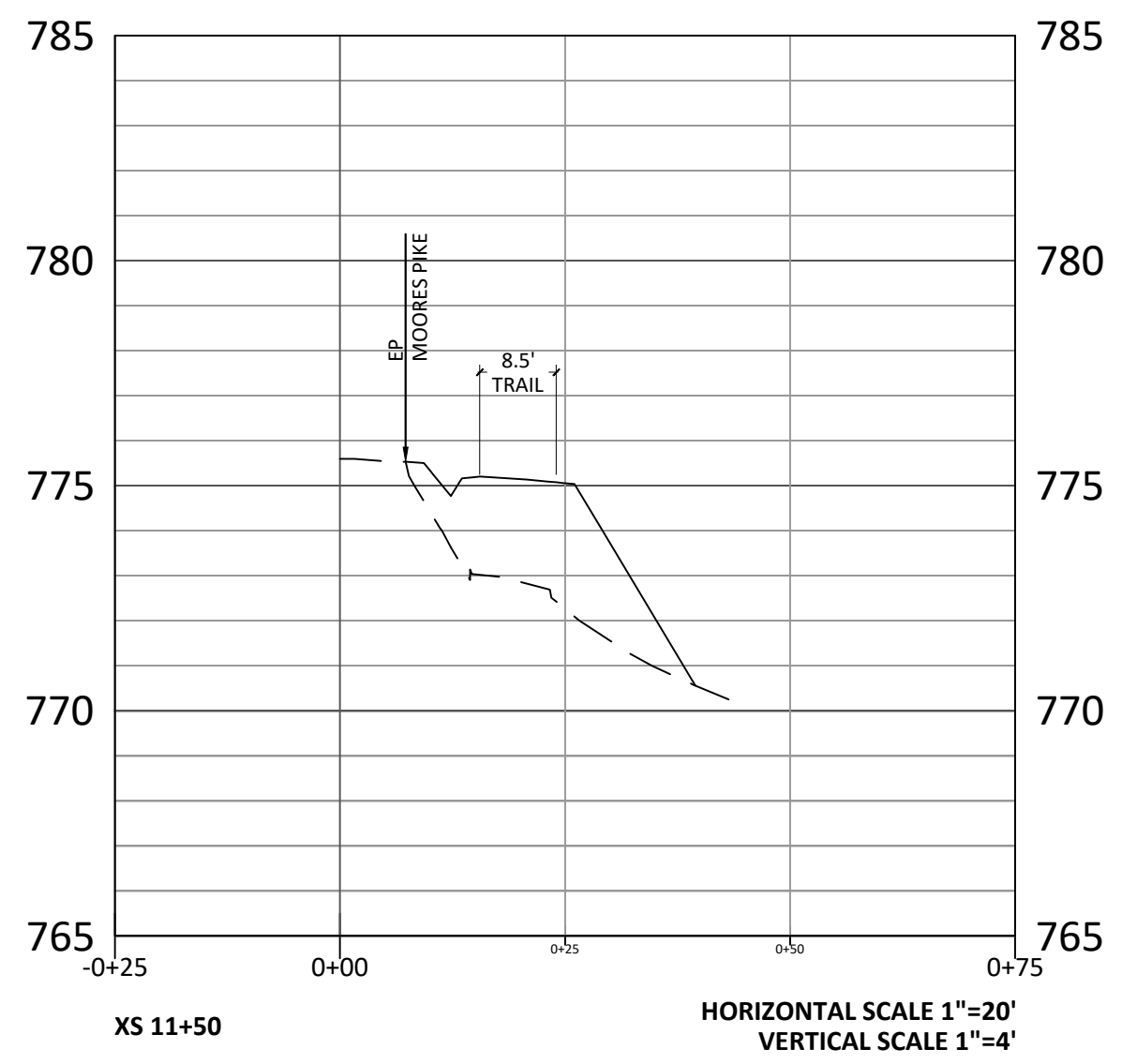
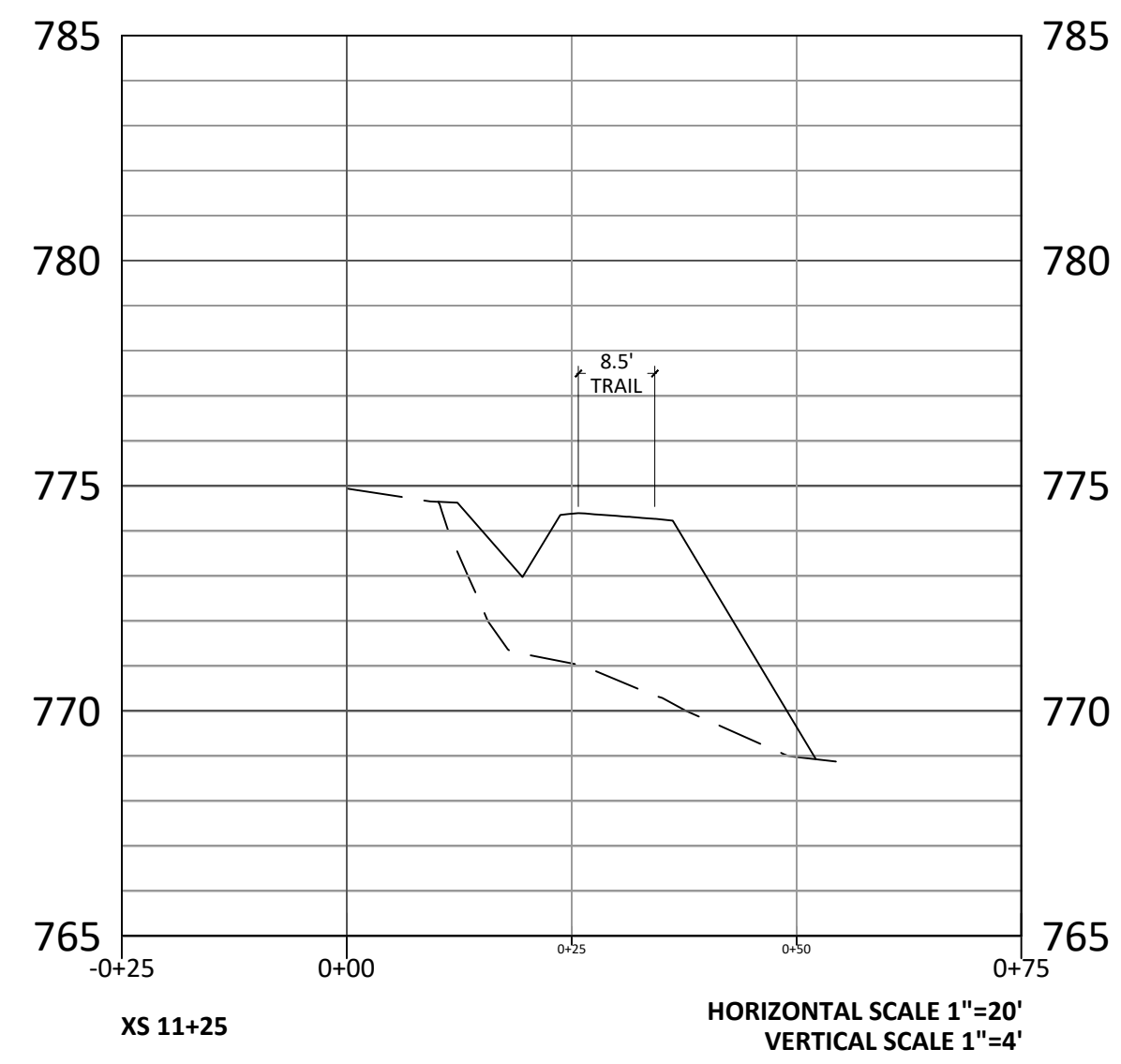
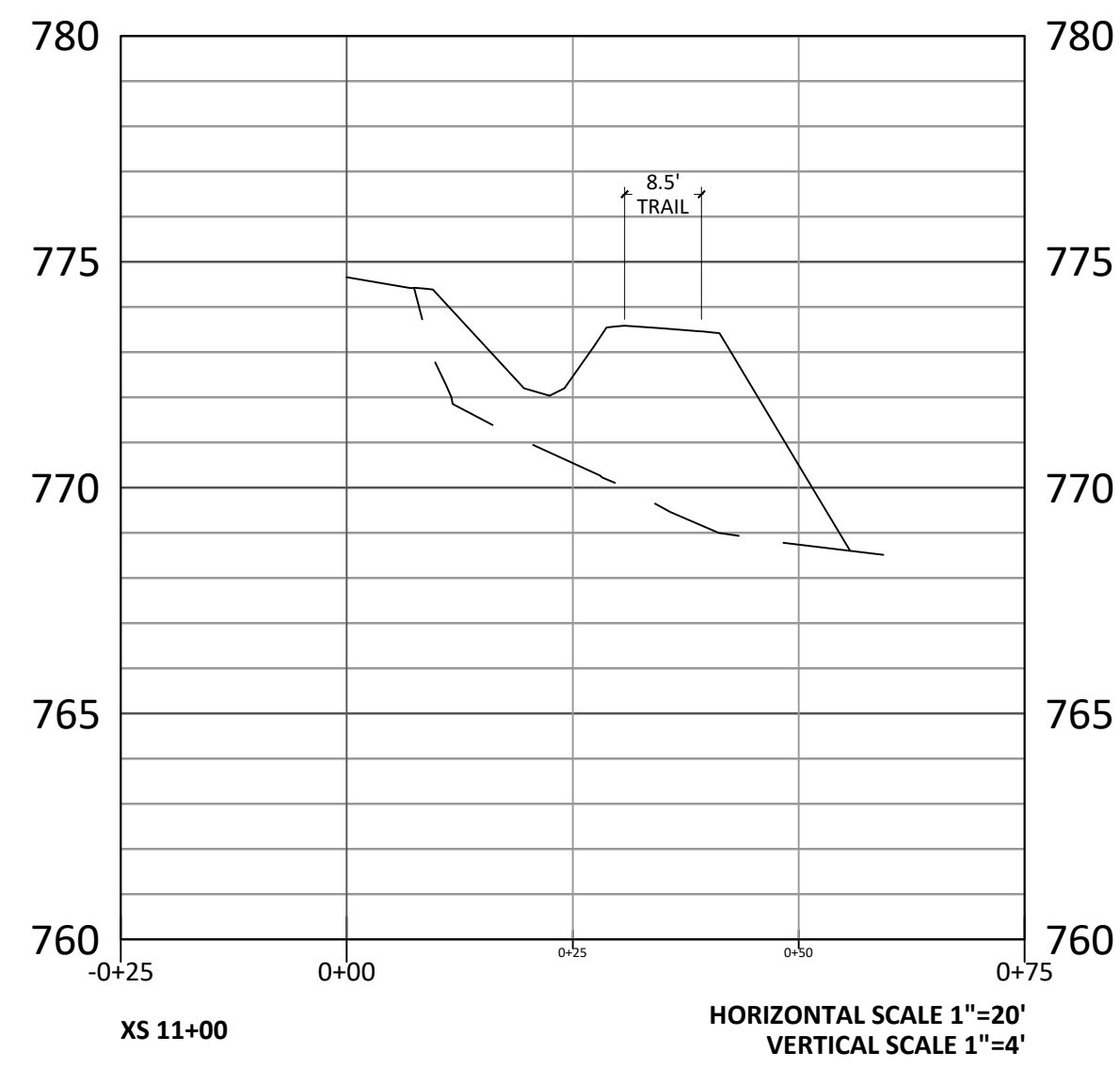
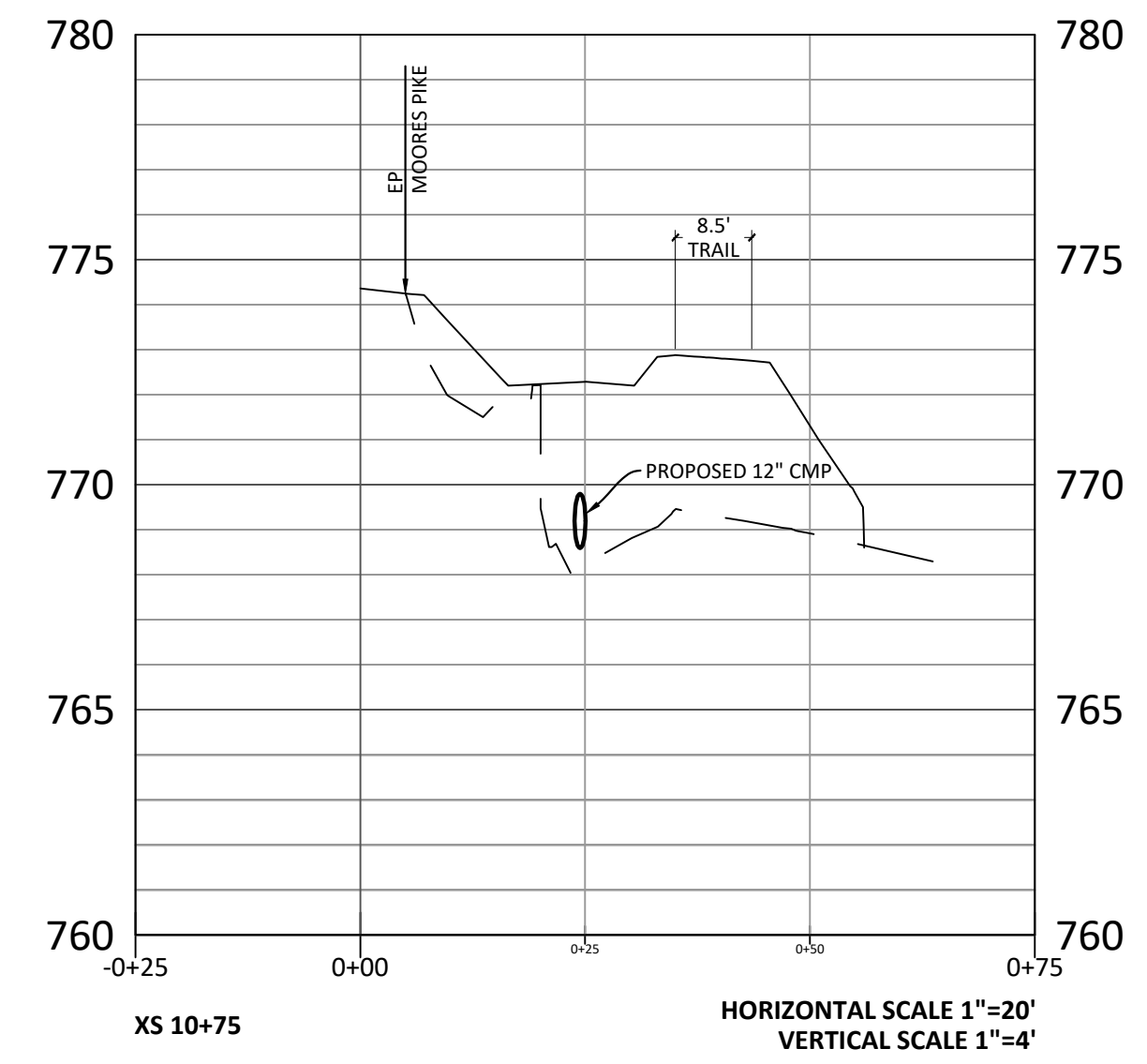
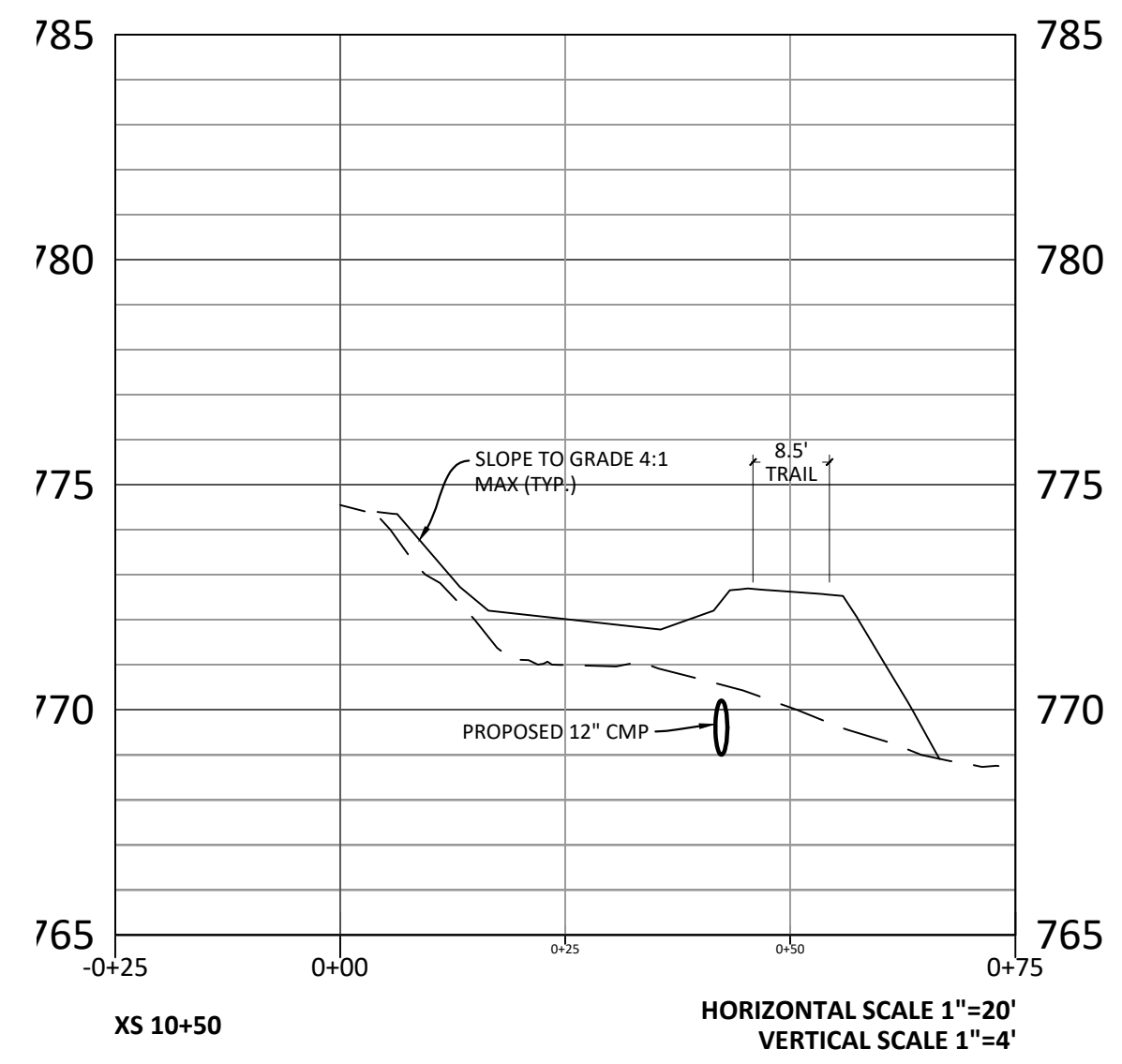
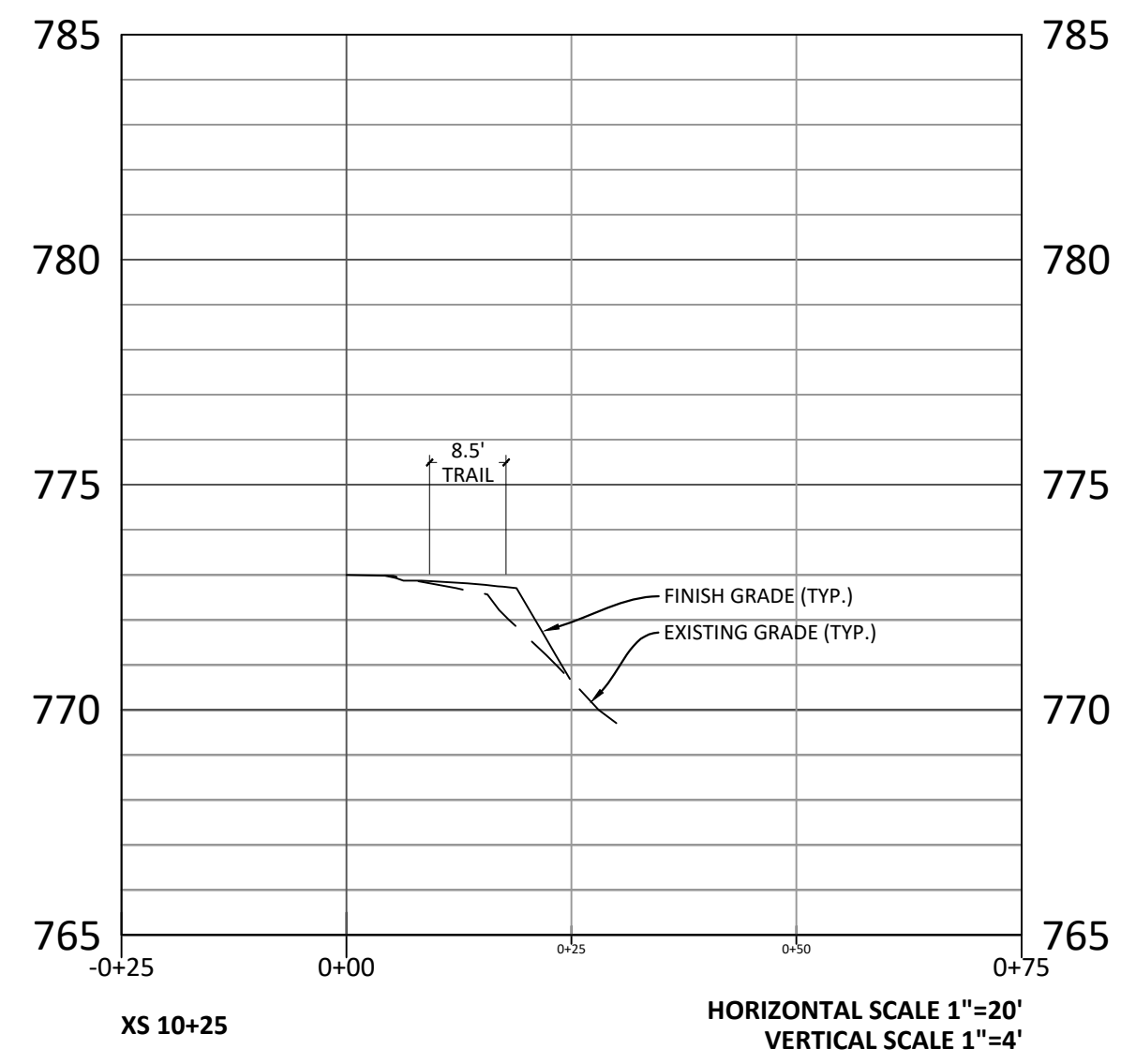
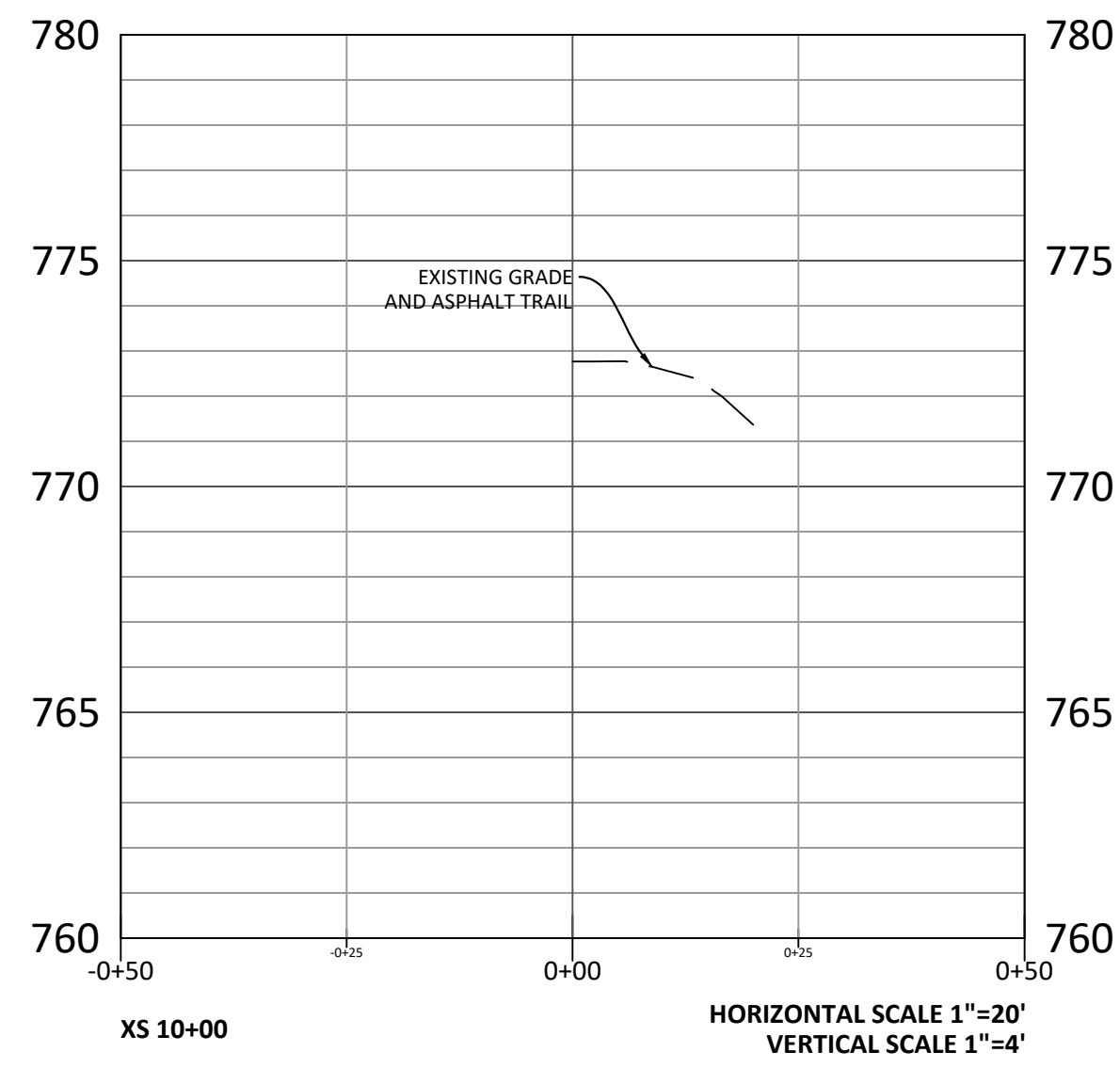
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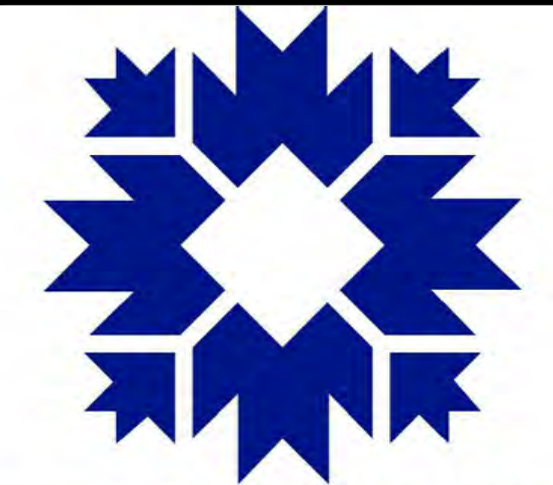
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C602





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MOORES PIKE/SE PARK TRAIL IMPROVEMENTS
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 BRCJ Project No: 11245
SITE DETAILS

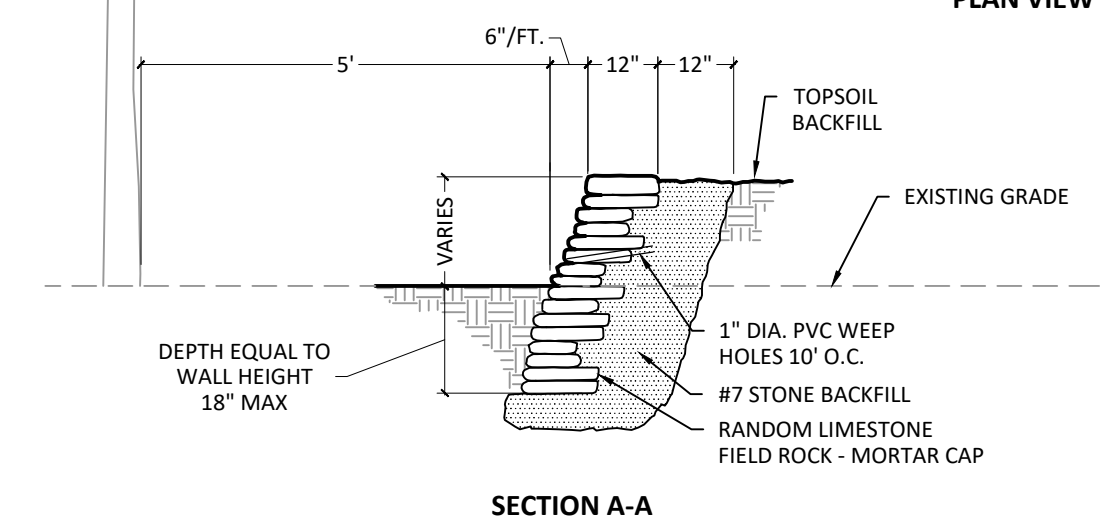
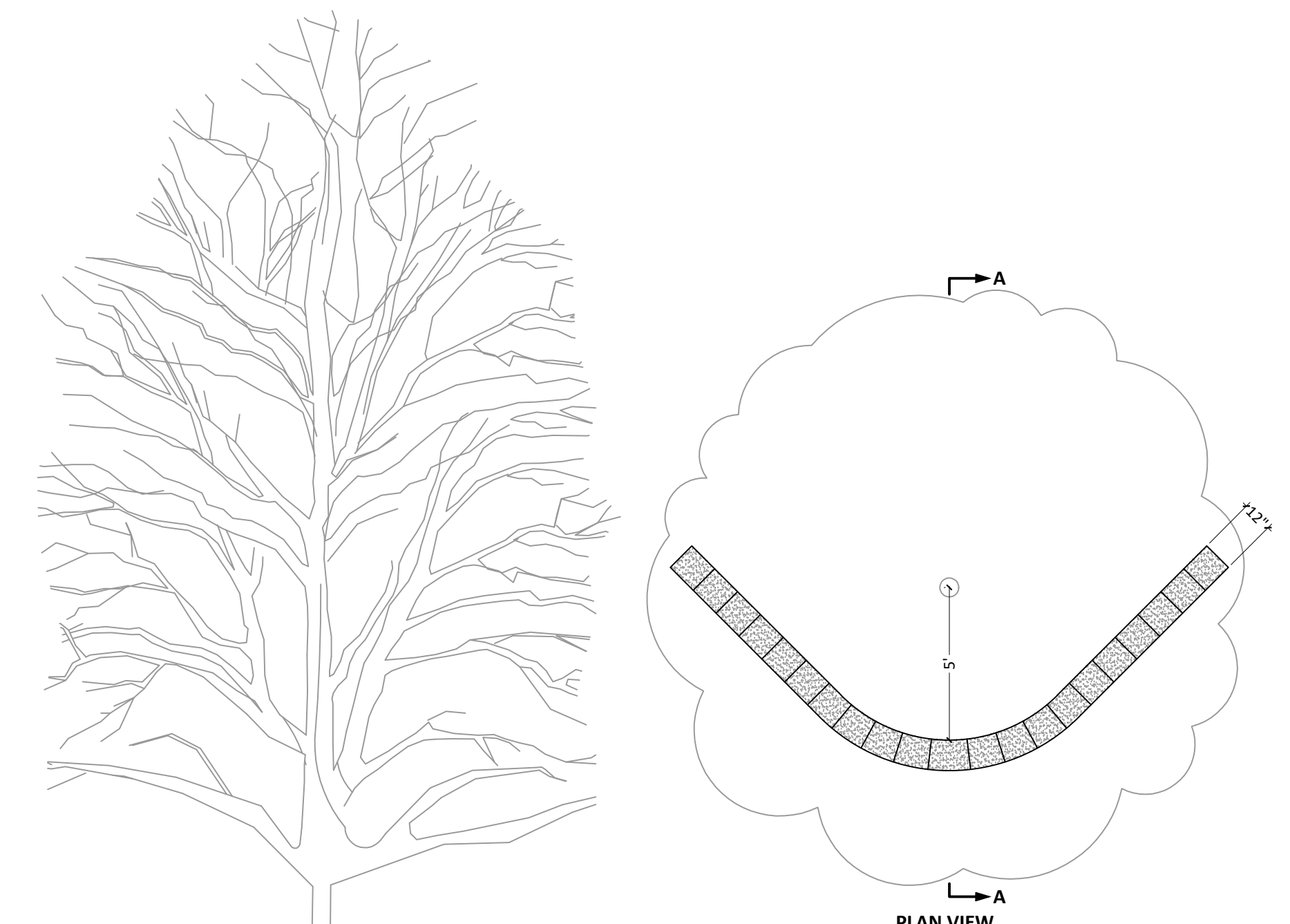
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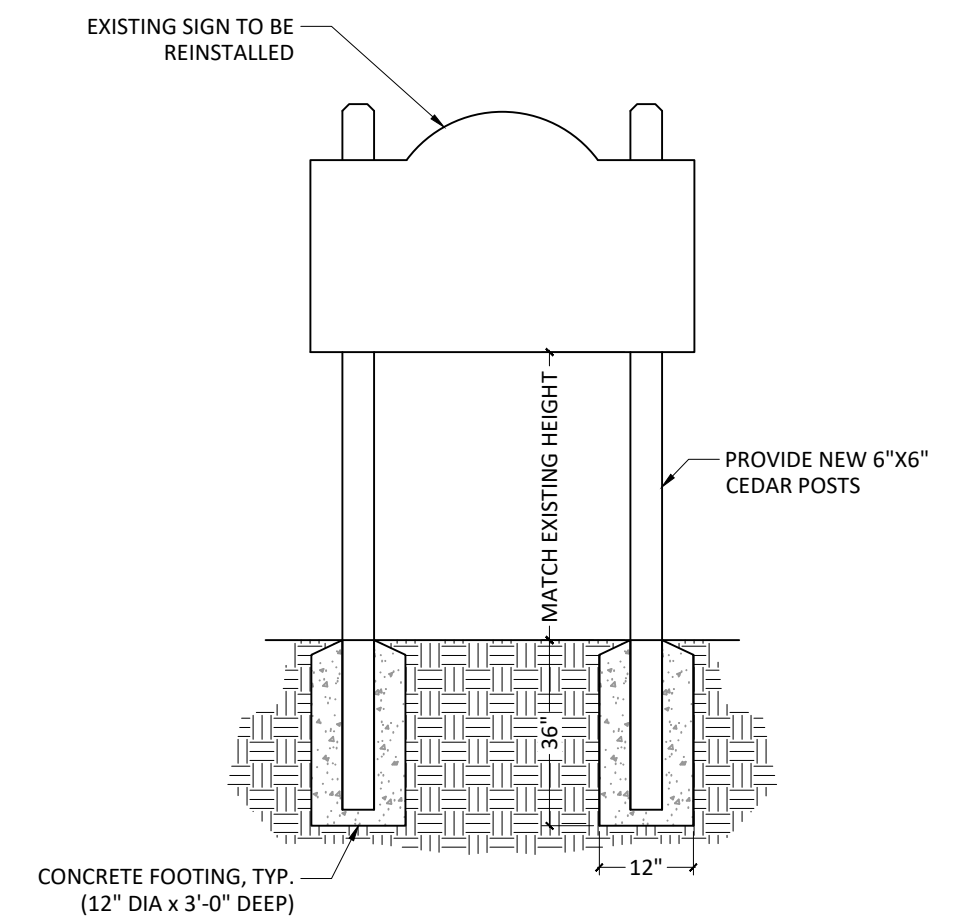
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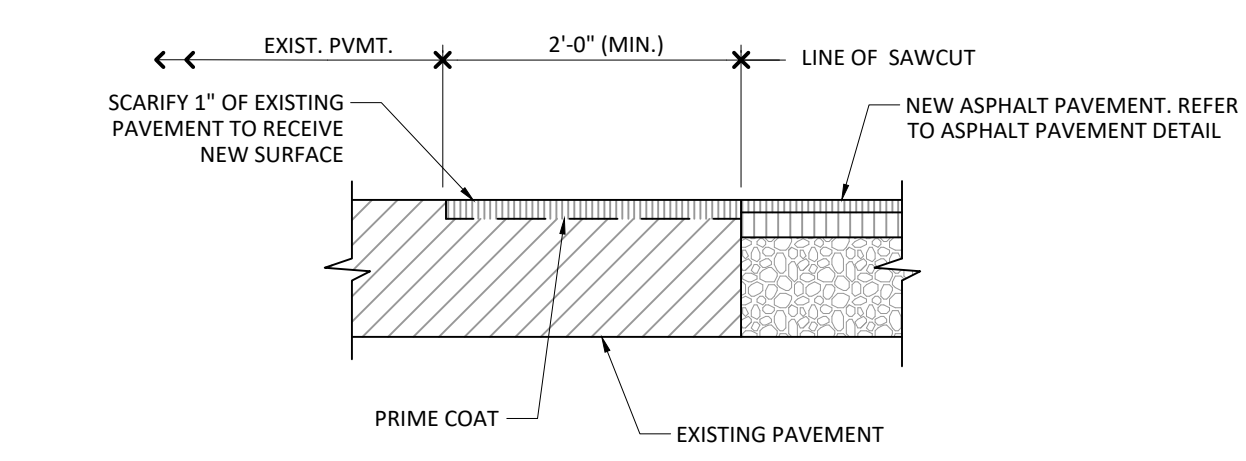
C701



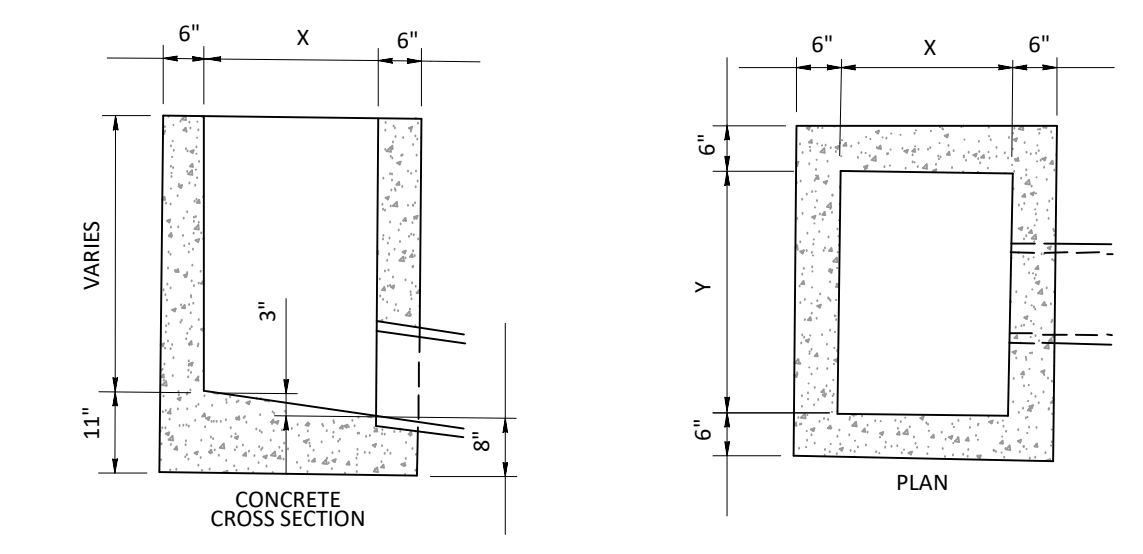
7 TREE WELL RETAINING WALL N.T.S.



6 SIGN REINSTALLATION N.T.S.



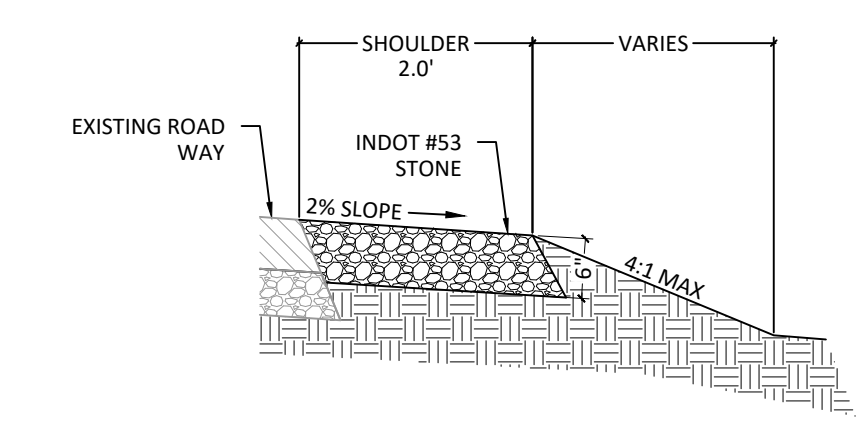
5 NEW PAVEMENT TO EXISTING PAVEMENT N.T.S.



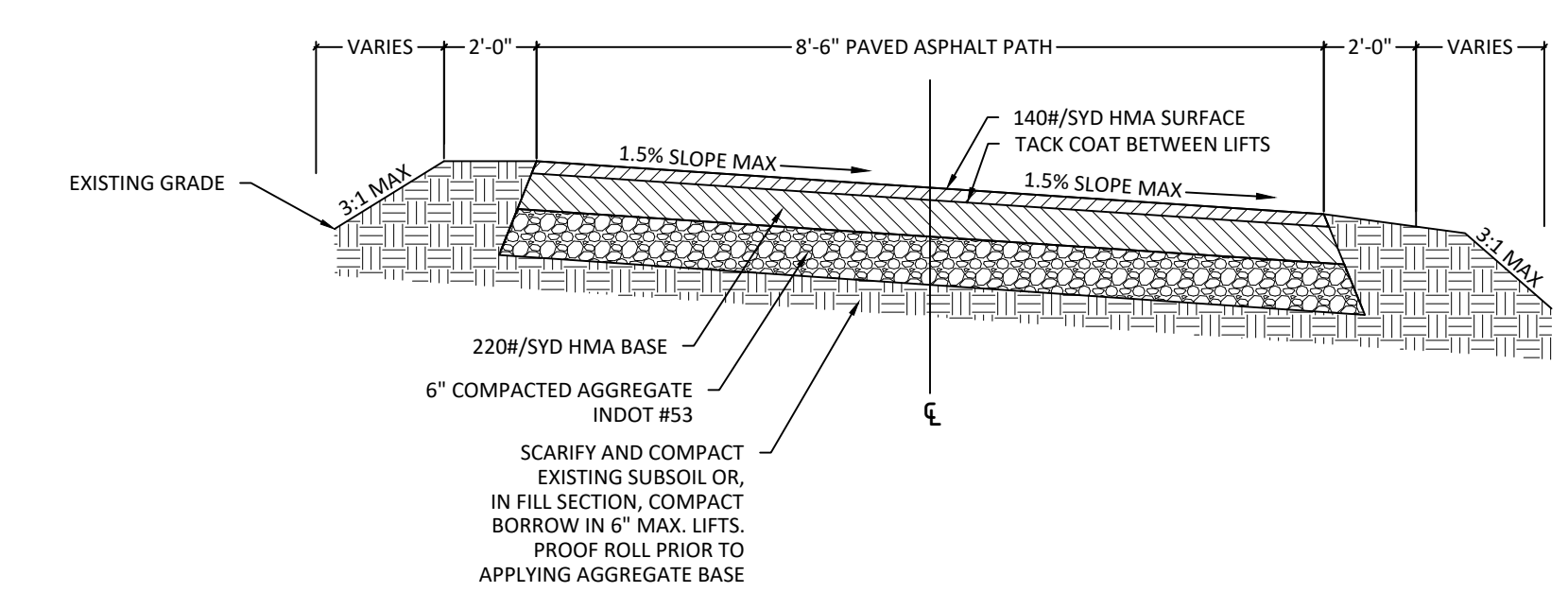
NOTE: BOX TO REST ON 4" OF COMPACTED NO. 11 STONE IF ON DIRT; 6" IF ON ROCK

TYPE	X	Y
A	24"	24"
B	20"	42"
C	30"	48"
E	30"	30"
J	24"	36"

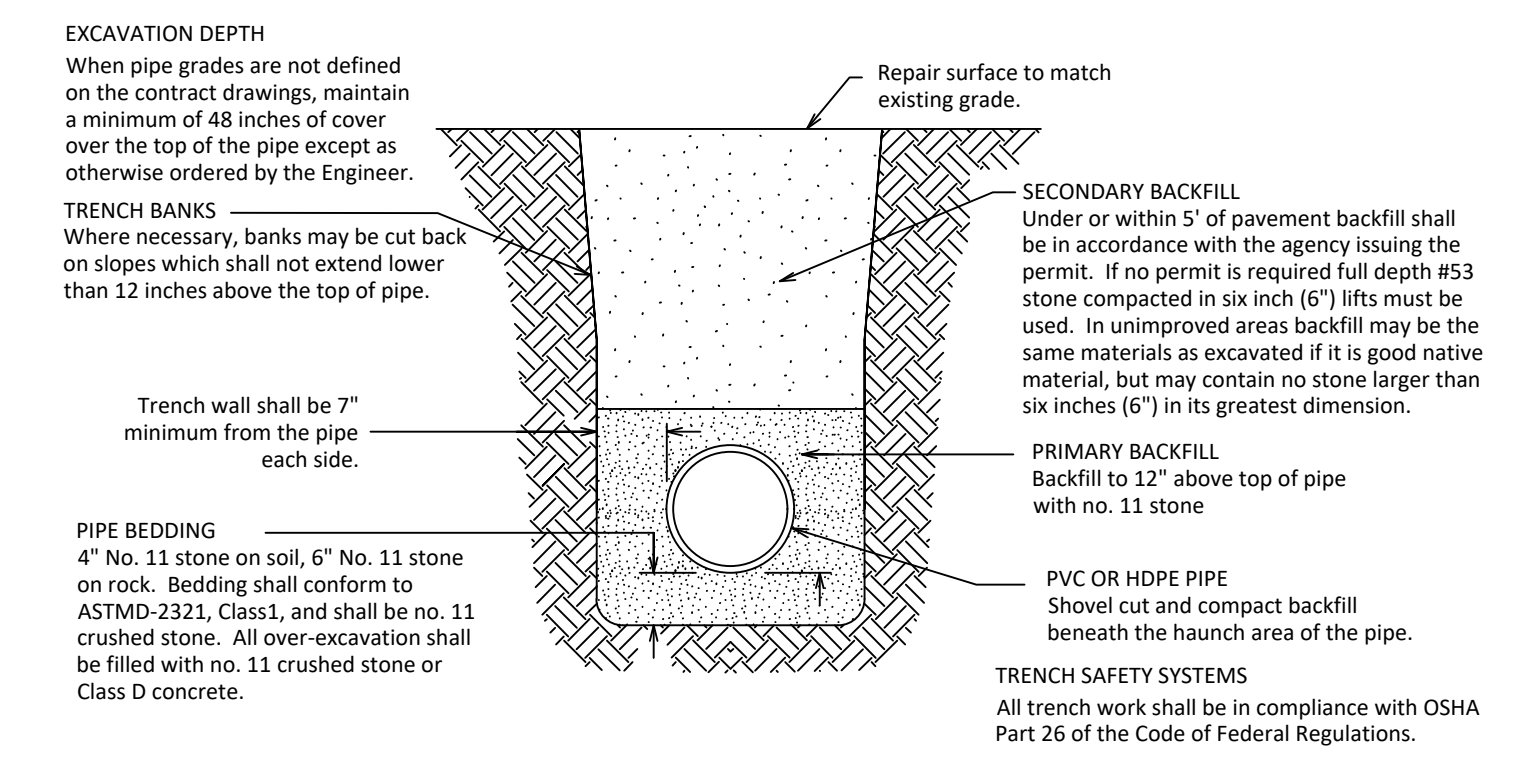
4 STORM INLET DETAIL N.T.S.



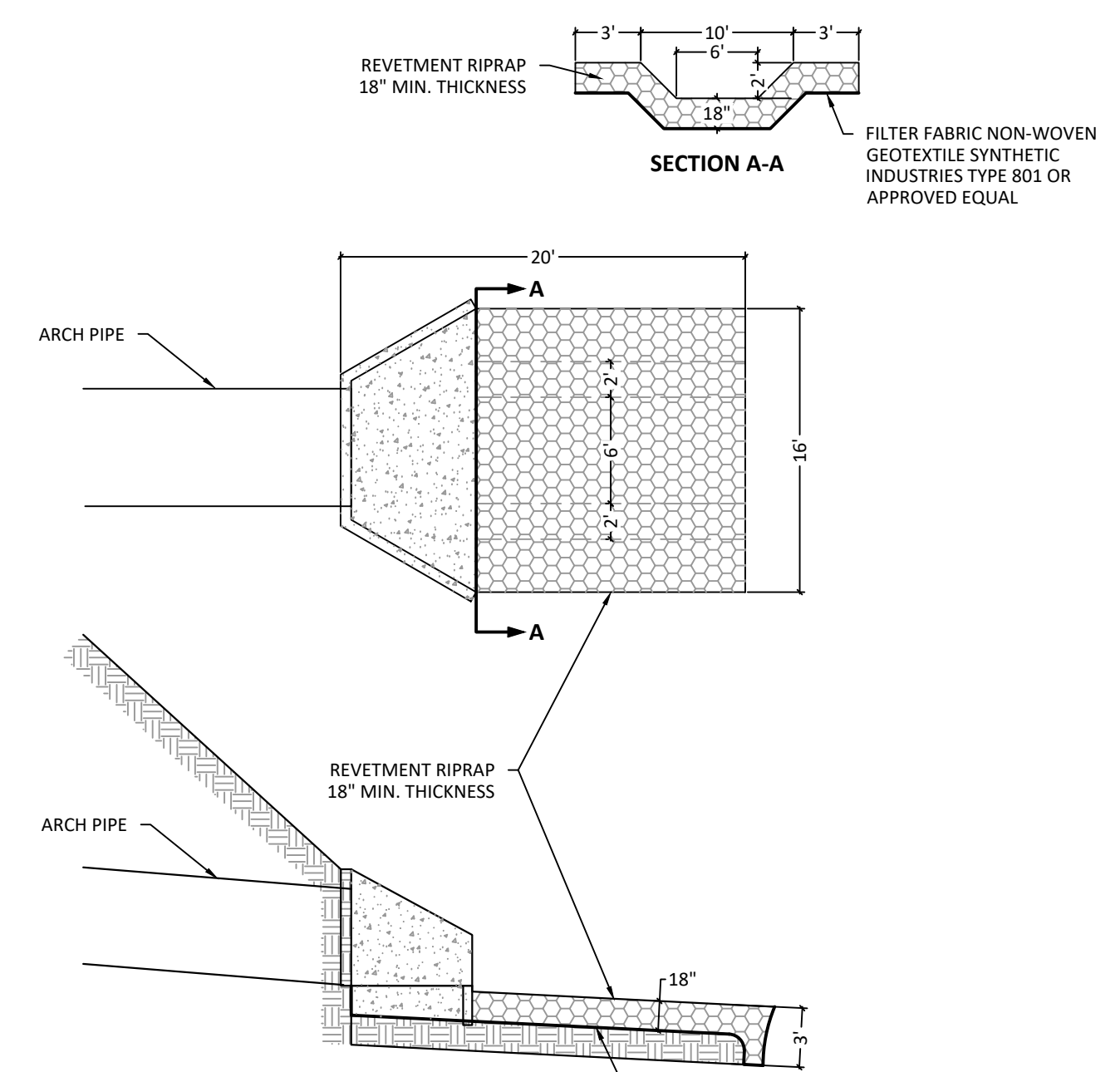
3 TYPICAL SECTION - ROADWAY SHOULDER N.T.S.



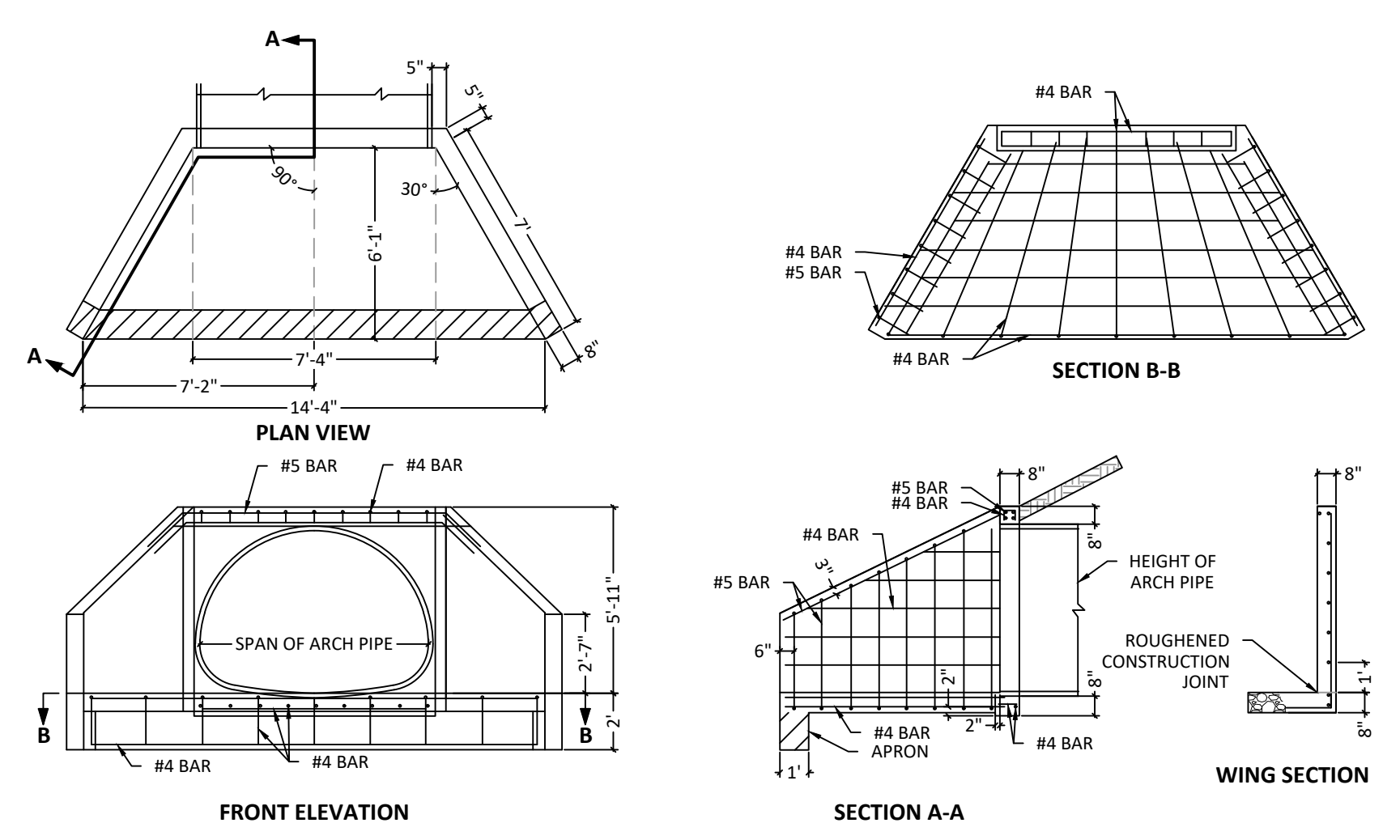
2 TYPICAL SECTION - ASPHALT TRAIL N.T.S.
 NOTE: TRAIL SLOPES DOWNWARD, AWAY FROM MOORES PIKE.



1 TYPICAL TRENCH SECTION N.T.S.



9 RIPRAP OUTFALL PROTECTION N.T.S.



8 CONCRETE HEADWALL WITH WINGWALLS N.T.S.
 *DIMENSIONS FROM FACE OF CONCRETE TO STEEL SHALL BE 2" CLEAR