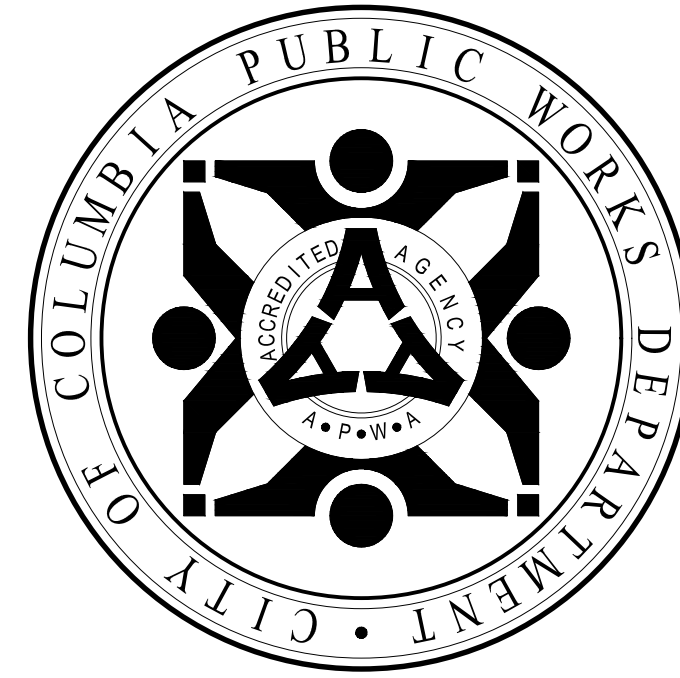


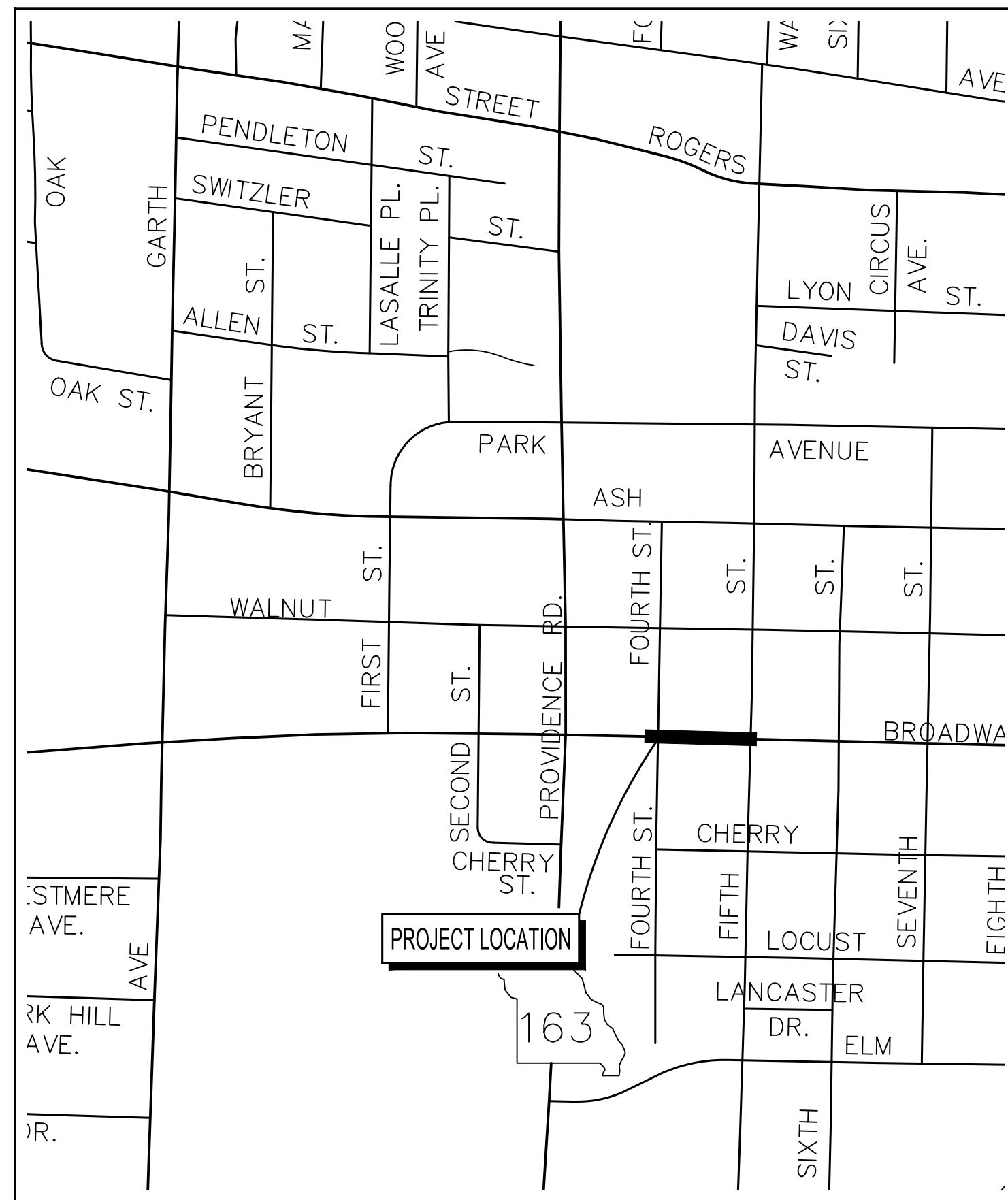
# City of Columbia, Missouri

## Department of Public Works



# FOURTH STREET & BROADWAY PEDESTRIAN CROSSING

CITY PROJECT NO: 00772



LOCATION MAP

### LEGEND OF SYMBOLS

POWER POLE	
TELEPHONE POLE	
GUY ANCHOR	
GUY POLE	
STREET LIGHT POLE	
YARD LIGHT (SOLAR)	
WATER METER	
GAS METER	
GAS VALVE	
WATER VALVE	
FIRE HYDRANT	
PIPE BREAKLINE	
SANITARY MANHOLE	
SANITARY CLEANOUT	
SANITARY LATERAL CLEANOUT	
TRAVERSE POINT	
MoDOT ROW MARKER	
BENCHMARK	
SIGN	
MAIL BOX	
PROPERTY IRON	
BUSH	
STUMP	
TREE REMOVAL	
TREE	
TREE LINE	
SILT FENCE/TREE PROTECT	
EXISTING PUBLIC SANITARY SEWER	
EXISTING SANITARY SEWER LATERAL	
FENCE	
CABLE TELEVISION	
TELEPHONE	
ELECTRIC	
TELEPHONE OR ELECTRIC MANHOLE	
WATER MAIN	
GAS MAIN	
FIBER OPTIC	
FLOW LINE	
PROPERTY LINE	
LOT LINE	
EXISTING RIGHT OF WAY LINE	
EXISTING EASEMENT	
PERMANENT UTILITY EASEMENT	
PROPOSED SANITARY SEWER EASEMENT	
PROPOSED PERMANENT DRAINAGE EASEMENT	
PROPOSED RIGHT STREET EASEMENT	
TEMPORARY ACCESS EASEMENT	
TEMPORARY CONSTRUCTION EASEMENT	
GRADING LIMIT	

### GENERAL NOTES

- All construction to be in accordance with "City of Columbia Street, Storm Drain and Sanitary Specifications" (Current edition). Where there is a conflict, these plans prevail over the Standard Specifications.
- The information shown in these plans concerning type and locations of underground utilities is not guaranteed to be accurate or all inclusive. It shall be the sole responsibility of the contractor to locate, protect, and restore all existing utilities encountered on this project. Notify Missouri One-Call (1-800-DIG-RITE) for the location of the utilities at least 5 days prior to construction. Contractor is to be aware that some utilities do not participate in the Missouri "One-Call" system. These utilities will need to be contacted individually.
- 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.
- All disturbed earth areas shall be restored as per TS-4 (Erosion Control) AND TS-12 (Seeding and Mulching).
- Remove all pavement surfaces, inlets, pipes and sidewalks within the construction limits as per TS-3 and TS-6, except those noted to remain. The field inspector shall verify removal of all driveway pavement.
- Construction shall meet ADA requirements. Any construction that does not meet ADA requirements must be removed and replaced at the contractor's expense.
- Sidewalk landings shall have maximum of 2% cross slope in both directions.
- Removal of trees and bushes shall be verified by field inspectors. Exercise caution when working near the construction limits to minimize disturbance to adjacent trees and shrubs that are not being removed by construction activities.
- Contractor is responsible for replacing any property or Right-of-Way monuments that are removed with this project.
- No open trenches will be allowed overnight outside of the "road closed" area. Asphaltic "cold mix" shall be used as a temporary patch overnight. Temporary patching shall be considered incidental to the work.

### UTILITY COMPANIES:

<b>TELEPHONE</b> CenturyLink 625 Cherry Street Columbia, MO 65205 573-886-3503	<b>WATER</b> City of Columbia P.O. Box 6015 City Utilities Columbia, MO 65205 573-874-2489
<b>NATURAL GAS</b> Ameren Missouri 2001 Maguire Boulevard Columbia, MO 65201 573-876-3063	<b>ELECTRIC</b> City of Columbia P.O. Box 6015 City Utilities Columbia, MO 65205 573-874-2489
<b>INTERNET</b> Socket 2703 Clark Lane, Columbia, MO 65202 573-777-1991	<b>SANITARY SEWER</b> City of Columbia P.O. Box 6015 City Utilities Columbia, MO 65205 573-874-2489
<b>LOCATES</b> Missouri One Call Inc. 1022 B Northeast Drive Jefferson City, MO 65109 1-800-344-7483	<b>FIBER OPTIC LINES</b> City of Columbia P.O. Box 6015 Columbia, MO 65205 573-874-6381

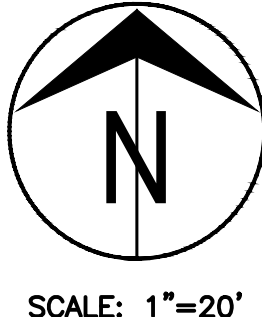
### CONTROL POINTS

#	NORTHING	EASTING	ELEVATION	DESCRIPTION
TP1	1135464.25	1687700.74	706.24	TP CX
TP2	1135457.01	1688008.28	711.14	TP PK
TP3	1135360.84	1687878.65	705.71	TP IR
TP4	1135450.62	1687876.44	706.87	TP INK

### INDEX OF SHEETS

Description	Sheet No.
Cover Sheet	1
Removal Sheet	2
Plan Sheet	3
Striping Plan Sheet	4
Detail Sheets	5-8
Cross Section Sheets	9-10
Traffic Control Sheets	11-12

<b>City of Columbia, Missouri</b> Department of Public Works			
No.	Date	By	Revision
File No.	C00772	Des.	E.M.F.
Scale:	None	Dwn.	G.R.K.
Date:	04-01-2021	Chk.	A.A.A.
Sheet			1 of 12
David Allen Nichols			Registered Professional Engineer E-24212
<b>Fourth Street &amp; Broadway Pedestrian Crossing</b>			
Approved By _____			
Director of Public Works		Date _____	



No.	Date	By	Revision

**Fourth Street and Broadway  
Pedestrian Crossing  
Removals Sheet**

City of Columbia, Missouri  
Department of Public Works

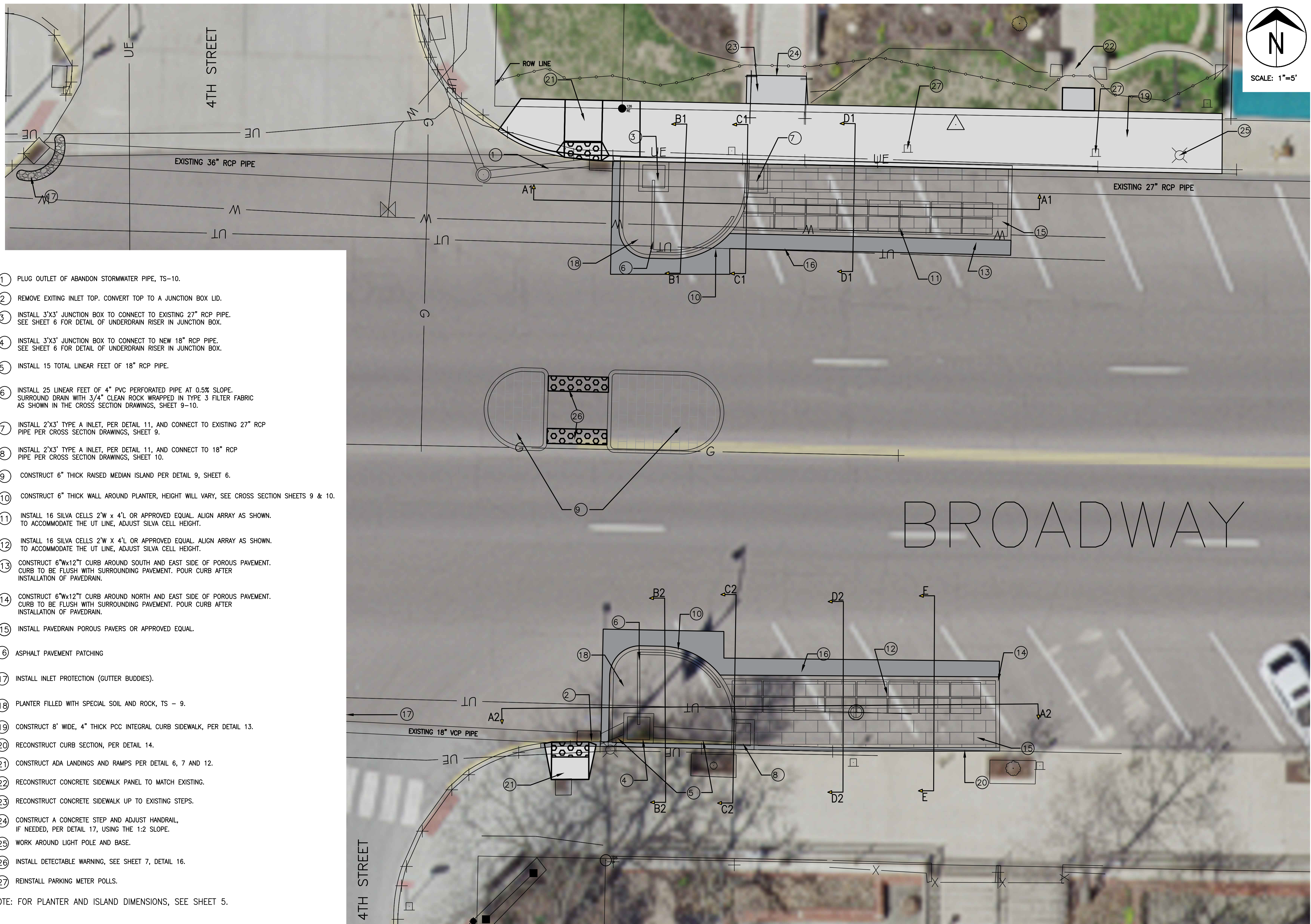
- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>① SAWCUT AND REMOVE A TOTAL OF 159 LINEAR FEET OF EXISTING CURB</li> <li>② REMOVE EXISTING CONCRETE SIDEWALK</li> <li>③ SAWCUT AND REMOVE EXISTING PAVEMENT</li> <li>④ REMOVE 7.5 LINEAR FEET OF EXISTING 27" STORMWATER RCP PIPE</li> <li>⑤ 12" STORMWATER PIPE WILL BE ABANDONED, SEE PLAN SHEET.</li> <li>⑥ REMOVE EXISTING INLET</li> <li>⑦ REMOVE EXISTING INLET TOP</li> <li>⑧ REMOVE PAINTED ARROWS</li> <li>⑨ REMOVE PAINTED ISLAND AND PARKING SPACES</li> <li>⑩ REMOVE PAINTED WHITE DASHED LINE, 6 TOTAL</li> <li>⑪ REMOVE PAINTED WHITE PARKING LINE, 3 TOTAL</li> </ul> | <ul style="list-style-type: none"> <li>⑫ REMOVE 2 EXISTING CONCRETE SIDEWALK PANELS.</li> <li>⑬ REMOVE EXISTING CHURCH SIDEWALK, UP TO THE STEPS.</li> <li>⑭ IF UGE LINE BECOMES A CONFLICT DURING EXCAVATION, CALL COLUMBIA WATER AND LIGHT, GREGORY BAEHR (573)817-5026.</li> <li>⑮ IF FIBER OPTIC UTILITY BOX NEEDS TO BE ADJUSTED CALL COLUMBIA WATER AND LIGHT, ERIC WORTS (573)874-6381.</li> <li>⑯ THE CITY PARKING UTILITY WILL REMOVE HOUSING AND METER. CONTRACTOR WILL REMOVE POLES.</li> </ul> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

David Allen Nichols  
Registered Professional Engineer  
E-24212

File No. 00772  
Scale: 1" = 20'  
Date: 4/1/2021  
Des. E.M.F.  
Dwn. G.R.K.  
Chk. A.A.A.

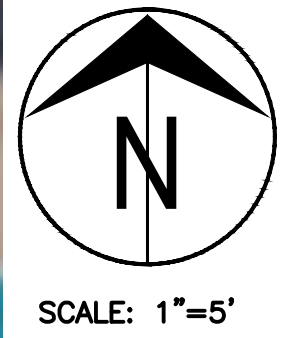
o:\caddpro\street\4th st & broadway crossing\design\4th street crossing design-ef (3-3-21).dwg

2011 Orthophoto Source: Boone County Assessor



- 1 PLUG OUTLET OF ABANDON STORMWATER PIPE, TS-10.
- 2 REMOVE EXISTING INLET TOP. CONVERT TOP TO A JUNCTION BOX LID.
- 3 INSTALL 3'X3' JUNCTION BOX TO CONNECT TO EXISTING 27" RCP PIPE. SEE SHEET 6 FOR DETAIL OF UNDERDRAIN RISER IN JUNCTION BOX.
- 4 INSTALL 3'X3' JUNCTION BOX TO CONNECT TO NEW 18" RCP PIPE. SEE SHEET 6 FOR DETAIL OF UNDERDRAIN RISER IN JUNCTION BOX.
- 5 INSTALL 15 TOTAL LINEAR FEET OF 18" RCP PIPE.
- 6 INSTALL 25 LINEAR FEET OF 4" PVC PERFORATED PIPE AT 0.5% SLOPE. SURROUND DRAIN WITH 3/4" CLEAN ROCK WRAPPED IN TYPE 3 FILTER FABRIC AS SHOWN IN THE CROSS SECTION DRAWINGS, SHEET 9-10.
- 7 INSTALL 2'X3' TYPE A INLET, PER DETAIL 11, AND CONNECT TO EXISTING 27" RCP PIPE PER CROSS SECTION DRAWINGS, SHEET 9.
- 8 INSTALL 2'X3' TYPE A INLET, PER DETAIL 11, AND CONNECT TO 18" RCP PIPE PER CROSS SECTION DRAWINGS, SHEET 10.
- 9 CONSTRUCT 6" THICK RAISED MEDIAN ISLAND PER DETAIL 9, SHEET 6.
- 10 CONSTRUCT 6" THICK WALL AROUND PLANTER, HEIGHT WILL VARY, SEE CROSS SECTION SHEETS 9 & 10.
- 11 INSTALL 16 SILVA CELLS 2'W X 4'L OR APPROVED EQUAL. ALIGN ARRAY AS SHOWN. TO ACCOMMODATE THE UT LINE, ADJUST SILVA CELL HEIGHT.
- 12 INSTALL 16 SILVA CELLS 2'W X 4'L OR APPROVED EQUAL. ALIGN ARRAY AS SHOWN. TO ACCOMMODATE THE UT LINE, ADJUST SILVA CELL HEIGHT.
- 13 CONSTRUCT 6'Wx12'T CURB AROUND SOUTH AND EAST SIDE OF POROUS PAVEMENT. CURB TO BE FLUSH WITH SURROUNDING PAVEMENT. POUR CURB AFTER INSTALLATION OF PAVEDRAIN.
- 14 CONSTRUCT 6'Wx12'T CURB AROUND NORTH AND EAST SIDE OF POROUS PAVEMENT. CURB TO BE FLUSH WITH SURROUNDING PAVEMENT. POUR CURB AFTER INSTALLATION OF PAVEDRAIN.
- 15 INSTALL PAVEDRAIN POROUS PAVERS OR APPROVED EQUAL.
- 16 ASPHALT PAVEMENT PATCHING
- 17 INSTALL INLET PROTECTION (GUTTER BUDDIES).
- 18 PLANTER FILLED WITH SPECIAL SOIL AND ROCK, TS - 9.
- 19 CONSTRUCT 8' WIDE, 4" THICK PCC INTEGRAL CURB SIDEWALK, PER DETAIL 13.
- 20 RECONSTRUCT CURB SECTION, PER DETAIL 14.
- 21 CONSTRUCT ADA LANDINGS AND RAMP PER DETAIL 6, 7 AND 12.
- 22 RECONSTRUCT CONCRETE SIDEWALK PANEL TO MATCH EXISTING.
- 23 RECONSTRUCT CONCRETE SIDEWALK UP TO EXISTING STEPS.
- 24 CONSTRUCT A CONCRETE STEP AND ADJUST HANDRAIL, IF NEEDED, PER DETAIL 17, USING THE 1:2 SLOPE.
- 25 WORK AROUND LIGHT POLE AND BASE.
- 26 INSTALL DETECTABLE WARNING, SEE SHEET 7, DETAIL 16.
- 27 REINSTALL PARKING METER POLLS.

NOTE: FOR PLANTER AND ISLAND DIMENSIONS, SEE SHEET 5.



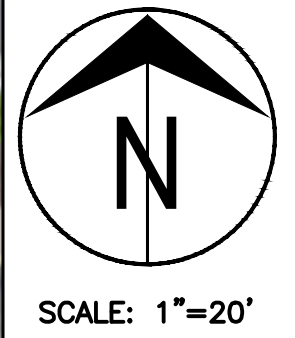
Revision	By	Date	No.

**Fourth Street and Broadway  
Pedestrian Crossing  
Plan Sheet**

City of Columbia, Missouri  
Department of Public Works

David Allen Nichols Registered Professional Engineer E-24212
File No. 00772
Scale: 1" = 5'
Date: 4/1/2021
Des. E.M.F.
Dwn. G.R.K.
Chk. A.A.A.

2011 Orthophoto Source: Boone County Assessor



No.	Date	By	Revision

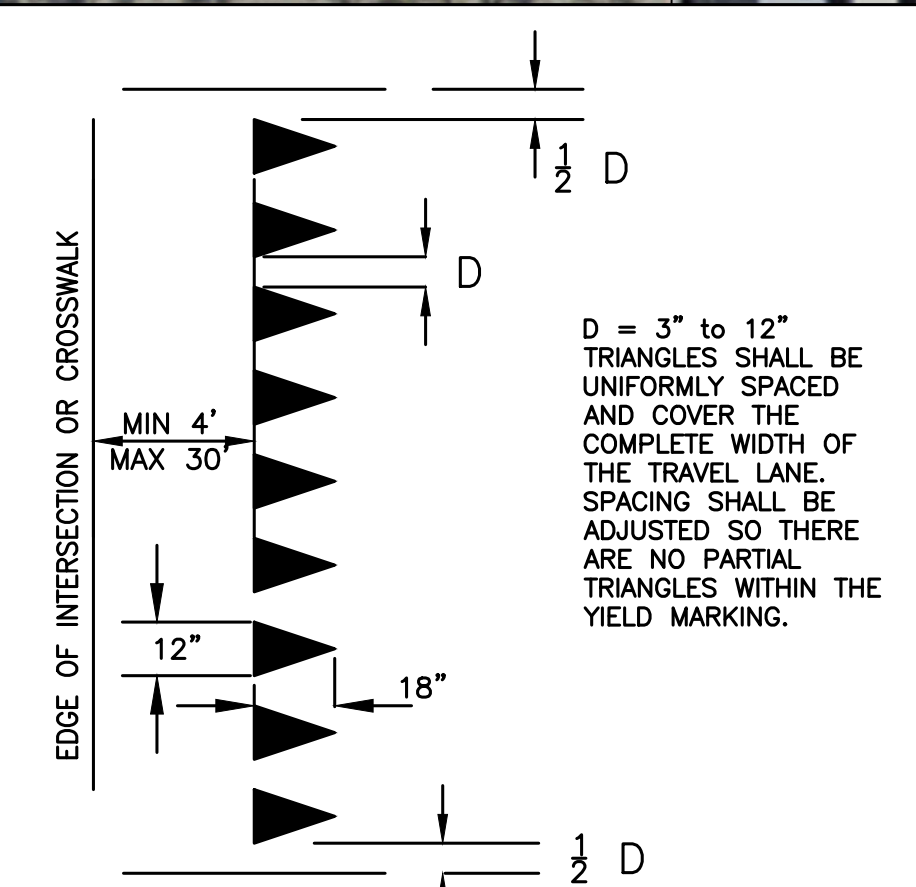
**Fourth Street and Broadway  
Pedestrian Crossing  
Pavement Marking Sheet**

City of Columbia, Missouri  
Department of Public Works

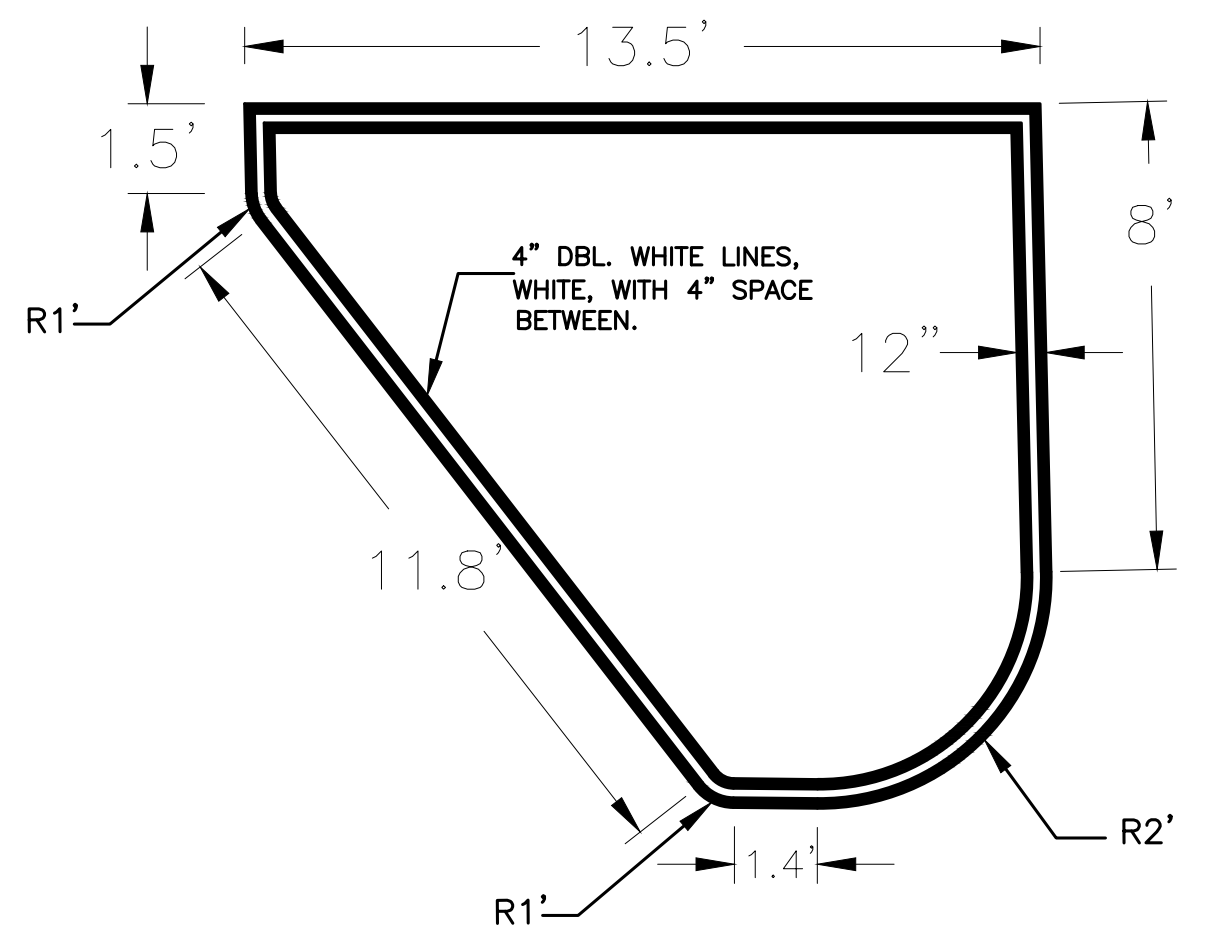
David Allen Nichols  
Registered Professional Engineer  
E-24212

File No. 00772  
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Des. E.M.F.  
Dwn. G.R.K.  
Chk. A.A.A.

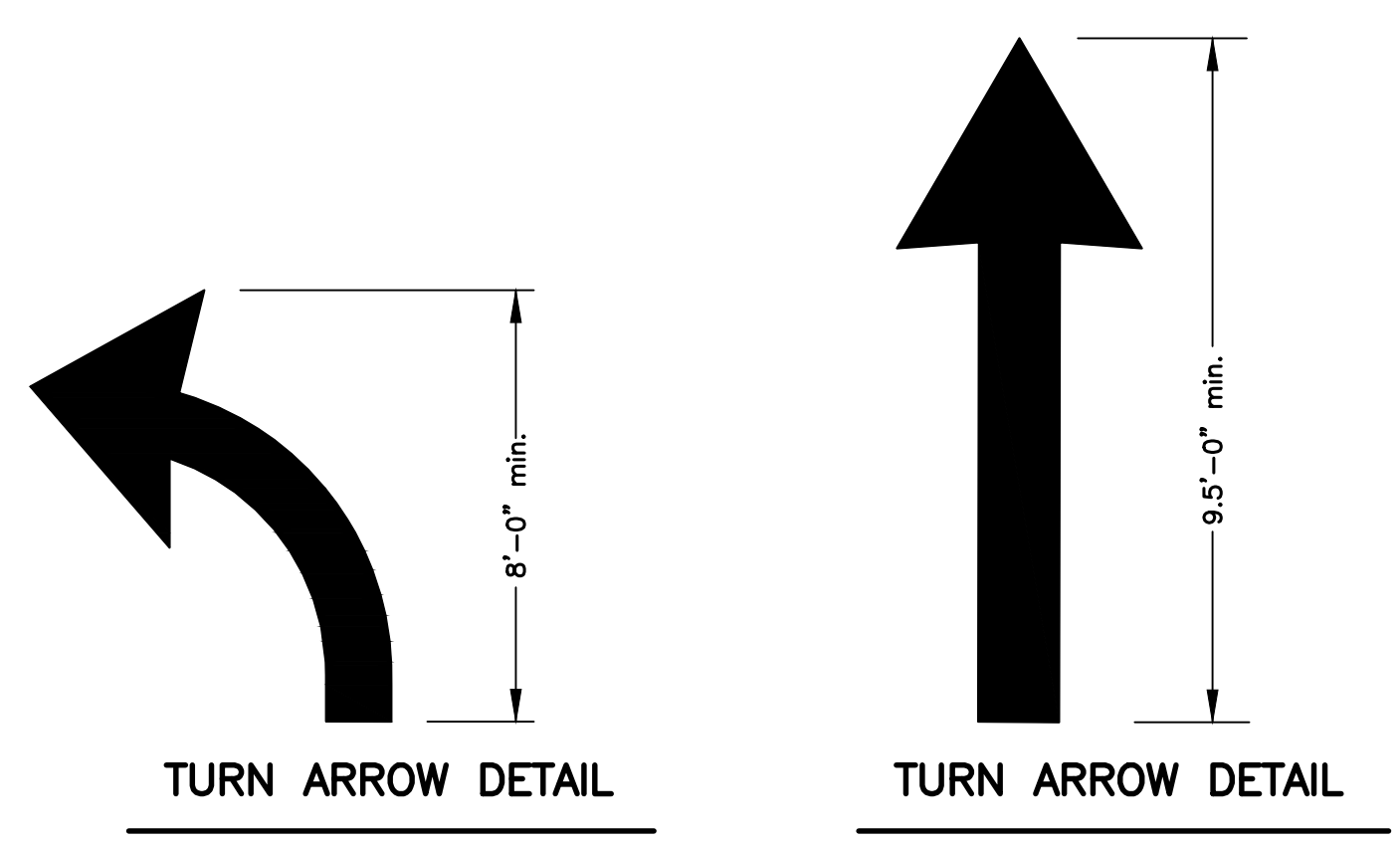
- ① 32.5 LINEAR FEET SOLID WHITE YIELD LINE MARKING PER DETAIL 1
- ② 8' WIDE WHITE PEDESTRIAN CROSSING PER DETAIL 4
- ③ YELLOW PAINTED MEDIAN APPROACH PER DETAIL 5
- ④ SOLID WHITE THROUGH ARROW PER DETAIL 3
- ⑤ SOLID WHITE RIGHT TURN ARROW PER DETAIL 3
- ⑥ 4" THICK SOLID WHITE LINES FOR PAINTED ISLAND PER DETAIL 2
- ⑦ 4" THICK SOLID WHITE PARKING LINES



DETAIL 1: YIELD LINE MARKINGS (TYP.)  
(NOT TO SCALE)

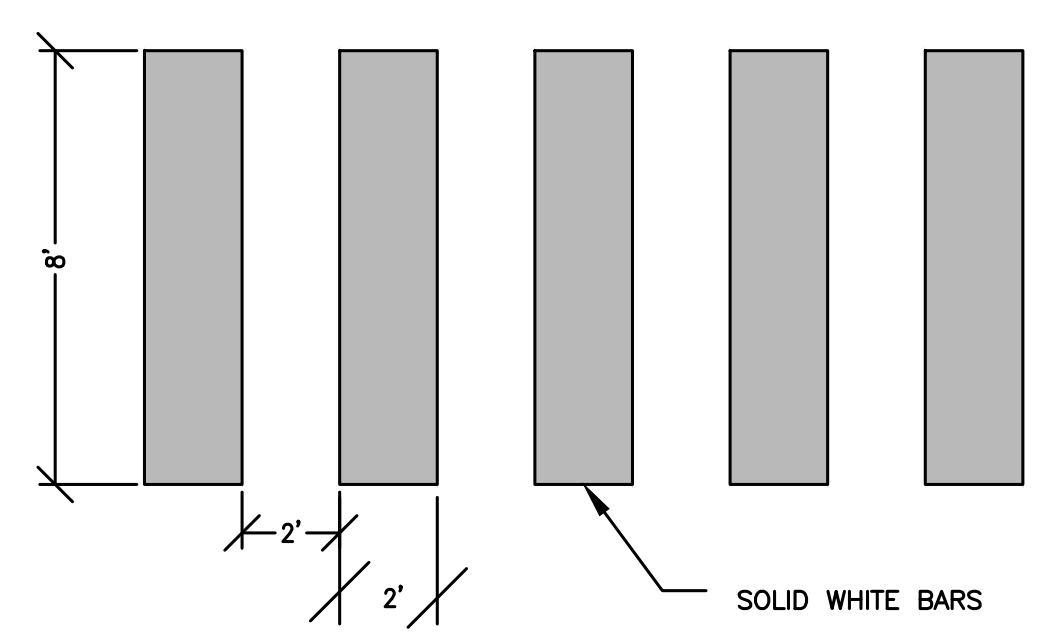


DETAIL 2: STRIPED ISLAND MARKINGS  
(NOT TO SCALE)



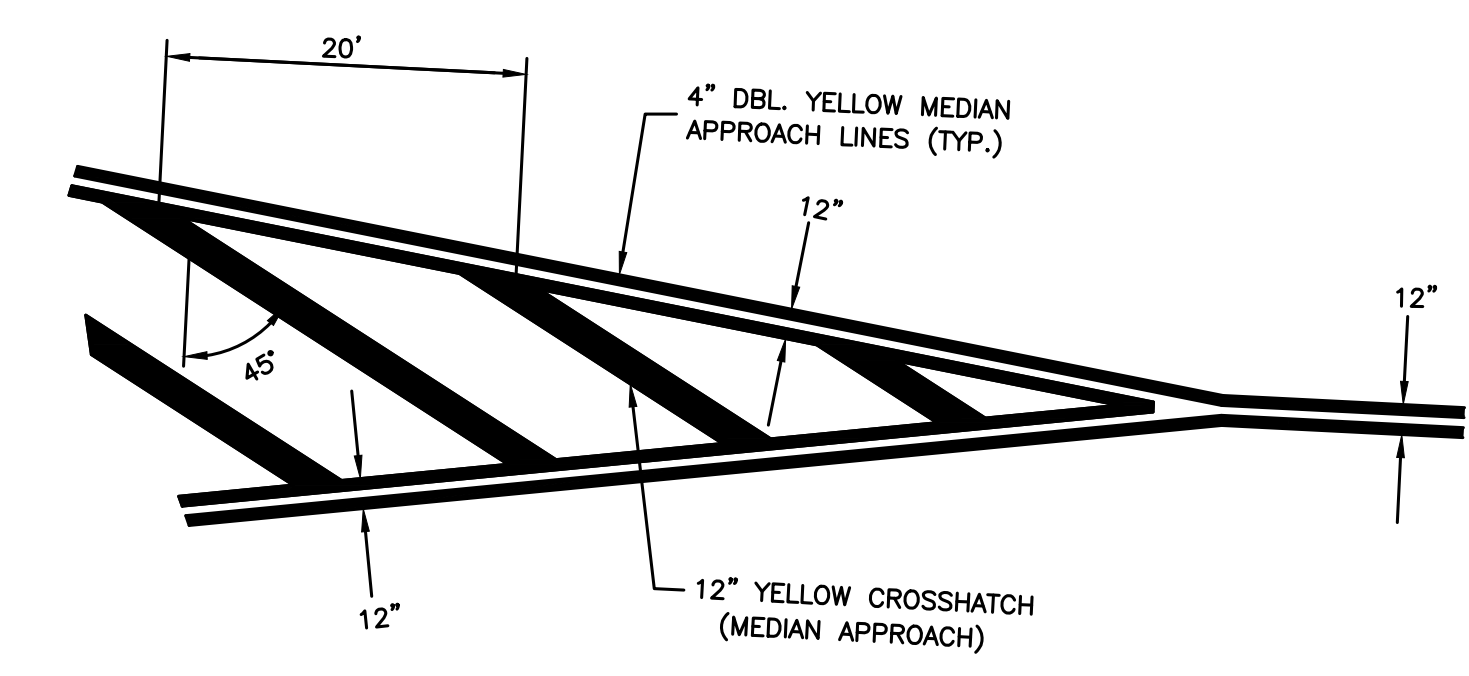
DETAIL 3: ARROW MARKINGS (TYP.)  
(NOT TO SCALE)

NOTE: All arrows shall comply with current MUTCD Standards.



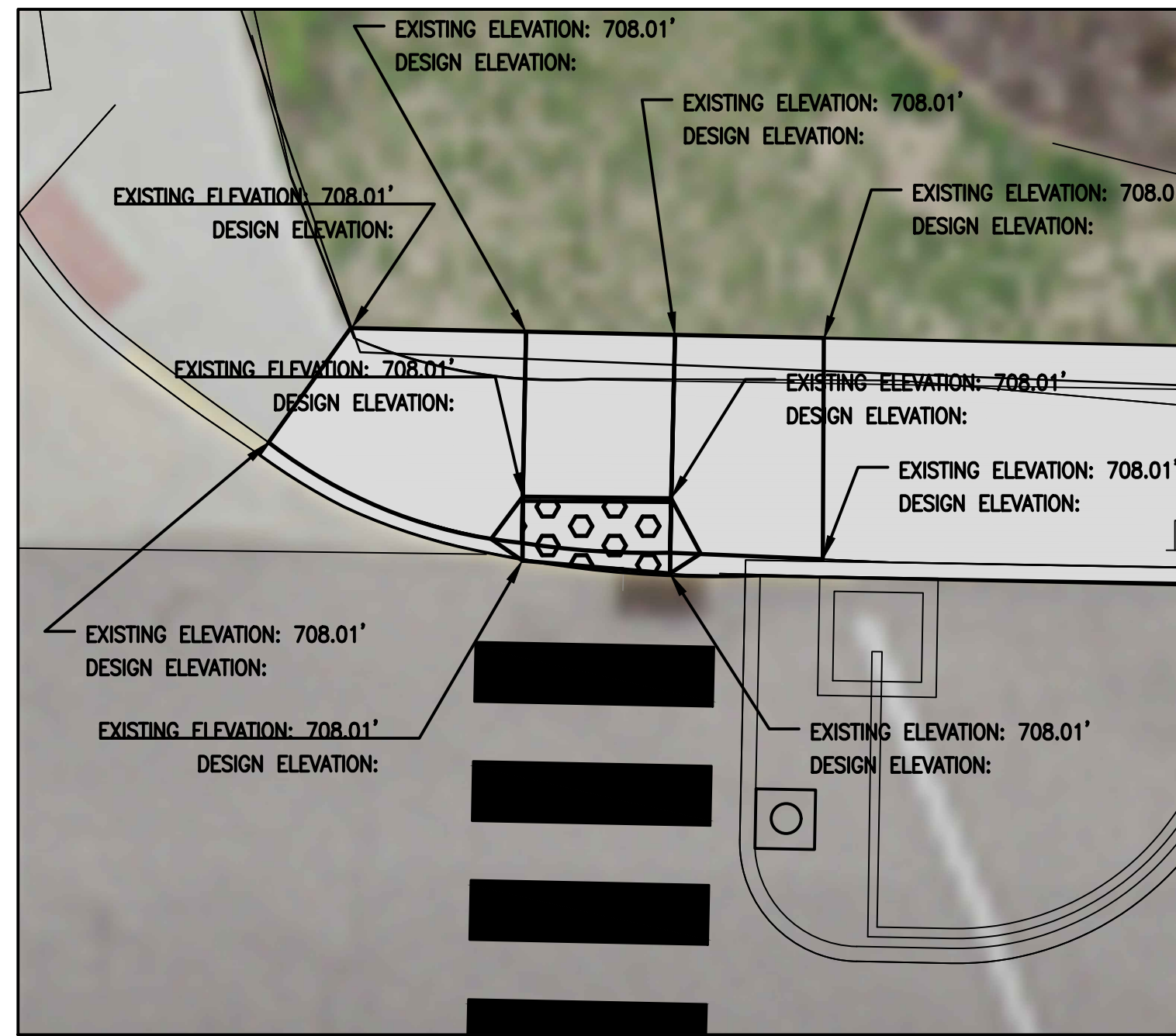
DETAIL 4: CROSSWALK MARKINGS (TYP.)  
(NOT TO SCALE)

NOTE: SHIFT BARS TO BEST FIT WHEEL PATHS THROUGH CROSSWALK

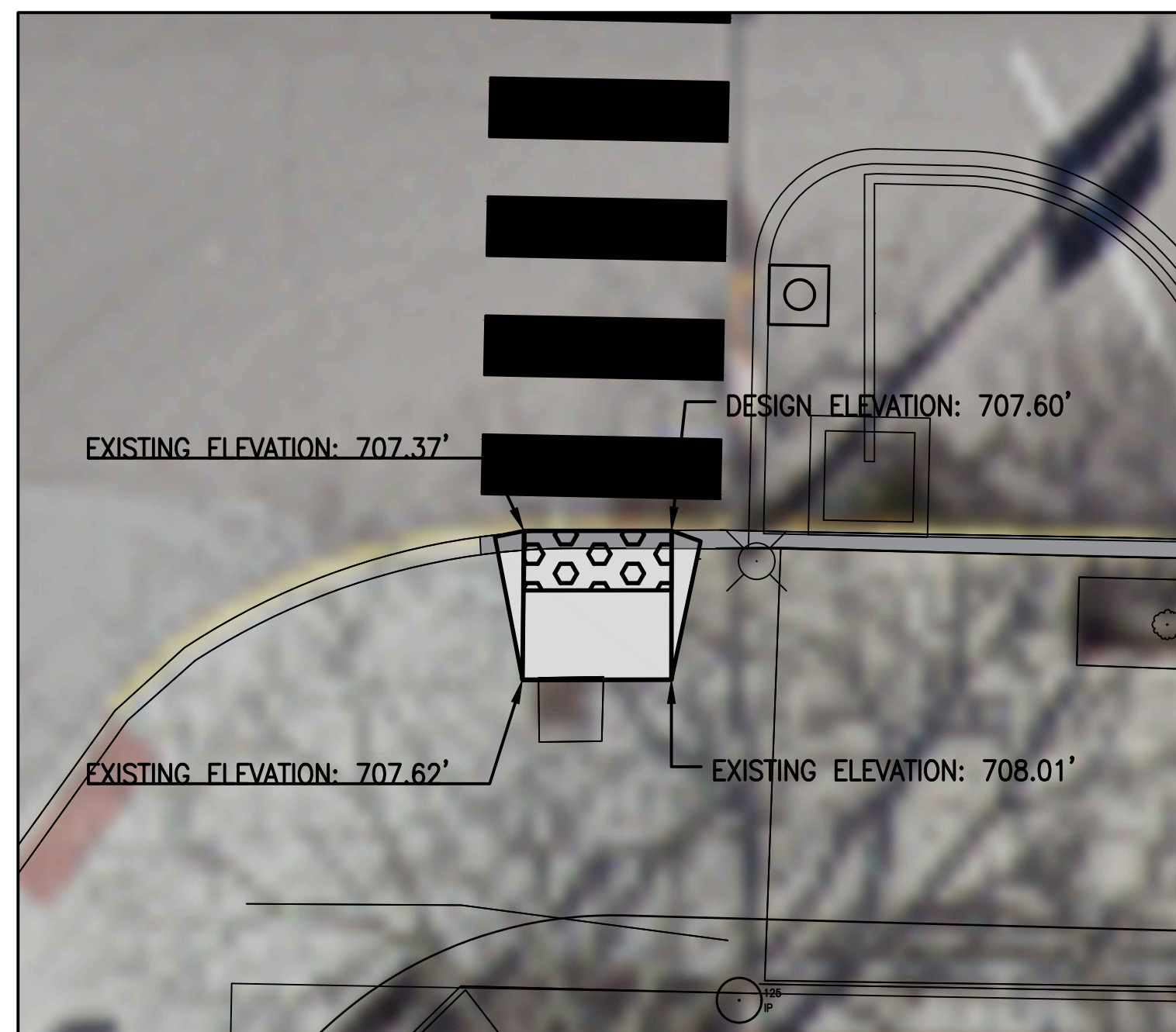


DETAIL 5: PAINTED MEDIAN DETAIL  
(NOT TO SCALE)

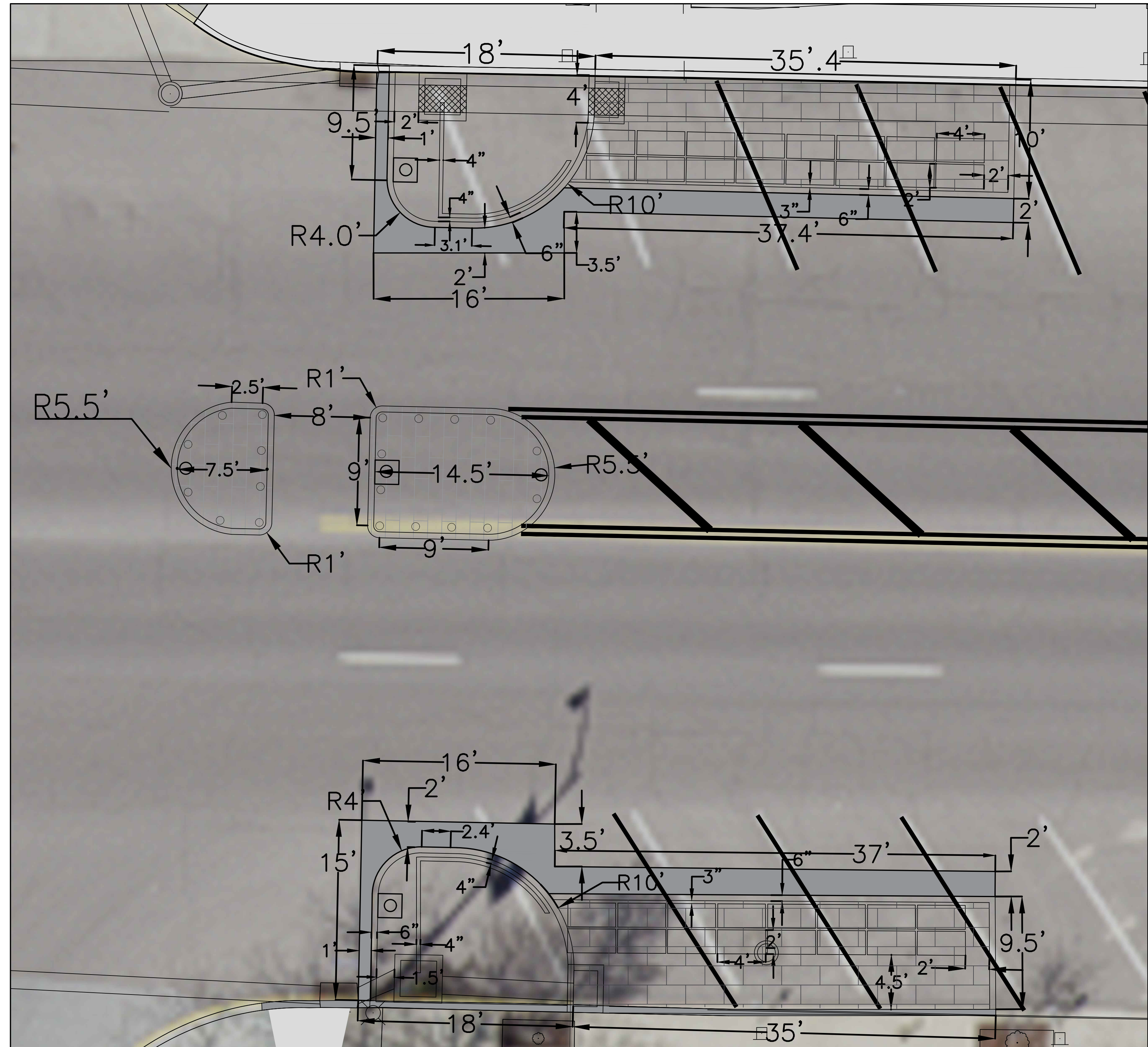
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DETAIL 6: NORTH RAMP AND LANDING  
(NOT TO SCALE)



DETAIL 7: SOUTH RAMP AND LANDING  
(NOT TO SCALE)



DETAIL 8: PLANTER AND ISLAND DIMENSIONS  
(NOT TO SCALE)

No.	Date	By	Revision

Fourth Street and Broadway  
Pedestrian Crossing  
Plan Sheet

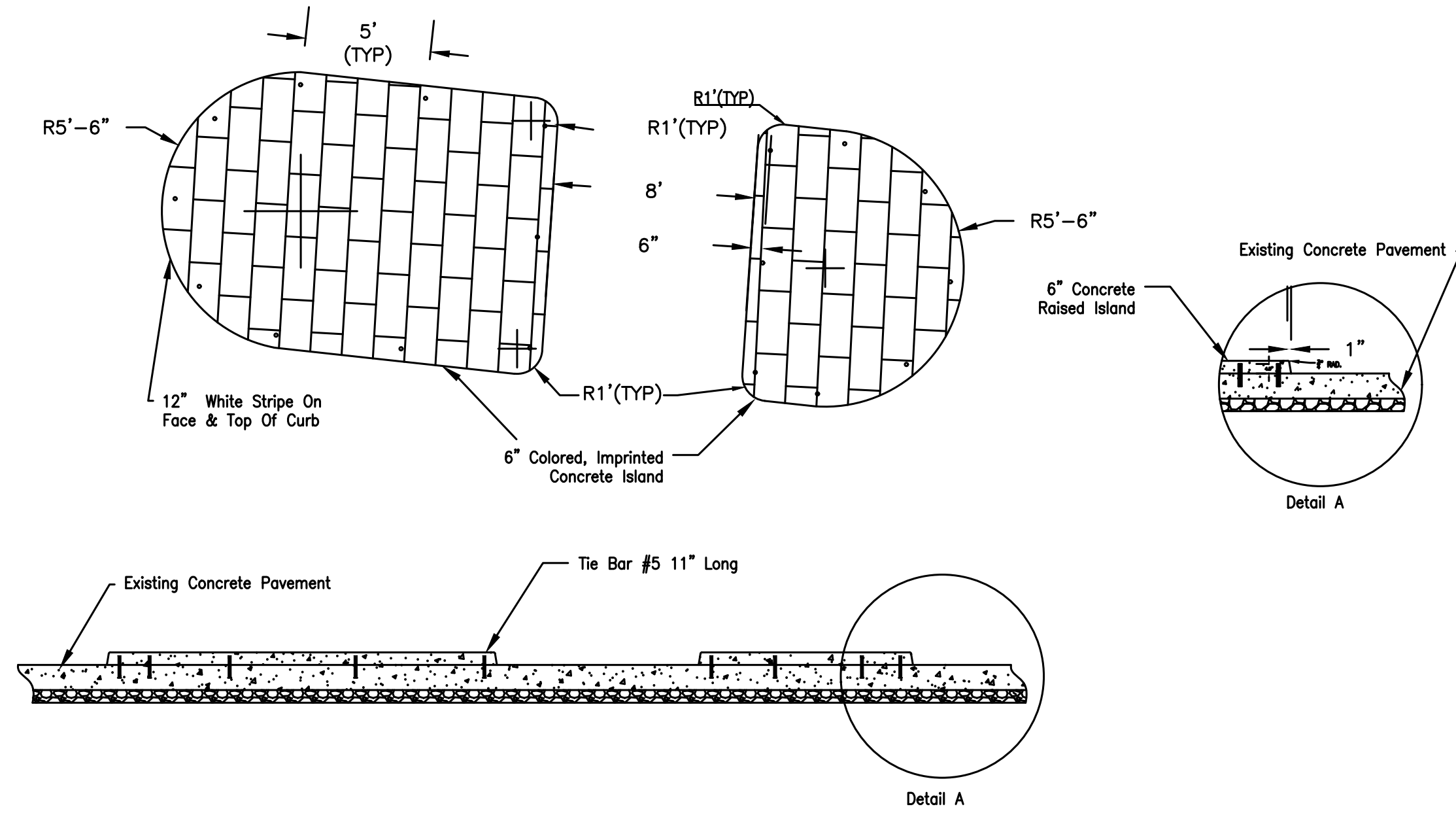
City of Columbia, Missouri  
Department of Public Works

David Allen Nichols  
Registered Professional Engineer  
E-24212

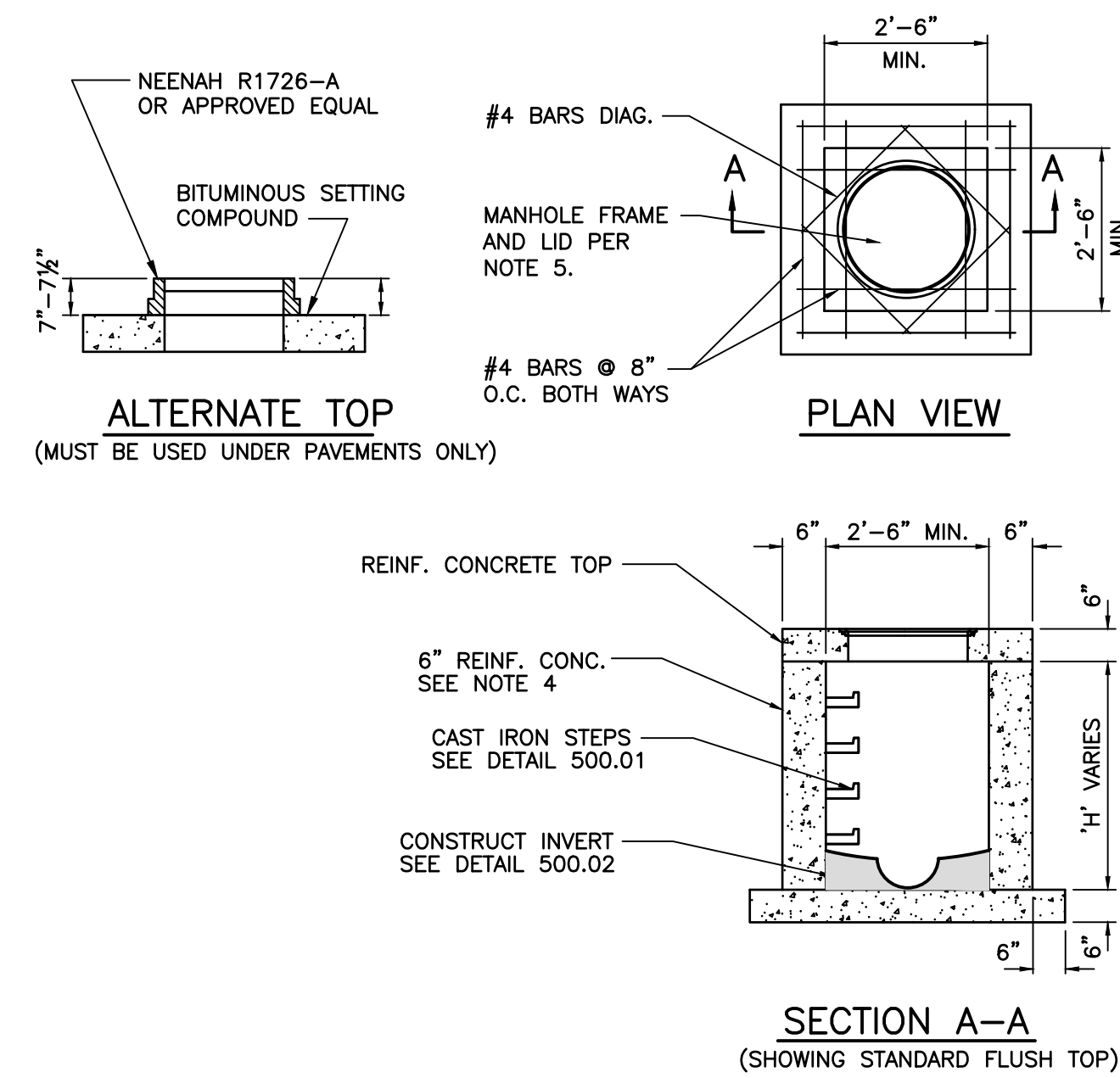
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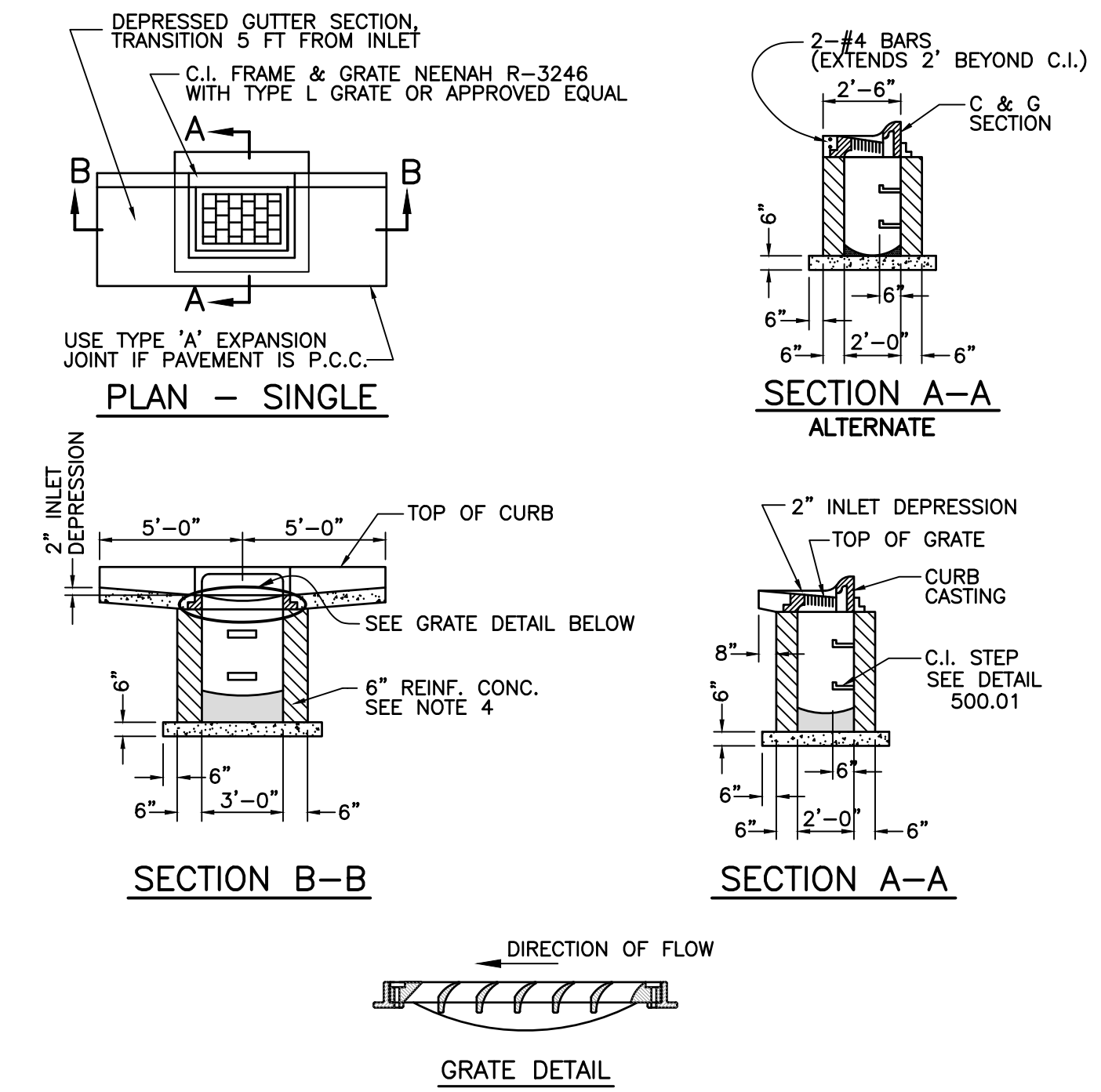
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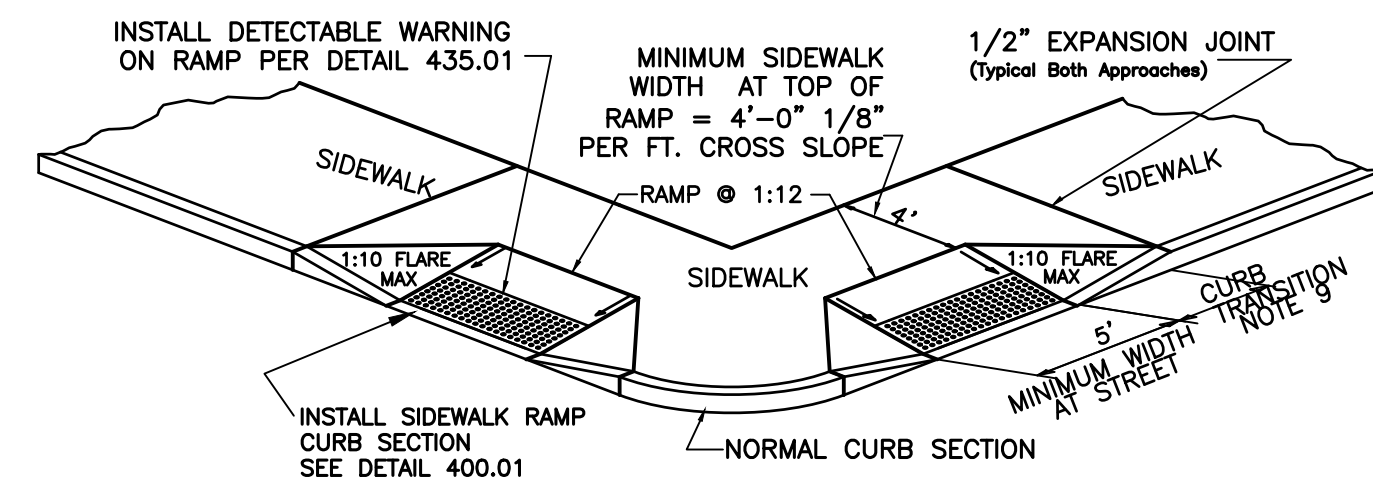
DETAIL 9: CONCRETE RAISED ISLAND DOWELING  
(NOT TO SCALE)



DETAIL 10: JUNCTION BOX  
(NOT TO SCALE)

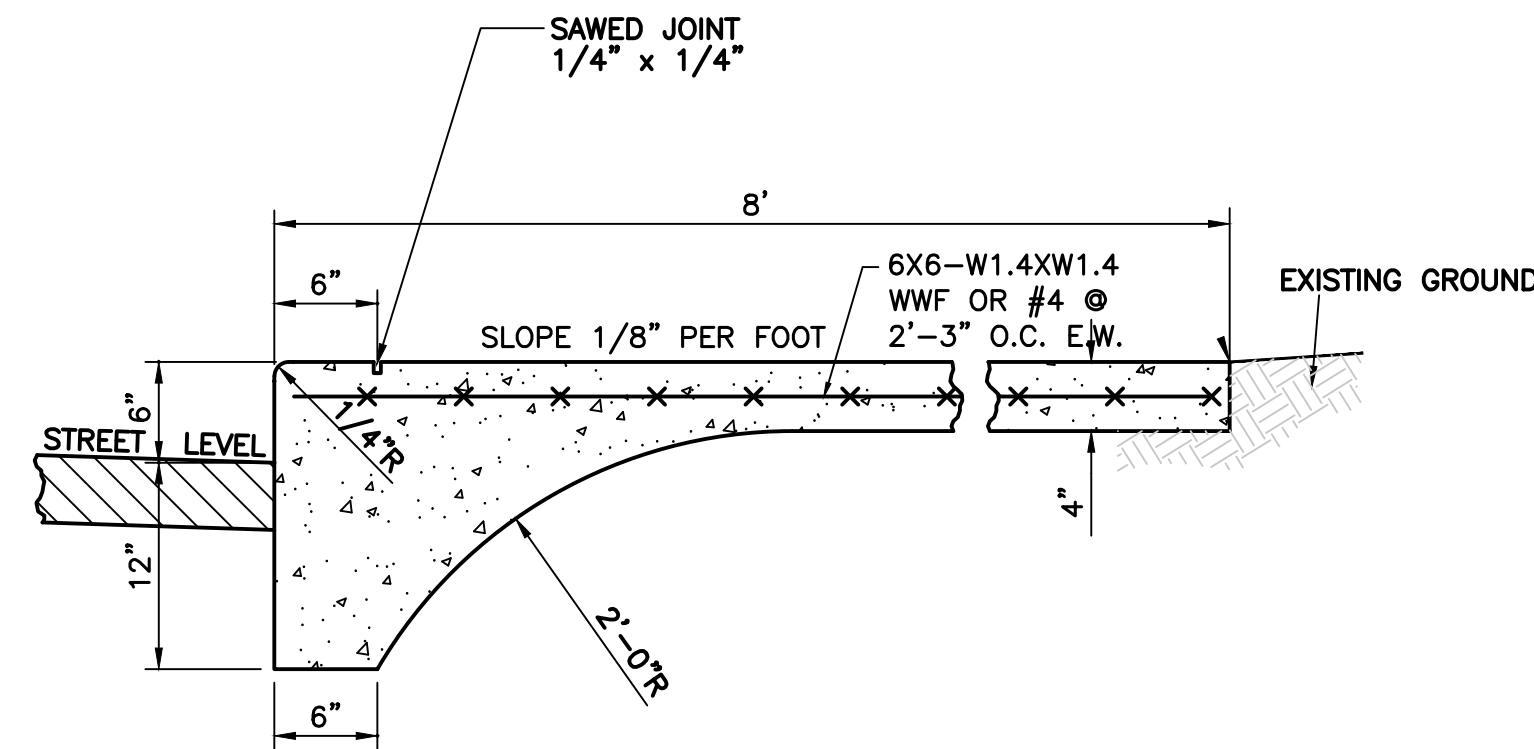


DETAIL 11: TYPE "A" INLET  
(NOT TO SCALE)



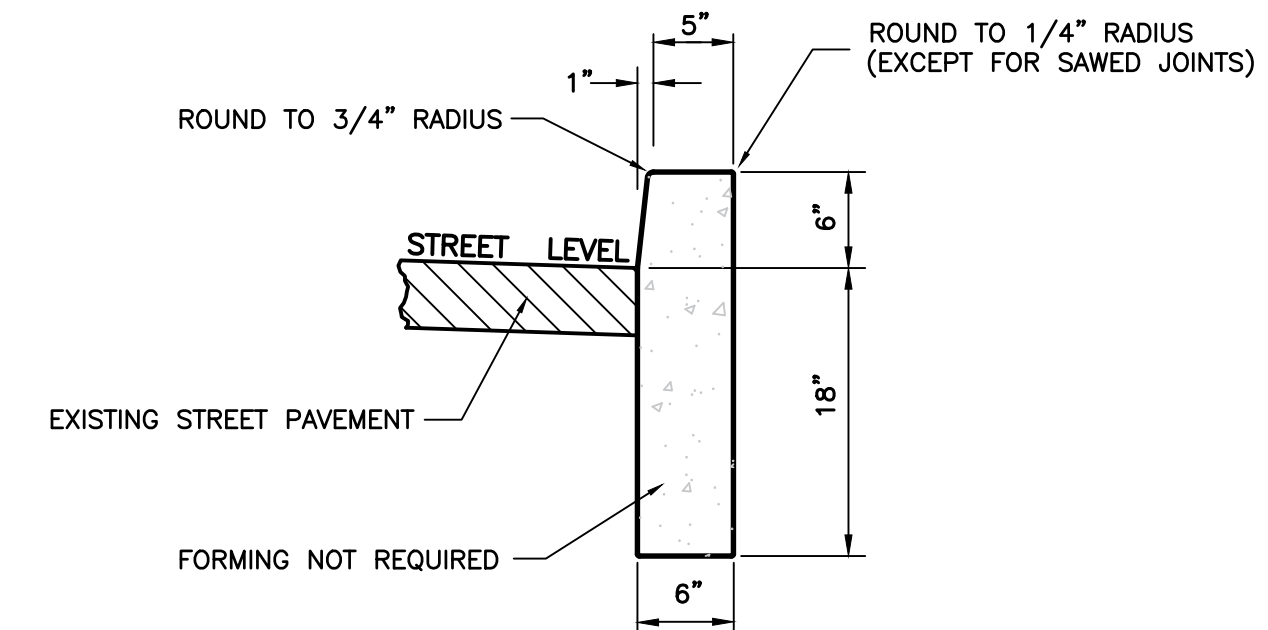
- NOTE:
1. RAMP SHALL BE 6" THICK MoDOT PAVEMENT CONCRETE WITH #4 BARS AT 12" O.C. E.W.
  2. EXPANSION JOINT SHALL BE 1/2" PREFORMED CORK OR BITUMINOUS EXPANSION JOINT MATERIAL.
  3. MAXIMUM RAMP CROSS SLOPE IS 2.00%.
  4. ALL SLOPES ARE MEASURED FROM THE HORIZONTAL.
  5. REPLACE STANDARD CURB SECTION WITH SIDEWALK RAMP CURB SECTION - DETAIL 400.01
  6. RAMP LENGTH IS DEPENDENT ON 1:12 MAX. SLOPE. USE FLATTER WHEN POSSIBLE.
  7. LANDING AREA AT TOP OF RAMP SHALL BE 4'-0" MIN WIDTH, CROSS SLOPE OF LANDING SHALL NOT EXCEED 2.00%.
  8. TYPE "A" RAMP NOT APPLICABLE IF SIDEWALK WIDTH DOES NOT PROVIDE 4'-0" LANDING AT THE TOP OF RAMP. USE TYPE "B" RAMP.
  9. RAMP EXTENDS INTO SIDEWALK, FLARE SLOPE MUST NOT EXCEED 1:10.
  10. CURB TRANSITION LENGTH IS DEPENDENT ON 1:10 FLARE SLOPE

DETAIL 12: SIDEWALK RAMP AT BACK OF CURB  
(NOT TO SCALE)

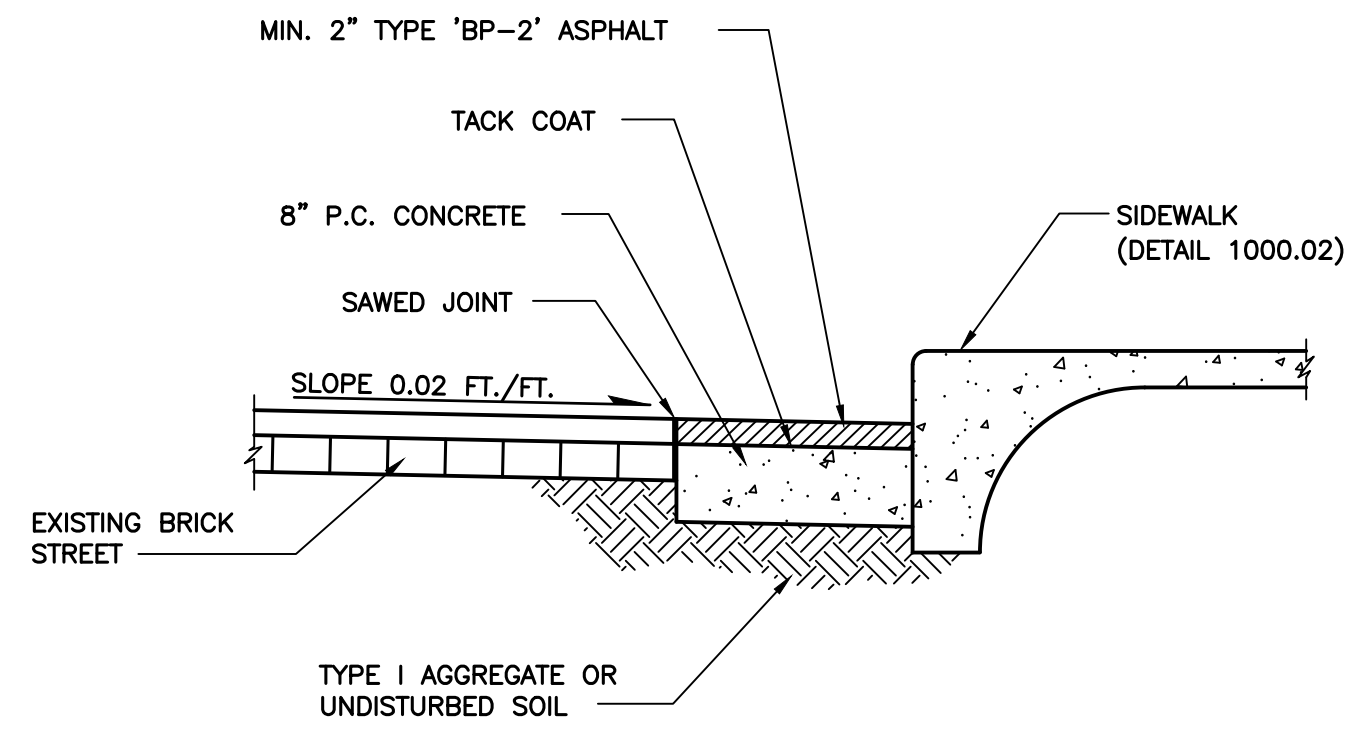


- NOTES:
1. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.00%.
  2. SAW AND PATCH STREET PAVEMENT AS NECESSARY FOR CONSTRUCTION OF NEW CURB.
  3. SEE JOINT DETAILS - 1000.03.
  4. SEE SPECIFICATIONS - 1000.01B THRU 1000.01D.
  5. NO STEEL TO BE PLACED THROUGH EXPANSION JOINT

DETAIL 13: INTEGRAL DOWNTOWN SIDEWALK  
(NOT TO SCALE)

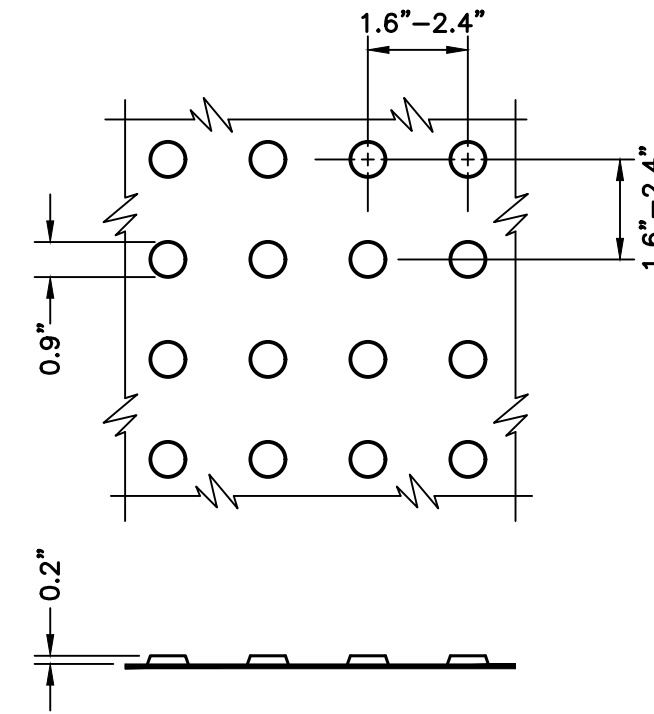


DETAIL 14: TYPE S CURB (SEPARATED)  
(SCALE: 1"=1')



**NOTE:**  
 AREAS TO BE OVERLAID SHALL HAVE A TACK COAT OF SS-1 WATER BASED EMULSION APPLIED AT A RATE OF 0.2 GALLONS PER SQUARE YARD. THIS IS TO BE INCLUDED IN THE PRICE BID FOR "PATCHING AND LANE WIDENING" AND/OR "FULL DEPTH STREET PATCH FOR CONDUIT".

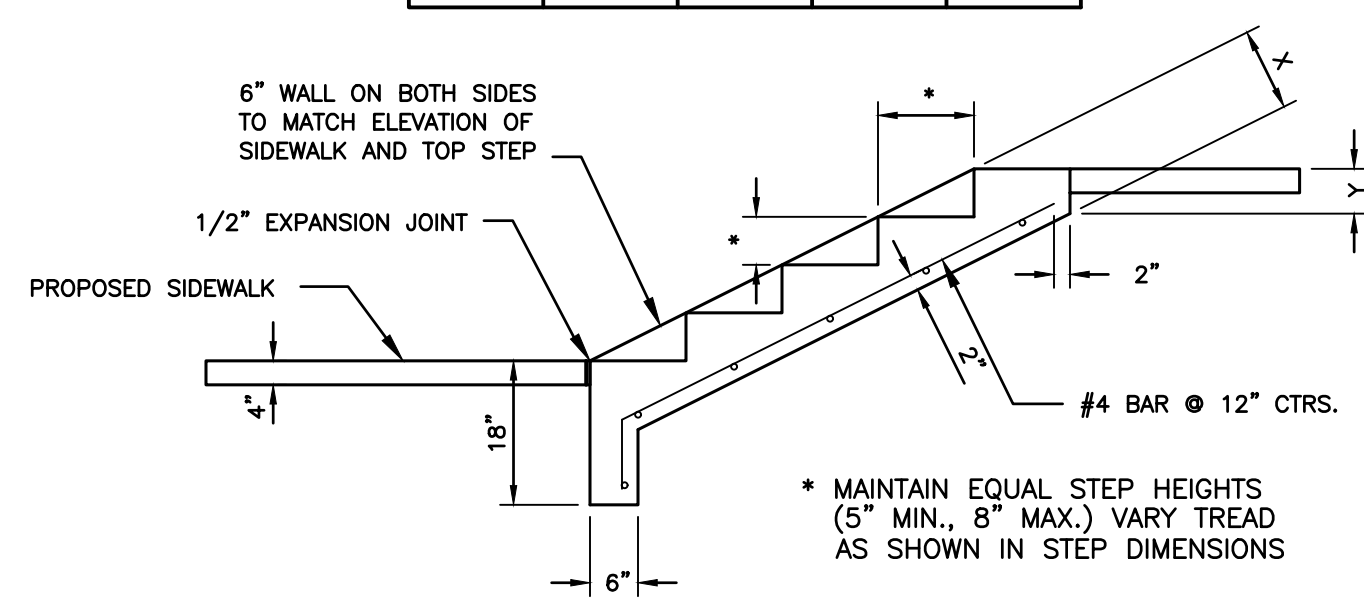
**DETAIL 15: PAVEMENT PATCHING**  
 (NOT TO SCALE)



- DETECTABLE WARNING NOTES:**
1. DETECTABLE WARNING SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF 0.9", A HEIGHT OF NOMINAL 0.2", AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35", AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, ACHIEVED BY THE INSTALLATION OF ADA SOLUTIONS 2436 REPBR, 2448 REPBR, OR 2460 REPBR (OR APPROVED EQUAL) AND SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.
  2. ADA SOLUTIONS 24RADREPBR OR APPROVED EQUAL TO BE USED WITH DETAIL 430.02, 432.02, AND 1000.08.
  3. STAMPED CONCRETE IS NOT AN APPROVED EQUAL.
  4. DOWNTOWN DETECTABLE WARNINGS MAY BE ADA 2004 COMPLIANT DETECTABLE WARNING PAVERS.
  5. DETECTABLE WARNING PLATS ARE TO BE COLONIAL OR BRICK RED IN COLOR OR APPROVED EQUAL.
  6. DETECTABLE WARNING SURFACES SHALL BE 24" WIDE AND EXTEND THE FULL LENGTH OF THE PUBLIC USE AREA.

**DETAIL 16: DETECTABLE WARNING**  
 (NOT TO SCALE)

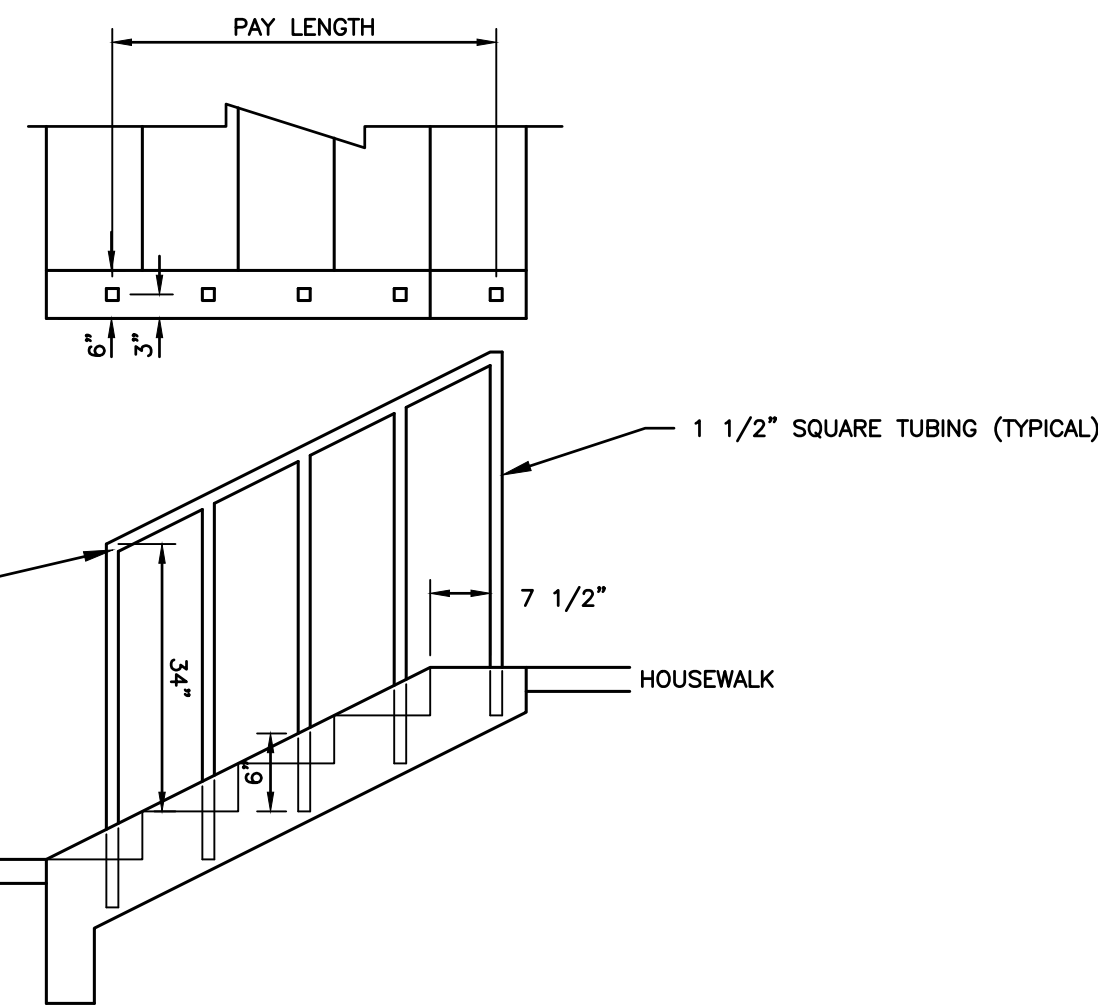
STEP DIMENSIONS				
SLOPE	TREAD	RISE	X	Y
1:1.5	12"	8"	11 1/16"	6"
1:2	12"	6"	10 3/8"	5 9/16"
1:3	14 1/4"	4 3/4"	9 1/2"	5 1/4"



**STEP ELEVATION**

- NOTES:**
1. MATCH WIDTH "W" OF EXISTING WALK. (MIN. 3')
  2. GRADE LAWN TO MATCH ELEVATION OF WALL ABUTTING STEPS.

**DETAIL 17: STEP AND HANDRAIL**  
 (NOT TO SCALE)



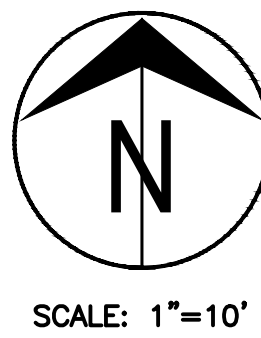
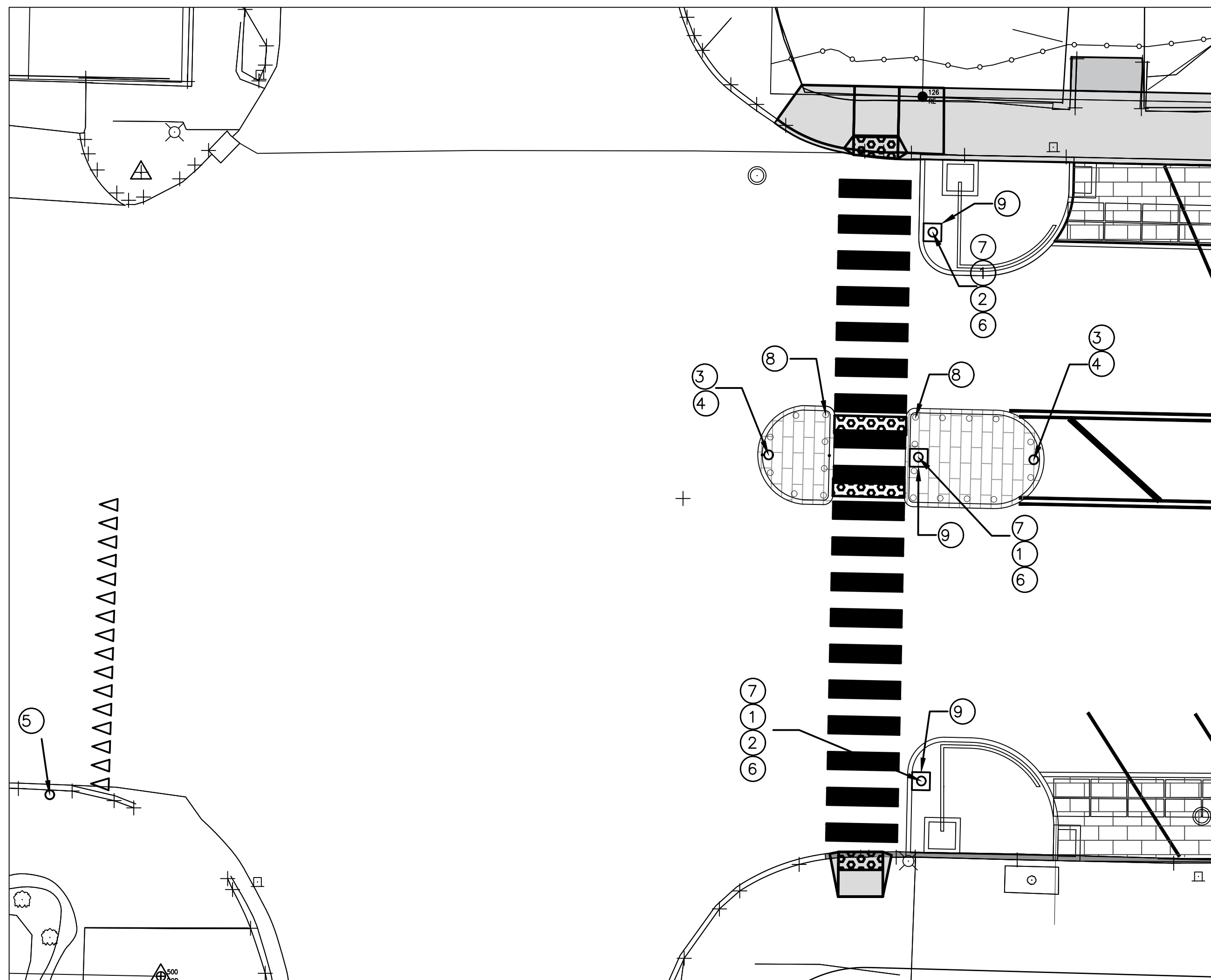
**HANDRAIL DETAILS**

- NOTES:**
1. HANDRAILS WILL BE REQUIRED ON ALL STEPS WITH 3 RISERS OR MORE. HANDRAIL SHALL BE INSTALLED ON ONE SIDE OF STEPS ONLY.
  2. PAINT WITH ONE COAT RUST PREVENTATIVE PRIMER AND TWO COATS DARK BROWN EXTERIOR PAINT.
  3. GRIND ALL WELDS AND SHARP EDGES SMOOTH BEFORE PAINTING.
  4. BID HANDRAIL PER LINEAR FOOT, AS SHOWN BY PAY LENGTH DIMENSION.

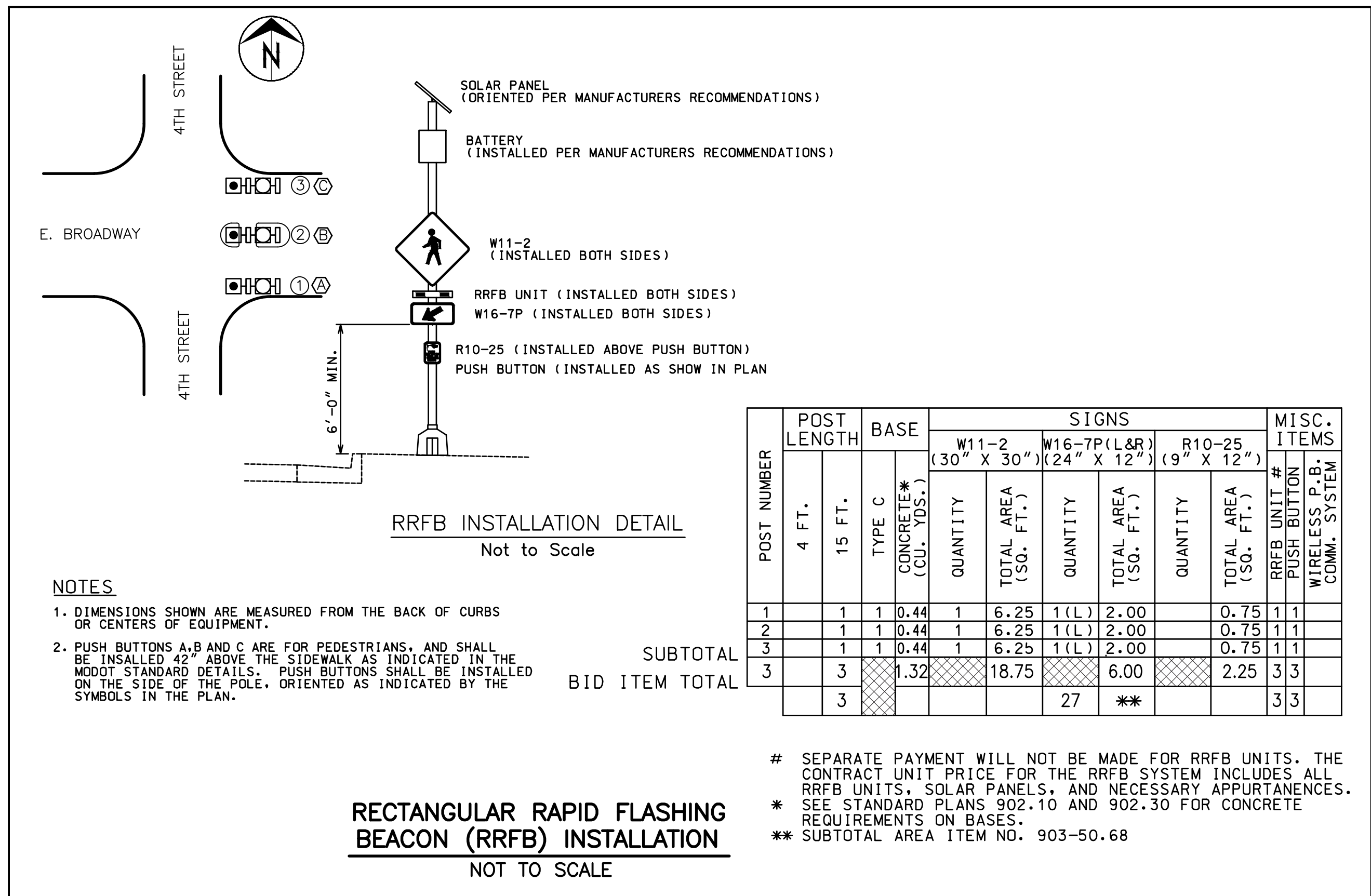
Fourth Street and Broadway  
 Pedestrian Crossing  
 Detail Sheet

City of Columbia, Missouri  
 Department of Public Works

David Allen Nichols  
 Registered Professional Engineer  
 E-24212  
 File No. 00772  
 Scale: As Shown  
 Date: 4/1/2021  
 Des. E.M.F.  
 Dwn. G.R.K.  
 Chk. A.A.A.



SCALE: 1"=10'



**NOTES**

- DIMENSIONS SHOWN ARE MEASURED FROM THE BACK OF CURBS OR CENTERS OF EQUIPMENT.
- PUSH BUTTONS A, B AND C ARE FOR PEDESTRIANS, AND SHALL BE INSTALLED 42" ABOVE THE SIDEWALK AS INDICATED IN THE MODOT STANDARD DETAILS. PUSH BUTTONS SHALL BE INSTALLED ON THE SIDE OF THE POLE, ORIENTED AS INDICATED BY THE SYMBOLS IN THE PLAN.

**RECTANGULAR RAPID FLASHING BEACON (RRFB) INSTALLATION**  
NOT TO SCALE

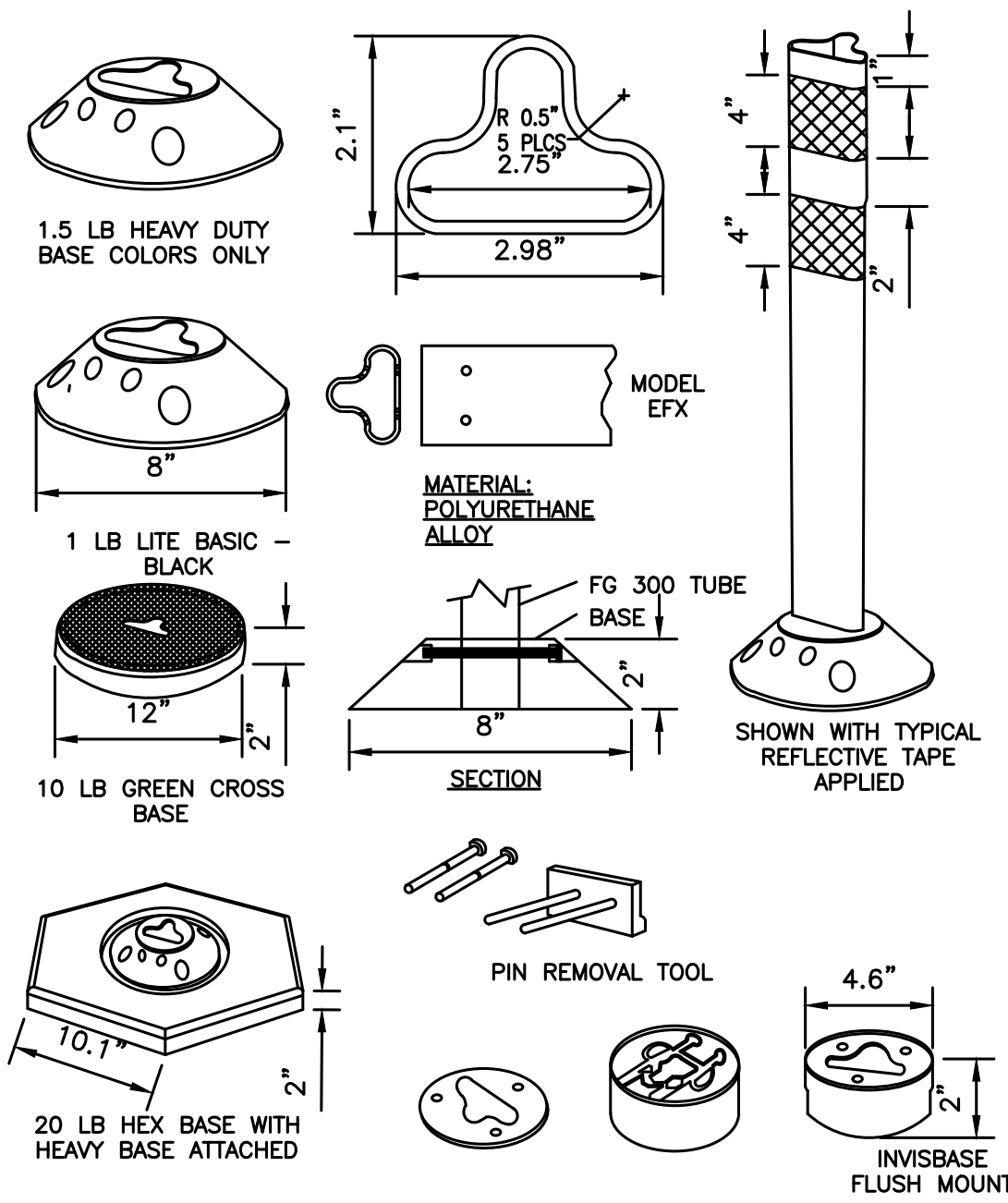
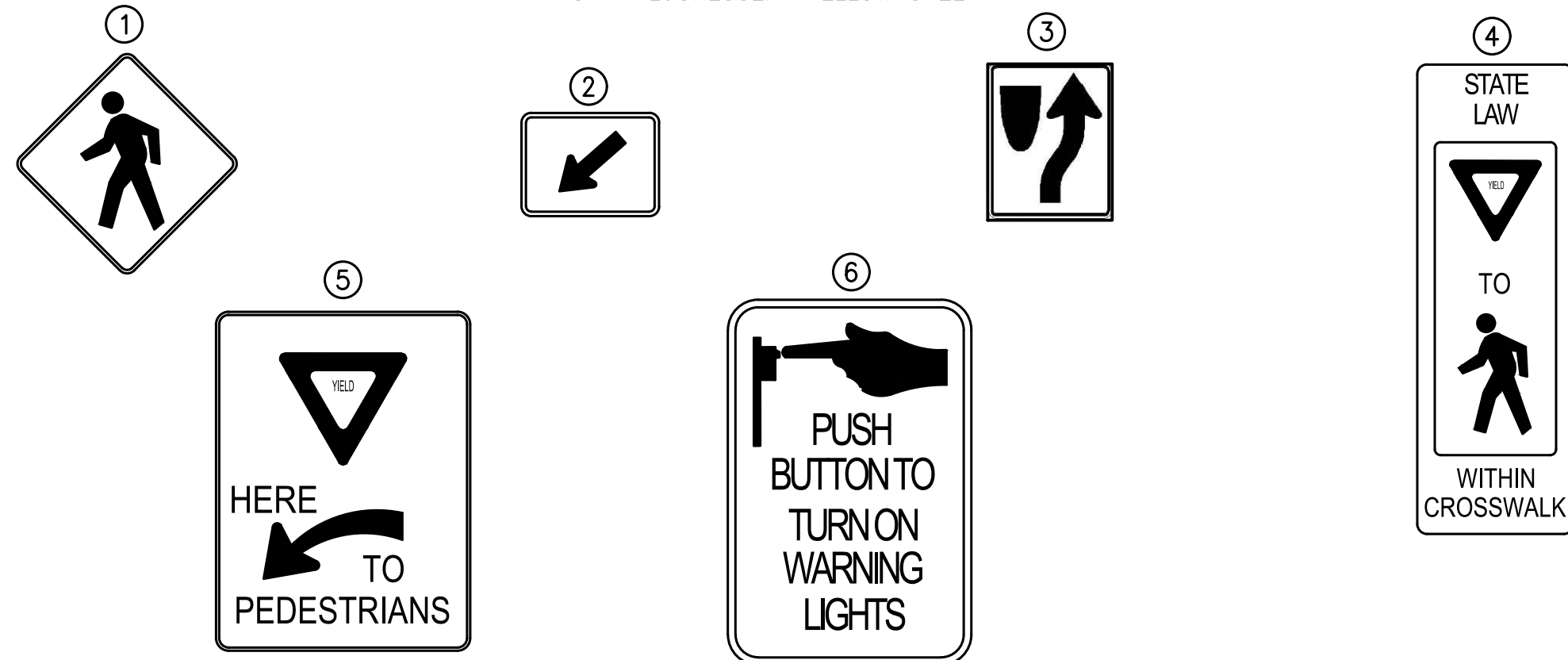
# SEPARATE PAYMENT WILL NOT BE MADE FOR RRFB UNITS. THE CONTRACT UNIT PRICE FOR THE RRFB SYSTEM INCLUDES ALL RRFB UNITS, SOLAR PANELS, AND NECESSARY APPURTANANCES.  
\* SEE STANDARD PLANS 902.10 AND 902.30 FOR CONCRETE REQUIREMENTS ON BASES.  
\*\* SUBTOTAL AREA ITEM NO. 903-50.68

**⑦: RECTANGULAR RAPID FLASHING BEACON DETAIL**  
(NOT TO SCALE)

**SIGN PLACEMENT DETAIL**  
(1" = 10')

MUTCD CODE	DESCRIPTION	QTY.
① W11-2 (FYG)	PEDESTRIAN CROSSING	6 (INSTALLED ON BOTH SIDES OF POLE)
② W16-7P (FYG)	DIRECTIONAL ARROW	4 (INSTALLED ON BOTH SIDES OF POLE)
④ R4-7	KEEP RIGHT	2
④ R1-6	IN-STREET PED CROSSING	2
⑤ R1-5a	YIELD HERE TO PEDESTRIANS	1
⑥ R10-25	PUSH BUTTON TO TURN ON WARNING LIGHTS	3
⑦	RAPID FLASHING BEACON	3
⑧	ISLAND DELINEATORS	18
⑨	POLE BASES (SEE DETAIL 9)	3

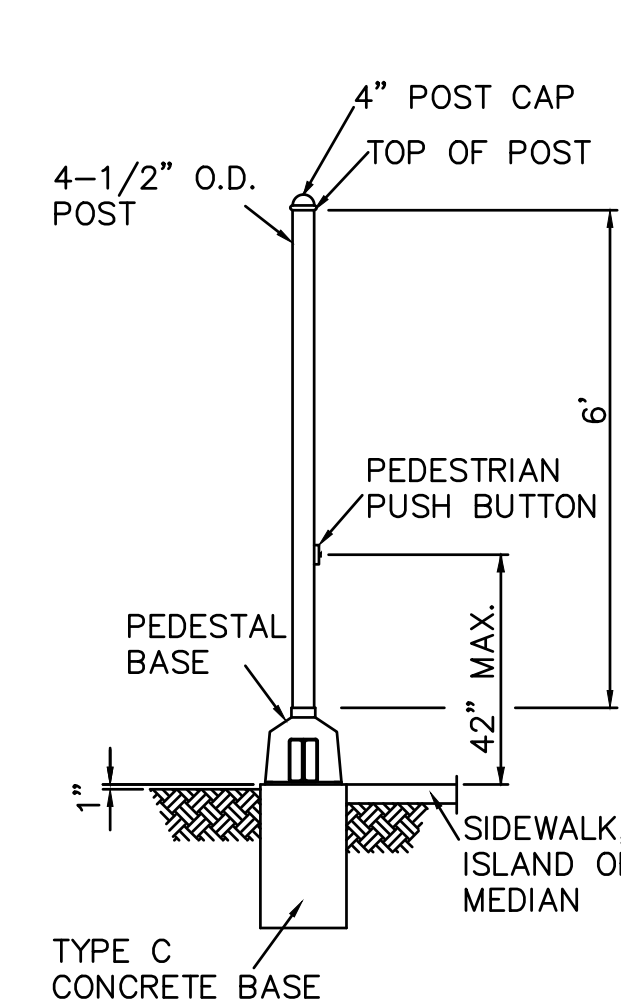
FYG = FLUORESCENT YELLOW GREEN



**DELINEATOR NOTES:**

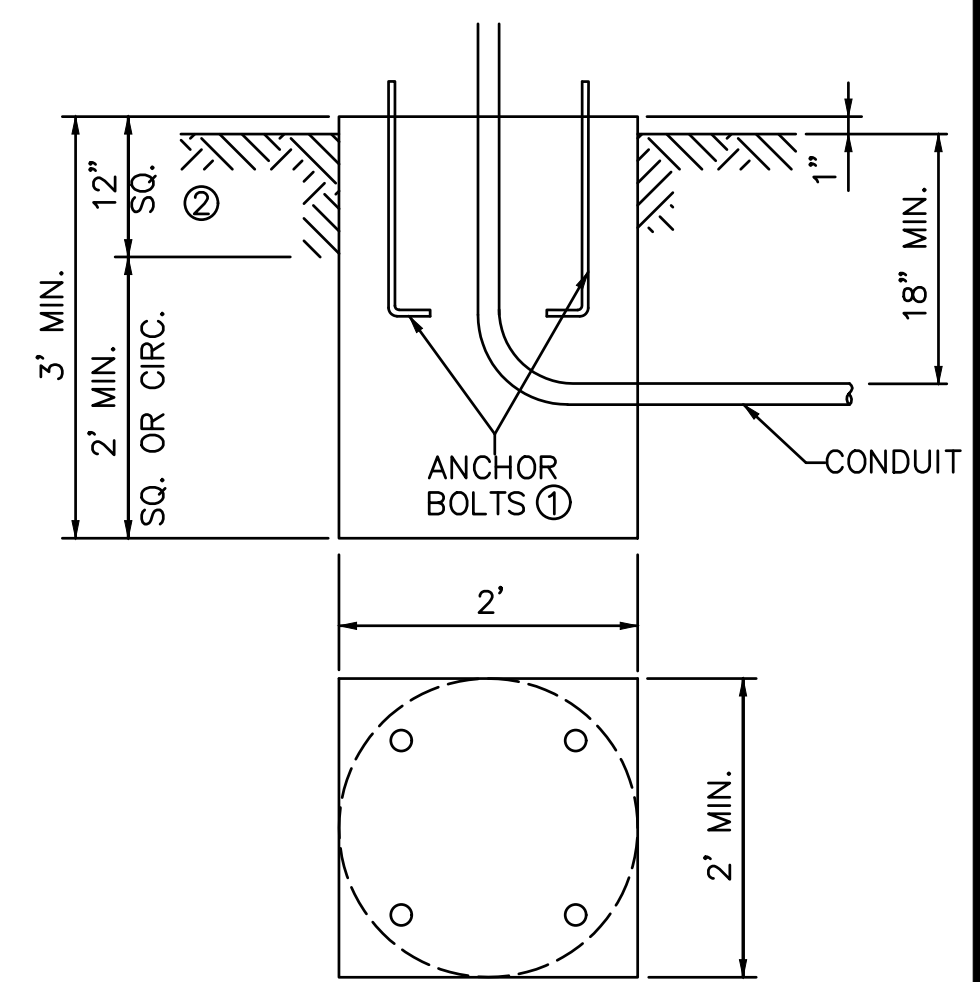
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- DO NOT SCALE DRAWINGS.
- POSTS, CURB AND REFLECTIVE SHEETING SHALL BE YELLOW IN COLOR.
- FLEXI-GUIDE POSTS SHALL BE 36" IN LENGTH.
- CONTRACTORS NOTE: FOR PRODUCT INFORMATION VISIT [www.modot.org](http://www.modot.org)

**⑧: DELINEATOR FG 300 POST**  
High-Performance Surface Mount Post  
(NOT TO SCALE)



**PEDESTAL POST MOUNTINGS**  
(NOT TO SCALE)

**AUDIBLE PEDESTRIAN PUSH BUTTON NOTE:**  
THE ACCESSIBLE PEDESTRIAN SIGNAL (APS) PEDESTRIAN PUSH BUTTON STATION (HOUSING AND SIGN FRAME) SHALL BE POLARA EZ COMMUNICATOR NAVIGATOR 2 WIRE PUSH BUTTON STATION (EN2 PBS) OR APPROVED EQUAL AND SHALL BE YELLOW IN COLOR.



**MoDOT TYPE C SIGNAL BASE 902.30P**  
(NOT TO SCALE)

- ANCHOR BOLT DIMENSIONS ARE SHOWN ON THE MANUFACTURER'S APPROVED DRAWINGS.
- SURFACE OF BASE TO BE CONSTRUCTED SQUARE FOR A DEPTH OF 12".

**⑨: PEDESTAL POST BASE DETAL**  
(NOT TO SCALE)

Revision  
By  
Date  
No.

**Fourth Street and Broadway  
Pedestrian Crossing  
Crosswalk Sign Detail Sheet**

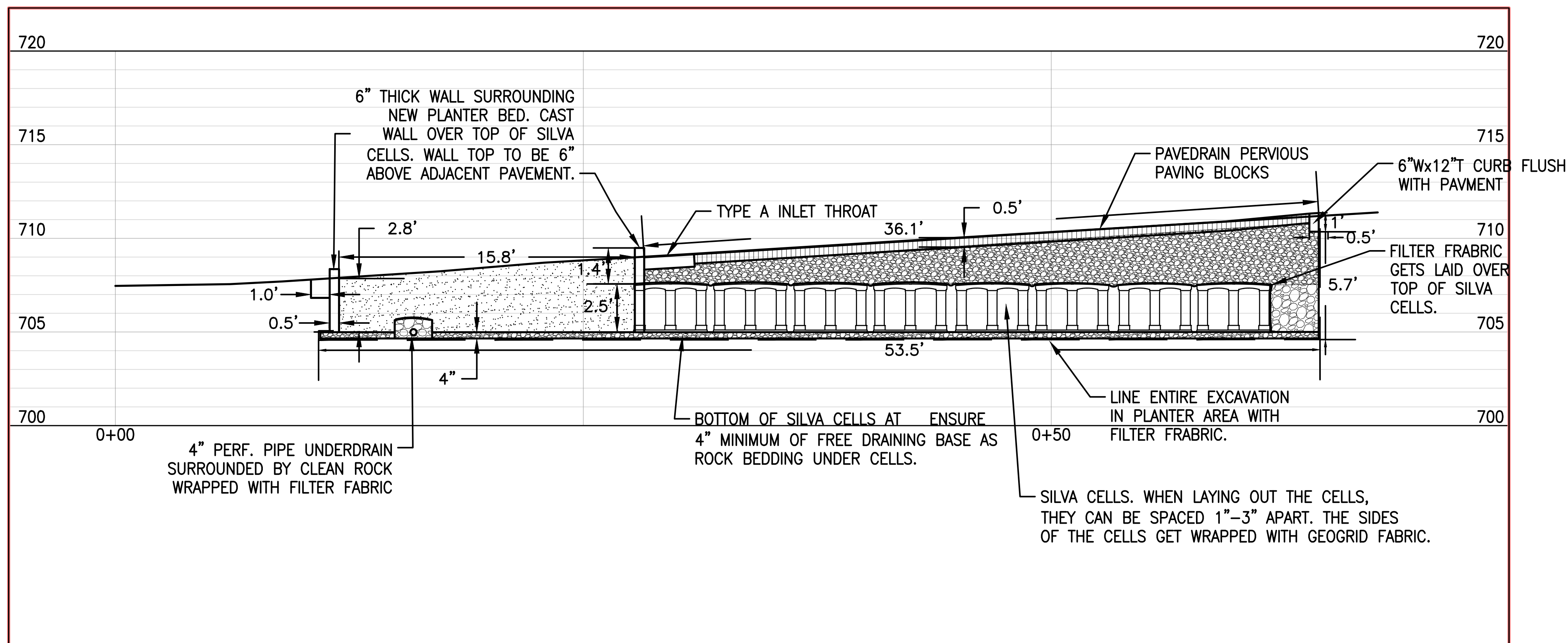
**City of Columbia, Missouri  
Department of Public Works**

David Allen Nichols  
Registered Professional Engineer  
E-24212

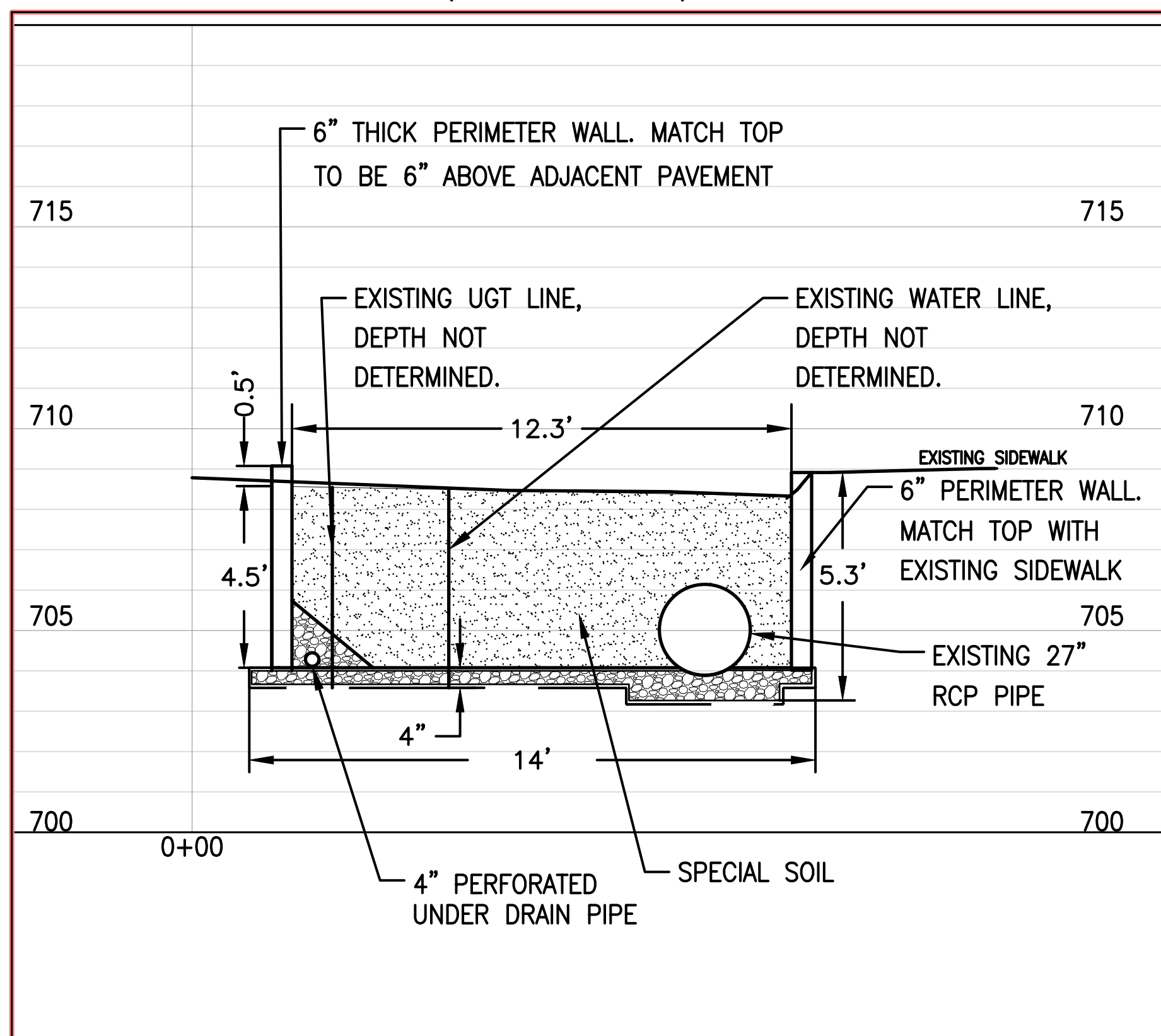
File No. 00772  
Scale: As Shown  
Date: 4/1/2021  
Des. E.M.F.  
Dwn. G.R.K.  
Chk. A.A.A.



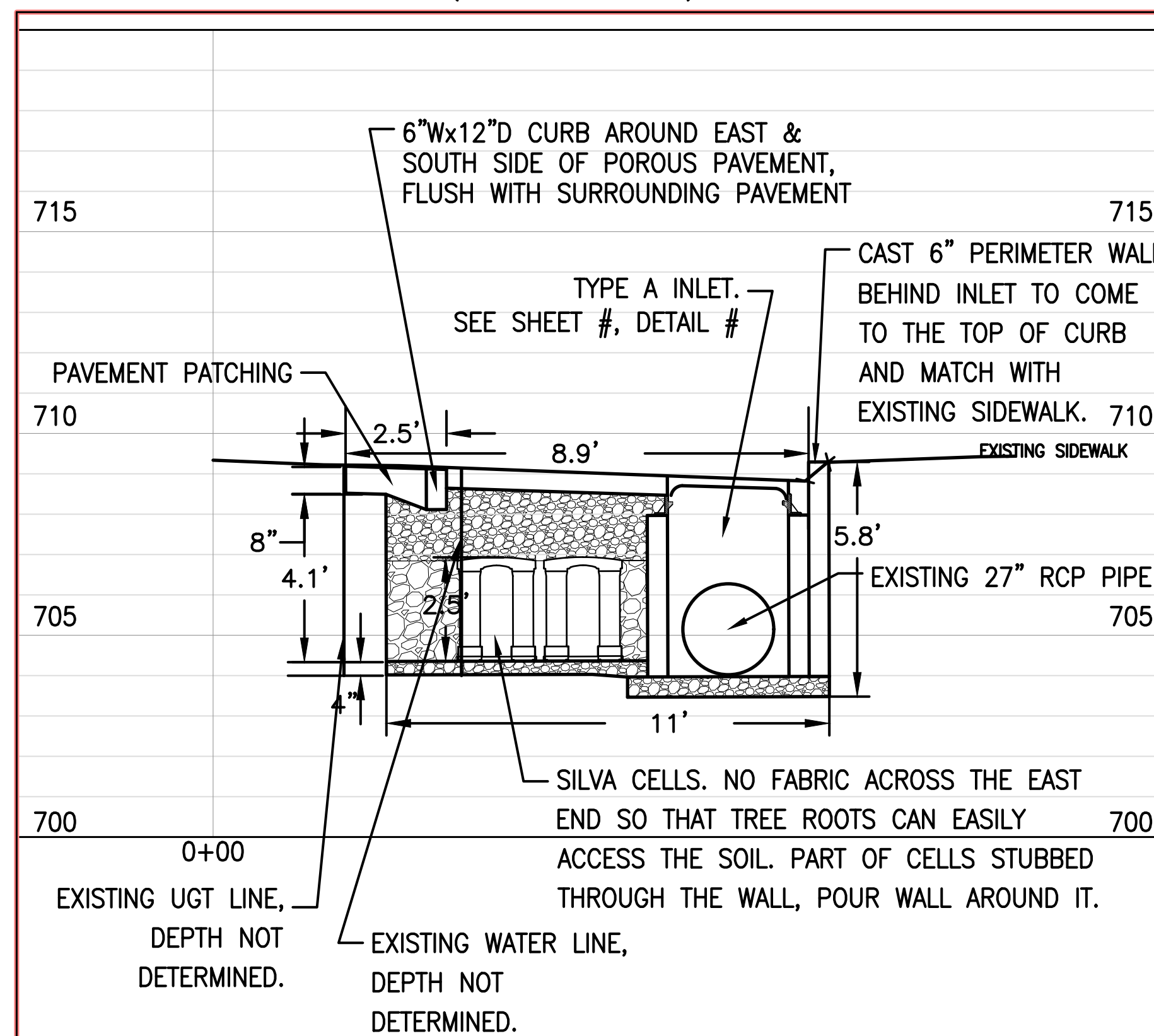
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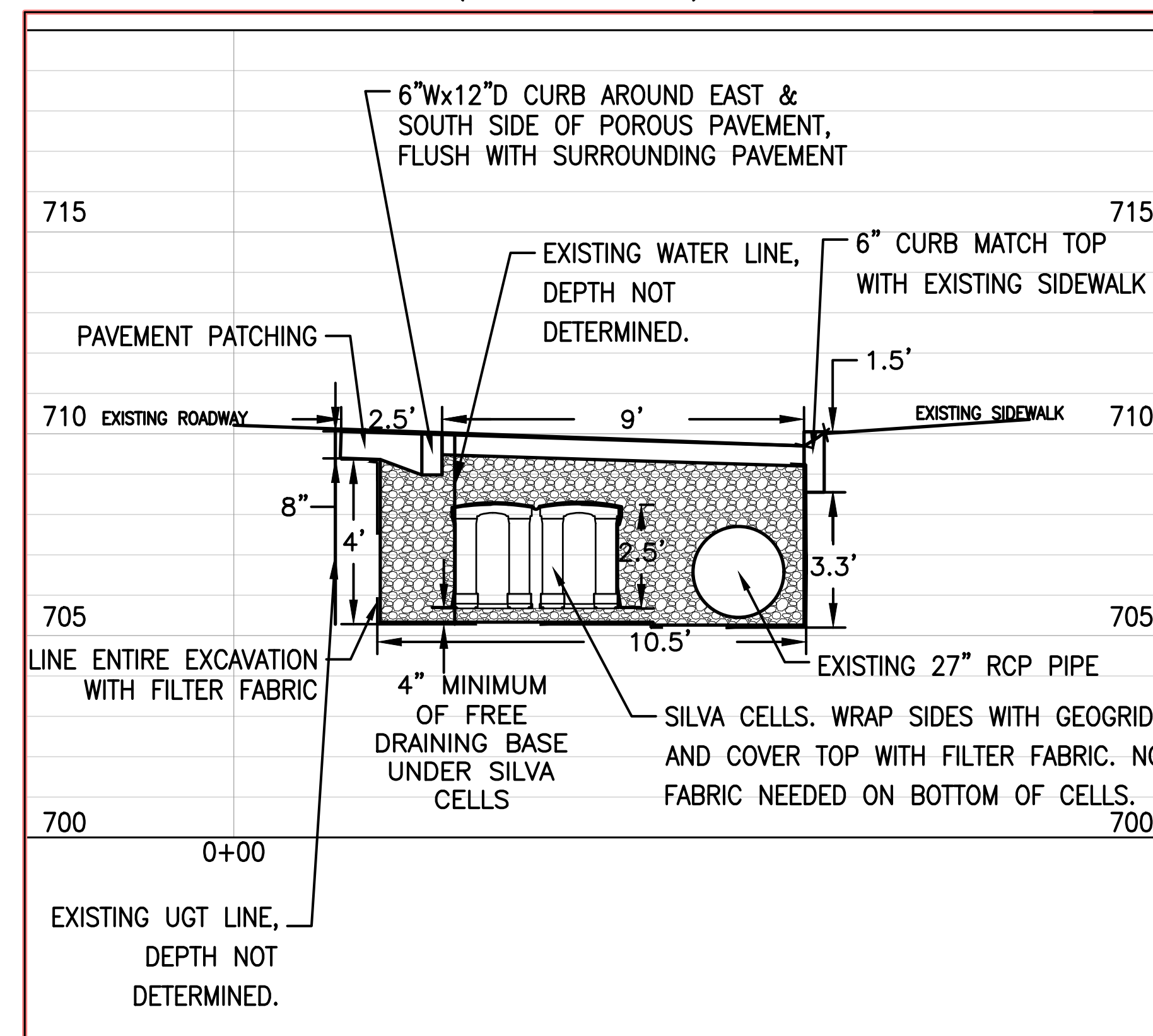
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CROSS SECTION: C1  
(SCALE: 1"=3')



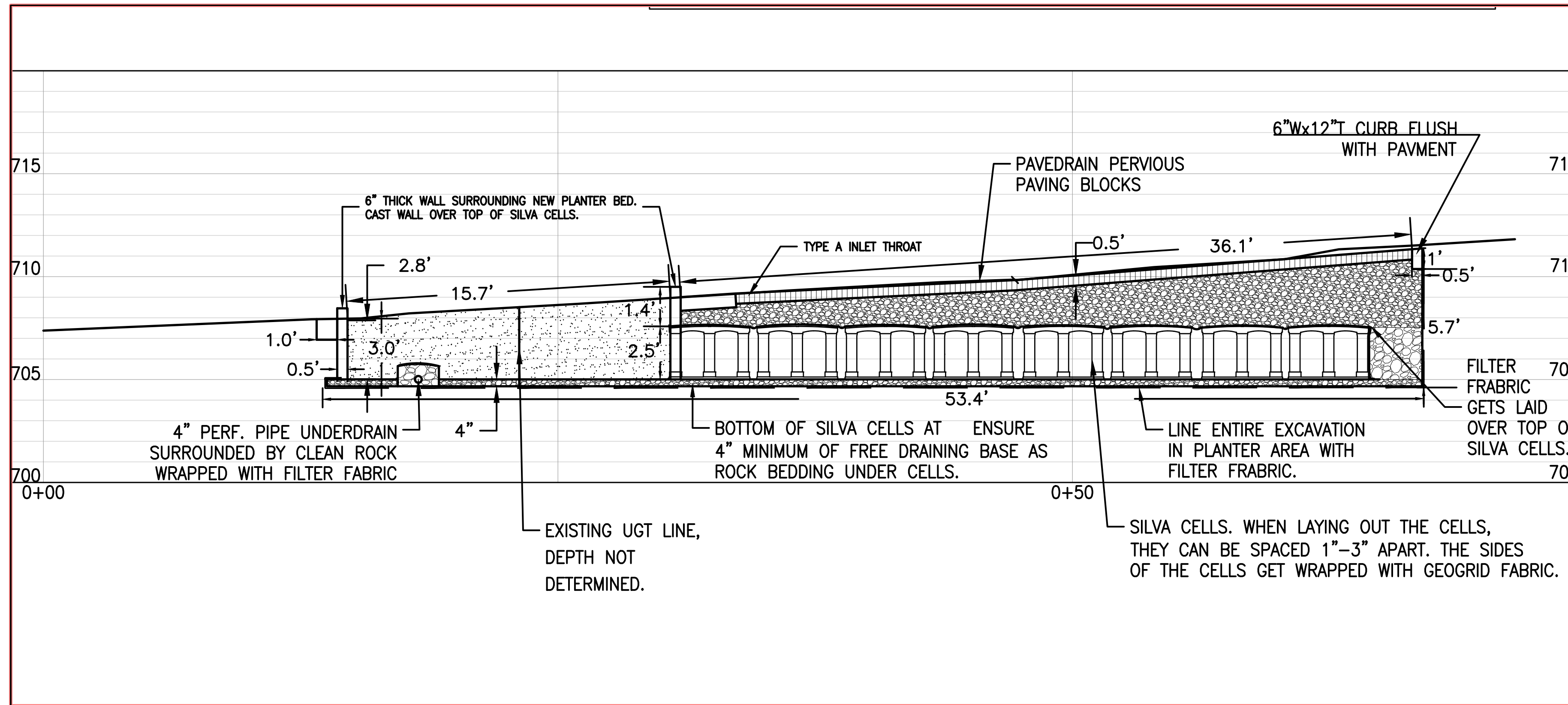
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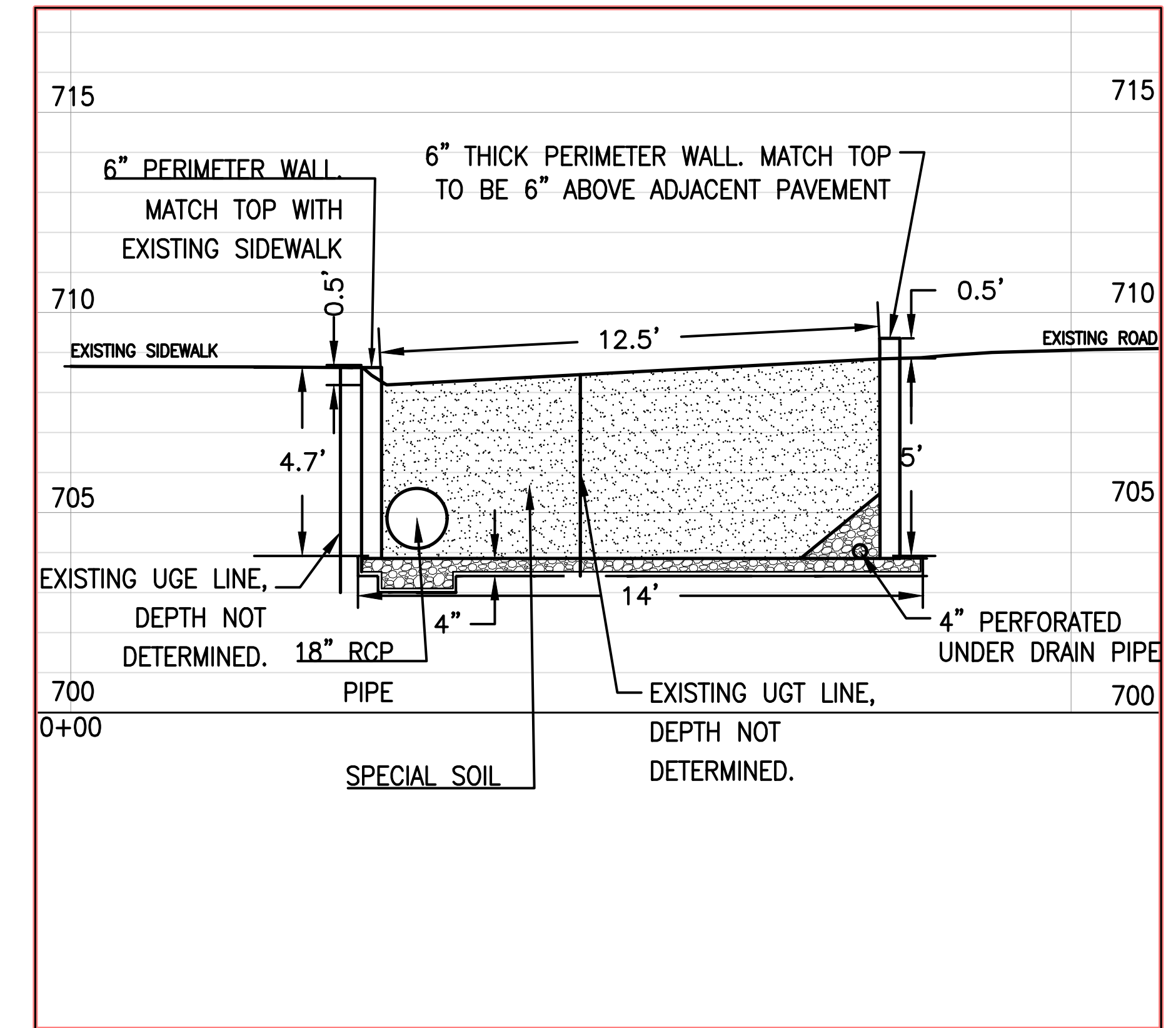
Revision	
By	
Date	
No.	
Fourth Street and Broadway Pedestrian Crossing Cross Section Sheet	
City of Columbia, Missouri	Department of Public Works
David Allen Nichols Registered Professional Engineer E-24212	
File No.	00772
Scale:	AS SHOWN
Date:	4/1/2021
Des.	E.M.F.
Dwn.	G.R.K.
Chk.	A.A.A.
Sheet 9 of 12	

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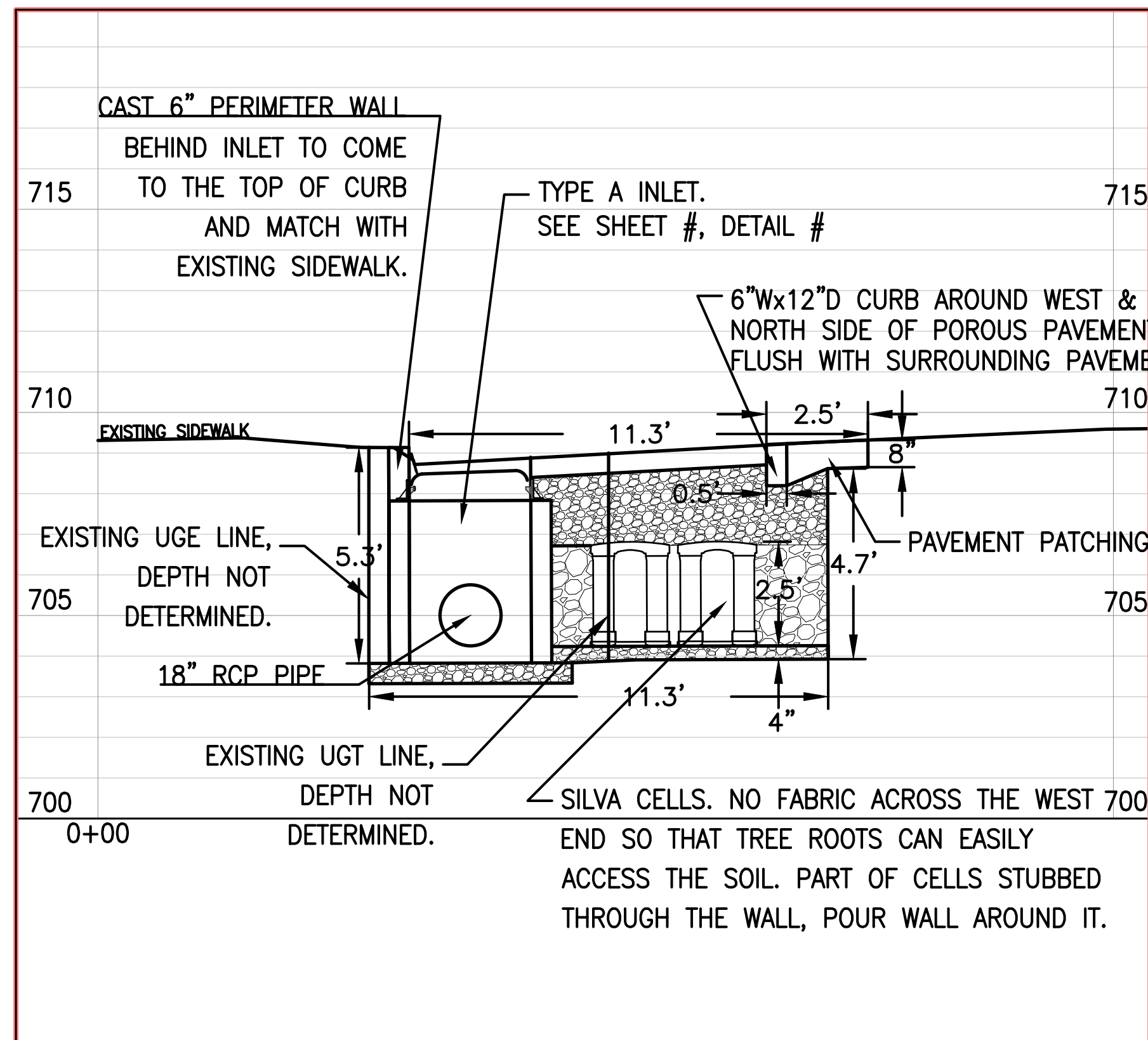
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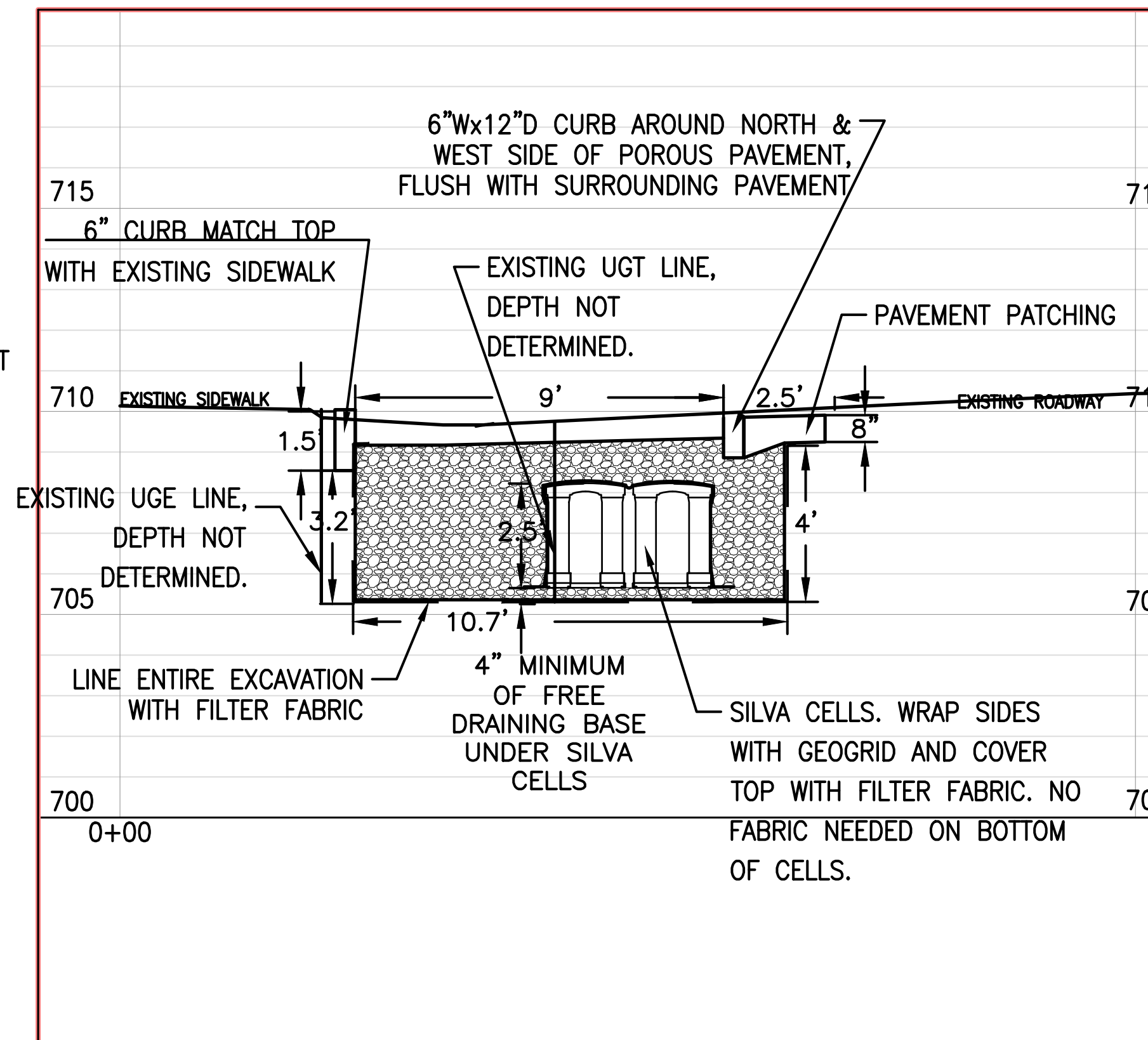
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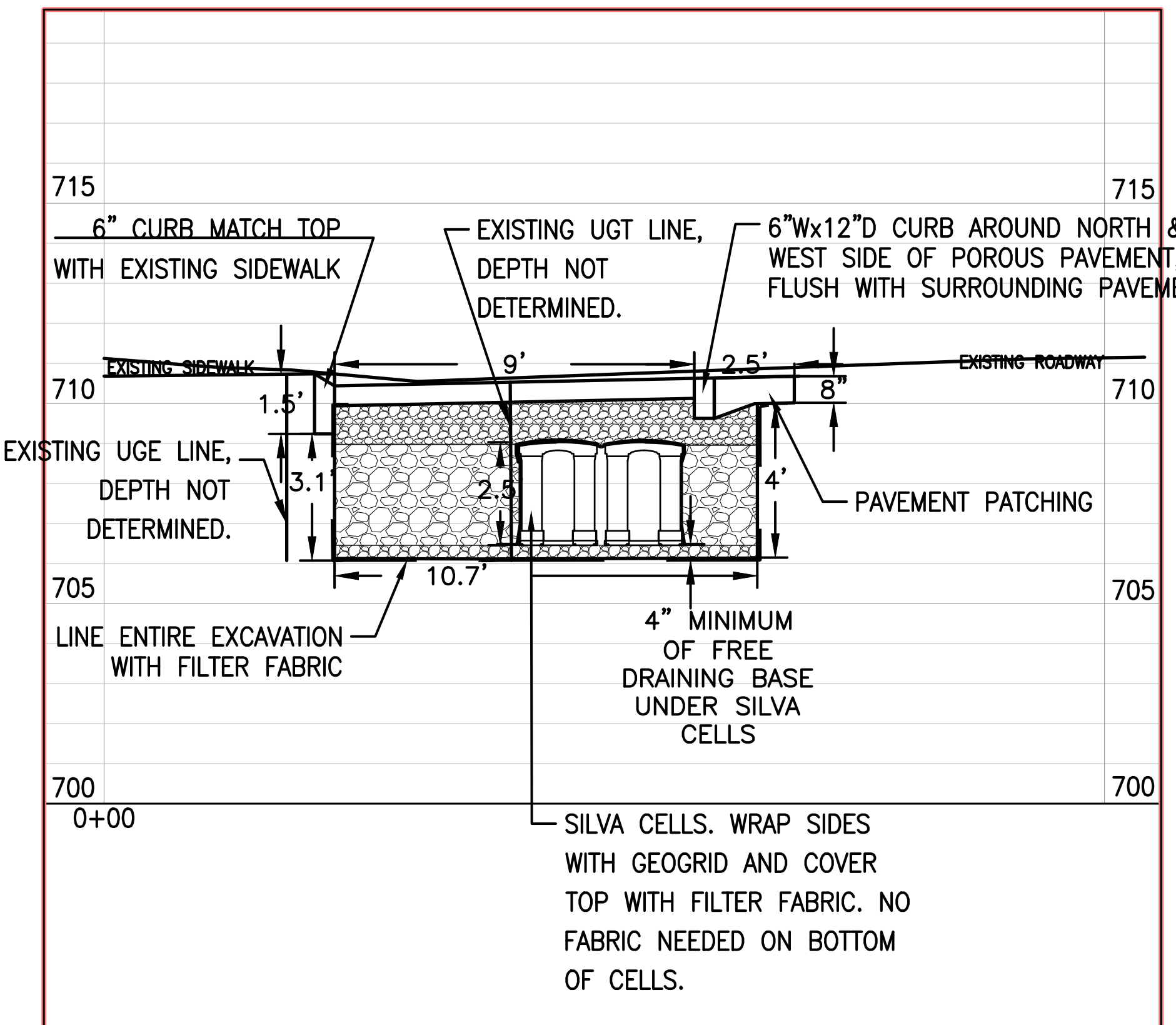
CROSS SECTION: C2  
(SCALE: 1"=3')



CROSS SECTION: D2  
(SCALE: 1"=3')



CROSS SECTION: E  
(SCALE: 1"=3')



Revision  
By  
Date  
No.

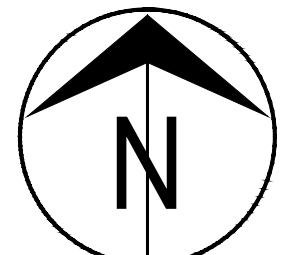
Fourth Street and Broadway  
Pedestrian Crossing  
Cross Section Sheet

City of Columbia, Missouri  
Department of Public Works

David Allen Nichols  
Registered Professional Engineer  
E-24212

File No. 00772  
Scale: AS SHOWN  
Date: 4/1/2021  
Des. E.M.F.  
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Chk. A.A.A.

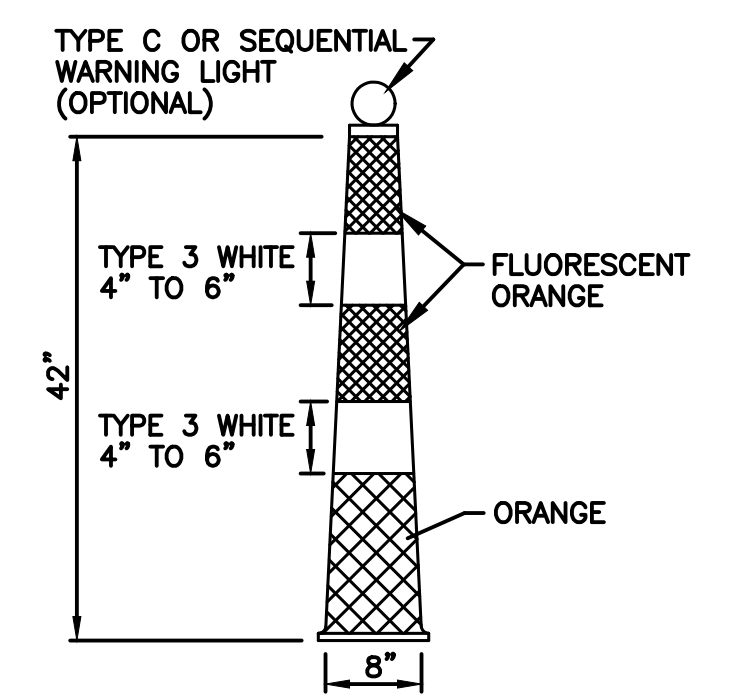
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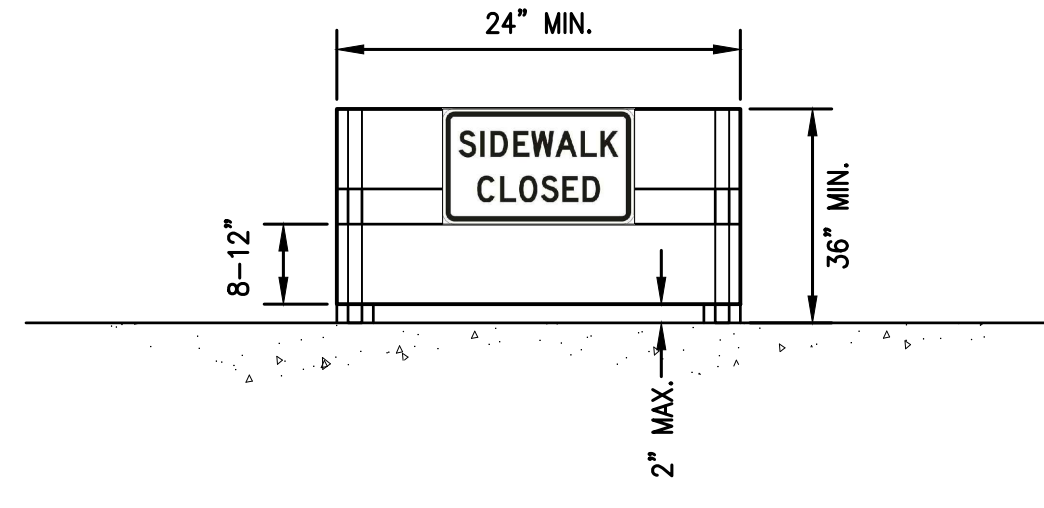
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**TRAFFIC CONTROL GENERAL NOTES:**

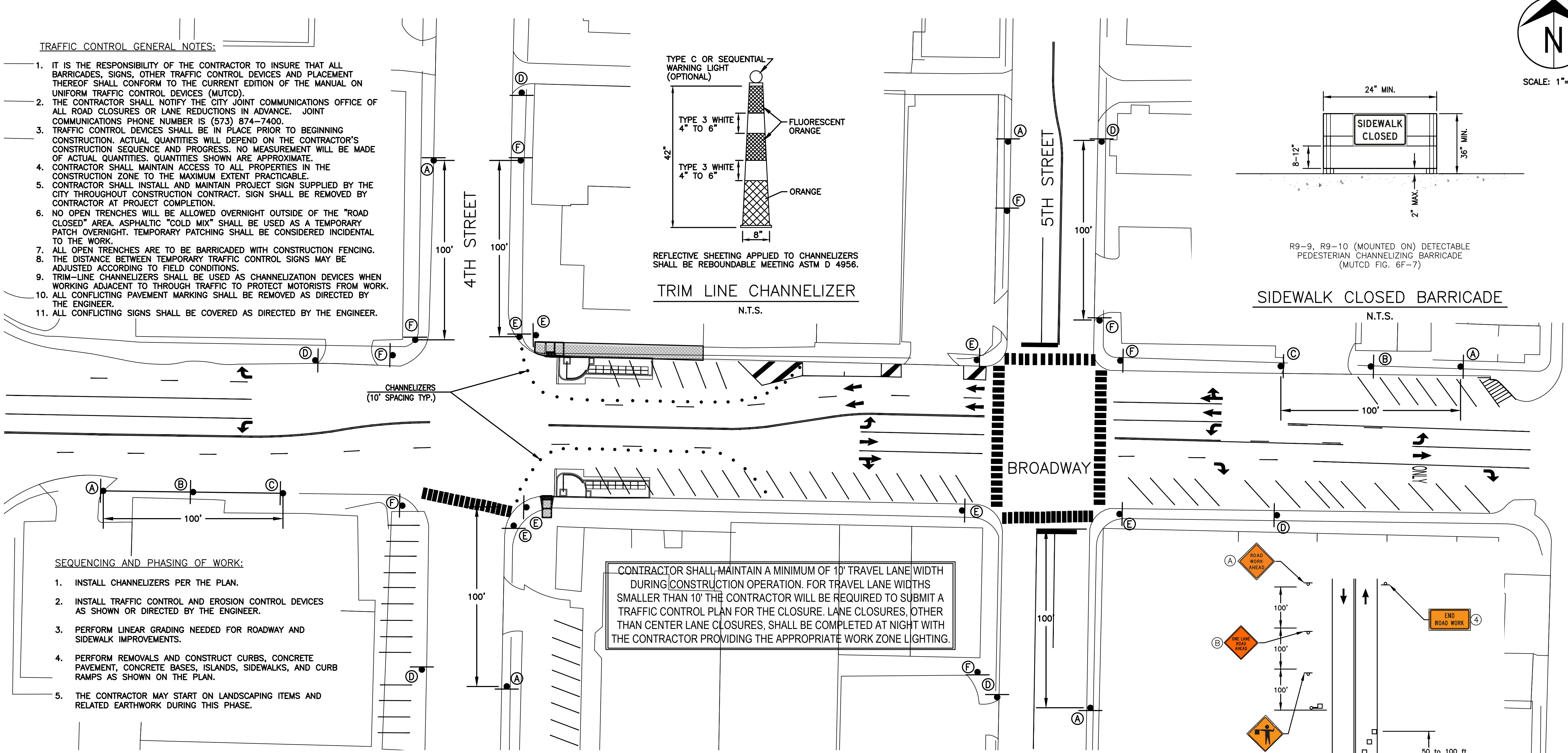
1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT ALL BARRICADES, SIGNS, OTHER TRAFFIC CONTROL DEVICES AND PLACEMENT THEREOF SHALL CONFORM TO THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. THE CONTRACTOR SHALL NOTIFY THE CITY JOINT COMMUNICATIONS OFFICE OF ALL ROAD CLOSURES OR LANE REDUCTIONS IN ADVANCE. JOINT COMMUNICATIONS PHONE NUMBER IS (573) 874-7400.
3. TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO BEGINNING CONSTRUCTION. ACTUAL QUANTITIES WILL DEPEND ON THE CONTRACTOR'S CONSTRUCTION SEQUENCE AND PROGRESS. NO MEASUREMENT WILL BE MADE OF ACTUAL QUANTITIES. QUANTITIES SHOWN ARE APPROXIMATE.
4. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES IN THE CONSTRUCTION ZONE TO THE MAXIMUM EXTENT PRACTICABLE.
5. CONTRACTOR SHALL INSTALL AND MAINTAIN PROJECT SIGN SUPPLIED BY THE CITY THROUGHOUT CONSTRUCTION CONTRACT. SIGN SHALL BE REMOVED BY CONTRACTOR AT PROJECT COMPLETION.
6. NO OPEN TRENCHES WILL BE ALLOWED OVERNIGHT OUTSIDE OF THE "ROAD CLOSED" AREA. ASPHALTIC "COLD MIX" SHALL BE USED AS A TEMPORARY PATCH OVERNIGHT. TEMPORARY PATCHING SHALL BE CONSIDERED INCIDENTAL TO THE WORK.
7. ALL OPEN TRENCHES ARE TO BE BARRICADED WITH CONSTRUCTION FENCING.
8. THE DISTANCE BETWEEN TEMPORARY TRAFFIC CONTROL SIGNS MAY BE ADJUSTED ACCORDING TO FIELD CONDITIONS.
9. TRIM-LINE CHANNELIZERS SHALL BE USED AS CHANNELIZATION DEVICES WHEN WORKING ADJACENT TO THROUGH TRAFFIC TO PROTECT MOTORISTS FROM WORK.
10. ALL CONFLICTING PAVEMENT MARKING SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
11. ALL CONFLICTING SIGNS SHALL BE COVERED AS DIRECTED BY THE ENGINEER.



REFLECTIVE SHEETING APPLIED TO CHANNELIZERS SHALL BE REBOUNDABLE MEETING ASTM D 4956.  
**TRIM LINE CHANNELIZER**  
 N.T.S.

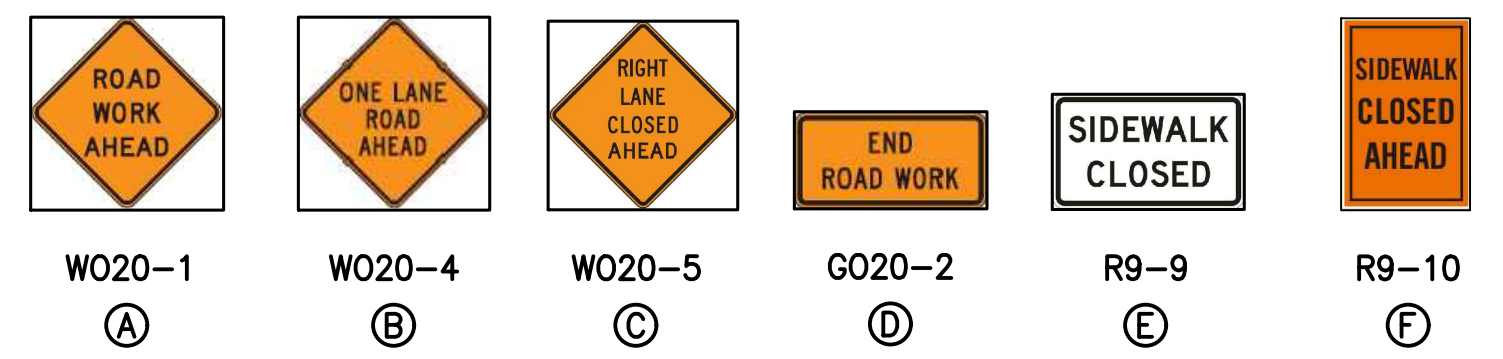


R9-9, R9-10 (MOUNTED ON) DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE (MUTCD FIG. 6F-7)  
**SIDEWALK CLOSED BARRICADE**  
 N.T.S.

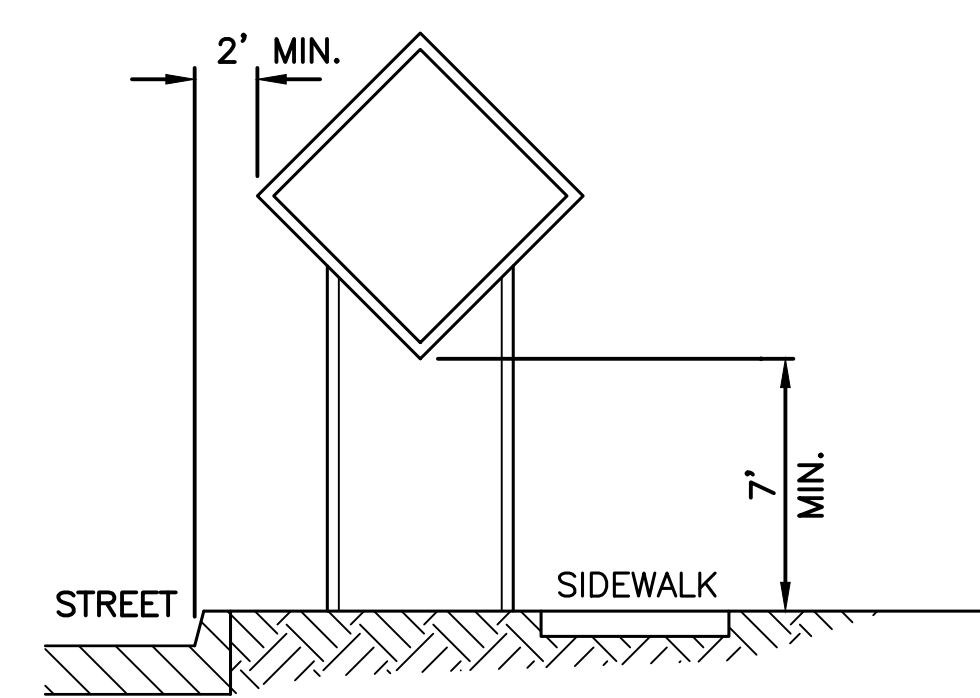


**SEQUENCING AND PHASING OF WORK:**

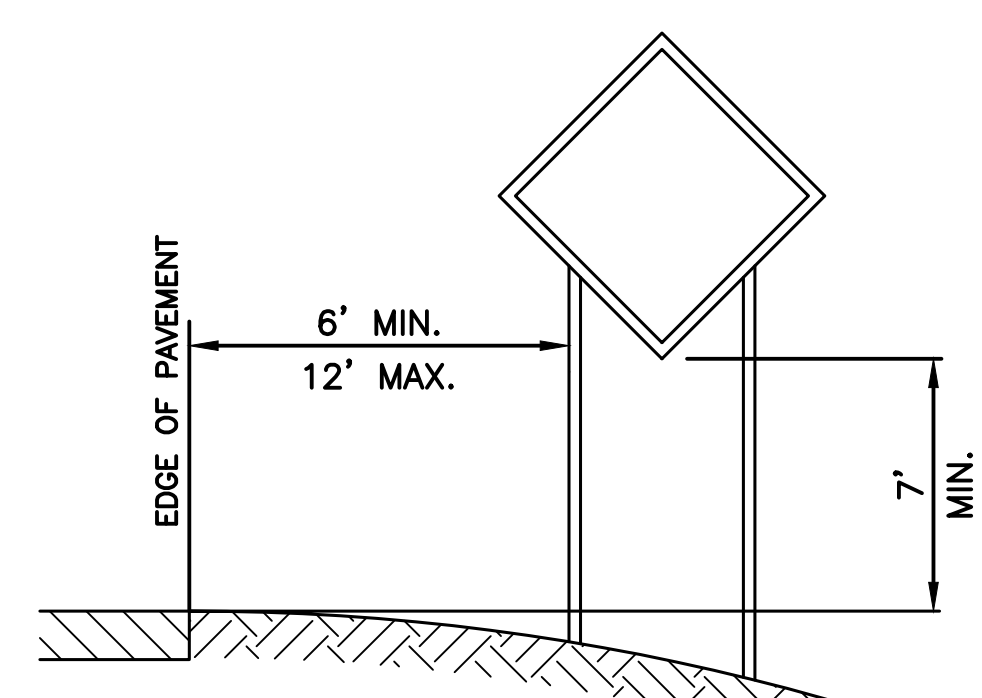
1. INSTALL CHANNELIZERS PER THE PLAN.
2. INSTALL TRAFFIC CONTROL AND EROSION CONTROL DEVICES AS SHOWN OR DIRECTED BY THE ENGINEER.
3. PERFORM LINEAR GRADING NEEDED FOR ROADWAY AND SIDEWALK IMPROVEMENTS.
4. PERFORM REMOVALS AND CONSTRUCT CURBS, CONCRETE PAVEMENT, CONCRETE BASES, ISLANDS, SIDEWALKS, AND CURB RAMPS AS SHOWN ON THE PLAN.
5. THE CONTRACTOR MAY START ON LANDSCAPING ITEMS AND RELATED EARTHWORK DURING THIS PHASE.



TRAFFIC CONTROL			
MUTCD	LEGEND	SIZE	QUANT.
(A) W020-1	"ROAD WORK AHEAD"	36" X 36"	6
(B) W020-4	"ONE LANE ROAD AHEAD"	36" X 36"	2
(C) W020-5	"RIGHT LANE CLOSED AHEAD"	36" X 36"	2
(D) G020-2	"END ROAD WORK"	36" X 18"	6
(E) R9-9	"SIDEWALK CLOSED"	24" X 12"	4
(F) R9-10	"SIDEWALK CLOSED AHEAD"	24" X 18"	8

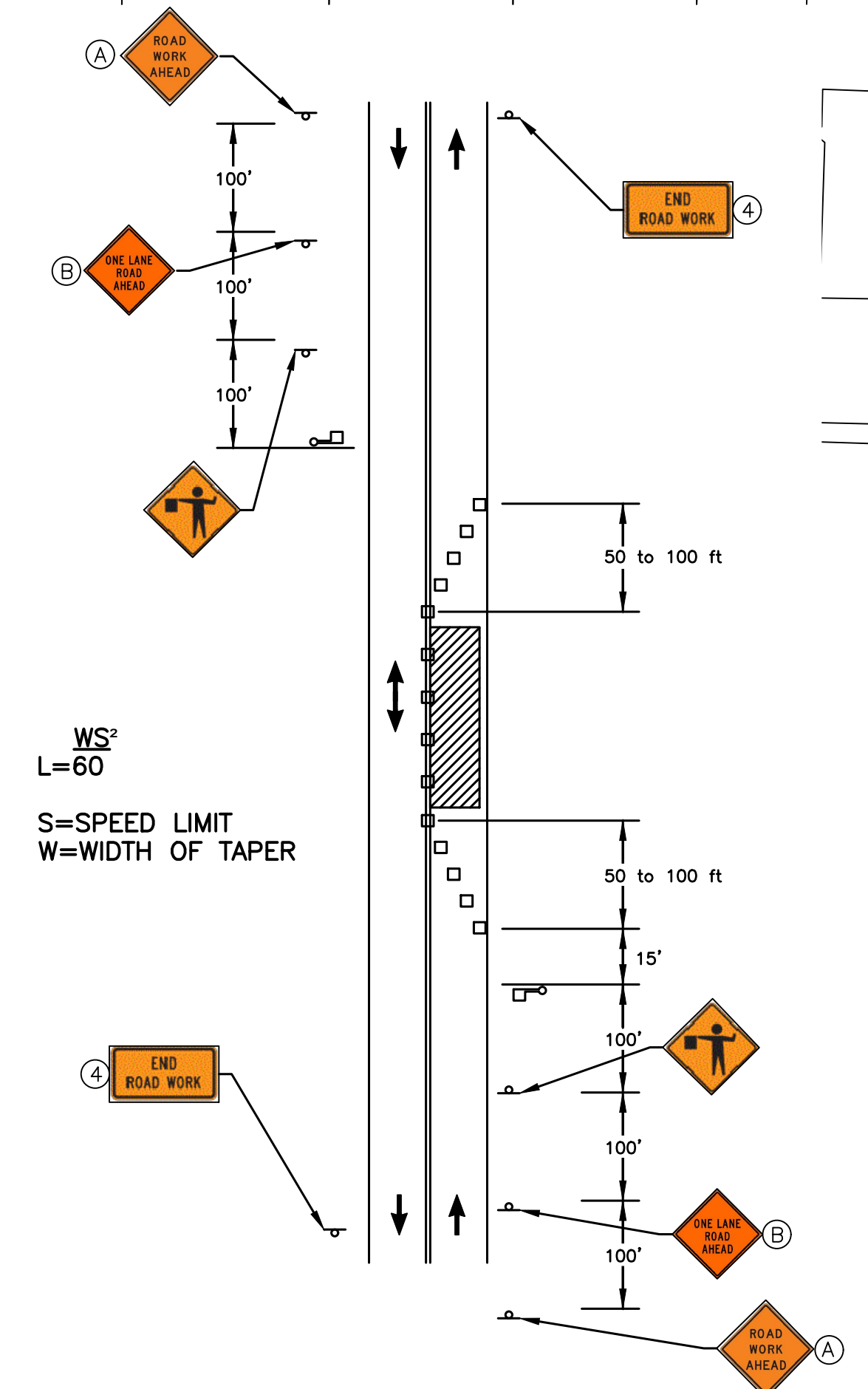


NOTE: SUPPORT POSTS SHALL NOT EXTEND ABOVE SIGN UNLESS DISTANCE PLAQUE OR WARNING LIGHTS ARE SPECIFIED.



NOTE: SUPPORT POSTS SHALL NOT EXTEND ABOVE SIGN UNLESS DISTANCE PLAQUE OR WARNING LIGHTS ARE SPECIFIED.

**SIGN MOUNTING**  
 N.T.S.



**TYPICAL LANE CLOSURE USING FLAGGERS**  
 N.T.S.

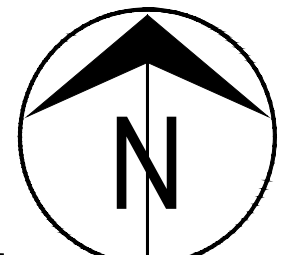
Revision	By	Date	No.

**Fourth Street and Broadway  
 Pedestrian Crossing  
 Traffic Control Plan - Phase 1**

City of Columbia, Missouri  
 Department of Public Works

David Allen Nichols  
 Registered Professional Engineer  
 E-24212

File No. 00772  
 Scale: 1" = 30'  
 Date: 04/01/2021  
 Des. E.M.F.  
 Dwn. G.R.K.  
 Chk. A.A.A.



SCALE: 1"=30'

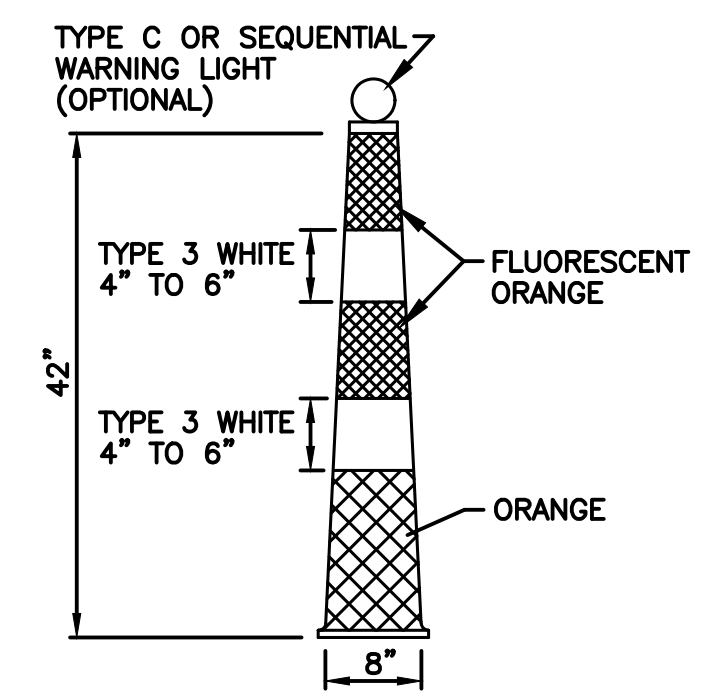
**TRAFFIC CONTROL GENERAL NOTES:**

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT ALL BARRICADES, SIGNS, OTHER TRAFFIC CONTROL DEVICES AND PLACEMENT THEREOF SHALL CONFORM TO THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. THE CONTRACTOR SHALL NOTIFY THE CITY JOINT COMMUNICATIONS OFFICE OF ALL ROAD CLOSURES OR LANE REDUCTIONS IN ADVANCE. JOINT COMMUNICATIONS PHONE NUMBER IS (573) 874-7400.
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4. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES IN THE CONSTRUCTION ZONE TO THE MAXIMUM EXTENT PRACTICABLE.
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9. TRIM-LINE CHANNELIZERS SHALL BE USED AS CHANNELIZATION DEVICES WHEN WORKING ADJACENT TO THROUGH TRAFFIC TO PROTECT MOTORISTS FROM WORK.
10. ALL CONFLICTING PAVEMENT MARKING SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
11. ALL CONFLICTING SIGNS SHALL BE COVERED AS DIRECTED BY THE ENGINEER.

4TH STREET  
100'

5TH STREET  
100'

BROADWAY



CHANNELIZERS  
(10' SPACING TYP.)

CONTRACTOR SHALL MAINTAIN A MINIMUM OF 10' TRAVEL LANE WIDTH DURING CONSTRUCTION OPERATION. FOR TRAVEL LANE WIDTHS SMALLER THAN 10' THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN FOR THE CLOSURE. LANE CLOSURES, OTHER THAN CENTER LANE CLOSURES, SHALL BE COMPLETED AT NIGHT WITH THE CONTRACTOR PROVIDING THE APPROPRIATE WORK ZONE LIGHTING.

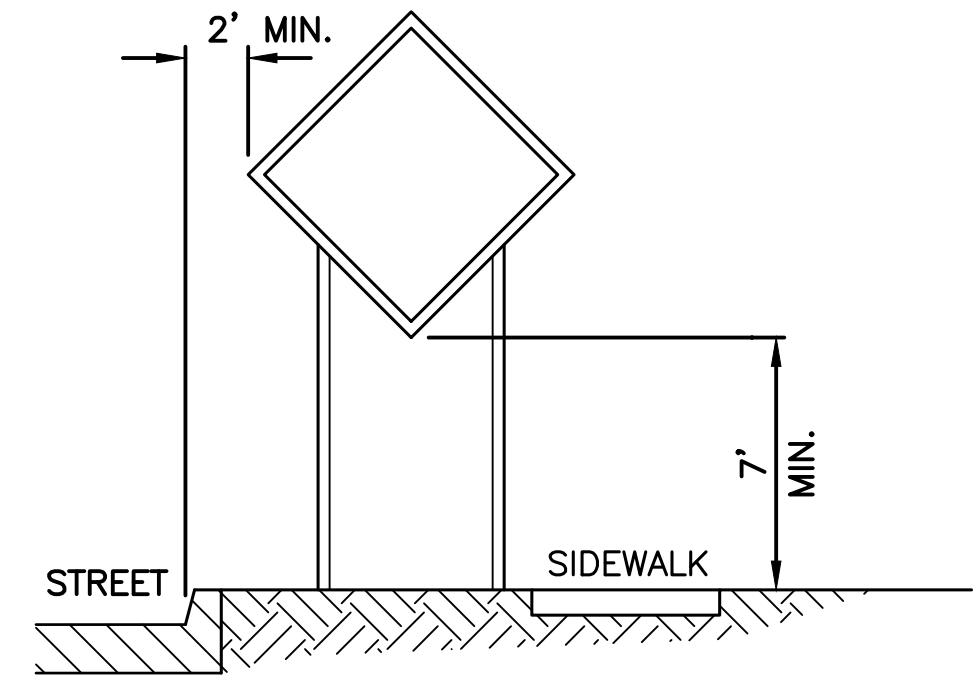
**SEQUENCING AND PHASING OF WORK:**

1. INSTALL CHANNELIZERS PER THE PLAN.
2. ALL PAVEMENT MARKINGS, SIGNS AND PERMANENT SIGNAGES MUST BE COMPLETED.
3. THE CONTRACTOR SHALL COMPLETE LANDSCAPING ITEMS AND RELATED EARTHWORK DURING THIS PHASE.

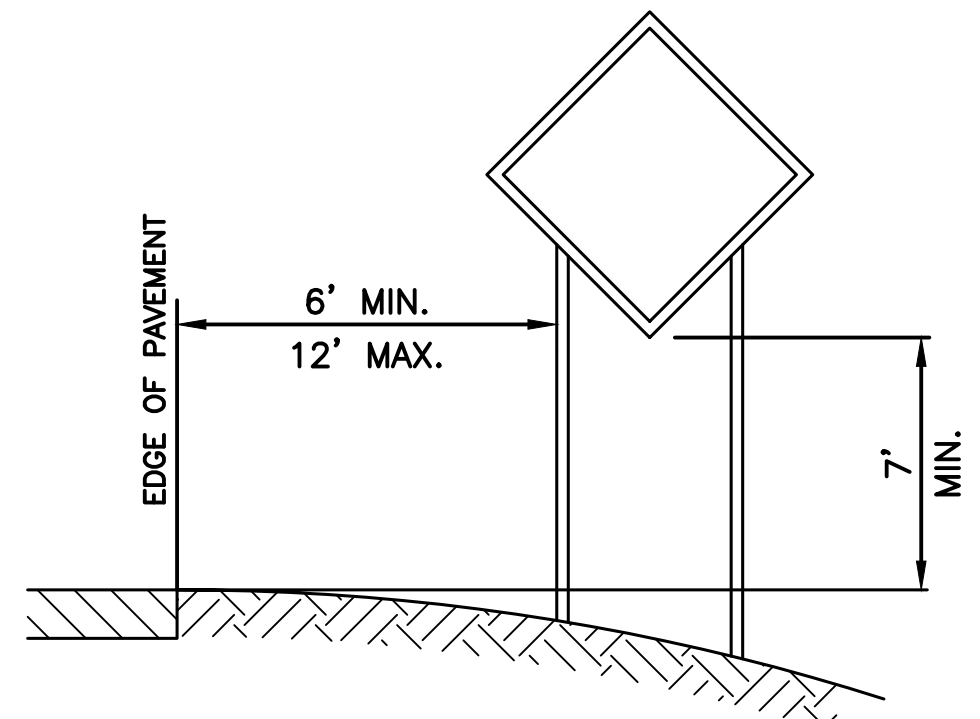


WO20-1 (A)    WO20-4 (B)    WO20-5 (C)    GO20-2 (D)

TRAFFIC CONTROL			
MUTCD	LEGEND	SIZE	QUANT.
(A) WO20-1	"ROAD WORK AHEAD"	36" X 36"	6
(B) WO20-4	"ONE LANE ROAD AHEAD"	36" X 36"	2
(C) WO20-5	"RIGHT LANE CLOSED AHEAD"	36" X 36"	2
(D) GO20-2	"END ROAD WORK"	36" X 18"	6

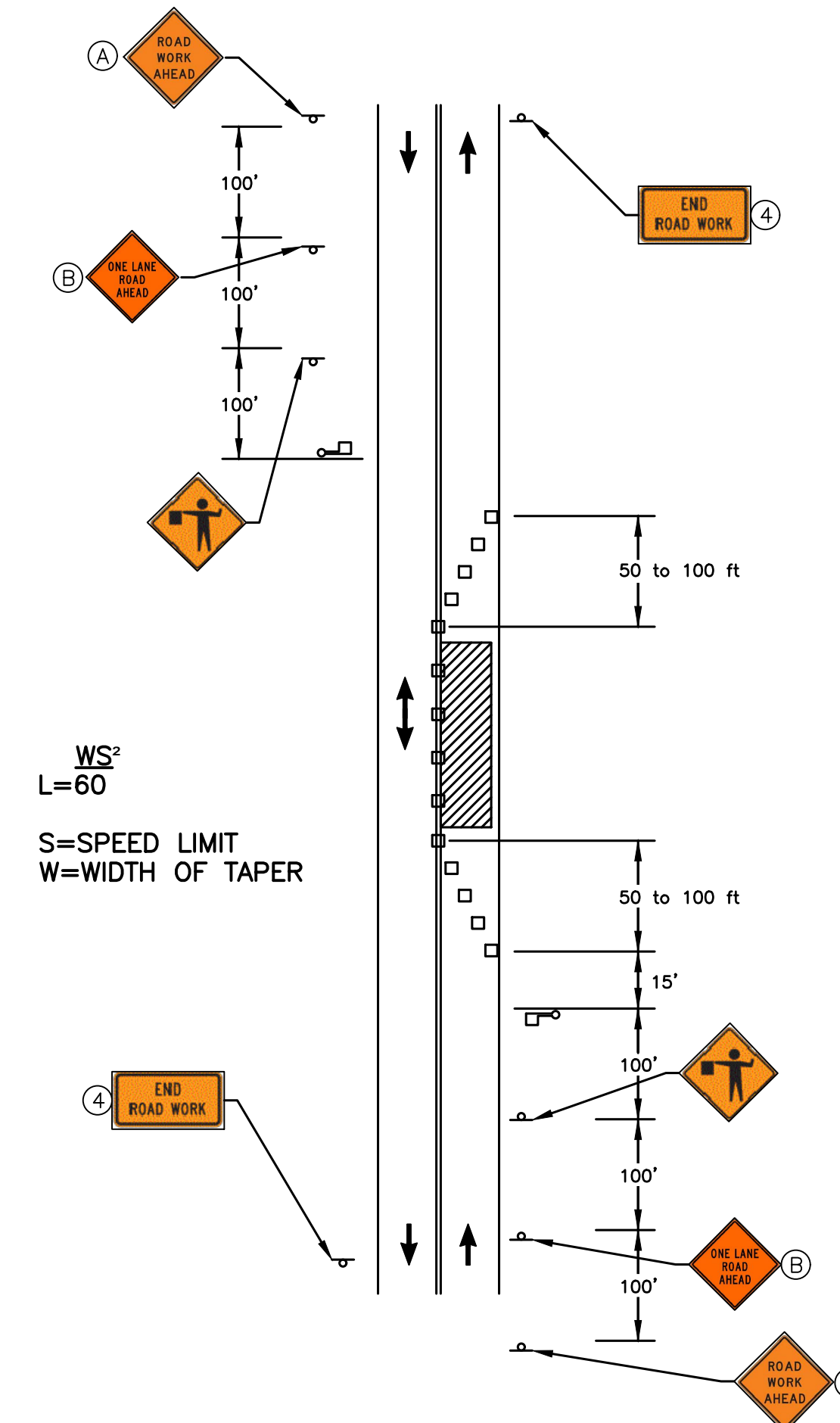


NOTE: SUPPORT POSTS SHALL NOT EXTEND ABOVE SIGN UNLESS DISTANCE PLAQUE OR WARNING LIGHTS ARE SPECIFIED.



NOTE: SUPPORT POSTS SHALL NOT EXTEND ABOVE SIGN UNLESS DISTANCE PLAQUE OR WARNING LIGHTS ARE SPECIFIED.

**SIGN MOUNTING**  
N.T.S.



**TYPICAL LANE CLOSURE USING FLAGGERS**  
N.T.S.

Revision	
By	
Date	
No.	

**Fourth Street and Broadway  
Pedestrian Crossing  
Traffic Control Plan - Phase 2**

City of Columbia, Missouri  
Department of Public Works

David Allen Nichols  
Registered Professional Engineer  
E-24212