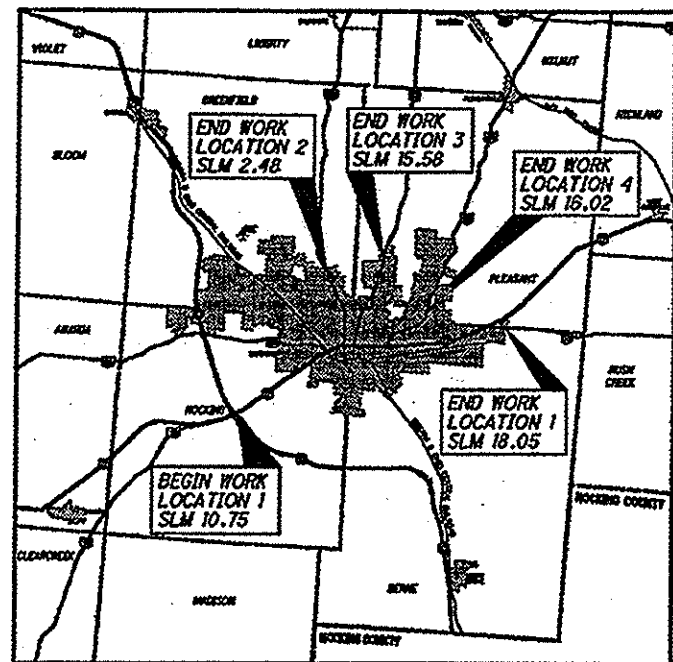


STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

FAI-22/VAR-10.75/VAR
CITY OF LANCASTER
GREENFIELD, HOCKING, BERNE
AND PLEASANT TOWNSHIPS
FAIRFIELD COUNTY

PROJECT DESCRIPTION:
ASPHALT CONCRETE RESURFACING AND RELATED
WORK ON U.S. 22, S.R. 37, S.R. 158 AND S.R.
188 WITHIN THE CITY OF LANCASTER.

Project Earth Disturbed Area =
N/A (Maintenance Project)
Estimated Contractor Earth Disturbed Area =
N/A (Maintenance Project)
Notice of Intent Earth Disturbed Area =
N/A (Maintenance Project)



LOCATION MAP

LATITUDE: 39° 42' 49" LONGITUDE: 82° 35' 40"

PORTION TO BE IMPROVED -----

DESIGN DESIGNATION	LOCATION 1 U.S. 22	LOCATION 2 S.R. 158	LOCATION 3 S.R. 37	LOCATION 4 S.R. 188
Functional Classification	RMA/UPA	UMA	UPA	UMA
Opening Year ADT (2013)	20,000	12,000	9,900	12,000
Design Year ADT (2025)	22,000	14,000	12,000	13,000
Design Hourly Volume (2025)	2,200	1,700	1,100	1,200
Directional Distribution	53%	53%	53%	53%
Trucks (24 Hour B&C)	4%	2%	4%	6%
Design Speed	35-55mph	25-35mph	35-50mph	35mph
Legal Speed	35-55mph	25-35mph	35-50mph	35mph

RMA = RURAL MINOR ARTERIAL
UMA = URBAN MINOR ARTERIAL
UPA = URBAN PRINCIPAL ARTERIAL

DESIGN EXCEPTIONS: NONE

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 5 PLANNING & ENGINEERING

ENGINEER'S SEAL

SIGNED: *Douglas N. Morgan*
DATE: 4-01-2013

INDEX OF SHEETS:

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STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	4-20-12	TC-41.20	1-19-01	800	4-19-13
BP-4.1	7-16-04	TC-42.20	1-21-11	823	7-20-12
BP-5.1	7-28-00	TC-52.20	1-18-13	832	5-5-09
		TC-65.10	4-20-12		
MT-95.31	7-20-12	TC-65.11	4-20-12		
MT-95.32	7-20-12	TC-71.10	10-19-12		
MT-97.10	7-20-12	TC-73.10	4-20-12		
MT-97.12	7-20-12	TC-82.10	1-18-13		
MT-99.20	7-20-12				
MT-101.90	10-19-12				
MT-105.10	7-20-12				
				SPECIAL PROVISIONS	

LOCATION	COUNTY	ROUTE	BEGIN S.L.M.	END S.L.M.	LENGTH MILES	CITY/VILLAGE
1a	FAL.	22	10.75	11.96	1.21	LANCASTER
1b	FAL.	22	11.96	13.16	1.20	LANCASTER
1c	FAL.	22	13.16	18.05	4.89	LANCASTER
2	FAL.	158	0.29	2.48	2.19	LANCASTER
3a	FAL.	37	12.92	13.69	0.77	LANCASTER
3b	FAL.	37	13.69	14.40	0.71	LANCASTER
3c	FAL.	37	14.40	15.58	1.18	LANCASTER
4	FAL.	188	14.48	16.02	1.54	LANCASTER

2013 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PANS AND ESTIMATES.

APPROVED: *Brad Fagnell*
DATE: 3/29/13 CITY ENGINEER

APPROVED: *[Signature]*
DATE: 3/29/13 SERVICE SAFETY DIRECTOR

APPROVED: *[Signature]*
DATE: 4/1/13 DISTRICT DEPUTY DIRECTOR

APPROVED: *[Signature]*
DATE: 4-8-13 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FAI - US-22/VAR-10.75/VAR
130419 PID - 83108 Contract Proposal Available @ www.
Dist 5 6/27/2013 contracts.dot.state.oh.us/home

FEDERAL PROJECT NO. E080(427)
PID NO. 83108
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT INDIANA & OHIO CENTRAL RAILROAD
FAI-22/VAR-10.75/VAR
1/71

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE A3 INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF TWENTY ONE (21) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND OR ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (614) 887-4510 OR EMAIL AT D05.PIO@DOT.STATE.OH.US

DISTRICT PERMIT SECTION BY FAX AT (614) 887-4525 OR EMAIL AT BRIAN.BOSCH@DOT.STATE.OH.US

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614) 728-4099 OR EMAIL AT HAULING.PERMITS@DOT.STATE.OH.US

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS, VIA MEDIA SOURCES.

PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN IN THE PLANS ARE TAKEN FROM EXISTING MARKINGS. THE CONTRACTOR SHALL DOCUMENT ALL OF THE EXISTING PAVEMENT MARKING LOCATIONS THAT WILL BE REMOVED/OBLITERATED DURING THIS PROJECT. THE CONTRACTOR SHALL PLACE NEW PAVEMENT MARKINGS AT THE LOCATION OF THE EXISTING MARKINGS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DOCUMENTATION OF PAVEMENT MARKING SHALL BE SUPPLIED TO THE ENGINEER BEFORE COMMENCEMENT OF ANY OPERATION WHICH WILL REMOVE/OBLITERATE MARKINGS. THE METHOD OF DOCUMENTATION SHALL BE APPROVED BY THE ENGINEER IN ORDER TO PROVIDE AN ACCEPTABLE TOLERANCE BETWEEN THE EXISTING AND PROPOSED PAVMENT MARKINGS.

REMOVAL OF LOOP DETECTORS

THE CONTRACTOR SHALL NOTIFY THE TRAFFIC CONTROL SUPERVISOR AT THE LANCASTER TRANSPORTATION DEPARTMENT (voice 740.687.6668, fax 740.687.6694) 48 HOURS BEFORE BEGINNING PLANING OR TRENCHING OPERATIONS ON ANY STREET SECTION WITH PAVEMENT LOOP DETECTORS. UNLESS THE ENGINEER DIRECTS OTHERWISE, REPLACEMENT LOOPS SHALL BE INSTALLED IN THE PAVEMENT AFTER PLANING OPERATIONS BUT BEFORE THE FINAL WEARING COURSE IS PLACED.

PAVING AT RAILROAD CROSSING

WORK THE CROWN OUT OF THE PROPOSED PAVEMENT ON EACH SIDE OF THE RAILROAD CROSSING, BEGINNING 50 FEET FROM THE NEAREST RAIL, BY RAISING THE EDGES OF THE NEW PAVEMENT TO MEET THE PLATFORM ELEVATION.

ITEM 202, WEARING COURSE REMOVED, AS PER PLAN

THIS ITEM SHALL BE USED TO REMOVE ASPHALT FROM BRIDGE APPROACH SLABS. THE ASPHALT SHALL BE COMPLETELY REMOVED FROM CONCRETE SURFACE. AFTER ASPHALT REMOVAL, THE SLABS SHALL BE INSPECTED FOR DETERIORATION. AREAS OF DETERIORATION SHALL BE REMOVED AS PER SPECIFICATION 519.03. REPAIR AREA SHALL BE TACKED AND THE REPLACEMENT MATERIAL SHALL BE ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448) PLACED AND COMPACTED AS DIRECTED BY THE ENGINEER. ASPHALT AND CONCRETE REMOVAL SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 202 WEARING COURSE REMOVED, AS PER PLAN. A CONTINGENCY QUANTITY OF ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448) IS CARRIED TO THE SUB-SUMMARY FOR THE PURPOSE DESCRIBED ABOVE.

ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448)
LOCATION 1c – 5 CU.YD.

ITEM 202, CURB REMOVED

A CONTINGENCY QUANTITY OF CURB, TYPE 6 HAS BEEN PROVIDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO REPAIR EXISTING CURB. THE FOLLOWING CONTINGENCY QUANTITY OF CURB REMOVED SHALL BE USED TO REMOVE THE DETERIORATED EXISTING CURB. THE CONTRACTOR SHALL NOT REMOVE ANY STONE CURB. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES.

ITEM 202, CURB REMOVED, TYPE 6
LOCATION 1b – 50 FT, LOCATION 1c – 800 FT, LOCATION 2 – 100 FT
LOCATION 3c – 100 FT, LOCATION 4 – 50 FT

ITEM 204, UNSTABLE SUBGRADE SOIL REPAIRS

IF UNSTABLE SUBGRADE SOILS ARE FOUND IN THE ROADBED AREA, THEY SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL AS DIRECTED BY THE ENGINEER. THE ENGINEER SHALL DETERMINE ACTUAL LOCATIONS AND DIMENSIONS OF THIS WORK.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE LOCATION 1c SUB-SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR THE ABOVE DESCRIBED WORK:

ITEM 204, EXCAVATION OF SUBGRADE **30 CU. YD.**
ITEM 204, GRANULAR MATERIAL, TYPE F **30 CU. YD.**
ITEM 204, GEOTEXTILE FABRIC **50 SQ. YD.**

ITEM 209, PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA 10 INCHES WIDE, BEGINNING AT THE EDGE OF THE PAVED ROADWAY, TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE. IF NECESSARY, EXCAVATE THE GRADED AREA TO THE DEPTH NECESSARY TO CONSTRUCT THE SAFETY EDGE. COMPACT THE GRADED SHOULDER ACCORDING TO 617.05, OR AS DIRECTED BY THE ENGINEER.

ITEM 209, LINEAR GRADING

IN ORDER TO PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING ROADWAY SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE TO PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER.

ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ALL EQUIPMENT, LABOR, OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 209 LINEAR GRADING.

THIS WORK MAY BE INTERMITTENT AND SPREAD THROUGHOUT THE PROJECT LIMITS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL ONLY BE PAID FOR INTERSECTIONS AND GAPS IF THEY ARE WITHIN THE LIMITS OF A SECTION MARKED BY THE ENGINEER FOR GRADING.

ALL LINEAR GRADING WORK SHALL BE DONE BEFORE PLACING THE ASPHALT SURFACE COURSE

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES FOR THE ABOVE PURPOSES.

ITEM 209, LINEAR GRADING
LOCATION 1a – 2.42 MILE **LOCATION 1b – 2.36 MILE**
LOCATION 1c – 3.74 MILE **LOCATION 2 – 1.48 MILE**
LOCATION 3a – 1.51 MILE **LOCATION 3b – 1.42 MILE**
LOCATION 3c – 0.52 MILE

ITEM 253, PAVEMENT REPAIR, AS PER PLAN

AN ESTIMATED QUANTITY FOR PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLANS TO BE USED AS DIRECTED BY THE ENGINEER. THE PAVEMENT ON U.S. 22 FROM COLUMBUS STREET TO HIGH STREET SHALL NOT BE REPAIRED USING THIS ITEM. REPAIRS SHALL BE MADE PRIOR TO PAVING OPERATIONS. REPAIRS SHALL BE MADE TO THOSE AREAS DESIGNATED BY THE ENGINEER. THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED OR TO CORRECT PREVIOUS UTILITY PATCHES WHICH HAVE COMPLETELY FAILED. REPAIRS TO UTILITY PATCHES SHALL EXTEND 1 FOOT BEYOND THE VISIBLE PATCH IN ALL DIRECTIONS. SURFACE IRREGULARITIES SHALL NOT BE REPAIRED USING THIS ITEM. THE DEPTH OF REPAIRS SHALL BE 7" MEASURED FROM THE EXISTING PAVEMENT SURFACE. THE MINIMUM WIDTH SHALL BE 4 FT. AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH 407 TACK COAT. REPLACEMENT MATERIAL SHALL BE ITEM 302 BITUMINOUS AGGREGATE BASE PLACED IN MAXIMUM LIFTS OF 3.5-INCHES. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ODOT CMS ITEM 253, PAVEMENT REPAIR.

ALL EXCAVATION, MATERIAL, LABOR, EQUIPMENT, TOOLS TRAFFIC CONTROL AND INCIDENTALS NEEDED TO PERFORM THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 253, PAVEMENT REPAIR, AS PER PLAN.

THE FOLLOWING QUANTITIES HAS BEEN CARRIED TO THE SUB-SUMMARIES TO BE USED AS DIRECTED BY THE ENGINEER FOR THE ABOVE DESCRIBED WORK:

ITEM 253, PAVEMENT REPAIR, AS PER PLAN

LOCATION 1c – 463 CU. YD.
LOCATION 2 – 186 CU. YD.
LOCATION 3c – 40 CU. YD.
LOCATION 4 – 37 CU. YD.

CALCULATED
JLS
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GENERAL NOTES

FAI-22/ VAR-10.75 / VAR

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ITEM 202, WALK REMOVED, AS PER PLAN (B)

THIS ITEM SHALL CONSIST OF REMOVING AND DISPOSING OF EXISTING CONCRETE WALK AND CONCRETE DRIVE APRON AT THE LOCATION SHOWN ON SHEET 35a. IN ADDITION TO THE REQUIREMENTS OF CMS 202.05, THIS ITEM SHALL INCLUDE THE COST FOR THE ADDITIONAL EXCAVATION NEEDED TO REMOVE THE EXISTING CONCRETE DRIVE APRON(S).

PAYMENT FOR ITEM 202, WALK REMOVED, AS PER PLAN (B), SHALL BE AT THE CONTRACT UNIT PRICE PER SQUARE FOOT OF WALK REMOVED, INCLUDING ALL OF THE LABOR, MATERIALS AND EQUIPMENT NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE.

ITEM 203, EMBANKMENT, AS PER PLAN

THIS ITEM SHALL CONSIST OF PLACING EMBANKMENT UNDER AND ADJACENT TO THE PROPOSED SIDEWALK SHOWN ON SHEET 35a. IN ADDITION TO THE REQUIREMENTS OF CMS 203, THE CONTRACTOR SHALL FURNISH AND INSTALL LANDSCAPING GRAVEL (2" THICK) AT THE LOCATION SHOWN ON SHEET 35a. THE LANDSCAPING GRAVEL SHALL MATCH THE EXISTING LANDSCAPING GRAVEL, ALREADY IN PLACE, IN AN AREA ADJACENT TO THE PROPOSED AREA.

PAYMENT FOR ITEM 203, EMBANKMENT, AS PER PLAN, SHALL BE AT THE CONTRACT UNIT PRICE PER CUBIC YARD OF EMBANKMENT, INCLUDING ALL OF THE LABOR, MATERIALS AND EQUIPMENT NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE.

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE

DEPTH OF PLANING VARIES BETWEEN 1.25" AND 3.0" AND SHALL BE AS SHOWN ON THE ASPHALT CONCRETE DATA SHEETS. PLANING SHALL BE FULL WIDTH OF PAVEMENT INCLUDING PAVED SHOULDERS. THE ROADWAY SHALL BE PLANED SUCH THAT POSITIVE DRAINAGE IS CREATED FROM THE CENTER LINE TO THE EDGE OF PAVEMENT IN TANGENT SECTIONS AND SHALL FOLLOW EXISTING SUPERELEVATIONS WHERE APPLICABLE. ALL REQUIREMENTS OF ITEM 254 SHALL APPLY.

ITEM 690, SPECIAL-MISC.: HAULING RACP

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO COMPENSATE THE CONTRACTOR FOR HAULING THE CUTTINGS FROM THE PAVEMENT PLANING OPERATIONS TO THE CITY DESIGNATED SITE ON LAWRENCE STREET. THE CITY WILL ONLY ACCEPT AND PAY FOR THE CUTTINGS FROM THE MAINLINE PLANING OPERATIONS AND NOT FOR CUTTINGS FROM PAVEMENT REPAIRS. THE CITY WILL MEASURE THE QUANTITY BY THE NUMBER OF TONS HAULED TO THE SITE. TONNAGE SHALL BE COMPUTED BY MULTIPLYING THE VOLUME OF THE PLANED AREA IN CUBIC YARDS BY 2 TONS/CU. YD. PAYMENT IS FULL COMPENSATION FOR FURNISHING ALL EQUIPMENT, LABOR, TOOLS, MATERIALS AND INCIDENTALS NECESSARY TO LOAD, TRANSPORT AND DUMP THE CUTTINGS AT THE CONTRACT PRICE AS FOLLOWS:

ITEM 690 SPECIAL-MISC.: HAULING RACP 3,000 TON

ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN

THE CONTRACTOR SHALL PLACE A 1" X 2.0" DEEP BEAD OF JOINT SEALER (AS PER 705.04) AT THE LOCATIONS SHOWN IN PLANS. THE CONTRACTOR SHALL SAW CUT A CHANNEL FOR THE JOINT SEALER. THE COST FOR SAW CUTTING THE CHANNEL FOR THE JOINT SEALER SHALL BE INCLUDED FOR PAYMENT WITH ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN.

ITEM 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC FS, AS PER PLAN

AN ESTIMATED QUANTITY FOR FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC FS, AS PER PLAN HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER. REPAIRS SHALL BE MADE PRIOR TO PAVING OPERATIONS. THE INTENT OF THIS OPERATION IS TO CORRECT IMPROPERLY MADE UTILITY PATCHES. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ODOT CMS ITEM 255, EXCEPT THE PLACING OF DOWELS AND TIEBARS SHALL NOT BE REQUIRED. THE DEPTH OF REMOVAL SHALL BE TO THE BOTTOM OF THE BRICK BASE WITH A LIKE REPLACEMENT OF ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC FS, AS PER PLAN.

UTILITY PATCHES VARY IN SIZE BUT ON AVERAGE ARE 5' BY 5' WITH THE REPAIR AREAS BEING 1' GREATER IN EACH DIRECTION, OR 7' BY 7'. A TYPICAL DEPTH OF 8" WAS USED FOR ESTIMATING PURPOSES.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

ITEM 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC FS, AS PER PLAN

LOCATION 1c - 100 SQ. YD.
LOCATION 2 - 25 SQ. YD.
LOCATION 3c - 25 SQ. YD.
LOCATION 4 - 25 SQ. YD.

**ITEM SPECIAL TACK COAT, TRACKLESS TACK
ITEM SPECIAL TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE**

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH NTSS-1HM TRACKLESS TACK PRODUCED BY BLACKLIDGE EMULSIONS, INC. MEET ALL REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 407 TACK COAT EXCEPT AS NOTED BELOW.

MATERIAL: CONFORM TO THE FOLLOWING TYPICAL PHYSICAL PROPERTIES:

PARAMETER	TEST METHOD	MIN.	MAX.
SAYBOLT FUROL VISCOSITY, SFS @ 25°C	ASTM D88	15	100
STORAGE STABILITY, 24 HRS, %	ASTM D244	--	1
STORAGE STABILITY, 5 DAYS, %	ASTM D244	--	5
RESIDUE BY DISTILLATION, %	ASTM D244	50	--
OIL DISTILLATE, %	ASTM D244	--	1
SIEVE TEST, %	ASTM D244	--	0.30
TEST ON RESIDUE			
PENETRATION, @ 25°C,	ASTM D5	--	20
SOFTENING POINT RANGE DEG C	ASTM D36	65	--
SOLUBILITY, %	ASTM D2042	97.5	--
ORIGINAL BINDER DSR@82°C G°/SIN δ10 RAD/SEC	AASHTO T111	1.00	--

NOTE: PRODUCT SHOULD NOT CONTAIN FILLER SUCH AS CLAY, ETC KEEP FROM FREEZING.

SUPPLY CERTIFIED TEST DATA TO THE ENGINEER SHOWING THE MATERIAL SUPPLIED WAS TESTED FOR AND MEETS THE ABOVE PROPERTIES.

**ITEM SPECIAL TACK COAT, TRACKLESS TACK
ITEM SPECIAL TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE
(CONTINUED)**

EQUIPMENT: ALL REQUIREMENTS OF 407.03 APPLY. SEE MANUFACTURER'S REPRESENTATIVE FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF CATIONIC EMULSION WAS PREVIOUSLY USED.

WEATHER LIMITATIONS: ALL REQUIREMENTS OF 407.04 APPLY.

PREPARATION OF SURFACE: ALL REQUIREMENTS OF 407.05 APPLY.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE ASPHALT MATERIAL WITH A DISTRIBUTOR PER THE REQUIREMENTS OF 407.06 EXCEPT AS NOTED.

DILUTION IS NOT ALLOWED.

IF PRODUCT IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL.

ALL NOZZLES AND SPRAY PATTERNS SHALL BE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. THE ANGLE OF THE NOZZLE SHOULD A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE, AND DISTRIBUTOR AND NOZZLE SETTINGS.

APPLY AT A RATE OF 0.04 TO 0.08 GALLONS PER SQUARE YARD. RECOMMENDED APPLICATION TEMPERATURE IS 160°F TO 180° F. DO NOT EXCEED 180°F.

THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE WILL APPROVE RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

THE APPLICATION IS CONSIDERED SATISFACTORY WHEN THE MATERIAL IS APPLIED UNIFORMLY WITH NO VISIBLE EVIDENCE OF STREAKING OR RIDGING AND THE APPLICATION RATE IS ±10% OF THE SPECIFIED RATE.

METHOD OF MEASUREMENT: ALL REQUIREMENTS OF 407.07 APPLY.

BASIS OF PAYMENT: THE DEPARTMENT WILL NOT PAY FOR NON-UNIFORMLY APPLIED MATERIALS AS DEFINED IN 407.06.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICES AS FOLLOWS:

ITEM	UNIT	DESCRIPTION
SPECIAL	GALLON (LITER)	TACK COAT, TRACKLESS TACK
SPECIAL	GALLON (LITER)	TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE

ITEM 407, TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

ITEM 407, TACK COAT FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 TACK COAT FOR INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

CALCULATED
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GENERAL NOTES

FAI-22/ VAR-10.75 / VAR

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ITEM 408, PRIME COAT, AS PER PLAN

THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER SECTION 702) AT A RATE OF 0.40 GALLON PER SQUARE YARD TO THE COMPLETED AGGREGATE SHOULDER (ITEM 617) AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF PAVEMENT OR EDGE LINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

THE FOLLOWING QUANTITIES OF PRIME COAT, AS PER PLAN HAVE BEEN CARRIED TO THE SUB-SUMMARIES AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT TO PERFORM THE ABOVE MENTIONED WORK.

ITEM 408, PRIME COAT, AS PER PLAN

- LOCATION 1a - 2,844 SQ.YD. X 0.40 GAL./SQ YD = 1,138 GAL
- LOCATION 1b - 2,592 SQ.YD. X 0.40 GAL./SQ YD = 1,037 GAL
- LOCATION 1c - 3,834 SQ.YD. X 0.40 GAL./SQ YD = 1,534 GAL
- LOCATION 2 - 1,746 SQ.YD. X 0.40 GAL./SQ YD = 699 GAL
- LOCATION 3a - 1,764 SQ.YD. X 0.40 GAL./SQ YD = 706 GAL
- LOCATION 3b - 1,674 SQ.YD. X 0.40 GAL./SQ YD = 670 GAL
- LOCATION 3c - 612 SQ.YD. X 0.40 GAL./SQ YD = 245 GAL

RESIDENTIAL AND COMMERCIAL DRIVES

AN ESTIMATED QUANTITY OF ITEM 448, ASPHALT CONCRETE, HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO PAVE APPROACH AREAS TO EXISTING DRIVEWAYS. PAVING SHALL TYPICALLY EXTEND 4' INTO THE DRIVEWAY (MEASURED FROM THE EDGE OF PAVEMENT OR PAVED SHOULDER IF PRESENT). THERE ARE 5 TYPES OF DRIVES: CONCRETE, ASPHALT, GRAVEL, GRAVEL WITH ASPHALT APRON AND FIELD/OIL WELL DRIVES. FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED. GRAVEL DRIVES SHALL BE PAVED BACK 4' INTO THE DRIVE-WAY UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CONCRETE AND ASPHALT DRIVES SHALL HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (PREFERRED 4') AS DIRECTED BY THE ENGINEER SO AS TO PROVIDE A SMOOTH TRANSITION. GRAVEL DRIVES WITH ASPHALT APRONS SHALL ALSO HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (PREFERRED 4') BUT ONLY IF THE EXISTING ASPHALT APRON IS IN AN ACCEPTABLE CONDITION TO BE PAVED OVER AS DIRECTED BY THE ENGINEER. IF THE ASPHALT APRON CANNOT BE PAVED OVER (FOR EXAMPLE, BROKEN INTO SMALL PIECES) AS DETERMINED BY THE ENGINEER, IT SHALL BE REMOVED BEFORE BEING PAVED BACK 4' INTO THE DRIVEWAY. ALL GRADING, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE DRIVES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEMS LISTED BELOW.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES FOR THE ABOVE DESCRIBED PURPOSE.

- ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 76-22M**
- | | | | |
|-------------|-----------|-------------|-----------|
| LOCATION 1a | 5 CU.YD. | LOCATION 1b | 8 CU.YD. |
| LOCATION 1c | 13 CU.YD. | LOCATION 2 | 15 CU.YD. |
| LOCATION 3a | 4 CU.YD. | LOCATION 3b | 5 CU.YD. |
| LOCATION 3c | 2 CU.YD. | | |

ITEM 202, WEARING COURSE REMOVED

- | | | | |
|-------------|------------|-------------|------------|
| LOCATION 1c | 370 SQ.YD. | LOCATION 2 | 430 SQ.YD. |
| LOCATION 3a | 100 SQ.YD. | LOCATION 3b | 130 SQ.YD. |
| LOCATION 3c | 60 SQ.YD. | | |

ITEM 617, COMPACTED AGGREGATE, AS PER PLAN

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE SHALL BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE PLASTICITY INDEX SHALL BE WAIVED. IF SO PERMITTED, THE CONTRACTOR MAY USE RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

SAFETY EDGE PLAN NOTE

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A COMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANS TECH SHOULDER WEDGE MAKER, THE CARLSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETSLOPE OR A SIMILAR APPROVED-EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

- | | |
|---|---|
| TransTech Systems, Inc.
1594 State Street
Schenectady, NY 12304
1-800-724-6306
www.transtechsys.com | Advant-Edge Paving Equipment, LLC.
P.O. Box 9163
Niskayuna, NY 12309-0163
518-280-6090
www.advantaedgepaving.com |
| Carlson Safety Edge End Gate
18425 50 th Avenue East
Tacoma, WA 98446
253-875-8000 | Troxler Electronics Laboratories, Inc.
3008 E. Cornwallis Rd.
Research Triangle Park, NC 27709
1-877-TROXLER
www.troxlerlabs.com |

IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TUENOUTRS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES (200 TO 300 mm) AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES TO PROVIDE EXTRA ASPHALT FOR CONSTRUCTION OF THE SAFETY EDGE:

- ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 76-22M**
- | |
|-------------------------|
| LOCATION 1a - 18 CU.YD. |
| LOCATION 1b - 17 CU.YD. |
| LOCATION 1c - 24 CU.YD. |
| LOCATION 2 - 11 CU.YD. |
| LOCATION 3a - 11 CU.YD. |
| LOCATION 3b - 11 CU.YD. |
| LOCATION 3c - 4 CU.YD. |

ITEM 609, CURB, TYPE 6

A CONTINGENCY QUANTITY OF CURB, TYPE 6 HAS BEEN PROVIDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO REPAIR EXISTING CURB. THE ENGINEER WILL CONTACT THE CITY OF LANCASTER TO DETERMINE WHAT SECTIONS OF CURB SHALL BE REPLACED. THE CONTRACTOR SHALL NOT REPLACE ANY STONE CURB. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES.

- ITEM 609, CURB, TYPE 6**
- | | | |
|-----------------------|-----------------------|---------------------|
| LOCATION 1b - 50 FT, | LOCATION 1c - 800 FT, | LOCATION 2 - 100 FT |
| LOCATION 3c - 100 FT, | LOCATION 4 - 50 FT | |

OPERATION OF FIRE HYDRANTS AND WATER VALVES:

THE CONTRACTOR SHALL NOT OPERATE, OPEN, CLOSE OR OTHERWISE USE ANY CITY OWNED FIRE HYDRANT OR WATER LINE VALVE WITHOUT THE WRITTEN AUTHORIZATION OF THE SUPERINTENDENT, DIVISION OF WATER. ANY UNAUTHORIZED TAKING OF WATER FROM THE CITY DISTRIBUTION SYSTEM WILL RESULT IN PROSECUTION FOR THE THEFT OF A PUBLIC UTILITY. ANY DAMAGE CAUSED TO FIRE HYDRANTS OR WATER VALVES AS A RESULT OF THE CONTRACTOR'S OPERATIONS WILL BE REPAIRED BY DIVISION OF WATER FORCES AT THE CONTRACTOR'S EXPENSE.

THE DIVISION OF WATER WILL PROVIDE THE CONTRACTOR POTABLE WATER AT THE MILLER PARK WATER TREATMENT PLANT, 225 NORTH MEMORIAL DRIVE IN BULK AT A RATE OF \$ 0.015 PER GALLON.

THE COST OF OBTAINING AND/OR PROVIDING WATER SHALL BE INCLUDED IN THE CONTRACTOR'S VARIOUS PRICES BID FOR ASSOCIATED ITEMS IN THE PROJECT UNLESS OTHERWISE PROVIDED FOR AS A SEPARATE BID ITEM.

MAIL BOX TURN OUTS

A QUANTITY OF ASPHALT CONCRETE HAS BEEN PROVIDED IN THE PLAN TO COVER MAIL BOX TURN-OUTS. TURN-OUTS SHALL BE PAVED AS SHOWN IN THE DETAIL IN DRAWING BP-4.1. ANY EXTRA GRADING OF THE SHOULDERS, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE MAIL BOX TURN OUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEMS LISTED BELOW.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIE FOR THE ABOVE PURPOSES.

- ITEM 448, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22**
- | |
|------------------------|
| LOCATION 1a - 4 CU.YD. |
| LOCATION 1b - 9 CU.YD. |
| LOCATION 2 - 11 CU.YD. |
| LOCATION 3b - 3 CU.YD. |
| LOCATION 3c - 1 CU.YD. |

- ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 76-22M**
- | |
|------------------------|
| LOCATION 1a - 3 CU.YD. |
| LOCATION 1b - 6 CU.YD. |
| LOCATION 2 - 8 CU.YD. |
| LOCATION 3b - 2 CU.YD. |
| LOCATION 3c - 1 CU.YD. |

ITEM 202, WEARING COURSE REMOVED

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|--------------------------|
| LOCATION 1a - 80 SQ.YD. |
| LOCATION 1b - 180 SQ.YD. |
| LOCATION 2 - 230 SQ.YD. |
| LOCATION 3b - 60 SQ.YD. |
| LOCATION 3c - 20 SQ.YD. |

ITEM 621, RAISED PAVEMENT MARKER REMOVED

RPM REMOVAL SHALL NOT OCCUR SOONER THAN 10 DAYS PRIOR TO RESURFACING OF THE ROADWAY. ALL RPM'S REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

- | |
|---|
| LOCATION 1a: 100 YELLOW/YELLOW, 6 WHITE/RED |
| LOCATION 1b: 79 YELLOW/YELLOW, 32 WHITE |

ITEM 621 RPM

- | |
|------------------------|
| LOCATION 1a - 106 EACH |
| LOCATION 1b - 111 EACH |

ITEM 621 RPM REMOVED

- | |
|------------------------|
| LOCATION 1a - 106 EACH |
| LOCATION 1b - 111 EACH |
| LOCATION 3a - 78 EACH |
| LOCATION 3b - 86 EACH |

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ITEM SPECIAL – REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS

THIS ITEM SHALL BE USED TO REINFORCE TRANSVERSE AND/OR LONGITUDINAL JOINT CRACKS PRODUCED FROM PREVIOUS CONCRETE UTILITY PATCHES OR FROM FULL DEPTH PAVEMENT REPAIRS PERFORMED WITH THIS PROJECT.

AFTER THE PAVEMENT HAS BEEN PLANED, THE ENGINEER WILL IDENTIFY LOCATIONS TO RECEIVE REINFORCED MESH. THE REINFORCING MESH SHALL BE PLACED ON THE PLANED SURFACE, CENTERED OVER TRANSVERSE AND/OR LONGITUDINAL JOINT CRACKS. WHERE NECESSARY, FOLLOW THE MANUFACTURER'S RECOMMENDATIONS FOR LAPPING JOINTS.

THE ENTIRE ROADWAY SHALL BE OVERLAYED WITH 3.00" OF ASPHALT CONCRETE AFTER PLACING OF THE REINFORCING MESH. THE PROJECT ENGINEER SHALL SELECT JOINT CRACKS UNTIL ALL OF THE MATERIAL SHOWN BELOW HAS BEEN UTILIZED. REINFORCING MATERIAL SHALL BE GLASGRID CG100 OR EQUIVALENT AND SHALL BE PLACED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND THIS NOTE.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM SPECIAL – REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS.

ITEM 690 SPECIAL – REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS

LOCATION 1c - 19,227 SQ.YD.

ITEM 632 DETECTOR LOOP, AS PER PLAN (A)

THIS WORK SHALL CONSIST OF INSTALLING DETECTOR LOOPS AT THE FOLLOWING INTERSECTIONS WITHIN THE CITY OF LANCASTER:

- LOCATION 1C:
- U.S. 22 & TALMADGE AVE. 2 – 6' x 6', 3 – 6' x 20'
- U.S. 22 & CEDAR HILL RD. 1 – 6' x 6', 3 – 6' x 20'
- U.S. 22 & PEARL AVE. 1 – 10' x 15'
- U.S. 22 & MT. PLEASANT AVE. 2 – 6' x 20'
- U.S. 22 & EASTWOOD AVE. 2 – 6' x 20'
- U.S. 22 & DELLA AVE. (KROGERS) 2 – 6' x 20', 1 – 5' x 30'
- U.S. 22 & DIAMOND POWER 1 – 5' x 30'

- LOCATION 2:
- S.R. 158 & PERSHING DR. 2 – 6' x 6', 2 – 6' x 20'

- LOCATION 3C:
- S.R. 37 & MULBERRY ST. 2 – 6' x 20'
- S.R. 37 & FIFTH AVE. 2 – 6' x 20'
- S.R. 37 & ALLEN ST. 1 – 6' x 20'

- LOCATION 4:
- S.R. 188 & SIXTH AVE./SHERIDAN DR. 1 – 6' x 6', 2 – 5' x 30'
- S.R. 188 & GOSLIN 2 – 6' x 20', 1 – 5' x 30'

ALL DILEMMA ZONE INDUCTANCE DETECTOR LOOPS CALLED FOR IN THE PLANS SHALL BE THE ANGULAR DESIGN DETECTION (ADD) LOOP AS SHOWN ON TC-82.10. DIMENSIONS SHALL BE AS SPECIFIED ON TC-82.10.

ALL DETECTOR LOOPS SHALL BE CUT INTO THE PLANED SURFACE OR THE PROPOSED INTERMEDIATE COURSE AT A DEPTH OF 4" FROM THE PROPOSED SURFACE ELEVATION. THE CONTRACTOR SHALL TEST ALL LEAD-IN CABLES PRIOR TO MAKING THE FINAL SPLICE. PLACEMENT SHALL BE AS PER SPECIFICATION 632.10.

ITEM 632 DETECTOR LOOP, AS PER PLAN (A), CONT'D

THE MODE, LENGTH AND LOCATION OF ALL OF THE LOOPS LISTED BELOW WILL BE PROVIDED TO THE CONTRACTOR BY THE CITY OF LANCASTER. THE CONTRACTOR SHALL CONTACT MR. TIM DEITZ, AT 740-687-6668, TO ARRANGE A MEETING. AT THIS MEETING, MR. DEITZ WILL PROVIDE THE NECESSARY DETECTOR LOOP INFORMATION TO THE CONTRACTOR FOR INSTALLATION.

ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, TRAFFIC CONTROL AND INCIDENTALS NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 632, DETECTOR LOOP, AS PER PLAN.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES FOR THE ABOVE PURPOSES.

ITEM 632 DETECTOR LOOP, AS PER PLAN (A)

- LOCATION 1c – 18 EACH
- LOCATION 2 – 4 EACH
- LOCATION 3c – 5 EACH
- LOCATION 4 – 6 EACH

ITEM 632 DETECTOR LOOP, AS PER PLAN (B)

THIS WORK SHALL CONSIST OF INSTALLING DETECTOR LOOPS AT THE FOLLOWING INTERSECTIONS WITHIN THE CITY OF LANCASTER. IF THE VIDEO DETECTION SYSTEM, AS PER PLAN (ALTERNATE BID) ITEM IS SELECTED, THESE DETECTOR LOOPS WILL NOT BE INSTALLED::

- LOCATION 1C:
- U.S. 22 & MEMORIAL DR. 6 – 6' x 20', 2 – 6' x 6'
- U.S. 22 & COLUMBUS ST. 3 – 6' x 6', 8 – 6' x 20'
- U.S. 22 & CENTER ALLEY 4 – 6' x 6'
- U.S. 22 & BROAD ST. 4 – 6' x 20'
- U.S. 22 & HIGH ST. 9 – 6' x 20'
- U.S. 22 & MAPLE ST. 4 – 6' x 20', 1 – 10' x 20'
- U.S. 22 & EWING ST. 6 – 6' x 20'

- LOCATION 2:
- S.R. 158 & SIXTH AVE. 1 – 6' x 20'
- S.R. 158 & FAIR AVE. 2 – 6' x 6', 2 – 6' x 20'

- LOCATION 3A:
- S.R. 37 & COLLEGE AVE. 2 – 6' x 6', 5 – 6' x 20'

- LOCATION 3C:
- S.R. 37 & SIXTH AVE. 2 – 6' x 6'
- S.R. 37 & FAIR AVE. 6 – 6' x 20', 1 – 5' x 30'

- LOCATION 4:
- S.R. 188 & EWING ST. 4 – 6' x 6', 3 – 6' x 20'

ALL DILEMMA ZONE INDUCTANCE DETECTOR LOOPS CALLED FOR IN THE PLANS SHALL BE THE ANGULAR DESIGN DETECTION (ADD) LOOP AS SHOWN ON TC-82.10. DIMENSIONS SHALL BE AS SPECIFIED ON TC-82.10.

ALL DETECTOR LOOPS SHALL BE CUT INTO THE PLANED SURFACE OR THE PROPOSED INTERMEDIATE COURSE AT A DEPTH OF 4" FROM THE PROPOSED SURFACE ELEVATION. THE CONTRACTOR SHALL TEST ALL LEAD-IN CABLES PRIOR TO MAKING THE FINAL SPLICE. PLACEMENT SHALL BE AS PER SPECIFICATION 632.10.

THE MODE, LENGTH AND LOCATION OF ALL OF THE LOOPS LISTED BELOW WILL BE PROVIDED TO THE CONTRACTOR BY THE CITY OF LANCASTER. THE CONTRACTOR SHALL CONTACT MR. TIM DEITZ, AT 740-687-6668, TO ARRANGE A MEETING. AT THIS MEETING, MR. DEITZ WILL PROVIDE THE NECESSARY DETECTOR LOOP INFORMATION TO THE CONTRACTOR FOR INSTALLATION.

ITEM 632 DETECTOR LOOP, AS PER PLAN (B), CONT'D

ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, TRAFFIC CONTROL AND INCIDENTALS NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 632, DETECTOR LOOP, AS PER PLAN.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES FOR THE ABOVE PURPOSES.

ITEM 632 DETECTOR LOOP, AS PER PLAN (B)

- LOCATION 1c – 47 EACH
- LOCATION 2 – 5 EACH
- LOCATION 3a – 7 EACH
- LOCATION 3c – 9 EACH
- LOCATION 4 – 7 EACH

VIDEO DETECTION SYSTEM (ALTERNATE BID)

THIS WORK CONSISTS OF FURNISHING AN ALDIS GRIDSMART BASIC STOPBAR VIDEO DETECTION SYSTEM OR AN APPROVED EQUAL. THE SYSTEM IS INTENDED FOR STOPBAR-ONLY DETECTION. EACH VIDEO SYSTEM SHALL BE CAPABLE OF PROVIDING STOPBAR DETECTION AT EACH APPROACH FOR ONE SIGNALIZED INTERSECTION. THE VIDEO DETECTION SYSTEM SHALL CONSIST OF POWER SUPPLY, ONE HARDWIRED VIDEO CAMERA, ALL NECESSARY VIDEO AND POWER CABLING WITH END CONNECTORS, MOUNTING BRACKETS, CAMERA END AND CABINET END SURGE PROTECTION AS RECOMMENDED BY THE MANUFACTURER, VIDEO DETECTION PROCESSORS/EXTENSION MODULES.

ALL PRODUCT DOCUMENTATION SHALL BE WRITTEN IN THE ENGLISH LANGUAGE. PROVIDE THREE BOUND COPIES AND ONE PDF VERSION OF THE USER'S MANUAL.

THE CONTRACTOR SHALL ORDER THE SPECIFIED NUMBER OF BASIC STOPBAR VIDEO DETECTION SYSTEMS IMMEDIATELY FOLLOWING AWARD OF THE PROJECT. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH TIM DEITZ, OF THE CITY OF LANCASTER, AT 740-687-6668, FOR DELIVERY OF THE SYSTEMS INCLUDING THE VIDEO CABLE. THE CITY OF LANCASTER WILL BE RESPONSIBLE FOR INSTALLING THE VIDEO DETECTION SYSTEMS.

WARRANTY

PROVIDE A 60-MONTH WARRANTY OR THE MANUFACTURERS STANDARD WARRANTY, WHICHEVER IS GREATER FOR THE FOLLOWING EQUIPMENT:

- CAMERA HEADS
- PROCESSORS

ENSURE THAT THE WARRANTY PERIOD BEGINS ON THE DATE OF SHIPMENT TO THE PROJECT. ENSURE THAT EACH SYSTEM HAS A PERMANENT LABEL OR STAMP INDICATING THE DATE OF SHIPMENT AND VENDOR NAME. THE WARRANTY SHALL INCLUDE, TECHNICAL SUPPORT SHALL BE AVAILABLE FROM THE SUPPLIER, AT NO COST, VIA TELEPHONE WITHIN 4 HOURS OF THE TIME A CALL IS MADE, FROM FACTORY-CERTIFIED PERSONNEL OR FACTORY-CERTIFIED INSTALLERS. THE WARRANTY SHALL INCLUDE UPDATES TO VIDEO DETECTION PROCESSOR AND APPLICATION SOFTWARE, AVAILABLE FROM THE MANUFACTURER WITHOUT CHARGE.

B. FUNCTIONAL CAPABILITIES

PROVIDE CAMERA SYSTEMS ABLE TO TRANSMIT VIDEO SIGNALS UP TO 1,000 FEET OVER THE SUPPLIED VIDEO CABLE.

C. INTERFACE

- VIDEO PROCESSOR INPUT

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GENERAL NOTES

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VIDEO DETECTION SYSTEM (ALTERNATE BID), CONT'D

PROVIDE VIDEO INPUT CONNECTOR(S) TO ACCEPT SIGNAL(S) FROM AN EXTERNAL VIDEO SOURCE (I.E., THE CAMERA HEAD). THE VIDEO INPUT CONNECTOR SHALL BE LOCATED ON THE FRONT OF THE VIDEO PROCESSING UNIT. PROVIDE A LED OR OTHER VISUAL INDICATOR TO INDICATE THE PRESENCE OF A VALID VIDEO SIGNAL. THE INDICATOR SHALL BE ASSERTED UPON VALID VIDEO SYNCHRONIZATION AND UN-ASSERTED WHEN THE PRESENCE OF A VALID VIDEO SIGNAL IS REMOVED.

2. VIDEO PROCESSOR OUTPUT

VIDEO OUTPUT SHALL BE ONE OR MORE OF THE FOLLOWING:

A. ANALOG VIDEO OUTPUT:

THE VIDEO PROCESSOR OUTPUT SHALL BE RS170 OR VGA COMPLIANT. THE PROCESSOR SHALL PASS THROUGH THE INPUT VIDEO SIGNAL TO THE VIDEO OUTPUT. THE VIDEO PROCESSOR OUTPUT INTERFACE CONNECTOR SHALL BE BNC OR RCA TYPE. THE VIDEO PROCESSOR OUTPUT SHALL HAVE THE CAPABILITY TO SHOW TEXT AND GRAPHICAL OVERLAYS TO AID IN SYSTEM SETUP. THE OVERLAYS SHALL DISPLAY REAL-TIME ACTUATION OF DETECTION ZONES UPON VEHICLE DETECTION OR PRESENCE. CONTROL OF THE OVERLAYS AND VIDEO SWITCHING SHALL ALSO BE PROVIDED THROUGH THE COMMUNICATIONS PORT AND/OR A SEPARATE MOUSE (SERIAL AND/OR USB) PORT.

B. DIGITAL VIDEO OUTPUT:

THE OUTPUT SHALL UTILIZE DVI, USB, OR ETHERNET INTERFACE. THE PROCESSOR SHALL PASS THROUGH AN EQUIVALENT INPUT VIDEO SIGNAL TO THE VIDEO OUTPUT. THE VIDEO PROCESSOR OUTPUT INTERFACE CONNECTOR SHALL BE D-SUBMINIATURE, FULL-SIZE OR MINI USB, OR RJ-45. THE VIDEO PROCESSOR OUTPUT SHALL HAVE THE CAPABILITY TO SHOW TEXT AND GRAPHICAL OVERLAYS TO AID IN SYSTEM SETUP. THE OVERLAYS SHALL DISPLAY REAL-TIME ACTUATION OF DETECTION ZONES UPON VEHICLE DETECTION OR PRESENCE. CONTROL OF THE OVERLAYS AND VIDEO SWITCHING SHALL ALSO BE PROVIDED THROUGH THE COMMUNICATIONS PORT, A SEPARATE MOUSE (SERIAL AND/OR USB) PORT, OR THE DIGITAL VIDEO PORT ITSELF (USB, ETHERNET).

3. COMMUNICATIONS PORT

IF ANALOG OR DVI VIDEO OUTPUT IS USED, PROVIDE AT LEAST ONE COMMUNICATIONS PORT ON THE FRONT PANEL. THE COMMUNICATIONS PORT(S) SHALL BE COMPLIANT WITH RS-232, RS-422 ELECTRICAL INTERFACES, USB, OR 10BASET ETHERNET AND SHALL USE A DB9, RJ45 OR USB TYPE CONNECTOR. THE COMMUNICATIONS INTERFACE SHALL ALLOW THE USER TO REMOTELY CONFIGURE THE SYSTEM AND/OR TO EXTRACT ANY CALCULATED VEHICLE/ROADWAY INFORMATION. EACH VIDEO DETECTION SYSTEM PROCESSOR SHALL HAVE THE CAPABILITY TO BE INDIVIDUALLY IP ADDRESSABLE EITHER BUILT IN OR WITH THIRD PARTY VIDEO SERVER UNITS. THIS PORT MAY BE USED AS PART OF THE SYSTEM SETUP AND CONFIGURATION.

4. DETECTOR CALL OUTPUTS

PROVIDE OPEN COLLECTOR CONTACT CLOSURE OUTPUTS MEETING NEMA TS1 REQUIREMENTS. THE OPEN COLLECTOR OUTPUT WILL BE USED FOR VEHICLE DETECTION INDICATORS AS WELL AS DISCRETE OUTPUTS FOR ALARM CONDITIONS. PROVIDE LED OR OTHER CALL STATUS INDICATORS ON THE FRONT PANEL. THE CALL STATUS INDICATORS SHALL ASSERT WHEN A CONTACT CLOSURE OUTPUT OCCURS. PROVIDE ONE CALL STATUS INDICATOR FOR EACH CONTACT CLOSURE OUTPUT.

VIDEO DETECTION SYSTEM (ALTERNATE BID), CONT'D

D. FUNCTIONALITY

DETECTION ZONES SHALL BE PROGRAMMED BY ONE OF TWO METHODS:

1. AN ON-BOARD MENU DISPLAYED ON A VIDEO MONITOR AND A POINTING DEVICE CONNECTED TO THE VIDEO DETECTION PROCESSOR.
2. LAPTOP COMPUTER VIA USB OR ETHERNET INTERFACE.

THE VIDEO DETECTION PROCESSOR SHALL DETECT VEHICLES IN REAL TIME AS THEY TRAVEL ACROSS EACH DETECTION ZONE. THE VIDEO DETECTION PROCESSOR SHALL DEFAULT TO A SAFE CONDITION, SUCH AS MINIMUM RECALL, FIXED RECALL OR A CONSTANT CALL ON EACH ACTIVE DETECTION CHANNEL, IN THE EVENT OF UNACCEPTABLE INTERFERENCE WITH THE VIDEO SIGNAL OR LOW VISIBILITY CONDITIONS. A USER-SELECTED OUTPUT SHALL BE ACTIVE DURING THE LOW-VISIBILITY CONDITION THAT CAN BE USED TO MODIFY THE CONTROLLER OPERATION IF CONNECTED TO THE APPROPRIATE CONTROLLER INPUT MODIFIER(S). THE SYSTEM SHALL AUTOMATICALLY REVERT TO NORMAL DETECTION MODE WHEN THE LOW-VISIBILITY CONDITION NO LONGER EXISTS.

E. VEHICLE DETECTION

SYSTEM SHALL SUPPORT A MINIMUM OF 6 DETECTION ZONES PER CAMERA, AND EACH DETECTION ZONE SHALL BE CAPABLE OF BEING SIZED TO SUIT THE SITE AND THE DESIRED VEHICLE DETECTION REGION/TYPE. A SINGLE DETECTION ZONE SHALL BE ABLE TO REPLACE MULTIPLE INDUCTIVE LOOPS AND THE DETECTION ZONES SHALL BE OR-ED AS THE DEFAULT OR MAY BE AND-ED TOGETHER TO INDICATE VEHICLE PRESENCE ON A SINGLE PHASE OF TRAFFIC MOVEMENT. THE VIDEO DETECTION PROCESSOR'S MEMORY SHALL BE NON-VOLATILE TO PREVENT DATA LOSS DURING POWER OUTAGES. THE VIDEO DETECTION PROCESSOR SHALL MAINTAIN NORMAL OPERATION OF EXISTING DETECTION ZONES WHEN A ZONE IS BEING ADDED OR MODIFIED. THE VIDEO DETECTION PROCESSOR SHALL OUTPUT A CONSTANT CALL ON ANY DETECTOR CHANNEL CORRESPONDING TO A ZONE BEING MODIFIED AND SHALL RESUME NORMAL OPERATION UPON COMPLETION. DETECTION ZONES SHALL BE DIRECTIONAL TO REDUCE FALSE DETECTIONS FROM OBJECTS TRAVELING IN DIRECTIONS OTHER THAN THE DESIRED DIRECTION OF TRAVEL IN THE DETECTION AREA. THE VIDEO DETECTION PROCESSOR SHALL OUTPUT MINIMUM RECALL, FIXED RECALL OR CONSTANT CALL FOR EACH ENABLED DETECTOR OUTPUT CHANNEL IF A LOSS OF VIDEO SIGNAL OCCURS. THE RECALL BEHAVIOR SHALL BE USER SELECTABLE FOR EACH DETECTOR OUTPUT. THE VIDEO DETECTION PROCESSOR SHALL OUTPUT A CONSTANT CALL DURING THE BACKGROUND "LEARNING" PERIOD. DETECTION ZONE OUTPUTS SHALL BE CONFIGURABLE TO ALLOW THE SELECTION OF PRESENCE, PULSE, EXTEND, AND DELAY OUTPUTS. TIMING PARAMETERS OF PULSE, EXTEND, AND DELAY OUTPUTS SHALL BE USER DEFINABLE BETWEEN 0.1 TO 25.0 SECONDS. REAL-TIME DATA SHALL BE RETRIEVED FROM ANY PC-BASED SOFTWARE PROVIDED WITH THE SYSTEM.

F. CAMERA HEAD

CAMERA HEADS SHALL BE COMPLETELY COMPATIBLE WITH THE VIDEO DETECTION PROCESSOR AND SHALL BE CERTIFIED BY THE MANUFACTURER TO ENSURE PROPER SYSTEM OPERATION. CAMERA SHALL RESPOND TO VISIBLE WAVELENGTHS. THE DETECTION SYSTEM SHALL PRODUCE ACCURATE DETECTOR OUTPUTS UNDER ALL ROADWAY LIGHTING CONDITIONS, REGARDLESS OF TIME OF DAY. THE MINIMUM RANGE OF VISIBLE-LIGHT SCENE LUMINANCE OVER WHICH THE CAMERA SHALL PRODUCE A USEABLE VIDEO IMAGE SHALL BE THE MINIMUM RANGE FROM NIGHTTIME TO DAYTIME, BUT NOT LESS THAN THE RANGE 0.009 TO 930 FOOT-CANDLES (0.1 LUX TO 10,000 LUX). THE CAMERA SHALL USE A COLOR OR BLACK-AND-WHITE CCD, CMOS, OR MICROBOLOMETER ARRAY SENSING ELEMENT WITH RESOLUTION OF NOT LESS THAN 470 LINES HORIZONTAL AND 400 LINES VERTICAL. THE CAMERA SHALL INCLUDE MECHANISMS TO COMPENSATE FOR CHANGING OF LIGHTING BY USING AN ELECTRONIC SHUTTER AND/OR AUTO-IRIS LENS. THE CAMERA SHALL INCLUDE A FACTORY PRESET FOCUS THAT REQUIRES NO FIELD ADJUSTMENT. CAMERA CONFIGURATION SHALL BE CUSTOMIZED FOR

VIDEO DETECTION SYSTEM (ALTERNATE BID), CONT'D

EACH APPROACH BASED ON FIELD SITE CONDITIONS AND THE PROJECT PLANS. THE CAMERA ELECTRONICS SHALL INCLUDE AUTOMATIC GAIN CONTROL (AGC) TO PRODUCE A SATISFACTORY IMAGE AT NIGHT. THE CAMERA SHALL BE HOUSED IN A WEATHER-TIGHT SEALED ENCLOSURE. THE HOUSING SHALL BE FIELD ROTATABLE TO ALLOW PROPER ALIGNMENT BETWEEN THE CAMERA AND THE TRAVELED ROAD SURFACE. THE CAMERA ENCLOSURE SHALL BE EQUIPPED WITH A SUNSHIELD. THE SUNSHIELD SHALL INCLUDE A PROVISION FOR WATER DIVERSION TO PREVENT WATER FROM FLOWING IN THE CAMERA'S FIELD OF VIEW. DOMED-WINDOW, VERTICAL-AXIS DOWNWARD-LOOKING CAMERAS SHALL NOT REQUIRE HEATERS BUT MUST BE SHIELDED FROM ACCUMULATING SNOW AND ICE. WHEN MOUNTED OUTDOORS IN THE ENCLOSURE, THE CAMERA SHALL OPERATE SATISFACTORILY IN A TEMPERATURE RANGE FROM -30°F TO +140°F (-34 °C TO +60 °C) AND A HUMIDITY RANGE FROM 0% RH TO 100% RH. POWER CONSUMPTION OF THE CAMERA SHALL BE 15 WATTS OR LESS UNDER ALL CONDITIONS. THE CAMERA ENCLOSURE SHALL BE EQUIPPED WITH WEATHER-TIGHT CONNECTIONS FOR POWER AND VIDEO CABLES AT THE REAR OF THE ENCLOSURE. ALL NECESSARY MOUNTING BRACKETS SHALL BE MOUNTED TO POLE SHAFTS, MAST ARMS, OR OTHER STRUCTURES TO MOUNT CAMERAS AS INDICATED ON THE PROJECT PLANS. MOUNTING BRACKETS SHALL RESULT IN A FIXED POSITION MOUNTING.

G. VIDEO CABLE

THE CABLE PROVIDED SHALL BE AS RECOMMENDED BY THE MANUFACTURER FOR OPTIMAL VIDEO DETECTION PERFORMANCE. THE CABLE SHALL BE EITHER MULTI-PAIRED JACKETED CABLE OR COAXIAL CABLE. THE SIGNAL ATTENUATION SHALL NOT EXCEED 0.78 DB PER 100 FEET (30 M) AT 10 MHZ. COAXIAL CABLE SHALL BE SUITABLE FOR INSTALLATION IN CONDUIT AND IN EXPOSED SUNLIGHT ENVIRONMENT. FOR MULTI-CONDUCTOR CABLES, PAIRS SHALL NOT BE INDIVIDUALLY SHIELDED. PAIRED CABLE AND POWER CABLES MAY BE INSTALLED UNDER THE SAME OUTER JACKET. THE CONTRACTOR SHALL FURNISH A TOTAL OF 200 FEET FOR EACH VIDEO SYSTEM.

H. POWER CABLE

POWER CABLE SHALL BE RATED FOR 90 DEGREES C, 600 VOLT, MINIMUM 16 AWG, STRANDED, THREE CONDUCTOR CABLE. CONDUCTOR INSULATION COLOR CODE SHALL BE BLACK, WHITE AND GREEN OR IEC STANDARD COLORS. OUTSIDE JACKET SHALL BE BLACK. CAMERA POWER CABLE SHALL BE SUITABLE FOR INSTALLATION IN CONDUIT AND IN EXPOSED, SUNLIT ENVIRONMENT AND UL LISTED. THE POWER AND VIDEO CABLE MAY BE INSTALLED UNDER THE SAME OUTER JACKET.

I. SURGE PROTECTION

PROVIDE SURGE PROTECTION DEVICES FOR ALL NEW OR ADDED VIDEO DETECTION DEVICES AS RECOMMENDED BY THE MANUFACTURER AT BOTH THE CAMERA END AND THE CABINET END. EXTERNAL SURGE SUPPRESSION GROUND WIRES, IF USED, SHALL BE MINIMUM 12 AWG. AS A MINIMUM, THE SURGE SUPPRESSION SYSTEM SHALL MEET THE FOLLOWING MINIMUM SPECIFICATIONS:

1. TESTED SURGE CURRENT: 10KA (8 X 20US WAVEFORM)
2. CLAMPING VOLTAGE: <7VDC
3. OPERATING CURRENT: <1A
4. BANDWIDTH: 0-20MHZ
5. INSERTION LOSS <1DB AT FULL BANDWIDTH
6. OPERATING TEMPERATURE: -40 DEGREES C TO +74 DEGREES C

PAYMENT FOR ITEM 816, VIDEO DETECTION SYSTEM, AS PER PLAN SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH COMPLETE UNIT AS DESCRIBED ABOVE, INCLUDING THE NECESSARY VIDEO CABLE, DELIVERED TO THE CITY OF LANCASTER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 633, CONTROLLER ITEM, MISC.: VIDEO DETECTION SYSTEM (ALTERNATE BID)

LOCATION 1c - 12 EACH

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GENERAL NOTES

FAI-22/ VAR-10.75 / VAR

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON TWO LANE ROADWAYS BY USE OF THE EXISTING PAVEMENT AND STANDARD DRAWING MT-97.10 OR MT-97.12. A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON FOUR LANE ROADWAYS BY USE OF THE EXISTING PAVEMENT AND STANDARD DRAWING MT-95.31 OR MT-95.32, UNLESS OTHERWISE NOTED BELOW.

THE CONTRACTOR SHALL CLOSE U.S. 22 (E. MAIN STREET) AND DETOUR TRAFFIC AS SHOWN ON SHEET 10 IN ORDER TO COMPLETE THE WORK LOCATED AT THE INTERSECTION OF COLUMBUS STREET, IN THE MID-BLOCK CROSSING EAST OF COLUMBUS STREET, AND AT THE INTERSECTION OF BROAD STREET (SEE SHEETS 20-21 FOR PROPOSED WORK AT THESE LOCATIONS). THE CONTRACTOR SHALL COMPLETE THE WORK AT THE INTERSECTION OF COLUMBUS STREET FIRST. THE PROPOSED WORK TO THE MID-BLOCK CROSSING SHALL BE COMPLETED CONCURRENTLY WITH THE WORK AT THE COLUMBUS STREET INTERSECTION. THE BROAD STREET INTERSECTION CANNOT BE CLOSED TO TRAFFIC UNTIL THE WORK IS COMPLETED AT COLUMBUS STREET. THE WORK AT THESE LOCATIONS SHALL BE COMPLETED BY AUGUST 30, 2013.

EXISTING SIGNS OR CONTRACTOR SUPPLIED SIGNS SHALL BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION.

ALL CONFLICTING SIGNS AND PAVEMENT MARKINGS, WHETHER INSIDE OR OUTSIDE THE WORK LIMITS, SHALL BE COVERED OR REMOVED. WHERE APPLICABLE, AND WHEN DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL PLACE TEMPORARY SIGNS OR TEMPORARY PAVEMENT MARKING AT THESE LOCATIONS.

BEFORE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF A PERSON OR PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICING AGENCIES. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR REPLACING NECESSARY TRAFFIC CONTROL DEVICES IMMEDIATELY.

THE CONTRACTOR SHALL ARRANGE HIS OPERATIONS SO AS TO PREVENT ANY INTERFERENCE TO THE CONTINUOUS FLOW OF TRAFFIC. ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIME TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.

TO MINIMIZE THE IMPACTS TO THE TRAVELING PUBLIC AND REDUCE CONGESTION, ALL OF THE WORK WITHIN THE PAVEMENT THAT REQUIRES TRAFFIC TO BE MAINTAINED SHALL BE COMPLETED DURING NIGHT TIME HOURS BEGINNING AT 8:00 P.M. TO 6:00 A.M. FOR THE FOLLOWING LOCATIONS: U.S. 22 FROM MEMORIAL DRIVE EAST TO THE END OF WORK ON U.S. 22 (EXCEPT FOR THE WORK MENTIONED ABOVE REQUIRING DETOURS; S.R. 158 FROM U.S. 22 (MAIN STREET) TO FAIR AVENUE. THE CONTRACTOR HAS THE OPTION TO WORK NIGHT TIME HOURS ON THE REMAINING SECTION OF U.S. 22. DUE TO RESIDENCES, NO NIGHT WORK SHALL BE ALLOWED ON S.R. 37, S.R. 188 OR THE PORTION OF S.R. 158 FROM FAIR AVENUE TO THE END OF WORK.

AT NO TIME SHALL TRAFFIC BE MAINTAINED ON THE PLANED SURFACE, AT LEAST ONE COURSE OF ASPHALT CONCRETE SHALL BE IN PLACE BEFORE OPENING TO TRAFFIC.

ONLY ITEM 614, WORK ZONE CENTER LINE, CLASS II HAS BEEN ITEMIZED IN THE PLAN. ALL OTHER WORK ZONE PAVEMENT MARKINGS NECESSARY SHALL BE INCLUDED IN THE LUMP SUM BID FOR MAINTAINING TRAFFIC.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT, IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION

ITEM 614, MAINTAINING TRAFFIC, CONT'D

OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

NOTICE OF CLOSURE SIGNS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

WORKING RESTRICTIONS – LANCASTER EVENTS

THE CITY OF LANCASTER HOSTS DIFFERENT SPECIAL EVENTS DURING THE SUMMER MONTHS THAT BRINGS TRAFFIC AND GUESTS INTO THE WORK AREAS THAT ARE NOT CUSTOMARILY FOUND IN THOSE AREAS EXCEPT DURING THOSE EVENTS. BOTH TO FACILITATE THE PROGRESS OF THE PROJECT AND TO AVOID DISRUPTION TO THOSE EVENTS, THE CONTRACTOR IS HEREBY RESTRICTED FROM WORKING IN THE AREAS AND ON THE DATES STATED BELOW:

- U.S. 22 BETWEEN MEMORIAL DR. AND MAPLE ST., AND S.R. 158 BETWEEN U.S. 22 AND MULBERRY ST.:**
NO WORK SHALL BE PERFORMED DURING THE LANCASTER FESTIVAL, AND ANY WORK STARTED PRIOR TO THE FESTIVAL SHALL BE COMPLETED PRIOR TO THE START OF THE FESTIVAL. THE LANCASTER FESTIVAL DATES ARE BETWEEN JULY 17, 2013 AND JULY 29, 2013.
- S.R. 158 BETWEEN SIXTH AVE. AND COONPATH RD., AND S.R. 37 BETWEEN RAINBOW DR. AND SIXTH AVE.:**
NO WORK SHALL BE PERFORMED DURING THE DATES OF THE FAIRFIELD COUNTY FAIR HELD OCTOBER 5, 2013 AND OCTOBER 13, 2013. IF ANY WORK HAS BEGUN ON THESE SECTIONS PRIOR TO THESE DATES, THEN THOSE WORK AREAS SHALL BE RESTORED TO A CONDITION SATISFACTORY TO THE CITY SERVICE SAFETY DIRECTOR PRIOR TO THE START OF THE FAIR.

THE CONTRACTOR SHALL NOT BE DUE ANY ADDITIONAL COMPENSATION FOR COMPLIANCE WITH THE ABOVE WORK RESTRICTIONS, BUT SHALL DEVELOP HIS PROJECT SCHEDULE TO AVOID THOSE AREAS ON THE ABOVE DATES STATED, YET DILIGENTLY PROSECUTE COMPLETION OF THE PROJECT.

RESTRICTING TRAFFIC ON CITY STREETS:

BEFORE CLOSING ANY PUBLIC STREET OR LANE, RESTRICTING PERMITTED PARKING ALONG ANY PUBLIC STREET, OR OTHERWISE USING THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL OBTAIN A **USE OF THE PUBLIC RIGHT-OF-WAY PERMIT** FROM THE SERVICE-SAFETY DIRECTOR. THE CONTRACTOR SHALL MAKE APPLICATION FOR THE PERMIT A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO THE EFFECTIVE TIME OF THE REQUESTED RESTRICTION, WEEKENDS AND HOLIDAYS EXCLUDED. THERE IS NOT A FEE FOR THE PERMIT.

THE CONTRACTOR SHALL POST ALL NECESSARY TRAFFIC CONTROL SIGNS AND/OR DEVICES, BARRICADES OR OTHER WARNING DEVICES AS REQUIRED IN THE PERMIT, AND SHALL NOTIFY THE SUPERINTENDENT OF TRANSPORTATION DEPARTMENT (740.687.6668) FOR APPROVAL OF THAT

RESTRICTING TRAFFIC ON CITY STREETS:, CONT'D

WORK. WHERE THE PERMIT ALLOWS THE POSTING OF PARKING RESTRICTIONS, THE CONTRACTOR MAY OBTAIN THE "NO PARKING BY ORDER OF THE SERVICE-SAFETY DIRECTOR" SIGNS FROM THE TRANSPORTATION DEPARTMENT (740.687-6668). THE SIGNS SHALL BE POSTED A MINIMUM OF TWENTY-FOUR (24) HOURS PRIOR TO THE EFFECTIVE TIME OF THE POSTING. THE CONTRACTOR SHALL MARK ON THE SIGNS THE EFFECTIVE TIME AND DATE OF THE POSTED RESTRICTION. THE PERSON POSTING THE SIGNS SHALL INITIAL, AND NOTE THE DATE AND TIME THE SIGN WAS ERECTED IN THE LOWER OUTSIDE MARGIN. THE SIGNS SHALL BE ERECTED PER THE OHIO MANUAL OF TRAFFIC CONTROL DEVICES. FAILURE TO FOLLOW THESE PROCEDURES WILL CAUSE THE RESTRICTION TO BE UNENFORCEABLE BY THE LANCASTER POLICE DEPARTMENT. ALL UNUSED SIGNS SHALL BE RETURNED TO THE CIT.

THE COST OF OBTAINING, LABELING, POSTING, REMOVING AND RETURNING NO PARKING SIGNS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPENED TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

MEMORIAL DAY	FOURTH OF JULY
LABOR DAY	

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

<u>DAY OF THE WEEK</u>	<u>TIME ALL LANES MUST BE OPEN TO TRAFFIC</u>
SUNDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE OF **\$50.00** FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

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MAINTENANCE OF TRAFFIC NOTES

FAI-22/ VAR-10.75/ VAR

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SEQUENCE OF OPERATIONS

PHASE 1

U.S. 22 (LOCATION 1a, LOCATION 1b, LOCATION 1c)

- CONSTRUCT ALL PAVEMENT REPAIRS BOTH RIGID AND FLEXIBLE. BEGIN CONSTRUCTION OF CURB RAMPS AND CURB REPAIR.
- BEGIN PLANING AND RESURFACING OPERATIONS.
- PLACE THE DETOURS AS SHOWN ON SHEET 10 AND COMPLETE THE WORK AT THE INTERSECTION OF U.S. 22 & COLUMBUS STREET ALONG WITH THE WORK ON THE MID-BLOCK CROSSING LOCATED EAST OF COLUMBUS STREET. **THIS WORK MUST BE COMPLETED BY AUGUST 30, 2013.**
- PLACE THE DETOURS AS SHOWN ON SHEET 10 AND COMPLETE THE WORK AT THE INTERSECTION OF U.S. 22 & BROAD STREET. **THIS WORK MUST BE COMPLETED BY AUGUST 30, 2013.**

PHASE 2

U.S. 22 (LOCATION 1a, LOCATION 1b, LOCATION 1c)

- CONTINUE WITH CURB RAMP AND CURB REPAIRS.
- CONTINUE PLANING AND RESURFACING OPERATIONS.
- ALL REMAINING WORK SHALL BE COMPLETED ON U.S. 22 DURING THIS PHASE.
- **ALL OF THE WORK ON U.S. 22 MUST BE COMPLETED THIS CONSTRUCTION SEASON.**

S.R. 158 (LOCATION 2), S.R. 37 (LOCATION 3c) & S.R. 188 (LOCATION 4)

- CONSTRUCT ALL CURB RAMP AND CURB REPAIRS.

PHASE 3

S.R. 158 (LOCATION 2)

- CONSTRUCT ALL PAVEMENT REPAIRS BOTH RIGID AND FLEXIBLE.
- BEGIN PLANING AND RESURFACING OPERATIONS.
- ALL REMAINING WORK SHALL BE COMPLETED ON S.R. 158 DURING THIS PHASE.

S.R. S7 (LOCATION 3a, LOCATION 3b, LOCATION 3c)

- CONSTRUCT ALL PAVEMENT REPAIRS BOTH RIGID AND FLEXIBLE.
- BEGIN PLANING AND RESURFACING OPERATIONS.
- ALL REMAINING WORK SHALL BE COMPLETED ON S.R. 37 DURING THIS PHASE.

S.R. 188 (LOCATION 4)

- CONSTRUCT ALL PAVEMENT REPAIRS BOTH RIGID AND FLEXIBLE.
- BEGIN PLANING AND RESURFACING OPERATIONS.
- ALL REMAINING WORK SHALL BE COMPLETED ON S.R. 188 DURING THIS PHASE.

ITEM 614, WORK ZONE MARKING SIGN

IN ACCORDANCE WITH CMS SECTION 614.04, THE QUANTITIES OF WORK ZONE MARKING SIGNS TO BE USED AS DIRECTED BY THE ENGINEER.

W8-H12a (NO EDGE LINES):
 LOCATION 1a - 4 EACH
 LOCATION 1b - 6 EACH
 LOCATION 2 - 6 EACH
 LOCATION 3a - 8 EACH
 LOCATION 3b - 3 EACH

R4-1 (DO NOT PASS):
 LOCATION 1a - 6 EACH
 LOCATION 1b - 9 EACH
 LOCATION 2 - 1 EACH
 LOCATION 3a - 5 EACH
 LOCATION 3b - 2 EACH

R4-2 (PASS WITH CARE):
 LOCATION 1a - 4 EACH
 LOCATION 1b - 3 EACH

ITEM 614, WORK ZONE MARKING SIGN (CARRIED TO SUB-SUMMARIES)

LOCATION 1a - 14 EACH
LOCATION 1b - 18 EACH
LOCATION 2 - 7 EACH
LOCATION 3a - 13 EACH
LOCATION 3b - 5 EACH

IN ADDITION, THE CONTRACTOR SHALL ERECT A "GROOVED PAVEMENT" SIGN 250 FEET IN ADVANCE OF ANY SECTION OF ROADWAY WHERE TRAFFIC MUST TRAVEL ON A PLANED SURFACE. ENSURE THESE SIGNS ARE IN PLACE BEFORE OPENING THE ROADWAY TO TRAFFIC. ERECT THESE SIGNS AT INTERSECTIONS OF THROUGH ROUTES TO WARN TRAFFIC OF THIS SURFACE CONDITION. "GROOVED PAVEMENT" SIGNS SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC AS PER CMS SECTION 614.055.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHT TIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIAL AND INCIDENTALS TO PERFORM THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR **ITEM 614, MAINTAINING TRAFFIC.**

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 30 EACH HAS BEEN PROVIDED IN THE SUB-SUMMARY FOR LOCATION 1c.

BUTT JOINT

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND AT THE EXTRA AREAS WITH WEARING COURSE REMOVED.

BUTT JOINTS SHALL BE AS PER STANDARD CONSTRUCTION DRAWING BP-3.1 UNLESS OTHERWISE SHOWN IN THE PLANS.

MINIMUM LENGTH FOR ASPHALT WEDGE AT BUTT JOINTS SHALL BE 10'.

LOCATION	ROUTE	DESCRIPTION	S.L.M.	ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
				CU. YD.
1a	U.S. 22	BEGIN WORK	10.75	2.8
1b	U.S. 22	BRIDGE: FAI-22-1243	12.43	2.6
1c	U.S. 22	BRIDGE: FAI-22-1358	13.58	3.3
1c	U.S. 22	RR CROSSING	13.63	3.3
1c	U.S. 22	BRIDGE: FAI-22-1385	13.85	3.3
1c	U.S. 22	BRIDGE: FAI-22-1536	15.36	5.6
1c	U.S. 22	BRIDGE: FAI-22-1706	17.06	5.9
1c	U.S. 22	END WORK	18.05	2.5
1c	U.S. 22	TOTAL		23.9
2	S.R. 158	BEGIN WORK	0.29	1.8
2	S.R. 158	END WORK	2.48	1.1
2	S.R. 158	TOTAL		2.9
3a	S.R. 37	BEGIN WORK	12.98	1.1
3c	S.R. 37	END WORK	15.58	1.7
4	S.R. 188	BEGIN WORK	14.48	1.7
4	S.R. 188	BRIDGE: FAI-188-1483	14.83	3.3
4	S.R. 188	BRIDGE: FAI-188-1494	14.94	3.0
4	S.R. 188	END WORK	16.02	1.5
4	S.R. 188	TOTAL		9.5

THE GRINDING FOR BUTT JOINTS SHALL BE INCLUDED WITH ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

DROPOFFS IN WORK ZONES

DROPOFFS THAT DEVELOP DURING CONSTRUCTION OPERATIONS AND THAT ARE NOT OTHERWISE PROVIDED FOR IN THE PLANS SHALL BE TREATED AS SHOWN ON STANDARD DRAWING MT-101.90. WHERE THE PLANS DO NOT PROVIDE SPECIFIC ITEMS FOR LABOR, EQUIPMENT, OR MATERIALS TO IMPLEMENT THE DROP-OFF TREATMENTS SPECIFIED, THEY SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

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MAINTENANCE OF TRAFFIC NOTES

FAI-22/ VAR-10.75 / VAR

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, TWO CHANGEABLE MESSAGE SIGNS, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGNS SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THE APPROVED LIST OF PORTABLE CHANGEABLE MESSAGE SIGNS CAN BE FOUND ON THE ODOT WEBSITE BY CLICKING ON THE SERVICES MENU, THEN CLICKING ON MATERIALS MANAGEMENT. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 650 FT. AND 475 FT., RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW RETROREFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 2 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF CMS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN (cont'd)

FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC.

THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

A TOTAL OF 2 PCMS SHALL BE REQUIRED FOR THIS PROJECT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO SUB-SUMMARY:

- ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN**
- LOCATION 1a – 60 DAY**
- LOCATION 1c – 60 DAY**
- LOCATION 2 – 15 DAY**
- LOCATION 3a – 30 DAY**
- LOCATION 4 – 15 DAY**

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

IN ADDITION TO THE REQUIREMENT OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS.

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE, (cont'd)

THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES.

- ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE**
- LOCATION 1a – 16 HOURS**
- LOCATION 1b – 16 HOURS**
- LOCATION 1c – 320 HOURS**
- LOCATION 2 – 40 HOURS**
- LOCATION 3a – 16 HOURS**
- LOCATION 3b – 16 HOURS**
- LOCATION 3c – 32 HOURS**
- LOCATION 4 – 40 HOURS**

COOPERATION BETWEEN CONTRACTORS

THE STATE OF OHIO HAS CONTRACTED TWO (2) PROJECTS, FAI-158-3.75 Pli #87344 (ROCKFALL PROJECT) AND FAI-158-2.48 PID #25191 (RESURFACING), WHICH MAY BE CONSTRUCTED CONCURRENTLY WITH THIS PROJECT. IT IS IMPARATIVE THAT THE CONTRACTORS COOPERATE FULLY WITH EACH OTHER AS OUTLINED IN SECTION 105.08 OF THE CMS MANUAL.

S.R. 158 WILL BE CLOSED TO TRAFFIC FOR THE ROCKFALL PROJECT. DURING THIS TIME, S.R. 158 WILL BE DETOURED USING S.R. 37. DURING THIS CLOSURE, THE CONTRACTOR SHALL COMPLETE THE WORK AT THE INTERSECTION OF U.S. 22 & COLUMBUS STREET, THE WORK ON THE MID-BLOCK CROSSING AND THE WORK AT THE INTERSECTION OF U.S. 22 AND BROAD STREET. THE ESTIMATED COMPLETION DATE FOR ROCKFALL PROJECT IS 8-30-2013.

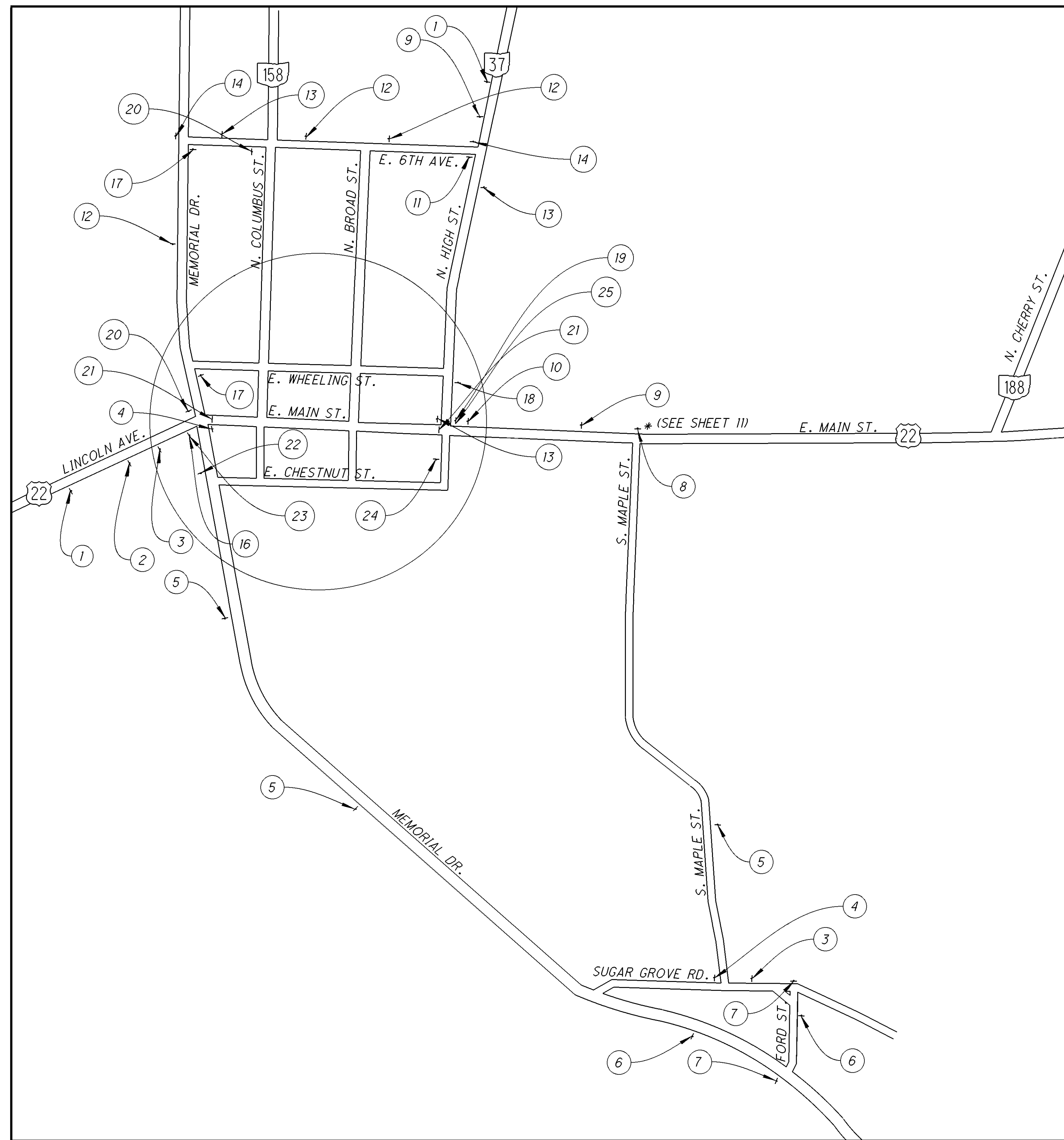
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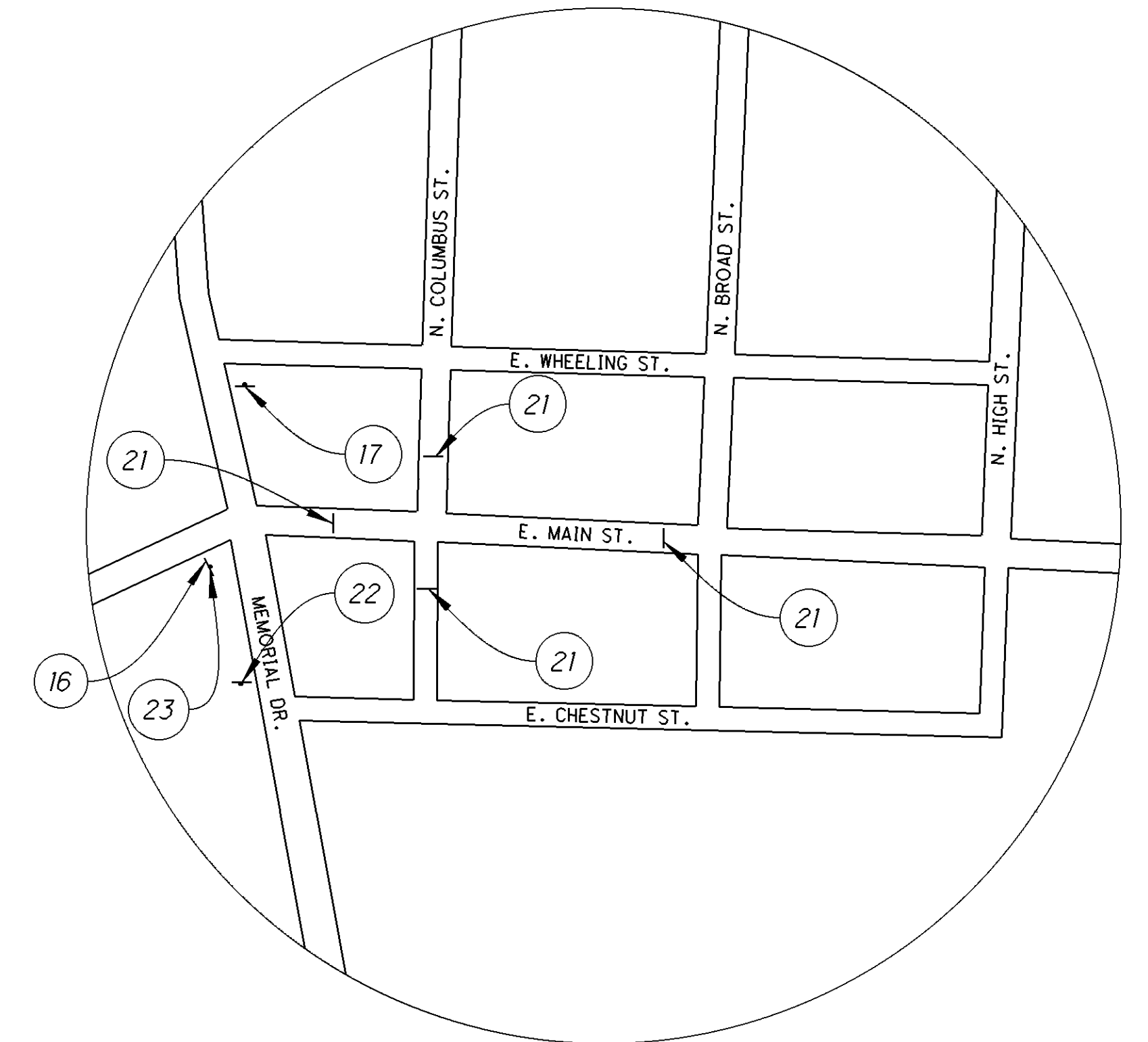
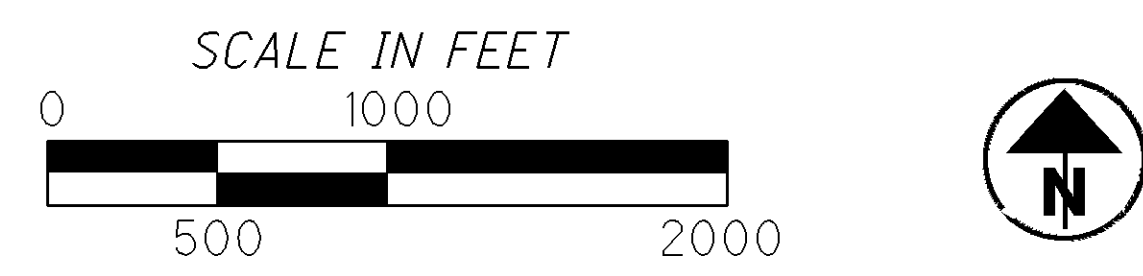
MAINTENANCE OF TRAFFIC NOTES

FAI-22/ VAR-10.75 / VAR

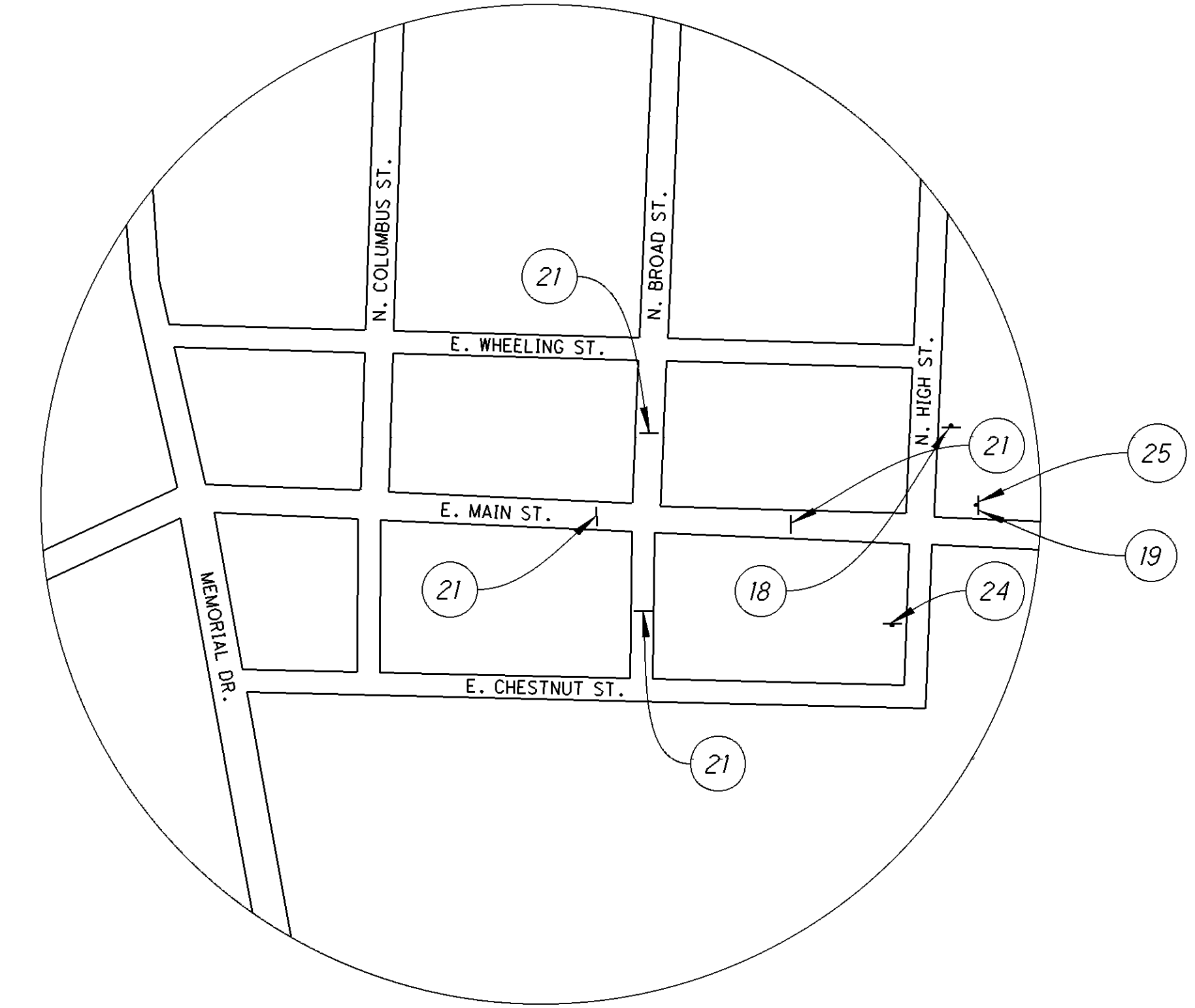
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DETOUR FAI-22/ VAR-10.75/ VAR



WORK ON COLUMBUS ST.
(INCLUDING CENTER ALLEY)



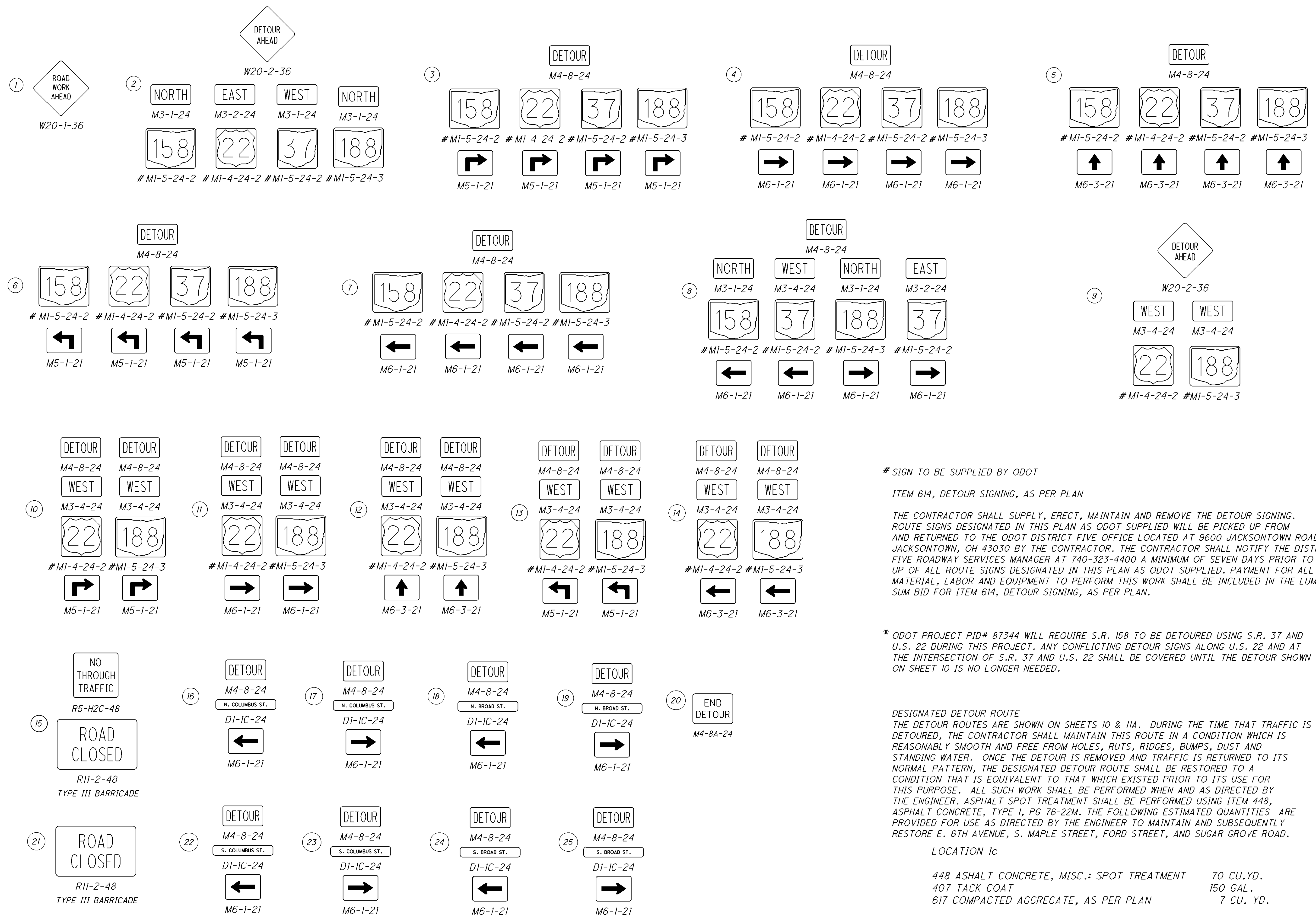
WORK ON BROAD ST.

CALCULATED
BRH
CHECKED

DETOUR MAP (DECORATIVE WALK)

FAI-22/ VAR-10.75/ VAR

10
71



SIGN TO BE SUPPLIED BY ODOT

ITEM 614, DETOUR SIGNING, AS PER PLAN

THE CONTRACTOR SHALL SUPPLY, ERECT, MAINTAIN AND REMOVE THE DETOUR SIGNING. ROUTE SIGNS DESIGNATED IN THIS PLAN AS ODOT SUPPLIED WILL BE PICKED UP FROM AND RETURNED TO THE ODOT DISTRICT FIVE OFFICE LOCATED AT 9600 JACKSONTOWN ROAD, JACKSONTOWN, OH 43030 BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE DISTRICT FIVE ROADWAY SERVICES MANAGER AT 740-323-4400 A MINIMUM OF SEVEN DAYS PRIOR TO PICK UP OF ALL ROUTE SIGNS DESIGNATED IN THIS PLAN AS ODOT SUPPLIED. PAYMENT FOR ALL MATERIAL, LABOR AND EQUIPMENT TO PERFORM THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING, AS PER PLAN.

* ODOT PROJECT PID# 87344 WILL REQUIRE S.R. 158 TO BE DETOURED USING S.R. 37 AND U.S. 22 DURING THIS PROJECT. ANY CONFLICTING DETOUR SIGNS ALONG U.S. 22 AND AT THE INTERSECTION OF S.R. 37 AND U.S. 22 SHALL BE COVERED UNTIL THE DETOUR SHOWN ON SHEET 10 IS NO LONGER NEEDED.

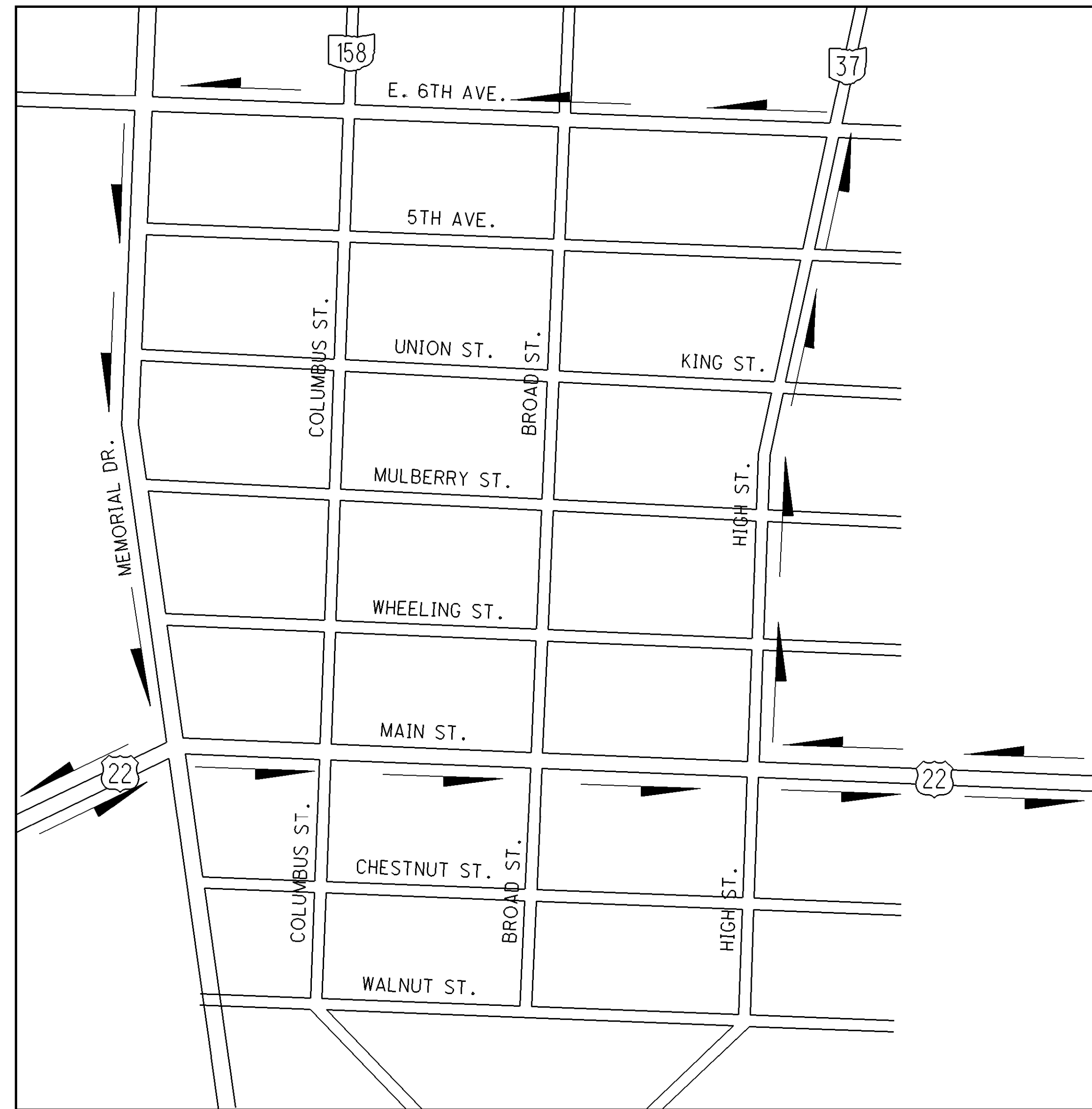
DESIGNATED DETOUR ROUTE
THE DETOUR ROUTES ARE SHOWN ON SHEETS 10 & 11A. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC IS RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DIRECTED BY THE ENGINEER. ASPHALT SPOT TREATMENT SHALL BE PERFORMED USING ITEM 448, ASPHALT CONCRETE, TYPE 1, PG 76-22M. THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE E. 6TH AVENUE, S. MAPLE STREET, FORD STREET, AND SUGAR GROVE ROAD.

LOCATION 1c

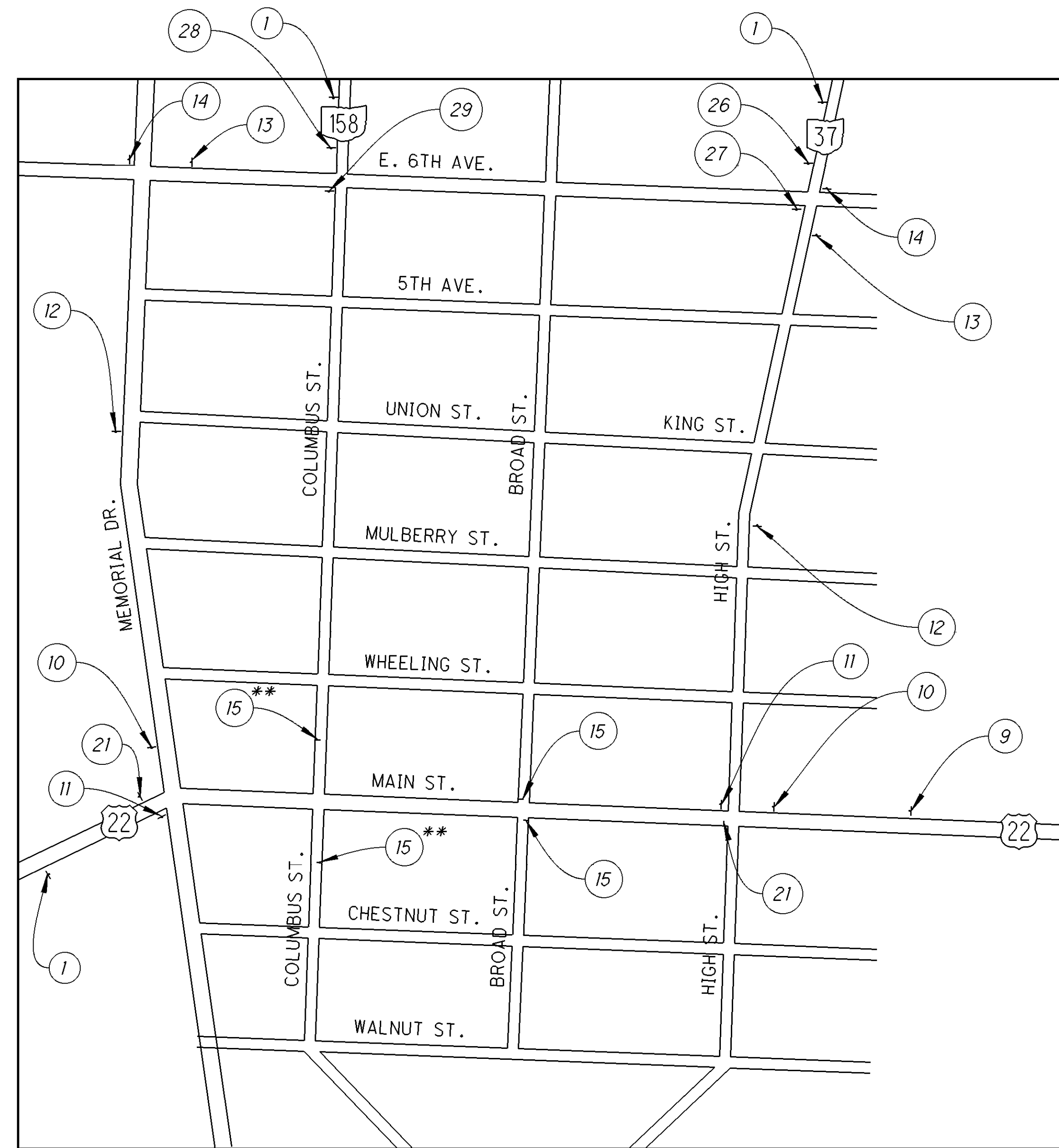
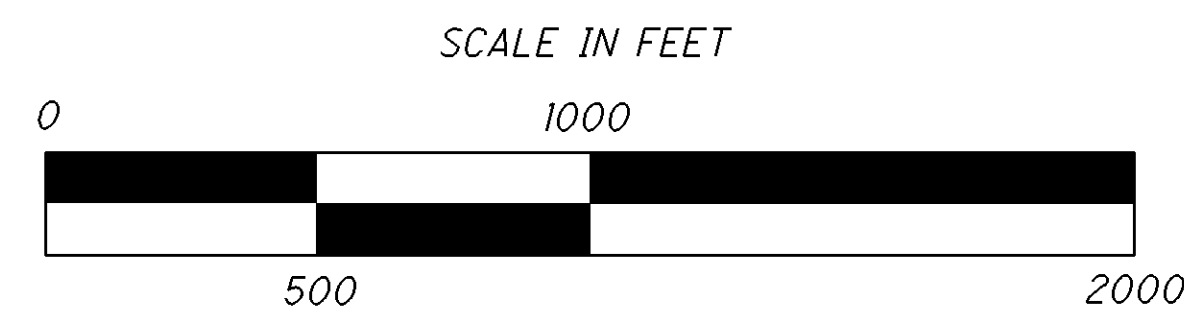
448 ASPHALT CONCRETE, MISC.: SPOT TREATMENT	70 CU.YD.
407 TACK COAT	150 GAL.
617 COMPACTED AGGREGATE, AS PER PLAN	7 CU. YD.

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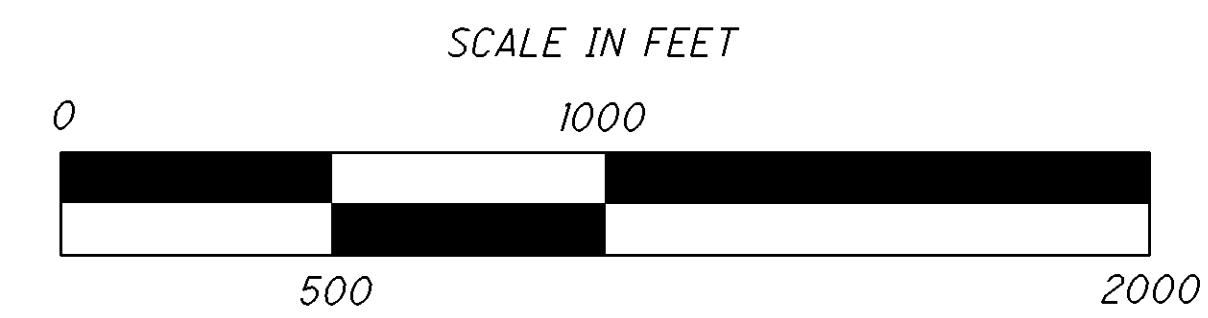
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DETOUR FAI-22/ VAR-10.75/ VAR



DETOUR FAI-22/ VAR-10.75/ VAR



- | | | | | | |
|---|---|---|---|---|---|
| 26 | 27 | 28 | 29 | | |
| <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">DETOUR</div> <div style="text-align: center; margin: 2px;">M4-8-24</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">WEST</div> <div style="text-align: center; margin: 2px;">M3-4-24</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">22</div> <div style="text-align: center; margin: 2px;">#M1-4-24-2</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">↗</div> <div style="text-align: center; margin: 2px;">M5-1-21</div> | <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">DETOUR</div> <div style="text-align: center; margin: 2px;">M4-8-24</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">WEST</div> <div style="text-align: center; margin: 2px;">M3-4-24</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">22</div> <div style="text-align: center; margin: 2px;">#M1-4-24-2</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">→</div> <div style="text-align: center; margin: 2px;">M6-1-21</div> | <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">DETOUR</div> <div style="text-align: center; margin: 2px;">M4-8-24</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">WEST</div> <div style="text-align: center; margin: 2px;">M3-4-24</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">22</div> <div style="text-align: center; margin: 2px;">#M1-4-24-2</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">↗</div> <div style="text-align: center; margin: 2px;">M5-1-21</div> | <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">DETOUR</div> <div style="text-align: center; margin: 2px;">M4-8-24</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">EAST</div> <div style="text-align: center; margin: 2px;">M3-2-24</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">22</div> <div style="text-align: center; margin: 2px;">#M1-4-24-2</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">↗</div> <div style="text-align: center; margin: 2px;">M5-1-21</div> | <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">DETOUR</div> <div style="text-align: center; margin: 2px;">M4-8-24</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">WEST</div> <div style="text-align: center; margin: 2px;">M3-4-24</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">22</div> <div style="text-align: center; margin: 2px;">#M1-4-24-2</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">→</div> <div style="text-align: center; margin: 2px;">M6-1-21</div> | <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">DETOUR</div> <div style="text-align: center; margin: 2px;">M4-8-24</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">EAST</div> <div style="text-align: center; margin: 2px;">M3-2-24</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">22</div> <div style="text-align: center; margin: 2px;">#M1-4-24-2</div> <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">→</div> <div style="text-align: center; margin: 2px;">M6-1-21</div> |

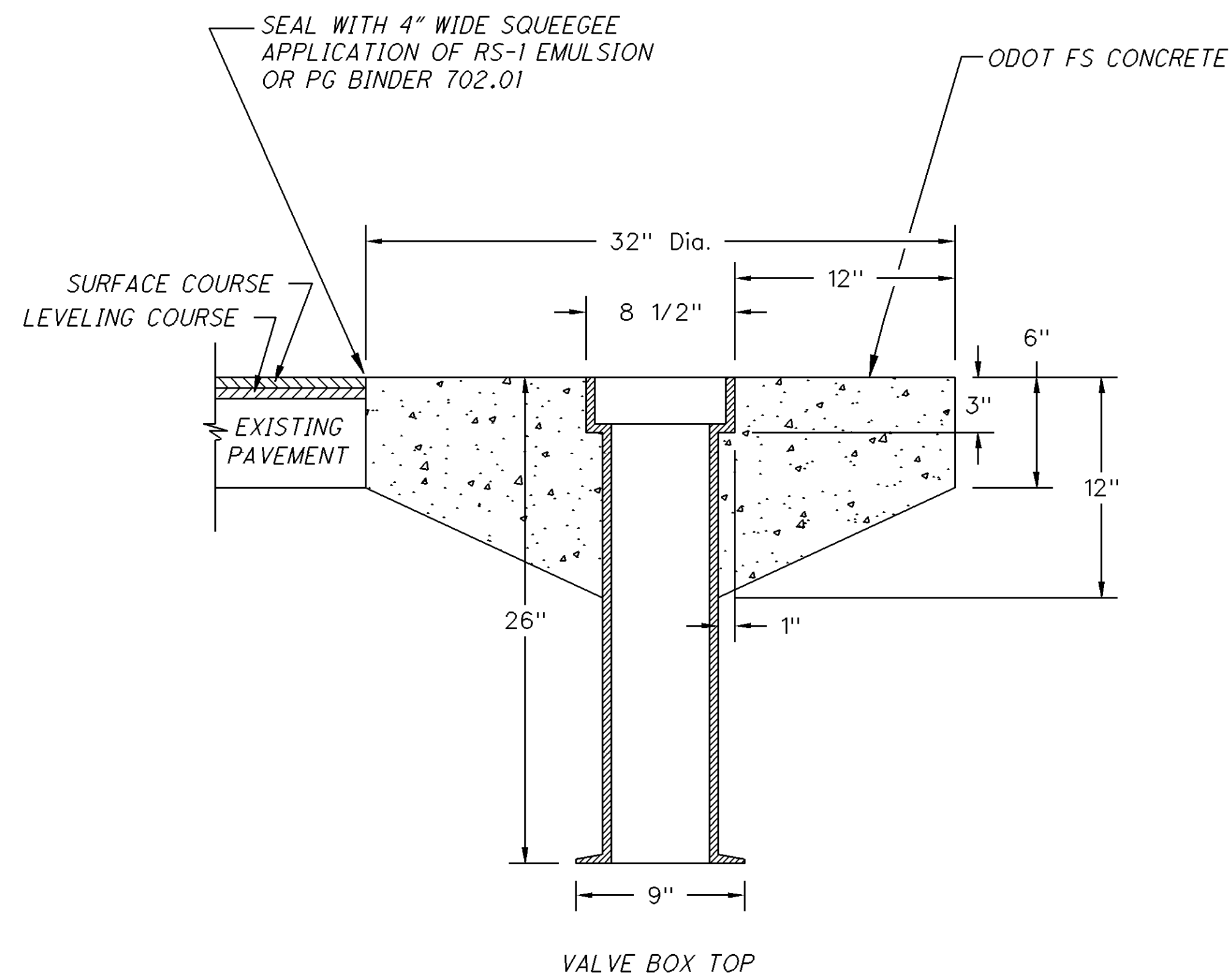
#SIGN TO BE SUPPLIED BY ODOT

**BARRICADES TO BE PLACED AS TO NOT BLOCK ACCESS TO ALLEYS, OR AS DIRECTED BY THE PROJECT ENGINEER.

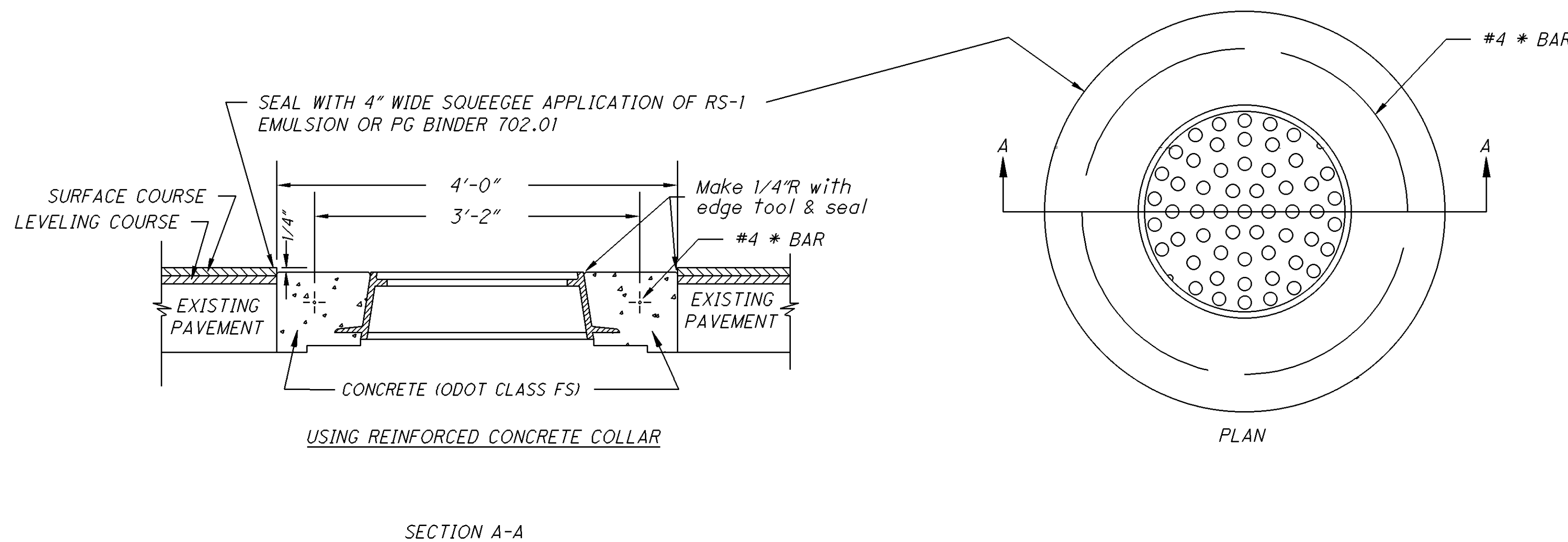
DETOUR MAP (CONCRETE PAVEMENT)

FAI-22/ VAR-10.75/ VAR

CALCULATED
BRH
CHECKED



VALVE BOX ADJUSTED TO GRADE DETAIL



MANHOLE ADJUSTED TO GRADE DETAIL

ITEM 611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN
 ITEM 638, VALVE BOX ADJUSTED TO GRADE, AS PER PLAN

MANHOLES AND VALVE BOXES WILL BE ADJUSTED TO GRADE IF THE UTILITY CASTING IS MORE THAN 1/8" (MAX) BELOW OR ABOVE THE FINISHED PAVEMENT SURFACE. THE ENGINEER SHALL MAKE A DETERMINATION OF THOSE UTILITY CASTINGS TO BE ADJUSTED AFTER THE PLACEMENT OF THE FINAL ASPHALT PAVEMENT COURSE. THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PERTINET ODOT CMS SPECIFICATION AND PER THE DETAILS ON THIS PLAN SHEET.

NOTE: NON-CITY UTILITY CASTINGS WILL BE RAISED AT THE OWNER'S EXPENSE

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR THE WORK DESCRIBED ABOVE:

LOCATION 1C:	
ITEM 611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN	50 EACH
ITEM 638, VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	35 EACH
LOCATION 2:	
ITEM 611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN	25 EACH
ITEM 638, VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	10 EACH
LOCATION 3A:	
ITEM 611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN	2 EACH
LOCATION 3C:	
ITEM 611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN	12 EACH
ITEM 638, VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	2 EACH
LOCATION 4:	
ITEM 611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN	8 EACH
ITEM 638, VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	3 EACH

ITEM 611, CATCH BASIN/INLET ADJUSTED TO GRADE

THESE ITEMS SHALL BE USED TO ADJUST CATCH BASINS AND INLETS LOCATED THROUGHOUT THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED SHALL BE INCLUDED FOR PAYMENT WITH THE ITEMS LISTED BELOW.

LOCATION 1C:	
ITEM 611, CATCH BASIN ADJUSTED TO GRADE	8 EACH
ITEM 611, INLET ADJUSTED TO GRADE	20 EACH
LOCATION 3C:	
ITEM 611, INLET ADJUSTED TO GRADE	6 EACH
LOCATION 4:	
ITEM 611, CATCH BASIN ADJUSTED TO GRADE	2 EACH
ITEM 611, INLET ADJUSTED TO GRADE	4 EACH

ITEM 611, CATCH BASIN/INLET/MANHOLE RECONSTRUCTED TO GRADE

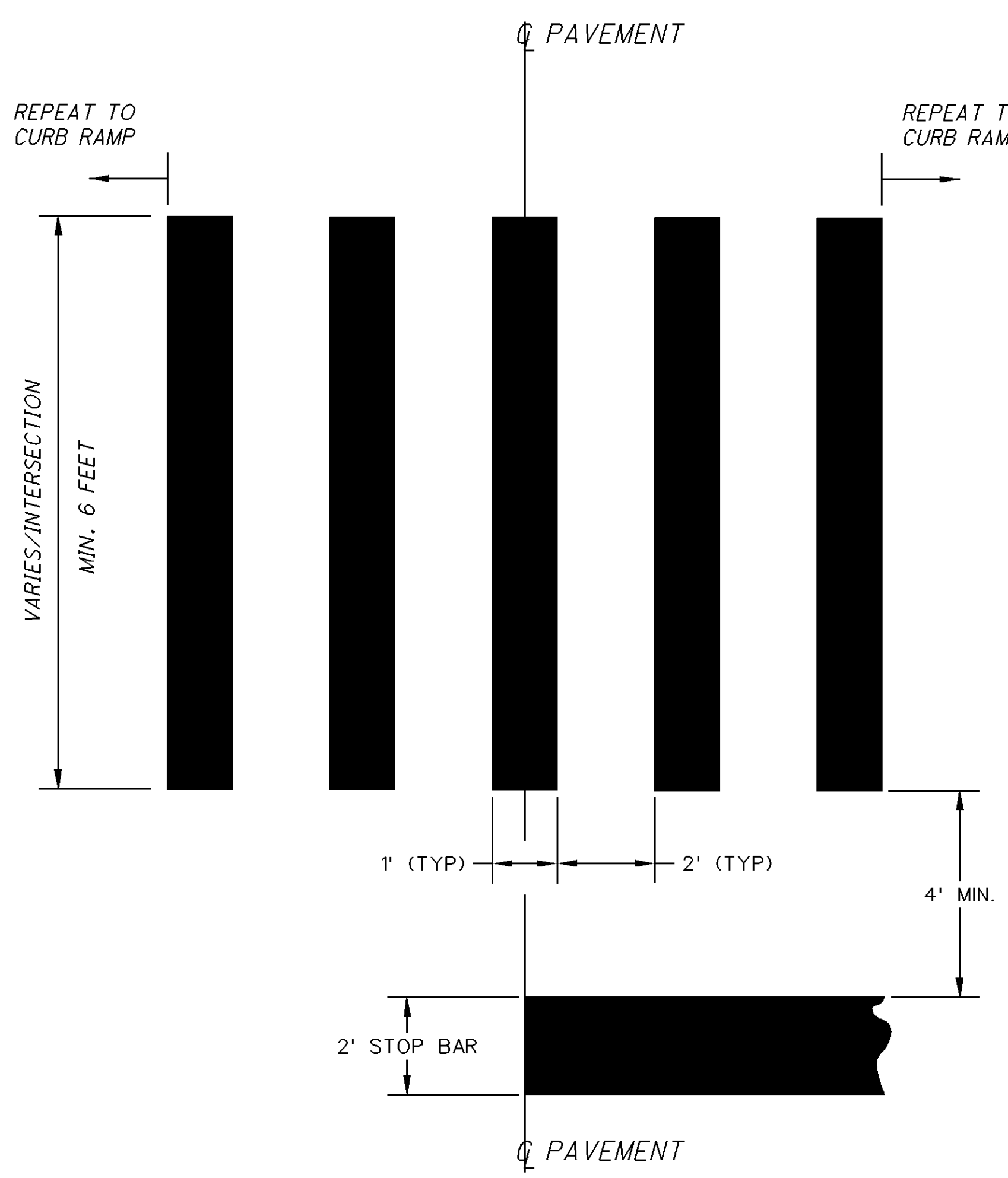
LOCATION 1C:	
ITEM 611, CATCH BASIN RECONSTRUCTED TO GRADE	7 EACH
ITEM 611, INLET RECONSTRUCTED TO GRADE	29 EACH
ITEM 611, MANHOLE RECONSTRUCTED TO GRADE	1 EACH

ITEM 611, CATCH BASIN/INLET RECONSTRUCTED TO GRADE, AS PER PLAN

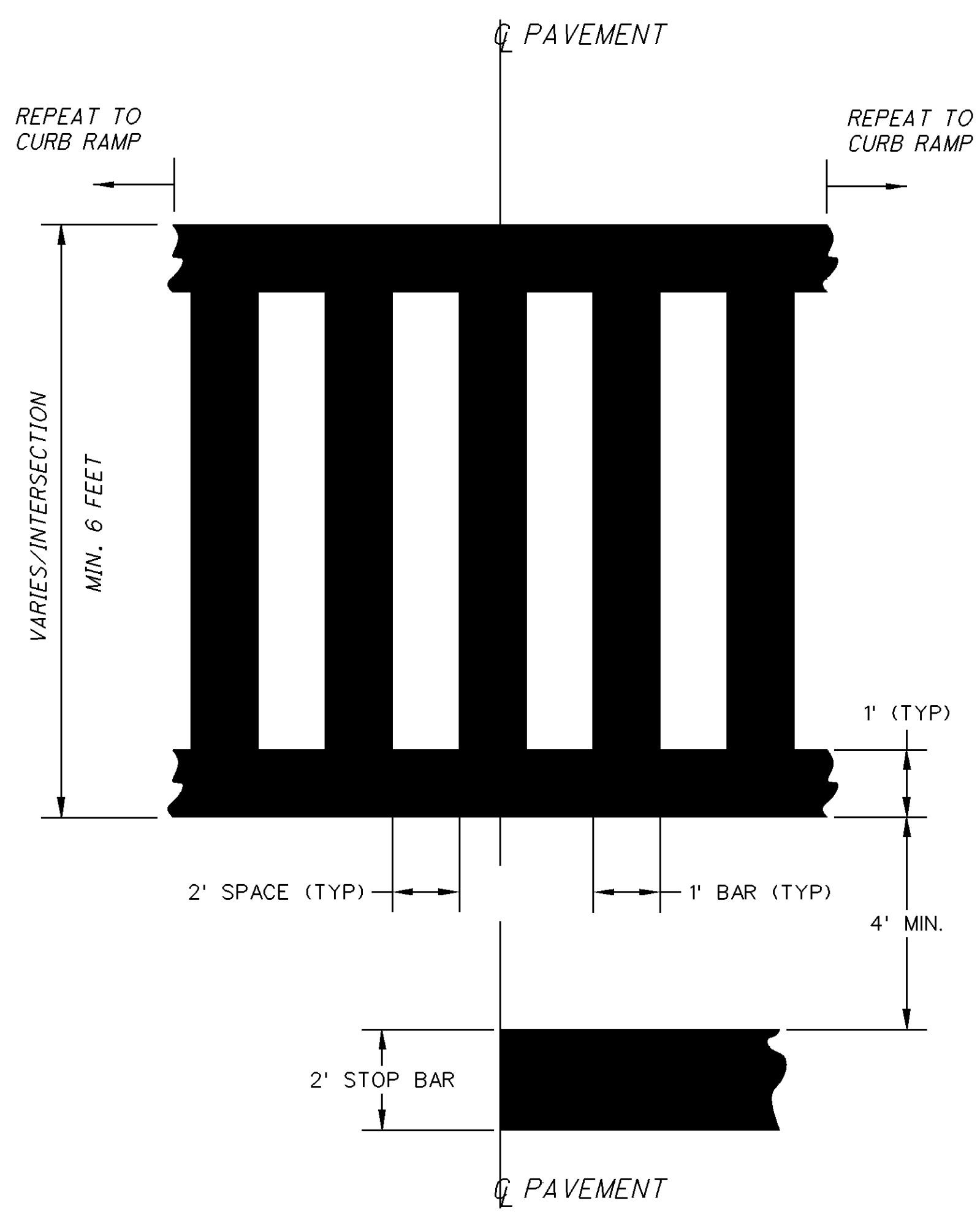
THESE ITEMS SHALL BE USED TO RECONSTRUCT CATCH BASINS AND INLETS LOCATED IN LOCATION 1C AS DIRECTED BY THE ENGINEER. IN ADDITION, NEW GRATES SHALL REPLACE THE OLD DAMAGED GRATES. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED SHALL BE INCLUDED FOR PAYMENT WITH THE ITEMS LISTED BELOW.

LOCATION 1C:	
ITEM 611, CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	2 EACH
ITEM 611, INLET RECONSTRUCTED TO GRADE, AS PER PLAN	2 EACH

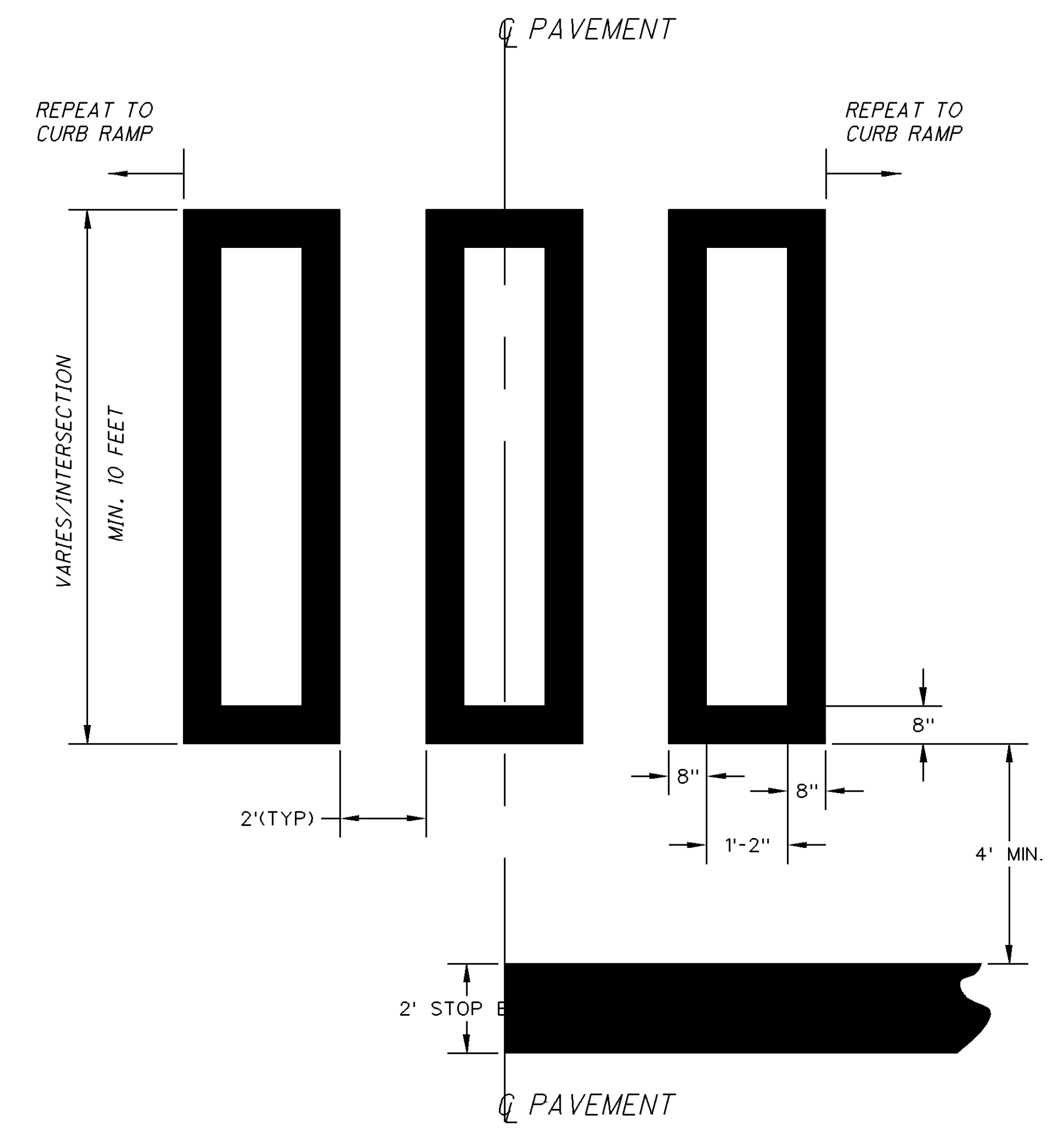
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TYPICAL CROSSWALK
(DETAIL A)



SCHOOL CROSSWALK
(DETAIL B)



DOWNTOWN DISTRICT CROSSWALK
(DETAIL C)

ITEM 644 CROSSWALK LINE, AS PER PLAN
ITEM 646 CROSSWALK LINE, AS PER PLAN

THE CROSSWALK LINES FOR THIS PROJECT SHALL BE CONSTRUCTED AS DETAILED ON THIS SHEET. THE CONTRACTOR SHALL NOTIFY THE TRAFFIC CONTROL SUPERVISOR AT THE CITY TRANSPORTATION DEPARTMENT AT (740)-687-6668 A MINIMUM OF 24 HOURS PRIOR TO LAYING OUT THE CROSSWALK LINE MARKINGS.

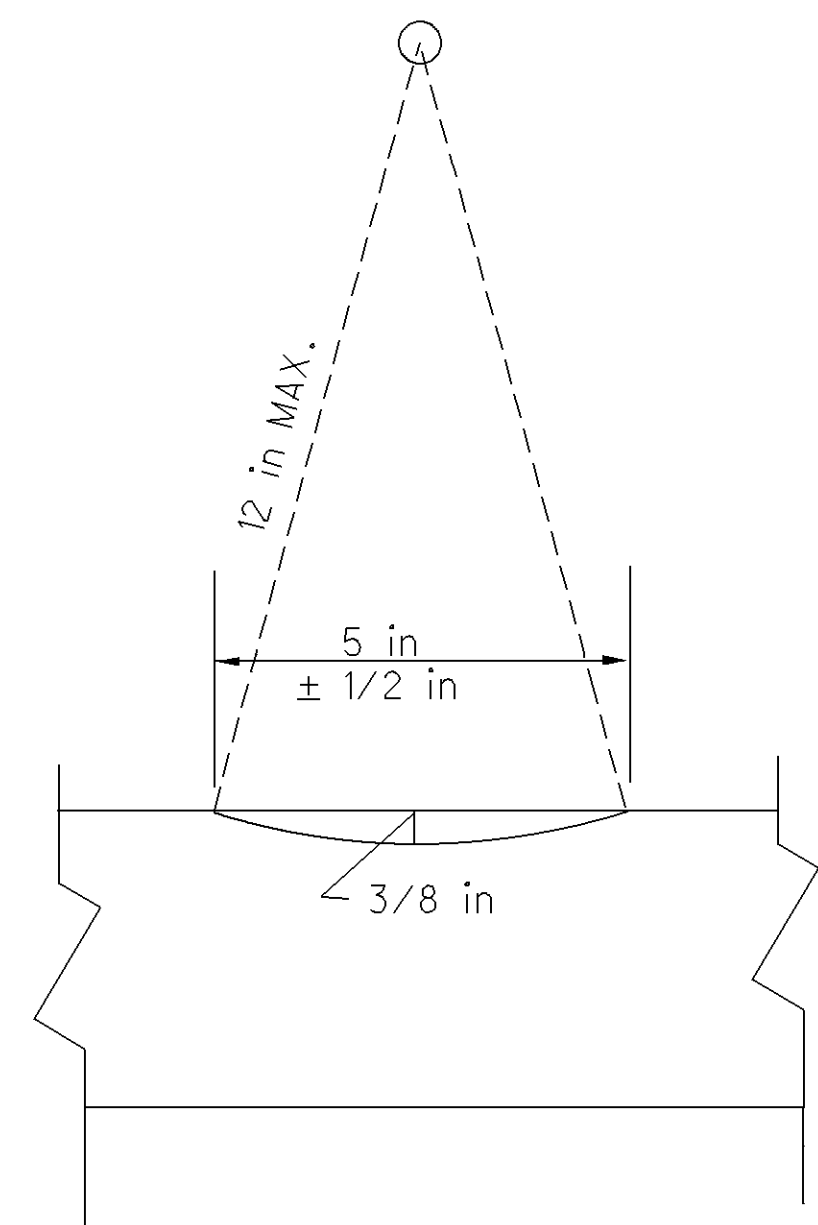
THE CROSSWALK LINES SHALL BE PLACED PARALLEL TO THE CENTER LINE. DO NOT SKEW THE TRANSVERSE CROSSWALK LINES.

ALL MATERIAL, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NEEDED TO PLACE THE CROSSWALK LINES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EACH ITEM LISTED ABOVE.

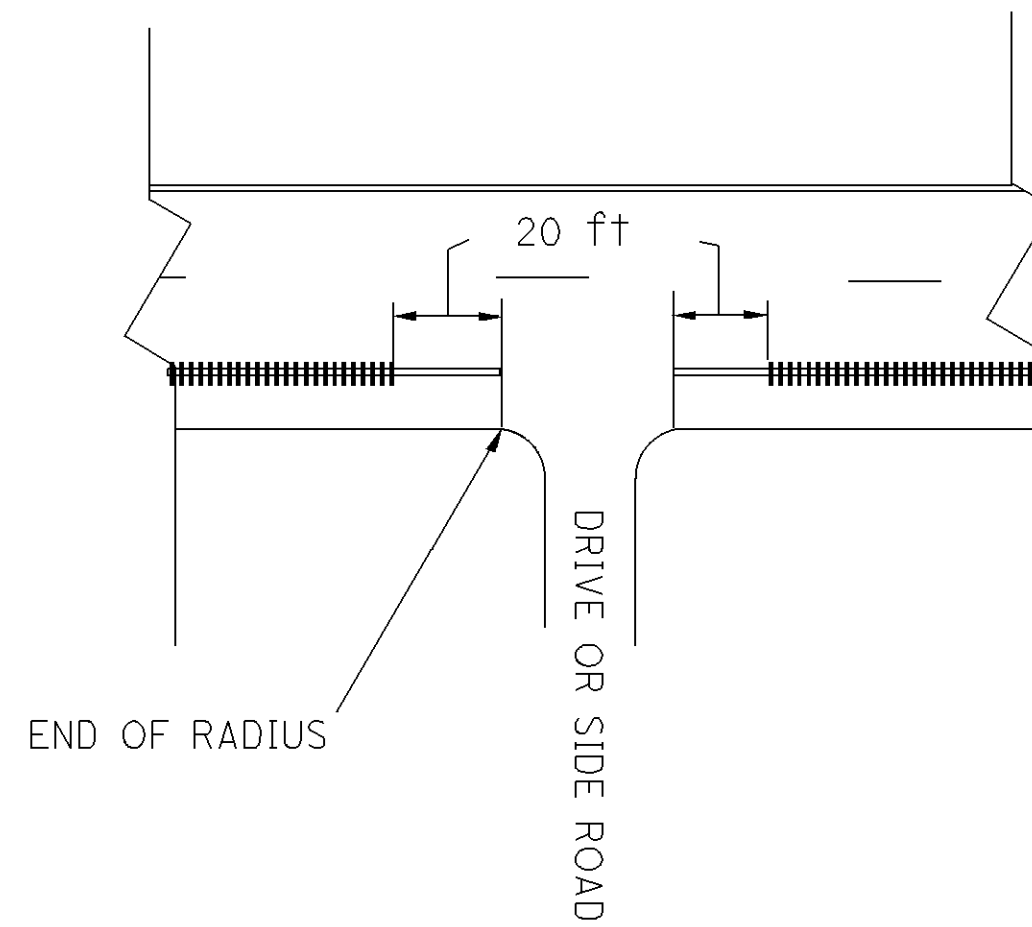
NOTES:

1. Markings to be Thermoplastic or epoxy in accordance with ODOT CMS item 644 or 646.
2. Typical Crosswalk (Detail A) shall be used unless otherwise indicated.
3. Downtown District Crosswalk (Detail C) to be used as directed by the Service Safety Director.
4. School Crosswalk (Detail B) shall be used at designated school crossings only.

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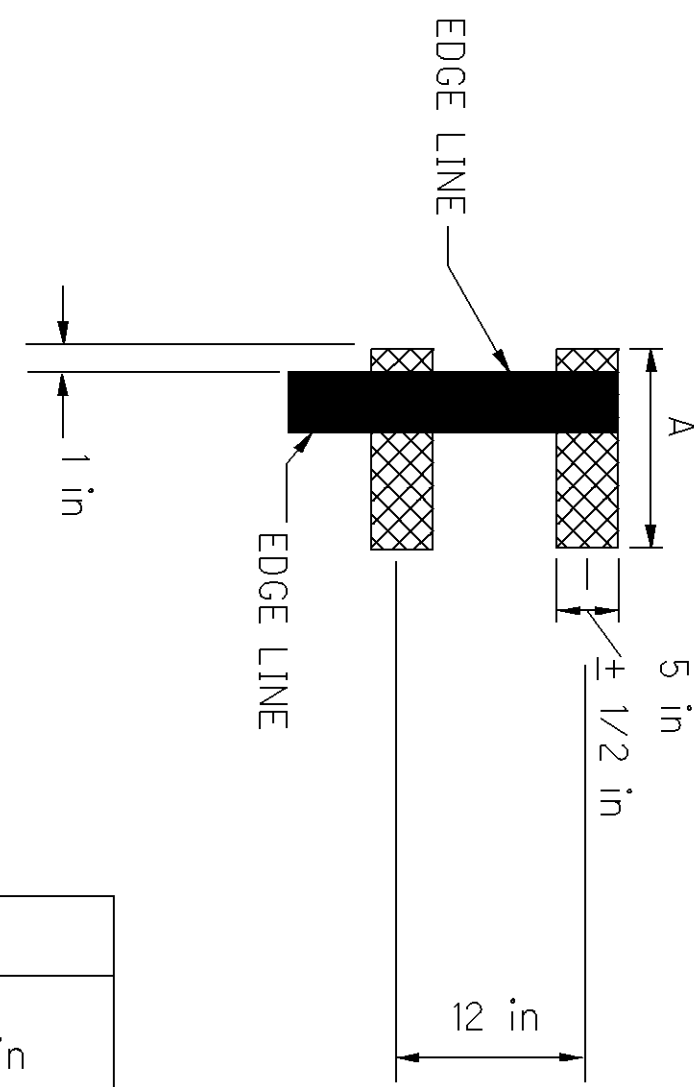
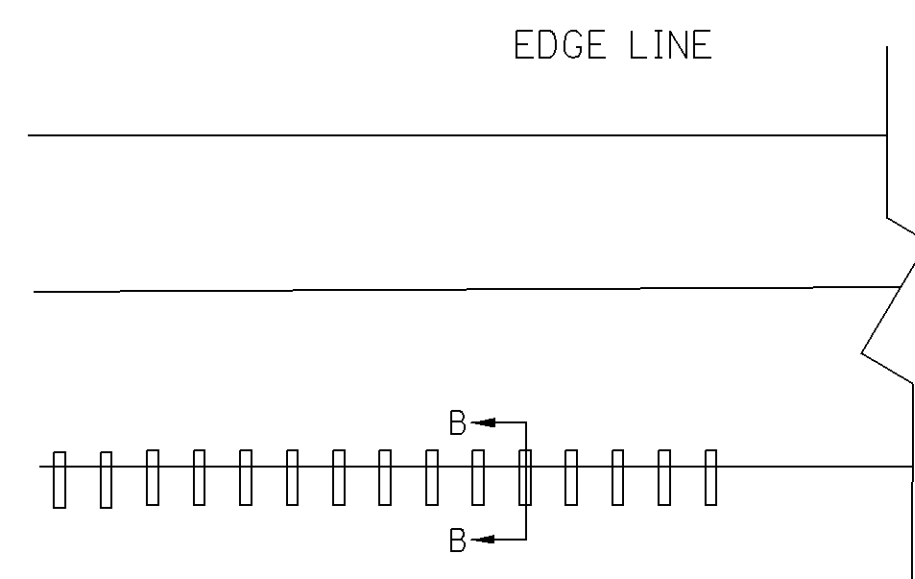
PROFILE



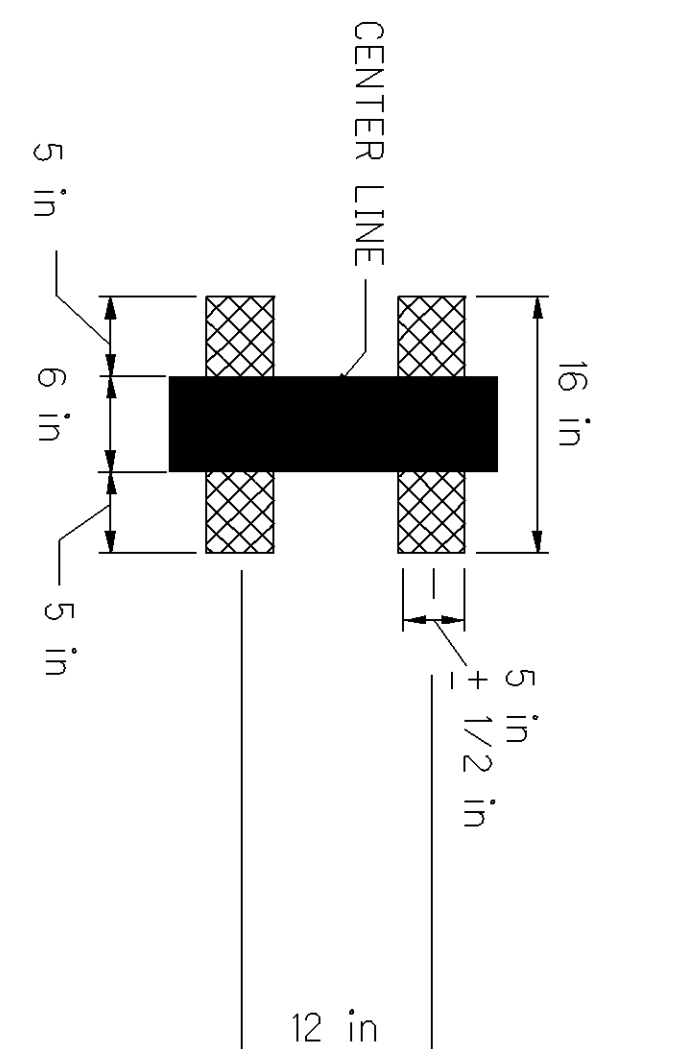
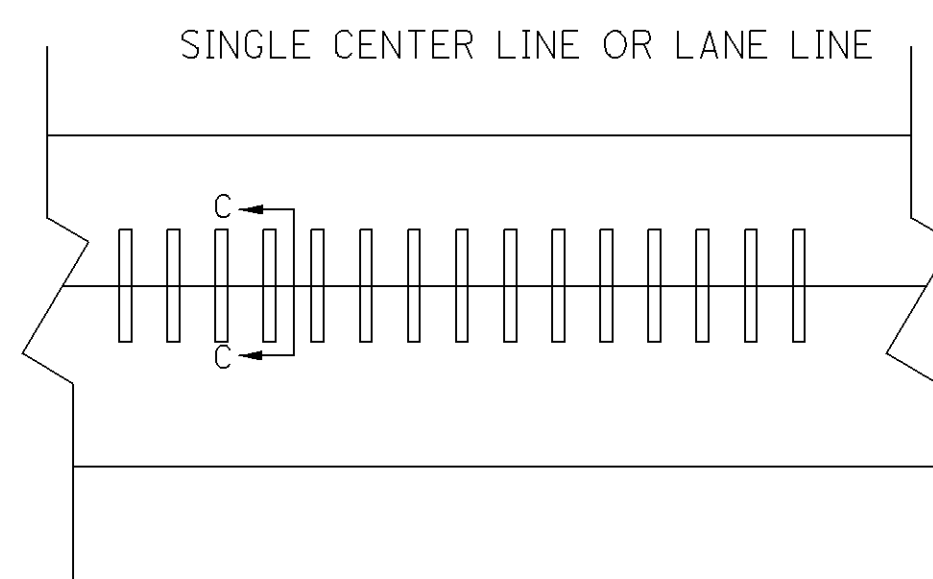
SIDE ROAD AND DRIVE RUMBLE STRIPE INSTALLATION DETAILS

NOTES

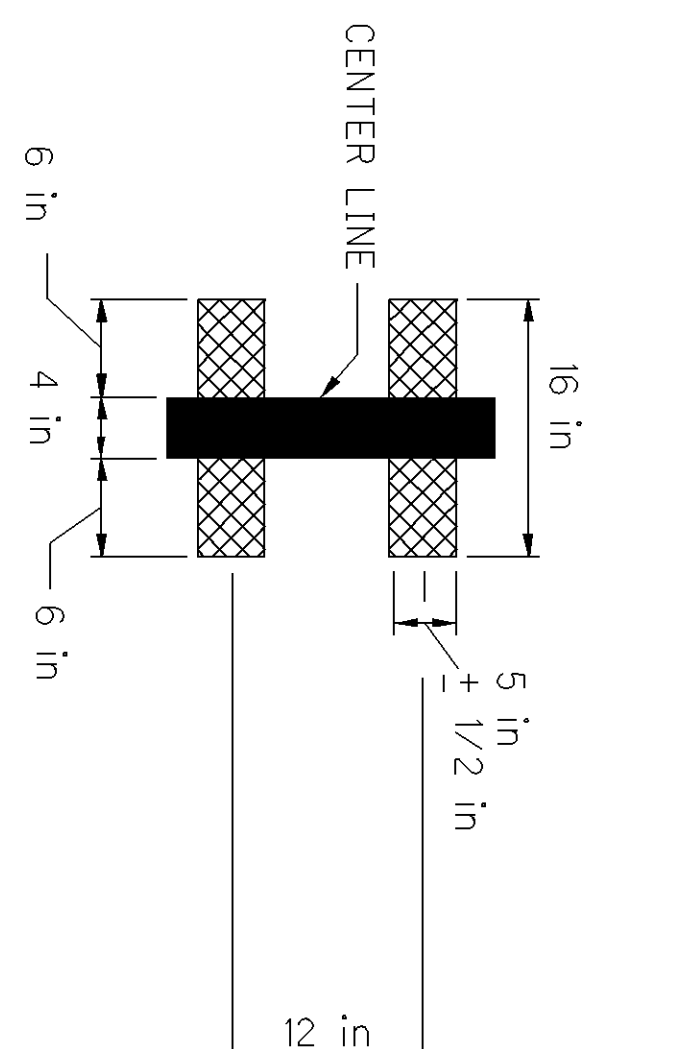
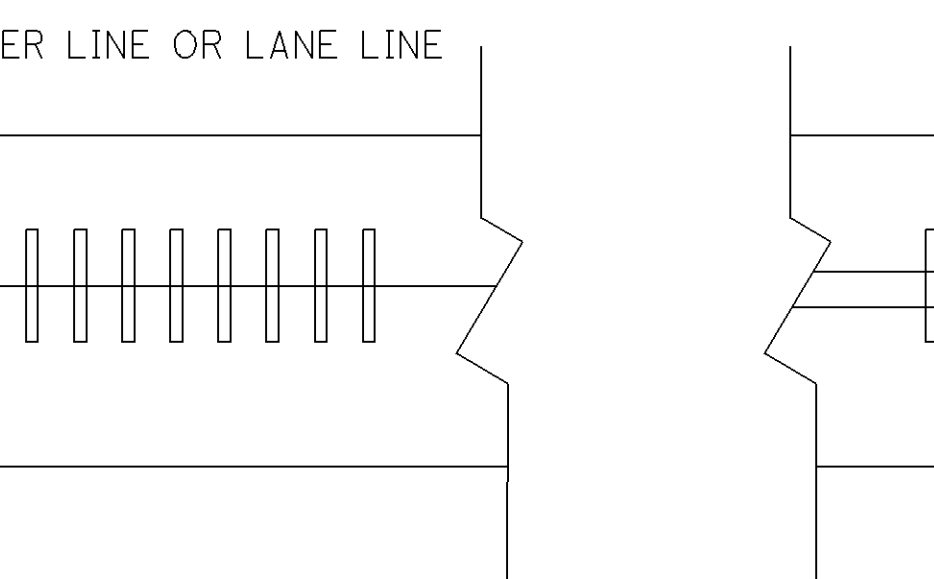
1. Rumble stripes shall be interrupted for driveways and intersections.
2. Rumble stripes shall be paid for in accordance with Item 618.
3. Rumble stripes shall be installed on a 62 foot cycle, i.e. 50 feet rumble stripes followed by a 12 foot gap.
4. Apply final pavement markings after rumble stripes are completed.
5. Location of the construction joint shall be verified in the field.



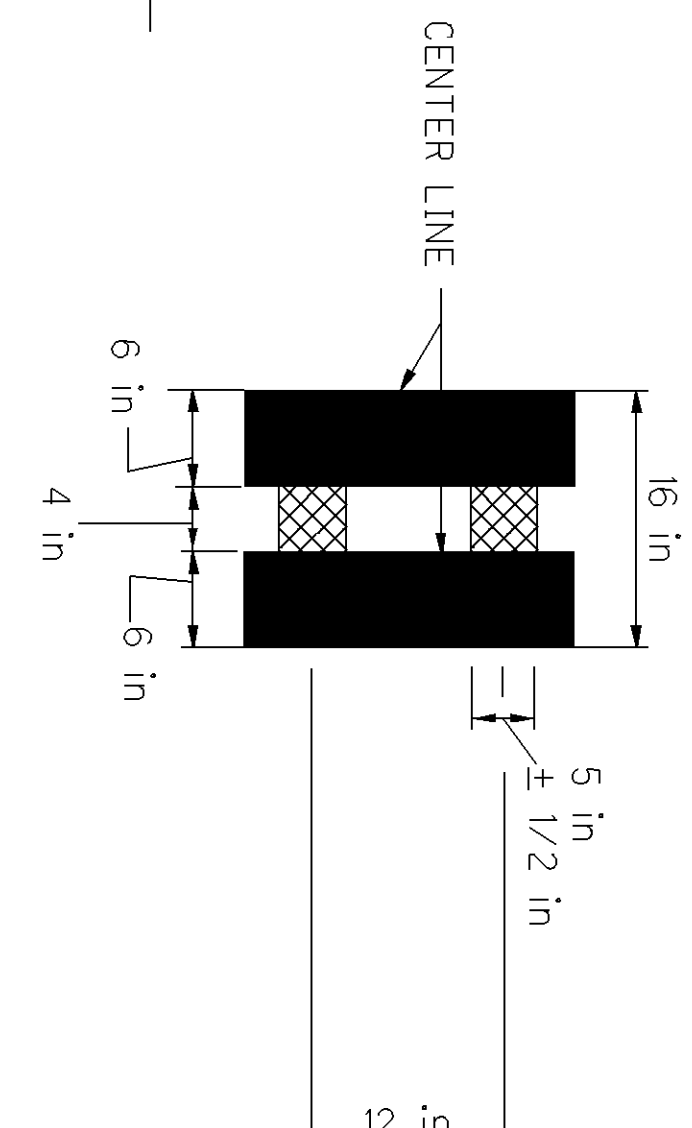
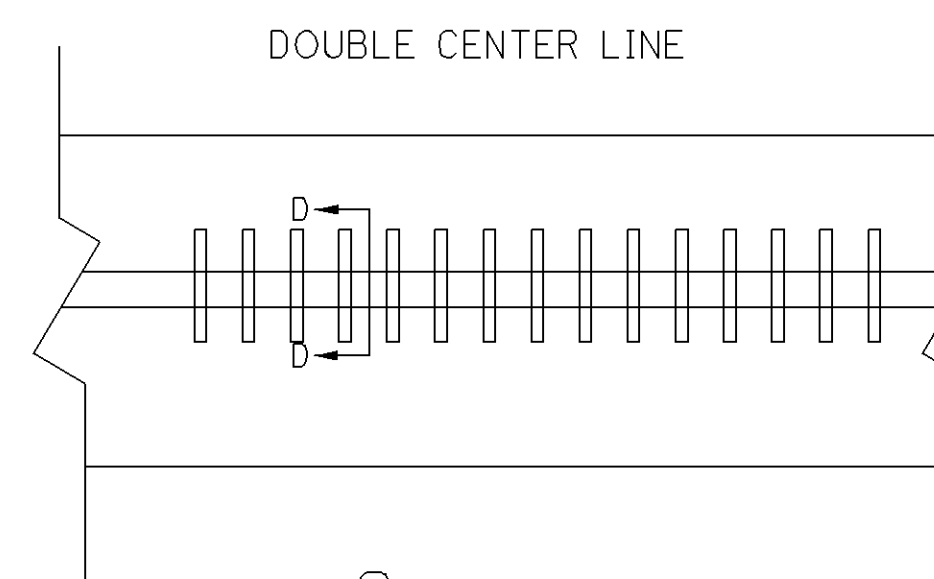
SECTION B-B
EDGE LINE RUMBLE STRIPE



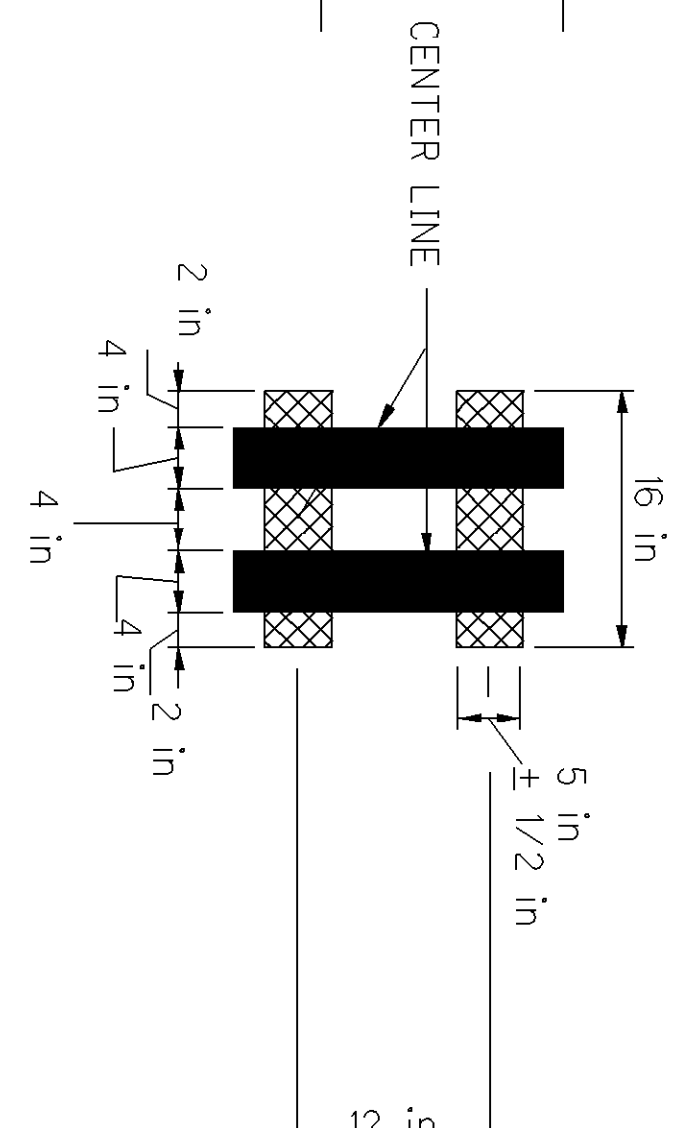
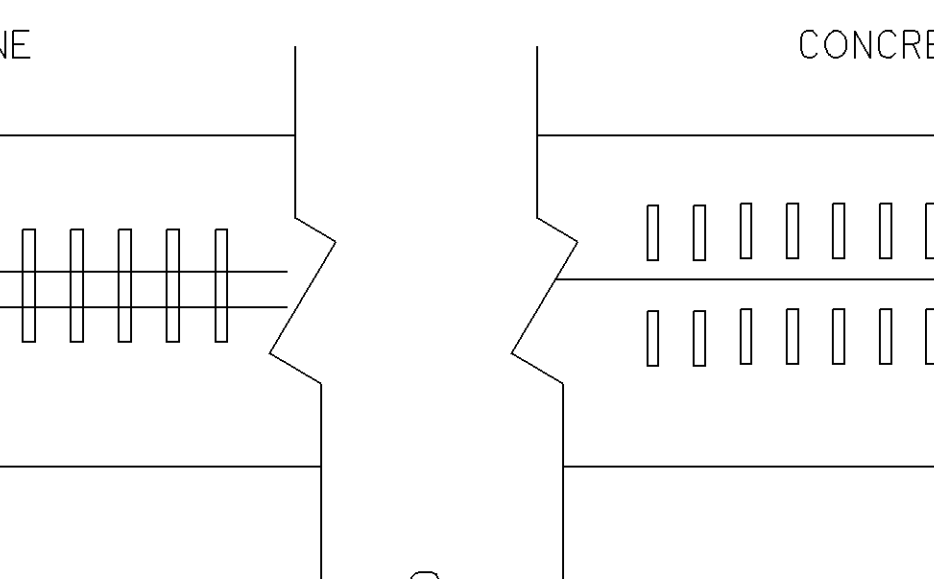
SECTION C-C
6" CENTER LINE OR LANE LINE
RUMBLE STRIPE



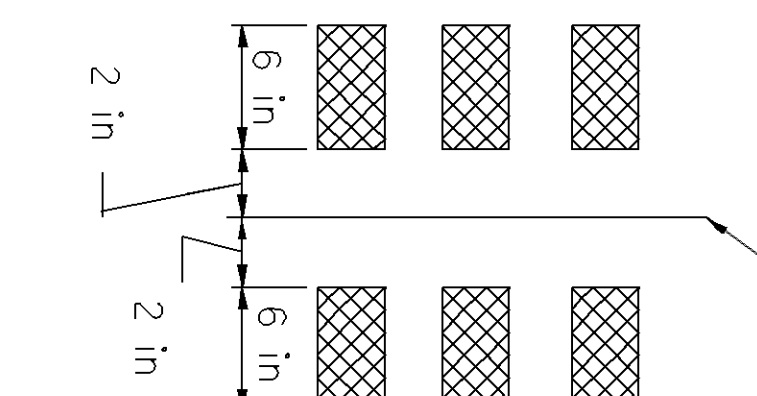
SECTION C-C
4" CENTER LINE OR LANE LINE
RUMBLE STRIPE



SECTION D-D
6" CENTER LINE RUMBLE STRIPE



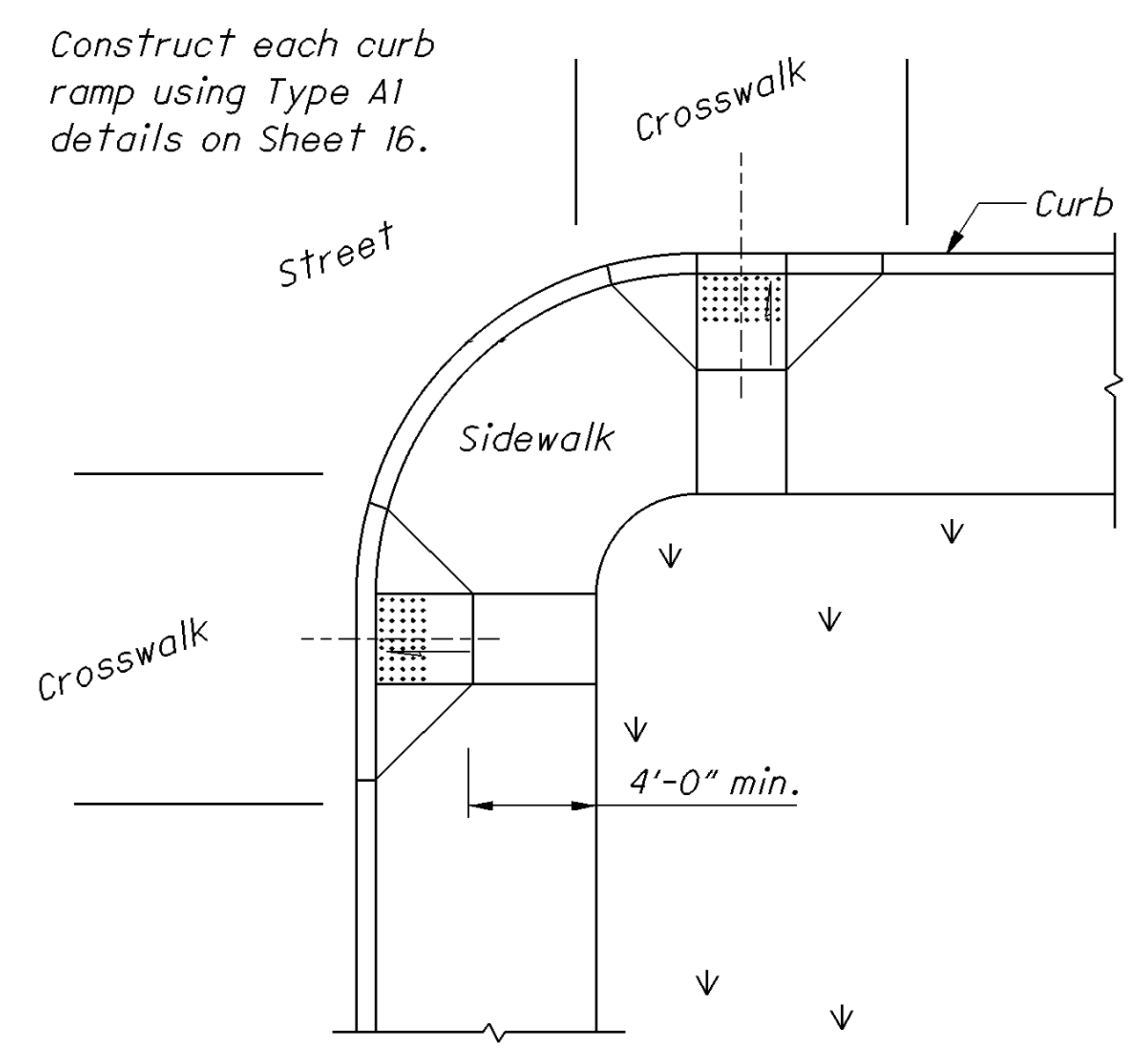
SECTION D-D
4" CENTER LINE RUMBLE STRIPE



SECTION E-E
PORTLAND CEMENT CONCRETE
JOINT CENTER LINE RUMBLE STRIPE

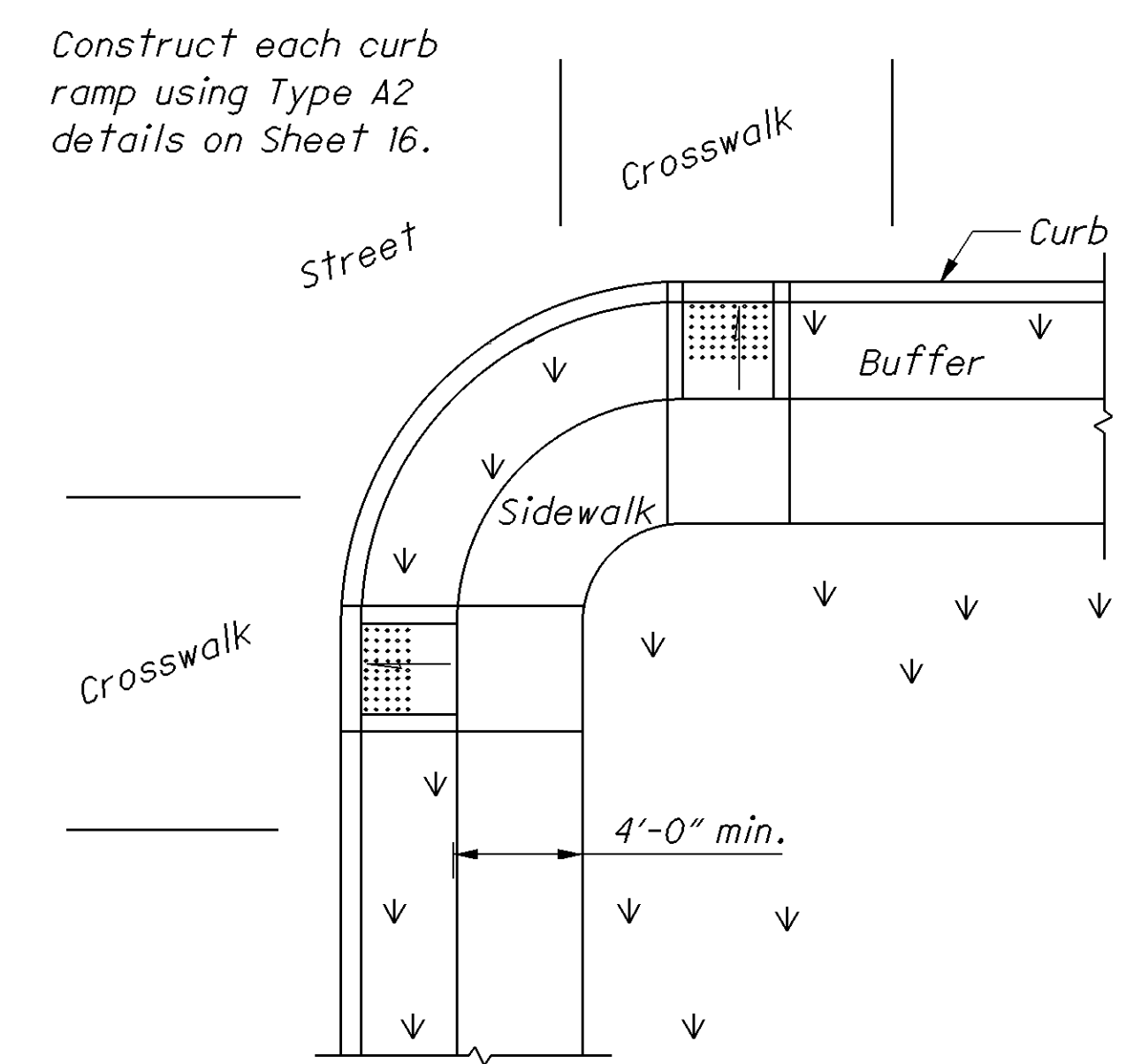
P.C. CONCRETE
JOINT LINE

SHOULDER WIDTH	A
2-5 ft	6 in
5 ft-1 in - 8 ft	10 in
≥ 8 ft- 1 in	16 in



Construct each curb ramp using Type A1 details on Sheet 16.

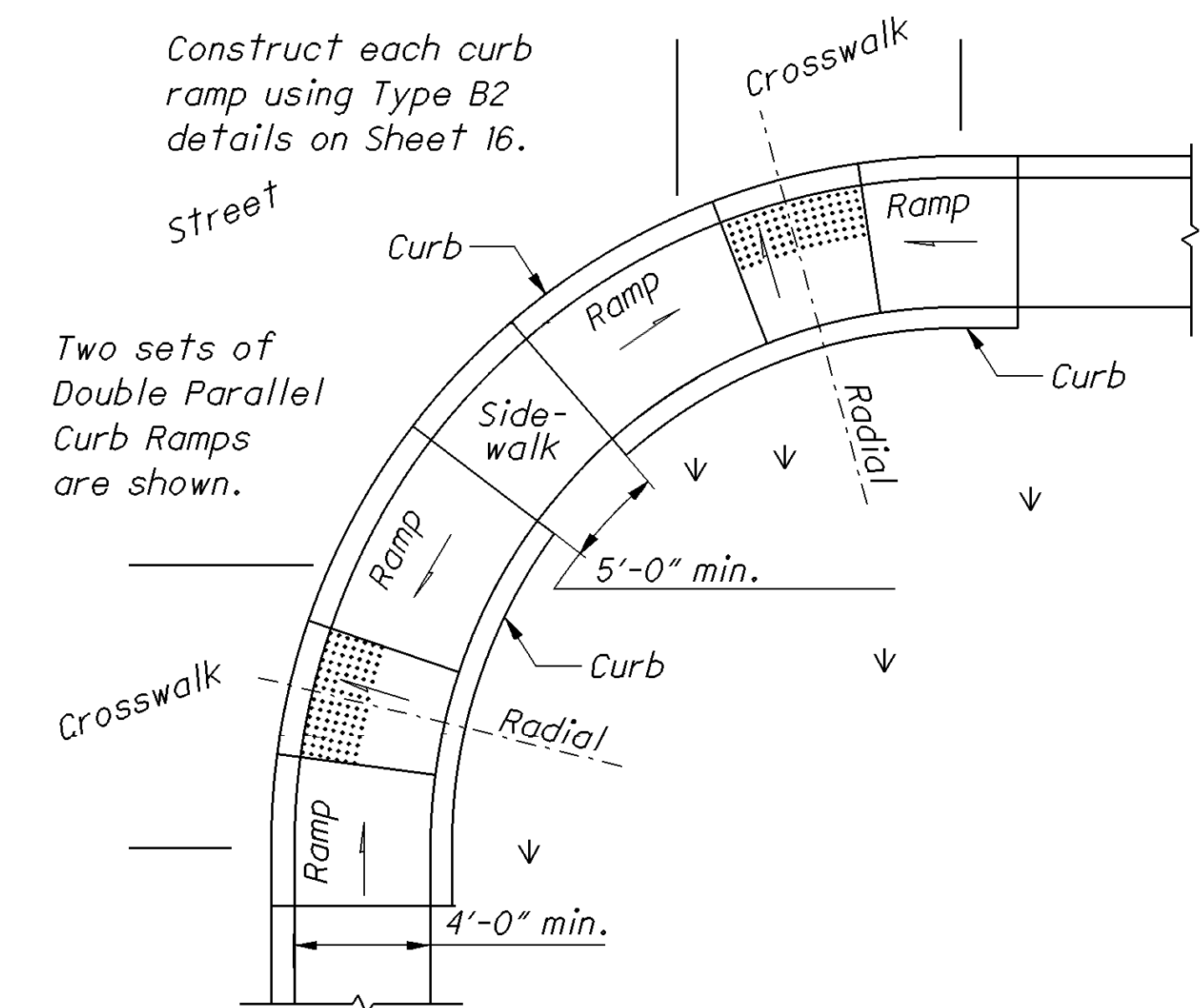
Use curb ramps with flared sides at locations with wide sidewalks.



Construct each curb ramp using Type A2 details on Sheet 16.

Use curb ramps with returned curbs where buffer is wide enough to accommodate ramp slope.

PERPENDICULAR CURB RAMPS

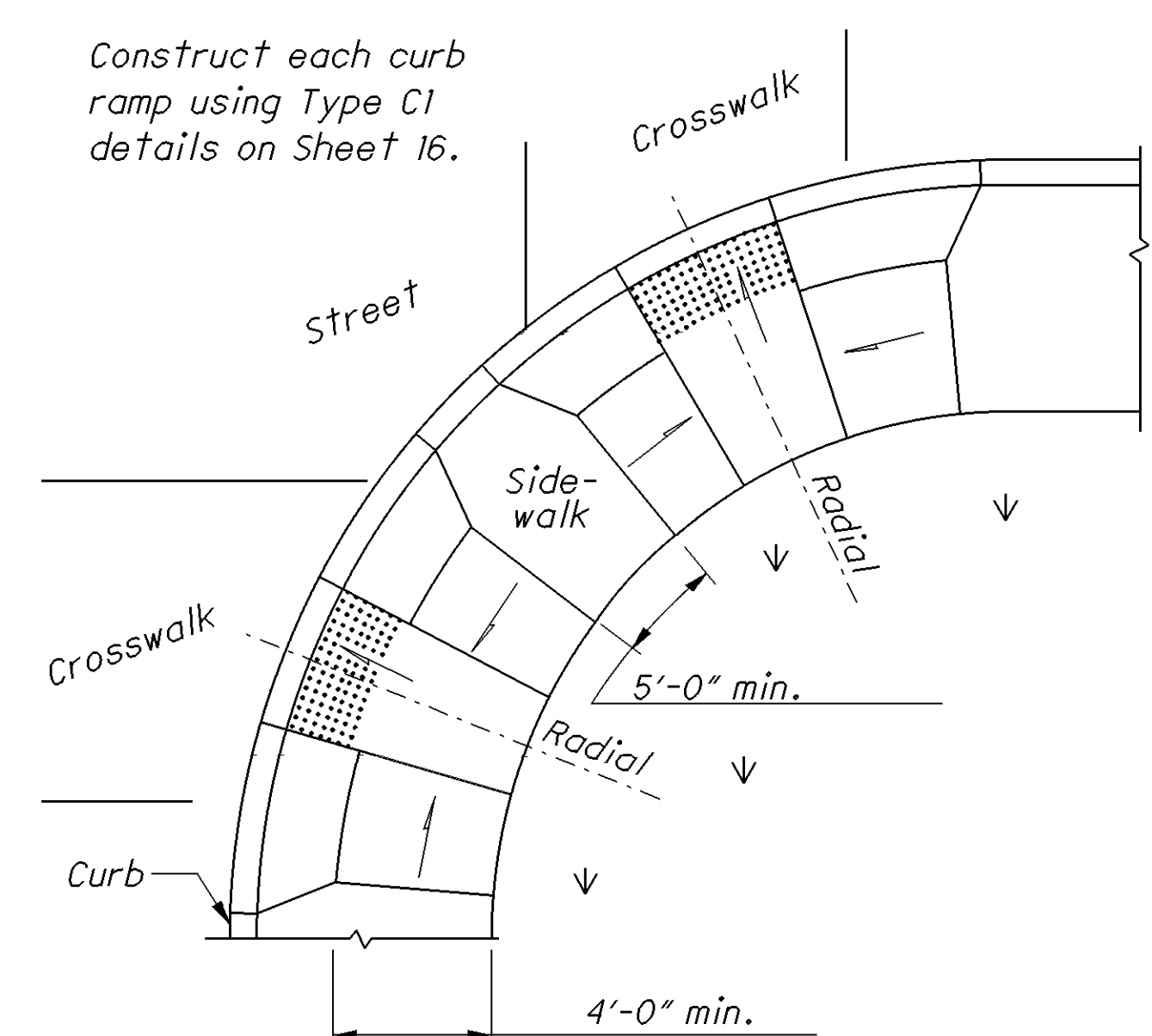


Construct each curb ramp using Type B2 details on Sheet 16.

Two sets of Double Parallel Curb Ramps are shown.

Place on streets having wide turning radius and where sidewalks are narrow.

PARALLEL CURB RAMPS



Construct each curb ramp using Type C1 details on Sheet 16.

Curb ramp placement where streets have wide turning radius, and sufficient sidewalks width.

COMBINATION CURB RAMPS

NOTES

GENERAL: This drawing shows curb ramp types details and placement examples for curb ramp construction, including the installation of detectable warnings.

Curb ramp types are shown on Sheet 16 and include Perpendicular, Parallel, and Combined types as specified to be constructed in the locations shown in the project plans.

The contractor may adjust the placement of curb ramps if existing field conditions warrant with the approval of the Engineer.

Excavate, form, place, finish, and cure according to 608.03.A, 608.03.B, 608.03.C, and 608.03.E.

DETECTABLE WARNINGS: Install Detectable Warnings on each curb ramp with approved materials, as shown on Sheet 17. Install these proprietary products as per manufacturer's written instructions.

DRAINAGE: Contractor is to ensure the base of each constructed curb ramp allows for proper drainage, without exceeding allowable cross slope or ramp slopes. Vertical change in level exceeding 1/8" between the 1) pavement and gutter, and 2) gutter and ramp, are not allowed.

JOINTS: Provide expansion joints in the curb ramp as extensions of walk joints and consistent with Item 608.03 requirements for a new concrete walk. Provide a 1/2" Item 705.03 expansion joint filler around the edge of ramps built in existing concrete walks. Lines shown on this drawing indicate the ramp edges and slope changes, and do not necessarily indicate joint lines.

METHOD OF MEASUREMENT: The Department will measure Curb Ramps by the number of each completed curb ramp. The Department will measure Detectable Warnings in existing curb ramps and at grade crossings by the number of square feet completed.

Concrete Walk and Curb, Item 608 and 609, will be measured through out the curb ramp area and paid for under their respective Items.

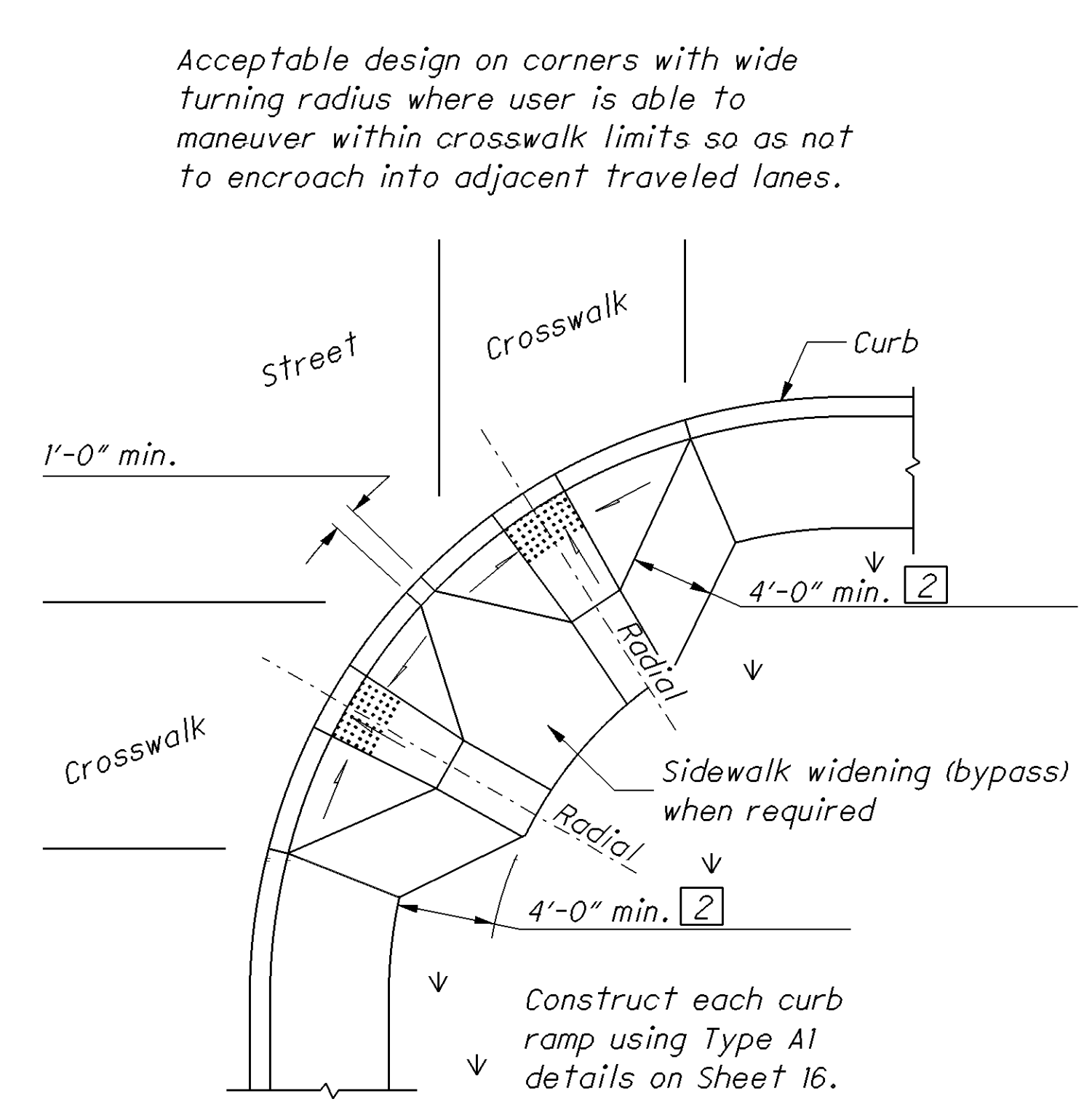
METHOD OF PAYMENT: New Curb Ramps constructed in new or existing Walk are paid for under Item 690 Special Misc.: Curb Ramp, Type -- (A1, A2, B1, B2, B3, C1, C2, or D) each, and includes the cost of any additional materials and installation (including detectable warnings), grading, forming and finishing.

Detectable Warnings constructed in existing curb ramps or for at-grade crossing locations are paid for under Item 690-Special Misc.: Detectable Warning (Sq. Ft.) and is full compensation for excavation, backfill, base course material, reinforcing steel, expansion joint materials, and any incidentals required to complete the installation as specified. The work to cast the tiles in place will also require removal of existing pavement or sidewalk (Item 202) to the nearest joint, or if no joint exists, a minimum of 4 feet.

Removal of existing curb, pavement, walk (or existing curb ramps) are paid under Item 202.

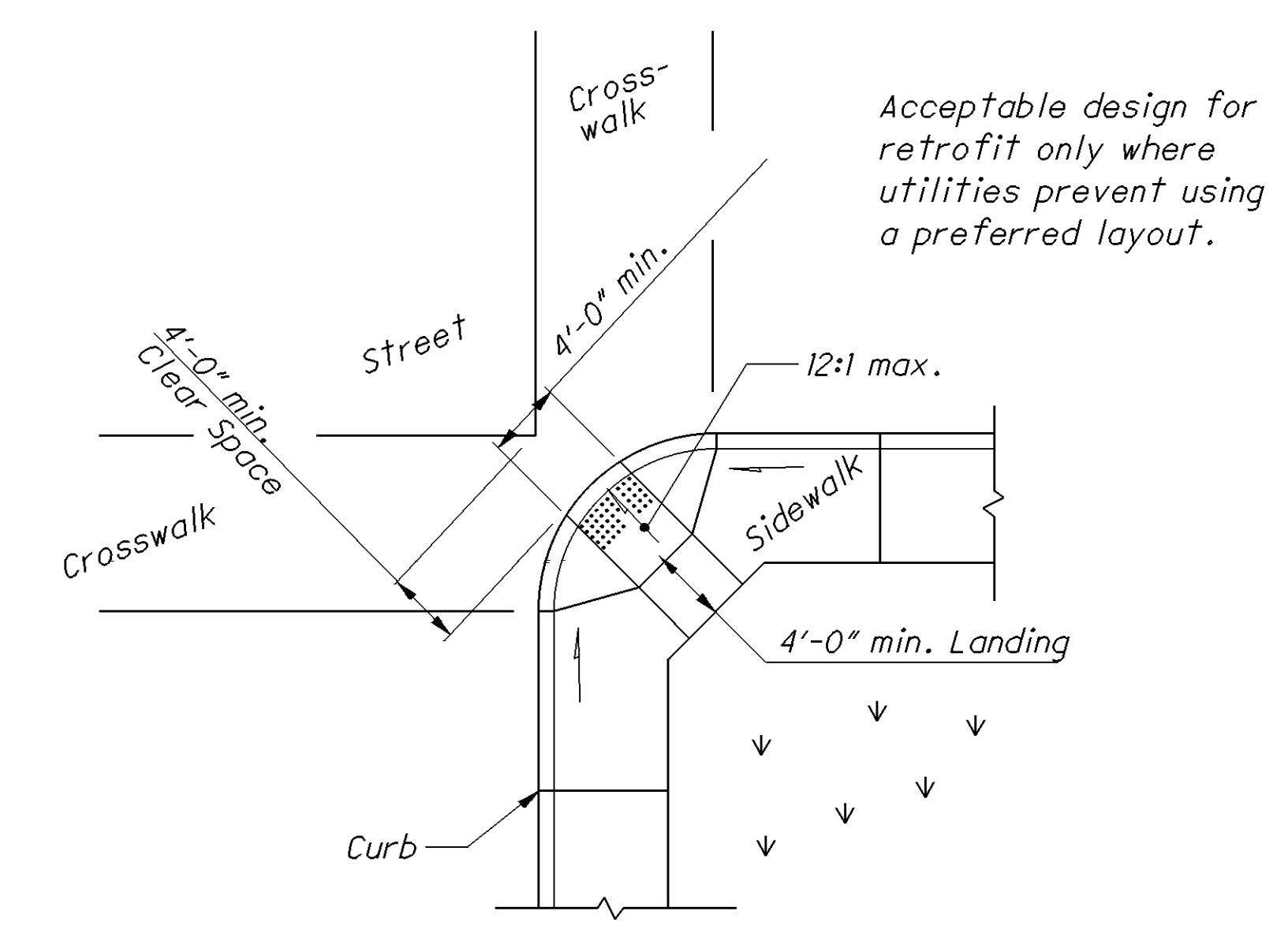
LEGEND

② May be reduced to 3'-4" in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.



Acceptable design on corners with wide turning radius where user is able to maneuver within crosswalk limits so as not to encroach into adjacent traveled lanes.

PERPENDICULAR RAMPS



Acceptable design for retrofit only where utilities prevent using a preferred layout.

Use this design only for existing walks, and when site constraints prohibit other designs. The diagonal Type D ramp may be constructed as either a Perpendicular, Parallel or Combination curb ramp type. Avoid using where curb radii are less than 20'-0" .

DIAGONAL RAMP (Type D)

ACCEPTABLE CONSTRUCTION PLACEMENT

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NOTES

The running slope of the ramp is preferred to be 12:1 or flatter. In existing sidewalks, where the maximum ramp slope is not feasible due to site constraints (e.g. utility poles or vaults, right-of-way limits) it may be reduced as follows:

- A) 10:1 for a max. rise of 6",
- B) 8:1 for a max. rise of 3",
- C) 6:1 over a max. run of 2'-0" for historic areas where a flatter slope is not feasible.

To prevent chasing the grade indefinitely, the transition from existing sidewalk to the curb ramp area is not required to exceed 15 feet in length.

While ramps may be skewed to the crosswalk, the entire lower landing area must fall within the cross walk that the ramp serves and cannot be located in the traveled lane of opposing traffic.

The counter slope of the gutter or street at the foot of a curb ramp, landing, or blended transitions shall be 20:1 or flatter.

The bottom edge of the ramp shall change planes perpendicular to the landing.

The edge of the curb shall be flush with the edge of the adjacent pavement and gutter and surface slopes that meet grade breaks shall also be flush.

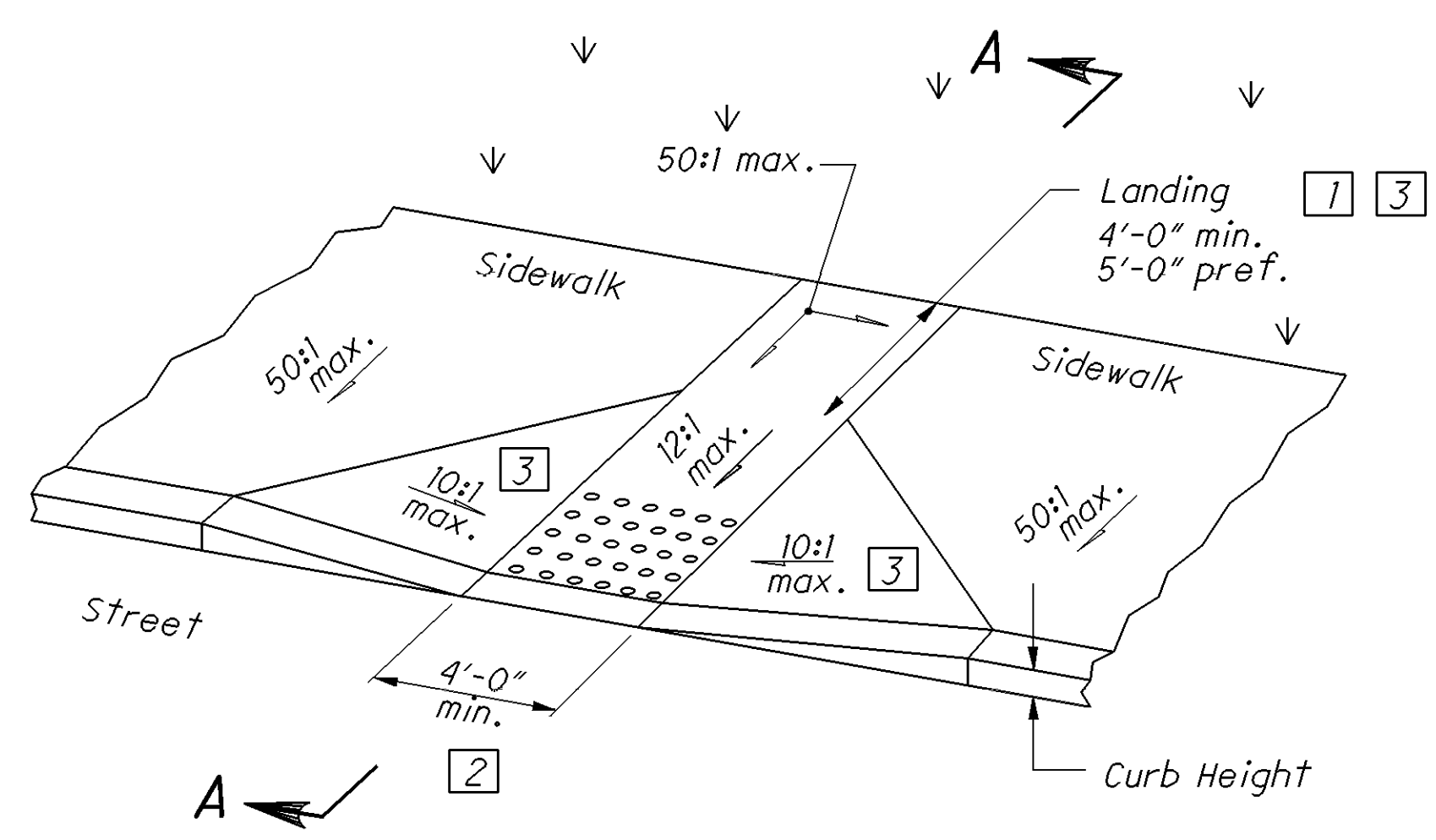
Ramp landings shall be 4' min. x 4' min. with a 50:1 or flatter cross slope and running slope, unless otherwise shown.

LEGEND

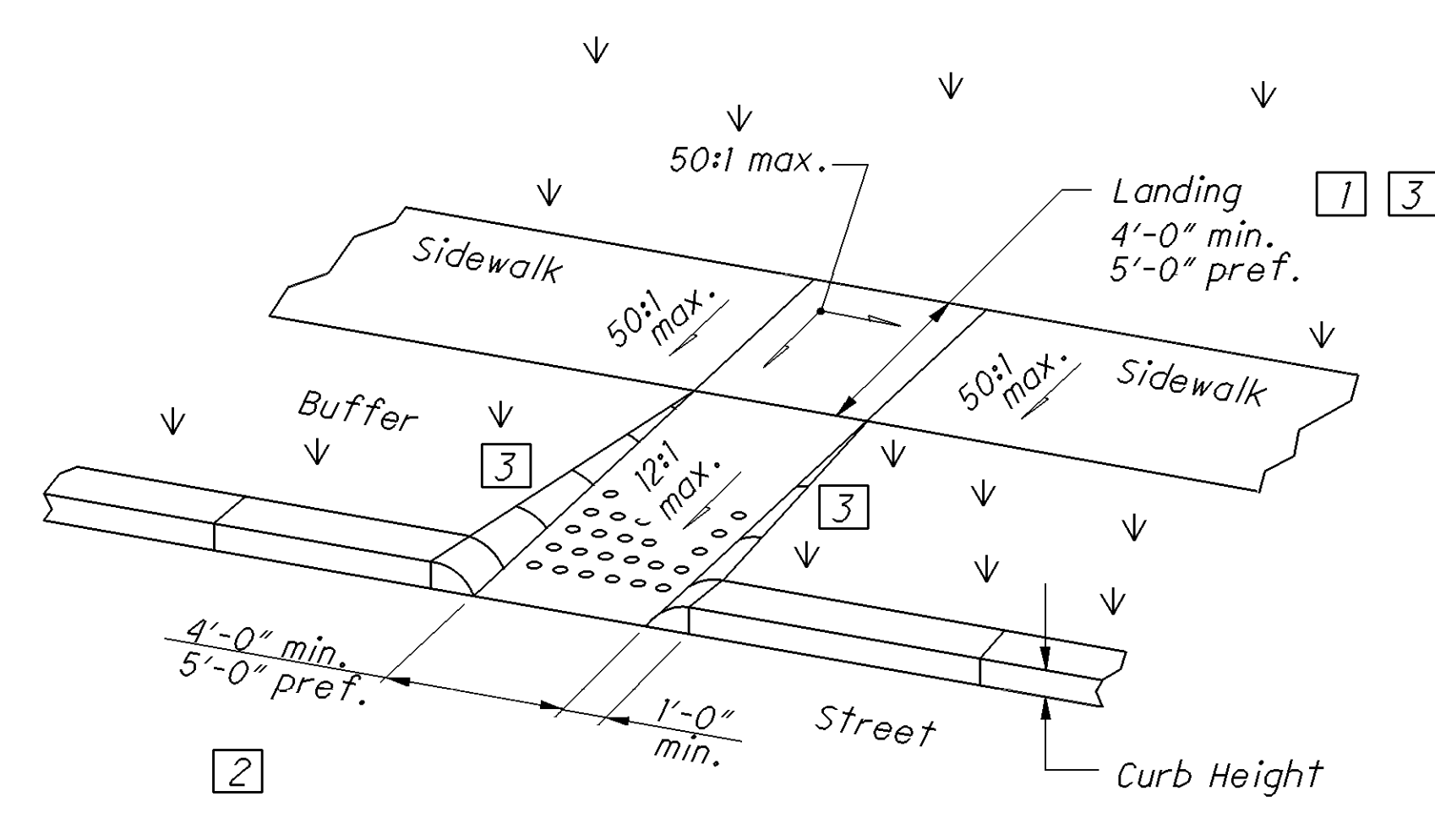
- 1 Dimension may be reduced to 3'-0" in existing sidewalks if the landing is unconstrained along the back edge.
- 2 May be reduced to 3'-4" in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.
- 3 Where landing width (D) has been reduced to 3'-0" the flared sides shall have a maximum slope of 12:1.

Flared sides are not required where the edges of a curb ramp are protected by landscaping or other barriers to travel by wheelchair users or pedestrians across the edge of the curb ramp. However, if the flared sides are used in these areas, they may be of any slope.

See Sheet 17 for Sections.

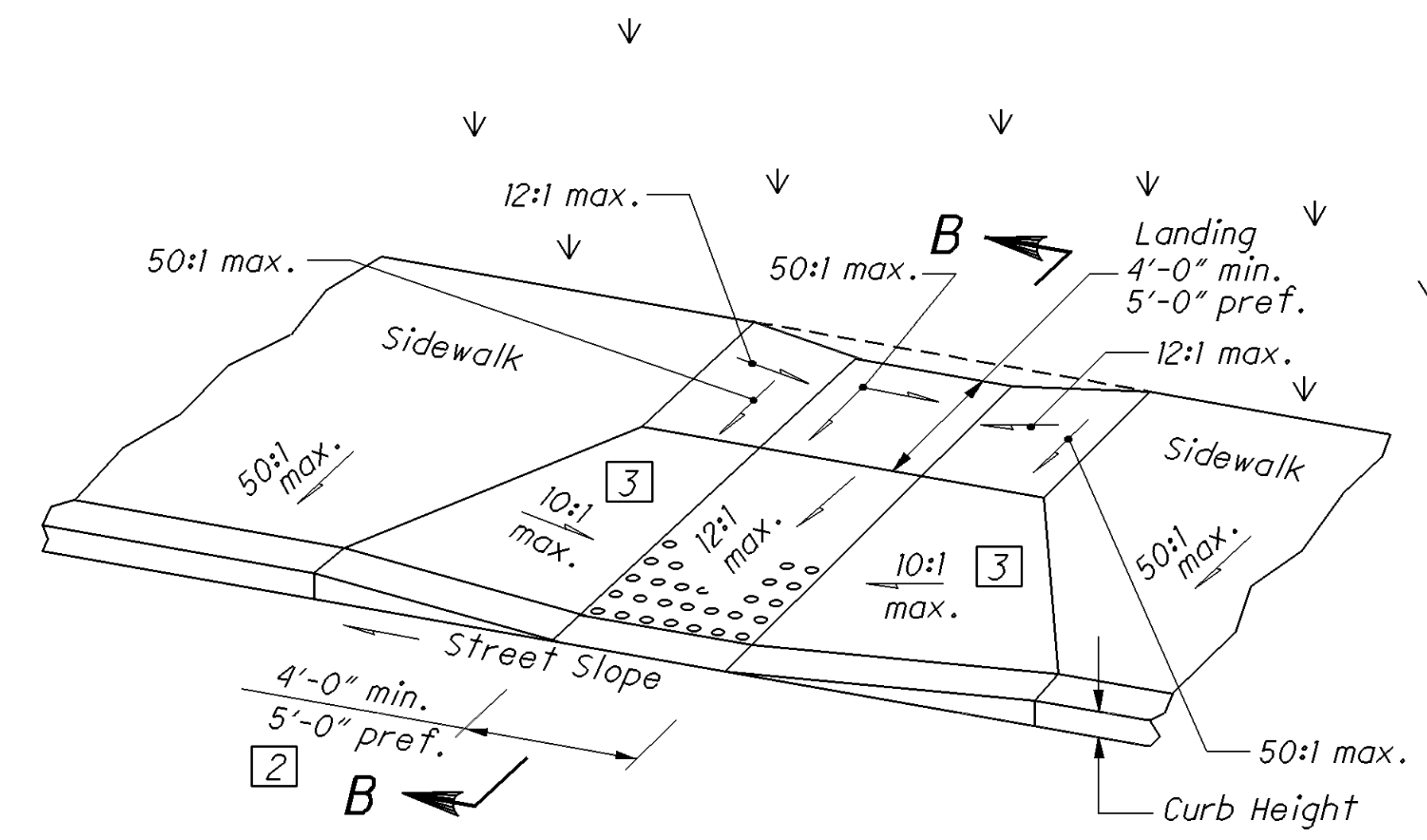


Type A1 (Perpendicular with flared sides)

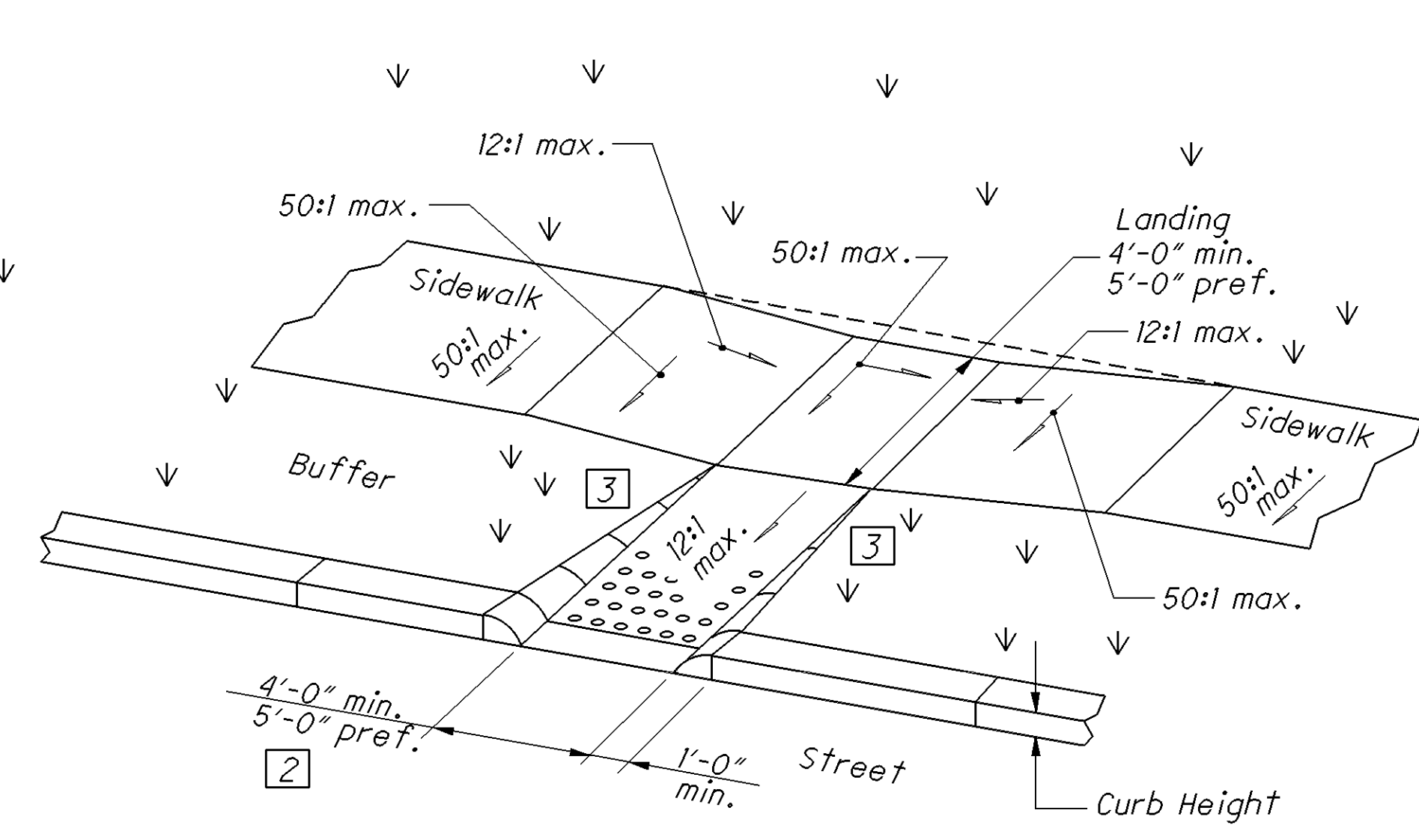


Type A2 (Perpendicular with returned curb)

PERPENDICULAR CURB RAMP DETAILS

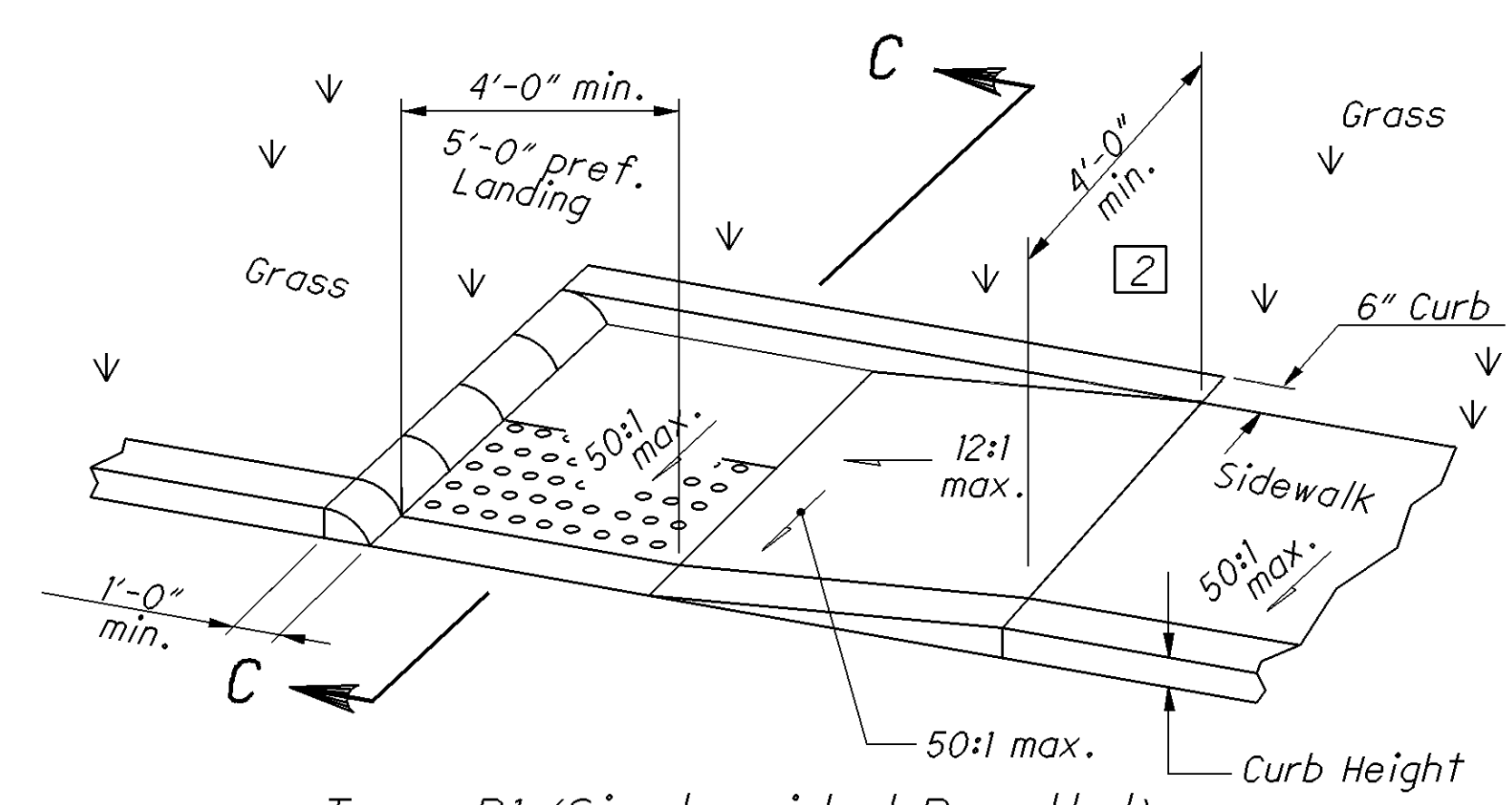


Type C1 (Combined with flared sides)

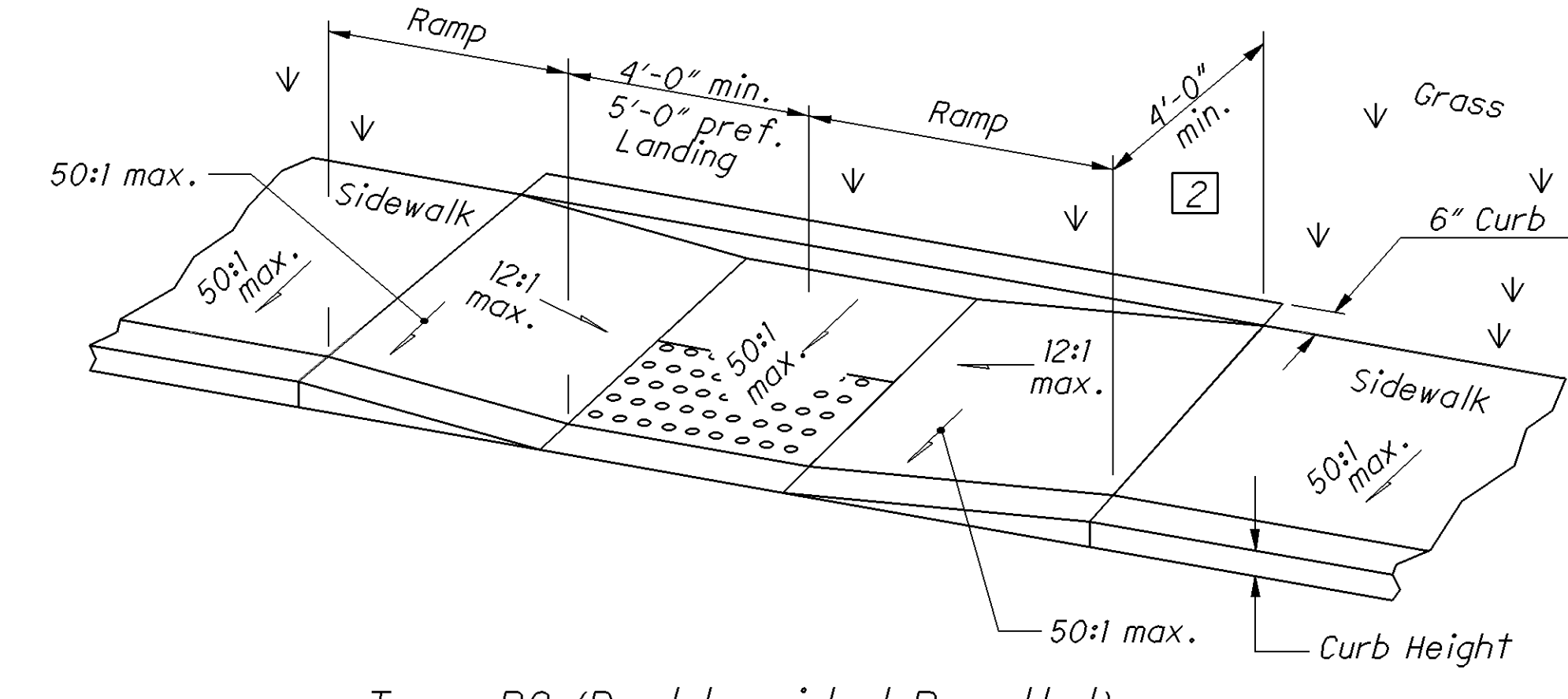


Type C2 (Combined with returned curb)

COMBINED CURB RAMP DETAILS

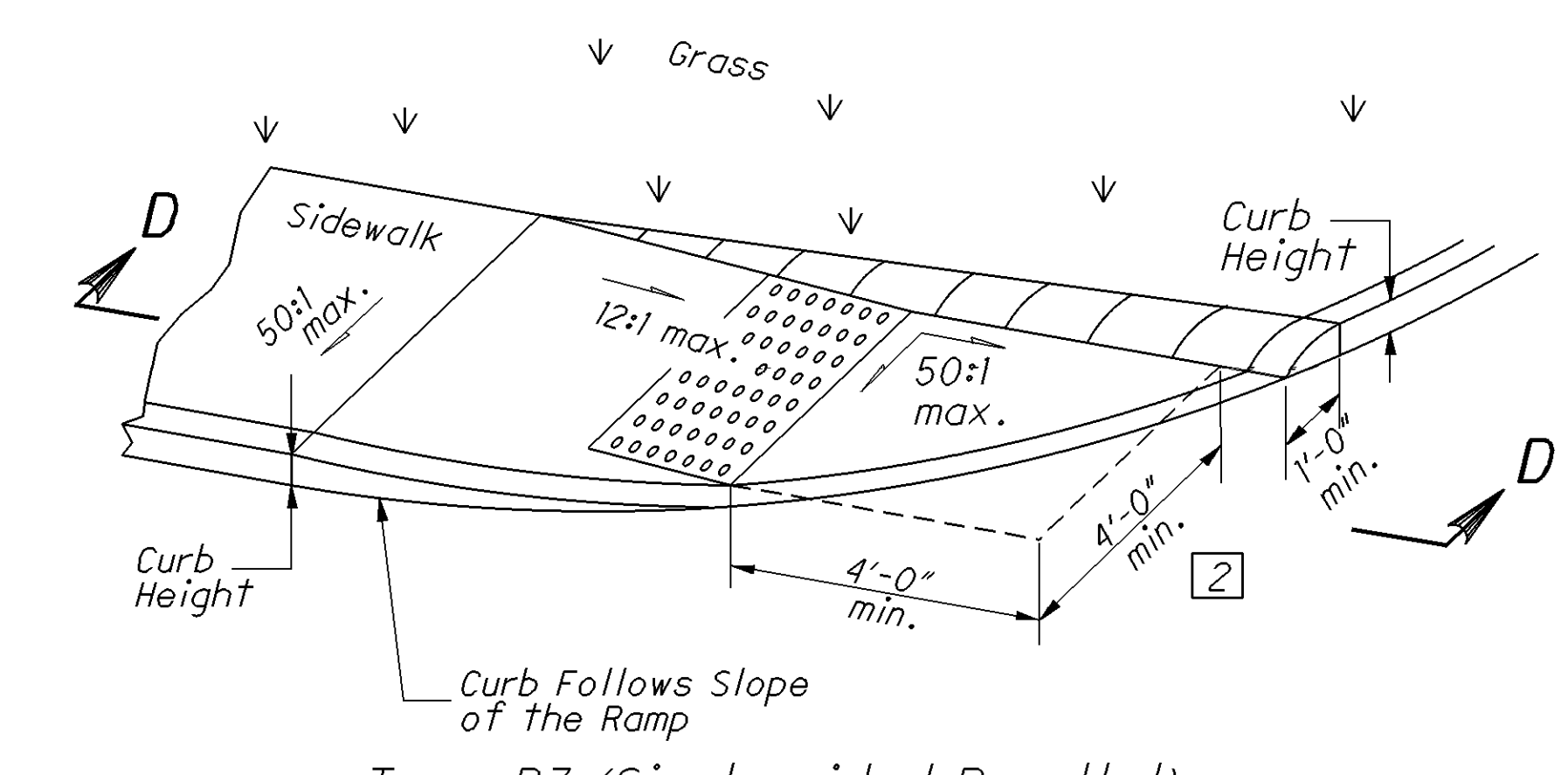


Type B1 (Single sided Parallel)



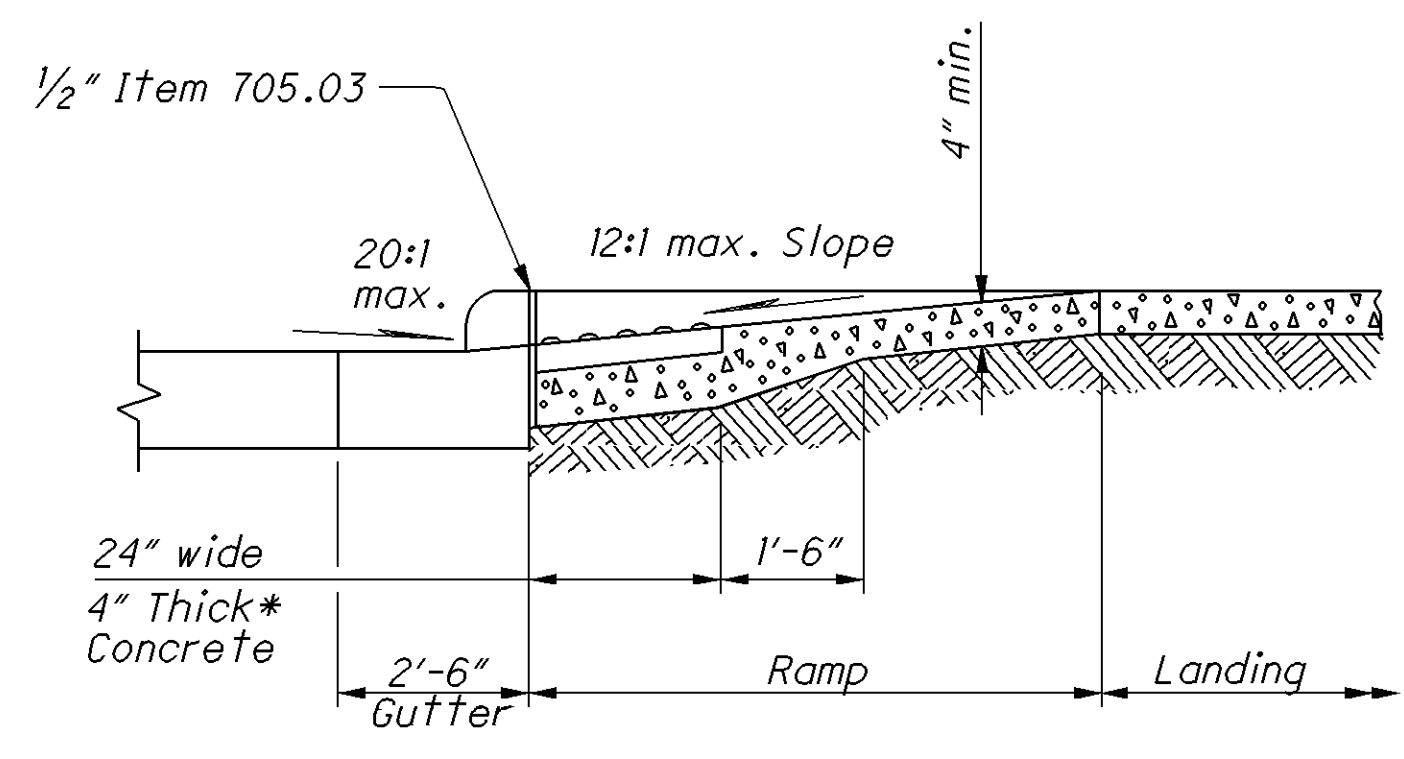
Type B2 (Double sided Parallel)

PARALLEL CURB RAMP DETAILS

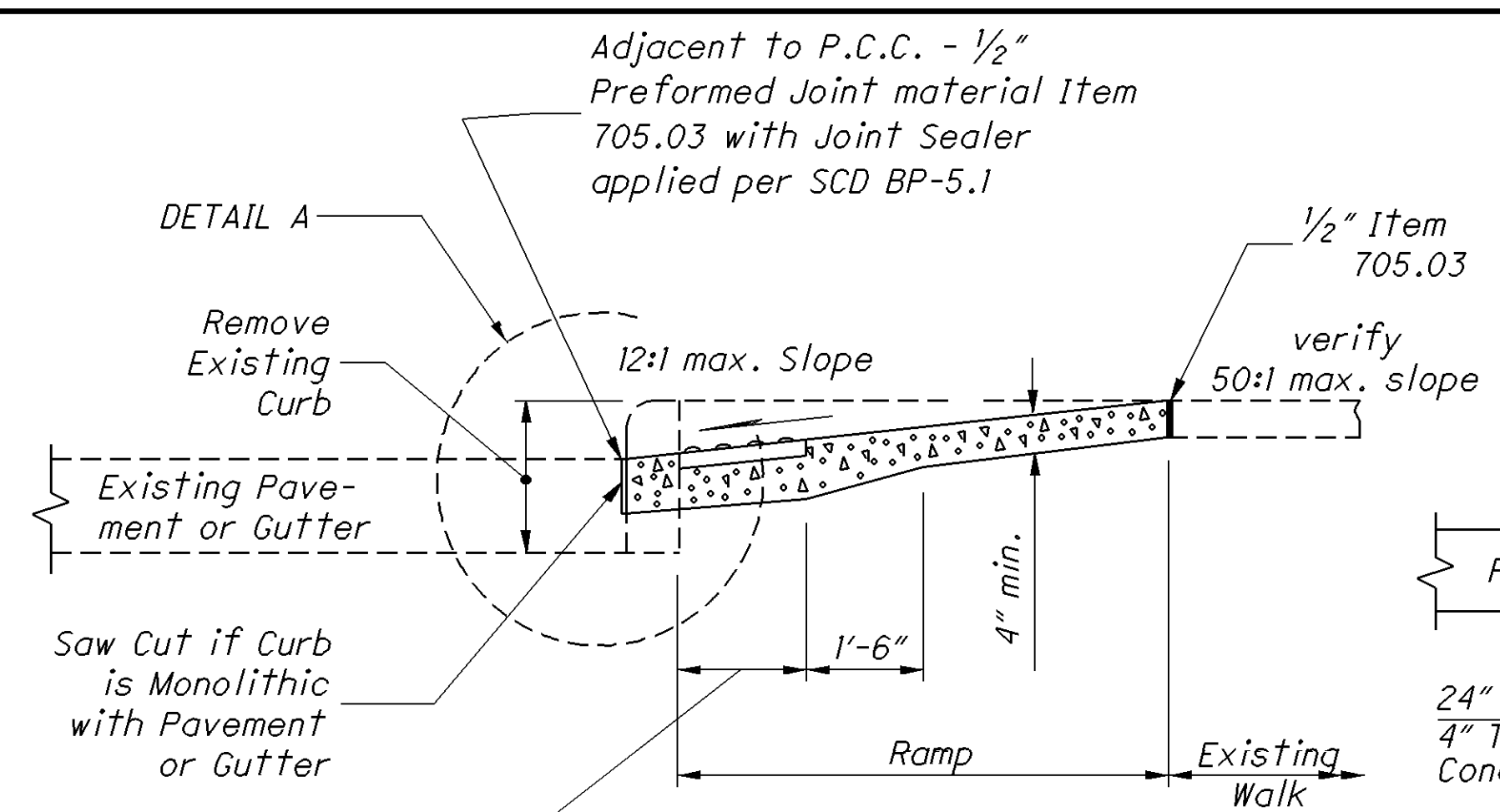


Type B3 (Single sided Parallel)

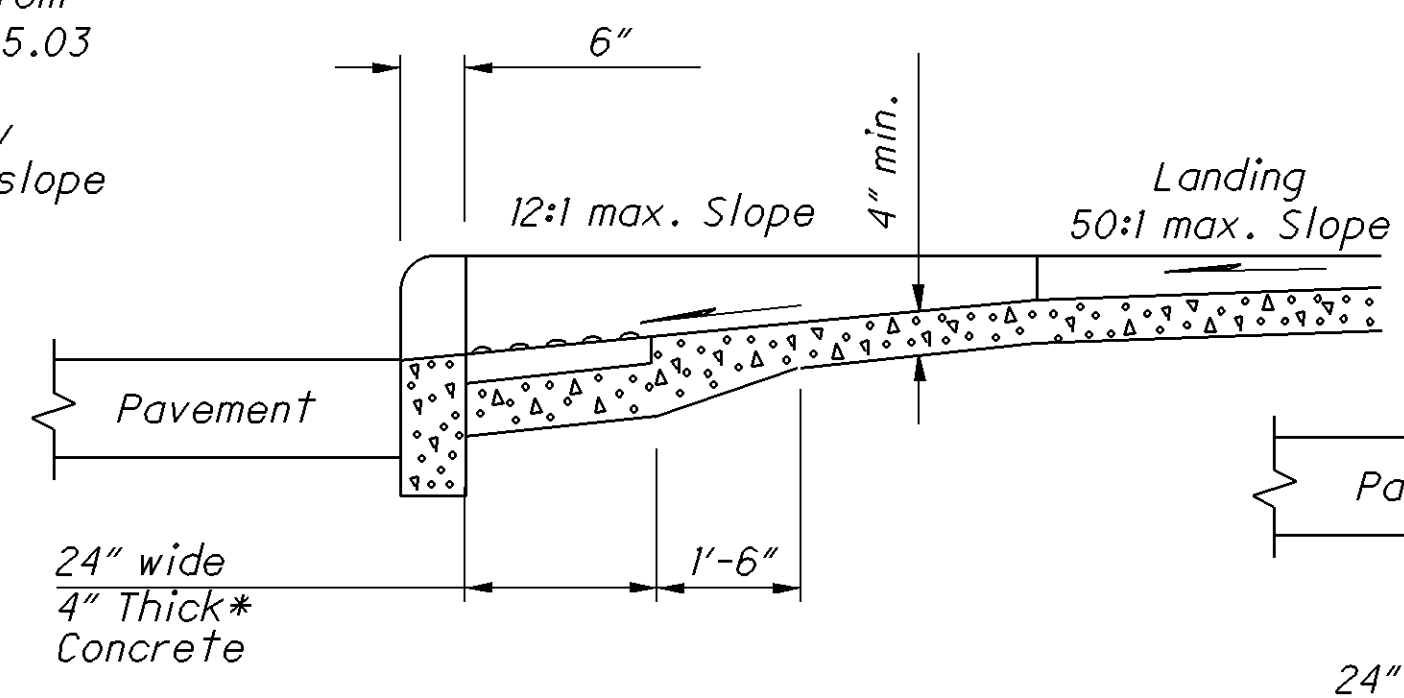
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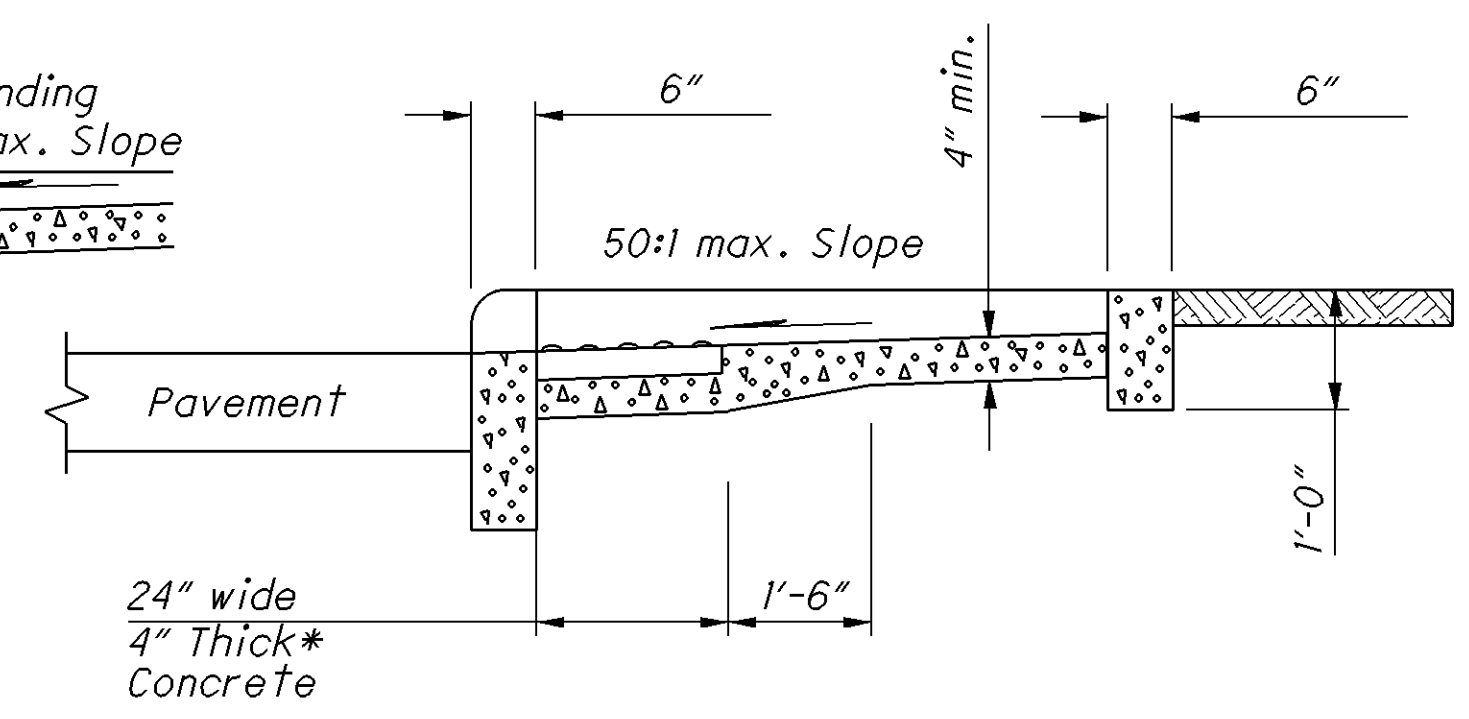
SECTION A-A
NORMAL DETAIL
See Sheet 16.



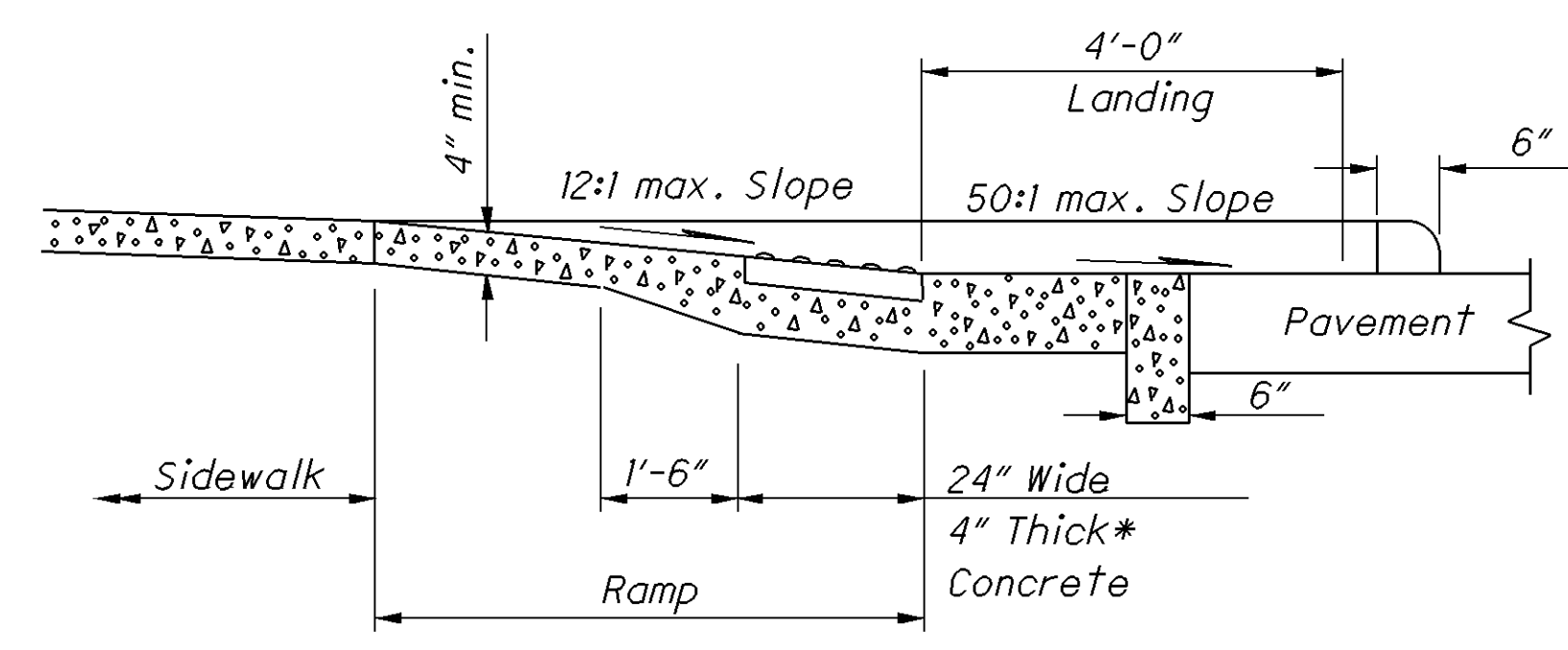
SECTION A-A
EXISTING WALK DETAIL
See Sheet 16.



SECTION B-B
See Sheet 16.

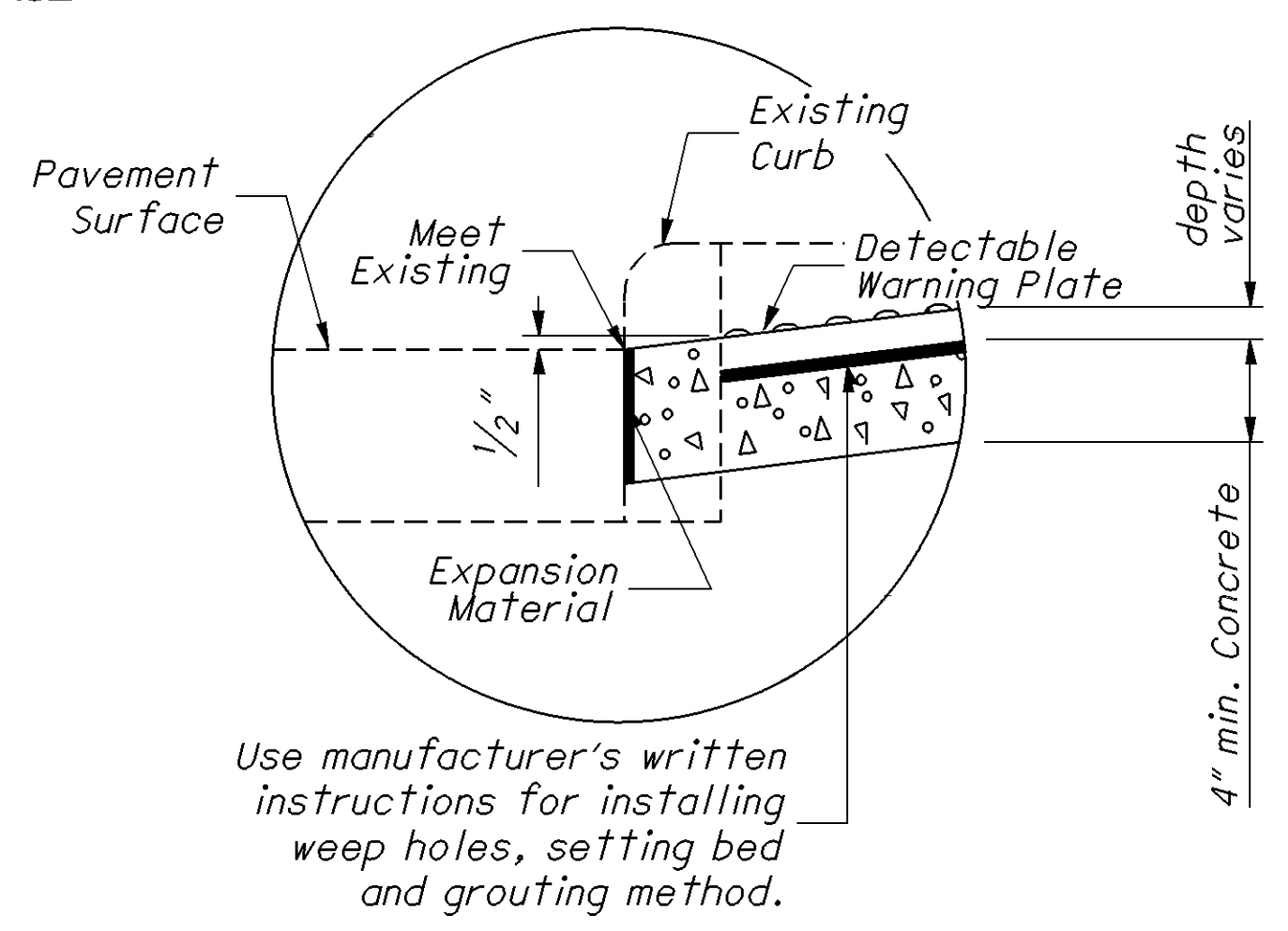


SECTION C-C
See Sheet 16.

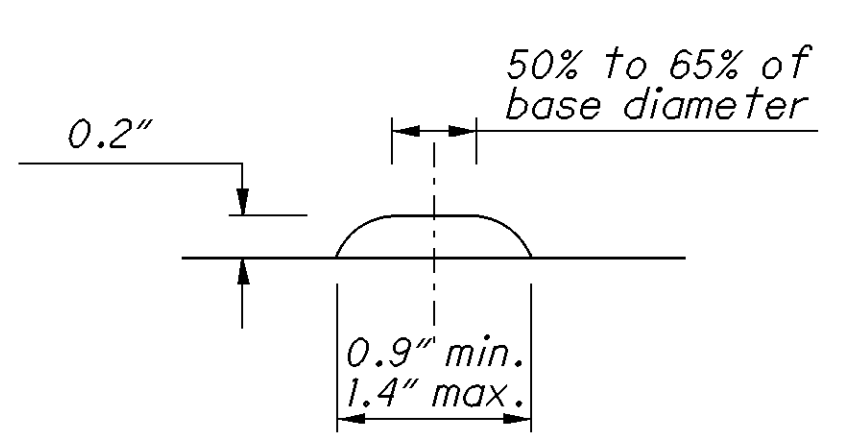


SECTION D-D
See Sheet 16.

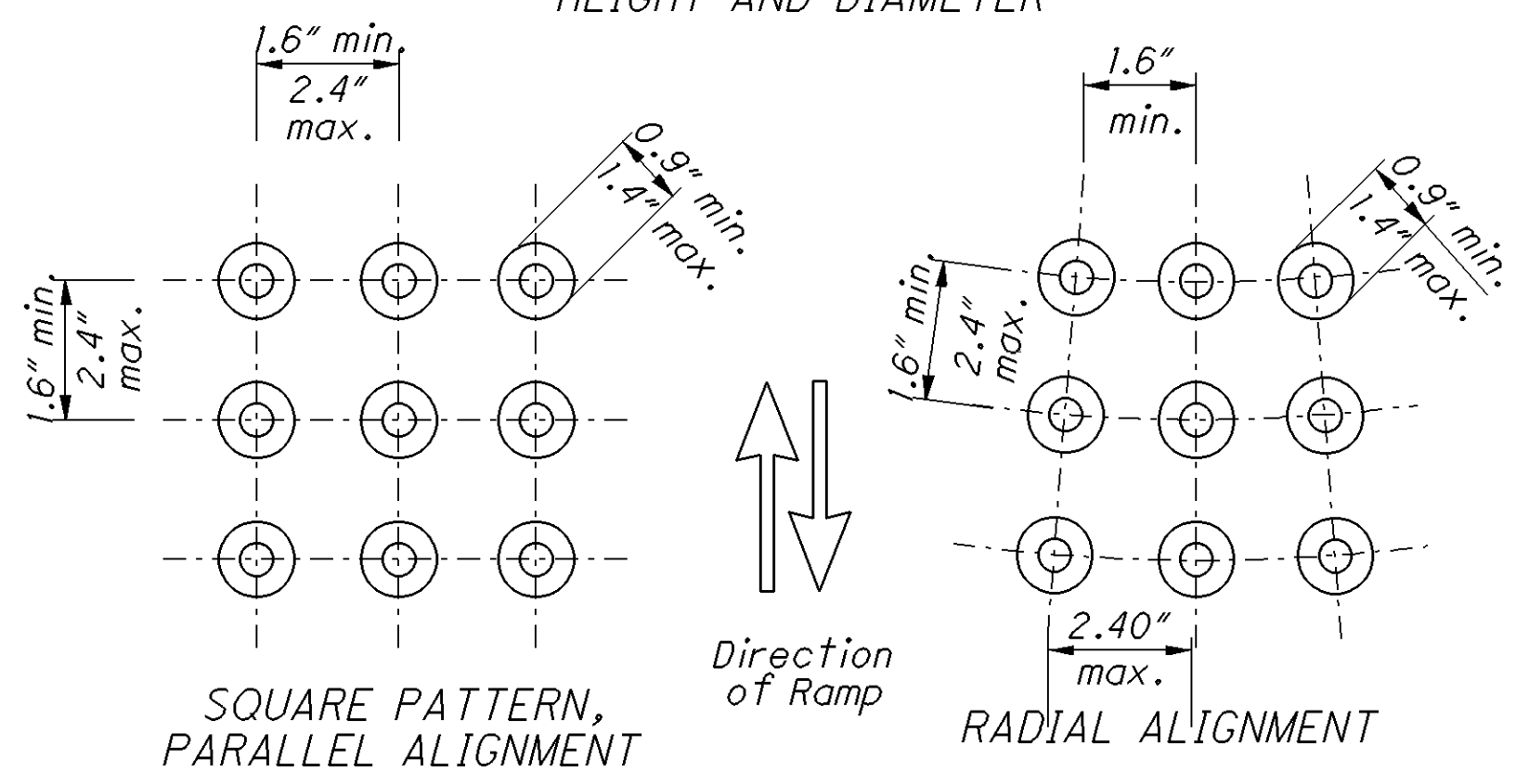
*Where possible, pour ramp area integral with the curb, otherwise use 6" thick walk.



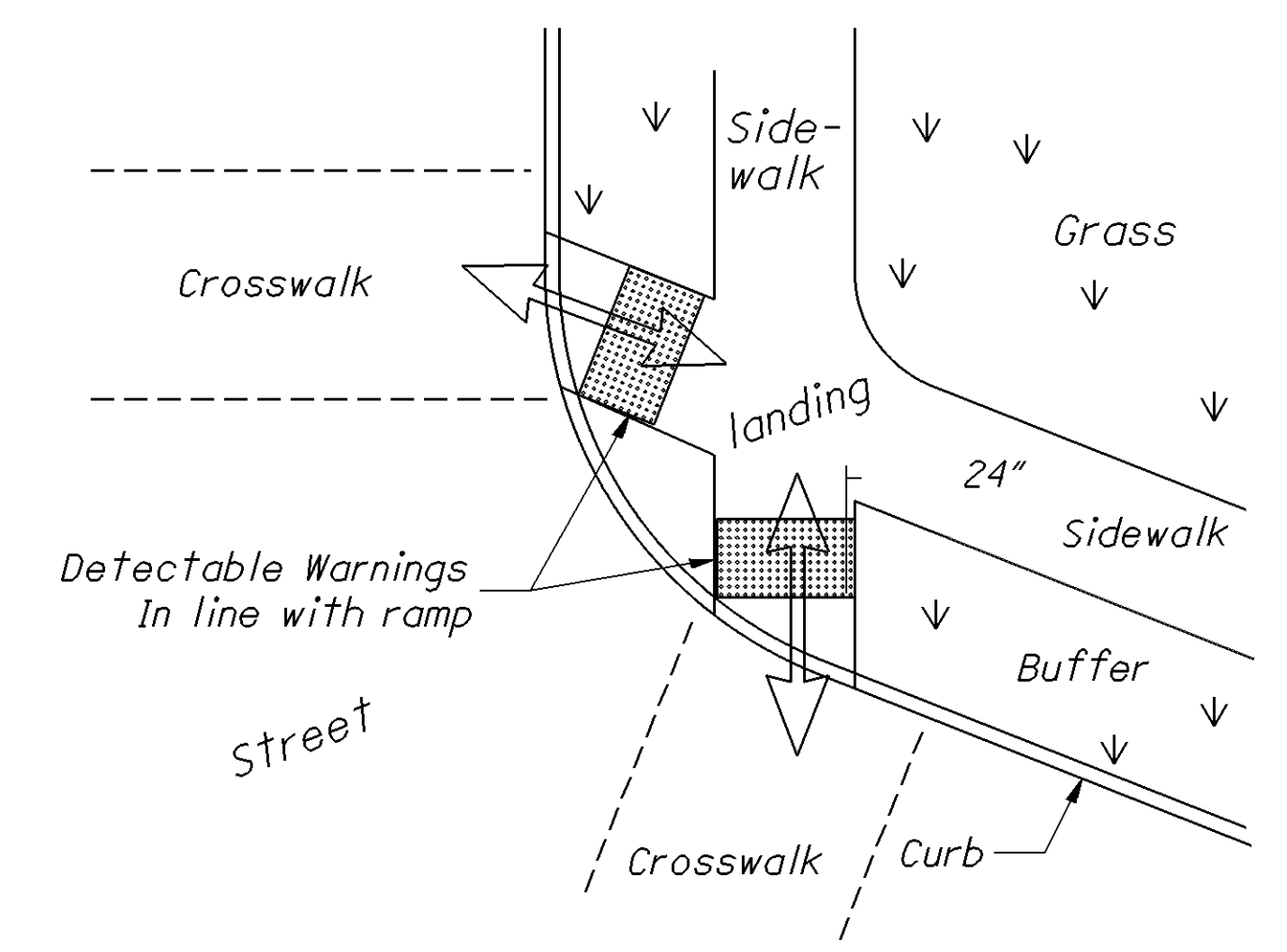
DETAIL A



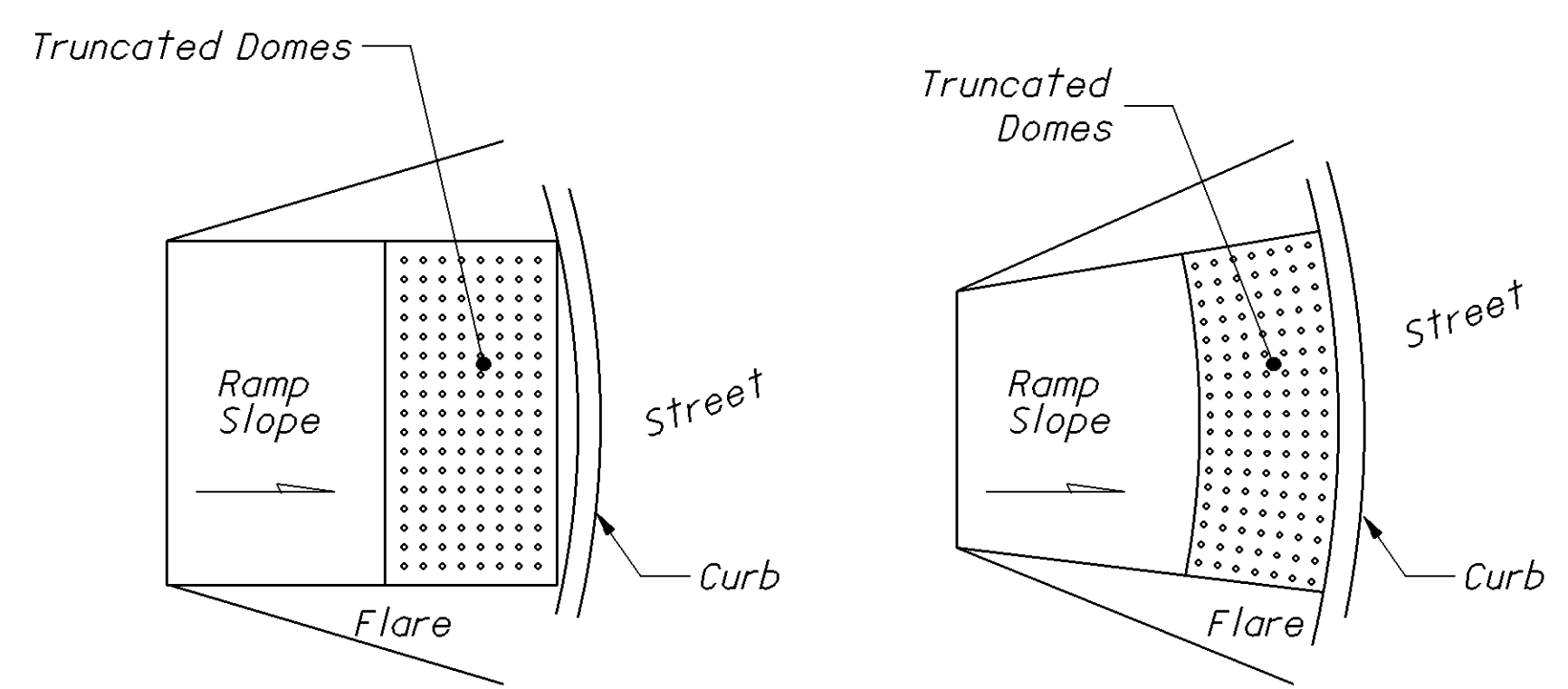
HEIGHT AND DIAMETER



TRUNCATED DOMES DETAILS



DETECTABLE WARNING ALIGNMENT



DOME ALIGNMENT ON RADIUS CURB

DETECTABLE WARNINGS NOTES

GENERAL: Detectable Warnings are a distinctive surface pattern of truncated domes which are detectable by cane or underfoot to alert people with vision impairments of their approach to streets and hazardous drop-offs.

PLACEMENT: Detectable warnings are to be installed at any location where pedestrians might cross paths with vehicular traffic lanes, such as the base of curb ramps or at blended curbs. A 24" strip of domes is to be installed for the full width of the ramp or walk. Typical street corner placement locations are shown on Sheet 15.

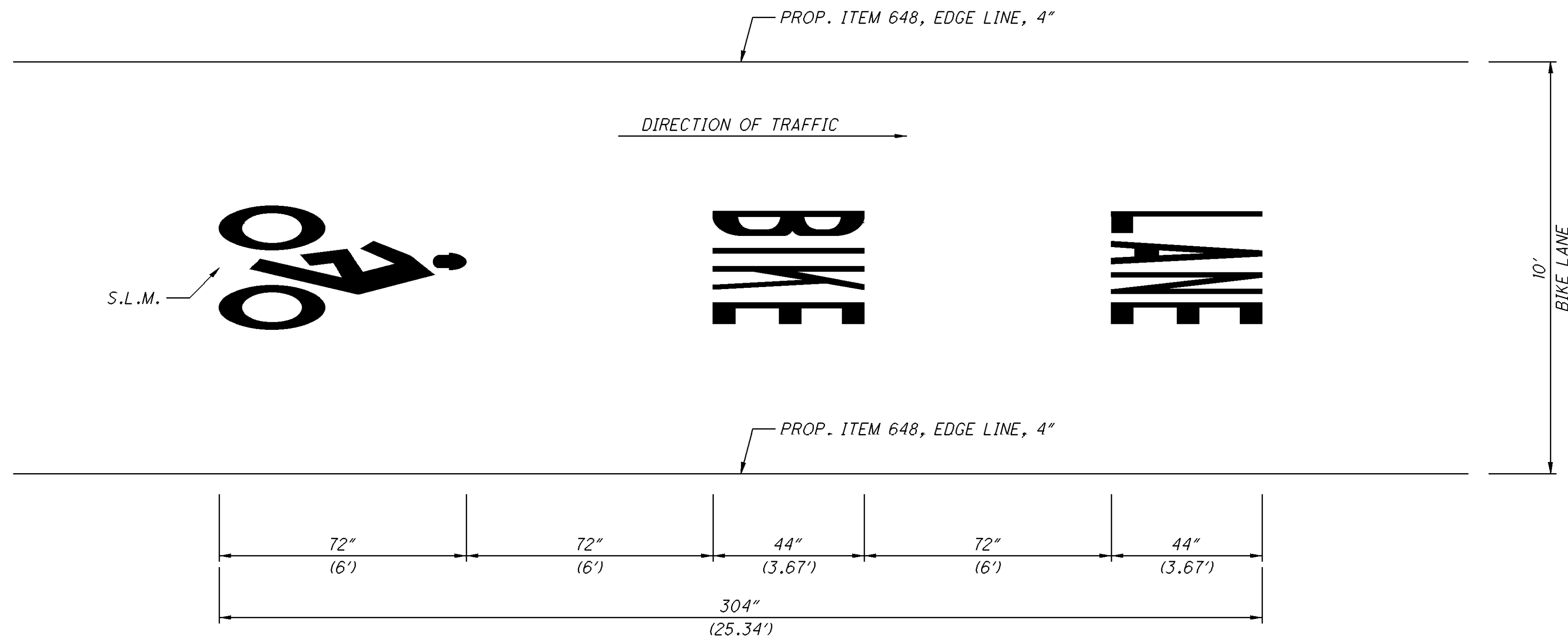
The depth of concrete underneath detectable warning products shall be a minimum of 4". See DETAIL A.

ALIGNMENT: Truncated domes should be aligned with the primary direction of the ramp as shown on the DETECTABLE WARNING ALIGNMENT Detail. Normally the detectable warnings should be flush with the back of the curb, but in skewed conditions at least one corner of the 24" strip should be adjacent to the back of curb. For non-standard layouts, detectable warning materials may have to be mitered and placed segmentally.

PRODUCTS & COLORS: Color of the detectable warnings should contrast with surrounding concrete walk and ramp. Black is not an acceptable color. Approved products and guidance on color may be found on the Office of Roadway Engineering Service's Detectable Warnings Approved List. Install products as per manufacturer's printed instructions.

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TYPICAL BIKE LANE MARKING



ITEM 644, BIKE LANE SYMBOL MARKING SHALL BE INCLUSIVE OF ONE 72" BIKE SYMBOL, ONE 44" WORD "BIKE" AND ONE 44" WORD "LANE". THE PAY UNIT FOR ALL THE ABOVE SHALL BE EACH.

ITEM 644, BIKE LANE SYMBOL MARKING SHALL BE PLACED AT THE FOLLOWING LOCATIONS:

- S.L.M. 16.22 U.S. 22 E.B.
- S.L.M. 17.10 U.S. 22 E.B.
- S.L.M. 17.10 U.S. 22 W.B.
- S.L.M. 17.97 U.S. 22 W.B.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
 ITEM 644, BIKE LANE SYMBOL MARKING 4 EACH

TYPICAL BIKE LANE MARKING SIGNS



R3-17-24
24" x 18"



R3-17AP-24
24" x 8"

PLACED AT THE FOLLOWING LOCATIONS:

- S.L.M. 16.22 U.S. 22 E.B.
- S.L.M. 17.97 U.S. 22 W.B.



R3-17-24
24" x 18"

PLACED AT THE FOLLOWING LOCATIONS:

- S.L.M. 17.10 U.S. 22 E.B.
- S.L.M. 17.10 U.S. 22 W.B.



R3-17-24
24" x 18"



R3-17BP-24
24" x 8"

PLACED AT THE FOLLOWING LOCATIONS:

- S.L.M. 17.97 U.S. 22 E.B.
- S.L.M. 16.22 U.S. 22 W.B.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 630, GROUND MOUNTED SUPPORT, NO. 2 POST 60.0 FT.
 (6 SIGNS w/10.0' POSTS)

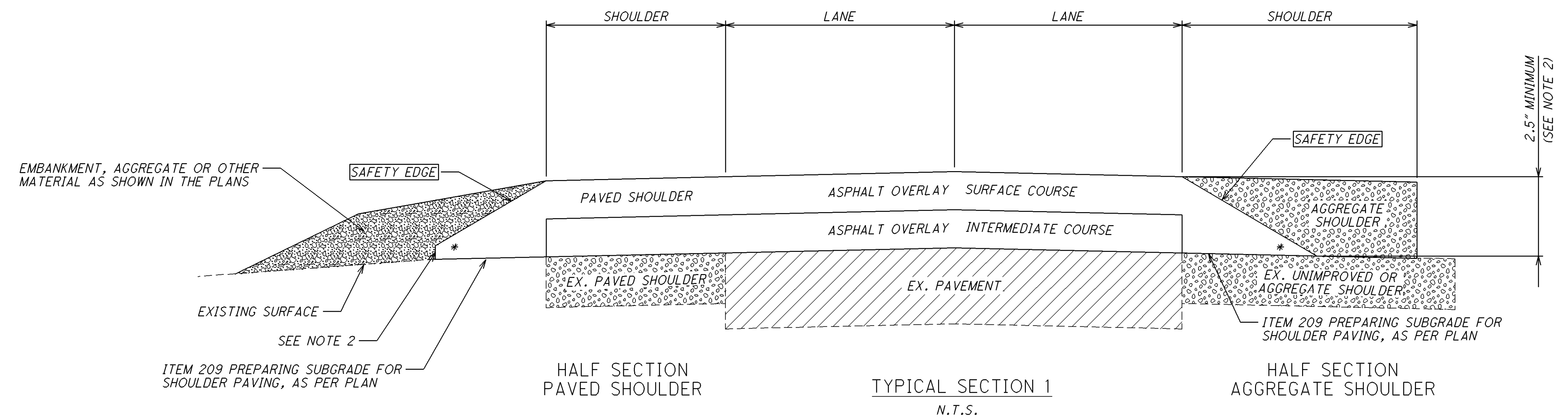
ITEM 630, SIGN, FLAT SHEET 23.6 SQ. FT.
 3.0 x 6 = 18.0
 1.4 x 4 = 5.6
 18.0 + 5.6 = 23.6 SQ. FT.

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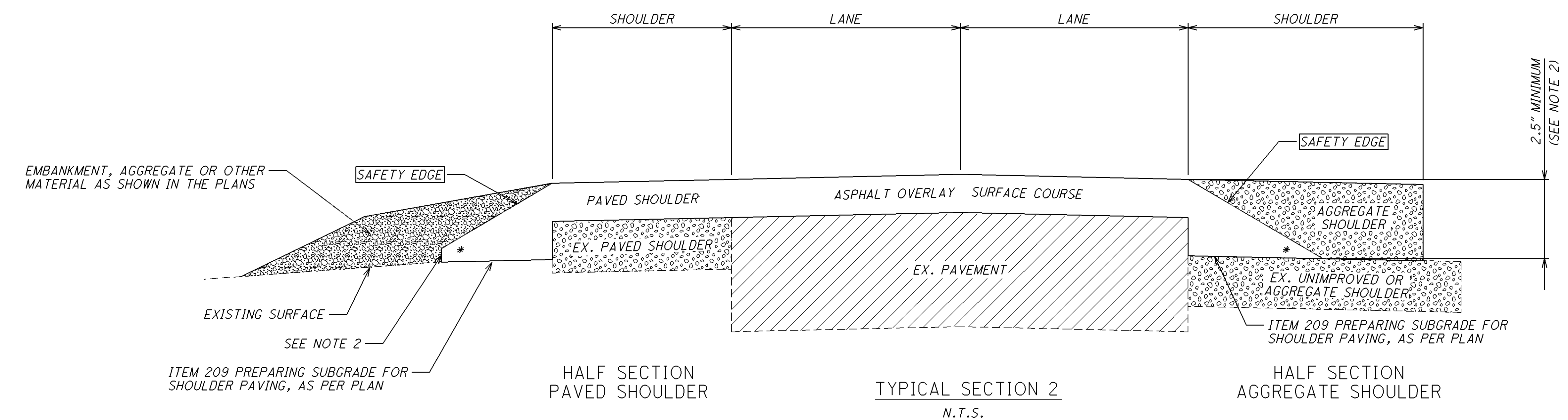
BIKE LANE DETAILS (LOCATION 1c)

FAI-22/ VAR-10.75/ VAR

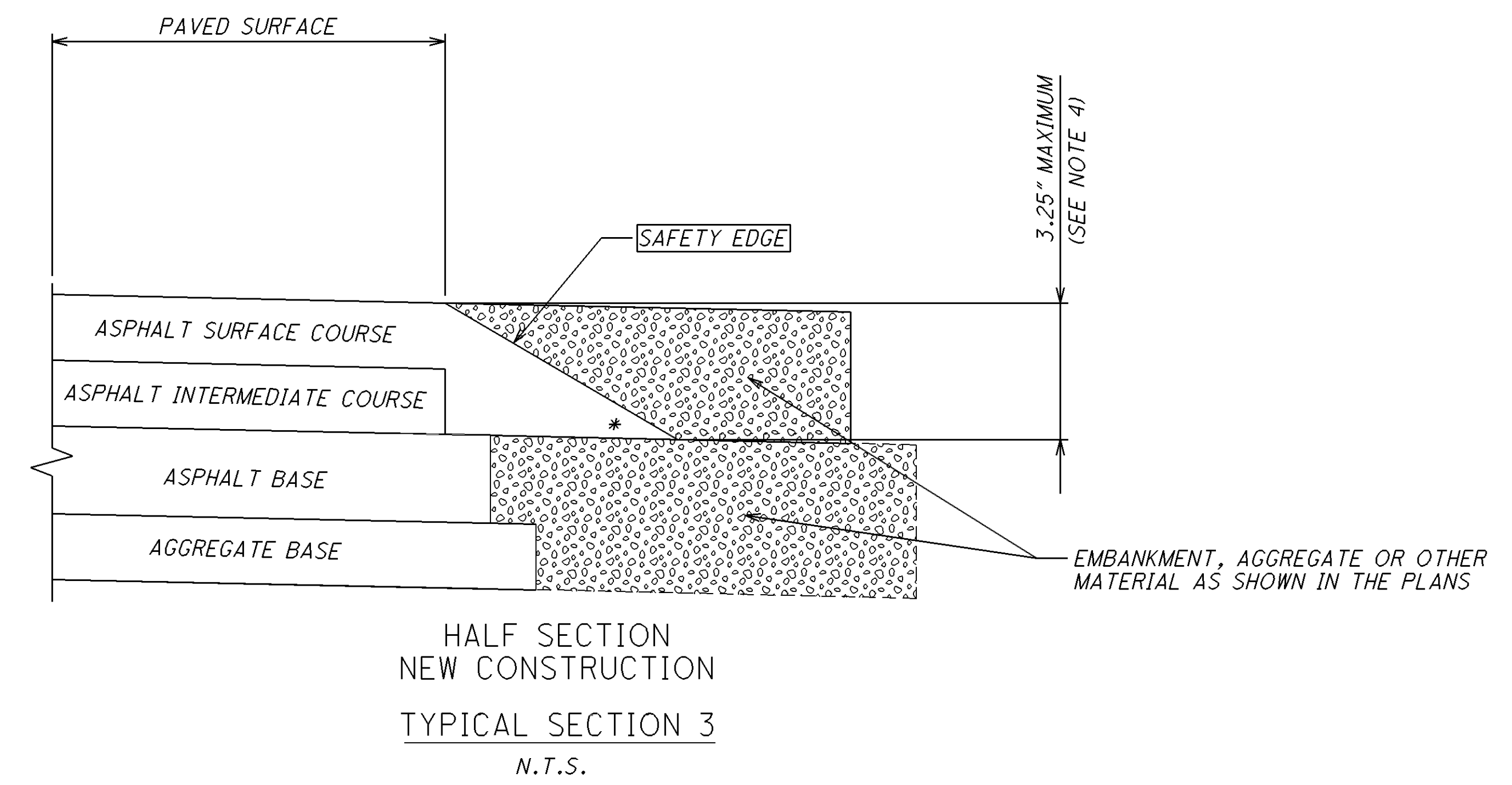
CALCULATED	JLS
CHECKED	DNM



TYPICAL SECTION 1
N.T.S.



TYPICAL SECTION 2
N.T.S.



TYPICAL SECTION 3
N.T.S.

NOTES:

- 1.) SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).
 - 2.) CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE OVERLAY THICKNESS OR 2.5" (63MM) WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6" (150MM). CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6" (150 MM).
 - 3.) BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.
 - 4.) FOR NEW PAVEMENT CONSTRUCT THE SAFETY EDGE THE FULL THICKNESS OF THE SURFACE AND INTERMEDIATE COURSES, NOT TO EXCEED 3.25" (82 MM).
- * 40° MAX

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REMOVAL MISC.: INLAID BRICK REMOVED

THE INLAID BRICK AND BITUMINOUS SETTING BED SHOWN ON EXISTING TYPICALS SHALL BE REMOVED IN PREPARATION FOR PLACING DECORATIVE CROSSWALK (SEE SHEET 20-21). AFTER REMOVAL, THE CAVITY SHALL BE CLEANED FREE OF ALL DEBRIS AND THE BASE SHALL BE SCARIFIED AS DIRECTED BY THE ENGINEER. THE BRICK REMOVED SHALL BECOME THE PROPERTY OF THE CITY OF LANCASTER.

ALL EQUIPMENT, LABOR, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NECESSARY FOR REMOVAL, CLEANING AND SCARIFICATION IN PREPARATION FOR PLACING DECORATIVE CROSSWALK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 202 REMOVAL MISC.: INLAID BRICK REMOVED.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.
ITEM 202 REMOVAL MISC.: INLAID BRICK REMOVED 5,441 SQ.FT.

ITEM 690, SPECIAL-MISC.: DECORATIVE CROSSWALK

THIS ITEM SHALL CONSIST OF FURNISHING AND PLACING A DECORATIVE STAMPED CONCRETE CROSSWALK IN AN EXISTING CONCRETE CAVITY.

PLACE APPROXIMATELY 3% OF SUPERPLASTICIZED DENSE CONCRETE MATERIAL. THE SDC MATERIAL SHALL MEET THE REQUIREMENTS OF ODOT SUPPLEMENTAL SPECIFICATION 847 SECTION 847.06. THE REQUIREMENTS FOR PLACING AND CURING SDC MATERIAL SHALL APPLY OTHER THAN THOSE WHICH ARE ONLY APPLICABLE TO BRIDGE WORK. BRING THE TOP OF CONCRETE SURFACE TO THE ELEVATION OF THE ADJACENT PAVEMENT.

THE CONTRACTOR SHALL PROVIDE STAMPED COLORED CONCRETE FOR THIS ITEM. THE PATTERN AND COLOR SHALL BE APPROVED BY **TOBY SHAMBLIN, TRANSPORTATION SUPERINTENDENT, (740) 687-6668.**

COLORING OF THE CONCRETE SHALL BE ACCOMPLISHED BY BLENDING/MIXING COLORING AGENT WITHIN THE CONCRETE. A TEST SLAB SHALL BE REQUIRED.

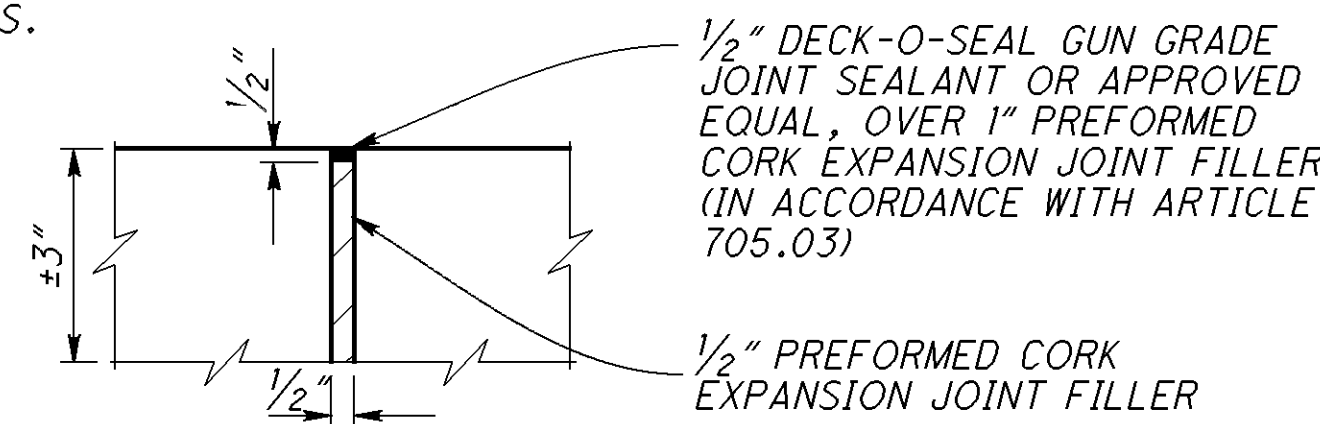
ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL, AND INCIDENTAL ITEMS NEEDED TO COMPLETE THE WORK AS DESCRIBED ABOVE, SHALL BE PAID FOR UNDER **ITEM 690, SPECIAL-MISC.: DECORATIVE CROSSWALK.**

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.
ITEM 690 SPECIAL-MISC.: DECORATIVE CROSSWALK 5,441 SQ.FT.
AREAS SHOWN ON SHEET 21

ITEM 516 1/2" PREFORMED EXPANSION JOINT FILLER, AS PER PLAN

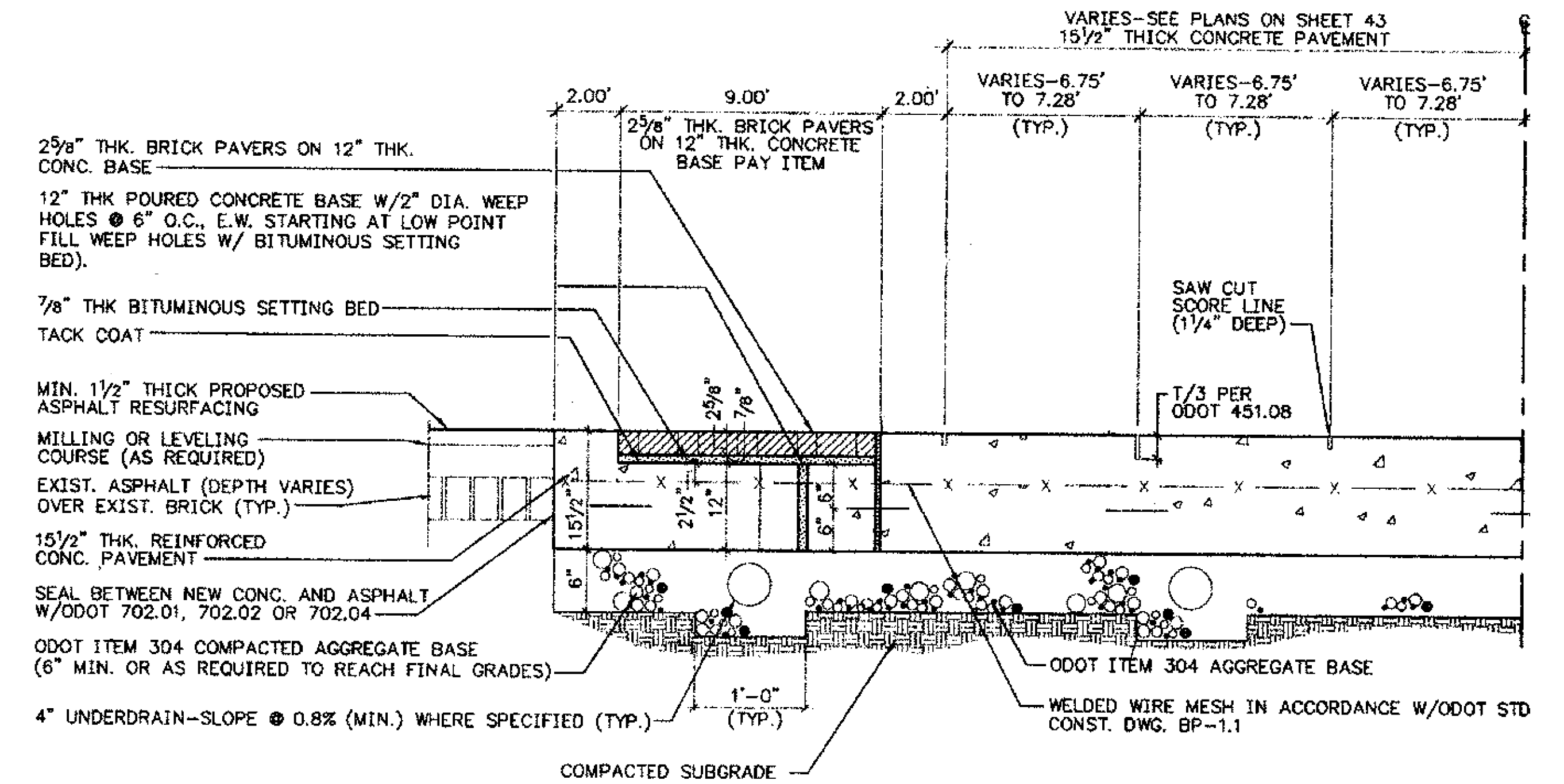
ALL 1/2" P.E.J.F. CALLED FOR IN THE PLANS SHALL BE PREFORMED CORK JOINT FILLER (IN ACCORDANCE WITH ARTICLE 705.03). RECESS JOINT FILLER 1/2" FOR ALL JOINTS (SEE DETAIL). SEAL ALL JOINTS THAT ARE ABOVE GRADE WITH DECK-O-SEAL GUN GRADE-JOINT SEALANT OR AN APPROVED EQUAL. THE COLOR SHALL BE STONE GRAY. APPROVED MANUFACTURER'S APPLICATION METHODS SHALL BE FOLLOWED DURING SURFACE PREPARATION AND APPLICATION FOR MAXIMUM EFFECTIVENESS.

DECK-O-SEAL
 P.O. BOX 397
 HAMPSHIRE, IL 60140
 PHONE: 800-542-7665



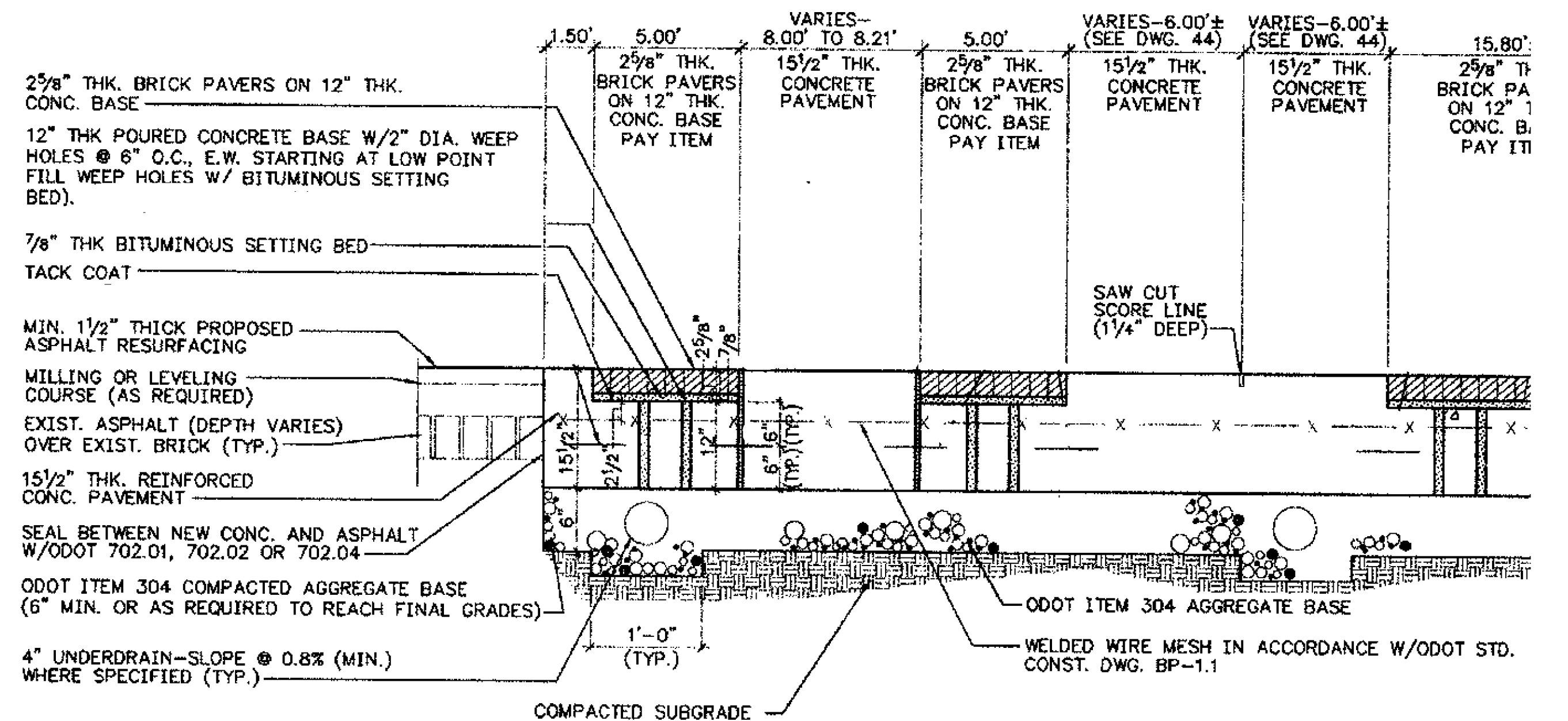
PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 516 - 1/2" PEJF, A.P.P., SQ.FT., AND SHALL INCLUDE ALL LABOR, EQUIPMENT, AND INCIDENTALS REQUIRED TO COMPLETE THE WORK DISCRIBED.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.
ITEM 516 - 1/2" PREFORMED EXPANSION JOINT FILLER, AS PER PLAN 388 SQ.FT.



INTERSECTION OF COLUMBUS & MAIN STREETS

EXISTING



INTERSECTION OF BROAD & MAIN STREETS

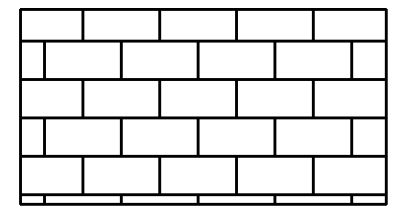
EXISTING

CALCULATED
 JLS
 CHECKED
 DNM

EXISTING INTERSECTION TYPICALS (LOCATION 1c)

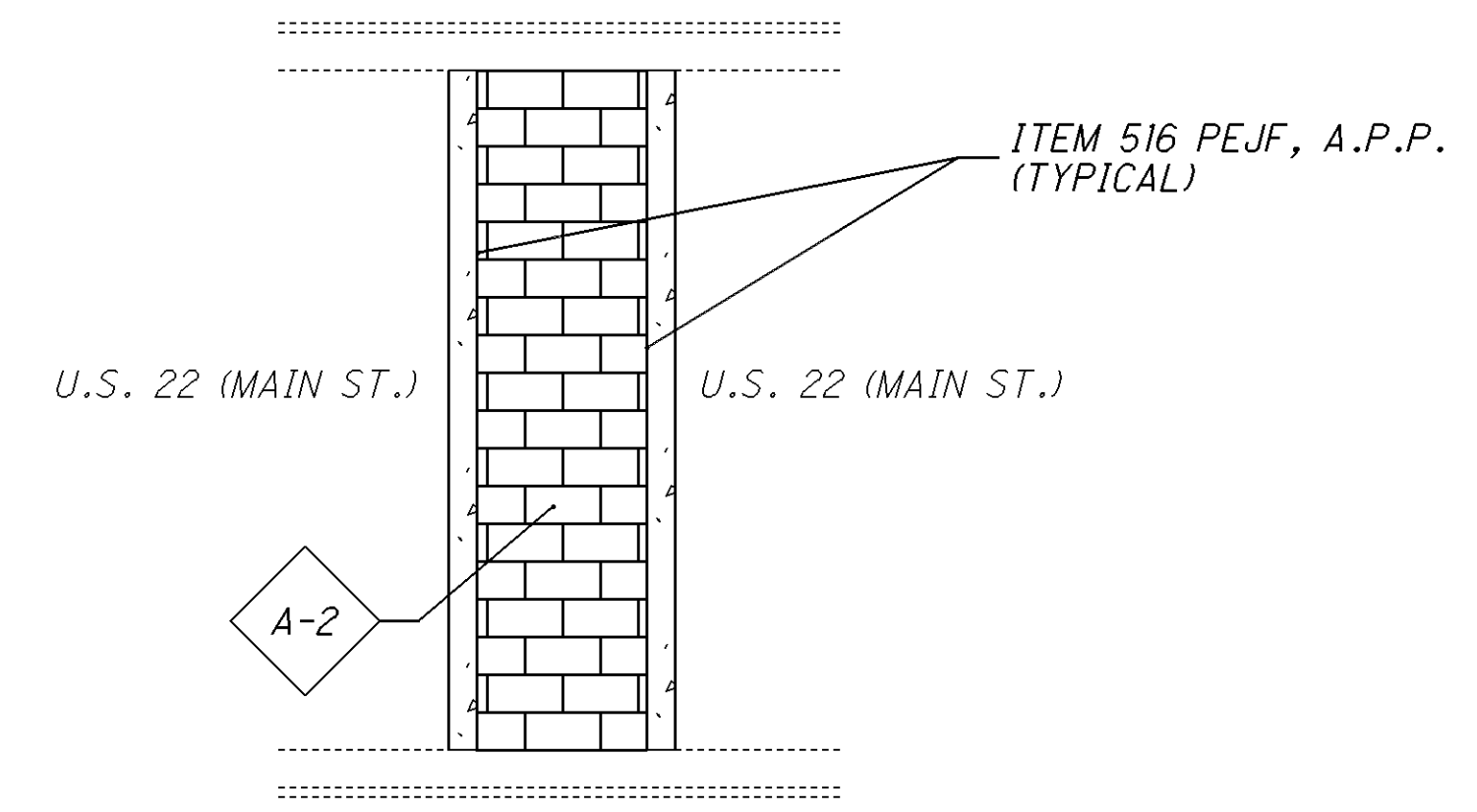
FAI-22/ VAR-10.75 / VAR

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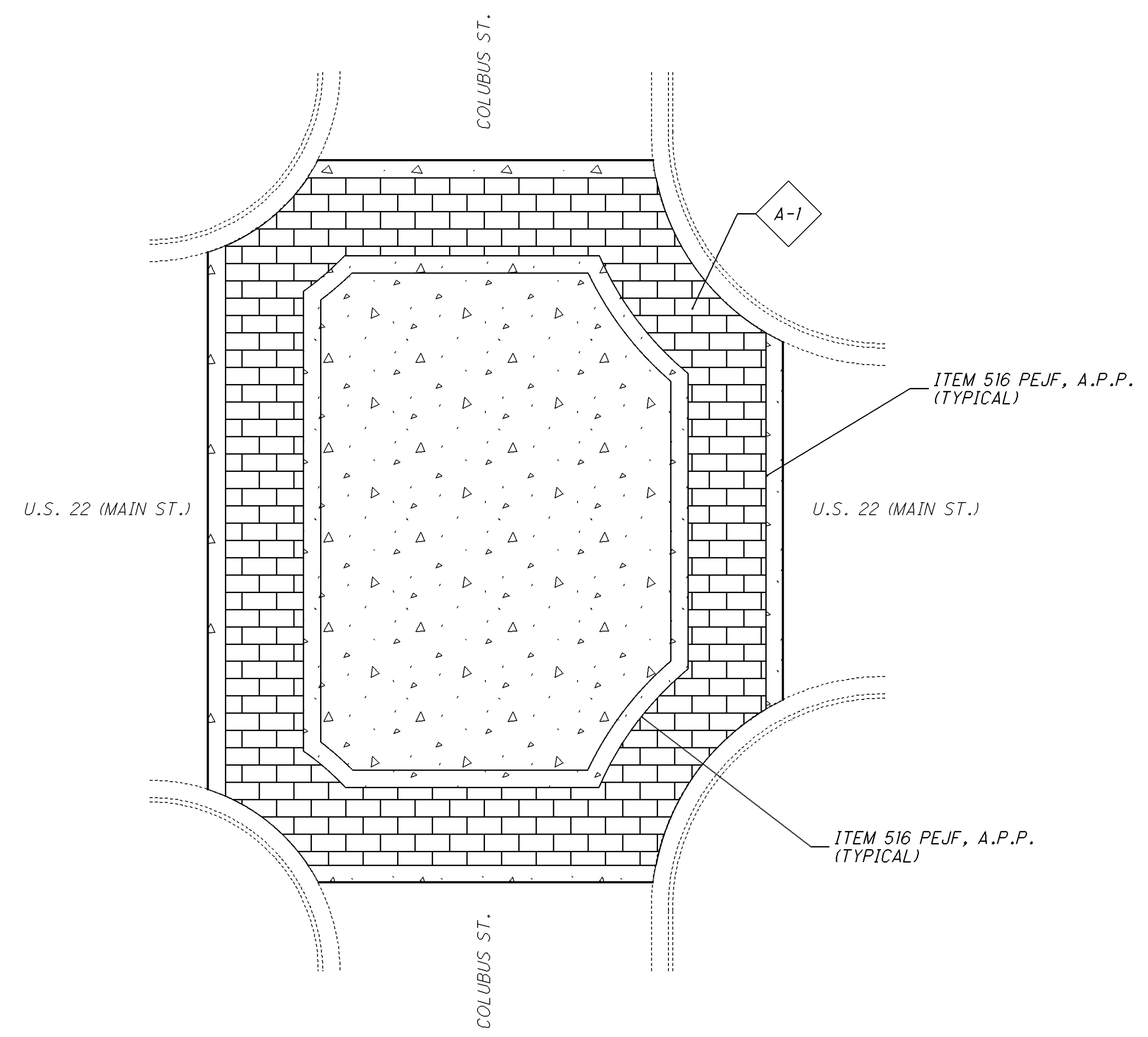
- ITEM SPECIAL-MISC.: DECORATIVE CONCRETE
(SEE SHEET 20 FOR NOTE AND QUANTITY)

ITEM 516 PREFORMED EXPANSION JOINT FILLER, AS PER PLAN
SHALL BE USED ON FULL LENGTH PERIMETER OF ALL DECORATIVE
WALK AREAS. SEE NOTE SHEET 20.

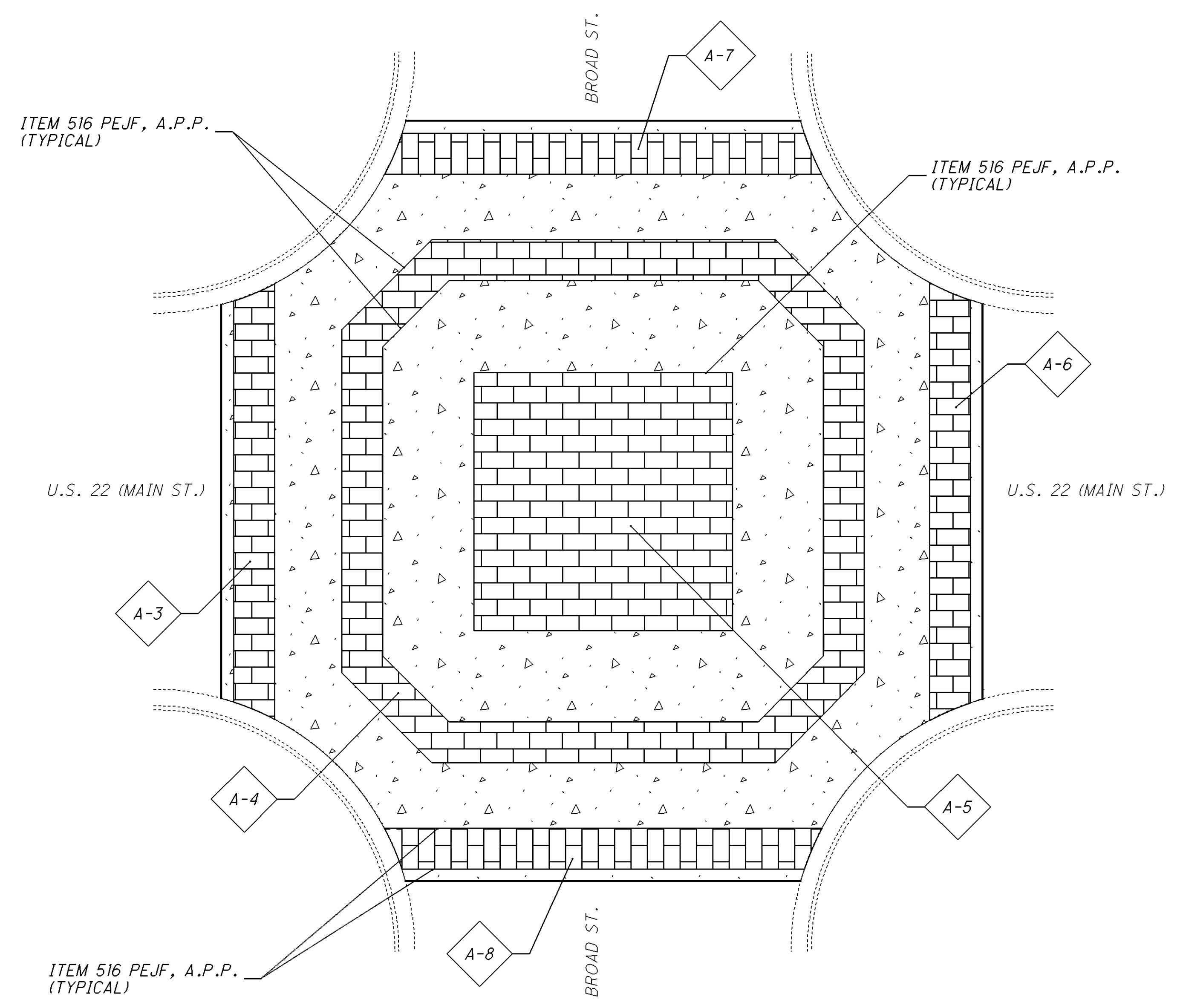


AREAS:	PERIMETER LENGTH:
A1 - 2,028.7 SQ. FT.	A1 - 452 FT.
A2 - 324.0 SQ. FT.	A2 - 90 FT.
A3 - 255.1 SQ. FT.	A3 - 114 FT.
A4 - 1,067.5 SQ. FT.	A4 - 427 FT.
A5 - 997.3 SQ. FT.	A5 - 127 FT.
A6 - 256.2 SQ. FT.	A6 - 114 FT.
A7 - 255.7 SQ. FT.	A7 - 114 FT.
A8 - 256.1 SQ. FT.	A8 - 114 FT.
TOTAL - 5,440.6 SQ. FT.	TOTAL - 1,552 FT.

CENTER ALLEY @ U.S. 22 (MAIN ST.)



COLUMBUS ST. @ U.S. 22 (MAIN ST.)

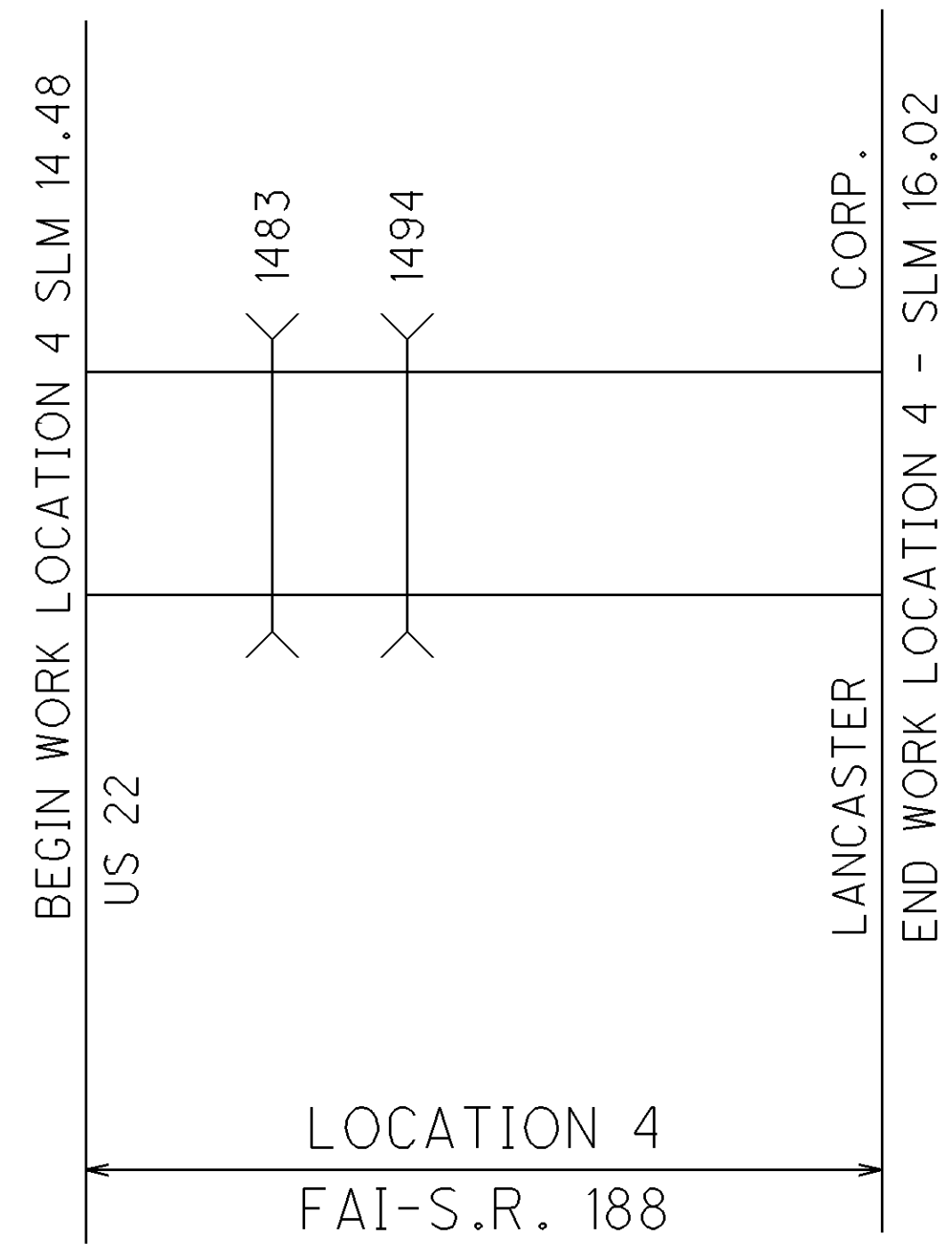
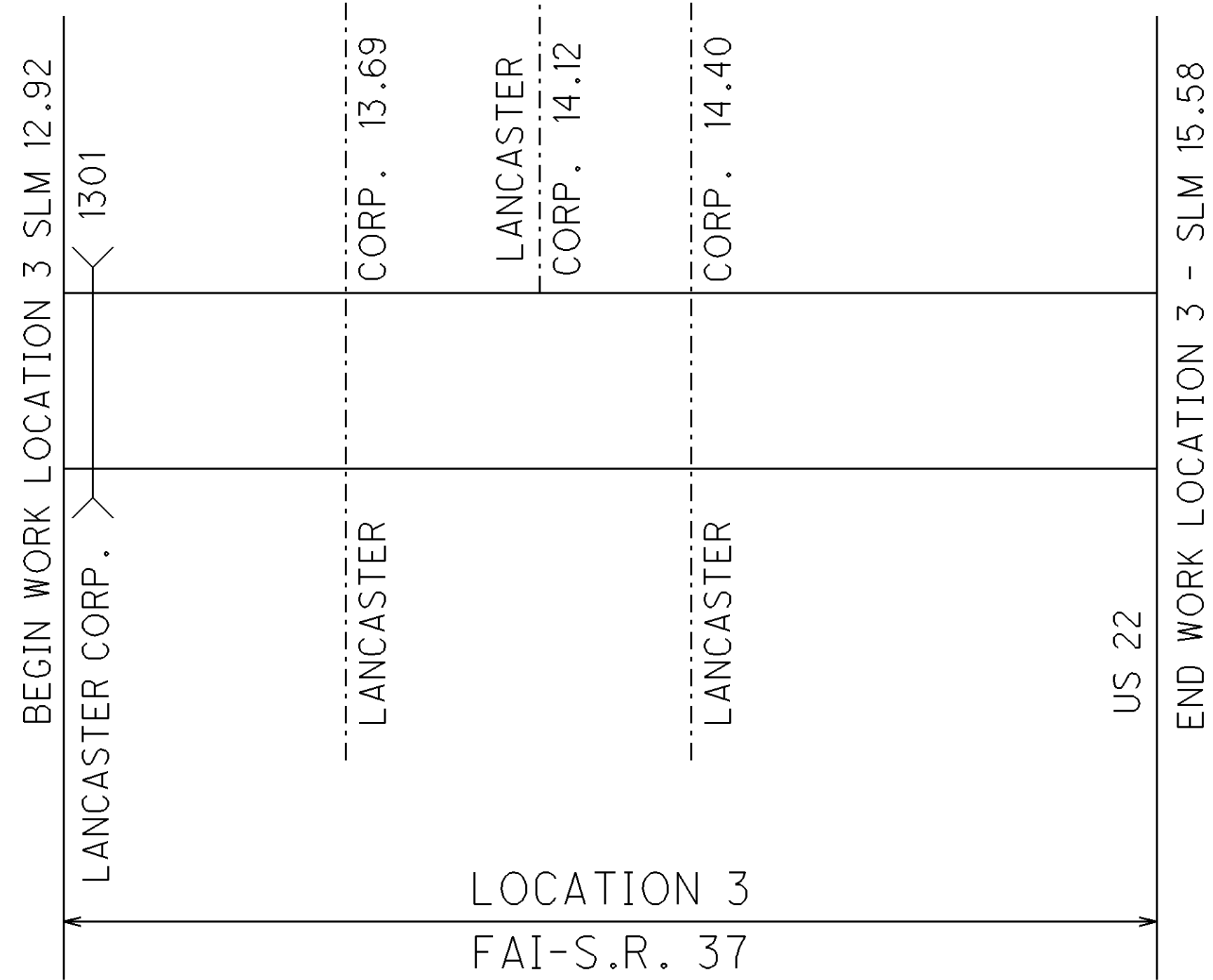
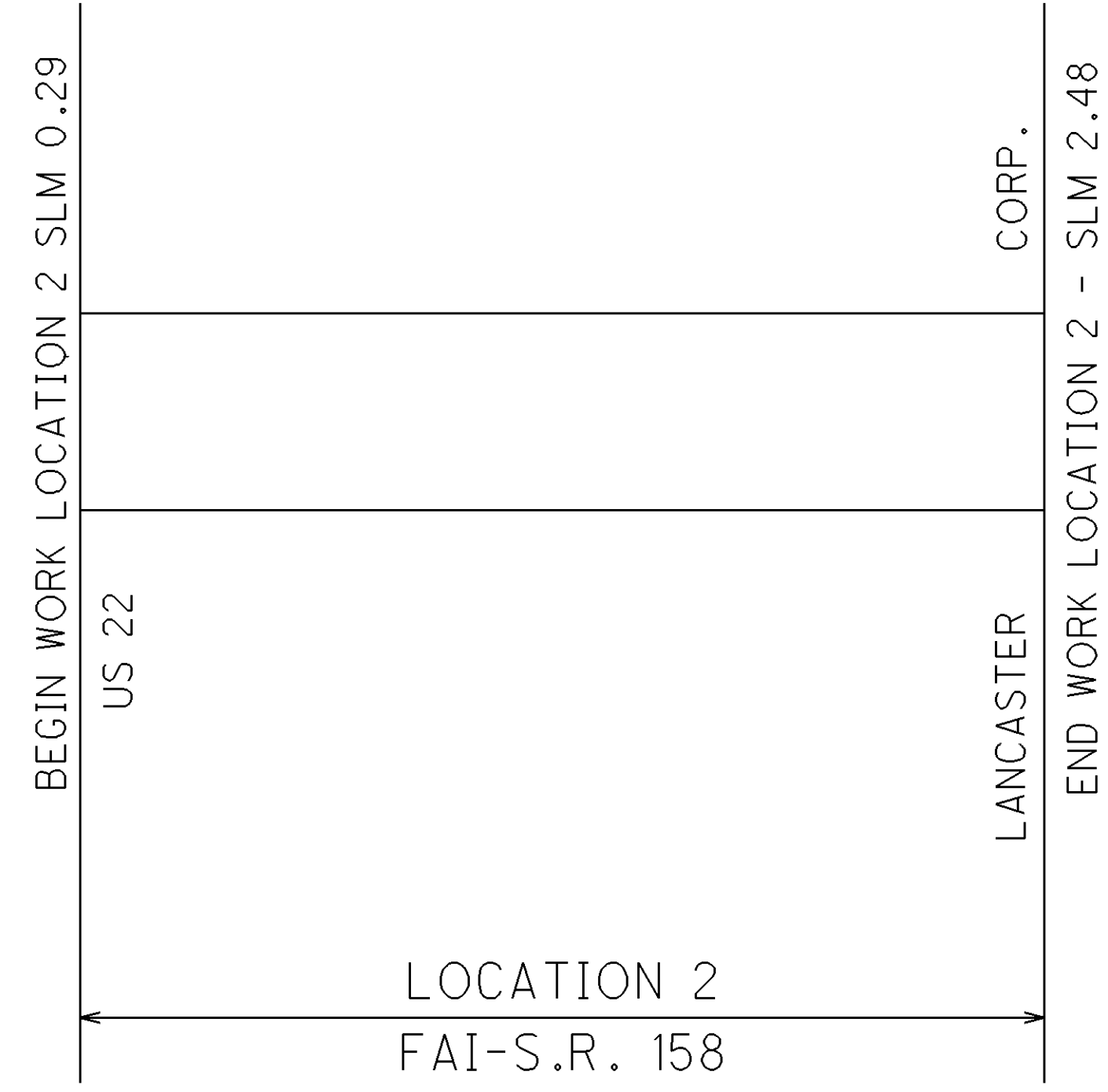
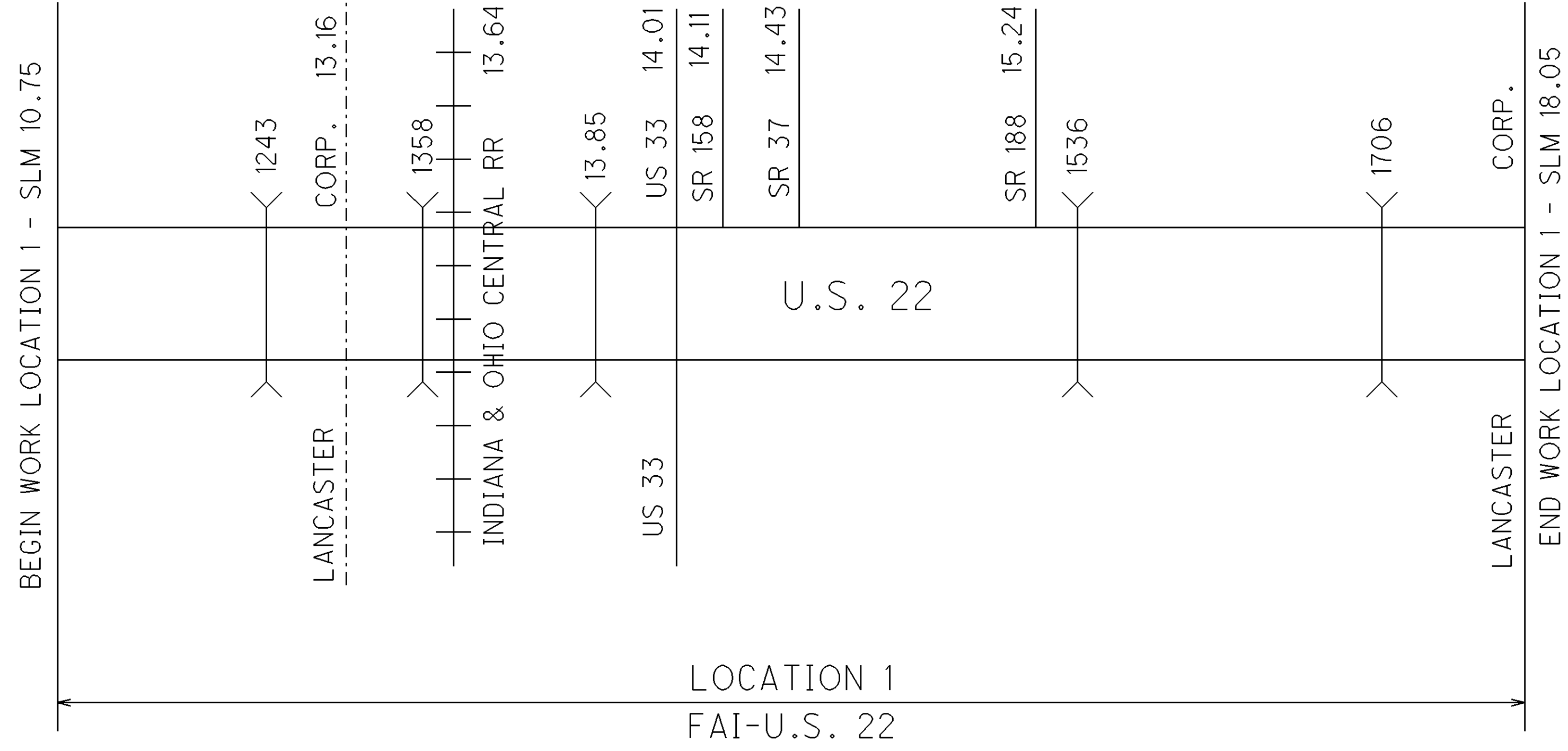
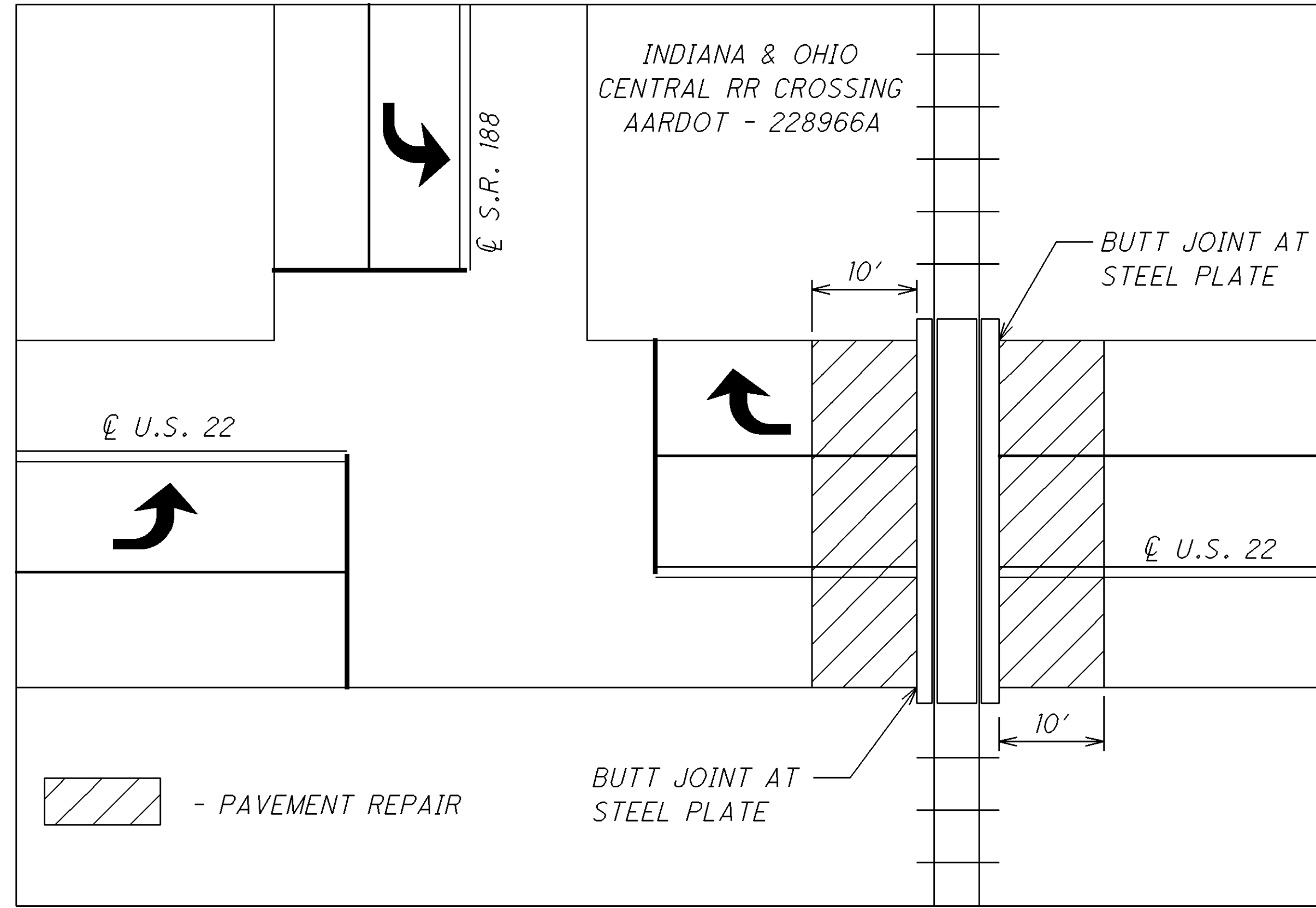


BROAD ST. @ U.S. 22 (MAIN ST.)

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STRAIGHT LINE DIAGRAMS

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CALCULATED
LME
CHECKED
DNM

ASPHALT CONCRETE DATA

FAI-22/ VAR-10.75/ VAR

22
71

NOTE:

THE PAVEMENT WIDTHS SHOWN IN THE "PAVEMENT DATA" TABLE ON SHEETS 24-25 ARE THE WIDTHS WHICH HAVE BEEN DETERMINED TO HAVE SUFFICIENT ROADWAY BASE FOR PAVING. IF ACTUAL ROADWAY WIDTHS DIFFER, THE ROADWAY SHALL BE PAVED ONLY THE WIDTH SHOWN IN THE AFOREMENTIONED TABLE. IF THE EXISTING ROADWAY IS WIDER THAN THAT WHICH IS SHOWN IN THE TABLE, PAVING SHALL BE CENTERED ABOUT THE FULL WIDTH OF THE ROADWAY AND ANY EXCESS EXISTING PAVEMENT ON THE EDGES SHALL BE COVERED WITH ITEM 617 COMPACTED AGGREGATE. PAVING IN CURBED ROADWAY SECTIONS SHALL BE FROM CURB TO CURB.

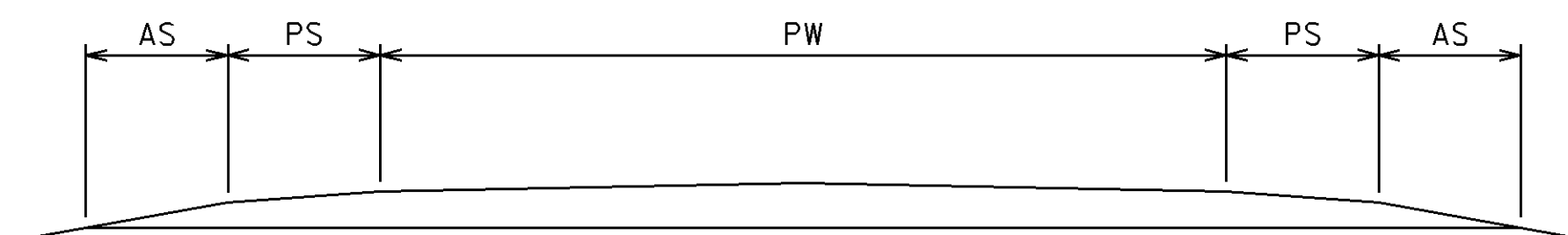
AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT, SHALL EXCEED A HEIGHT OF 35 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. A COPY OF THE SUBMISSION AND TWO COPIES OF FORM 7460-1 SHALL BE FORWARDED TO THE ODOT OFFICE OF AVIATION. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

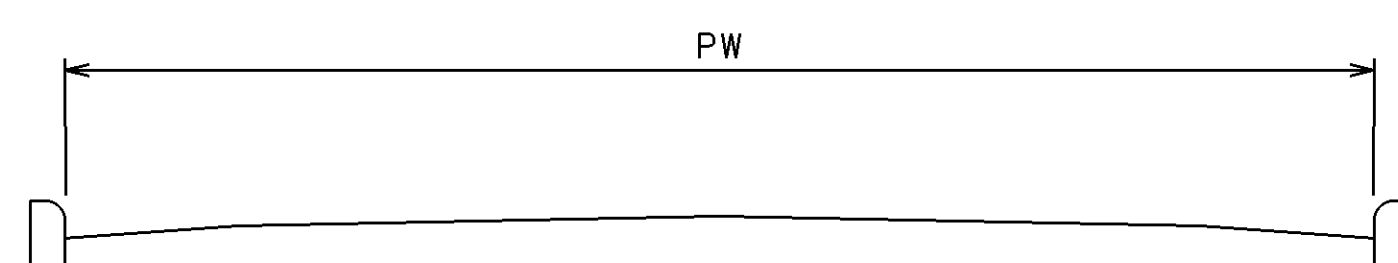
EXPRESS PROCESSING CENTER
 THE FEDERAL AVIATION ADMINISTRATION
 SOUTHWEST REGIONAL OFFICE
 AIR TRAFFIC AIRSPACE BRANCH ASW-520
 2601 MEACHAN BLVD.
 FORT WORTH, TX 76137-4298

OHIO DEPARTMENT OF TRANSPORTATION
 OFFICE OF AVIATION
 2829 WEST DUBLIN-GRANVILLE ROAD COLUMBUS, OHIO 43235
 614-387-2346

TYPICAL 1

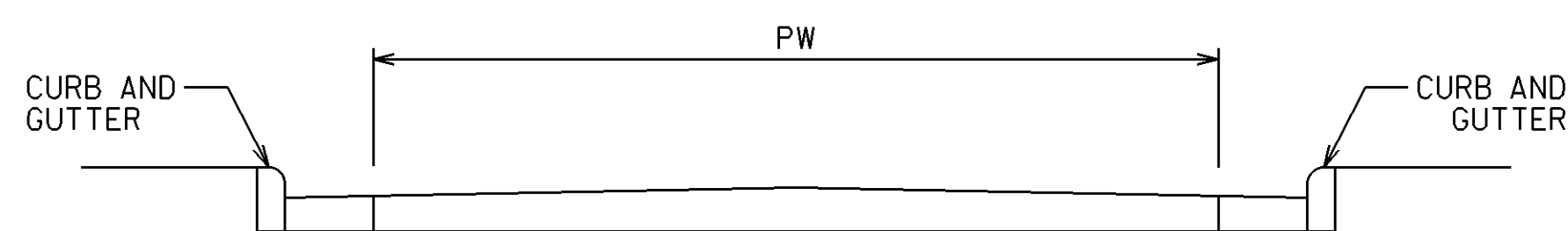


TYPICAL 2

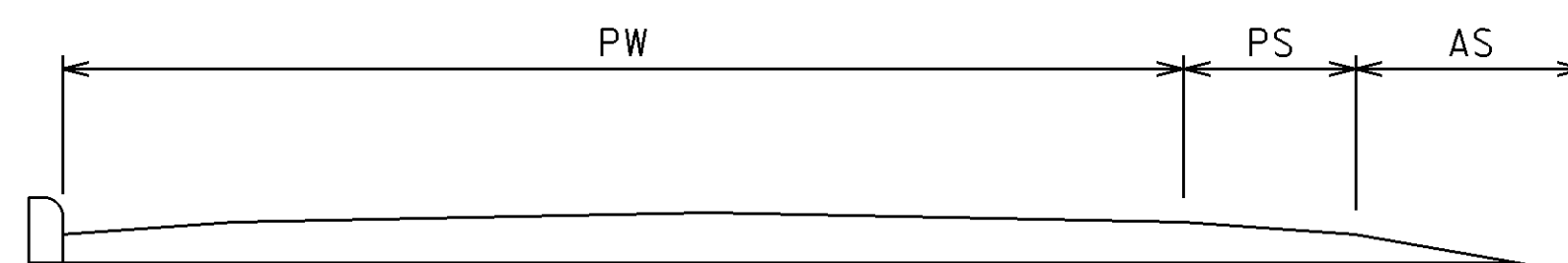


PW = PAVEMENT WIDTH
 PS = PAVED SHOULDER
 AS = AGGREGATE SHOULDER

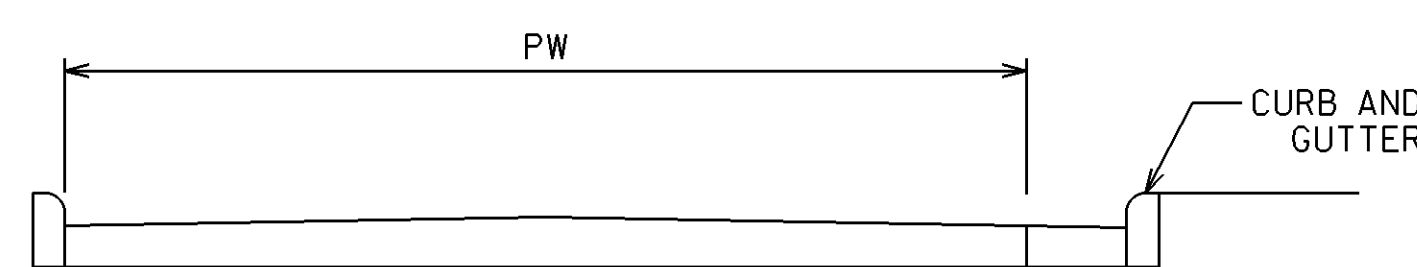
TYPICAL 3



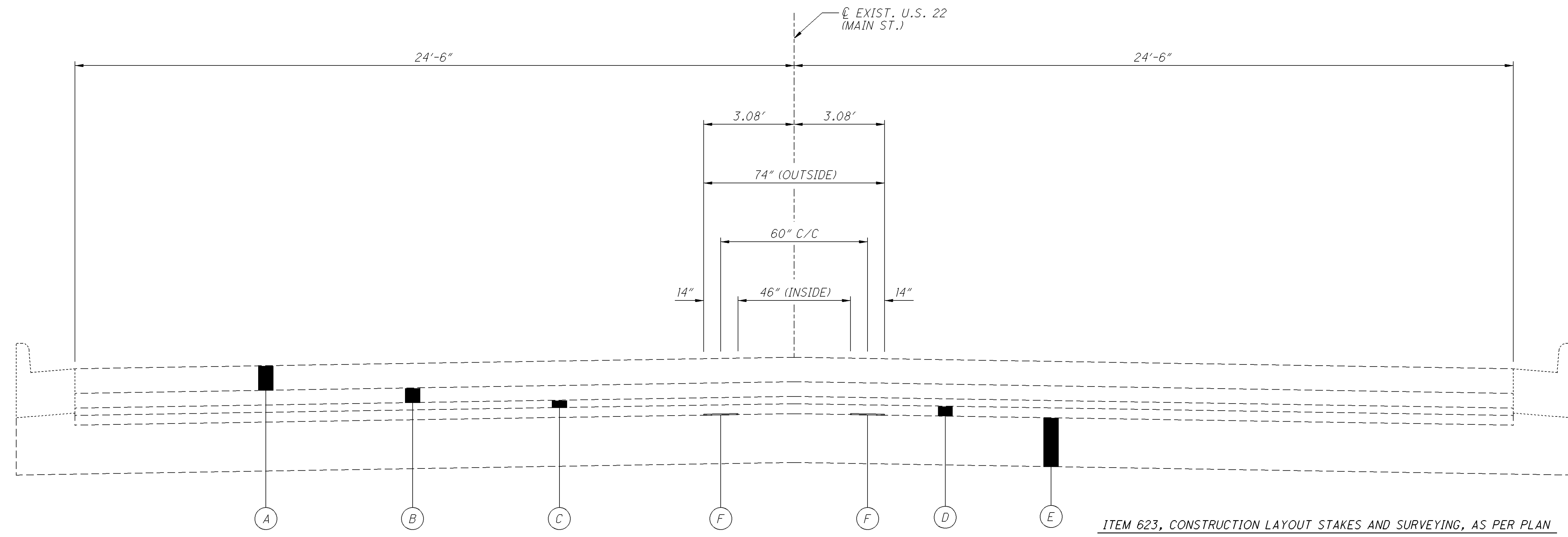
TYPICAL 4



TYPICAL 5



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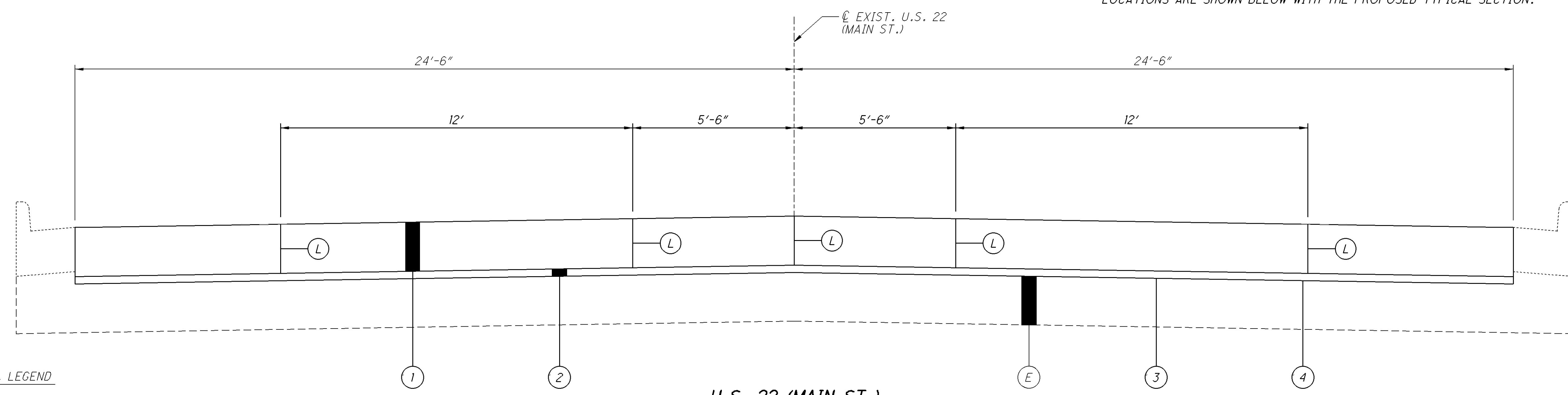
U.S. 22 (MAIN ST.)
(EXIST. PAVEMENT TYPICAL)

ITEM 623, CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS, THE CONTRACTOR SHALL SURVEY THE EXISTING PROFILE GRADE, AT THE CENTERLINE OF THE EXISTING ROADWAY, PRIOR TO THE REMOVAL OF EXISTING PAVEMENT.

THE PROPOSED CONCRETE PAVEMENT PROFILE SHALL MATCH THE EXISTING PAVEMENT PROFILE.

LOCATIONS ARE SHOWN BELOW WITH THE PROPOSED TYPICAL SECTION.



U.S. 22 (MAIN ST.)
(PROP. CONCRETE PAVEMENT TYPICAL)

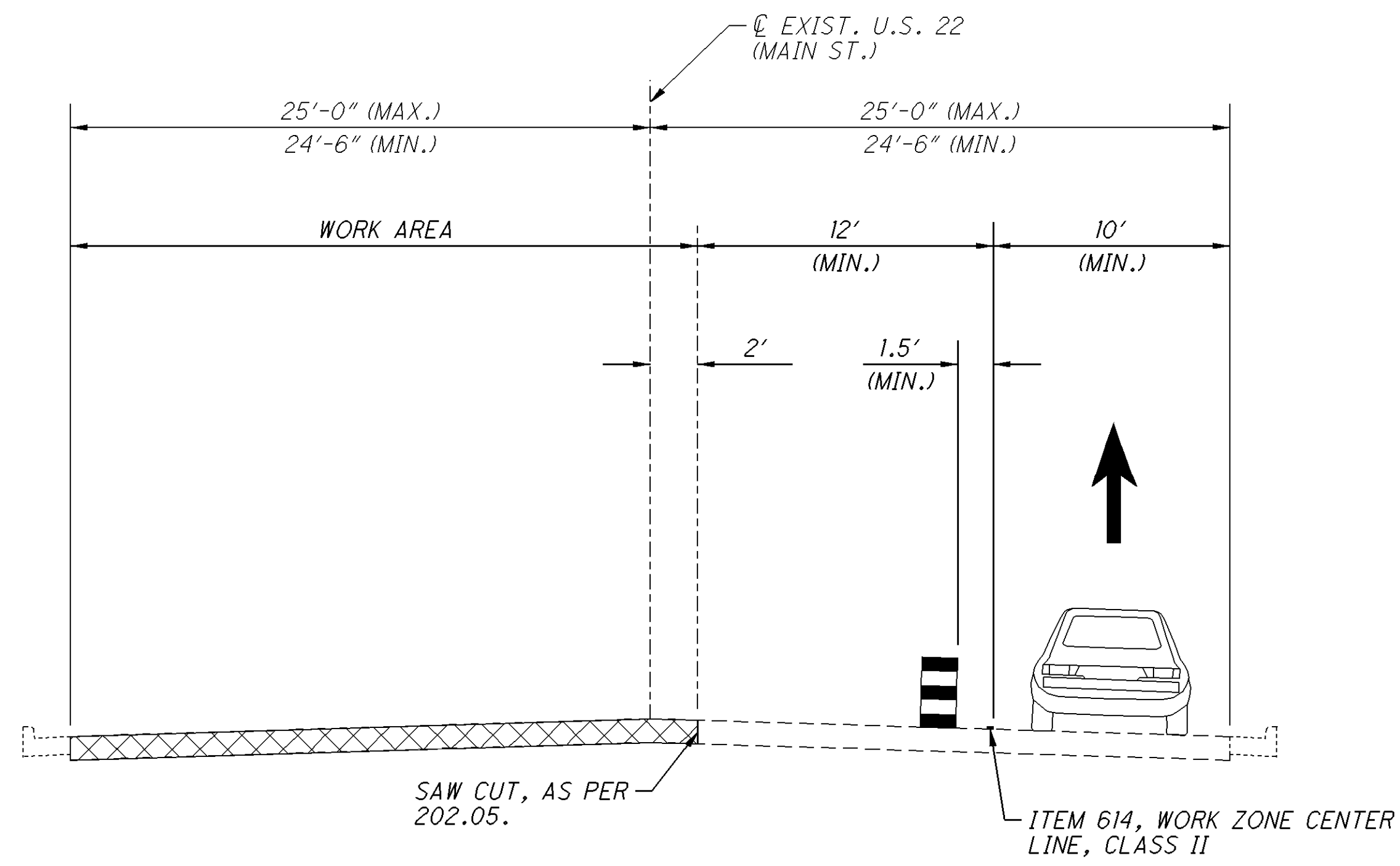
S.L.M. 14.12 TO S.L.M. 14.25 = 0.13 MILE
S.L.M. 14.27 TO S.L.M. 14.39 = 0.12 MILE
TOTAL 0.25 MILE

- EXIST. LEGEND**
- (A) 5-8"± EXIST. ASPHALT CONCRETE
 - (B) 3" EXIST. BRICK
 - (C) 1/2" EXIST. AGGREGATE BASE
 - (D) 2" EXIST. CONCRETE PAVEMENT
 - (E) 10" EXIST. AGGREGATE BASE
 - (F) 1/4" x 14" STEEL PLATE (EXIST. TROLLEY CAR TRACK)

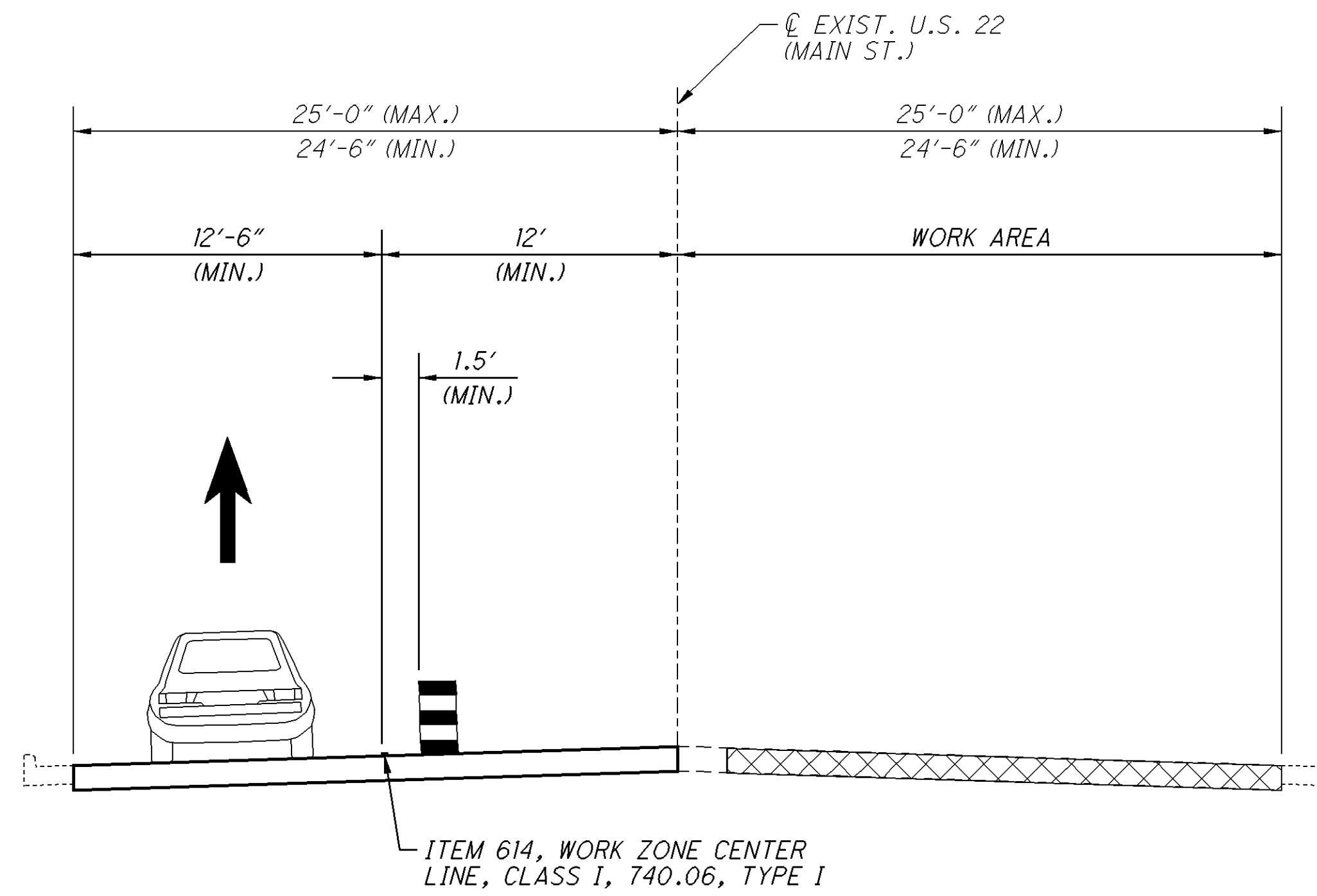
- PROP. LEGEND**
- (1) ITEM 452, 10" NON-REINFORCED CONCRETE PAVEMENT, CLASS OCI
 - (2) ITEM 304, AGGREGATE BASE (VAR. THICKNESS) (1/2" TO 4 1/2")
 - (3) ITEM 204, SUBGRADE COMPACTION
 - (4) ITEM 204, PROOF ROLLING
 - (L) STANDARD LONGITUDINAL JOINT, AS PER BP-2.1

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U.S. 22 (CONCRETE PAVEMENT)
PHASE 1



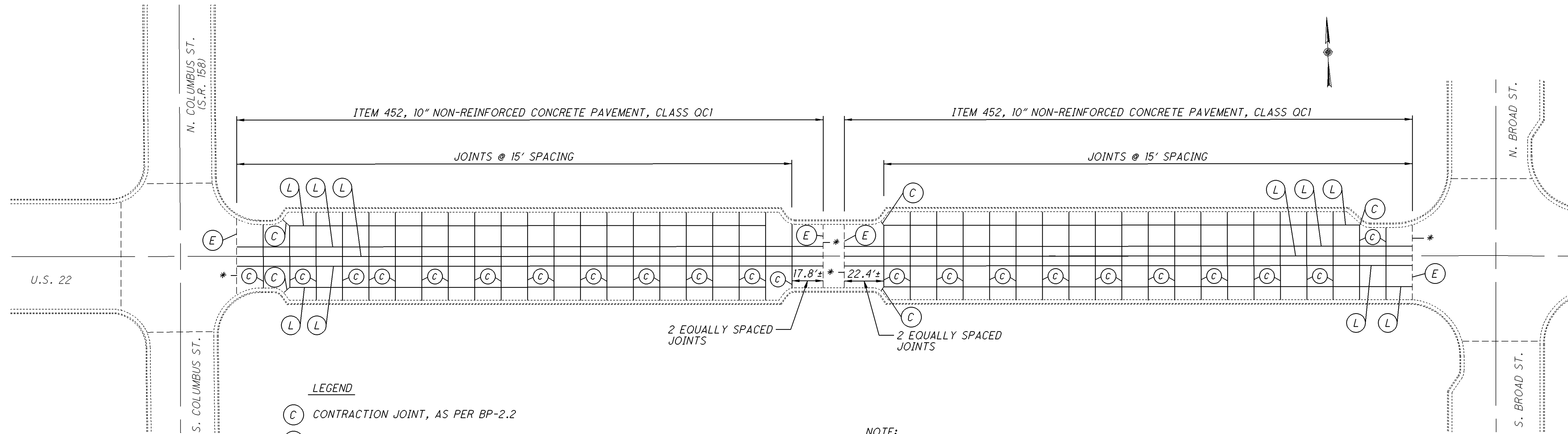
U.S. 22 (CONCRETE PAVEMENT)
PHASE 2

CALCULATED
JLS
CHECKED
DNM

MAINTENANCE OF TRAFFIC TYPICAL SECTION

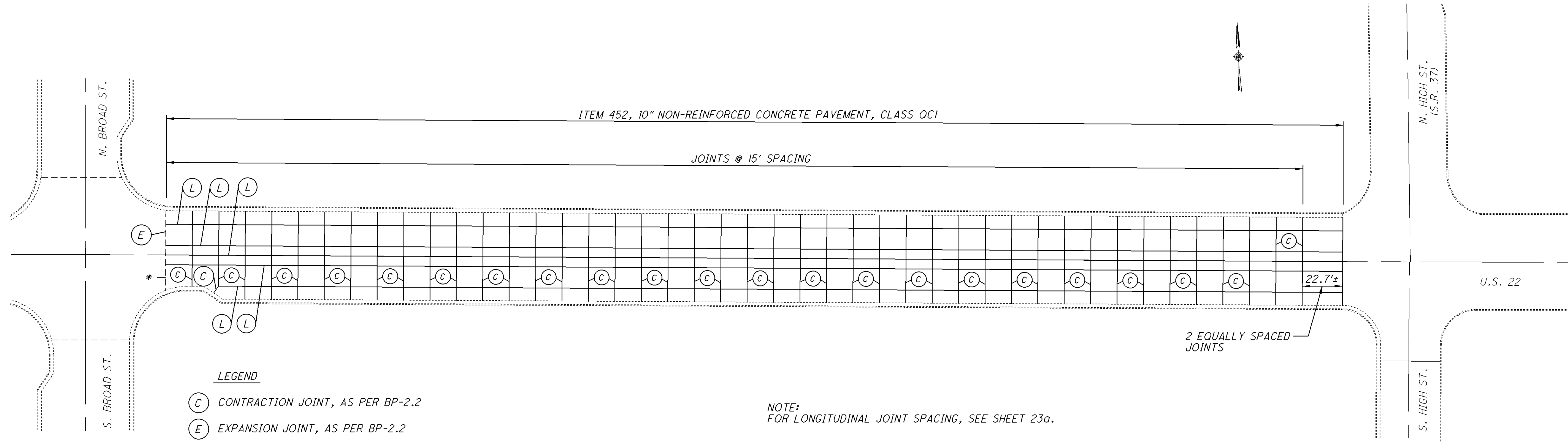
FAI-22/ VAR-10.75 / VAR

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- LEGEND**
- (C) CONTRACTION JOINT, AS PER BP-2.2
 - (E) EXPANSION JOINT, AS PER BP-2.2
 - (L) STANDARD LONGITUDINAL JOINT, AS PER BP-2.1
 - * - MEET EXISTING CONCRETE

NOTE:
FOR LONGITUDINAL JOINT SPACING, SEE SHEET 23a.



- LEGEND**
- (C) CONTRACTION JOINT, AS PER BP-2.2
 - (E) EXPANSION JOINT, AS PER BP-2.2
 - (L) STANDARD LONGITUDINAL JOINT, AS PER BP-2.1
 - * - MEET EXISTING CONCRETE

NOTE:
FOR LONGITUDINAL JOINT SPACING, SEE SHEET 23a.

CALCULATED
JLS
CHECKED
DNM

PAVEMENT JOINT DETAIL (LOCATION 1c)

FAI-22/ VAR-10.75 / VAR

PAVEMENT DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		PAVEMENT WIDTH (FEET)	TYPICAL (See Sheet 23)	EXISTING PAVEMENT TYPE	PAVEMENT AREA	254		407		442			448			614									
					MILES	LIN. FT.					DEPTH	PAVEMENT PLANING, ASPHALT CONCRETE	SPECIAL - TACK COAT, TRACKLESS TACK @ 0.075 GAL./S.Y.	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS	ASPHALT CONCRETE, INTERMEDIATE COURSE, 19 MM, TYPE A, (448)	THICKNESS	ASPHALT CONCRETE, SURFACE COURSE, 12.5 MM, TYPE A (446)	THICKNESS	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22	THICKNESS	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 76-22M	WORK ZONE CENTER LINE, CLASS II							
											SQ. YD.	IN.	SQ. YD.	GAL.	GAL.	IN.	CU. YD.	IN.	CU. YD.	IN.	CU. YD.	IN.	CU. YD.	MILE						
1a	FAI	U.S. 22	10.75	10.79	0.04	211.2	60.0	1	448	1,408.0	1.25	1,408.0	105.6	70.4					1.75	68.5	1.25	48.9	0.08							
			10.79	10.80	0.01	52.9	54.0 Avg.	1	448	317.4	1.25	317.4	23.9	15.9					1.75	15.5	1.25	11.1	0.02							
			10.80	10.86	0.06	316.8	48.0	1	448	1,689.6	1.25	1,689.6	126.8	84.5					1.75	82.2	1.25	58.7	0.12							
			10.86	11.06	0.20	1,056.1	40.0 AVG	1	448	4,693.8	1.25	4,693.8	352.1	234.7					1.75	228.2	1.25	163.0	0.40							
			11.06	11.96	0.90	4,752.0	24.0	1	448	12,672.0	1.25	12,672.0	950.4	633.6					1.75	616.0	1.25	440.0	1.80							
Location 1a Totals (Carried to Sub-Summary)																														
1b	FAI	U.S. 22	11.96	13.09	1.13	5,966.4	24.0	1	448	15,910.4	1.25	15,910.4	1,193.3	795.6					1.75	773.5	1.25	552.5	2.26							
			13.09	13.16	0.07	369.7	24.0	1	448	985.9	3.00	985.9	74.0	49.3	1.50	41.1	1.50	41.1						0.14						
			Bridge Deductions																											
			Location 1b Totals (Carried to Sub-Summary)																											
1c	FAI	U.S. 22	13.16	13.34	0.18	950.4	30.0 Avg.	1	857	3,168.0	3.00	3,168.0	237.6	158.4	1.50	132.0	1.50	132.0						0.36						
			13.34	13.63	0.29	1,531.2	36.0	1	857	6,124.8	3.00	6,124.8	459.4	306.3	1.50	255.2	1.50	255.2						0.58						
			Intersection of U.S. 22/Indiana and Ohio Central Railroad																											
			13.63	13.89	0.26	1,372.8	36.0	1	857	5,491.2	3.00	5,491.2	411.9	274.6	1.50	228.8	1.50	228.8						0.52						
			13.89	14.00	0.11	580.8	54.0 Avg.	2	857	3,484.8	3.00	3,484.8	261.4	174.3	1.50	145.2	1.50	145.2						0.22						
			Intersection of U.S. 22/U.S. 33 (Memorial Drive)																											
			14.04	14.11	0.07	369.7	60.0	3	857	2,464.7	3.00	2,464.7	184.9	123.3	1.50	102.7	1.50	102.7							0.14					
Proposed Concrete Pavement (See Sheet 24a)																														
			14.11	14.39	0.28	1,478.5																								
			14.39	15.60	1.21	6,388.8	60.0 Avg.	2.3	857	42,592.0	3.00	42,592.0	3,194.4	2,129.6	1.50	1,774.7	1.50	1,774.7					2.42							
			15.60	15.66	0.06	316.9	50.0 Avg.	2	857	1,760.6	3.00	1,760.6	132.1	88.1	1.50	73.4	1.50	73.4					0.12							
			15.66	15.86	0.20	1,056.0	40.0	2	857	4,693.4	3.00	4,693.4	352.1	234.7	1.50	195.6	1.50	195.6					0.40							
			15.86	15.88	0.02	105.7	44.0 Avg.	2	857	516.8	3.00	516.8	38.8	25.9	1.50	21.6	1.50	21.6					0.04							
			15.88	16.14	0.26	1,372.8	48.0	2.5	857	7,321.6	3.00	7,321.6	549.2	366.1	1.50	305.1	1.50	305.1					0.52							
			16.14	16.40	0.26	1,372.8	48.0	4	857	7,321.6	3.00	7,321.6	549.2	366.1					1.75	356.0	1.25	254.3	0.52							
			16.40	17.98	1.58	8,342.5	48.0	1	857	44,493.4	3.00	44,493.4	3,337.1	2,224.7					1.75	2,162.9	1.25	1,545.0	3.16							
			17.98	18.05	0.07	369.7	54.0 Avg.	1	857	2,218.2	3.00	2,218.2	166.4	111.0					1.75	107.9	1.25	77.1	0.14							
Bridge Deductions																														
Location 1c Totals (Carried to Sub-Summary)																														
Location 1c Totals (Carried to Sub-Summary)																														

CALCULATED JLS CHECKED DNM
ASPHALT CONCRETE DATA (LOCATIONS 1a-1c)
FAI-22/ VAR-10.75 / VAR
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 71

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PAVEMENT DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		PAVEMENT WIDTH (FEET)	TYPICAL (See Sheet 23)	EXISTING PAVEMENT TYPE	PAVEMENT AREA	202	204		304		452	614	
					MILES	LIN. FT.					PAVEMENT REMOVED	SUBGRADE COMPACTION	PROOF ROLLING	THICKNESS	AGGREGATE BASE	10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I	WORK ZONE CENTER LINE, CLASS II
1c	FAI	U.S. 22	14.11	14.12	0.01	52.8				Exist. Concrete Intersection (Columbus St.)(No Work Required)								
			14.12	14.25	0.13	686.5	50.0	3	857	3,813.9	3,813.9	3,813.9	1.91	3.0 Avg.	317.9	3,813.9	0.13	0.13
			14.25	14.27	0.02	105.6				Exist. Concrete Intersection (Broad St.)(No Work Required)								
			14.27	14.39	0.12	633.7	50.0	3	857	3,520.6	3,520.6	3,520.6	1.77	3.0 Avg.	293.4	3,520.6	0.12	0.12
Location 1c Totals (Carried to Sub-Summary)											7,334.5	7,334.5	3.68		611.3	7,334.5	0.25	0.25

ITEM 646, CENTER LINE

LOCATION	COUNTY	ROUTE	S.L.M.		TOTAL LENGTH (MILES)	INFORMATION ONLY		TOTAL CENTER LINE (MILES)	REMARKS
			FROM	TO		CENTER LINE QUANTITIES			
						TOTAL MILES	EQUIVALENT SOLID LINE		
1c	Fai	U.S. 22	14.11	14.12	0.01				Exist. Concrete Intersection (Columbus St.)(No Work Required)
			14.12	14.25	0.13	0.13	0.340	0.13	Concrete Pavement between Columbus St. and Broad St.
			14.25	14.27	0.02				Exist. Concrete Intersection (Broad St.)(No Work Required)
			14.27	14.39	0.12	0.12	0.289	0.12	Concrete Pavement between Broad St. and S.R. 37 (High St.)
Location 1c Total (Carried to Sub-Summary)									0.25

ITEM 646, AUXILIARY MARKINGS

LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	S.L.M.	CHANNELIZING LINE, 8"	STOP LINE	CROSSWALK LINE, AS PER PLAN			TRANSVERSE/DIAGONAL LINE (YELLOW)	ISLAND MARKING	RAILROAD SYMBOL MARKING	LANE ARROW				LANE REDUCTION ARROW	WORD ON PAVEMENT, 96" (ONLY)	DOTTED LINE, 4" (YELLOW)	REMARKS
								(A) (See Sheet 13)	(B) (See Sheet 13)	(C) (See Sheet 13)				LEFT	THRU	RIGHT	COMBINATION THRU/RIGHT				
1c	Fai	U.S. 22	N. Columbus St. (S.R. 158)	Lt.															See Location 2 Auxiliary Markings		
			S. Columbus St.	Rt.															No Work Required.		
			after Columbus St.	Lt./Rt.		140	26			36			1				1		See Sheet 51.		
			at Center Alley	Lt./Rt.			13			67									See Sheet 51.		
			at Center Alley	Lt./Rt.			13			67									See Sheet 51.		
			before Broad St.	Lt./Rt.		220	32			36			2	1	1		3		See Sheet 51.		
			N. Broad St.	Lt.															No Work Required.		
			S. Broad St.	Rt.															No Work Required.		
			after Broad St.	Lt./Rt.		260	32						2	2	2		3		See Sheet 51.		
			between Broad St. and High St.	Lt./Rt.									2						See Sheet 51.		
			before High St.	Lt./Rt.		190	32			253			2				1		See Sheet 52.		
			N. High St. (S.R. 37)	Lt.															See Location 3 Auxiliary Markings		
Sub-Totals													9	3	3						
Location 1c Totals (Carried to Sub-Summary)						810	148			253	72	134				15		8			

CALCULATED
JLS
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CONCRETE PAVEMENT (LOCATION 1c)

FAI-22/ VAR-10.75 / VAR

24a
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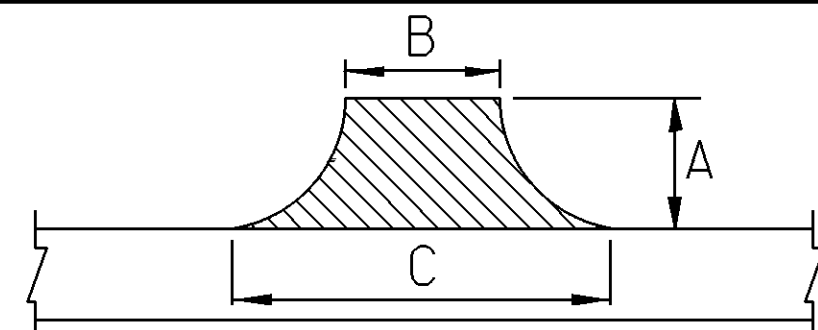
PAVEMENT DATA																			
LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		PAVEMENT WIDTH (FEET)	TYPICAL (See Sheet 23)	EXISTING PAVEMENT TYPE	PAVEMENT AREA	254		407			448			614
					MILES	LIN. FT.					DEPTH	PAVEMENT PLANING, ASPHALT CONCRETE	SPECIAL - TACK COAT, TRACKLESS TACK @ 0.075 GAL./S.Y.	SPECIAL - TACK COAT, TRACKLESS TACK, FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22	THICKNESS	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 76-22M	WORK ZONE CENTER LINE, CLASS II
											IN.	SQ. YD.	GAL.	GAL.	IN.	CU. YD.	IN.	CU. YD.	MILE
2	FAI	S.R. 158	0.29	1.55	1.26	6,652.8	40.0	2,3	448	29,568.0	3.00	29,568.0	2,217.6	1,478.4	1.75	1,437.4	1.25	1,026.7	2.52
			1.55	1.74	0.19	1,003.2	30.0	1	448	3,344.0	3.00	3,344.0	250.8	167.2	1.75	162.6	1.25	116.2	0.38
			1.74	2.48	0.74	3,907.2	24.0	1	448	10,419.2	3.00	10,419.2	781.5	521.0	1.75	506.5	1.25	361.8	1.48
Location 2 Totals (Carried to Sub-Summary)												43,331.2	3,249.9	2,166.6		2,106.5		1,504.7	4.38
3a	FAI	S.R. 37	12.92	12.98	0.06	316.9	24.0	1	448	845.1	3.00	845.1	63.4	42.3	1.75	41.1	1.25	29.4	0.12
			12.98	13.06	0.08	422.4	30.0 AVG	1	448	1,408.0	3.00	1,408.0	105.6	70.4	1.75	68.5	1.25	48.9	0.16
			13.06	13.10	0.04	211.2	36.0	1	448	844.8	3.00	844.8	63.4	42.3	1.75	41.1	1.25	29.4	0.08
			13.10	13.14	0.04	211.3	30.0 AVG	1	448	704.4	3.00	704.4	52.9	35.3	1.75	34.3	1.25	24.5	0.08
			13.14	13.32	0.18	950.4	24.0	1	448	2,534.4	3.00	2,534.4	190.1	126.8	1.75	123.2	1.25	88.0	0.36
			13.32	13.38	0.06	316.9	30.0 AVG	1	448	1,056.4	3.00	1,056.4	79.3	52.9	1.75	51.4	1.25	36.7	0.12
			13.38	13.46	0.08	422.4	36.0	1	448	1,689.6	3.00	1,689.6	126.8	84.5	1.75	82.2	1.25	58.7	0.16
			13.46	13.51	0.05	264.0	30.0 AVG	1	448	880.0	3.00	880.0	66.0	44.0	1.75	42.8	1.25	30.6	0.10
			13.51	13.69	0.18	950.4	24.0	1	448	2,534.4	3.00	2,534.4	190.1	126.8	1.75	123.2	1.25	88.0	0.36
			Bridge Deductions											(490.0)	(490.0)	(36.7)	(24.5)	1.75	(23.8)
Location 3a Totals (Carried to Sub-Summary)												12,007.1	900.9	600.8		584.0		417.2	1.51
3b	FAI	S.R. 37	13.69	13.98	0.29	1,531.2	24.0	1	448	4,083.2	3.00	4,083.2	306.3	204.2	1.75	198.5	1.25	141.8	0.58
			13.98	14.01	0.03	158.4	30.0 AVG	1	448	528.0	3.00	528.0	39.6	26.4	1.75	25.7	1.25	18.4	0.06
			14.01	14.08	0.07	369.7	36.0	1	448	1,478.8	3.00	1,478.8	111.0	74.0	1.75	71.9	1.25	51.4	0.14
			14.08	14.11	0.03	158.4	30.0 AVG	1	448	528.0	3.00	528.0	39.6	26.4	1.75	25.7	1.25	18.4	0.06
			14.11	14.40	0.29	1,531.2	24.0	1	448	4,083.2	3.00	4,083.2	306.3	204.2	1.75	198.5	1.25	141.8	0.58
Location 3b Totals (Carried to Sub-Summary)												10,701.2	802.8	535.2		520.3		371.8	1.42
3c	Fai.	S.R. 37	14.40	14.66	0.26	1,372.8	24.0	1	448	3,660.8	3.00	3,660.8	274.6	183.1	1.75	178.0	1.25	127.2	0.52
			14.66	14.71	0.05	264.1	30.0	2	448	880.4	3.00	880.4	66.1	44.1	1.75	42.8	1.25	30.6	0.10
			14.71	14.87	0.16	844.8	30.0	2	448	2,816.0	3.00	2,816.0	211.2	140.8	1.75	136.9	1.25	97.8	0.32
			14.87	14.91	0.04	211.3	33.0	2	448	774.8	3.00	774.8	58.2	38.8	1.75	37.7	1.25	27.0	0.08
			14.91	15.16	0.25	1,320.0	33.0	2	448	4,840.0	3.00	4,840.0	363.0	242.0	1.75	235.3	1.25	168.1	0.50
			15.16	15.58	0.42	2,217.6	36.0	2	448	8,870.4	3.00	8,870.4	665.3	443.6	1.75	431.2	1.25	308.0	0.84
Location 3c Totals (Carried to Sub-Summary)												21,842.4	1,638.4	1,092.4		1,061.9		758.7	2.36
4	Fai.	S.R. 188	14.48	14.90	0.42	2,217.6	36.0	2	448	8,870.4	3.00	8,870.4	665.3	443.6	1.75	431.2	1.25	308.0	0.84
			14.90	15.02	0.12	633.6	40.0	2,3	448	2,816.0	3.00	2,816.0	211.2	140.8	1.75	136.9	1.25	97.8	0.24
			15.02	16.02	1.00	5,280.0	32.0	2,3	448	18,773.4	3.00	18,773.4	1,408.1	938.7	1.75	912.6	1.25	651.9	2.00
Bridge Deductions											(818.2)	(818.2)	(61.3)	(40.9)	1.75	(39.7)	1.25	(28.4)	(0.08)
Location 4 Totals (Carried to Sub-Summary)												29,641.6	2,223.3	1,482.2		1,441.0		1,029.3	3.00

CALCULATED JLS CHECKED DNM
ASPHALT CONCRETE DATA (LOCATIONS 2-4)
FAI-22/ VAR-10.75/ VAR
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SHOULDER DATA																													
LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		TYPICAL (See Sheet 23)	SHOULDER WIDTH (FEET)		SHOULDER AREA SQ. YD.	209		254		407		442			448			617		618				
					MILES	LIN. FT.		A	B		PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	THICKNESS	PAVEMENT PLANING, ASPHALT CONCRETE	SPECIAL - TACK COAT, TRACKLESS TACK @ 0.075 GAL./S.Y.	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS	ASPHALT CONCRETE, INTERMEDIATE COURSE, 19 MM, TYPE A, (448)	THICKNESS	ASPHALT CONCRETE, SURFACE COURSE, 12.5 MM, TYPE A (446)	THICKNESS	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22	THICKNESS	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 76-22M	THICKNESS	COMPACTED AGGREGATE, AS PER PLAN (2'-WIDTH)	EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE)			
1a	Fai	U.S. 22	10.75	11.07	0.32	1,689.6	1	10.0	10.0	3,754.7	0.64	1.25	3,754.7	281.7	187.8					1.75	182.6	1.25	130.4	2.00	41.8	0.64			
			11.07	11.11	0.04	211.2	1	6.0 AVG	6.0 AVG	281.6	0.08	1.25	281.6	21.2	14.1					1.75	19.7	1.25	9.8	2.00	5.3	0.08			
			11.11	11.96	0.85	4,488.1	1	2.0	2.0	1,994.8	1.70	1.25	1,994.8	149.7	99.8					1.75	97.0	1.25	69.3	2.00	110.9	1.70			
Location 1a Totals (Carried to Sub-Summary)											2.42		6,031.1	452.6	301.7					293.3		209.5		158.0	2.42				
1b	Fai	U.S. 22	11.96	13.09	1.13	5,966.4	1	2.0	2.0	2,651.8	2.26	1.25	2,651.8	198.9	132.6					1.75	129.0	1.25	92.1	2.00	147.4	2.26			
			13.09	13.16	0.07	369.7	1	2.0	2.0	164.4	0.14	3.00	164.4	12.4	8.3	1.50	15.5	1.50	15.5							0.14			
			Bridge Deductions											(90.1)	(0.08)		(90.1)	(6.7)	(4.5)				1.75	(4.3)	1.25	(3.1)	2.00	(5.1)	(0.02)
Location 1b Totals (Carried to Sub-Summary)											2.33		2,726.2	204.6	136.4			15.5		15.5		124.7		89.0		142.3	2.38		
1c	Fai	U.S. 22	16.14	16.18	0.04	211.2	4	5.0 AVG	5.0 AVG	234.7	0.08	3.00	234.7	17.7	11.8					1.75	11.5	1.25	8.2						
			16.18	16.40	0.22	1,161.6	4	8.0	8.0	2,065.1	0.44	3.00	2,065.1	154.9	103.3					1.75	100.4	1.25	71.8						
			16.40	18.05	1.65	8,712.1	1	8.0	8.0	15,488.2	3.30	3.00	15,488.2	1,161.7	774.5					1.75	752.9	1.25	537.8	2.00	215.2				
Bridge Deductions											(254.2)	(0.05)		(254.2)	(19.0)	(12.7)				1.75	(12.3)	1.25	(8.8)	2.00	(3.6)				
Location 1c Totals (Carried to Sub-Summary)											3.77		17,533.8	1,315.3	876.9					852.5		609.0		211.6					
2	Fai	S.R. 158	1.74	2.48	0.74	3,907.2	1	2.0	2.0	1,736.6	1.48	3.00	1,736.6	130.3	86.9					1.75	84.5	1.25	60.3	2.00	96.5				
			Location 2 Totals (Carried to Sub-Summary)											1.48		1,736.6	130.3	86.9					84.5		60.3		96.5		
3a	Fai	S.R. 37	12.92	13.69	0.77	4,065.6	1	2.0	2.0	1,807.0	1.54	3.00	1,807.0	135.6	90.4					1.75	87.9	1.25	62.8	2.00	100.4				
			Bridge Deductions											(65.3)	(0.06)		(65.3)	(4.9)	(3.2)				1.75	(3.1)	1.25	(2.2)	2.00	(3.7)	
			Location 3a Totals (Carried to Sub-Summary)											1.49		1,741.7	130.7	87.2					84.8		60.6		96.7		
3b	Fai	S.R. 37	13.69	14.40	0.71	3,748.8	1	2.0	2.0	1,666.2	1.42	3.00	1,666.2	125.0	83.4					1.75	81.0	1.25	57.9	2.00	92.6				
			Location 3b Totals (Carried to Sub-Summary)											1.42		1,666.2	125.0	83.4					81.0		57.9		92.6		
3c	Fai	S.R. 37	14.40	14.66	0.26	1,372.8	1	2.0	2.0	610.2	0.52	3.00	610.2	45.8	30.6					1.75	29.7	1.25	21.2	2.00	33.9				
			Location 3c Totals (Carried to Sub-Summary)											0.52		610.2	45.8	30.6					29.7		21.2		33.9		

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EXTRA AREAS																			
LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	INTERSECTIONS			AREA	202		204	302		407		448			
					DETAIL DIMENSION				PAVEMENT REMOVED	WEARING COURSE REMOVED	SUBGRADE COMPACTION	THICKNESS	ASPHALT CONCRETE, BASE, PG 64-22	SPECIAL TACK COAT, TRACKLESS TACK @ 0.075 GAL./SQ. Y.	SPECIAL TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE @ 0.05 GAL./SQ. Y.	THICKNESS	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22	THICKNESS	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 64-22
					A	B	C												
					FT.	FT.	FT.												
1a	Fai.	U.S. 22	Becks Knob Rd.	Lt.	40	39	126	366.7											
			Stonewall Cemetery Rd.	Rt.	40	19	73	204.5											
Location 1a Totals (Carried to Sub-Summary)										571.2				43.0	28.7		27.9	20.0	
1b	Fai.	U.S. 22	Crumley Rd.	Lt.	70	21	96	455.0											
			Concord Hall Dr.	Rt.	25	19	60	109.8											
			Williamsburg Ln.	Lt.	35	30	72	198.4											
			Trace Dr.	Lt.	35	40	80	233.4											
Location 1b Totals (Carried to Sub-Summary)										996.6				75.0	50.0		48.7	34.8	
1c	Fai.	U.S. 22	Ellwood Ave.	Lt.	20	30	63	103.4											
			Peters Ave.	Lt.	20	23	63	95.6											
			Boving Rd.	Rt.	46	41	57	250.5											
			Boving Rd.	Rt.	130	32	87	859.5											
			Mithoff Dr.	Rt.	15	24	46	58.4											
			Martens Park Entrance	Lt.	50	36	66	283.4	283.4	283.4	283.4	6.00	47.3	21.3	14.2	1.75	13.8	1.25	9.9
			Talmadge Ave.	Rt.	15	34	67	84.2											
			S. Roosevelt Ave.	Lt.	18	20	45	65.0											
			Hunter Ave.	Rt.	17	29	52	76.5											
			Cedar Hill Rd. (S.R. 188)	Lt.	No Work Required.														
			S. Zane Ave.	Lt.	28	29	58	135.4											
			Alley	Lt.	18	11	21	32.0											
			S. George St.	Lt.	34	27	56	156.8											
			Alley	Lt.	14	14	21	27.3											
			Thomas Ave.	Lt.	27	21	55	114.0											
			Whiley Ave.	Rt.	15	44	92	113.4											
			N. Columbus St. (S.R. 158)	Lt.	See Location 2 Asphalt Sheet														
			S. Columbus St.	Rt.	No Work Required.														
			N. Broad St.	Lt.	No Work Required.														
			S. Broad St.	Rt.	No Work Required.														
			N. High St. (S.R. 37)	Lt.	See Location 3c Asphalt Sheet														
			S. High St.	Rt.	26	44	72	167.6											
			N. Pearl Ave.	Lt.	14	21	34	42.8											
			S. Pearl Ave.	Rt.	40	8	19	60.0											
			Alley	Lt.	8	9	16	11.2											
			S. Tenant St.	Rt.	15	35	54	74.2											
			Alley	Lt.	12	11	20	20.7											
			Alley	Rt.	12	9	15	16.0											
			Alley	Lt.	13	9	16	18.1											
			N. Maple St.	Lt.	20	25	59	93.4											
			S. Maple St.	Rt.	19	38	52	95.0											
			Alley	Rt.	12	15	20	23.4											
			Alley	Lt.	10	9	18	15.0											
Location 1c Totals (Carried to Next Sheet)									283.4	3,092.8	283.4		47.3	233.2	155.8		151.8	108.8	



$$AREA = \left[A \frac{(B + C)}{2} \right] / 9$$

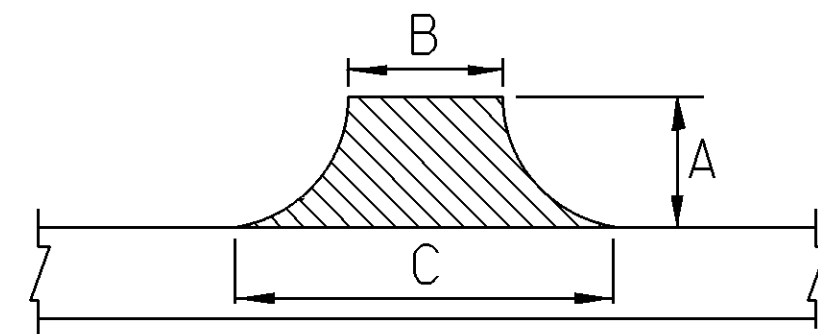
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EXTRA AREA DATA (LOCATIONS 1a-1c)

FAI-22/ VAR-10.75 / VAR

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EXTRA AREAS																			
LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	INTERSECTIONS			AREA	202		204	302		407		448			
					DETAIL DIMENSION				PAVEMENT REMOVED	WEARING COURSE REMOVED	SUBGRADE COMPACTION	THICKNESS	ASPHALT CONCRETE, BASE, PG 64-22	SPECIAL-TACK COAT, TRACKLESS TACK @ 0.075 GAL/S.Y.	SPECIAL-TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE @ 0.05 GAL/S.Y.	THICKNESS	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22	THICKNESS	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 64-22
					A	B	C												
					FT.	FT.	FT.												
1c	Fai.	U.S. 22	Narrow St.	Rt.	18	15	23	38.0		38.0				2.9	1.9	1.75	1.9	1.25	1.4
			Alley	Lt.	10	11	20	17.3		17.3				1.3	0.9	1.75	0.9	1.25	0.7
			N. Mt. Pleasant St.	Lt.	20	38	52	100.0		100.0				7.5	5.0	1.75	4.9	1.25	3.5
			S. Mt. Pleasant St.	Rt.	20	38	40	86.7		86.7				6.6	4.4	1.75	4.3	1.25	3.1
			Alley	Lt.	11	11	18	17.8		17.8				1.4	0.9	1.75	0.9	1.25	0.7
			Starit St.	Lt.	20	34	61	105.6		105.6				8.0	5.3	1.75	5.2	1.25	3.7
			Wyandotte St.	Rt.	10	29	46	41.7		41.7				3.2	2.1	1.75	2.1	1.25	1.5
			Alley	Lt.	12	11	20	20.7		20.7				1.6	1.1	1.75	1.1	1.25	0.8
			N. Eastwood Ave.	Lt.	20	40	55	105.6		105.6				8.0	5.3	1.75	5.2	1.25	3.7
			S. Eastwood Ave.	Rt.	20	30	47	85.6		85.6				6.5	4.3	1.75	4.2	1.25	3.0
			Alley	Rt.	10	10	17	15.0		15.0				1.2	0.8	1.75	0.8	1.25	0.6
			N. Cherry St. (S.R. 188)	Lt.	See Location 4 Asphalt Sheet														
			S. Cherry St.	Rt.	14	36	54	70.0		70.0				5.3	3.5	1.75	3.5	1.25	2.5
			Alley	Rt.	19	12	26	40.2		40.2				3.1	2.1	1.75	2.0	1.25	1.4
			Angle St.	Lt.	40	35	71	235.6		235.6				17.7	11.8	1.75	11.5	1.25	8.2
			Goslin Dr.	Lt.	30	48	88	226.7		226.7				17.1	11.4	1.75	11.1	1.25	7.9
			Della Ave.	Rt.	40	29	44	162.3		162.3				12.2	8.2	1.75	7.9	1.25	5.7
			Harmon Ave.	Lt.	17	30	46	71.8		71.8				5.4	3.6	1.75	3.5	1.25	2.5
			N. Ewing St.	Lt.	38	36	97	280.8		280.8				21.1	14.1	1.75	13.7	1.25	9.8
			S. Ewing St.	Rt.	32	36	91	225.8		225.8				17.0	11.3	1.75	11.0	1.25	7.9
			N. Livingston Ave.	Lt.	12	14	25	26.0		26.0				2.0	1.3	1.75	1.3	1.25	1.0
			S. Livingston Ave.	Rt.	21	24	49	85.2		85.2				6.4	4.3	1.75	4.2	1.25	3.0
			Fulkerson Ave.	Rt.	15	24	52	63.4		63.4				4.8	3.2	1.75	3.1	1.25	2.3
			Baldwin Dr.	Lt.	17	27	47	69.9		69.9				5.3	3.5	1.75	3.4	1.25	2.5
			Kanawha Rd.	Lt.	25	36	89	173.7		173.7				13.1	8.7	1.75	8.5	1.25	6.1
			Ann Ct.	Lt.	20	30	84	126.7		126.7				9.6	6.4	1.75	6.2	1.25	4.4
			Graceland Dr.	Rt.	15	27	34	50.9		50.9				3.9	2.6	1.75	2.5	1.25	1.8
			Homestead Ct.	Rt.	42	32	77	254.4		254.4				19.1	12.8	1.75	12.4	1.25	8.9
			Sells Rd.	Lt.	25	24	63	120.9		120.9				9.1	6.1	1.75	5.9	1.25	4.2
			Lynwood Ln.	Lt.	59	20	78	321.3		321.3				24.1	16.1	1.75	15.7	1.25	11.2
			Shadow Lane Dr.	Rt.	15	22	50	60.0		60.0				4.5	3.0	1.75	3.0	1.25	2.1
			Quarry Rd.	Rt.	55	36	76	342.3		342.3				25.7	17.2	1.75	16.7	1.25	11.9
			Marietta Rd.	Lt.	37	30	116	300.2		300.2				22.6	15.1	1.75	14.6	1.25	10.5
Location 1c Totals (This Sheet)										3,942.1				297.3	198.3		193.2		138.5
Location 1c Totals (Carried from Previous Sheet)									283.4	3,092.8	283.4		47.3	233.2	155.8		151.8		108.8
Location 1c Totals (Carried to Sub-Summary)									283.4	7,034.9	283.4		47.3	530.5	354.1		345.0		247.3

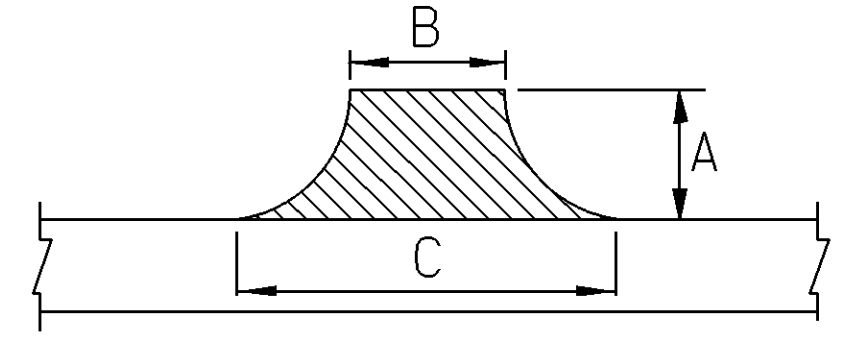


$$AREA = \left[\frac{A (B + C)}{2} \right] / 9$$

CALCULATED: JLS
 CHECKED: DNM
EXTRA AREA DATA (LOCATION 1c)
FAI-22/ VAR -10.75 / VAR
 28 / 71

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EXTRA AREAS															
LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	INTERSECTIONS			AREA SQ. YD.	202	407		448			
					WEARING COURSE REMOVED	SPECIAL - TACK COAT, TRACKLESS TACK @ 0.075 GAL./S.Y.	SPECIAL - TACK COAT, TRACKLESS TACK, FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.		THICKNESS	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22	THICKNESS	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 64-22			
													DETAIL DIMENSION		
													A	B	C
FT.	FT.	FT.	SQ. YD.	SQ. YD.	GAL.	GAL.	IN.	CU. YD.	IN.	CU. YD.					
2	Fai.	S.R. 158	Alley	Rt.	No work required.										
			W. Wheeling St.	Lt.	30	40	62	170.0	170.0	12.8	8.5	1.75	8.3	1.25	6.0
			W. Wheeling St.	Rt.	30	35	59	156.7	156.7	11.8	7.9	1.75	7.7	1.25	5.5
			Alley	Lt.	13	12	19	22.4	22.4	1.7	1.2	1.75	1.1	1.25	0.8
			Alley	Rt.	14	11	19	23.4	23.4	1.8	1.2	1.75	1.2	1.25	0.9
			W. Mulberry St.	Lt.	12	36	64	66.7	66.7	5.1	3.4	1.75	3.3	1.25	2.4
			W. Mulberry St.	Rt.	13	39	63	73.7	73.7	5.6	3.7	1.75	3.6	1.25	2.6
			Union St.	Lt.	15	41	60	84.2	84.2	6.4	4.3	1.75	4.1	1.25	3.0
			Union St.	Rt.	15	37	57	78.4	78.4	5.9	4.0	1.75	3.9	1.25	2.8
			Alley	Lt.	15	16	25	34.2	34.2	2.6	1.8	1.75	1.7	1.25	1.2
			Alley	Rt.	14	14	23	28.8	28.8	2.2	1.5	1.75	1.4	1.25	1.0
			W. 5th Ave.	Lt.	15	37	55	76.7	76.7	5.8	3.9	1.75	3.8	1.25	2.7
			W. 5th Ave.	Rt.	16	34	55	79.2	79.2	6.0	4.0	1.75	3.9	1.25	2.8
			Alley	Lt.	13	15	19	24.6	24.6	1.9	1.3	1.75	1.2	1.25	0.9
			Alley	Rt.	13	15	20	25.3	25.3	1.9	1.3	1.75	1.3	1.25	0.9
			W. 6th Ave.	Lt.	14	40	60	77.8	77.8	5.9	3.9	1.75	3.8	1.25	2.8
			W. 6th Ave.	Rt.	14	40	60	77.8	77.8	5.9	3.9	1.75	3.8	1.25	2.8
			Alley	Lt.	13	13	21	24.6	24.6	1.9	1.3	1.75	1.2	1.25	0.9
			W. Allen St.	Lt.	14	35	54	69.3	69.3	5.2	3.5	1.75	3.4	1.25	2.5
			W. Allen St.	Rt.	14	35	58	72.4	72.4	5.5	3.7	1.75	3.6	1.25	2.6
			Alley	Lt.	13	12	16	20.3	20.3	1.6	1.1	1.75	1.0	1.25	0.8
			Alley	Rt.	13	11	14	18.1	18.1	1.4	1.0	1.75	0.9	1.25	0.7
			Arnold Ave.	Rt.	13	22	42	46.3	46.3	3.5	2.4	1.75	2.3	1.25	1.7
			Alley	Lt.	13	11	18	21.0	21.0	1.6	1.1	1.75	1.1	1.25	0.8
			Alley	Rt.	15	12	19	25.9	25.9	2.0	1.3	1.75	1.3	1.25	0.9
			W. Fair Ave.	Lt.	14	33	60	72.4	72.4	5.5	3.7	1.75	3.6	1.25	2.6
			W. Fair Ave.	Rt.	15	34	60	78.4	78.4	5.9	4.0	1.75	3.9	1.25	2.8
			Reber Ave.	Lt.	12	29	44	48.7	48.7	3.7	2.5	1.75	2.4	1.25	1.7
			Fairground Entrance	Rt.	20	22	44	73.4	73.4	5.6	3.7	1.75	3.6	1.25	2.6
			Park St.	Lt.	12	28	43	47.4	47.4	3.6	2.4	1.75	2.4	1.25	1.7
			Fairground's Drive	Rt.	20	12	18	33.4	33.4	2.6	1.7	1.75	1.7	1.25	1.2
			Alley	Lt.	12	10	18	18.7	18.7	1.5	1.0	1.75	1.0	1.25	0.7
			Davis St.	Rt.	12	26	43	46.0	46.0	3.5	2.3	1.75	2.3	1.25	1.6
			Edgewood Ave.	Lt.	14	31	46	59.9	59.9	4.5	3.0	1.75	3.0	1.25	2.1
			Kinhead Ave.	Lt.	12	17	25	28.0	28.0	2.1	1.4	1.75	1.4	1.25	1.0
			Wilson Ave.	Rt.	12	28	44	48.0	48.0	3.6	2.4	1.75	2.4	1.25	1.7
			Alley	Rt.	12	13	22	23.4	23.4	1.8	1.2	1.75	1.2	1.25	0.9
			Marks Ave.	Rt.	16	33	54	77.4	77.4	5.9	3.9	1.75	3.8	1.25	2.7
			Alley	Rt.	11	20	36	34.3	34.3	2.6	1.8	1.75	1.7	1.25	1.2
			Forest Rose Cemetery Entrance	Rt.	33	58	77	247.5	247.5	18.6	12.4	1.75	12.1	1.25	8.6
			Forest Rose Cemetery's Drive	Rt.	11	12	20	19.6	19.6	1.5	1.0	1.75	1.0	1.25	0.7
			N. Columbus St.	Lt.	70	40	96	528.9	528.9	39.7	26.5	1.75	25.8	1.25	18.4
			Forest Rose Cemetery's Drive	Rt.	13	14	40	39.0	39.0	3.0	2.0	1.75	1.9	1.25	1.4
			N. Pershing Dr.	Lt.	14	36	58	73.2	73.2	5.5	3.7	1.75	3.6	1.25	2.6
			N. Pershing Dr.	Rt.	20	33	63	106.7	106.7	8.1	5.4	1.75	5.2	1.25	3.8
			Leonard Dr.	Rt.	17	24	55	74.7	74.7	5.7	3.8	1.75	3.7	1.25	2.6
			Pairan Ln.	Rt.	23	27	69	122.7	122.7	9.3	6.2	1.75	6.0	1.25	4.3
Location 2 Totals (Carried to Sub-Summary)									3,299.5	249.8	167.2		162.6		116.9

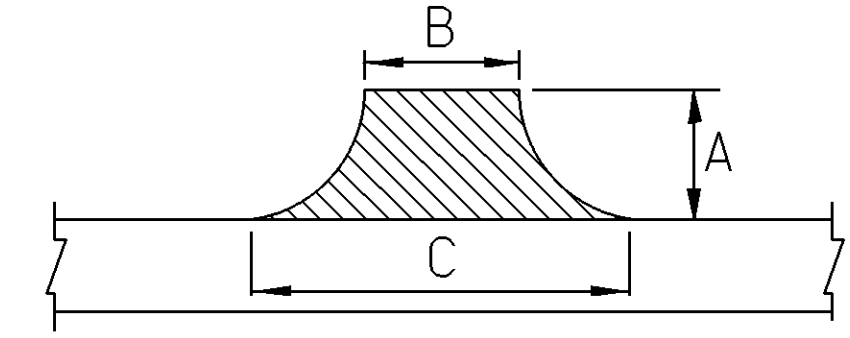


$$AREA = \left[A \frac{(B + C)}{2} \right] / 9$$

CALCULATED JLS
 CHECKED DNM
EXTRA AREA DATA (LOCATION 2)
FAI-22 / VAR-10.75 / VAR
 29
 71

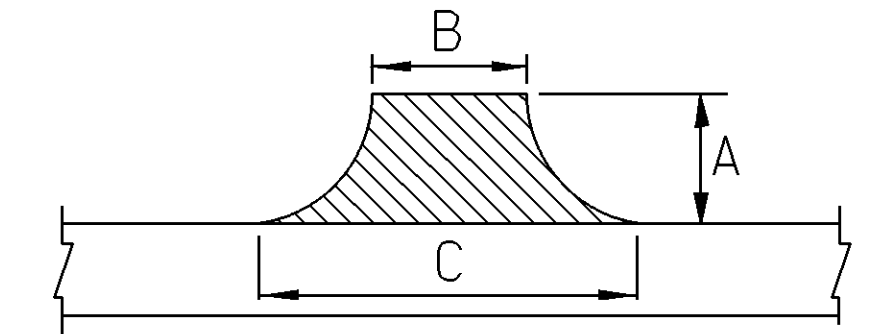
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LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	INTERSECTIONS			AREA SQ. YD.	EXTRA AREAS		407		448			
					DETAIL DIMENSION				WEARING COURSE REMOVED SQ. YD.	SPECIAL - TACK COAT, TRACKLESS TACK @ 0.075 GAL./S.Y.	SPECIAL - TACK COAT, TRACKLESS TACK, FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS IN.	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22 CU. YD.	THICKNESS IN.	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 64-22 CU. YD.	
					A	B	C									
					FT.	FT.	FT.									SQ. YD.
3a	Fai.	S.R. 37	Creskide Dr.	Lt.	50	38	134	477.8	477.8	35.9	23.9	1.75	23.3	1.25	16.6	
			Mondhank Rd.	Rt.	50	24	120	400.0	400.0	30.0	20.0	1.75	19.5	1.25	13.9	
			Countryside Dr.	Lt.	32	36	142	316.5	316.5	23.8	15.9	1.75	15.4	1.25	11.0	
			College Ave.	Lt.	60	40	116	520.0	520.0	39.0	26.0	1.75	25.3	1.25	18.1	
			Beaver Field Entrance	Rt.	20	22	46	75.6	75.6	5.7	3.8	1.75	3.7	1.25	2.7	
			Ohio University-Lancaster Exit	Lt.	30	29	74	171.7	171.7	12.9	8.6	1.75	8.4	1.25	6.0	
			Ohio University-Lancaster Entrance	Lt.	30	35	86	201.7	201.7	15.2	10.1	1.75	9.9	1.25	7.1	
Location 3a Totals (Carried to Sub-Summary)								2,163.3	162.5	108.3		105.5		75.4		
3b	Fai.	S.R. 37	Fair Acres Dr.	Rt.	20	22	61	92.3	92.3	7.0	4.7	1.75	4.5	1.25	3.3	
			Arbor Valley Dr.	Lt.	42	24	88	261.4	261.4	19.7	13.1	1.75	12.8	1.25	9.1	
Location 3b Totals (Carried to Sub-Summary)								353.7	26.7	17.8		17.3		12.4		
3c	Fai.	S.R. 37	Red Bud Ln.	Rt.	20	18	40	64.5	64.5	4.9	3.3	1.75	3.2	1.25	2.3	
			Orchard Hill Dr.	Lt.	30	24	67	151.7	151.7	11.4	7.6	1.75	7.4	1.25	5.3	
			N. High St.	Rt.	70	25	135	622.3	622.3	46.7	31.2	1.75	30.3	1.25	21.7	
			Bainter Circle (Rising Park Entrance)	Lt.	28	43	118	250.5	250.5	18.8	12.6	1.75	12.2	1.25	8.7	
			E. Fair Ave.	Lt.	29	31	64	153.1	153.1	11.5	7.7	1.75	7.5	1.25	5.4	
			E. Fair Ave.	Rt.	35	42	91	258.7	258.7	19.5	13.0	1.75	12.6	1.25	9.0	
			Alley	Rt.	10	11	18	16.2	16.2	1.3	0.9	1.75	0.8	1.25	0.6	
			Lake St.	Lt.	12	36	55	60.7	60.7	4.6	3.1	1.75	3.0	1.25	2.2	
			Lake St.	Rt.	13	36	50	62.2	62.2	4.7	3.2	1.75	3.1	1.25	2.2	
			Arnold Ave.	Lt.	11	11	21	19.6	19.6	1.5	1.0	1.75	1.0	1.25	0.7	
			Arnold Ave.	Rt.	11	11	18	17.8	17.8	1.4	0.9	1.75	0.9	1.25	0.7	
			Alley	Rt.	12	12	12	16.0	16.0	1.2	0.8	1.75	1.0	1.25	0.6	
			E. Allen St.	Lt.	12	38	60	65.4	65.4	5.0	3.3	1.75	3.2	1.25	2.3	
			E. Allen St.	Rt.	12	25	38	42.0	42.0	3.2	2.1	1.75	2.1	1.25	1.5	
			Alley	Lt.	10	12	25	20.6	20.6	1.6	1.1	1.75	1.1	1.25	0.8	
			Alley	Rt.	10	11	21	17.8	17.8	1.4	0.9	1.75	0.9	1.25	0.7	
			E. 6th Ave.	Lt.	13	53	68	87.4	87.4	6.6	4.4	1.75	4.3	1.25	3.1	
			E. 6th Ave.	Rt.	15	41	60	84.2	84.2	6.4	4.3	1.75	4.1	1.25	3.0	
			Alley	Lt.	10	11	12	12.8	12.8	1.0	0.7	1.75	0.7	1.25	0.5	
			Alley	Rt.	10	12	19	17.3	17.3	1.3	0.9	1.75	0.9	1.25	0.7	
			E. 5th Ave.	Lt.	12	34	52	57.4	57.4	4.4	2.9	1.75	2.8	1.25	2.0	
E. 5th Ave.	Rt.	12	34	54	58.7	58.7	4.5	3.0	1.75	2.9	1.25	2.1				
Alley	Lt.	12	10	19	19.4	19.4	1.5	1.0	1.75	1.0	1.25	0.7				
Alley	Rt.	14	12	19	24.2	24.2	1.9	1.3	1.75	1.2	1.25	0.9				
E. King St.	Lt.	15	38	60	81.7	81.7	6.2	4.1	1.75	4.0	1.25	2.9				
E. King St.	Rt.	15	38	60	81.7	81.7	6.2	4.1	1.75	4.0	1.25	2.9				
Alley	Lt.	16	12	21	29.4	29.4	2.3	1.5	1.75	1.5	1.25	1.1				
Alley	Rt.	14	12	20	24.9	24.9	1.9	1.3	1.75	1.3	1.25	0.9				
E. Mulberry St.	Lt.	18	36	58	94.0	94.0	7.1	4.7	1.75	4.6	1.25	3.3				
E. Mulberry St.	Rt.	18	36	58	94.0	94.0	7.1	4.7	1.75	4.6	1.25	3.3				
Alley	Lt.	15	14	20	28.4	28.4	2.2	1.5	1.75	1.4	1.25	1.0				
Alley	Rt.	16	19	32	45.4	45.4	3.5	2.3	1.75	2.3	1.25	1.6				
E. Wheeling St.	Lt.	19	39	62	106.7	106.7	8.1	5.4	1.75	5.2	1.25	3.8				
E. Wheeling St.	Rt.	19	39	64	108.8	108.8	8.2	5.5	1.75	5.3	1.25	3.8				
Alley	Lt.	17	15	31	43.5	43.5	3.3	2.2	1.75	2.2	1.25	1.6				
Alley	Rt.	16	13	22	31.2	31.2	2.4	1.6	1.75	1.6	1.25	1.1				
Location 3c Totals (Carried to Sub-Summary)								2,970.2	224.8	150.1		146.2		105.0		



$$AREA = \left[A \frac{(B + C)}{2} \right] / 9$$

EXTRA AREAS															
LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	INTERSECTIONS			AREA	202	407		448			
					DETAIL DIMENSION				WEARING COURSE REMOVED	SPECIAL - TACK COAT, TRACKLESS TACK @ 0.075 GAL./S.Y.	SPECIAL - TACK COAT, TRACKLESS TACK, FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22	THICKNESS	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 64-22
					A	B	C								
					FT.	FT.	FT.								
4	Fai.	S.R. 188	Alley	Rt.	15	16	28	36.7	36.7	2.8	1.9	1.75	1.8	1.25	1.3
			Angle St.	Rt.	25	30	45	104.2	104.2	7.9	5.3	1.75	5.1	1.25	3.7
			E. Wheeling St.	Lt.	23	38	53	116.3	116.3	8.8	5.9	1.75	5.7	1.25	4.1
			Alley	Lt.	11	17	26	26.3	26.3	2.0	1.4	1.75	1.3	1.25	1.0
			E. Mulberry St.	Lt.	20	32	48	88.9	88.9	6.7	4.5	1.75	4.4	1.25	3.1
			Alley	Rt.	11	10	17	16.5	16.5	1.3	0.9	1.75	0.9	1.25	0.6
			Alley	Lt.	16	20	28	42.7	42.7	3.3	2.2	1.75	2.1	1.25	1.5
			Alley	Rt.	10	14	21	19.5	19.5	1.5	1.0	1.75	1.0	1.25	0.7
			E. King St.	Lt.	11	30	43	44.7	44.7	3.4	2.3	1.75	2.2	1.25	1.6
			E. 5th Ave.	Lt.	12	34	45	52.7	52.7	4.0	2.7	1.75	2.6	1.25	1.9
			E. 6th Ave.	Lt.	No work required.										
			Sheridan Dr.	Lt.	No work required.										
			Goslin Dr.	Rt.	10	33	46	43.9	43.9	3.3	2.2	1.75	2.2	1.25	1.6
			N. Ewing St.	Rt.	25	35	82	162.5	162.5	12.2	8.2	1.75	7.9	1.25	5.7
			Baldwin Dr.	Rt.	13	59	90	107.7	107.7	8.1	5.4	1.75	5.3	1.25	3.8
			Kemper Ave.	Rt.	28	27	67	146.3	146.3	11.0	7.4	1.75	7.2	1.25	5.1
			Kanawha Rd.	Rt.	29	37	85	196.6	196.6	14.8	9.9	1.75	9.6	1.25	6.9
			Marietta Rd.	Rt.	60	14	42	186.7	186.7	14.1	9.4	1.75	9.1	1.25	6.5
			Marietta Rd.	Rt.	40	32	38	155.6	155.6	11.7	7.8	1.75	7.6	1.25	5.5
			Sha Ln.	Lt.	18	30	40	70.0	70.0	5.3	3.5	1.75	3.5	1.25	2.5
			Wheeling Rd.	Rt.	54	26	91	351.0	351.0	26.4	17.6	1.75	17.1	1.25	12.2
			Lynn Dr.	Lt.	37	30	81	228.2	228.2	17.2	11.5	1.75	11.1	1.25	8.0
Location 4 Totals (Carried to Sub-Summary)								2,197.0	165.8	111.0		107.7		77.3	



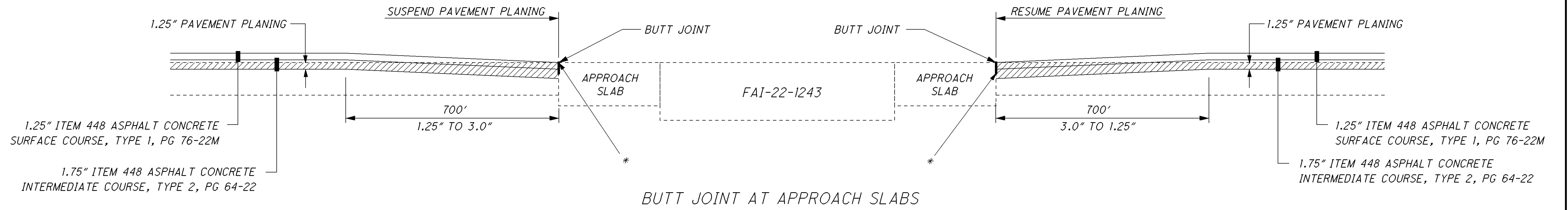
$$AREA = \left[\frac{A (B + C)}{2} \right] \times 9$$

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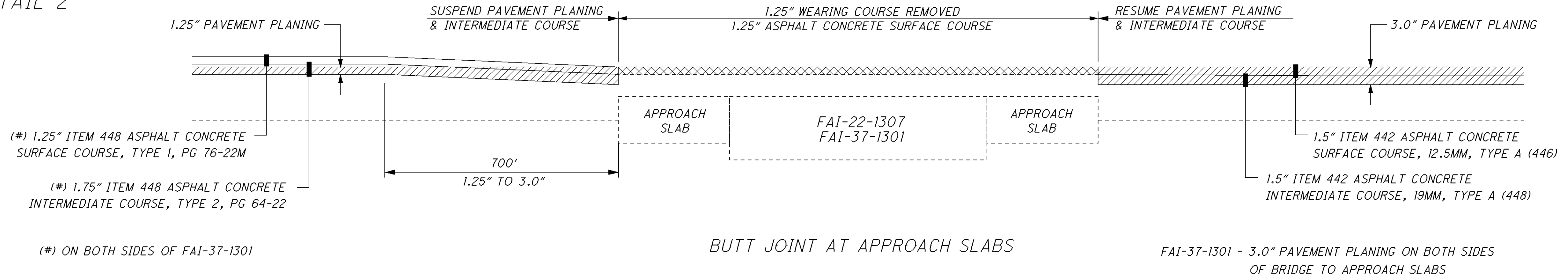
BRIDGE DATA																																											
LOCATION	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	AREA	APPROACH SLAB LENGTH	APPROACH SLAB WIDTH	APPROACH SLAB AREA (INCLUDES BOTH APPROACH SLABS)	DETAIL (SEE SHEETS 33-34)	MAINLINE DEDUCTIONS (CARRIED TO SHEETS 24-25)	SHOULDER DEDUCTIONS (CARRIED TO SHEET 26)	202		407			442				448			516																				
		LIN. FT.	LIN. FT.	SQ. YD.	LIN. FT.	LIN. FT.	SQ. YD.				SQ. YD.	SQ. YD.	TACK COAT, 702.13 @ 0.075 GAL/SQ.YD.	SPECIAL-TACK COAT, TRACKLESS TACK @ 0.075 GAL/S.Y.	SPECIAL-TACK COAT, TRACKLESS TACK, FOR INTERMEDIATE COURSE @ 0.05 GAL/S.Y.	THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448)	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)	THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, PG 64-22	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 76-22M	2" DEEP JOINT SEALER, AS PER PLAN																			
1a	SLM 10.75	AT BEGIN WORK																													60												
LOCATION 1a TOTALS (CARRIED TO SUB-SUMMARY)																																											60
1b	FAI-22-1243	50.7	40.5	228.2	20.0	40.5	180.0	1	241.9	40.3														84																			
1b	FAI-22-1307	82.0	32.0	291.6	15.0	32.0	106.7	2	298.7	49.8	398.3		29.9								1.25	13.9																					
BRIDGE DEDUCTIONS									(540.5)	(90.1)																																	
LOCATION 1b TOTALS (CARRIED TO SUB-SUMMARY)											398.3		29.9																		84												
1c	FAI-22-1358	59.8	48.3	321.0	15.0	48.3	161.0	3	359.2																72																		
1c	FAI-22-1385	79.5	47.6	420.5	25.0	47.3	262.8	4	518.0		262.8	19.7				2.00	14.6								72																		
1c	FAI-22-1536	63.0	68.3	478.1	15.0	68.0	226.7	3	620.0																120																		
1c	FAI-22-1706	93.0	68.0	702.7	25.0	64.0	355.6	5	762.7	254.2	355.6	26.7			2.50	24.7									134																		
BRIDGE DEDUCTIONS									(2,259.9)	(254.2)																																	
LOCATION 1c TOTALS (CARRIED TO SUB-SUMMARY)												618.4	46.4				39.3														398												
3a	FAI-37-1301	97.0	51.3	552.9	25.0	51.0	283.3	2	490.0	65.3	836.2		62.8								1.25	29.1																					
BRIDGE DEDUCTIONS									(490.0)	(65.3)																																	
LOCATION 3a TOTALS (CARRIED TO SUB-SUMMARY)											836.2		62.8																		29.1												
4	FAI-188-1483	69.0	36.0	276.0	15.0	36.0	120.0	6	396.0																72																		
4	FAI-188-1494	65.0	40.0	288.9	15.0	40.0	133.3	6	422.2																80																		
BRIDGE DEDUCTIONS									(818.2)																																		
LOCATION 4 TOTALS (CARRIED TO SUB-SUMMARY)																															152												

CALCULATED	JLS	CHECKED	DNM
BRIDGE DECK TREATMENT DATA			
FAI-22/ VAR -10.75 / VAR			
32 71			

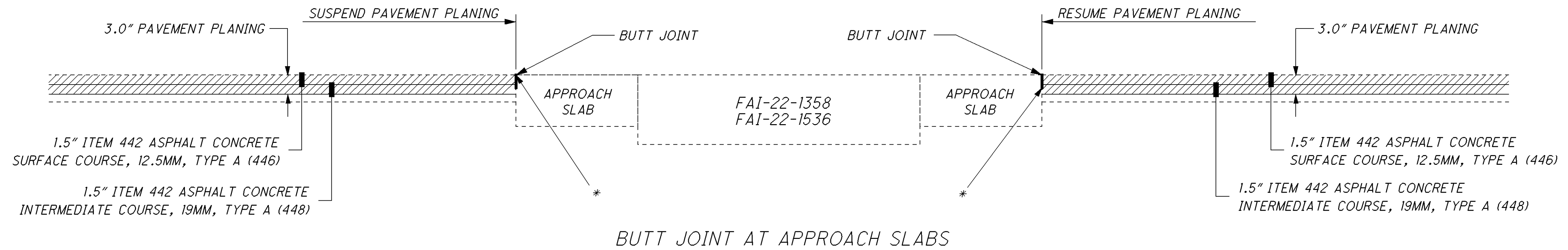
DETAIL 1




DETAIL 2



DETAIL 3



 ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

 ITEM 202 WEARING COURSE REMOVED

 ITEM 202 WEARING COURSE REMOVED, AS PER PLAN

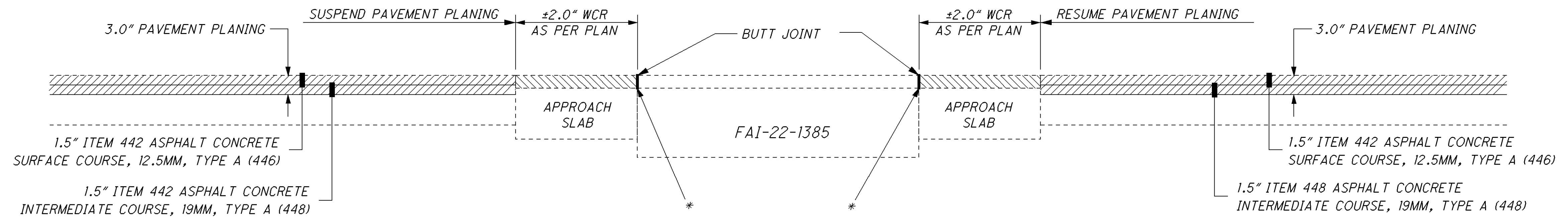
* 2" DEEP JOINT SEALER, AS PER PLAN

BRIDGE DECK TREATMENT DATA

FAI-22/ VAR -10.75/ VAR

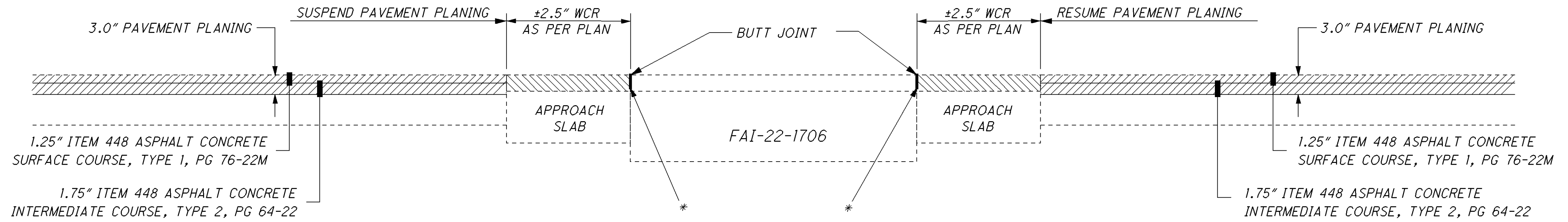
CALCULATED	LME
CHECKED	DNM

DETAIL 4



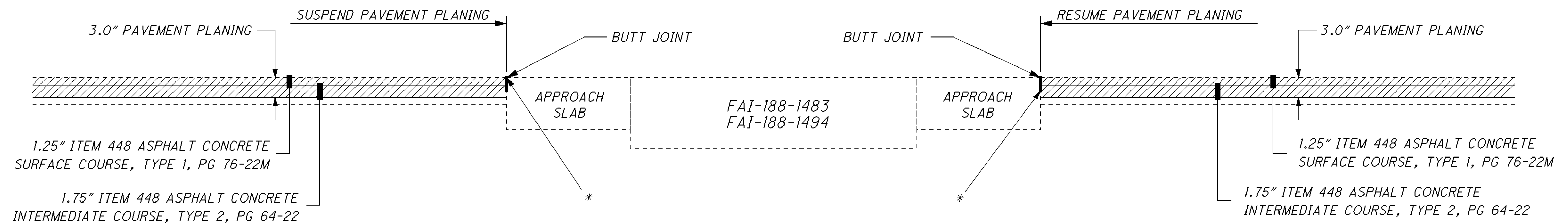
BUTT JOINT AT BRIDGE DECK

DETAIL 5

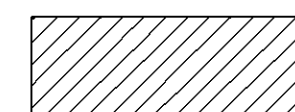


BUTT JOINT AT BRIDGE DECK

DETAIL 6



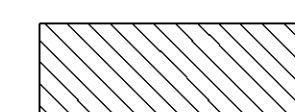
BUTT JOINT AT APPROACH SLABS



ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE



ITEM 202 WEARING COURSE REMOVED



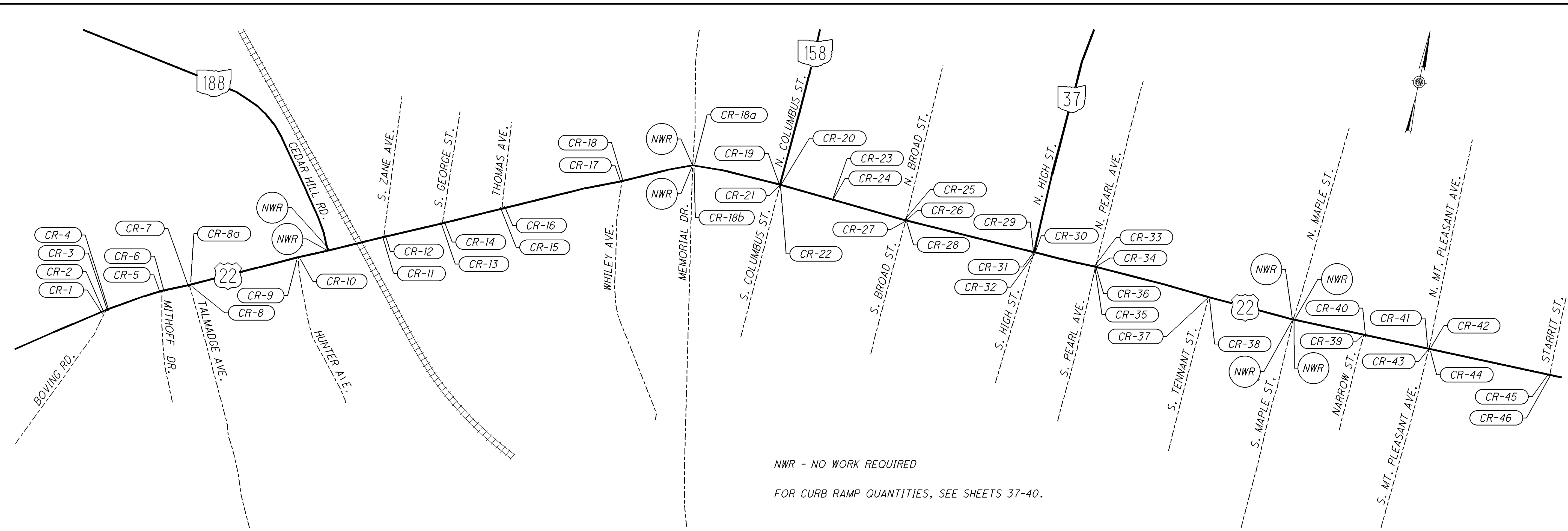
ITEM 202 WEARING COURSE REMOVED, AS PER PLAN

* 2" DEEP JOINT SEALER, AS PER PLAN

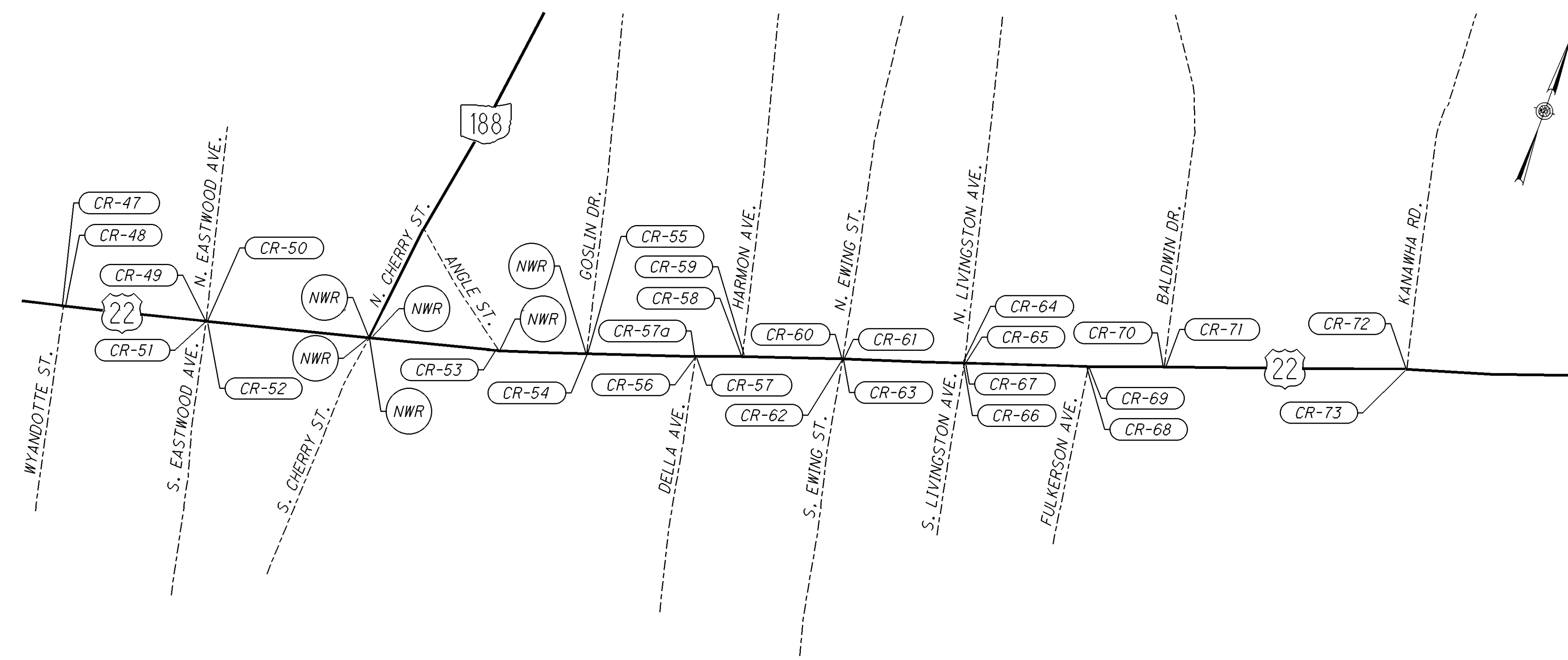
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BRIDGE DECK TREATMENT DATA

FAI-22/ VAR-10.75/ VAR



NWR - NO WORK REQUIRED
FOR CURB RAMP QUANTITIES, SEE SHEETS 37-40.



NWR - NO WORK REQUIRED
FOR CURB RAMP QUANTITIES, SEE SHEETS 37-40.

ITEM 202 WALK REMOVED, AS PER PLAN (A)

THIS WORK SHALL CONSIST OF REMOVING, STORING AND REPLACING BRICK SIDEWALK AT LOCATIONS WHERE A DETECTABLE WARNING DEVICE IS REQUIRED TO BE INSTALLED IN AN EXISTING BRICK SIDEWALK.

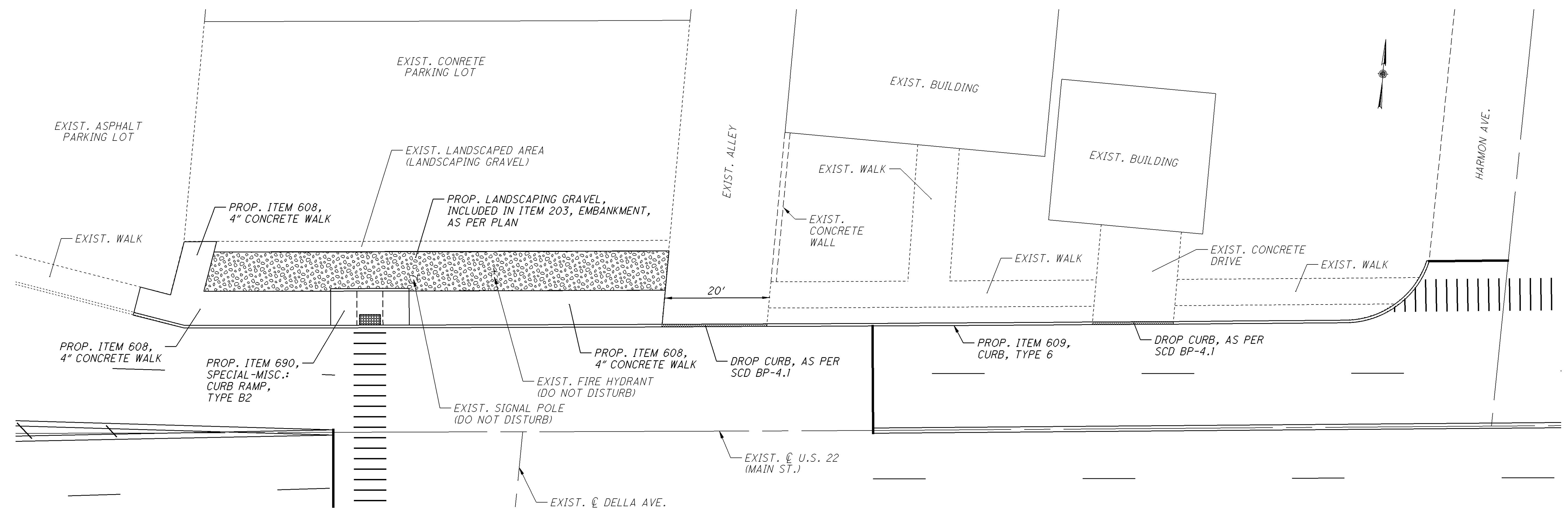
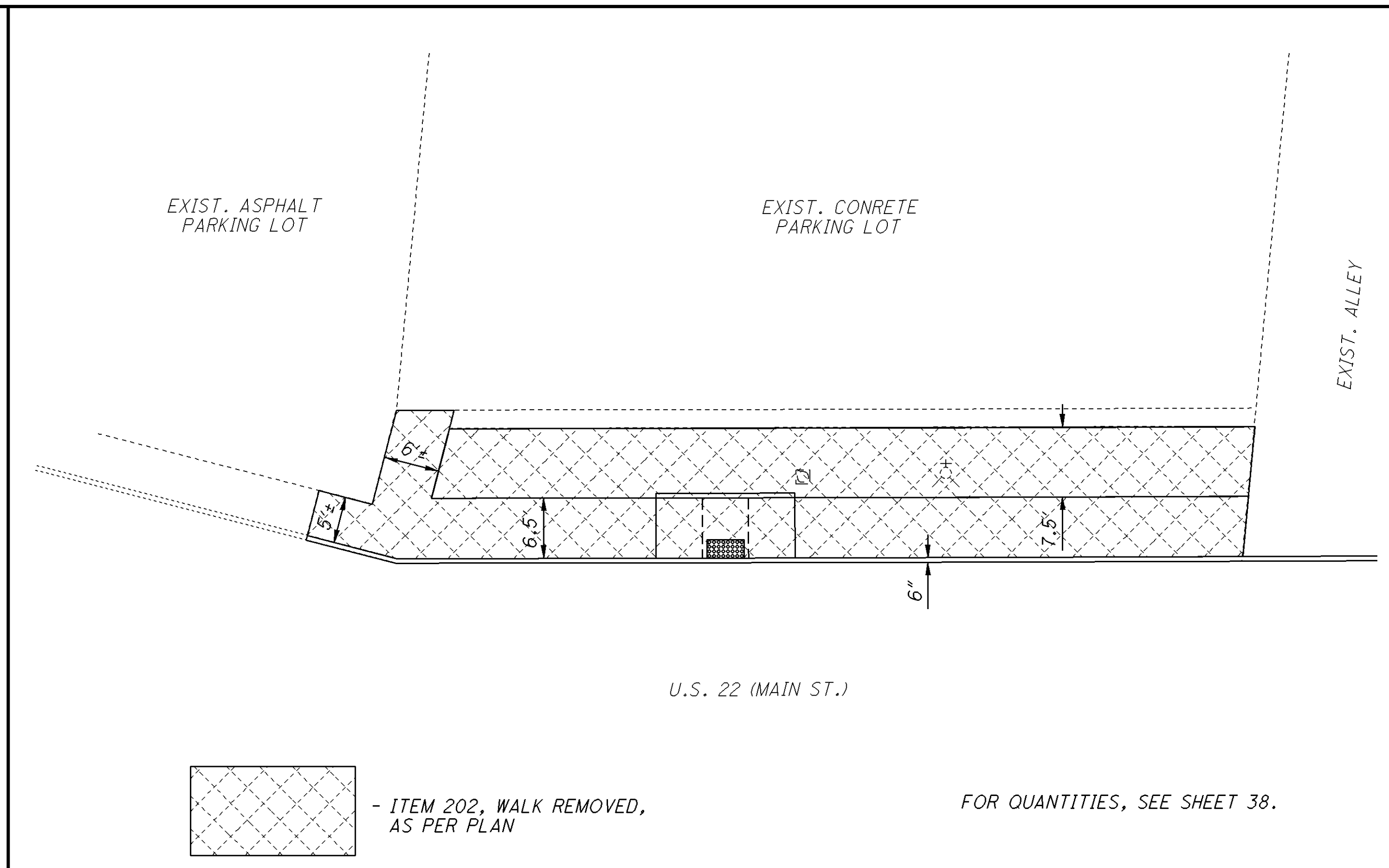
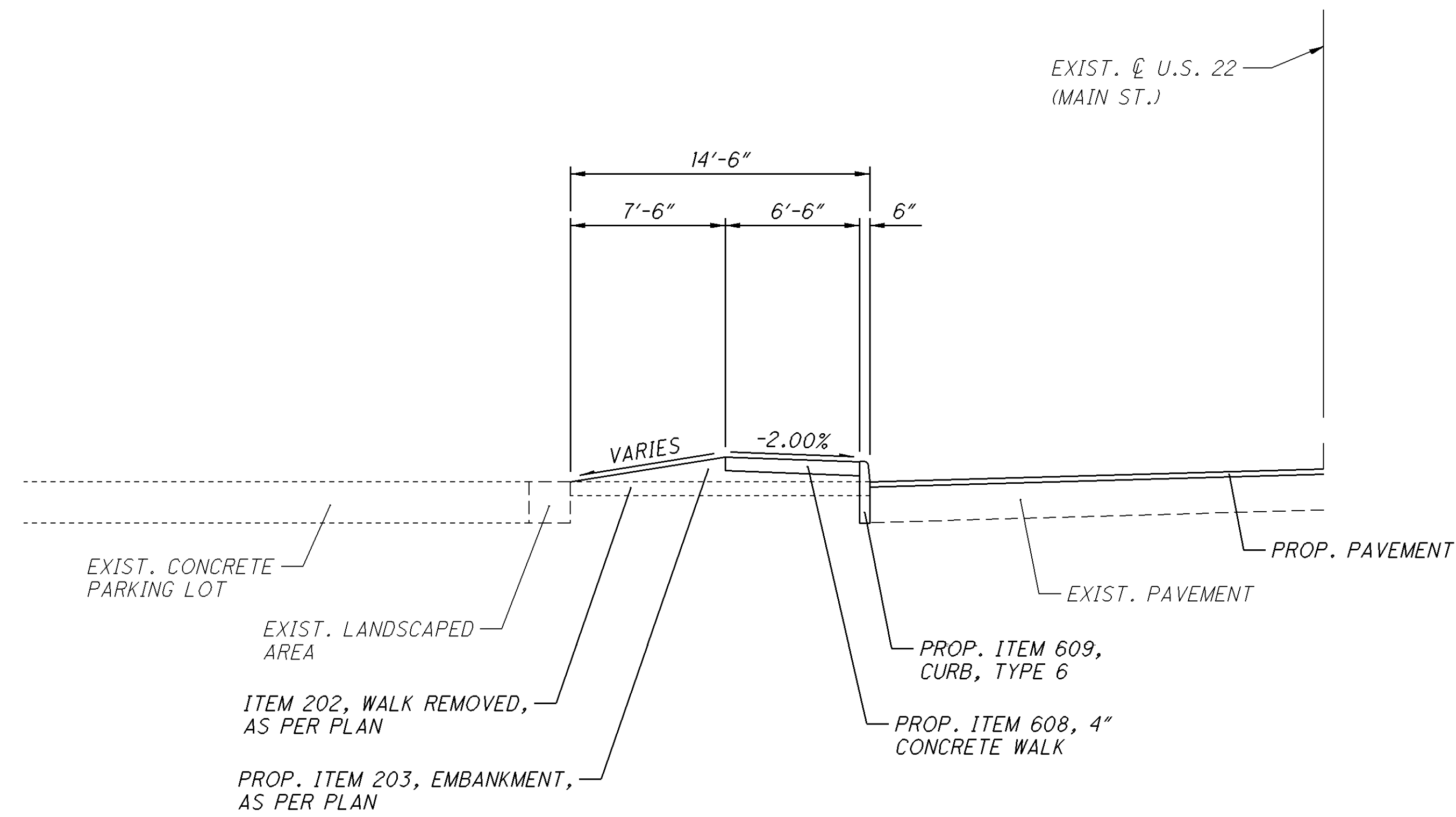
THE CONTRACTOR SHALL CAREFULLY REMOVE THE NECESSARY BRICKS AND THE CONCRETE PAVEMENT LOCATED UNDER THE BRICKS. THE CONTRACTOR SHALL THEN INSTALL A DETECTABLE WARNING PLATE AS DETAILED ON SHEET 17. ONCE THE DETECTABLE WARNING PLATE IS INSTALLED, THE CONTRACTOR SHALL RE-INSTALL THE EXISTING BRICKS AROUND THE DETECTABLE WARNING PLATE.

THE EXISTING BRICKS THAT ARE RE-INSTALLED SHALL MATCH THE EXISTING BRICK PATTERN AND PROVIDE A SMOOTH TRANSITION FROM THE BRICK SIDEWALK TO THE DETECTABLE WARNING PLATE. ANY REMAINING BRICKS SHALL BECOME THE PROPERTY OF THE CITY OF LANCASTER. THE CONTRACTOR SHALL CONTACT TIM DEITZ AT (740)-687-6668 TO ARRANGE PICK UP BY CITY FORCES.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, INCIDENTALS NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE, INCLUDING CUTTING EXISTING BRICKS TO FIT AROUND THE DETECTABLE WARNING PLATE, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 202, WALK REMOVED, AS PER PLAN (A).

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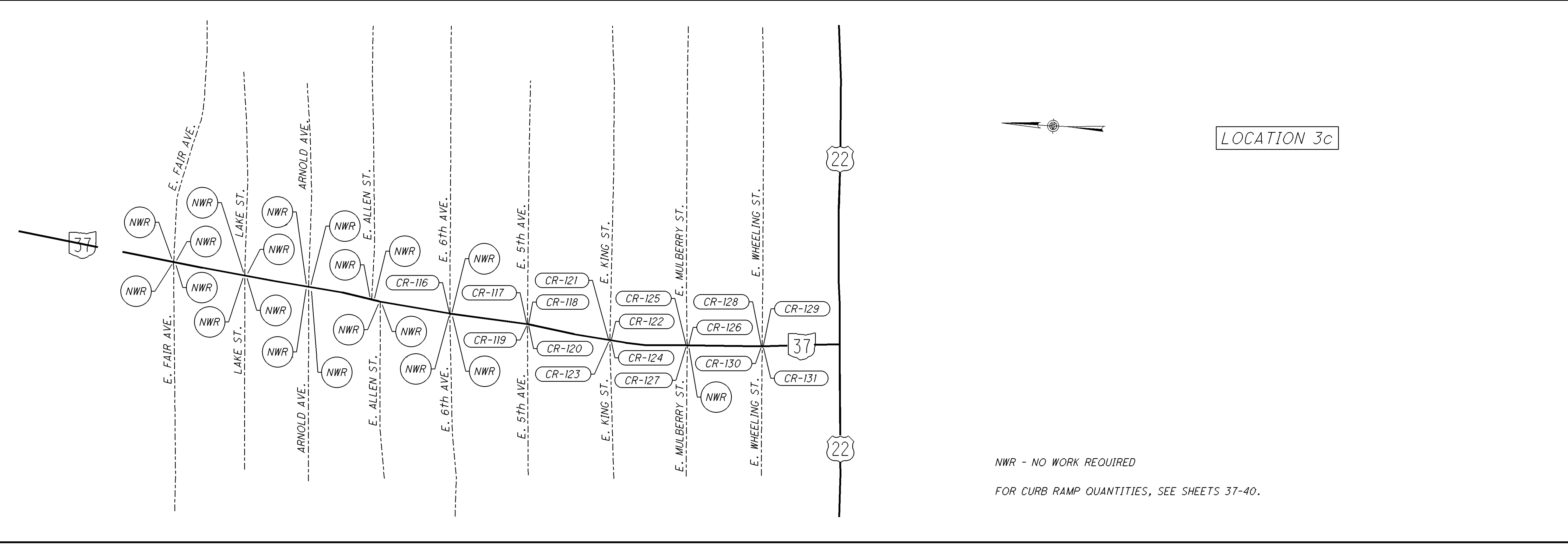
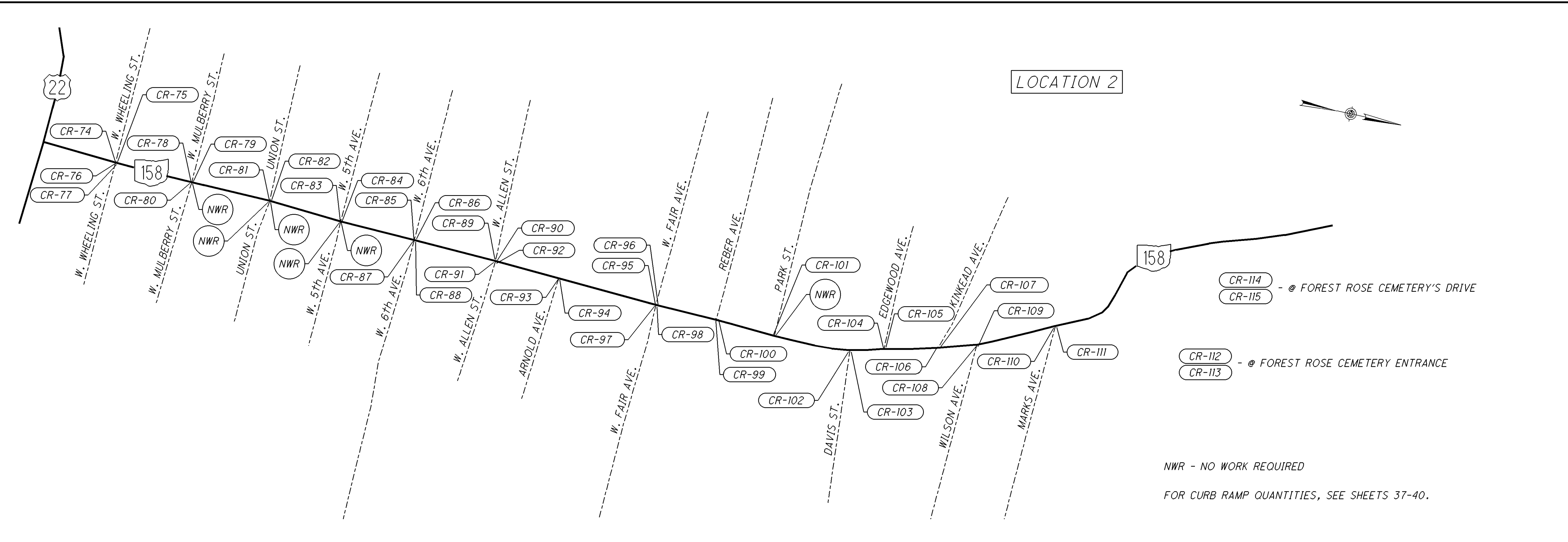
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CALCULATED
JLS
CHECKED
DNM

DETAILS ACROSS FROM DELLA AVE. (LOCATION 1c)

FAI-22/ VAR-10.75/ VAR



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REFERENCE NO.	SHEET NO.	LOCATION	SIDE	202				608		609		690					REMARKS	
				WALK REMOVED	WALK REMOVED, AS PER PLAN (A)	CURB REMOVED	CURB AND GUTTER REMOVED	4" CONCRETE WALK (Curb Ramp Area)	4" CONCRETE WALK (Extra Walk Area)	COMBINATION CURB AND GUTTER, TYPE 2	CURB, TYPE 6	SPECIAL-MISC.: CURB RAMPS,						SPECIAL - MISC.: DETECTABLE WARNING
												TYPE A1	TYPE B1	TYPE B2	TYPE B3	TYPE D		
LL/RL	SQ. FT.	SQ. FT.	FT.	FT.	SQ. FT.	SQ. FT.	FT.	FT.	EACH	EACH	EACH	EACH	EACH	SQ. FT.				
Location 1c																		
U.S. 22 (Lincoln Ave./Main St.)																		
CR-1	35	at Boving Rd.	Rt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-2	35	at Boving Rd.	Rt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-3	35	at Boving Rd.	Rt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-4	35	at Boving Rd.	Rt.	16.0			6	8.0		6					8.0	Add Detectable Warning		
CR-5	35	at Mithoff Dr.	Rt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-6	35	at Mithoff Dr.	Rt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-7	35	at Talmadge Ave.	Rt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-8	35	at Talmadge Ave.	Rt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-8a	35	at Martens Park Entrance	Lt.			10		40.0		20			1			New Curb Ramp placed on radius		
CR-9	35	at Hunter Ave.	Rt.	16.0		6		8.0		6					8.0	Add Detectable Warning, Gas Valve in walk		
CR-10	35	at Hunter Ave.	Rt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
		at Cedar Hill Rd. (S.R. 188)	Lt.	No Work Required														
		at Cedar Hill Rd. (S.R. 188)	Lt.	No Work Required														
CR-11	35	at S. Zane Ave.	Lt.	16.0				8.0		6					8.0	Add Detectable Warning		
CR-12	35	at S. Zane Ave.	Lt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-13	35	S. George St.	Lt.	16.0				8.0		6					8.0	Add Detectable Warning		
CR-14	35	S. George St.	Lt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-15	35	at Thomas Ave.	Lt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-16	35	at Thomas Ave.	Lt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-17	35	at Whiley Ave.	Rt.	64.0		16		64.0		32			1			New Curb Ramp placed on radius		
CR-18	35	at Whiley Ave.	Rt.	64.0		16		64.0		32			1			New Curb Ramp placed on radius		
		at Memorial Dr.	Lt.	No Work Required														
CR-18a	35	at Memorial Dr.	Lt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
		at Memorial Dr.	Rt.	No Work Required														
CR-18b	35	at Memorial Dr.	Rt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-19	35	at N. Columbus St. (S.R. 158)	Lt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-20	35	at N. Columbus St. (S.R. 158)	Lt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-21	35	at S. Columbus St.	Rt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-22	35	at S. Columbus St.	Rt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-23	35	at Center Alley	Lt.		8.0										8.0	Add Detectable Warning in exist. brick walk with bollards		
CR-24	35	at Center Alley	Rt.		8.0										8.0	Add Detectable Warning in exist. brick walk with bollards		
CR-25	35	at N. Broad St.	Lt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-26	35	at N. Broad St.	Lt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-27	35	at S. Broad St.	Rt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-28	35	at S. Broad St.	Rt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-29	35	at N. High St. (S.R. 37)	Lt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-30	35	at N. High St. (S.R. 37)	Lt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-31	35	at S. High St.	Rt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-32	35	at S. High St.	Rt.	16.0		6		8.0		6					8.0	Add Detectable Warning		
CR-33	35	at N. Pearl Ave.	Lt.	32.0		12		16.0		12					16.0	Add 2 Detectable Warnings		
CR-34	35	at N. Pearl Ave.	Lt.	Work done by Others.														
CR-35	35	at S. Pearl Ave.	Rt.	32.0		12		16.0		12					16.0	Add 2 Detectable Warnings, Fire Hydrant in walk		
CR-36	35	at S. Pearl Ave.	Rt.	Work done by Others.														
CR-37	35	at S. Tenant St.	Rt.	Work done by Others.														
CR-38	35	at S. Tenant St.	Rt.	Work done by Others.														
		at N. Maple St.	Lt.	No Work Required														
		at N. Maple St.	Lt.	No Work Required														
Sub-Totals								344.0	0.0									
Location 1c Totals (Carried to Next Sheet)				480	112	156	6	344		6	210		2	1	288			

CALCULATED	JLS
CHECKED	DNM
CURB RAMP DATA (LOCATION 1c)	
FAI-22/ VAR-10.75 / VAR	
37	71

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REFERENCE NO.	SHEET NO.	LOCATION	SIDE	202					203	608		609		690					REMARKS	
				WALK REMOVED	WALK REMOVED, AS PER PLAN (A)	WALK REMOVED, AS PER PLAN (B)	CURB REMOVED	CURB AND GUTTER REMOVED	EMBANKMENT, AS PER PLAN	4" CONCRETE WALK (Curb Ramp Area)	4" CONCRETE WALK (Extra Walk Area)	COMBINATION CURB AND GUTTER, TYPE 2	CURB, TYPE 6	SPECIAL-MISC.: CURB RAMPS,						SPECIAL - MISC.: DETECTABLE WARNING
				Lt./Rt.	SQ. FT.	SQ. FT.	SQ. FT.	FT.	FT.	CU. YD.	SQ. FT.	SQ. FT.	FT.	FT.	TYPE A1	TYPE B1	TYPE B2	TYPE B3		TYPE D
		Location 1c																		
		U.S. 22 (Main St.)																		
		at S. Maple St.	Rt.															No Work Required.		
		at S. Maple St.	Rt.															No Work Required.		
CR-39	35	at Narrow St.	Rt.	16.0			6			8.0		6					8.0	Add Detectable Warning		
CR-40	35	at Narrow St.	Rt.	16.0			6			8.0		6					8.0	Add Detectable Warning		
CR-41	35	at N. Mt. Pleasant Ave.	Lt.	32.0			12			16.0		12					16.0	Add 2 Detectable Warnings		
CR-42	35	at N. Mt. Pleasant Ave.	Lt.	32.0			12			16.0		12					16.0	Add 2 Detectable Warnings		
CR-43	35	at S. Mt. Pleasant Ave.	Rt.	32.0			12			16.0		12					16.0	Add 2 Detectable Warnings		
CR-44	35	at S. Mt. Pleasant Ave.	Rt.	32.0			12			16.0		12					16.0	Add 2 Detectable Warnings		
CR-45	35	at Starrit St.	Lt.	16.0			6			8.0		6					8.0	Add Detectable Warning		
CR-46	35	at Starrit St.	Lt.	16.0			6			8.0		6					8.0	Add Detectable Warning		
CR-47	35	at Wyandotte St.	Rt.	54.0			14			54.0		14	1					New Curb Ramp		
CR-48	35	at Wyandotte St.	Rt.	54.0			14			54.0		14	1					New Curb Ramp		
CR-49	35	at N. Eastwood Ave.	Lt.	60.0			20			60.0		20				1		New Curb Ramp		
CR-50	35	at N. Eastwood Ave.	Lt.	60.0			20			60.0		20				1		New Curb Ramp		
CR-51	35	at S. Eastwood Ave.	Rt.	60.0			20			60.0		20				1		New Curb Ramp		
CR-52	35	at S. Eastwood Ave.	Rt.	60.0			20			60.0		20				1		New Curb Ramp		
		at N. Cherry St. (S.R. 188)	Lt.															No Work Required.		
		at N. Cherry St. (S.R. 188)	Lt.															No Work Required.		
		at S. Cherry St.	Rt.															No Work Required.		
		at S. Cherry St.	Rt.															No Work Required.		
CR-53	35	at Angle St.	Lt.	16.0			6			8.0		6					8.0	Add Detectable Warning		
		at Angle St.	Lt.															No Work Required.		
		at Goslin Dr.	Lt.															No Work Required.		
CR-54	35	across from Goslin Dr.	Rt.	54.0			14			54.0		14	1							
CR-55	35	at Goslin Dr.	Lt.	16.0			6			8.0		6					8.0	Add Detectable Warning		
CR-56	35	at Della Ave.	Rt.	135.0			25			60.0	67.0	25				1	8.0	New Curb Ramp		
CR-57	35	at Della Ave.	Rt.	72.0			8			40.0	32.0	20			1			New Curb Ramp		
CR-57a	35	across from Della Ave.	Lt.	64.0						64.0		32			1			New Curb Ramp		
	35a	across from Della Ave.	Lt.			1,428.0	20		49.0		663.0	265						New Curb and Sidewalk		
CR-58	35	at Harmon Ave.	Lt.	16.0			6			8.0		6					8.0	Add Detectable Warning		
CR-59	35	at Harmon Ave.	Lt.	64.0			32			64.0		32			1			New Curb Ramp placed on radius		
CR-60	35	at N. Ewing St.	Lt.	60.0			20			60.0		20				1		New Curb Ramp		
CR-61	35	at N. Ewing St.	Lt.	64.0			32			64.0		32			1			New Curb Ramp placed on radius		
CR-62	35	at S. Ewing St.	Rt.	64.0			32			64.0		32			1			New Curb Ramp placed on radius		
CR-63	35	at S. Ewing St.	Rt.	64.0			32			64.0		32			1			New Curb Ramp placed on radius		
CR-64	35	at N. Livingston Ave	Lt.	16.0			6			8.0		6					8.0	Add Detectable Warning		
CR-65	35	at N. Livingston Ave	Lt.	16.0			6			8.0		6					8.0	Add Detectable Warning		
CR-66	35	at S. Livingston Ave	Rt.	54.0			14			54.0		14	1					New Curb Ramp		
CR-67	35	at S. Livingston Ave	Rt.	54.0			14			54.0		14	1					New Curb Ramp		
CR-68	35	at Fulkerson Ave.	Rt.	54.0			14			54.0		14	1					New Curb Ramp		
CR-69	35	at Fulkerson Ave.	Rt.	54.0			14			54.0		14	1					New Curb Ramp		
CR-70	35	at Baldwin Dr.	Lt.	54.0			14			54.0		14	1					New Curb Ramp		
CR-71	35	at Baldwin Dr.	Lt.	54.0			14			54.0		14	1					New Curb Ramp		
CR-72	35	at Kanawha Rd.	Lt.	54.0			14			54.0		14	1					New Curb Ramp		
CR-73	35	across from Kanawha Rd.	Rt.	54.0			14			54.0		14	1					New Curb Ramp		
Sub-Totals										1,450.0	762.0									
Location 1c Totals (This Sheet)				1,693		1,428	537		49	2,212		826	11		5		6	144		
Location 1c Totals (Carried from Previous Sheet)				480	112		156	6		344	6	210			2	1		288		
Location 1c Totals (Carried to Sub-Summary)				2,173	112	1,428	693	6	49	2,556	6	1,036	11		7	1	6	432		

CALCULATED JLS
 CHECKED DNM
CURB RAMP DATA (LOCATION 1c)
FAI-22/ VAR-10.75 / VAR
 38
 71

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REFERENCE NO.	SHEET NO.	LOCATION	SIDE	202				608		609		690					REMARKS	
				WALK REMOVED	WALK REMOVED, AS PER PLAN (A)	CURB REMOVED	CURB AND GUTTER REMOVED	4" CONCRETE WALK (Curb Ramp Area)	4" CONCRETE WALK (Extra Walk Area)	COMBINATION CURB AND GUTTER, TYPE 2	CURB, TYPE 6	SPECIAL-MISC.: CURB RAMPS,						SPECIAL - MISC.: DETECTABLE WARNING
												TYPE A1	TYPE A2	TYPE B2	TYPE B3	TYPE D		
Lt/Rt.	SQ. FT.	SQ. FT.	FT.	FT.	SQ. FT.	SQ. FT.	FT.	FT.	EACH	EACH	EACH	EACH	EACH	SQ. FT.				
Location 2																		
S.R. 158 (N. Columbus St.)																		
CR-74	36	at W. Wheeling St.	Lt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-75	36	at W. Wheeling St.	Lt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-76	36	at W. Wheeling St.	Rt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-77	36	at W. Wheeling St.	Rt.		8.0										8.0	Add Detectable Warning in exist. brick walk		
CR-78	36	at W. Mulberry St.	Lt.	32.0		12		16.0			12				16.0	Add 2 Detectable Warnings		
CR-79	36	at W. Mulberry St.	Lt.	32.0		12		16.0			12				16.0	Add 2 Detectable Warnings		
CR-80	36	at W. Mulberry St.	Rt.	108.0		28		108.0			28	2				New Curb Ramps		
		at W. Mulberry St.	Rt.	No Work Required.														
CR-81	36	at Union St.	Lt.	32.0		12		16.0			12				16.0	Add 2 Detectable Warnings		
CR-82	36	at Union St.	Lt.	16.0		6		8.0			6				8.0	Add 1 Detectable Warnings		
		at Union St.	Rt.	No Work Required.														
		at Union St.	Rt.	No Work Required.														
CR-83	36	at W. 5th Ave.	Lt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-84	36	at W. 5th Ave.	Lt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
		at W. 5th Ave.	Rt.	No Work Required.														
		at W. 5th Ave.	Rt.	No Work Required.														
CR-85	36	at W. 6th Ave.	Lt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-86	36	at W. 6th Ave.	Lt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-87	36	at W. 6th Ave.	Rt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-88	36	at W. 6th Ave.	Rt.	60.0		20		60.0			20			1		New Curb Ramp		
CR-89	36	at W. Allen St.	Lt.	32.0		12		16.0			12				16.0	Add 2 Detectable Warnings		
CR-90	36	at W. Allen St.	Lt.	32.0		12		16.0			12				16.0	Add 2 Detectable Warnings		
CR-91	36	at W. Allen St.	Rt.	32.0		12		16.0			12				16.0	Add 2 Detectable Warnings		
CR-92	36	at W. Allen St.	Rt.	32.0		12		16.0			12				16.0	Add 2 Detectable Warnings		
CR-93	36	at Arnold Ave.	Rt.	16.0		6		8.0			6				8.0	Add Detectable Warning, Remove Mid-Block crossing		
CR-94	36	at Arnold Ave.	Rt.	16.0		6		8.0			6				8.0	Add Detectable Warning, Remove Mid-Block crossing		
CR-95	36	at W. Fair Ave.	Lt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-96	36	at W. Fair Ave.	Lt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-97	36	at W. Fair Ave.	Rt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-98	36	at W. Fair Ave.	Rt.	60.0		20		60.0			20			1		New Curb Ramp		
CR-99	36	at Reber Ave.	Lt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-100	36	at Reber Ave.	Lt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-101	36	at Park St.	Lt.	16.0				8.0							8.0	Add Detectable Warning		
		at Park St.	Lt.	No Work Required.														
CR-102	36	at Davis St.	Rt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-103	36	at Davis St.	Rt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-104	36	at Edgewood Ave.	Lt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-105	36	at Edgewood Ave.	Lt.	64.0		32		64.0			32	1				New Curb Ramp placed on radius		
CR-106	36	at Kinkead Ave.	Lt.	40.0		20		40.0			20		1			New Curb Ramp		
CR-107	36	at Kinkead Ave.	Lt.	40.0		20		40.0			20		1			New Curb Ramp		
CR-108	36	at Wilson Ave.	Rt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-109	36	at Wilson Ave.	Rt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-110	36	at Marks Ave.	Rt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-111	36	at Marks Ave.	Rt.	16.0		6		8.0			6				8.0	Add Detectable Warning		
CR-112	36	at Forest Rose Cemetery Entrance	Rt.	16.0				8.0							8.0	Add Detectable Warning		
CR-113	36	at Forest Rose Cemetery Entrance	Rt.	40.0		20		40.0			20	1				New Curb Ramp		
CR-114	36	at Forest Rose Cemetery's Drive	Rt.	40.0		20		40.0			20	1				New Curb Ramp		
CR-115	36	at Forest Rose Cemetery's Drive	Rt.	40.0		20		40.0			20	1				New Curb Ramp		
Sub-Totals								780.0										
Location 2 Totals (Carried to Sub-Summary))				1,068	32	404		780			404	2	3	1	2	320		

CALCULATED
JLS
CHECKED
DNM

CURB RAMP DATA (LOCATION 2)

FAI-22/ VAR -10.75 / VAR

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ITEM 648, CENTER LINE									
L O C A T I O N	C O U N T Y	R O U T E	S.L.M.		T O T A L L E N G T H (M I L E S)	I N F O R M A T I O N O N L Y		T O T A L C E N T E R L I N E (M I L E S)	R E M A R K S
			F R O M	T O		C E N T E R L I N E Q U A N T I T I E S			
						T O T A L M I L E S	E Q U I V A L E N T S O L I D L I N E		
1a	Fai.	U.S. 22	10.75	11.96	1.21	1.21	2.026	1.21	Concrete Pavement at U.S. 33 Interchange to Stonewall Cemetery Rd.
								0.08	Additional added for turn lanes
Location 1a Total (Carried to Sub-Summary)								1.29	
1b	Fai.	U.S. 22	11.96	13.16	1.20	1.20	1.664	1.20	Stonewall Cemetery Rd. to West Corp. Limit of Lancaster
Location 1b Total (Carried to Sub-Summary)								1.20	
1c	Fai.	U.S. 22	13.16	14.11	0.95	0.95	1.590	0.95	West Corp. Limit of Lancaster to Columbus St.
1c			14.11	14.39	0.28	0.28			Proposed Concrete Pavement (See Sheet 24a)
1c			14.39	18.05	3.66	3.66	8.992	3.66	S.R. 37 (High St.) to East Corp. Limit of Lancaster
								0.65	Additional added for turn lanes
Location 1c Total (Carried to Sub-Summary)								5.26	
2	Fai.	S.R. 158	0.29	2.48	2.19	2.19	4.147	2.19	U.S. 22 to Corp. Limit of Lancaster
Location 2 Total (Carried to Sub-Summary)								2.19	
3a	Fai.	S.R. 37	12.92	13.69	0.77	0.77	1.914	0.77	Creekside Dr. to Corp. Limit of Lancaster
								0.27	Additional added for turn lanes
Location 3a Total (Carried to Sub-Summary)								1.04	
3b	Fai.	S.R. 37	13.69	14.40	0.71	0.71	1.836	0.71	Corp. Limit of Lancaster to Red Bud Ln.
								0.14	Additional added for turn lanes
Location 3b Total (Carried to Sub-Summary)								0.85	
3c	Fai.	S.R. 37	14.40	15.58	1.18	1.18	1.982	1.18	Red Bud Ln. to U.S. 22
Location 3c Total (Carried to Sub-Summary)								1.18	
4	Fai.	S.R. 188	14.48	16.02	1.54	1.54	2.902	1.54	U.S. 22 to Corp. Limit of Lancaster
								0.10	Additional added for turn lanes
Location 4 Total (Carried to Sub-Summary)								1.64	

CALCULATED	JLS
CHECKED	DNM
CENTER LINE DATA	
FAI-22/ VAR-10.75 / VAR	
41	71

ITEM 648, LANE LINE, 4"									
L O C A T I O N	C O U N T Y	R O U T E	S.L.M.		T O T A L L E N G T H (MILES)	I N F O R M A T I O N O N L Y		T O T A L L A N E L I N E (MILES)	R E M A R K S
			F R O M	T O		L A N E L I N E Q U A N T I T I E S			
						D A S H E D	S O L I D		
1a	Fai.	U.S. 22 E.B.	10.75	10.88	0.13	0.13		0.13	4 Lane Undivided
		U.S. 22 W.B.	10.75	10.79	0.04	0.04		0.04	4 Lane Undivided
Location 1a Total (Carried to Sub-Summary)								0.17	
1c	Fai.	U.S. 22 W.B.	13.73	14.00	0.27	0.27		0.27	between S. George St to Memorial Dr.
		U.S. 22 E.B.	13.89	13.97	0.08	0.08		0.08	before Whitley Ave. to Memorial Dr. turn lanes
		U.S. 22 E.B.	14.04	14.08	0.04	0.04		0.04	between Memorial Dr. and Columbus St. turn lanes
		U.S. 22 W.B.	14.06	14.10	0.04	0.04		0.04	between Memorial Dr. turn lanes and Columbus St.
		U.S. 22 E.B.	14.76	15.20	0.44	0.44		0.44	between Narrow St. and Cherry St. turn lanes
		U.S. 22 W.B.	14.80	15.23	0.43	0.43		0.43	between Narrow St. and Cherry St.
		U.S. 22 E.B.	15.24	15.57	0.33	0.33		0.33	between Cherry St. and Ewing St. turn lanes
		U.S. 22 W.B.	15.27	15.59	0.32	0.32		0.32	between Cherry St. turn lanes and Ewing St.
		U.S. 22 E.B.	15.61	18.05	2.44	2.44		2.44	between Ewing St. and S.R. 37 Split
U.S. 22 W.B.	15.63	18.05	2.42	2.42		2.42	between Ewing St. turn lanes and S.R. 37 Split		
Location 1c Total (Carried to Sub-Summary)								6.81	

ITEM 648, EDGE LINE, 4"									
L O C A T I O N	C O U N T Y	R O U T E	S.L.M.		T O T A L L E N G T H (MILES)	I N F O R M A T I O N O N L Y		T O T A L E D G E L I N E (MILES)	R E M A R K S
			F R O M	T O		E D G E L I N E Q U A N T I T I E S			
						H I G H W A Y M I L E S	R A M P M I L E S		
1a	Fai.	U.S. 22	10.75	11.96	1.21	2.42		2.42	Concrete Pavement at U.S. 33 Interchange to Stonewall Cemetery Rd.
Location 1a Total (Carried to Sub-Summary)								2.42	
1b	Fai.	U.S. 22	11.96	13.16	1.20	2.40		2.40	Stonewall Cemetery Rd. to West Corp. Limit of Lancaster
Location 1b Total (Carried to Sub-Summary)								2.40	
1c	Fai.	U.S. 22	16.14	18.05	1.91	3.82		3.82	West Corp. Limit of Lancaster to East Corp. Limit of Lancaster
Location 1c Total (Carried to Sub-Summary)								3.82	
1c	Fai.	U.S. 22	16.22	17.97	1.75	3.50		3.50	Additional Edge Line for the Bike Lane (100% City)
Total (Carried to General Summary)								3.50	
2	Fai.	S.R. 156	1.82	2.48	0.66	1.32		1.32	Pershing Dr. to Corp. Limit of Lancaster
Location 2 Total (Carried to Sub-Summary)								1.32	
3a	Fai.	S.R. 37	12.92	13.69	0.77	1.54		1.54	Creekside Dr. to Corp. Limit of Lancaster
Location 3a Total (Carried to Sub-Summary)								1.54	
3b	Fai.	S.R. 37	13.69	14.40	0.71	1.42		1.42	Corp. Limit of Lancaster to Red Bud Ln.
Location 3b Total (Carried to Sub-Summary)								1.42	
3c	Fai.	S.R. 37	14.40	14.65	0.25	0.50		0.50	Red Bud Ln. to Barrier Circle (Rising Park Entrance)
Location 3c Total (Carried to Sub-Summary)								0.50	

CALCULATED
JLS
CHECKED
DNM

LANE LINE AND EDGE LINE DATA

FAI-22/ VAR-10.75 / VAR

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ITEM 644, AUXILIARY MARKINGS

LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	S.L.M.	CHANNELIZING LINE, 8"	STOP LINE	CROSSWALK LINE, AS PER PLAN			TRANSVERSE/DIAGONAL LINE (YELLOW)	ISLAND MARKING	RAILROAD SYMBOL MARKING	LANE ARROW				LANE REDUCTION ARROW	WORD ON PAVEMENT, 96" (ONLY)	DOTTED LINE, 4" (YELLOW)	REMARKS	
								(A) (See Sheet 13)	(B) (See Sheet 13)	(C) (See Sheet 13)				LEFT	THRU	RIGHT	COMBINATION THRU/RIGHT					
								FT.	FT.	FT.				EACH	EACH	EACH	EACH					EACH
1a	Fai.	U.S. 22	before Becks Knob Rd.	Lt/Rt.		205					202							1	See Sheet 48.			
			Becks Knob Rd.	Lt.			36													See Sheet 48.		
			after Becks Knob Rd.	Lt/Rt.								277	67							See Sheet 48.		
			Stonewall Cemetery Rd.	Rt.																		
Location 1a Totals (Carried to Sub-Summary)						205	50				479	67					1					
1b	Fai.	U.S. 22	Crumley Rd.	Lt.																		
			Concord Hall Dr.	Rt.																		
			Williamsburg Ln.	Lt.																		
			before Trace Dr.	Rt.																		
			Trace Dr.	Lt.																		
Location 1b Totals (Carried to Sub-Summary)							104															
1c	Fai.	U.S. 22	Elkwood Ave.	Lt.																		
			Peters Ave.	Lt.																		
			at Boving Rd.	Lt/Rt.								30	67							See Sheet 49.		
			Boving Rd.	Rt.																See Sheet 49.		
			Boving Rd.	Rt.																See Sheet 49.		
			between Boving Rd. and Mithoff Dr.	Lt/Rt.			220												2	1	See Sheet 49.	
			Mithoff Dr.	Rt.																	See Sheet 49.	
			between Mithoff Dr. and Talmadge Ave.	Lt/Rt.			80	25													See Sheet 49.	
			Martens Park Entrance	Lt.			50	25													See Sheet 49.	
			Talmadge Ave.	Rt.				18	123												See Sheet 49.	
			between Talmadge Ave. and S. Roosevelt Ave.	Lt/Rt.			300	25	129												See Sheet 49.	
			S. Roosevelt Ave.	Lt.				14													See Sheet 49.	
			between S. Roosevelt Ave. and Cedar Hill Rd.	Lt/Rt.			245	25					42	67						2	1	See Sheet 49.
			Hunter Ave.	Rt.				13	103												See Sheet 49.	
			Cedar Hill Rd. (S.R. 188)	Lt.																	No Work Required.	
			between Cedar Hill Rd. and S. Zane Ave.	Lt/Rt.			240	25														See Sheet 49.
			S. Zane Ave.	Lt.				12	118													See Sheet 50.
			between S. Zane Ave. and S. George St.	Lt/Rt.			230	25														See Sheet 50.
			S. George St.	Lt.				25	77													See Sheet 50.
			Thomas Ave.	Lt.				11	85													See Sheet 50.
before Whitley Ave	Lt/Rt.									87	48								See Sheet 50.			
Whitley Ave.	Rt.				24	164													See Sheet 50.			
between Whitley Ave. and Memorial Dr.	Lt/Rt.			495															See Sheet 50.			
between Memorial Dr. and Columbus St.	Lt/Rt.			750	73														See Sheet 51.			
N. Columbus St. (S.R. 158)	Lt.																		See Location 2 Auxiliary Markings			
S. Columbus St.	Rt.																		No Work Required.			
after Columbus St.	Lt/Rt.																		Proposed Concrete Pavement (See Sheet 24a)			
at Center Alley	Lt/Rt.																		Proposed Concrete Pavement (See Sheet 24a)			
at Center Alley	Lt/Rt.																		Proposed Concrete Pavement (See Sheet 24a)			
before Broad St.	Lt/Rt.																		Proposed Concrete Pavement (See Sheet 24a)			
N. Broad St.	Lt.																		No Work Required.			
S. Broad St.	Rt.																		No Work Required.			
after Broad St.	Lt/Rt.																		Proposed Concrete Pavement (See Sheet 24a)			
between Broad St. and High St.	Lt/Rt.																		Proposed Concrete Pavement (See Sheet 24a)			
before High St.	Lt/Rt.																		Proposed Concrete Pavement (See Sheet 24a)			
N. High St. (S.R. 37)	Lt.																		See Location 3 Auxiliary Markings			
S. High St.	Rt.				11	25													See Sheet 52.			
between High St. and Pearl Ave.	Lt/Rt.			260	67	164													See Sheet 52.			
N. Pearl Ave.	Lt.					67													See Sheet 52.			
S. Pearl Ave.	Rt.				21	66													See Sheet 52.			
after Pearl Ave.	Lt/Rt.				21	169				136	67								See Sheet 52.			
S. Tenant St.	Rt.				18	119													See Sheet 52.			
between Pearl Ave. and Maple Ave.	Lt/Rt.																		See Sheet 52.			
Location 1c Totals (Carried to Next Sheet)						2,881	584	1,778	483	295	249	3	24	9	6			18	167			

CALCULATED
JLS
CHECKED
DNM

AUXILIARY MARKINGS (LOCATIONS 1a, 1b AND 1c)

FAI-22/ VAR-10.75 / VAR

43
71

ITEM 644, AUXILIARY MARKINGS

LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	S.L.M.	CHANNELIZING LINE, 8"	STOP LINE	CROSSWALK LINE, AS PER PLAN			TRANSVERSE/DIAGONAL LINE (YELLOW)	ISLAND MARKING	RAILROAD SYMBOL MARKING	PARKING LOT STALL MARKING	LANE ARROW				LANE REDUCTION ARROW	WORD ON PAVEMENT, 96" (ONLY)	DOTTED LINE, 4" (YELLOW)	REMARKS
								(A) (See Sheet 13)	(B) (See Sheet 13)	(C) (See Sheet 13)					LEFT	THRU	RIGHT	COMBINATION THRU/RIGHT				
								FT.	FT.	FT.					EACH	EACH	EACH	EACH				
1c	Fai.	U.S. 22	before Maple Ave.	Rt.		140	34	163														See Sheet 53.
			N. Maple St.	Lt.			23	120														See Sheet 53.
			S. Maple St.	Rt.			23	122														See Sheet 53.
			between Maple St. and Narrow St.	Lt./Rt.		140	33	175														See Sheet 53.
			Narrow St.	Rt.			8	51														See Sheet 53.
			before Mt. Pleasant St.	Lt./Rt.			31	178									1					See Sheet 53.
			N. Mt. Pleasant St.	Lt.			22	108														See Sheet 53.
			S. Mt. Pleasant St.	Rt.			15	106														See Sheet 53.
			after Mt. Pleasant St.	Lt./Rt.			31	186														See Sheet 53.
			Starr St.	Lt.			16	102														See Sheet 53.
			Wyandotte St.	Rt.				122														
			before Eastwood Ave.	Lt./Rt.		80	37															See Sheet 54.
			N. Eastwood Ave.	Lt.			16	200														See Sheet 54.
			S. Eastwood Ave.	Rt.			16	186														See Sheet 54.
			after Eastwood Ave.	Lt./Rt.		100	37	321														See Sheet 54.
			between Eastwood Ave. and Cherry St.	Lt./Rt.																		See Sheet 54.
			before Cherry St.	Lt./Rt.		320	37	235														See Sheet 54.
			N. Cherry St (S.R. 198)	Lt.																		See Sheet 54.
			S. Cherry St	Rt.			18	108														See Sheet 54.
			after Cherry St.	Lt./Rt.		220	36	205														See Sheet 54.
			Angle St.	Lt.				156														See Sheet 54.
			after Angle St.	Lt.		60																See Sheet 54.
			before Goslin Dr.	Lt./Rt.		110	36	184														See Sheet 55.
			Goslin Dr.	Lt.			31	183														See Sheet 55.
			between Goslin Dr. and Della Ave.	Lt./Rt.			48	126														See Sheet 55.
			Della Ave.	Rt.			16	191														See Sheet 55.
			after Della Ave.	Lt.			21															See Sheet 55.
			Hamon Ave.	Lt.			16	110														See Sheet 55.
			before Ewing St.	Lt./Rt.		190	43	208														See Sheet 55.
			N. Ewing St.	Lt.			21	152														See Sheet 55.
			S. Ewing St.	Rt.			21	191														See Sheet 55.
			between Ewing St. and Livingston Ave.	Lt./Rt.		200	35	200														See Sheet 55.
			N. Livingston Ave.	Lt.			22	66														
			S. Livingston Ave.	Rt.			13	100														
			Fulkerson Ave.	Rt.			17	131														
			Baldwin Dr.	Lt.			14	130														
			before Kanawha Rd.	Rt.			25	175														
			Kanawha Rd.	Lt.																		DO NOT REPLACE CROSSWALK ON KANAWHA RD
			after Kanawha Rd.	Lt.			24															
			Ann Ct.	Lt.			15															
			Graceland Dr.	Rt.			15															
			before Shopping Center	Rt.			24															
			after Shopping Center	Lt.			24															
			Homestead Ct.	Rt.			27															
			Sells Rd.	Lt.			32															
			Lynwood Ln.	Lt.			36															
			Shadow Lane Dr.	Rt.																		No Work Required.
			before Quarry Rd.	Rt.			24															No Work Required.
			Quarry Rd.	Rt.																		
			after Quarry Rd.	Lt.			24															
			before Diamond Power Access Drive	Rt.			24															
			after Diamond Power Access Drive	Lt.			24															
			Marietta Rd.	Lt.			23															
			at S.R. 37 Split	Rt.		255																
Location 1c Totals (This Sheet)						1,815	1,130	4,194	1,031	447	48			14	5	1	9	1	13			
Location 1c Totals (Carried from Previous Sheet)						2,881	584	1,778		483	295	249	3	24	9	6			18	167		
Location 1c Totals (Carried to Sub-Summary)						4,696	1,714		7,486	742	297	3	2,040		68		1	31	167			

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AUXILIARY MARKINGS (LOCATION 1c)

FAI-22/ VAR-10.75 / VAR

ITEM 644, AUXILIARY MARKINGS

LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	S.L.M.	CHANNELIZING LINE, 8"	STOP LINE	CROSSWALK LINE, AS PER PLAN			TRANSVERSE/DIAGONAL LINE (YELLOW)	ISLAND MARKING	RAILROAD SYMBOL MARKING	PARKING LOT STALL MARKING	LANE ARROW				LANE REDUCTION ARROW	WORD ON PAVEMENT, 96" (ONLY)	DOTTED LINE, 4" (YELLOW)	REMARKS		
								(A) (See Sheet 13)	(B) (See Sheet 13)	(C) (See Sheet 13)					LEFT	THRU	RIGHT	COMBINATION THRU/RIGHT						
								FT.	FT.	FT.					EACH	EACH	EACH	EACH						
2	Fai.	S.R. 158	after U.S. 22 (Main St.)	Lt./Rt.		60	27								1							See Sheet 56.		
			before Wheeling St.	Lt./Rt.			18																	
			W. Wheeling St.	Lt.			18																	
			W. Wheeling St.	Rt.			14																	
			after Wheeling St.	Lt./Rt.			18																	
			before Mulberry St.	Lt./Rt.			18	138																
			W. Mulberry St.	Lt.			13	150																
			W. Mulberry St.	Rt.			13	140																
			after Mulberry St.	Lt./Rt.			18	142																
			before Union St.	Lt./Rt.			18	126																
			Union St.	Lt.			12	126																
			Union St.	Rt.			12	116																
			after Union St.	Lt./Rt.			20	134																
			before 5th Ave.	Lt./Rt.			20	132																
			W. 5th Ave.	Lt.			16	108																
			W. 5th Ave.	Rt.			16	108																
			after 5th Ave.	Lt./Rt.			20	150																
			before 6th Ave.	Lt./Rt.			60	26	136								1							See Sheet 56.
			W. 6th Ave.	Lt.			22	114																
			W. 6th Ave.	Rt.			22	114																
			after 6th Ave.	Lt./Rt.			60	26	129								1							See Sheet 56.
			before Allen St.	Lt./Rt.			18	114																
			W. Allen St.	Lt.			16	100																
			W. Allen St.	Rt.			16	107																
			after Allen St.	Lt./Rt.			20	126																
			Arnold Ave.	Rt.				66																Do not replace crosswalk lines on S.R. 158 @ Arnold Ave.
			before Fair Ave.	Lt./Rt.			60	27	144								1							See Sheet 56.
			W. Fair Ave.	Lt.				13	126															
			W. Fair Ave.	Rt.				22	118															
			after Fair Ave.	Lt./Rt.			70	28	138								1							See Sheet 56.
Reber Ave.	Lt.				93																			
Park St.	Lt.				16	132																		
Davis St.	Rt.				36																			
Edgewood Ave.	Lt.				16	102																		
Kinkead Ave.	Lt.					100																		
Wilson Ave.	Rt.				12	90																		
Marks Ave.	Rt.				13	122																		
after Columbus St. Split	Lt.				13																			
before Pershing Dr.	Lt./Rt.				18																			
N. Pershing Dr.	Lt.				14																			
N. Pershing Dr.	Rt.				14																			
after Pershing Dr.	Lt./Rt.				17																			
Leonard Dr.	Rt.				20																			
Pairan Ln.	Rt.				19																			
Sub-Totals								3,777	742															
Location 2 Totals (Carried to Sub-Summary)						310	719	4,519					780	5										

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AUXILIARY MARKINGS (LOCATION 2)

FAI-22/ VAR-10.75 / VAR

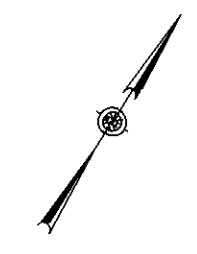
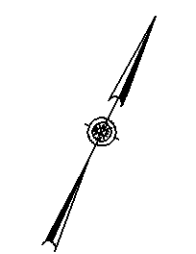
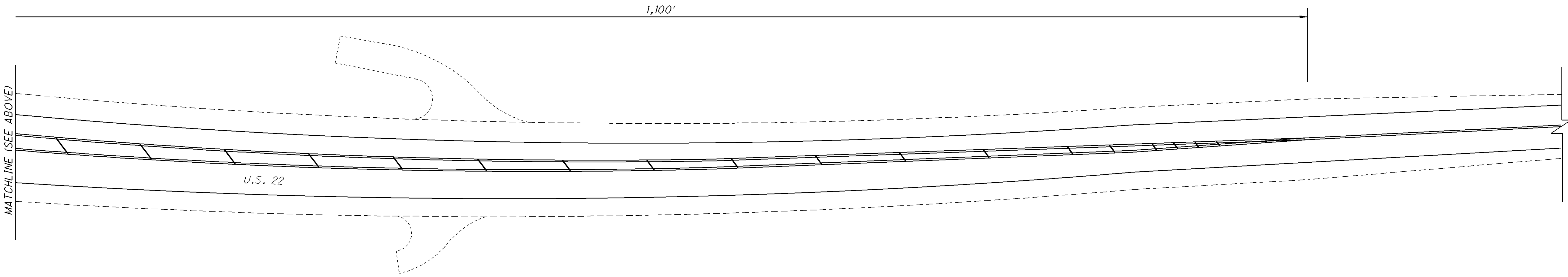
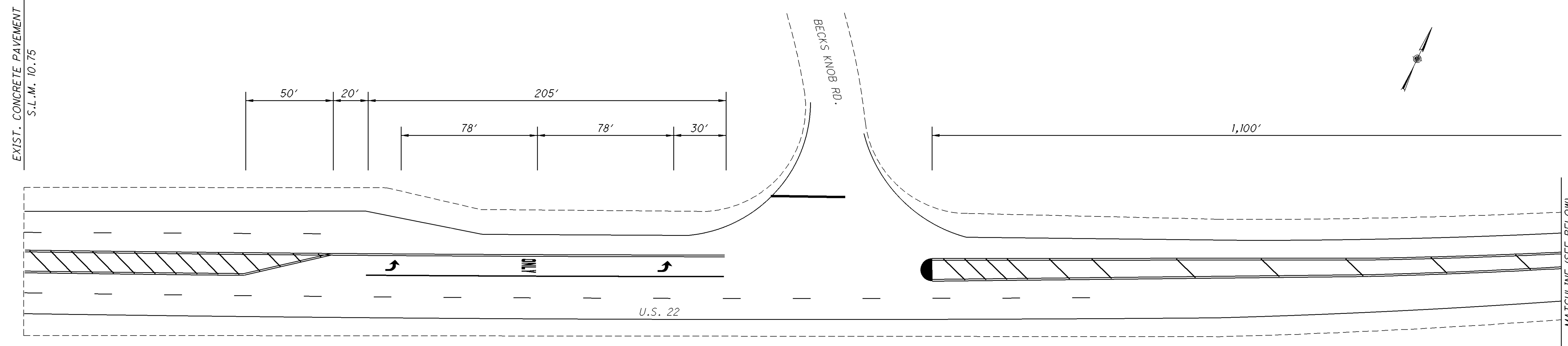
ITEM 644, AUXILARY MARKINGS

LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	S.L.M.	CHANNELIZING LINE, 8"	STOP LINE	CROSSWALK LINE, AS PER PLAN			TRANSVERSE/DIAGONAL LINE (YELLOW)	ISLAND MARKING	RAILROAD SYMBOL MARKING	SCHOOL SYMBOL MARKING, 96"	LANE ARROW				LANE REDUCTION ARROW	WORD ON PAVEMENT, 96" (ONLY)	DOTTED LINE, 4" (YELLOW)	YIELD LINE	REMARKS
								(A) (See Sheet 13)	(B) (See Sheet 13)	(C) (See Sheet 13)					LEFT	THRU	RIGHT	COMBINATION THRU/RIGHT					
								FT.	FT.	FT.					EACH	EACH	EACH	EACH					
4	Fai.	S.R. 188	after U.S. 22 (Main St.)	Lt./Rt.		100	24	118						1			2		1				See Sheet 60.
			Angle St.	Rt.			32	115															
			E. Wheeling St.	Lt.			18		239														
			Mid-Block Crossing at Wheeling St.	Lt./Rt.					184													38	See Sheet 60.
			E. Mulberry St.	Lt.			18	154															
			E. King St.	Lt.			16	98															
			E. 5th Ave.	Lt.			18	123															
			E. 6th Ave.	Lt.																			
			Sheridan Dr.	Lt.																			
			before E. 6th Ave./Sheridan Dr./Pleasantville Rd. Intersection	Lt./Rt.		120	24	320						2			3		1				See Sheet 60.
			after E. 6th Ave./Sheridan Dr./Pleasantville Rd. Intersection	Lt./Rt.				237															
			Goslin Dr.	Rt.			20	162															
			after Goslin Dr.	Rt.		140										2			1				See Sheet 60.
			after Goslin Dr.	Lt.		320	24							3			5		2				See Sheet 60.
			before Ewing St.	Lt./Rt.			13			111	52												
			N. Ewing St.	Rt.		20	22																
			between Ewing St. and Baldwin Dr.	Lt./Rt.		100	24			42				1					1				
			Baldwin Dr.	Rt.			32																
			Kemper Ave.	Rt.			20																
			before Kanawha Rd.	Lt./Rt.						47	53												
			Kanawha Rd.	Rt.		15	26																
			after Kanawha Rd.	Lt./Rt.		100				55				1					1				
			Marietta Rd.	Rt.																			
			Marietta Rd.	Rt.			35																
			Sha Ln.	Lt.																			
			Wheeling Rd.	Rt.			26																
			Lynn Dr.	Lt.			26																
Sub-Totals								1,327	423					8		2	10						
Location 4 Totals (Carried to Sub-Summary)						915	418		1,750		255	105				20			7			38	

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CALCULATED	JLS	CHECKED	DNM		
AUXILARY MARKINGS (LOCATION 4)					
FAI-22 / VAR - 10.75 / VAR					
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71					

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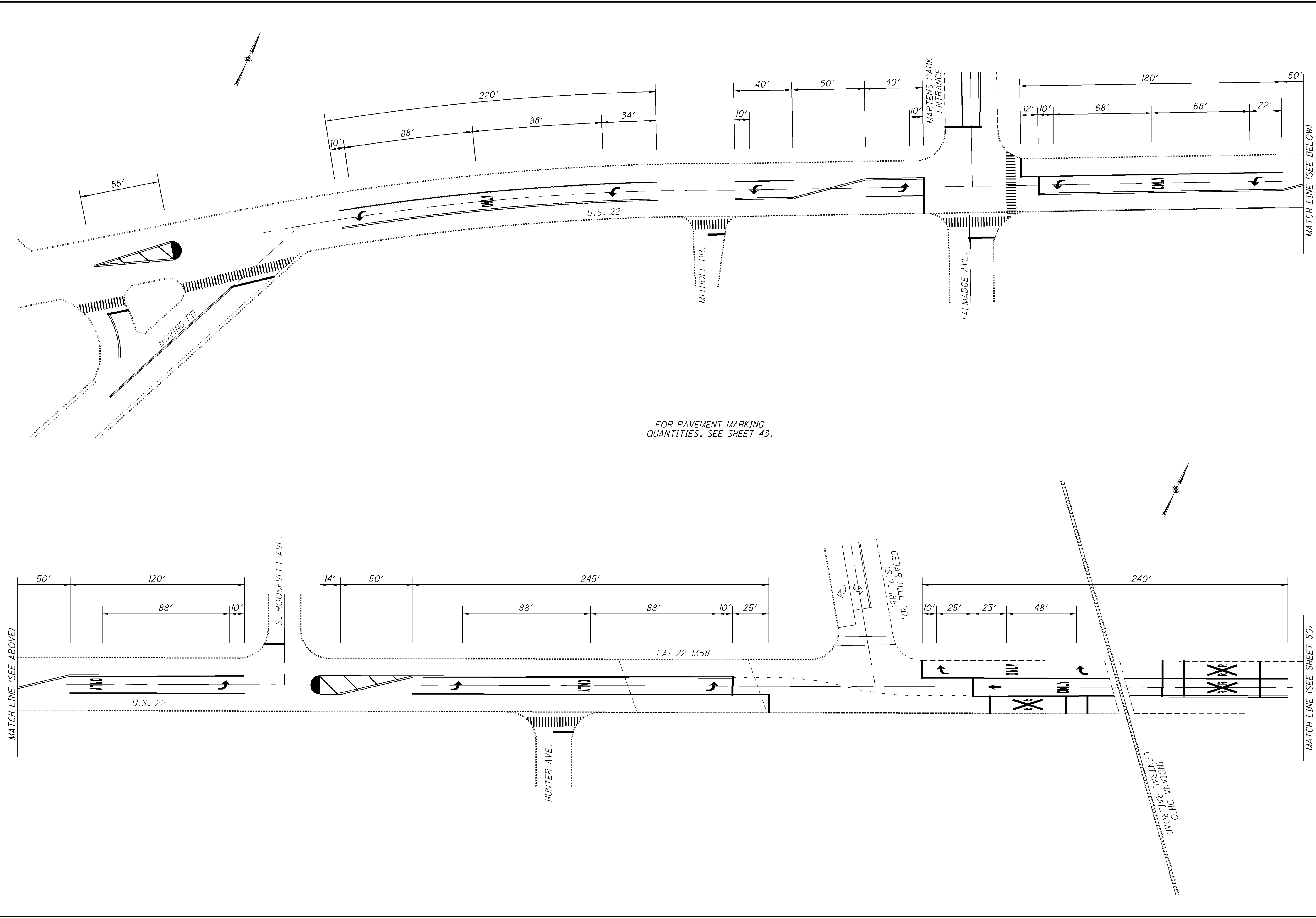


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PAVEMENT MARKING DETAILS (LOCATION 1a)

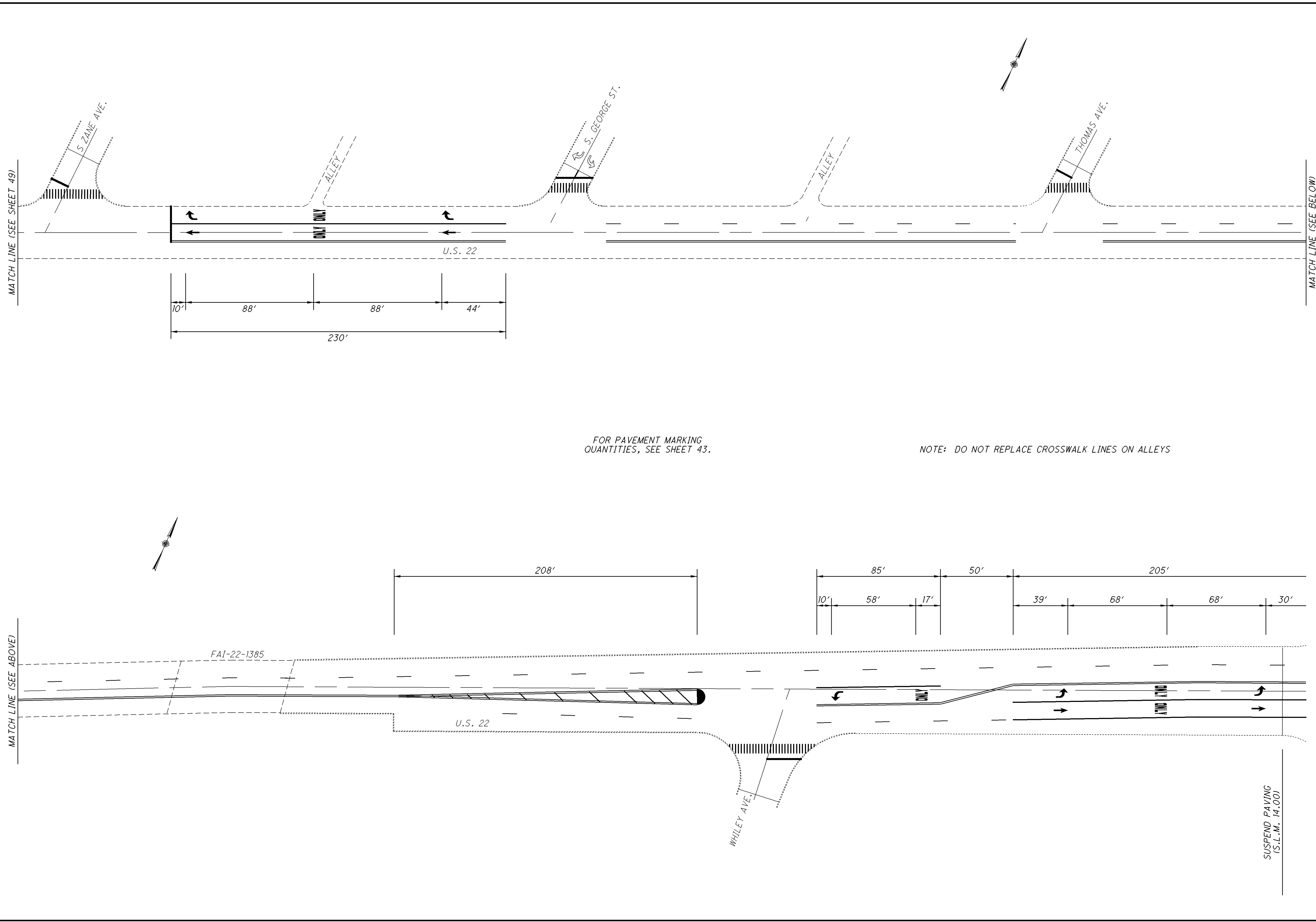
FAI-22/ VAR-10.75 / VAR

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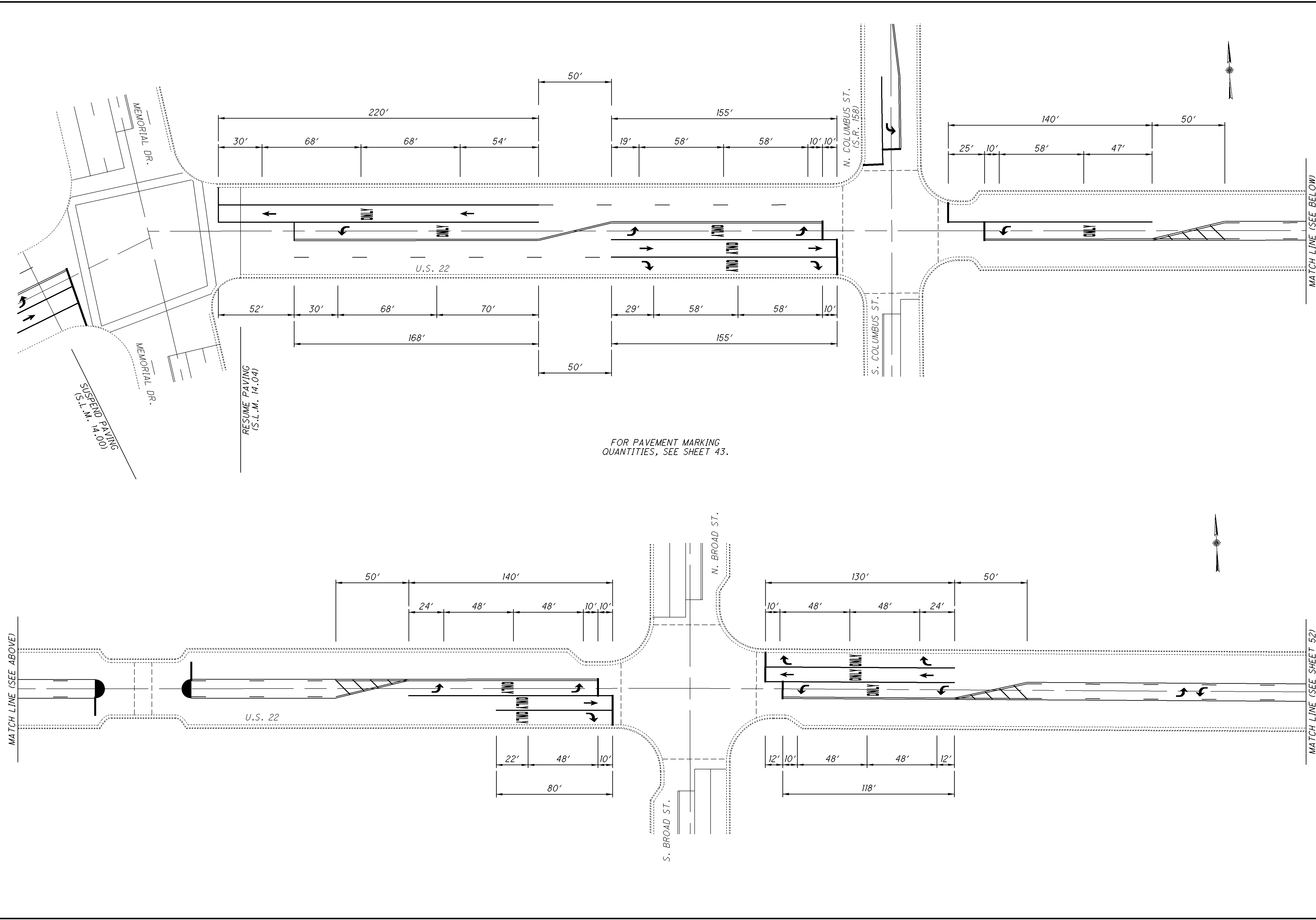


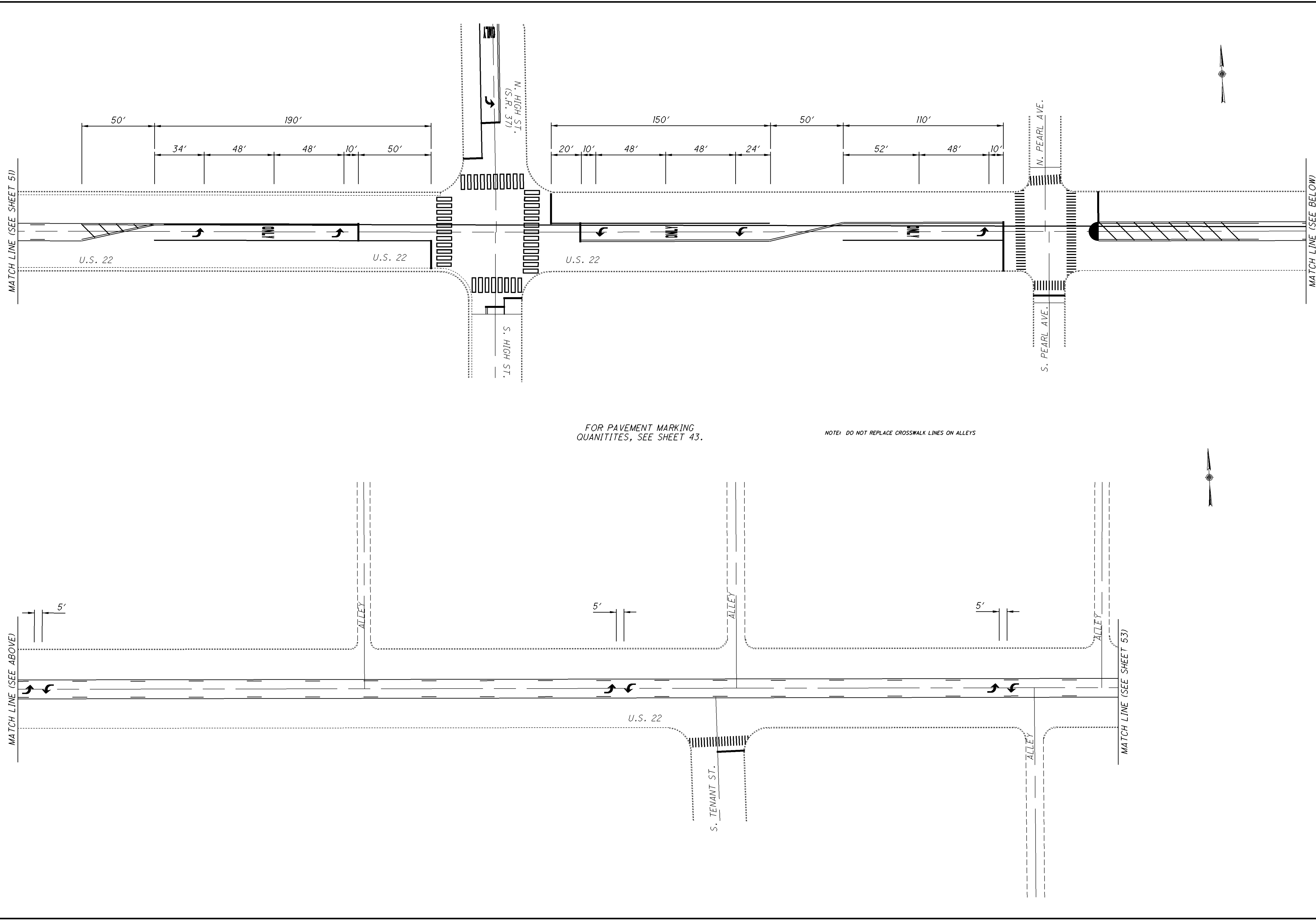
CALCULATED	JLS
	CHECKED
DMM	
PAVEMENT MARKING DETAILS (LOCATION 1c)	
FAI-22/ VAR-10.75 / VAR	
49	71

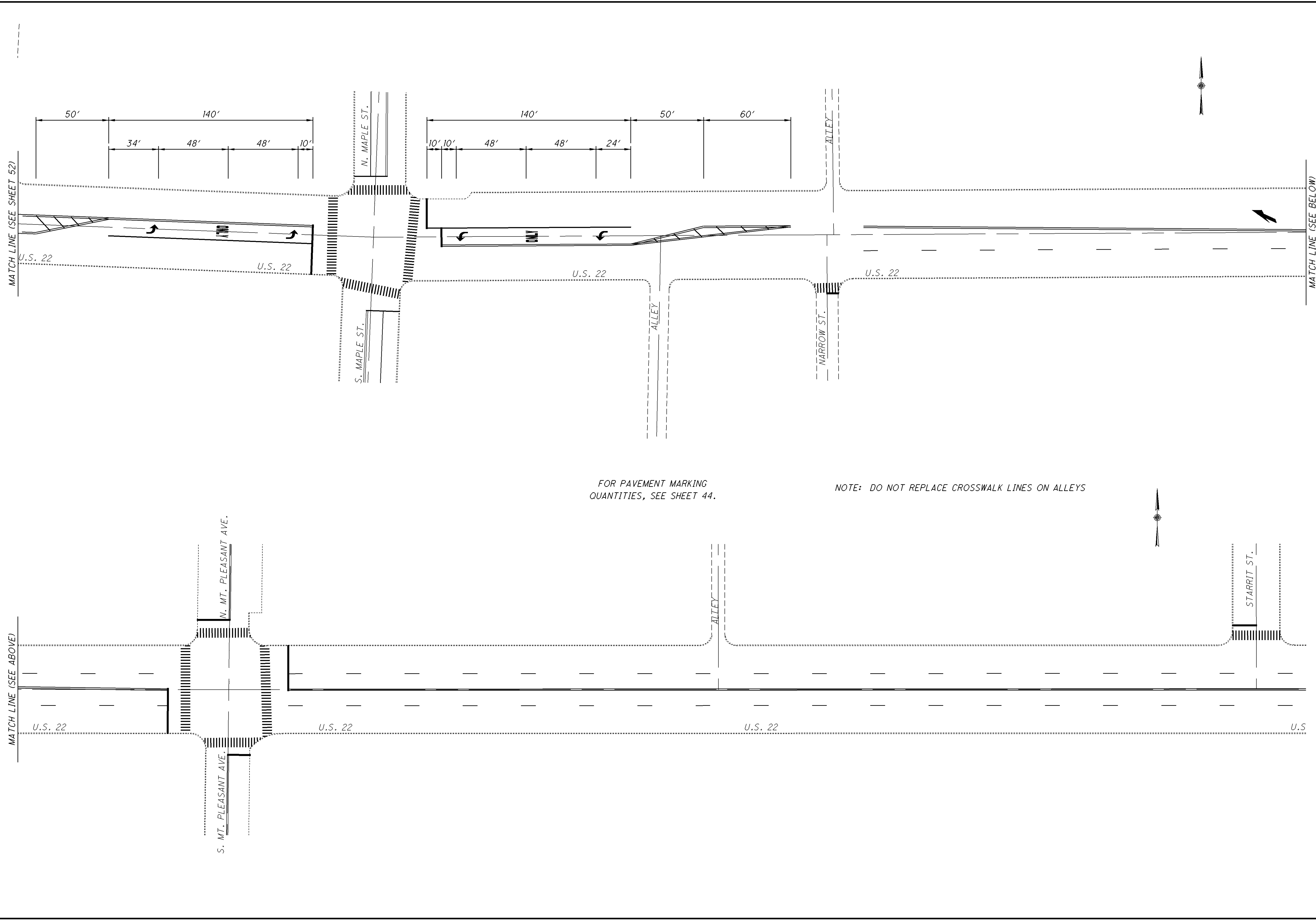
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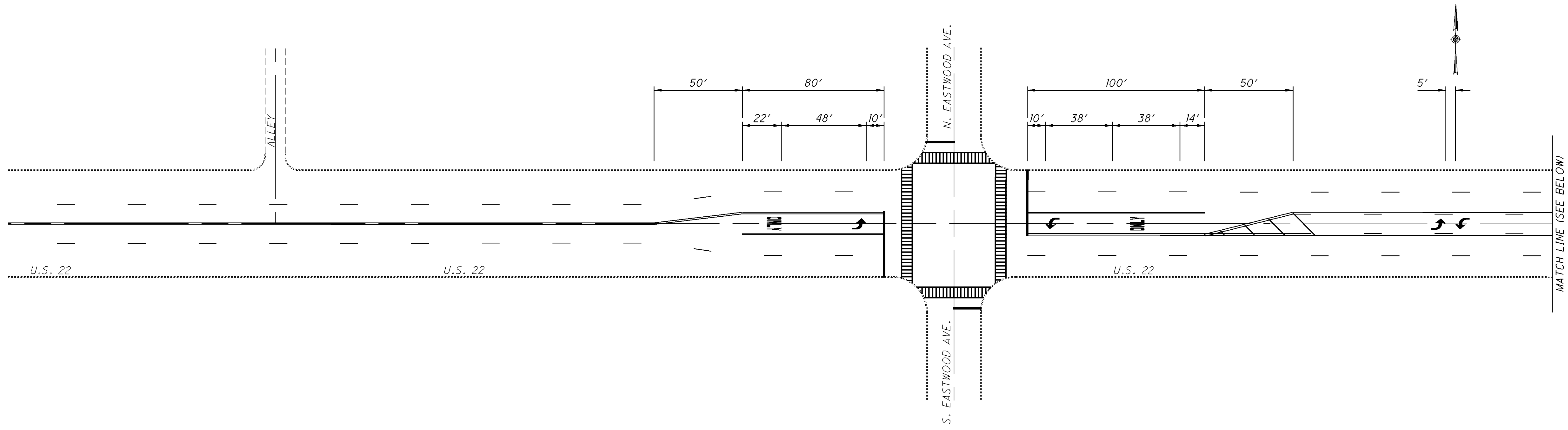


50 71	FAI-22/ VAR-10.75 / VAR		PAVEMENT MARKING DETAILS (LOCATION 1c)	
	CALCULATED	JLS	CHECKED	DNM







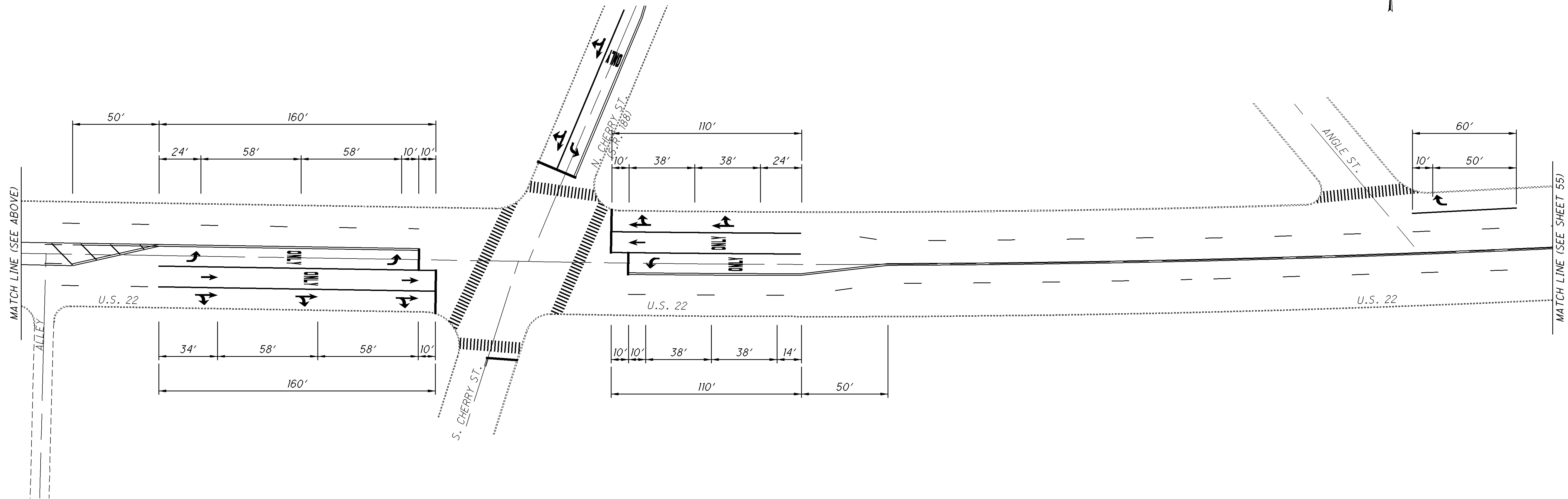


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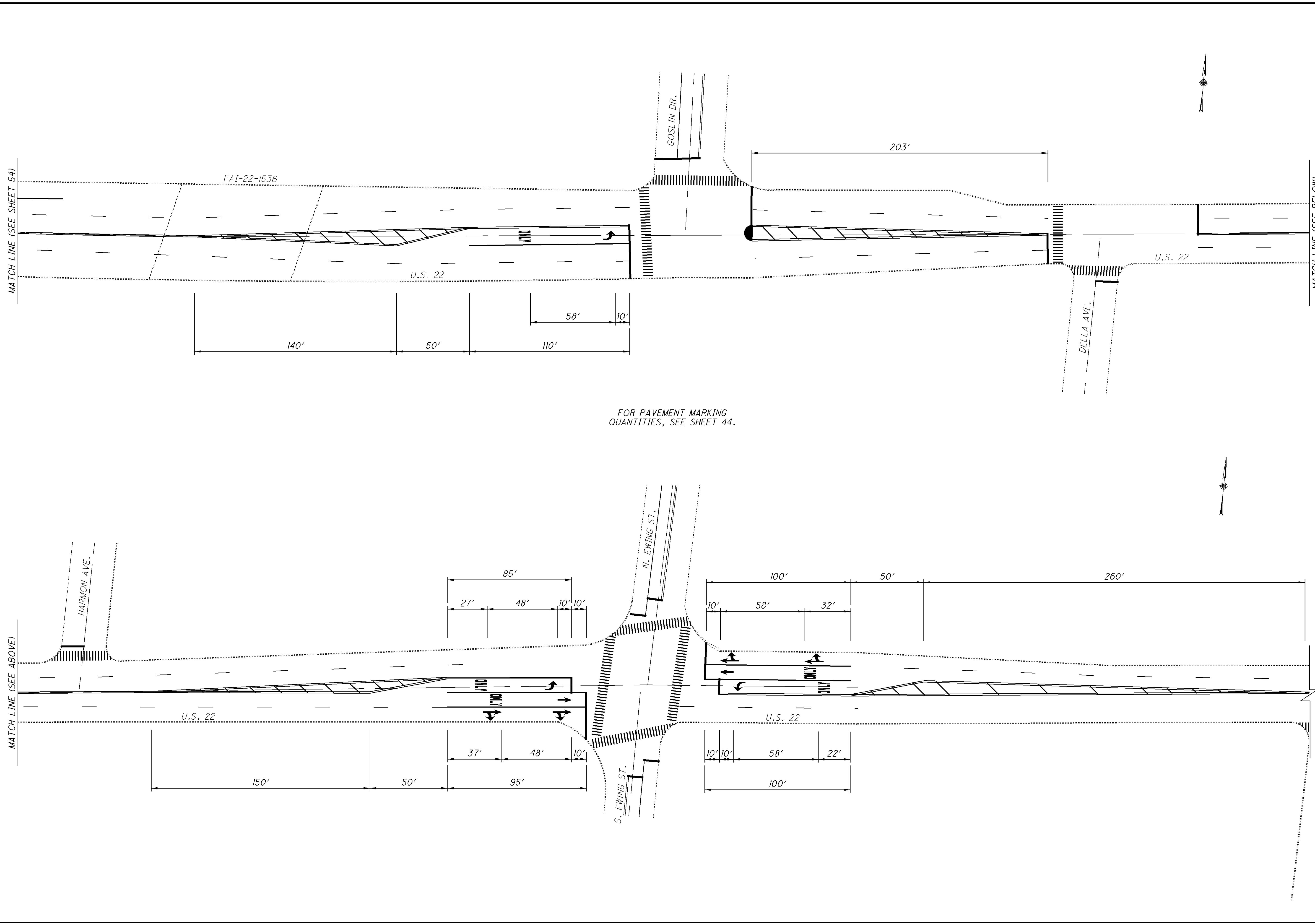
PAVEMENT MARKING DETAILS (LOCATION 1c)

FOR PAVEMENT MARKING QUANTITIES, SEE SHEET 44.

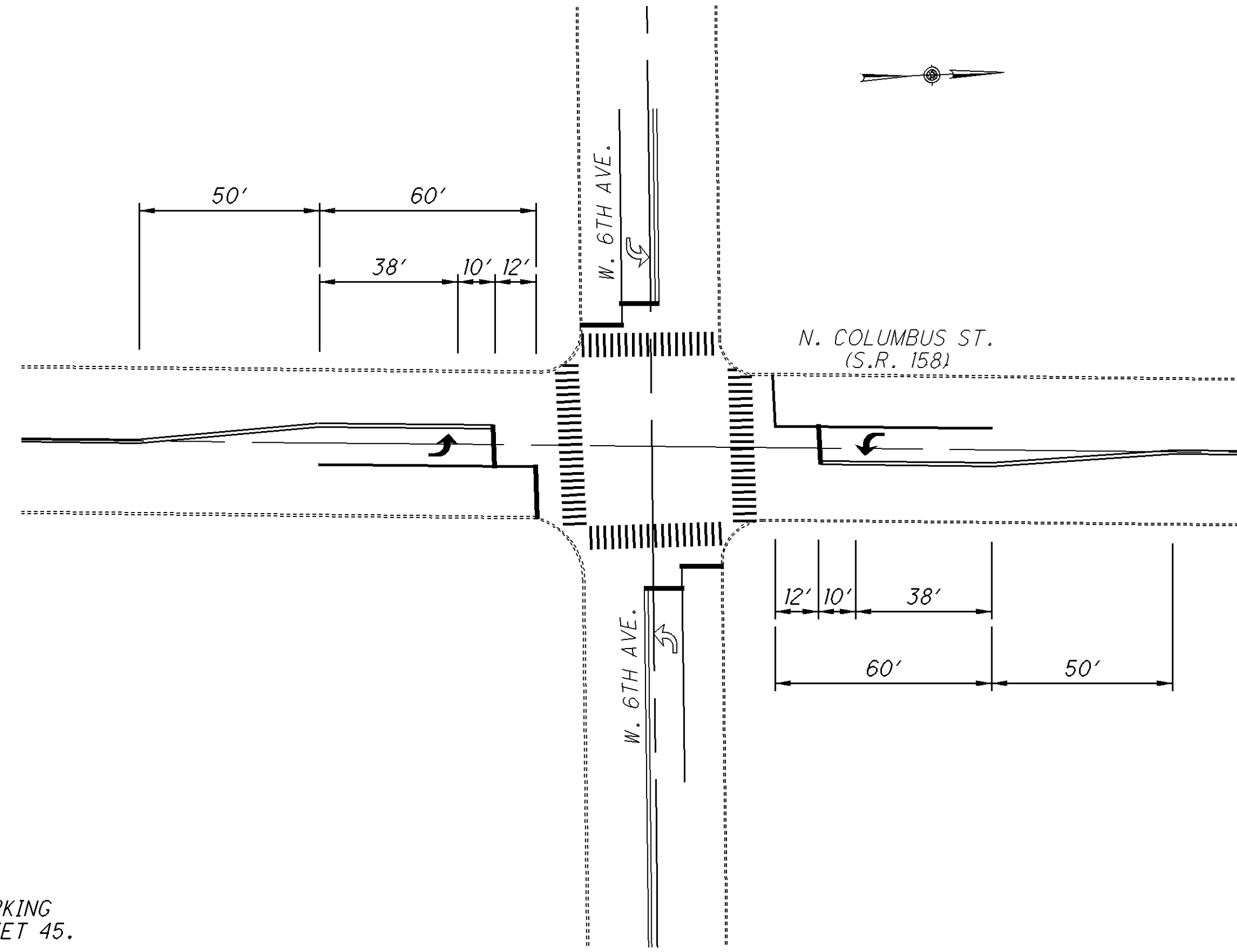
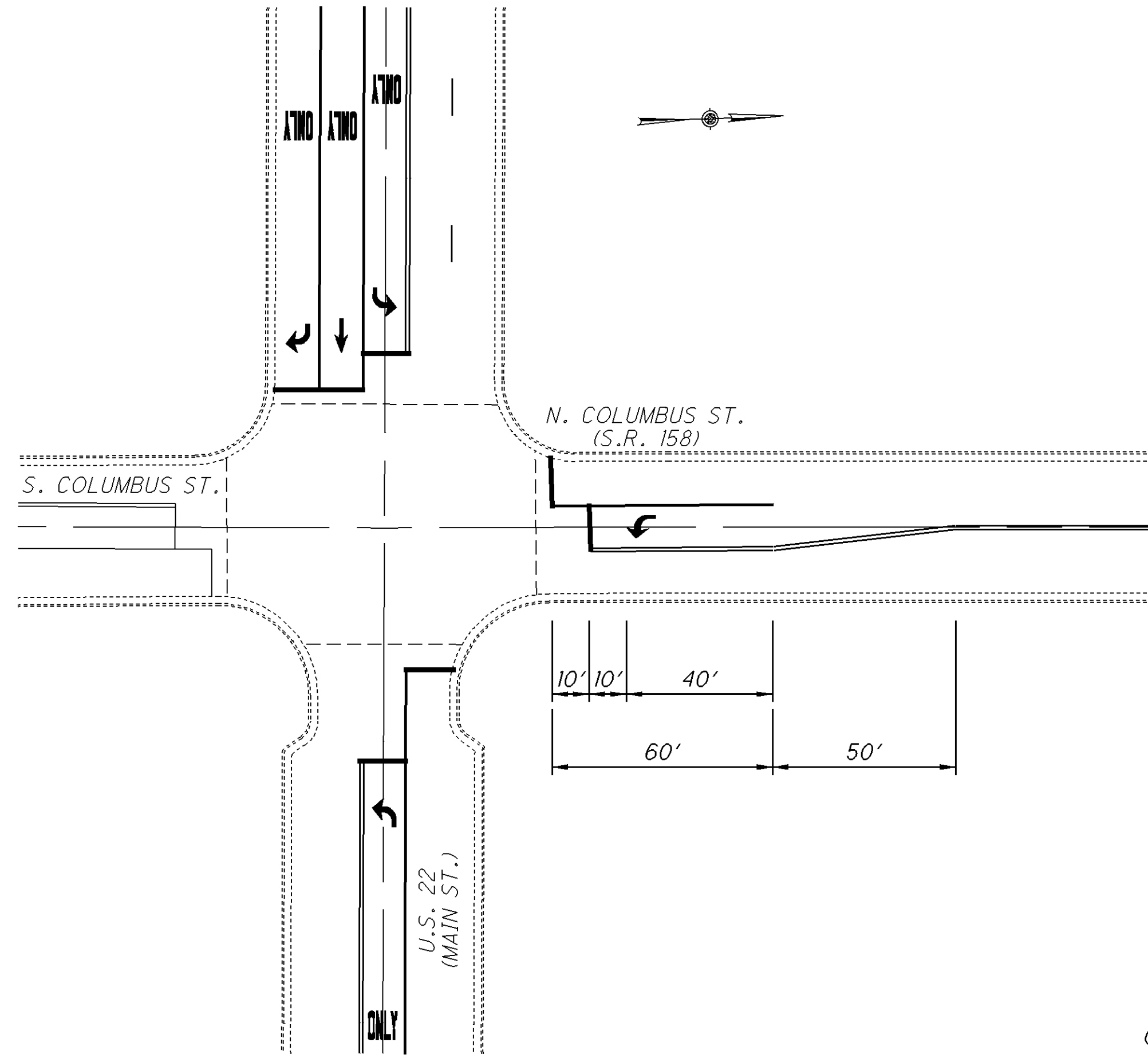
NOTE: DO NOT REPLACE CROSSWALK LINES ON ALLEYS



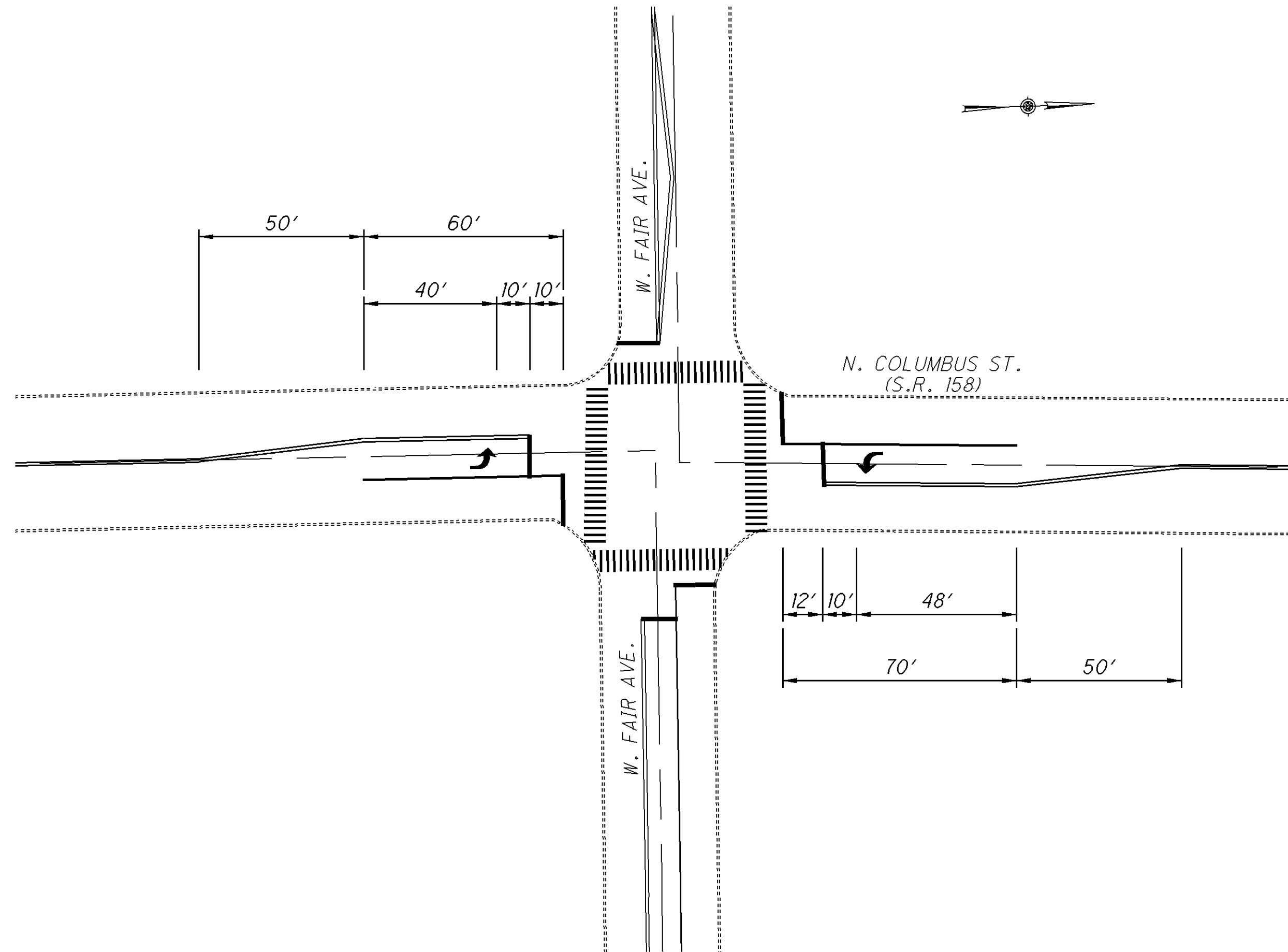
FAI-22/ VAR-10.75 / VAR

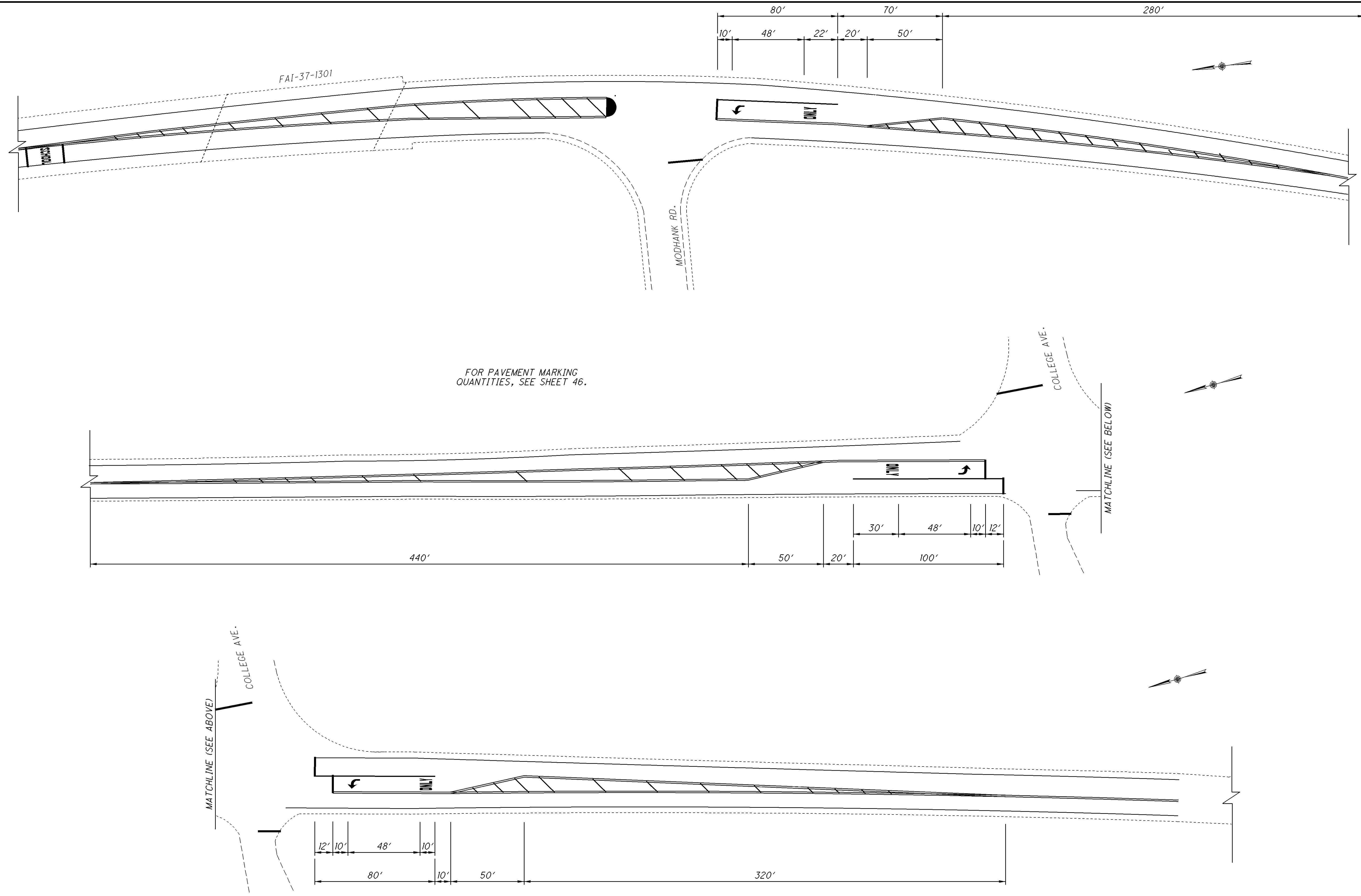


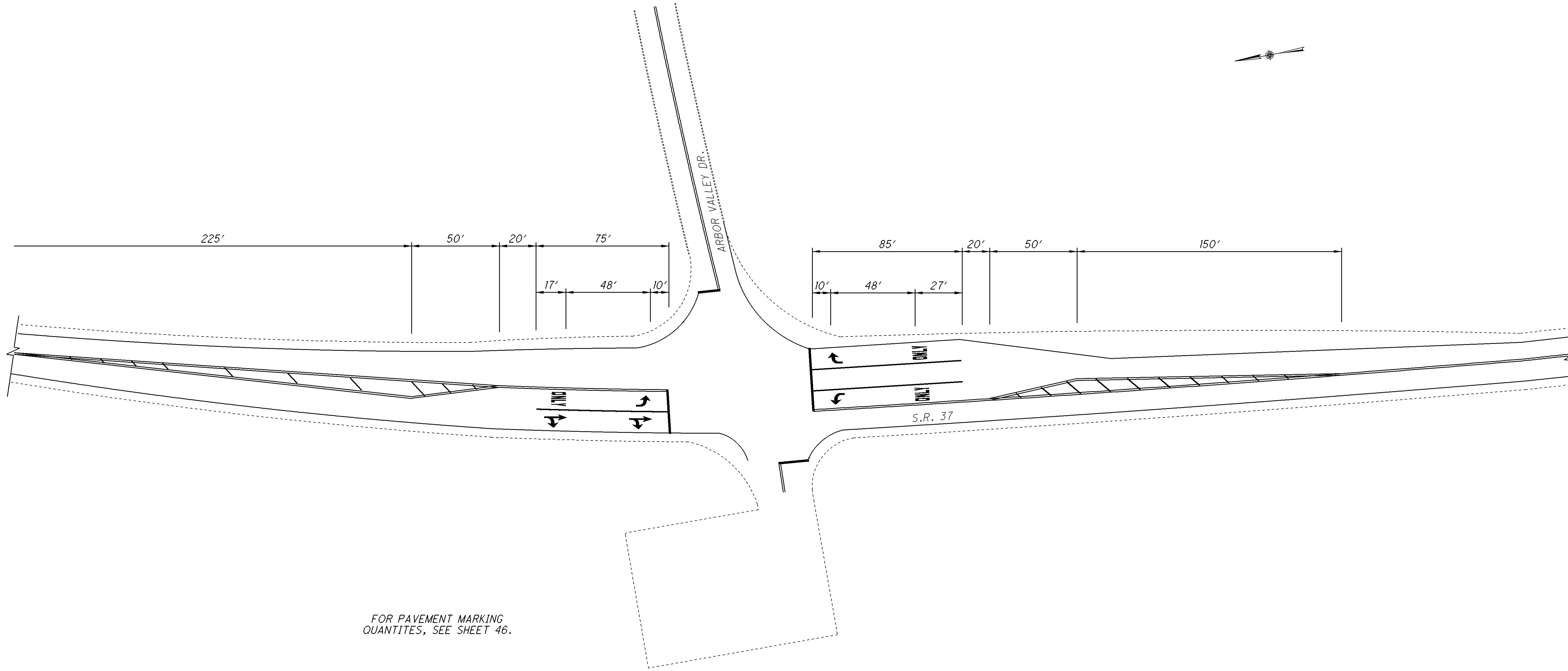
FOR PAVEMENT MARKING QUANTITIES, SEE SHEET 44.



FOR PAVEMENT MARKING
QUANTITIES, SEE SHEET 45.





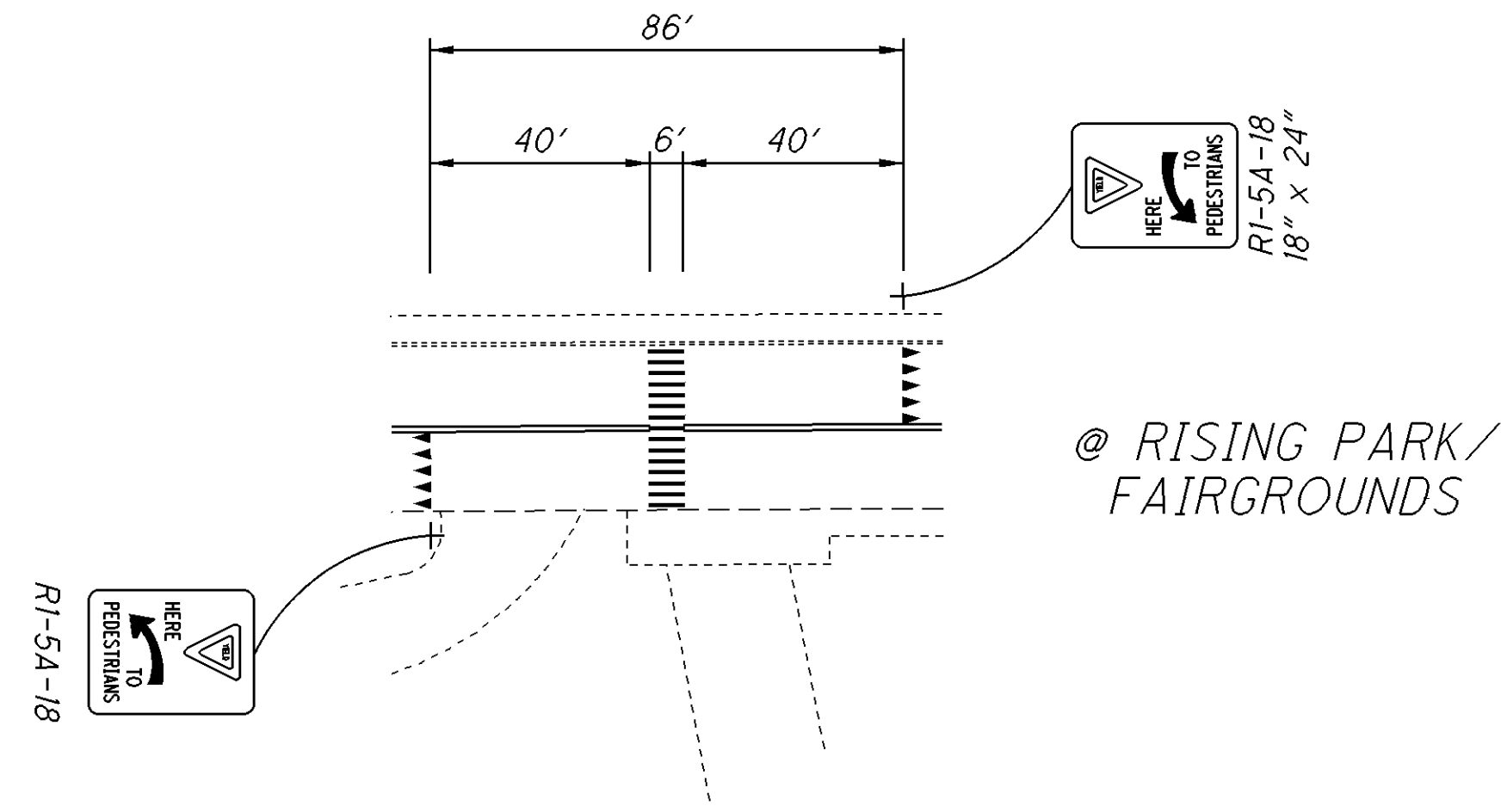
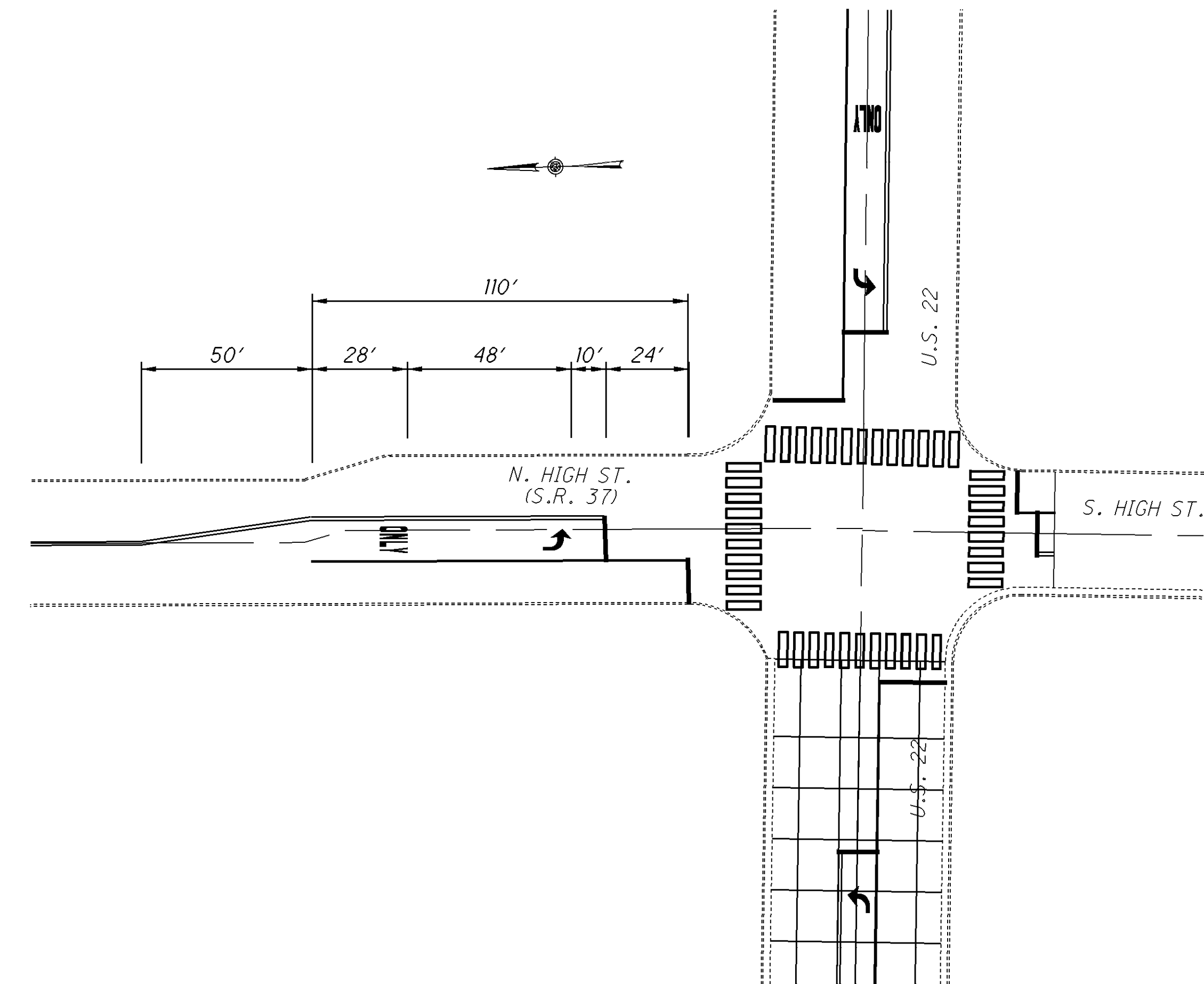


FOR PAVEMENT MARKING
QUANTITIES, SEE SHEET 46.

CALCULATED
JLS
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DNM

PAVEMENT MARKING DETAILS (LOCATION 3b)

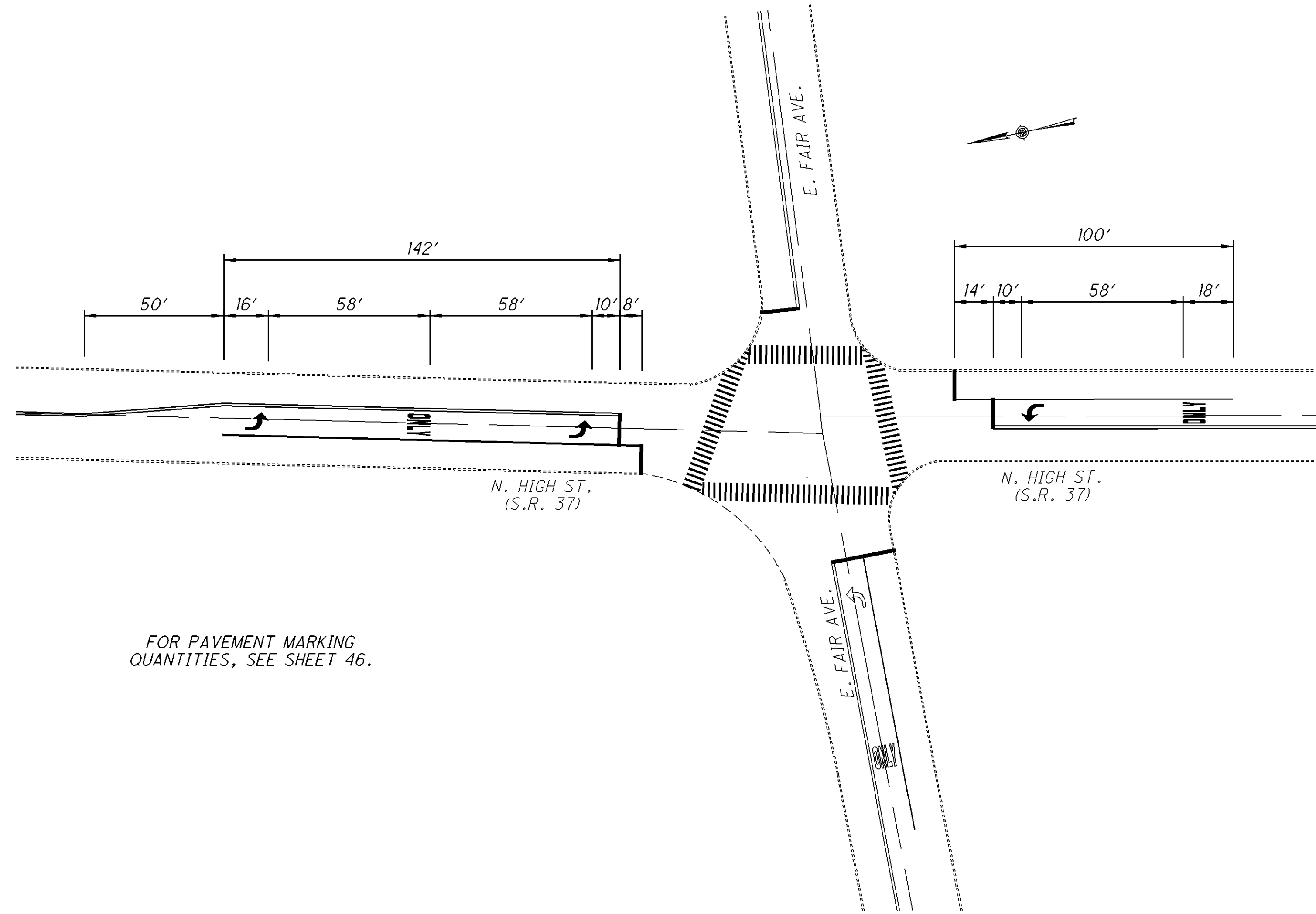
FAI-22/ VAR-10.75 / VAR



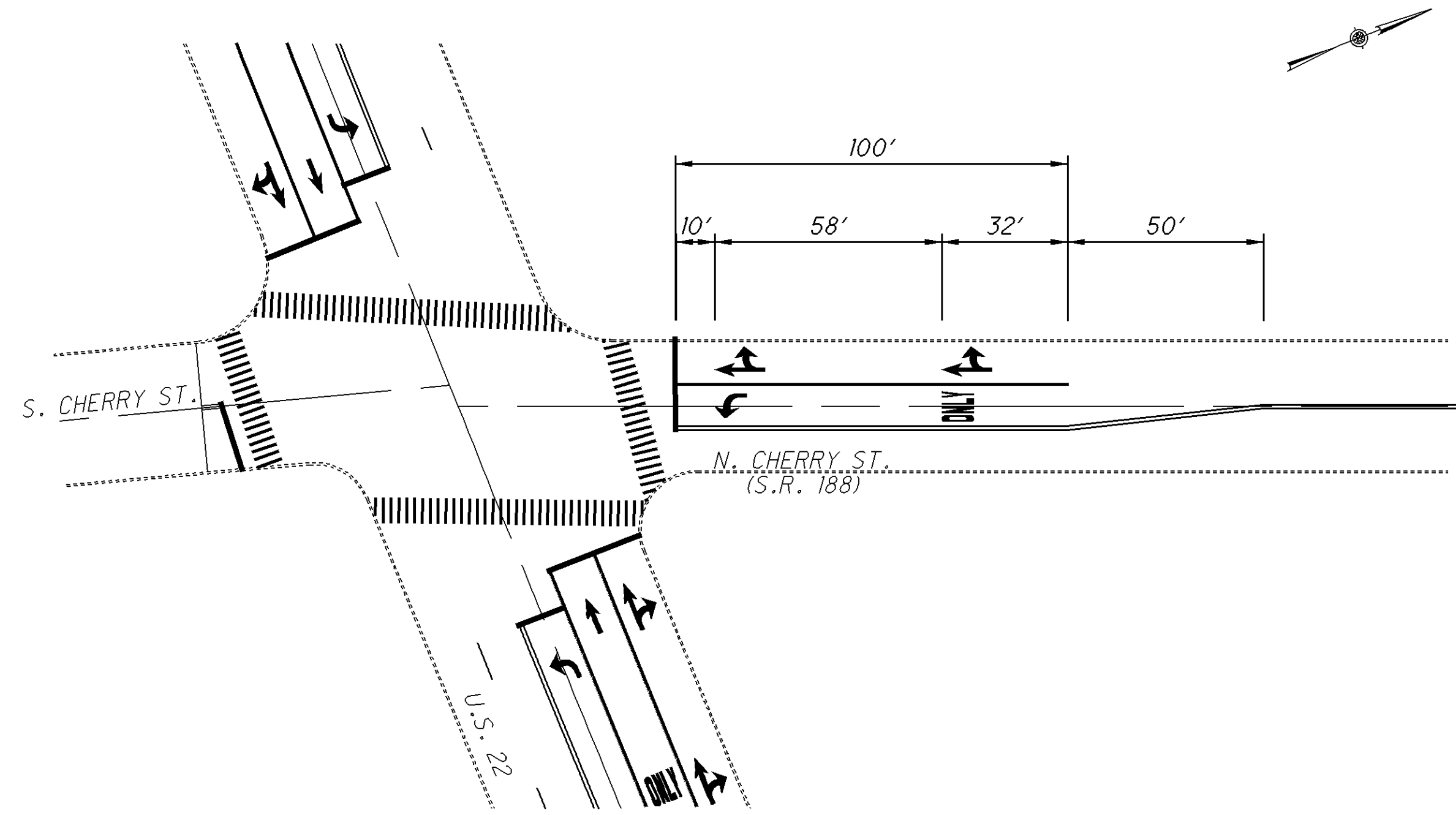
THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION 3c SUB-SUMMARY:

ITEM 630, GROUND MOUNTED SUPPORT, NO. 2 POST 25.0 FT.
(2 SIGNS w/12.5' POSTS)

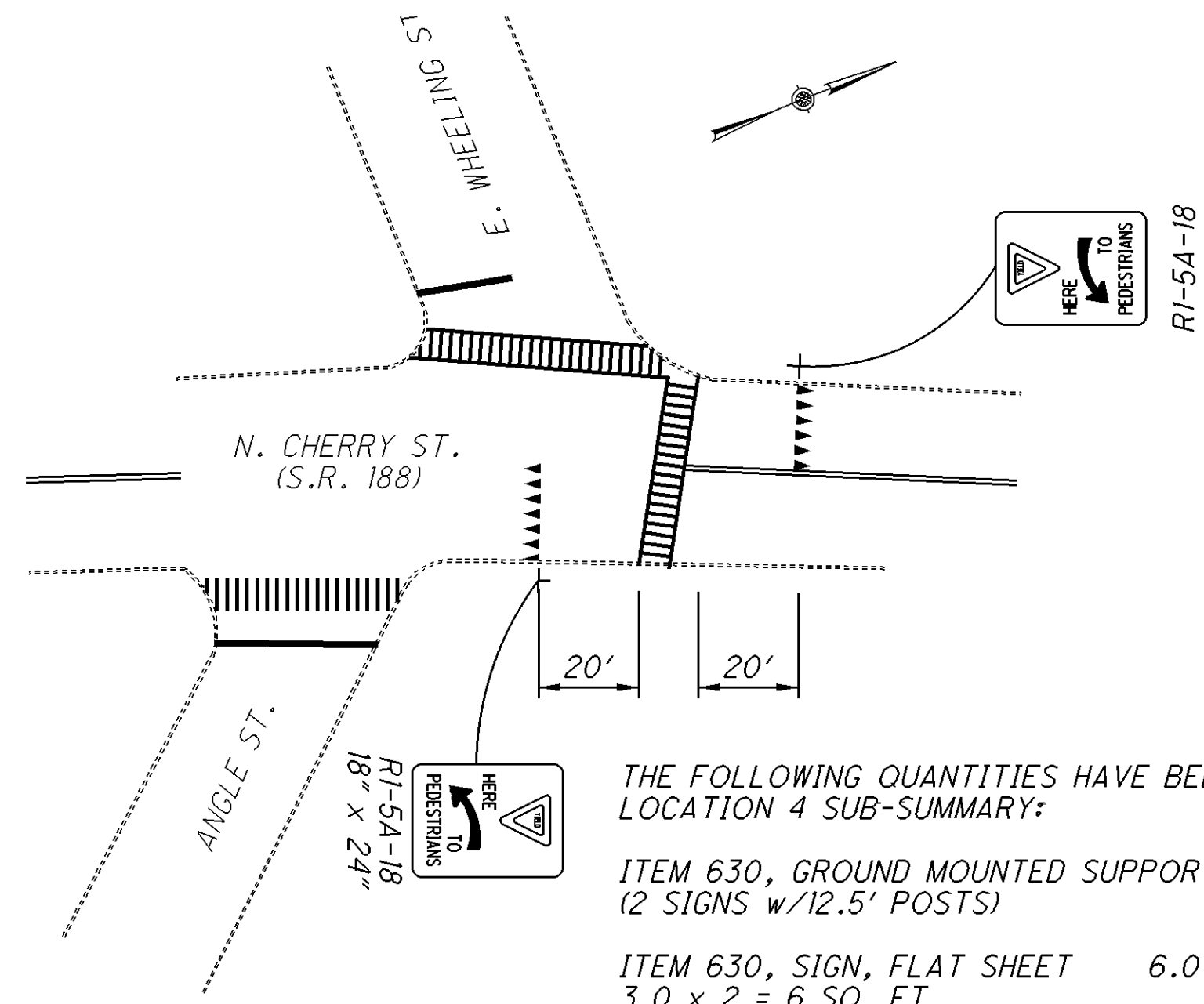
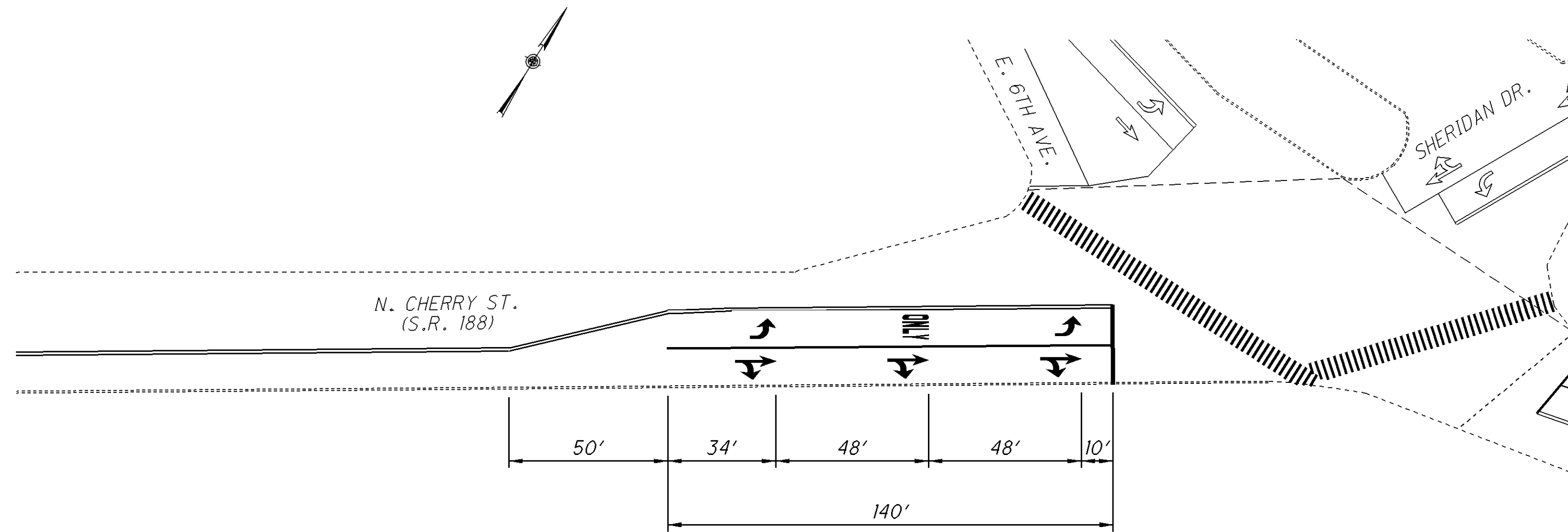
ITEM 630, SIGN, FLAT SHEET 6.0 SQ. FT.
3.0 x 2 = 6 SQ. FT.



FOR PAVEMENT MARKING QUANTITIES, SEE SHEET 46.

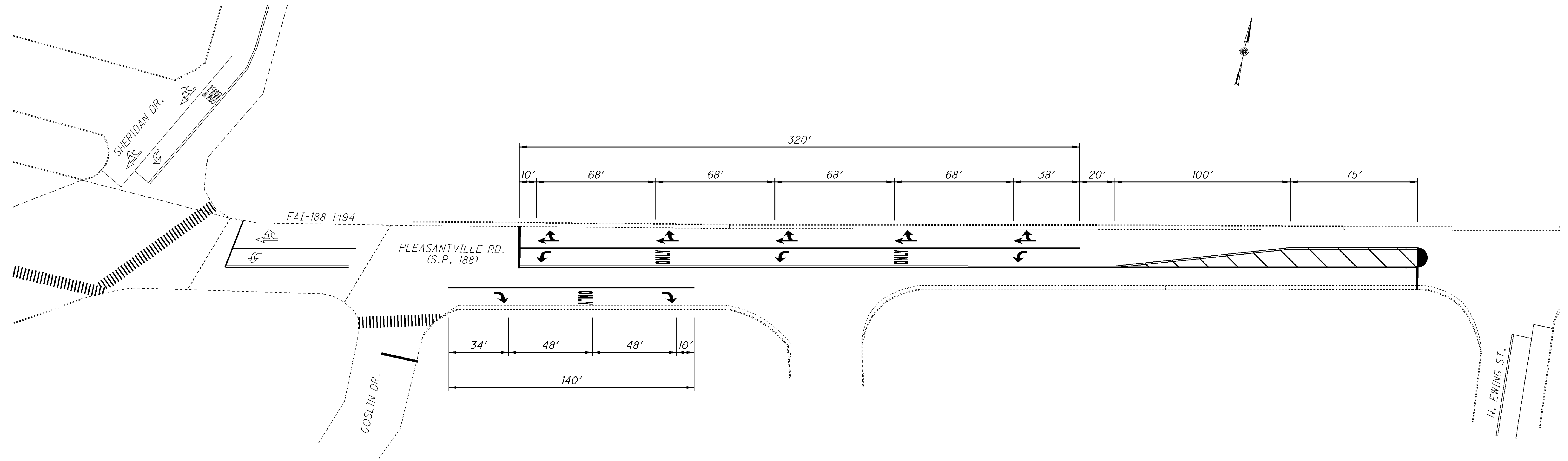


FOR PAVEMENT MARKING QUANTITIES, SEE SHEET 47.

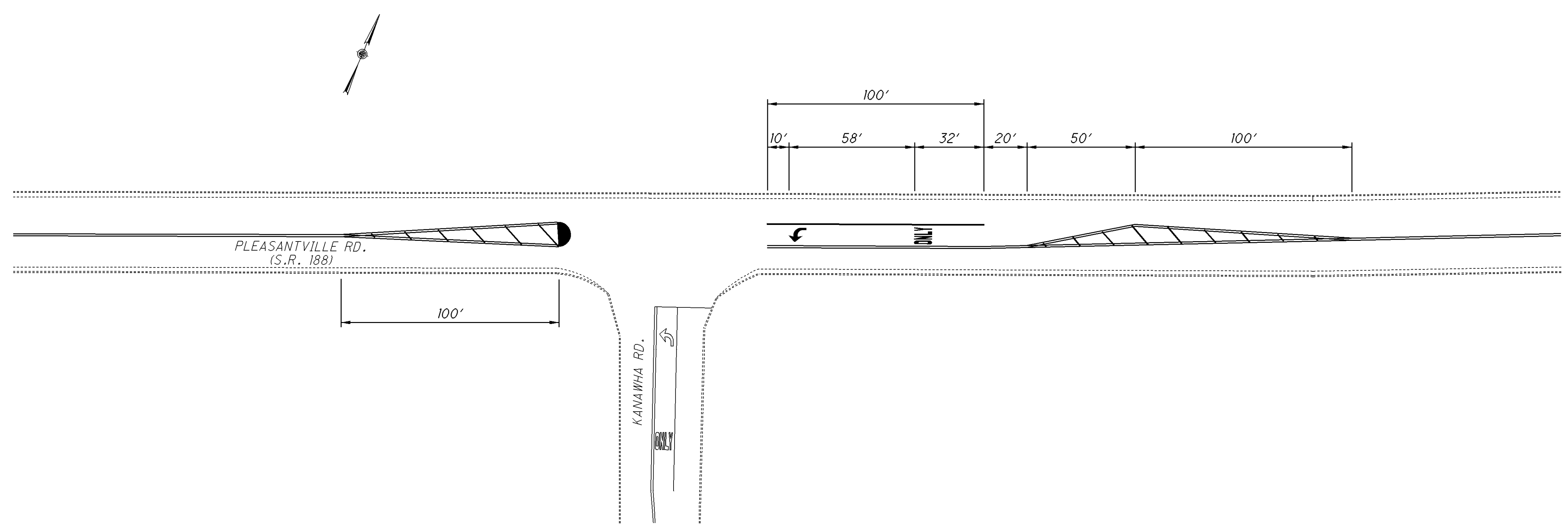


THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION 4 SUB-SUMMARY:

- ITEM 630, GROUND MOUNTED SUPPORT, NO. 2 POST 25.0 FT.
(2 SIGNS w/12.5' POSTS)
- ITEM 630, SIGN, FLAT SHEET 6.0 SQ. FT.
3.0 x 2 = 6 SQ. FT.



FOR PAVEMENT MARKING QUANTITIES, SEE SHEET 47.



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PAVEMENT MARKING DETAILS (LOCATION 4)

FAI-22/ VAR-10.75 / VAR

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LOCATION 1a TOTALS											ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
Sht. 2	Sht. 4	Sht. 8	Sht. 9	Sht. 24	Sht. 26	Sht. 27	Sht. 32	Sht. 41	Sht. 42	Sht. 43					
	80					572					202	23500	652	SQ YD	WEARING COURSE REMOVED
2.42					2.42						209	60500	2.42	MILE	LINEAR GRADING
											209	72051	2.42	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
				20,781	6,032						254	01000	26,813	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
				1,559	453	43					407	20500	2,055	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK
				1,040	302	29					407	20510	1,371	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE
	1,138										408	10001	1,138	GALLON	PRIME COAT, AS PER PLAN
	4			1,011	294	28					448	46050	1,337	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
	26			722	210						448	47004	958	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG76-22M
						20					448	47020	20	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
							60				516	31011	60	FT	2" DEEP JOINT SEALER, AS PER PLAN
			16								614	11110	16	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
		14									614	12460	14	EACH	WORK ZONE MARKING SIGN
		3									614	13000	3	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
			60								614	18401	60	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
				2.42							614	21400	2.42	MILE	WORK ZONE CENTER LINE, CLASS II
					158						617	10101	158	CU YD	COMPACTED AGGREGATE, AS PER PLAN
					2.42						618	41000	2.42	MILE	EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE)
	106										621	00100	106	EACH	RPM
	106										621	54000	106	EACH	RAISED PAVEMENT MARKER REMOVED
										205	644	00400	205	FT	CHANNELIZING LINE, 8"
										50	644	00500	50	FT	STOP LINE
										479	644	00700	479	FT	TRANSVERSE/DIAGONAL LINE
										67	644	00900	67	SQ FT	ISLAND MARKING
										2	644	01300	2	EACH	LANE ARROW
										1	644	01410	1	EACH	WORD ON PAVEMENT, 96"
									2.42		648	00100	2.42	MILE	EDGE LINE, 4"
									0.17		648	00200	0.17	MILE	LANE LINE, 4"
								1.29			648	00300	1.29	MILE	CENTER LINE

CALCULATED JLS CHECKED DNM
LOCATION SUB-SUMMARY (LOCATION 1a)
FAI-22/ VAR-10.75 / VAR
 61
 71

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LOCATION 1b TOTALS											ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
Sht. 2	Sht. 4	Sht. 8	Sht. 9	Sht. 24	Sht. 26	Sht. 27	Sht. 32	Sht. 41	Sht. 42	Sht. 43					
	180					997	399				202	23500	1,576	SQ YD	WEARING COURSE REMOVED
50											202	32000	50	FT	CURB REMOVED
2.36											209	60500	2.36	MILE	LINEAR GRADING
					2.33						209	72051	2.33	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
				16,356	2,727						254	01000	19,083	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
				1,227	205	75	30				407	20500	1,537	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK
				818	137	50					407	20510	1,005	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE
	1,037										408	10001	1,037	GALLON	PRIME COAT, AS PER PLAN
				42	16						442	10000	58	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)
				42	16						442	20200	58	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448)
	9			748	125	49					448	46050	931	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
	31			534	89		14				448	47004	668	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG76-22M
						35					448	47020	35	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
							84				516	31011	84	FT	2" DEEP JOINT SEALER, AS PER PLAN
	50										609	26000	50	FT	CURB, TYPE 6
			16								614	11110	16	HOURL	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
		18									614	12460	18	EACH	WORK ZONE MARKING SIGN
		3									614	13000	3	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
				2.34							614	21400	2.34	MILE	WORK ZONE CENTER LINE, CLASS II
					143						617	10101	143	CU YD	COMPACTED AGGREGATE, AS PER PLAN
					2.38						618	41000	2.38	MILE	EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE)
	111										621	00100	111	EACH	RPM
	111										621	54000	111	EACH	RAISED PAVEMENT MARKER REMOVED
										104	644	00500	104	FT	STOP LINE
									2.40		648	00100	2.40	MILE	EDGE LINE, 4"
							1.20				648	00300	1.20	MILE	CENTER LINE

CALCULATED JLS CHECKED DNM
LOCATION SUB-SUMMARY (LOCATION 1b)
FAI-22/ VAR-10.75 / VAR
 62
 71

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LOCATION 1c TOTALS										ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
Sht. 2	Sht. 3	Sht. 4	Sht. 11	Sht. 24	Sht. 24a	Sht. 26	Sht. 28	Sht. 32	Sht. 38					
					7,335		284			202	23000	7,619	SQ YD	PAVEMENT REMOVED
		370					7,035			202	23500	7,405	SQ YD	WEARING COURSE REMOVED
								619		202	23501	619	SQ YD	WEARING COURSE REMOVED, AS PER PLAN
									2,173	202	30000	2,173	SQ FT	WALK REMOVED
									112	202	30001	112	SQ FT	WALK REMOVED, AS PER PLAN (A)
800									1,428	202	30001	1,428	SQ FT	WALK REMOVED, AS PER PLAN (B)
									693	202	32000	1,493	FT	CURB REMOVED
									6	202	32500	6	FT	CURB AND GUTTER REMOVED
									49	203	20001	49	CU YD	EMBANKMENT, AS PER PLAN
					7,335		284			204	10000	7,619	SQ YD	SUBGRADE COMPACTION
30										204	13000	30	CU YD	EXCAVATION OF SUBGRADE
30										204	30050	30	CU YD	GRANULAR MATERIAL, TYPE F
					4					204	45000	4	HOUR	PROOF ROLLING
50										204	50000	50	SQ YD	GEOTEXTILE FABRIC
3.74										209	60500	3.74	MILE	LINEAR GRADING
						3.77				209	72051	3.77	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
										253	02001	463	CU YD	PAVEMENT REPAIR, AS PER PLAN
463										254	01000	146,926	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
					129,392		17,534			255	10111	100	SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC FS, AS PER PLAN
	100									302	46000	48	CU YD	ASPHALT CONCRETE BASE, PG64-22
										304	20000	612	CU YD	AGGREGATE BASE
					612					407	10000	150	GALLON	TACK COAT
				150						407	13900	47	GALLON	TACK COAT, 702.13
								47		407	20500	11,553	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK
					9,706		1,316	531		407	20510	7,703	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE
					6,471		877	355		408	10001	1,534	GALLON	PRIME COAT, AS PER PLAN
		1,534								442	10000	3,212	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)
5					3,172			40		442	20200	3,177	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448)
					2,590		853	345		448	46050	3,788	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
		37			1,850		609			448	47004	2,496	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG76-22M
								248		448	47020	248	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
			70							448	90000	70	CU YD	ASPHALT CONCRETE, MISC.: SPOT TREATMENT
					7,335					452	14010	7,335	SQ YD	10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1
								398		516	31011	398	FT	2" DEEP JOINT SEALER, AS PER PLAN
									2,556	608	10000	2,556	SQ FT	4" CONCRETE WALK
									6	609	12000	6	FT	COMBINATION CURB AND GUTTER, TYPE 2
		800							1,036	609	26000	1,836	FT	CURB, TYPE 6

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 LOCATION SUB-SUMMARY (LOCATION 1c)
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LOCATION 1c TOTALS												ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
Sht. 5	Sht. 8	Sht. 9	Sht. 11	Sht. 12	Sht. 24	Sht. 24a	Sht. 26	Sht. 38	Sht. 41	Sht. 42	Sht. 44					
				8								611	98630	8	EACH	CATCH BASIN ADJUSTED TO GRADE
				7								611	98634	7	EACH	CATCH BASIN RECONSTRUCTED TO GRADE
				2								611	98635	2	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN
				20								611	99150	20	EACH	INLET ADJUSTED TO GRADE
				29								611	99154	29	EACH	INLET RECONSTRUCTED TO GRADE
				2								611	99155	2	EACH	INLET RECONSTRUCTED TO GRADE, AS PER PLAN
				50								611	99655	50	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN
				1								611	99660	1	EACH	MANHOLE RECONSTRUCTED TO GRADE
		320										614	11110	320	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
			Lump									614	12421	LUMP		DETOUR SIGNING, AS PER PLAN
	30											614	12600	30	EACH	REPLACEMENT DRUM
	24											614	13000	24	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
		60										614	18401	60	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
						0.25						614	21200	0.25	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I
					9.00	0.25						614	21400	9.25	MILE	WORK ZONE CENTER LINE, CLASS II
				7								617	10101	219	CU YD	COMPACTED AGGREGATE, AS PER PLAN
18												632	26501	18	EACH	DETECTOR LOOP, AS PER PLAN (A)
47												632	26501	47	EACH	DETECTOR LOOP, AS PER PLAN (B)
												638	10801	35	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN
												644	00400	4,696	FT	CHANNELIZING LINE, 8"
												644	00500	1,714	FT	STOP LINE
												644	00601	7,486	FT	CROSSWALK LINE, AS PER PLAN
												644	00700	742	FT	TRANSVERSE/DIAGONAL LINE
												644	00900	297	SQ FT	ISLAND MARKING
												644	01000	3	EACH	RAILROAD SYMBOL MARKING
												644	01200	2,040	EACH	PARKING LOT STALL MARKING
												644	01300	68	EACH	LANE ARROW
												644	01350	1	EACH	LANE REDUCTION ARROW
												644	01410	31	EACH	WORD ON PAVEMENT, 96"
												644	01500	167	FT	DOTTED LINE, 4"
						0.25						646	10200	0.25	MILE	CENTER LINE
						810						646	10300	810	FT	CHANNELIZING LINE, 8"
						148						646	10400	148	FT	STOP LINE
						253						646	10501	253	FT	CROSSWALK LINE, AS PER PLAN
						72						646	10600	72	FT	TRANSVERSE/DIAGONAL LINE
						134						646	10800	134	SQ FT	ISLAND MARKING
						15						646	20300	15	EACH	LANE ARROW
						8						646	20410	8	EACH	WORD ON PAVEMENT, 96"
												648	00100	3.82	MILE	EDGE LINE, 4"
										3.82		648	00200	6.81	MILE	LANE LINE, 4"
									5.26			648	00300	5.26	MILE	CENTER LINE
19,227												690	12050	19,227	SQ YD	SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS
												690	98000	11	EACH	SPECIAL - MISC.: CURB RAMP, TYPE A1
												690	98000	7	EACH	SPECIAL - MISC.: CURB RAMP, TYPE B2
												690	98000	1	EACH	SPECIAL - MISC.: CURB RAMP, TYPE B3
												690	98000	6	EACH	SPECIAL - MISC.: CURB RAMP, TYPE D
												690	98200	432	SQ FT	SPECIAL - MISC.: DETECTABLE WARNING

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LOCATION 2 TOTALS														ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	
Sht. 2	Sht. 3	Sht. 4	Sht. 5	Sht. 8	Sht. 9	Sht. 12	Sht. 25	Sht. 26	Sht. 29	Sht. 39	Sht. 41	Sht. 42	Sht. 45						
		660							3,300						202	23500	3,960	SQ YD	WEARING COURSE REMOVED
										1,068					202	30000	1,068	SQ FT	WALK REMOVED
										32					202	30001	32	SQ FT	WALK REMOVED, AS PER PLAN (A)
100										404					202	32000	504	FT	CURB REMOVED
1.48								1.48							209	60500	1.48	MLE	LINEAR GRADING
															209	72051	1.48	MLE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
186															253	02001	186	CU YD	PAVEMENT REPAIR, AS PER PLAN (A)
							43,332	1,737							254	01000	45,069	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
	25														255	10111	25	SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC FS, AS PER PLAN
							3,250	131	250						407	20500	3,631	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK
							2,167	87	168						407	20510	2,422	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE
		699													408	10001	699	GALLON	PRIME COAT, AS PER PLAN
		11					2,107	85	163						448	46050	2,366	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
		34					1,505	61							448	47004	1,600	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG76-22M
										117					448	47020	117	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
											780				608	10000	780	SQ FT	4" CONCRETE WALK
		100													609	26000	504	FT	CURB, TYPE 6
						25									611	99655	25	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN
					40										614	11110	40	HR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
				7											614	12460	7	EACH	WORK ZONE MARKING SIGN
				3											614	13000	3	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
					15										614	18401	15	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
						4.38									614	21400	4.38	MLE	WORK ZONE CENTER LINE, CLASS II
								97							617	10101	97	CU YD	COMPACTED AGGREGATE, AS PER PLAN
			4												632	26501	4	EACH	DETECTOR LOOP, AS PER PLAN (A)
			5												632	26501	5	EACH	DETECTOR LOOP, AS PER PLAN (B)
						10									638	10801	10	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN
														310	644	00400	310	FT	CHANNELIZING LINE, 8"
														719	644	00500	719	FT	STOP LINE
														4,519	644	00601	4,519	FT	CROSSWALK LINE, AS PER PLAN
														780	644	01200	780	EACH	PARKING LOT STALL MARKING
														5	644	01300	5	EACH	LANE ARROW
												2.19			648	00100	1.32	MLE	EDGE LINE, 4"
															648	00300	2.19	MLE	CENTER LINE
									2						690	98000	2	EACH	SPECIAL - MISC.: CURB RAMP, TYPE A1
									3						690	98000	3	EACH	SPECIAL - MISC.: CURB RAMP, TYPE A2
									1						690	98000	1	EACH	SPECIAL - MISC.: CURB RAMP, TYPE B2
									2						690	98000	2	EACH	SPECIAL - MISC.: CURB RAMP, TYPE B3
									2						690	98000	2	EACH	SPECIAL - MISC.: CURB RAMP, TYPE D
									320						690	98200	320	SQ FT	SPECIAL - MISC.: DETECTABLE WARNING

LOCATION 3a TOTALS													ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	
Sht. 2	Sht. 4	Sht. 5	Sht. 8	Sht. 9	Sht. 12	Sht. 25	Sht. 26	Sht. 30	Sht. 32	Sht. 41	Sht. 42	Sht. 46						
	100							2,164	837					202	23500	3,101	SQ YD	WEARING COURSE REMOVED
1.51							1.49							209	60500	1.51	MILE	LINEAR GRADING
														209	72051	1.49	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
							12,008	1,742						254	01000	13,750	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
						901	131	163	63					407	20500	1,258	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK
						601	88	109						407	20510	798	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE
	706													408	10001	706	GALLON	PRIME COAT, AS PER PLAN
						584	85	106						448	46050	775	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
	15					418	61		30					448	47004	524	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG76-22M
								76						448	47020	76	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
					2									611	99655	2	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN
				16										614	11110	16	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
			13											614	12460	13	EACH	WORK ZONE MARKING SIGN
			2											614	13000	2	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
				30										614	18401	30	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
						1.51								614	21400	1.51	MILE	WORK ZONE CENTER LINE, CLASS II
								97						617	10101	97	CU YD	COMPACTED AGGREGATE, AS PER PLAN
	78													621	54000	78	EACH	RAISED PAVEMENT MARKER REMOVED
		7												632	26501	7	EACH	DETECTOR LOOP, AS PER PLAN (B)
													260	644	00400	260	FT	CHANNELIZING LINE, 8"
													257	644	00500	257	FT	STOP LINE
													546	644	00700	546	FT	TRANSVERSE/DIAGONAL LINE
													67	644	00900	67	SQ FT	ISLAND MARKING
													2	644	01110	2	EACH	SCHOOL SYMBOL MARKING, 96"
													3	644	01300	3	EACH	LANE ARROW
													3	644	01410	3	EACH	WORD ON PAVEMENT, 96"
												1.54	648	00100	1.54	MILE	EDGE LINE, 4"	
										1.04			648	00300	1.04	MILE	CENTER LINE	

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LOCATION 3b TOTALS										ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
Sht. 2	Sht. 4	Sht. 5	Sht. 9	Sht. 25	Sht. 26	Sht. 30	Sht. 41	Sht. 42	Sht. 46					
	190					354				202	23500	544	SQ YD	WEARING COURSE REMOVED
1.42					1.42					209	60500	1.42	MILE	LINEAR GRADING
										209	72051	1.42	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
				10,702	1,667					254	01000	12,369	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
				803	125	27				407	20500	955	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK
				536	84	18				407	20510	638	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE
	670									408	10001	670	GALLON	PRIME COAT, AS PER PLAN
	3			521	81	18				448	46050	623	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
	18			372	58					448	47004	448	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG76-22M
						13				448	47020	13	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
			16							614	11110	16	HOURL	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
			5							614	12460	5	EACH	WORK ZONE MARKING SIGN
			1.42							614	21400	1.42	MILE	WORK ZONE CENTER LINE, CLASS II
					93					617	10101	93	CU YD	COMPACTED AGGREGATE, AS PER PLAN
	86									621	54000	86	EACH	RAISED PAVEMENT MARKER REMOVED
									245	644	00400	245	FT	CHANNELIZING LINE, 8"
									113	644	00500	113	FT	STOP LINE
									138	644	00700	138	FT	TRANSVERSE/DIAGONAL LINE
									2	644	01110	2	EACH	SCHOOL SYMBOL MARKING, 96"
									5	644	01300	5	EACH	LANE ARROW
									2	644	01410	2	EACH	WORD ON PAVEMENT, 96"
								1.42		648	00100	1.42	MILE	EDGE LINE, 4"
							0.85			648	00300	0.85	MILE	CENTER LINE

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LOCATION SUB-SUMMARY (LOCATION 3b)

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LOCATION 3c TOTALS															ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	
Sht. 2	Sht. 3	Sht. 4	Sht. 5	Sht. 8	Sht. 9	Sht. 12	Sht. 25	Sht. 26	Sht. 30	Sht. 40	Sht. 41	Sht. 42	Sht. 46	Sht. 59						
		80							2,971							202	23500	3,051	SQ YD	WEARING COURSE REMOVED
										448						202	30000	448	SQ FT	WALK REMOVED
100										168						202	32000	268	FT	CURB REMOVED
0.52																209	60500	0.52	MILE	LINEAR GRADING
								0.52								209	72051	0.52	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
40																253	02001	40	CU YD	PAVEMENT REPAIR, AS PER PLAN (A)
								21,843	611							254	01000	22,454	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
	26															255	10111	26	SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS OC FS, AS PER PLAN
							1,639	46	225							407	20500	1,910	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK
							1,093	31	151							407	20510	1,275	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE
		245														408	10001	245	GALLON	PRIME COAT, AS PER PLAN
		1					1,062	30	147							448	46050	1,240	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
		7					759	22								448	47004	783	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG76-22M
										105						448	47020	105	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
											224					608	10000	224	SQ FT	4" CONCRETE WALK
		100														609	26000	268	FT	CURB, TYPE 6
																611	99150	6	EACH	INLET ADJUSTED TO GRADE
																611	99655	12	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN
																614	11110	32	HR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
					2											614	13000	2	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
																614	21400	2.36	MILE	WORK ZONE CENTER LINE, CLASS II
																617	10101	34	CU YD	COMPACTED AGGREGATE, AS PER PLAN
																630	02100	25	EACH	GROUND MOUNTED SUPPORT, NO. 2 POST
															6.0	630	80100	6.0	SQ FT	SIGN, FLAT SHEET
																632	26501	5	EACH	DETECTOR LOOP, AS PER PLAN (A)
																632	26501	9	EACH	DETECTOR LOOP, AS PER PLAN (B)
																636	10801	2	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN
																644	00400	360	FT	CHANNELIZING LINE, 8"
																644	00500	573	FT	STOP LINE
																644	00601	4,079	FT	CROSSWALK LINE, AS PER PLAN
																644	01300	4	EACH	LANE ARROW
																644	01410	3	EACH	WORD ON PAVEMENT, 96"
																644	20800	30	FT	YIELD LINE
																648	00100	0.50	MILE	EDGE LINE, 4"
																648	00300	1.18	MILE	CENTER LINE
																690	98200	224	SQ FT	SPECIAL - MISC.: DETECTABLE WARNING

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LOCATION 4 TOTALS													ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	
Sht. 2	Sht. 3	Sht. 4	Sht. 5	Sht. 8	Sht. 9	Sht. 12	Sht. 25	Sht. 31	Sht. 32	Sht. 41	Sht. 47	Sht. 60						
								2,197						202	23500	2,197	SQ YD	WEARING COURSE REMOVED
50														202	32000	50	FT	CURB REMOVED
37														253	02001	37	CU YD	PAVEMENT REPAIR, AS PER PLAN (A)
							29,642							254	01000	29,642	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
	25													255	10111	25	SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS OC FS, AS PER PLAN
							2,224	166						407	20500	2,390	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK
							1,483	111						407	20510	1,594	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE
							1,441	108						448	46050	1,549	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
							1,030							448	47004	1,030	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG76-22M
								78						448	47020	78	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
										152				516	31011	152	FT	2" DEEP JOINT SEALER, AS PER PLAN
		50												609	26000	50	FT	CURB, TYPE 6
								2						611	98630	2	EACH	CATCH BASIN ADJUSTED TO GRADE
								4						611	99150	4	EACH	INLET ADJUSTED TO GRADE
								8						611	99655	8	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN
													40	614	11110	40	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
					10									614	13000	10	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
								15						614	18401	15	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
													3.00	614	21400	3.00	MILE	WORK ZONE CENTER LINE, CLASS II
													25	630	02100	25	EACH	GROUND MOUNTED SUPPORT, NO. 2 POST
													6.0	630	80100	6.0	SQ FT	SIGN, FLAT SHEET
													6	632	26501	6	EACH	DETECTOR LOOP, AS PER PLAN (A)
													7	632	26501	7	EACH	DETECTOR LOOP, AS PER PLAN (B)
													3	638	10801	3	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN
													915	644	00400	915	FT	CHANNELIZING LINE, 8"
													418	644	00500	418	FT	STOP LINE
													1,750	644	00601	1,750	FT	CROSSWALK LINE, AS PER PLAN
													255	644	00700	255	FT	TRANSVERSE/DIAGONAL LINE
													105	644	00900	105	SQ FT	ISLAND MARKING
													20	644	01300	20	EACH	LANE ARROW
													7	644	01410	7	EACH	WORD ON PAVEMENT, 96°
													38	644	20800	38	FT	YIELD LINE
													1.64	648	00300	1.64	MILE	CENTER LINE

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LOCATION TOTALS								FUNDING PARTICIPATION							ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET
Loc. 1a	Loc. 1b	Loc. 1c	Loc. 2	Loc. 3a	Loc. 3b	Loc. 3c	Loc. 4	"01/NHS/PV"	"02/NHS/PV/LANC"	"03/STR/PV"	"04/NHS/OT/LANC"	"05/NHS/OT/LANC"	"06/S<2/PV/LANC"	"07/NHS/PV/LANC"						
		7,619							284					7,335	202	23000	7,619	SQ YD	PAVEMENT REMOVED	
652	1,576	7,405	3,960	3,101	544	3,051	2,197	2,120	13,557	652			6,157		202	23500	22,486	SQ YD	WEARING COURSE REMOVED	
		619							619						202	23501	619	SQ YD	WEARING COURSE REMOVED, AS PER PLAN	2
		2,173	1,068							448		3,689			202	30000	3,689	SQ FT	WALK REMOVED	
		112	32									144			202	30001	144	SQ FT	WALK REMOVED, AS PER PLAN (A)	35
		1,428										1,428			202	30001	1,428	SQ FT	WALK REMOVED, AS PER PLAN (B)	3
	50	1,493	504				268	50				2,365			202	32000	2,365	FT	CURB REMOVED	
		6										6			202	32500	6	FT	CURB AND GUTTER REMOVED	
												5,441			202	98400	5,441	SQ FT	REMOVAL MISC.: INLAID BRICK REMOVED	20
		49										49			203	20001	49	CU YD	EMBANKMENT, AS PER PLAN	3
		7,619							284					7,335	204	10000	7,619	SQ YD	SUBGRADE COMPACTION	
		30							30						204	13000	30	CU YD	EXCAVATION OF SUBGRADE	
		30							30						204	30050	30	CU YD	GRANULAR MATERIAL, TYPE F	
		4												4	204	45000	4	HOUR	PROOF ROLLING	
		50							50						204	50000	50	SQ YD	GEOTEXTILE FABRIC	
2.42	2.36	3.74	1.48	1.51	1.42	0.52		3.78	5.77	2.42			1.48		209	60500	13.45	MILE	LINEAR GRADING	
2.42	2.33	3.77	1.48	1.49	1.42	0.52		3.75	5.78	2.42			1.48		209	72051	13.43	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	2
		463	186				40	37				503			253	02001	726	CU YD	PAVEMENT REPAIR, AS PER PLAN	2
26,813	19,083	146,926	45,069	13,750	12,369	22,454	29,642	31,452	183,130	26,813			74,711		254	01000	316,106	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
		100	25				25	25				125		50	255	10111	175	SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC FS, AS PER PLAN	3
		48							48						302	46000	48	CU YD	ASPHALT CONCRETE BASE, PG64-22	
		612												612	304	20000	612	CU YD	AGGREGATE BASE	
		150							150						407	10000	150	GALLON	TACK COAT	
		47							47						407	13900	47	GALLON	TACK COAT, 702.13	
2,055	1,537	11,553	3,631	1,258	955	1,910	2,390	2,492	14,721	2,055			6,021		407	20500	25,289	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK	3
1,371	1,005	7,703	2,422	798	638	1,275	1,594	1,643	9,776	1,371			4,016		407	20510	16,806	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE	3
1,138	1,037	1,534	699	706	670	245		1,707	2,485	1,138			699		408	10001	6,029	GALLON	PRIME COAT, AS PER PLAN	
	58	3,212						58	3,212						442	10000	3,270	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)	
	58	3,177						58	3,177						442	20200	3,235	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448)	
1,337	931	3,788	2,366	775	623	1,240	1,549	1,554	5,803	1,337			3,915		448	46050	12,609	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	
958	668	2,496	1,600	524	448	788	1,030	1,116	3,808	958			2,630		448	47004	8,512	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG76-22M	
20	35	248	117	76	13	105	78	48	429	20			195		448	47020	692	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	
		70							70						448	90000	70	CU YD	ASPHALT CONCRETE, MISC.: SPOT TREATMENT	
		7,335												7,335	452	14010	7,335	SQ YD	10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1	
60	84	398					152	84	398	60			152		516	31011	694	FT	2" DEEP JOINT SEALER, AS PER PLAN	3
												388			516	13201	388	SQ FT	1/2" PREFORMED EXPANSION JOINT FILLER, AS PER PLAN . AS PER PLAN	20
		2,556	780				224					3,560			608	10000	3,560	SQ FT	4" CONCRETE WALK	
		6										6			609	12000	6	FT	COMBINATION CURB AND GUTTER, TYPE 2	
	50	1,836	504				268	50				2,708			609	26000	2,708	FT	CURB, TYPE 6	
		8						2				8		2	611	98630	10	EACH	CATCH BASIN ADJUSTED TO GRADE	
		7							7			7			611	98634	7	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	
		2							2			2			611	98635	2	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	12
		20					6	4				26		4	611	99150	30	EACH	INLET ADJUSTED TO GRADE	
		29							29			29			611	99154	29	EACH	INLET RECONSTRUCTED TO GRADE	
		2							2			2			611	99155	2	EACH	INLET RECONSTRUCTED TO GRADE, AS PER PLAN	12
		50	25	2			12	8				64		33	611	99655	97	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	12
		1							1			1			611	99660	1	EACH	MANHOLE RECONSTRUCTED TO GRADE	

GENERAL SUMMARY

FAI-22/ VAR -10.75 / VAR

CALCULATED
JLS
CHECKED
DNM

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LOCATION TOTALS								FUNDING PARTICIPATION							ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET
Loc. 1a	Loc. 1b	Loc. 1c	Loc. 2	Loc. 3a	Loc. 3b	Loc. 3c	Loc. 4	"01/NHS/PV"	"02/NHS/PV/LANC"	"03/STR/PV"	"04/NHS/OT/LANC"	"05/NHS/OT/LANC"	"06/S<2/PV/LANC"	"07/NHS/PV/LANC"						
16	16	320	40	16	16	32	40	32	368	16				80	614	11110	496	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
		LUMP							LUMP						614	12421	LUMP		DETOUR SIGNING, AS PER PLAN	11
14	18		7	13	5			23	13	14				7	614	12460	57	EACH	WORK ZONE MARKING SIGN	
		30							30						614	12600	30	EACH	REPLACEMENT DRUM	
3	3	24	3	2		2	10	3	28	3				13	614	13000	47	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC HIGHWAY	
60		60	15	30			15		90	60				30	614	18401	180	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	9
		0.25							0.25						614	21200	0.25	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I	
2.42	2.34	9.25	4.38	1.51	1.42	2.36	3.00	3.76	13.12	2.42				7.38	614	21400	26.68	MILE	WORK ZONE CENTER LINE, CLASS II	
158	143	219	97	97	83	34		236	350	158				97	617	10101	841	CU YD	COMPACTED AGGREGATE, AS PER PLAN	4
2.42	2.38							2.38		2.42					618	41000	4.80	MILE	EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE)	
106	111							111		106					621	00100	217	EACH	RPM	
106	111			78	86			197	78	106					621	54000	381	EACH	RAISED PAVEMENT MARKER REMOVED	
						25	25		25		60			25	630	02100	110	EACH	GROUND MOUNTED SUPPORT, NO. 2 POST PLAN	
						6.0	6.0		6.0		23.6			6.0	630	80100	35.6	SQ FT	SIGN, FLAT SHEET	
		18	4			5	6		23					10	632	26501	33	EACH	DETECTOR LOOP, AS PER PLAN (A)	5
		47	5	7		9	7		63					12	632	26501	75	EACH	DETECTOR LOOP, AS PER PLAN (B)	5
		35	10			2	3		37					13	638	10801	50	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN JOINTS AND RETAINED MECHANICAL J	12
205		4,696	310	260	245	360	915	245	5,316	205			1,225	644	00400	6,991	FT	CHANNELIZING LINE, 8"		
50	104	1,714	719	257	113	573	418	217	2,544	50			1,137	644	00500	3,948	FT	STOP LINE		
		7,486	4,519			4,079	1,750		11,565				6,269	644	00601	17,834	FT	CROSSWALK LINE, AS PER PLAN	13	
479		742		546	139		255	138	1,288	479			255	644	00700	2,160	FT	TRANSVERSE/DIAGONAL LINE		
67		297		67			105		364	67			105	644	00900	536	SQ FT	ISLAND MARKING		
		3							3						644	01000	3	EACH	RAILROAD SYMBOL MARKING	
			2	2				2	2						644	01110	4	EACH	SCHOOL SYMBOL MARKING, 96"	
2		2,040	780								2,820				644	01200	2,820	FT	PARKING LOT STALL MARKING	
		68	5	3	5	4	20	5	75	2			25	644	01300	107	EACH	LANE ARROW		
		1							1						644	01350	1	EACH	LANE REDUCTION ARROW	
1		31		3	2	3	7	2	37	1			7	644	01410	47	EACH	WORD ON PAVEMENT, 96"		
		167							167						644	01500	167	FT	DOTTED LINE, 4"	
						30	38		30		4				644	01602	4	EACH	BIKE LANE SYMBOL MARKING	
									30				38	644	20800	68	FT	YIELD LINE		
		0.25							0.25						646	10200	0.25	MILE	CENTER LINE	
		810							810						646	10300	810	FT	CHANNELIZING LINE, 8"	
		148							148						646	10400	148	FT	STOP LINE	
		253							253						646	10501	253	FT	CROSSWALK LINE, AS PER PLAN	13
		72							72						646	10600	72	FT	TRANSVERSE/DIAGONAL LINE	
		134							134						646	10800	134	SQ FT	ISLAND MARKING	
		15							15						646	20300	15	EACH	LANE ARROW	
		8							8						646	20410	8	EACH	WORD ON PAVEMENT, 96"	
2.42	2.40	3.82	1.32	1.54	1.42	0.50		3.82	5.86	2.42	3.50		1.32	648	00100	16.92	MILE	EDGE LINE, 4"		
0.17		6.81							6.81	0.17				648	00200	6.98	MILE	LANE LINE, 4"		
1.29	1.20	5.26	2.19	1.04	0.85	1.18	1.64	2.05	7.48	1.29			3.83	648	00300	14.65	MILE	CENTER LINE		
		19,227							19,227						690	12050	19,227	SQ YD	SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL	5
		11	2								13			690	98000	13	EACH	SPECIAL - MISC.: CURB RAMP, TYPE A1		
			3								3			690	98000	3	EACH	SPECIAL - MISC.: CURB RAMP, TYPE A2		
		7	1								8			690	98000	8	EACH	SPECIAL - MISC.: CURB RAMP, TYPE B2		
		1	2								3			690	98000	3	EACH	SPECIAL - MISC.: CURB RAMP, TYPE B3		
		6	2								8			690	98000	8	EACH	SPECIAL - MISC.: CURB RAMP, TYPE D		
		432	320			224					976			690	98200	976	SQ FT	SPECIAL - MISC.: DETECTABLE WARNING		
											5,441			690	98200	5,441	SQ FT	SPECIAL - MISC.: DECORATIVE CROSSWALK	20	
												3,000		690	98800	3,000	TON	SPECIAL - MISC.: ROAD HAULING RACP	3	
									9				3	633	99000	12	EACH	CONTROLLER ITEM, MISC.: VIDEO DETECTION SYSTEM (ALTERNATE BID) (additional cost to alt. bid will be "100% City")		
								8%	65%	7%			20%	103	05000	LUMP		PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND		
								8%	65%	7%			20%	614	11000	LUMP		MAINTAINING TRAFFIC		
								8%	65%	7%			20%	619	16010	11	MONTH	FIELD OFFICE, TYPE B		
								8%	65%	7%			20%	623	10001	LUMP		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	23a	
								8%	65%	7%			20%	624	10000	LUMP		MOBILIZATION		