Standard Drawing Index

City of Columbus, Ohio
Department of Public Service
Division of Design and Construction

Reference Index of Standard Construction Drawings

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2020	Combination Curb & Gutter, Type Special 8"	3/30/2018
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2207	Driveway (Non-Residential) W/Flares, Non-Curbed Roadway (Deleted 12/31/2018)	
2208	Driveway (Non-Residential) W/Radius, Non-Curbed Roadway (Deleted 12/31/2018)	
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2212	Driveway, Right/Left-In & Right-Out	4/30/2018
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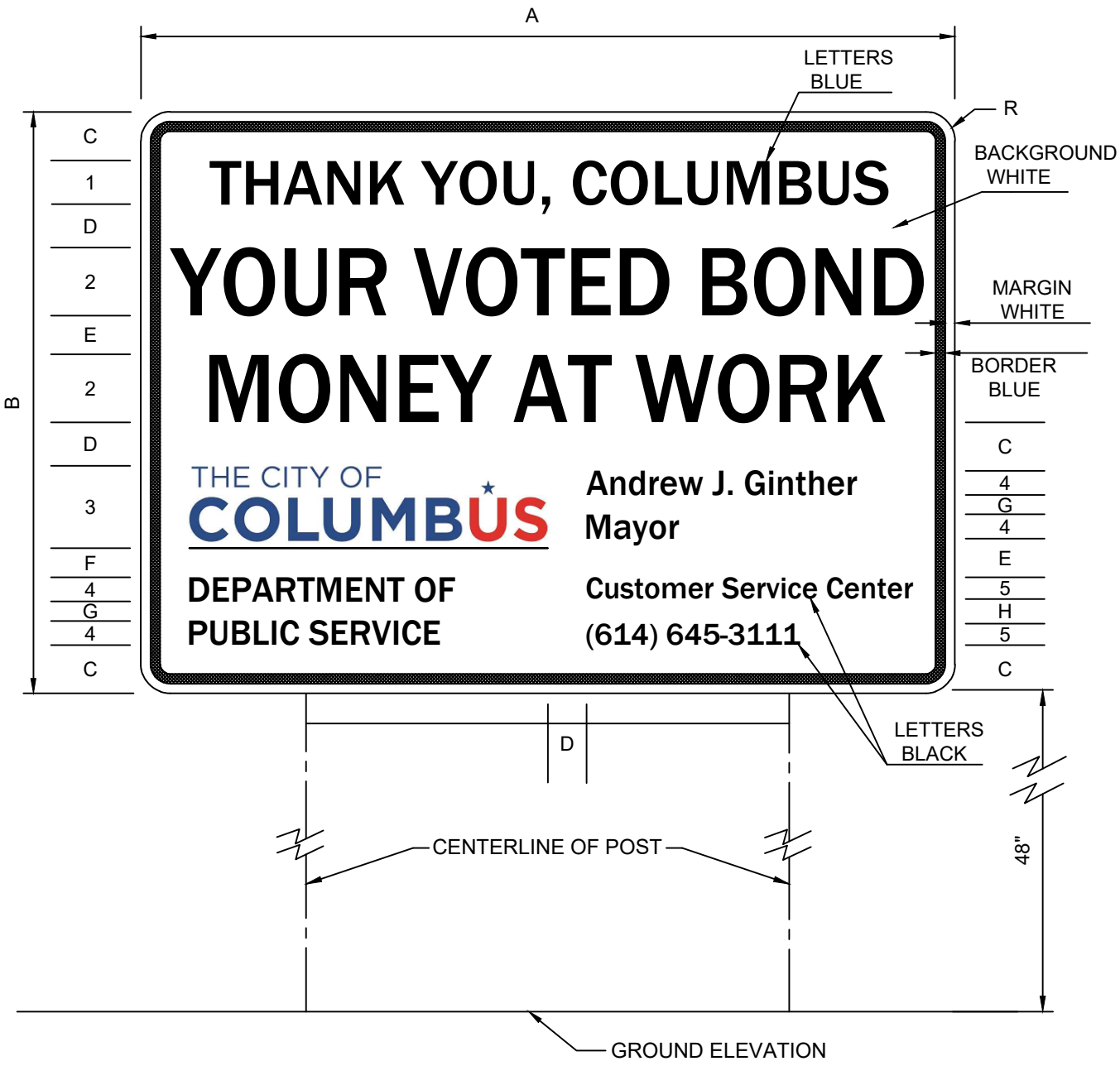
2320	Pipe Roof Drains	4/30/2018
2328	Concrete Steps	4/30/2018
2331	Concrete Median	4/30/2018
2332	Concrete Bus Pad	4/30/2018
2335	Speed Hump	4/30/2018
2337	Intersection Speed Table	4/30/2018
2400	Litter Receptacles	12/31/2018

A	B	LETTERS					C	D	E	F	G	H	R	BORDER	MARGIN	NUMBER OF POSTS	POSTS LENGTH
		1	2	3	4	5											
42"	30"	2-¼" D	3-½" C	4-¼" C	1-¼" C	1-⅛" C	2-½"	2-¼"	2"	1-½"	1"	1-¼"	1-½"	½"	½"	2	13'



METAL SIGNS ARE TO BE MOUNTED ON 2 LB. POSTS.
WOOD SIGNS ARE TO BE MOUNTED ON TWO 4"x4" POSTS.
WOOD SIGNS MAY HAVE SQUARE CORNERS.

YOUR BOND MONEY AT WORK SIGN

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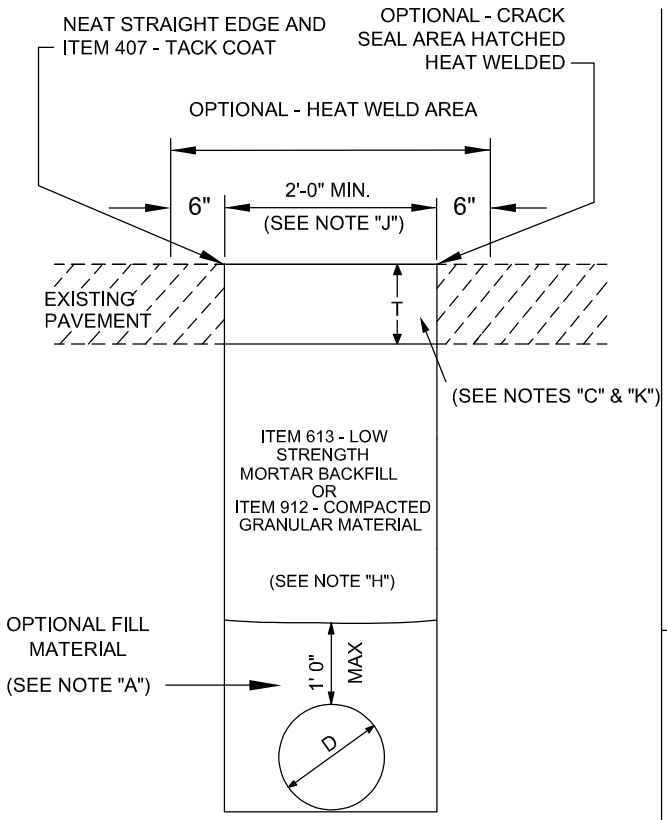
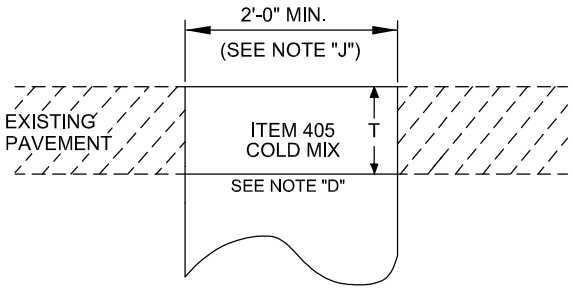


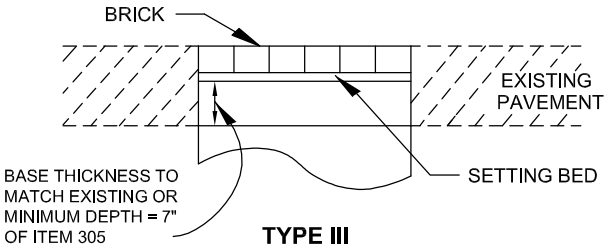
TYPE I

STANDARD FLEXIBLE ASPHALT REPAIR
(SEE NOTES "B" & "C")



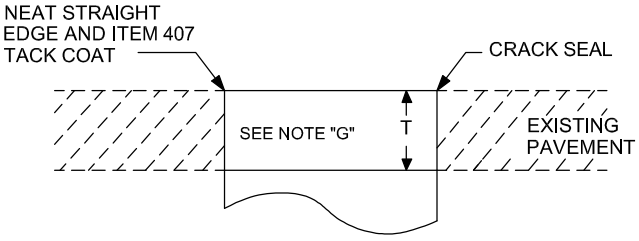
TYPE II

WINTER OPERATIONS FLEXIBLE ASPHALT REPAIR
(SEE NOTE "E")



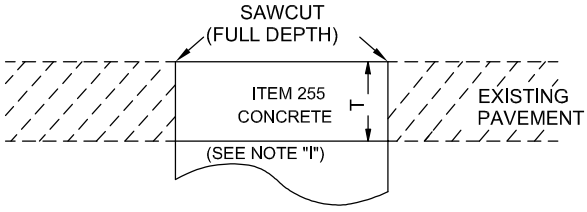
TYPE III

BRICK STREET REPAIR
(SEE NOTE "F")



TYPE IV

ALLEY REPAIR
(SEE NOTE "G")



TYPE V

CONCRETE STREET REPAIR, CONCRETE BASE, CONCRETE BUS PAD OR CONCRETE PANEL REPLACEMENT
(SEE NOTE "I")

BACKFILL FOR ALL TYPES SHALL MEET THE REQUIREMENTS SHOWN IN TYPE I ABOVE.

T: MATCH EXISTING PAVEMENT THICKNESS, HOWEVER, MINIMUM OF 10" ON ALL STREET CUTS AND 6" ON ALL ALLEYS.

PAVEMENT & UTILITY CUT REPAIR STANDARDS

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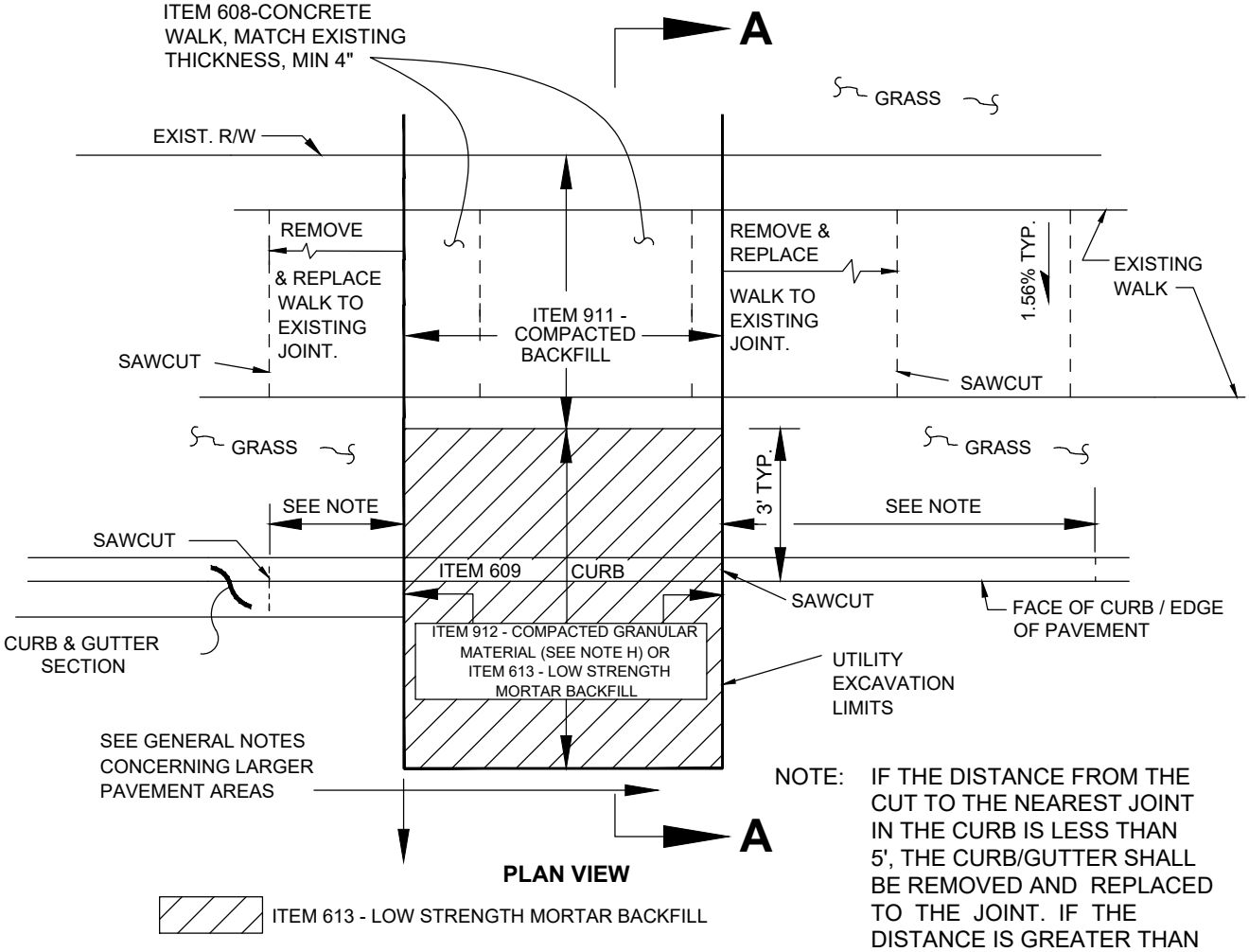
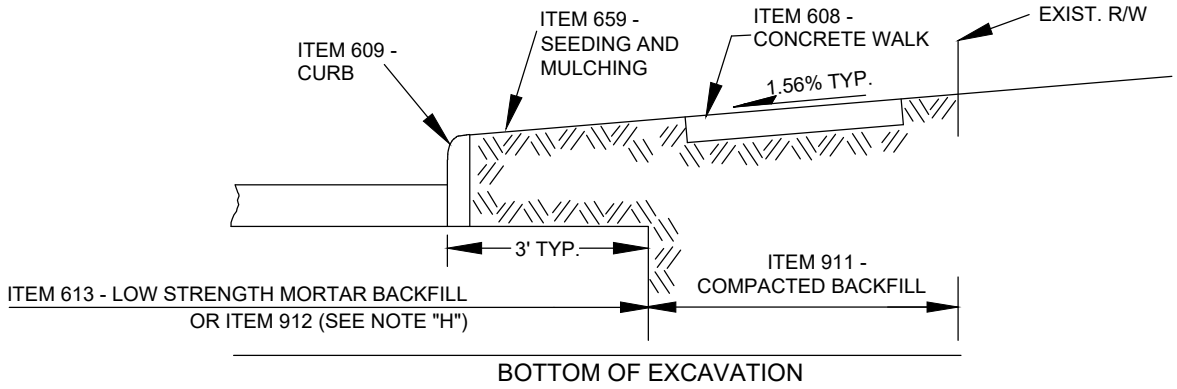
SIDEWALK AND CURB REPAIR DETAILS



NOTE: IF THE DISTANCE FROM THE CUT TO THE NEAREST JOINT IN THE CURB IS LESS THAN 5', THE CURB/GUTTER SHALL BE REMOVED AND REPLACED TO THE JOINT. IF THE DISTANCE IS GREATER THAN 5', THE CURB MAY REMAIN.

SECTION A-A



ALL GRASS AREAS SHALL BE SEEDED IN ACCORDANCE WITH ITEM 659 - SEEDING AND MULCHING.

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GENERAL NOTES

EXCAVATION PERMIT REQUIRED: A CITY OF COLUMBUS STREET EXCAVATION PERMIT IS REQUIRED FOR ALL EXCAVATIONS WITHIN THE PUBLIC RIGHT-OF-WAY, AS SET FORTH BY COLUMBUS CITY CODE, CHAPTER 903 AND ISSUED IN ACCORDANCE WITH PROVISIONS IN THE GENERAL RULES AND REGULATIONS OF THE DEPARTMENT OF PUBLIC SERVICE (DPS).

SCOPE OF WORK

THE CONTRACTOR SHALL FULLY COMPLY WITH THE CITY OF COLUMBUS ADA RULES AND REGULATIONS AND THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, CURRENT EDITION.

THIS WORK SHALL CONSIST OF PAVEMENT REMOVAL, NECESSARY EXCAVATION, AND PAVEMENT REPLACEMENT IN ACCORDANCE WITH THE DETAILS SHOWN HEREIN. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT CITY OF COLUMBUS CONSTRUCTION AND MATERIALS SPECIFICATION (CMSC).

PROCEDURES USED FOR THE PAVEMENT REMOVAL AND REPLACEMENT SHALL NOT CAUSE SPALLING OR CRACKING OF ADJACENT PAVEMENT.

WHEN THE PAVEMENT IS REMOVED AND THE CONTRACTOR IS UNABLE TO COMPLETE THE REQUIRED REPLACEMENT IN TIME FOR IT TO BE OPENED TO TRAFFIC AS INDICATED ON THE PERMIT, THE EXCAVATION SHALL BE FILLED WITH THOROUGHLY COMPACTED ITEM 405 BITUMINOUS COLD MIX WITH A DURABLE SURFACE (OR APPROVED BITUMINOUS MATERIAL) OR PROPERLY PLATED PER CHAPTER 903 AND SHEETS 12 AND 13 OF THIS STANDARD DRAWING. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THESE TEMPORARY MEASURES WHILE THEY ARE IN SERVICE. THE COST OF PLACING, MAINTAINING, REMOVING AND DISPOSING OF THE TEMPORARY PATCHES OR PLATES WILL BE AT THE CONTRACTOR'S EXPENSE.

WHEN ITEM 613 LOW STRENGTH MORTAR BACKFILL (LSMB) IS USED AS A BACKFILL, NO PAVEMENT SHALL BE PLACED UNTIL BLEED WATER HAS BEEN EVAPORATED FROM THE LSMB SURFACE OR HAS BEEN DRAINED OR REMOVED FROM THE SURFACE. ITEM 613 LSMB IS NOT PERMITTED AS A TEMPORARY DRIVING SURFACE OR WITHIN THE DEPTH OF THE PAVEMENT REPAIR. LSMB SHALL NOT BE PLACED HIGHER THAN THE SUBGRADE ELEVATION AND NOT EXTEND INTO THE PAVEMENT BUILD-UP.

THE PAVEMENT REPAIR SHALL BE PERFORMED BY THE CONTRACTOR OR PERMITTEE IN ACCORDANCE WITH CITY SPECIFICATIONS. IF DESIRED, ANY OR ALL OF THIS WORK CAN BE PERFORMED BY THE CITY OF COLUMBUS. THE CITY SHALL COLLECT APPROPRIATE FEES AT THE TIME THE PERMIT IS ISSUED FOR SAID WORK. PAVEMENT RESTORATION MAY TRIGGER REQUIRED ADA IMPROVEMENTS PER CITY OF COLUMBUS ADA RULES AND REGULATIONS.

RESTORATION OF ANY SIDEWALK, CURB, STREET PAVEMENT (INCLUDING CRACK SEALING OR HEAT WELDING), ETC., SHALL OCCUR NO LATER THAN 30 DAYS AFTER CONCLUSION OF ANY UTILITY REPAIR OR INSTALLATION ACTIVITY. CONSTRUCTION ACTIVITY COMPLETED DECEMBER THROUGH APRIL SHALL BE RESOLVED NO LATER THAN MAY 31ST. ADDITIONAL PERMITS SHALL NOT BE ISSUED UNTIL THE VIOLATIONS ARE CORRECTED TO THE SATISFACTION OF THE DEPARTMENT OF PUBLIC SERVICE. IN ADDITION, EACH VIOLATION MAY BE ENFORCED IN ACCORDANCE WITH SECTION 903.99 OF THE COLUMBUS CITY CODE.

CITY CHAPTER 903 - SECTION 9 - NEW PAVEMENT OR REPAVEMENT

A THREE (3) YEAR MORATORIUM SHALL BE ENFORCED FOR ALL NEW PAVEMENT OR REPAVEMENT/RESURFACING. **NO PERMIT SHALL BE GRANTED FOR THE PURPOSE OF OPENING SUCH PAVEMENT FOR A PERIOD OF NO LESS THAN THREE (3) YEARS AFTER COMPLETION**, EXCEPT FOR THE PURPOSE OF REPAIRING LEAKING PIPES OR WORK DEEMED NECESSARY BY THE DIRECTOR OF PUBLIC SERVICE, CITY ENGINEER OR DESIGNEE. EMERGENCY REPAIRS OR PAVEMENT OPENINGS WITHIN THE THREE (3) YEAR MORATORIUM SHALL HAVE ADDITIONAL AND SPECIFIC REQUIREMENTS BEYOND THE MINIMUM REQUIREMENT OF STD DWG 1441.

PAVEMENT & UTILITY CUT REPAIR STANDARDS

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SCOPE OF WORK (CONTINUED FROM PREVIOUS SHEET)

SPECIAL IMPROVED STREETS

SPECIAL IMPROVED STREETS, AS APPROVED BY THE DIRECTOR OF PUBLIC SERVICE, CITY ENGINEER OR DESIGNEE SHALL HAVE FIVE (5) YEAR MORATORIUM. NO PERMIT SHALL BE GRANTED FOR THE PURPOSE TO MAKE ANY OPENING ON ANY HARD SURFACE AREAS SUCH AS PAVEMENT, SIDEWALK, CURB, ETC., WITHIN THE RIGHT OF WAY OF SPECIAL IMPROVED STREET FOR A PERIOD OF NO LESS THAN FIVE (5) YEARS AFTER COMPLETION OF SUCH HARD SURFACE AREA. EMERGENCY REPAIRS OR PAVEMENT OPENINGS WITHIN THE FIVE (5) MORATORIUM SHALL HAVE ADDITIONAL AND SPECIFIC REQUIREMENTS BEYOND THE MINIMUM REQUIREMENTS OF STD DWG 1441 AND APPROVED ONLY BY THE DIRECTOR OF THE PUBLIC SERVICE AND CITY ENGINEER OR DESIGNEE.

CURB RAMP INSTALLATION

ALL CURB RAMPS SHALL BE INSTALLED PER STANDARD DRAWINGS 2300, 2319 AND DPS ADA RULES AND REGULATIONS.

SPECIAL PAVEMENT, BASE, AND STORMWATER BMPS

WHEN PAVEMENT CUTS OR REPAIRS IMPACT NON-CONVENTIONAL PAVEMENT BUILDUPS, THE CITY ENGINEER OR DESIGNEE WILL PROVIDE DIRECTION ON THE REQUIRED RESTORATION. IF THE NON-CONVENTIONAL PAVEMENT IS NOT IDENTIFIED IN THE DESIGN STAGE, IT IS THE PERMIT HOLDER'S RESPONSIBILITY TO BRING THIS TO THE ATTENTION OF THE DEPARTMENT OF PUBLIC SERVICE. SOME EXAMPLES OF NON-CONVENTIONAL PAVEMENT INCLUDE, FABRICS AND GRIDS USED TO STABILIZE SUBGRADE AND PAVEMENT, SPECIALITY BACKFILL AND SOIL SUPPORT STRUCTURES, PERMEABLE PAVEMENT AND STORMWATER BEST MANAGEMENT PRACTICES (BMPS).

TRAFFIC CONTROL

WHEN PAVEMENT CUTS OR REPAIRS REMOVE EXISTING STRIPING OR OTHERWISE RENDER STRIPING UNSERVICEABLE AS DETERMINED BY THE ENGINEER, TEMPORARY PAVEMENT MARKINGS PER CMSC 614 SHALL APPLY. TEMPORARY CLASS II MARKINGS SHALL BE PLACED IMMEDIATELY. CLASS II MARKINGS ARE ONLY FOR LANE LINES, CENTERLINES AND GORE MARKINGS AND PLACED FOR A MAXIMUM OF 14 DAYS. ALL TEMPORARY MARKINGS PLACED FOR A PERIOD LONGER THAN 14 DAYS BUT LESS THAN 30 DAYS SHALL BE ITEM 642 CLASS III MARKINGS. PERMANENT THERMOPLASTIC OR SPRAY THERMOPLASTIC SHALL BE PLACED WITHIN 30 DAYS ON A SURFACE COURSE. WHEN THERMOPLASTIC OR SPRAY THERMOPLASTIC IS TO BE INSTALLED, TEMPORARY MARKINGS SHALL BE CLASS III. ALL OVER WINTER TEMPORARY MARKINGS SHALL BE TYPE 1. ALL TEMPORARY PAVEMENT MARKINGS ON CONCRETE SHALL BE AS PER 740.06, TYPE I. PERMANENT PAVEMENT MARKINGS ON CONCRETE SHALL MATCH THE EXISTING PAVEMENT MARKINGS DIRECTED BY THE ENGINEER.

SPECIAL NOTES

NOTE 'A' : LOW STRENGTH MORTAR BACKFILL (LSMB)
WHEN USING LOW STRENGTH MORTAR BACKFILL (LSMB), THE OPTIONAL FILL AREA OVER THE CONDUIT MAY BE BACKFILLED WITH SAND, GRANULAR MATERIAL, OR OTHER SUITABLE 912 MATERIAL, FOR A DISTANCE NOT TO EXCEED 1 FT. A PROTECTIVE BARRIER OF VISQUEEN OR SIMILAR MATERIAL IS PERMITTED.

NOTE 'B' : TYPE 1 PAVEMENT REPAIR SEALING
FOR TYPE I PAVEMENT REPAIR SEALING OPTIONS - THE FOLLOWING METHODS ARE PERMITTED:

1. CRACK SEALING METHOD: SEAL THE PERIMETER SURFACE OF THE REPAIRED AREA BY APPLYING A NOMINAL 4 INCH STRIP OF APPROVED ITEM 423 - CRACK SEALING, TYPE II OR III.

2. HEAT WELD METHOD: FOR PAVEMENT REPAIR LOCATIONS, THE AREA TO BE HEAT WELDED IS TO INCLUDE THE CUT AND EXTEND FOR 6 INCHES BEYOND EACH SIDE OF THE CUT FOR A NOMINAL DEPTH OF 2 INCHES.

NOTE 'C' : TYPE 1 PAVEMENT REPAIR RESURFACING (SEE SHEETS 9-11)
FOR TYPE I PAVEMENT REPAIR APPLICATIONS, THE FOLLOWING METHODS ARE PERMITTED:

1. IF LANE WIDTH TO BE RESURFACED: USE ITEM 441 ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, (BINDER MATCHING SURFACE COURSE) PLACED IN LIFTS NOT EXCEEDING 3 INCHES TO REPAIR PAVEMENT TO THE SURFACE. DURING THE LATER MILL AND ASPHALT OVERLAY OPERATION, USE ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1.
2. IF NO LANE WIDTH RESURFACING: USE ITEM 441 ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PLACED IN LIFTS NOT EXCEEDING 3 INCHES AND ITEM 441 ASPHALT CONCRETE, SURFACE COURSE, TYPE 1 PLACED AT A MAXIMUM 1.5 INCH LIFT THICKNESS. THE INTERMEDIATE COURSE MATERIAL IS NOT PERMITTED AS THE FINAL SURFACE COURSE.

THE ASPHALT BINDER FOR INTERMEDIATE AND SURFACE COURSE ASPHALT SHALL BE PG 70-22 ON ARTERIAL ROADWAYS, BUS ROUTES, AND WHERE SPECIFIED BY THE PERMIT OFFICE. ALL OTHER ROADS SHALL BE PG 64-22.

TRENCHES THAT REQUIRE FULL LANE RESURFACING SHALL INCLUDE FULL LANE RESURFACING ON ALL CONNECTING TRENCHES AND ASSOCIATED VALVE OR CASTING WORK AREAS ALONG ADJACENT STREETS (UTILITY SERVICE REPAIRS SHALL BE AS PER SHEETS 9, 10 AND 11.) REGARDLESS OF THE LENGTH OF THE CONNECTING TRENCH.

WHEN AN EXCAVATION EXCEEDS 100 FT IN LENGTH, THE REPAIR SHALL INCLUDE ITEM 254 PLANING OF A FULL LANE WIDTH (OR ANY OTHER LANE WIDTH AS DIRECTED BY THE DEPARTMENT OF PUBLIC SERVICE) TO A DEPTH OF 1- 1/2 INCHES FOR THE ENTIRE LENGTH OF THE EXCAVATION. THE RESURFACING SHALL NOT INTRODUCE ANY LONGITUDINAL PAVEMENT JOINTS. WHEN RESURFACING OUTSIDE LANES, RESURFACING SHALL EXTEND TO THE FACE OF CURB OR EDGE OF PAVEMENT. IF PAVEMENT PLANING DOES NOT PROVIDE A UNIFORM PLANED SURFACE DUE TO THE EXISTING PAVEMENT CONDITION, THE DEPTH OF THE PAVEMENT REMOVAL AND RESURFACING SHALL BE ADJUSTED ACCORDINGLY. WHERE THE PROPOSED RESURFACING IS IN CLOSE PROXIMITY TO AN EXISTING LONGITUDINAL JOINT, THE RESURFACING SHALL BE EXTENDED TO MEET OR OVERLAP THAT JOINT. WHEN RESURFACING ADJOINS AN AREA WITH EXISTING OVERLAID GUTTER, THE RESURFACING SHALL EXTEND THE FULL LANE WIDTH TO THE EXISTING PAVEMENT EDGE AT THE FACE OF CURB. THE PLANED AREA SHALL BE TACKED USING ITEM 407.02 MATERIAL PRIOR TO PLACING AND COMPACTING APPROVED ASPHALT CONCRETE WITH A PAVER IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS. ITEM 423 -CRACK SEALING, TYPE II OR III SHALL BE APPLIED TO EXPOSED JOINTS ONCE THE PAVING OPERATION HAS BEEN COMPLETED.

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WHEN AN EXCAVATION CROSSES LANES, ALL LANES AFFECTED SHALL REQUIRE PLANING AND RESURFACING AS DESCRIBED ABOVE. THIS WORK SHALL INCLUDE ALL OF THE AFFECTED PAVEMENT AREA. WHEN EXCAVATION WORK FOR LATERALS CROSS LANES AT A FREQUENCY OF 2 OR MORE TRENCHES WITHIN 100 FT OF ROADWAY, THE REPAIR SHALL INCLUDE THE RESURFACING OF A FULL LANE WIDTH AS DESCRIBED ABOVE FOR THE AFFECTED LANES EXTENDING A MINIMUM OF 2 FT BEYOND THE LATERAL EXCAVATIONS LOCATED FARTHEST APART.

FULL LANE WIDTH RESURFACING OUTSIDE TRAVEL LANES SHALL EXTEND TO THE EDGE OF PAVEMENT FACE OF CURB UNLESS A SHOULDER WIDER THAN 4 FEET IS SEPARATED BY AN EXISTING LONGITUDINAL JOINT.

WHEN 2 OR MORE PAVEMENT REPAIRS ARE LOCATED WITHIN 100 FT OF EACH OTHER IN THE SAME LANE, THE REPAIR SHALL INCLUDE THE RESURFACING OF A FULL LANE WIDTH AS DESCRIBED ABOVE OF THE AFFECTED LANES EXTENDING A MINIMUM OF 2 FT BEYOND THE PAVEMENT REPAIRS LOCATED FARTHEST APART.

IF APPROVED BY THE CITY OF COLUMBUS, WHEN A PAVEMENT REPAIR AREA IS GREATER THAN 5 FT IN WIDTH AND/OR GREATER THAN 100 FT IN LENGTH, THE PAVEMENT REPAIR SECTION MAY CONFORM TO 3 INCHES OF ITEM 441 ASPHALT CONCRETE ON 7 INCHES OF ITEM 301 ASPHALT CONCRETE BASE (PLACED IN 2 LIFTS). LANE WIDTH RESURFACING REQUIREMENTS STILL APPLY. THIS OPTION MUST BE NOTED ON THE PERMIT APPLICATION AND APPROVED BY THE CITY OF COLUMBUS.

NOTE 'D' : TYPE II BITUMINOUS COLD MIX PLACEMENT

COLD MIX SHALL BE ITEM 405 BITUMINOUS COLD MIX OR OTHER COLD MIX APPROVED BY THE CITY OF COLUMBUS. IN LIEU OF COLD MIX, THE CONTRACTOR MAY USE STOCKPILED ITEM 441 ASPHALT CONCRETE AND REHEAT IT TO PLACE IN CUT AS TEMPORARY PAVEMENT REPAIR. TYPE II PAVEMENT REPLACEMENT SHALL CONSIST OF FULL DEPTH ITEM 405 COLD MIX FOR SMALL EXCAVATIONS.

NOTE 'E' : TYPE II TEMPORARY COLD MIX PLACEMENT

THE TEMPORARY COLD MIX IS TO BE REPLACED WITH ITEM 441 ASPHALT CONCRETE FOLLOWING PAVEMENT REPAIR PROCEDURES. THIS WORK SHALL BE PERFORMED AS SOON AS ASPHALT IS AVAILABLE.

NOTE 'F' : TYPE III REPAIR OF BRICK STREETS

1. THE CITY OF COLUMBUS MAINTAINS TWO TYPES OF BRICK STREETS: 1) HISTORICAL BRICK STREETS; AND 2) NEWER STYLE ROADWAY PAVER STREETS THAT COMPLY WITH SUPPLEMENTAL SPECIFICATION 1524. WHEN EXCAVATING AND REPAIRING BRICK STREETS, THE MATERIAL USED FOR REPLACEMENT SHALL MATCH THE EXISTING.
2. BRICKS OR PAVERS REMOVED FROM A REPAIR AREA SHALL BE STORED IN A SAFE PLACE BY THE CONTRACTOR FOR REUSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY BRICKS OR PAVERS THAT ARE STOLEN OR DAMAGED, AT NO ADDITIONAL COST TO THE CITY.
3. IF BRICKS OR PAVERS ARE SUPPLIED BY THE CONTRACTOR, THEY MUST CLOSELY MATCH THE EXISTING BRICKS OR PAVERS AND FIRST BE APPROVED BY THE CITY BEFORE THEY ARE USED. SEE THE DEPARTMENT OF PUBLIC SERVICE APPROVED PRODUCERS / PRODUCTS LISTS THAT CAN BE FOUND AT THE "DOCUMENT LIBRARY ON DEPARTMENT OF PUBLIC SERVICE WEBSITE"
4. SAW CUTTING: ALL PARTIAL BRICKS SHALL BE SAWCUT. FURTHER, NO BRICK WILL BE PERMITTED TO BE CUT, FOR REPLACEMENT, TO A LENGTH LESS THAN 1/2 ITS ORIGINAL LENGTH. THIS MAY REQUIRE SAW CUTTING OF ADJACENT UNDISTURBED BRICK(S).
5. DURING REMOVAL OF THE EXISTING BASE MATERIAL, IT SHALL BE CUT BACK TO AS NEARLY VERTICAL AS POSSIBLE. IF SHEARING OF THE ADJACENT BASE RESULTS, THE CONTRACTOR SHALL REMOVE ADDITIONAL BASE MATERIAL UNTIL A VERTICAL FACE IS ACHIEVED.

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SPECIAL NOTES

6. DURING INSTALLATION, THE BRICK IS TO BE RESET IN REASONABLY CLOSE CONFORMITY TO THE PATTERN OF THE EXISTING BRICK PAVEMENT ON A SETTING BED OVER ITEM 305 CONCRETE BASE. THE SETTING BED FOR HISTORICAL BRICK STREETS SHALL CONSIST OF 1 INCH OF SAND; WHEREAS, 3/4-INCH BITUMINOUS SETTING BED FOR NEWER STYLE ROADWAY PAVERS. THE CONCRETE BASE THICKNESS SHALL MATCH THE EXISTING BASE OR A MINIMUM OF 7 INCHES.

6A. HISTORICAL BRICKS WITHOUT SPACING LUGS: THE MAXIMUM WIDTH OF A BRICK JOINT SHALL BE 1/2 INCH. THIS RESTRICTION SHALL ALSO APPLY TO THE JOINT FORMED ADJACENT TO THE PERIMETER OF A REPAIR AREA, WHERE THE ROWS MAY NOT BE PARALLEL TO ONE ANOTHER. ALL JOINTS SHALL BE FILLED WITH POLYMERIC SAND FROM THE APPROVED MATERIALS LIST FOLLOWING MANUFACTURER'S INSTRUCTIONS. THIS MAY REQUIRE MORE THAN ONE APPLICATION. FURTHER, MECHANICAL VIBRATION WILL BE REQUIRED FOR CONSOLIDATION OF DRY MORTAR MIX.

6B. NEWER STYLE ROADWAY PAVERS: INSTALLATION AND MATERIALS SHALL MEET WITH THE REQUIREMENTS OF COLUMBUS SUPPLEMENTAL SPECIFICATION 1524.

SPECIAL NOTES

NOTE 'G' : **TYPE IV ALLEY REPAIR**

FOR ALLEY REPAIRS, THE PAVEMENT REPLACEMENT SHALL CONFORM TO THE TYPE AND THICKNESS OF THE EXISTING PAVEMENT. CHIP AND SEAL TYPE ALLEYS SHALL REQUIRE MATCHING THE EXISTING THICKNESS OF PAVEMENT WITH THE APPROPRIATE COMBINATION OF MATERIALS BASED ON THE SIZE OF THE EXCAVATION. THE MINIMUM PAVEMENT THICKNESS SHALL CONSIST OF 6 INCHES OF ITEM 441 ASPHALT CONCRETE. FINISHED CONCRETE PAVEMENT IS NOT PERMITTED. MATERIALS USED SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT CMSC.

IF MORE THAN 1/3 OF THE WIDTH OF AN ALLEY IS REMOVED, THE PAVEMENT SHALL BE REPLACED AS PER TYPE 1 AND THEN OVERLAYED OVER THE TOTAL WIDTH OF PAVEMENT AND LENGTH OF TRENCH.

NOTE 'H' : **ITEM 912 - COMPACTED GRANULAR MATERIAL**

THIS METHOD OF BACKFILL CAN ONLY BE USED WITH FULL TIME CITY INSPECTION. AN INSPECTION FEE MUST BE POSTED WHEN THE PERMIT IS ISSUED.

NOTE 'I' : **CONCRETE BASE OR FULL DEPTH CONCRETE PAVEMENT**

FULL DEPTH CONCRETE PAVEMENT

IF THE UTILITY TRENCH CUT IS WITHIN 6 FT OF A TRANSVERSE OR LONGITUDINAL JOINT, THE LIMITS OF THE REPAIR SHALL EXTEND TO THE JOINT. THIS MAY REQUIRE THE ENTIRE PANEL TO BE REPLACED. AT A MINIMUM, THE LIMITS OF THE CONCRETE REPAIR SHALL EXTEND 1 FT BEYOND THE LIMITS OF THE TRENCH.

IF MAINTENANCE OF TRAFFIC REQUIREMENTS ALLOW FOR SUFFICIENT CURING TIME SO THAT FAST SETTING CONCRETE IS NOT NEEDED, STANDARD CONCRETE BASE OR FULL DEPTH CONCRETE PAVEMENT MAY BE PLACED AS PER CMSC ITEM 255. THIS OPTION MUST BE NOTED ON THE PERMIT APPLICATION AND APPROVED BY THE CITY OF COLUMBUS. THE ENTIRE IMPACTED CONCRETE PANEL SHALL BE REPLACED WHEN THE UTILITY CUT IS LOCATED IN THE DOWNTOWN BUSINESS DISTRICT.

PAVEMENT WITH A CONCRETE BASE THE NEW CONCRETE BASE THICKNESS SHALL MATCH THE EXISTING (7 INCHES MINIMUM) AND IT SHALL BE PLACED TO THE LEVEL OF THE ADJACENT CONCRETE BASE WITH

1-1/2 INCHES OF ITEM 441 ASPHALT CONCRETE OVERLAY. LANE WIDTH RESURFACING REQUIREMENTS OF TYPE 1 STILL APPLY.

NOTE 'J' : **MINIMUM TRENCH RESTORATION WIDTH**

THE TRENCH WIDTH FOR SMALL PIPES AND CONDUITS SHALL BE OF SUFFICIENT WIDTH TO ALLOW FOR THE PROPER PLACEMENT OF THE BACKFILL MATERIAL. THE PAVEMENT PORTION OF THE TRENCH SHALL BE A MINIMUM OF 2 FT IN WIDTH. THIS IS TO ALLOW FOR THE PROPER COMPACTION OF THE ASPHALT PAVEMENT. IF THE TRENCH FOR PLACING CONDUIT IS NARROWER THAN 2 FT THEN THE PAVEMENT PORTION SHALL BE CUT BACK TO PROVIDE THE 2 FT MINIMUM FOR PAVING OPERATIONS.

NOTE 'K' : **TEMPORARY CONCRETE PAVEMENT**

CONCRETE MAY BE USED AS A PAVEMENT REPAIR OPTION AND A TEMPORARY PAVEMENT SURFACE FOR TYPE 1 PAVEMENT REPAIR IF APPROVED BY THE CITY. THE CONCRETE SHALL BE PLACED PER CMSC ITEM 255 AND FOLLOW THE REQUIREMENTS OF TYPE V PAVEMENT REPAIR. 1-1/2 INCHES OF ITEM 441 ASPHALT OVERLAY WILL BE REQUIRED OVER THE CONCRETE WHEN WORK IS COMPLETED. THIS OPTION MUST BE NOTED ON THE PERMIT APPLICATION APPROVED BY THE CITY OF COLUMBUS.

NOTE 'L' : **SURFACE REPAIR SHAPE** (SEE SHEET 11)

THE SURFACE REPAIR OF ALL IRREGULAR-SHAPED EXCAVATIONS SHALL ALWAYS BE A RECTANGLE WITH PARALLEL SIDES THAT ARE PERPENDICULAR TO THE DIRECTION OF TRAVEL OF THE ROADWAY.

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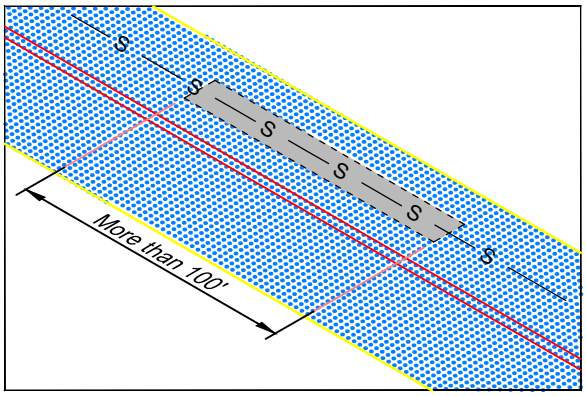
ACCEPTABLE UTILITY CUT REPAIRS

EXCAVATION EXCEEDING 100' IN LENGTH LOCATED WITHIN LANE

WHEN AN EXCAVATION EXCEEDS 100 FT IN LENGTH, THE REPAIR SHALL INCLUDE ITEM 254 PAVEMENT PLANING OF A FULL LANE WIDTH (OR ANY OTHER LANE WIDTH AS DIRECTED BY THE DEPARTMENT OF PUBLIC SERVICE) TO A DEPTH OF 1-1/2 INCHES FOR THE ENTIRE LENGTH OF THE EXCAVATION. THE PLANED AREA SHALL BE THOROUGHLY CLEANED AND DRY, THEN TACKED USING ITEM 407 TACK COAT MATERIAL PRIOR TO PLACING AND COMPACTING APPROVED ASPHALT CONCRETE WITH A PAVER IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS. ITEM 423 CRACK SEALING, TYPE II OR III, SHALL BE APPLIED TO EXPOSED JOINTS ONCE THE PAVING OPERATION HAS BEEN COMPLETED.

SEE NOTE "C"

NOT ACCEPTABLE



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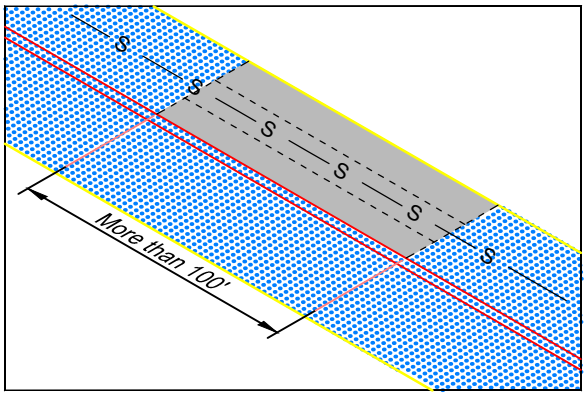


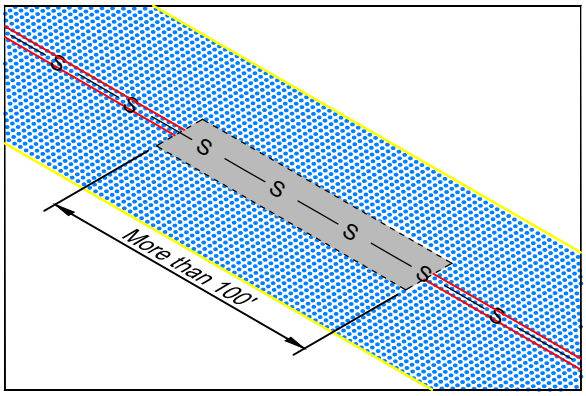
FOR AN EXCAVATION IN A SINGLE LANE, PERFORM A FULL-LANE-WIDTH PLANE AND REPAIR.

EXCAVATION EXCEEDING 100' IN LENGTH BETWEEN OR CROSSING LANES

WHEN AN EXCAVATION CROSSES LANES, ALL AFFECTED LANES SHALL REQUIRE PLANING AND RESURFACING AS DESCRIBED ABOVE. THIS WORK SHALL INCLUDE ALL OF THE PAVEMENT AREA WITHIN THE AFFECTED LANES FOR THE LIMITS OF THE EXCAVATION.

SEE NOTE "C"

NOT ACCEPTABLE



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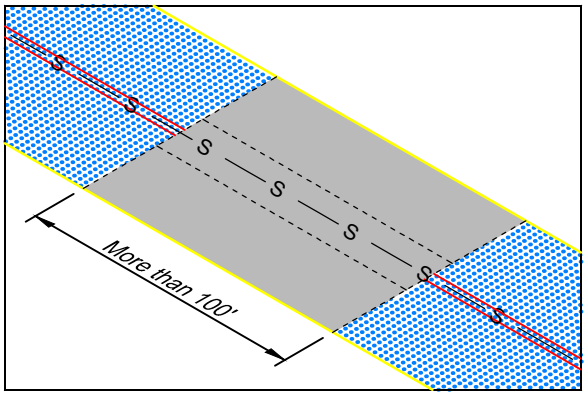

FOR AN EXCAVATION IN MULTIPLE LANES, PERFORM A FULL-LANE-WIDTH PLANE AND REPAIR FOR ALL IMPACTED LANES.

LEGEND

EXISTING PAVEMENT

NEW PAVEMENT REPAIR

NOTE:
EXCAVATIONS ARE CONCEPTUAL ONLY. SEE DETAILED CROSS SECTION AND PROFILE SHEETS FOR CONSTRUCTION PROCEDURES AND WIDTHS.

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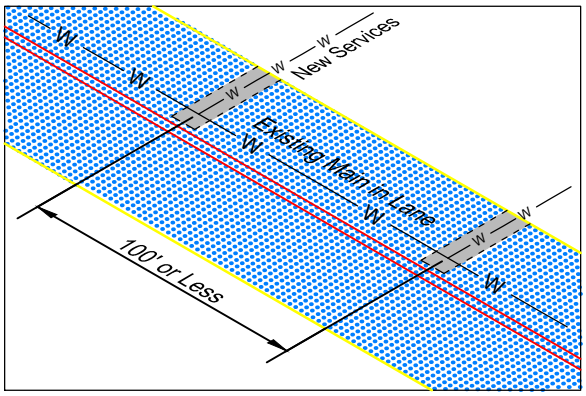
ACCEPTABLE UTILITY CUT REPAIRS

UTILITY EXCAVATIONS CROSSING ONE LANE WITHIN 100'

WHEN EXCAVATION WORK FOR LATERALS CROSSES A LANE AT A FREQUENCY OF 2 OR MORE LATERAL EXCAVATIONS WITHIN 100 FEET OF EACH OTHER, THE REPAIR SHALL INCLUDE ITEM 254 PAVEMENT PLANING FOR THE FULL LANE WIDTH TO A DEPTH OF 1- 1/2 INCHES AND FOR A MINIMUM OF 2 FEET BEYOND THE FURTHEST LATERAL EXCAVATIONS. THE PLANED AREA SHALL BE THOROUGHLY CLEANED AND DRY, THEN TACKED USING ITEM 407 TACK COAT MATERIAL PRIOR TO PLACING AND COMPACTING APPROVED ASPHALT CONCRETE WITH A PAVER IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS. ITEM 423 CRACK SEALING, TYPE II OR III, SHALL BE APPLIED TO EXPOSED JOINTS ONCE THE PAVING OPERATION HAS BEEN COMPLETED.

SEE NOTE "C"

NOT ACCEPTABLE



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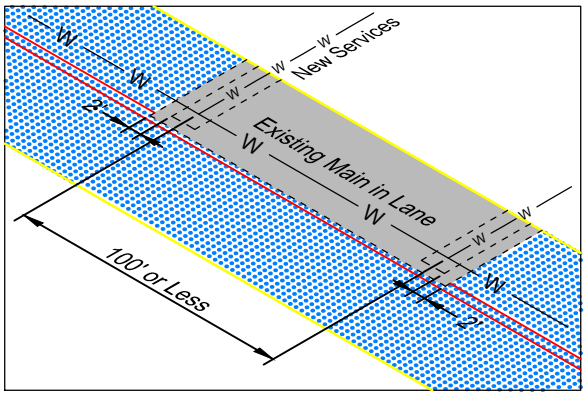


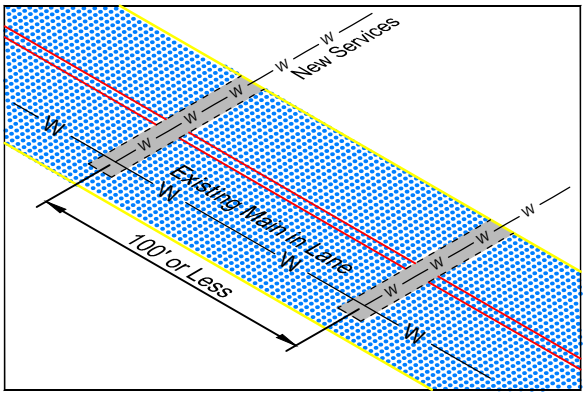
FOR MULTIPLE EXCAVATIONS WITHIN 100', PERFORM A FULL-LANE-WIDTH PLANE AND REPAIR.

UTILITY EXCAVATIONS CROSSING MULTIPLE LANES WITHIN 100'

WHEN EXCAVATION WORK CROSSES MULTIPLE LANES, ALL AFFECTED LANES SHALL REQUIRE PLANING AND RESURFACING AS DESCRIBED ABOVE. THIS WORK SHALL INCLUDE ALL OF THE PAVEMENT AREA WITHIN THE AFFECTED LANES FOR THE LIMITS OF THE LATERAL EXCAVATIONS.

SEE NOTE "C"

NOT ACCEPTABLE



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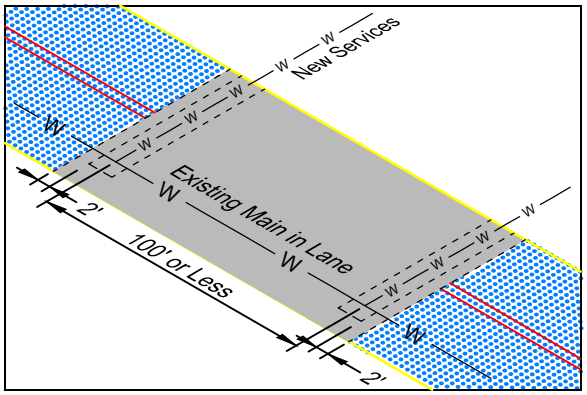

FOR MULTIPLE EXCAVATIONS WITHIN 100' IN MULTIPLE LANES, PERFORM A FULL-LANE-WIDTH PLANE AND REPAIR FOR ALL IMPACTED LANES.

LEGEND

EXISTING PAVEMENT

NEW PAVEMENT REPAIR

NOTE:
EXCAVATIONS ARE CONCEPTUAL ONLY. SEE DETAILED CROSS SECTION AND PROFILE SHEETS FOR CONSTRUCTION PROCEDURES AND WIDTHS.

PAVEMENT & UTILITY CUT REPAIR STANDARDS

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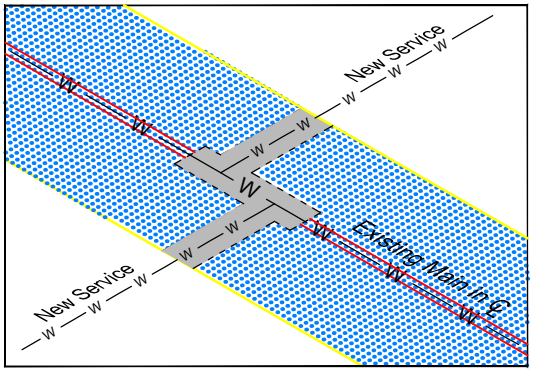
ACCEPTABLE UTILITY CUT REPAIRS

SEE NOTE "C"

NOT ACCEPTABLE



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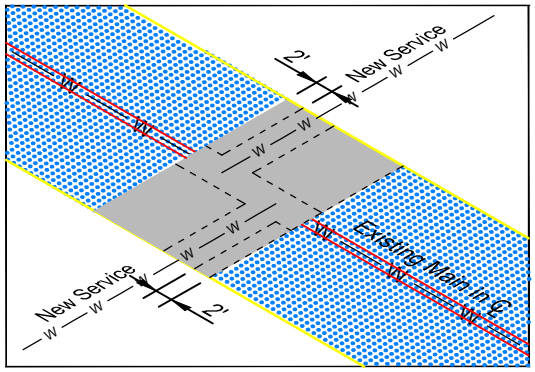
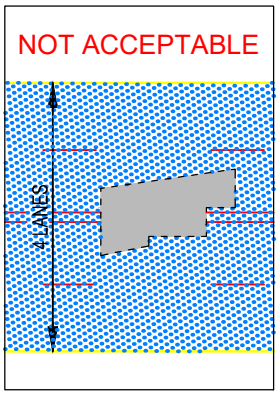


IRREGULAR SHAPES - SEE NOTE "L"

NOT ACCEPTABLE



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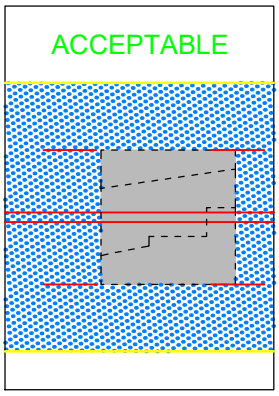

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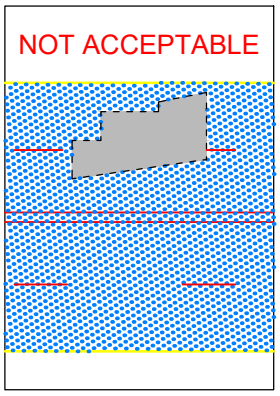

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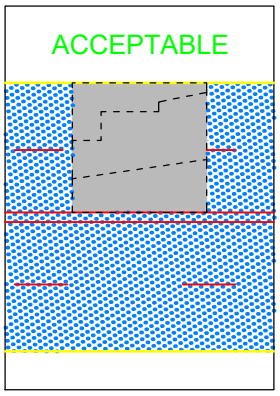

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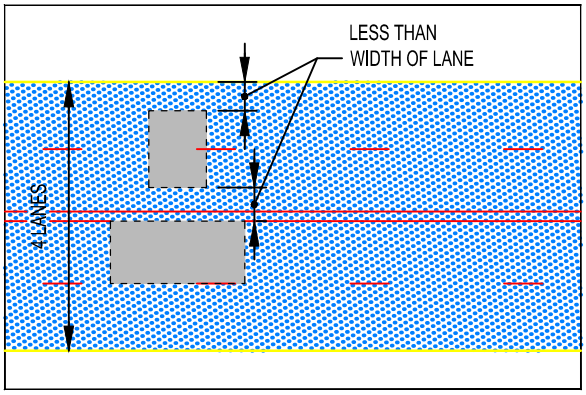

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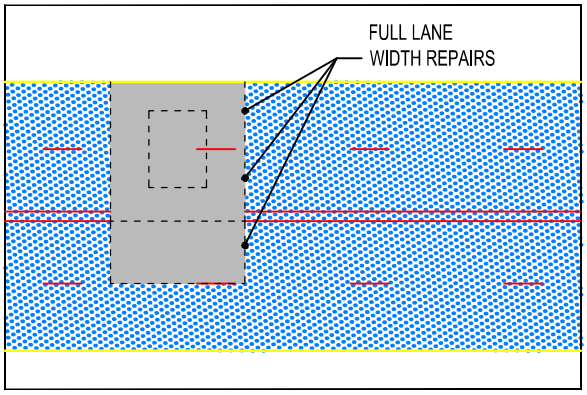

LEGEND

EXISTING PAVEMENT

NEW PAVEMENT REPAIR

NOTE:
EXCAVATIONS ARE CONCEPTUAL ONLY. SEE DETAILED CROSS SECTION AND PROFILE SHEETS FOR CONSTRUCTION PROCEDURES AND WIDTHS.

PAVEMENT & UTILITY CUT REPAIR STANDARDS

CITY OF COLUMBUS, OHIO
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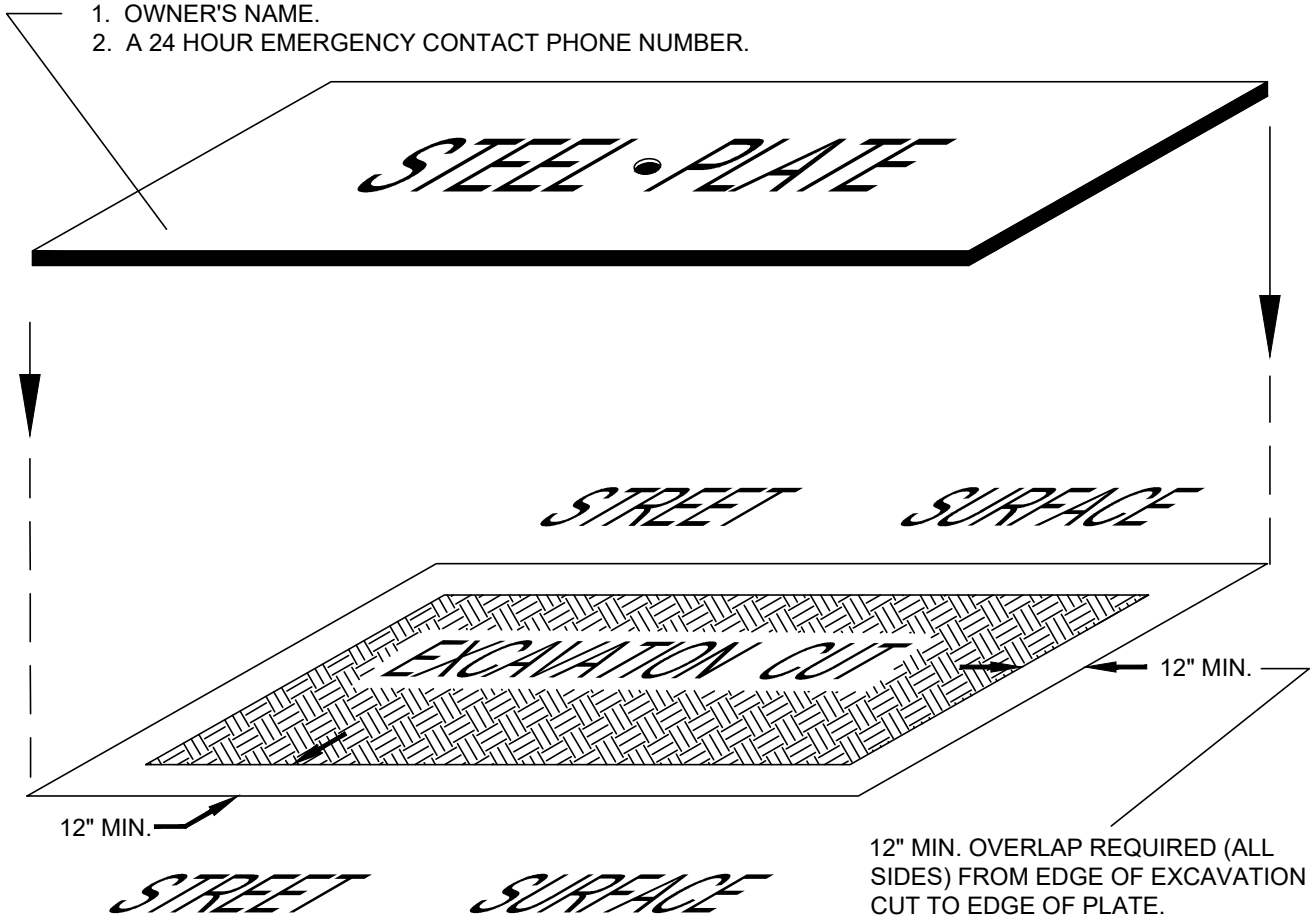


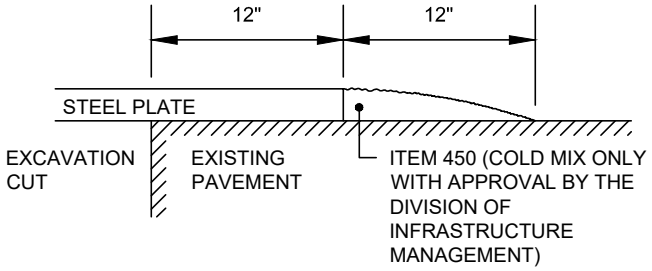
ALL STEEL PLATES MUST HAVE THE FOLLOWING INFORMATION CLEARLY AND LEGIBLY 'ETCHED' INTO THEIR TOP SURFACE:

1. OWNER'S NAME.
2. A 24 HOUR EMERGENCY CONTACT PHONE NUMBER.
3. CONTACT CITY OF COLUMBUS DIVISION OF INFRASTRUCTURE MANAGEMENT TO REPORT LOCATION OF STEEL PLATE (614) 645-5550

MINIMUM THICKNESS OF STEEL PLATES	
SIZE OF PLATE	THICKNESS
4' x 4'	1/2"
4' x 6'	3/4"
LARGER	1"

NO STEEL PINS ARE PERMITTED.

SEE SHEET 13 FOR SIGNING REQUIREMENTS.



STEEL PLATE REQUIREMENTS

PAVEMENT & UTILITY CUT REPAIR STANDARDS

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SIGNS ARE TO BE 36"x36" FOR RESIDENTIAL AND DOWNTOWN AREAS AND 48"x48" ON MULTI-LANE, HIGH SPEED (45 MPH OR GREATER) ROADWAYS.

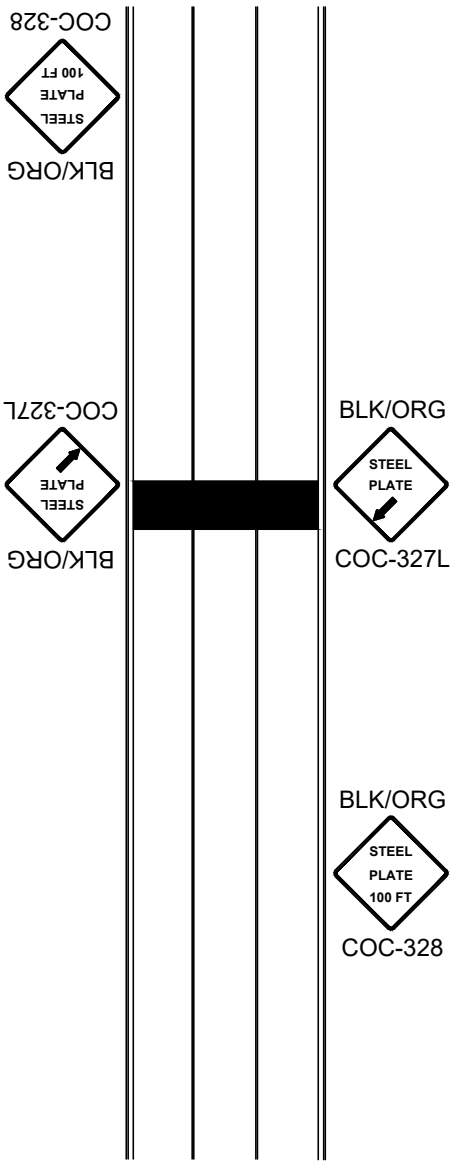
SIGN COC-327 (R/L) IS REQUIRED AT ALL PLATE LOCATIONS. SIGN COC-328 IS REQUIRED WHEN POSTED SPEED IS 35 MPH OR GREATER.

SIGNS SHOULD BE PLACED IN ALL DIRECTIONS THAT ARE AFFECTED. SIGN SPACING SHALL INCREASE TO 250' WHEN SPEED EXCEEDS 45 MPH.

SIGNS SHOULD BE DUAL MOUNTED ON MULTI-LANE, ONE-WAY ROADWAYS.

ALL SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD).

SIGNS SHALL NOT BE PLACED IN A MANNER THAT WOULD BLOCK PARKING, BIKE LANES, OR RESTRICT A PEDESTRIAN FROM USING ANY SIDEWALK INCLUDING CURB RAMPS. PAR SHALL BE MAINTAINED AT ALL TIMES.



STEEL PLATE REQUIREMENTS

PAVEMENT & UTILITY CUT REPAIR STANDARDS

CITY OF COLUMBUS, OHIO
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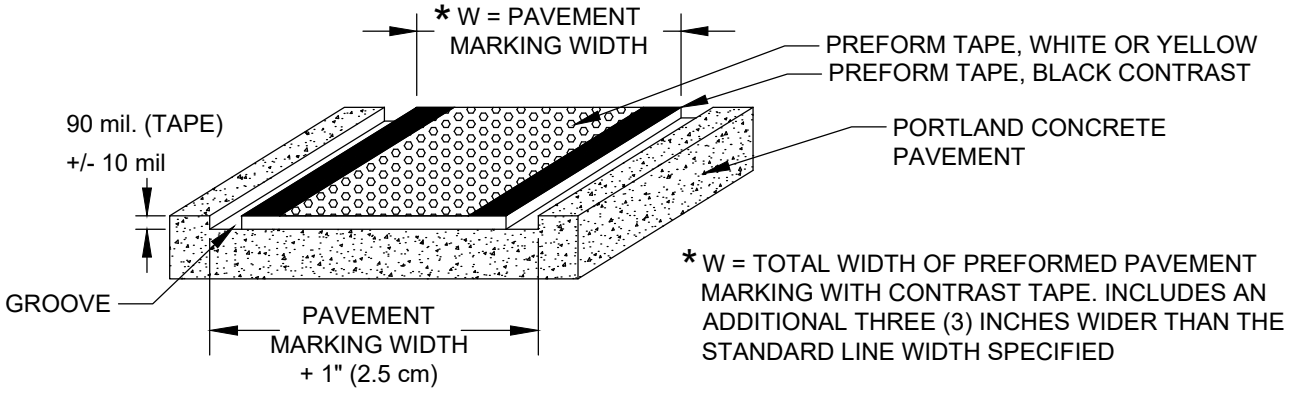

FIGURE 1- MARKING MATERIAL GROOVED APPLICATION

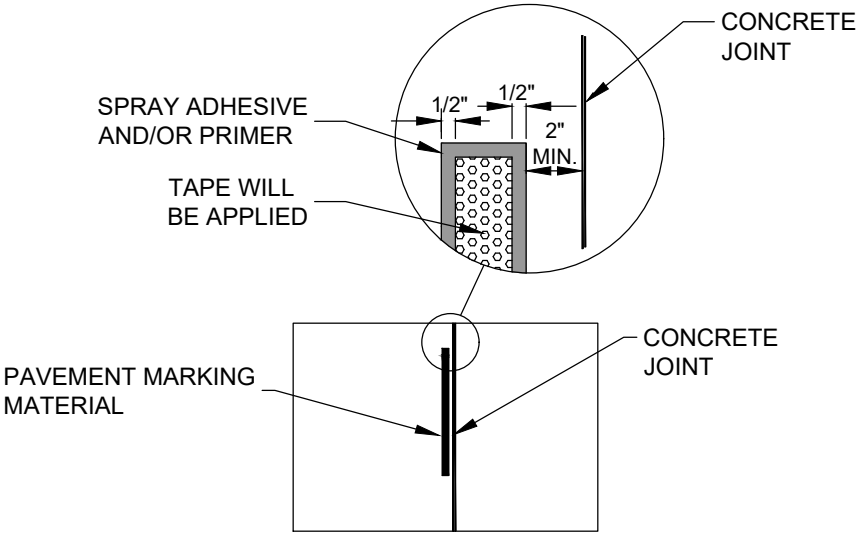

FIGURE 2- MARKING MATERIAL PARALLEL AT CONCRETE JOINT

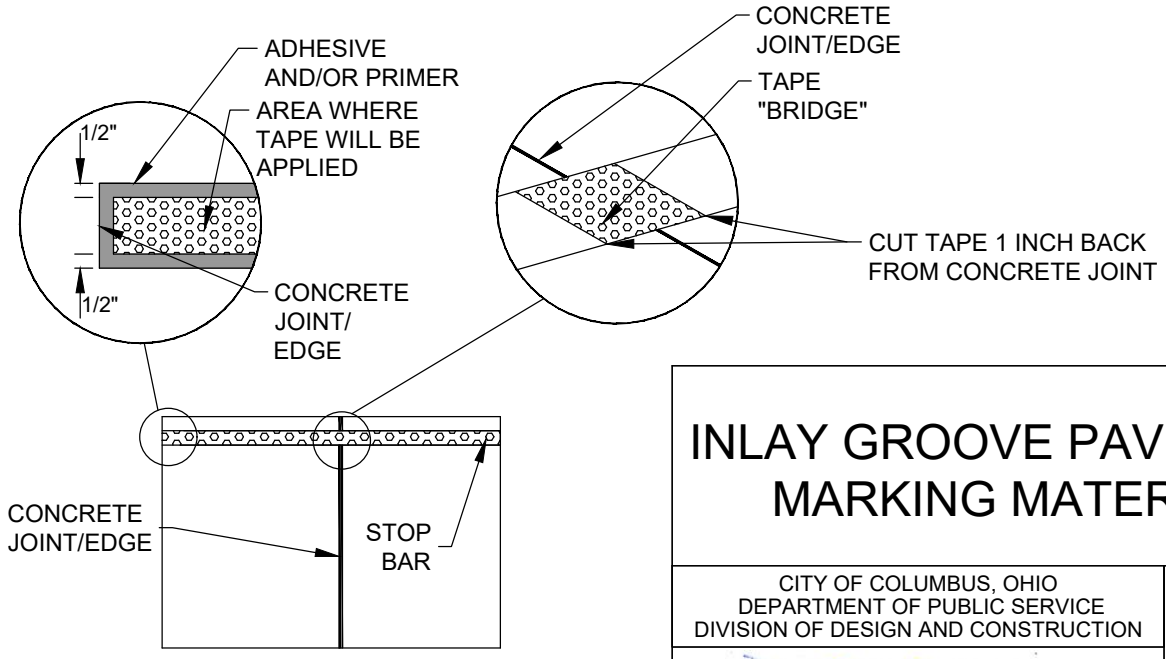

FIGURE 3 - MARKING MATERIAL CROSSING CONCRETE JOINT

INLAY GROOVE PAVEMENT MARKING MATERIAL

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
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CITY ENGINEER

STD DWG
1645

4/30/2018

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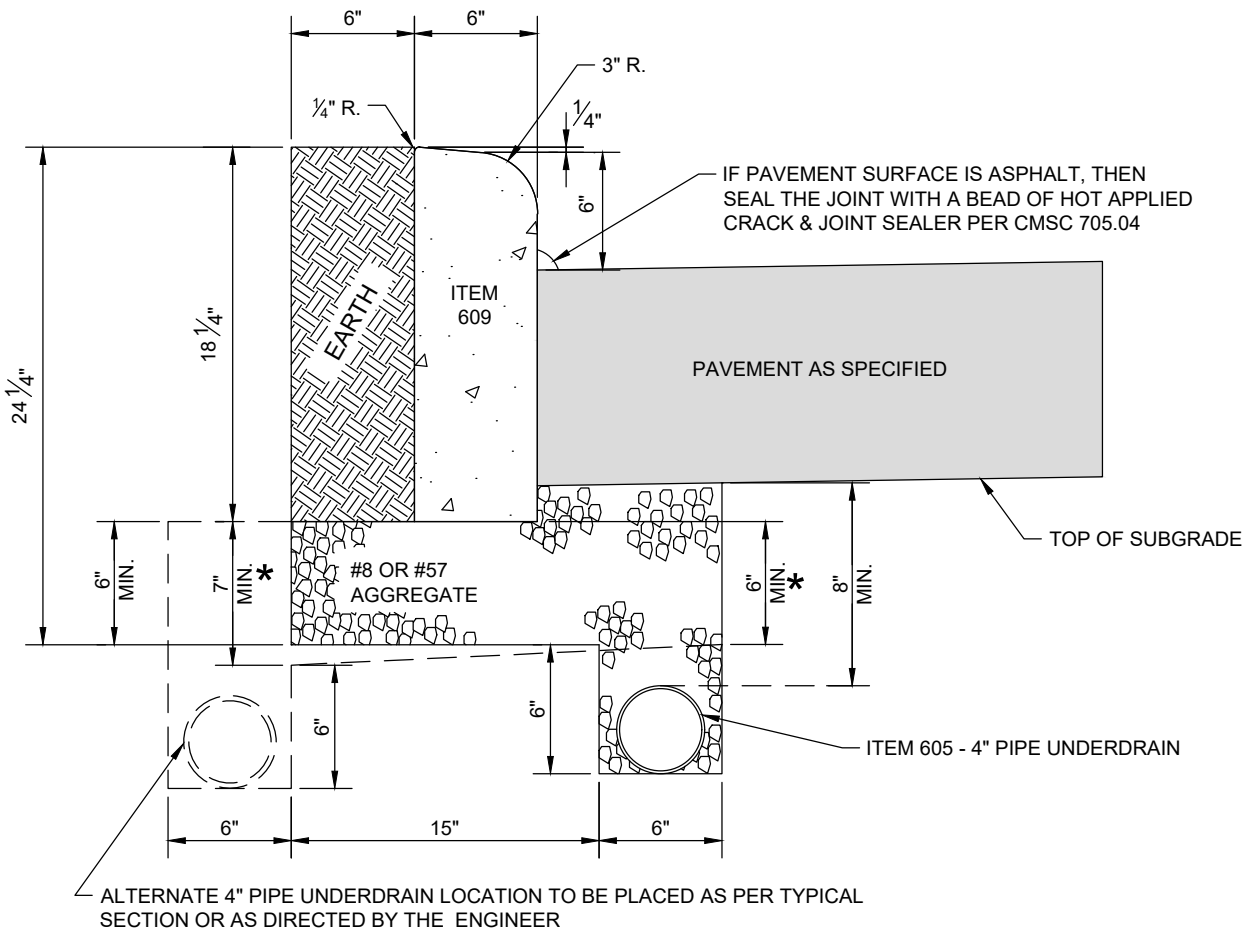

* CURB AGGREGATE COURSE-WHERE THE ROADWAY PAVEMENT HAS AGGREGATE BASE, MATCH THE BOTTOM OF THE CURB AGGREGATE COURSE TO THE TOP OF SUBGRADE. ENSURE ROADWAY SUB BASE MEETS UNDERDRAIN AGGREGATE.

IF THE TOP OF THE SUBGRADE IS BELOW THE BOTTOM OF THE CURB, THE UNDERDRAIN SHALL BE ADJUSTED TO KEEP THE TOP OF THE UNDERDRAIN AT LEAST 8" BELOW THE TOP OF THE SUBGRADE; AGGREGATE DEPTH BETWEEN BOTTOM OF CURB AND TOP OF UNDERDRAIN MAY VARY IF THIS OCCURS.

SUBGRADE COMPACTION SHALL BE COMPLETED BEFORE UNDERDRAIN INSTALLATION.

WHEN A CURB AND GUTTER INLET IS INSTALLED, THE TOP OF THE CASTING SHALL BE THE SAME AS THE TOP OF CURB ELEVATION. THE EDGE OF PAVEMENT ELEVATION SHALL BE 3/8" HIGHER THAN THE GRATE WHEREVER THEY MEET.

FOR REPLACEMENT WORK, THE CURB SHALL BE REMOVED AT AN EXISTING JOINT OR NO CLOSER THAN 5 FEET FROM AN EXISTING JOINT.

1/2" EXPANSION MATERIAL WILL BE INSTALLED BEHIND THE CURB WHEN A CONCRETE WALK, DRIVE, OR OTHER CONCRETE ITEM IS ADJOINING IT.

UNDERDRAIN IS NOT REQUIRED WHEN CURB IS ALONG CONCRETE MEDIAN.

0.74 C.F. CONCRETE PER L.F.

CURB, STRAIGHT 18"

CITY OF COLUMBUS, OHIO
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CITY ENGINEER

STD DWG
2000

3/30/2018

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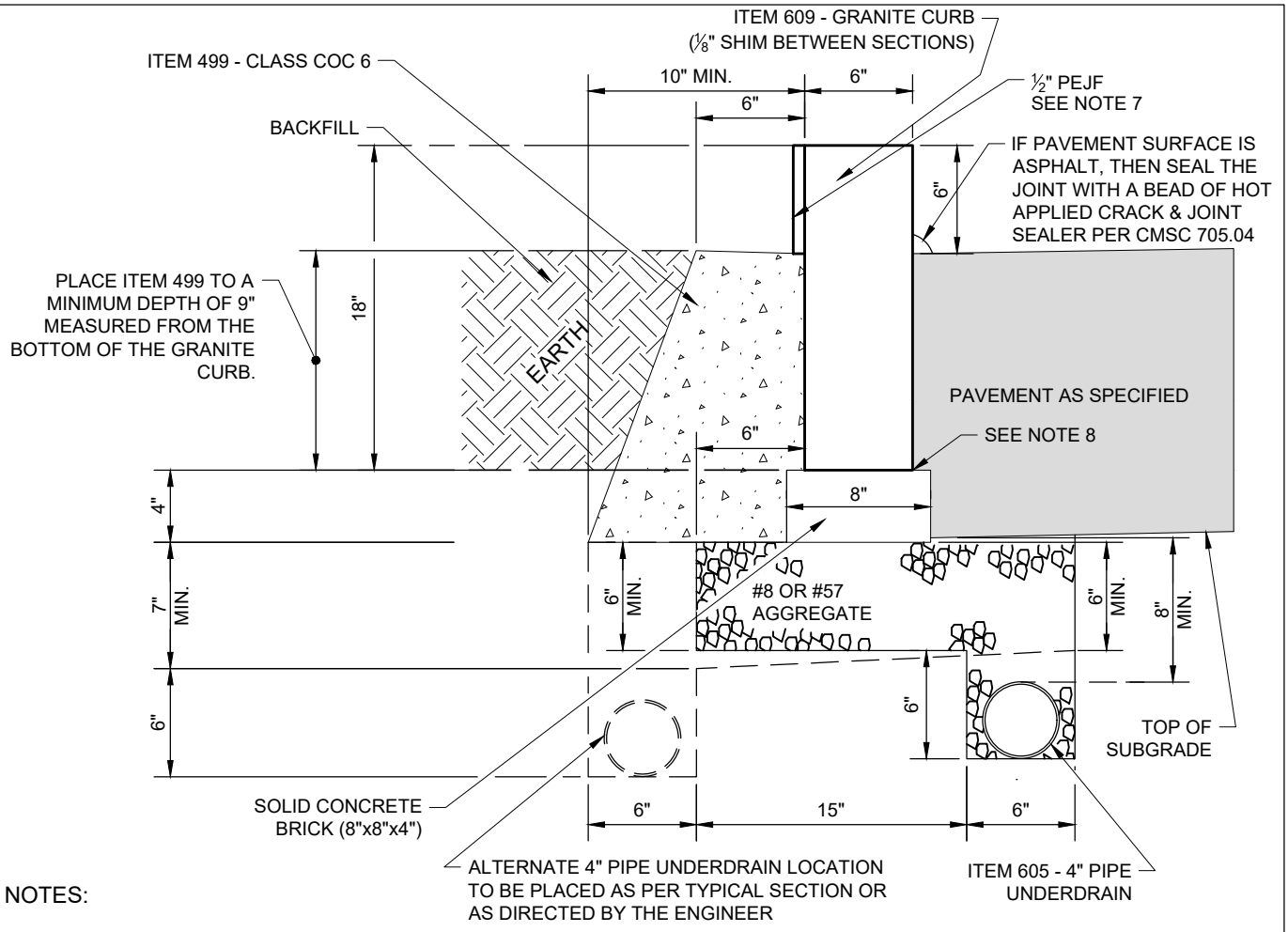

NOTES:

1. IF THE TOP OF THE SUBGRADE IS BELOW THE BOTTOM OF THE CURB, THE UNDERDRAIN SHALL BE ADJUSTED TO KEEP THE TOP OF THE UNDERDRAIN AT LEAST 8" BELOW THE TOP OF THE SUBGRADE; AGGREGATE DEPTH BETWEEN BOTTOM OF CURB AND TOP OF UNDERDRAIN MAY VARY IF THIS OCCURS.

2. SUBGRADE COMPACTION SHALL BE COMPLETED BEFORE UNDERDRAIN INSTALLATION.

3. WHEN A CURB AND GUTTER INLET IS INSTALLED, THE TOP OF THE CASTING SHALL BE THE SAME AS THE TOP OF CURB ELEVATION. THE CASTING SHALL BE A SQUARE BACK CASTING PER CITY DIVISION OF SEWER & DRAINS STANDARD DRAWING AA-S128. THE EDGE OF PAVEMENT ELEVATION SHALL BE 3/8" HIGHER THAN THE GRATE WHEREVER THEY MEET.

4. CURB SHALL BE IN NOMINAL LENGTHS OF 11 FT. FOR CLOSURE & FILL IN, THE MINIMUM CURB LENGTH ALLOWED IS 3 FT.

5. FOR REPLACEMENT WORK, THE CURB SHALL BE REMOVED AT AN EXISTING JOINT AND USE MINIMUM 36" LENGTHS.

6. PLANS TO SPECIFY GRANITE MATERIAL AND TYPE OF SURFACE FINISH.

7. 1/2" EXPANSION MATERIAL WILL BE INSTALLED BEHIND THE CURB WHEN A CONCRETE WALK, DRIVE, OR OTHER CONCRETE ITEM IS ADJOINING IT.

8. REMOVE ANY CONCRETE BEYOND FACE-OF-CURB TO PROVIDE FULL DEPTH PAVEMENT SECTION.

9. GRANITE CURB SHALL BE FIELD CUT AT CURB RAMPS TO ALLOW FOR FIELD ADJUSTMENTS AS DIRECTED BY THE PROJECT ENGINEER.

10. UNDERDRAIN IS NOT REQUIRED WHEN CURB IS ALONG CONCRETE MEDIAN.

CURB GRANITE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2005

3/30/2018

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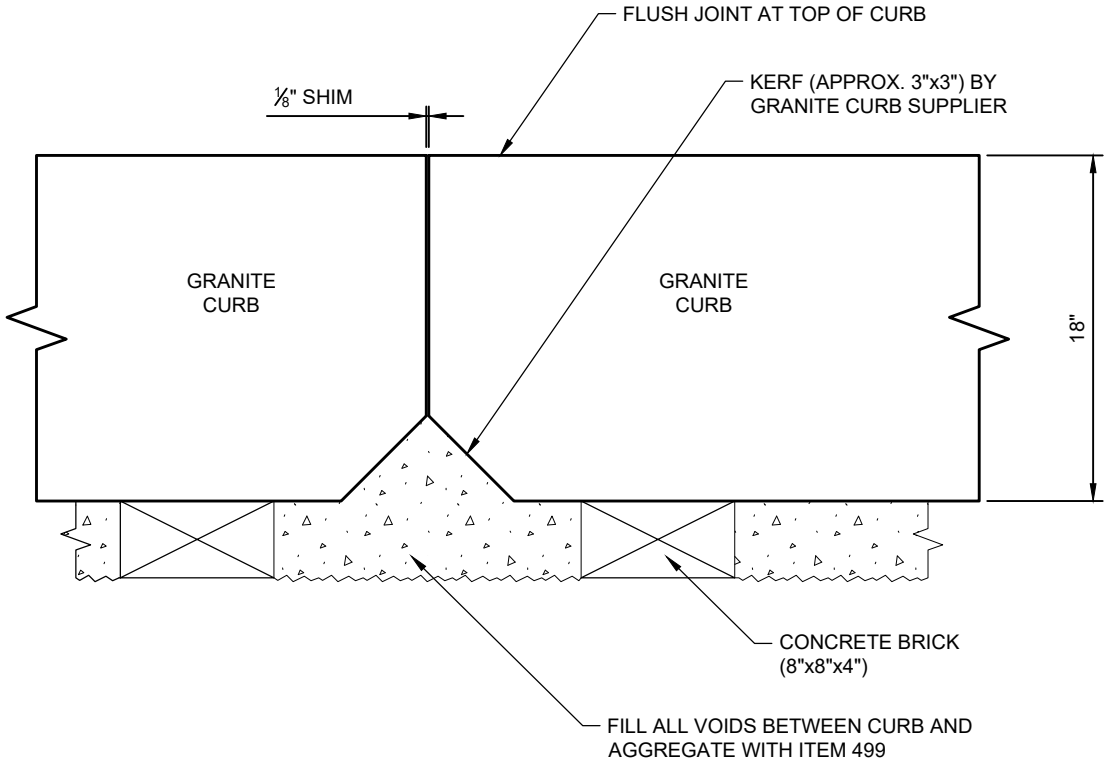

ELEVATION

CURB
GRANITE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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2005
3/30/2018
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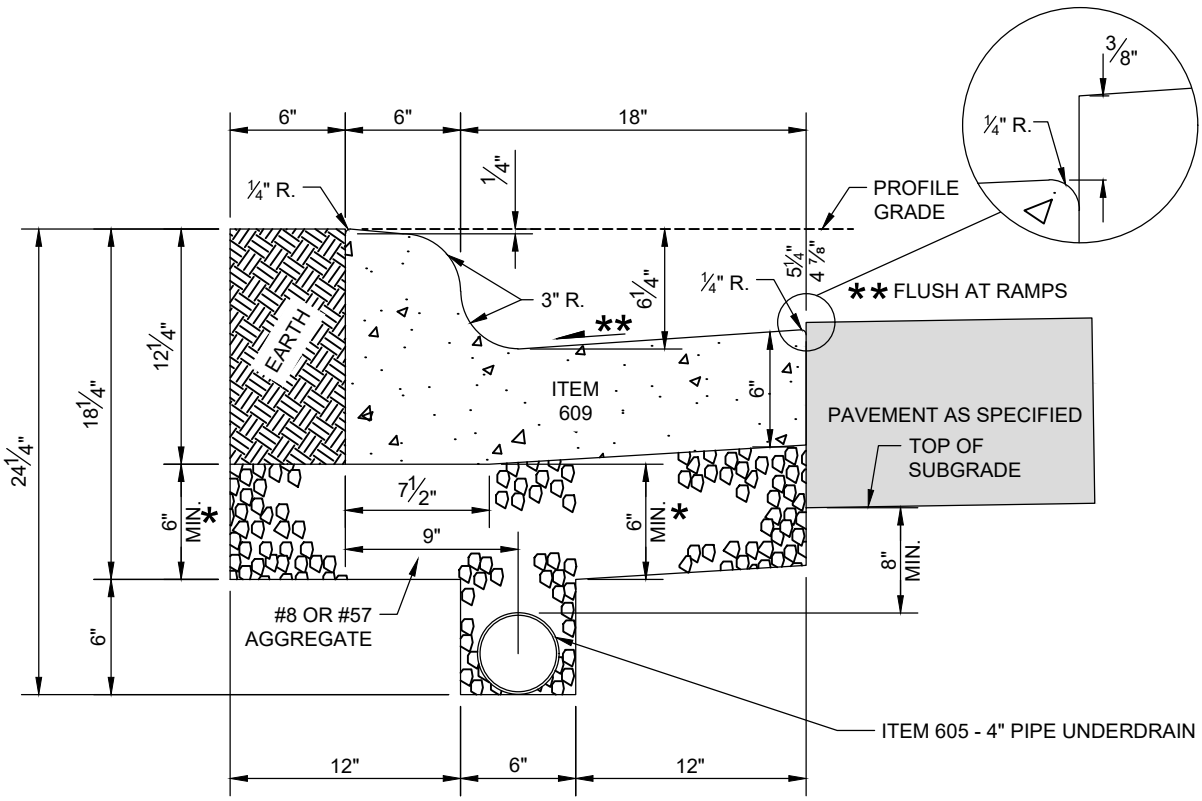


* CURB AND GUTTER AGGREGATE COURSE-WHERE THE ROADWAY PAVEMENT HAS AGGREGATE BASE, MATCH THE BOTTOM OF THE CURB AND GUTTER AGGREGATE COURSE TO THE TOP OF SUBGRADE. ENSURE ROADWAY SUB BASE MEETS UNDERDRAIN AGGREGATE.

** AT CURB RAMP LOCATIONS, THE GUTTER SLOPE SHALL NOT EXCEED 4.7%. TRANSITION GUTTER OVER 3' TO MATCH EXISTING CURB & GUTTER SLOPE. THE PAVEMENT SHALL BE FLUSH AT THE GUTTER IN FRONT OF CURB RAMPS. CURB RAMPS SHALL BE BUILT PER STD DWG 2319.

IF THE TOP OF THE SUBGRADE IS BELOW THE BOTTOM OF THE CURB, THE UNDERDRAIN SHALL BE ADJUSTED TO KEEP THE TOP OF THE UNDERDRAIN AT LEAST 8" BELOW THE TOP OF THE SUBGRADE; AGGREGATE DEPTH BETWEEN BOTTOM OF CURB AND TOP OF UNDERDRAIN MAY VARY IF THIS OCCURS.

SUBGRADE COMPACTION SHALL BE COMPLETED BEFORE UNDERDRAIN INSTALLATION.

WHEN A CURB AND GUTTER INLET IS INSTALLED, THE TOP OF THE CASTING SHALL BE THE SAME AS THE TOP OF CURB ELEVATION. THE EDGE OF PAVEMENT SHALL BE 3/8" HIGHER THAN THE GRATE WHEREVER THEY MEET.

FOR REPLACEMENT WORK, THE CURB SHALL BE REMOVED AT AN EXISTING JOINT OR NO CLOSER THAN 5 FEET FROM AN EXISTING JOINT.

1/2" EXPANSION MATERIAL WILL BE INSTALLED BEHIND THE CURB WHEN A CONCRETE WALK, DRIVE, OR OTHER ITEM IS ADJOINING IT.

WHEN CONNECTING TO AN EXISTING COMBINATION CURB AND GUTTER, TRANSITION THE GUTTER PAN AS REQUIRED, OVER A DISTANCE OF 10 FEET MAXIMUM, TO MAINTAIN POSITIVE DRAINAGE.

1.26 C.F. CONCRETE PER L.F.

COMBINATION CURB & GUTTER, TYPE STANDARD

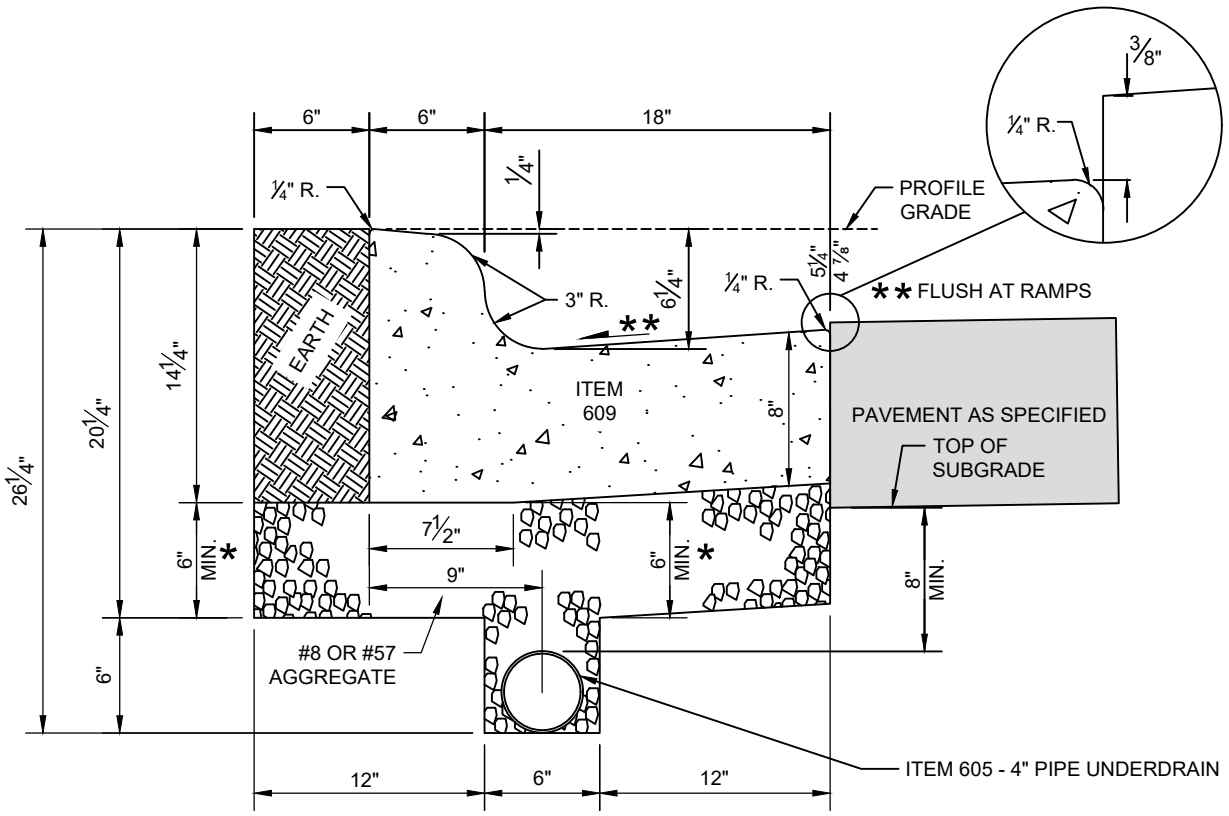
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2010

3/30/2018

SHT 1 OF 1



* CURB AND GUTTER AGGREGATE COURSE-WHERE THE ROADWAY PAVEMENT HAS AGGREGATE BASE, MATCH THE BOTTOM OF THE CURB AND GUTTER AGGREGATE COURSE TO THE TOP OF SUBGRADE. ENSURE ROADWAY SUB BASE MEETS UNDERDRAIN AGGREGATE.

** AT CURB RAMP LOCATIONS, THE GUTTER SLOPE SHALL NOT EXCEED 4.7%. TRANSITION GUTTER OVER 3' TO MATCH EXISTING CURB & GUTTER SLOPE. THE PAVEMENT SHALL BE FLUSH AT THE GUTTER IN FRONT OF CURB RAMPS. CURB RAMPS SHALL BE BUILT PER STD DWG 2319.

IF THE TOP OF THE SUBGRADE IS BELOW THE BOTTOM OF THE CURB, THE UNDERDRAIN SHALL BE ADJUSTED TO KEEP THE TOP OF THE UNDERDRAIN AT LEAST 8" BELOW THE TOP OF THE SUBGRADE; AGGREGATE DEPTH BETWEEN BOTTOM OF CURB AND TOP OF UNDERDRAIN MAY VARY IF THIS OCCURS.

SUBGRADE COMPACTION SHALL BE COMPLETED BEFORE UNDERDRAIN INSTALLATION.

WHEN A CURB AND GUTTER INLET IS INSTALLED, THE TOP OF THE CASTING SHALL BE THE SAME AS THE TOP OF CURB ELEVATION. THE EDGE OF PAVEMENT SHALL BE 3/8" HIGHER THAN THE GRATE WHEREVER THEY MEET.

FOR REPLACEMENT WORK, THE CURB SHALL BE REMOVED AT AN EXISTING JOINT OR NO CLOSER THAN 5 FEET FROM AN EXISTING JOINT.

1/2" EXPANSION MATERIAL WILL BE INSTALLED BEHIND THE CURB WHEN A CONCRETE WALK, DRIVE, OR OTHER ITEM IS ADJOINING IT.

WHEN CONNECTING TO AN EXISTING COMBINATION CURB AND GUTTER, TRANSITION THE GUTTER PAN AS REQUIRED, OVER A DISTANCE OF 10 FEET MAXIMUM, TO MAINTAIN POSITIVE DRAINAGE.

1.59 C.F. CONCRETE PER L.F.

COMBINATION CURB & GUTTER, TYPE SPECIAL 8"

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

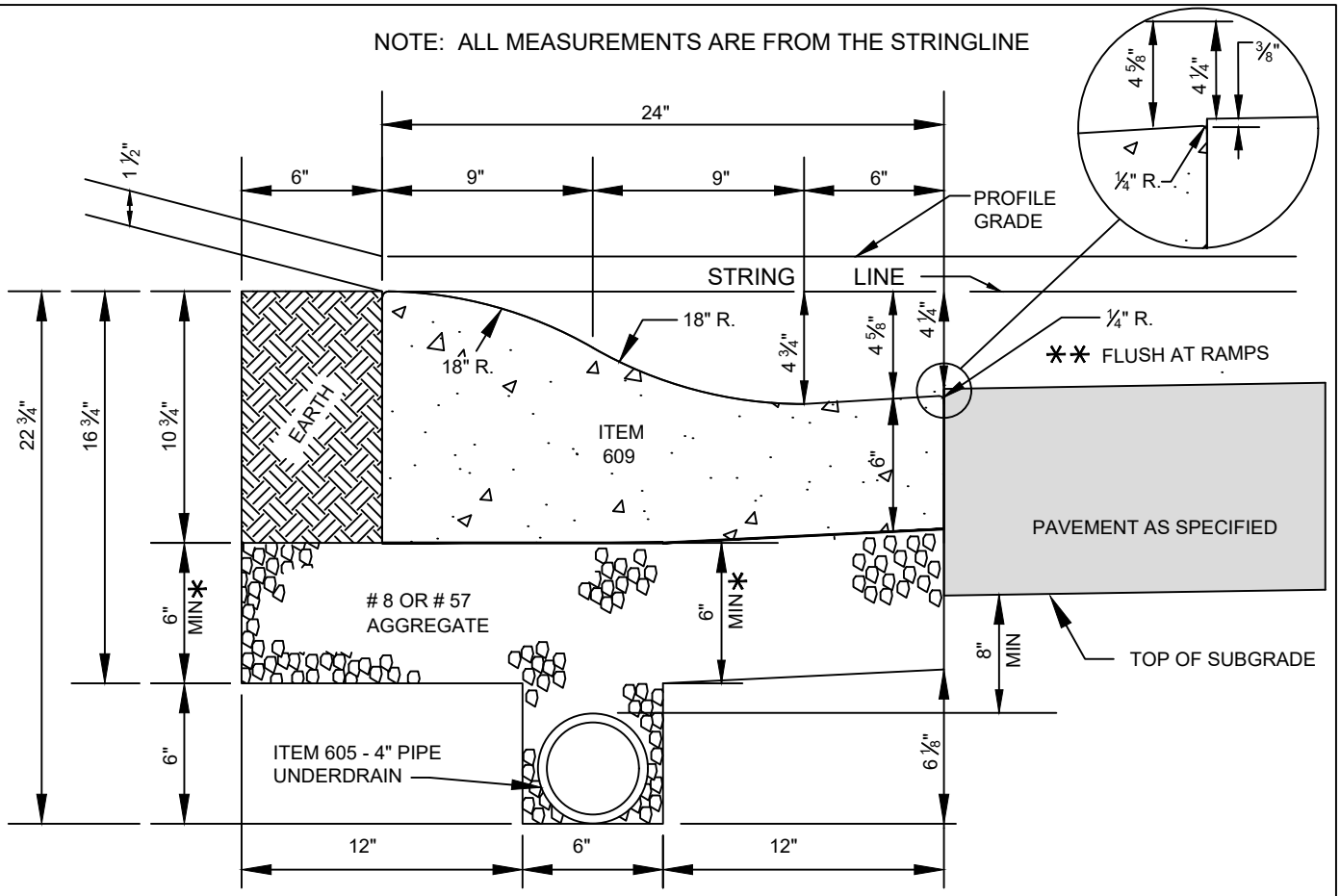
CITY ENGINEER

STD DWG
2020

3/30/2018

SHT 1 OF 1

NOTE: ALL MEASUREMENTS ARE FROM THE STRINGLINE



* CURB AND GUTTER AGGREGATE COURSE-WHERE THE ROADWAY PAVEMENT HAS AGGREGATE BASE, MATCH THE BOTTOM OF THE CURB AND GUTTER AGGREGATE COURSE TO THE TOP OF SUBGRADE. ENSURE ROADWAY SUB BASE MEETS UNDERDRAIN AGGREGATE.

** AT CURB RAMP LOCATIONS, THE GUTTER SLOPE SHALL NOT EXCEED 4.7%. TRANSITION GUTTER OVER 3' TO MATCH EXISTING CURB & GUTTER SLOPE. THE PAVEMENT SHALL BE FLUSH AT THE GUTTER IN FRONT OF CURB RAMPS. CURB RAMPS SHALL BE BUILT PER STD DWG 2319.

IF THE TOP OF THE SUBGRADE IS BELOW THE BOTTOM OF THE CURB, THE UNDERDRAIN SHALL BE ADJUSTED TO KEEP THE TOP OF THE UNDERDRAIN AT LEAST 8" BELOW THE TOP OF THE SUBGRADE; AGGREGATE DEPTH BETWEEN BOTTOM OF CURB AND TOP OF UNDERDRAIN MAY VARY IF THIS OCCURS.

SUBGRADE COMPACTION SHALL BE COMPLETED BEFORE UNDERDRAIN INSTALLATION.

WHEN A CURB AND GUTTER INLET IS INSTALLED, THE TOP OF THE CASTING SHALL BE THE SAME AS THE TOP OF CURB ELEVATION. THE EDGE OF PAVEMENT SHALL BE 3/8" HIGHER THAN THE GRATE WHEREVER THEY MEET.

FOR REPLACEMENT WORK, THE CURB SHALL BE REMOVED AT AN EXISTING JOINT OR NO CLOSER THAN 5 FEET FROM AN EXISTING JOINT.

1/2" EXPANSION MATERIAL WILL BE INSTALLED BEHIND THE CURB WHEN A CONCRETE WALK, DRIVE, OR OTHER ITEM IS ADJOINING IT.

WHEN CONNECTING TO AN EXISTING COMBINATION CURB AND GUTTER, TRANSITION THE GUTTER PAN AS REQUIRED, OVER A DISTANCE OF 10 FEET MAXIMUM, TO MAINTAIN POSITIVE DRAINAGE.

1.33 C.F. CONCRETE PER L.F.

COMBINATION CURB & GUTTER, TYPE MOUNTABLE

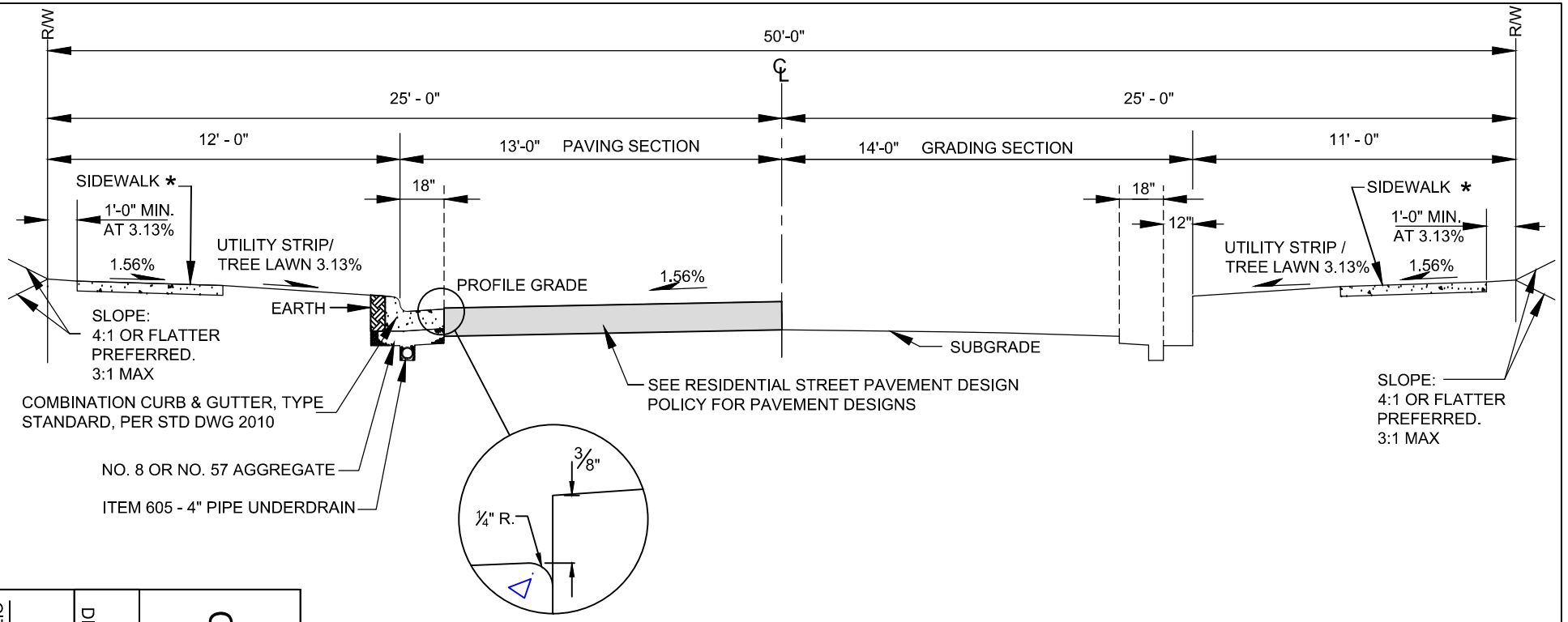
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2030

3/30/2018

SHT 1 OF 1



* SIDEWALK WIDTH PER STANDARD DRAWING 2300.

A MINIMUM 7FT WIDE PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED BETWEEN OPPOSING RAMPS AND SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) NO GREATER THAN 1.56%.

26' SECTION (RESIDENTIAL) COMBINATION CURB & GUTTER, TYPE STANDARD

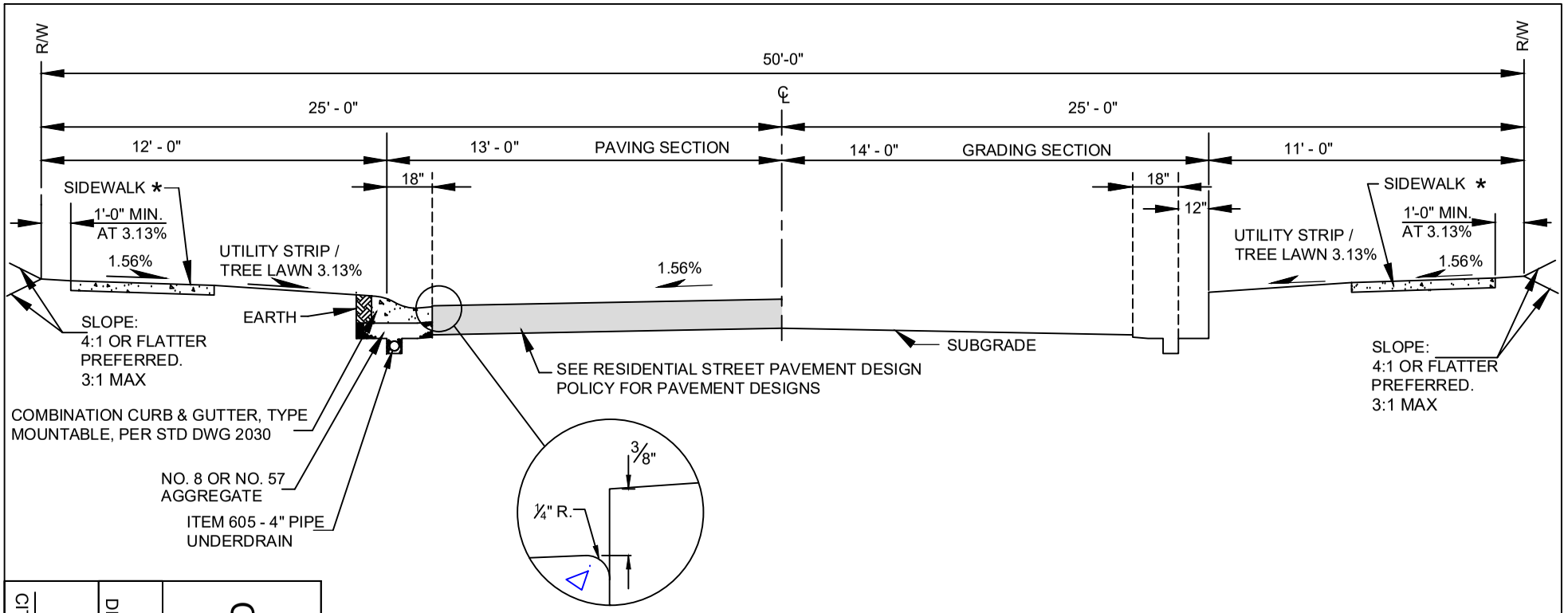
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG 2100

12/31/2018

SHT 1 OF 1



26' SECTION (RESIDENTIAL) COMBINATION CURB & GUTTER, TYPE MOUNTABLE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

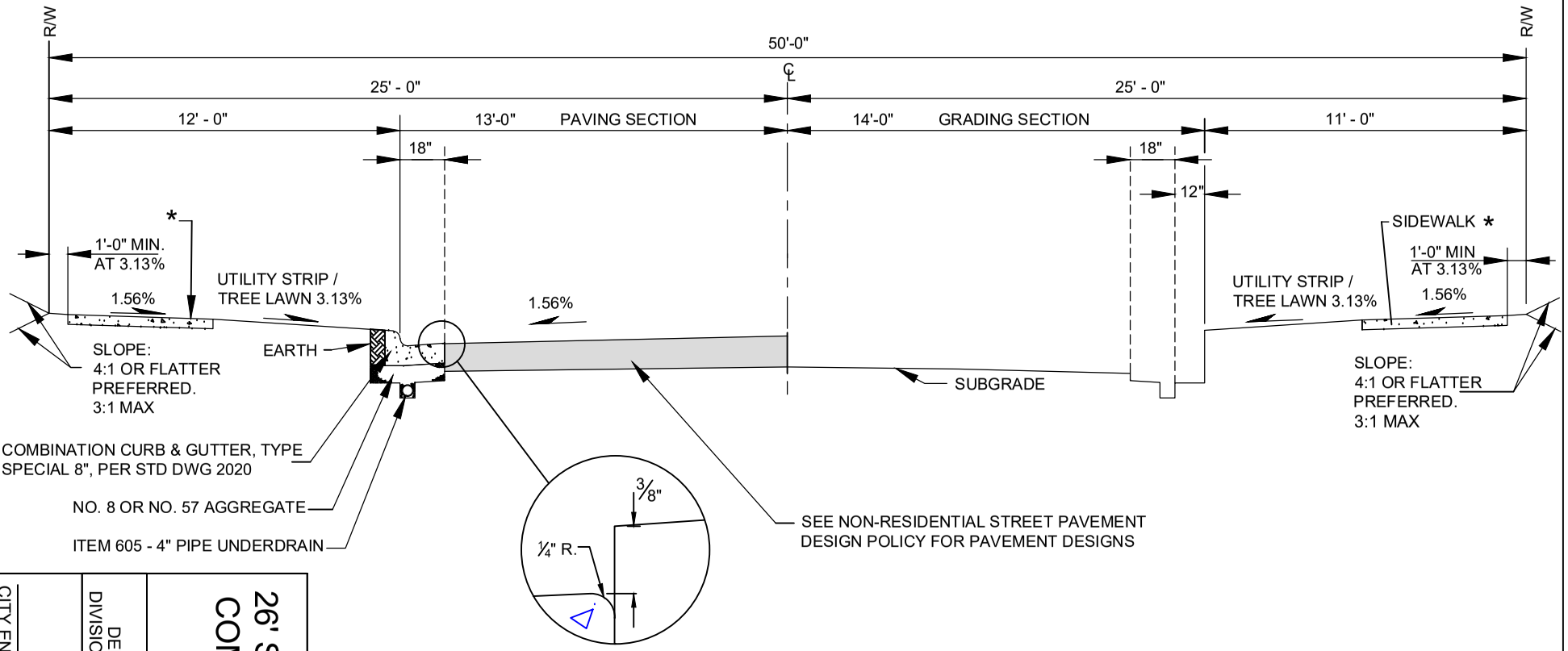
STD DWG
2101

12/31/2018

SHT 1 OF 1

* SIDEWALK WIDTH PER STANDARD DRAWING 2300.

A MINIMUM 7FT WIDE PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED BETWEEN OPPOSING RAMPS AND SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) NO GREATER THAN 1.56%.



26' SECTION (NON-RESIDENTIAL) COMBINATION CURB & GUTTER, TYPE SPECIAL 8"

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

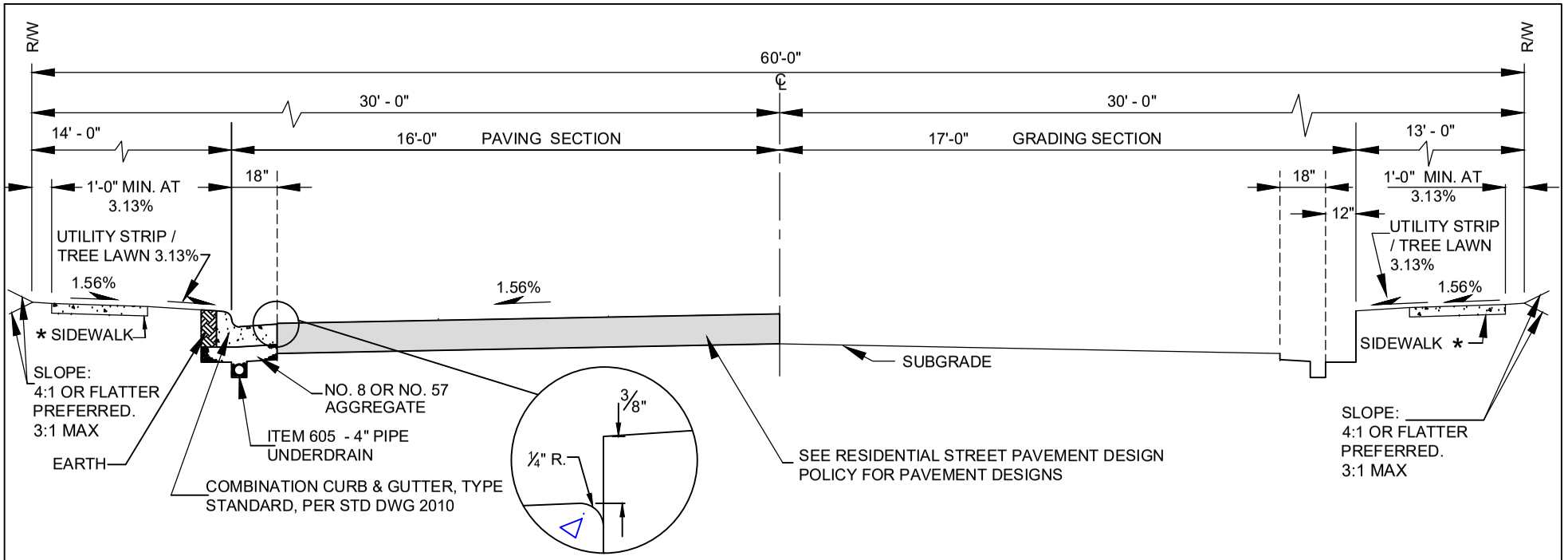
STD DWG
2105

12/31/2018

SHT 1 OF 1

* SIDEWALK WIDTH PER STANDARD DRAWING 2300.

A MINIMUM 7FT WIDE PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED BETWEEN OPPOSING RAMPS AND SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) NO GREATER THAN 1.56%.



* SIDEWALK WIDTH PER STANDARD DRAWING 2300.

A MINIMUM 7FT WIDE PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED BETWEEN OPPOSING RAMPS AND SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) NO GREATER THAN 1.56%.

32' SECTION (RESIDENTIAL) COMBINATION CURB & GUTTER, TYPE STANDARD

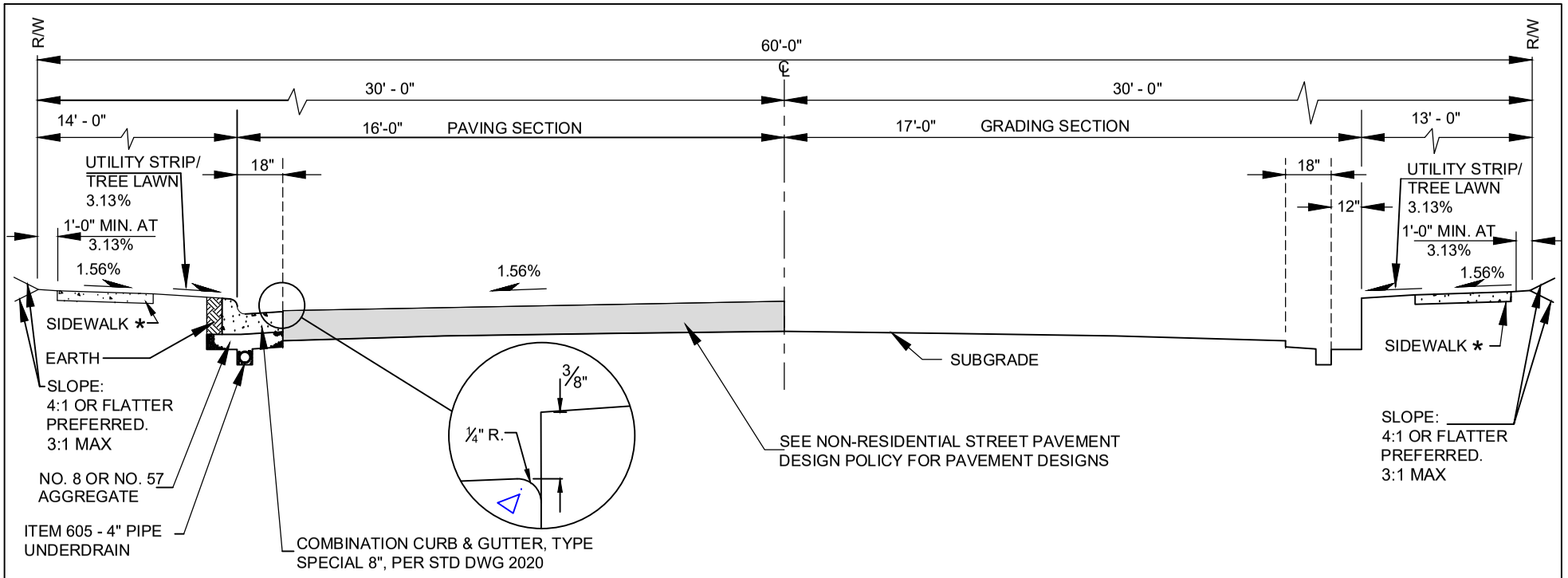
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2110

12/31/2018

SHT 1 OF 1



32' SECTION (NON-RESIDENTIAL) COMBINATION CURB & GUTTER, TYPE SPECIAL 8"

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

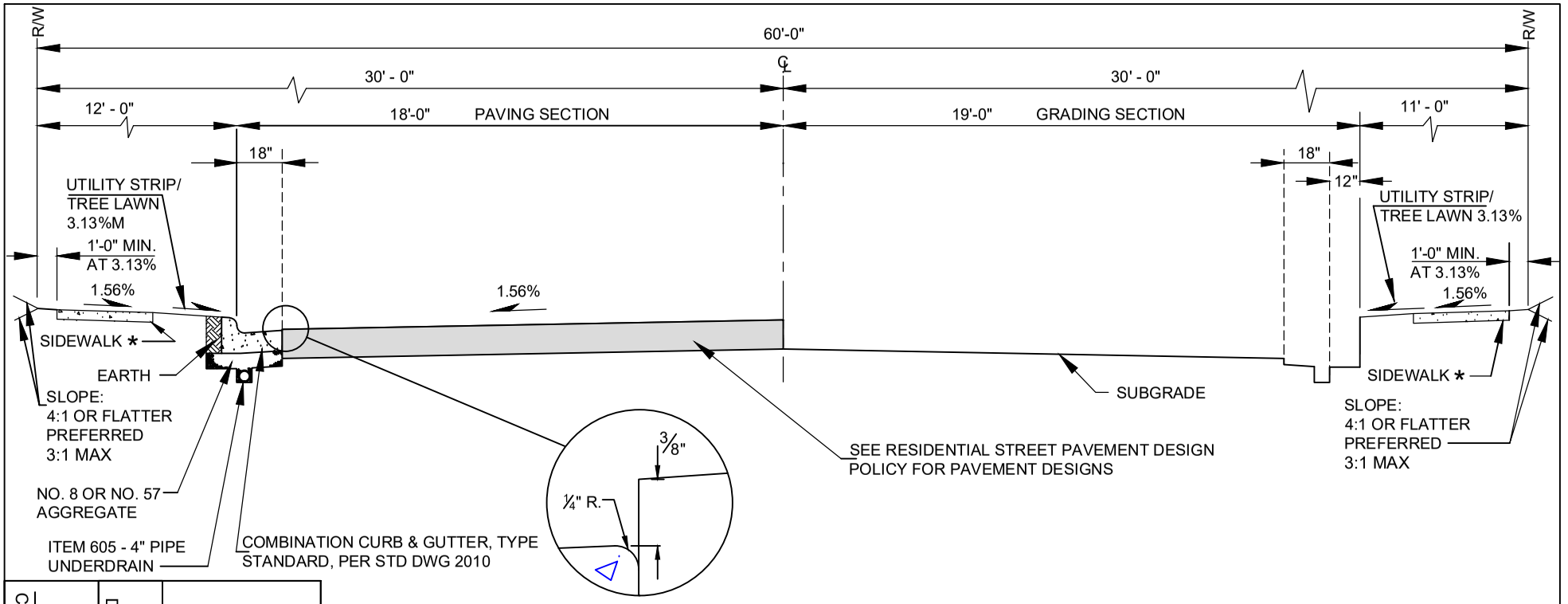
STD DWG
2111

12/31/2018

SHT 1 OF 1

* SIDEWALK WIDTH PER STANDARD DRAWING 2300.

A MINIMUM 7FT WIDE PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED BETWEEN OPPOSING RAMPS AND SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) NO GREATER THAN 1.56%.



* SIDEWALK WIDTH PER STANDARD DRAWING 2300.

A MINIMUM 7FT WIDE PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED BETWEEN OPPOSING RAMPS AND SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) NO GREATER THAN 1.56%.

36' SECTION (RESIDENTIAL) COMBINATION CURB & GUTTER, TYPE STANDARD

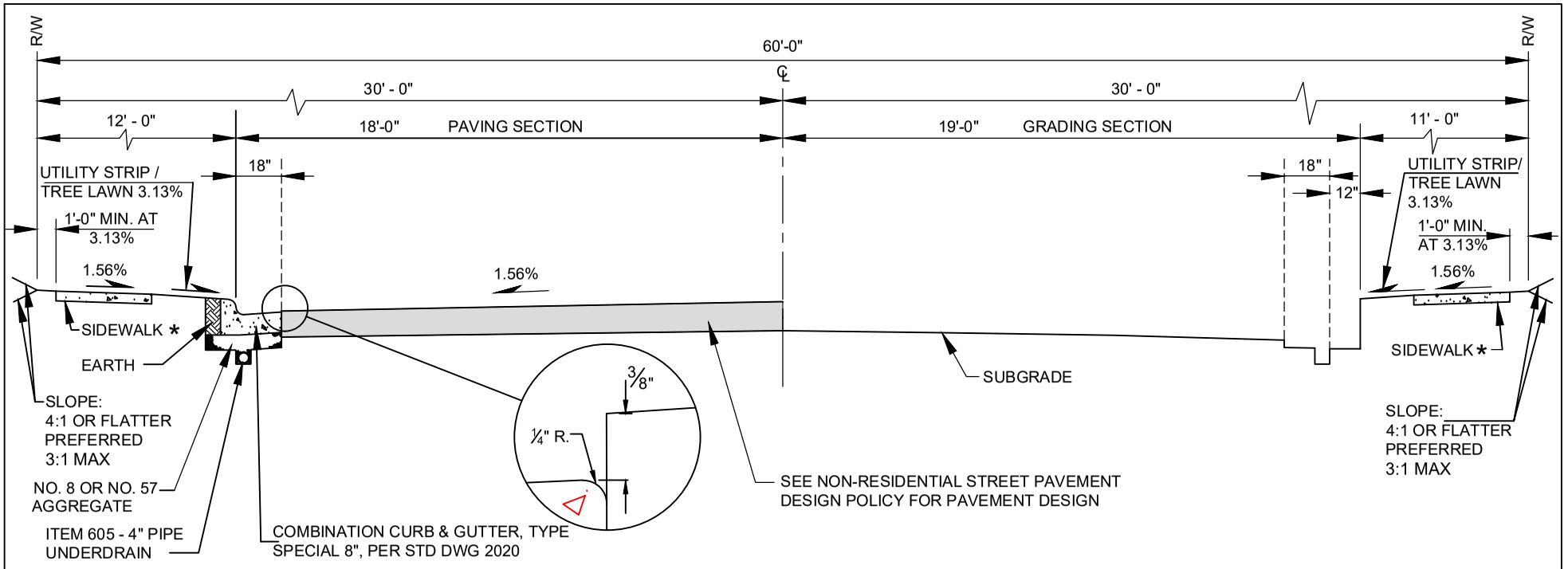
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2115

12/31/2018

SHT 1 OF 1



* SIDEWALK WIDTH PER STANDARD DRAWING 2300.

A MINIMUM 7FT WIDE PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED BETWEEN OPPOSING RAMPS AND SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) NO GREATER THAN 1.56%.

36' SECTION (NON-RESIDENTIAL) COMBINATION CURB & GUTTER, TYPE SPECIAL 8"

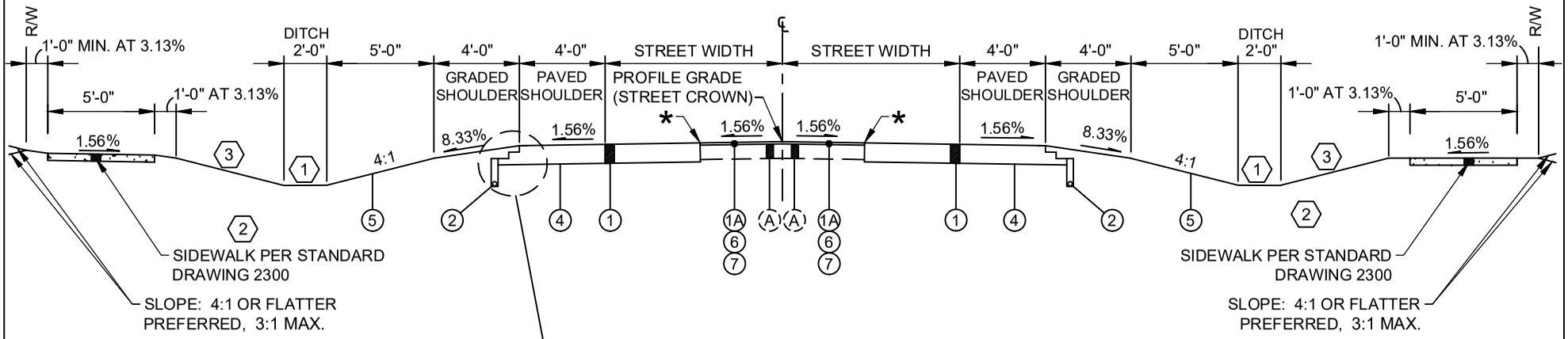
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

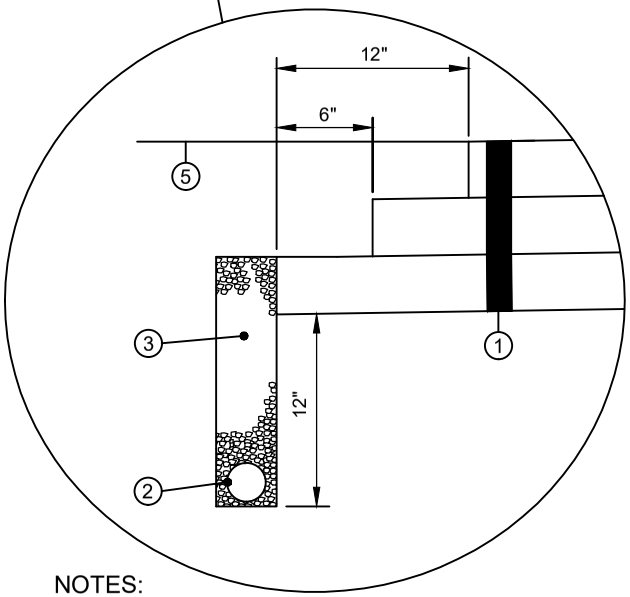
CITY ENGINEER

STD DWG
2116

12/31/2018

SHT 1 OF 1





WIDENING UNCURBED SECTION SIDE DITCH

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG 2130

4/30/2018

SHT 1 OF 1

NOTES:

1. DITCH DESIGN PER CITY STORMWATER DRAINAGE MANUAL.
2. PUBLIC ACCESS EASEMENT REQUIRED FOR ANY WALK OUTSIDE OF R/W.
3. SLOPE: 4:1 PREFERRED
   3:1 MAX

* PLACE LONGITUDINAL WIDENING JOINT AT A LOCATION WITH SOUND PAVEMENT, MEASURING NO LESS THAN 2.5'-3' FROM THE LANE CENTERLINE WHEN LANES ARE 10'-12' RESPECTIVELY. THE STRAIGHT SECTION OF THE CUT SHALL NOT BE PLACED IN THE TRAVELED LANE ON BOTH SIDES.

(A) EXISTING PAVEMENT

(1) PAVEMENT DESIGN FOR WIDENING SHALL BE PER CITY OF COLUMBUS NON-RESIDENTIAL STREET PAVEMENT DESIGN POLICY. PAVEMENT SHALL BE EQUAL TO OR GREATER THAN EXISTING PAVEMENT TO PROVIDE POSITIVE DRAINAGE OF SUBGRADE.

(1A) ITEM 441 - ASPHALT CONCRETE, SURFACE COURSE

(2) ITEM 605 - 4" PIPE UNDERDRAIN

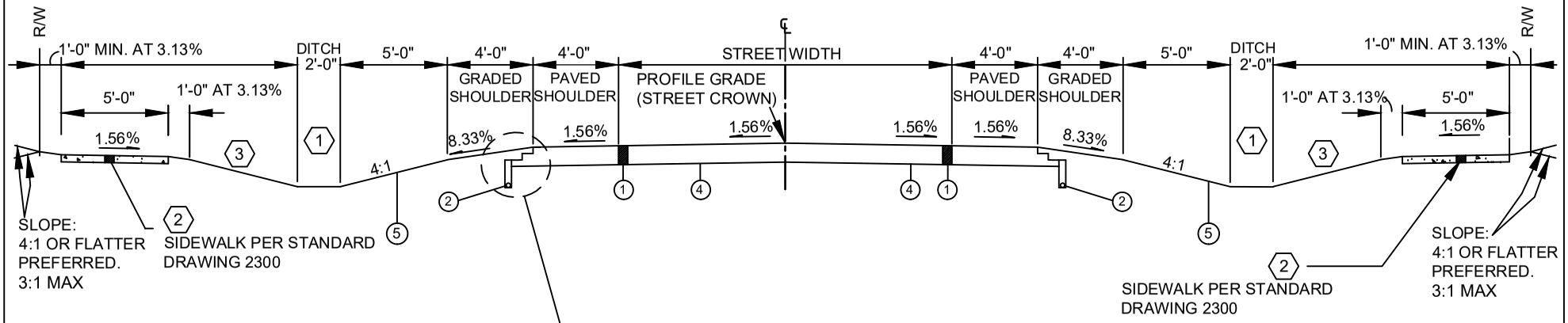
(3) NO. 8 OR NO. 57 AGGREGATE

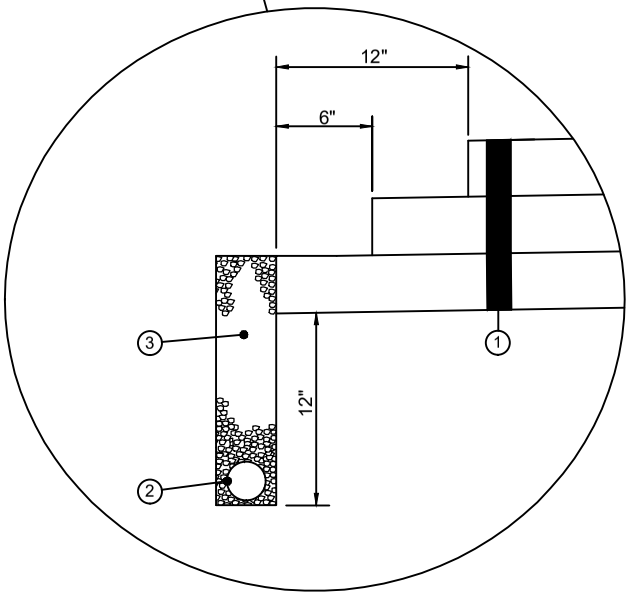
(4) ITEM 204 - SUBGRADE COMPACTION

(5) ITEM 659 - SEEDING AND MULCHING

(6) ITEM 254 - 1½" PAVEMENT PLANING

(7) ITEM 407 - TACK COAT





1. PAVEMENT DESIGN PER CITY OF COLUMBUS NON-RESIDENTIAL STREET PAVEMENT DESIGN POLICY
2. ITEM 605 - 4" PIPE UNDERDRAIN
3. NO. 8 OR NO. 57 AGGREGATE
4. ITEM 204 - SUBGRADE COMPACTION
5. ITEM 659 - SEEDING AND MULCHING

NOTES:

1. DITCH DESIGN PER CITY STORMWATER DRAINAGE MANUAL.
2. PUBLIC ACCESS EASEMENT REQUIRED FOR ANY WALK OUTSIDE OF R/W.
3. SLOPE: 4:1 PREFERRED
   3:1 MAX

UNCURBED SECTION
SIDE DITCH

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2135

3/30/2018

SHT 1 OF 1

CURBED SECTION APPROACH TO NON-CURBED SECTION

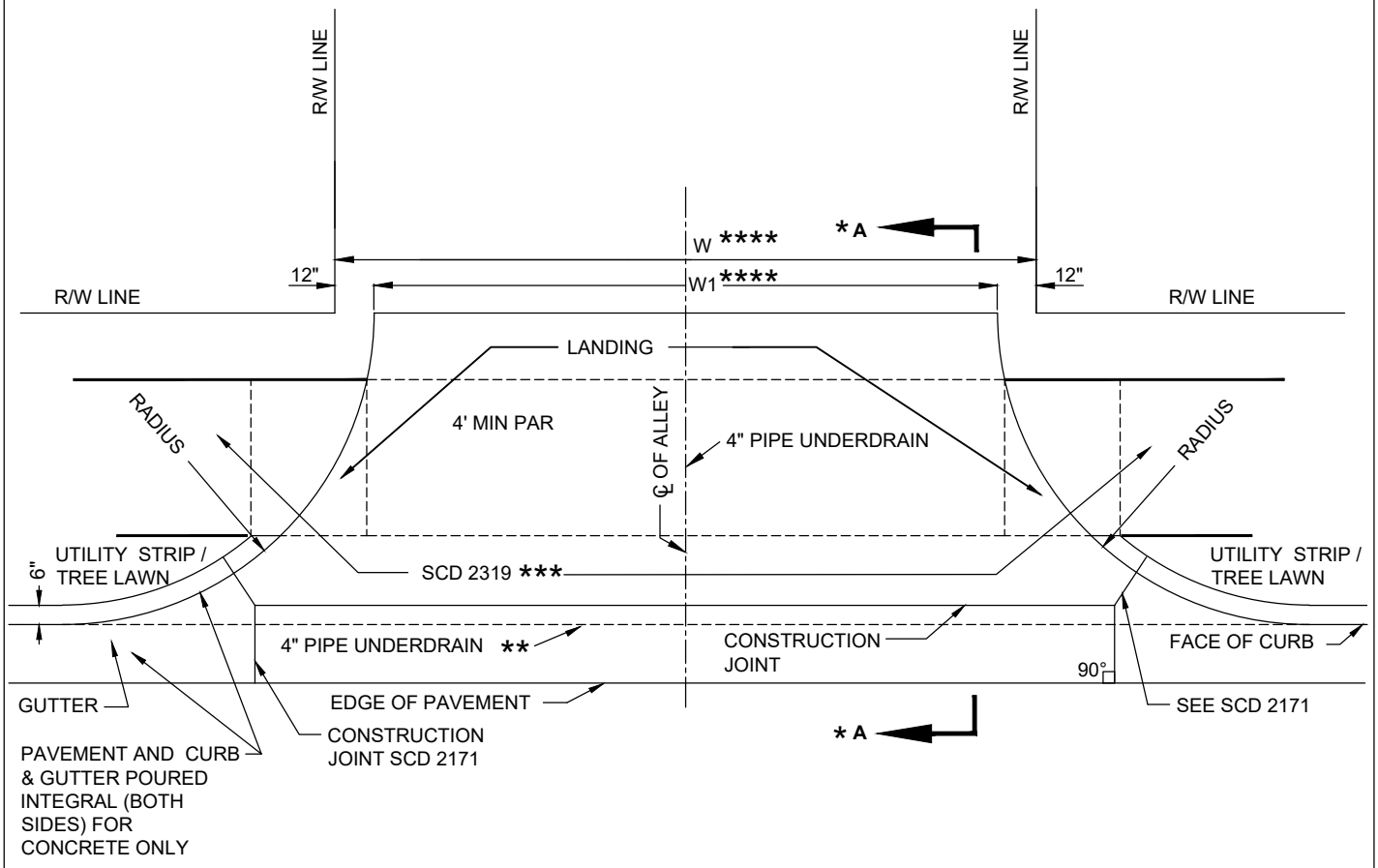
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2145

3/30/2018

SHT 1 OF 1



* SEE SHEET 3 OF 3 FOR SECTION A-A.

** MAINTAIN CONCRETE GUTTER AND 4" PIPE UNDERDRAIN.

*** IF SIDEWALK IS BUILT AT GRADE AND CURB IS DROPPED THEN ONLY DETECTABLE WARNINGS ARE REQUIRED.

**** SEE TABLE SCD 2151.

RAISED EDGE OR CURB ON ALLEY SECTION WILL BE INCLUDED IN THE AREA OF CONCRETE PAVING AND CURB AND GUTTER LENGTH THROUGH ALLEY

PAR = PEDESTRIAN ACCESS ROUTE.

d = DISTANCE FROM STRINGLINE TO CENTERLINE INVERT.

COMBINATION CURB & GUTTER

ALLEY APPROACH

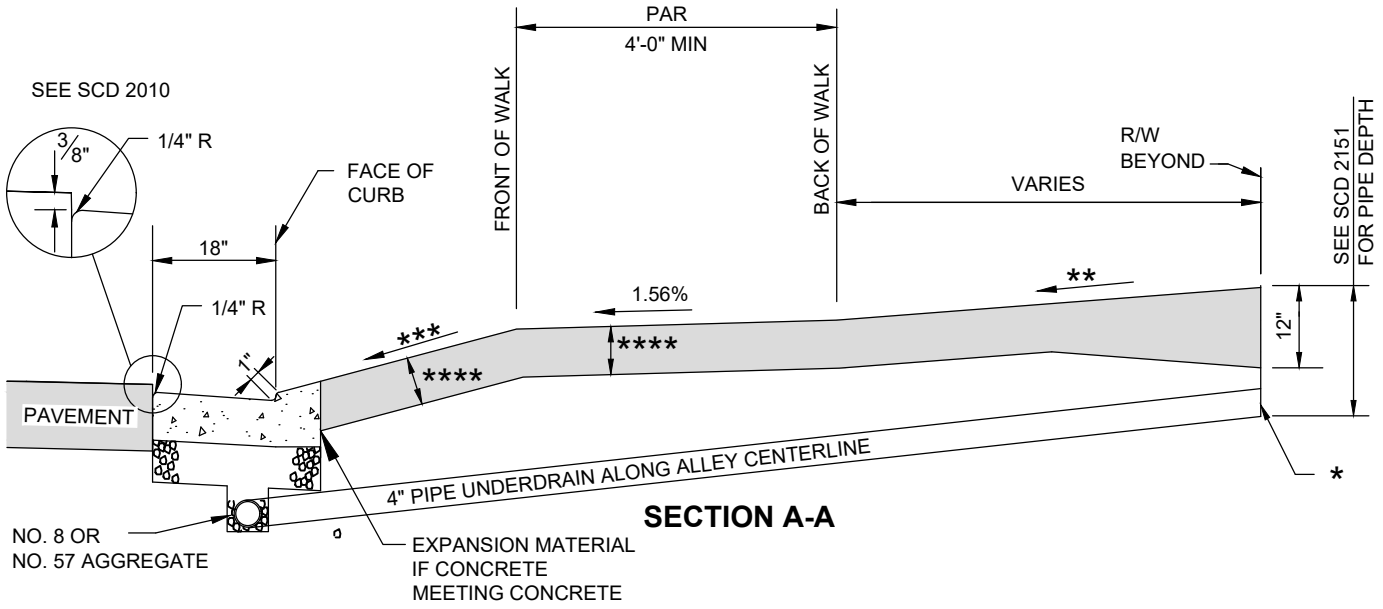
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

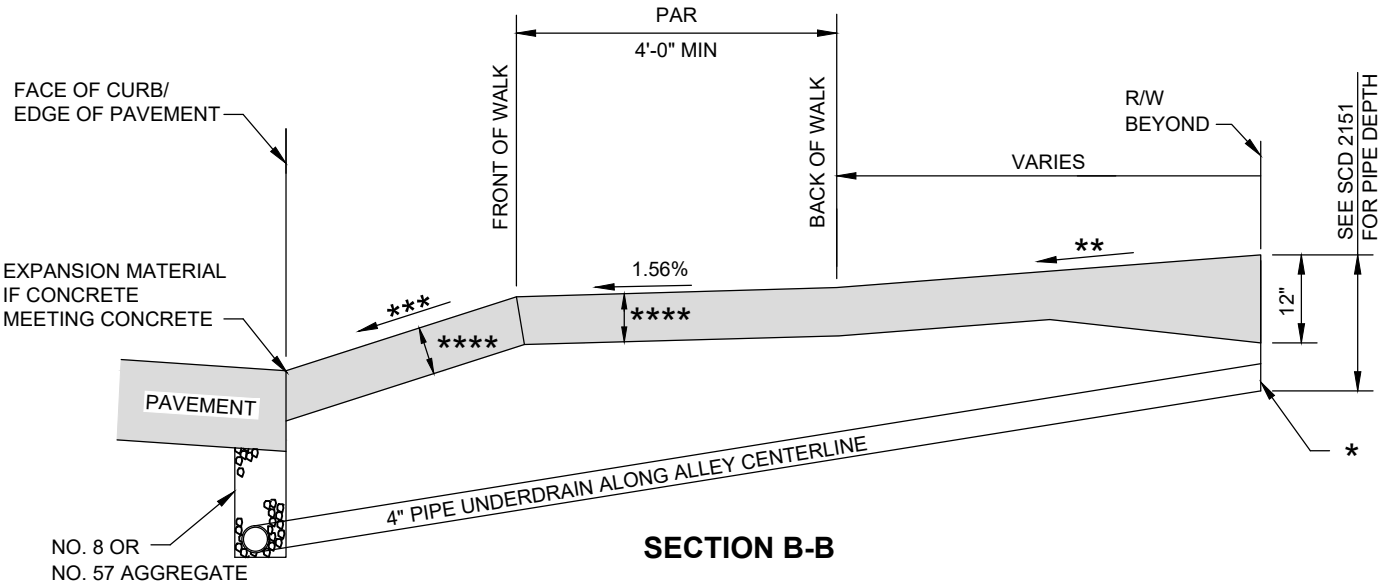
STD DWG
2150

4/30/2018

SHT 1 OF 3



SECTION A-A



SECTION B-B

* CAP END IF NOT CONNECTED TO PIPE UNDERDRAIN AT TIME OF CONSTRUCTION.

** SLOPE VARIES.

*** 8% MAX SLOPE

**** FOR CONCRETE, 7".
FOR FLEXIBLE PAVEMENT, SEE RESIDENTIAL PAVEMENT POLICY.

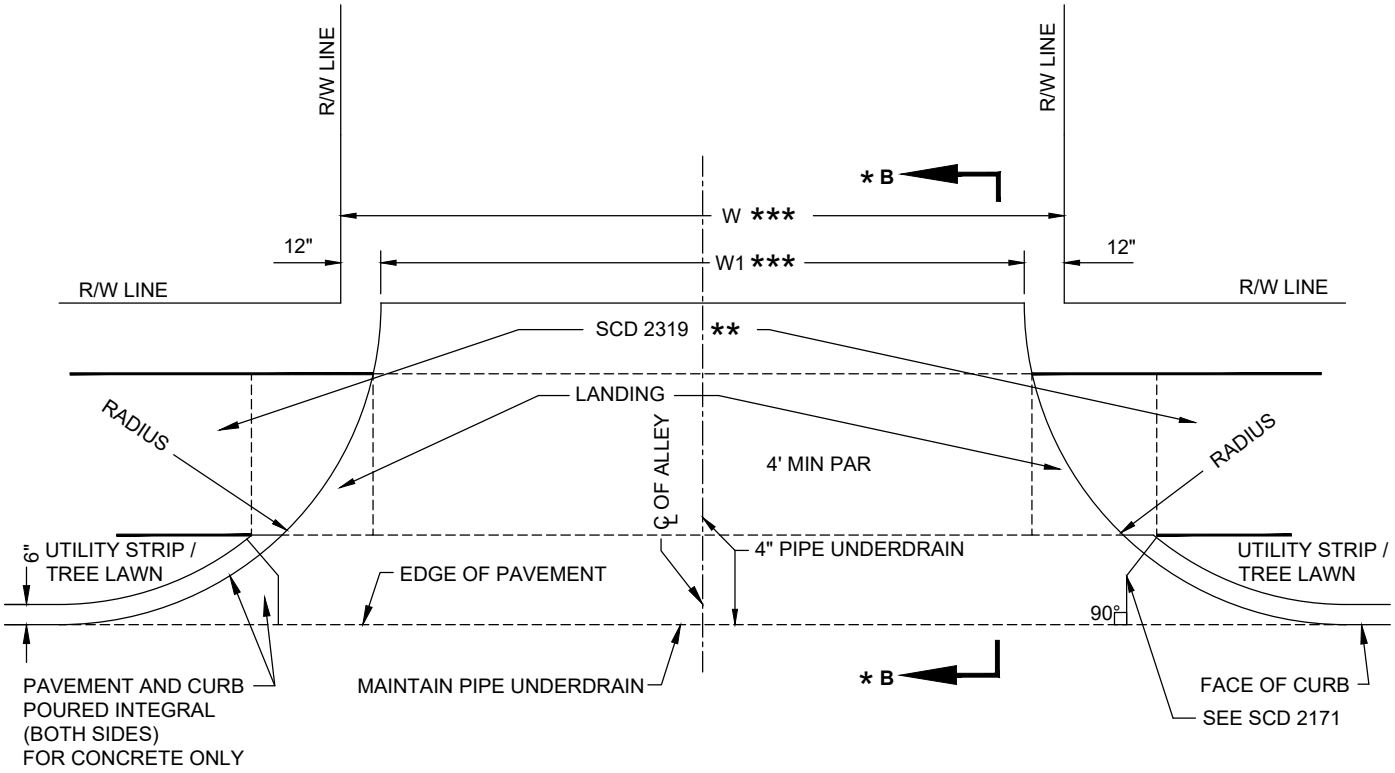
TYPICAL PROFILE

PAR = PEDESTRIAN ACCESS ROUTE.

ALLEY APPROACH

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2150
4/30/2018
SHT 3 OF 3



* SEE SHEET 3 OF 3 FOR SECTION B-B.

** IF SIDEWALK IS BUILT AT GRADE AND CURB IS DROPPED THEN ONLY DETECTABLE WARNINGS ARE REQUIRED.

*** SEE TABLE, SCD 2151.

RAISED EDGE OR CURB ON ALLEY SECTION WILL BE INCLUDED IN THE AREA OF CONCRETE PAVING AND CURB AND GUTTER LENGTH THROUGH ALLEY.

PAR = PEDESTRIAN ACCESS ROUTE.

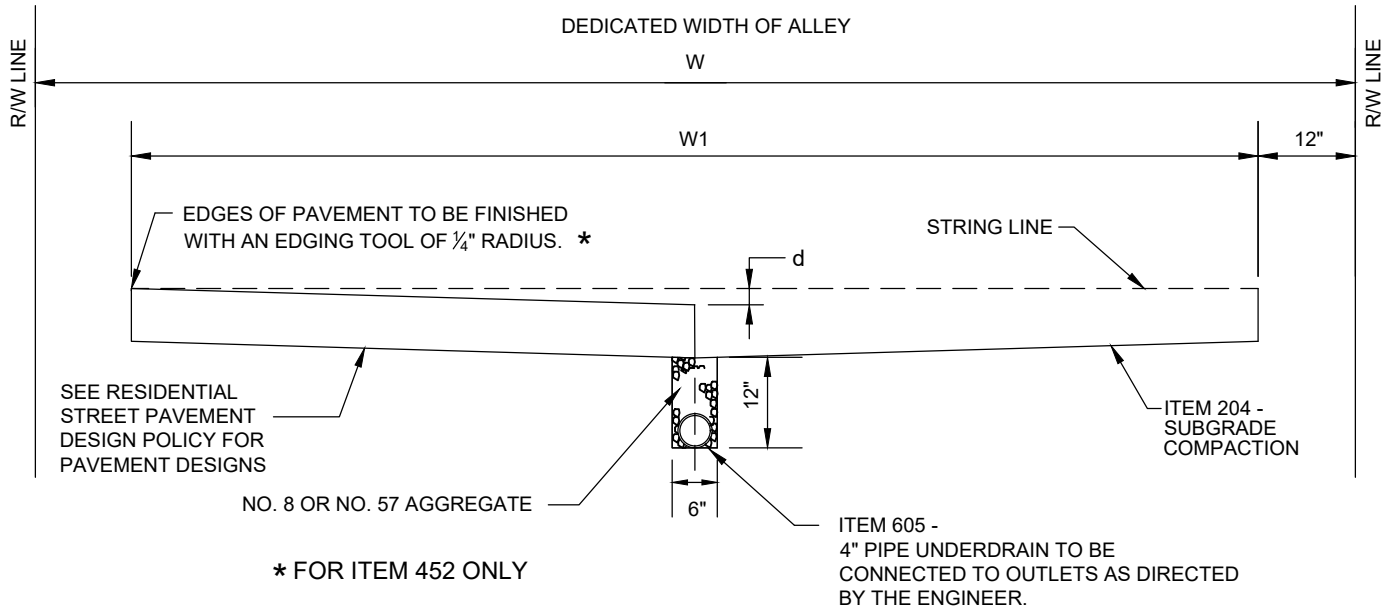
d = DISTANCE FROM STRINGLINE TO CENTERLINE INVERT.

CURB, STRAIGHT 18"

ALLEY APPROACH

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2150
4/30/2018
SHT 2 OF 3



* FOR ITEM 452 ONLY

W (R/W WIDTH)	W1	d
15'	13'	2 ¾"
16'	14'	3"
18'	16'	3 ¼"
20'	18'	3 ½"
OVER 20'	20'	3 ¾"
OVER 24'	24'	4 ½"

TYPICAL SECTION

ALLEY

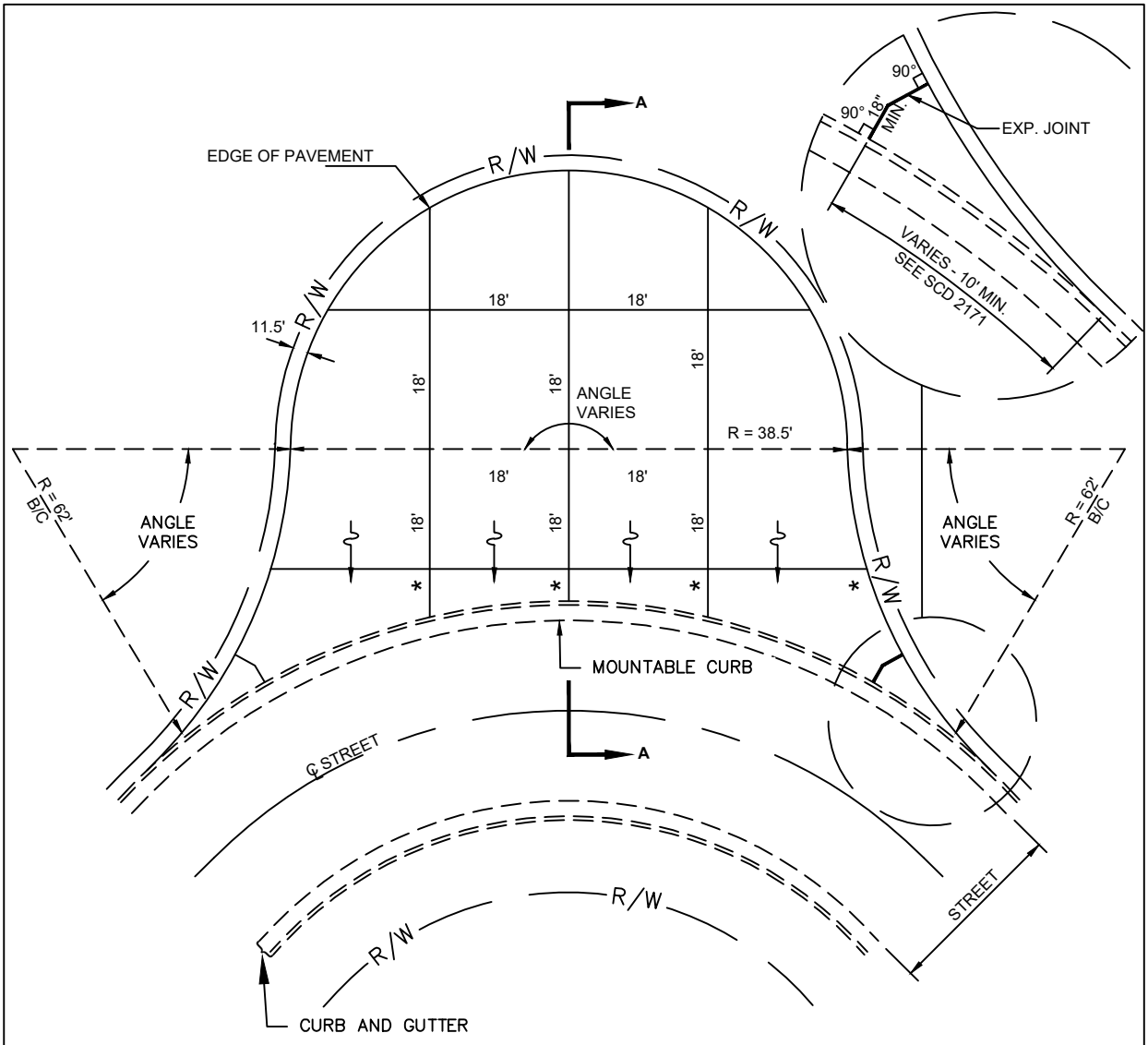
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2151

4/30/2018

SHT 1 OF 1



* VARIABLE - 2' MIN, 18' MAX

EYEBROW SHALL HAVE CONTINUOUS POSITIVE DRAINAGE TO STREET

JOINT SPACING DETAIL

EYEBROW

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2154

12/31/2018

SHT 1 OF 2

ENLARGED SECTION A-A

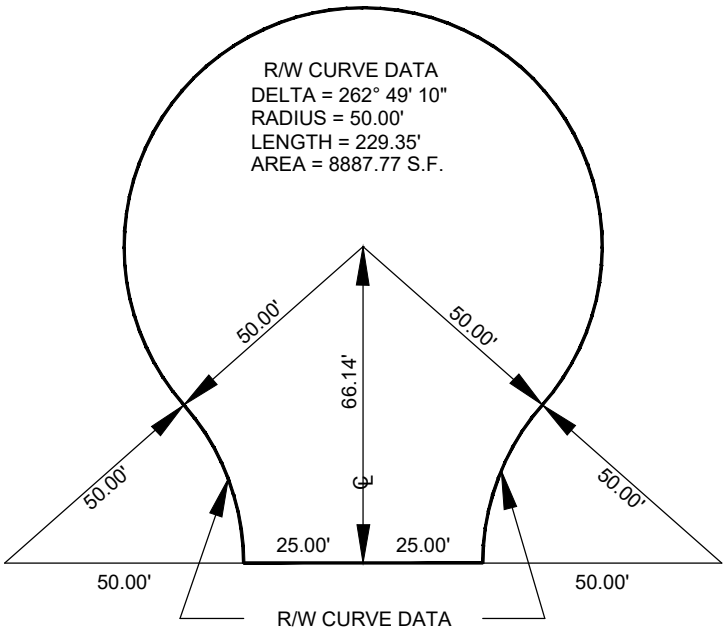
(1) ITEM 452 - 7" NON-REINFORCED CONCRETE PAVEMENT.

TYPICAL SECTION
COMBINATION CURB &
GUTTER, TYPE MOUNTABLE

EYEBROW

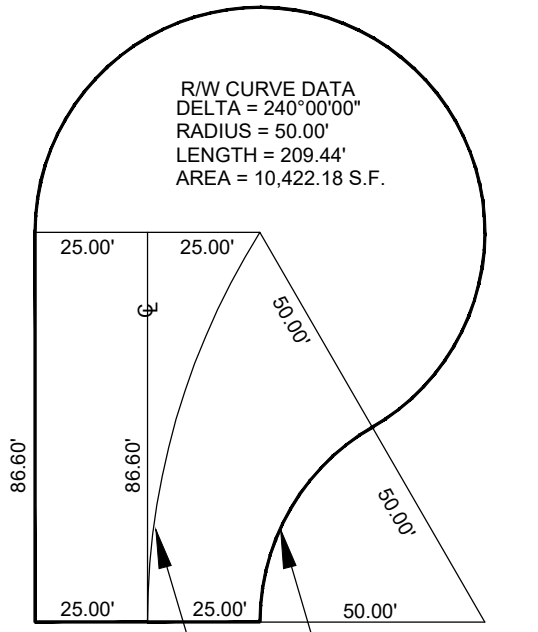
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2154
12/31/2018
SHT 2 OF 2



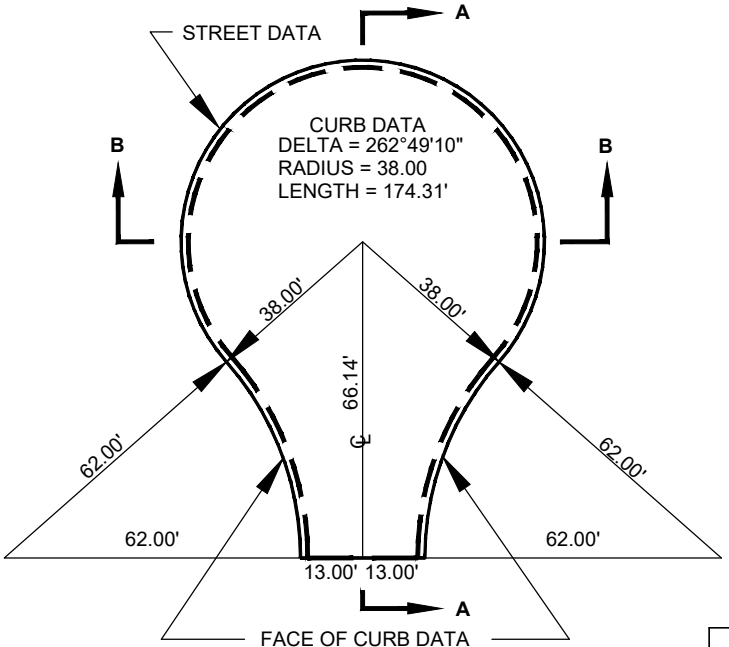
R/W CURVE DATA
DELTA = 41°24'35"
RADIUS = 50.00'
LENGTH = 36.14'

NOTE: ALL DIMENSIONS SHOWN ARE FOR RIGHT-OF-WAY ONLY.

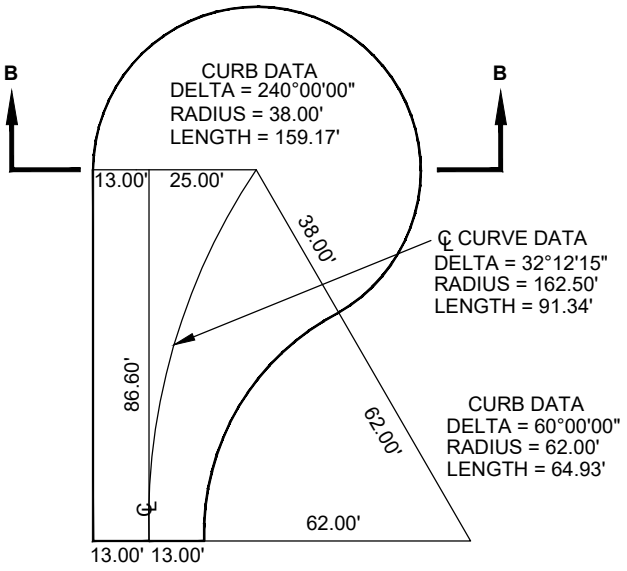


℄ CURVE DATA
DELTA = 32°12'15"
RADIUS = 162.50'
LENGTH = 91.34'

R/W CURVE DATA
DELTA = 60°00'00"
RADIUS = 50.00'
LENGTH = 52.36'



FACE OF CURB DATA
DELTA = 41°24'35"
RADIUS = 62.00'
LENGTH = 44.81'



℄ CURVE DATA
DELTA = 32°12'15"
RADIUS = 162.50'
LENGTH = 91.34'

CURB DATA
DELTA = 60°00'00"
RADIUS = 62.00'
LENGTH = 64.93'

PAVEMENT AREA

PAVEMENT AREA ONLY

AREA = 5102.09 Sq. Ft.

NOTE: ALL DIMENSIONS SHOWN ARE TO FACE OF CURB ONLY.

CUL-DE-SAC FOR 26' WIDE STREET ON A 50' RIGHT-OF-WAY

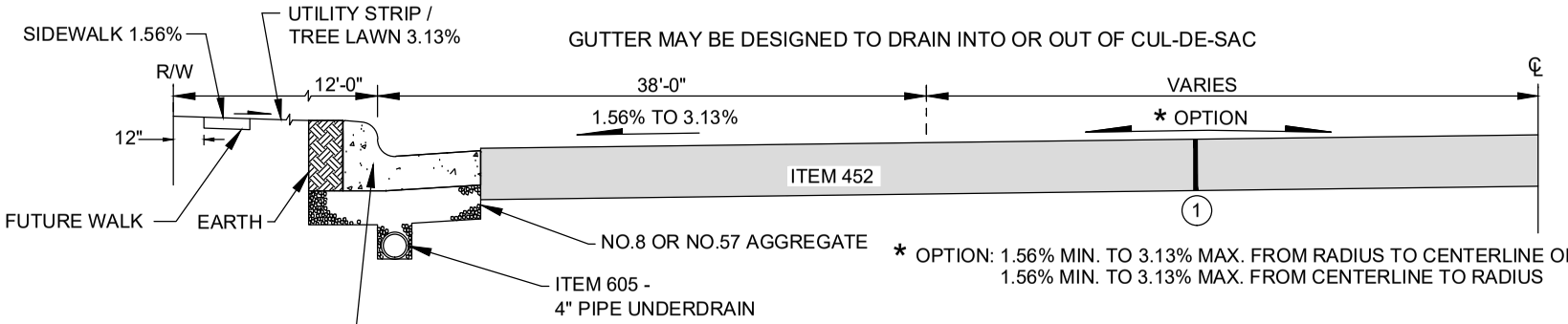
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

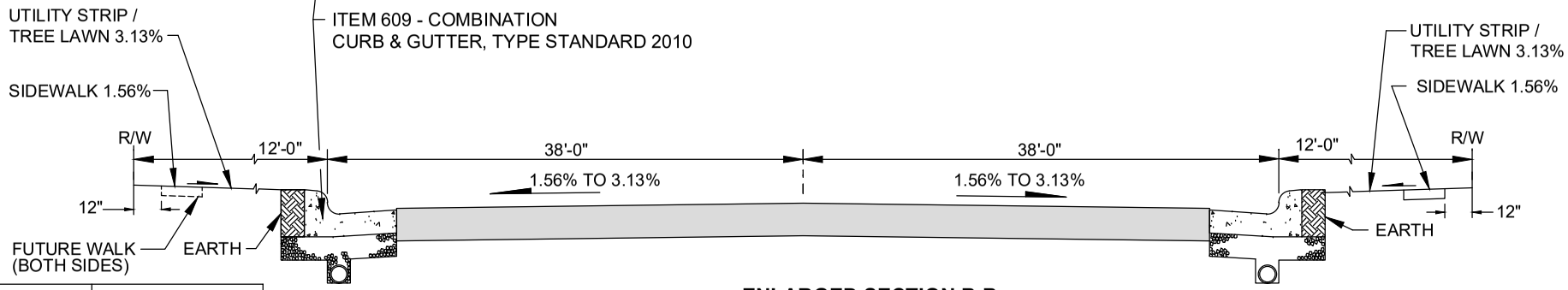
STD DWG
2156

04/30/18

SHT 1 OF 3



ENLARGED SECTION A-A



ENLARGED SECTION B-B

CUL-DE-SAC FOR 26' WIDE STREET ON A 50' RIGHT-OF-WAY

TYPICAL SECTION COMBINATION CURB & GUTTER, TYPE STANDARD

SAW CONTRACTION JOINTS PER STANDARD DRAWING 2156, SHEET 3 OF 3.

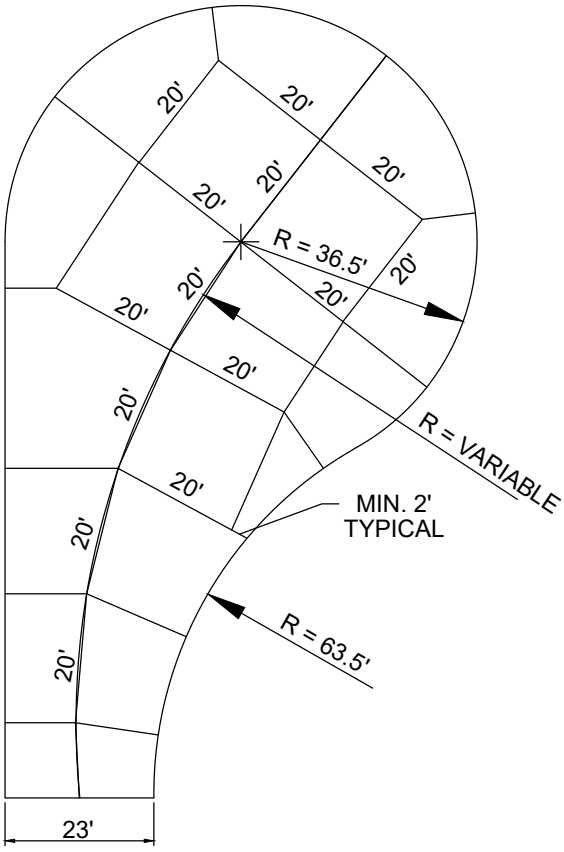
THE TYPE OF CURB AROUND THE CUL-DE-SAC SHALL BE THE SAME AS THE TYPE USED ON THE ADJACENT STREET.

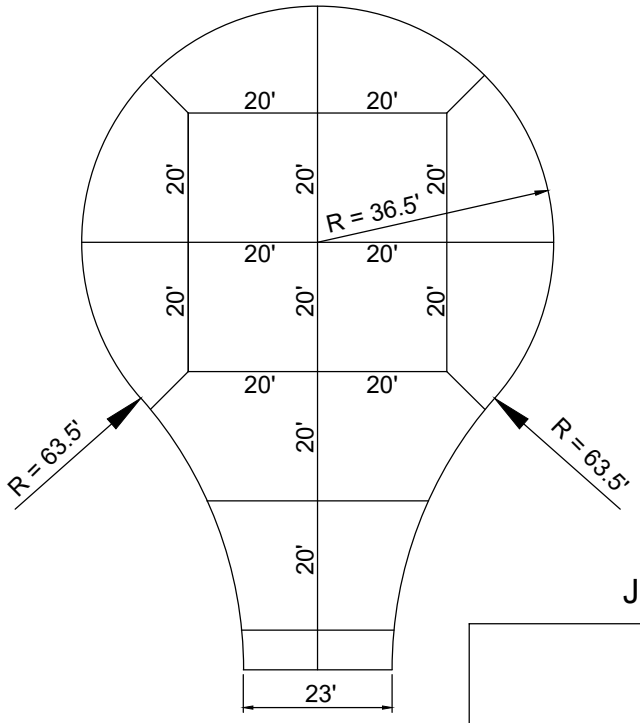
(1) ITEM 452 - 7" NON-REINFORCED CONCRETE PAVEMENT.

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG **2156**

04/30/18





JOINT SPACING DETAIL

CUL-DE-SAC

NOTE: DETAIL APPLIES TO CONCRETE PAVEMENT OR CONCRETE BASE ONLY.

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
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2156
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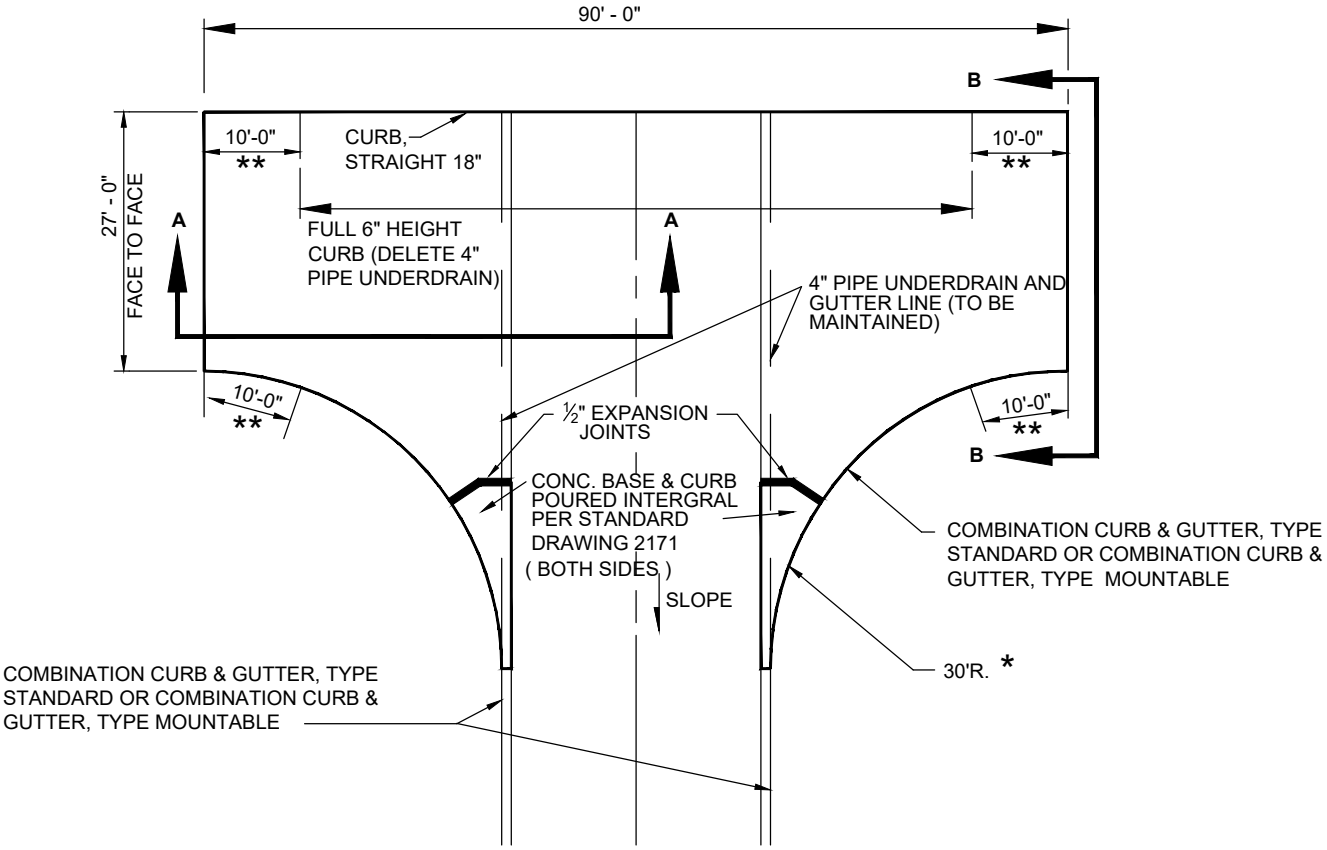

* 20' RADIUS IF 200' OR LESS FROM CENTERLINE OF STREET TO CENTERLINE OF TURNAROUND.

** TAPER CURB 6" TO 1".

UNDERDRAIN SHALL BE SLOPED FOR POSITIVE DRAINAGE TO CURB INLET.

R/W AND EASEMENTS FOR T-TURNAROUND TO BE DETERMINED DURING SITE DEVELOPMENT PHASE AND PLATTING PROCESS.

T - TURNAROUND

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2157

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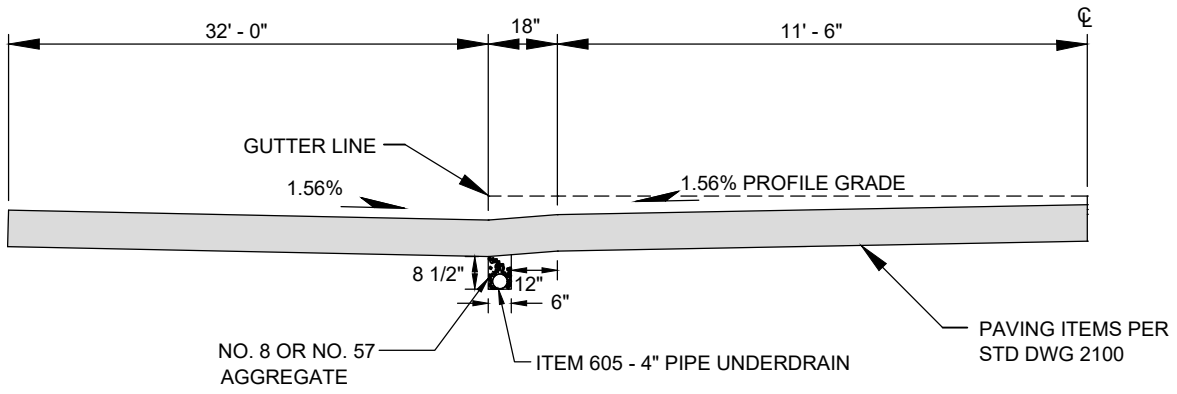
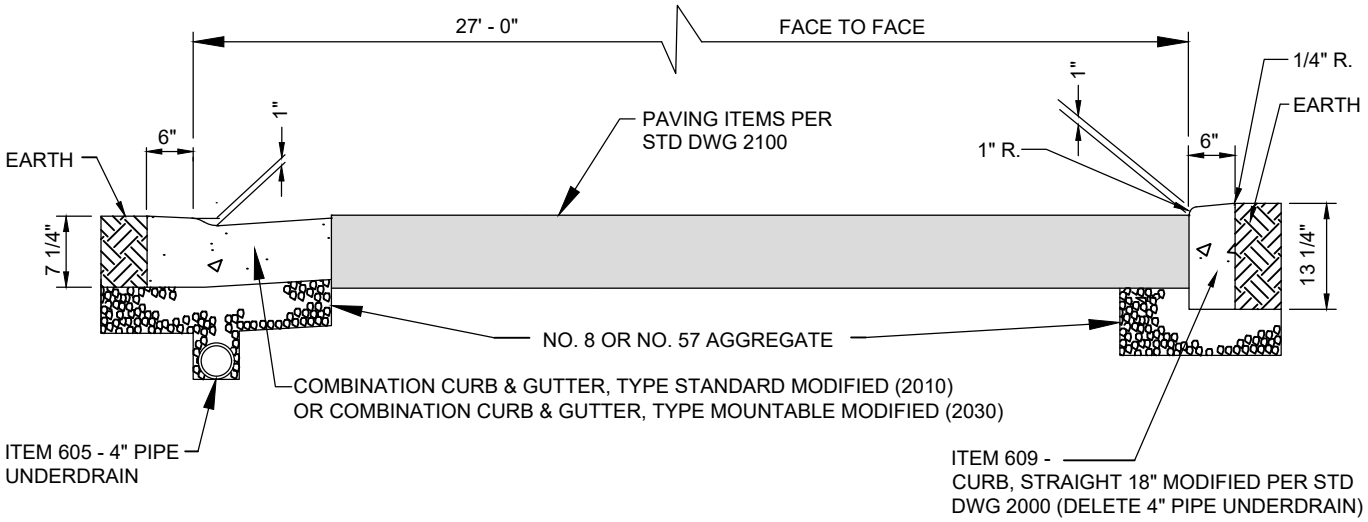
SHT 1 OF 3



SECTION A - A



SECTION B - B

TYPICAL SECTION

NOTE:
UNDERDRAINS SHALL BE SLOPED FOR
POSITIVE DRAINAGE TO CURB INLET.

T - TURNAROUND

CITY OF COLUMBUS, OHIO
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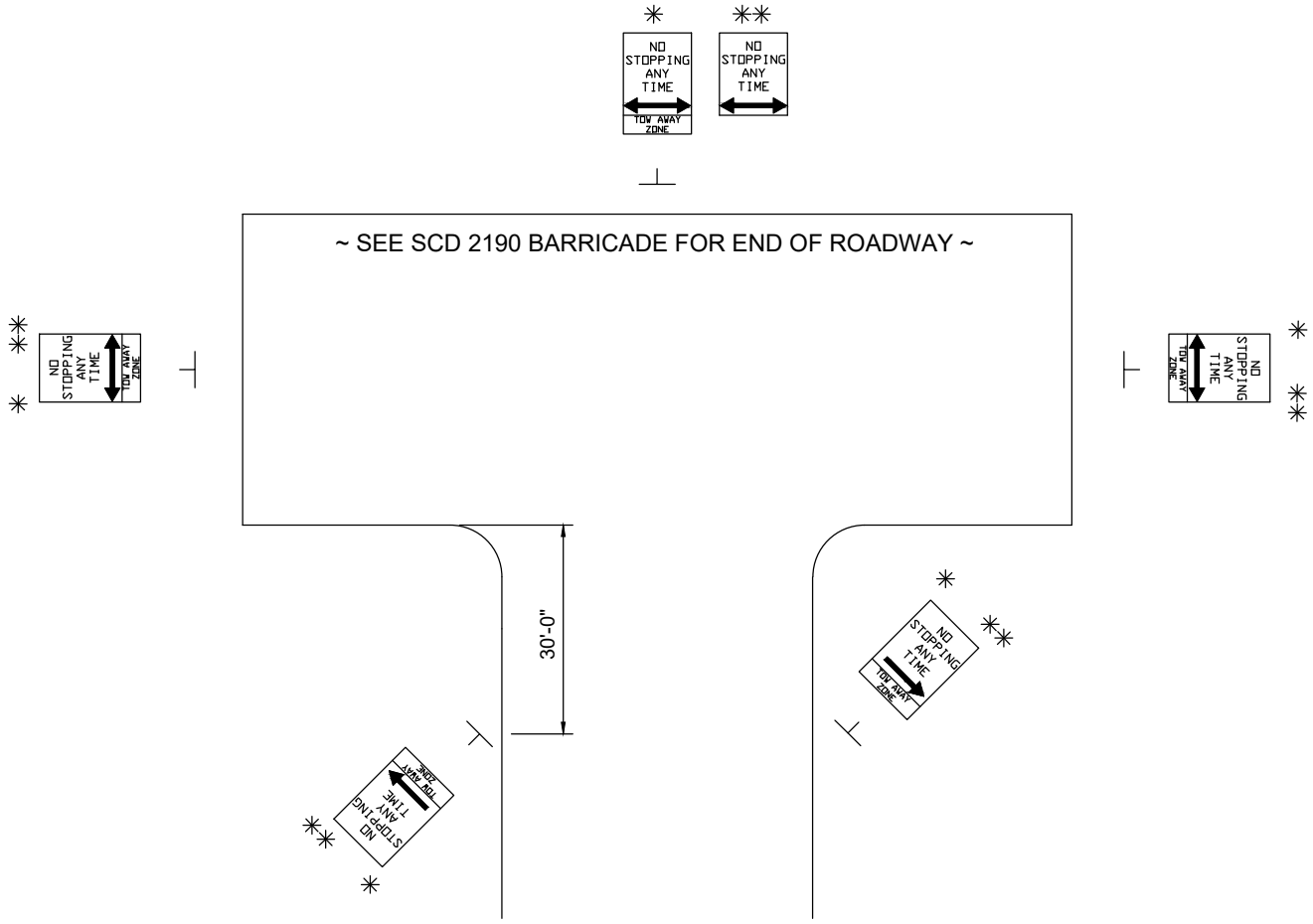

SIGNING SHALL BE INSTALLED TO KEEP TURNAROUND CLEAR FOR EMERGENCY VEHICLES. SIGNS ARE TO BE REMOVED IF AND WHEN THE STREET IS CUT THROUGH.

REFERENCE SUPPLEMENTAL SPECIFICATIONS 1630.

✳ FOR USE ON PRIVATE STREETS ONLY

CP-116.16 (L)(R)(D)
12"x 24"

✳✳ FOR USE ON PUBLIC R/W

CP-114.01 (L)(R)(D)
12"x 18"

⊥ U-CHANNEL DRIVE POST

SIGNING

T - TURNAROUND

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
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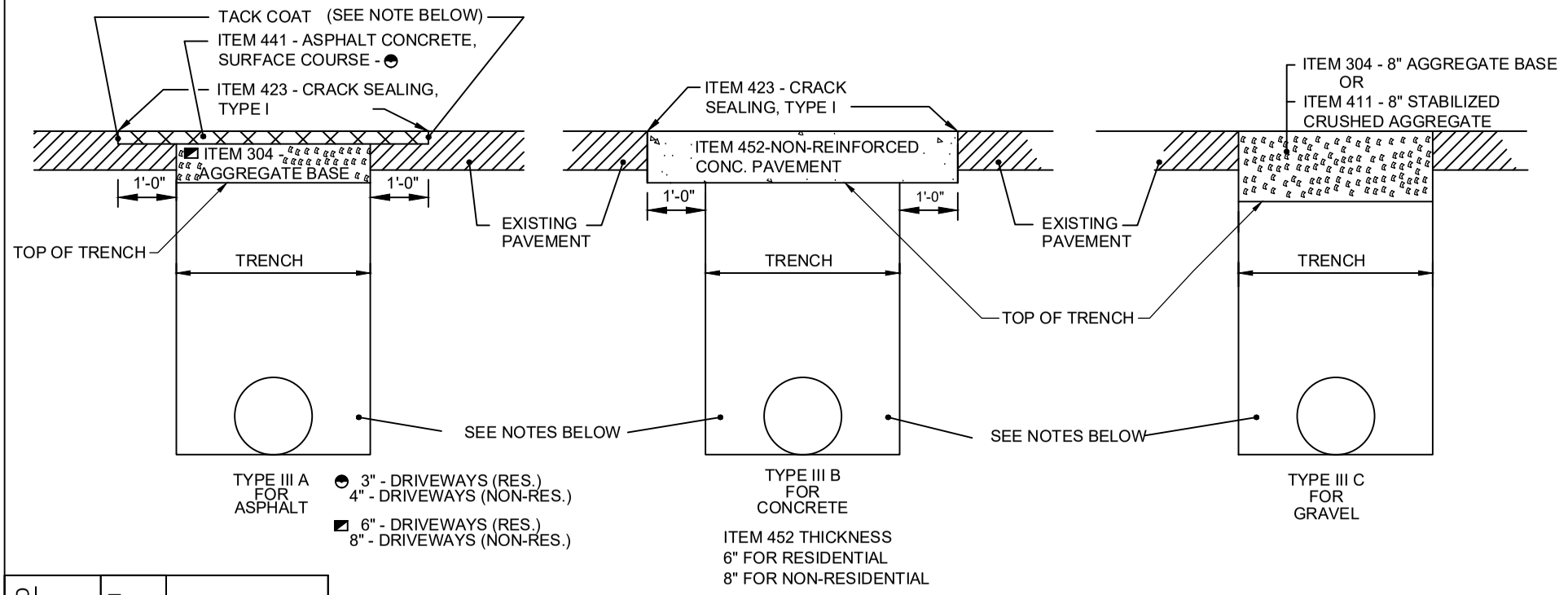


DRIVEWAY REPLACEMENT

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG 2160

12/31/2018

SHT 1 OF 1

BACKFILL FOR ALL TRENCHES SHALL BE IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS.

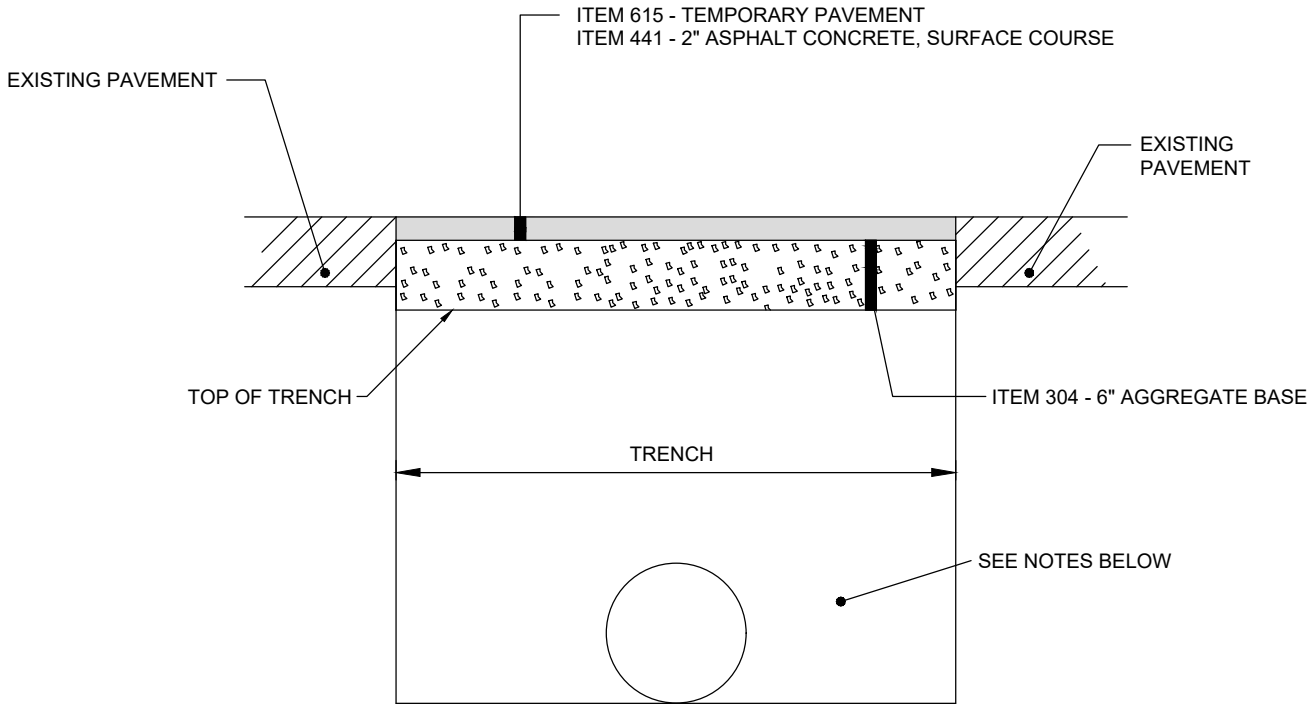
PERMANENT REPAVING SHALL NOT BE DONE UNTIL SO ORDERED OR APPROVED BY THE ENGINEER. THE EDGE SHALL BE CUT VERTICAL AND TRIMMED TO PROVIDE A STRAIGHT LINE.

ITEM 407 - TACK COAT SHALL BE APPLIED AT A RATE OF 0.08 GAL/SY.

ALL EXISTING CONCRETE WALKS OR CONCRETE PAVEMENTS BEING REPLACED SHALL BE REMOVED AT AN EXISTING JOINT AND REPLACED PER STANDARD DRAWING.

DRIVEWAY PAVEMENT SHALL BE REPLACED BY EITHER MATCHING THE EXISTING MATERIALS & THICKNESS, OR BY USING THE ABOVE THICKNESS, WHICHEVER IS GREATER.

IF COMPLETE DRIVE APPROACH IS BEING REBUILT REFERENCE THE STANDARD DRAWING APPLICABLE TO THE DRIVE.



BACKFILL FOR ALL TRENCHES SHALL BE IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS.

TEMPORARY PAVEMENT SHALL BE PLACED ON THE SAME DAY THE ORIGINAL PAVEMENT IS CUT.

ITEM 441 SHALL NOT BE USED BETWEEN NOVEMBER 1 THROUGH APRIL 1.

TEMPORARY PAVEMENT

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2161

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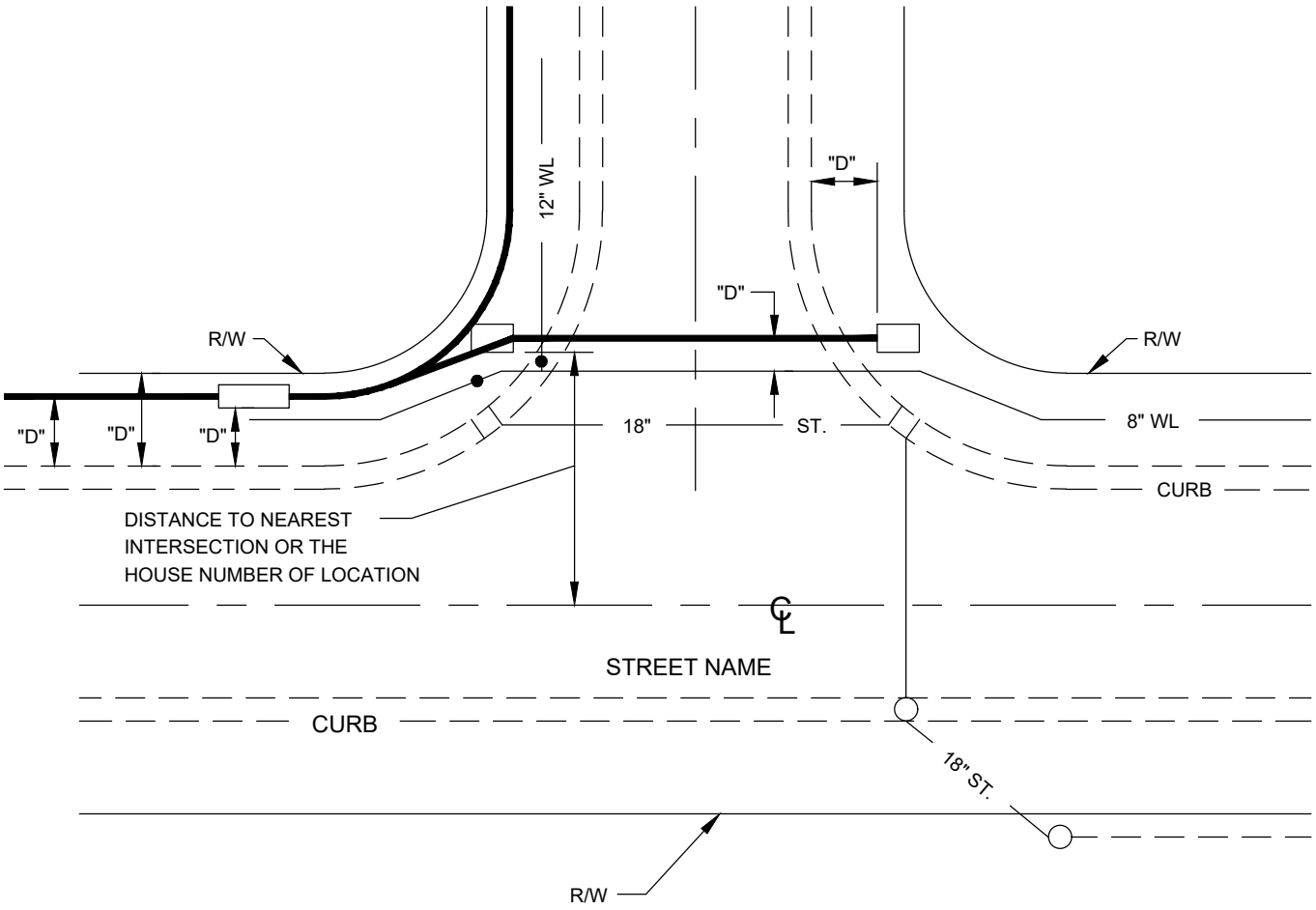

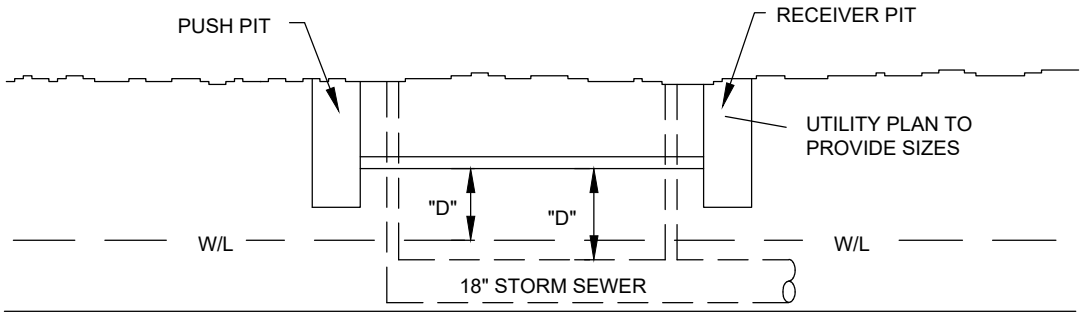

"D" DENOTES WHERE DIMENSIONS ARE NEEDED

PAVEMENT REPLACEMENT SHALL BE
PER STANDARD DRAWING 1441

DIRECTIONAL BORING

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

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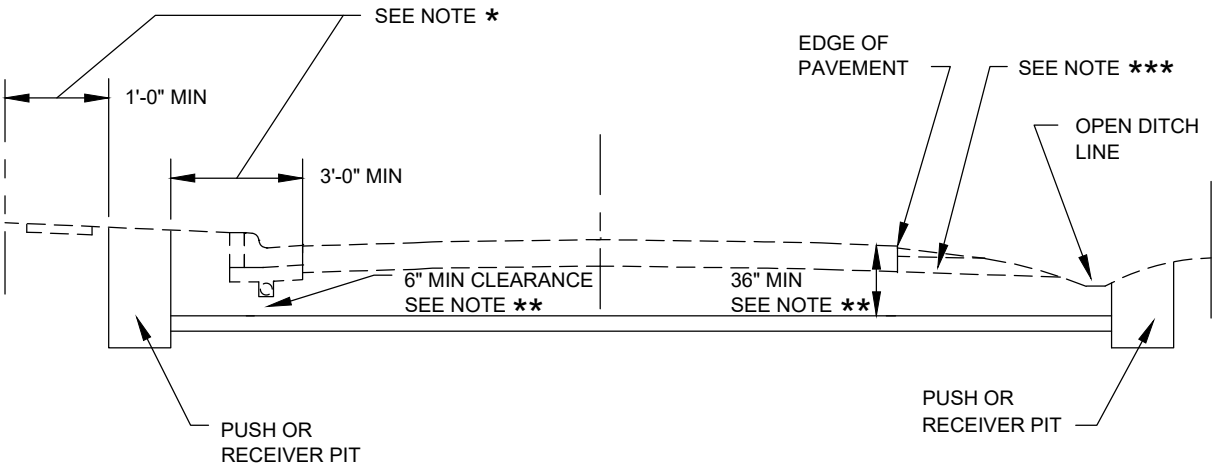
TYPICAL LOCATION
FOR CURBED STREETS

TYPICAL LOCATION
FOR UNCURBED STREETS



NOTES:

* MINIMUM OFFSETS SHALL BE 1 FOOT FROM RIGHT-OF-WAY LINES OR 3 FEET FROM EDGE OF PAVEMENT OR EDGE OF SHOULDER.

** MINIMUM DEPTH FROM TOP OF PUSH TO TOP OF CURB FOR STANDARD COMBINED CURB AND GUTTER IS 30", STRAIGHT CURB 36", AND FLEXIBLE PAVEMENT 36" BELOW TOP OF PAVEMENT.

*** IF AGGREGATE DRAINS ARE DISTURBED, THEY SHALL BE REPLACED.

DIRECTIONAL BORING

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
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NOTES

GENERAL: NOTES AND DETAILS SHOWN ON THIS DRAWING SHALL BE CONSIDERED IN CONJUNCTION WITH AND SUPPLEMENTAL TO THE PERTINENT SPECIFICATIONS FOR PORTLAND CEMENT CONCRETE PAVEMENT AND BASES, AND RELATED INCIDENTALS.

JOINT COMPONENTS: THIS DRAWING IS INTENDED FOR USE WITH A UNIFORM DEPTH PAVEMENT. WHEN THE PROJECT INVOLVES THE PLACING OF VARIABLE DEPTH PAVEMENT, THE JOINT COMPONENTS SHALL BE HELD IN PLACE IN ACCORDANCE WITH THE METHOD SHOWN IN THE PLANS OR AS APPROVED BY THE ENGINEER.

CONTRACTION JOINTS: CONTRACTION JOINTS OF THE TYPE SPECIFIED SHALL BE SPACED IN ACCORDANCE WITH THE CONTRACTION JOINT SPACING TABLE.

CONTRACTION JOINT SPACING	
TYPES OF PAVEMENT OR BASE	**MAXIMUM SPACING BETWEEN JOINTS**
ITEM 451 - REINFORCED CONCRETE PAVEMENT	21'
ITEM 452 - NON-REINFORCED CONCRETE PAVEMENT	15'
ITEM 305 - CONCRETE BASE	15'
ITEM 307 - RCC	30'

CONSTRUCTION JOINTS: IN ITEM 305 - CONCRETE BASE, A CONSTRUCTION JOINT SHALL NOT BE LOCATED CLOSER THAN 6' TO ANOTHER PARALLEL JOINT.

KERF AND SEAL CONFORMING IN ALL ASPECTS TO DETAILS SHOWN FOR CONTRACTION JOINTS SHALL BE PROVIDED AT EACH CONSTRUCTION JOINT IN CONCRETE PAVEMENT AND BASE.

JOINT DETAILS FOR PORTLAND CEMENT CONCRETE PAVING

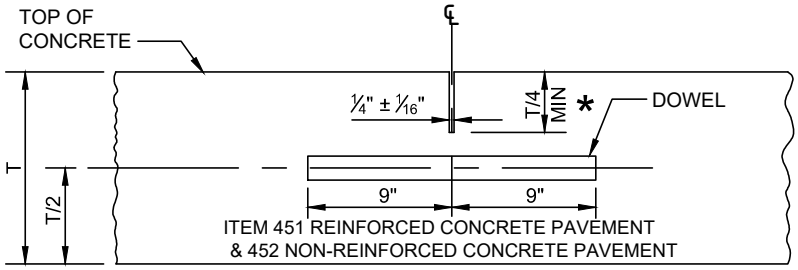
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

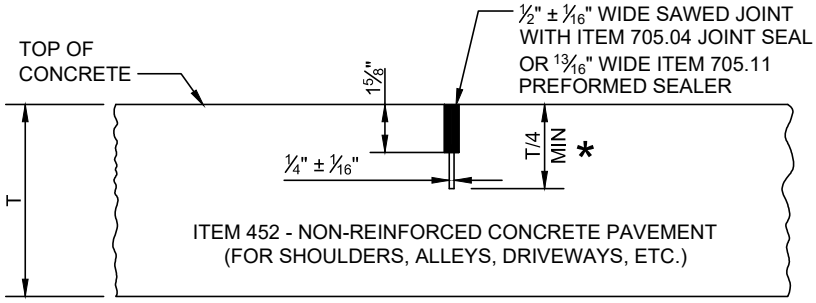
STD DWG
2170

04/30/18

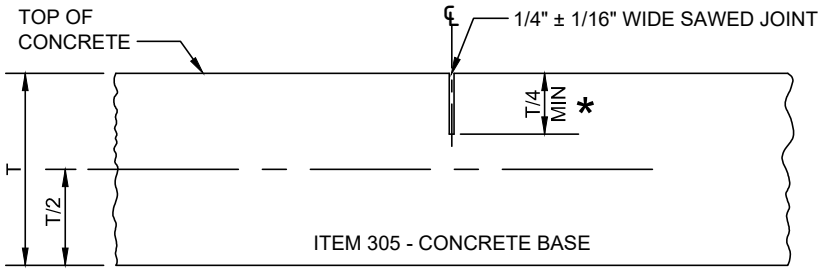
SHT 1 OF 6



ITEM 451 & 452 W/ UNSEALED JOINTS
(DOWEL BAR OMITTED FOR SHOULDERS, ALLEYS, DRIVEWAYS, ETC.)



ITEM 452 W/ SEALED JOINTS



ITEM 305

* WHERE T > 10", THE SAWCUT DEPTH SHALL BE T/3.

CONTRACTION JOINT SECTIONS

JOINT DETAILS FOR PORTLAND CEMENT CONCRETE PAVING

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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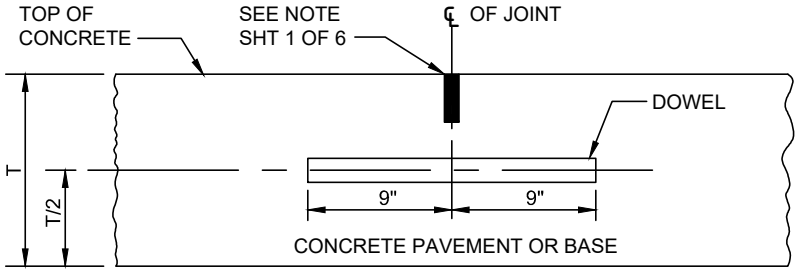
SHT 2 OF 6



SECTION THROUGH CONSTRUCTION JOINT

CONSTRUCTION JOINT

JOINT DETAILS FOR PORTLAND CEMENT CONCRETE PAVING

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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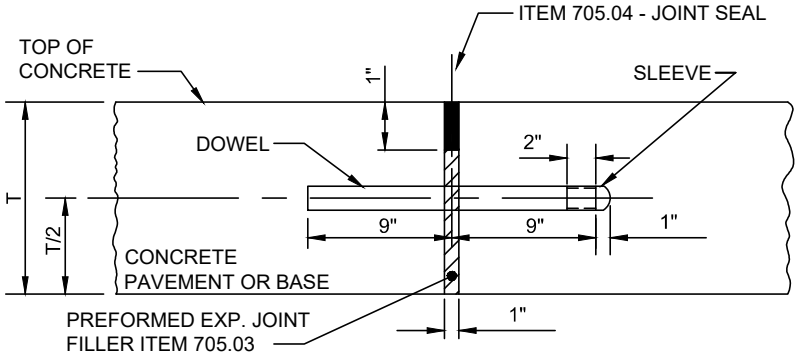
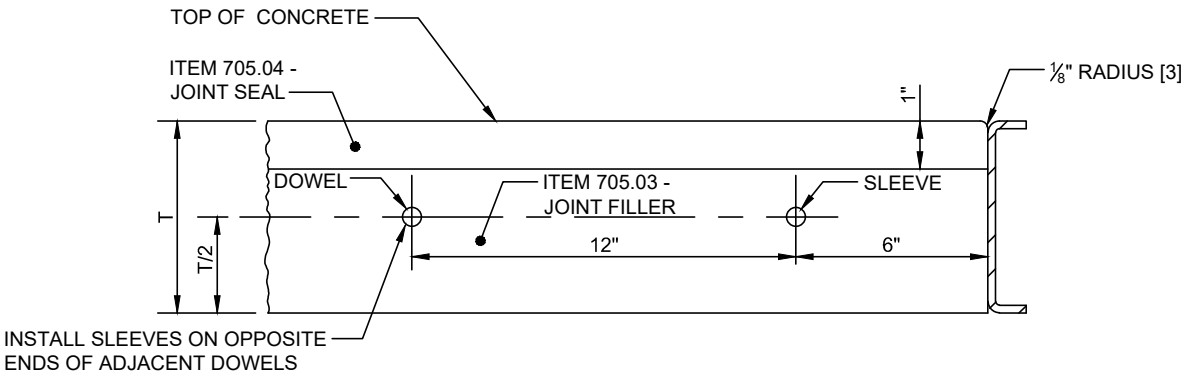
SHT 3 OF 6



SECTION THROUGH EXPANSION JOINT



SIDE ELEVATION OF EXPANSION JOINT
(THROUGH CONCRETE PAVEMENT OR BASE)

EXPANSION JOINTS

JOINT DETAILS FOR PORTLAND CEMENT CONCRETE PAVING

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
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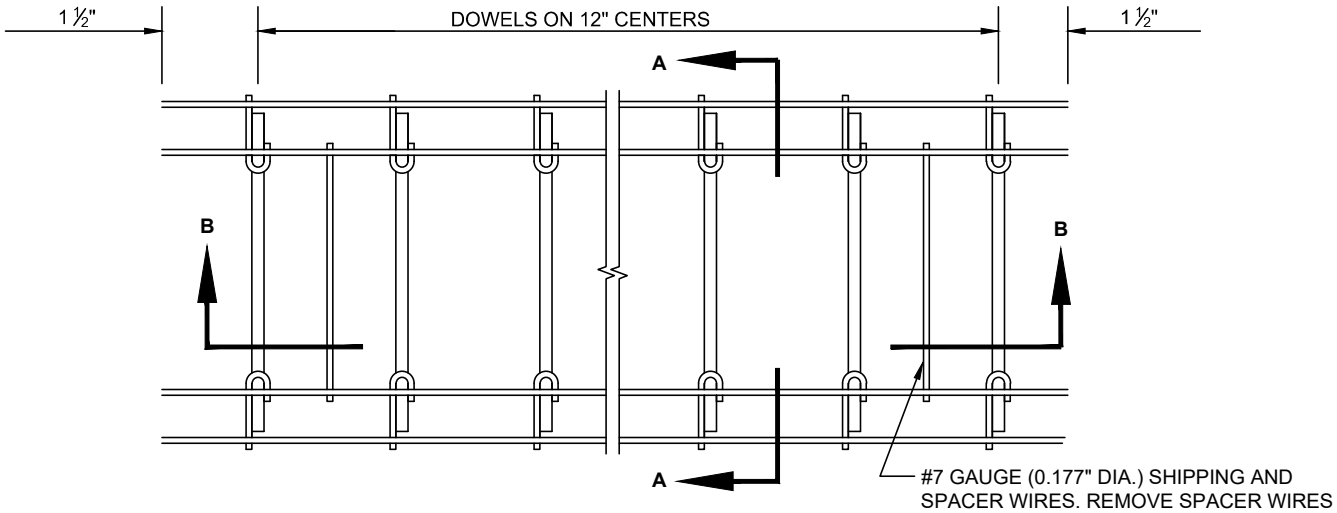
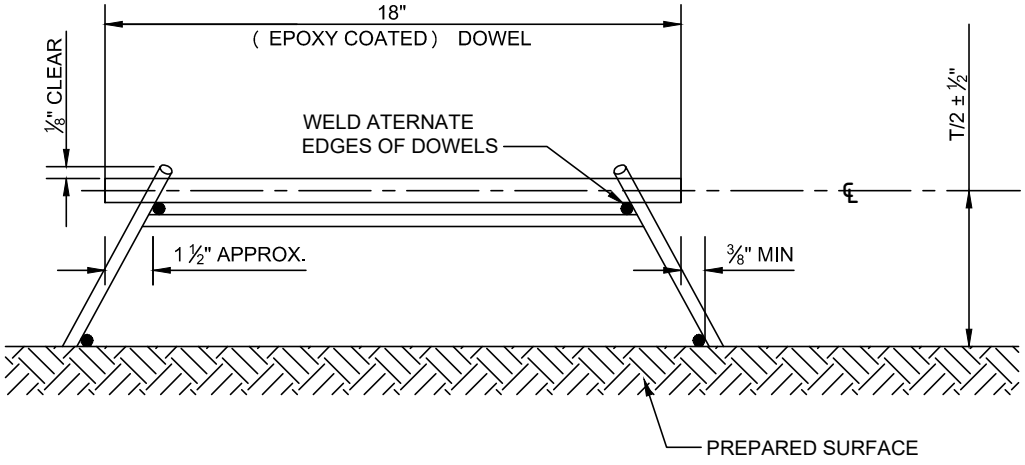
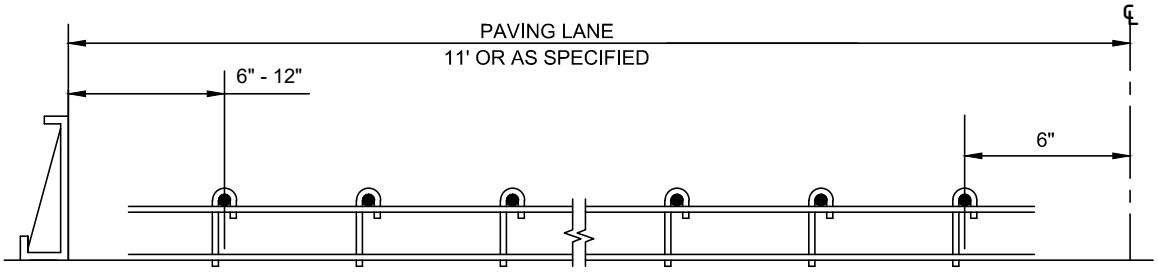


PLAN VIEW



SECTION A-A



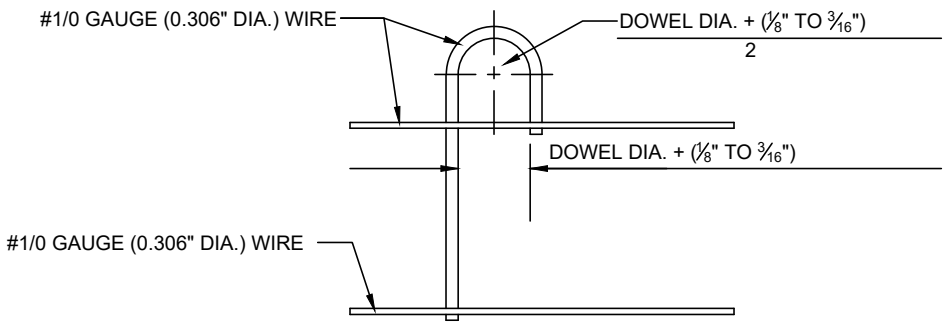
SECTION B-B

DOWEL BASKET ASSEMBLY

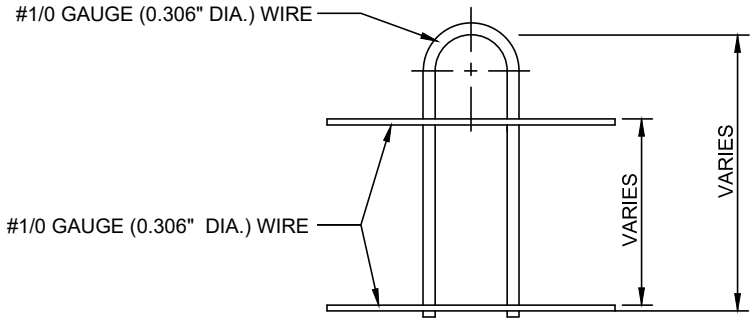
JOINT DETAILS FOR PORTLAND CEMENT CONCRETE PAVING

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2170
04/30/18
SHT 5 OF 6



J-LEG DETAIL
(ALTERNATE)



U-LEG DETAIL

REFER TO CMSC 451.09.B AND 709.13 FOR DOWEL SPECIFICATIONS.

WIRE SIZES SHOWN ARE MINIMUM REQUIRED.

ALL WIRE INTERSECTIONS ARE TO BE WELDED.

STAKES TYPICALLY APPLIED AT WORKING ENDS OF DOWEL.

TOLERANCES:
A) ± ¼" PER FOOT UNLESS OTHERWISE SPECIFIED.
B) CENTERLINE OF INDIVIDUAL DOWELS SHALL BE PARALLEL TO EACH OTHER, THE SURFACE AND THE CENTERLINE OF THE SLAB.
C) ON CENTERS SHOULD BE ±½".
D) DOWELS SHOULD BE PLACED AT MID-DEPTH OF SLAB.

J-LEG OR U-LEG TO BE INSTALLED ON INSIDE OR OUTSIDE OF SUBFRAME.

DOWEL BASKET ASSEMBLY

JOINT DETAILS FOR PORTLAND CEMENT CONCRETE PAVING

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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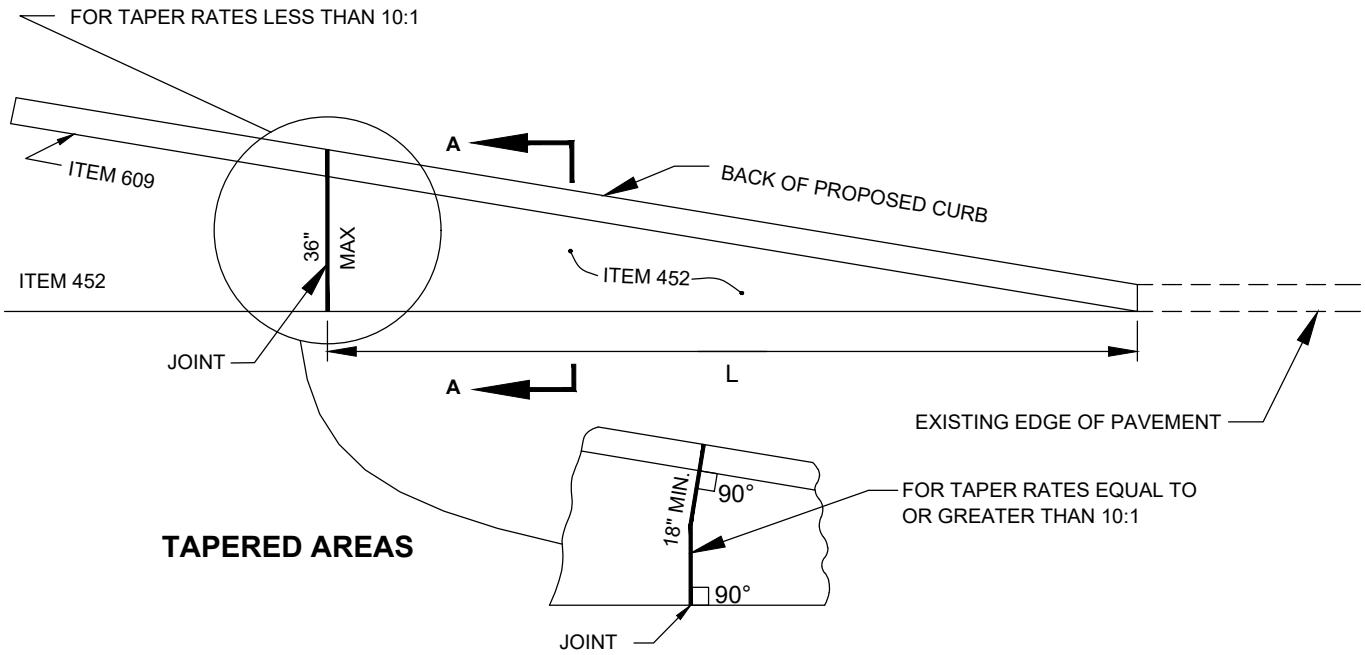
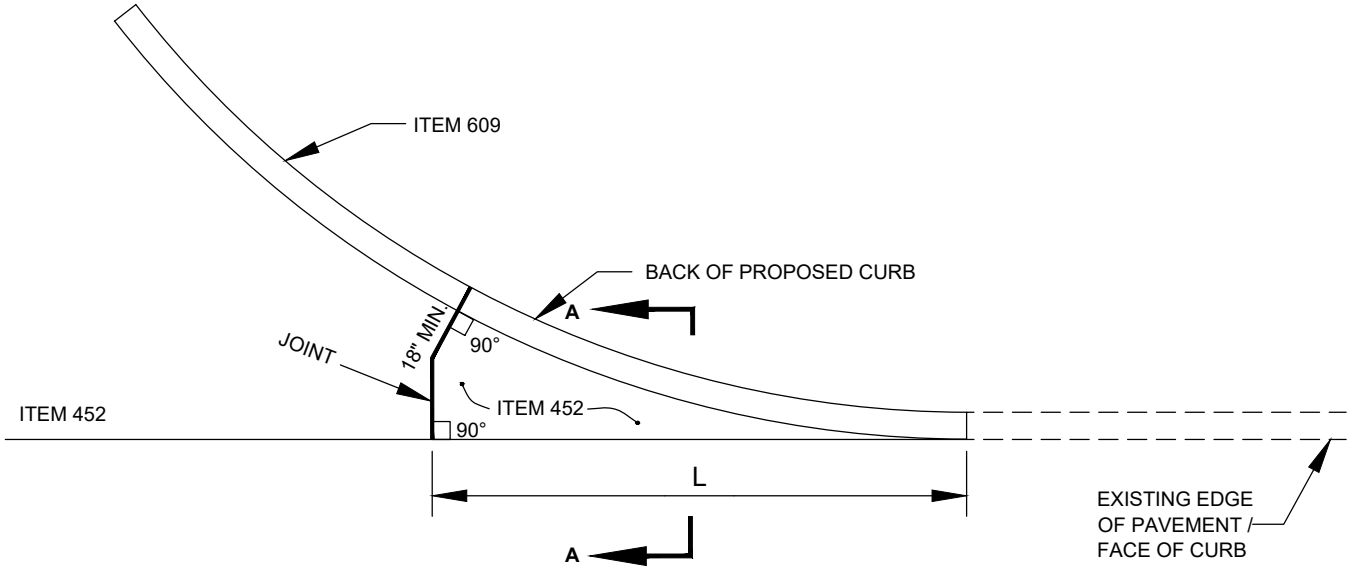
SHT 6 OF 6



TAPERED AREAS



RADIUS AREAS

JOINT LOCATIONS

TRANSITION SECTION TO BE USED WHEN WIDTH OF CONCRETE BASE MATERIAL IS LESS THAN 36".

IF LENGTH L IS GREATER THAN 9 FEET, SAW IN EQUAL SEGMENTS 5 FEET TO 9 FEET LONG.

TRANSITION SECTION FOR CONCRETE PAVEMENT

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

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2171

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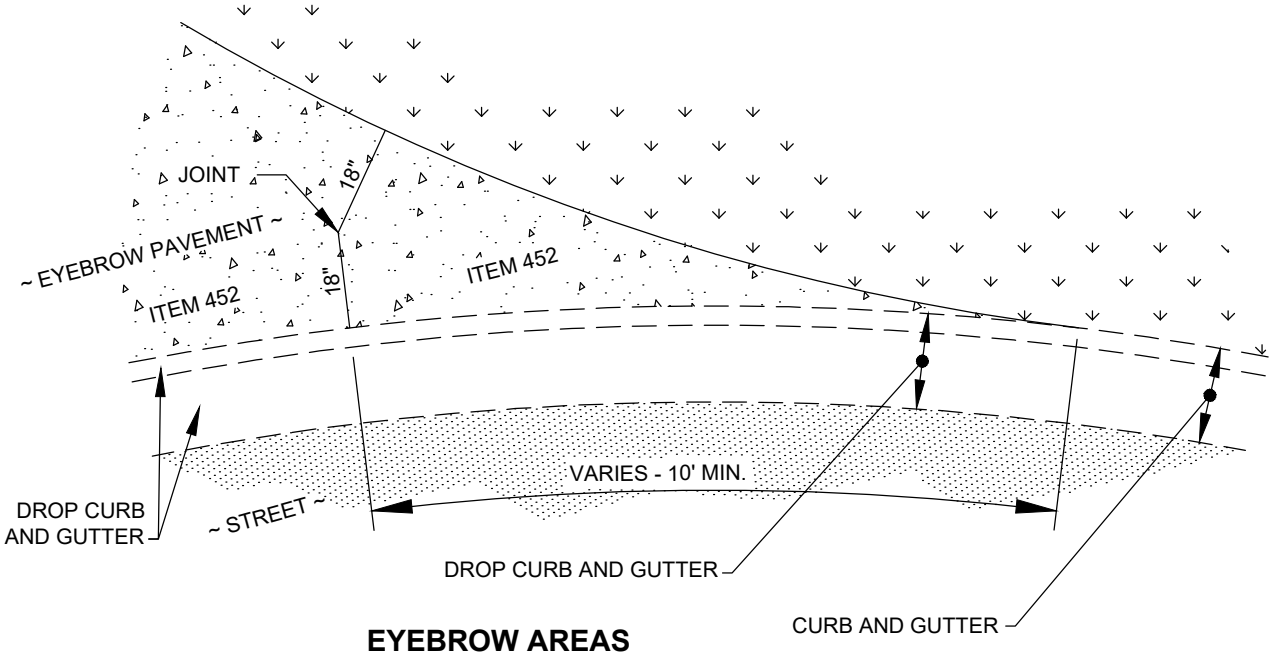
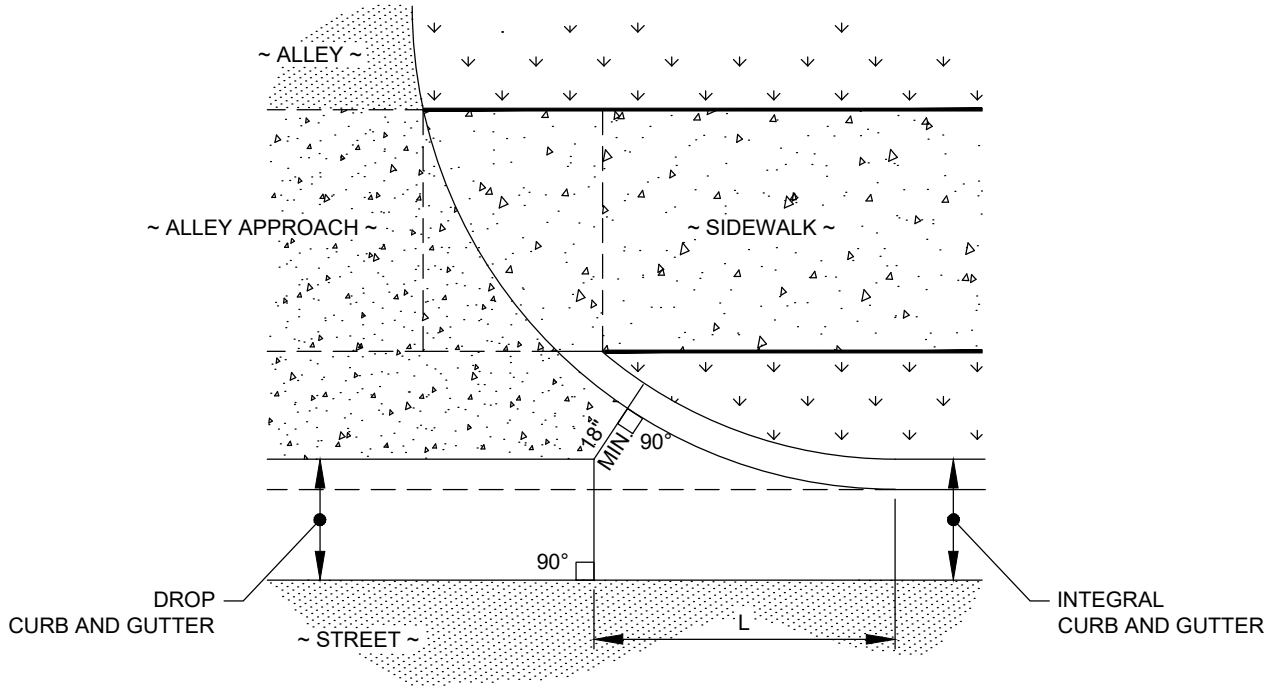


EYEBROW AREAS



ALLEY APPROACH AREAS

JOINT LOCATIONS

TRANSITION SECTION TO BE USED WHEN WIDTH OF CONCRETE BASE MATERIAL IS LESS THAN 36".

IF LENGTH L IS GREATER THAN 9 FEET, SAW IN EQUAL SEGMENTS 5 FEET TO 9 FEET LONG.

TRANSITION SECTION FOR CONCRETE PAVEMENT

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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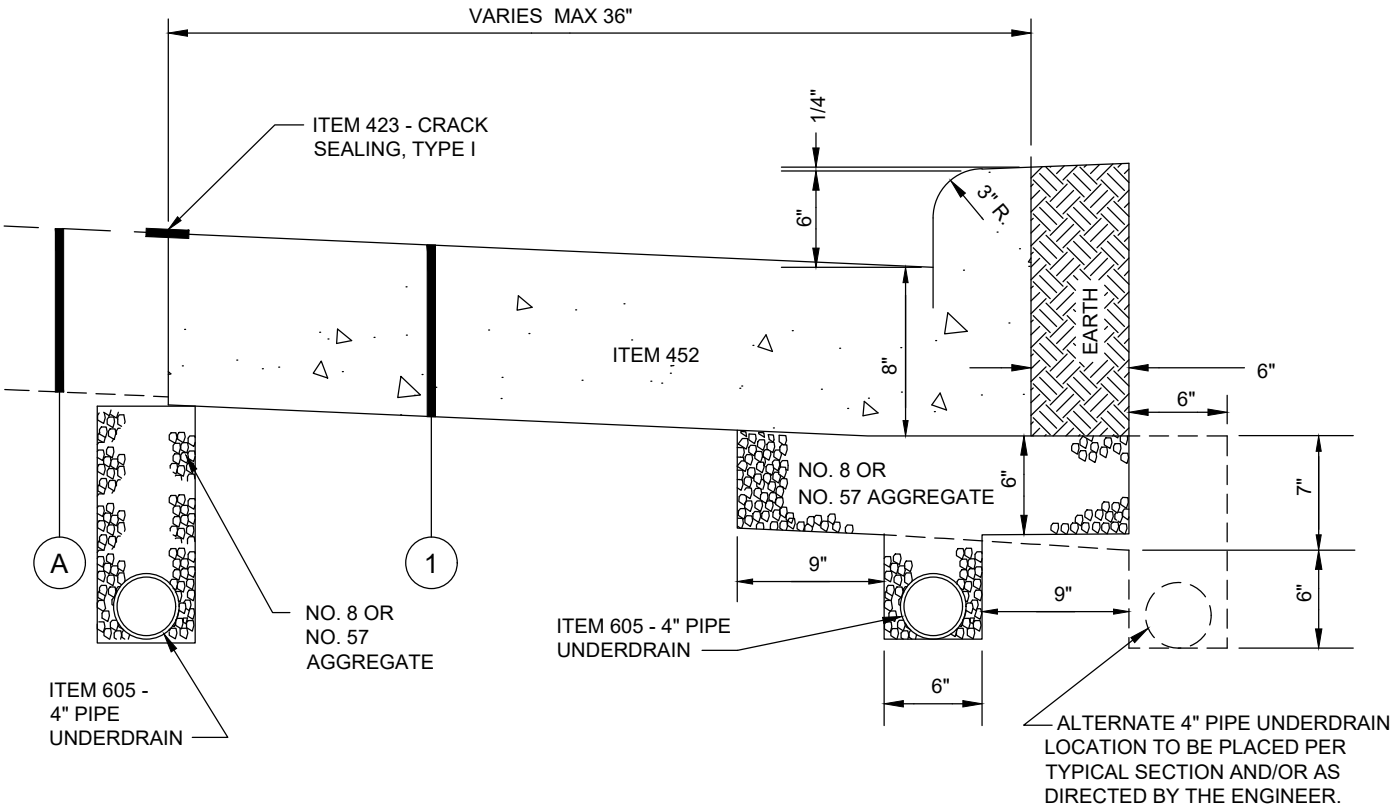

(A) EXISTING PAVEMENT (VARIES)

(1) ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT WITH INTEGRAL CURB

SECTION A - A

TRANSITION SECTION FOR CONCRETE PAVEMENT

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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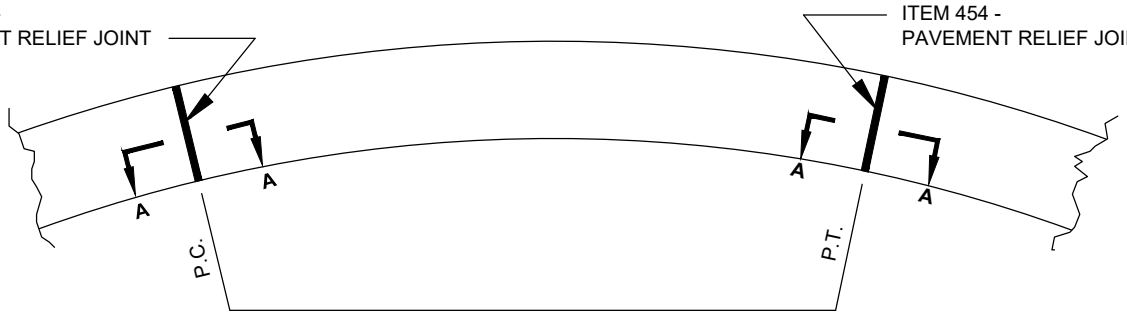
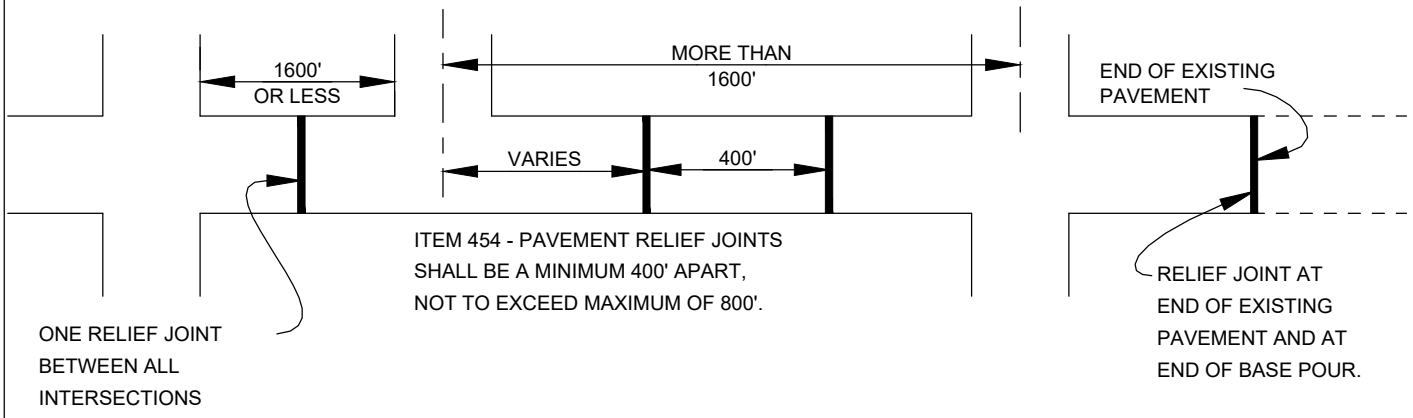
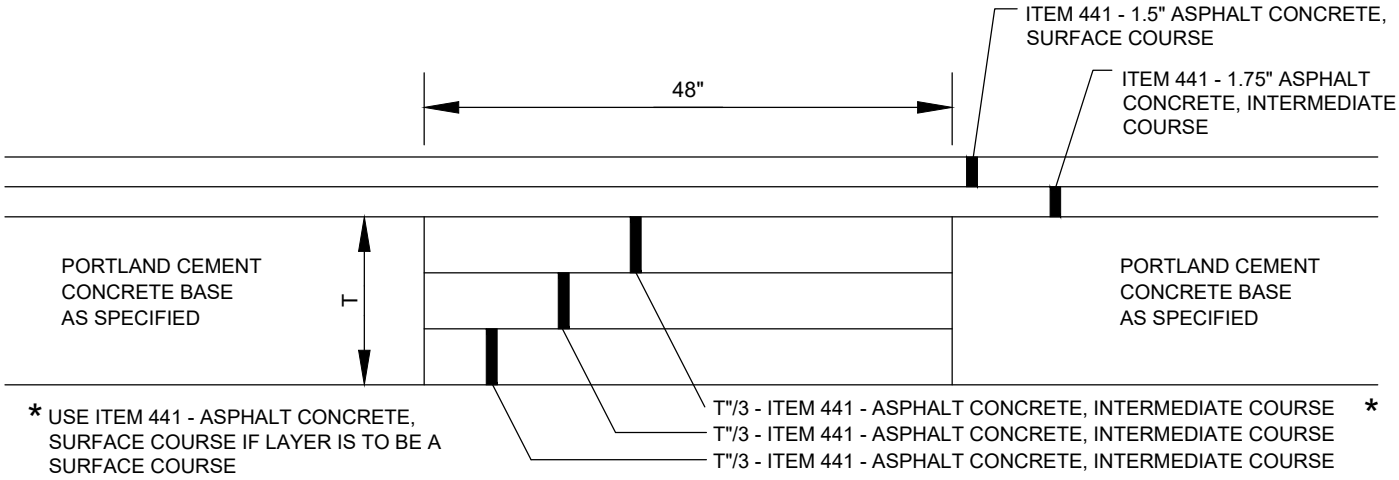
SHT 3 OF 3



RELIEF JOINT DETAIL IS FOR PAVEMENT SECTIONS WITH A CENTERLINE RADIUS OF UP TO 500' AND A DELTA (△) GREATER THAN 50°



TYPICAL LOCATION PLAN



* USE ITEM 441 - ASPHALT CONCRETE, SURFACE COURSE IF LAYER IS TO BE A SURFACE COURSE

USE TYPE 2 FOR THE INTERMEDIATE COURSE ASPHALT.

*

SECTION A-A

FOR CONCRETE BASE PAVEMENT

2" EXPANSION MATERIAL SHALL BE PLACED AT ALL PAVEMENT RELIEF JOINTS IN THE STRAIGHT CURB, OR CURB AND GUTTER AND CENTERED ON THE PAVEMENT RELIEF JOINT.

ALL RESIDENTIAL RELIEF JOINTS SHOULD BE LOCATED OR RELOCATED AWAY FROM DRIVEWAYS, IF POSSIBLE.

PAVEMENT RELIEF JOINT DETAIL (RESIDENTIAL)

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

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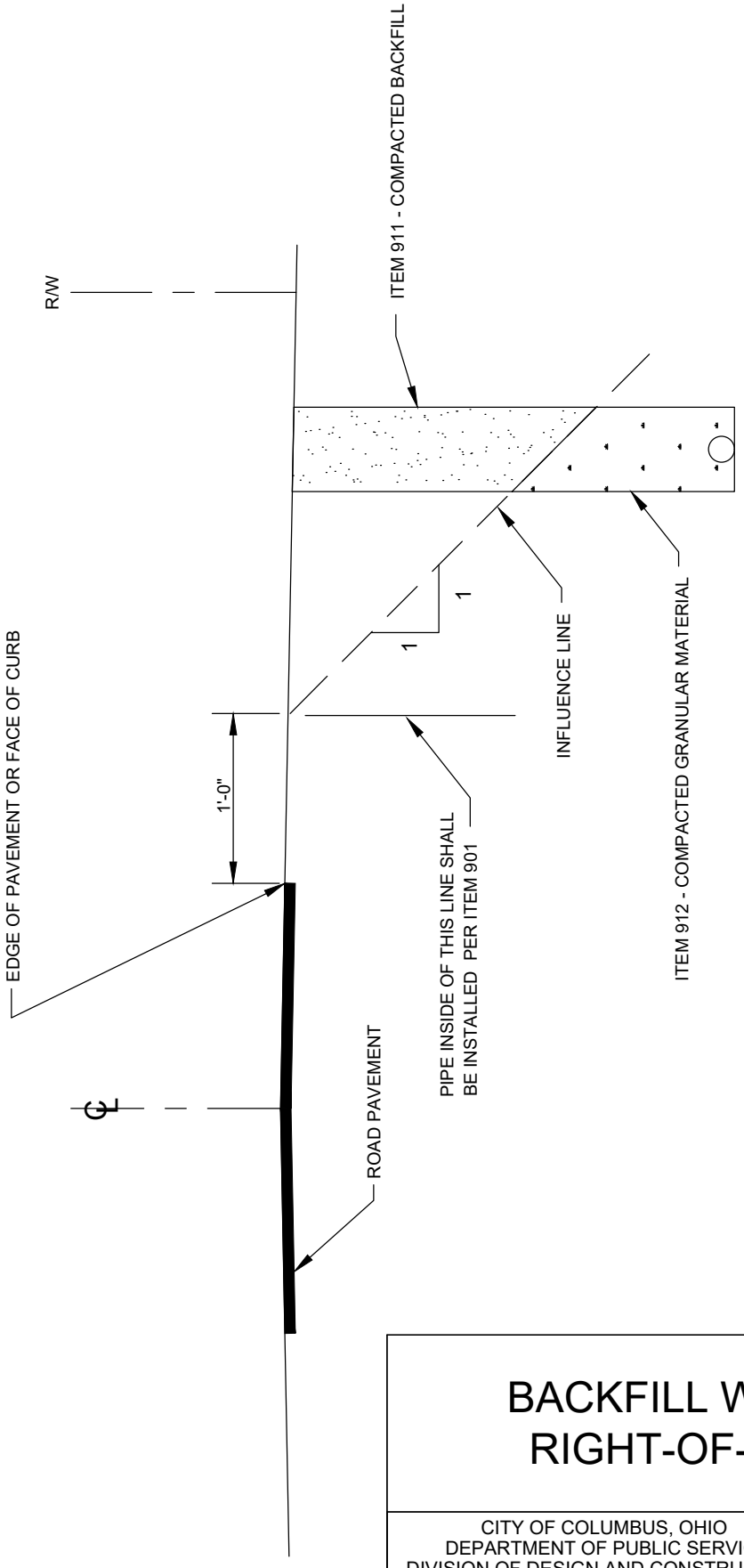


BACKFILL WITHIN RIGHT-OF-WAY

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

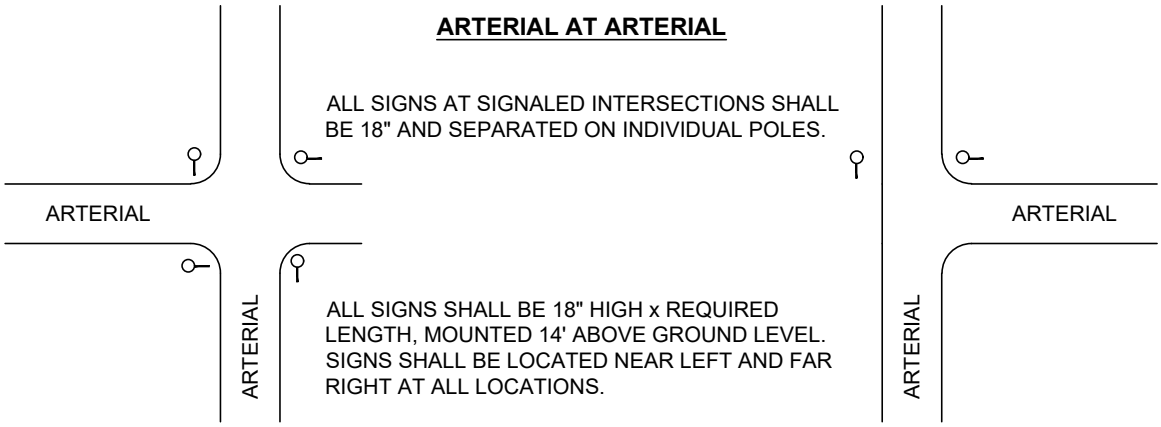
STD DWG
2179

12/31/18

SHT 1 OF 1

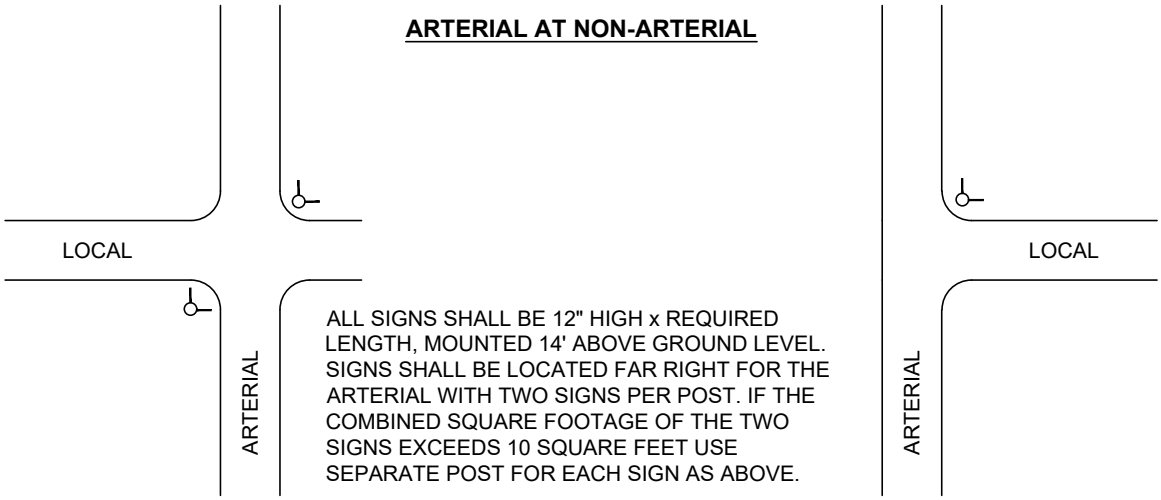
ARTERIAL AT ARTERIAL

ALL SIGNS AT SIGNALED INTERSECTIONS SHALL BE 18" AND SEPARATED ON INDIVIDUAL POLES.



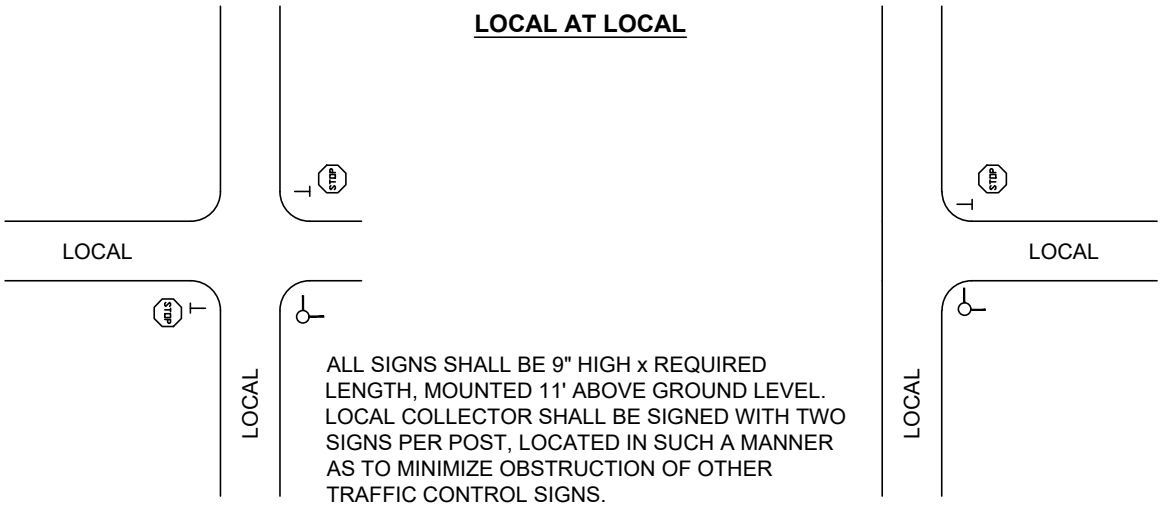
ALL SIGNS SHALL BE 18" HIGH x REQUIRED LENGTH, MOUNTED 14' ABOVE GROUND LEVEL. SIGNS SHALL BE LOCATED NEAR LEFT AND FAR RIGHT AT ALL LOCATIONS.

ARTERIAL AT NON-ARTERIAL



ALL SIGNS SHALL BE 12" HIGH x REQUIRED LENGTH, MOUNTED 14' ABOVE GROUND LEVEL. SIGNS SHALL BE LOCATED FAR RIGHT FOR THE ARTERIAL WITH TWO SIGNS PER POST. IF THE COMBINED SQUARE FOOTAGE OF THE TWO SIGNS EXCEEDS 10 SQUARE FEET USE SEPARATE POST FOR EACH SIGN AS ABOVE.

LOCAL AT LOCAL



ALL SIGNS SHALL BE 9" HIGH x REQUIRED LENGTH, MOUNTED 11' ABOVE GROUND LEVEL. LOCAL COLLECTOR SHALL BE SIGNED WITH TWO SIGNS PER POST, LOCATED IN SUCH A MANNER AS TO MINIMIZE OBSTRUCTION OF OTHER TRAFFIC CONTROL SIGNS.

PLACEMENT

LOCAL COLLECTOR AND RESIDENTIAL STREETS SHALL HAVE THE SAME SIZE POST AND PLACEMENT STANDARDS.

STREET NAME SIGN

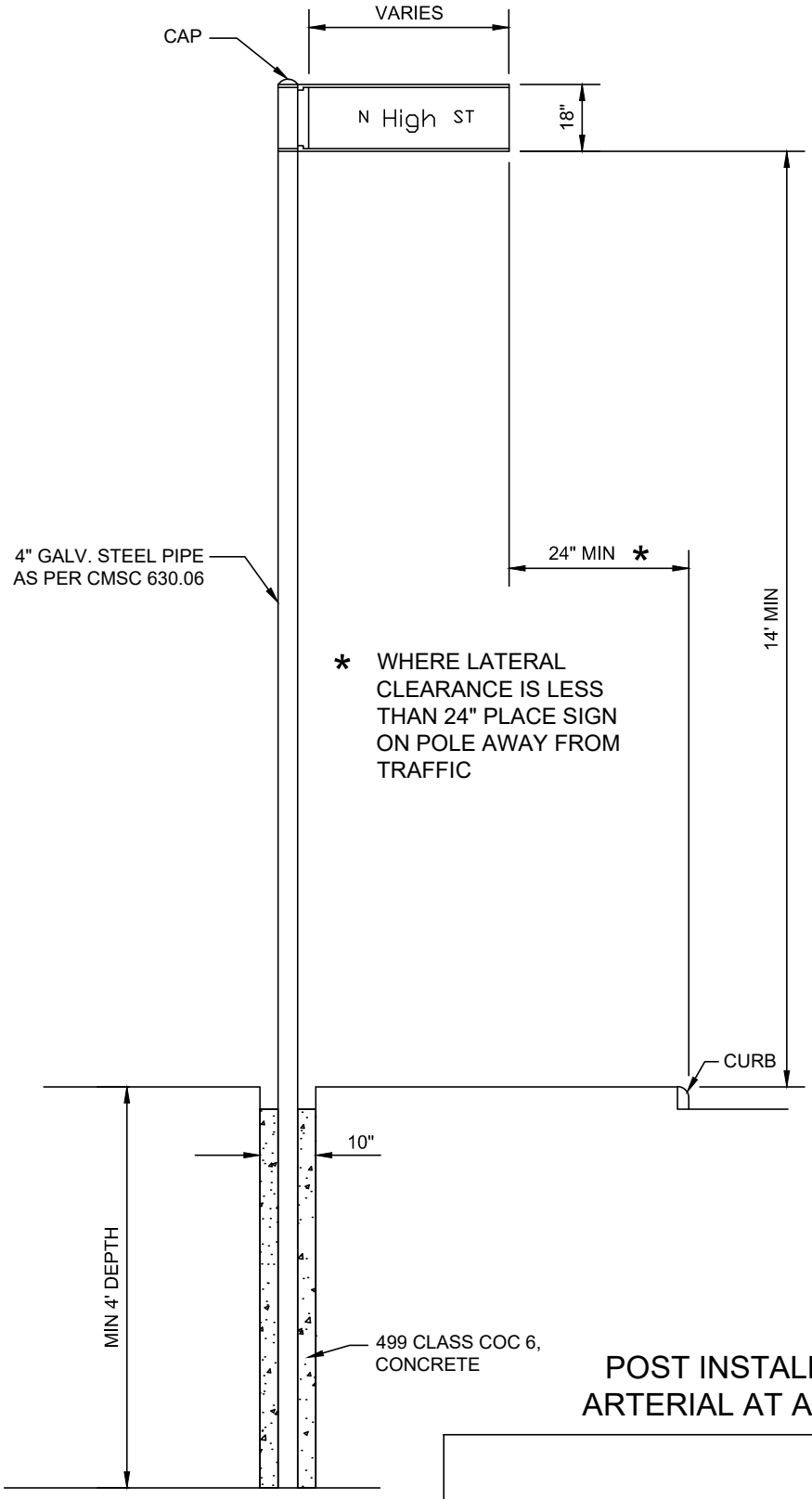
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2185

3/30/2018

SHT 1 OF 9



POST INSTALLATION
ARTERIAL AT ARTERIAL

DIMENSIONS SHOWN SHALL BE CONSIDERED MINIMUM DIMENSIONS FOR NEW INSTALLATIONS AS WELL AS FOR INSTALLATIONS USING EXISTING SUPPORTS SUCH AS UTILITY POLES AND TRAFFIC SIGNAL POLES.

ONLY ONE STREET NAME SIGN PER SUPPORT SHALL BE LOCATED NEAR-LEFT AND FAR-RIGHT AT ALL LOCATIONS UNLESS OTHERWISE SPECIFIED.

STREET NAME SIGN

CITY OF COLUMBUS, OHIO
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DIVISION OF DESIGN AND CONSTRUCTION

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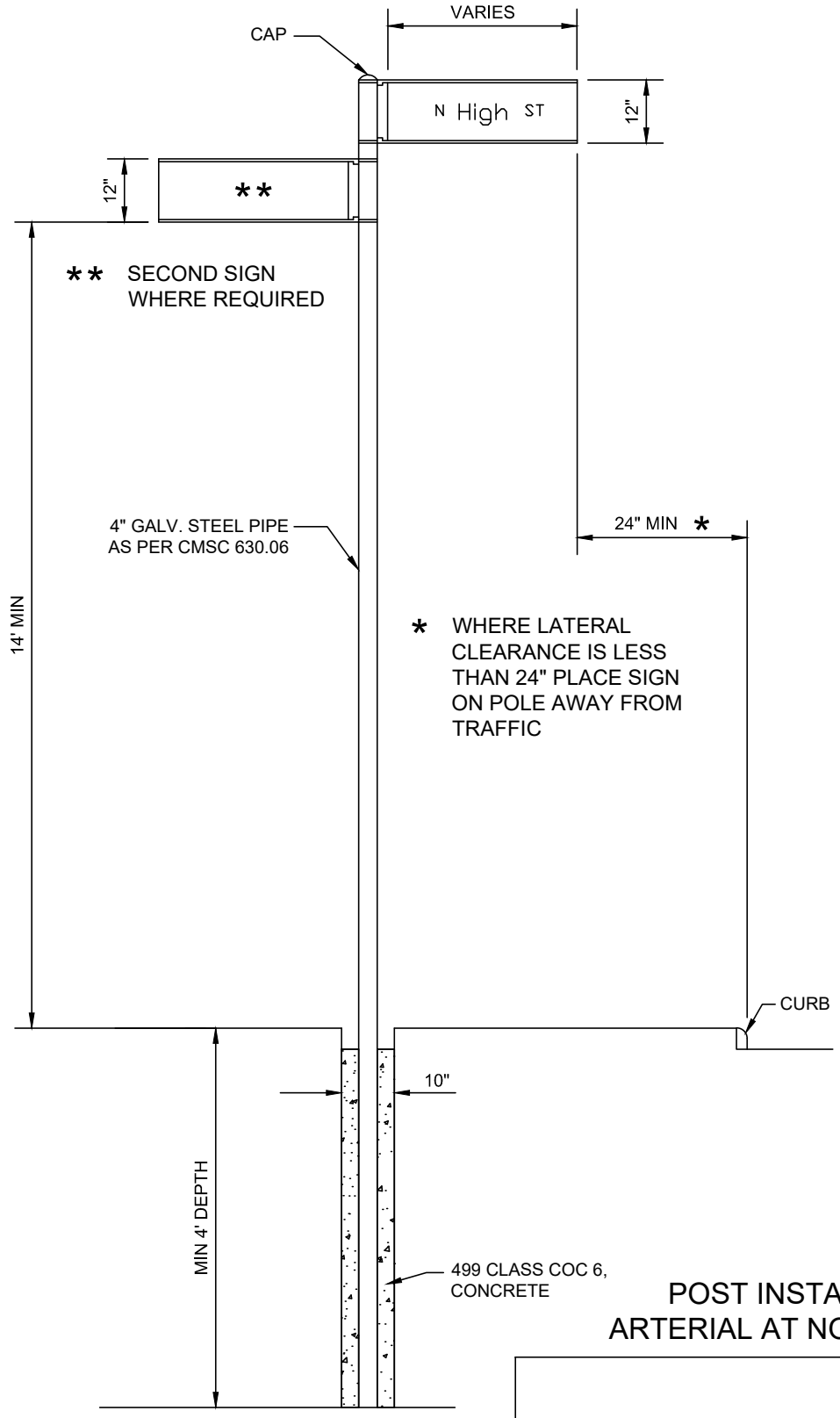

POST INSTALLATION
ARTERIAL AT NON-ARTERIAL

STREET NAME SIGN

SIGNS SHALL BE LOCATED FAR-RIGHT FOR THE ARTERIAL WITH 2 SIGNS PER SUPPORT. IF THE COMBINED SQUARE FOOTAGE EXCEEDS 10 SQUARE FEET, A SEPARATE SUPPORT SHALL BE USED FOR EACH SIGN.

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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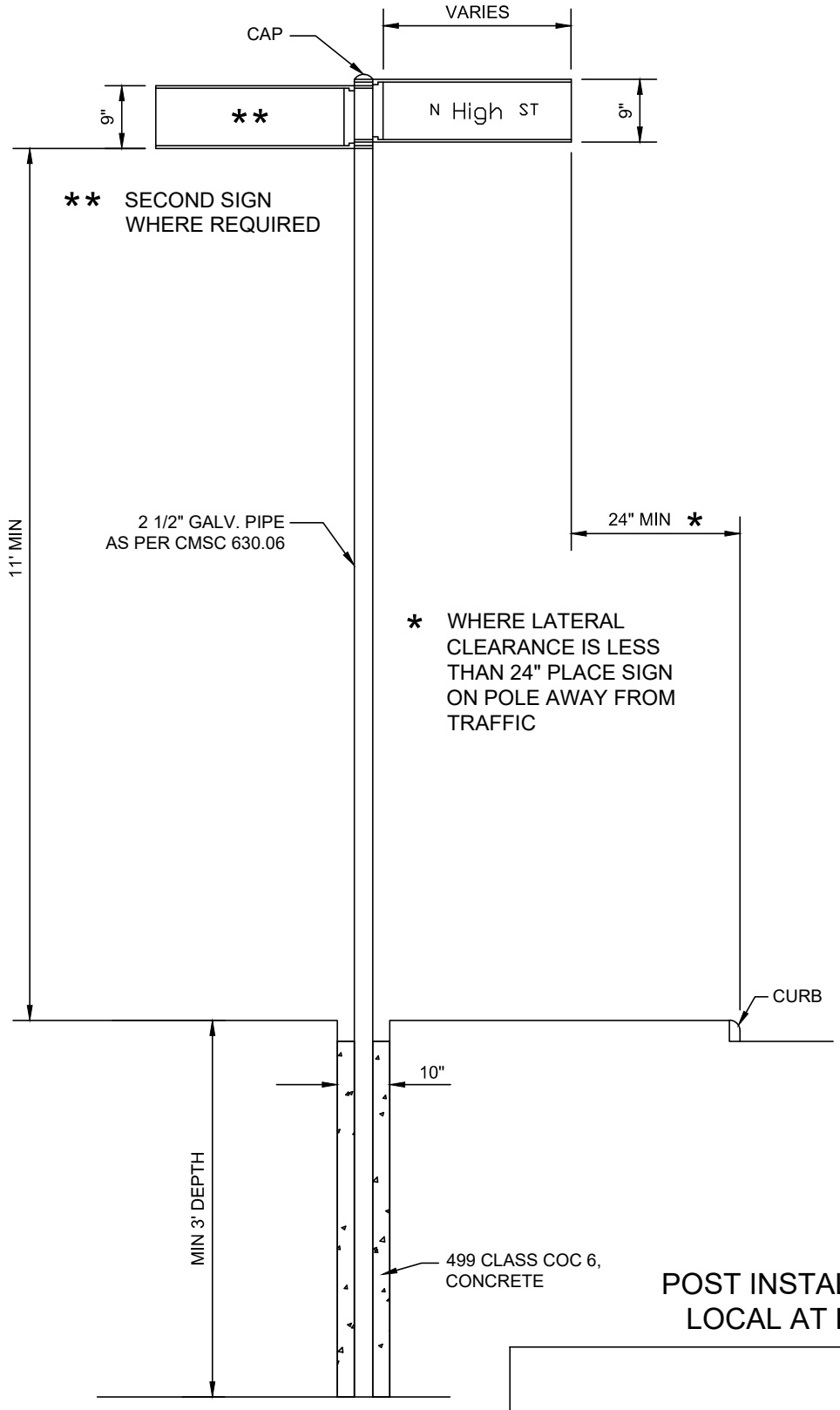

POST INSTALLATION
LOCAL AT LOCAL

STREET NAME SIGN

LOCAL COLLECTOR AND RESIDENTIAL STREETS
SHALL BE TREATED THE SAME.

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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3/30/2018
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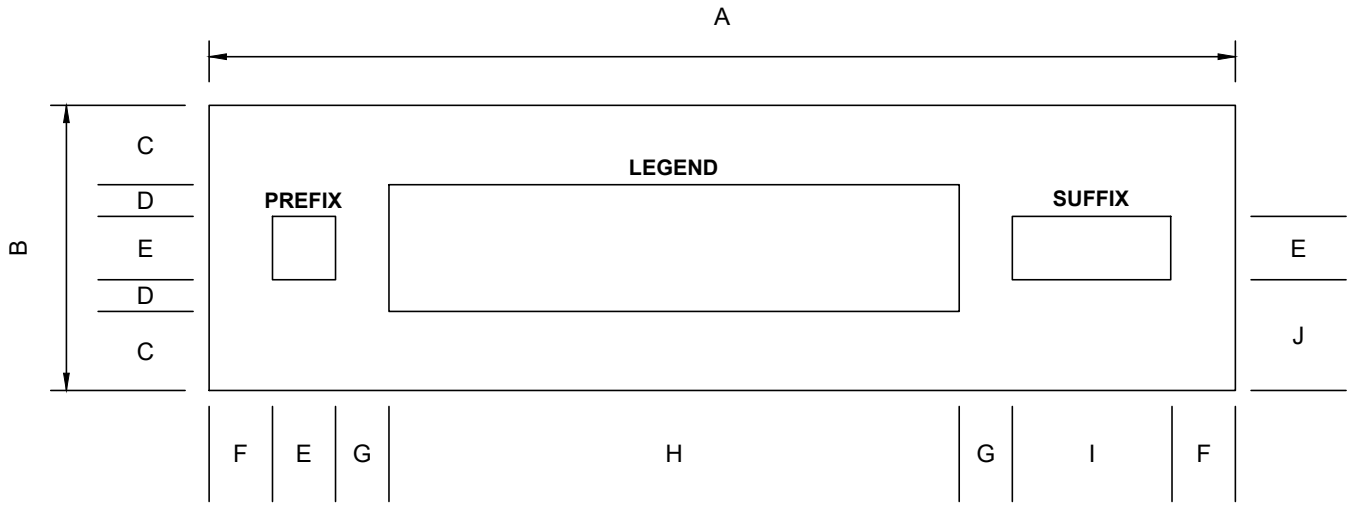

SIZE	A	B	C	D	E	F	G	H	I	J
9" SIGN	VARIES	9.0"	2.5"	1.0"	2.0"	2.0" MIN	2.0" MIN	VARIES	VARIES	3.5"
12" SIGN	VARIES	12.0"	3.0"	1.5"	3.0"	3.0" MIN	3.0" MIN	VARIES	VARIES	4.5"
18" SIGN	72.0" MAX	18.0"	5.0"	2.0"	4.0"	4.0" MIN	4.0" MIN	VARIES	VARIES	7.0"

BLADE

STREET NAME SIGN

CITY OF COLUMBUS, OHIO
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DIVISION OF DESIGN AND CONSTRUCTION

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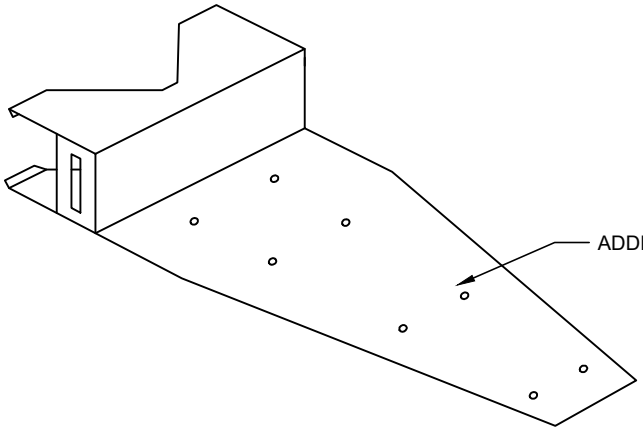
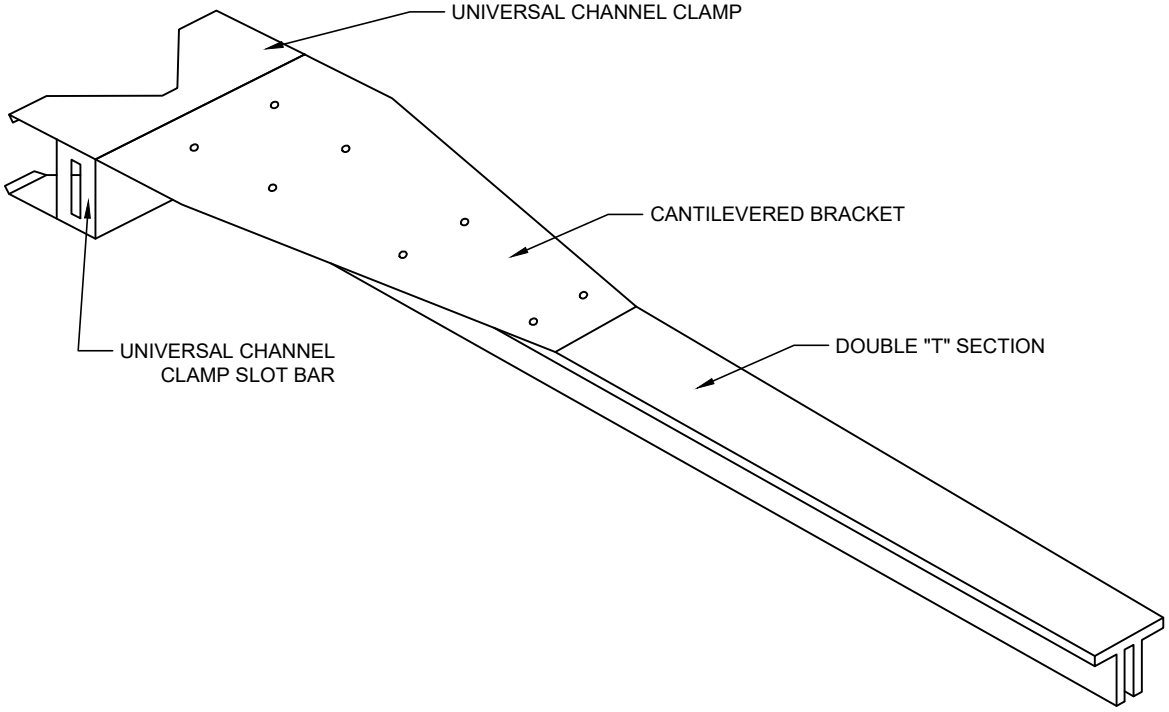
SHT 5 OF 9



* USED WHEN SIGN AREA EXCEEDS SIX (6) SQUARE FEET. PLACE TWO (2) BRACKETS BACK TO BACK ON TOP AND BOTTOM OF SIGN BLADE.



MOUNTING HARDWARE

FASTEN TO SUPPORT WITH PRE-ASSEMBLED BUCKLE-STRAP COMBINATION ASSEMBLY.

THE CANTILEVER BRACKET SHALL BE BANDED TO THE SUPPORT USING TYPE 201 STAINLESS STEEL WITH A MINIMUM THICKNESS OF 0.036" AND 3/4" WIDTH.

STREET NAME SIGN

CITY OF COLUMBUS, OHIO
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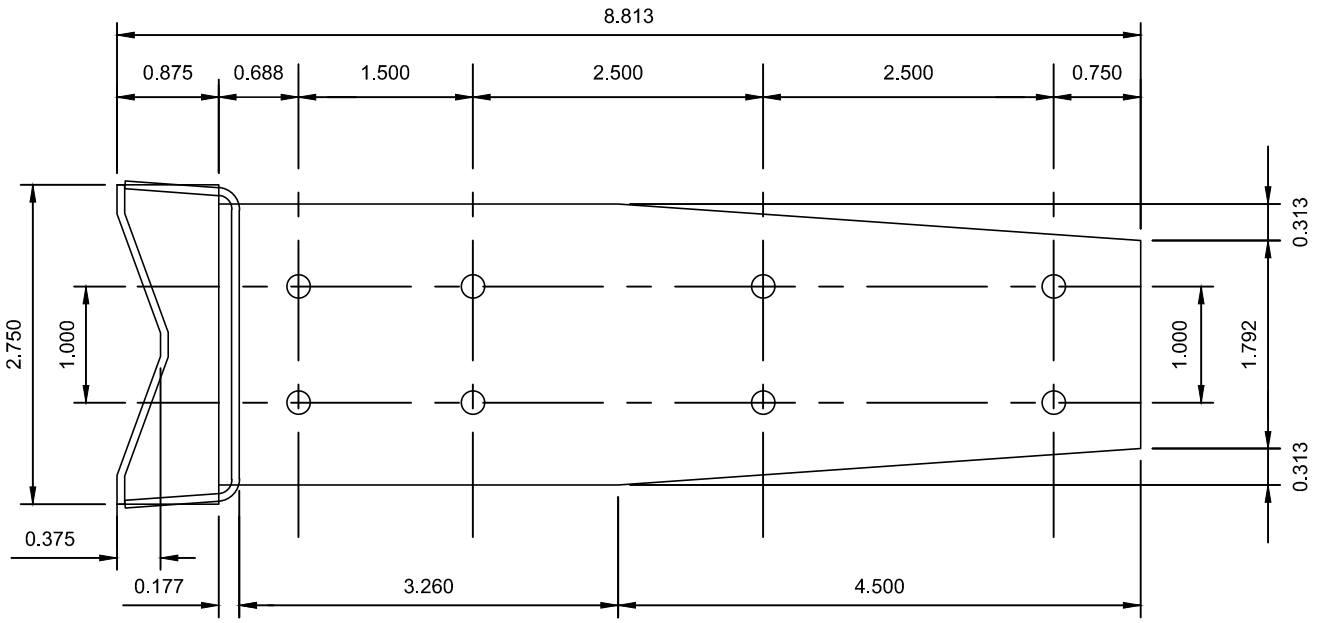
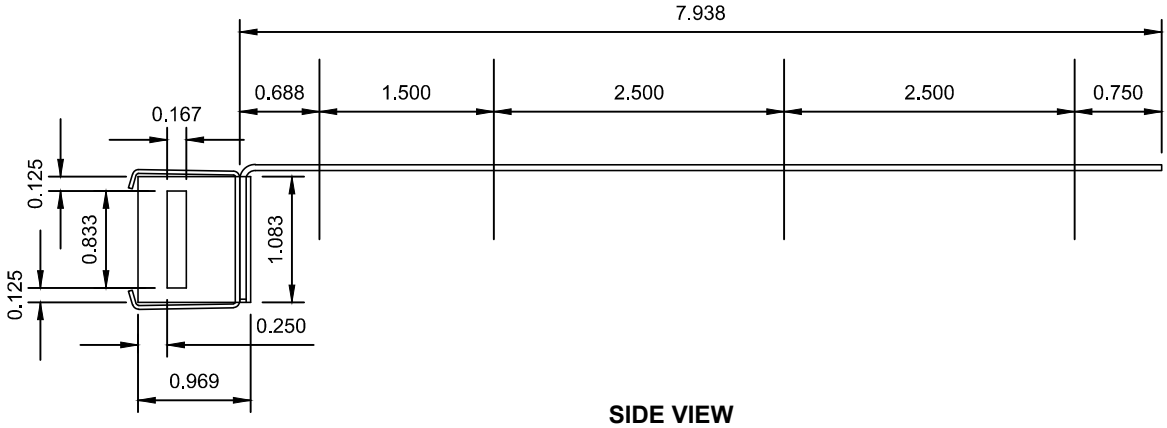


TOP VIEW



SIDE VIEW

MOUNTING HARDWARE
CANTILEVER BRACKET

STREET NAME SIGN

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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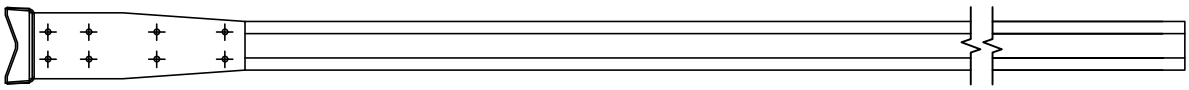
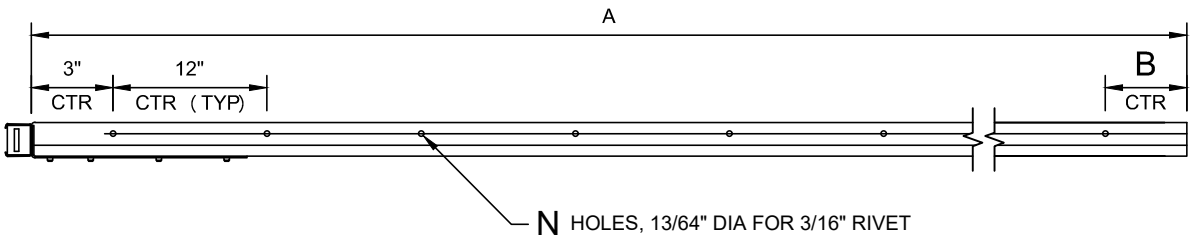
SHT 7 OF 9

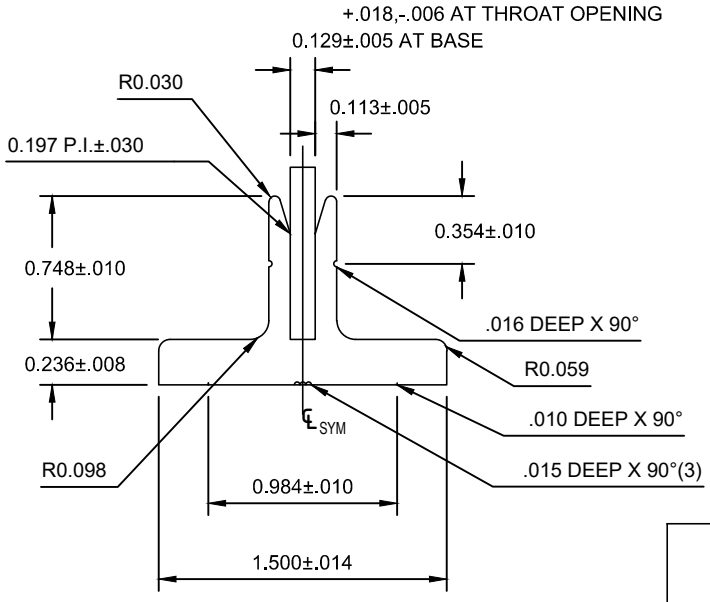


PLAN

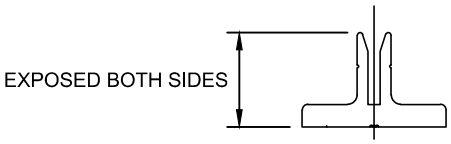


ELEVATION

A (inches)	B (inches)	N (number of holes)
42	3	4
48	1	4
54	3	5



SECTION



ACTUAL SIZE

MOUNTING HARDWARE
DOUBLE TEE, TYPE II

USE TYPE II TEE FOR 9" AND 12" BLADES THAT ARE 42", 48" AND 54" LONG.

USE TYPE I TEE FOR 9" AND 12" BLADES THAT ARE LESS THAN 42" LONG.

STREET NAME SIGN

CITY OF COLUMBUS, OHIO
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DIVISION OF DESIGN AND CONSTRUCTION

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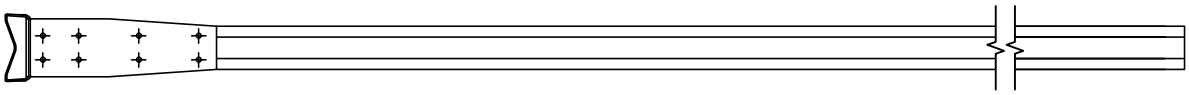
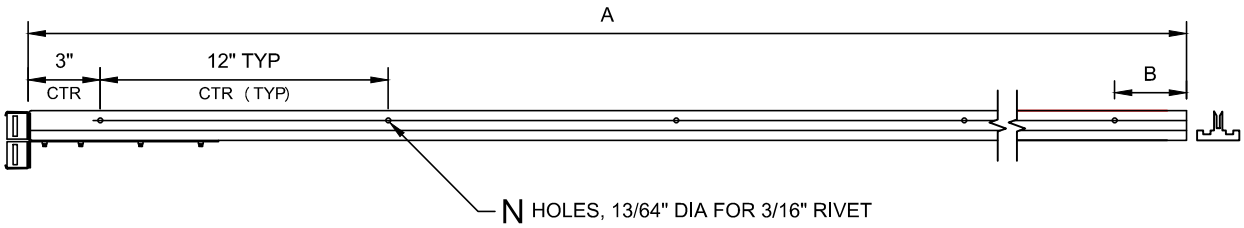
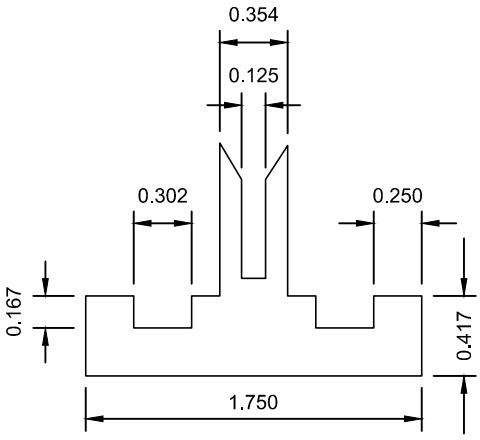


PLAN



ELEVATION

A (inches)	B (inches)	N (number of holes)
42	3	4
48	1	4
54	3	5
60	1	6
72	1	7



SECTION

USE TYPE III TEES FOR 9" AND 12" BLADES THAT ARE 60", 66" & 72" LONG AND ALL 18" BLADES WITH BACK TO BACK CANTILEVER BRACKETS.

MOUNTING HARDWARE
DOUBLE TEE, TYPE III

STREET NAME SIGN

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2185
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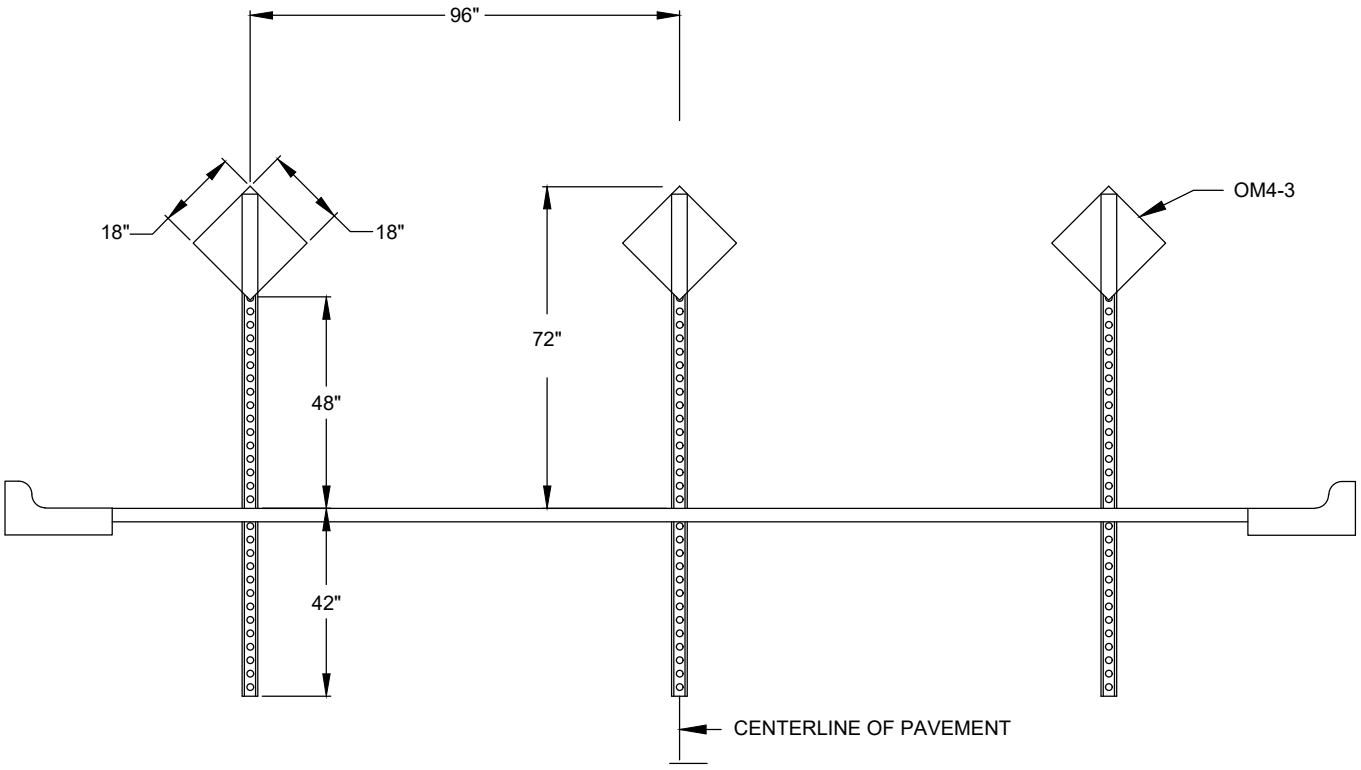
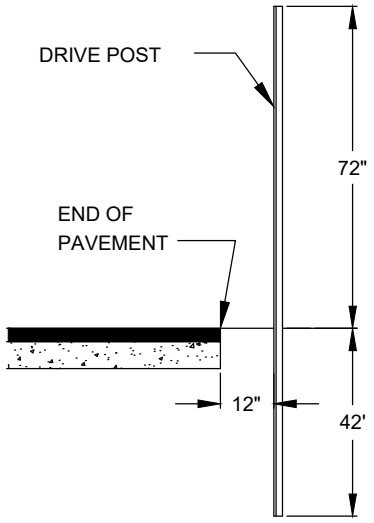
SHT 9 OF 9



NUMBER OF ASSEMBLIES TO BE INSTALLED:

PAVEMENTS 24' OR LESS IN WIDTH = 2
PAVEMENTS 25'-32' IN WIDTH = 3
PAVEMENTS 33'-40' IN WIDTH = 4
PAVEMENTS 41'-48' IN WIDTH = 5
PAVEMENTS 49'-56' IN WIDTH = 6
PAVEMENTS 57'-64' IN WIDTH = 7

THE OM4-3 IS A 18"X18" .080 GAUGE ALUMINUM PANEL COVERED WITH RED REFLECTIVE SHEETING.



REFERENCE SUPPLEMENTAL SPECIFICATION 1630.

BARRICADE FOR END OF ROADWAY PAVEMENT

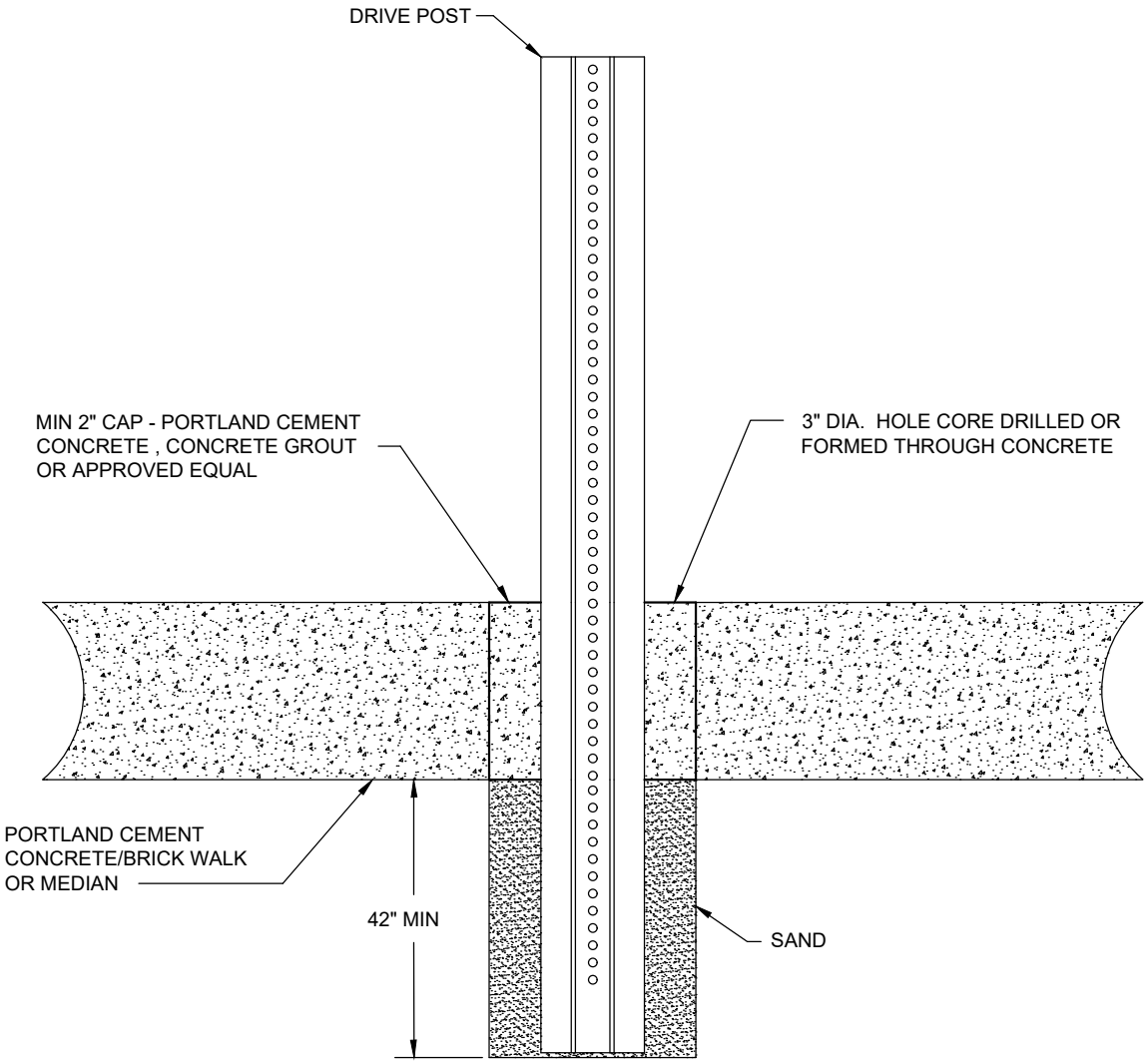
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2190

3/30/2018

SHT 1 OF 1



NOTES: MAINTAIN STANDARD INSTALLATION DEPTH OF DRIVE POST.

REFERENCE SUPPLEMENTAL SPECIFICATION 1630.

DRIVE POST INSTALLATION THROUGH CONCRETE / BRICK

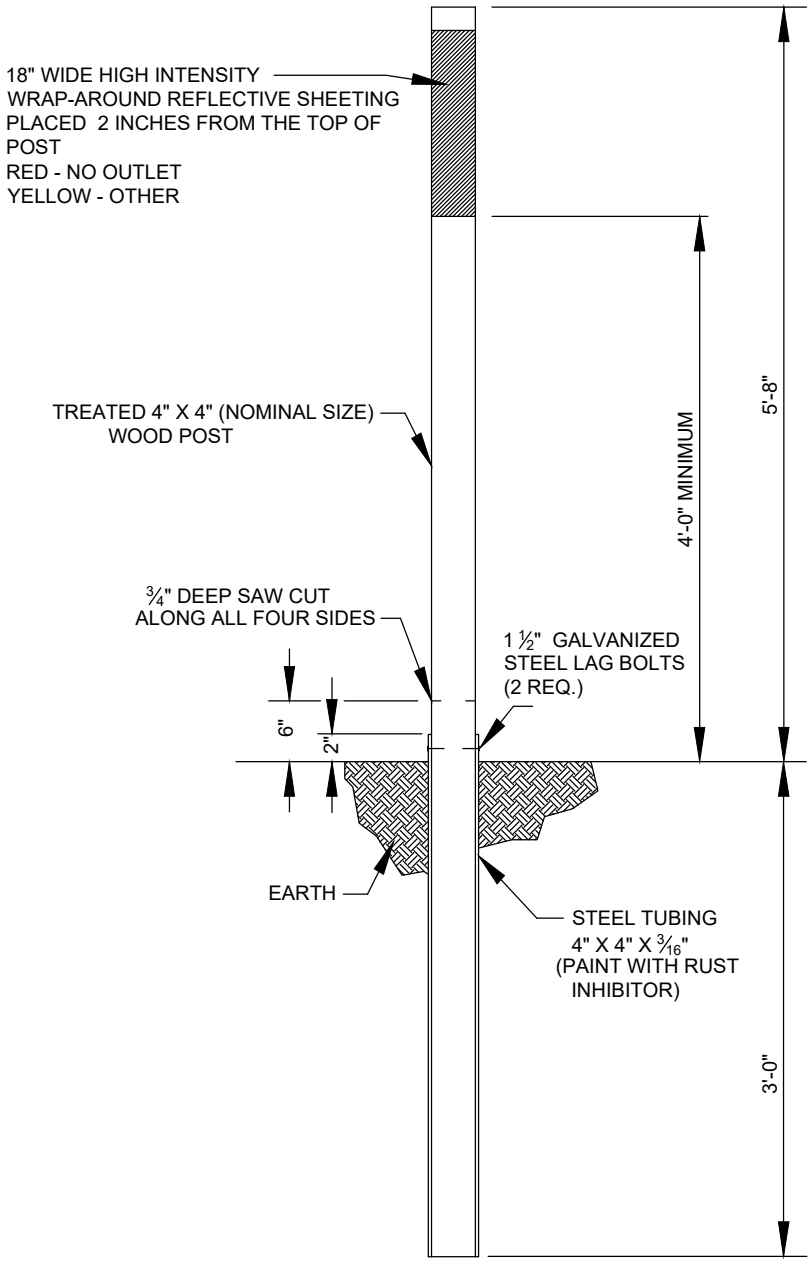
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2191

3/30/2018

SHT 1 OF 1



TYPE - A
FOR USE IN AREAS OPEN
TO PEDESTRIAN TRAFFIC

BREAK-AWAY BOLLARD

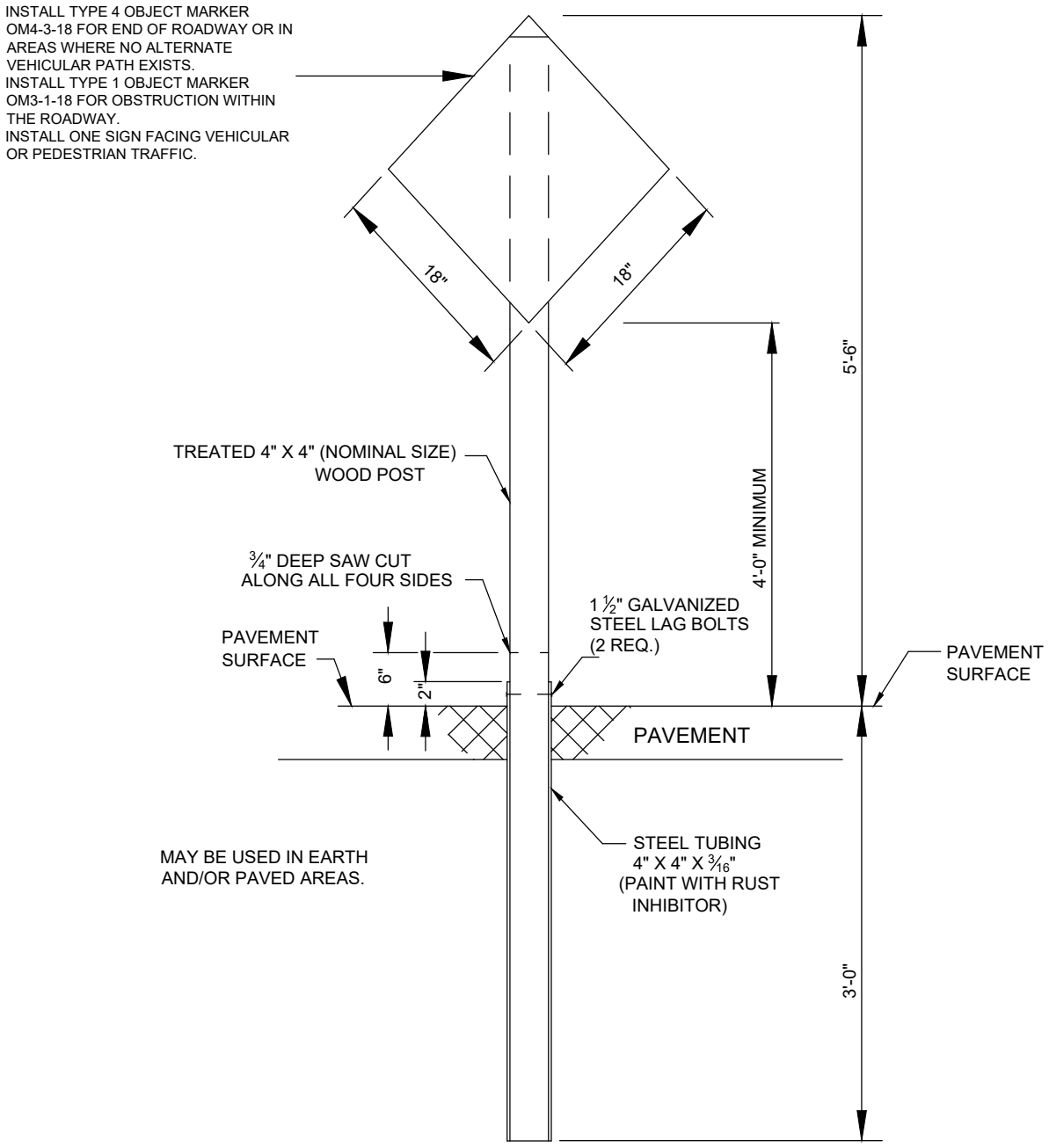
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2195

3/30/2018

SHT 1 OF 2



TYPE - B
FOR USE IN LIMITED ACCESS AREAS

BREAK-AWAY BOLLARD

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2195
3/30/2018
SHT 2 OF 2

FOR USE ON A PARCEL WITH A SINGLE DWELLING

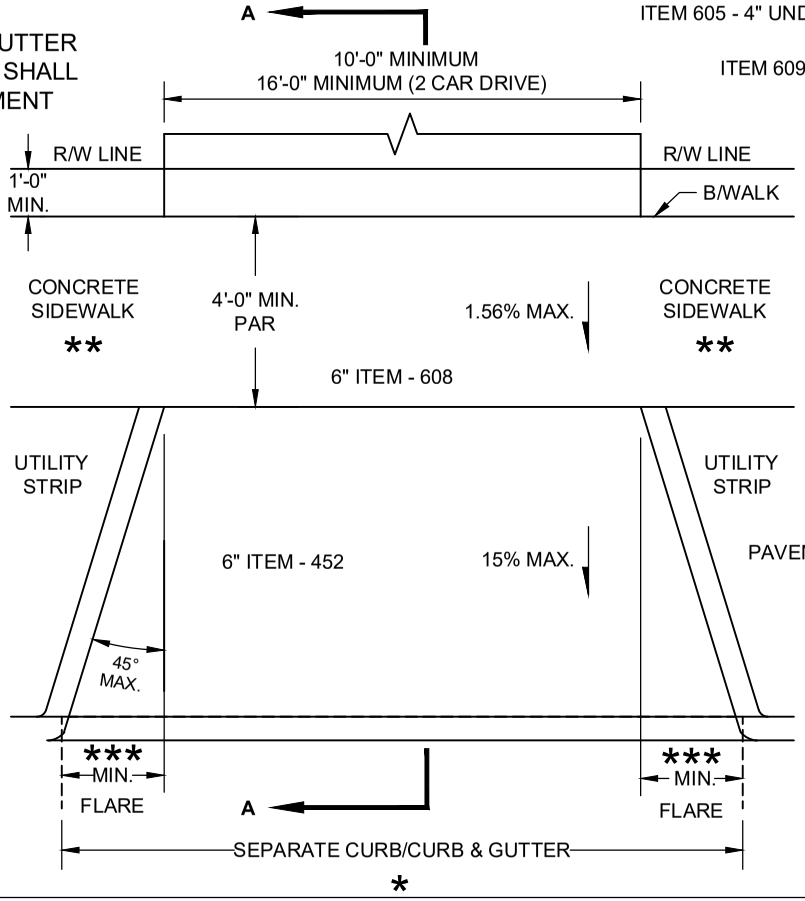
* CURB OR COMBINED CURB AND GUTTER SHALL BE TAKEN OUT AND REPLACED WITH CONCRETE, SEPARATED FROM THE DRIVE BY 1/2" PREMOLDED EXPANSION JOINT. WHEN LESS THAN 5 FT. OF A CURB SECTION REMAINS AFTER THE CURB CUT IS LOCATED, IT SHALL ALSO BE REMOVED AND REPLACED. CURB SHALL BE CONSTRUCTED IN MINIMUM 5 FT. SECTIONS AND MAXIMUM 10 FT. SECTIONS.

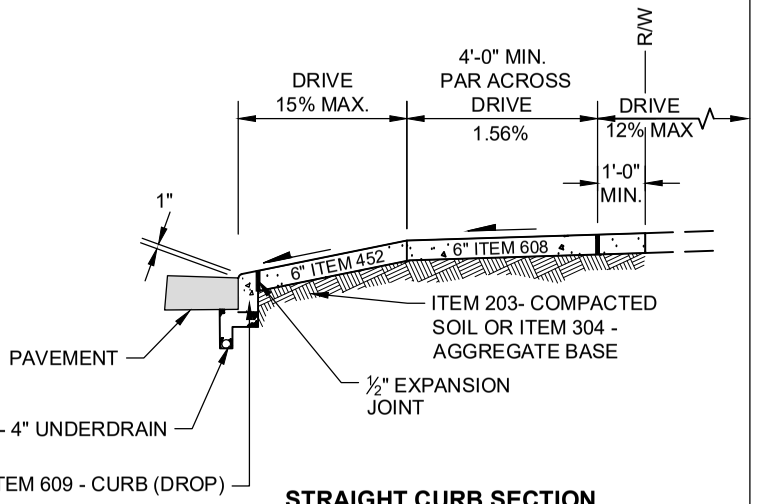
** SIDEWALK WIDTH SHALL BE PER STANDARD DRAWING 2300. SIDEWALK THICKNESS SHALL BE 6" CONCRETE TO ONE FULL PANEL (MIN. 5 FT.) BEYOND THE EDGE OF THE FULL WIDTH SECTION OF THE DRIVE.

*** 5 FT. ON ROADWAYS WITH 35 MPH SPEED LIMIT, 2 FT. FOR SPEED LIMITS LESS THAN 35 MPH.

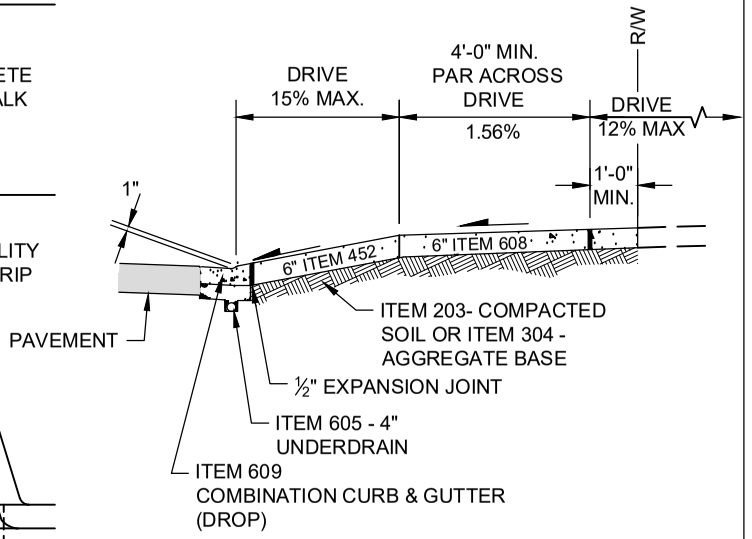
PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

WHEN A CURB OR CURB AND GUTTER ARE PRESENT ALL DRIVEWAYS SHALL BE ITEM 452 CONCRETE PAVEMENT





STRAIGHT CURB SECTION
SECTION A-A



COMBINATION CURB AND GUTTER SECTION
SECTION A-A

DRIVEWAY, RESIDENTIAL

CURBED ROADWAY, WITH UTILITY STRIP, RIGID

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

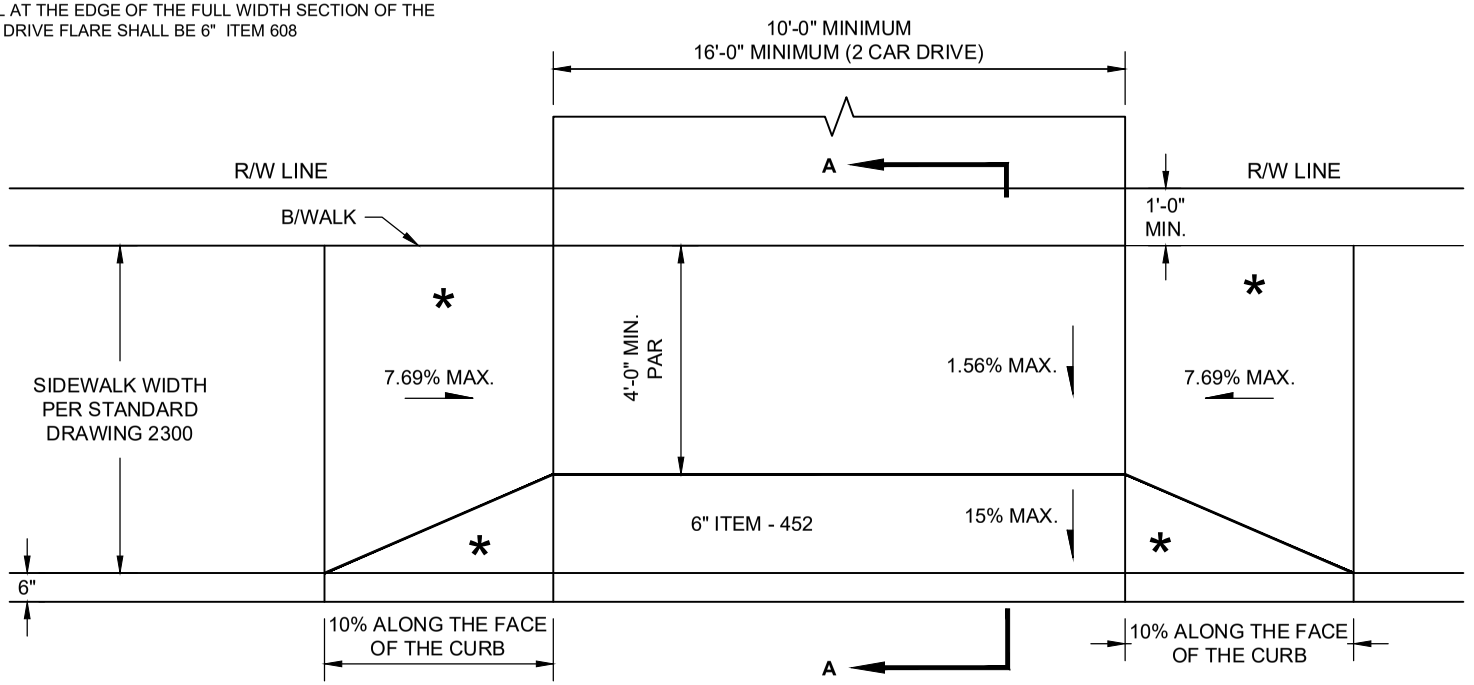
CITY ENGINEER

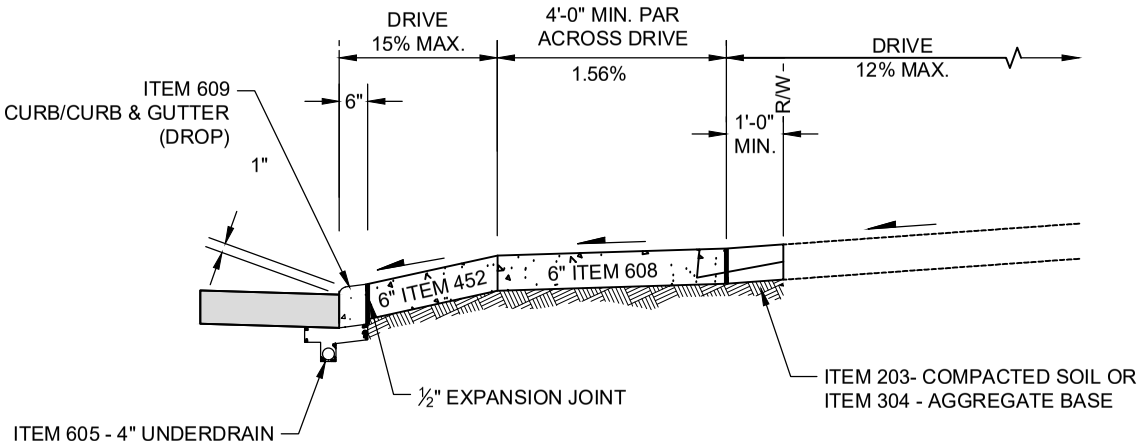
STD DWG 2201

12/31/18

SHT 1 OF 6

* THE FIRST FULL PANEL AT THE EDGE OF THE FULL WIDTH SECTION OF THE DRIVE INCLUDING THE DRIVE FLARE SHALL BE 6" ITEM 608





SECTION A-A

SEE SHEET 1 OF 6 FOR NOTES

CURBED ROADWAY, TYPE A, RIGID

DRIVEWAY, RESIDENTIAL

STD DWG 2201

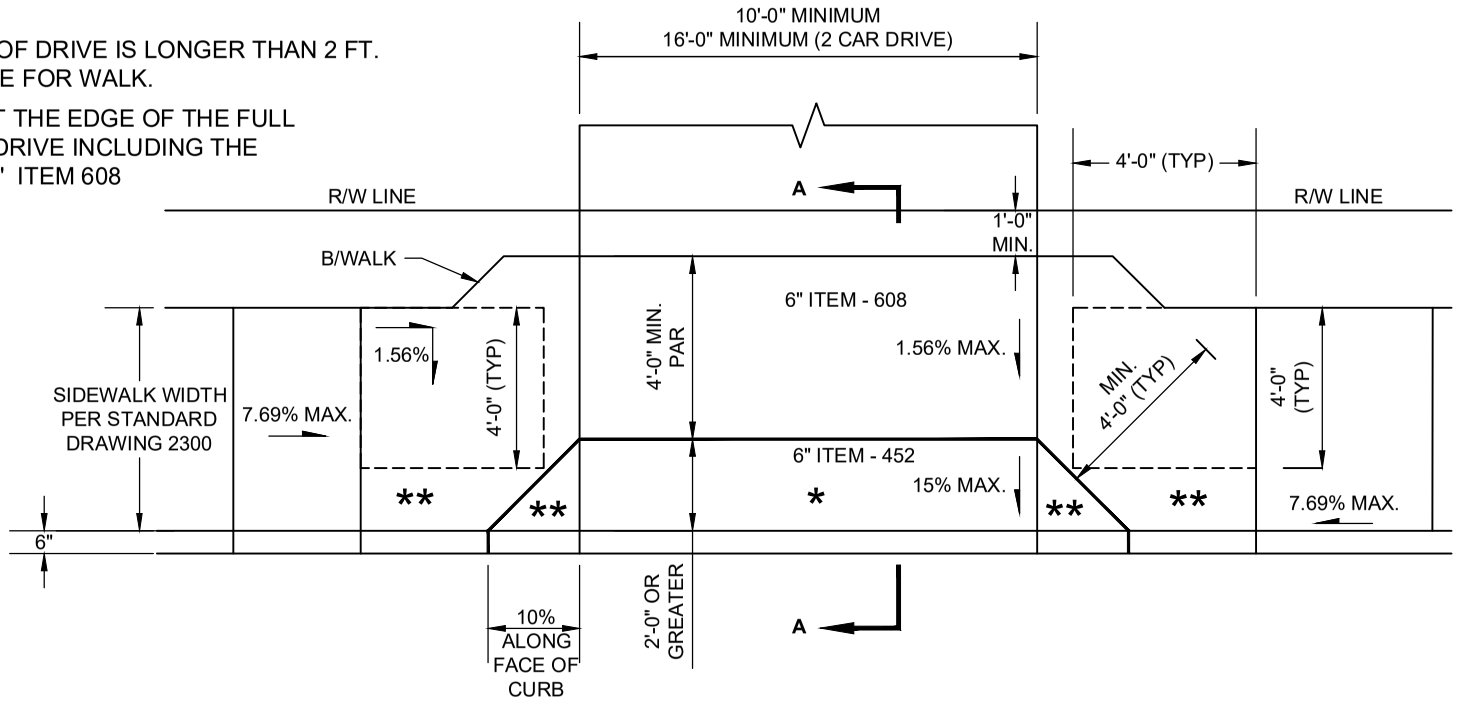
12/03/18

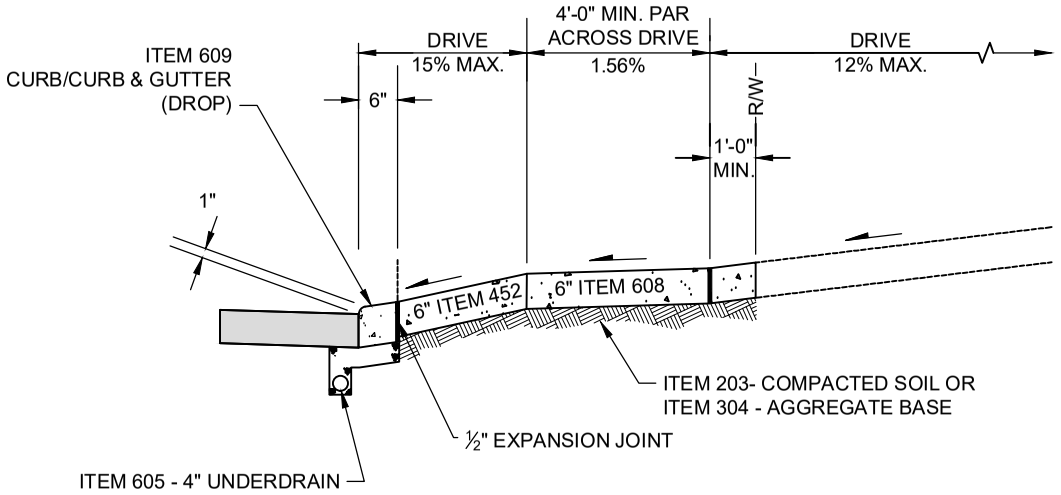
SHT 2 OF 6

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

* USE WHEN FRONT RAMP OF DRIVE IS LONGER THAN 2 FT. MAINTAIN R/W CLEARANCE FOR WALK.

** THE FIRST FULL PANEL AT THE EDGE OF THE FULL WIDTH SECTION OF THE DRIVE INCLUDING THE DRIVE FLARE SHALL BE 6" ITEM 608





SECTION A-A

SEE SHEET 1 OF 6 FOR NOTES

DRIVEWAY, RESIDENTIAL

CURBED ROADWAY, TYPE B, RIGID

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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12/31/18

SHT 3 OF 6

SECTION A-A

SEE SHEET 1 OF 6 FOR NOTES

CURBED ROADWAY, TYPE C, RIGID

DRIVEWAY, RESIDENTIAL

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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2201
12/31/18
SHT 4 OF 6

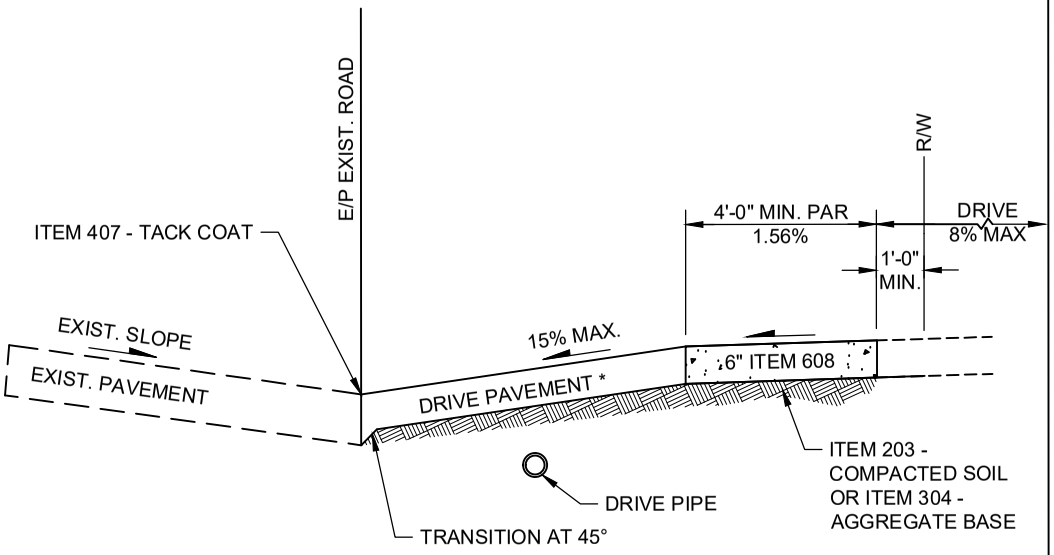
FOR USE ON A PARCEL WITH A SINGLE DWELLING

* REPLACEMENT OF EXISTING DRIVES SHALL MATCH PAVEMENT (TYPE, DESIGN) IN KIND TO EXISTING DRIVE. NEW DRIVES SHALL BE PAVEMENT (TYPE, DESIGN) SIMILAR TO MAIN ROADWAY (TYPE, DESIGN).

DRIVE PAVEMENT (TYPE, FLEXIBLE)
ITEM 441 - 1.5" ASPHALT CONCRETE, SURFACE COURSE, (TYPE 1), PG 64-22
ITEM 441 - 2.5" ASPHALT CONCRETE, INTERMEDIATE COURSE, (TYPE 2),448
ITEM 304 - 4" AGGREGATE BASE

** SIDEWALK SHALL BE PER STANDARD DRAWING 2300. SIDEWALK THICKNESS SHALL BE 6" CONCRETE TO ONE FULL PANEL (MIN. 5 FT.) BEYOND THE EDGE OF THE FULL WIDTH SECTION OF THE DRIVE.

PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.



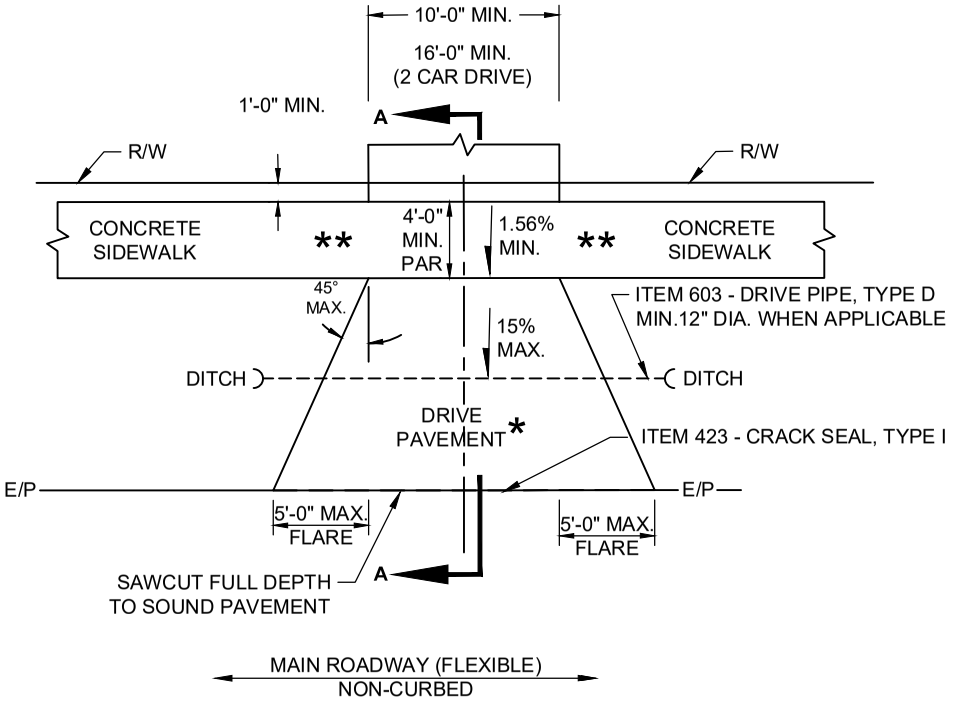
SECTION A-A

WHEN CONDITIONS EXIST USE THE FOLLOWING;
IF THE DISTANCE FROM THE SIDEWALK TO THE EDGE OF PAVEMENT IS:

>5' ----- HOLD THE FLARE TO 45* AND ADJUST THE WIDTH ACCORDINGLY, MAINTAIN THE MINIMUM 2' WIDE PERPENDICULAR AREA OF THE APPROACH

5'-7' --- MAINTAIN THE 5' MAXIMUM FLARE WIDTH, VARY THE ANGLE, AND MAINTAIN THE MINIMUM 2' WIDE PERPENDICULAR AREA OF THE APPROACH

>7' ----- DECREASE THE 45* ANGLE (ADJUST ACCORDINGLY), MAINTAIN THE MINIMUM 2' WIDE PERPENDICULAR AREA OF THE APPROACH



DRIVEWAY, RESIDENTIAL

NON-CURBED ROADWAY,
DRIVE PAVEMENT FLEXIBLE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
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SHT 5 OF 6

FOR USE ON A PARCEL WITH A SINGLE DWELLING

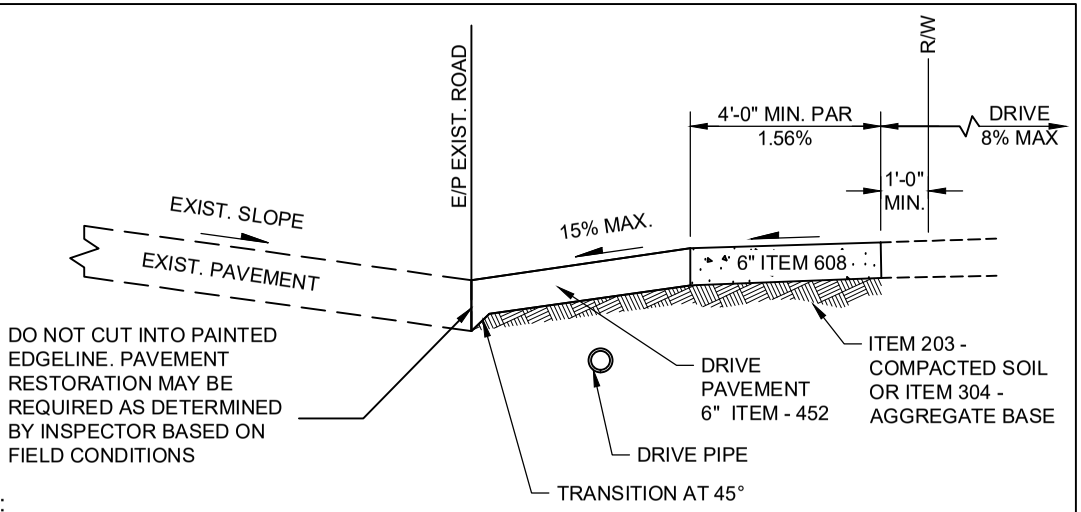
* DRIVE PAVEMENT (TYPE, RIGID)
ITEM 452 - 6" NON-REINFORCED PORTLAND CEMENT CONCRETE

** SIDEWALK SHALL BE PER STANDARD DRAWING 2300. SIDEWALK THICKNESS SHALL BE 6" CONCRETE TO ONE FULL PANEL (MIN. 5 FT.) BEYOND THE EDGE OF THE FULL WIDTH SECTION OF THE DRIVE.

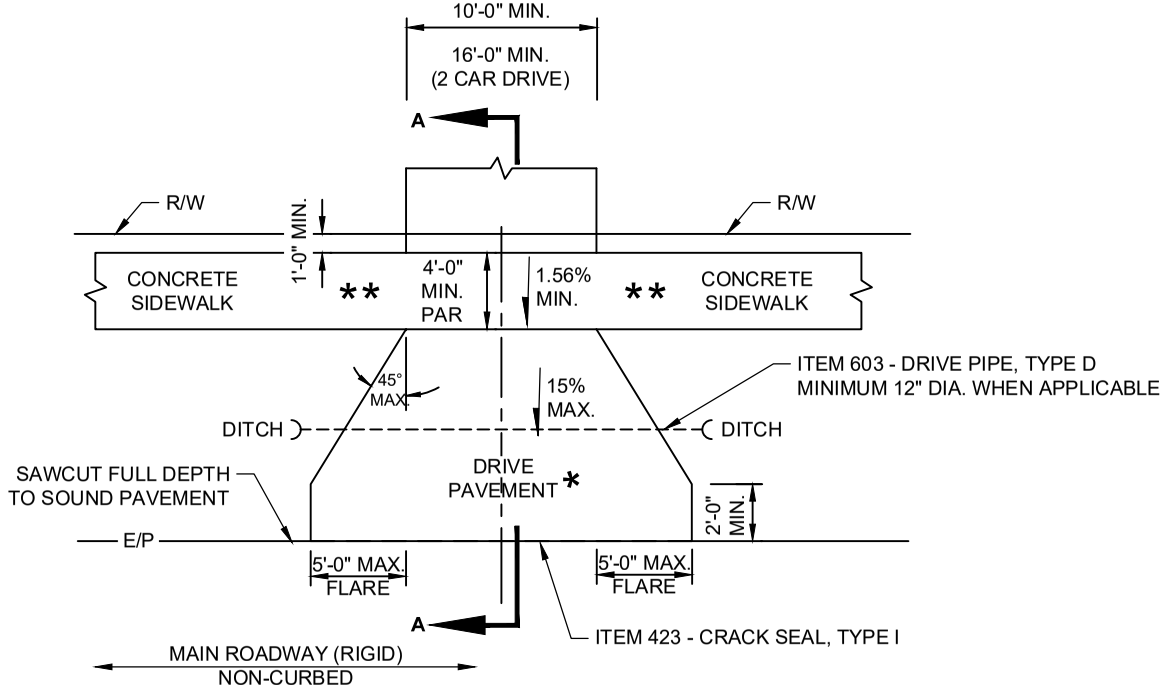
PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

WHEN CONDITIONS EXIST USE THE FOLLOWING;
IF THE DISTANCE FROM THE SIDEWALK TO THE EDGE OF PAVEMENT IS:

>5' ----- HOLD THE FLARE TO 45* AND ADJUST THE WIDTH ACCORDINGLY, MAINTAIN THE MINIMUM 2' WIDE PERPENDICULAR AREA OF THE APPROACH
5'-7' ---- MAINTAIN THE 5' MAXIMUM FLARE WIDTH, VARY THE ANGLE, AND MAINTAIN THE MINIMUM 2' WIDE PERPENDICULAR AREA OF THE APPROACH
>7' ----- DECREASE THE 45* ANGLE (ADJUST ACCORDINGLY), MAINTAIN THE MINIMUM 2' WIDE PERPENDICULAR AREA OF THE APPROACH



SECTION A-A



DRIVEWAY, RESIDENTIAL

NON-CURBED ROADWAY
DRIVE PAVEMENT, RIGID

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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12/31/18

SHT 6 OF 6

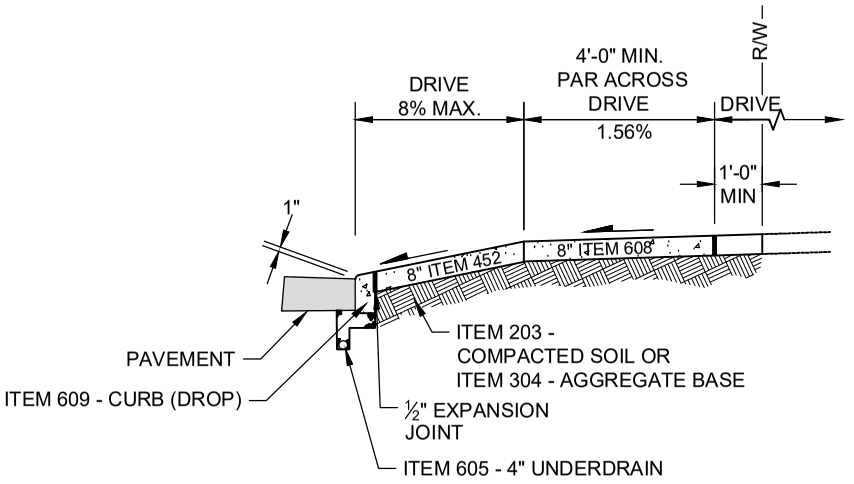
THIS STANDARD DRAWING IS FOR DRIVES ON LOCAL OR COLLECTOR STREETS WITH SPEEDS ≤ 35 MPH, UNLESS APPROVED OTHERWISE BY DEPARTMENT OF PUBLIC SERVICE.

*CURB OR COMBINED CURB AND GUTTER SHALL BE TAKEN OUT AND REPLACED WITH CONCRETE, SEPARATED FROM THE DRIVE BY 1/2" PREMOLDED EXPANSION JOINT. WHEN LESS THAN 5 FT. OF A CURB SECTION REMAINS AFTER THE CURB CUT IS LOCATED, IT SHALL ALSO BE REMOVED AND REPLACED. CURB SHALL BE CONSTRUCTED IN MINIMUM 5 FT. SECTIONS AND MAXIMUM 10 FT. SECTIONS.

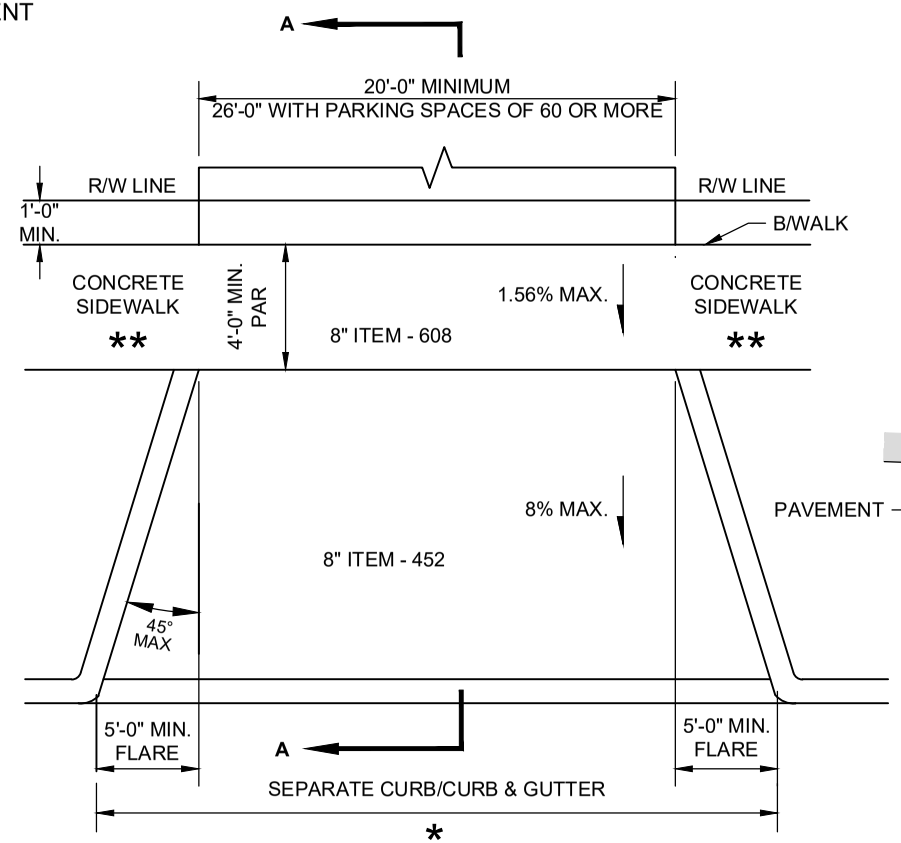
**SIDEWALK WIDTH SHALL BE PER STANDARD DRAWING 2300. SIDEWALK THICKNESS SHALL BE 8" CONCRETE TO ONE FULL PANEL (MIN. 5 FT.) BEYOND THE EDGE OF THE FULL WIDTH SECTION OF THE DRIVE.

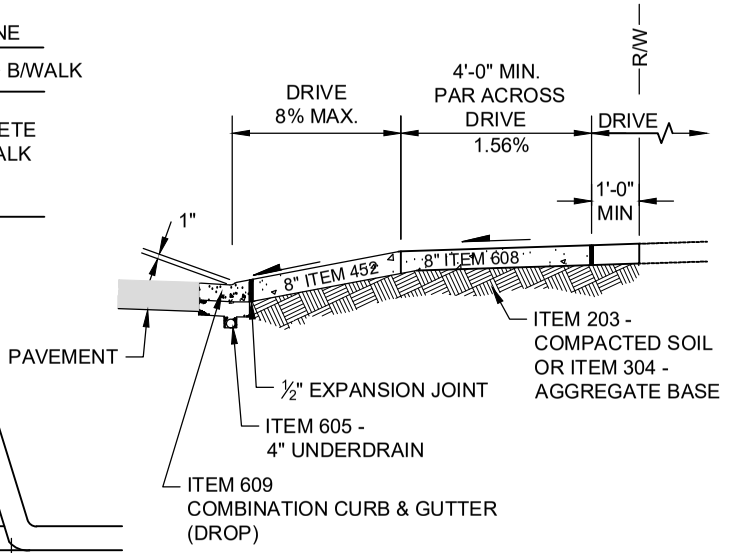
PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

WHEN CURB OR CURB OR CURB AND GUTTER ARE PRESENT ALL DRIVEWAYS SHALL BE ITEM 452 CONCRETE PAVEMENT



STRAIGHT CURB SECTION
SECTION A-A





COMBINATION CURB AND GUTTER SECTION
SECTION A-A

DRIVEWAY, NON-RESIDENTIAL

CURBED ROADWAY WITH FLARES, TYPE A

CITY OF COLUMBUS, OHIO
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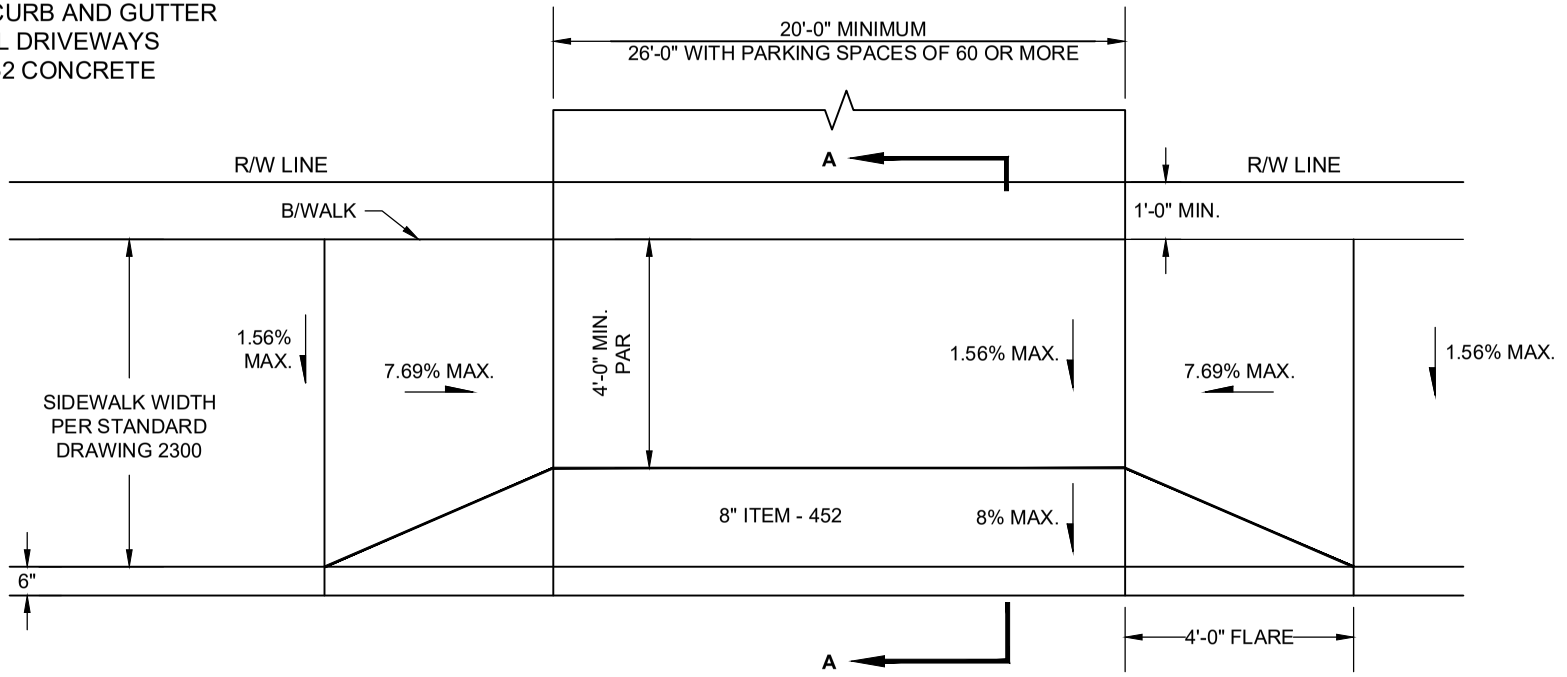
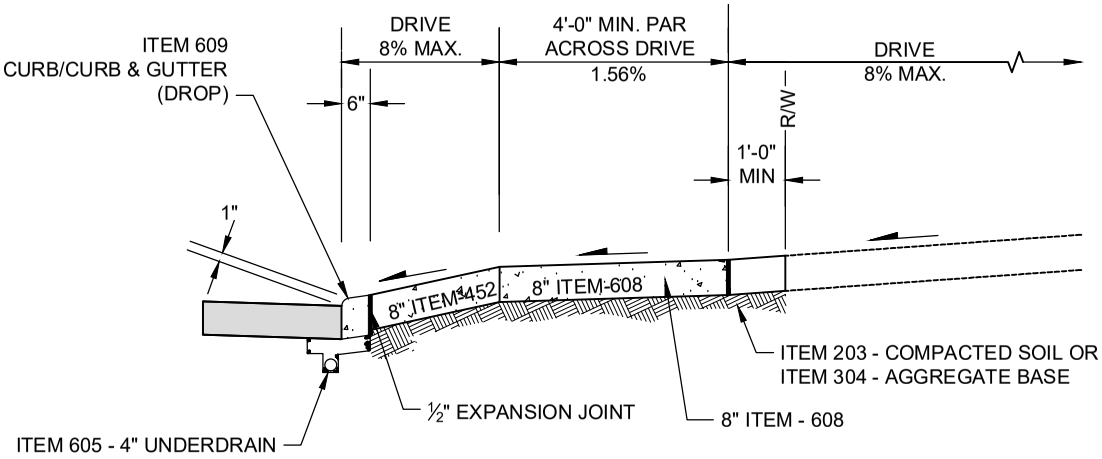
WHEN CURB OR CURB AND GUTTER ARE PRESENT ALL DRIVEWAYS SHALL BE ITEM 452 CONCRETE PAVEMENT





SECTION A-A

SEE SHEET 1 OF 14 FOR NOTES

DRIVEWAY, NON-RESIDENTIAL

CURBED ROADWAY WITH FLARES, TYPE B

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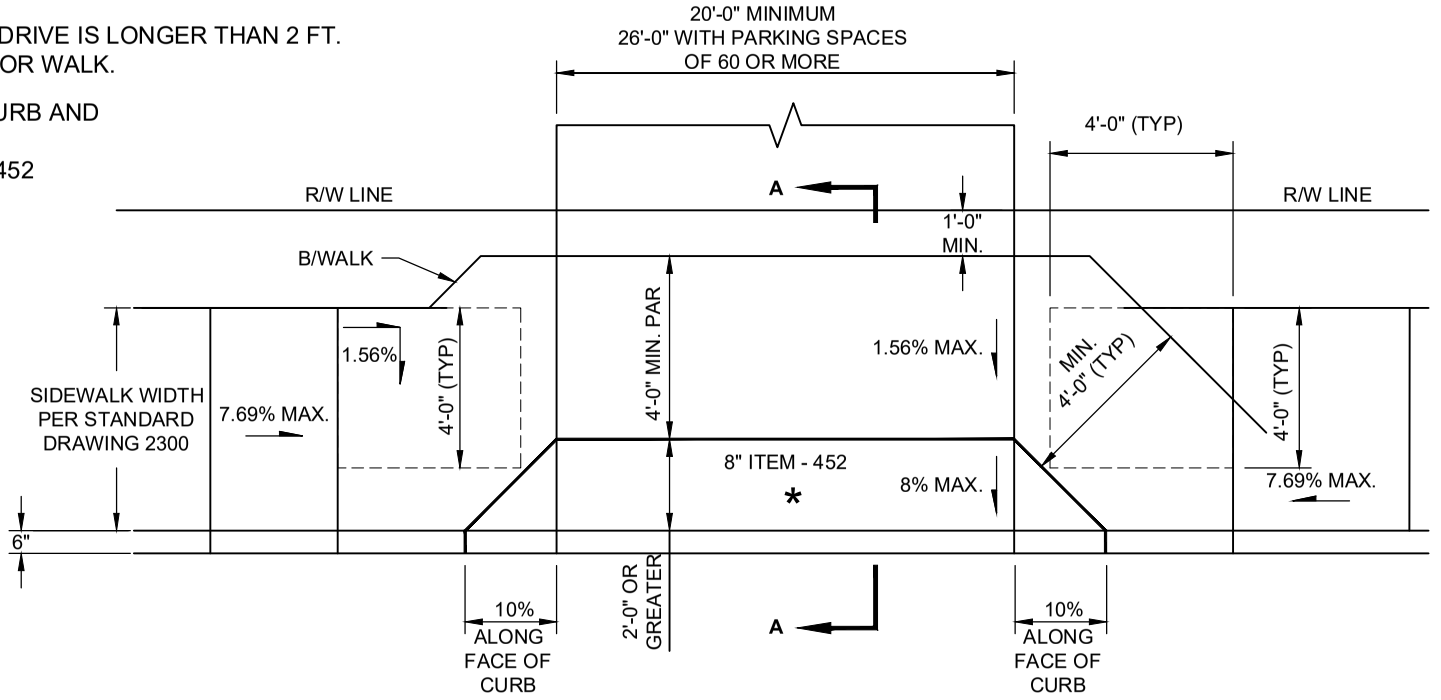
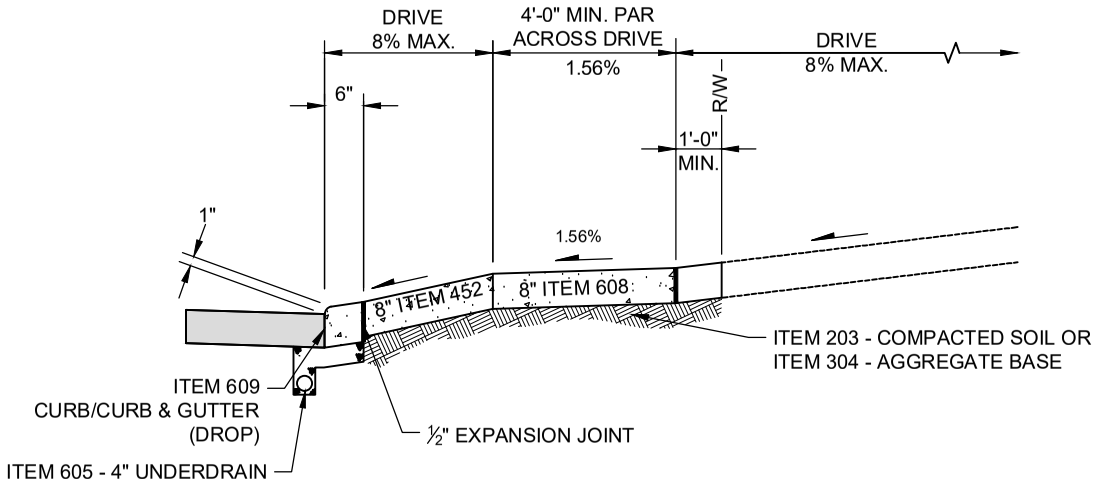
* USE WHEN FRONT RAMP OF DRIVE IS LONGER THAN 2 FT. MAINTAIN R/W CLEARANCE FOR WALK.

WHEN CURB OR CURB OR CURB AND GUTTER ARE PRESENT ALL DRIVEWAYS SHALL BE ITEM 452 CONCRETE PAVEMENT





SECTION A-A

SEE SHEET 1 OF 14 FOR NOTES

DRIVEWAY, NON-RESIDENTIAL

CURBED ROADWAY WITH FLARES, TYPE C

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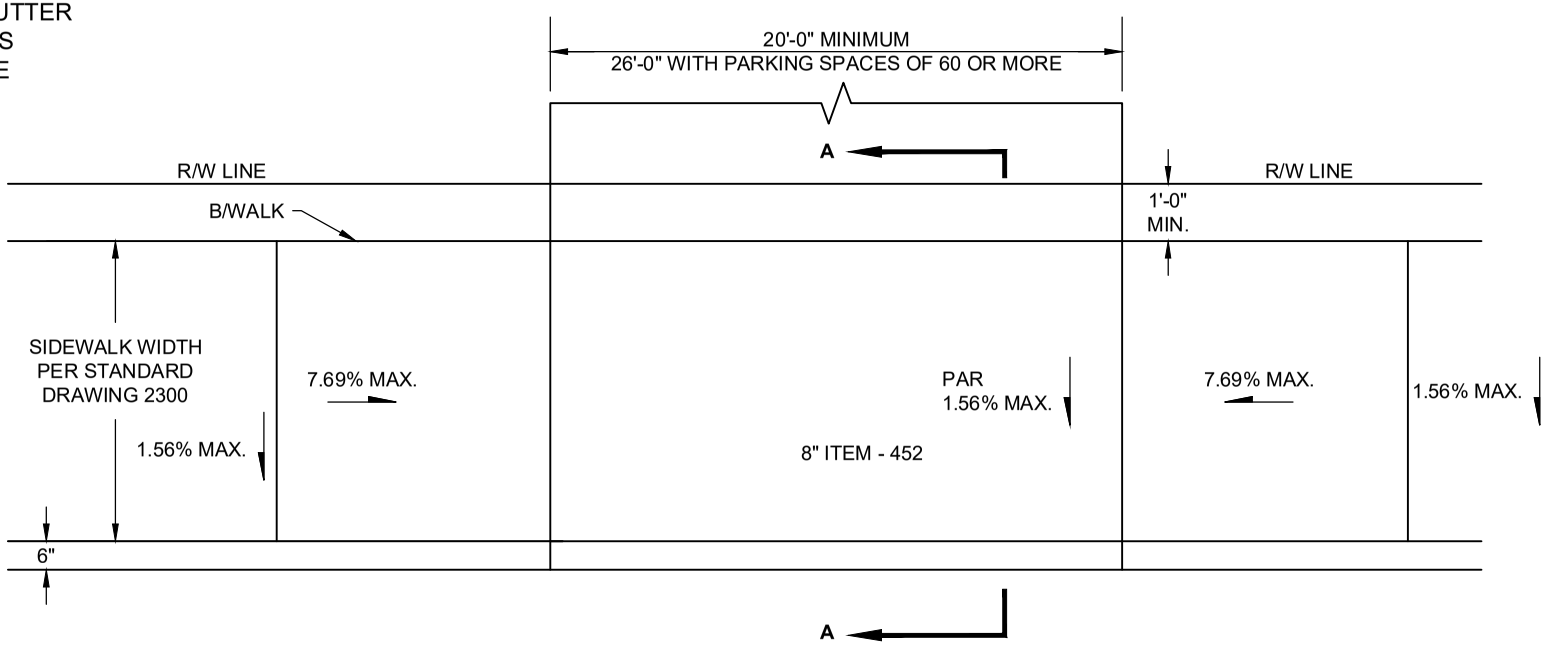
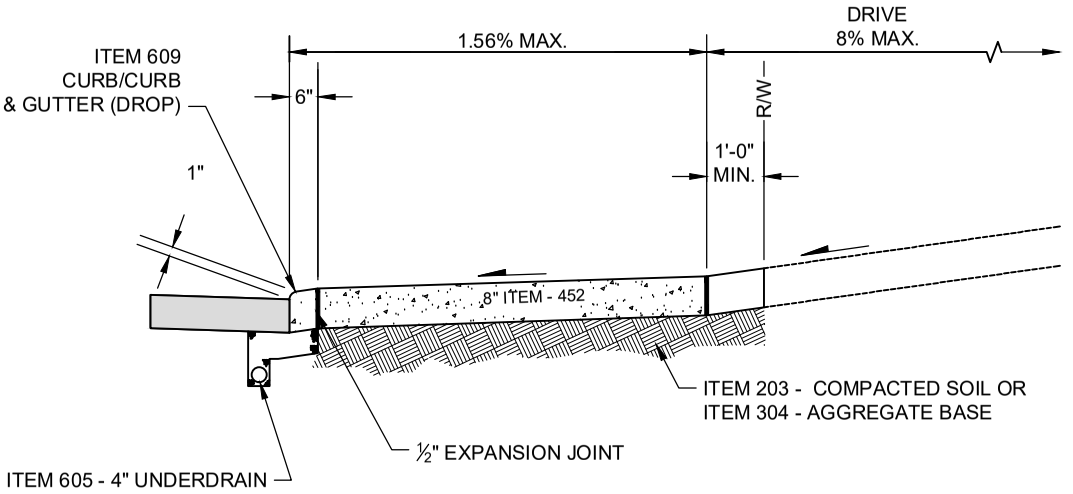
WHEN CURB OR CURB AND GUTTER ARE PRESENT ALL DRIVEWAYS SHALL BE ITEM 452 CONCRETE PAVEMENT





SECTION A-A

SEE SHEET 1 OF 14 FOR NOTES

DRIVEWAY, NON-RESIDENTIAL

CURBED ROADWAY WITH FLARES, TYPE D

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
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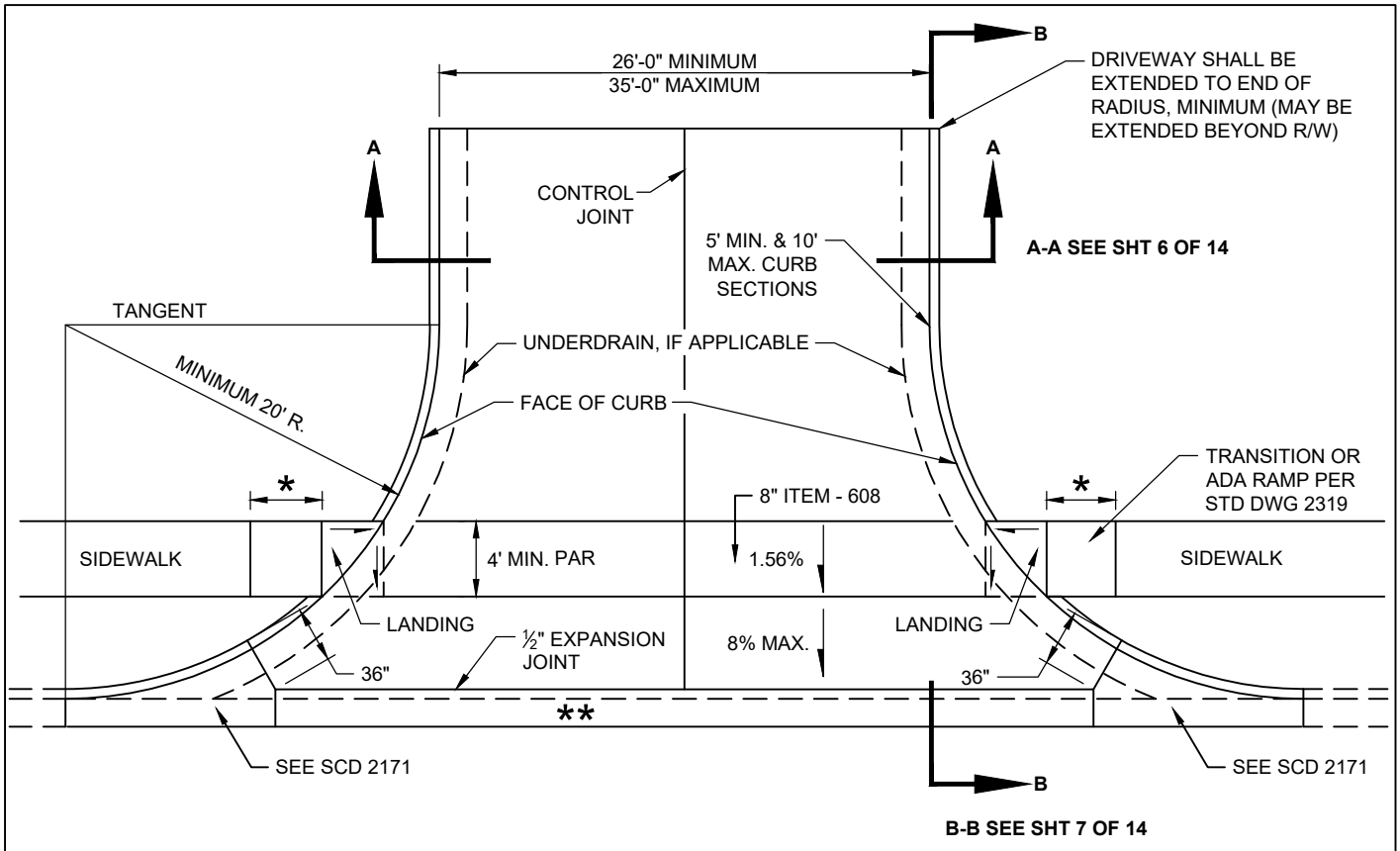

* 8" CONCRETE SIDEWALK FOR 1 FULL PANEL (MIN. 5 FT.) BEYOND EDGE OF DRIVE.

** MAINTAIN 4" PIPE UNDERDRAIN. CURB OR COMBINED CURB AND GUTTER SHALL BE TAKEN OUT AND REPLACED WITH CONCRETE, SEPARATED FROM THE DRIVE BY 1/2" PREMOLDED EXPANSION JOINT. WHEN LESS THAN 5 FT. OF A CURB SECTION REMAINS AFTER THE CURB CUT IS LOCATED, IT SHALL ALSO BE REMOVED AND REPLACED. CURB/GUTTER SHALL BE CONSTRUCTED IN MINIMUM 5 FT. SECTIONS AND MAXIMUM 10 FT. SECTIONS.

PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

NO DOWELS REQUIRED ON DRIVES.

WHEN A CURB OR CURB AND GUTTER ARE PRESENT ALL DRIVEWAYS SHALL BE ITEM 452 CONCRETE PAVEMENT

CURBED ROADWAY WITH RADIUS

DRIVEWAY, NON-RESIDENTIAL

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
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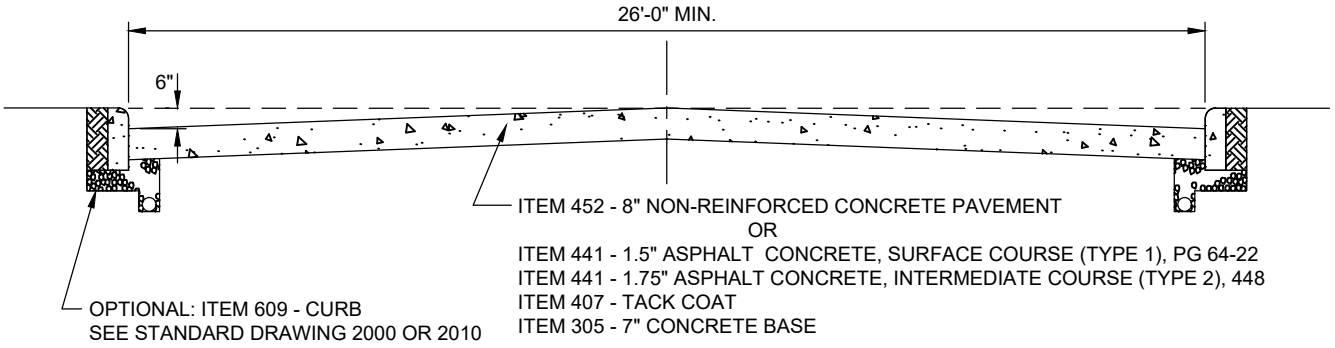
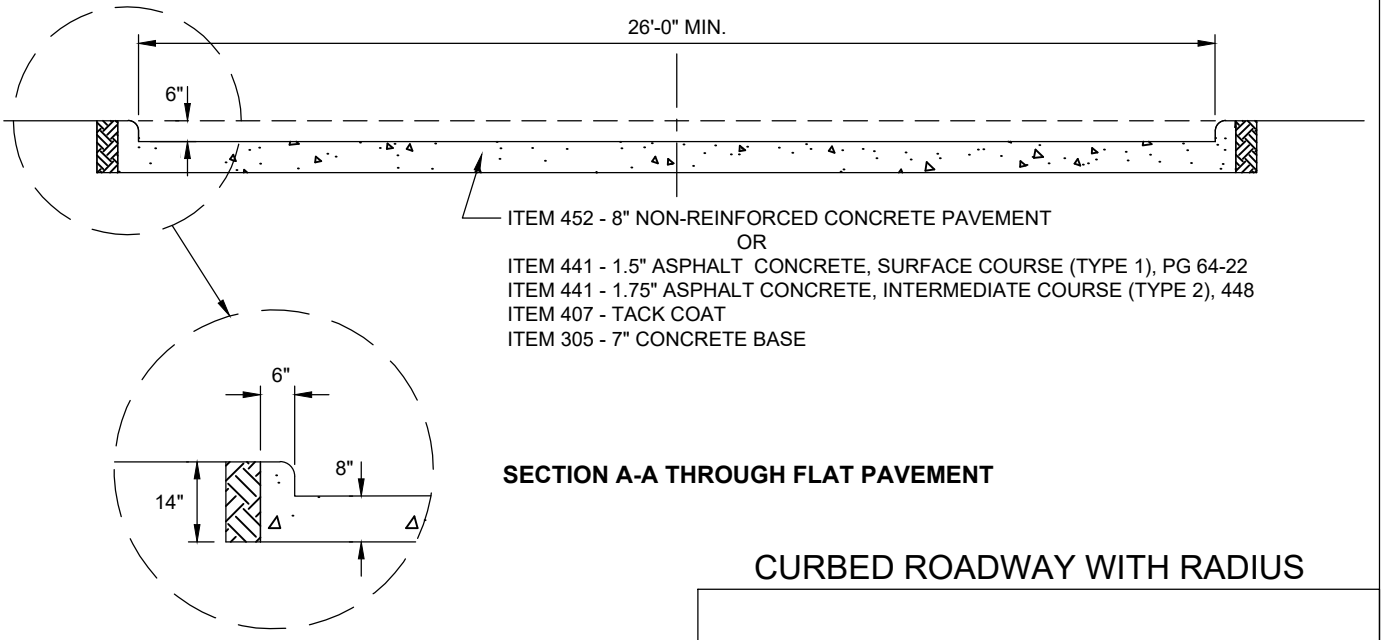


SECTION A-A THROUGH CROWNED PAVEMENT



SECTION A-A THROUGH FLAT PAVEMENT

CURBED ROADWAY WITH RADIUS

DRIVEWAY, NON-RESIDENTIAL

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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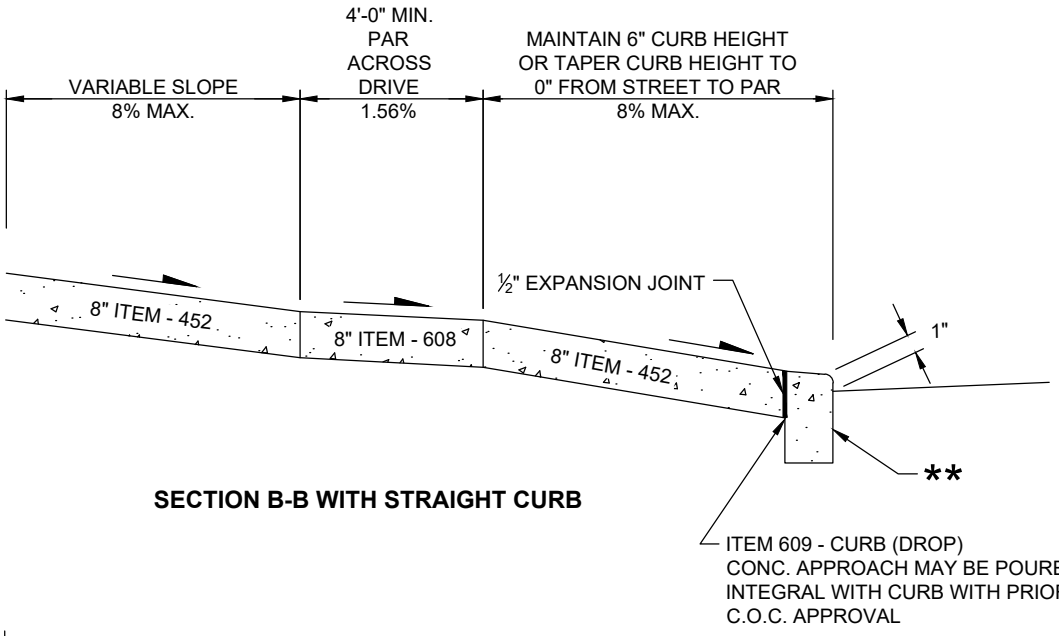
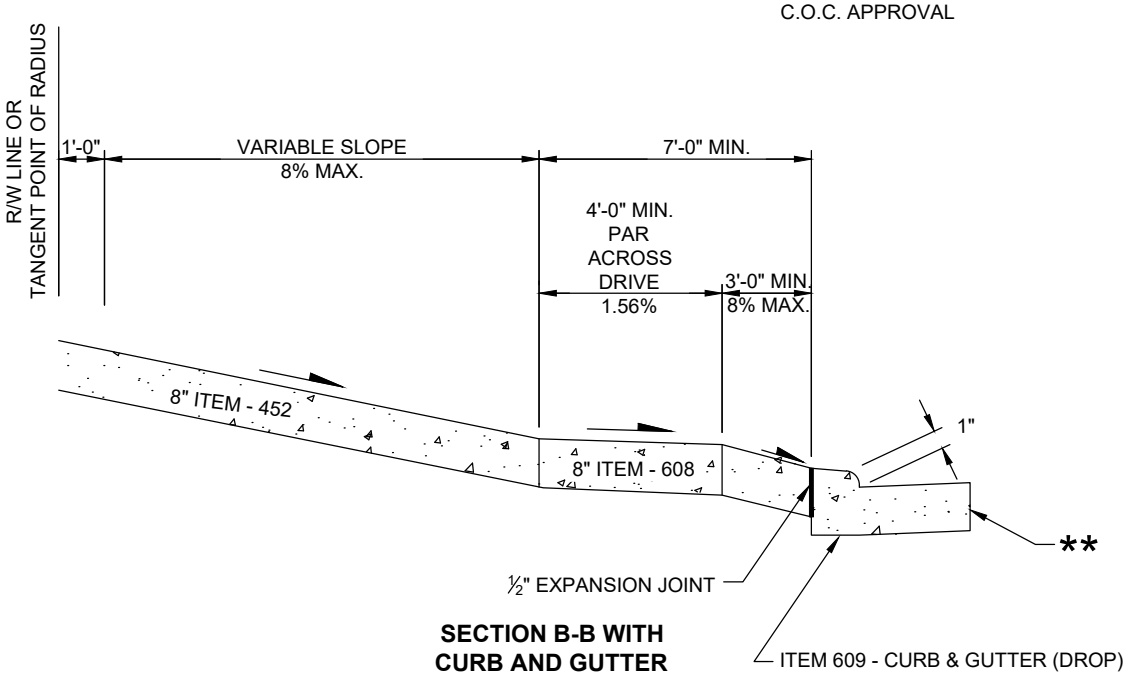
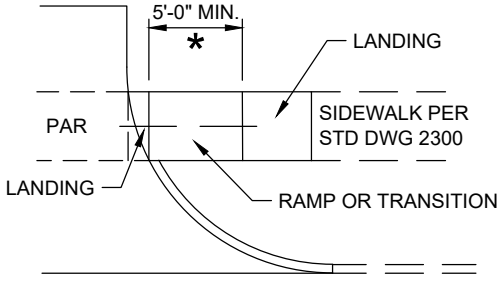


SECTION B-B WITH STRAIGHT CURB



SECTION B-B WITH CURB AND GUTTER



CURBED ROADWAY WITH RADIUS

PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

* 8" ITEM - 608

** STRAIGHT CURB OR CONCRETE CURB & GUTTER.

DRIVEWAY, NON-RESIDENTIAL

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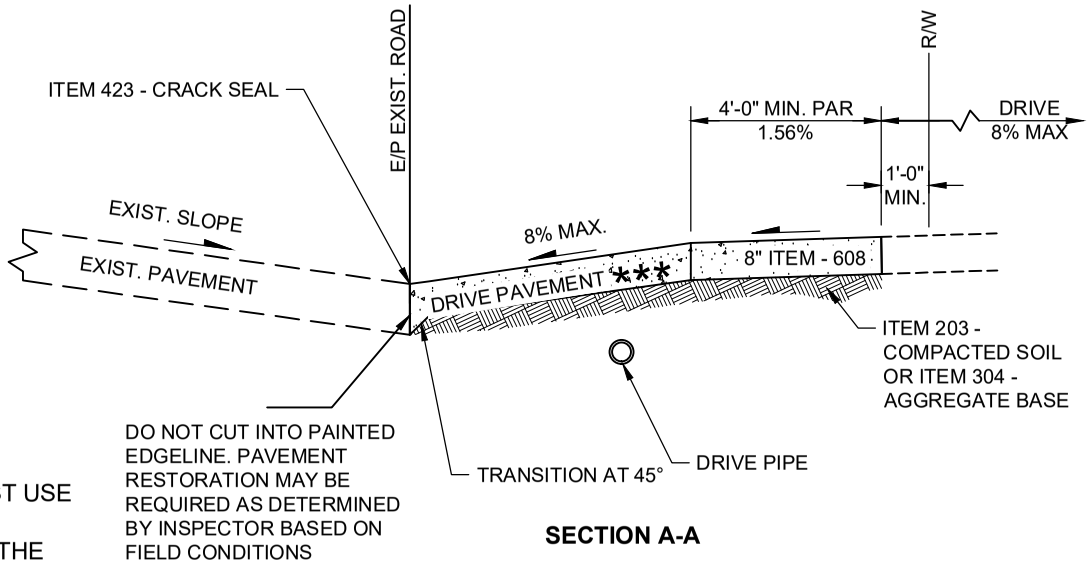
FOR USE ON A NON-RESIDENTIAL PARCEL

DRIVE PAVEMENT (TYPE, RIGID)
ITEM 452 - 8" NON-REINFORCED PORTLAND CEMENT CONCRETE

SIDEWALK SHALL BE PER STANDARD DRAWING 2300. SIDEWALK THICKNESS SHALL BE 8" CONCRETE TO ONE FULL PANEL (MIN. 5 FT.) BEYOND THE EDGE OF THE FULL WIDTH SECTION OF THE DRIVE.

* PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.



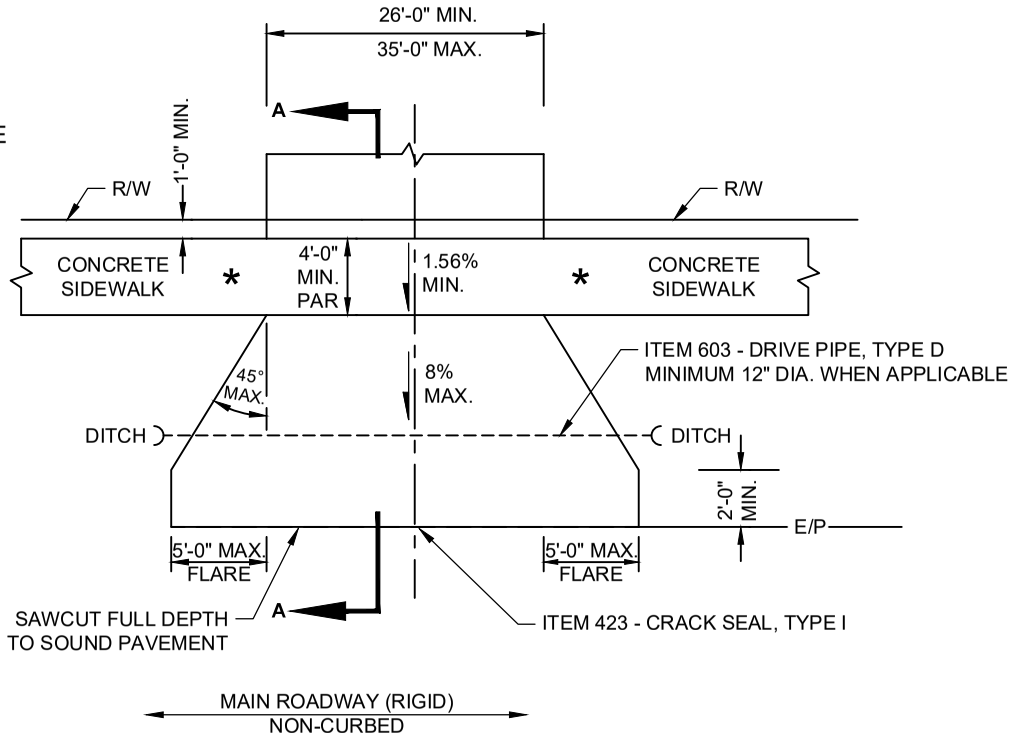
SECTION A-A

WHEN CONDITIONS EXIST USE THE FOLLOWING;
IF THE DISTANCE FROM THE SIDEWALK TO THE EDGE OF PAVEMENT IS:

>5' ----- HOLD THE FLARE TO 45* AND ADJUST THE WIDTH ACCORDINGLY, MAINTAIN THE MINIMUM 2' WIDE PERPENDICULAR AREA OF THE APPROACH

5'-7' --- MAINTAIN THE 5' MAXIMUM FLARE WIDTH, VARY THE ANGLE, AND MAINTAIN THE MINIMUM 2' WIDE PERPENDICULAR AREA OF THE APPROACH

>7' ----- DECREASE THE 45* ANGLE (ADJUST ACCORDINGLY), MAINTAIN THE MINIMUM 2' WIDE PERPENDICULAR AREA OF THE APPROACH



DRIVEWAY, NON- RESIDENTIAL

NON-CURBED ROADWAY WITH FLARES
DRIVE PAVEMENT, RIGID

CITY OF COLUMBUS, OHIO
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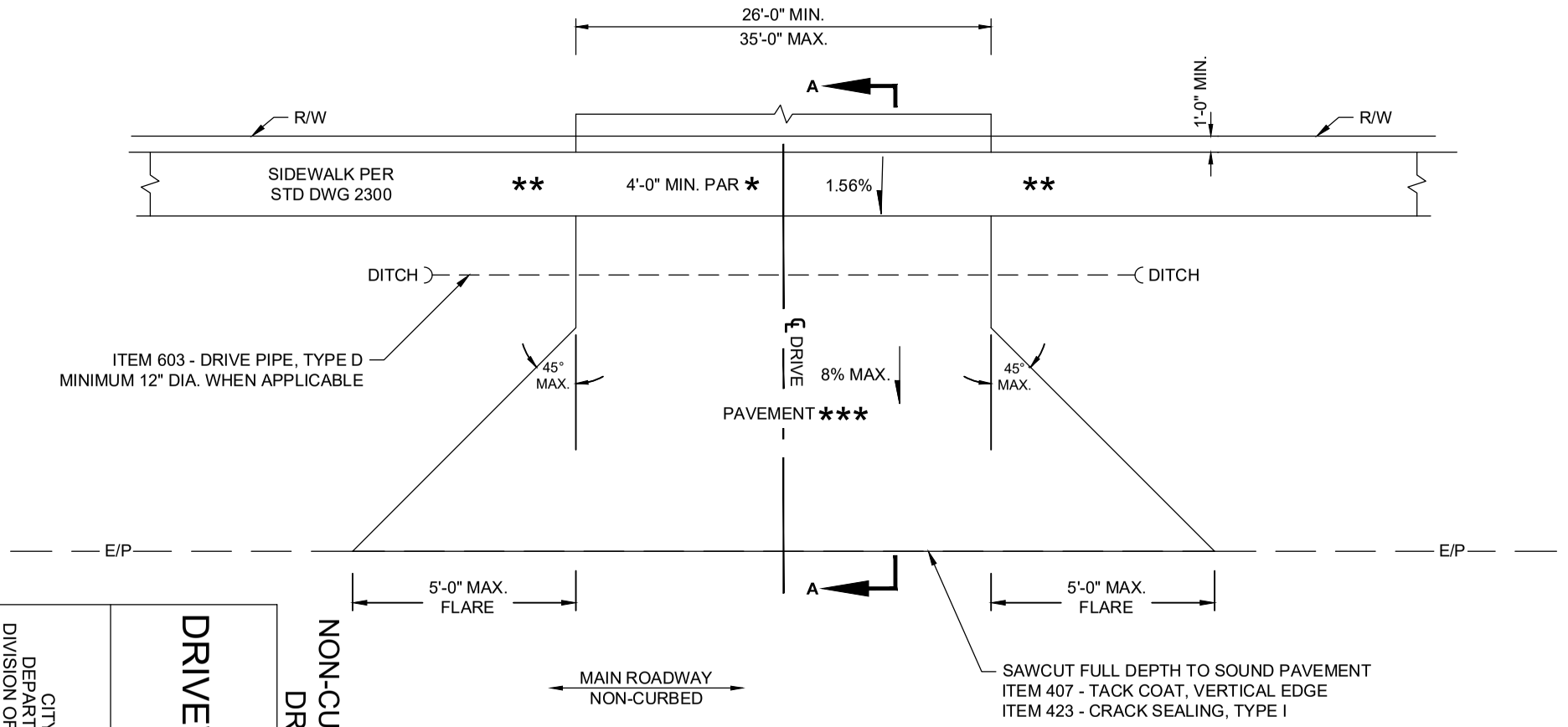

A-A SEE SHT 10 OF 14

* PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

** 8" THICK CONCRETE SIDEWALK FOR 1 FULL PANEL (MIN. 5 FT.) BEYOND THE EDGE OF THE FULL WIDTH SECTION OF THE DRIVE.

*** DRIVE PAVEMENT (FLEXIBLE DESIGN)
ITEM 441 - 1.5" ASPHALT CONCRETE, SURFACE COURSE, (TYPE 1), PG 64-22
ITEM 441 - 2" ASPHALT CONCRETE, INTERMEDIATE COURSE, (TYPE 2)
ITEM 301 - 4.5" ASPHALT CONCRETE BASE
ITEM 304 - 4" AGGREGATE BASE

DRIVEWAY, NON-RESIDENTIAL

NON-CURBED ROADWAY WITH FLARES
DRIVE PAVEMENT, FLEXIBLE

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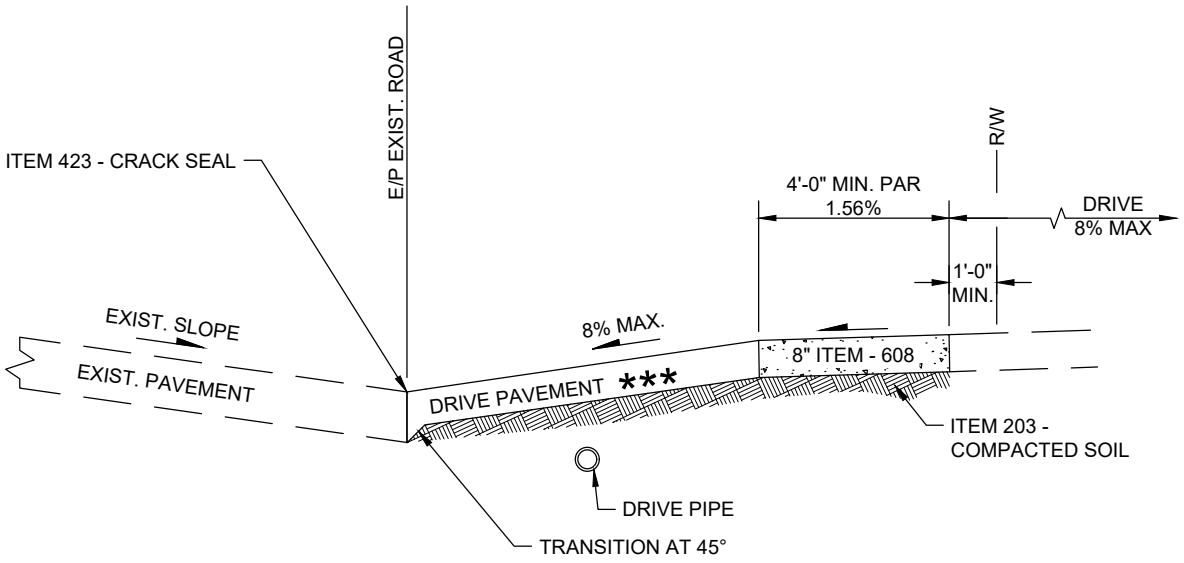

SECTION A-A

NON-CURBED ROADWAY WITH FLARES
DRIVE PAVEMENT, FLEXIBLE

DRIVEWAY, NON-RESIDENTIAL

CITY OF COLUMBUS, OHIO
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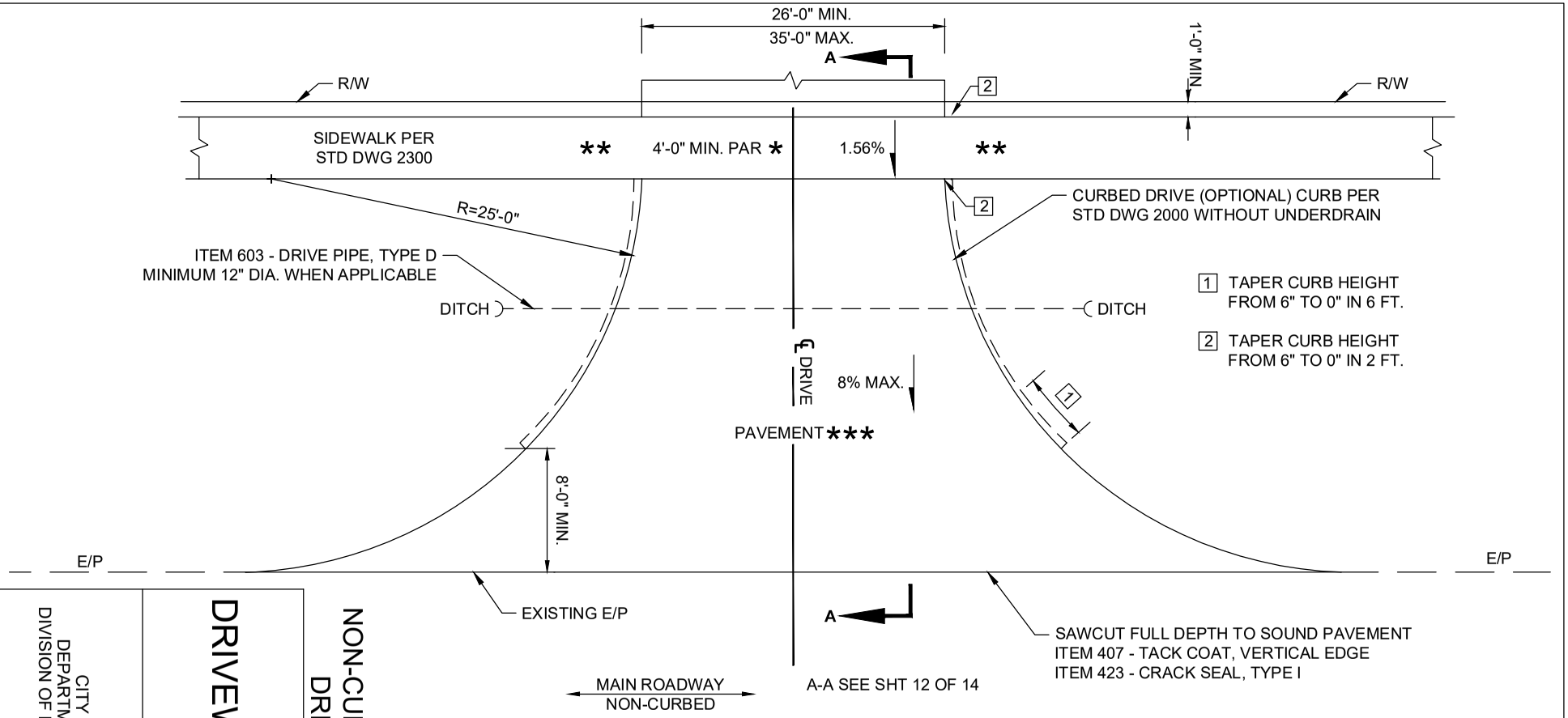

* PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

** 8" THICK CONCRETE SIDEWALK FOR 1 FULL PANEL (MIN. 5 FT.) BEYOND THE EDGE OF THE FULL WIDTH SECTION OF THE DRIVE.

*** DRIVE PAVEMENT (FLEXIBLE DESIGN)
ITEM 441 - 1.5" ASPHALT CONCRETE, SURFACE COURSE, (TYPE 1), PG 64-22
ITEM 441 - 2" ASPHALT CONCRETE, INTERMEDIATE COURSE (TYPE 2)
ITEM 301 - 4.5" ASPHALT CONCRETE BASE
ITEM 304 - 4" AGGREGATE BASE

DRIVEWAY, NON-RESIDENTIAL

NON-CURBED ROADWAY WITH RADIUS
DRIVE PAVEMENT, FLEXIBLE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
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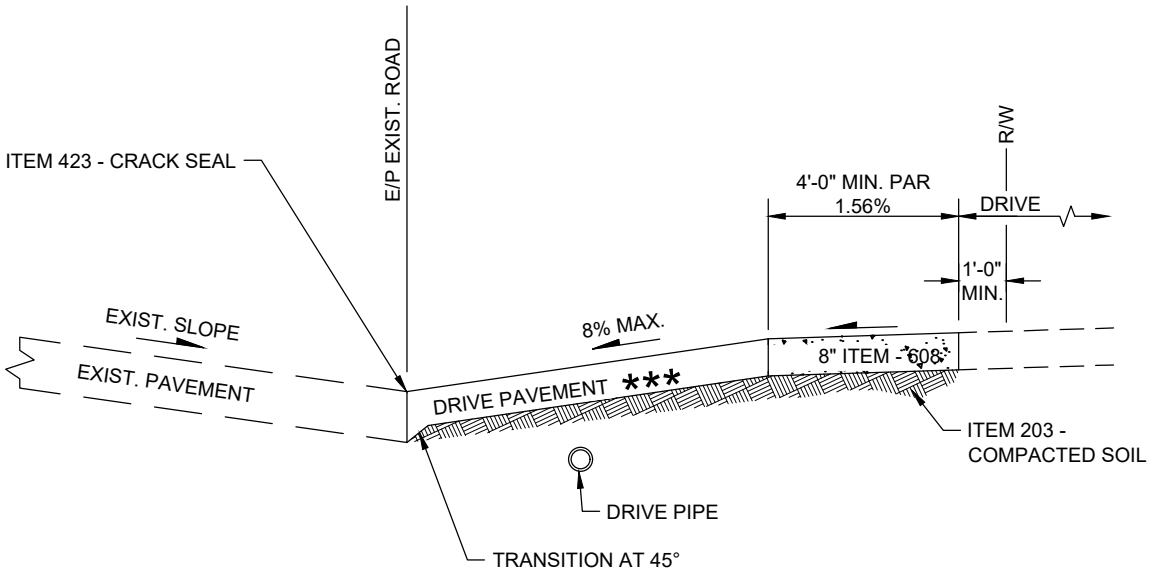

SECTION A-A

NON-CURBED ROADWAY WITH RADIUS,
DRIVE PAVEMENT, FLEXIBLE

DRIVEWAY, NON-RESIDENTIAL

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
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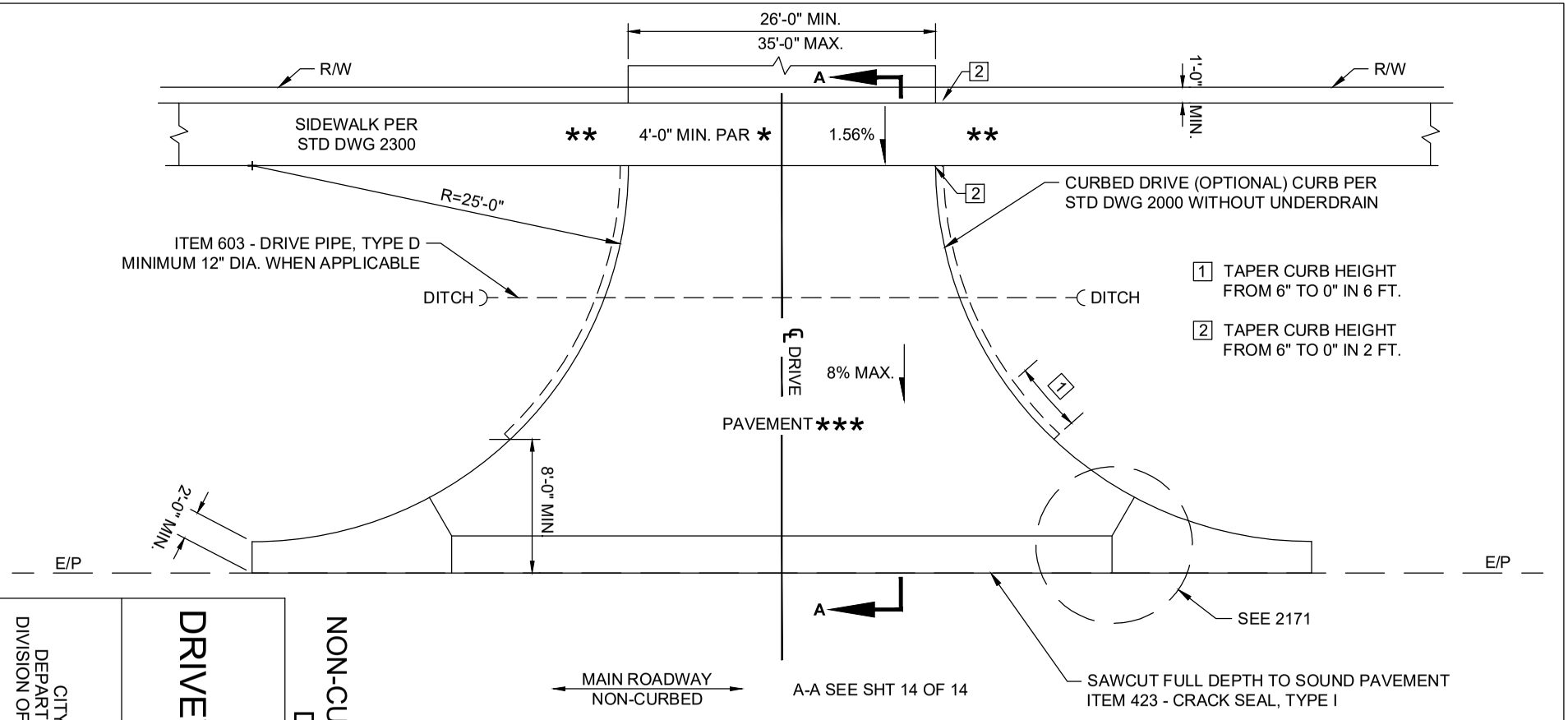

* PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

** 8" THICK CONCRETE SIDEWALK FOR 1 FULL PANEL (MIN. 5 FT.) BEYOND THE EDGE OF THE FULL WIDTH SECTION OF THE DRIVE.

*** DRIVE PAVEMENT (RIGID DESIGN)
ITEM 452 - 8" NON-REINFORCED PORTLAND CEMENT CONCRETE.

DRIVEWAY, NON-RESIDENTIAL

NON-CURBED ROADWAY WITH RADIUS
DRIVE PAVEMENT, RIGID

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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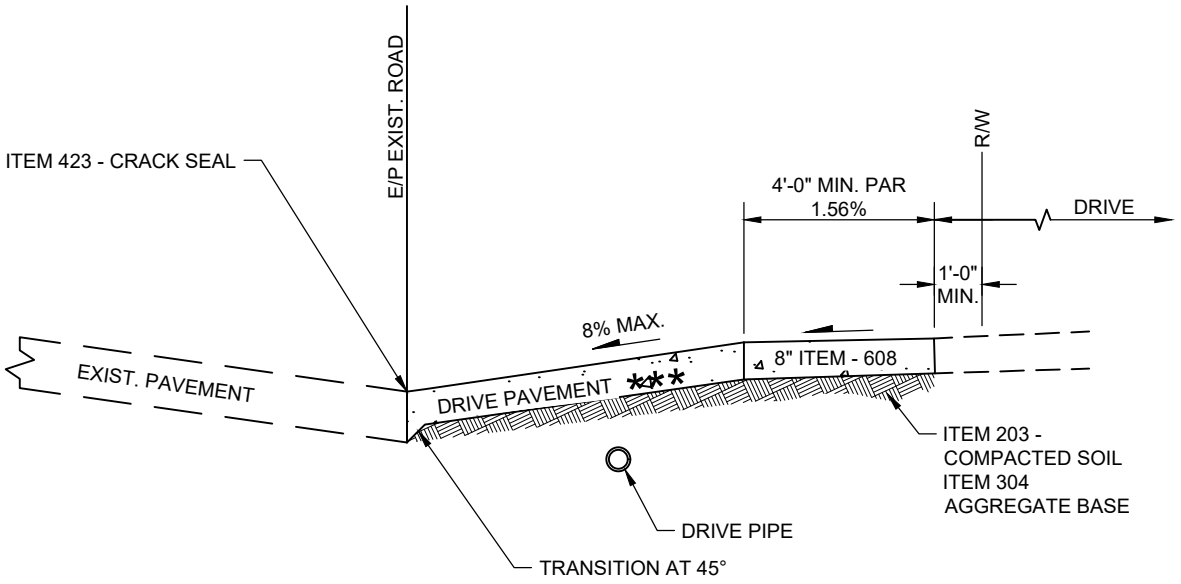

SECTION A-A

NON-CURBED ROADWAY WITH RADIUS
DRIVE PAVEMENT, RIGID

DRIVEWAY, NON-RESIDENTIAL

CITY OF COLUMBUS, OHIO
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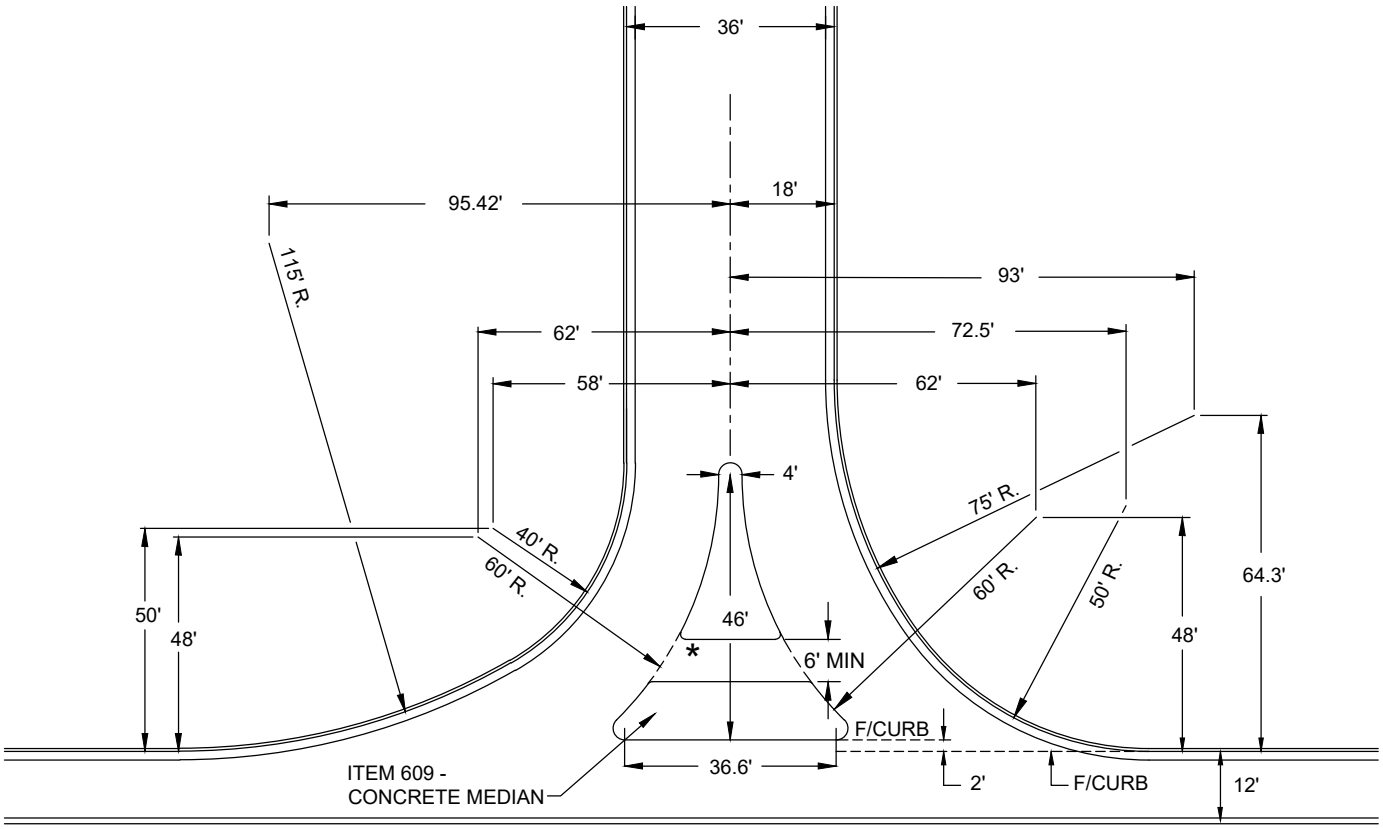

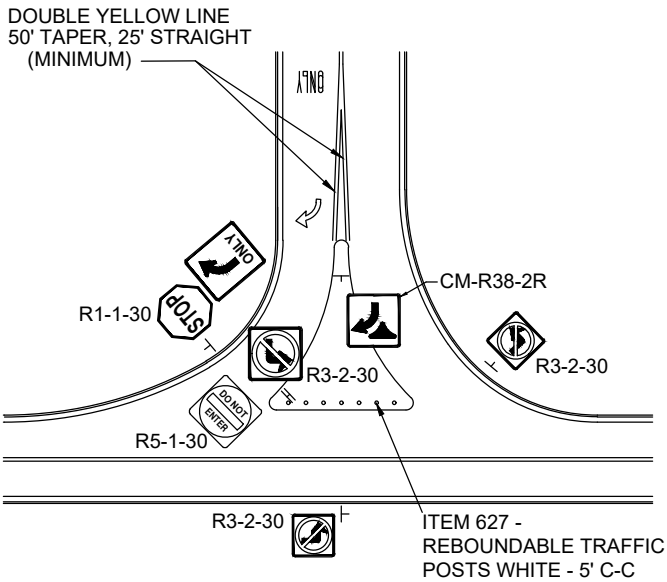

ANY DEVIATIONS FROM THE ABOVE DIMENSIONS SHALL REQUIRE A DESIGN SPECIFICALLY FOR THOSE DEVIATIONS.

DIMENSIONS ARE TO FACE OF CURB (UNLESS OTHERWISE NOTED).

DESIGN IS FOR WB-50 TURNING TEMPLATE.

CHANGES FROM THESE DRAWINGS REQUIRE CITY OF COLUMBUS APPROVAL.

* DRIVE ISLANDS SHALL BE BUILT WITH AN ADA COMPLIANT PEDESTRIAN CROSSING. SEE STD DWG 2319.

ISLAND CORNER RADII ARE 2' MIN.

DRIVEWAY
RIGHT IN & RIGHT OUT

CITY OF COLUMBUS, OHIO DEPARTMENT OF PUBLIC SERVICE DIVISION OF DESIGN AND CONSTRUCTION	STD DWG 2211
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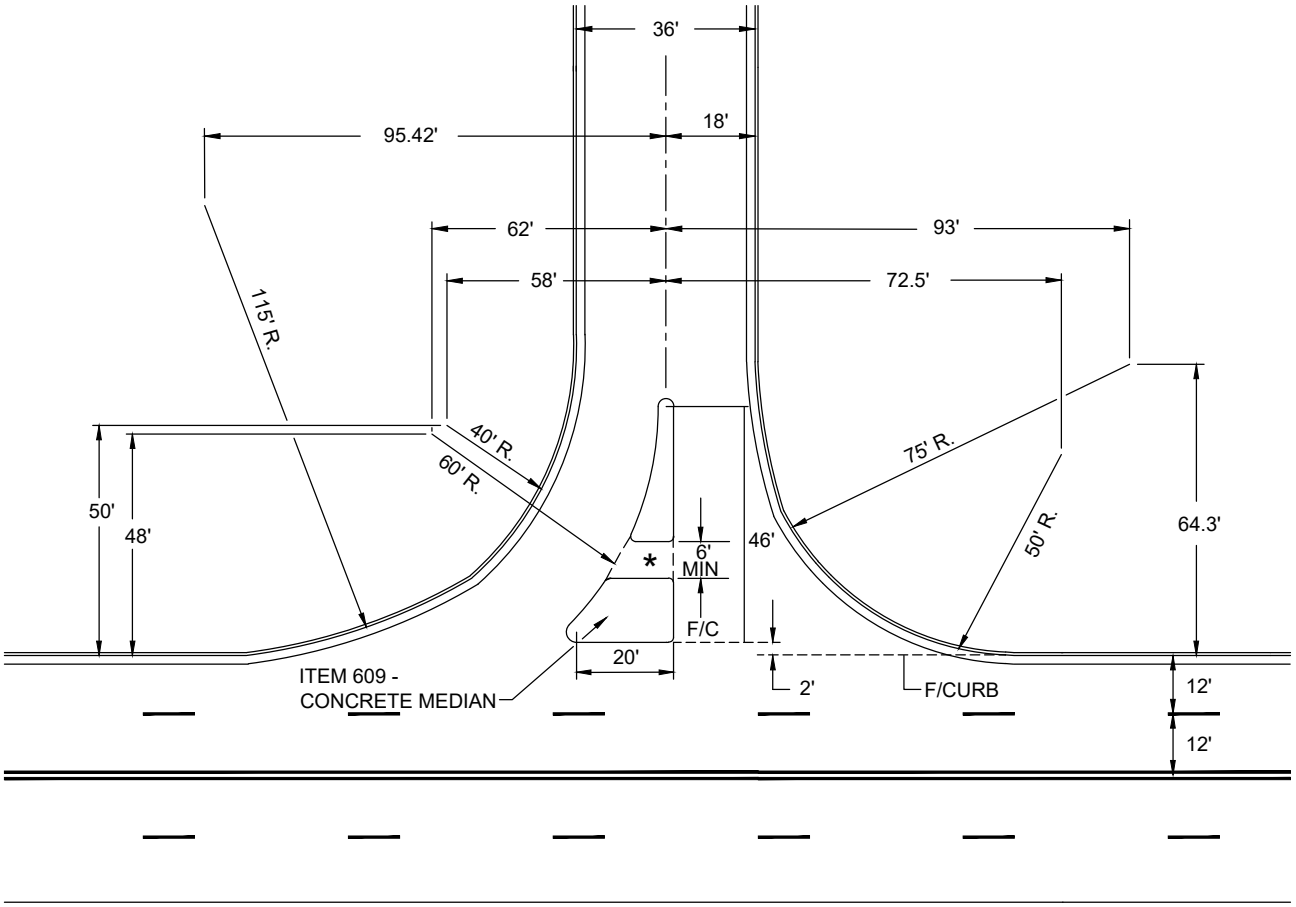

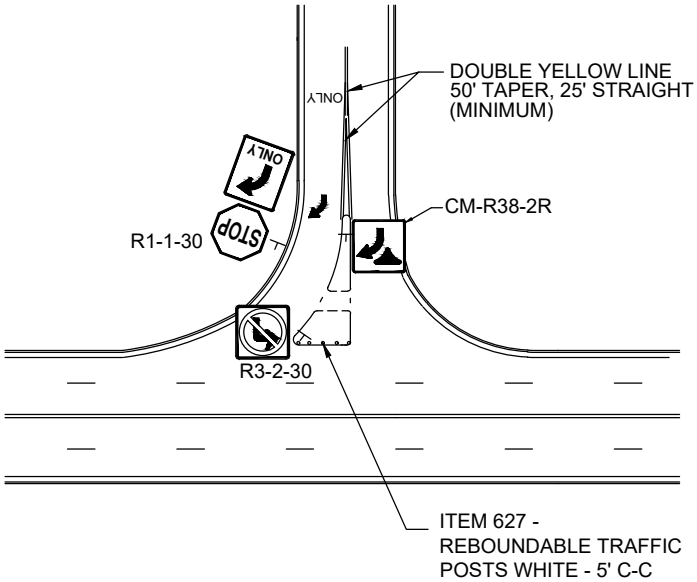

ANY DEVIATIONS FROM THE ABOVE DIMENSIONS SHALL REQUIRE A DESIGN SPECIFICALLY FOR THOSE DEVIATIONS.

DIMENSIONS ARE TO FACE OF CURB (UNLESS OTHERWISE NOTED).

DESIGN IS FOR WB-50 TURNING TEMPLATE.

* DRIVE ISLANDS SHALL BE BUILT WITH AN ADA COMPLIANT PEDESTRIAN CROSSING. SEE STD DWG 2319.

ISLAND CORNER RADII ARE 2' MIN.

DRIVEWAY
RIGHT IN & RIGHT OUT
WITH LEFT IN

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
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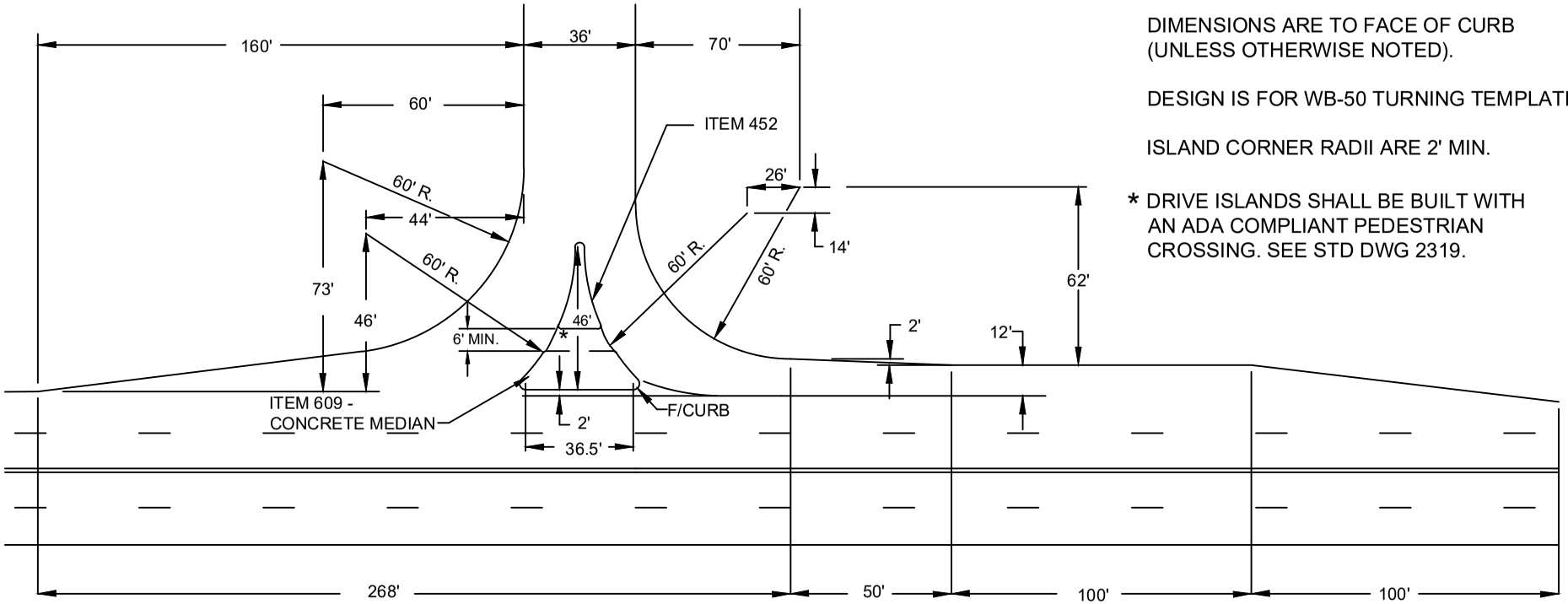
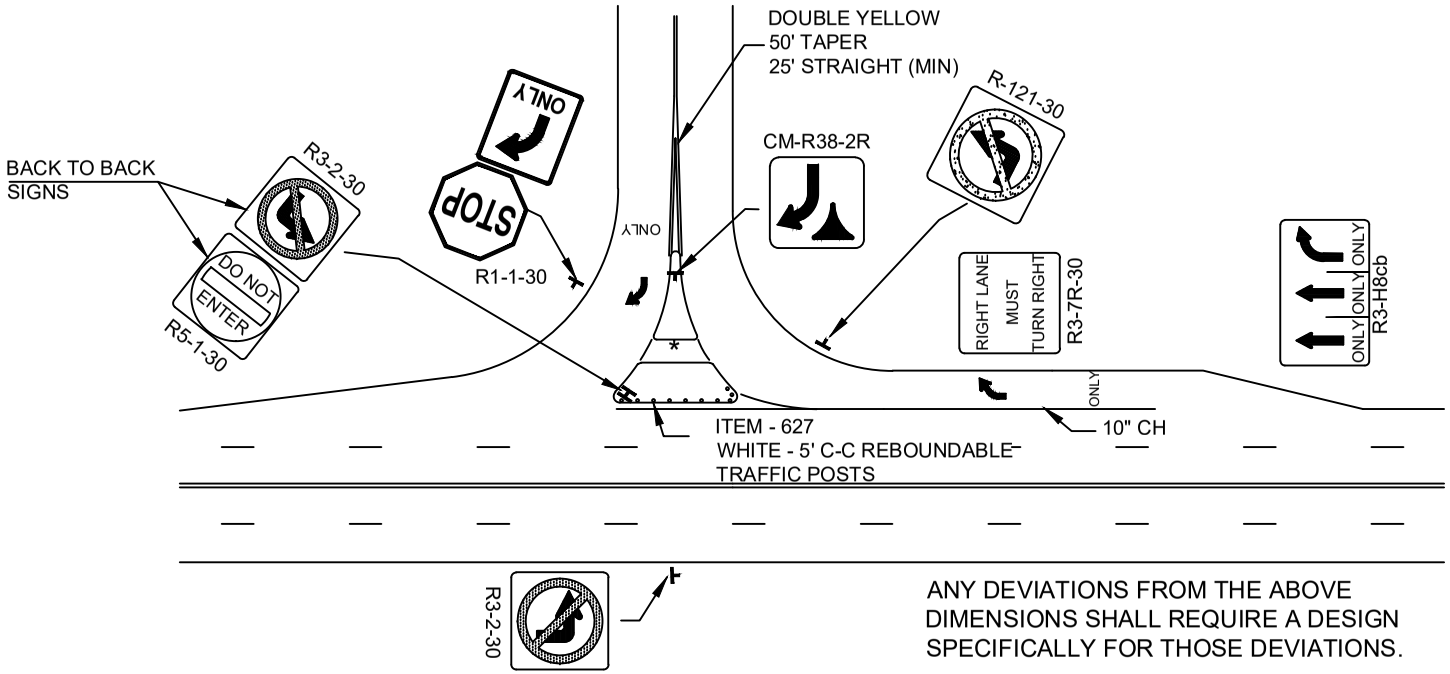


DIMENSIONS ARE TO FACE OF CURB (UNLESS OTHERWISE NOTED).

DESIGN IS FOR WB-50 TURNING TEMPLATE.

ISLAND CORNER RADII ARE 2' MIN.

* DRIVE ISLANDS SHALL BE BUILT WITH AN ADA COMPLIANT PEDESTRIAN CROSSING. SEE STD DWG 2319.



ANY DEVIATIONS FROM THE ABOVE DIMENSIONS SHALL REQUIRE A DESIGN SPECIFICALLY FOR THOSE DEVIATIONS.

DRIVEWAY
RIGHT IN & RIGHT OUT
WITH ADD LANE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
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CITY ENGINEER

STD DWG
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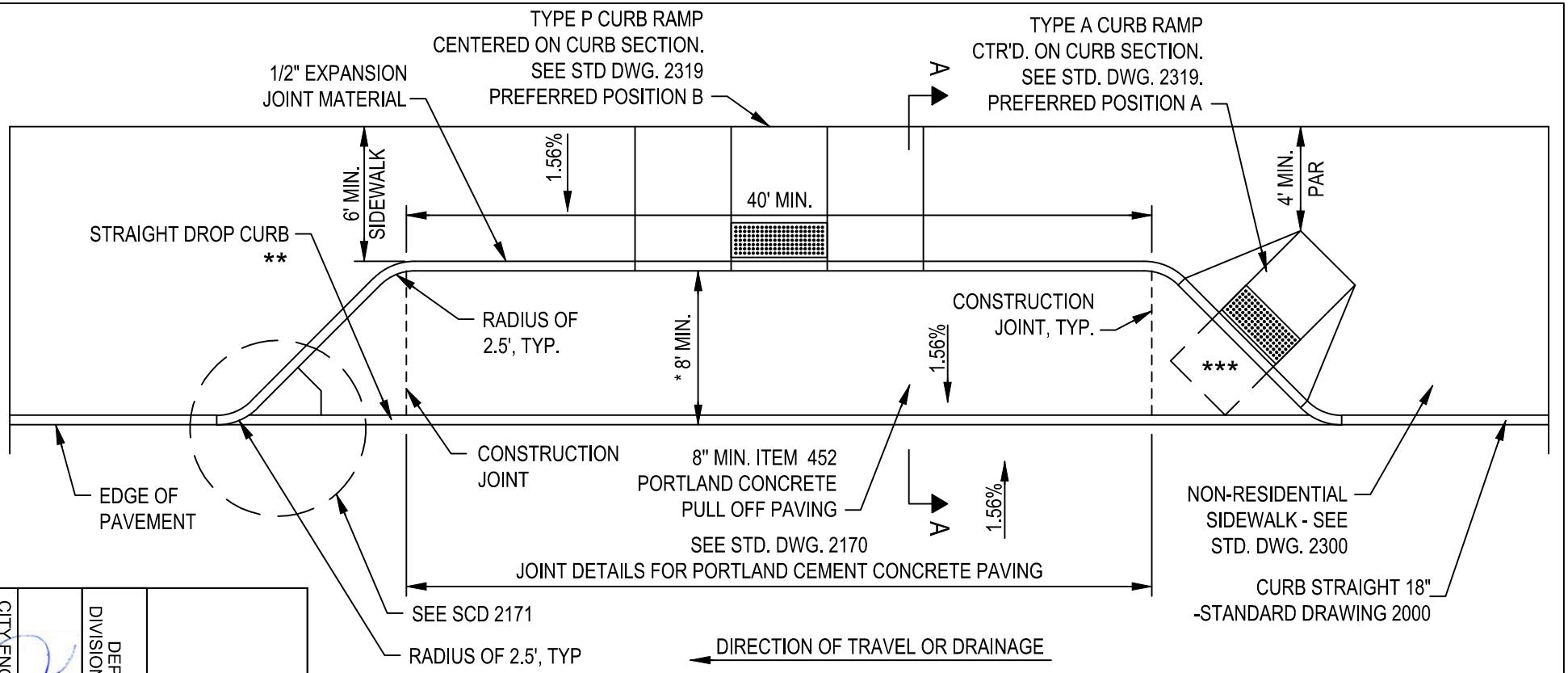

* THE MINIMUM WIDTH OF PULL OFF SHALL BE 10' WHEN ADJACENT TO A TRAVEL LANE. ANY EXCEPTIONS REQUIRE DIVISION OF TRAFFIC MANAGEMENT APPROVAL.

** THE TYPE OF CURB AT THE EDGE OF PAVEMENT ALONG THE VEHICLE PULL OFF WILL BE THE SAME TYPE OF CURB PLACED ADJACENT TO THE VEHICLE PULL OFF BUT IN A DROP CONDITION AND SHALL MAINTAIN A 1" ELEVATION DIFFERENCE TO CHANNEL RUNOFF. SEE STD DWG 2201 SECTION A-A STRAIGHT CURB AND COMBINATION CURB AND GUTTER FOR DROP CONDITION.

*** THE MINIMUM LANDING WIDTH IS 4' SQUARE AND SHALL BE ADA COMPLIANT.

THE ADA COMPLIANT RAMP SHALL BE PLACED IN PREFERRED POSITION A. POSITION A MAY BE ON EITHER SIDE OF THE PULL OFF, BUT PREFERRED ON THE UPSTREAM SIDE OF THE DRAINAGE AND AT THE REAR OF THE TRAFFIC FLOW. IF POSITION A CANNOT BE ACCOMPLISHED, POSITION B MAY BE UTILIZED. POSITION B MAY BE SHIFTED AS NEEDED WITHIN THE STRAIGHT SECTION OF THE PULL OFF.

A MINIMUM AREA OF 4' WIDE BY 20' LONG, ADJACENT TO THE CURB, SHALL BE PROVIDED IN THE STRAIGHT SECTION OF THE PULL OFF WITH NO STREET FURNITURE OR OBSTRUCTIONS.

VEHICLE PULL OFF

CITY OF COLUMBUS, OHIO
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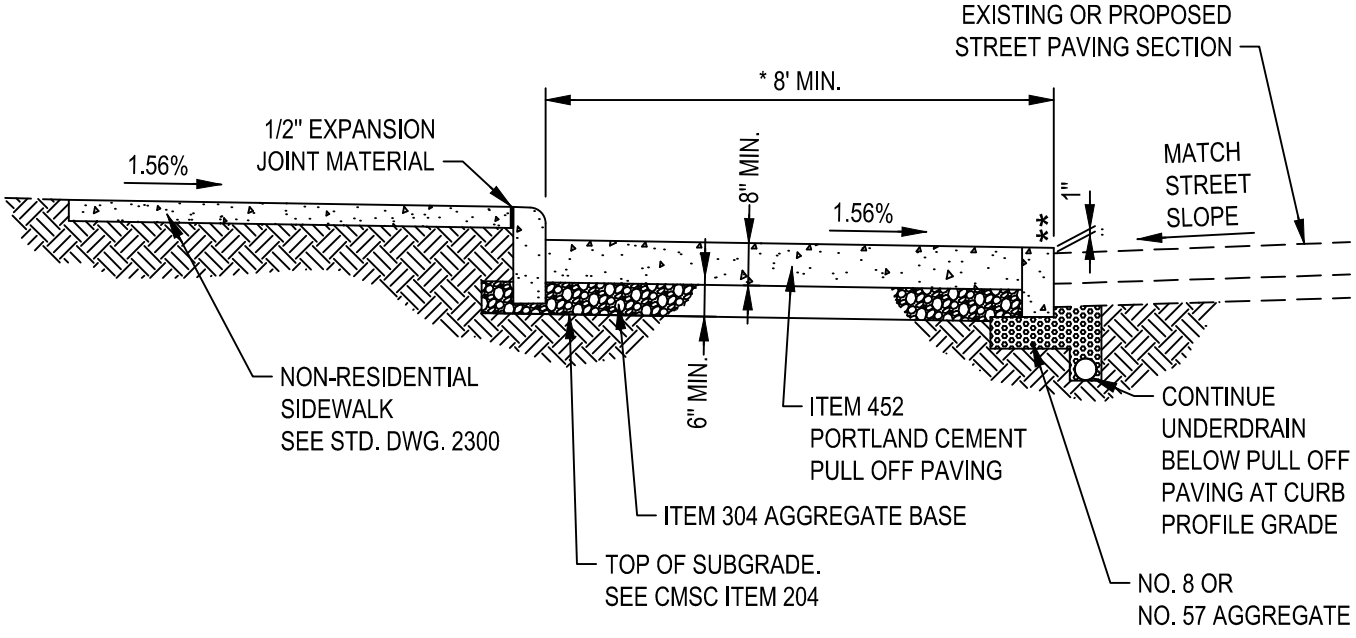

SECTION A

* THE MINIMUM WIDTH OF PULL OFF SHALL BE 10' WHEN ADJACENT TO A TRAVEL LANE. ANY EXCEPTIONS REQUIRE DIVISION OF TRAFFIC MANAGEMENT APPROVAL.

** THE TYPE OF CURB AT THE EDGE OF PAVEMENT ALONG THE VEHICLE PULL OFF WILL BE THE SAME TYPE OF CURB PLACED ADJACENT TO THE VEHICLE PULL OFF BUT IN A DROP CONDITION AND SHALL MAINTAIN A 1" ELEVATION DIFFERENCE TO CHANNEL RUNOFF. SEE STD DWG 2201 SECTION A-A STRAIGHT CURB AND COMBINATION CURB AND GUTTER FOR DROP CONDITION.

VEHICLE PULL OFF

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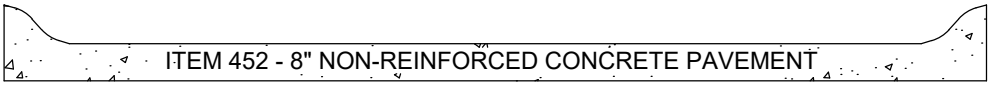
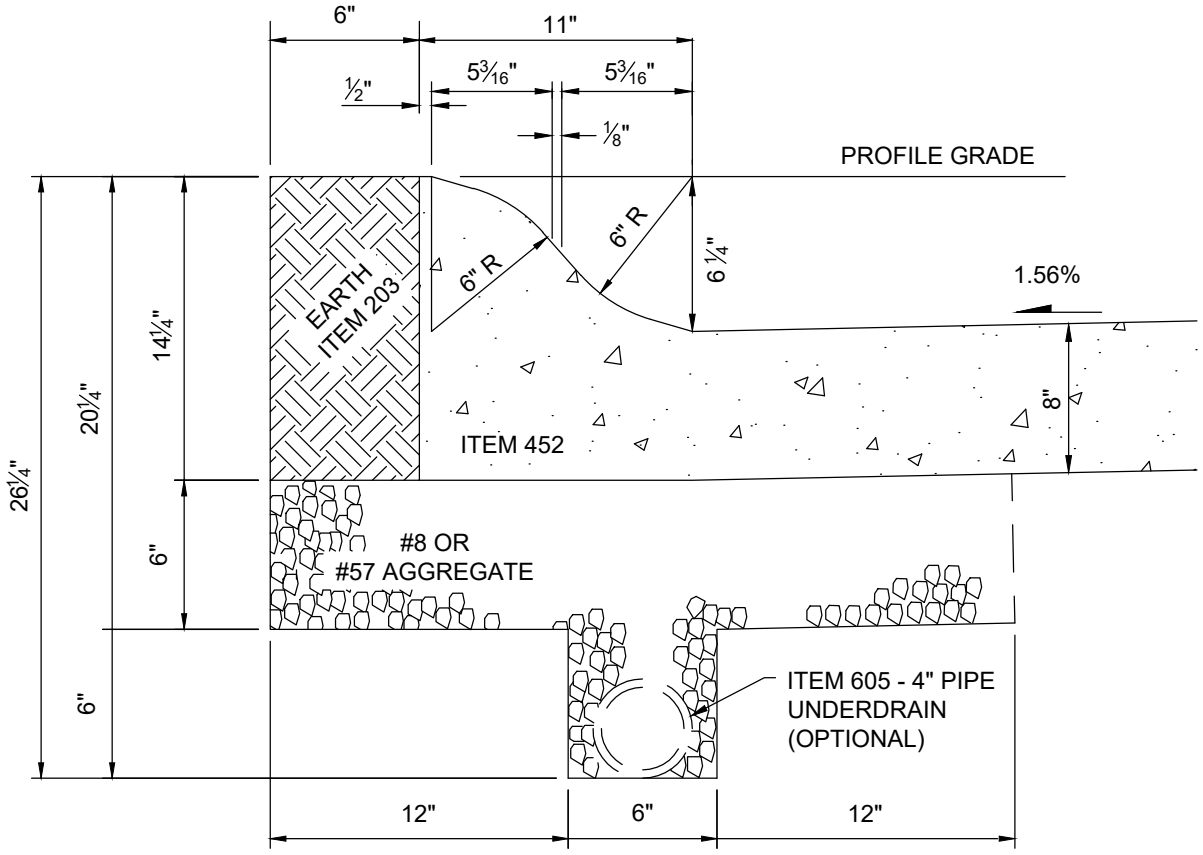
12/31/2018
SHT 2 OF 2



SECTION VIEW OF DRIVE



ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT WITH INTEGRAL CURB

INTEGRAL CURB, GUTTER, AND PAVEMENT FOR NON-RESIDENTIAL DRIVES

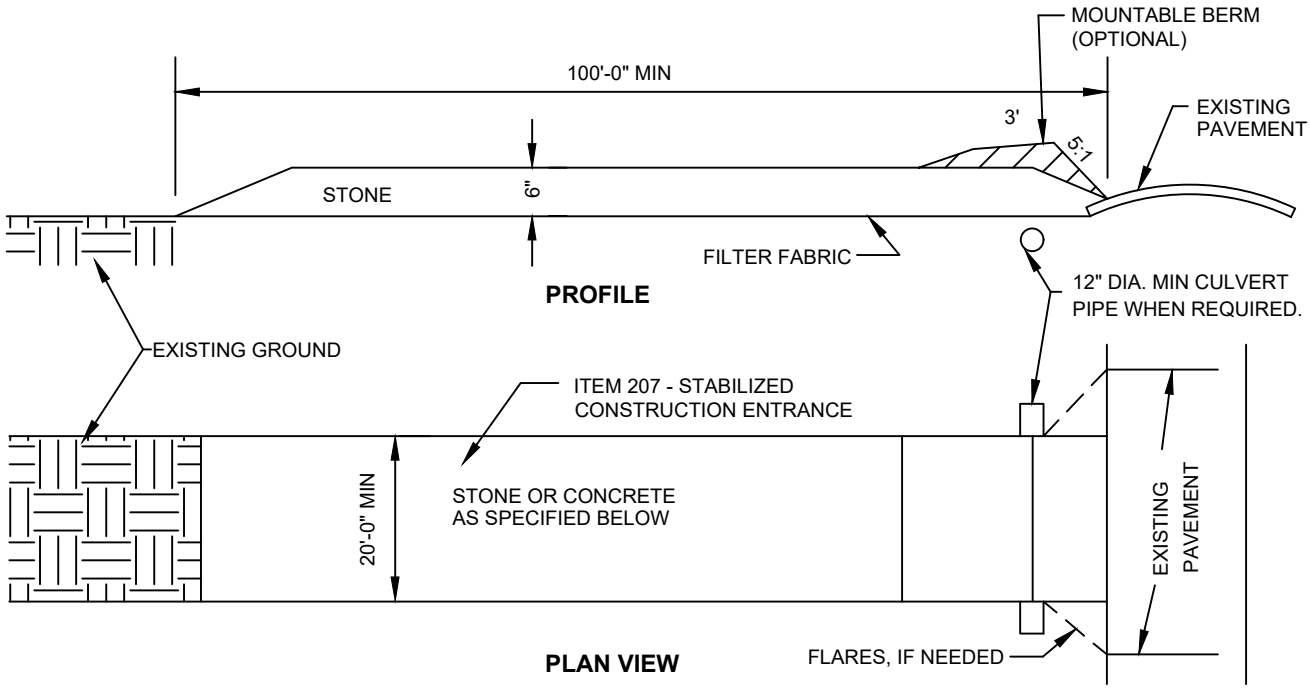
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2225

4/30/18

SHT 1 OF 1



STABILIZED CONSTRUCTION ENTRANCE

1. STONE SIZE - USE 2" STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - SHALL BE A LENGTH REQUIRED TO KEEP SEDIMENT OFF ROADWAY, BUT MAY BE LONGER AS DETERMINED BY THE CITY OF COLUMBUS.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWENTY (20) FEET MINIMUM BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. MAY BE WIDER AS DETERMINED BY THE CITY OF COLUMBUS.
5. FLARES OR RADII SHALL BE INSTALLED AT THE ENTRANCE IF THE PUBLIC ROADWAY SPEEDS AND/OR TRAFFIC CONDITIONS WARRANT IT, OR IF DIRECTED BY C.O.C. PERSONNEL.
6. FILTER FABRIC - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
7. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES SHALL BE PERMITTED.
8. CULVERT PIPE - 12" MINIMUM PIPE IS REQUIRED IF A STORM DITCH OR SWALE EXISTS AT THE PROPOSED ENTRANCE.THE CULVERT PIPE INVERTS SHALL MATCH THE EXISTING DITCH AT BOTH SIDES OF THE ENTRANCE.
9. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PROTECT THE PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
10. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE INTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
11. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
12. MAINTENANCE OF TRAFFIC SIGNAGE SHALL BE A 48" x 48" CONSTRUCTION ENTRANCE AHEAD, 200' (ADEQUATE SIGHT DISTANCE SHALL BE CONSIDERED) BEFORE THE ENTRANCE ON BOTH SIDES OF THE ROAD OR AS APPROVED BY THE C.O.C. TEMPORARY TRAFFIC CONTROL COORDINATOR. YOU SHALL CALL THE TTCC @ 645-7393 BEFORE STARTING THE ENTRANCE WORK.

TEMPORARY CONSTRUCTION ENTRANCE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

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2230

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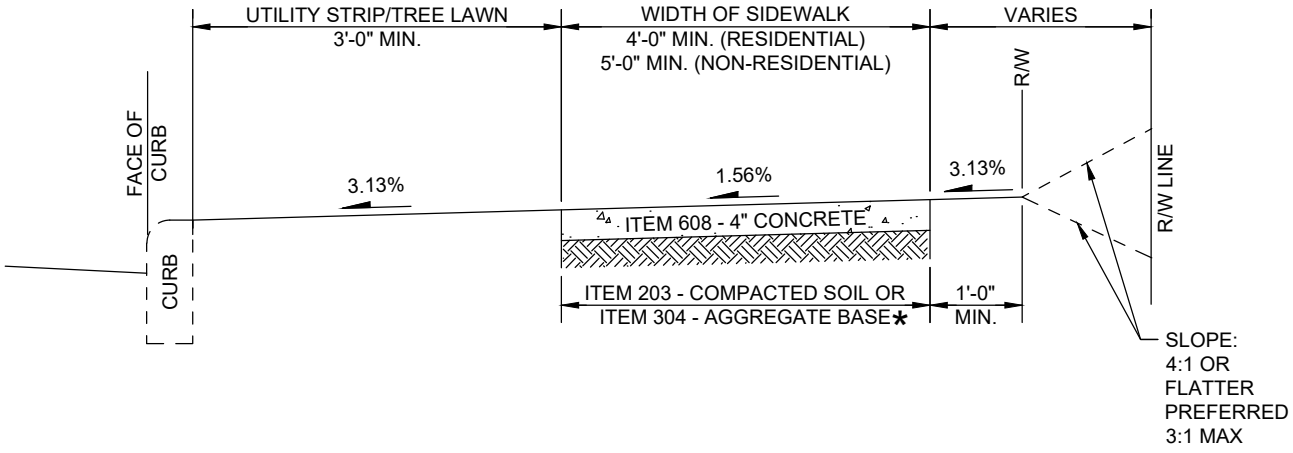

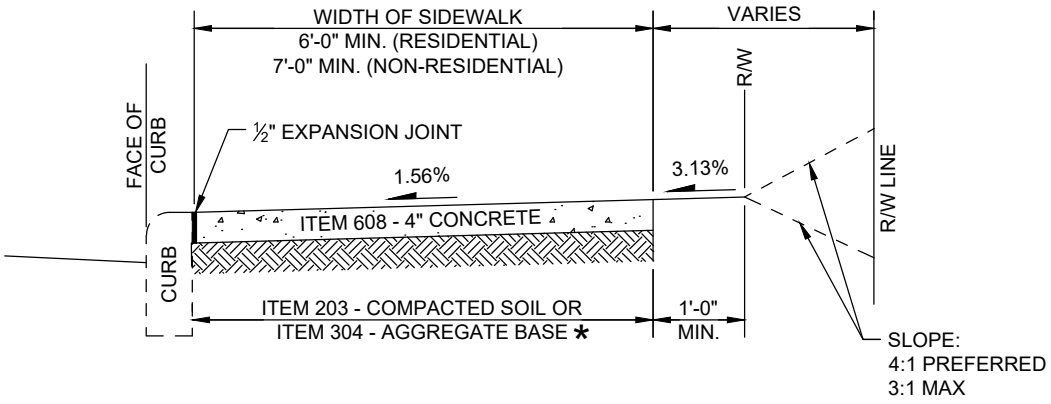

WHERE SIDEWALKS ABUT DRIVEWAYS OR ALLEY APPROACHES, THE CONCRETE THICKNESS OF THE WALK SHALL EQUAL THE THICKNESS OF THE APPROACH (6" MINIMUM) FOR A DISTANCE OF ONE (1) FULL PANEL OR MINIMUM 5 FEET. SEE STANDARD DRAWING OF THE APPLICABLE DRIVEWAY OR ALLEY.

WHERE NEW WALK ABUTS ADJOINING WALK, SAWCUT EXISTING WALK TO NEAREST JOINT AND INSTALL EXPANSION JOINT.

EXPANSION JOINT LOCATION AND SPACING PER ITEM 608.03.

WATER AND UTILITY BOXES IN THE SIDEWALK AREA SHALL BE ADJUSTED FLUSH WITH FINAL SURFACE.

ROOF DRAINS SHALL BE EXTENDED UNDER THE SIDEWALK AND THROUGH THE CURB. SEE STD DWG 2320.

ITEM NUMBERS REFER TO THE CITY OF COLUMBUS CMSC, CURRENT EDITION. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE SPECIFICATIONS.

* #57 AGGREGATE MAY BE USED FOR REPLACEMENT WORK.

SIDEWALK

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2300

04/30/18

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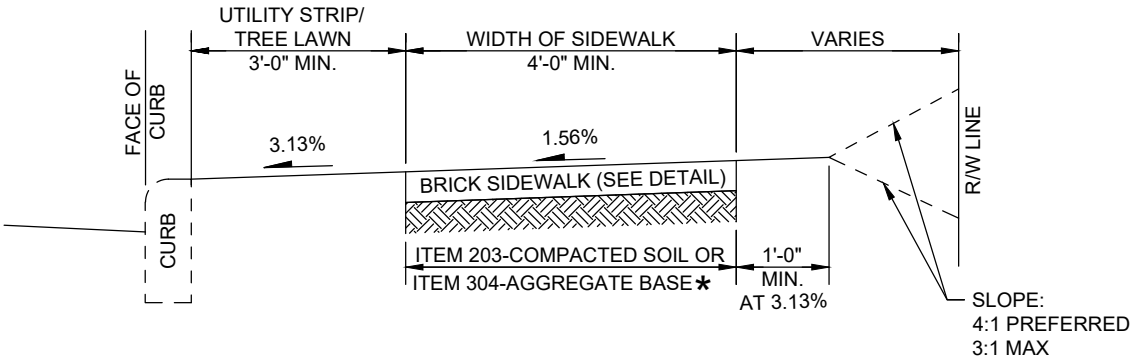
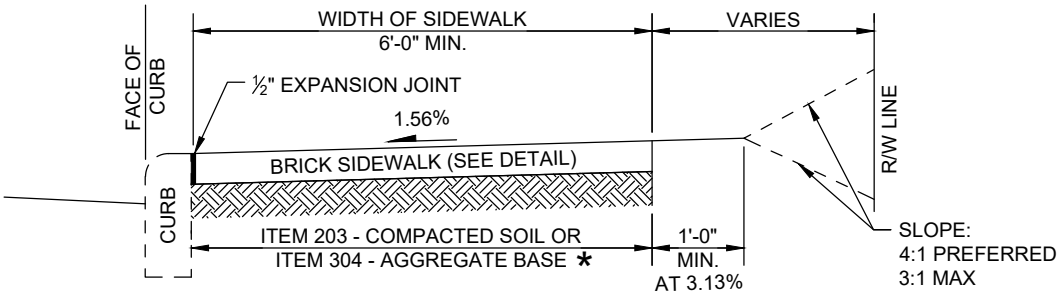
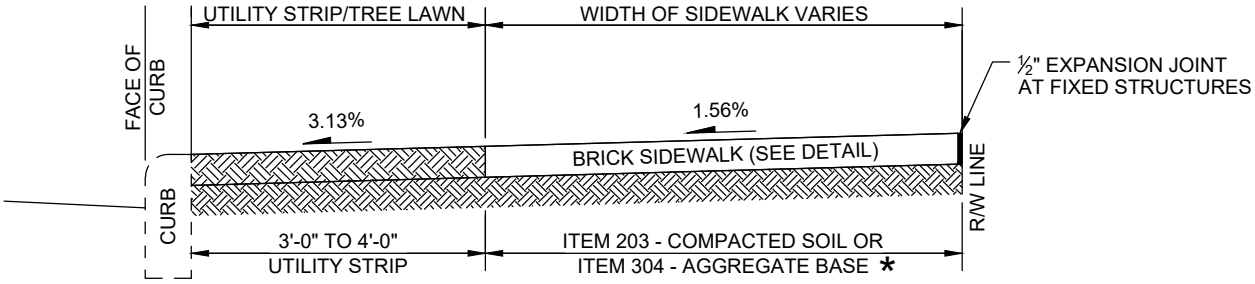






WHERE NEW WALK ABUTS ADJOINING WALK, SAWCUT EXISTING WALK TO NEAREST JOINT AND INSTALL EXPANSION JOINT.

EXPANSION JOINT LOCATIONS AND SPACING PER ITEM 608.03.

WATER AND UTILITY BOXES IN THE SIDEWALK AREA SHALL BE ADJUSTED FLUSH WITH FINAL SURFACE.

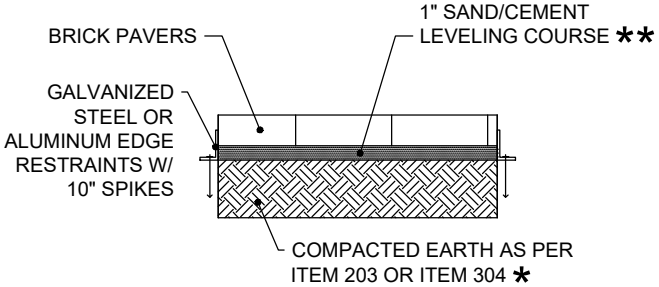
ROOF DRAINS SHALL BE EXTENDED UNDER THE SIDEWALK AND THROUGH THE CURB. SEE STD DWG 2320.

WHEN A SIDEWALK IS CONSTRUCTED FOR THE ENTIRE WIDTH FROM THE CURB TO THE R/W LINE, THE WALK SHALL BE CONSTRUCTED PART WIDTH AT A TIME, ALLOWING FOR SUFFICIENT UNOBSTRUCTED AREA 48" WIDE FOR SAFE MOVEMENT OF PEDESTRIAN TRAFFIC, OR AS APPROVED BY ENGINEER.

ITEM NUMBERS REFER TO THE CITY OF COLUMBUS CMSC, CURRENT EDITION. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE SPECIFICATIONS.

* #57 AGGREGATE MAY BE USED FOR REPLACEMENT WORK.

** THE SAND TO CEMENT RATIO IS 5 PARTS SAND TO ONE PART CEMENT.



DETAIL

RESIDENTIAL

BRICK SIDEWALK

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2301

04/30/18

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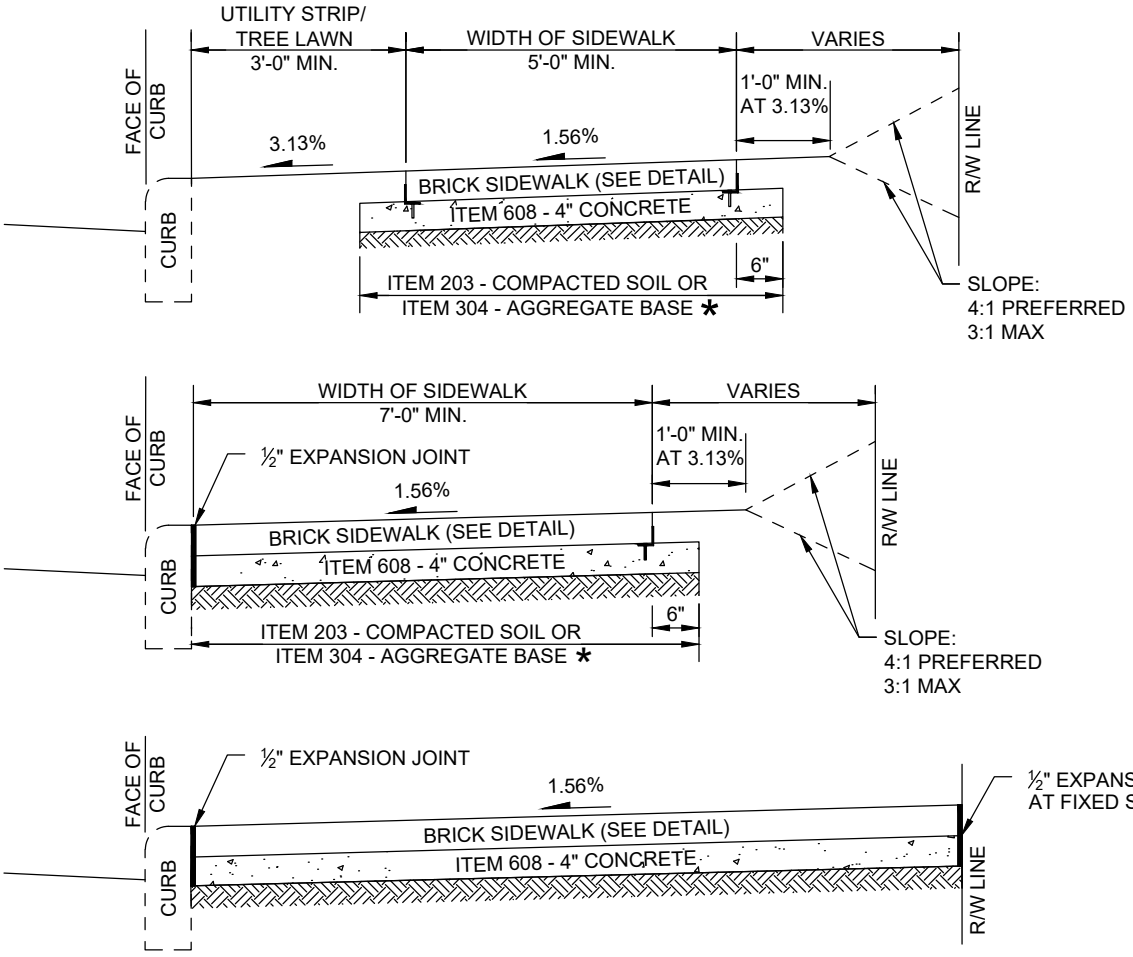


WHERE SIDEWALKS ABUT DRIVEWAYS OR ALLEY APPROACHES, THE CONCRETE THICKNESS OF THE WALK SHALL EQUAL THE THICKNESS OF THE APPROACH (6" MINIMUM) FOR A DISTANCE OF ONE (1) FULL PANEL OR MINIMUM 5 FEET. SEE STANDARD DRAWING OF THE APPLICABLE DRIVEWAY OR ALLEY.

WHERE NEW WALK ABUTS ADJOINING WALK, SAWCUT EXISTING WALK TO NEAREST JOINT AND INSTALL EXPANSION JOINT.

EXPANSION JOINT LOCATIONS AND SPACING PER ITEM 608.03.

WATER AND UTILITY BOXES IN THE SIDEWALK AREA SHALL BE ADJUSTED FLUSH WITH FINAL SURFACE.

ROOF DRAINS SHALL BE EXTENDED UNDER THE SIDEWALK AND THROUGH THE CURB. SEE STD DWG 2320.

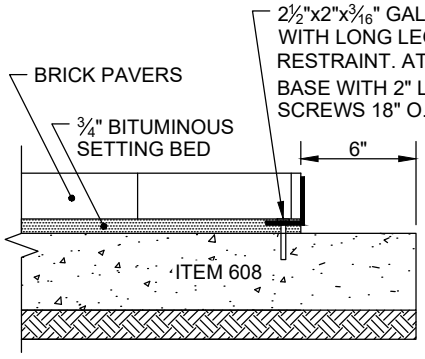
WHEN A SIDEWALK IS CONSTRUCTED FOR THE ENTIRE WIDTH FROM THE CURB TO THE R/W LINE, THE WALK SHALL BE CONSTRUCTED PART WIDTH AT A TIME, ALLOWING FOR SUFFICIENT UNOBSTRUCTED AREA 48" WIDE FOR SAFE MOVEMENT OF PEDESTRIAN TRAFFIC, OR AS APPROVED BY ENGINEER.

ONE INCH CONTRACTION JOINTS SHALL BE SAWED IN THE CONCRETE EVERY 10 FEET.

ITEM NUMBERS REFER TO THE CITY OF COLUMBUS CMSC, CURRENT EDITION. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE SPECIFICATIONS.

* #57 AGGREGATE MAY BE USED FOR REPLACEMENT WORK.

NON-RESIDENTIAL



DETAIL

BRICK SIDEWALK

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2301
04/30/18
SHT 2 OF 3

ITEM SPECIAL - BRICK PAVERS INCLUDING CONCRETE BASE

SEE SUPPLEMENTAL SPECIFICATION SS-1524 ROADWAY PAVERS; FOLLOW ALL APPLICATION STANDARDS, SUBMITTAL REQUIREMENTS, MATERIALS, CONSTRUCTION REQUIREMENTS, QUALITY ASSURANCE AND CONTROL, METHOD OF MEASUREMENT, BASIS OF PAYMENT AND WARRANTY REQUIREMENTS.

MANUFACTURERS AND MATERIALS SHALL BE AS PER THE QUALIFIED PRODUCTS LIST AND APPROVED MANUFACTURERS / SUPPLIERS LIST.

BRICK SIDEWALK

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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① ANGLE HAND TAMP AT 45°

② ITEM 441 - 2.5" ASPHALT CONCRETE SURFACE COURSE (LIGHT TRAFFIC), PG 64-22

③ ITEM 304 - 6" AGGREGATE BASE

④ ITEM 204 - SUBGRADE COMPACTION

PAVEMENT DETAIL

SHARED USE PATH

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

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2310

04/30/18

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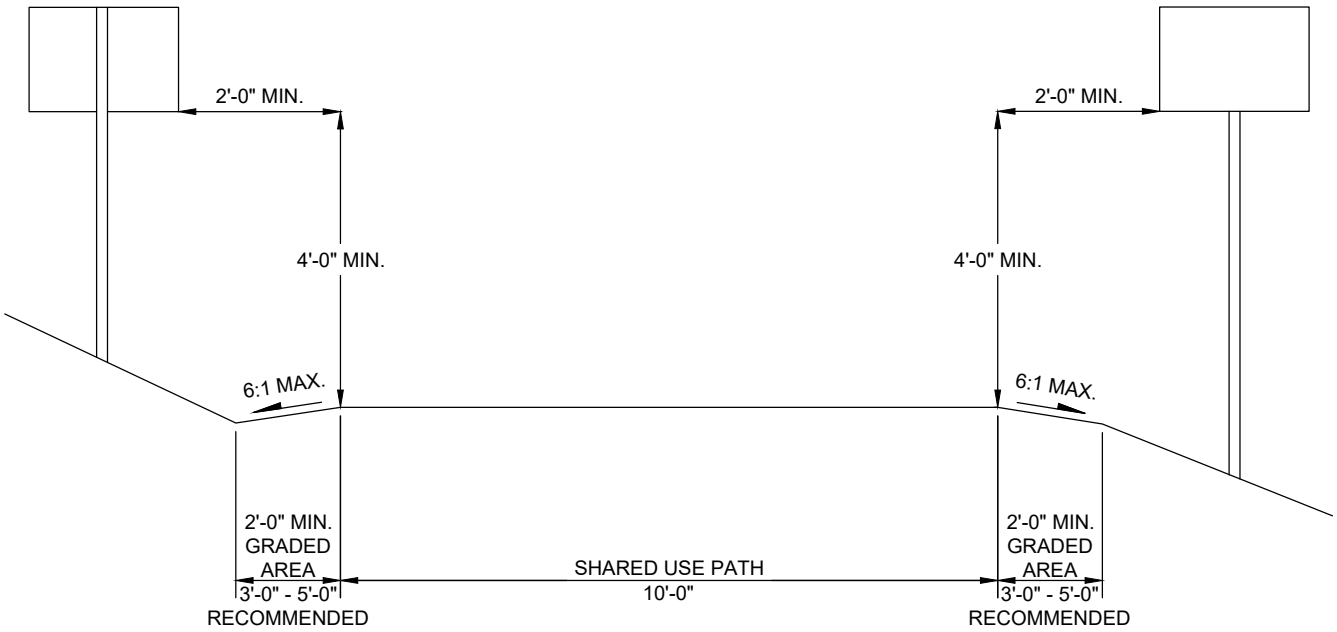

REFERENCE GUIDE TO BICYCLE FACILITIES,
CURRENT EDITION FOR SAFETY RAIL REQUIREMENTS.

SIGN DETAIL

SHARED USE PATH

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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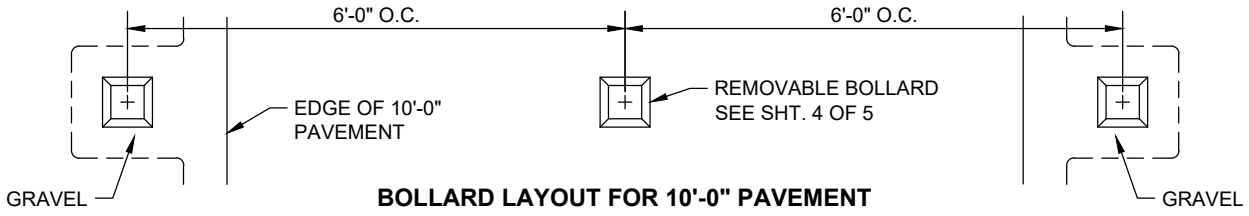
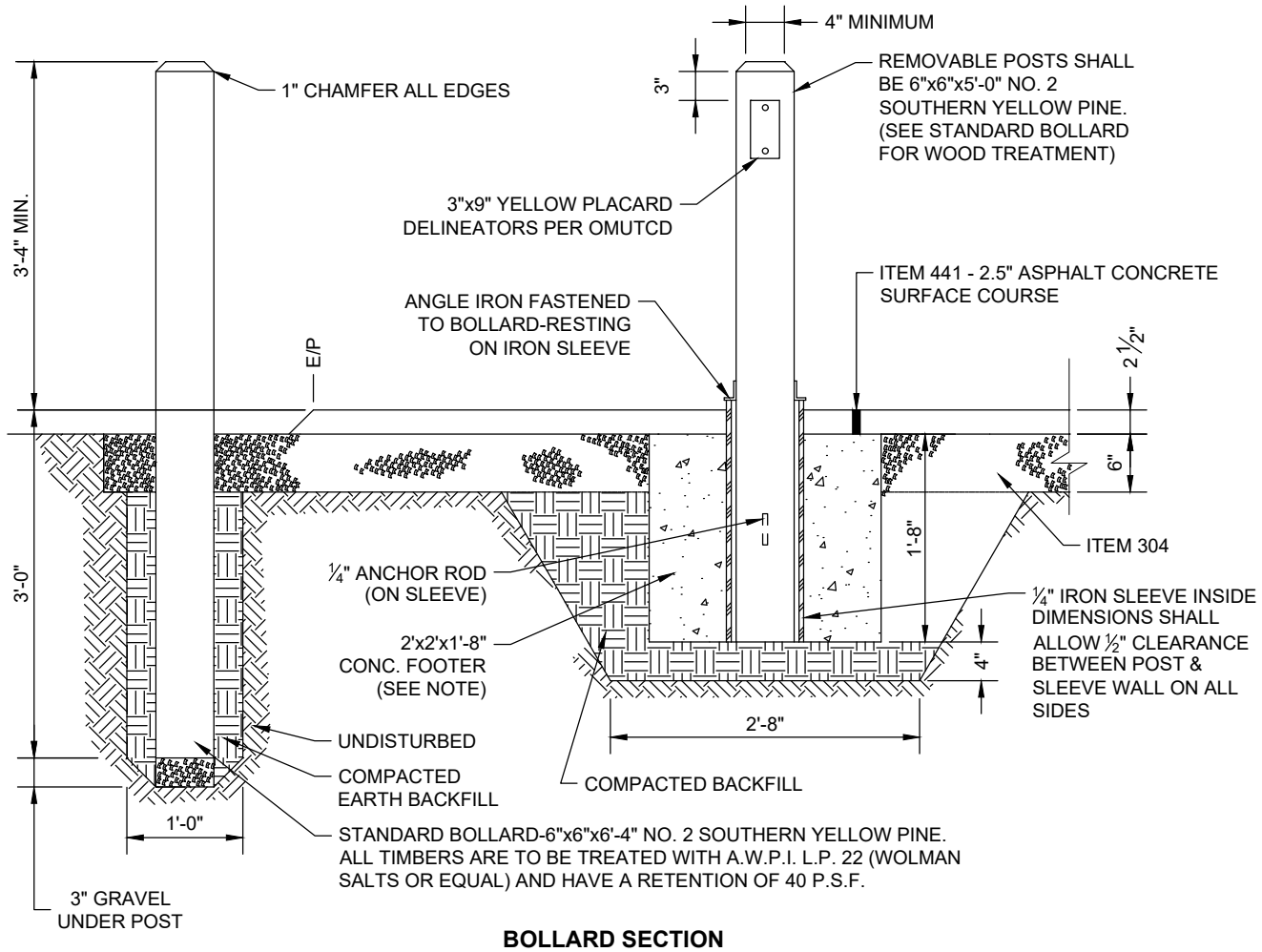


BOLLARD LAYOUT FOR 10'-0" PAVEMENT



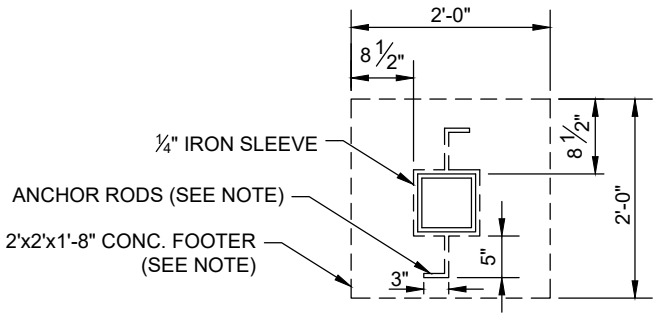
BOLLARD SECTION

THE CONTRACTOR SHALL INSTALL THE EARTH BACKFILL IN 6" LIFTS AND TAKE CARE TO PLUMB EACH POST.

THE IRON SLEEVES, ANGLE IRON, AND ANCHOR RODS SHALL BE PAINTED WITH TWO COATS OF RUST-OLEUM NO769 DAMP-PROOF RED PRIMER OR EQUAL PRIOR TO INSTALLATION.

THE CONTRACTOR MAY SUBSTITUTE A 24" CIRCULAR FOOTER IN PLACE OF THE ONE SHOWN BELOW.

WOOD BOLLARD DETAIL



REMOVABLE BOLLARD

SHARED USE PATH

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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2310
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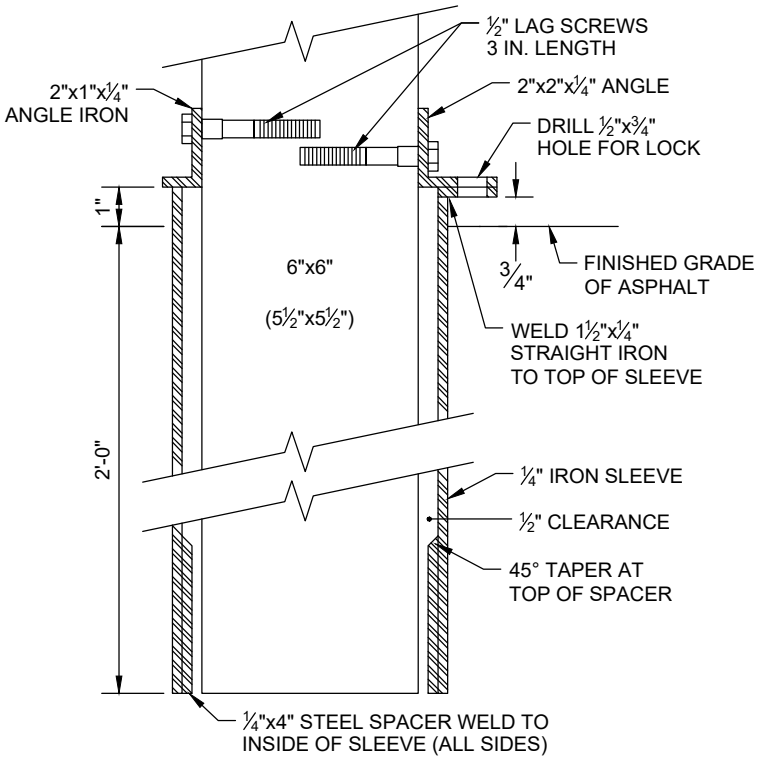
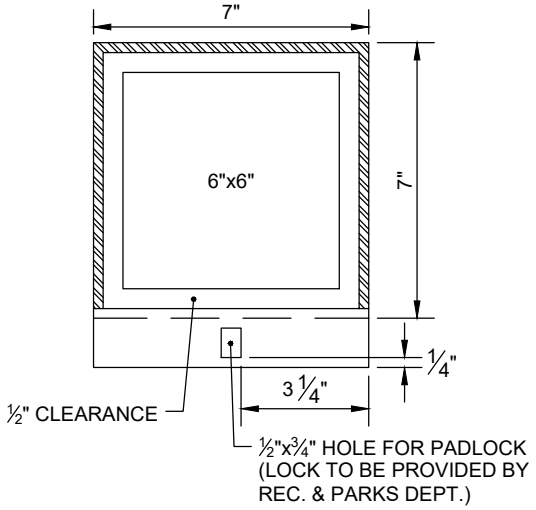
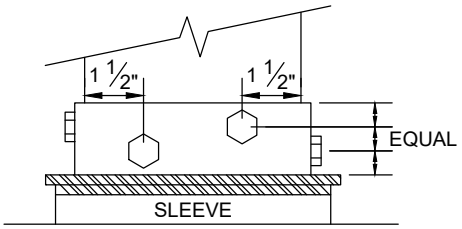


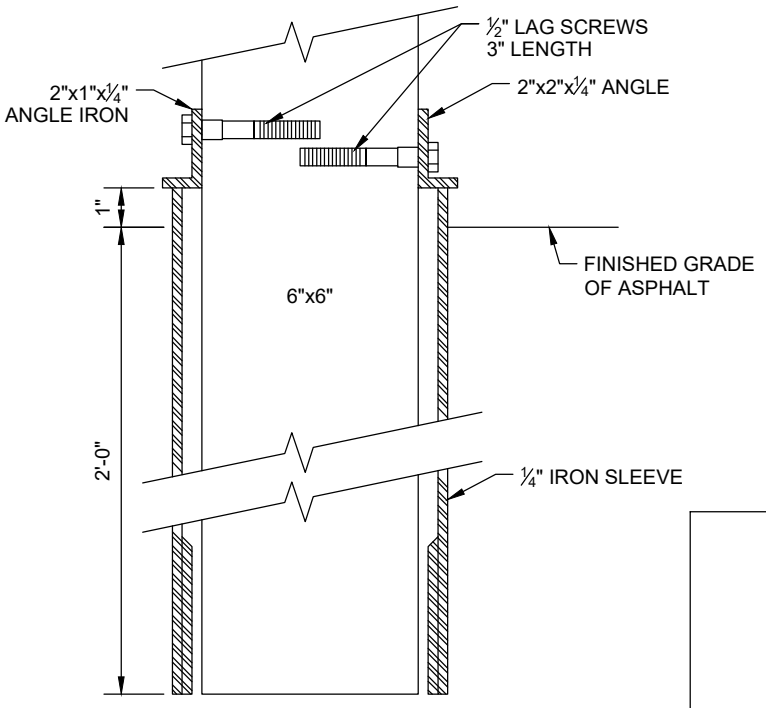
SECTION A-A



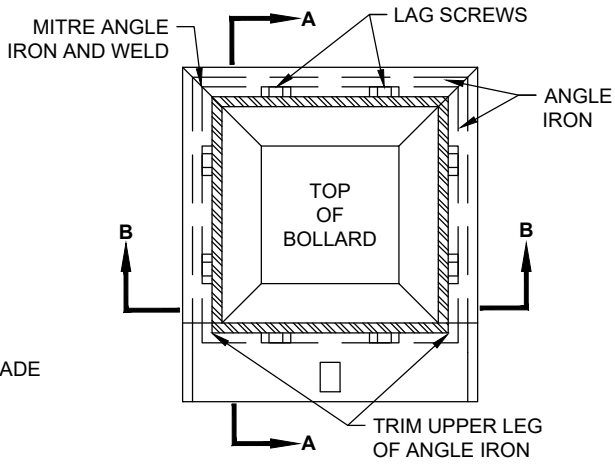
PLAN



ELEVATION



SECTION B-B



PLAN

REMOVABLE BOLLARD DETAIL

SHARED USE PATH

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2310
04/30/18
SHT 4 OF 5

RAMPS SHALL BE ADA COMPLIANT: SEE STANDARD DRAWINGS 2319/2300.

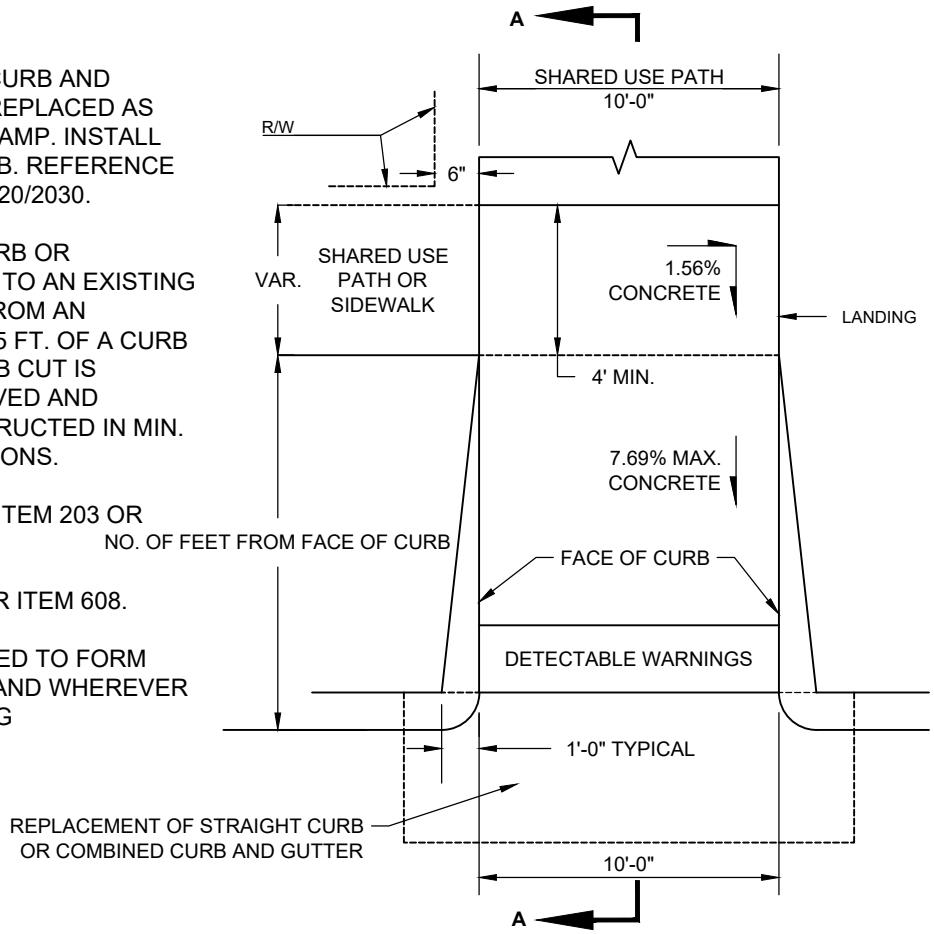
EXISTING CURB OR COMBINATION CURB AND GUTTER SHALL BE REMOVED AND REPLACED AS REQUIRED FOR INSTALLATION OF RAMP. INSTALL EXPANSION JOINT AT BACK OF CURB. REFERENCE STANDARD DRAWINGS 2000/2010/2020/2030.

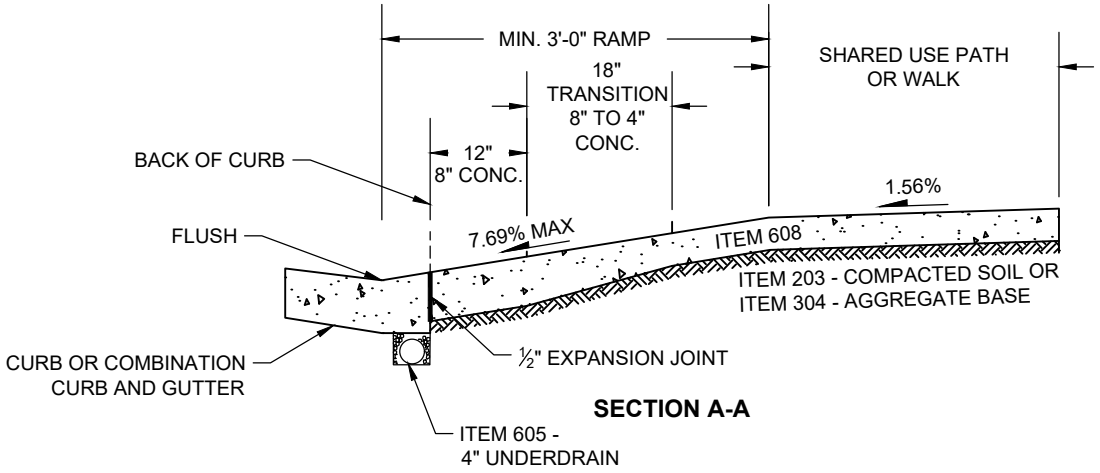
FOR REPLACEMENT WORK, THE CURB OR CURB/GUTTER SHALL BE REMOVED TO AN EXISTING JOINT OR NO CLOSER THAN 5 FT. FROM AN EXISTING JOINT. WHEN LESS THAN 5 FT. OF A CURB SECTION REMAINS AFTER THE CURB CUT IS LOCATED, IT ALSO SHALL BE REMOVED AND REPLACED. CURB SHALL BE CONSTRUCTED IN MIN. 5 FT. SECTIONS & MAX. 10 FT. SECTIONS.

FILLS, IF REQUIRED, SHALL BE PER ITEM 203 OR ITEM 304.

RAMP SHALL BE CONSTRUCTED PER ITEM 608.

EXPANSION JOINTS SHALL BE PLACED TO FORM UTILITY STRIPS WHERE REQUIRED AND WHEREVER NEW CONCRETE TOUCHES EXISTING CONSTRUCTION.





SECTION A-A

RAMP

SHARED USE PATH

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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2310
04/30/18
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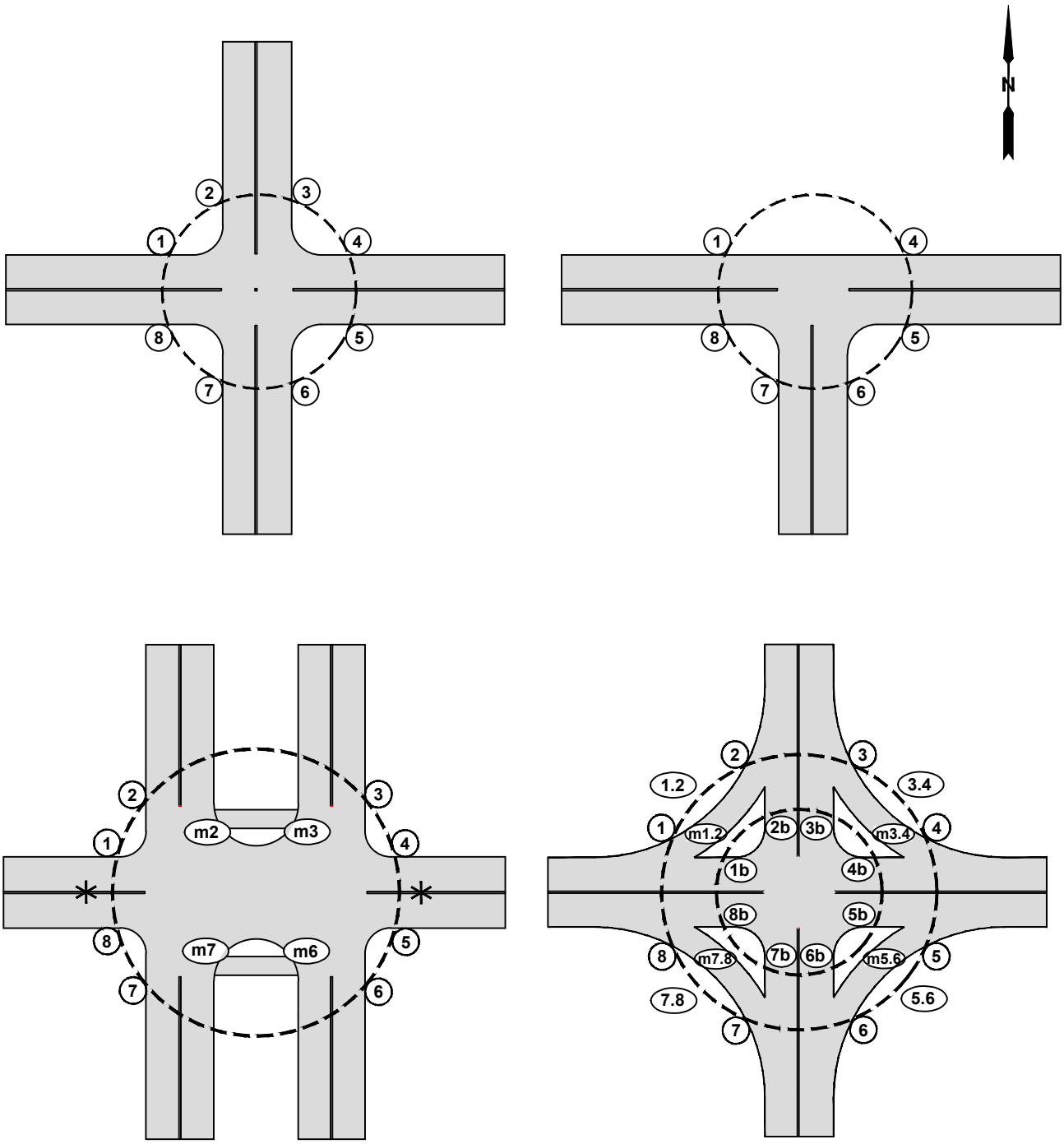

ALL NUMBERING BEGINS FROM THE NORTHWEST CORNER AND GOES CLOCKWISE. EACH CORNER HAS ITS SPECIFIC NUMBER THAT SHALL BE USED IF CURB RAMPS ARE IN THESE LOCATIONS.

* MEDIAN RAMPS ON THE WEST AND/OR EAST LEGS WOULD BE M1, M8, AND M4, M5 RESPECTIVELY.

INTERSECTION CURB RAMP NUMBERING SYSTEM

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2319

3/30/2018

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GENERAL NOTES, CURB RAMPS

1. CURB RAMPS SHALL BE INSTALLED PER STD DWGS 2300, 2319, CMSC 608, AND DPS ADA RULES AND REGULATIONS.
2. MATERIAL: THE RAMP PANEL AND FLARED SIDES SHALL BE CONCRETE.
3. RAMP TYPES ARE CATEGORIZED BELOW IN TIERS BY REQUIRED ORDER OF USE. LOCATING THE RAMP AS CLOSE AS POSSIBLE TO THE INTERSECTION FOLLOWING THE CURB RAMP DESIGN BOUNDARY CONTAINED IN THE ADA RULES AND REGULATIONS IS THE FIRST PRIORITY. THE DESIGNER SHALL NOT USE A LOWER TIERED RAMP WITHOUT FIRST DETERMINING AND HAVING JUSTIFICATION THAT THE UPPER TIER RAMPS ARE NOT CONSTRUCTIBLE.

CITY OF COLUMBUS RAMP TYPE HIERARCHY

TIER 1 (THESE PERPENDICULAR RAMPS SHOULD BE UTILIZED WHENEVER POSSIBLE.)

- TYPE D
- TYPE C
- TYPE A

TIER 2 (PARALLEL RAMPS SHOULD ONLY BE USED DUE TO RIGHT OF WAY (ROW) OR OTHER SPACE CONSTRAINTS WHERE A TIER 1 RAMP CANNOT BE USED.)

- TYPE P-6 (6' OF ROW AVAILABLE)
- TYPE P-7 (7' OF ROW AVAILABLE)
- TYPE P-5 (5' OF ROW AVAILABLE)
- TYPE P-4 (4' OF ROW AVAILABLE)

TIER 3 (TIER 3 RAMPS CAN ONLY BE USED WITH WRITTEN APPROVAL BY THE CITY ENGINEER OR DESIGNEE. TIER 3 RAMPS SHALL BE IDENTIFIED IN THE DESIGN SCOPE OR APPROVAL REQUESTED BY THE DESIGNER JUSTIFYING THAT THIS RAMP TYPE IS NECESSARY.)

- TYPE J (MODIFIED ALLEY RAMP), USE SHOULD BE LIMITED DUE TO DRAINAGE CONCERNS
- RADIAL RAMPS
- SINGLE SHARED RAMPS

SPECIALTY RAMPS (SHALL ONLY BE USED FOR THE LISTED SITUATION, OR WRITTEN APPROVAL BY THE CITY ENGINEER OR DESIGNEE.)

- TYPE G - ONLY TO BE USED ON ALLEY CROSSINGS
- TYPE H - ONLY TO BE USED ON ALLEY CROSSINGS
- TYPE L-1 - ONLY FOR MEDIAN CROSSINGS
- TYPE L-2 - ONLY FOR MEDIAN CROSSINGS
- PEDESTRIAN PADS - USED FOR ACCESS TO PUSHBUTTONS WHERE THERE IS NO EXISTING SIDEWALK. THE INTENT IS TO PROVIDE ACCESS TO CROSS THE INTERSECTION IN BOTH DIRECTIONS WITHOUT ENTERING THE STREET TO ACCESS TO OTHER CROSSING. THE FOLLOWING IS THE ORDER OF PREFERENCE ON PEDESTRIAN PADS:
  1. PP-1 TWO CONNECTED RAMPS WITH UTILITY STRIP
  2. PP-2 TWO CONNECTED RAMPS WITH SIDEWALK AGAINST CURB
  3. PP-3 USED AS SINGLE SHARED RAMP THAT CAN ACCESS BOTH CROSSWALK LEGS AND THE PUSHBUTTON
  4. PP-3 USED TO ONLY ACCESS THE LEG OF THE INTERSECTION CONTROLLED BY THE PUSHBUTTON

4. RAMP RUNNING SLOPE: THE RUNNING SLOPE SHALL BE NO GREATER THAN 7.69%.
5. ALL JOINTS BETWEEN NEW AND EXISTING MATERIALS SHALL BE FLUSH.
6. LANDINGS:
   - LANDINGS SHALL HAVE A MAXIMUM 1.56% SLOPE IN ALL DIRECTIONS FOR ALL CURB RAMP TYPES.
   - A PARALLEL RAMP, CONSTRAINED ON TWO (2) SIDES, E.G., TYPE P-7, SHALL HAVE A LANDING 5-FT WIDE BY 5-FT DEEP A PARALLEL RAMP, CONSTRAINED ON ONE (1) SIDE, E.G., TYPES P-4, 5, & 6, SHALL HAVE A LANDING NO LESS THAN 4-FT MINIMUM BY 5-FT. THE 5-FT DIMENSION SHALL BE PROVIDED AS SHOWN IN THESE STANDARD DRAWINGS.

CURB RAMP GENERAL NOTES

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

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2319
3/30/2018
SHT 2 OF 21

- ALL PERPENDICULAR RAMPS SHALL HAVE A LANDING NO LESS THAN 4-FT MINIMUM BY 4-FT. A PERPENDICULAR RAMP THAT IS CONSTRAINED AT THE BACK OF SIDEWALK SHALL HAVE A LANDING 4-FT BY 5-FT. THE 5-FT DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF RAMP RUN, AS SHOWN IN THESE STANDARD DRAWINGS.
- LANDING AT INTERSECTING SIDEWALKS - WHEREVER SIDEWALKS INTERSECT, THERE SHALL BE A LANDING.

7. STREET COUNTER SLOPE: THE COUNTER SLOPE AT THE BASE OF THE RAMP SHALL BE A MAXIMUM OF 5% FOR A MINIMUM OF 2-FT.
8. CLEAR SPACE: AT MARKED CROSSINGS THE RAMP AND STREET CLEAR SPACE MUST BE FULLY CONTAINED WITHIN THE MARKED CROSSWALK. AT UNMARKED CROSSINGS THE RAMP AND CLEAR MUST BE WITHIN THE CURB RAMP DESIGN BOUNDARY.
9. SURFACES: RAMP, FLARE, AND LANDING SURFACES MUST BE STABLE AND SLIP RESISTANT. RAMPS SHALL BE BROOM FINISHED, TRANSVERSE TO THE DIRECTION OF TRAVEL. GRATINGS, VALVE BOXES, AND UTILITY BOXES SHALL NOT BE LOCATED IN THE RAMP OR LANDING.
10. DETECTABLE WARNINGS: DETECTABLE WARNINGS SHALL BE INSTALLED ACCORDING TO THESE STANDARD DRAWINGS, CMSC 608, AND DPS ADA RULES AND REGULATIONS.
11. CURB WALLS MAY BE NECESSARY FOR CURB RAMP CONSTRUCTION WHERE SPACE RESTRICTION DO NOT ALLOW FOR GRADING WITHIN ROW AT A 3:1 SLOPE OR FLATTER. THE MAXIMUM HEIGHT OF 6" THICK, NON-REINFORCED CURB WALL IS 12" ABOVE THE SIDEWALK SURFACE. THE BURIED PORTION OF THE NON-REINFORCED CURB WALL SHALL BE EQUAL TO THE EXPOSED REVEAL. RETAINING EMBANKMENT TO A HEIGHT OF MORE THAN 12" ABOVE THE SIDEWALK WILL REQUIRE A DESIGNED RETAINING WALL OR CELLULAR WALL.
12. RAMPS MUST BE CONSTRUCTED TO ALLOW FOR POSITIVE DRAINAGE. THE RAMP ITSELF SHALL NOT HOLD EXCESS WATER AND THE ADJACENT PAVEMENT SHALL NOT BE ALTERED TO INHIBIT FLOW OF WATER. IF AN EXISTING CONSTRAINT PREVENTS BUILDING THE RAMP AND ADJACENT AREA WITH POSITIVE DRAINAGE IT MUST BE BROUGHT TO THE CITY'S ATTENTION PRIOR TO CONSTRUCTION AND FINAL DESIGN APPROVED BY THE CITY.

CURB RAMP GENERAL NOTES

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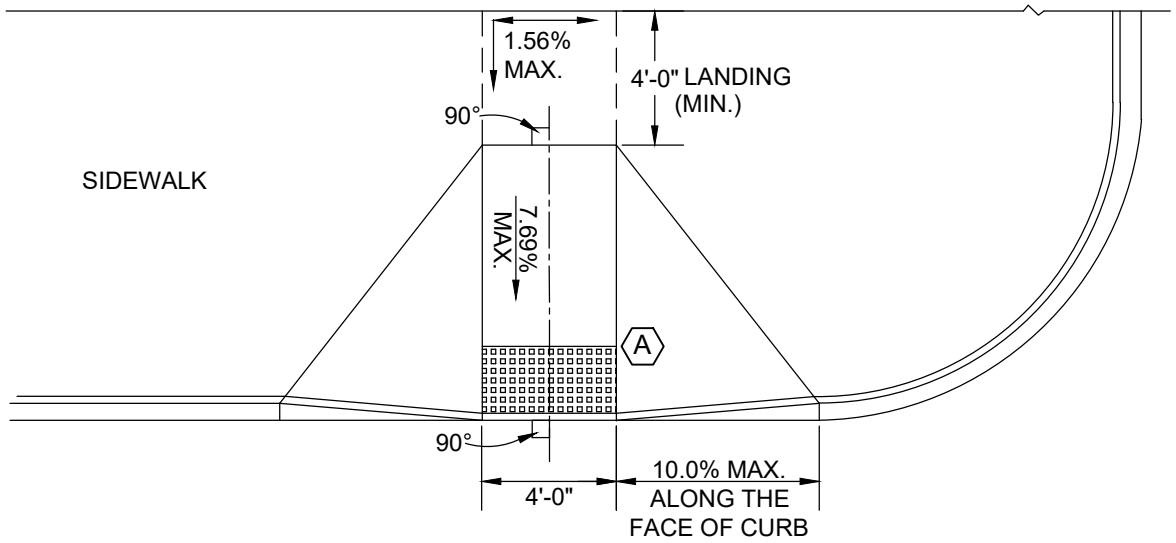

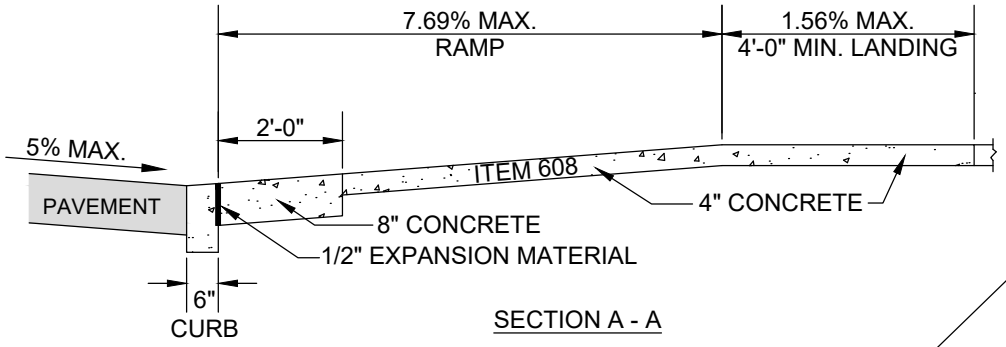

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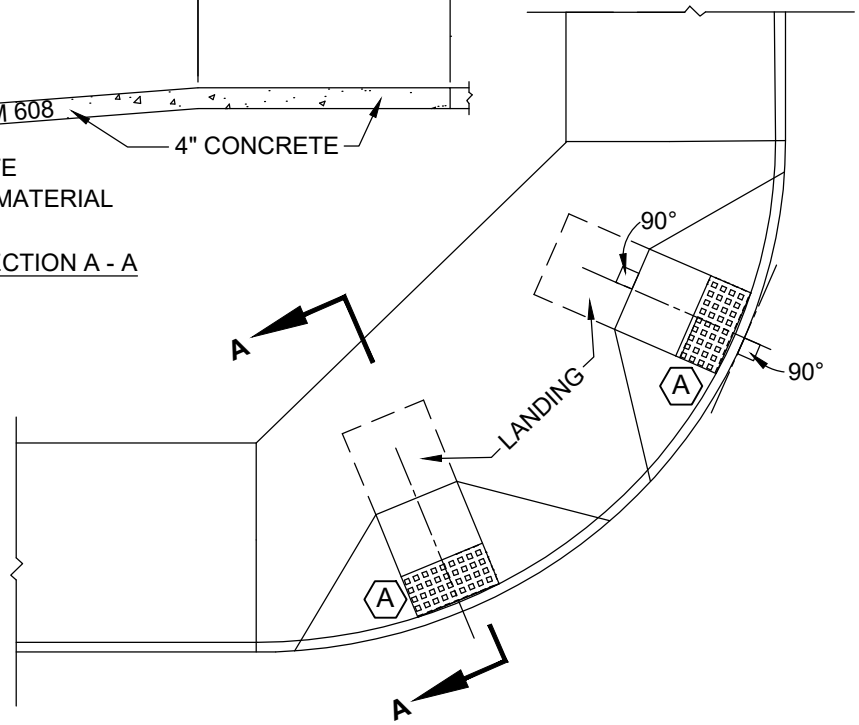

CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP
TYPE A

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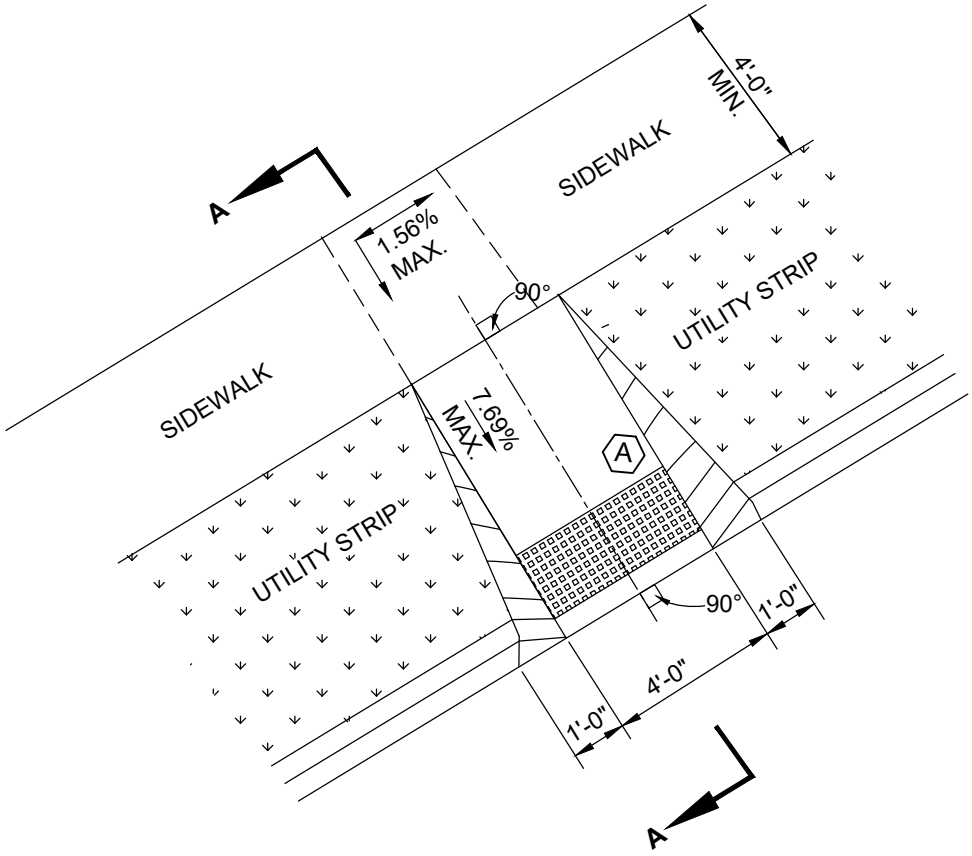

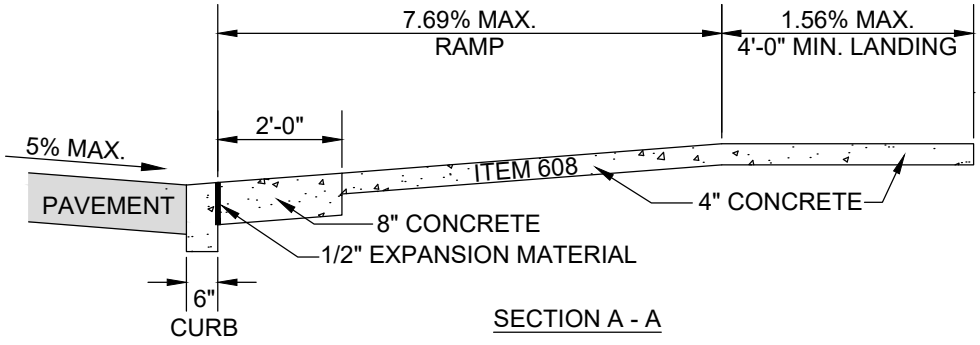

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CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP TYPE C

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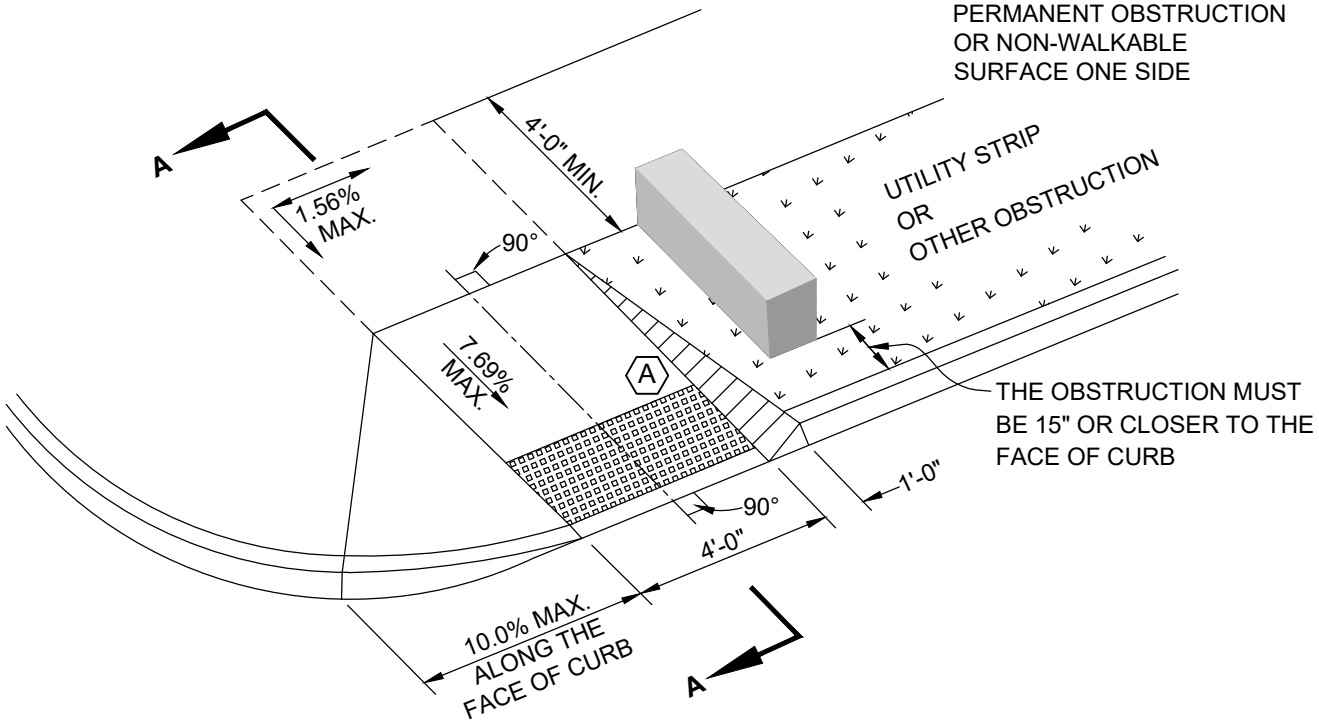

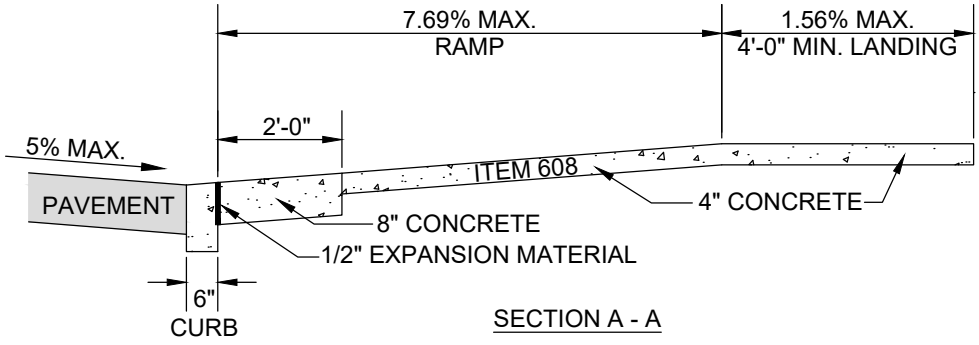

SECTION A - A

CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP TYPE D

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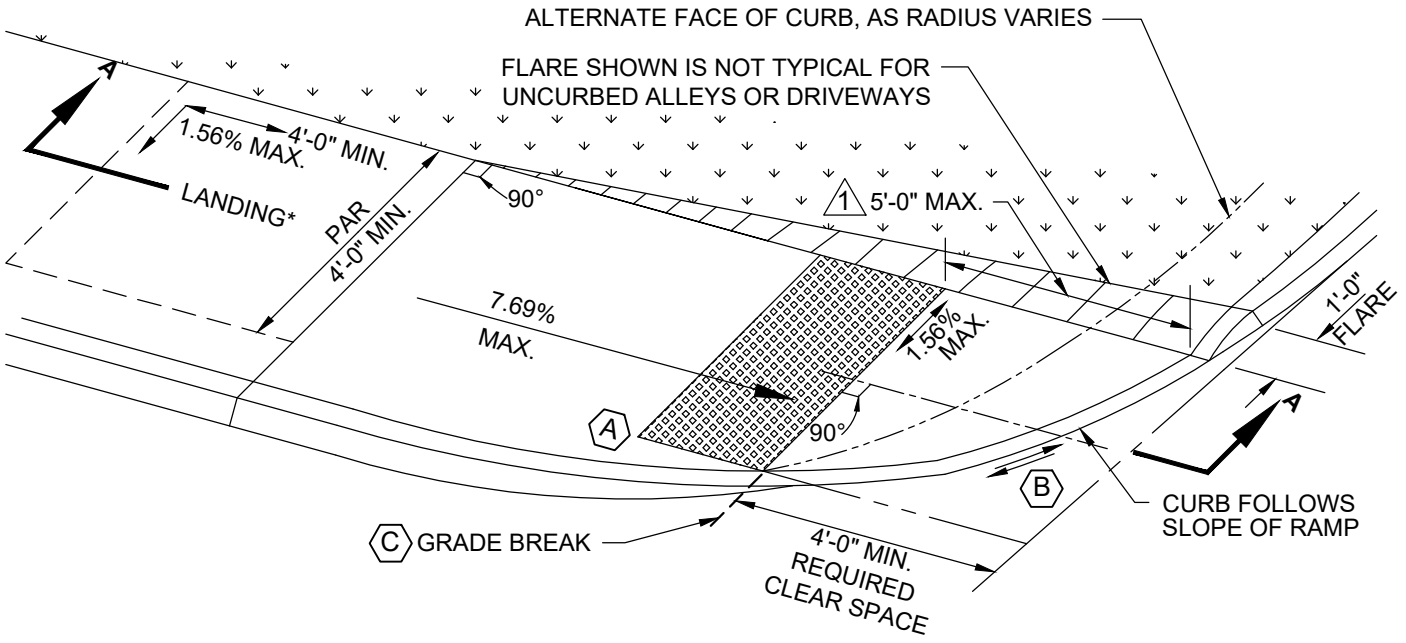
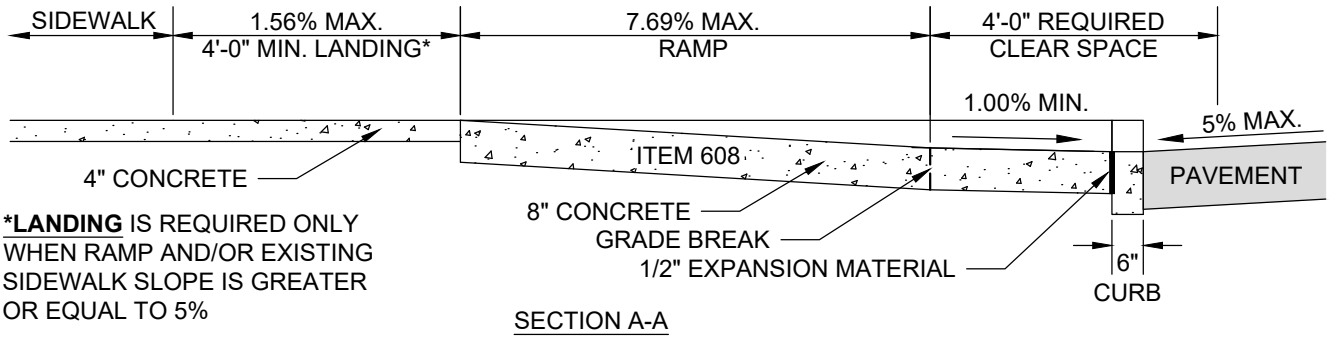
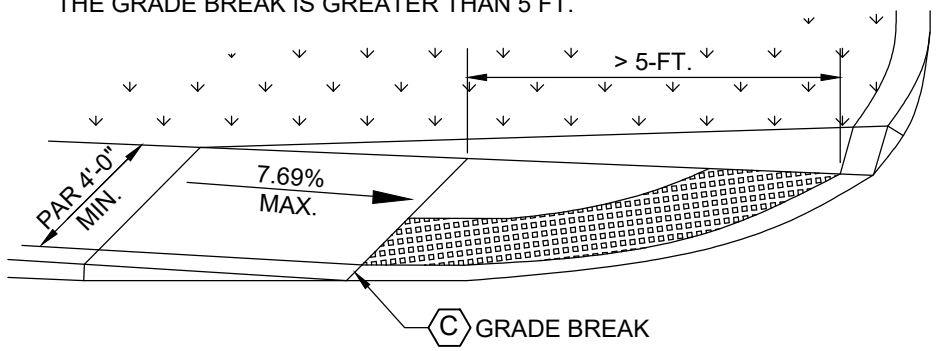




***LANDING** IS REQUIRED ONLY WHEN RAMP AND/OR EXISTING SIDEWALK SLOPE IS GREATER OR EQUAL TO 5%

SECTION A-A

1 DETAIL TO BE USED WHEN DISTANCE FROM BACK OF CURB TO THE GRADE BREAK IS GREATER THAN 5 FT.



CODED NOTES:

- (A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS
- (B) PROVIDE POSITIVE DRAINAGE ALONG CURBLINE, SHOULD BE 1.00% MINIMUM SLOPE
- (C) WHERE THE DISTANCE FROM EITHER END OF THE BOTTOM OF THE GRADE BREAK TO THE BACK OF CURB IS GREATER THAN 5-FT, THE DETECTABLE WARNING SHALL BE PLACED AT THE BACK OF CURB

CURB RAMP TYPE G

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
2. THE EDGE OF THE CURB WITHIN THE CLEAR SPACE SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER.

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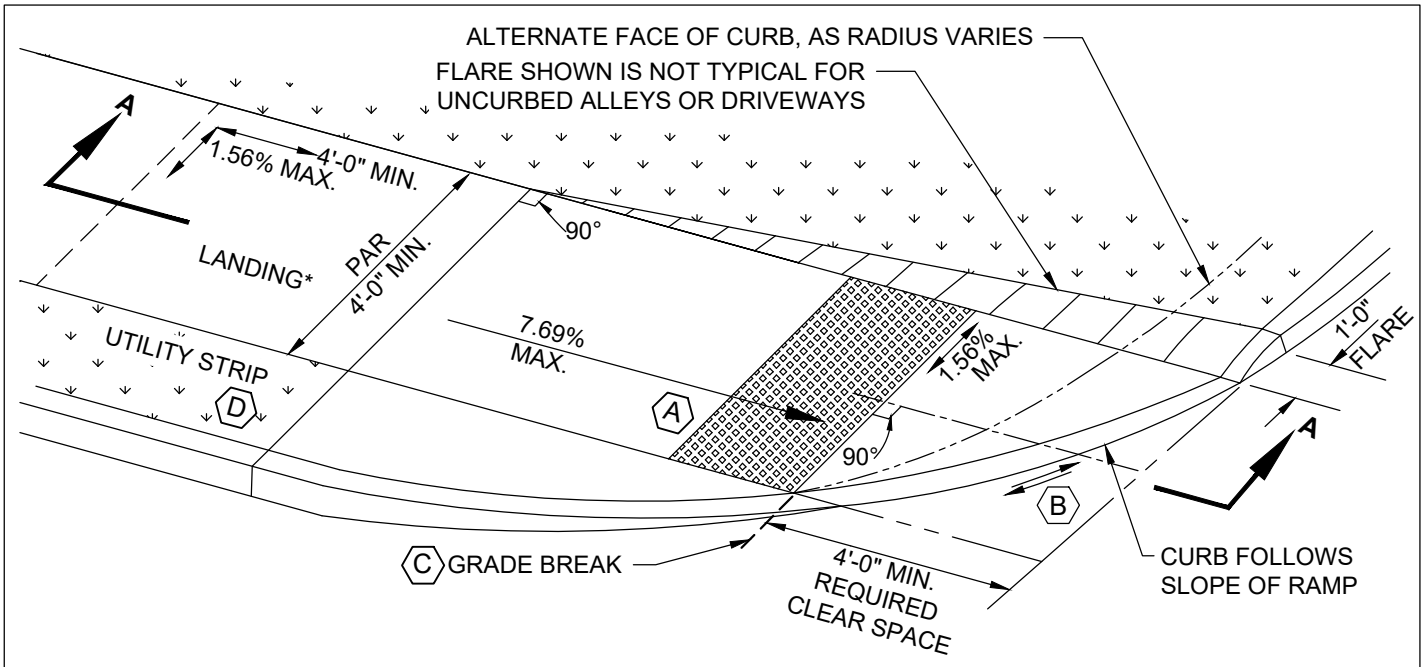

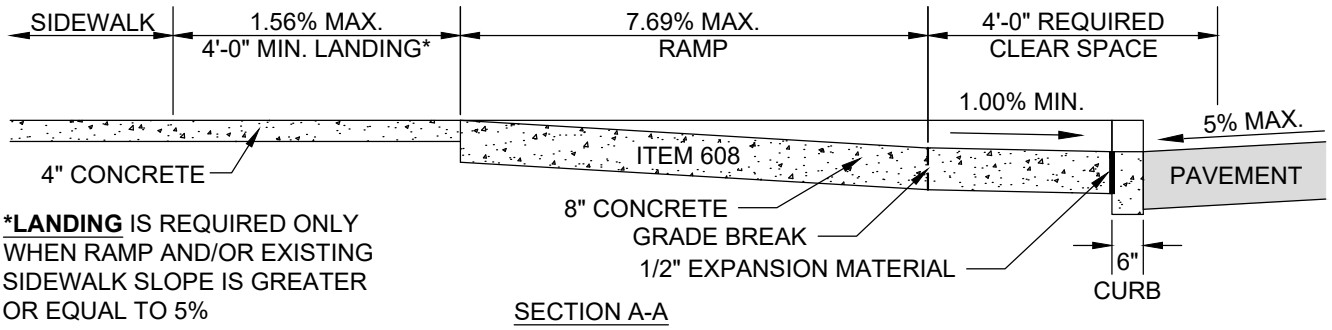

***LANDING** IS REQUIRED ONLY WHEN RAMP AND/OR EXISTING SIDEWALK SLOPE IS GREATER OR EQUAL TO 5%

SECTION A-A

CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

(B) PROVIDE POSITIVE DRAINAGE ALONG CURBLINE, SHOULD BE 1.00% MINIMUM SLOPE

(C) WHERE THE DISTANCE FROM EITHER END OF THE BOTTOM OF THE GRADE BREAK TO THE BACK OF CURB IS GREATER THAN 5-FT, THE DETECTABLE WARNING SHALL BE PLACED AT THE BACK OF CURB

(D) FOR THE LENGTH OF THE RAMP, THE UTILITY STRIP MAY BE REMOVED AND REPLACED WITH 8" CONCRETE (ITEM 608), PROVIDED THE UTILITY STRIP IS NO WIDER THAN 2-FT

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
2. THE EDGE OF THE CURB WITHIN THE CLEAR SPACE SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER.

CURB RAMP TYPE H

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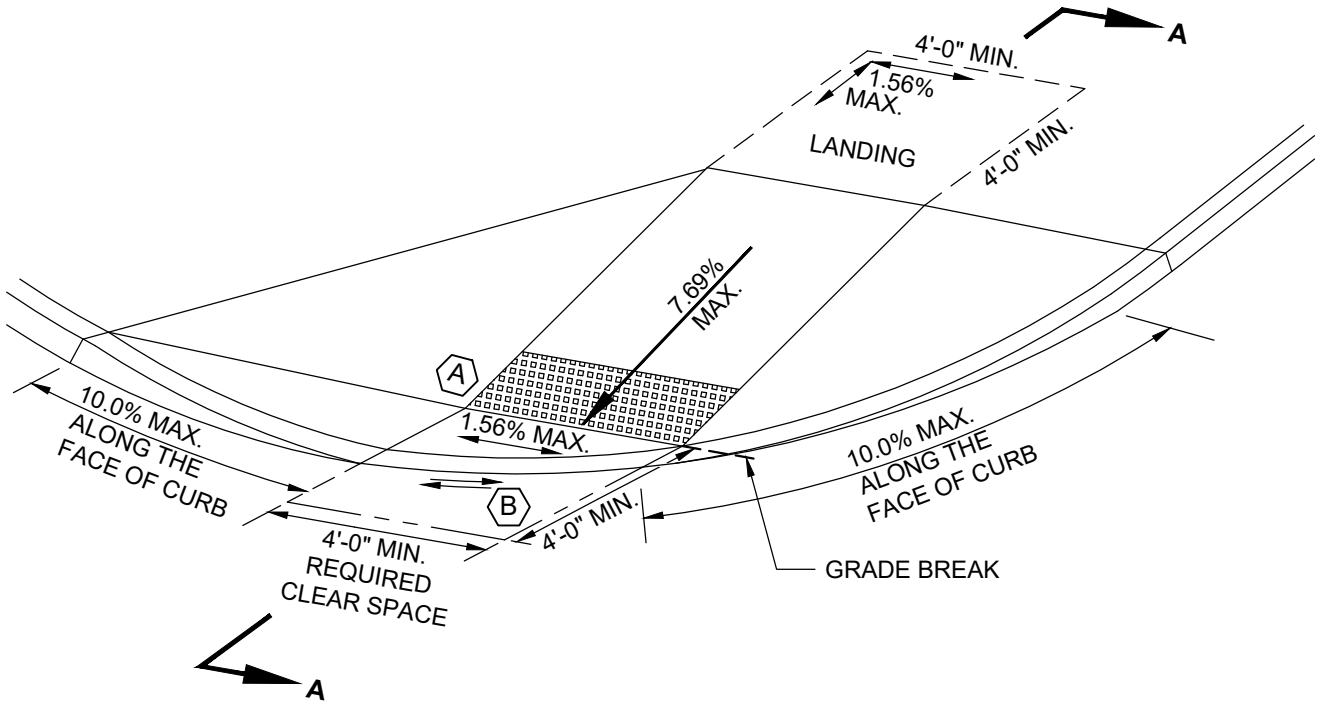

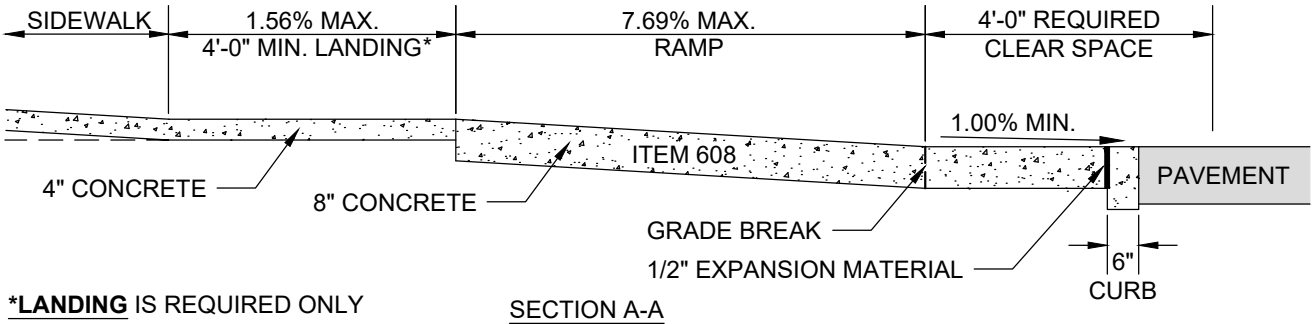

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***LANDING** IS REQUIRED ONLY WHEN RAMP AND/OR EXISTING SIDEWALK SLOPE IS GREATER OR EQUAL TO 5%

CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

(B) PROVIDE POSITIVE DRAINAGE ALONG CURBLINE, SHOULD BE 1.00% MINIMUM SLOPE

CURB RAMP TYPE J

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
2. THE EDGE OF THE CURB WITHIN THE CLEAR SPACE SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER.

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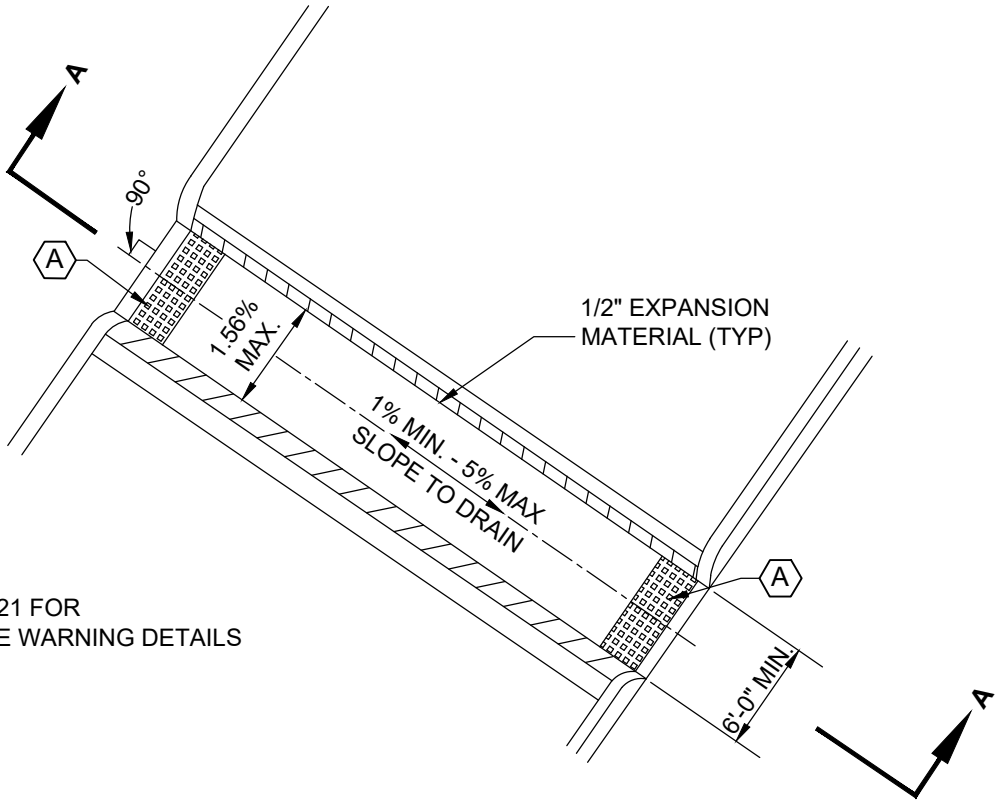
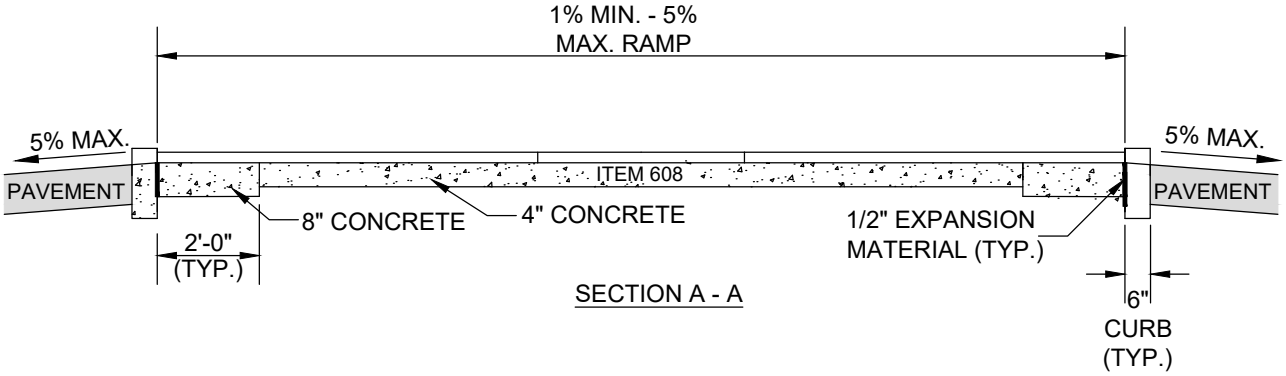


CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS



SECTION A - A

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
2. RAMP L-1 SHALL BE USED IN ALL CIRCUMSTANCES WHERE NOT PROHIBITED BY DRAINAGE ISSUES. AN L-1 RAMP SHOULD NOT BE PLACED IN A WAY THAT WOULD CONVEY THE CURB FLOW OF WATER THROUGH THE MEDIAN PASSTHROUGH. WHERE THE ROADWAY CROSS-SLOPE DIRECTS WATER TOWARDS THE MEDIAN AND FLOWS THROUGH THE GUTTER LINE ADJACENT TO THE PASSTHROUGH, USE AN L-2 RAMP.
3. MEDIANS / ISLANDS WITHIN COMMERCIAL DRIVES REQUIRE DETECTABLE WARNINGS ONLY WHEN OPPOSING CURB RAMPS REQUIRE DETECTABLE WARNINGS. (SEE SHEET 21 OF 21, NOTE 1)

CURB RAMP TYPE L-1

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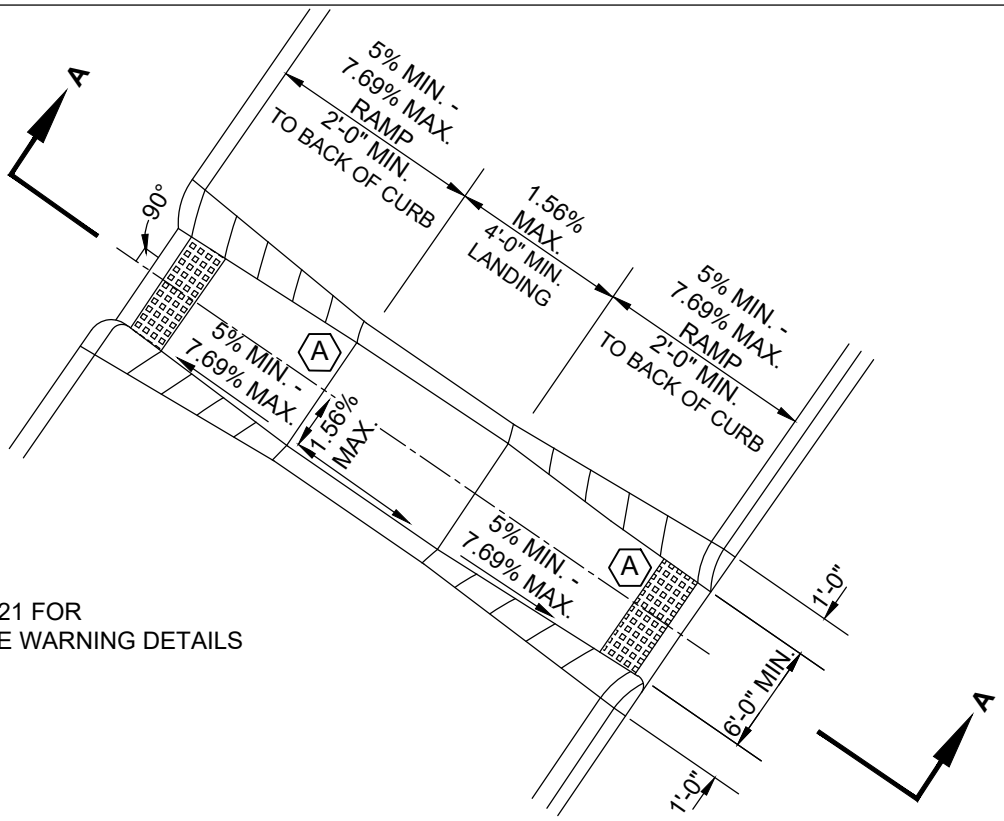
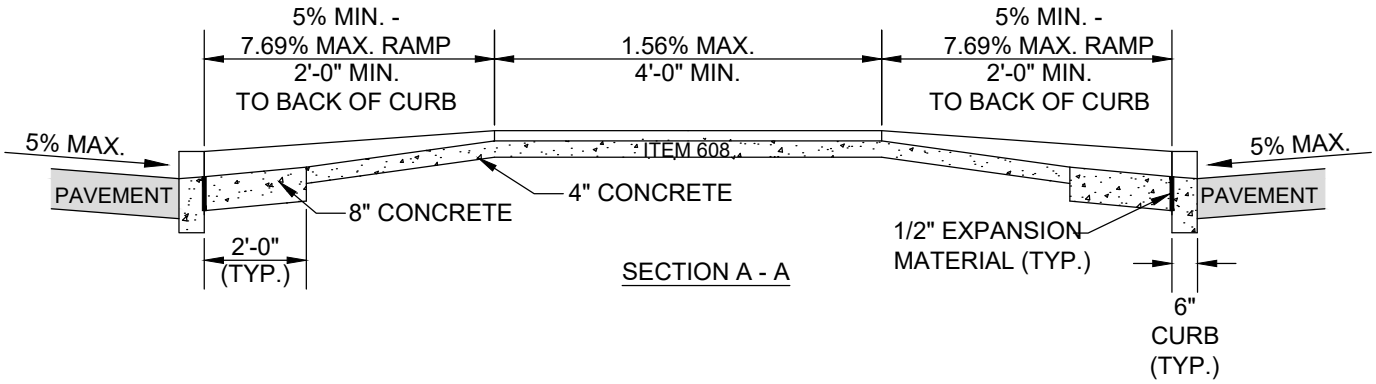


CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS



SECTION A - A

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
2. MEDIANS / ISLANDS WITHIN COMMERCIAL DRIVES REQUIRE DETECTABLE WARNINGS ONLY WHEN OPPOSING CURB RAMPS REQUIRE DETECTABLE WARNINGS. (SEE SHEET 21 OF 21, NOTE 1).
3. TYPE L-2 RAMPS ARE ONLY TO BE INSTALLED WHEN IT IS NOT POSSIBLE TO INSTALL A TYPE L-1 RAMP DUE TO DRAINAGE ISSUES.
4. TYPE L-2 RAMPS CAN ONLY BE USED ON MEDIANS 8 FEET WIDE OR MORE.

CURB RAMP TYPE L-2

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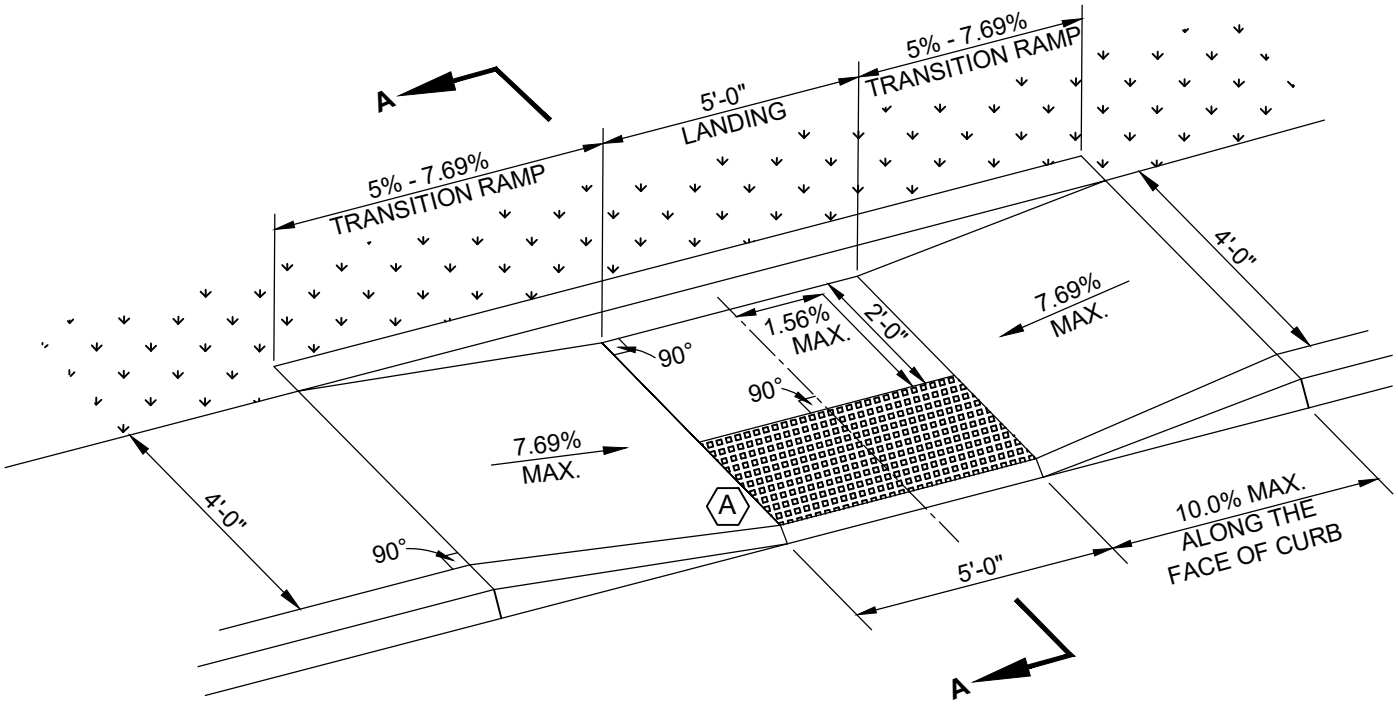

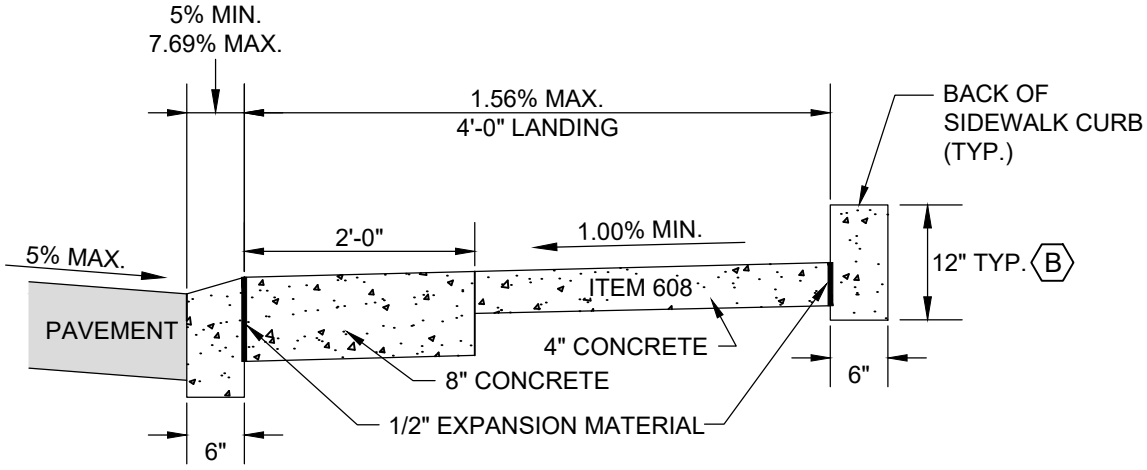

SECTION A-A

CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

(B) EXPOSED REVEAL MUST EQUAL BURIED DEPTH; 12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS SEE CURB WALL SPECIFICATION

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP TYPE P-4

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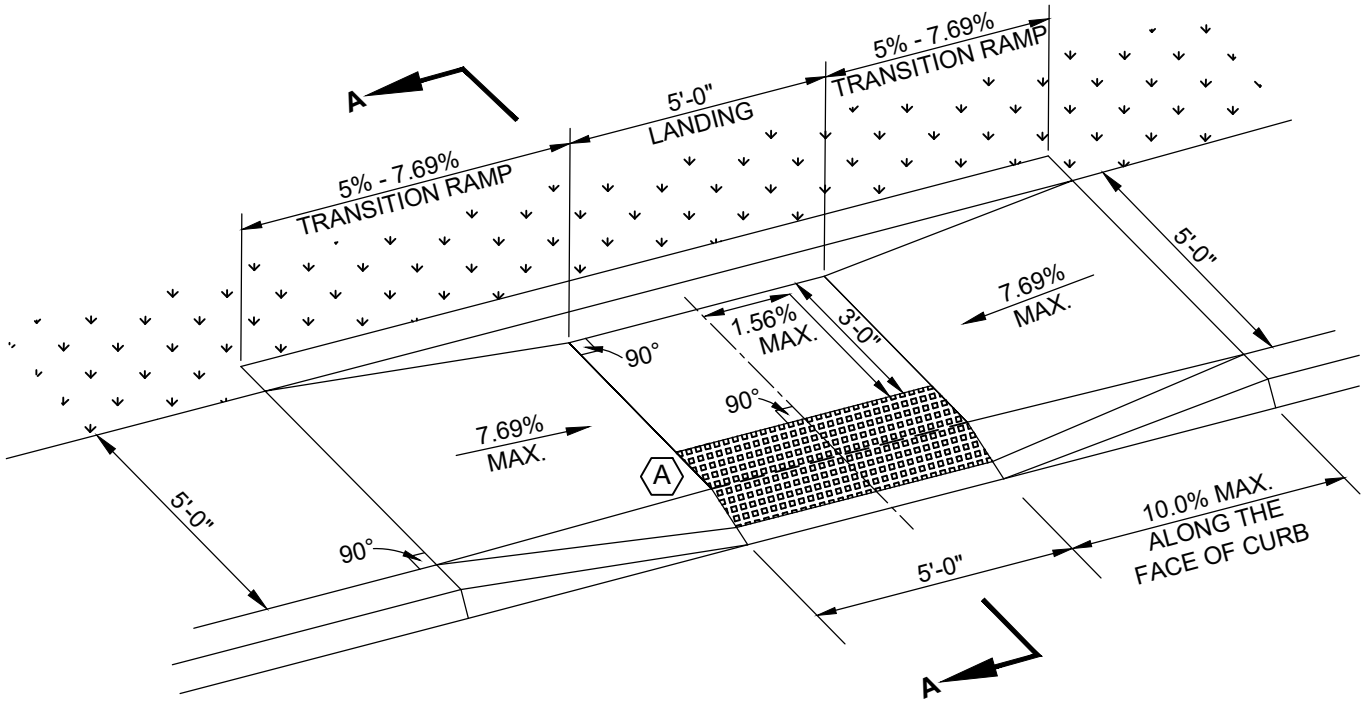

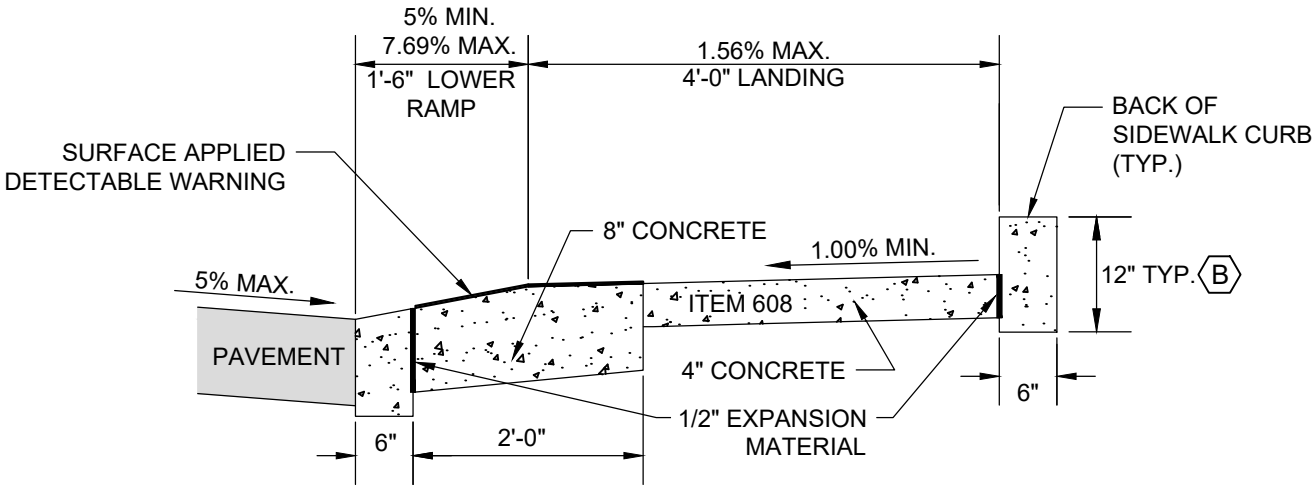

SECTION A-A

CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

(B) EXPOSED REVEAL MUST EQUAL BURIED DEPTH; 12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS SEE CURB WALL SPECIFICATION

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP TYPE P-5

CITY OF COLUMBUS, OHIO
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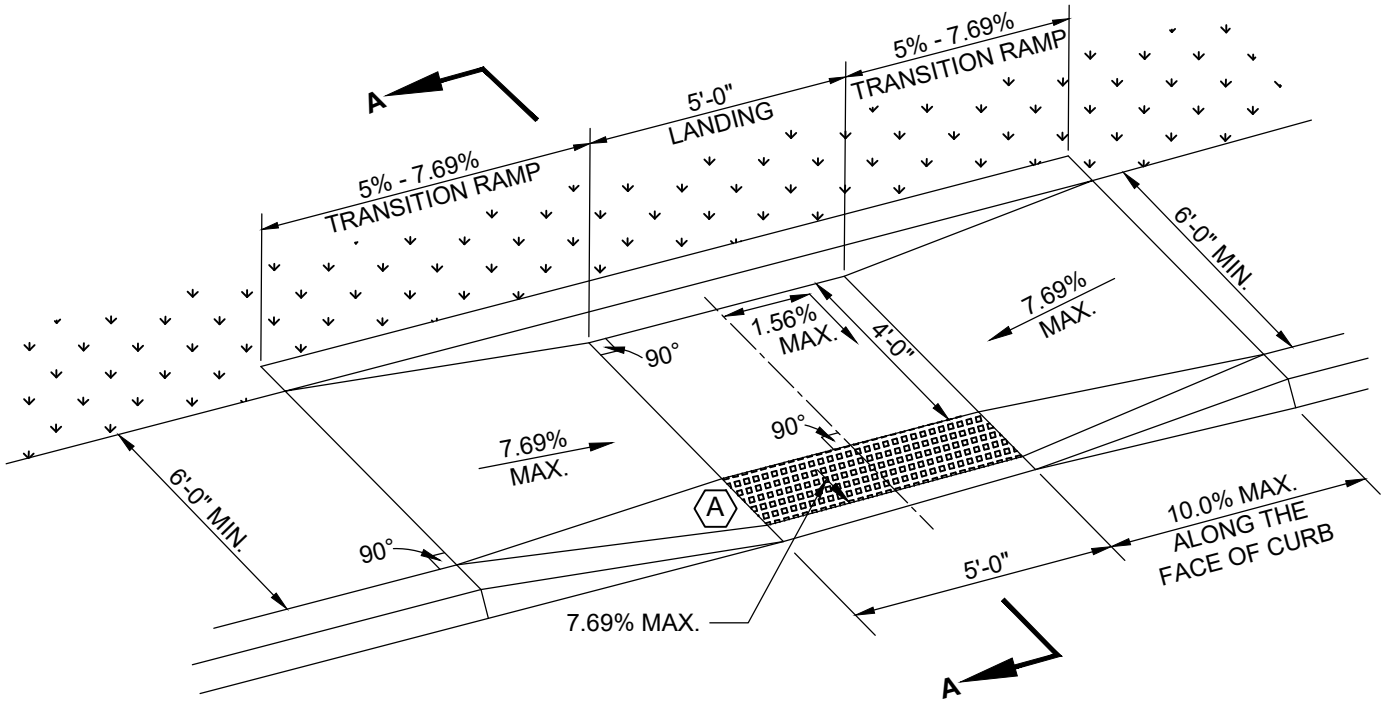

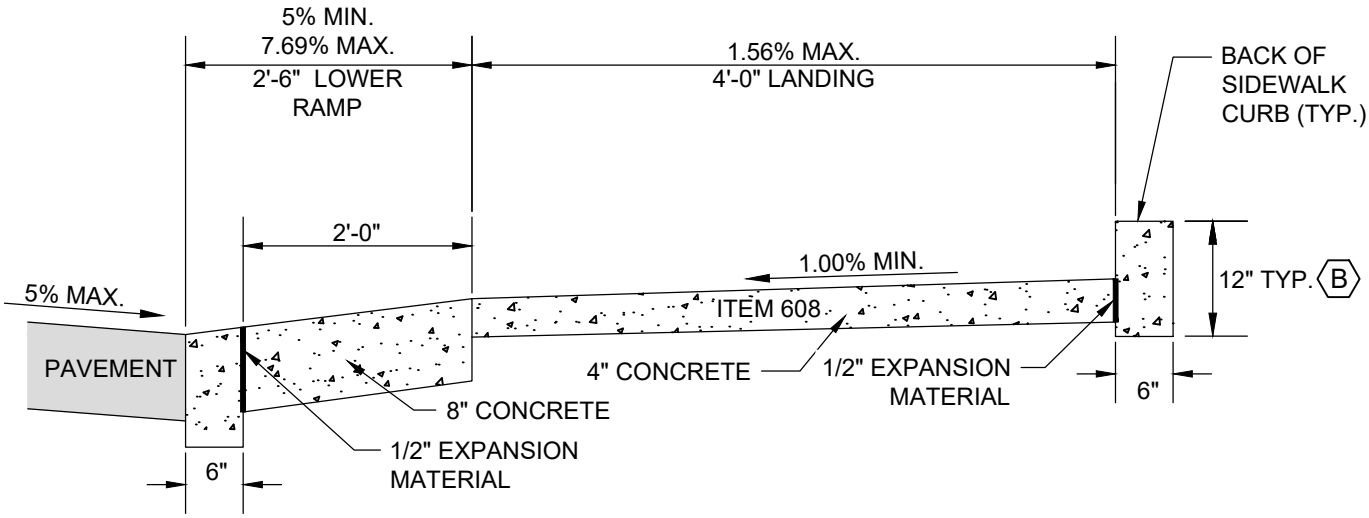

SECTION A-A

CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

(B) EXPOSED REVEAL MUST EQUAL BURIED DEPTH; 12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS SEE CURB WALL SPECIFICATION

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP TYPE P-6

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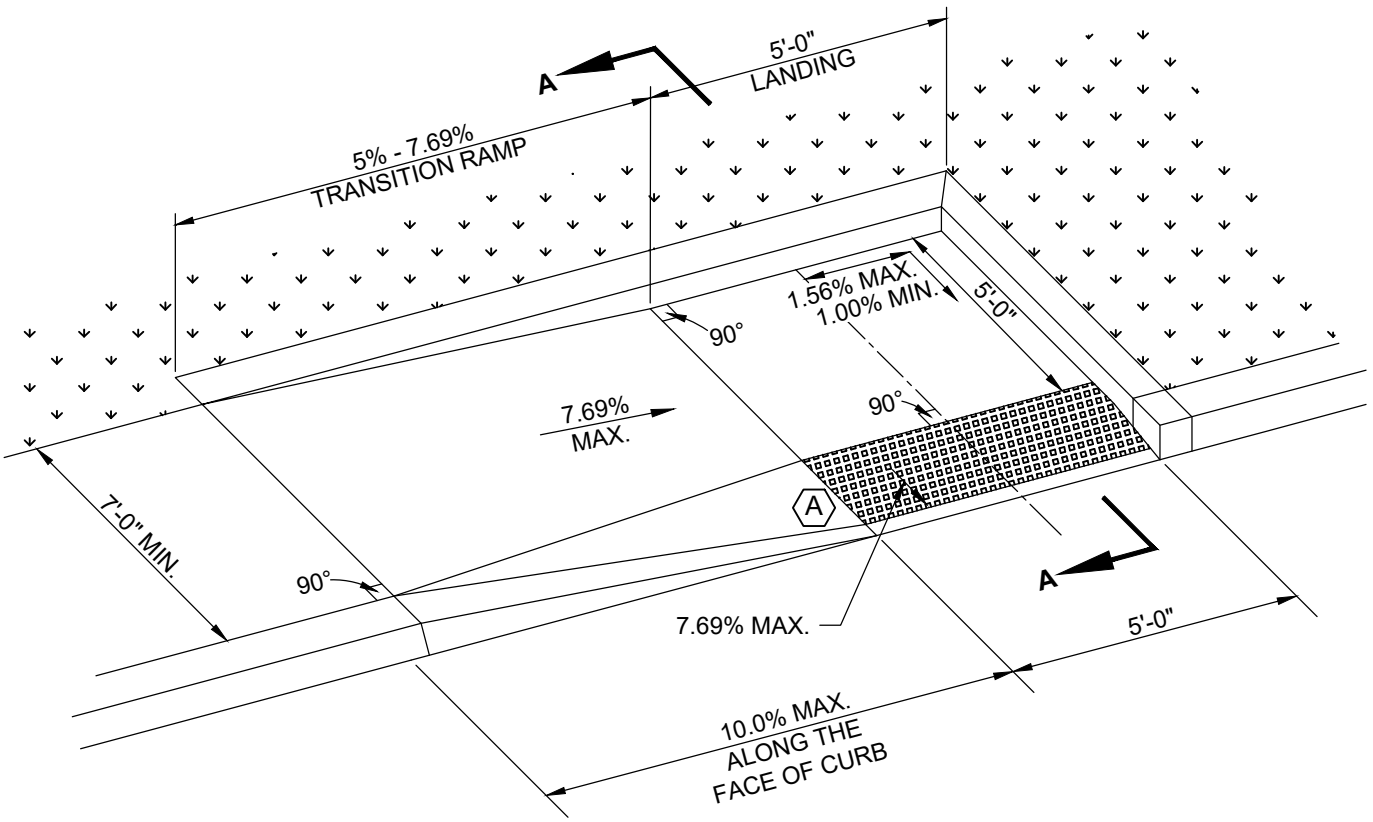

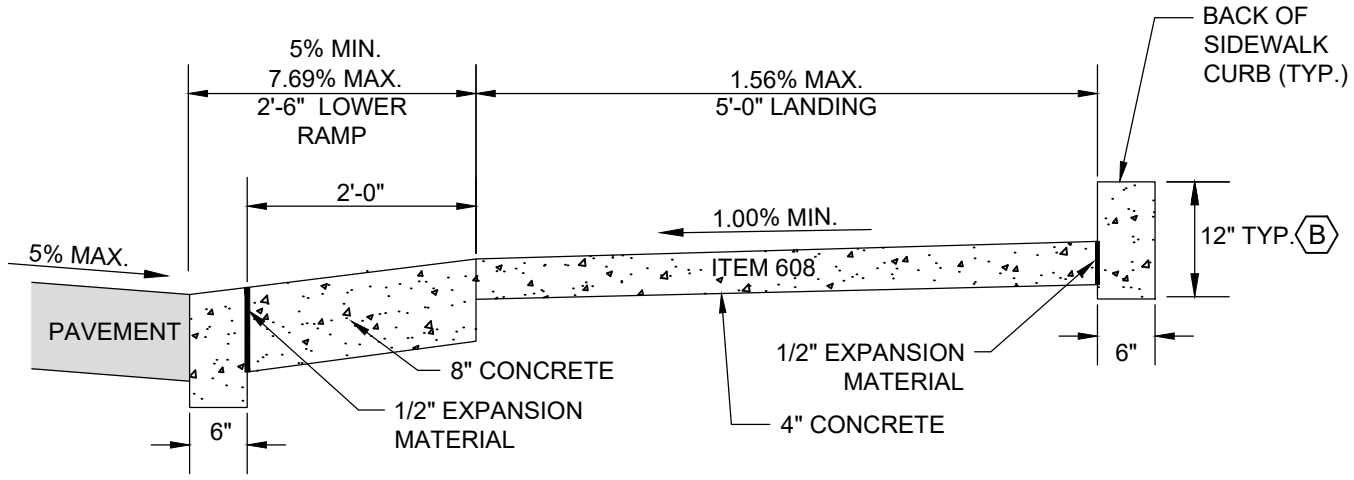

SECTION A-A

CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

(B) EXPOSED REVEAL MUST EQUAL BURIED DEPTH; 12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS SEE CURB WALL SPECIFICATION

GENERAL NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP TYPE P-7

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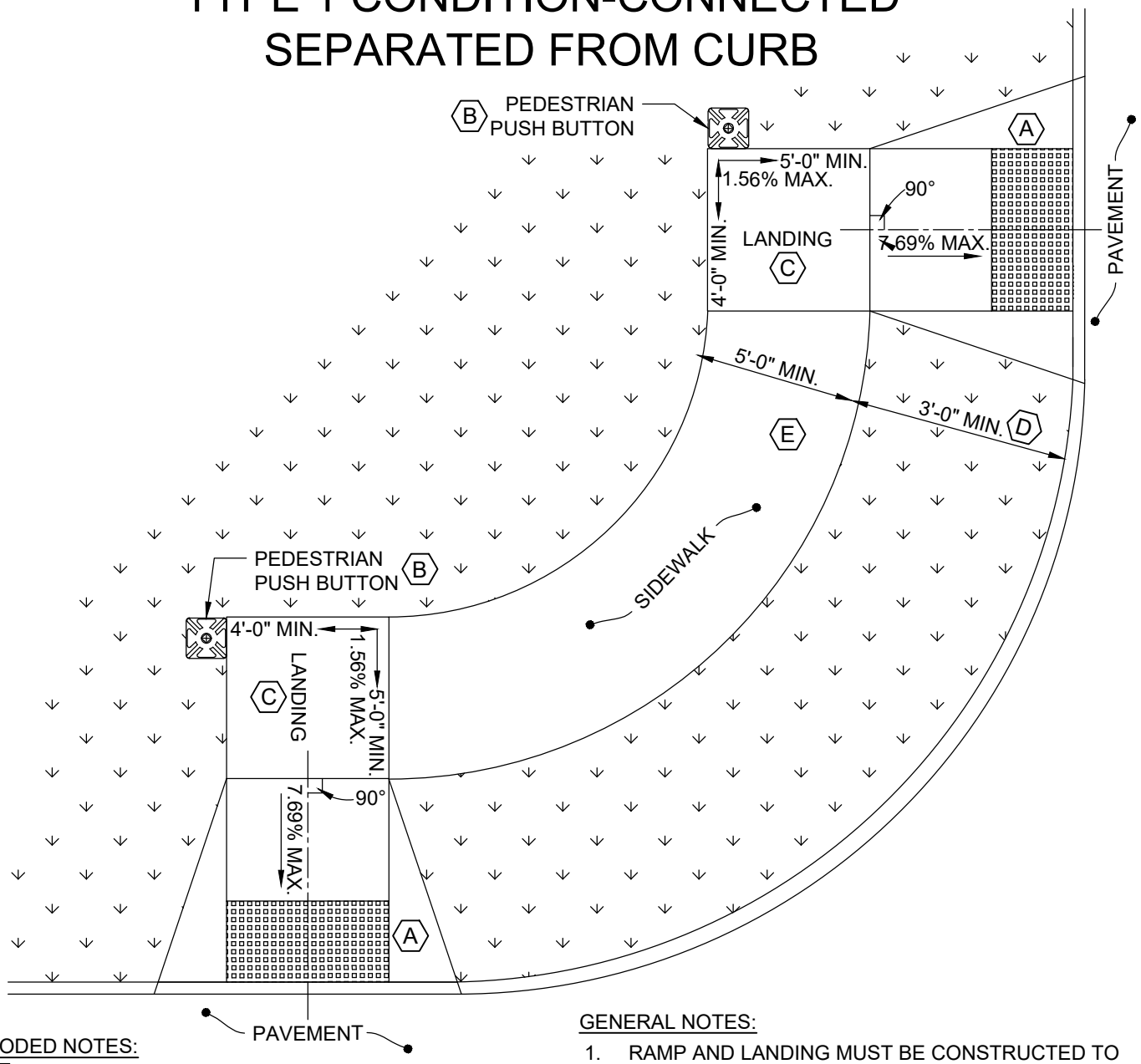
PEDESTRIAN PAD (PP)
TYPE 1 CONDITION-CONNECTED SEPARATED FROM CURB



CODED NOTES:

(A) USE 1-FT FLARES ON CURBED ROADWAY. ON UNCURBED ROADWAY RAMP SHALL BE CONSTRUCTED WITHOUT FLARES, SEE STANDARD DRAWING FOR DETECTABLE WARNING PLACEMENT DETAILS. THE FRONT TWO FEET OF THE RAMP AND FLARES SHALL BE CONSTRUCTED USING CONCRETE 8" THICK AND TRANSITIONING TO 4" CONCRETE FURTHER THAN 2 FEET FROM THE BACK OF THE CURB

(B) ORIENTATION/LOCATION OF PUSH BUTTON/PEDESTAL TO BE PER POLICY

(C) LANDING SHALL BE 5-FT BY 5-FT WHEN SURROUNDED BY CURB WALL, AND THE PEDESTRIAN PUSH BUTTON SHALL BE INTEGRAL WITH THE CURB WALL

(D) IF UTILITY STRIP IS LESS THAN 3-FT, SIDEWALK SHALL BE CONSTRUCTED ADJACENT TO CURB, SEE PP-2

(E) SIDEWALK WIDTH AND LANDING DEPTH MAY BE REDUCED TO 4' DUE TO CONSTRAINTS.

GENERAL NOTES:

1. RAMP AND LANDING MUST BE CONSTRUCTED TO DRAIN, TYPICALLY TOWARDS THE ROADWAY, BUT MAY VARY BASED ON EXISTING TOPOGRAPHY. WEEP HOLES ARE NOT PERMITTED FOR DRAINAGE.
2. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP TYPE PP-1

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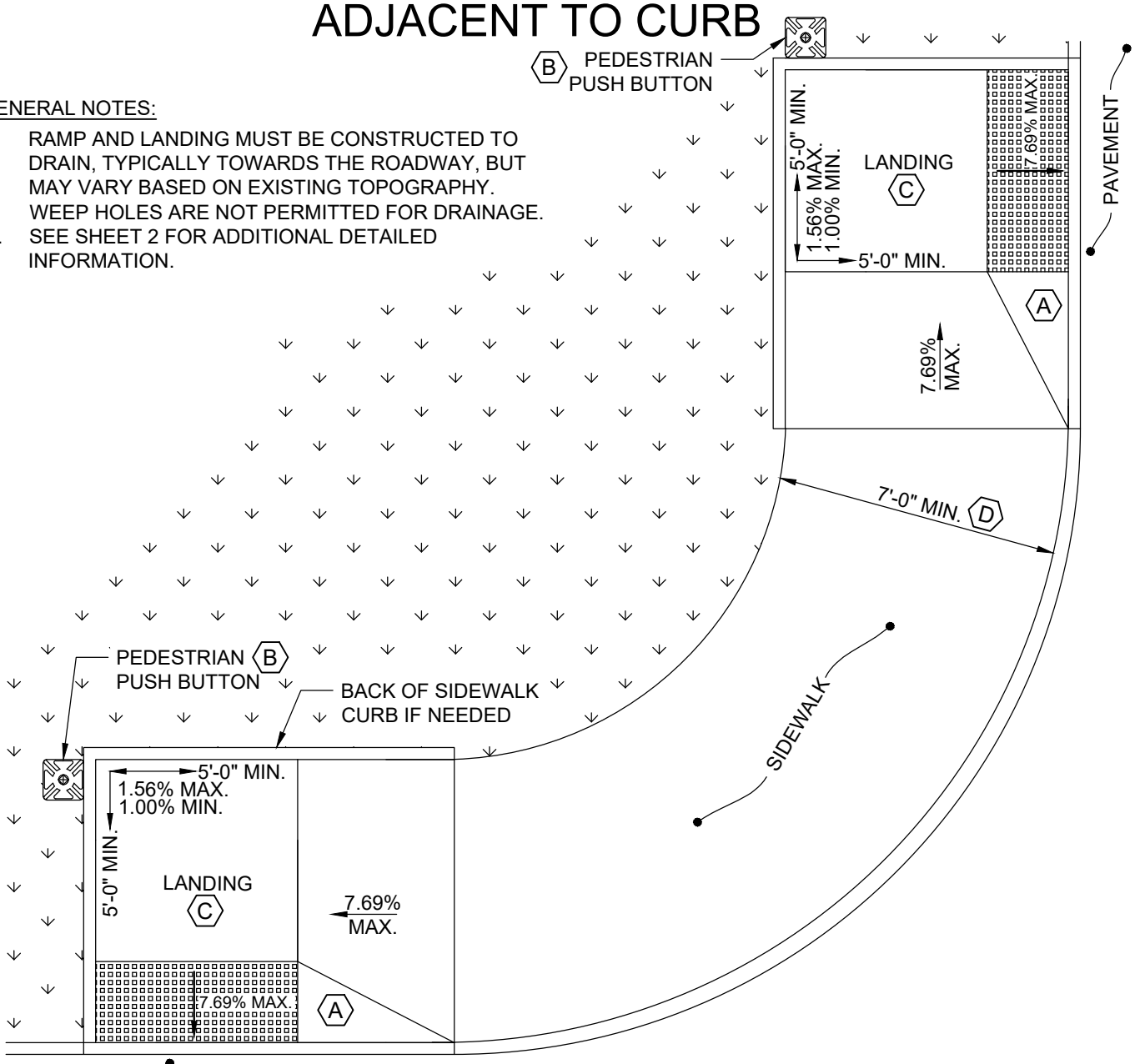
PEDESTRIAN PAD (PP)
TYPE 2 CONDITION-CONNECTED ADJACENT TO CURB



GENERAL NOTES:

1. RAMP AND LANDING MUST BE CONSTRUCTED TO DRAIN, TYPICALLY TOWARDS THE ROADWAY, BUT MAY VARY BASED ON EXISTING TOPOGRAPHY. WEEP HOLES ARE NOT PERMITTED FOR DRAINAGE.
2. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS. THE FRONT TWO FEET OF THE RAMP AND FLARES SHALL BE CONSTRUCTED USING CONCRETE 8" THICK AND TRANSITIONING TO 4" CONCRETE FURTHER THAN 2 FEET FROM THE BACK OF THE CURB

(B) ORIENTATION/LOCATION OF PUSH BUTTON/PEDESTAL TO BE PER POLICY

(C) WIDTH OF THE RAMP AND LANDING MAY BE REDUCED TO 4-FT WHERE NO CURB WALL IS PRESENT

(D) SIDEWALK WIDTH MAY BE REDUCED TO 5-FT MIN. WHEN CONSTRAINED. SEE RAMP TYPE P-4, SECTION A-A FOR RAMP AND LANDING

CURB RAMP TYPE PP-2

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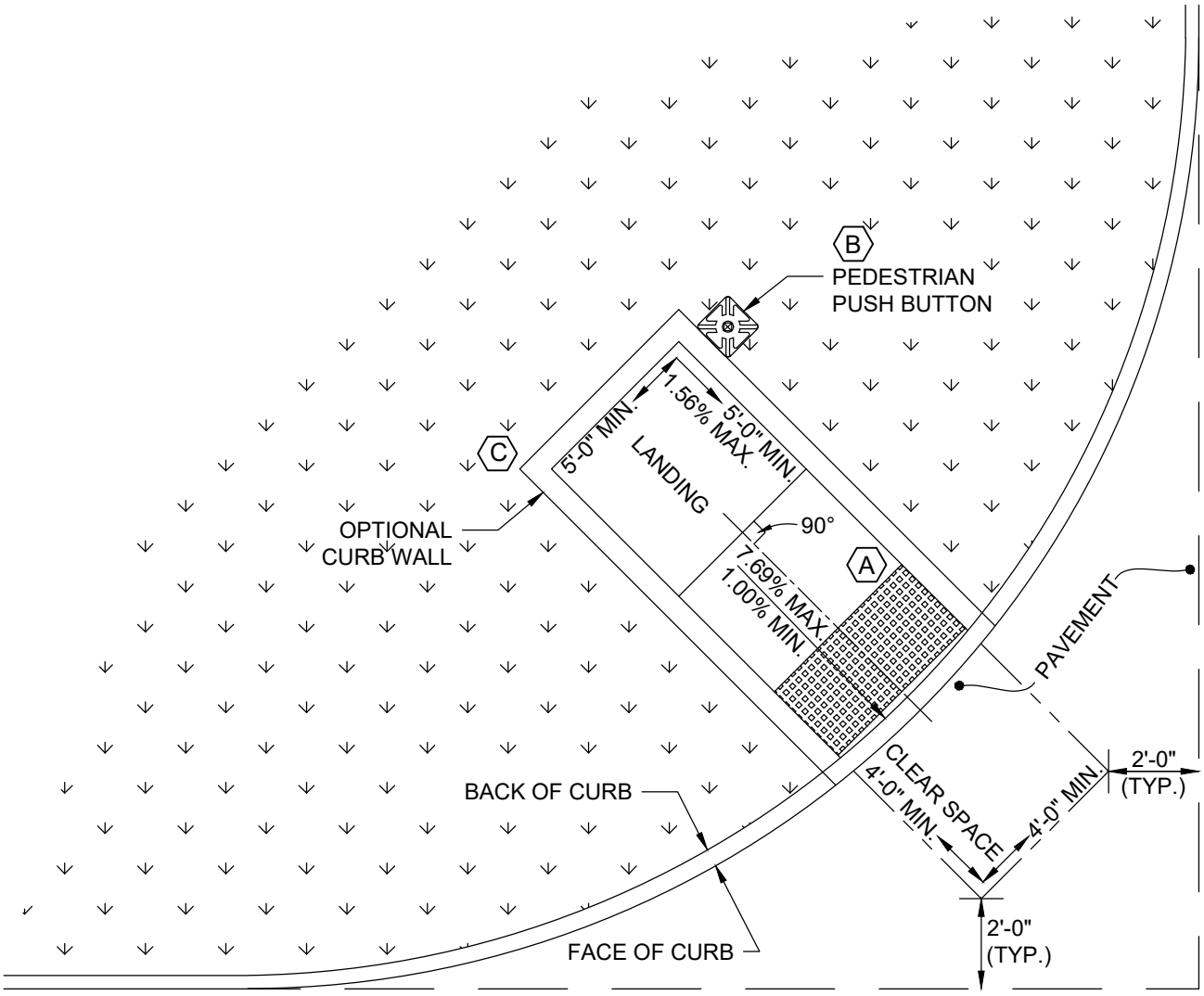
PEDESTRIAN PAD (PP)
TYPE 3 CONDITION-SHARED
CURB IS PRESENT



CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS. THE FRONT TWO FEET OF THE RAMP AND FLARES SHALL BE CONSTRUCTED USING CONCRETE 8" THICK AND TRANSITIONING TO 4" CONCRETE FURTHER THAN 2 FEET FROM THE BACK OF THE CURB

(B) ORIENTATION/LOCATION OF PUSH BUTTON/PEDESTAL TO BE PER POLICY

(C) CURB WALL MAY BE NECESSARY BASED ON EXISTING TOPOGRAPHY. IF CURB WALL IS NOT CONSTRUCTED, THE LANDING WIDTH CAN BE REDUCED TO 4'x4'.

GENERAL NOTES:

1. RAMP AND LANDING MUST BE CONSTRUCTED TO DRAIN, TYPICALLY TOWARDS THE ROADWAY, BUT MAY VARY BASED ON EXISTING TOPOGRAPHY. WEEP HOLES ARE NOT PERMITTED FOR DRAINAGE.
2. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CURB RAMP
TYPE PP-3

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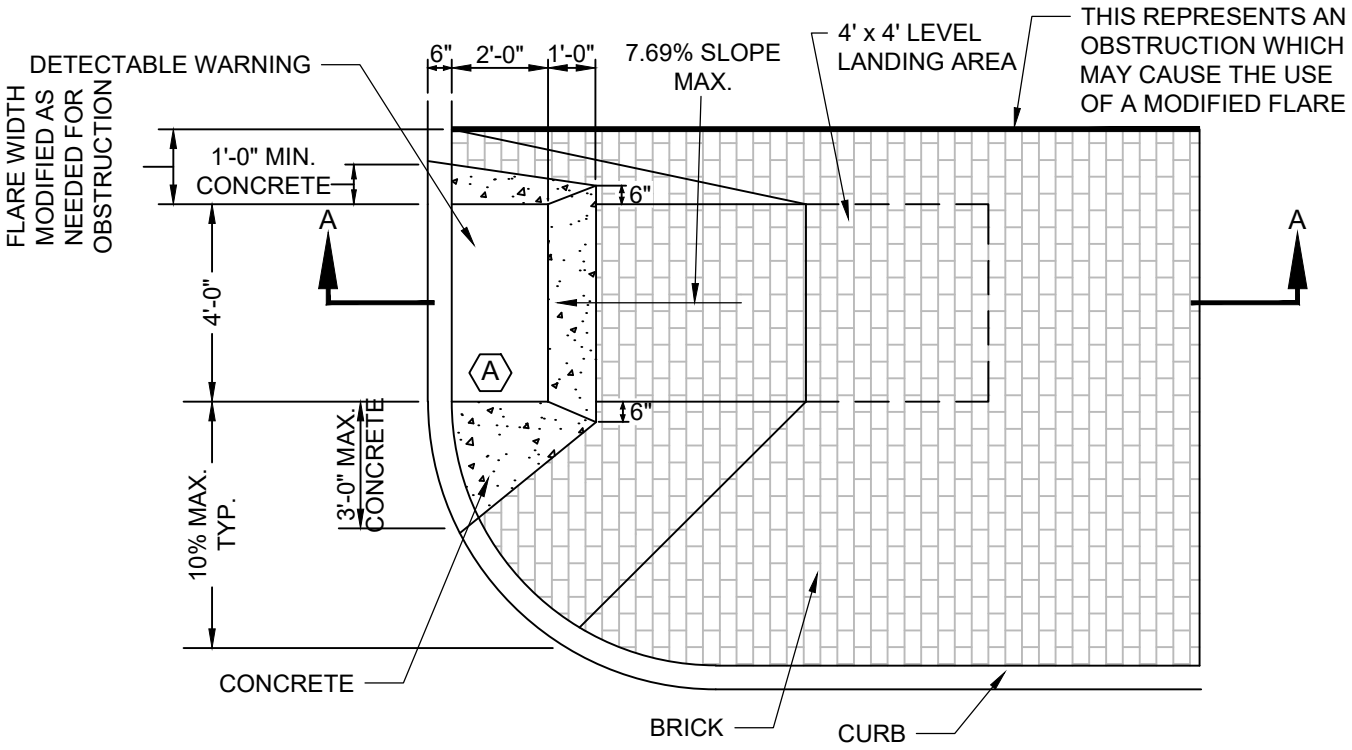

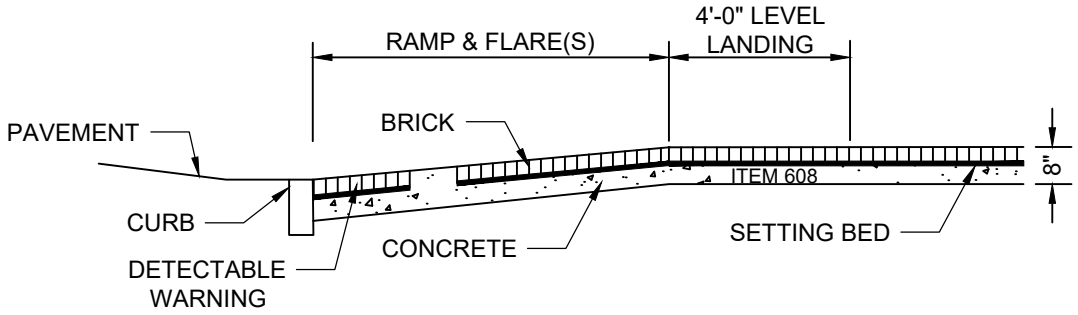

SECTION A-A

1. WRITTEN APPROVAL FROM THE CITY ENGINEER OR AN AUTHORIZED REPRESENTATIVE SHALL BE OBTAINED PRIOR TO THE DESIGN OR CONSTRUCTION OF GRANITE OR AN ALTERNATE MATERIAL CURB RAMP.
2. ALONG WITH THE REQUIREMENT OF THIS SHEET FOR BRICK OR GRANITE CURB RAMPS, ALL OTHER APPLICABLE REQUIREMENTS OF 2319 SHALL BE FOLLOWED.
3. BRICK OR GRANITE CURB RAMPS SHALL BE TYPED PER 2319. TYPICALLY TYPE A OR TYPE D WILL BE USED. ALL APPLICABLE DIMENSIONS AND REQUIREMENTS FOR THE SELECTED TYPE OF RAMP SHALL BE FOLLOWED.
4. LONG FLARES WILL BE USED WHEREVER POSSIBLE. A MODIFIED FLARE SHALL BE USED WHEN AN OBSTRUCTION EXISTS.
5. THE INSTALLATION OF THE BRICK OR GRANITE PAVERS SHALL BE DONE PER STD DWG 2301, BRICK SIDEWALK.

CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

PERPENDICULAR CURB RAMP BRICK SIDEWALK

CITY OF COLUMBUS, OHIO
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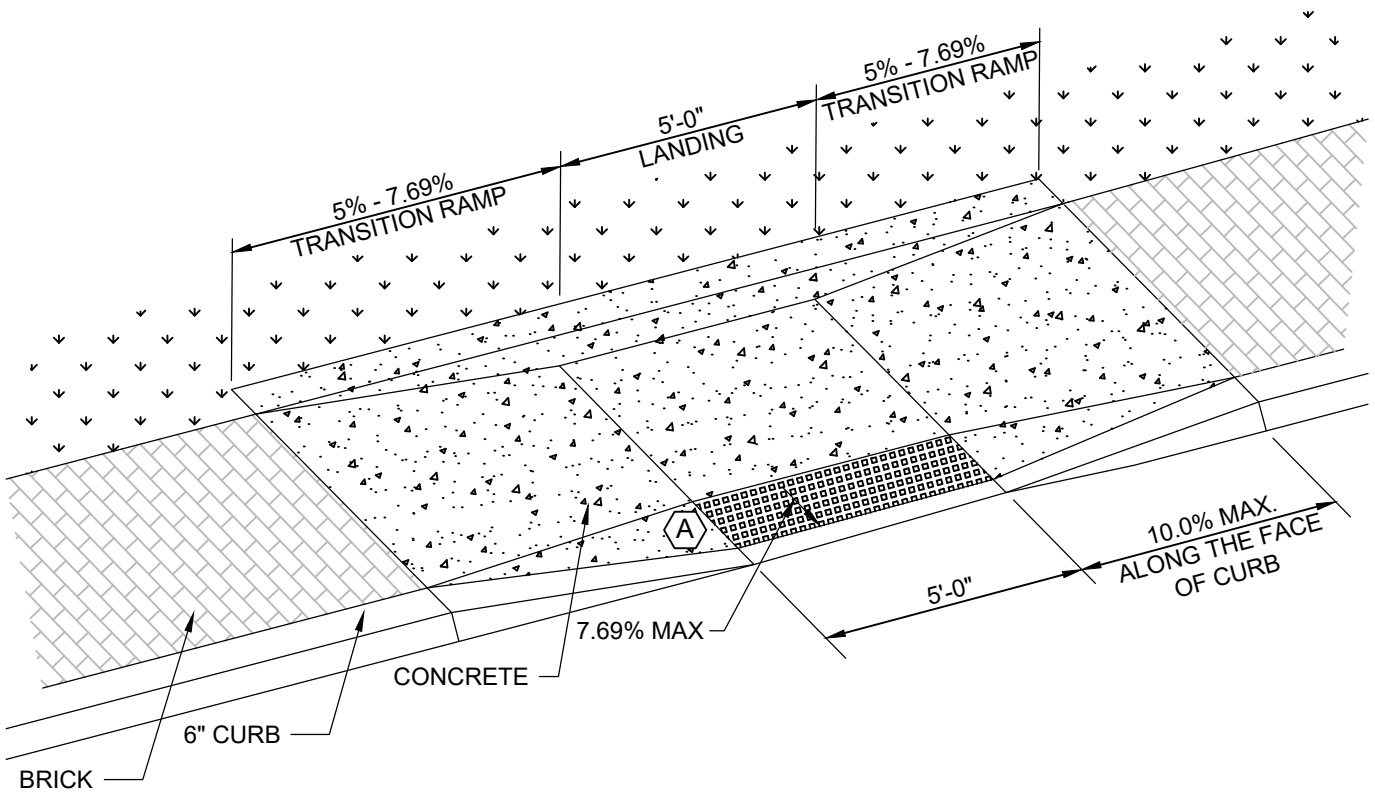
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
2319
3/30/2018
SHT 19 OF 21



1. WRITTEN APPROVAL FROM THE CITY ENGINEER OR AN AUTHORIZED REPRESENTATIVE SHALL BE OBTAINED PRIOR TO THE DESIGN OR CONSTRUCTION OF GRANITE OR AN ALTERNATE MATERIAL CURB RAMP.
2. ALONG WITH THE REQUIREMENT OF THIS SHEET FOR BRICK OR GRANITE CURB RAMPS, ALL OTHER APPLICABLE REQUIREMENTS OF 2319 SHALL BE FOLLOWED.
3. BRICK OR GRANITE CURB RAMPS SHALL BE TYPED PER 2319. TYPICALLY TYPE A OR TYPE D WILL BE USED. ALL APPLICABLE DIMENSIONS AND REQUIREMENTS FOR THE SELECTED TYPE OF RAMP SHALL BE FOLLOWED.
4. LONG FLARES WILL BE USED WHEREVER POSSIBLE. A MODIFIED FLARE SHALL BE USED WHEN AN OBSTRUCTION EXISTS.
5. THE INSTALLATION OF THE BRICK OR GRANITE PAVERS SHALL BE DONE PER STD DWG 2301, BRICK SIDEWALK.

CODED NOTES:

(A) SEE SHEET 21 FOR DETECTABLE WARNING DETAILS

PARALLEL CURB RAMP BRICK SIDEWALK

CITY OF COLUMBUS, OHIO
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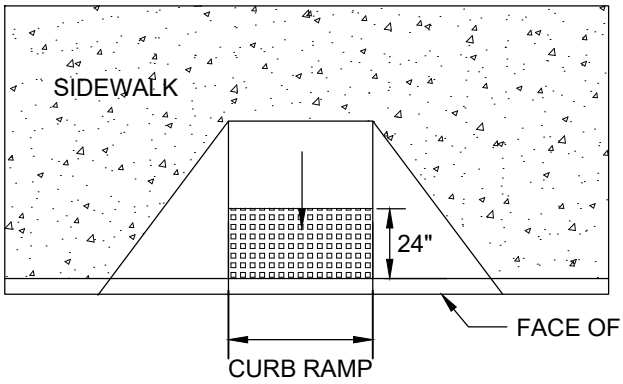
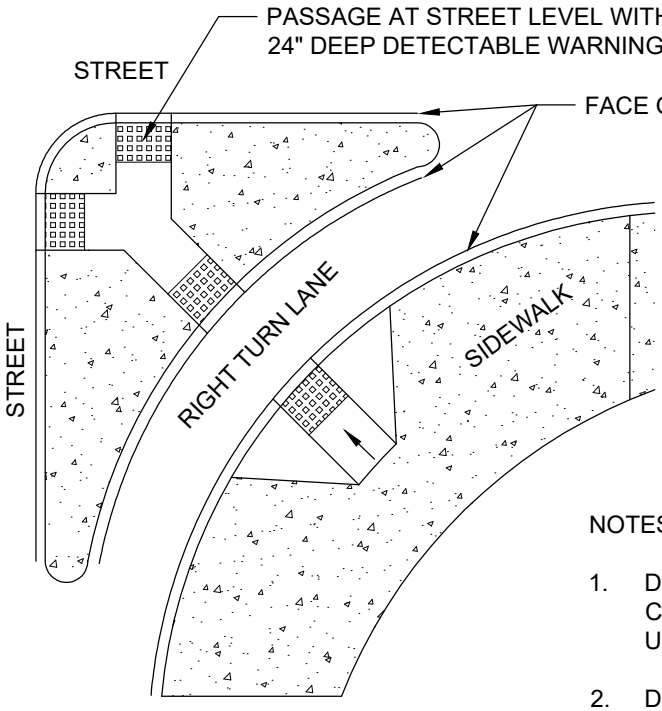
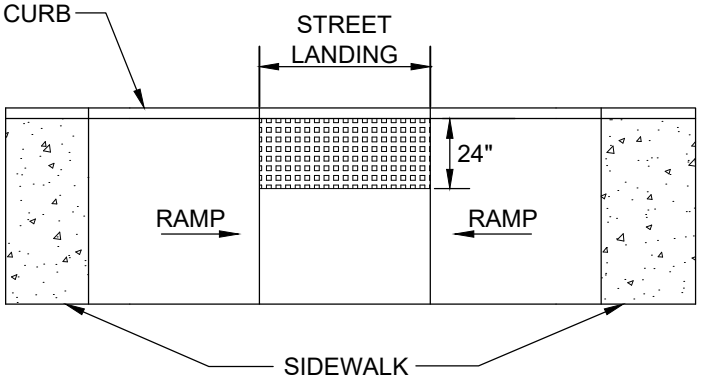






NOTES:

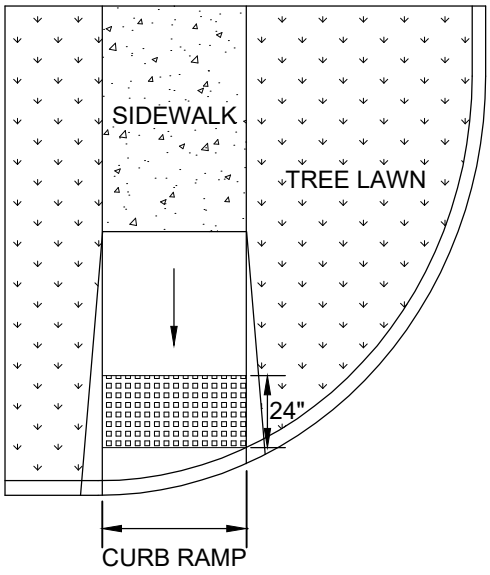
1. DETECTABLE WARNINGS SHALL BE PROVIDED WHEREVER A CURB RAMP CROSSES A VEHICULAR WAY. EXCLUDING UNSIGNALIZED DRIVEWAY CROSSINGS.

2. DETECTABLE WARNINGS SHALL BE PROVIDED 24" IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. THE DETECTABLE WARNING SHALL BE LOCATED ADJACENT TO THE CURB LINE.

3. MATERIALS SHALL COMPLY WITH CMSC 608 AND DPS ADA RULES AND REGULATIONS.

4. DETECTABLE WARNINGS SHALL BE PLACED 6" TO 8" BEHIND THE FACE OF CURB AND BEHIND THE CURB JOINT.

5. CAST IN PLACE OR ANY NON-SURFACE APPLIED DETECTABLE WARNING SHALL HAVE A MINIMUM OF 3" OF CONCRETE ON EACH SIDE OF THE WARNING.



CURB RAMP DETECTABLE WARNINGS

CITY OF COLUMBUS, OHIO
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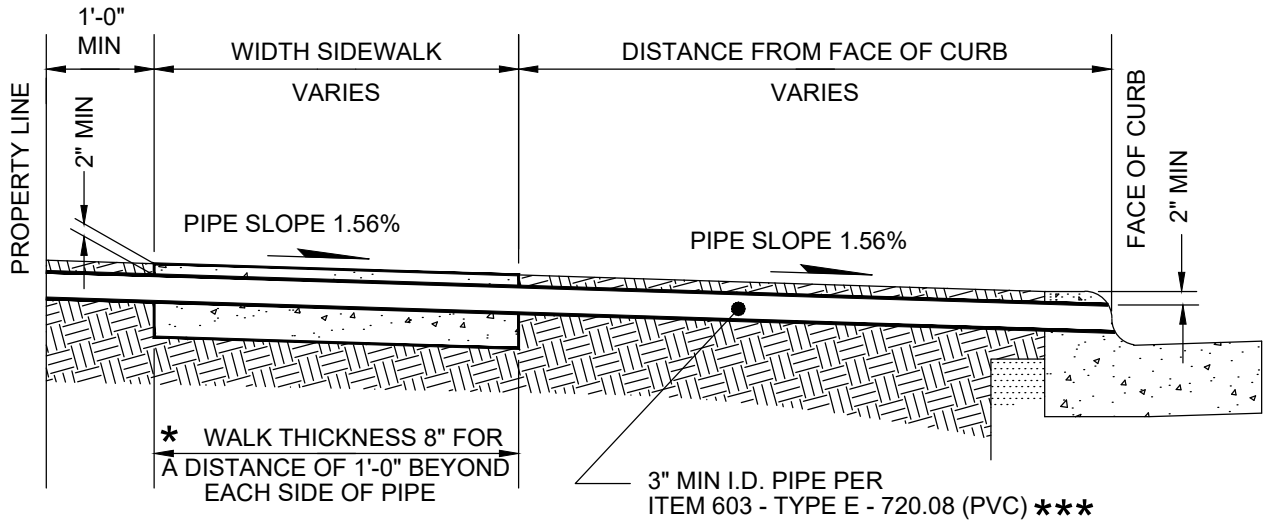

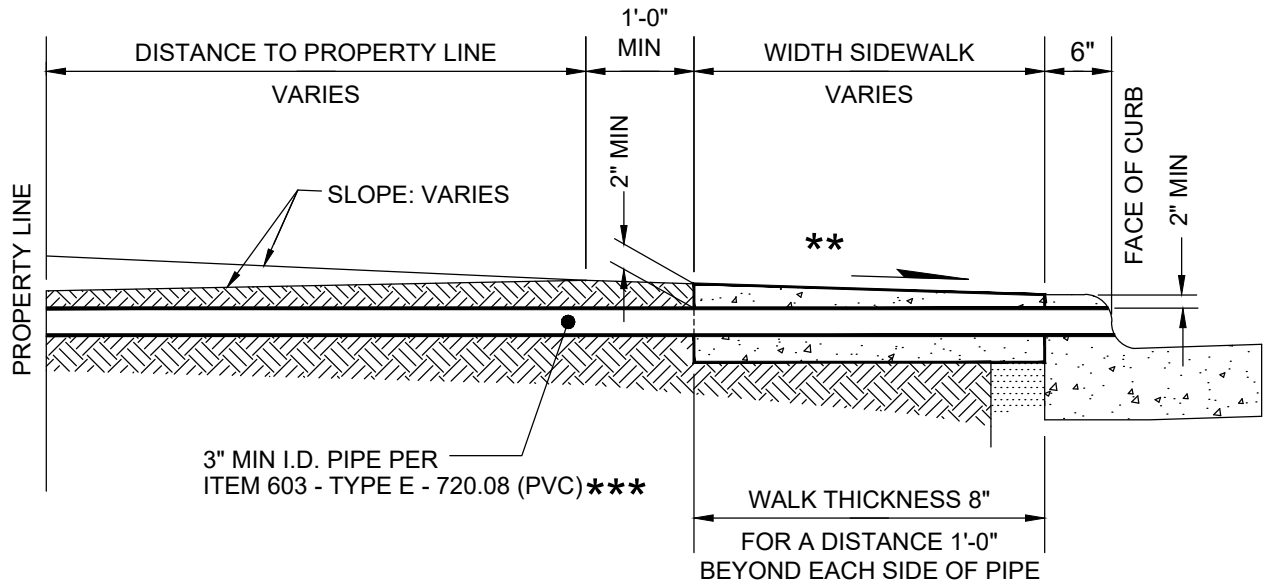

* APPLICABLE ONLY WHERE THICKNESS OF CONCRETE OVER PIPE IS LESS THAN 4".

** SLOPE 1.56% ON SIDEWALK AREA.

*** IF THERE IS EXISTING ROOF DRAIN PIPE, THEN MATCH EXISTING SIZE.
IF EXISTING ROOF DRAIN IS LARGER THAN 3", RUN SMALLER PARALLEL PIPES
TO MAINTAIN 3" PIPE AT FACE OF CURB.

MOUNTABLE CURB SHALL BE CORE DRILLED ONLY FOR ROOF DRAIN OPENING.

PIPE ROOF DRAIN

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
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CITY ENGINEER

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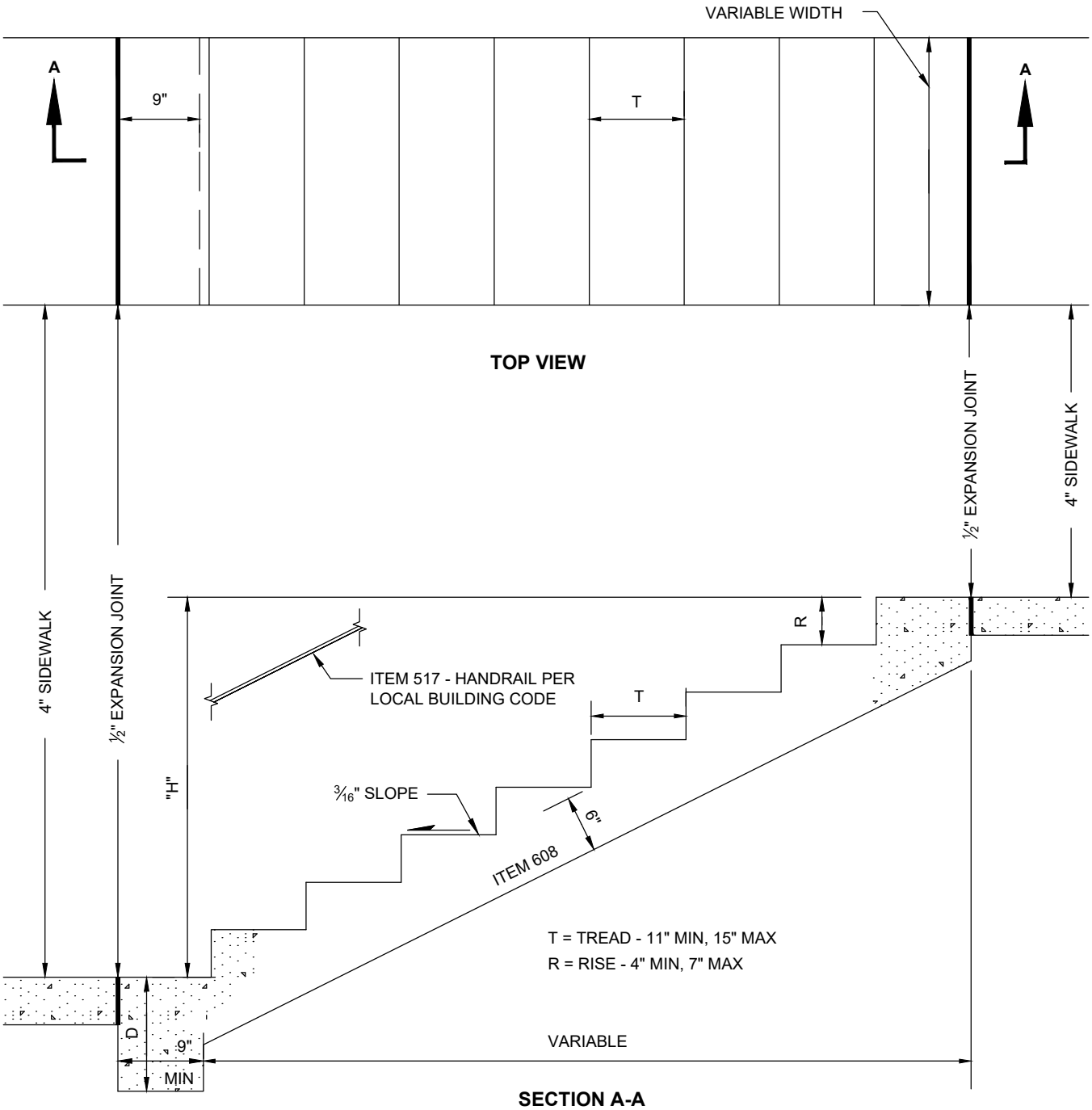
SHT 1 OF 1



FOR "H"=24" AND UNDER SEE SHEET 2 OR 3	
NO. OF RISERS	"D"
4	8"
5	10"
6	10"
7	12"
8	12"

STAIR TREADS AND RISERS SHALL BE OF EQUAL SIZE AND SHAPE. TOLERANCE BETWEEN THE LARGEST AND SMALLEST RISER HEIGHT OR BETWEEN THE LARGEST AND SMALLEST TREAD DEPTHS SHALL NOT EXCEED 3/8 INCHES.

CONCRETE STEPS

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2328

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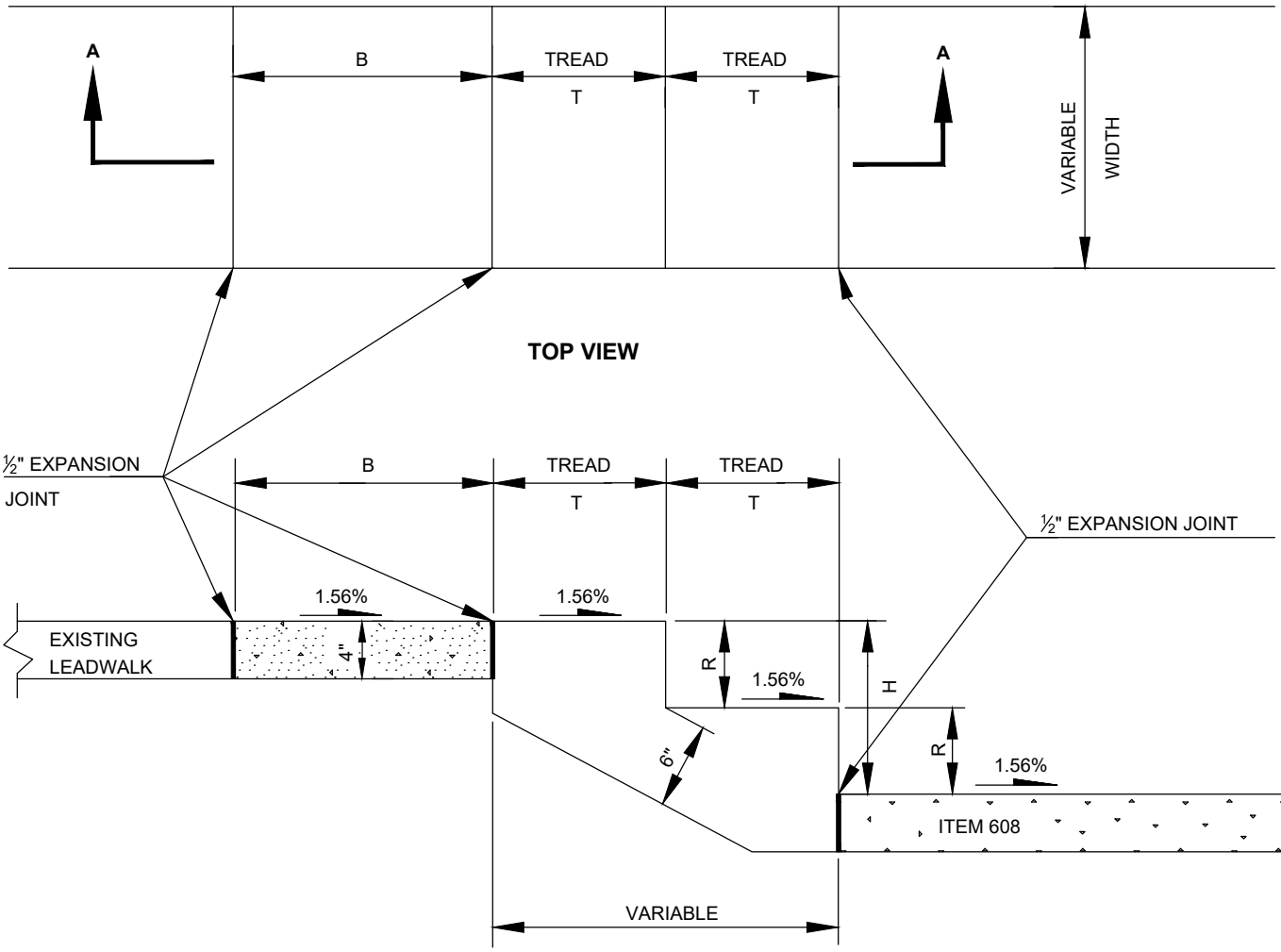
SHT 1 OF 3



TOP VIEW

SECTION A-A

T = TREAD - 11" MIN, 15" MAX

R = RISER - 4" MIN, 7" MAX

IF "H" IS GREATER THAN 24", SEE SHT. 1 OF 3

STAIR TREADS AND RISERS SHALL BE OF EQUAL SIZE AND SHAPE. TOLERANCE BETWEEN THE LARGEST AND SMALLEST RISER HEIGHT OR BETWEEN THE LARGEST AND SMALLEST TREAD DEPTHS SHALL NOT EXCEED ⅜ INCHES.

CONCRETE STEPS

CITY OF COLUMBUS, OHIO
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DIVISION OF DESIGN AND CONSTRUCTION

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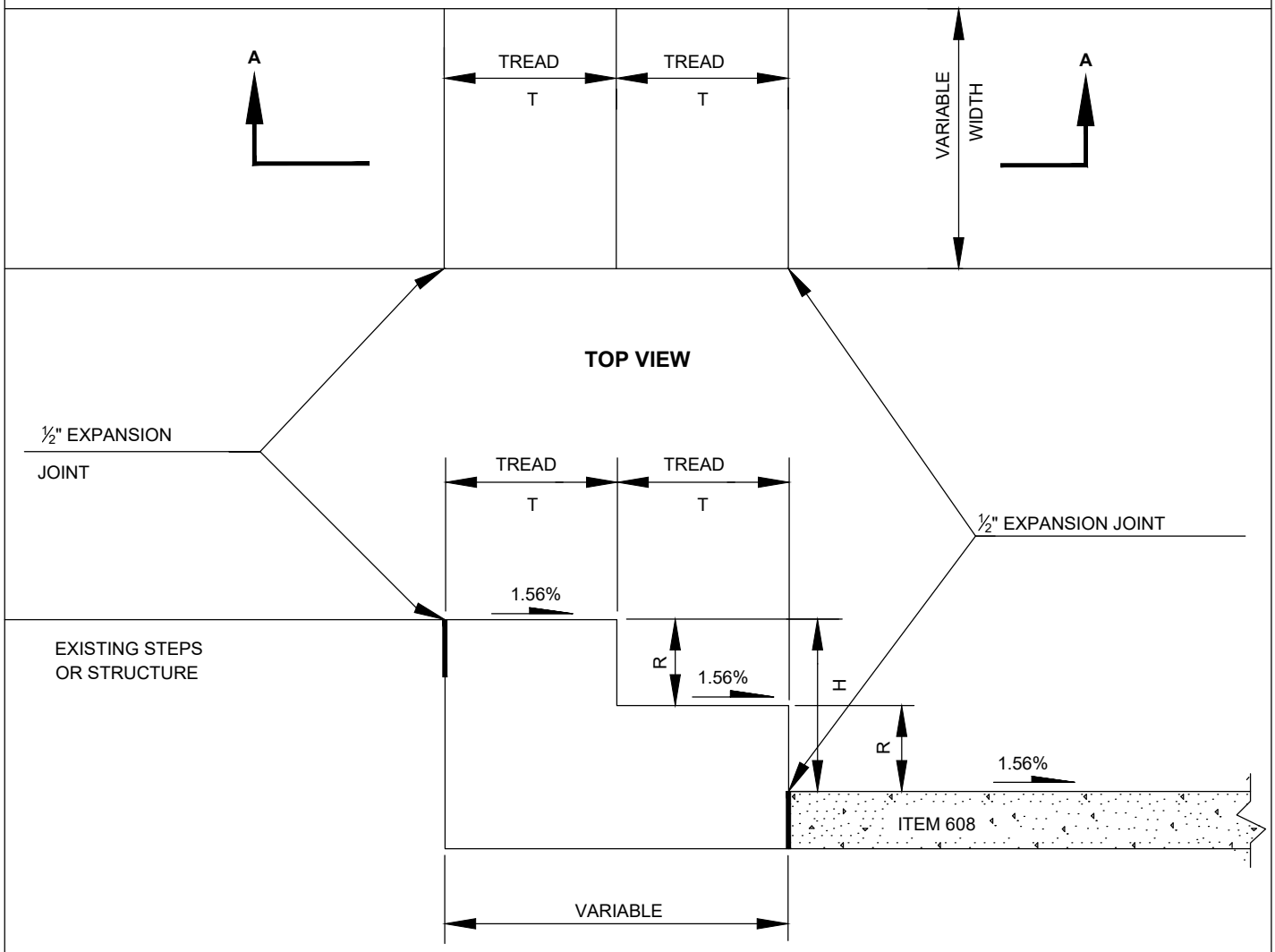
SHT 2 OF 3



SECTION A-A

T = TREAD - 11" MIN, 15" MAX

R = RISER - 4" MIN, 7" MAX

IF "H" IS GREATER THAN 24", SEE SHT. 1 OF 3

THIS STANDARD DRAWING SHALL BE USED WHEN CONSTRUCTING A SMALL PORCH STOOP OR WHEN MEETING EXISTING STEPS.

STAIR TREADS AND RISERS SHALL BE OF EQUAL SIZE AND SHAPE. TOLERANCE BETWEEN THE LARGEST AND SMALLEST RISER HEIGHT OR BETWEEN THE LARGEST AND SMALLEST TREAD DEPTHS SHALL NOT EXCEED ⅜ INCHES.

CONCRETE STEPS

CITY OF COLUMBUS, OHIO
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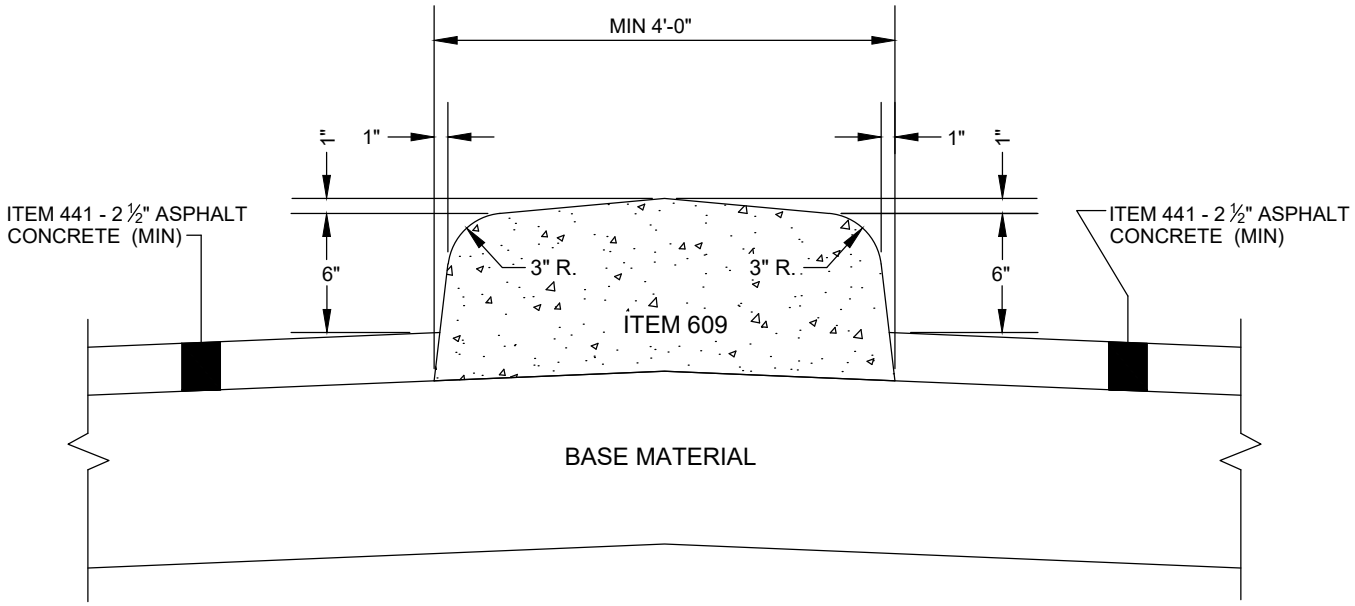
SHT 3 OF 3



2.74 C.F. CONCRETE PER L.F. FOR 4' WIDTH.

3.99 C.F. CONCRETE PER L.F. FOR 6' WIDTH.

JOINTS: ¼" CONTRACTION JOINTS SHALL BE CONSTRUCTED OR SAWED AT 10' INTERVALS TO A 2" MINIMUM DEPTH AND ALIGNED WITH TRANSVERSE CONSTRUCTION JOINTS IN BASE.

SLOPE OF TOP OF MEDIAN TO BE IN SAME DIRECTION AS PAVEMENT SLOPE ON EITHER SIDE OF MEDIAN.

MEDIAN NOSE SHALL BE TAPERED FROM 6" TO 2" IN 4'-0" OR GREATER INTERVALS.

CONCRETE MEDIAN

CITY OF COLUMBUS, OHIO
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CITY ENGINEER

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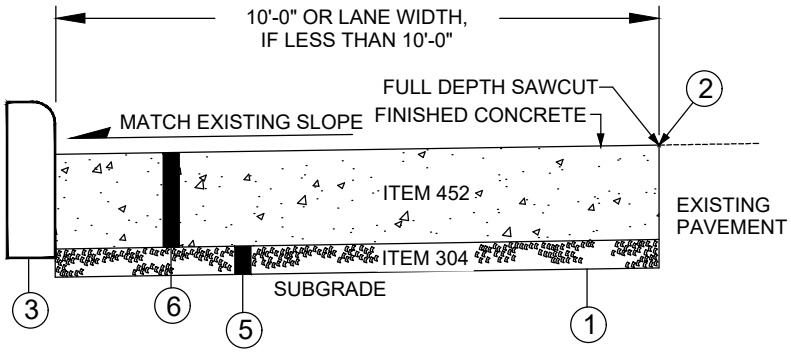
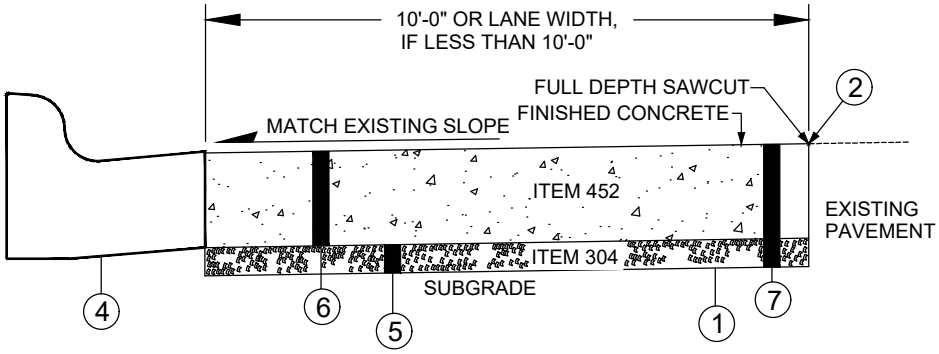


TYPE A: CONCRETE BUS PAD AT LOCATIONS WITH STRAIGHT CURB



TYPE B: CONCRETE BUS PAD AT LOCATIONS WITH COMBINATION CURB & GUTTER

1. ITEM 204 - SUBGRADE COMPACTION
2. ITEM 423 - CRACK SEALING, TYPE I
3. ITEM 609 - EXISTING CURB OR, CURB STRAIGHT 18" (STANDARD DRAWING 2000)
4. ITEM SPECIAL - COMBINATION CURB AND GUTTER, TYP. SPECIAL 10" (STANDARD DRAWING 2020, MODIFIED)
5. ITEM 304 - 6" AGGREGATE BASE
6. ITEM 452 - 10" NON-REINFORCED CONCRETE PAVEMENT
7. PAVEMENT REMOVAL AND ITEM 203 - EXCAVATION

ITEM SPECIAL, CONCRETE BUS PAD, S.Y., SHALL INCLUDE THE FOLLOWING ITEMS:

ALL SAWCUTTING, PAVEMENT REMOVAL, ITEM 203 - EXCAVATION, ITEM 204 - SUBGRADE COMPACTION, ITEM 304 - 6" AGGREGATE BASE, ITEM 423 - CRACK SEALING, TYPE I, AND ITEM 452 - 10" NON-REINFORCED CONCRETE PAVEMENT.

FOR TYPE B CONDITION, THE EXISTING COMBINATION CURB & GUTTER SHALL BE REPLACED TO LIMITS OF BUS PAD INSTALLATION UNLESS WAIVED BY ENGINEER.

CONCRETE BUS PAD

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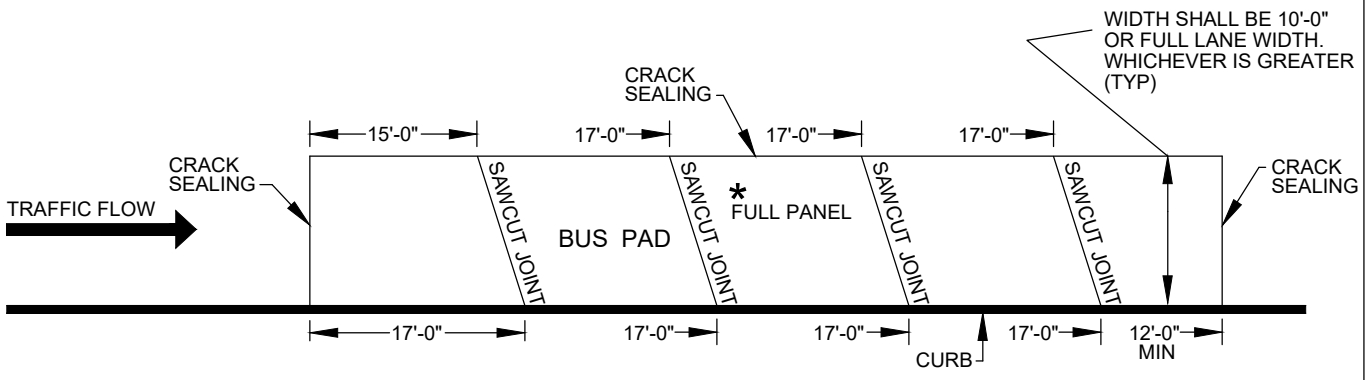
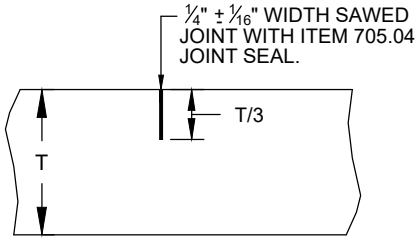
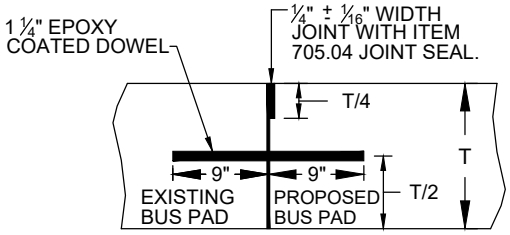


TRANSVERSE JOINT PLAN VIEW



DETAIL "A"



DETAIL "B"

TRANSVERSE JOINT

EACH CONCRETE BUS PAD SHALL BE SAWCUT TO PROVIDE EQUAL PANELS WITH CONTRACTION JOINTS SPACED AT A MAXIMUM OF 17 FEET.

THE JOINT SHALL BE SKEWED WITH THE RIGHT EDGE OF THE JOINT 2 FEET AHEAD OF THE LEFT EDGE IN THE DIRECTION OF TRAVEL OVER WIDTH OF BUS PAD (SEE PLAN VIEW ABOVE AND DETAIL "A").

EACH SAWCUT JOINT SHALL BE SEALED WITH ITEM 705.04.

PARTIAL BUS PAD REPLACEMENT

* ANY PARTIAL REPLACEMENT SHALL BE NO LESS THAN A FULL PANEL.

CONSTRUCTION JOINT

1) AT LOCATIONS WHERE A CONSTRUCTION JOINT IS REQUIRED (WHERE THE BUS PAD REQUIRES PARTIAL REPLACEMENT OR LENGTHENING), 1 ¼" EPOXY COATED DOWELS ARE TO BE USED AS SHOWN IN DETAIL "B".

2) DOWELS SHALL BE SPACED AT 12" CENTERS FOR TRANSVERSE JOINTS, BEGINNING 6" FROM THE JOINT.

3) THIS WORK SHALL BE PAID FOR UNDER ITEM 509 - EPOXY COATED REINFORCING (POUNDS) AND ITEM 510 - DOWEL HOLES (EACH).

TRANSVERSE JOINT

CONCRETE BUS PAD

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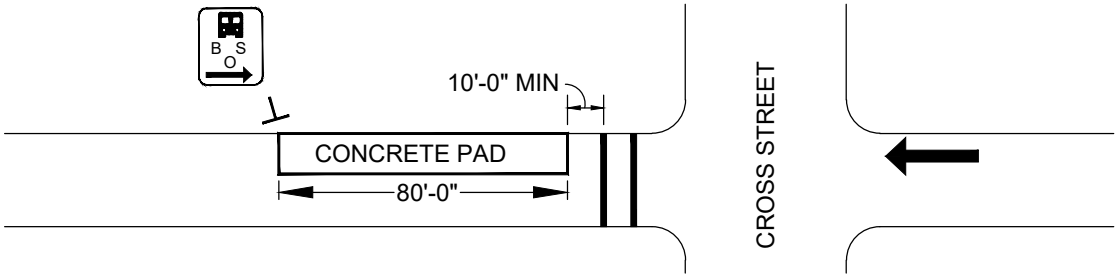
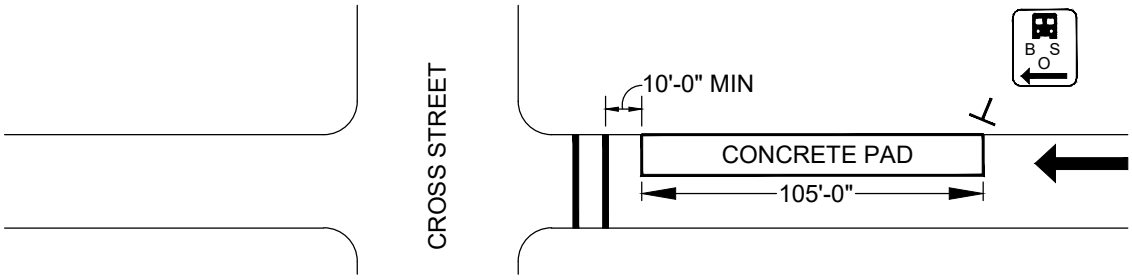
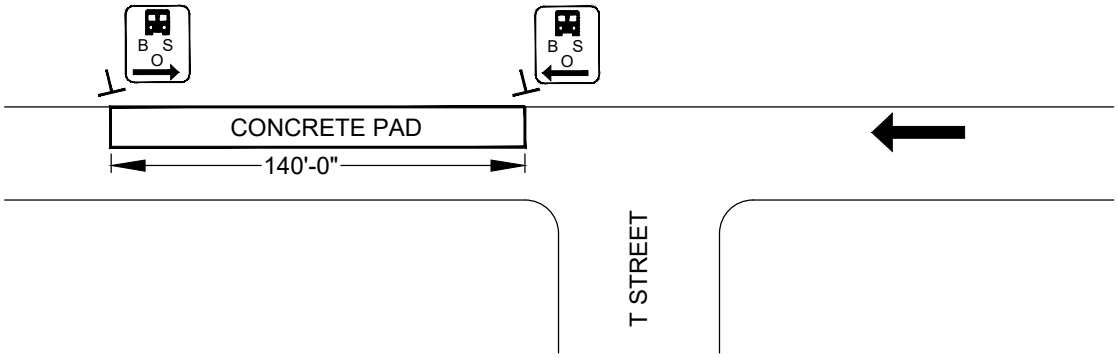


FAR SIDE BUS STOP



NEAR SIDE BUS STOP



MID BLOCK BUS STOP

DIRECTION OF TRAVEL

TYPICAL LOCATIONS

CONCRETE BUS PAD

CITY OF COLUMBUS, OHIO
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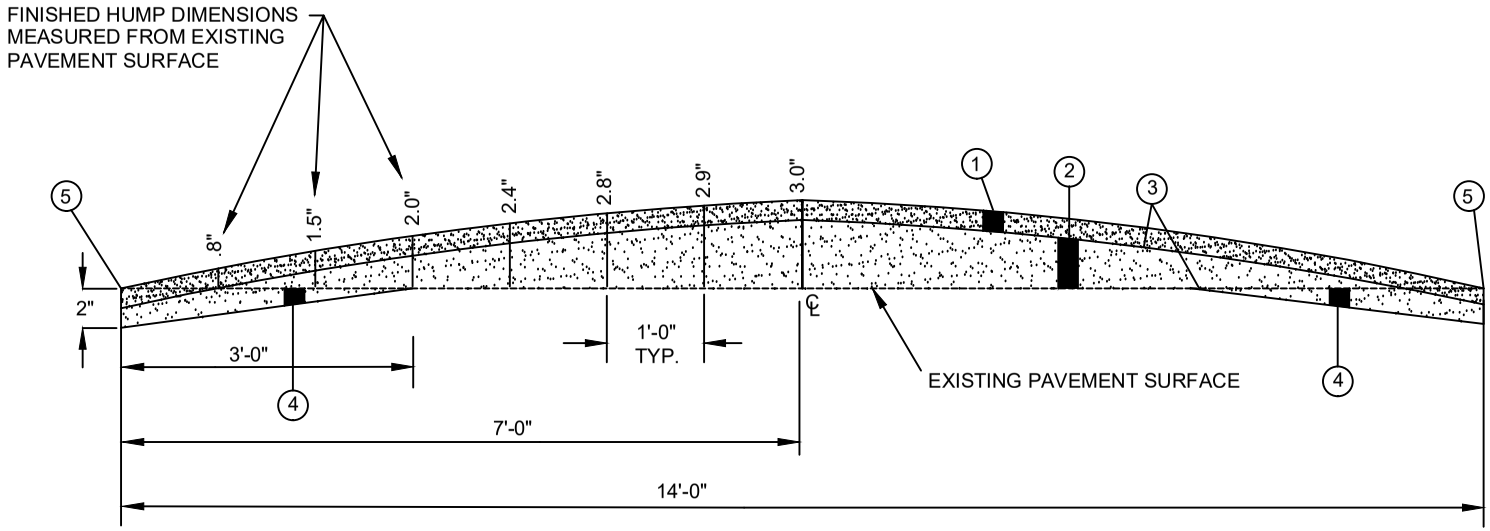

CROSS - SECTION

1. ITEM 441 - 1 ½" ASPHALT CONCRETE, SURFACE COURSE (TYPE 1), PG64-22
2. ITEM 441 - VAR. ASPHALT CONCRETE, INTERMEDIATE COURSE (TYPE 2), PG64-22
3. ITEM 407 - TACK COAT
4. ASPHALT REMOVED
5. ITEM 423 - CRACK SEALING, TYPE I

THE TEMPERATURE FOR ITEM 441 - ASPHALT CONCRETE, INTERMEDIATE COURSE SHALL BE < 150° F BEFORE ITEM 441 - ASPHALT CONCRETE, SURFACE COURSE CAN BE PLACED.

ITEM SPECIAL: 14' SPEED HUMP (EACH)

TOLERANCES (@ CREST) -¼" TO +½"

14' SPEED HUMP

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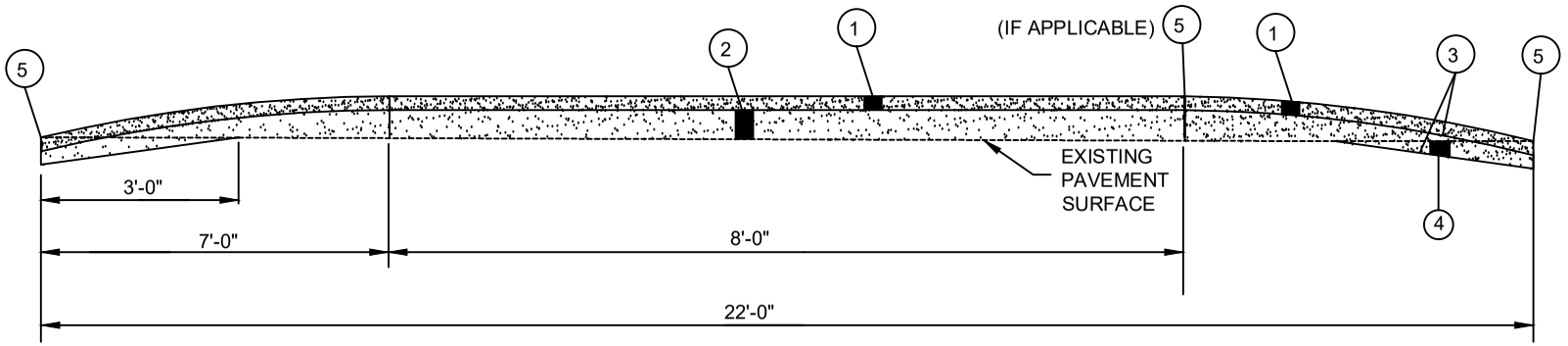


(1) ITEM 441 - 1 ½" ASPHALT CONCRETE, SURFACE COURSE (TYPE 1), PG64-22

(2) ITEM 441 - VAR. ASPHALT CONCRETE, INTERMEDIATE COURSE (TYPE 2), PG64-22

(3) ITEM 407 - TACK COAT

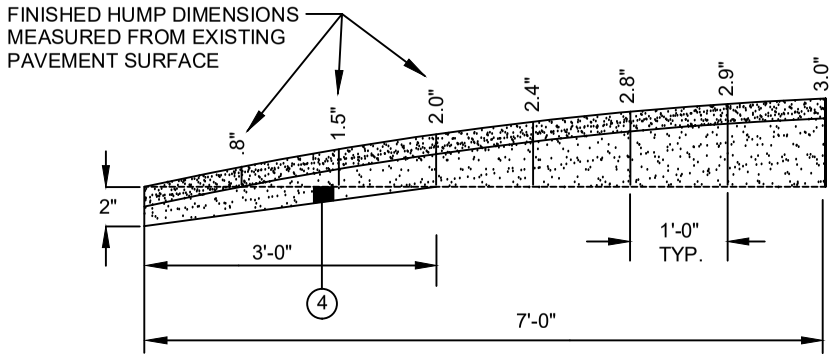
(4) ASPHALT REMOVED

(5) ITEM 423 - CRACK SEALING, TYPE I

THE TEMPERATURE FOR ITEM 441 - ASPHALT CONCRETE, INTERMEDIATE COURSE SHALL BE < 150° F BEFORE ITEM 441 - ASPHALT CONCRETE, SURFACE COURSE CAN BE PLACED.

ITEM SPECIAL: 22' SPEED HUMP (EACH)

TOLERANCES (@ CREST) -¼" TO +½"



CROSS - SECTION

22' SPEED HUMP

CITY OF COLUMBUS, OHIO
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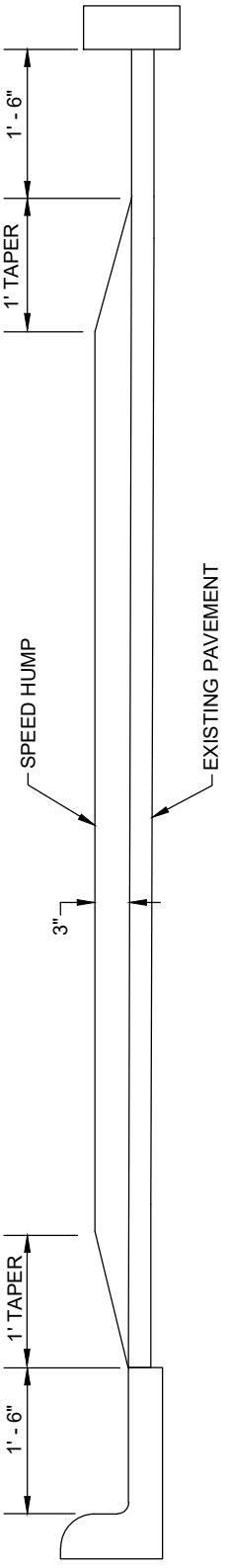
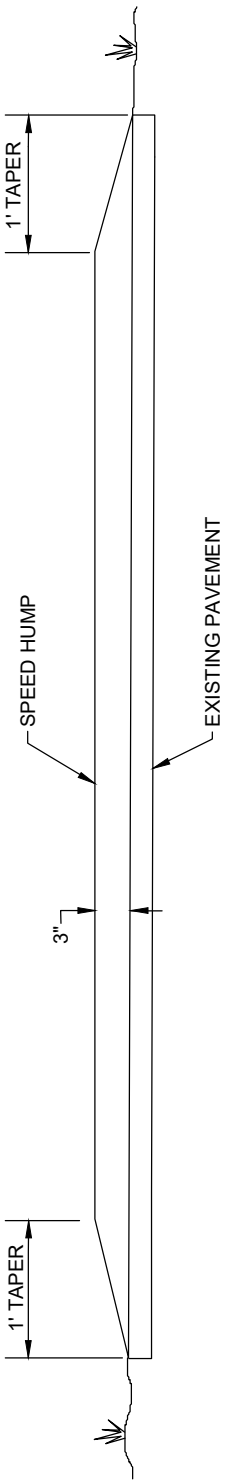


CURB & GUTTER OR STRAIGHT CURB



UNCURBED

ROADWAY CROSS - SECTION

SPEED HUMP

NOTE: DRAWING DOES NOT SHOW REQUIRED ASPHALT REMOVAL. REFER TO SHEETS 1 OF 3 AND 2 OF 3.

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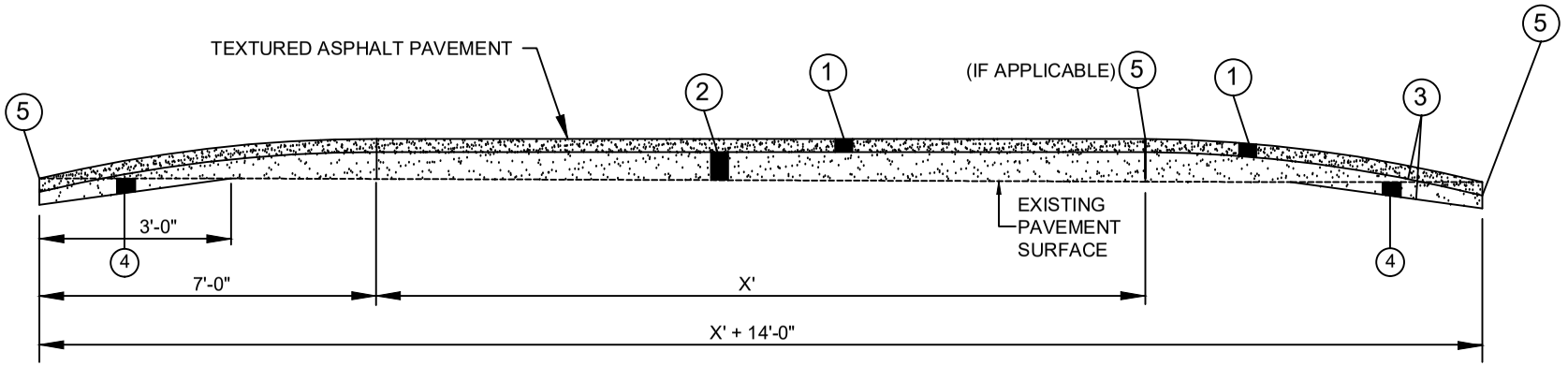


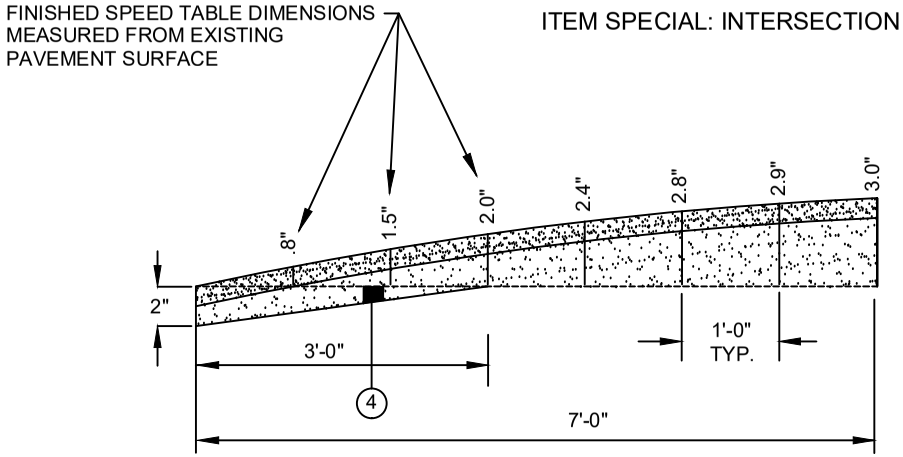
1. ITEM 441 - 1 ½" ASPHALT CONCRETE, SURFACE COURSE (TYPE 1), PG64-22
2. ITEM 441 - VAR. ASPHALT CONCRETE, INTERMEDIATE COURSE (TYPE 2), PG64-22
3. ITEM 407 - TACK COAT
4. ASPHALT REMOVED
5. ITEM 423 - CRACK SEALING, TYPE I

THE TEMPERATURE FOR ITEM 441 - ASPHALT CONCRETE, INTERMEDIATE COURSE SHALL BE < 150° F BEFORE ITEM 441 - ASPHALT CONCRETE, SURFACE COURSE CAN BE PLACED.

X = VARIES ACCORDING TO STREET WIDTH.

ITEM SPECIAL: INTERSECTION SPEED TABLE (EACH)

CROSS - SECTION



INTERSECTION SPEED TABLE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

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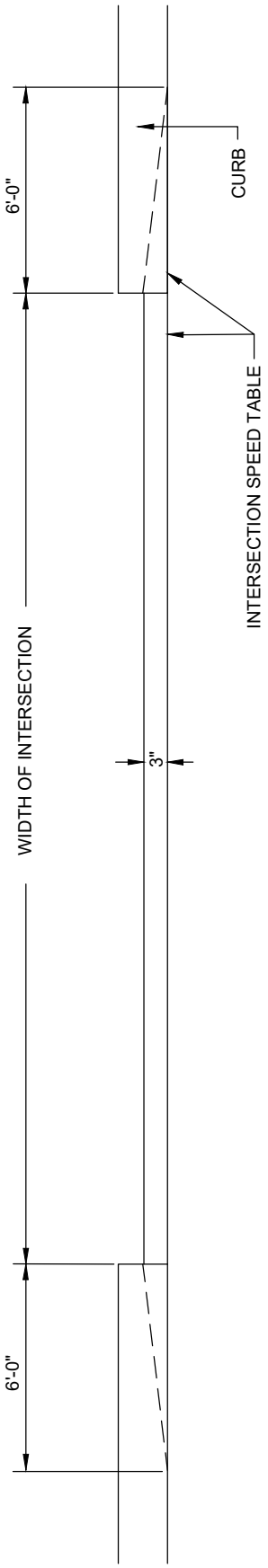
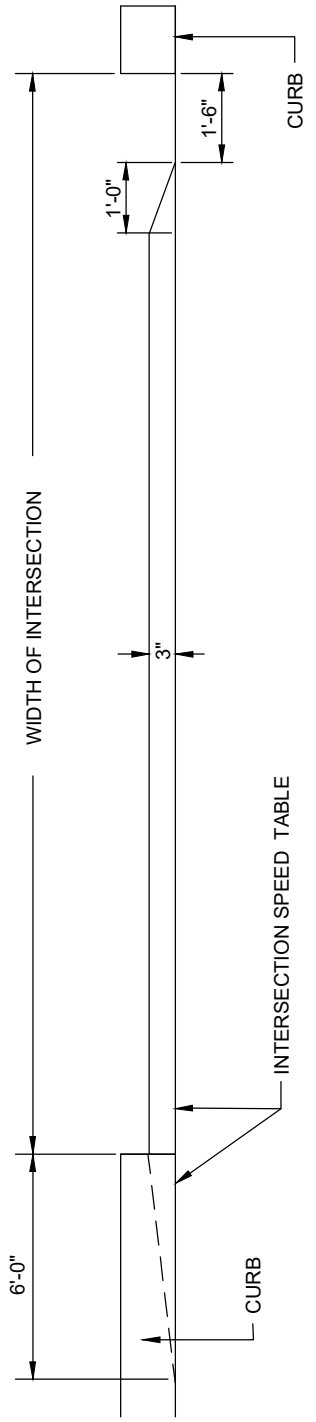


FOUR - LEG INTERSECTION



THREE - LEG INTERSECTION

ROADWAY CROSS - SECTION

INTERSECTION SPEED TABLE

CITY OF COLUMBUS, OHIO
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STD DWG
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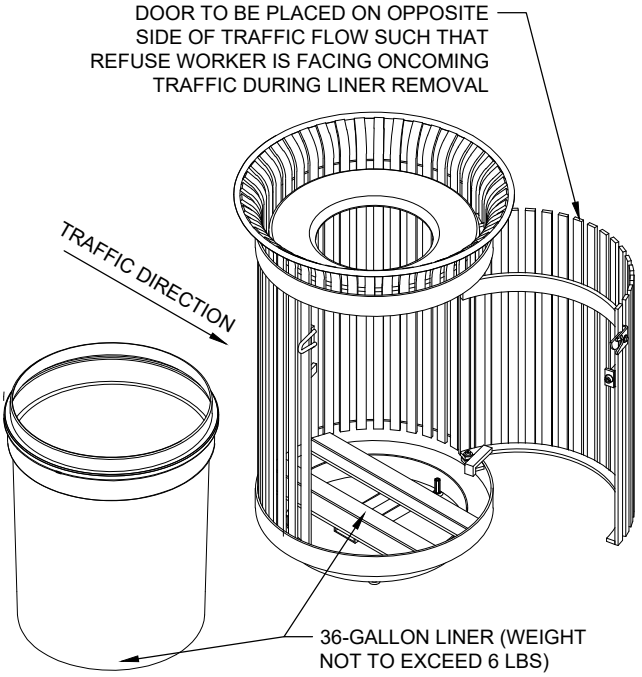
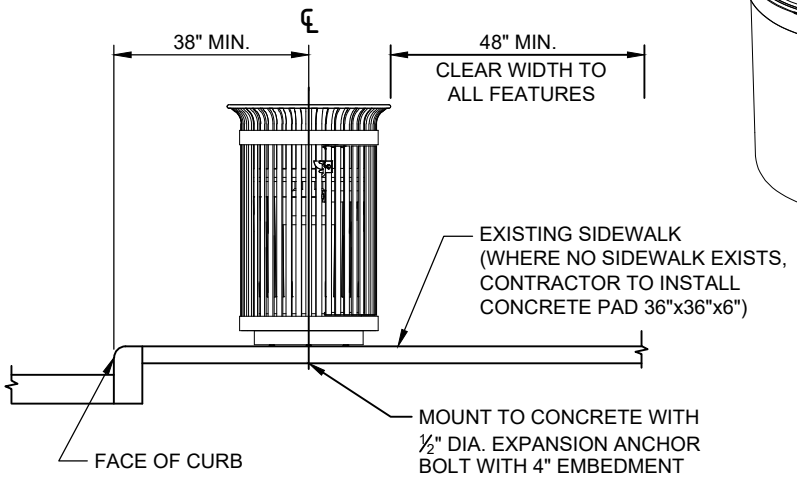
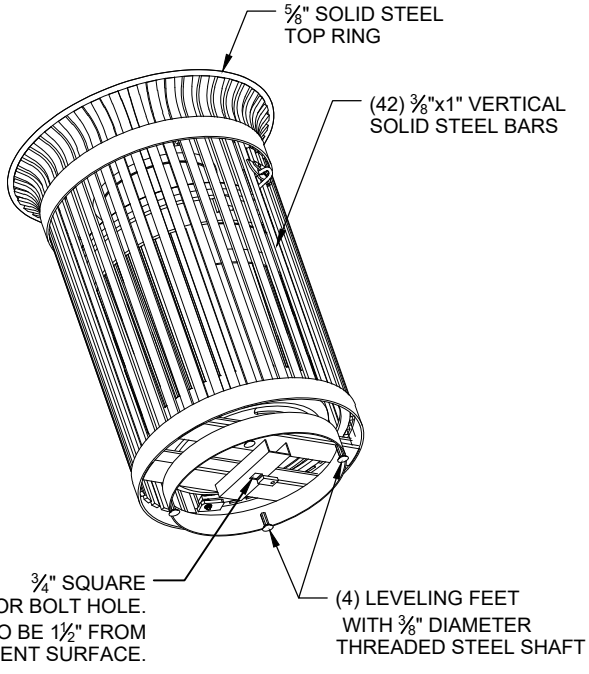
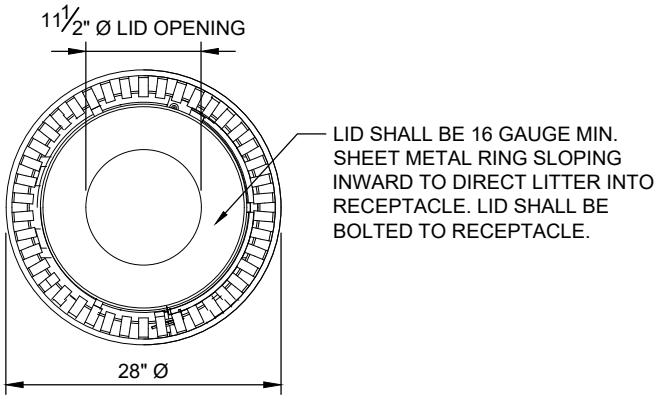
NOTES:

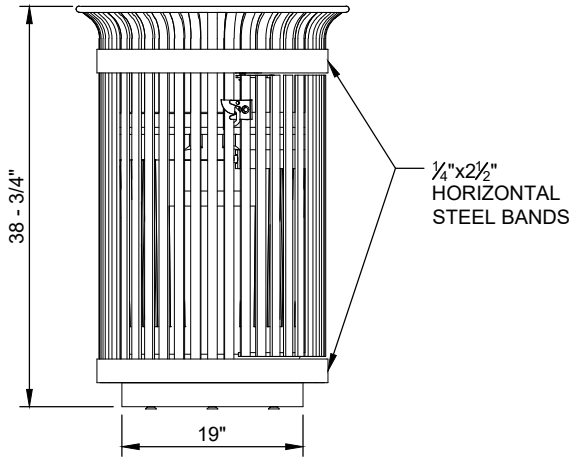
1. SHIPPING WEIGHT OF RECEPTACLE SHALL BE 280 LBS, MIN.
2. RECEPTACLE SHALL HAVE SIDE DOOR ACCESS. USE OIL IMPREGNATED BRONZE BUSHINGS AND STAINLESS STEEL PIVOT PINS FOR DOOR MOVEMENT, WITH 3/16" SOLID STEEL LATCH ASSEMBLY (NO LOCK).
3. ALL FABRICATED METAL COMPONENTS SHALL BE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER COATINGS, 8-10 MILS THICK. ALL PARTS SHALL BE BLACK POWDER COATED.
4. RECEPTACLES SHALL NOT BE INSTALLED NEXT TO ON-STREET PARKING.
5. LINER SHALL BE BLACK HIGH-DENSITY POLYETHYLENE PLASTIC. PLASTIC LINER REINFORCED, RIBBED AND MOLDED FOR LONGER LIFE, MINIMUM HEIGHT 26-3/4" - MAXIMUM 27-1/4", DIAMETER MINIMUM 21-1/2" - MAXIMUM 21-3/4".











LITTER RECEPTACLE
36 GALLON CAPACITY

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
2400

12/31/2018

SHT 1 OF 1