



207-209 HITT STREET - DEMOLISH BUILDING

FOR THE CURATORS OF THE UNIVERSITY OF MISSOURI PROJECT NO. CP241121

LOCATION MAP NOT TO SCALE



PROJECT BENCHMARKS:

TEMPORARY BENCHMARK (TBM) #1 - CHISELED SQUARE ON THE WEST SIDE OF THE LIGHT POLE BASE LOCATED JUST NORTH OF THE ALLEY, ON THE WEST SIDE OF HITT STREET.

ELEVATION = 749.90'

MU CONTROL POINT #MCP-002
N = 1134654.62
E = 1690008.60
ELEV. = 755.18

UTILITY COMPANIES:

LOCATES:

MISSOURI ONE CALL INC.
1022 B NORTHEAST DRIVE
JEFFERSON CITY, MO 65109
1-800-344-7483



NATURAL GAS:

AMEREN MISSOURI
2001 MAGUIRE BLVD.
COLUMBIA, MO 65201
573-876-3030

WATER/ELECTRIC/FIBER/SEWERMAIN:

CITY OF COLUMBIA
P.O. BOX 6015
WATER & LIGHT DEPARTMENT
COLUMBIA, MO 65205
573-874-2489

TELEPHONE:

BRIGHT SPEED
JARED HANES
SRO COLUMBIA, MO
(573) 823-3962

DATA/TELEVISION:

MEDIACOM
1211 WILKES BLVD
COLUMBIA, MO 65201
(855) 633-4226

CHARTER COMMUNICATIONS
1510 CHARTER BOONE
INDUSTRIAL BOULEVARD
COLUMBIA, MO 65202
573-875-8875

SOCKET
573-817-0000

GENERAL NOTES:

ALL PUBLIC STREET, STORM DRAIN, AND SANITARY SEWER CONSTRUCTION TO BE IN ACCORDANCE WITH THE CITY OF COLUMBIA "STREET, STORM DRAIN, AND SANITARY SEWER SPECIFICATIONS AND STANDARDS" (CURRENT EDITION).

ANY CITY DETAILS SHOWN ON THIS SET OF PLANS ARE FOR REFERENCE ONLY. CONTRACTOR TO HAVE A COPY OF THE CITY'S LATEST EDITION OF SPECIFICATIONS AND STANDARDS FOR ALL STREET, STORM, AND SANITARY CONSTRUCTION ON SITE AT ALL TIMES DURING CONSTRUCTION. REFER TO <https://www.como.gov/publicworks/specs-and-standards/>

A GEOTECHNICAL EVALUATION OF THE SUBSURFACE SOIL, GROUNDWATER CONDITIONS, AND A SLOPE STABILITY ANALYSIS HAS NOT BEEN PERFORMED BY THIS ENGINEER. THE OWNER SHALL SATISFY THEMSELVES OF ALL GEOTECHNICAL CONDITIONS PRIOR TO ANY CONSTRUCTION.

THERE IS NO REGULATED STREAM BUFFER WITHIN THE LIMITS OF THIS PROJECT AS DETERMINED BY THE USCS MAP FOR COLUMBIA QUADRANGLE, BOONE COUNTY, MISSOURI AND ARTICLE X OF CHAPTER 12A OF THE CITY OF COLUMBIA CODE OF ORDINANCES.

THERE IS NO CLIMAX FOREST, AS DEFINED BY THE CITY OF COLUMBIA, LOCATED WITHIN THE LIMITS OF THIS PLAT.

ANY FILL PLACEMENT WITHIN STREET RIGHT-OF-WAY SHALL BE INSPECTED BY THE CITY OF COLUMBIA.

ALL EXCAVATION WITHIN THE STREET RIGHT-OF-WAY SHALL BE BACKFILLED PER CURRENT CITY OF COLUMBIA SPECIFICATIONS.

LAND DISTURBANCE SITES SHOULD BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 48 HOURS AFTER ANY STORM EVENT EQUAL TO OR GREATER THAN A 2-YEAR, 24-HOUR STORM HAS CEASED DURING A NORMAL WORK DAY OR WITHIN 72 HOURS IF THE RAIN EVENT CEASES DURING A NON-WORK DAY SUCH AS A WEEKEND OR HOLIDAY. ANY DEFICIENCIES SHALL BE CORRECTED WITHIN SEVEN CALENDAR DAYS.

CONTRACTOR WILL BE RESPONSIBLE FOR PLACEMENT AND MAINTENANCE OF TRAFFIC CONTROL DEVICES NECESSARY TO COMPLETE THEIR PORTION OF WORK. THE DEVICES AND METHODS EMPLOYED WILL COMPLY WITH THE CURRENT VERSION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD).

EXISTING UTILITIES SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL COORDINATE LOCATES PRIOR TO ANY EXCAVATION.

ALL EXCAVATION TO BE IN ACCORDANCE WITH SECTIONS 319.010-319.050, REVISED STATUTES OF THE STATE OF MISSOURI. SUCH COMPLIANCE SHALL NOT, HOWEVER, EXCUSE ANY PERSON MAKING ANY EXCAVATION FROM DOING SO IN A CAREFUL AND PRUDENT MANNER, NOR SHALL IT EXCUSE SUCH PERSON FROM LIABILITY FOR ANY DAMAGE OR INJURY TO UNDERGROUND UTILITIES RESULTING FROM THE EXCAVATION.

IT IS THE INTENT OF THESE PLANS TO COMPLY WITH THE REQUIREMENTS OF THE MOENR CLEAN WATER COMMISSION.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL DEVICES AND REMOVING THEM ONCE THE SITE IS STABILIZED.

CONTRACTOR TO PROTECT ALL EXISTING UTILITIES, STRUCTURES, AND PAVEMENT THAT IS TO REMAIN. ALL DAMAGED ITEMS OUTSIDE THE SCOPE OF WORK TO BE REPLACED OR REPAIRED TO ORIGINAL CONDITION AT THE CONTRACTORS EXPENSE.

ALL PAVEMENTS, SIDEWALKS, ABANDONED SEWERS, PIPELINES, EXCESS EARTHWORK, OR OTHER OBSTRUCTIONS TO CONSTRUCTION THAT ARE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS SPECIFICALLY NOTED AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH STATE REGULATION 10 CSR 80-2.010 (9)(A)1.

ALL SLOPES ARE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.

ALL DISTURBED AREAS WITHIN THE "LIMITS OF DISTURBANCE" THAT ARE NOT TO BE PAVED, SHALL BE FINE GRADED BY CONTRACTOR TO AN ELEVATION OF 6" BELOW FINISHED GRADE FOR TURF AREAS AND 24" BELOW FINISHED GRADE FOR PLANTER AREAS. TOP SOIL AND VEGETATION WILL BE REESTABLISHED BY OWNER.

TOTAL DISTURBED AREA = 0.22 AC.

MISSOURI DNR LAND DISTURBANCE PERMIT NOT NEEDED FOR THIS PROJECT.

ALL WORK SHALL BE SCHEDULED WITH THE OWNER'S REPRESENTATIVE AND BE SUBJECT TO THE OWNER'S APPROVAL PRIOR TO PROCEEDING.

SPECIAL INSPECTIONS:

THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE:

- a. PLACING OF CONCRETE AND REINFORCING STEEL (CONTINUOUS OF CONCRETE SAMPLING / PERIODIC OF REINFORCING)
- b. IN-SITU SOILS, EXCAVATIONS, FILLING & COMPACTION (PERIODIC)

THE CONTRACTOR SHALL REQUEST SPECIAL INSPECTION OF THE ITEMS LISTED ABOVE PRIOR TO THOSE ITEMS BECOMING INACCESSIBLE AND UNOBSERVABLE DUE TO PROGRESSION OF THE WORK.

DEFERRED SUBMITTALS:

NONE.

ENGINEER CERTIFICATION:

BY SIGNING AND AFFIXING MY SEAL TO THESE PLANS, I HEREBY CERTIFY THESE DRAWINGS AND/OR SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE DRAWINGS AND/OR SPECIFICATIONS ARE AS REQUIRED BY AND IN COMPLIANCE WITH THE BUILDING CODES OF THE UNIVERSITY OF MISSOURI.

FLOOD PLAIN STATEMENT:

NO PART OF THIS TRACT IS LOCATED WITHIN THE 100-YEAR FLOODPLAIN AS PER THE BOONE COUNTY FIRM MAP #2900340280E DATED APRIL 19, 2017.

CITY OF COLUMBIA WORK NOTES:

- 1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CITY RIGHT OF WAY PERMIT TO PERFORM WORK WITHIN CITY OF COLUMBIA RIGHT OF WAY FOR WORK SHOWN.
- 2. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING CITY INSPECTORS AND PERSONNEL AS PART OF THEIR WORK WITHIN CITY RIGHT OF WAY.

APPLICABLE CODES:

- International Building Code - 2021
- International Plumbing Code - 2021
- International Mechanical Code - 2021
- International Fire Code - 2021
- ICC A117.1 Accessible and Usable Buildings and Facilities - 2017 (all sections are now applicable)
- National Electric Code/NFPA 70 - 2020
- NFPA 51B Standard for Fire Prevention During Welding, Cutting, and Other Hot Work - 2019
- Americans with Disabilities Act - Standards for Accessible Design 2010

Sheet List Table

Sheet Number	Sheet Title	BID SET	REVISION 1
CE 0	COVER SHEET	X	
CE 1	DEMOLITION PLAN	X	
CE 2	EROSION CONTROL PLAN	X	
CE 3	GRADING PLAN	X	
CE 4	SITE PLAN	X	
CE 5	SITE CONSTRUCTION DETAILS	X	
CE 6	CITY DETAILS 1 OF 2	X	
CE 7	CITY DETAILS 2 OF 2	X	
CE 8	BASE BID PHASE 1 SIDEWALK CLOSURE PLAN	X	
CE 9	BASE BID PHASE 1 SOUTH SEWER TRAFFIC CONTROL PLAN	X	
CE 10	BASE BID PHASE 1 EAST WATER TRAFFIC CONTROL PLAN	X	
CE 11	ALT*1 PHASE 2 SIDEWALK CLOSURE PLAN	X	
CE 12	ALT*1 PHASE 3 SIDEWALK CLOSURE PLAN	X	
RW1	GENERAL STRUCTURAL DATA	X	
RW2	RETAINING WALL SITE PLAN	X	
RW3	RETAINING WALL PROFILE	X	
RW4	RETAINING WALL DETAILS	X	

LEGEND OF SYMBOLS:

---	EXISTING CURB	FF-XXXX	FINISH FLOOR OF STRUCTURE
---	PROPOSED CURB	XXXX TC	PROPOSED TOP OF CURB ELEVATION
---	RIP RAP	XXXX TP	PROPOSED TOP OF PAVEMENT ELEVATION
---	EXISTING STRUCTURE	XXXX FG	PROPOSED FINISH GRADE ELEVATION
---	EXISTING TREELINE	XXXX TW	PROPOSED TOP OF WALL
---	PROPOSED TREELINE	XX	LOT NUMBER
---	EDGE OF WATERWAY	X	STORM SEWER STRUCTURE LABEL
---	EXISTING WATERLINE	X	SANITARY SEWER STRUCTURE LABEL
---	PROPOSED WATERLINE	HP.	HIGH POINT
---	EXISTING GAS LINE	LP.	LOW POINT
---	PROPOSED GAS LINE	---	EXISTING SIGNS
---	EXISTING UNDERGROUND TELEPHONE	---	EXISTING POWER POLE
---	EXISTING UNDERGROUND CABLE TELEVISION	---	EXISTING GAS VALVE
---	EXISTING HIGH VOLTAGE ELECTRIC	---	EXISTING WATER VALVE
---	EXISTING OVERHEAD ELECTRIC	---	EXISTING GAS METER
---	EXISTING UNDERGROUND ELECTRIC	---	EXISTING WATER METER
---	EXISTING OVERHEAD ELEC. & TV	---	EXISTING FIRE HYDRANT
---	EXISTING OVERHEAD ELEC., TV & TELE.	---	MANHOLE
---	EXISTING SANITARY SEWER	---	EXISTING SANITARY SEWER LATERAL
---	PROPOSED SANITARY SEWER	---	PROPOSED SANITARY SEWER LATERAL
---	EXISTING MINOR CONTOUR	---	PROPOSED TRACER WIRE TEST STATION BOX
---	EXISTING MAJOR CONTOUR	---	EXISTING AIR CONDITIONER
---	PROPOSED MINOR CONTOUR	---	EXISTING TELEPHONE PEDESTAL
---	PROPOSED MAJOR CONTOUR	---	EXISTING ELECTRICAL TRANSFORMER
---	100 YEAR FLOOD PLAIN	---	EXISTING ELECTRIC METER
---	FLOODWAY	---	EXISTING LIGHT POLE
---	ORDINARY HIGH WATER MARK	---	EXISTING GUY WIRE
---	STREAM SIDE BUFFER	---	CONSTRUCTION BARRIER FENCING
---	OUTER STREAM BUFFER	---	PEDESTRIAN GUARDRAIL FENCING AT RETAINING WALL
---	DEMOLITION LIMITS		
---	SILT FENCE		

REVISIONS:

NO.	DATE
BID SET	07/18/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

ANDREW T. GREENE
REGISTERED PROFESSIONAL ENGINEER
NO. 0000000043
7/18/2024
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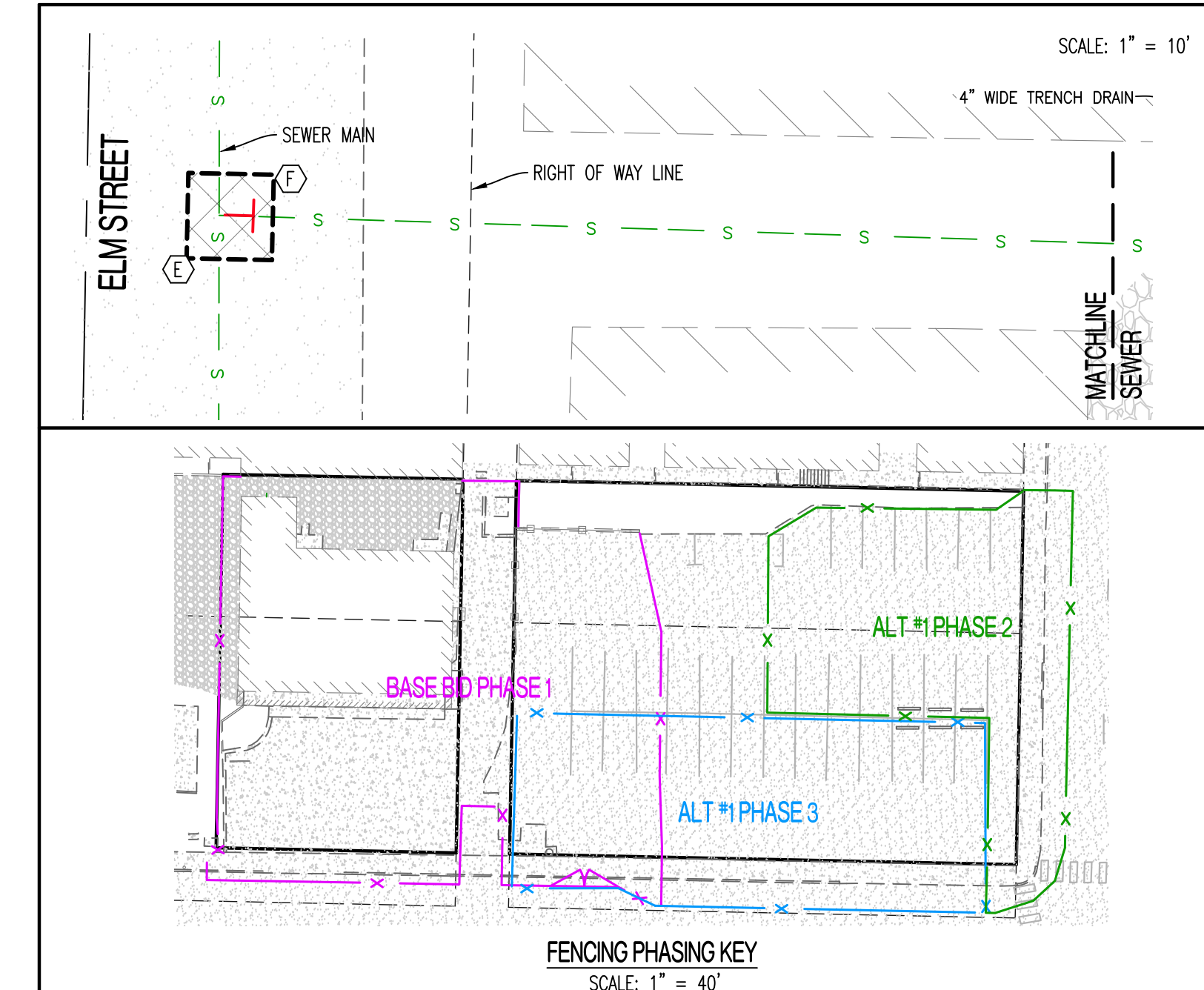
OWNER:
CURATORS OF THE UNIVERSITY OF MISSOURI
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COLUMBIA, MO 65211

207-209 HITT STREET - DEMOLISH BUILDING
CP241121
COLUMBIA-BOONE COUNTY, MISSOURI

DRAWING INCLUDES:
COVER SHEET

DESIGNED: ATG
DRAWN: ATG
PROJECT NO: 230464
SHEET:
CE 0

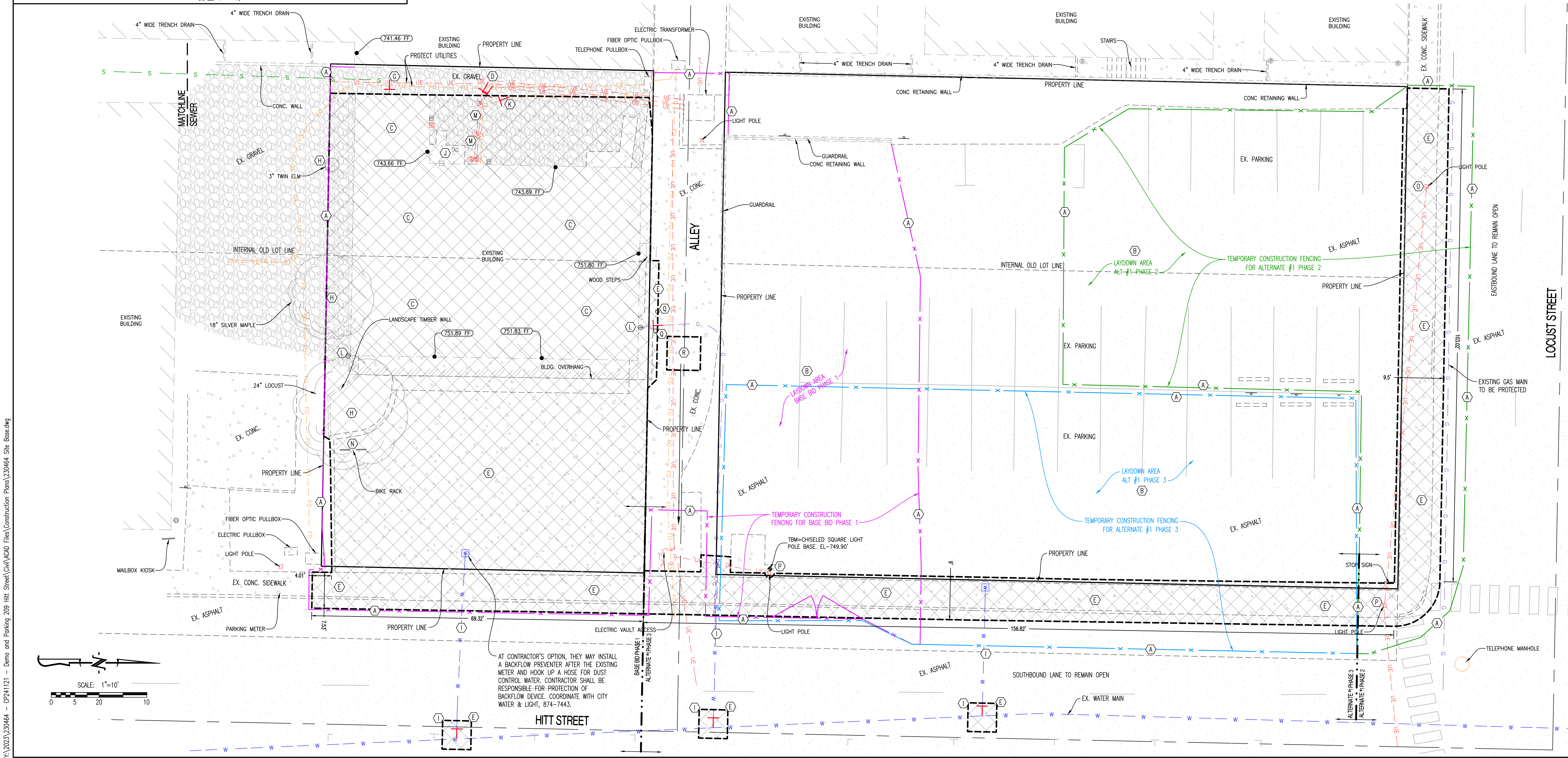
Y:\2023\230464 - CP241121 - Demo and Parking 209 Hitt Street\Civil\Auto Files\Construction Plans\230464_Site Base.dwg



- GENERAL DEMOLITION NOTES:**
- CONTRACTOR SHALL TAKE CAUTION TO PROTECT EXISTING UTILITIES THAT ARE TO REMAIN.
 - CERTAIN AREAS MAY BE REQUIRED TO BE REMOVED IN PHASES. CONTRACTOR TO COORDINATE TIMING WITH OWNER.
 - ITEMS OUTSIDE CONSTRUCTION LIMITS OR CALLED OUT TO REMAIN SHALL BE PROTECTED AS REQUIRED. CONTRACTOR SHALL REPAIR/REPLACE DAMAGED ITEMS OUTSIDE PROJECT SCOPE OF WORK AT NO EXPENSE TO THE OWNER.
 - CONCRETE TO BE REMOVED TO THE NEAREST SAW JOINT, BUT NOT LESS THAN THE DEMOLITION LIMITS SHOWN ON THE PLAN.
 - CONTRACTOR TO COORDINATE WITH UTILITY SERVICE PROVIDER AND OWNER (MU ENERGY MANAGEMENT) PRIOR TO DISCONNECTING ANY UTILITIES.
 - ONCE ALL UTILITIES ARE DISCONNECTED, NOTIFY OWNER'S REPRESENTATIVE PRIOR TO DEMOLITION.
 - CONTRACTOR SHALL CLEAN/POWER WASH CONSTRUCTION AREA PAVEMENT ONCE WORK IS COMPLETE.

- PHASING NOTES:**
- PHASE 1 SHALL GENERALLY INCLUDE DEMOLITION OF THE BUILDING AND CONSTRUCTION OF THE NEW PARKING LOT. PARKING LOT SHALL BE COMPLETED AND OPENED TO VEHICLES PRIOR TO STARTING ON PHASE 2.
 - PHASE 2 SHALL GENERALLY BE REMOVAL AND REPLACEMENT OF SIDEWALKS/DRIVE APPROACHES ALONG LOCUST STREET. DURING THIS TIME, ACCESS TO AND USE OF THE EAST HALF OF THE EXISTING PARKING LOT SHALL REMAIN, AS ACCESSED FROM HITT STREET.
 - PHASE 3 SHALL GENERALLY BE THE REMOVAL AND REPLACEMENT OF SIDEWALKS/DRIVE APPROACHES ALONG HITT STREET, NORTH OF THE BASE BID PHASE 1 SCOPE. DURING THIS TIME, ACCESS TO AND USE OF THE WEST HALF OF THE EXISTING PARKING LOT SHALL REMAIN, AS ACCESSED FROM LOCUST STREET.
 - COORDINATE WITH OWNER'S REPRESENTATIVE AND CITY SOLID WASTE (TRASH) ON SHORT TERM LOCATION OF DUMPSTER TO PERFORM THE WORK AT THE ALLEY CONNECTION TO HITT STREET.

- LEGEND OF LABELS:**
- (A) INSTALL 6' TALL CHAIN LINK FENCE WITH GATES AS SHOWN FOR LIMITS OF WORK AREA. FENCE SHALL REMAIN IN PLACE THROUGHOUT PHASE DURATION. REFER TO SPECIFICATIONS FOR FURTHER FENCING REQUIREMENTS.
 - (B) CONTRACTOR TO USE EXISTING PAVING AS STAGING AREA WITHIN THE FENCE LIMITS. ANY DAMAGED PAVEMENT DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR. CONTRACTOR SHALL CLEAN/POWER WASH CONSTRUCTION AREA PAVEMENT ONCE WORK IS COMPLETE.
 - (C) EXISTING BUILDING AND FOUNDATION TO BE REMOVED. CONTRACTOR TO DISCONNECT AND CAP BUILDING UTILITIES PER NOTES ON THIS SHEET. REMOVE ABOVE GRADE STRUCTURE AND BELOW GRADE FOUNDATIONS, THEN DISPOSE OF OFF-SITE.
 - (D) DURING DUST SUPPRESSION APPLICATION, MAINTAIN POSITIVE DRAINAGE OF RUNOFF AT WEST LIMITS. ENSURE NO RUNOFF IS DIRECTED TOWARDS NEIGHBORING PROPERTIES. RUNOFF SHALL GENERALLY DISCHARGE DOWN ALLEY TOWARDS WEST.
 - (E) REMOVE EXISTING PAVEMENT/SIDEWALK AS SHOWN. EXACT PAVEMENT REMOVAL LIMITS SHALL BE TO NEAREST SAW JOINT IN CONCRETE PAVEMENT. PROVIDE CLEAN, FULL DEPTH SAW CUT IN EXISTING PAVEMENT TO REMAIN. PAVEMENT CUTS AND PATCHES WITHIN CITY RIGHT OF WAY SHALL BE PERFORMED PER CITY STANDARD DETAILS 120.01, 120.02, & 120.03A/B.
 - (F) APPROXIMATE LOCATION OF SEWER LATERAL. CONTRACTOR SHALL PERFORM "SERVICE KILL" OF CONNECTION OF LATERAL TO MAIN. "SERVICE KILL" CAN BE EITHER:
1) LINER THROUGH CONNECTION VIA UPSTREAM/DOWNSTREAM MANHOLE; OR
2) EXCAVATION TO CONNECTION AND CAPPING OF THE LATERAL CONNECTION AT MAIN. (REFER TO APPLICABLE TRAFFIC CONTROL PLAN IF OPTION 2 IS CHOSEN).
 - (G) EXISTING SANITARY SEWER LATERAL TO BE DISCONNECTED FROM BUILDING AND CAPPED BELOW GRADE. REMAINING PIPING TO BE ABANDONED IN PLACE.
 - (H) EXISTING LANDSCAPE AREA/TREE TO BE REMOVED AS SHOWN PRIOR TO WORKING IN THIS AREA. MULCH, TREES, PLANTS, BUSHES AND ETC. TO BE DISPOSED OF OFF SITE. REMOVE ENTIRE ROOT BALL OF TREES WHERE POSSIBLE WITHOUT DAMAGE TO ANY EXISTING BURIED UTILITIES THAT WILL REMAIN. IF EXISTING UNDERGROUND UTILITIES PREVENT THE REMOVAL OF THE ROOT BALL OF A TREE, THEN THE STUMP SHALL BE GROUND DOWN TO 6 INCHES BELOW GRADE.
 - (I) EXISTING WATER SERVICE LINE TO BE DISCONNECTED AT THE MAIN. REMOVE OLD METER PIT/VALVE AND ABANDON SERVICE LINE IN PLACE. CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, REMOVAL AND REPAIR OF STREET, INCLUDING PAVEMENTS. COORDINATE WITH CITY OF COLUMBIA WATER AND LIGHT AT LEAST ONE (1) WEEK PRIOR TO EXCAVATION AT MAIN CONNECTION UNDER THE STREET PAVEMENT. CITY WATER AND LIGHT WILL PERFORM DISCONNECTION/MAIN REPLACEMENT AT WATERMAIN. (REFER TO APPLICABLE TRAFFIC CONTROL PLAN).
 - (J) DISCONNECT AND REMOVE EXISTING A/C UNITS. COMPLY WITH APPLICABLE DECOMMISSIONING PROCEDURES AND REGULATIONS.
 - (K) EXISTING DATA/COMMUNICATIONS SERVICE TO BE DISCONNECTED FROM BUILDING AND REMOVED AS REQUIRED. COORDINATE WITH UTILITY PROVIDER.
 - (L) EXISTING GAS SERVICE TO BE MADE SAFE PRIOR TO DISCONNECTION FROM BUILDING. CONTRACTOR TO COORDINATE WITH AMEREN TO DETERMINE SERVICE TERMINATION PROCEDURES.
 - (M) EXISTING ELECTRIC SERVICE TO BE DISCONNECTED FROM BUILDING, CAPPED AND REMOVED AS REQUIRED BY CITY. COORDINATE WITH CITY OF COLUMBIA UTILITIES ON DISCONNECTS.
 - (N) BIKE RACK TO BE REMOVED AND DISPOSED OFF-SITE.
 - (O) PAVEMENT AROUND EXISTING LIGHT POLE TO BE REMOVED AND REPLACED TO NEW LOWERED SIDEWALK ELEVATION. LIGHT POLE AND FOUNDATION BASE SHALL REMAIN IN PLACE AND BE PROTECTED AS ALLOWED. SHOULD THE LOWERING OF THE SIDEWALK PAVEMENT ELEVATION LEAVE LESS THAN 4" BETWEEN THE TOP OF THE EXISTING POLE BASE FOUNDATION AND TOP OF PAVEMENT ELEVATION, THEN THE LIGHT POLE BASE FOUNDATION SHALL BE REMOVED AND REPLACED TO LOWER ELEVATION PER COLUMBIA WATER AND LIGHT DETAIL "L8" ON CE 5. PROVIDE ALLOWANCE IN BID FORM SHOULD REMOVAL AND REPLACEMENT OF POLE BASE FOUNDATION BE REQUIRED.
 - (P) EXISTING LIGHT POLE TO BE PROTECTED IN PLACE DURING CONSTRUCTION. IF CONTRACTOR CHOOSES TO TEMPORARILY REMOVE THE POLE AND REINSTALL, COORDINATE WITH COLUMBIA WATER & LIGHT ON DISCONNECTIONS.
 - (Q) REMOVE EXISTING BOLLARDS AND DISPOSED OFF-SITE.
 - (R) EXISTING CITY DUMPSTER TO BE RELOCATED, REFER TO SITE PLAN.



REVISIONS:

NO.	DATE
BID SET	07/18/2024

THIS SHEET HAS BEEN SIGNED SEALED AND DATED ELECTRONICALLY

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207-209 HITT STREET - DEMOLISH BUILDING
CP241121
COLUMBIA-BOONE COUNTY, MISSOURI

DRAWING INCLUDES:
DEMOLITION PLAN

DESIGNED: ATG
DRAWN: ATG
PROJECT NO: 230464
SHEET: CE1

Y:\2023\230464 - CP241121 - Demo and Parking 209 Hitt Street\Civil\A&D Files\Construction Plans\230464_Site Base.dwg

GENERAL EROSION CONTROL NOTES:

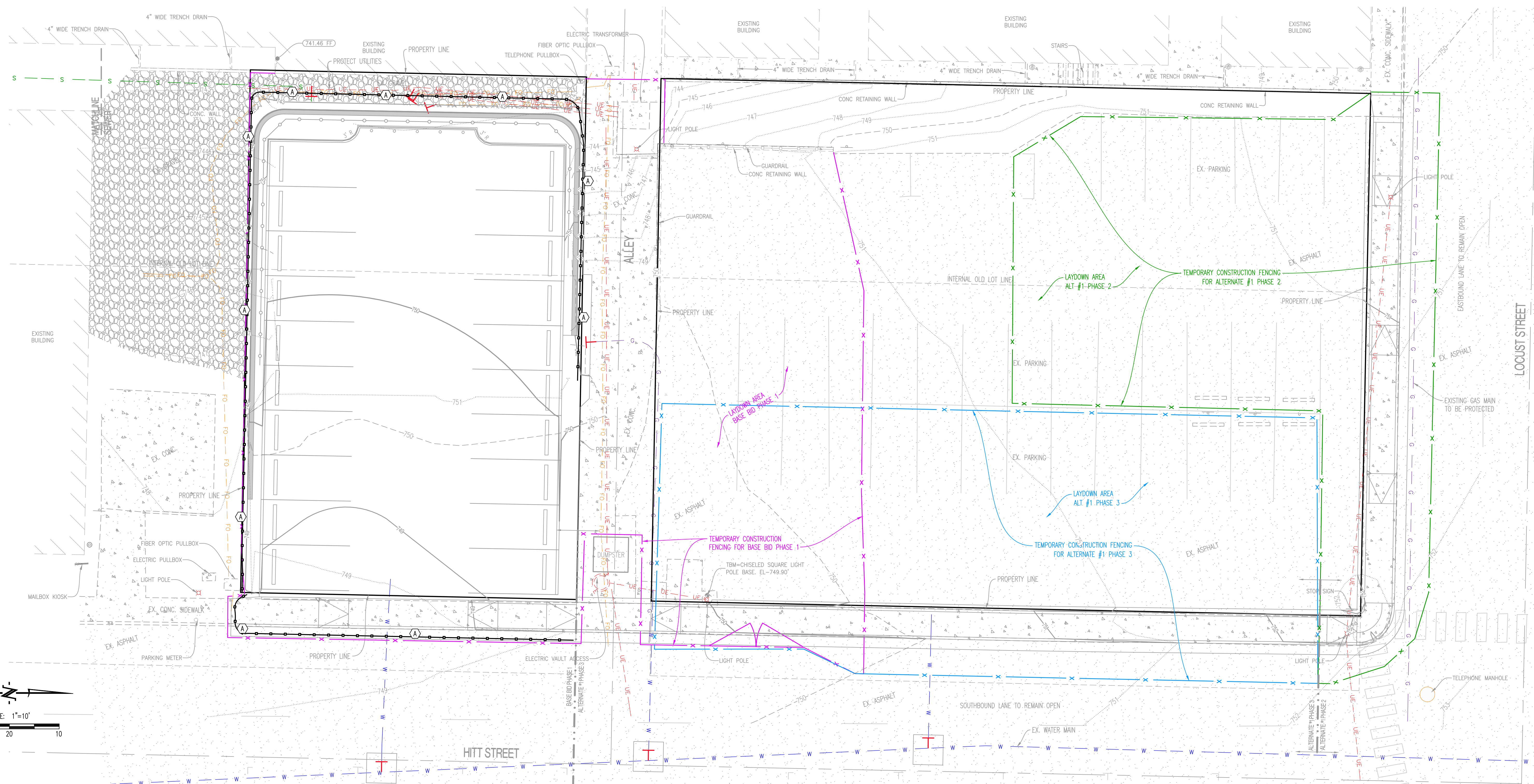
1. THE CONTRACTOR SHALL PROVIDE FOR CONTROL OF SURFACE EROSION AND SEDIMENT DEPOSITION DURING ALL PHASES OF CONSTRUCTION AND UNTIL THE OWNER ACCEPTS THE WORK AS SUBSTANTIALLY COMPLETE.
2. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ROADWAYS AND SIDEWALKS ADJACENT TO THE CONSTRUCTION OF THIS PROJECT.
3. CONTRACTOR SHALL KEEP THE ENTIRE PROJECT SITE FREE OF DEBRIS AND TRASH AT ALL TIMES. CONTRACTOR SHALL EXECUTE WORK USING METHODS THAT MINIMIZE EXCESSIVE NOISE OR DUST EMISSIONS. CONTRACTOR SHALL PROVIDE METHODS, MEANS AND FACILITIES TO PREVENT CONTAMINATION OF SOIL OR WATER FROM DISCHARGE OF REGULATED MATERIALS (I.E., DIESEL FUEL) USED DURING CONSTRUCTION.
4. CONTRACTOR MUST INSTALL AND MAINTAIN THE EROSION CONTROL MEASURES SHOWN ON THIS PLAN. IF THE ENGINEER, OWNER'S REPRESENTATIVE, DETERMINES THAT THE INSTALLATION OF THE MAINTENANCE IS INADEQUATE, THE CONTRACTOR MUST IMMEDIATELY CORRECT AT THEIR EXPENSE. IF IT IS DETERMINED THAT ADDITIONAL EROSION CONTROL MEASURES ARE NEEDED THE CONTRACTOR WILL BE DIRECTED TO INSTALL AND MAINTAIN THOSE MEASURES.
5. THE CONTRACTOR SHALL INSPECT THE LAND DISTURBANCE SITE AT LEAST ONCE EVERY SEVEN (7) DAYS AND WITHIN TWENTY-FOUR (24) HOURS FOLLOWING EACH RAINFALL EVENT OF 1/2" OR MORE WITHIN ANY TWENTY-FOUR (24) HOUR PERIOD. THE CONTRACTOR SHALL ALSO INSPECT AND ASSURE THAT ALL SEDIMENT CONTROL DEVICES ARE IN WORKING CONDITION PRIOR TO ANY FORECASTED RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SEDIMENT FROM THE FLOW AREAS AND MAKE ALL NECESSARY REPAIRS TO MAINTAIN THE INTEGRITY OF THE SEDIMENT CONTROL MEASURES. SEDIMENT SHALL BE REMOVED ONCE IT REACHED 1/2 THE INSTALLED HEIGHT OF MEASURE.
7. SOME OF THE EROSION AND SEDIMENT CONTROL MEASURES, WILL REQUIRE THE CONTRACTOR TO INSTALL, REMOVE, AND REINSTALL THE MEASURES AS CONSTRUCTION PROCEEDS. THE PHASING OF THIS WORK IS DEPENDENT ENTIRELY ON THE CONTRACTOR'S SCHEDULE, AND IS NOT SPECIFIED HEREIN. HOWEVER, THE CONTRACTOR SHALL COORDINATE THESE ACTIONS WITH THE ENGINEER AT THE TIMES ADJUSTMENTS ARE NEEDED.
8. CONTRACTOR SHALL DIRECT CONCRETE TRUCKS TO WASHOUT AT PLANT.

GENERAL LANDSCAPE NOTES:

1. VEHICLES ARE TO USE DESIGNATED CONSTRUCTION ENTRANCES AS INDICATED ON DRAWINGS OR CONSTRUCTION DOCUMENTS. IF NO CONSTRUCTION ROUTE IS INDICATED VEHICLES ARE RESTRICTED TO PAVED AREAS. ALL CONSTRUCTION EQUIPMENT AND OR VEHICLES SHALL VERIFY THE WEIGHT LIMIT AND RESTRICTION ON PAVEMENT PRIOR TO CONSTRUCTION AND NOTIFY OWNERS REPRESENTATIVE OF THE PLANNED ROUTE.
2. THERE SHALL BE NO VEHICLE MOVEMENT IN ANY LANDSCAPED, SHRUB OR PERENNIAL AREAS. MULCH BED AND/OR TREE CANOPY DRIP AND ROOT ZONES, WITHOUT PRIOR MODIFICATIONS AND APPROVAL FROM LANDSCAPE SERVICES. LANDSCAPE SERVICES REQUIRES ONE WEEK NOTICE PRIOR TO ANY VEHICLE MOVEMENT IN THESE AREAS.
3. VEHICLE ACCESS SHALL NOT BREAK OR RUB TREE BRANCHES. OWNER WILL PRUNE TREE BRANCHES TO PROVIDE CLEARANCE AROUND BUILDING ENTRANCE. OWNER REQUIRES ONE WEEKS NOTICE FOR THIS WORK TO BE DONE.
4. DO NOT COMPACT GRADE WITHIN THE DRIP LINE OF TREES TO REMAIN. PROVIDE APPROVED FENCING TO PREVENT DRIVING OR EQUIPMENT PARKING WITHIN DRIP LINE OF TREES. PRIOR TO CONSTRUCTION OR WORK IN THE PROJECT AREA, MU'S CAMPUS STANDARD 6" CHAIN LINK FENCE AND POST SHALL BE USED UNLESS OTHERWISE NOTED AND/OR APPROVED BY OWNERS REPRESENTATIVE.
5. CONTRACTOR SHALL RIP THE SUB-SOIL TO A DEPTH OF 6" TO BREAK UP COMPACTION. CONTRACTOR SHALL THEN COMPACT THE SUB-SOIL TO 85% (IN NON-PAVED AREAS) OR 95% (IN PAVED AREAS) OF THE MATERIAL'S STANDARD PROCTOR DRY DENSITY. CONTRACTOR SHALL LEAVE THE AREA 6" BELOW THE FINISHED GRADE IN TURF AREAS AND 24" BELOW THE FINISHED GRADE IN PLANTER BED AREAS.
6. FINAL 6" OF TOP SOIL PLACEMENT AND TURF ESTABLISHMENT BY MU.
7. THE CONTRACTOR SHALL ADJUST EXISTING AND NEW YARD BOXES VALVE BOXES, PULL BOXES, CLEANOUTS, AND MANHOLE LID RINGS ETC. (INCLUDES IRRIGATION, SEWERS, WATER AND ELECTRIC), TO THE INDICATED FINAL FINISH GRADE WHERE NEW FINISHED GRADE ELEVATIONS ARE PROVIDED, INDICATED, OR OTHERWISE IMPLIED.
8. THE OWNER WILL WATER AND MAINTAIN ALL SEED AND LANDSCAPING.
9. IRRIGATION LINES AND VALVES MAY EXIST IN THE AREA, CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE OF THE SYSTEM AS CAUSED BY CONSTRUCTION. WITHIN REASON AND WHEN POSSIBLE, THE NEW WORK SHALL BE INSTALLED TO AVOID LANDSCAPING COMPONENTS. IF AVOIDANCE IS NOT POSSIBLE, CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL, REPAIR AND/OR RE-INSTALLATION OF THE IRRIGATION AS REQUIRED TO COMPLETE THE WORK AS SHOWN AND TO LEAVE THE OWNER WITH AN IRRIGATION SYSTEM IN THE SAME CONDITION AS WHEN WORK BEGAN.

LEGEND OF LABELS:

- (A) INSTALL PERIMETER EROSION CONTROL DEVICE (SILT FENCE OR STRAW WADDE) DURING EARTHWORK OPERATIONS AND/OR WHEN SILT RUNOFF IS EXPECTED TO BE GENERATED.



REVISIONS:

NO.	DATE
BID SET	07/18/2024

THIS SHEET HAS BEEN SIGNED SEALED AND DATED ELECTRONICALLY

ANDREW T. GREENE
MO LICENSE 2022000043

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COLUMBIA, MO 65211

207-209 HITT STREET - DEMOLISH BUILDING
CP241121
COLUMBIA-BOONE COUNTY, MISSOURI

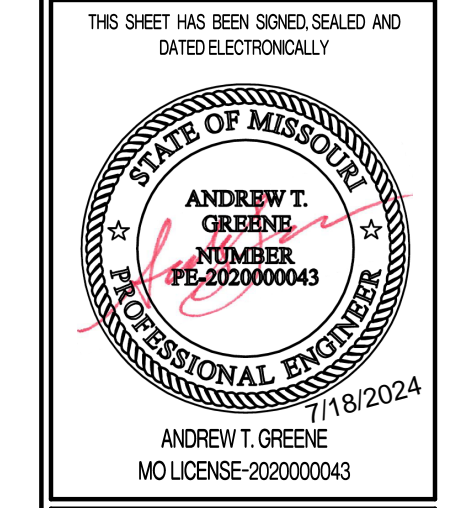
DRAWING INCLUDES:

EROSION CONTROL PLAN

DESIGNED: ATG
DRAWN: ATG
PROJECT NO.: 230464
SHEET: CE 2

Y:\2023\230464 - CP241121 - Demo and Parking 209 Hitt Street\Civil\A&D Files\Construction Plans\230464_Croding_Base.dwg

REVISIONS:	
NO.	DATE
BID SET	07/18/2024



PREPARED BY:
CROCKETT
 ENGINEERS & ARCHITECTS
 1000 W. Walnut Blvd.
 Columbia, Missouri 65203
 (314) 487-0299
 www.crockettengineering.com
 Missouri Certificate of Authority
 #00000001

OWNER:
 CLARATORS OF THE UNIVERSITY OF MISSOURI
 C/O BUSINESS SERVICES
 285 UNIVERSITY HALL
 COLUMBIA, MO 65211

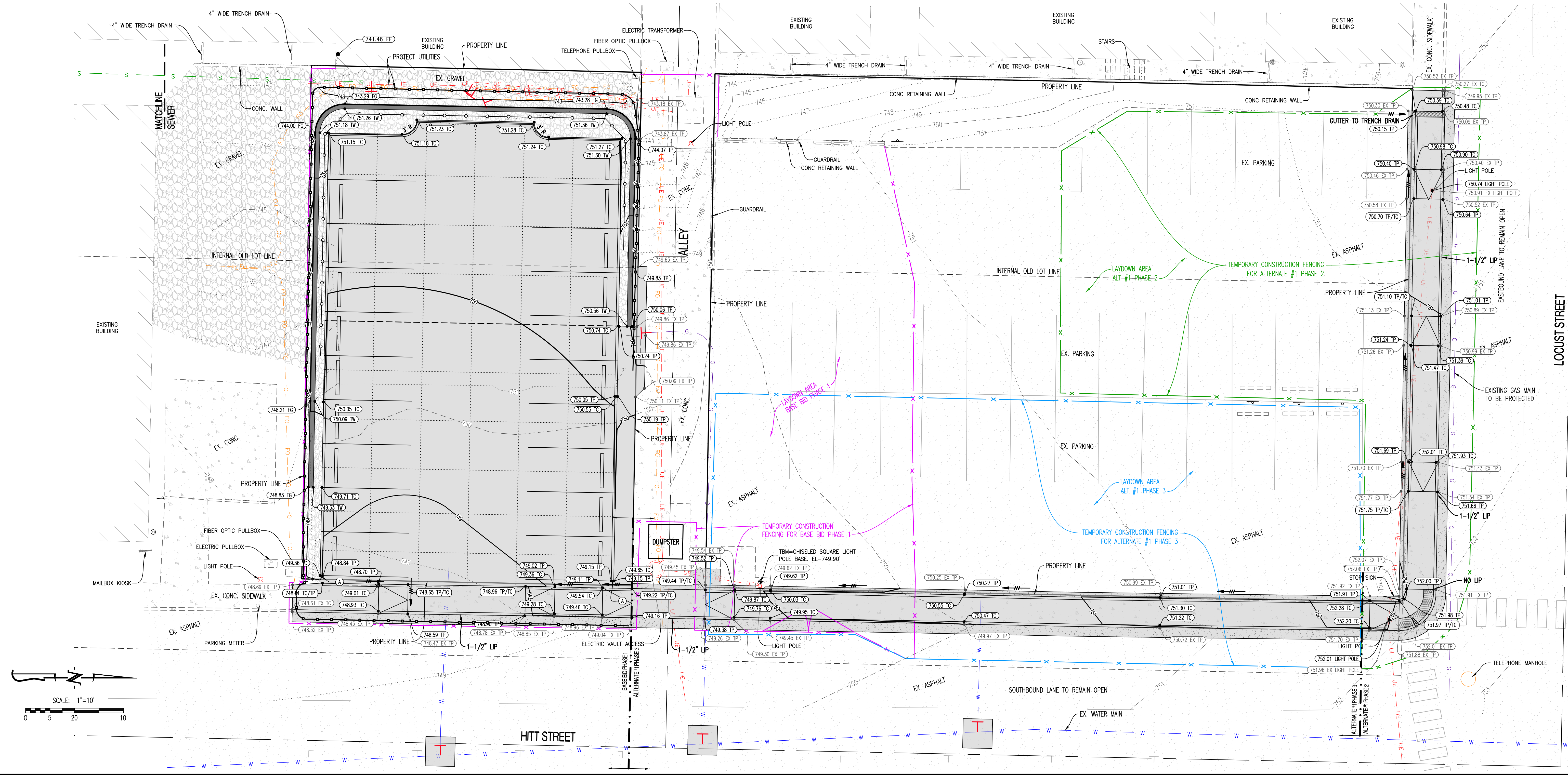
207-209 HITT STREET - DEMOLISH BUILDING CP241121 COLUMBIA-BOONE COUNTY, MISSOURI

DRAWING INCLUDES:
 GRADING PLAN

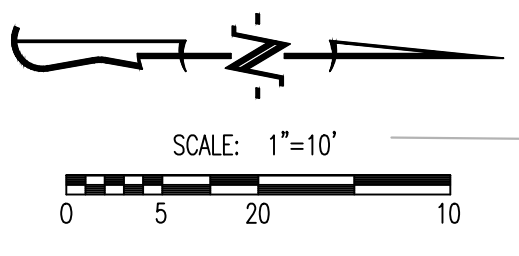
DESIGNED: ATG
 DRAWN: ATG
 PROJECT NO: 230464
 SHEET:
 CE 3

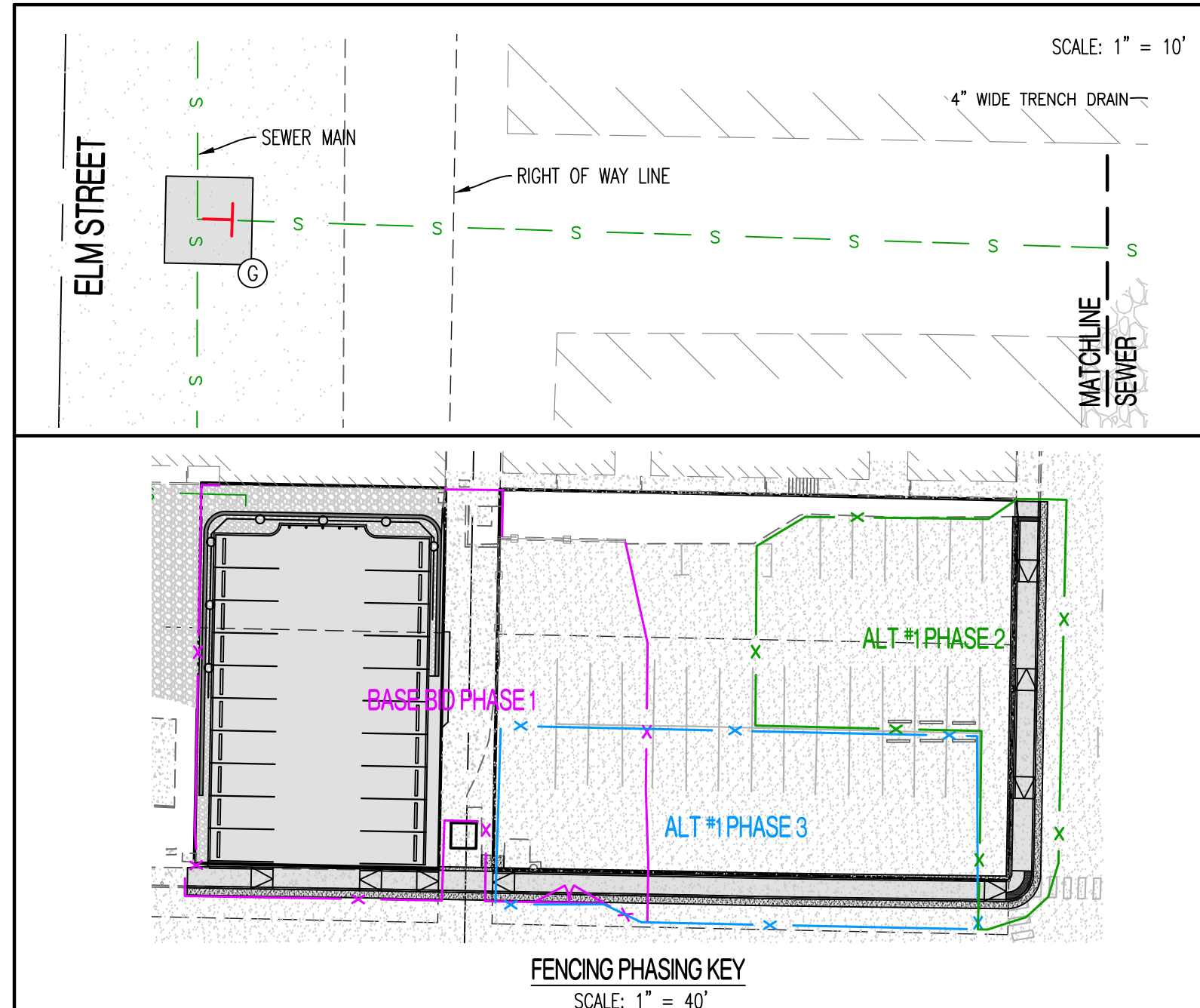
LEGEND OF LABELS	
Ⓐ	TRANSITION FROM 6" TALL CURB TO ZERO CURB.

LEGEND OF SYMBOLS:	
-----XXX-----	EXISTING MINOR CONTOUR
-----XXX-----	EXISTING MAJOR CONTOUR
-----XXX-----	PROPOSED MINOR CONTOUR
-----XXX-----	PROPOSED MAJOR CONTOUR
(XXX.XX TC)	PROPOSED TOP OF CURB ELEVATION TC = (TP+6") UNLESS NOTED OTHERWISE
(XXX.XX TP)	PROPOSED TOP OF PAVEMENT ELEVATION
(XXX.XX FG)	PROPOSED FINISHED GRADE ELEVATION
(XXX.XX TW)	PROPOSED FINISHED GRADE AT TOP OF WALL
(XXX.XX EX)	EXISTING SPOT ELEVATION MODIFIER



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 07/18/2024 10:00 AM





GENERAL NOTES:

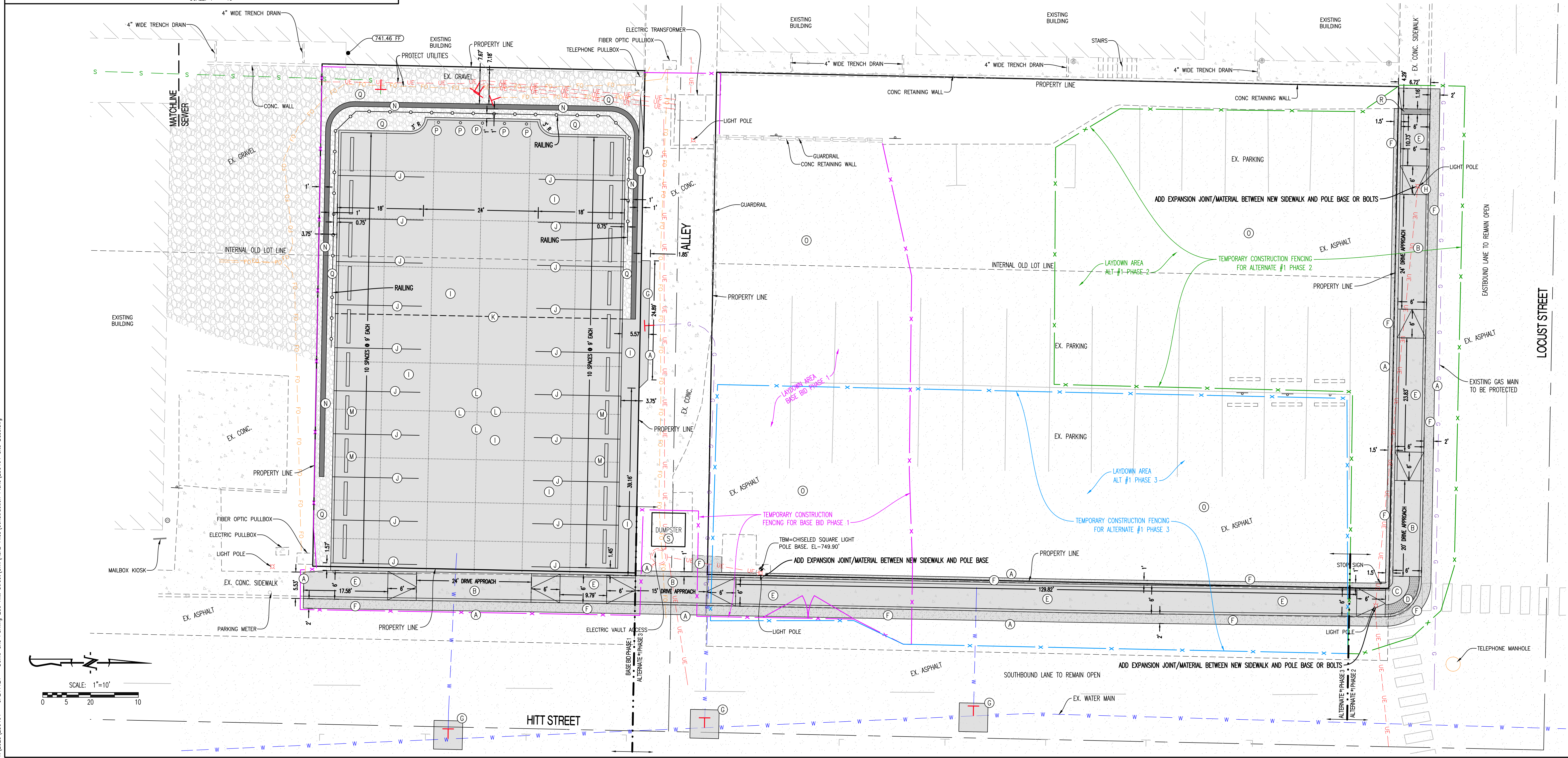
- 1) CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE BSD RIGHT OF WAY TECHNICIAN (874-7474), IMMEDIATELY PRIOR TO CLOSURE OF STREET, DURING CONSTRUCTION FOR INSPECTIONS AND AGAIN WHEN WORK IS COMPLETE AND STREET IS REOPENED.
- 2) THE PAVEMENT JOINTS SHOWN ARE A GRAPHICAL REPRESENTATION OF A POSSIBLE JOINT LAYOUT. CONTRACTOR TO PROVIDE SHOP DRAWINGS WITH JOINT LAYOUT FOR APPROVAL BY ENGINEER PRIOR TO POURING OF PAVEMENT.
- 3) CONTRACTOR SHALL REFER TO THE CITY OF COLUMBIA STANDARD DETAILS FOR DETAILS REFERENCED. REFER TO LINK ON COVER SHEET TO CITY OF COLUMBIA STANDARDS.

PHASING NOTES:

1. PHASE 1 SHALL GENERALLY INCLUDE DEMOLITION OF THE BUILDING AND CONSTRUCTION OF THE NEW PARKING LOT. PARKING LOT SHALL BE COMPLETED AND OPENED TO VEHICLES PRIOR TO STARTING ON PHASE 2.
 2. PHASE 2 SHALL GENERALLY BE REMOVAL AND REPLACEMENT OF SIDEWALKS/DRIVE APPROACHES ALONG LOCUST STREET. DURING THIS TIME, ACCESS TO AND USE OF THE EAST HALF OF THE EXISTING PARKING LOT SHALL REMAIN, AS ACCESSED FROM HITT STREET.
 3. PHASE 3 SHALL GENERALLY BE THE REMOVAL AND REPLACEMENT OF SIDEWALKS/DRIVE APPROACHES ALONG HITT STREET, NORTH OF THE BASE BID PHASE 1 SCOPE. DURING THIS TIME, ACCESS TO AND USE OF THE WEST HALF OF THE EXISTING PARKING LOT SHALL REMAIN, AS ACCESSED FROM LOCUST STREET.
- 3.1. COORDINATE WITH OWNER'S REPRESENTATIVE AND CITY SOLID WASTE (TRASH) ON SHORT TERM LOCATION OF DUMPSTER TO PERFORM THE WORK AT THE ALLEY CONNECTION TO HITT STREET.

LEGEND OF LABELS

- | | |
|---|---|
| <ul style="list-style-type: none"> (A) CONTRACTOR TO PROVIDE A CLEAN SAW CUT IN PAVEMENT TO PROVIDE A CLEAN TIE INTO PROPOSED PAVEMENT. (B) CONSTRUCT COMMERCIAL DRIVEWAY APPROACH WITH RAMP ON EACH SIDE AS SHOWN. REFER TO DRIVEWAY APPROACH DETAIL ON CE 7 (C) AT CORNER, CONSTRUCT SIDEWALK RAMP AT SIDEWALK AT BACK OF CURB (TYPE C) AS SHOWN. REFER TO CITY DETAIL 1000.08 ON CE 6. (D) INSTALL DETECTABLE WARNING AS SHOWN. REFER TO CITY DETAIL 435.01 ON CE 6. (E) CONSTRUCT CITY DOWNTOWN SIDEWALK AS SHOWN. REFER TO DOWNTOWN SIDEWALK DETAIL ON CE 7. CONSTRUCT VARIABLE HEIGHT "CURB" ON THE BACKSIDE OF SIDEWALK, BETWEEN PARKING LOT AND SIDEWALK. REFER TO GRADING PLAN FOR CURB ELEVATIONS. (F) CONSTRUCT ASPHALT TOPPED PAVEMENT PATCHING BETWEEN EXISTING PAVEMENT AND NEW DOWNTOWN SIDEWALK. REFER TO CITY DETAIL 1000.04 ON CE 6. (G) PATCH CITY PAVEMENT AS SHOWN. PAVEMENT REPAIRS, CUTS, AND PATCHES WITHIN CITY RIGHT OF WAY SHALL BE PERFORMED PER CITY STANDARD DETAILS 120.01, 120.02, & 120.03A/B ON CE 6. (H) SHOULD THE LOWERING OF THE SIDEWALK PAVEMENT ELEVATION LEAVE LESS THAN 4" BETWEEN THE TOP OF THE EXISTING POLE BASE FOUNDATION AND TOP OF PAVEMENT ELEVATION, THEN THE LIGHT POLE BASE FOUNDATION SHALL BE REMOVED AND REPLACED TO LOWER ELEVATION PER COLUMBIA WATER AND LIGHT DETAIL "L8" ON CE 5. (I) CONSTRUCT NORMAL DUTY PCC PAVEMENT WITH INTEGRAL CURB WHERE SHOWN. REFER TO DETAIL ON CE 5. (J) PAINT 4" PARKING STALL STRIPES AS SHOWN, COLOR WHITE. TYPICAL. ALL STALLS EXCEPT ACCESSIBLE STALLS. REFER TO PLAN FOR WIDTH AND DEPTH OF STALLS. | <ul style="list-style-type: none"> (K) INSTALL 1" EXPANSION JOINT AS SHOWN. REFER TO DETAIL ON CE 5. (L) INSTALL SAWED CONTROL JOINT WITH SEALANT AS SHOWN (TYPICAL). REFER TO DETAIL ON CE 5. (M) INSTALL WHEEL STOP AS SHOWN (TYPICAL). REFER TO DETAIL ON CE 5. (N) INSTALL RETAINING WALL W/ PEDESTRIAN GUARDRAIL WHEN ELEVATION DIFFERENCE IS OVER 30" IN HEIGHT. GUARDRAIL SHALL CONFORM TO SECTION 1015 OF THE 2021 I.B.C. (SEE PEDESTRIAN GUARDRAIL REQUIREMENTS NOTES ON RETAINING WALL PLAN SHEETS). REFER TO GRADING PLAN FOR ELEVATIONS. REFER TO STRUCTURAL PLANS FOR RETAINING WALL DESIGN. (O) CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING OF PARKING LOT TO EXISTING CONDITIONS SHOULD IT BE DAMAGED DURING THE WORK. CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION WALK THROUGH WITH THE OWNER TO DOCUMENT EXISTING PARKING LOT CONDITION PRIOR TO MOBILIZING TO SITE. ANY DAMAGED PAVEMENTS SHALL BE REPAIRED TO MATCH EXISTING CONDITIONS. (P) INSTALL 6" BOLLARDS AS SHOWN. REFER TO DETAIL ON CE 5. (Q) INSTALL GRAVEL ON HEAVY WEED MAT FABRIC AS SHOWN. (R) INSTALL TRENCH GRATE SECTION AS SHOWN. REFER TO DETAIL 1000.16 ON CE 6. (S) EXISTING CITY DUMPSTER TO BE RELOCATED HERE DURING CONSTRUCTION. PUBLIC ACCESS TO AND CITY SERVICEABILITY OF DUMPSTER SHALL BE MAINTAINED THROUGHOUT PROJECT DURATION. COORDINATE WITH OWNER'S REPRESENTATIVE AND CITY SOLID WASTE FOR TEMPORARY RELOCATION AS REQUIRED TO INSTALL DRIVEWAY APPROACH AND SIDEWALK BETWEEN DUMPSTER AND STREET. |
|---|---|



REVISIONS:

NO.	DATE
BID SET	07/18/2024

THIS SHEET HAS BEEN SIGNED SEALED AND DATED ELECTRONICALLY

7/18/2024
ANDREW T. GREENE
MO LICENSE: 202000043

PREPARED BY: **CROCKETT ENGINEERS & ARCHITECTS**
1000 W. Illinois Blvd.
Columbia, Missouri 65203
(314) 487-0299
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#00000001

OWNER: **CURATORS OF THE UNIVERSITY OF MISSOURI**
COLUMBIA BUSINESS SERVICES
228 UNIVERSITY HALL
COLUMBIA, MO 65211

207-209 HITT STREET - DEMOLISH BUILDING
CP241121
COLUMBIA-BOONE COUNTY, MISSOURI

DRAWING INCLUDES:
SITE PLAN

DESIGNED: ATG
DRAWN: ATG
PROJECT NO: 230464
SHEET:
CE 4

Y:\2023\230464 - Demo and Parking 209 Hitt Street\Civil\Auto Files\Construction Plans\230464_Site Base.dwg

REVISIONS:

NO.	DATE
BID SET	07/18/2024

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ANDREW T. GREENE
MEMBER
#202000043
7/18/2024
ANDREW T. GREENE
MO LICENSE: 202000043

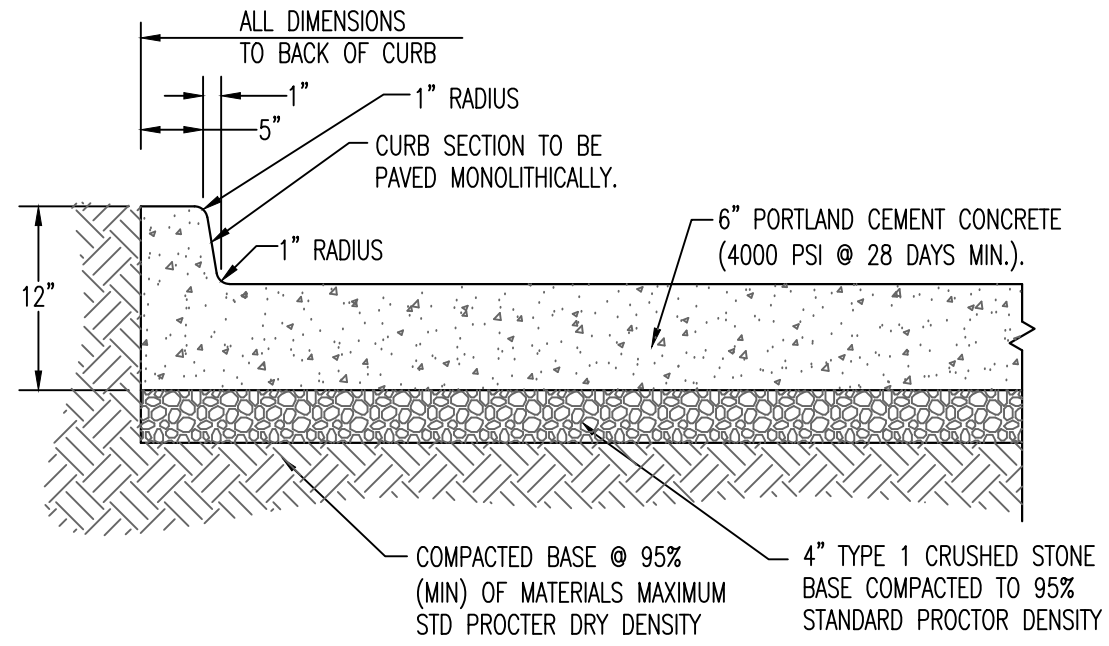
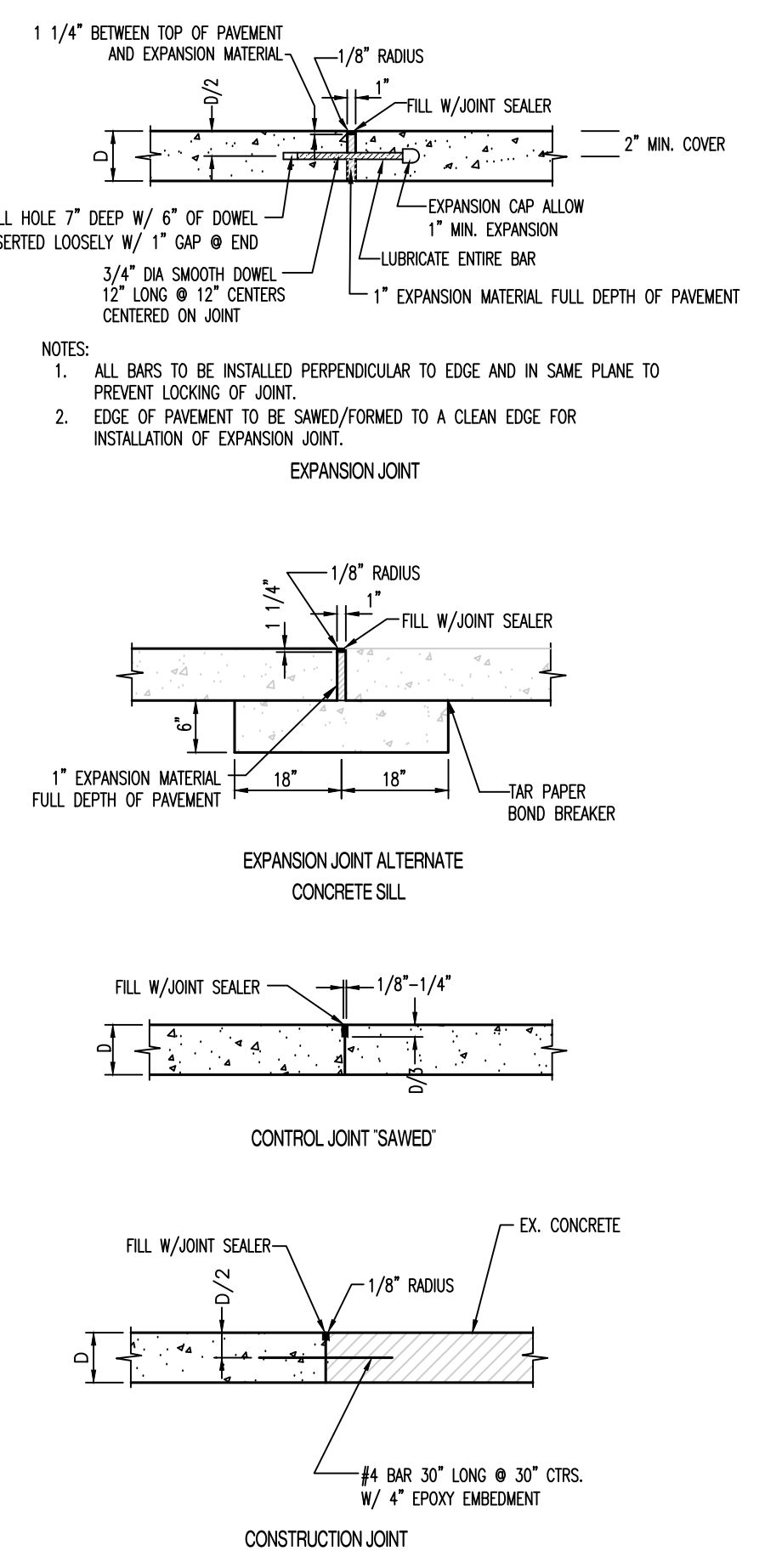
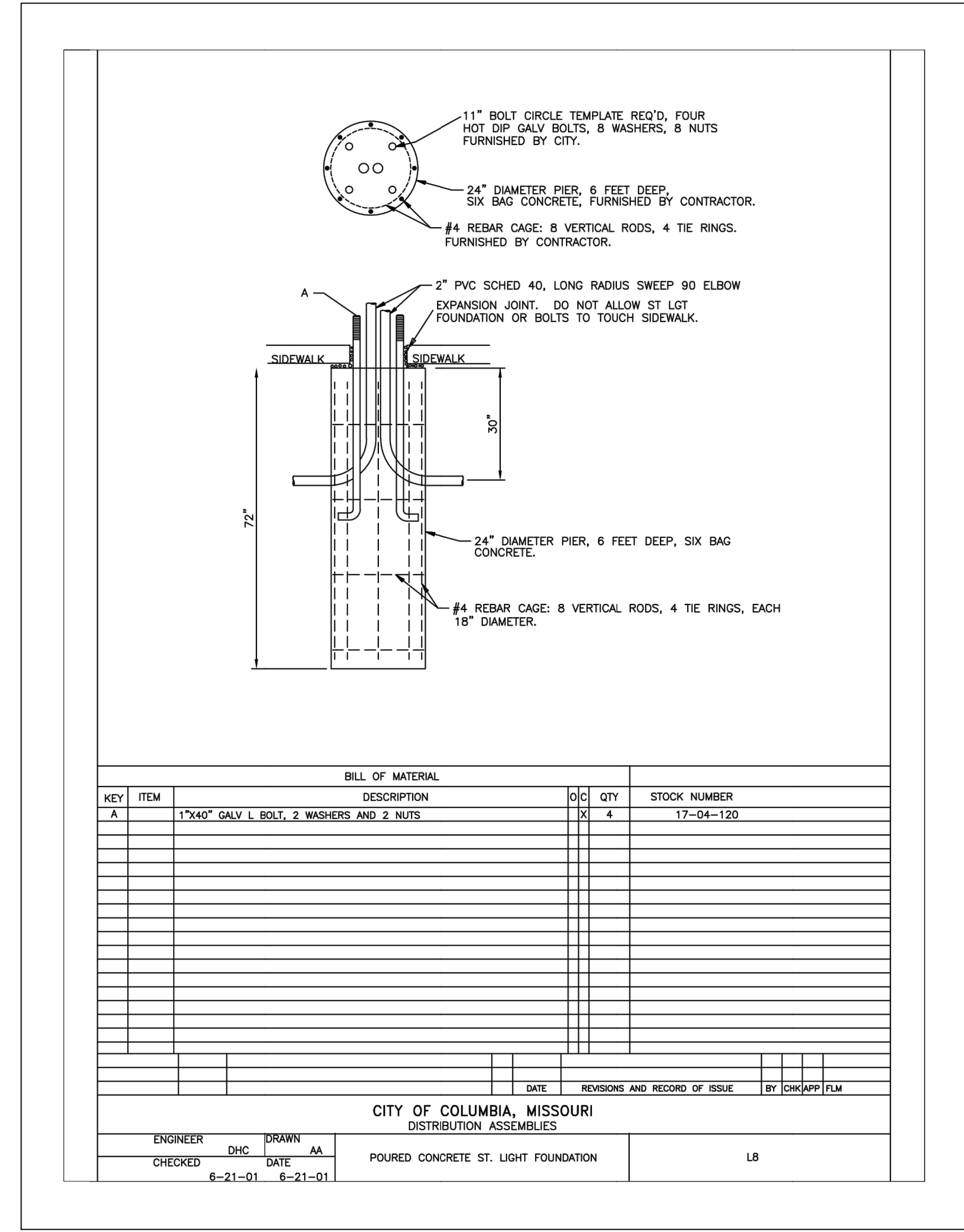
PREPARED BY:
CROCKETT ENGINEERS & ARCHITECTS
1000 W. Walnut St., Suite 1000
Columbia, Missouri 65203
(314) 487-0299
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority #00000001

OWNER:
CURATORS OF THE UNIVERSITY OF MISSOURI
C/O BUSINESS SERVICES
285 UNIVERSITY HALL
COLUMBIA, MO 65211

207-209 HITT STREET - DEMOLISH BUILDING
CP241121
COLUMBIA-BOONE COUNTY, MISSOURI

DRAWING INCLUDES:
SITE CONSTRUCTION DETAILS

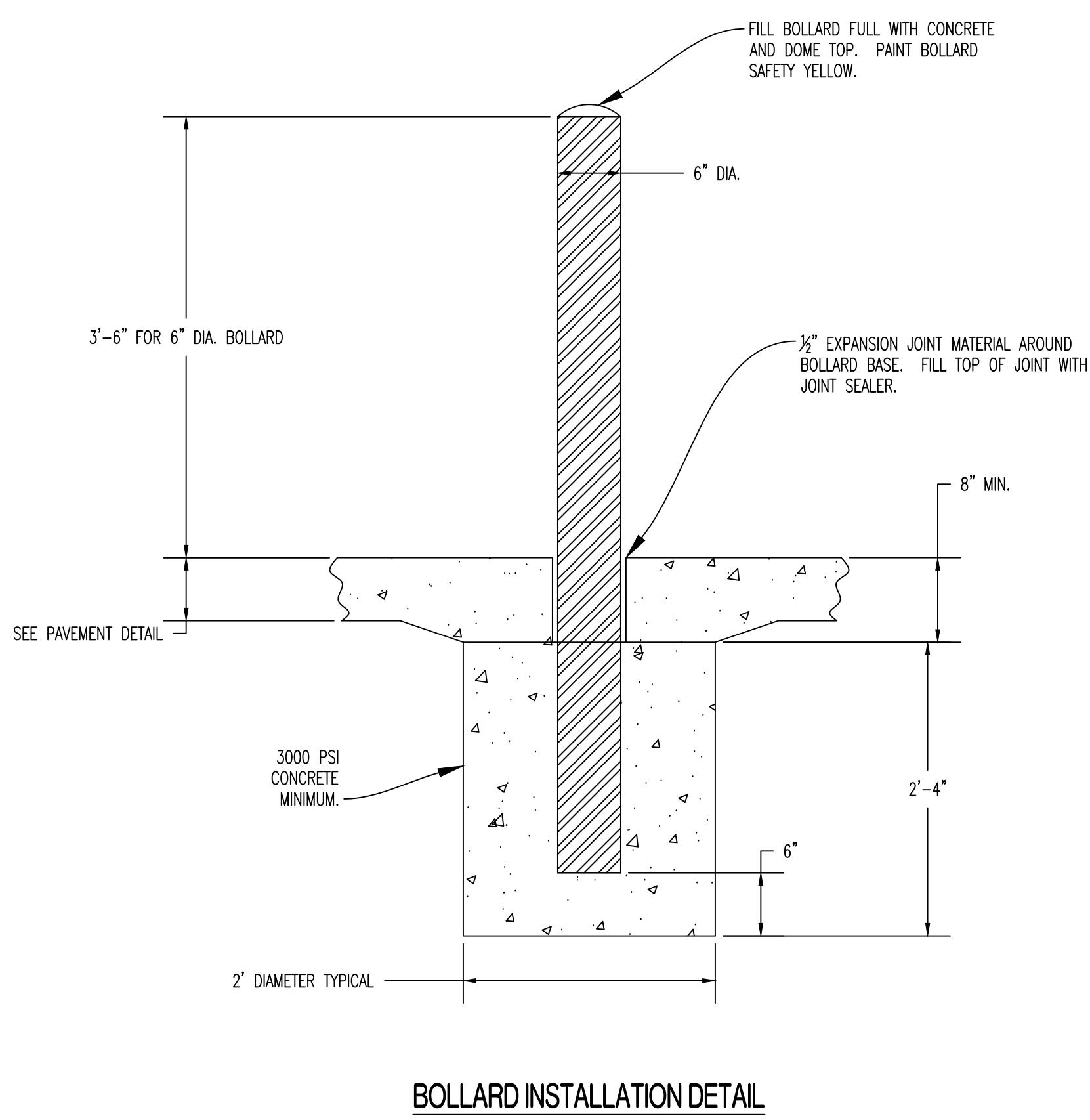
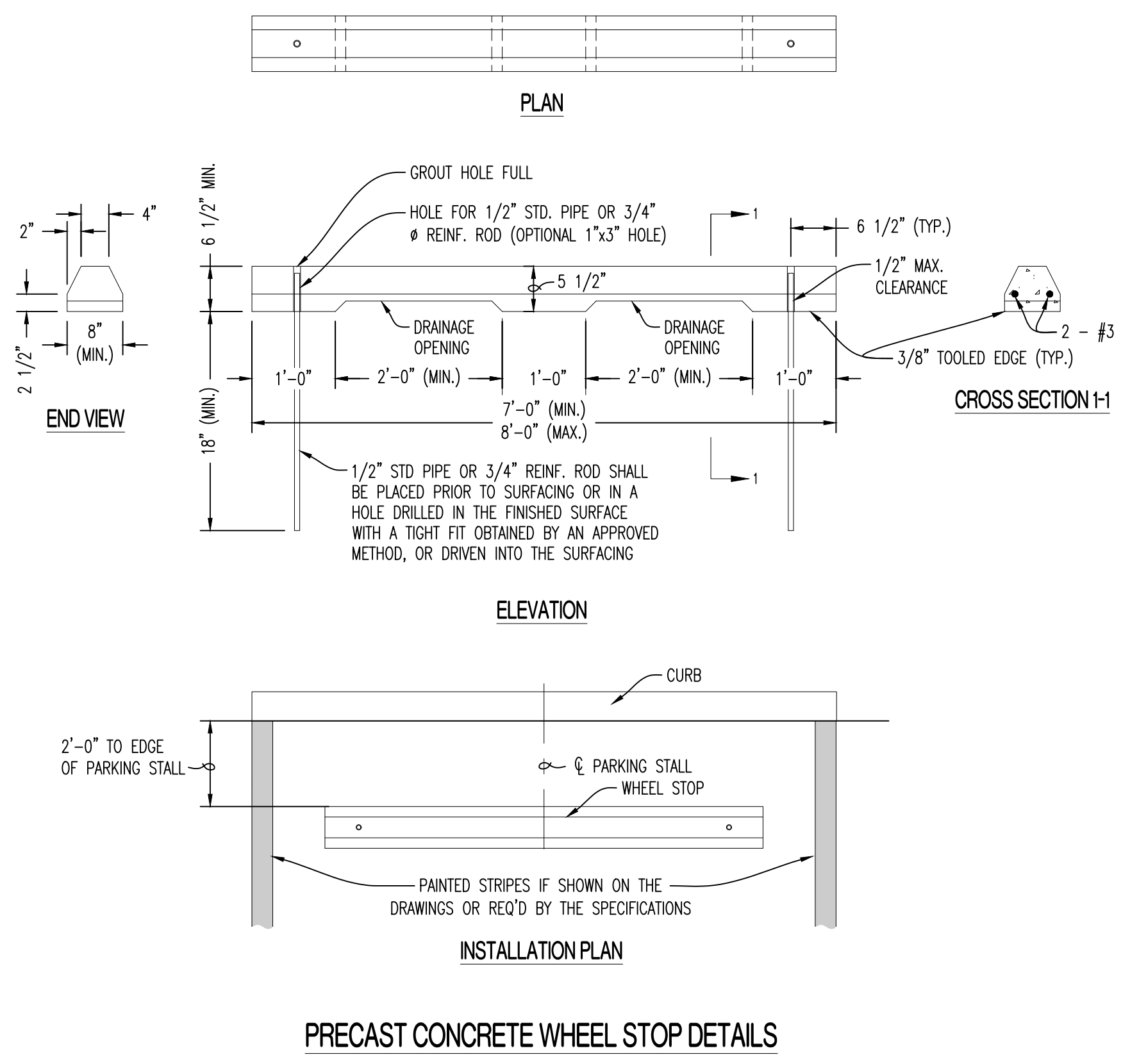
DESIGNED: ATG
DRAWN: ATG
PROJECT NO: 230464
SHEET:
CE 5

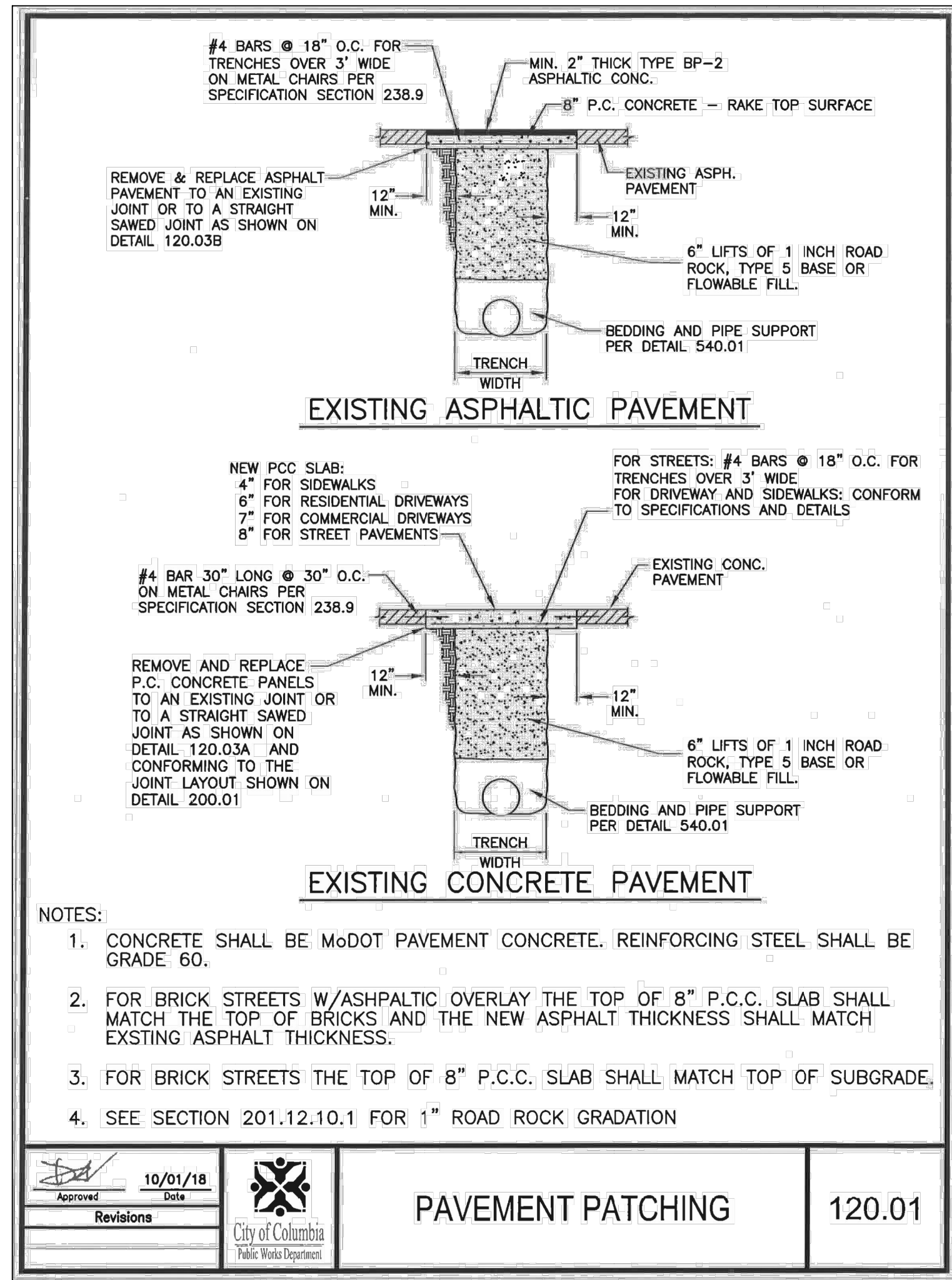


NOTES: 1. ALL PAVEMENT IS TO HAVE PANELS SAW CUT WITH JOINTS NO LARGER THAN 12'X12' IN SIZE. FILL JOINT WITH BITUMINOUS SEALER.

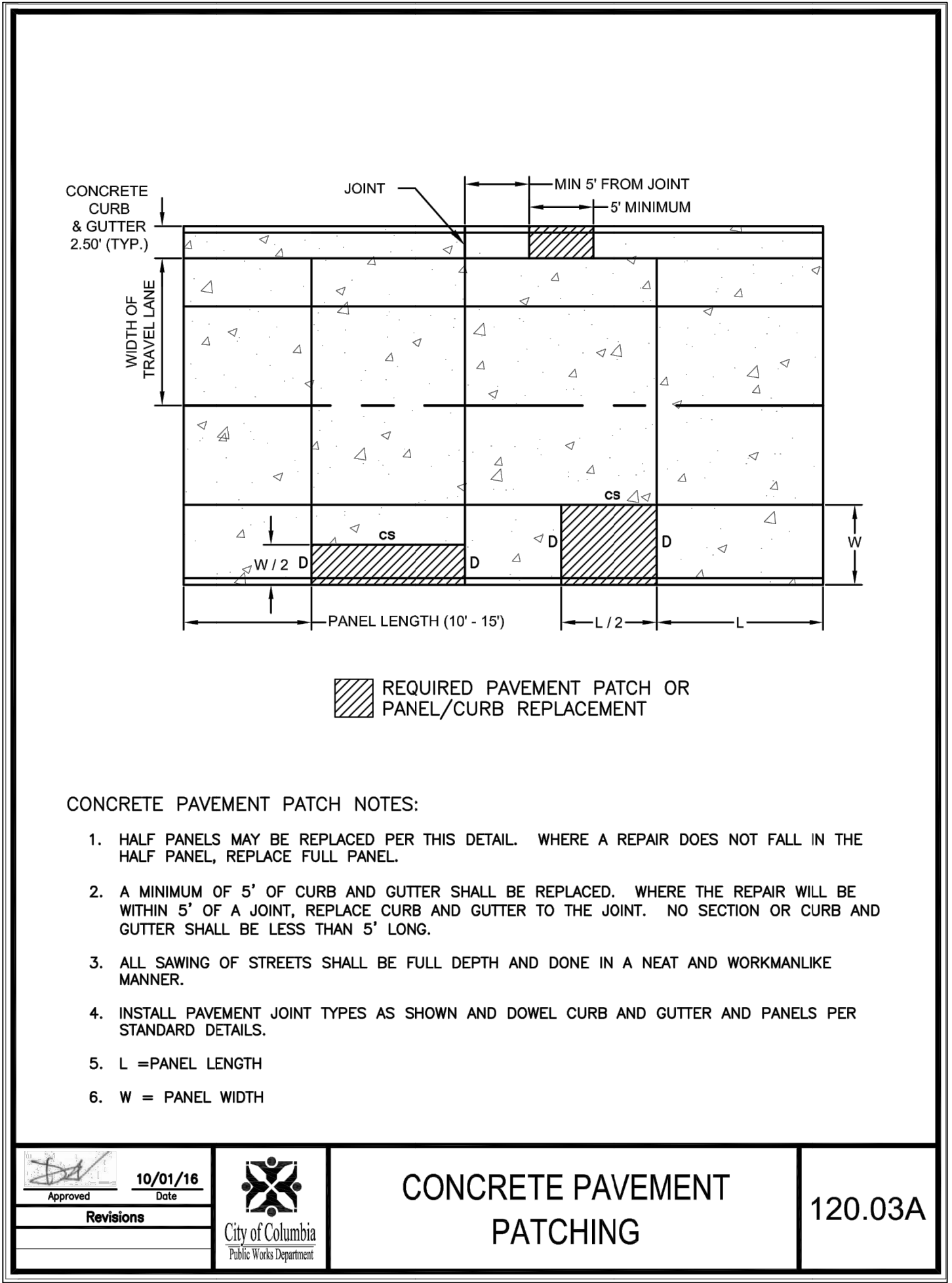
TYPICAL PRIVATE CONCRETE PAVEMENT W/ INTEGRAL CURB

PRIVATE PAVEMENT JOINT DETAILS
(P.C. CONCRETE PAVEMENT)

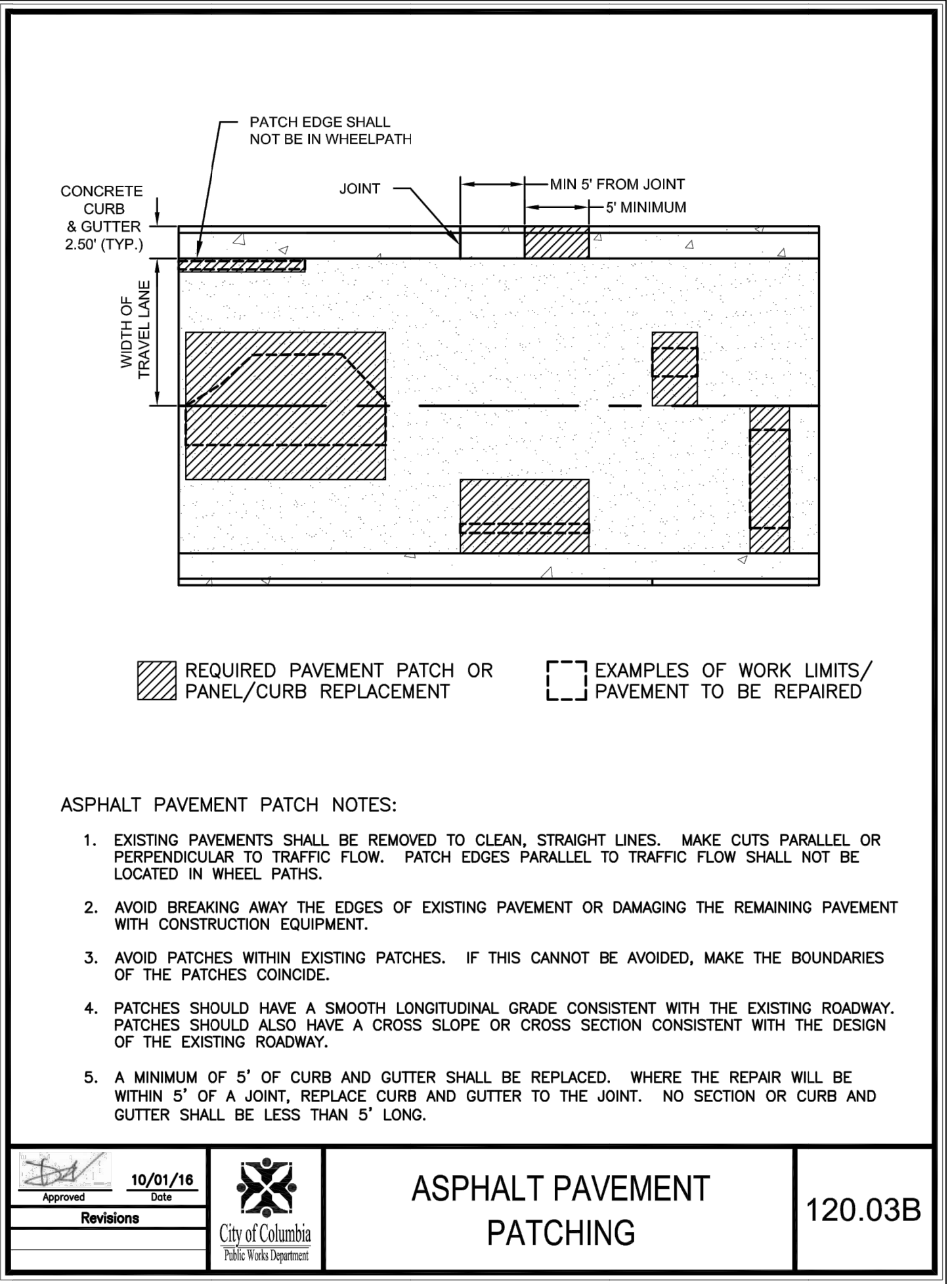




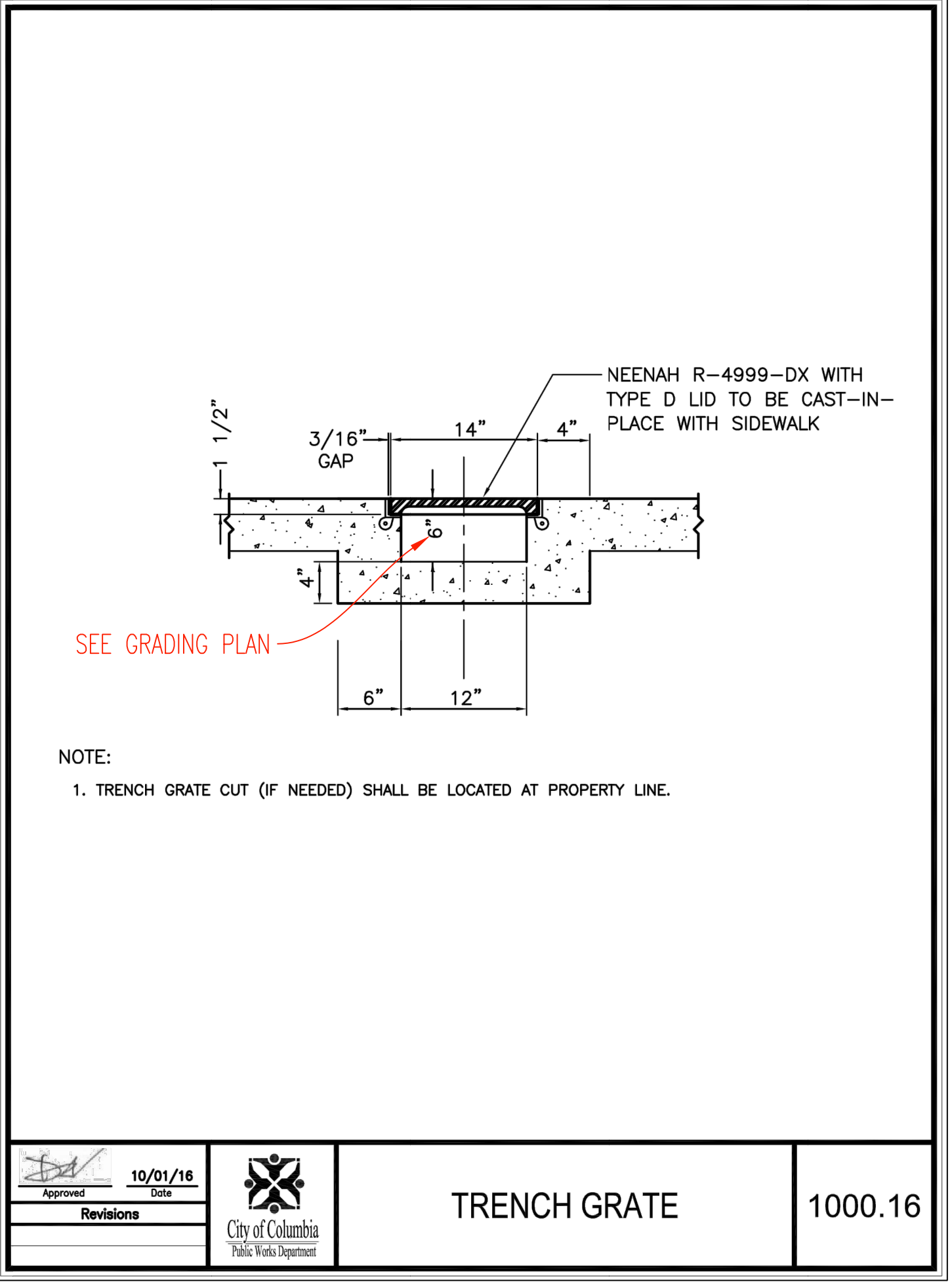
Approved	10/01/18	City of Columbia Public Works Department	PAVEMENT PATCHING	120.01
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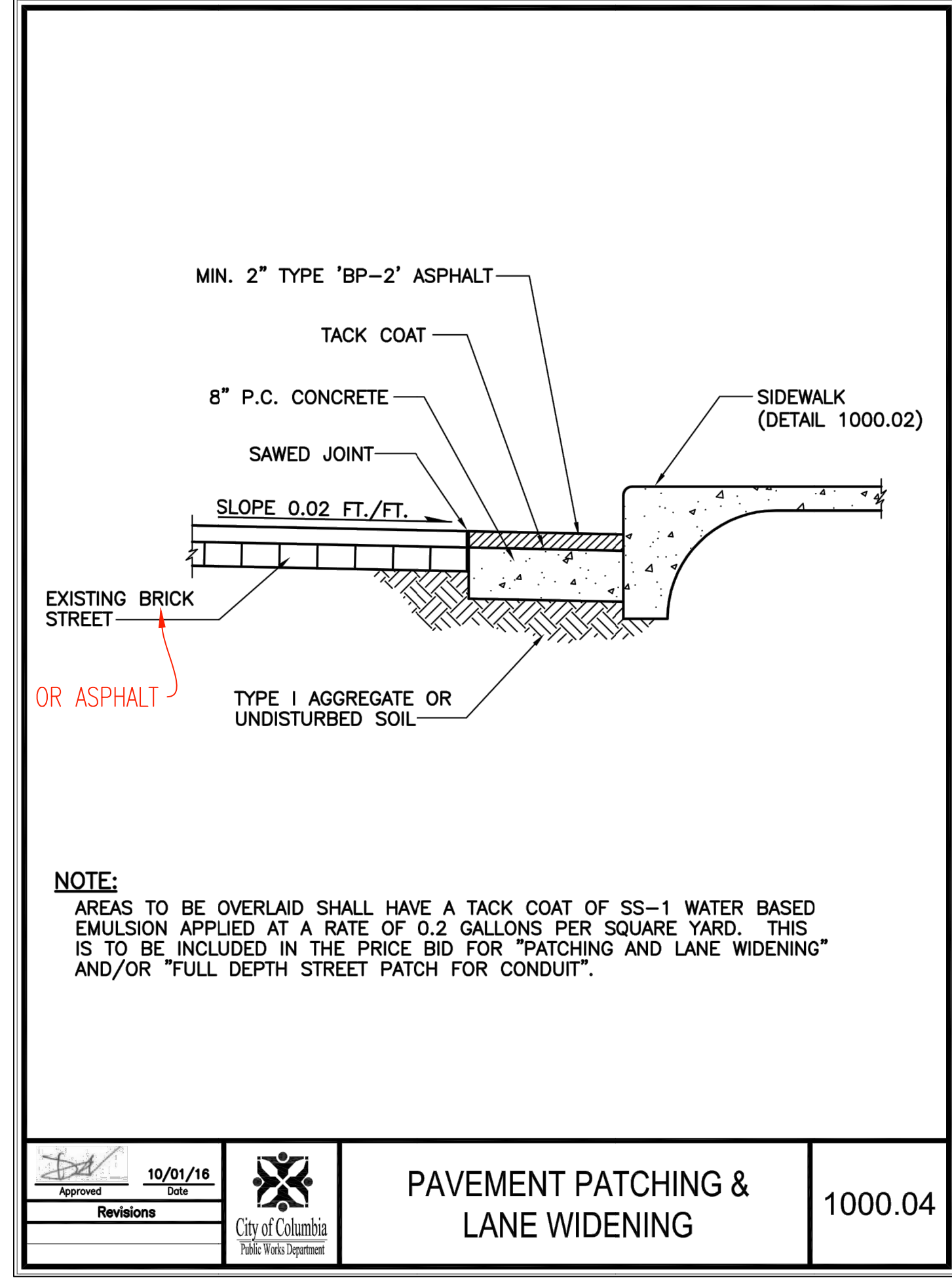
Approved	10/01/16	City of Columbia Public Works Department	CONCRETE PAVEMENT PATCHING	120.03A
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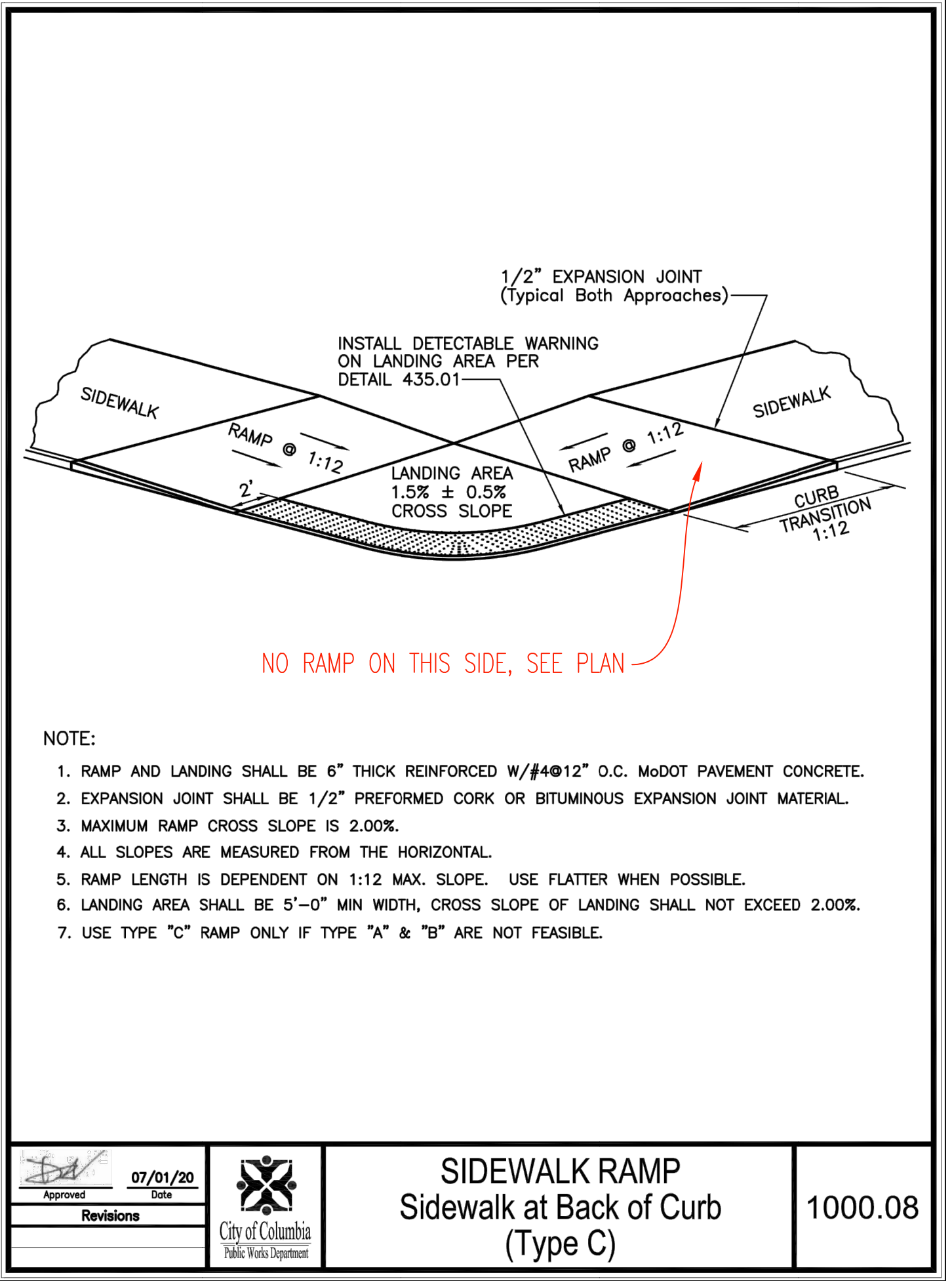
Approved	10/01/16	City of Columbia Public Works Department	ASPHALT PAVEMENT PATCHING	120.03B
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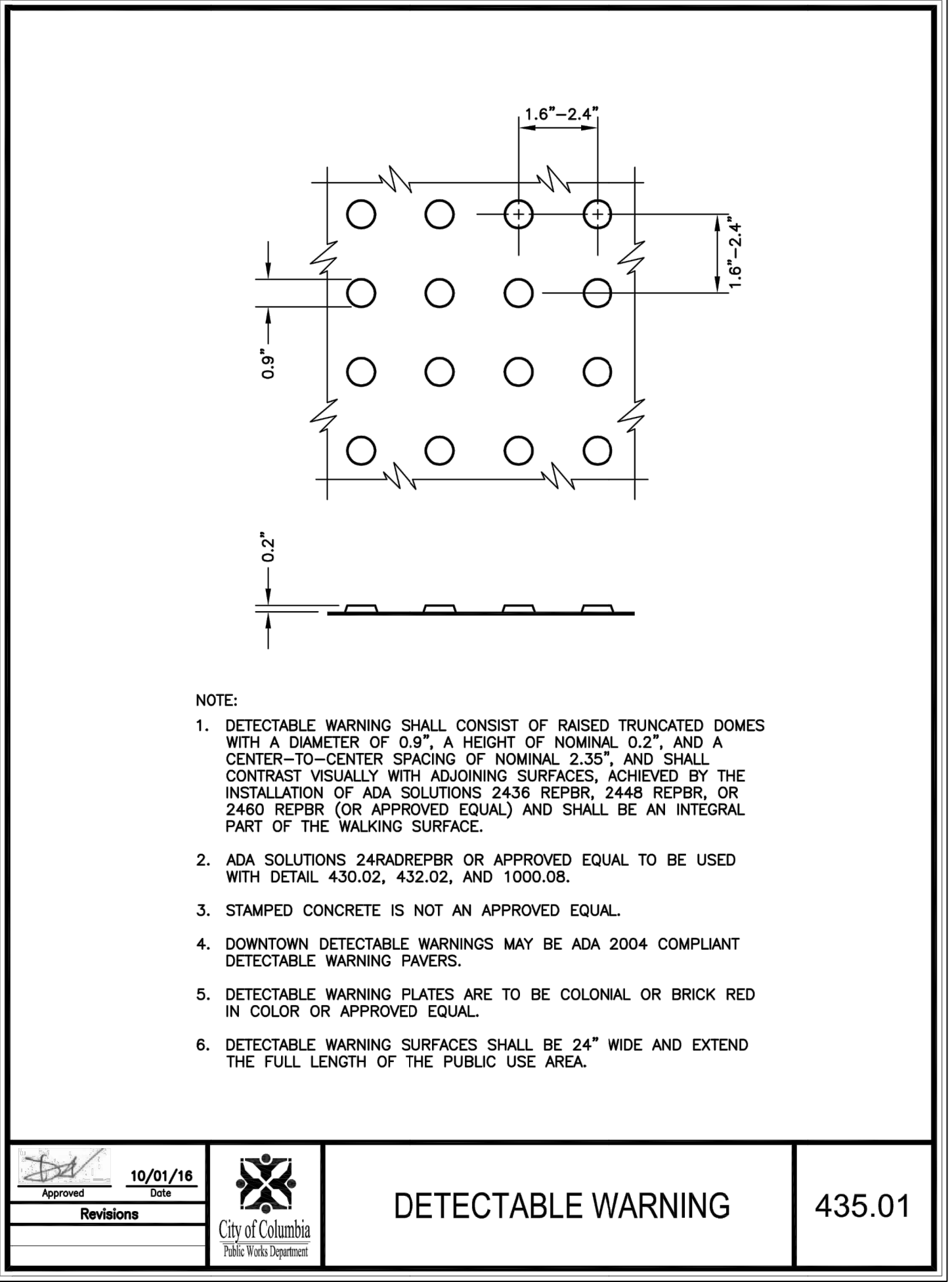
Approved	10/01/16	City of Columbia Public Works Department	TRENCH GRATE	1000.16
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Approved	10/01/16	City of Columbia Public Works Department	PAVEMENT PATCHING & LANE WIDENING	1000.04
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Approved	07/01/20	City of Columbia Public Works Department	SIDEWALK RAMP Sidewalk at Back of Curb (Type C)	1000.08
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Approved	10/01/16	City of Columbia Public Works Department	DETECTABLE WARNING	435.01
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REVISIONS:

NO.	DATE
BID SET	07/18/2024

THIS SHEET HAS BEEN SIGNED AND DATED ELECTRONICALLY

STATE OF MISSOURI
ANDREW T. GREENE
REGISTERED PROFESSIONAL ENGINEER
MEMBER #E-2022000043
7/18/2024
ANDREW T. GREENE
MO LICENSE 202000043

PREPARED BY: CROCKETT ENGINEERS & ARCHITECTS
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(314) 487-0299
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority #00000001

OWNER: CURATORS OF THE UNIVERSITY OF MISSOURI
COLUMBUS BUSINESS SERVICES
228 UNIVERSITY HALL
COLUMBIA, MO 65211

207-209 HITT STREET - DEMOLISH BUILDING
CP241121
COLUMBIA-BOONE COUNTY, MISSOURI

DRAWING INCLUDES:
CITY DETAILS 1 OF 2

DESIGNED: ATG
DRAWN: ATG
PROJECT NO: 230464
SHEET: CE 6

REVISIONS:	
NO.	DATE
BID SET	07/18/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

ANDREW T. GREENE
 MISSOURI PROFESSIONAL ENGINEER
 MO LICENSE: 202000043

PREPARED BY:

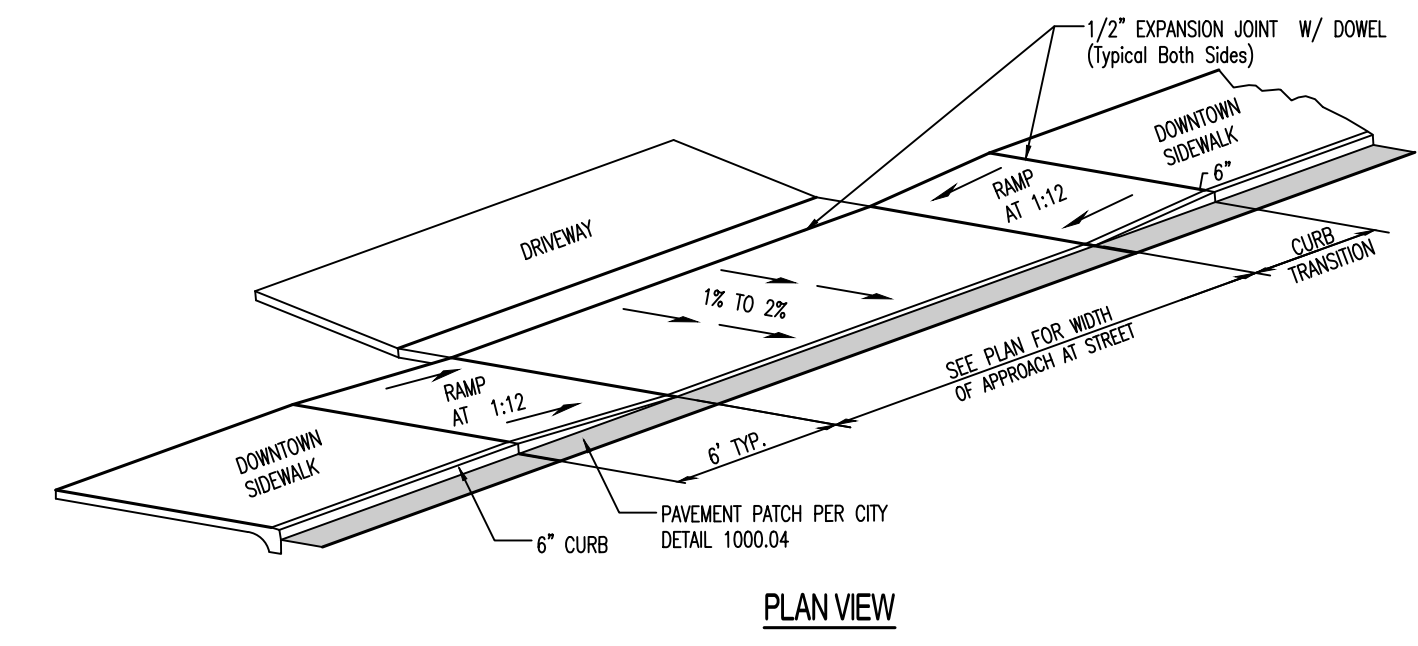
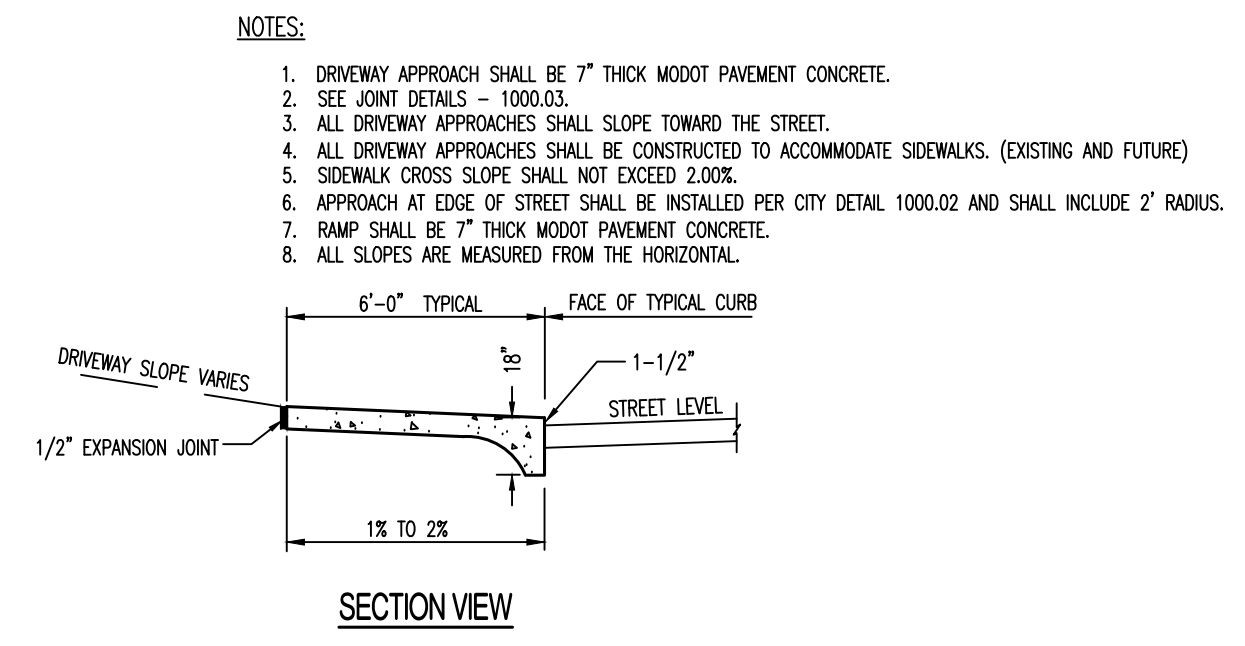
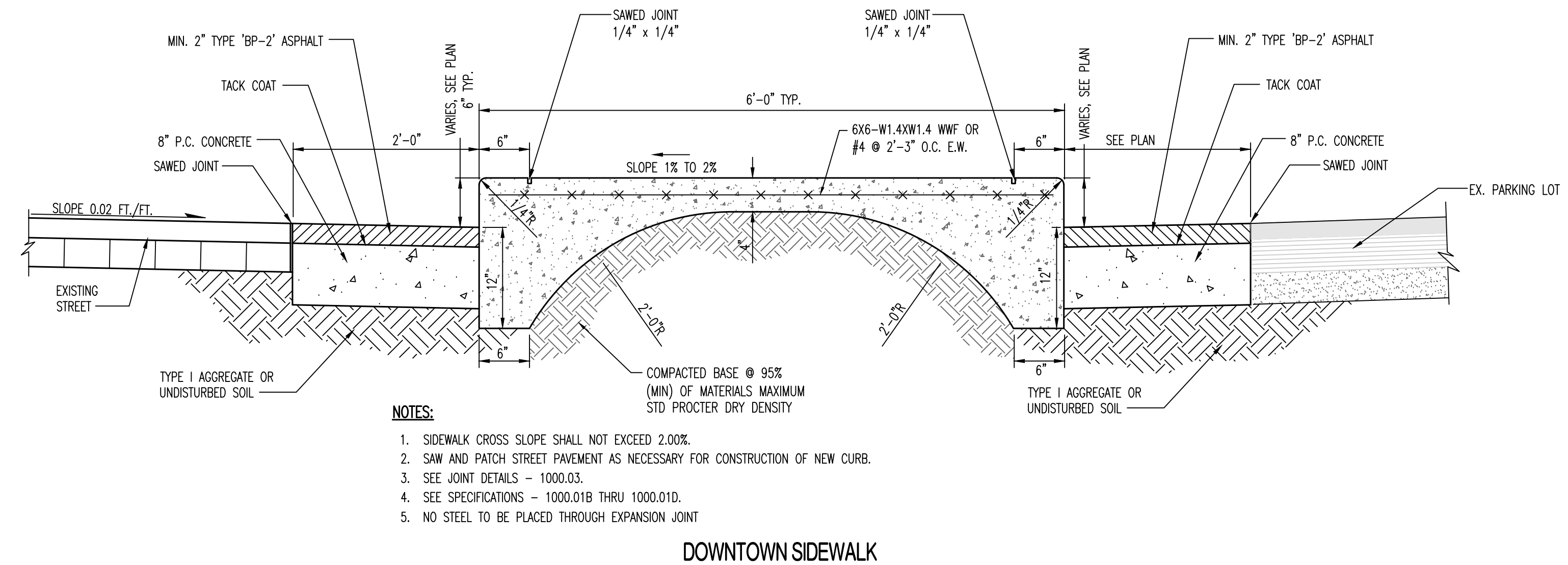
CROCKETT ENGINEERING CONSULTANTS
 ENGINEERS, ARCHITECTS, PLANNERS
 1000 W. Illinois Street, Suite 200
 Columbia, Missouri 65203
 (314) 487-0299
 www.crocketting.com
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CURATORS OF THE UNIVERSITY OF MISSOURI
 COLUMBIAN BUSINESS SERVICES
 228 UNIVERSITY HALL
 COLUMBIA, MO 65211

207-209 HITT STREET - DEMOLISH BUILDING
 CP241121
 COLUMBIA, BOONE COUNTY, MISSOURI

DRAWING INCLUDES:	
CITY DETAILS 2 OF 2	
DESIGNED:	ATG
DRAWN:	ATG
PROJECT NO:	230464
SHEET:	CE 7



DRIVEWAY APPROACH DETAIL

JOINT SEALANT

Joint sealant is required in all control, expansion and construction joints. Joint sealant shall be light gray in color. Joint sealant shall be a one or two component polysulfide polymer sealant or a one or two component polyurethane prepolymer sealant, Horn Daraseal-V or Vulkem Sealant or approved equal. Joint sealant shall be installed in accordance with manufacturer's specifications. A resilient closed cell foam backing rod, Etha Foam or approved equal, shall be used in all saw joints and placed to a depth equal to the width of the joint.

SIDEWALK ACCESSIBILITY

Accessible Sidewalk Ramps shall be provided at all intersections. Cross slopes of sidewalks shall not exceed 1:50. The preferred minimum downtown sidewalk width is 10 ft.

BLOCK OUT FOR TREES

Block outs for tree grates shall be provided in conformance with the approved downtown plan. The configuration of the block out is shown on drawings 1000.09, 1000.10A and 1000.10B. Tree grates shall be provided by the developer. Trees and soil backfill will be provided by the City.

TREES

Tree selection shall be in accordance with City Staff recommendations which are based on proven desirable growth characteristics for urban use areas. All tree selections must be approved by the City prior to installation.

VAULTS

When a sidewalk is constructed over a basement vault, the structural stability of the vault and sidewalk shall be analyzed by an Engineer or Architect.

AUTHORITY

The Director of Public Works shall have the authority in the interest of safety and maintenance to make technical refinements and modifications to these construction standards and methods during the time these standards are in effect.

This bull floating must be done prior to bleed water coming to the surface. If needed, in the Engineer's judgement, the Engineer will require a ten foot straight edge to be used immediately following the bull floating operation.

Following the evaporation of the bleed water and when the fresh concrete will support normal foot pressure with a maximum 1/8 inch indentation, the wood floating operations should be commenced, followed by the magnesium float, and brooming with a medium bristle, high quality concrete finishing broom.

The acceptable tolerance for the surface of the sidewalk area is 1/8 inch in ten feet as determined by a ten foot straight edge checking the concrete sidewalk or other area in any direction.

CONTROL JOINTS

Control joints are to be sawed to a minimum depth of 1-inch. Joints shall be sawed as soon as the concrete can withstand raveling. Joints shall be cleaned and sealed immediately following sawing. Proper care must be taken to ensure that these saw joints are uniform and straight. The following guidelines will control the size of the sidewalk pads to govern the sawing:

From 0 to 6 feet wide - no longitudinal joint is required and the traverse joint will be at even intervals equal to the width of the sidewalk.

From 6'1\"/>

DOWNTOWN SIDEWALK SPECIFICATIONS

SCOPE

The following Downtown Specifications and Standards are to be used for sidewalk, driveway and curb construction or replacement in the Downtown Area as outlined on drawing 1000.01A. All work within the Right of Way shall be in conformance with the City of Columbia Street and Storm Sewer Specifications and Standards, and these Downtown Sidewalk Specifications and Standards. If a conflict occurs the Downtown Sidewalk Specifications and Standards will govern.

CURBS

The curbs will be placed monolithically with the sidewalk and a saw joint will be provided 6-inches behind the face of the curb for the length of the curb. The curb shall extend a minimum of 6-inches above the existing pavement and 12-inches below the surface of the pavement. Drawing 1000.02 shows curb and sidewalk. Any variations from this standard must have the prior approval of the Director of Public Works.

CONCRETE

All concrete shall be MoDOT pavement concrete.

SIDEWALK REMOVAL AND REPLACEMENT

Whenever sidewalk is removed and replaced, removals must be made along existing saw joints. Diagonal saw cuts and partial panel replacements are not allowed.

TEXTURE

The sidewalk surface texture required shall be that achieved by brooming with a stiff or medium-stiff broom. The direction of brooming shall be transverse to the long axis of the sidewalk. All edges except sawed construction joints shall be worked with an edging tool to a 1/4-inch radius.

FINISHING OPERATIONS

Concrete finishing operations on downtown sidewalks is extremely critical. The contractor must assume the highest level of diligence in performing finishing operations to produce a high quality, durable surface.

Once the concrete has been placed, it shall be immediately struck off using a uniform strike off device free from any defects. During the strike off operation, a minimum of one inch surcharge must be maintained in front of the strike off screed. The strike off screed operations should, in most instances, seal the surface. Immediately following the strike off operation, a magnesium or aluminum bull float should be used to complete the sealing and consolidation of the surface.

CONTROL JOINT

LONGITUDINAL JOINTS SHALL BE MIN. OF 1/4\"/>

Approved	10/01/16		SIDEWALK JOINT DETAILS	1000.03
Revisions	Date			

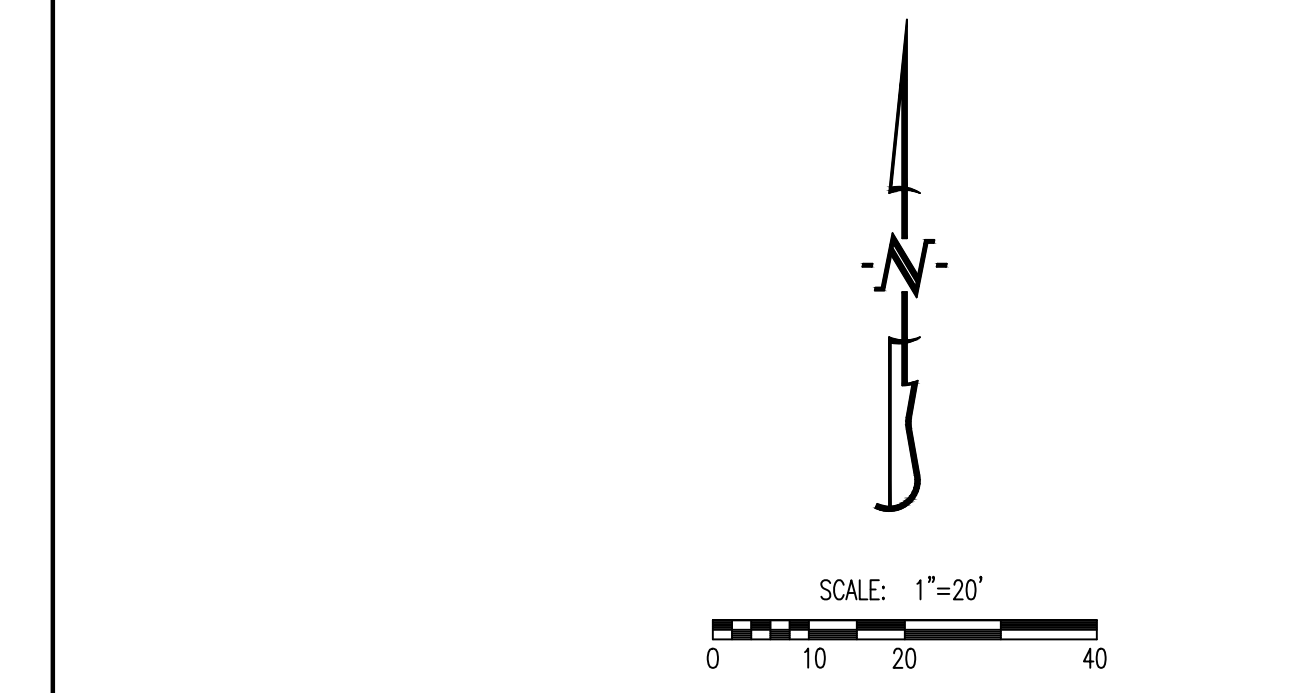
Approved	10/01/16		DOWNTOWN SIDEWALKS Specifications	1000.01B
Revisions	Date			

Approved	10/01/16		DOWNTOWN SIDEWALKS Specifications	1000.01C
Revisions	Date			

Approved	10/01/16		DOWNTOWN SIDEWALKS Specifications and Standards	1000.01D
Revisions	Date			

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Y:\2023\230464 - CP241121 - Demo and Parking 209 Hitt Street\Civil\ACAD Files\Construction Plans\230464 Traffic Control Plan.dwg

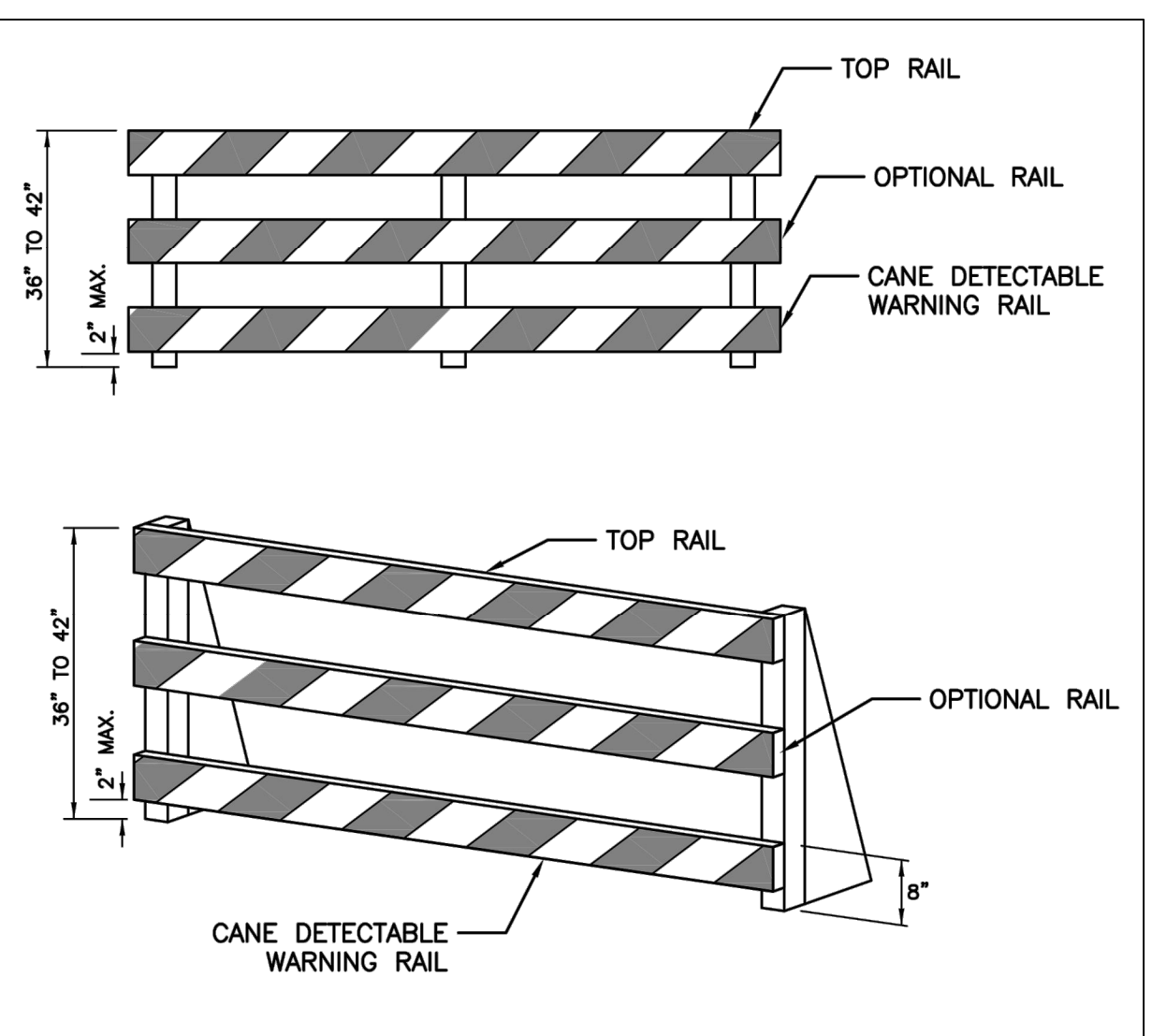


GENERAL NOTES

- TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE MUTCD.
- CONTRACTOR SHALL MAINTAIN A MINIMUM LANE WIDTH OF 11' AT ALL TIMES FOR ANY OPEN LANE OF TRAFFIC.
- CONTRACTOR SHALL REFER TO THE CURRENT EDITION OF THE MCDOT MANUAL OF TRAFFIC CONTROL FOR FIELD OPERATIONS FOR INFORMATION ON THE PROPER DEPLOYMENT OF TRAFFIC CONTROL DEVICES.
- CONTRACTOR SHALL KEEP ALL ADJACENT DRIVEWAYS OPEN AT ALL TIMES.
- CONTRACTOR SHALL NOTIFY CITY OF COLUMBIA COMMUNITY DEVELOPMENT THREE WEEKS PRIOR TO ANY CLOSURE MADE ACCORDING TO THIS PLAN. ALL TIMES FOR CLOSURE SHALL BE APPROVED BY THE CITY OF COLUMBIA PRIOR TO IMPLEMENTATION OF THIS PLAN.
- CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE BSD RIGHT OF WAY TECHNICIAN (874-7474), IMMEDIATELY PRIOR TO CLOSURE OF STREET, DURING CONSTRUCTION FOR INSPECTIONS AND AGAIN WHEN WORK IS COMPLETE AND STREET IS REOPENED.

TRAFFIC CONTROL DEVICE LEGEND

	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # R9-11L/R SHOULD READ "SIDEWALK CLOSED AHEAD CROSS HERE"). SIGN SHALL BE 24" X 18" MIN.
	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # R9-9 SHOULD READ "SIDEWALK CLOSED"). SIGN SHALL BE 24" X 18" MIN.



- NOTES:**
1. RAILS SHALL BE HIGHLY VISIBLE, YELLOW, ORANGE, OR WHITE CONTRAST FROM THE REST OF THE BARRIER
 2. RAILS SHALL EXTEND THE FULL WIDTH OF THE BARRICADE
 3. THE BARRICADES SHALL EXTEND THE WIDTH OF THE SIDEWALK CLOSURE AND OR THE LENGTH OF THE ACCESSIBLE ROUTE WITH NO GAPS BETWEEN BARRICADES

TYPICAL DETECTABLE BARRICADE
N.T.S.



REVISIONS:	
NO.	DATE
BID SET	07/18/2024
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY	
ANDREW T. GREENE MISSOURI PROFESSIONAL ENGINEER MO LICENSE: 2020000043	
PREPARED BY: CROCKETT ENGINEERS & ARCHITECTS 1000 W. HITT ST., 3RD FL. COLUMBIA, MISSOURI 65203 (314) 487-0299 www.crockettengineering.com Missouri Certificate of Authority #00000001	
OWNER: CURATORS OF THE UNIVERSITY OF MISSOURI C/O BUSINESS SERVICES 225 UNIVERSITY HALL COLUMBIA, MO 65211	
207-209 HITT STREET - DEMOLISH BUILDING CP241121 COLUMBIA-BOONE COUNTY, MISSOURI	
DRAWING INCLUDES:	
BASE BID PHASE 1 SIDEWALK CLOSURE PLAN	
DESIGNED:	ATG
DRAWN:	ATG
PROJECT NO:	230464
SHEET:	CE 8



SCALE: 1"=20'
0 10 20 40

GENERAL NOTES

TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE MUTCD.

CONTRACTOR SHALL MAINTAIN A MINIMUM LANE WIDTH OF 11' AT ALL TIMES FOR ANY OPEN LANE OF TRAFFIC.

CONTRACTOR SHALL REFER TO THE CURRENT EDITION OF THE MCDOT MANUAL OF TRAFFIC CONTROL FOR FIELD OPERATIONS FOR INFORMATION ON THE PROPER DEPLOYMENT OF TRAFFIC CONTROL DEVICES.

CONTRACTOR SHALL KEEP ALL ADJACENT DRIVEWAYS OPEN AT ALL TIMES.

CONTRACTOR SHALL NOTIFY CITY OF COLUMBIA COMMUNITY DEVELOPMENT THREE WEEKS PRIOR TO ANY CLOSURE MADE ACCORDING TO THIS PLAN. ALL TIMES FOR CLOSURE SHALL BE APPROVED BY THE CITY OF COLUMBIA PRIOR TO IMPLEMENTATION OF THIS PLAN.

CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE BSD RIGHT OF WAY TECHNICIAN (874-7474), IMMEDIATELY PRIOR TO CLOSURE OF STREET, DURING CONSTRUCTION FOR INSPECTIONS AND AGAIN WHEN WORK IS COMPLETE AND STREET IS REOPENED.

TRAFFIC CONTROL DEVICE LEGEND

	<p>PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # W20-1 SHOULD READ "ROAD WORK AHEAD"). SIGN SHALL BE 24" X 24" MIN.</p>
--	---



REVISIONS:

NO.	DATE
BID SET	07/18/2024

THIS SHEET HAS BEEN SIGNED SEALED AND DATED ELECTRONICALLY

ANDREW T. GREENE
REGISTERED PROFESSIONAL ENGINEER
MO LICENSE: 2020000043

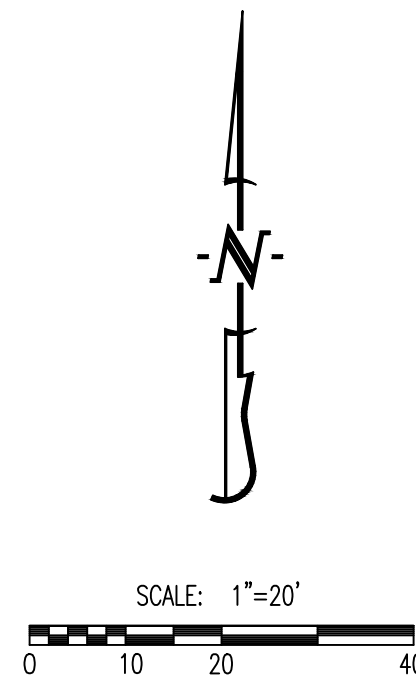
PREPARED BY:
CROCKETT ENGINEERS & ARCHITECTS
1000 W. Illinois Blvd., Ste. 100
Columbia, Missouri 65203
(314) 487-0299
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority #00000001

OWNER:
CURATORS OF THE UNIVERSITY OF MISSOURI
COLUMBUS SERVICES
228 UNIVERSITY HALL
COLUMBIA, MO 65211

207-209 HITT STREET - DEMOLISH BUILDING
CP241121
COLUMBIA-BOONE COUNTY, MISSOURI

DRAWING INCLUDES:
BASE BID PHASE 1 SOUTH SEWER TRAFFIC CONTROL PLAN

DESIGNED: ATG
DRAWN: ATG
PROJECT NO.: 230464
SHEET: CE 9

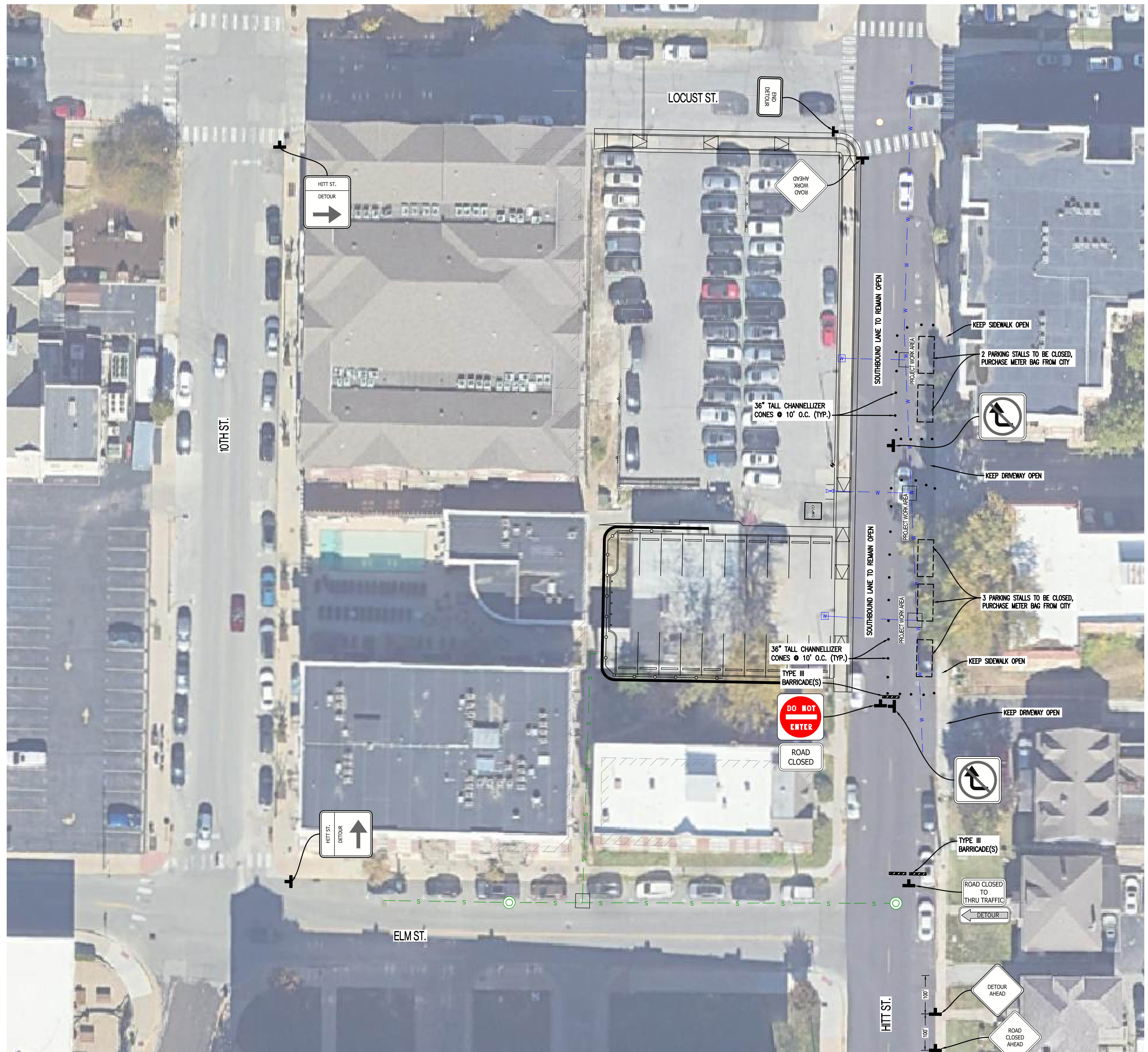


GENERAL NOTES

- TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE MUTCD.
- CONTRACTOR SHALL MAINTAIN A MINIMUM LANE WIDTH OF 11' AT ALL TIMES FOR ANY OPEN LANE OF TRAFFIC.
- CONTRACTOR SHALL REFER TO THE CURRENT EDITION OF THE MODOOT MANUAL OF TRAFFIC CONTROL FOR FIELD OPERATIONS FOR INFORMATION ON THE PROPER DEPLOYMENT OF TRAFFIC CONTROL DEVICES.
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TRAFFIC CONTROL DEVICE LEGEND

	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # W20-1 SHOULD READ "ROAD WORK AHEAD"). SIGN SHALL BE 24" X 24" MIN.
	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # M4-8a SHOULD READ "END DETOUR"). SIGN SHALL BE 24" X 18" MIN.
	CHANNELIZER CONE/MARKER. 36" TALL MIN.
	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # R3-1 SHOULD HAVE NO RIGHT TURN SYMBOL). SIGN SHALL BE 24" X 24" MIN.
	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # W5-1 SHOULD READ "DO NOT ENTER"). SIGN SHALL BE 24" X 24" MIN.
	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # M4-9L SHOULD READ "DETOUR" WITH LEFT, RIGHT, OR STRAIGHT DIRECTION ARROW SYMBOL). SIGN SHALL BE 24" X 30" MIN.
	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # M4-10 SHOULD READ "DETOUR", AND POINT LEFT). SIGN SHALL BE 48" X 18" MIN.
	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # R11-4 SHOULD READ "ROAD CLOSED TO THRU TRAFFIC"). SIGN SHALL BE 24" X 18" MIN.
	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # R11-2 SHOULD READ "ROAD CLOSED"). SIGN SHALL BE 24" X 12" MIN.
	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # W20-3 SHOULD READ "ROAD CLOSED AHEAD"). SIGN SHALL BE 24" X 24" MIN.
	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # W20-2 SHOULD READ "DETOUR AHEAD"). SIGN SHALL BE 24" X 24" MIN.



REVISIONS:

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BID SET	07/18/2024

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ANDREW T. GREENE
REGISTERED PROFESSIONAL ENGINEER
MISSOURI LICENSE # 2020000043
7/18/2024

PREPARED BY:
CROCKETT ENGINEERS & ARCHITECTS
1000 W. Kings Blvd., Ste. 200
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(314) 487-0299
www.crockettengineering.com
Missouri Certificate of Authority #00000001

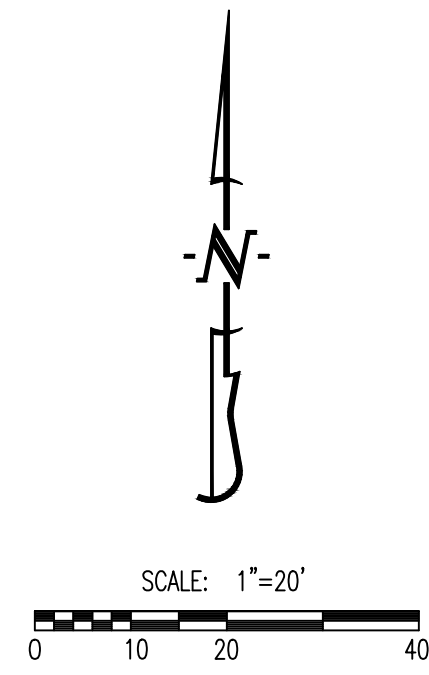
OWNER:
CURATORS OF THE UNIVERSITY OF MISSOURI
COLUMBIA BUSINESS SERVICES
285 UNIVERSITY HALL
COLUMBIA, MO 65211

207-209 HITT STREET - DEMOLISH BUILDING
CP241121
COLUMBIA-BOONE COUNTY, MISSOURI

DRAWING INCLUDES:
BASE BID PHASE 1 EAST WATER TRAFFIC CONTROL PLAN

DESIGNED: ATG
DRAWN: ATG
PROJECT NO: 230464
SHEET: CE 10

Y:\2023\230464 - CP241121 - Demo and Parking 209 Hitt Street\Civil\ACAD Files\Construction Plans\230464 Traffic Control Plan.dwg

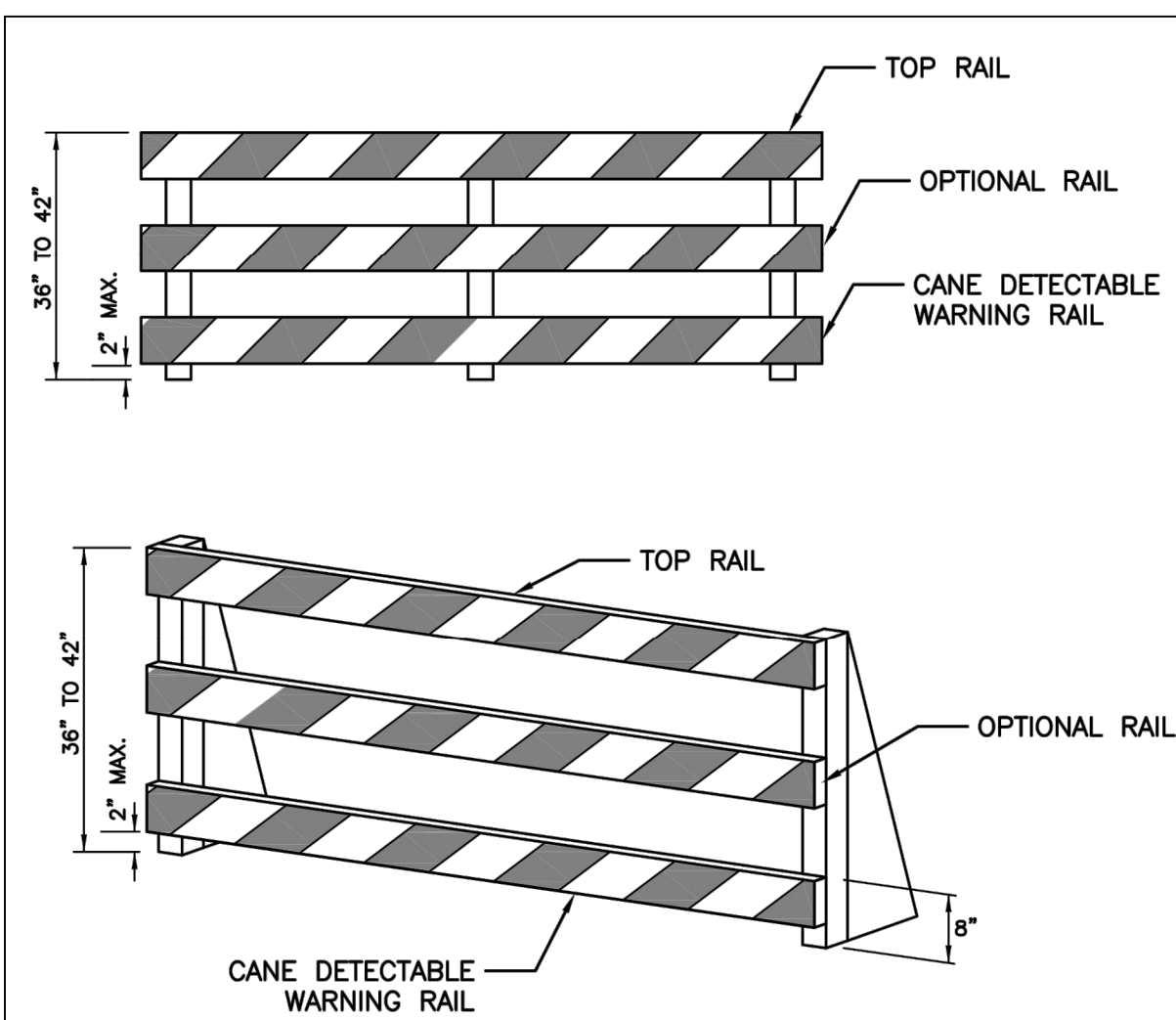


GENERAL NOTES

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- CONTRACTOR SHALL MAINTAIN A MINIMUM LANE WIDTH OF 11' AT ALL TIMES FOR ANY OPEN LANE OF TRAFFIC.
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- CONTRACTOR SHALL KEEP ALL ADJACENT DRIVEWAYS OPEN AT ALL TIMES.
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TRAFFIC CONTROL DEVICE LEGEND

	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # R9-11L/R SHOULD READ "SIDEWALK CLOSED AHEAD CROSS HERE"). SIGN SHALL BE 24" X 18" MIN.
	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # R9-9 SHOULD READ "SIDEWALK CLOSED"). SIGN SHALL BE 24" X 18" MIN.
	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # R1-1, SHOULD READ "STOP"). SIGN SHALL BE 30" X 30" MIN.



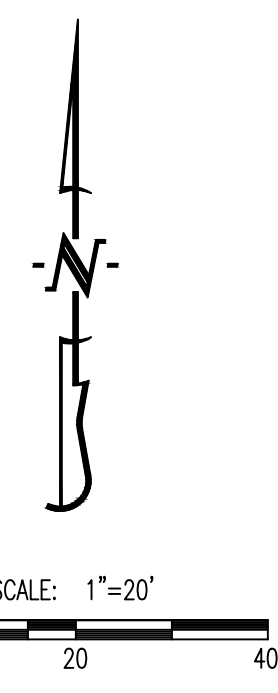
- NOTES:**
1. RAILS SHALL BE HIGHLY VISIBLE, YELLOW, ORANGE, OR WHITE CONTRAST FROM THE REST OF THE BARRIER
 2. RAILS SHALL EXTEND THE FULL WIDTH OF THE BARRIER
 3. THE BARRICADES SHALL EXTEND THE WIDTH OF THE SIDEWALK CLOSURE AND OR THE LENGTH OF THE ACCESSIBLE ROUTE WITH NO GAPS BETWEEN BARRICADES

TYPICAL DETECTABLE BARRICADE
N.T.S.



REVISIONS:	
NO.	DATE
BID SET	07/18/2024
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY	
<p>ANDREW T. GREENE REGISTERED PROFESSIONAL ENGINEER MO LICENSE: 2020000043</p>	
<p>PREPARED BY: CROCKETT ENGINEERS & ARCHITECTS 1000 W. Wilson Blvd. Columbia, Missouri 65203 (314) 487-0299 www.crockettengineering.com Crockett Engineering Consultants, LLC Missouri Certificate of Authority #00000001</p>	
<p>OWNER: CURATORS OF THE UNIVERSITY OF MISSOURI C/O BUSINESS SERVICES 225 UNIVERSITY HALL COLUMBIA, MO 65211</p>	
<p>207-209 HITT STREET - DEMOLISH BUILDING CP241121 COLUMBIA-BOONE COUNTY, MISSOURI</p>	
DRAWING INCLUDES:	
ALT#1 PHASE 2 SIDEWALK CLOSURE PLAN	
DESIGNED:	ATG
DRAWN:	ATG
PROJECT NO:	230464
SHEET:	CE 11

Y:\2023\230464 - CP241121 - Demo and Parking 209 Hitt Street\Civil\ACAD Files\Construction Plans\230464 Traffic Control Plan.dwg

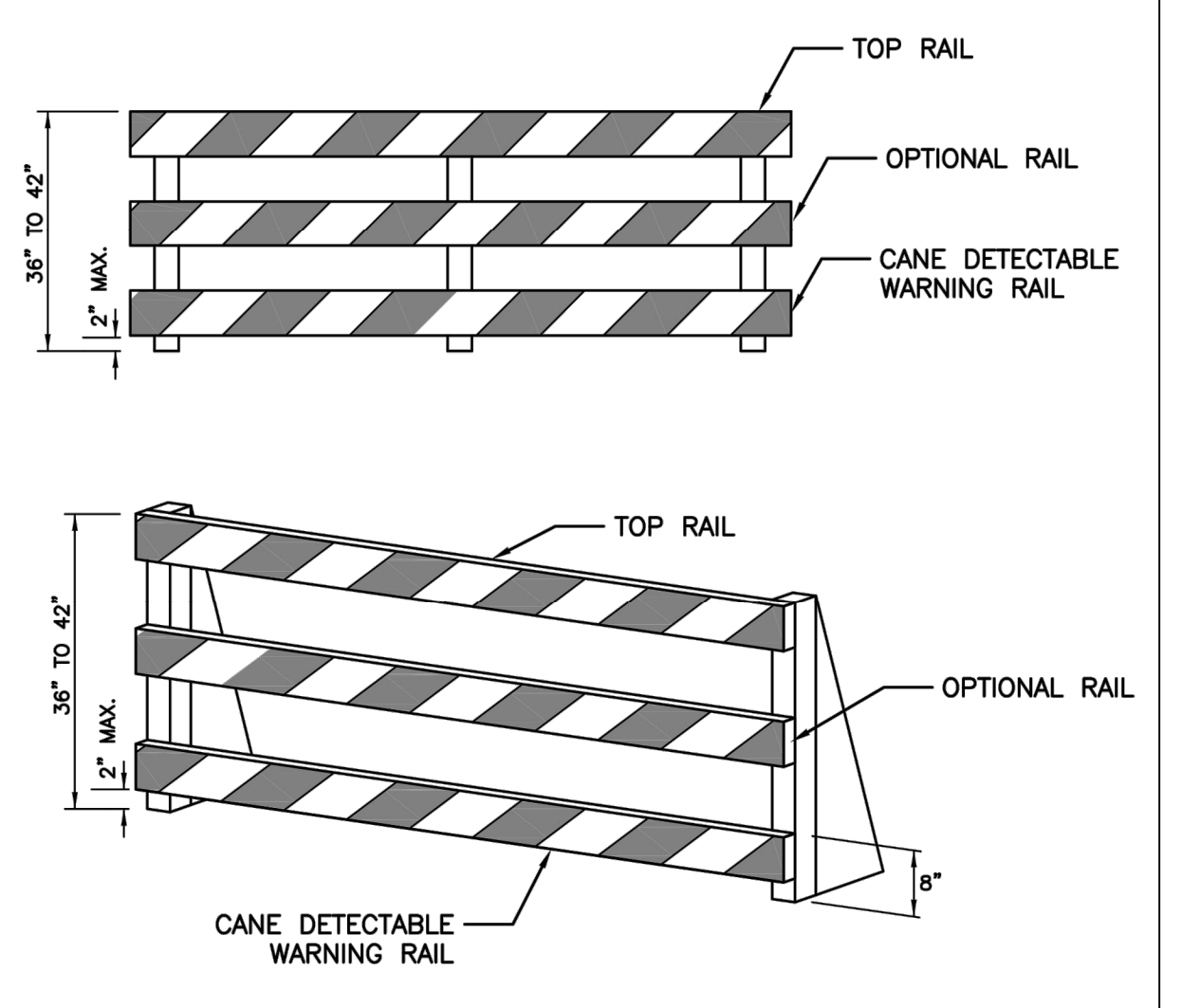


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TRAFFIC CONTROL DEVICE LEGEND

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	PLACE STANDARD HIGHWAY SIGN (MUTCD SIGN # R9-9 SHOULD READ "SIDEWALK CLOSED"). SIGN SHALL BE 24" X 18" MIN.



- NOTES:**
1. RAILS SHALL BE HIGHLY VISIBLE, YELLOW, ORANGE, OR WHITE CONTRAST FROM THE REST OF THE BARRIER
 2. RAILS SHALL EXTEND THE FULL WIDTH OF THE BARRICADE
 3. THE BARRICADES SHALL EXTEND THE WIDTH OF THE SIDEWALK CLOSURE AND OR THE LENGTH OF THE ACCESSIBLE ROUTE WITH NO GAPS BETWEEN BARRICADES

TYPICAL DETECTABLE BARRICADE
N.T.S.



REVISIONS:	
NO.	DATE
BID SET	07/18/2024
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY 	
PREPARED BY: CROCKETT ENGINEERS & ARCHITECTS 1000 W. Kings Blvd., Suite 200 Columbia, Missouri 65203 (314) 487-0299 www.crockettengineering.com Missouri Certificate of Authority #000001001	
OWNER: CURATORS OF THE UNIVERSITY OF MISSOURI C/O BUSINESS SERVICES 228 UNIVERSITY HALL COLUMBIA, MO 65211	
207-209 HITT STREET - DEMOLISH BUILDING CP241121 COLUMBIA-BOONE COUNTY, MISSOURI	
DRAWING INCLUDES:	
ALT#1 PHASE 3 SIDEWALK CLOSURE PLAN	
DESIGNED:	ATG
DRAWN:	ATG
PROJECT NO:	230464
SHEET:	CE 12

1. MATERIALS

- A. BACKFILL SOILS
- a. REINFORCED STRUCTURAL BACKFILL MATERIALS SHALL BE APPROVED BY THE OWNER OR OWNER'S REPRESENTATIVE AND SHALL MEET THE STRENGTH REQUIREMENTS AS DEFINED IN SECTION 5.0. THE REINFORCED BACKFILL MATERIAL SHALL BE:
MODOT TYPE 1, TYPE 5, OR 1" CLEAN.
 - b. FURTHERMORE, REINFORCED BACKFILL AND RETAINED SOIL/FILL MATERIALS SHALL BE FREE OF EXCESS MOISTURE, ROOTS, MUCK, SOD, SNOW, FROZEN LUMPS, ORGANIC MATTER OR OTHER DELETERIOUS MATERIALS. ALL ROCK PARTICLES AND HARD EARTH CLODS SHALL BE LESS THAN THREE INCHES IN THE LONGEST DIMENSION. REINFORCED BACKFILL MATERIALS WHICH DO NOT MEET THIS CRITERION SHALL BE CONSIDERED UNSUITABLE AND SHALL BE REMOVED.
 - c. DRAINAGE FILL BEHIND BASKET FACE SHALL CONSIST OF CLEAN CRUSHED STONE OR CRUSHED GRAVEL (1" CLEAN).
- B. GEOGRID REINFORCING SHALL BE STRATA GEOGRIDS AS SHOWN OR APPROVED EQUAL

2. TECHNICAL REQUIREMENTS

- A. PRIOR TO CONSTRUCTION OF THE WALLS, THE GRADING CONTRACTOR SHALL CLEAR AND GRUB THE REINFORCED BACKFILL ZONE AREA, REMOVING TOP SOILS, BRUSH, SOD OR OTHER ORGANIC MATERIALS. ANY UNSUITABLE SOILS SHALL BE OVER-EXCAVATED, REPLACED AND COMPACTED WITH REINFORCED BACKFILL MATERIAL TO PROTECT SPECIFICATIONS OR OTHERWISE DIRECTED BY THE OWNER'S GEOTECHNICAL ENGINEER.
- B. THE GEOTECHNICAL ENGINEER SHALL CONFIRM THAT THE SITE HAS BEEN PROPERLY PREPARED AND THE DESIGN PARAMETERS IN SECTION 5 ARE APPROPRIATE PRIOR TO FILL PLACEMENT. A WRITTEN CONFIRMATION SHALL BE PROVIDED TO CROCKETT ENGINEERING PRIOR TO FILL PLACEMENT.
- C. FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 10 INCHES IN UNCOMPACTED THICKNESS FOR HEAVY COMPACTION EQUIPMENT. FOR ZONES WHERE COMPACTION IS ACCOMPLISHED WITH HAND OPERATED EQUIPMENT, FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 6 INCHES IN UNCOMPACTED THICKNESS. ONLY HAND-OPERATED EQUIPMENT SHALL BE ALLOWED WITHIN THREE FEET OF THE BACK FACE WALL.
- D. FILL MATERIALS SHALL BE PLACED FROM THE BACK OF THE FACING UNITS TOWARDS THE ENDS OF THE GEOGRID TO ENSURE FURTHER TENSIONING.
- E. FILL SHALL BE COMPACTED AS SPECIFIED BY PROJECT SPECIFICATIONS OR TO A MINIMUM 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-698.
- F. TESTING METHODS, FREQUENCY, VERIFICATION OF MATERIAL SPECIFICATIONS, AND COMPACTION SHALL BE THE RESPONSIBILITY OF THE OWNER'S GEOTECHNICAL ENGINEER. A COPY OF THE REPORT SHALL BE PROVIDED TO CROCKETT ENGINEERING.
- G. CAP UNITS SHALL BE PERMANENTLY SECURED TO THE BLOCK UNITS USING AN OUTDOOR CONSTRUCTION ADHESIVE.

3. GEOGRID PLACEMENT

- A. GEOGRID SHALL BE PLACED AT THE LOCATIONS AND ELEVATIONS SHOWN ON THE DRAWINGS. REINFORCED FILL ZONE LENGTH IS MEASURED FROM THE FRONT FACE OF THE WALL UNITS, EXTENDING TO THE END OF THE GEOGRID.
- B. GEOGRID REINFORCEMENT SHALL BE CONTINUOUS THROUGHOUT THEIR EMBEDMENT LENGTH(S).
- C. PRIOR TO PLACING FILL, THE GEOGRID MATERIALS SHALL BE PLACED IN BETWEEN BLOCK COURSES, THE SLACK REMOVED AND ANCHORED.
- D. CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED DIRECTLY ON THE GEOGRID. A MINIMUM FILL THICKNESS OF SIX INCHES IS REQUIRED FOR OPERATION OF TRACKED VEHICLES OVER THE GEOGRID. TURNING OF TRACKED VEHICLES SHOULD BE KEPT TO A MINIMUM TO PREVENT TRACKS FROM DISPLACING THE FILL AND/OR THE GEOGRID.
- E. GEOGRID SHALL BE ROLLED OUT WITH THE LONG AXIS OF THE APERTURES (MACHINE DIRECTION) PERPENDICULAR TO THE WALL FACE.
- F. A MINIMUM OF 3 INCHES OF FILL MATERIAL SHALL BE REQUIRED BETWEEN OVERLAPPING LAYERS OF GEOGRID AND FILTER FABRIC, UNLESS OTHERWISE SHOWN.

4. DRAINAGE

- A. AT THE END OF EACH WORK DAY, BACKFILL SURFACE SHALL BE COMPACTED WITH A SMOOTH PLATE COMPACTOR TO MINIMIZE PONDING OF WATER AND SATURATION OF THE BACKFILL.
- B. PERMANENT SURFACE WATER DIVERSION SHALL BE AS REQUIRED AND PROVIDED BY THE OWNER OR OWNER'S REPRESENTATIVE.

5. DESIGN PARAMETERS

- A. DESIGN OF THE REINFORCED SOIL STRUCTURE IS BASED ON THE FOLLOWING PARAMETERS BASED ON SITE EXPOSED ROCK ENTIRE WALL SURFACE:

	EFFECTIVE FRICTION ANGLE	EFFECTIVE COHESION	MOIST UNIT WT
REINFORCED FILL	34	0	125
RETAINED SOILS	22	0	120
FOUNDATION SOILS	22	0	120

MINIMUM BEARING CAPACITY 1,500 PSF
- B. DESIGN METHODOLOGY: NCMA GUIDELINES
- C. FACTOR OF SAFETY:
 - INTERNAL STABILITY: STATIC
 - MINIMUM FACTOR OF SAFETY (FOS) FOR UNCERTAINTIES = 1.5
 - MINIMUM FOS FOR GEOGRID PULLOUT = 1.5
 - MINIMUM FOS FOR CONNECTION = 1.5
 - MINIMUM FOS FOR FACING STABILITY = 1.5
 - MINIMUM FOS FOR SLIDING AT LOWEST GEOGRID = 1.5
 - SOIL - GEOGRID INTERACTION COEFFICIENT = 0.8
 - PERCENT COVERAGE OF GEOGRID = 100%
- D. EXTERNAL STABILITY
 - MINIMUM FACTOR OF SAFETY FOR OVERTURNING = 2.0
 - MINIMUM FACTOR OF SAFETY FOR SLIDING = 2.0
- E. SURCHARGE LOADING
 - PARKING LOT 100 PSF

6. SPECIAL PROVISIONS

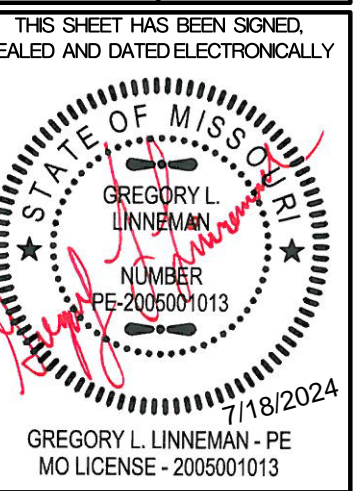
- A. THE DESIGN PRESENTED HEREIN IS BASED ON SOIL PARAMETERS, FOUNDATION CONDITIONS, GROUNDWATER CONDITIONS, AND LOADINGS STATED IN SECTION 5.
- B. WALL ELEVATION VIEWS AND LOCATIONS AND GEOMETRY OF EXISTING STRUCTURES AND GRADE ABOVE AND BELOW WALLS MUST BE VERIFIED BY THE CONTRACTOR, TO MATCH ELEVATIONS SHOWN IN THE CONTRACT DOCUMENTS, PRIOR TO CONSTRUCTION.
- C. THE ENGINEER OF RECORD IS RESPONSIBLE FOR THE SEGMENTED RETAINING WALL & REINFORCED SOIL IN ITS FINAL CONDITION ONLY. GLOBAL STABILITY, BEARING CAPACITY, AND SETTLEMENT ANALYSIS IS THE RESPONSIBILITY OF THE OWNER'S GEOTECHNICAL ENGINEER. ANY CHANGES TO THE WALL REQUIRED BASED ON THE GEOTECHNICAL ANALYSIS SHOULD BE COORDINATED BY THE GEOTECHNICAL ENGINEER PRIOR TO WALL CONSTRUCTION.
- D. REFER TO BLOCK MANUFACTURE'S WRITTEN INSTALLATION INSTRUCTIONS FOR SEGMENTED RETAINING WALL INSTALLATION, SPECIFICALLY REGARDING CONNECTIONS FROM BLOCK TO BLOCK AND GEOGRID INSTALLATION.
- E. THE SOIL DESIGN PARAMETERS STATED IN SECTION 5.0 SHALL BE VERIFIED BY THE PROJECT GEOTECHNICAL ENGINEER. WRITTEN VERIFICATION OF DESIGN PARAMETERS SHALL BE SUBMITTED TO CROCKETT ENGINEERING AND PRIOR TO COMMENCING WITH CONSTRUCTION.
- F. ANY REVISIONS TO DESIGN PARAMETERS STATED IN SECTION 5.0 OR STRUCTURE GEOMETRY SHALL REQUIRE DESIGN MODIFICATIONS PRIOR TO PROCEEDING WITH CONSTRUCTION.

7. GUARDRAIL SPEC

- A. SHALL BE 42" TALL ABOVE ADJACENT WALKING SURFACE.
- B. SHALL NOT HAVE OPENINGS LARGE ENOUGH TO PASS A 4" SPHERE.
- C. MAIN RAILS SHALL RESIST 50 POUND PER LINEAL FOOT LATERALLY AT THE TOP RAIL OR 200 POUNDS CONCENTRATED LOAD LATERALLY.
- D. INTERMEDIATE RAILS SHALL RESIST A CONCENTRATED LOAD OF 50 POUNDS LATERALLY.
- E. REFER TO VINYL COATED CHAIN LINK FENCE SPECIFICATION.

REVISIONS:

No.	Date
BID SET	07/18/2024



CLIENT:
 CURATORS OF THE UNIVERSITY OF MISSOURI
 COLLEGE BUSINESS SERVICES
 228 UNIVERSITY HALL
 COLUMBIA, MO 65211

207-209 HITT STREET - DEMOLISH BUILDING
CP241121
 COLUMBIA, BOONE COUNTY, MISSOURI

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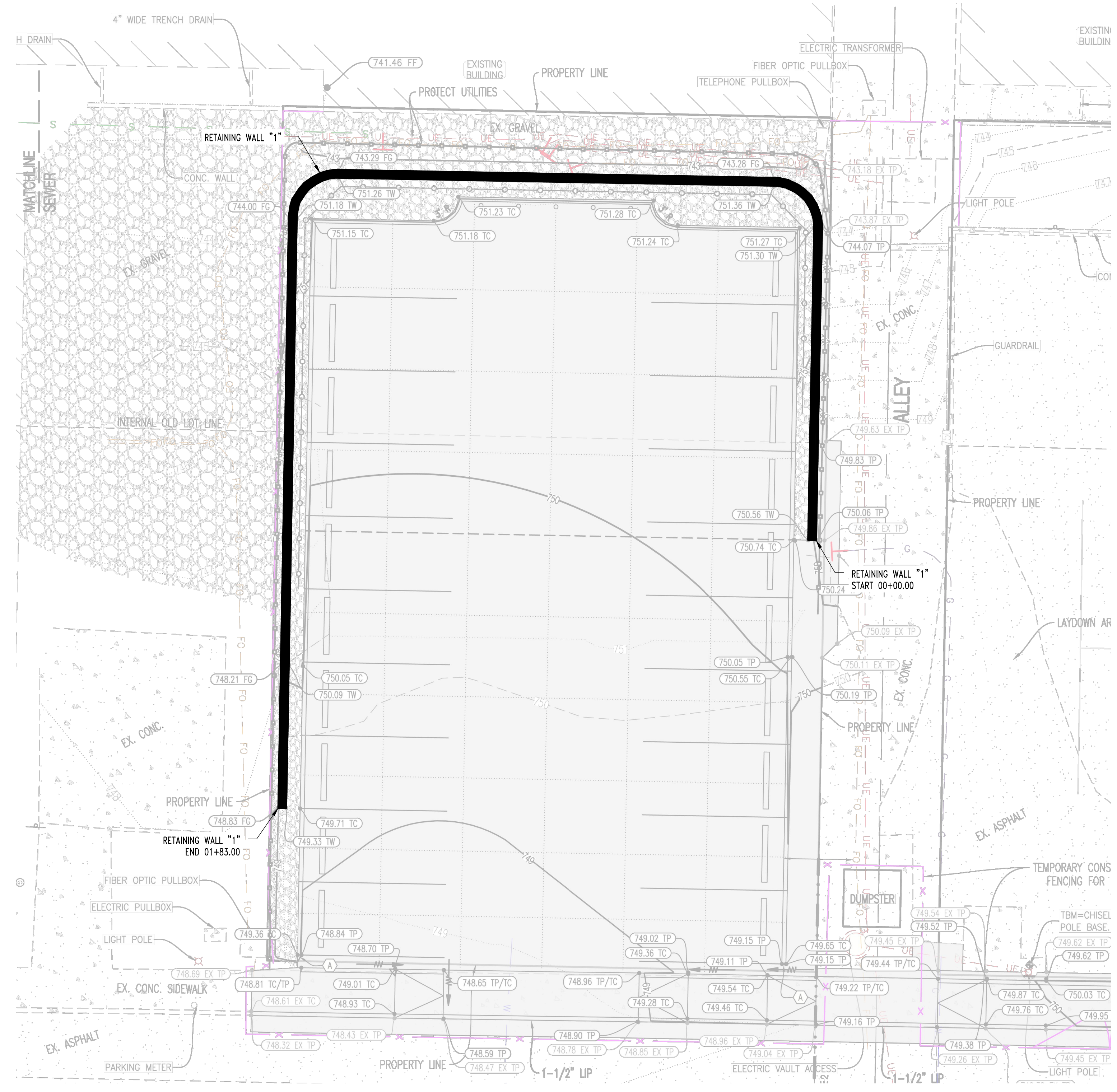
GENERAL
 STRUCTURAL DATA

DESIGNED: GLL

DRAWN: SEH

PROJECT NO.: 230464

SHEET:
 RW1



1
RW2

RETAINING WALL "1" PLAN

NOT TO SCALE

PLAN NORTH

REVISIONS:

No.	Date
BID SET	07/18/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

GREGORY L. LINNEMAN
PE-2005001013
7/18/2024
GREGORY L. LINNEMAN - PE
MO LICENSE - 2005001013

STRUCTURAL ENGINEER

CROCKETT
ENGINEERING CONSULTANTS

1000 W. NIKOS BLVD. #203
COLUMBIA, MISSOURI 65203
(314) 487-0992
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority #20031301

CLIENT:

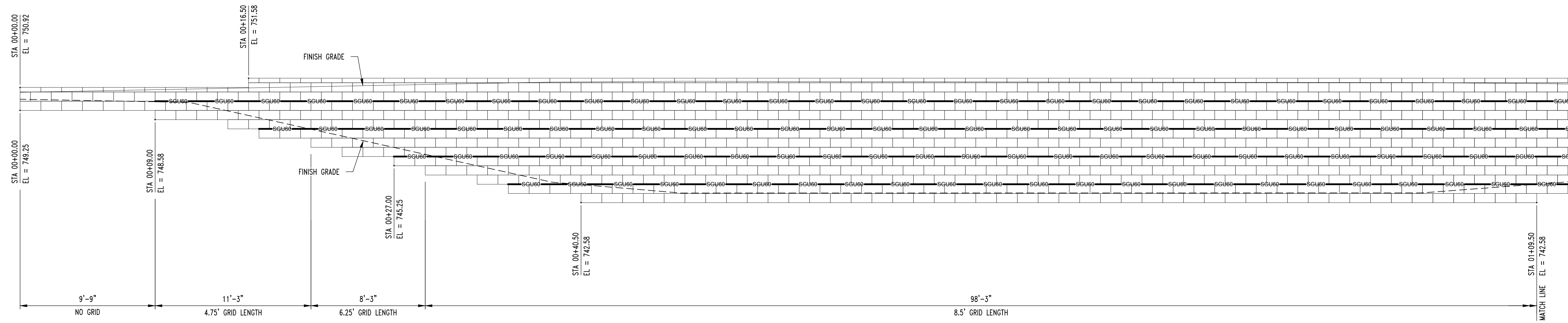
CURATORS OF THE UNIVERSITY OF MISSOURI
COLUMBUS BUSINESS SERVICES
225 UNIVERSITY HALL
COLUMBIA, MO 65211

207-209 HITT STREET - DEMOLISH BUILDING
CP241121
COLUMBIA, BOONE COUNTY, MISSOURI

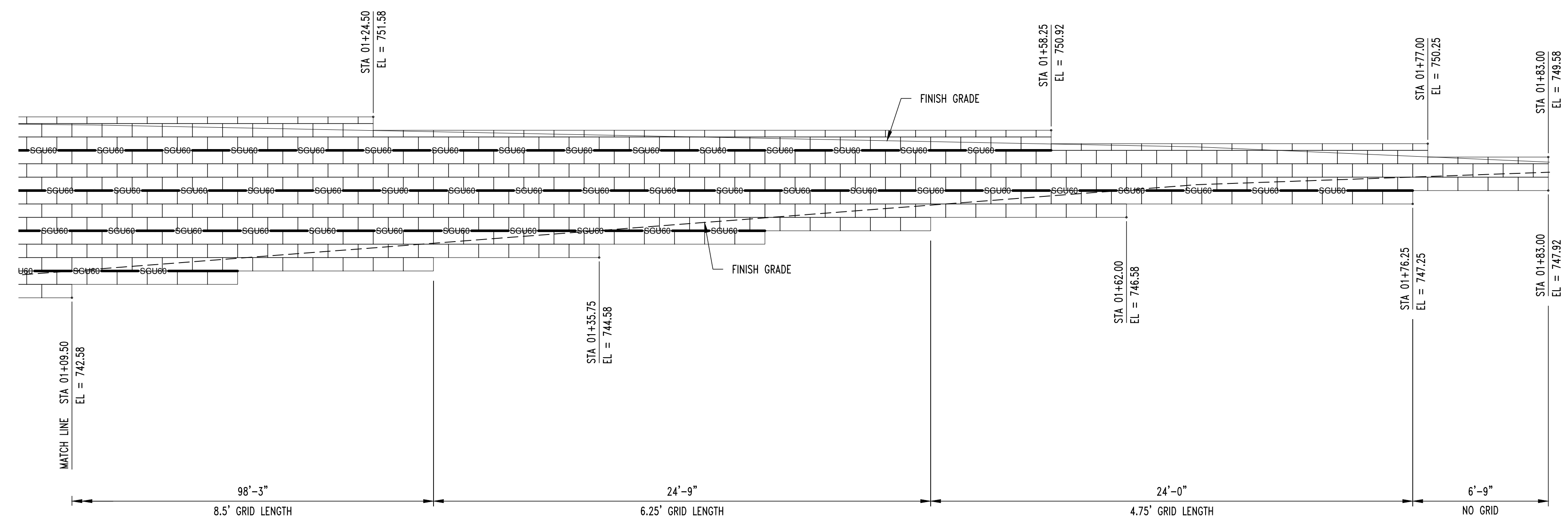
DRAWING INCLUDES:

RETAINING WALL PLAN

DESIGNED: GLL
DRAWN: SEH
PROJECT NO.: 230464
SHEET: RW2



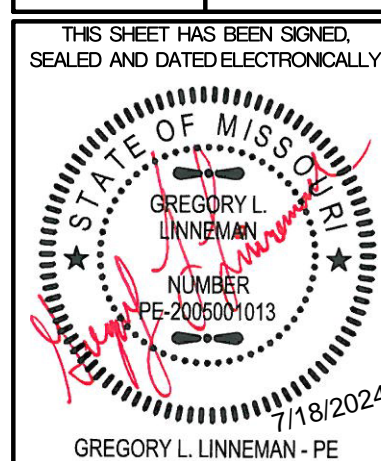
1
RW3
RETAINING WALL 1 (AREA 1,122 SQ. FT.)
SCALE: 1/4" = 1'-0"



2
RW3
RETAINING WALL 1 (AREA 1,122 SQ. FT.)
SCALE: 1/4" = 1'-0"

REVISIONS:

No.	Date
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STRUCTURAL ENGINEER:
CROCKETT
ENGINEERING CONSULTANTS
1000 W. Niras Blvd. Suite 1
Columbia, Missouri 65203
(573) 447-0992
www.crockettengineering.com
Crockett Engineering Consultants, LLC
Missouri Certificate of Authority
#200313001

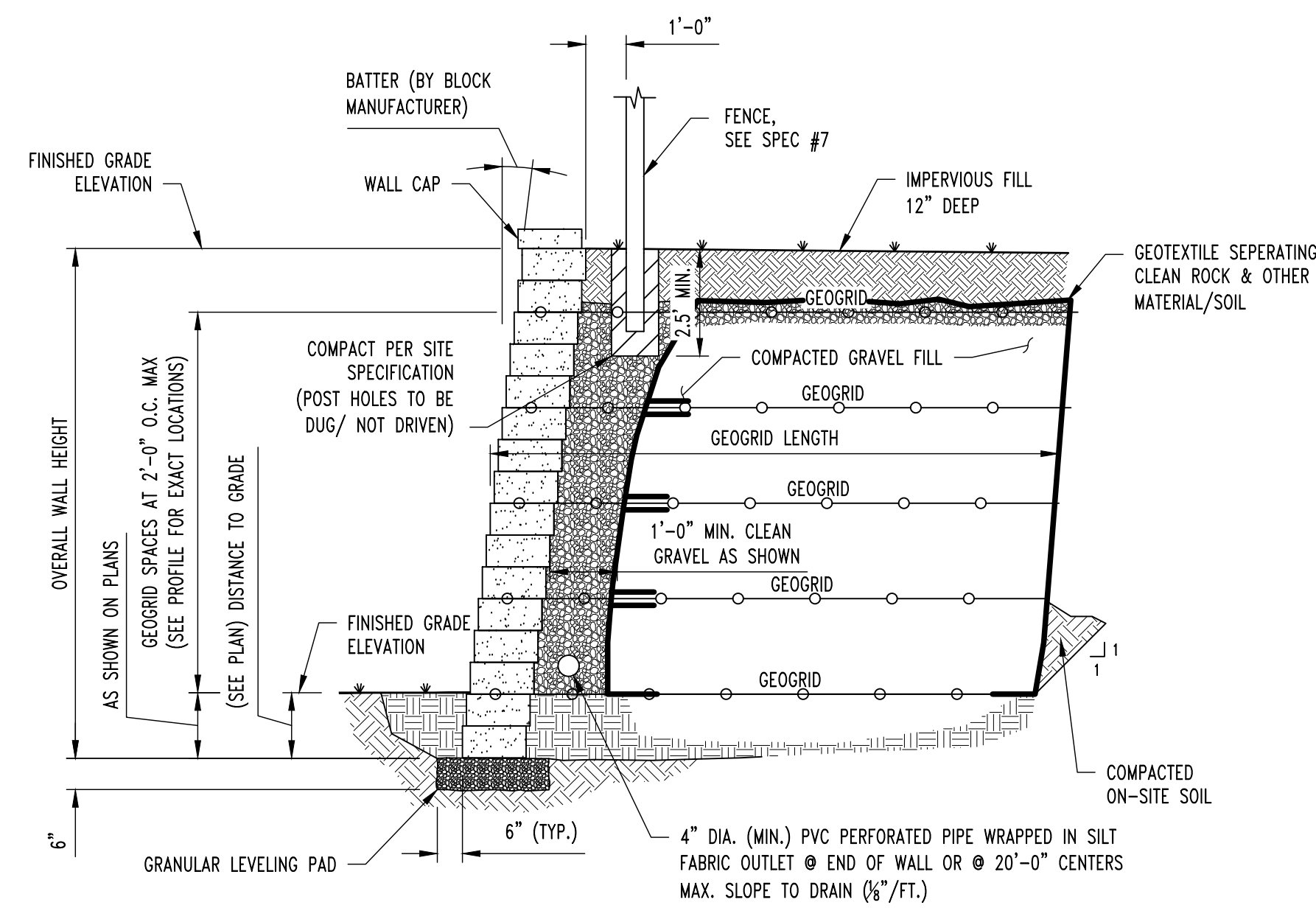
CLIENT:
CURATORS OF THE UNIVERSITY OF MISSOURI
COLLEGE BUSINESS SERVICES
228 UNIVERSITY HALL
COLUMBIA, MO 65211

207-209 HITT STREET - DEMOLISH BUILDING
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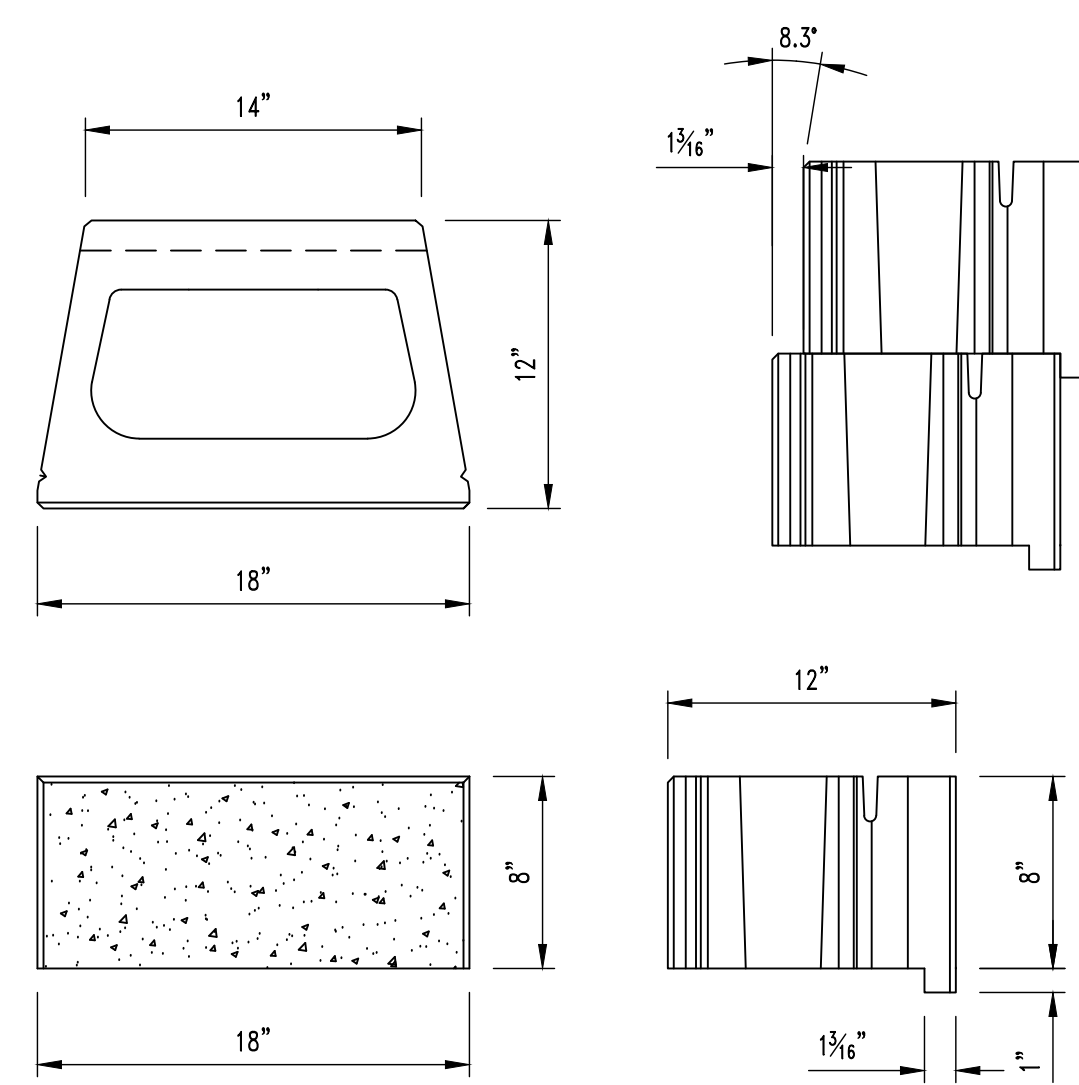
DRAWING INCLUDES:

RETAINING WALL
PROFILE

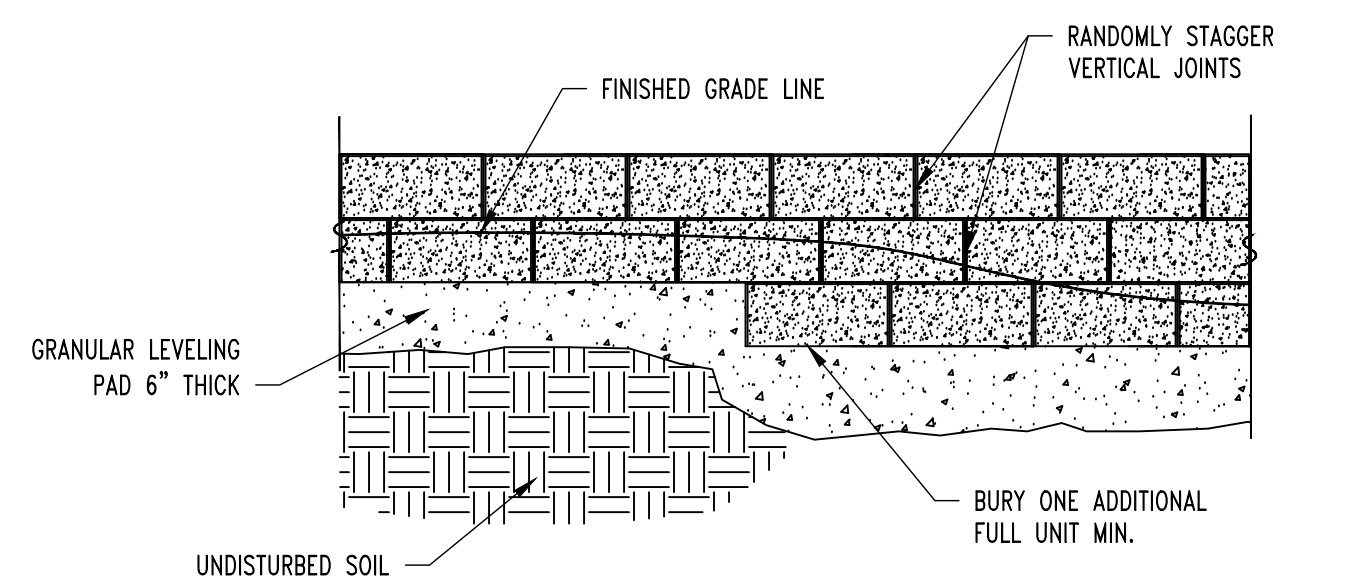
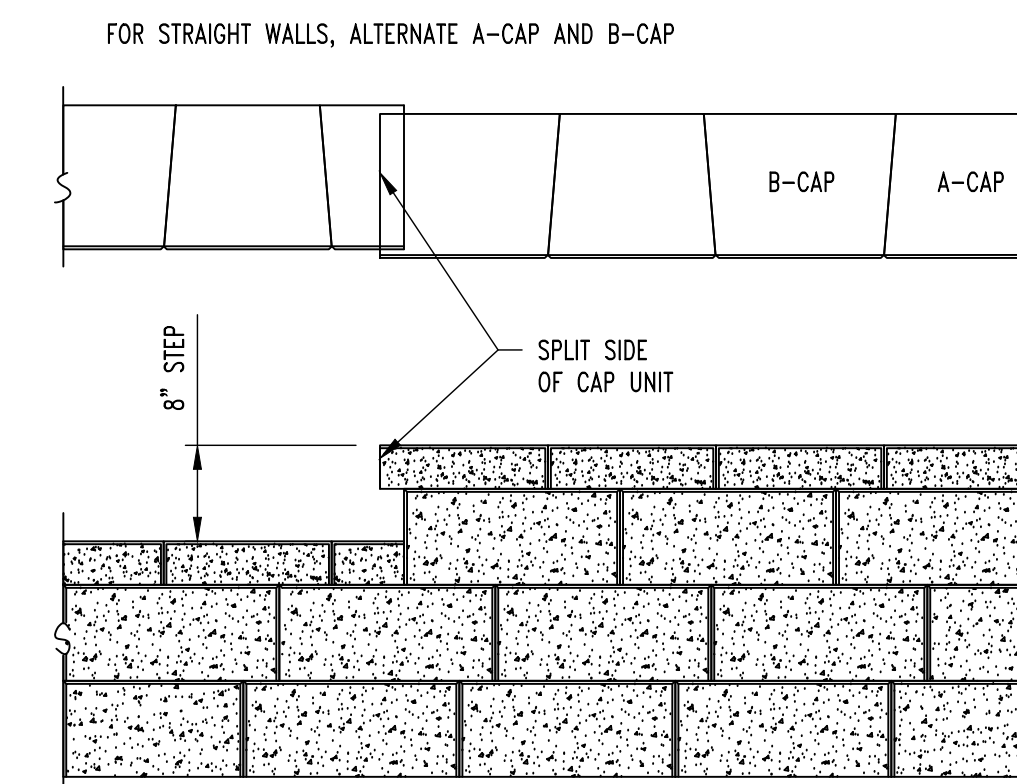
DESIGNED: GLL
DRAWN: SEH
PROJECT NO.: 230464
SHEET: RW3



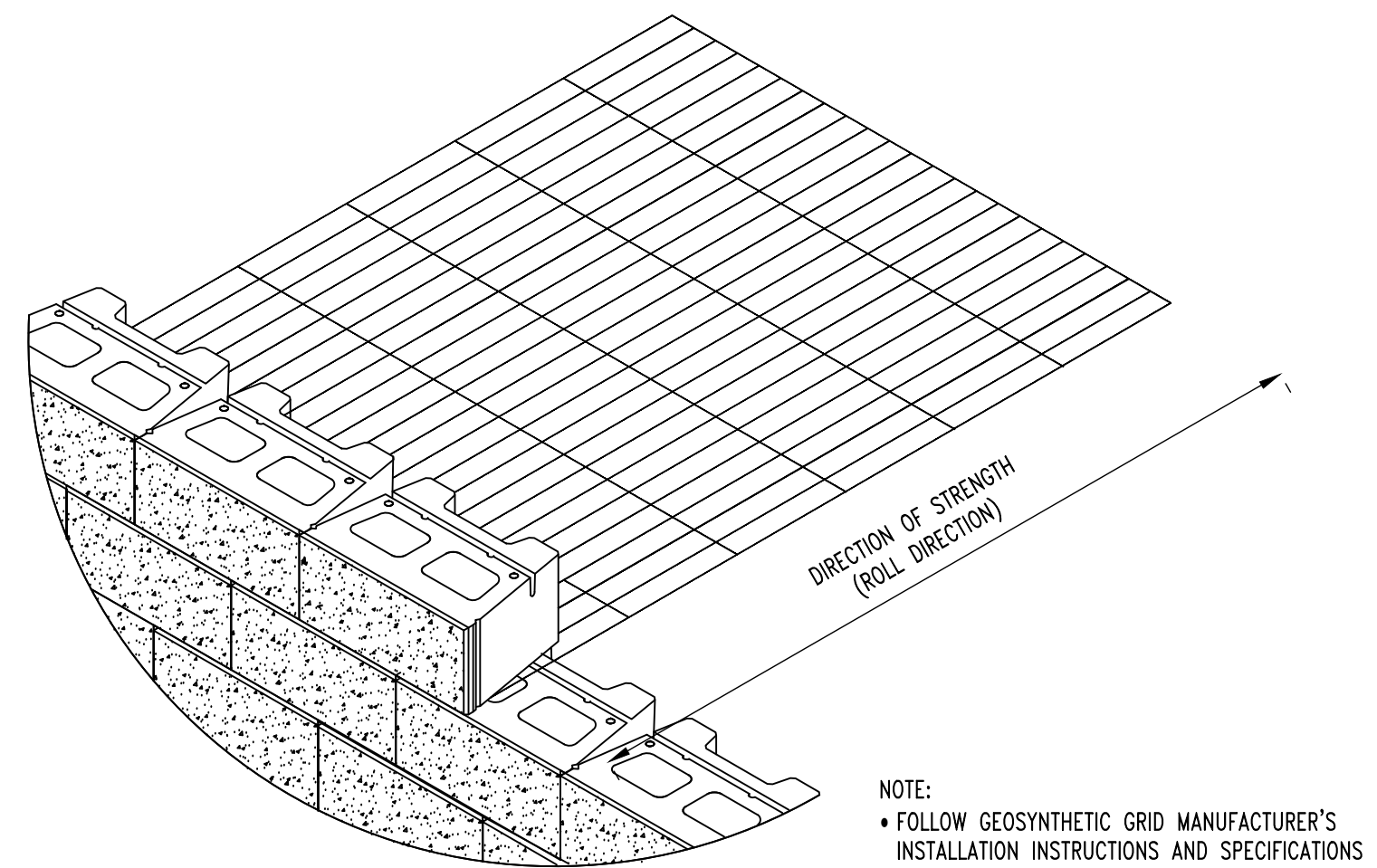
NOTE:
THIS WALL SECTION IS GENERIC IN NATURE & REPRESENTS BASIC WALL CONSTRUCTION & COMPONENTS ONLY. ACTUAL DESIGN IS BASED ON ACTUAL PROJECT PARAMETERS, WHICH MAY NOT BE REPRESENTED IN THIS SECTION. REFER TO CIVIL DRAWINGS FOR ACTUAL SITE SPECIFIC SECTIONS & REQUIREMENTS.



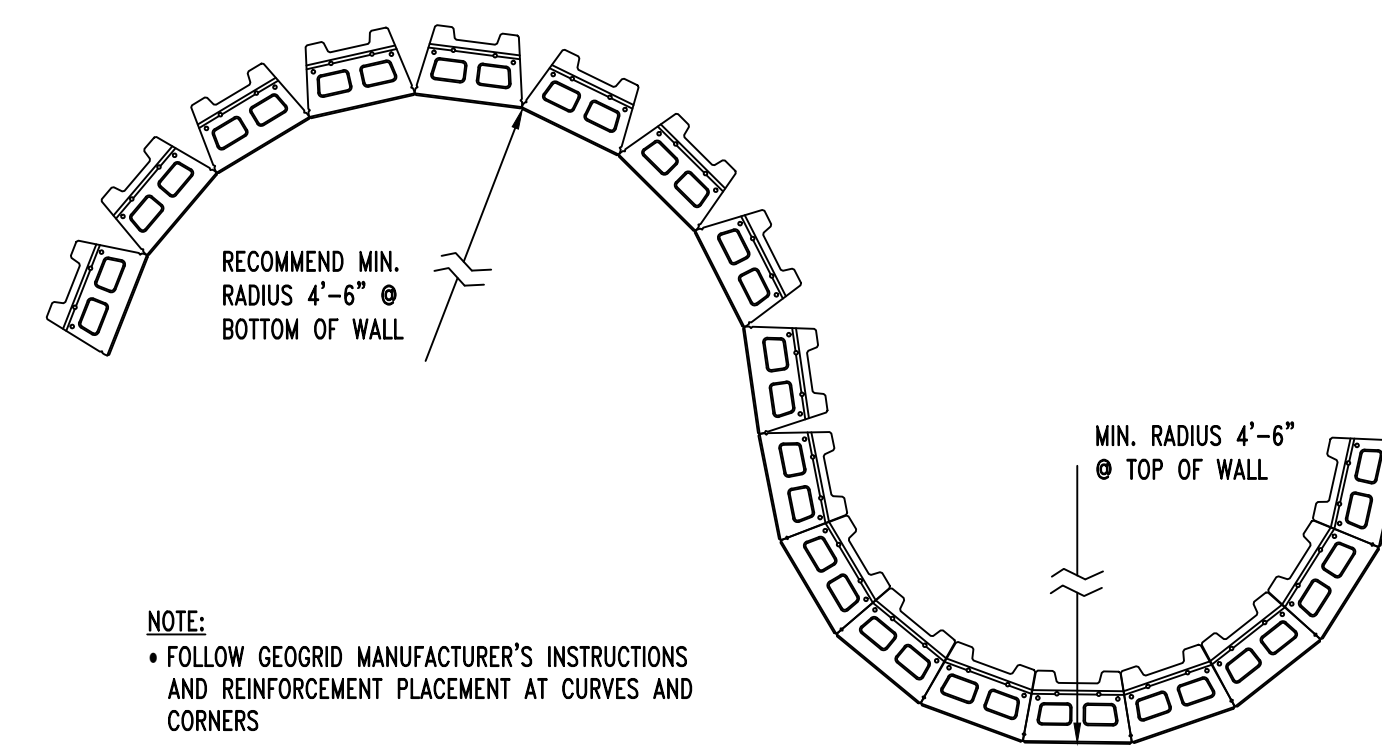
NOTE:
• HOLLOW CELLS TO BE FILLED w/ CLEAN GRAVEL



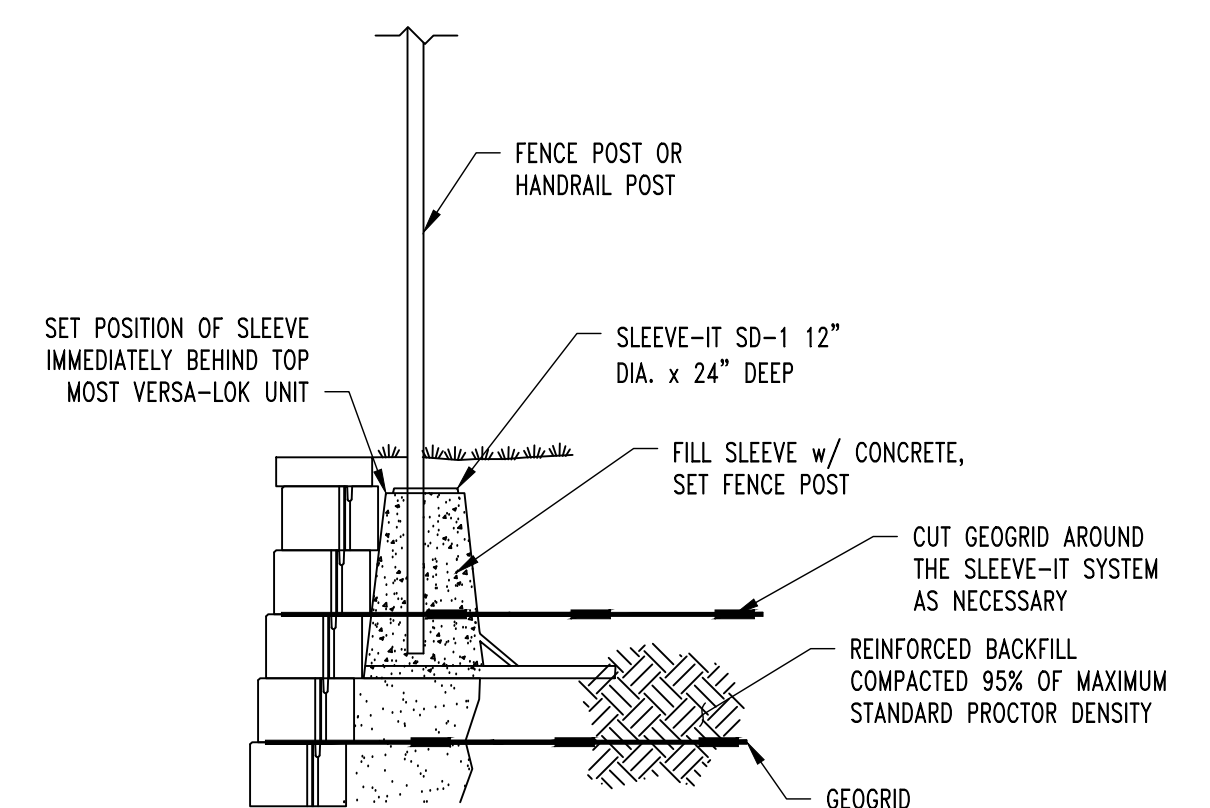
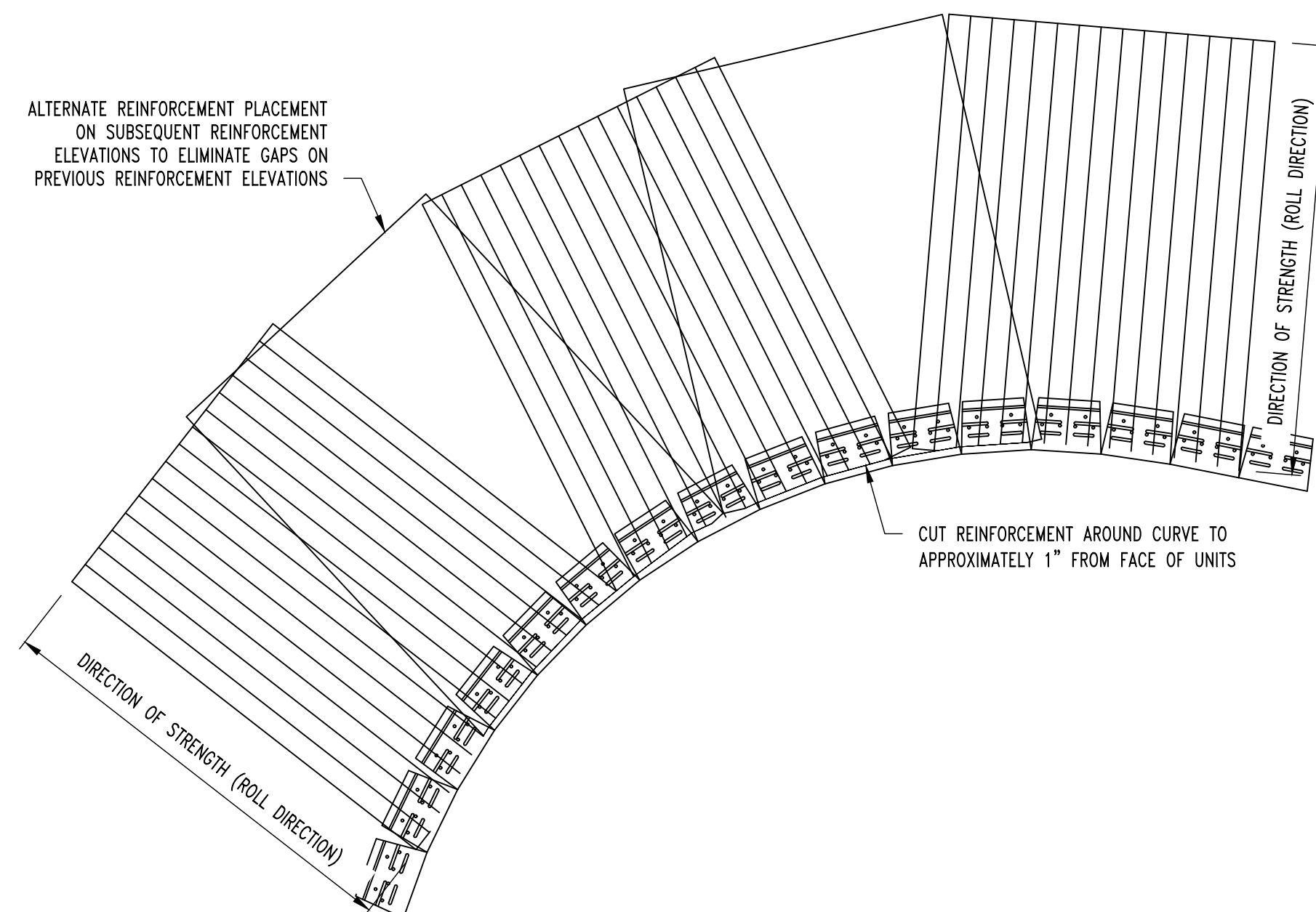
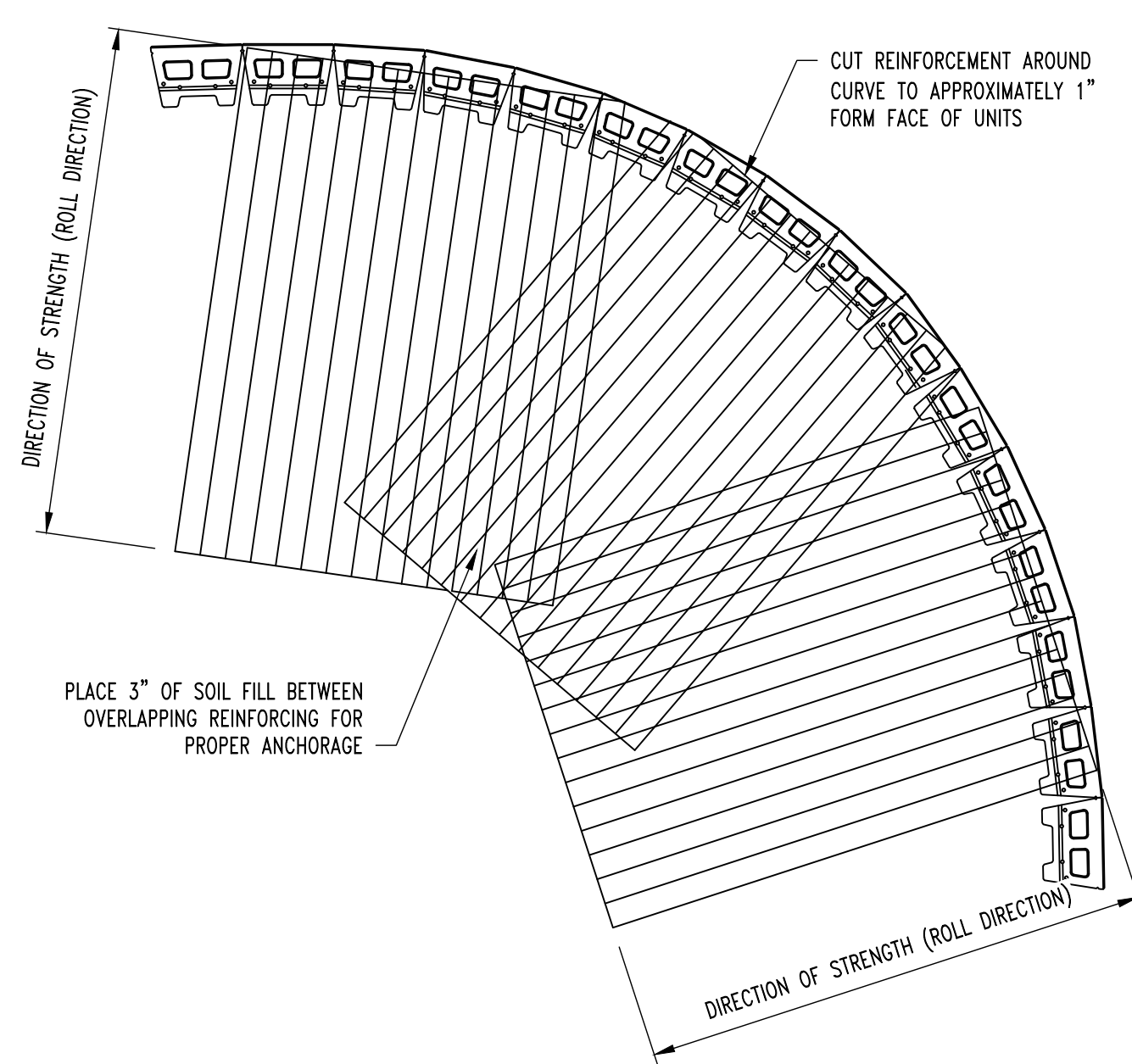
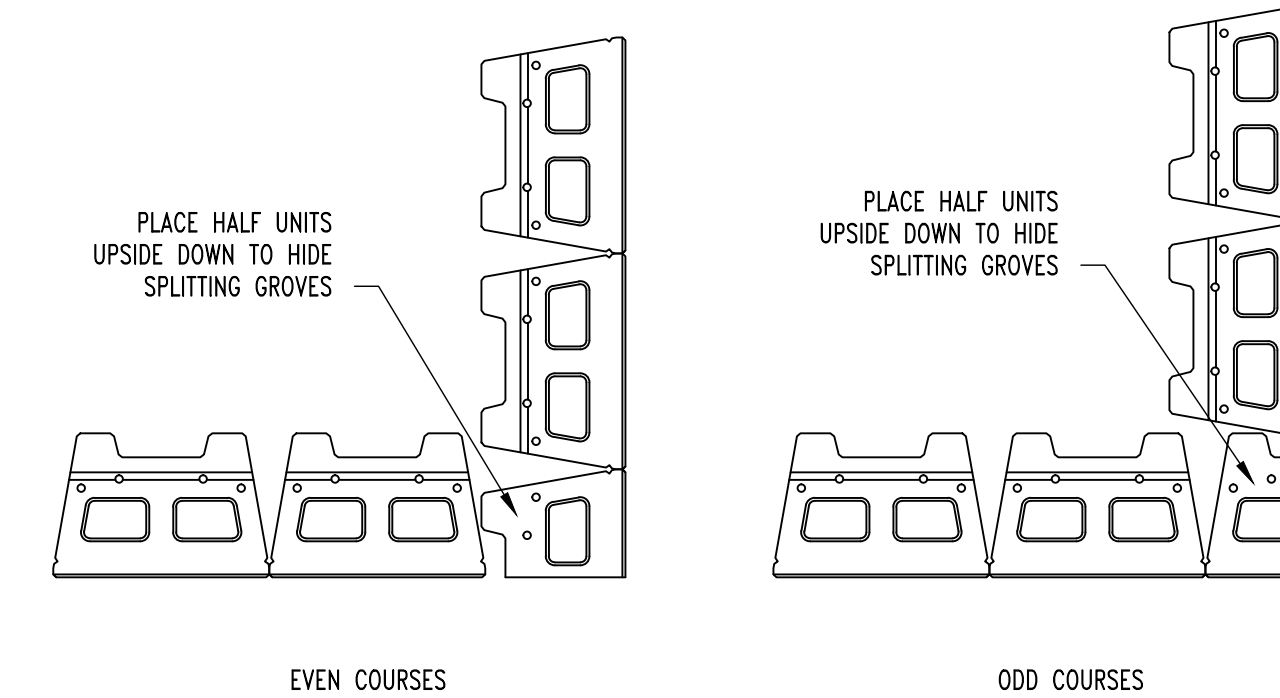
NOTE:
• LIMIT CHANGES IN BASE ELEVATION TO 8" PER STEP TO AVOID DIFFERENTIAL SETTLEMENT
• STEP AS NEEDED TO MINIMIZE BURIED UNITS AND MAINTAIN MINIMUM REQUIRED EMBEDMENT



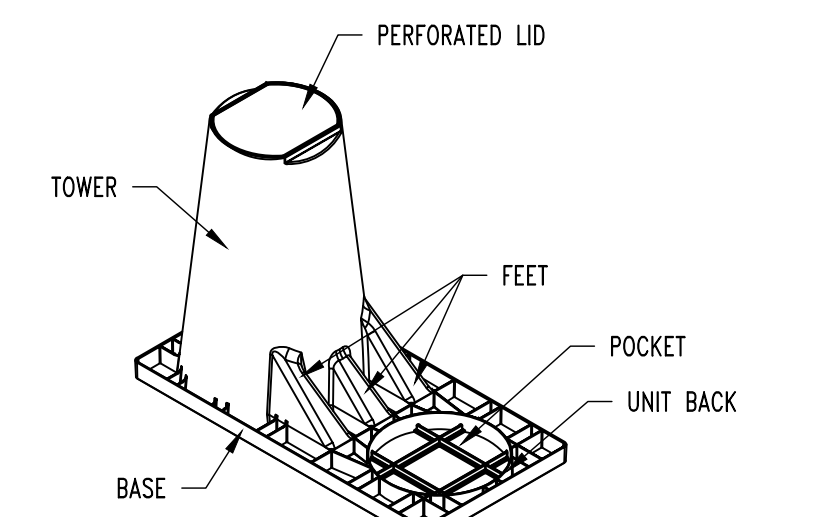
NOTE:
• FOLLOW GEOSYNTHETIC GRID MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SPECIFICATIONS
• GEOGRID LENGTH AND ELEVATION PLACEMENT SHALL BE DETERMINED BY WALL DESIGN ENGINEER



NOTE:
• FOLLOW GEOGRID MANUFACTURER'S INSTRUCTIONS AND REINFORCEMENT PLACEMENT AT CURVES AND CORNERS



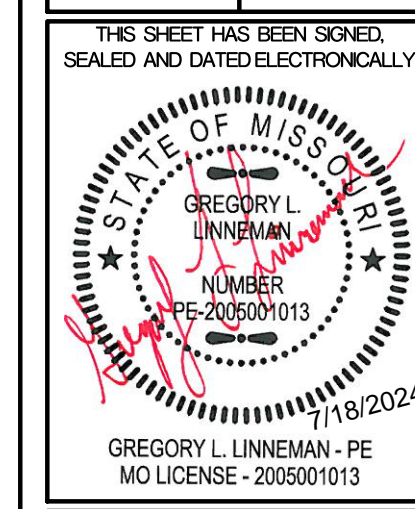
SEE SLEEVE-IT SYSTEM MANUFACTURER, STRATA SYSTEMS FOR COMPLETE SPECIFICATIONS, AND TECHNICAL GUIDANCE



SEE SLEEVE-IT SYSTEM MANUFACTURER, STRATA SYSTEMS FOR COMPLETE SPECIFICATIONS, AND TECHNICAL GUIDANCE

REVISIONS:

No.	Date
BID SET	07/18/2024



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207-209 HITT STREET - DEMOLISH BUILDING
CP241121
COLUMBIA, BOONE COUNTY, MISSOURI

DRAWING INCLUDES:
RETAINING WALL DETAILS

DESIGNED: GLL
DRAWN: SEH
PROJECT NO.: 230464
SHEET: RW4