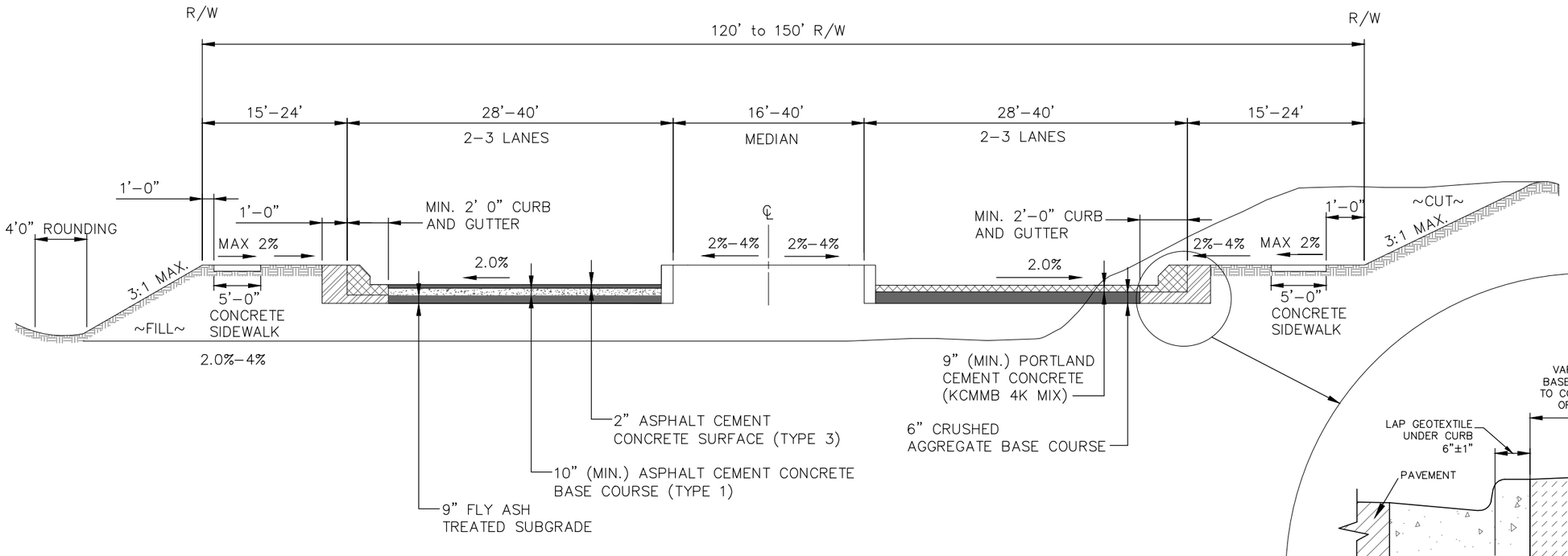
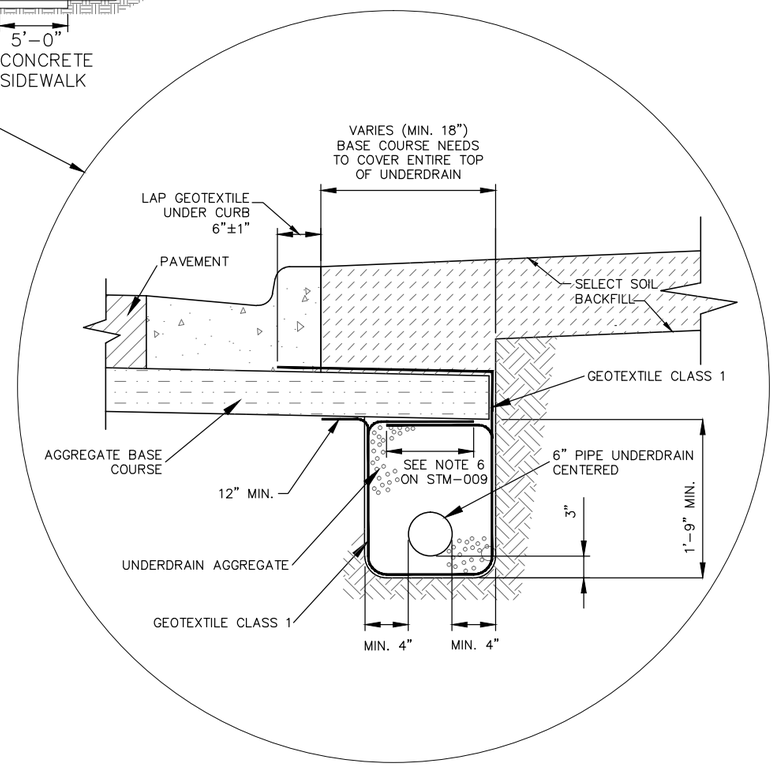




NOTE:

1. CUT AND FILL SECTIONS ARE TYPICAL ONLY. NEITHER ALTERNATE PAVEMENT TYPE IS SPECIFIED FOR EXCLUSIVE USE WITH CUT OR FILL SECTIONS. REFER TO SPECIFICATIONS FOR INFORMATION ON FLY ASH TREATED SUBGRADE, CRUSHED AGGREGATE BASE COURSE, AND PAVEMENT UNDERDRAINS.
2. THE PAVEMENT THICKNESSES ARE RECOMMENDED MINIMUMS. THE ACTUAL PAVEMENT DESIGN THICKNESS SHOULD BE DETERMINED BY AN ENGINEERING ANALYSIS OF THE TRAFFIC AND LOCAL SUBGRADE CONDITIONS. THE CITY RESERVES THE RIGHT TO REQUIRE ADDITIONAL PAVEMENT THICKNESS IF CONDITIONS WARRANT.
3. OTHER PAVEMENT, SUBGRADE, AND SUBBASE TYPE OPTIONS MAY BE CONSIDERED IF SUBMITTED TO THE CITY OF BELTON FOR APPROVAL ALONG WITH AN ENGINEERING ANALYSIS AND/OR GEOTECHNICAL REPORT.
4. GEOGRID IS NOT REQUIRED FOR USE WITH THE RECOMMENDATIONS IN THIS DRAWING. IF USED AT THE DESIGNER'S OPTION OR PER RECOMMENDATION OF GEOTECHNICAL REPORT, GEOGRID SHALL BE TENSAR BX1100 OR APPROVED EQUIVALENT.
5. WHERE CURB AND GUTTER IS MONOLITHIC WITH THE STREET, THE CURB SHALL BE POURED AT THE SAME DEPTH AS THE STREET.
6. UNLESS SPECIFIED OTHERWISE, KCMMB 4K IS REQUIRED FOR ALL CONCRETE.

TYPICAL ROADWAY SECTION MAJOR ARTERIAL

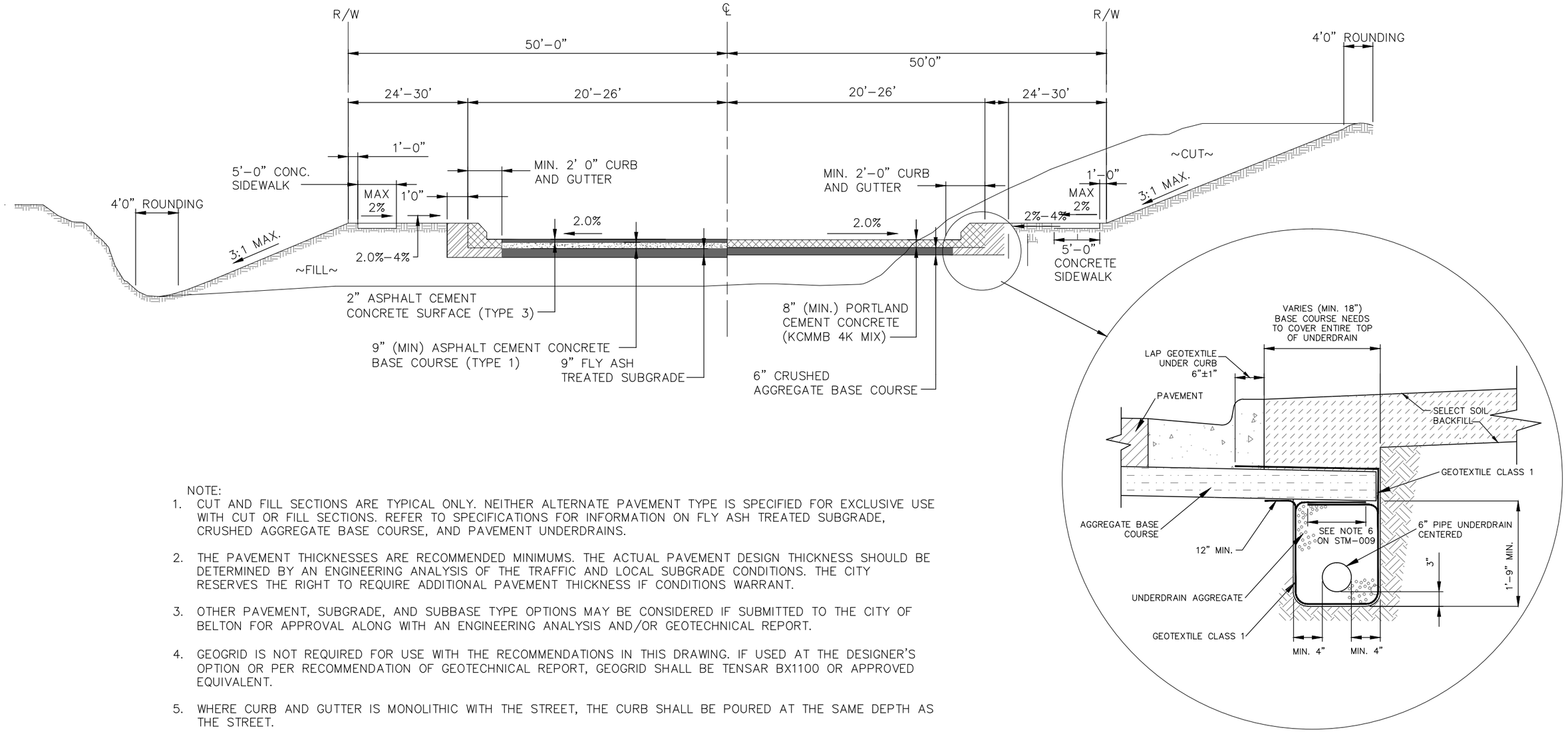
2015 Details

PUBLIC WORKS

City of BELTON Missouri

TYPICAL SECTION - MAJOR ARTERIAL

SCALE:	NO SCALE	REV.	
DETAIL NO:	STR-001		
DATE:	03-16-15		



NOTE:

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5. WHERE CURB AND GUTTER IS MONOLITHIC WITH THE STREET, THE CURB SHALL BE POURED AT THE SAME DEPTH AS THE STREET.
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TYPICAL ROADWAY SECTION MINOR ARTERIAL

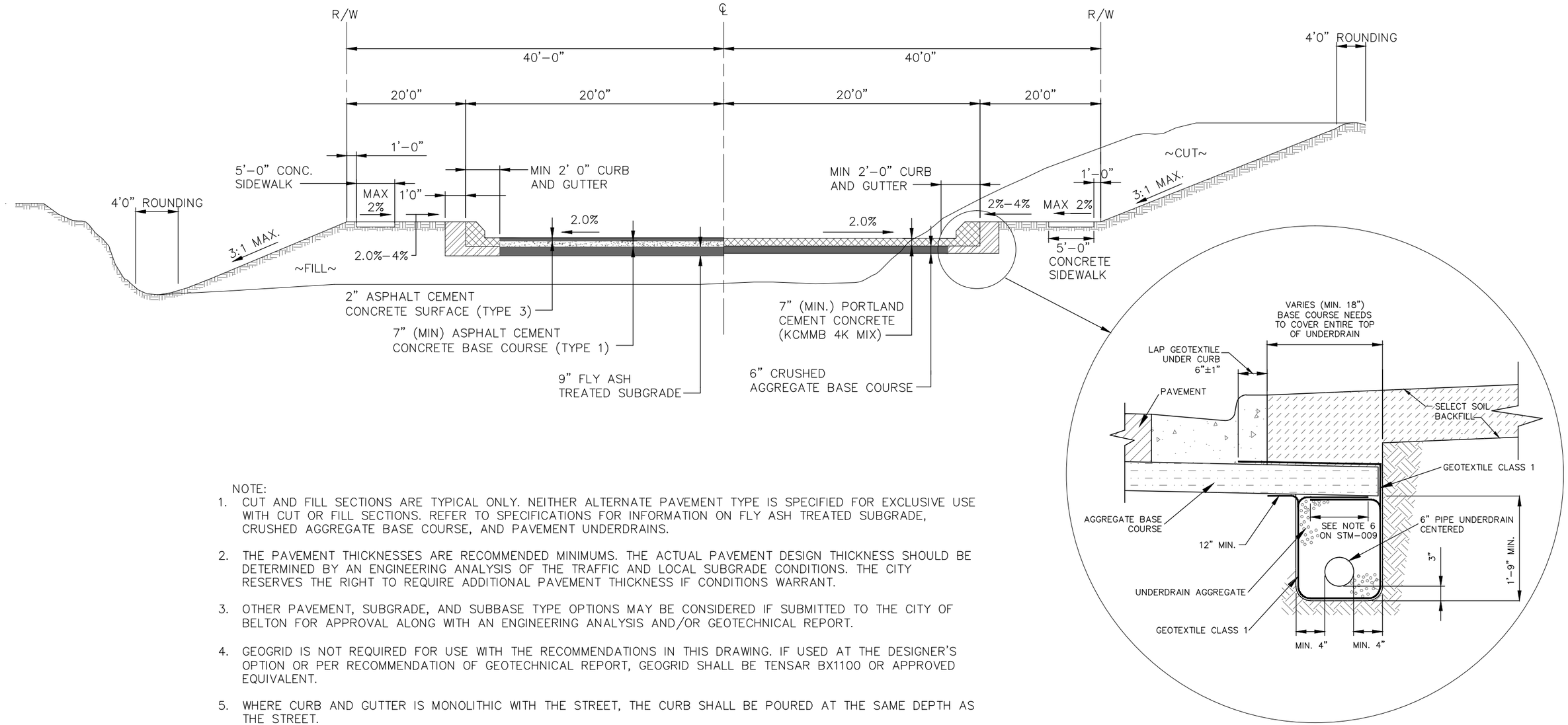
2015 Details

City of BELTON Missouri

PUBLIC WORKS

TYPICAL SECTION MINOR ARTERIAL

SCALE:	NO SCALE	REV.		
DETAIL NO:	STR-002			
DATE:	03-16-15			



NOTE:

1. CUT AND FILL SECTIONS ARE TYPICAL ONLY. NEITHER ALTERNATE PAVEMENT TYPE IS SPECIFIED FOR EXCLUSIVE USE WITH CUT OR FILL SECTIONS. REFER TO SPECIFICATIONS FOR INFORMATION ON FLY ASH TREATED SUBGRADE, CRUSHED AGGREGATE BASE COURSE, AND PAVEMENT UNDERDRAINS.
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6. UNLESS SPECIFIED OTHERWISE, KCMMB 4K IS REQUIRED FOR ALL CONCRETE.

TYPICAL ROADWAY SECTION - INDUSTRIAL/COMMERCIAL COLLECTOR STREET

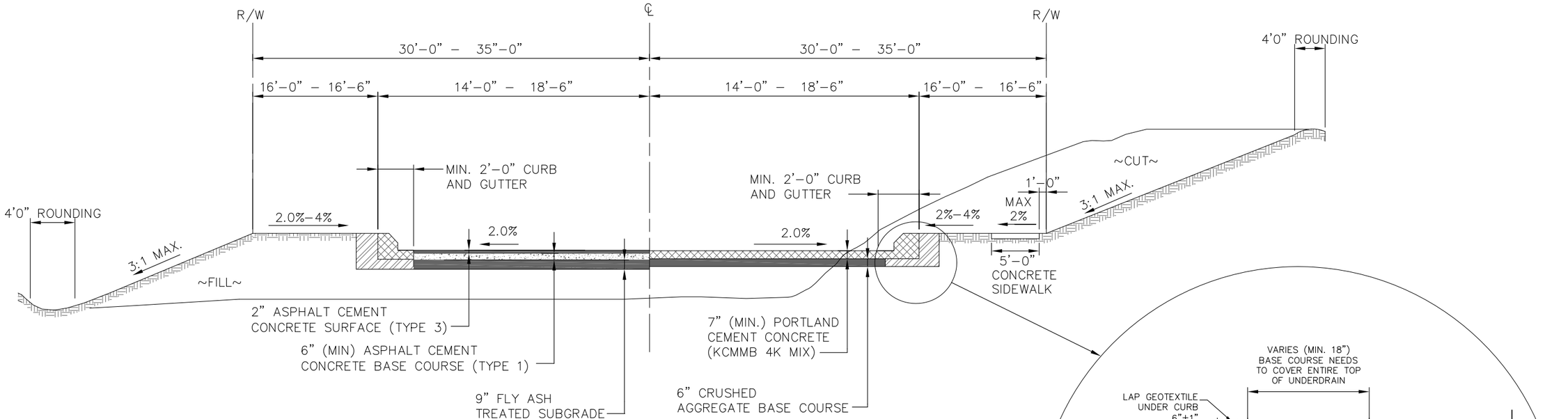
2015 Details

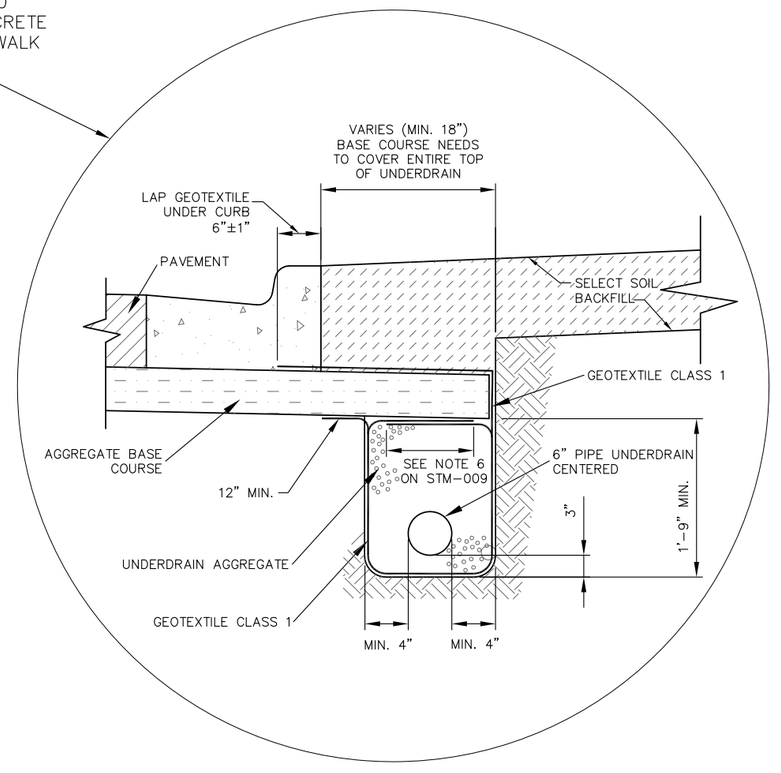
City of BELTON Missouri

PUBLIC WORKS

TYPICAL SECTION - COMMERCIAL

SCALE:	NO SCALE	REV.		
DETAIL NO:	STR-003			
DATE:	03-16-15			





NOTE:

1. CUT AND FILL SECTIONS ARE TYPICAL ONLY. NEITHER ALTERNATE PAVEMENT TYPE IS SPECIFIED FOR EXCLUSIVE USE WITH CUT OR FILL SECTIONS. REFER TO SPECIFICATIONS FOR INFORMATION ON FLY ASH TREATED SUBGRADE, CRUSHED AGGREGATE BASE COURSE, AND PAVEMENT UNDERDRAINS.
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5. WHERE CURB AND GUTTER IS MONOLITHIC WITH THE STREET, THE CURB SHALL BE POURED AT THE SAME DEPTH AS THE STREET.
6. UNLESS SPECIFIED OTHERWISE, KCMMB 4K IS REQUIRED FOR ALL CONCRETE.

TYPICAL ROADWAY SECTION - RESIDENTIAL
COLLECTOR/LOCAL/ACCESS STREET

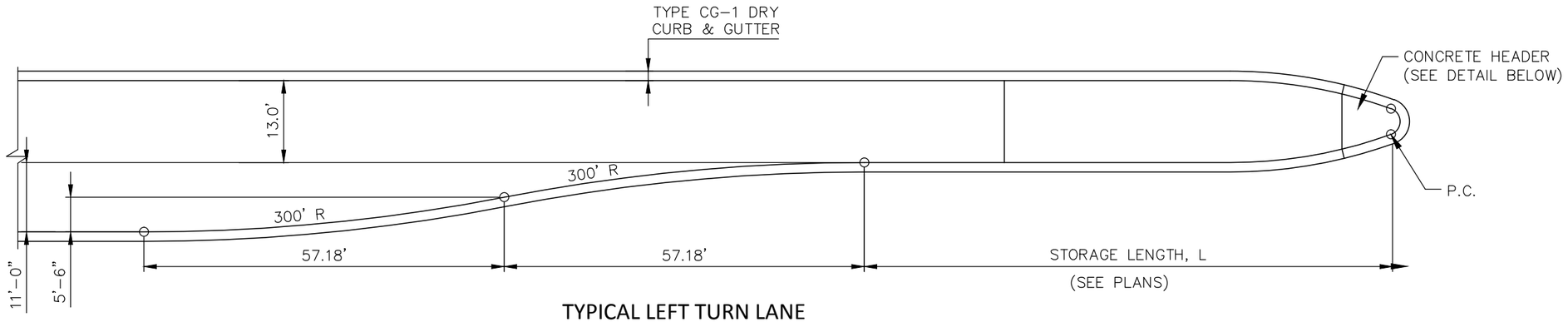
2015 Details

City of BELTON Missouri

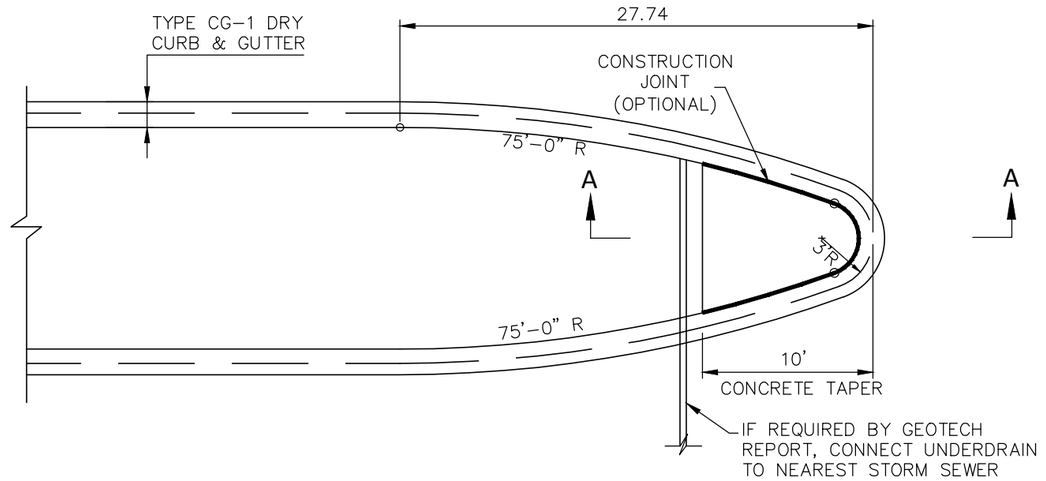
PUBLIC WORKS

TYPICAL SECTION - RESIDENTIAL

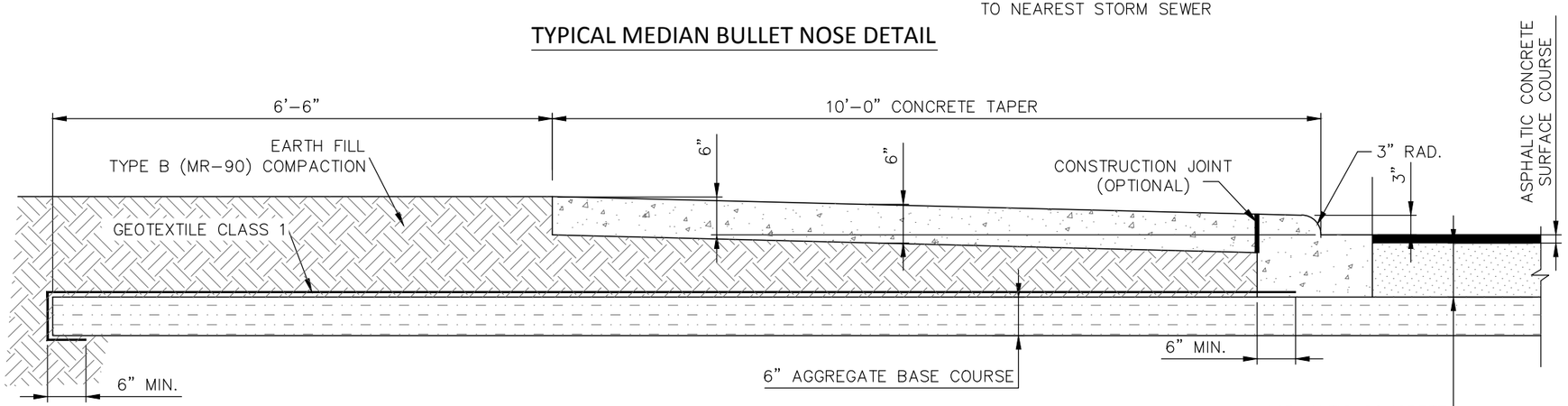
SCALE:	NO SCALE	REV.		
DETAIL NO:	STR-004			
DATE:	03-16-15			



TYPICAL LEFT TURN LANE



TYPICAL MEDIAN BULLET NOSE DETAIL



SECTION A-A

MEDIAN NOSE DETAIL
LEFT TURN BAY ISLANDS

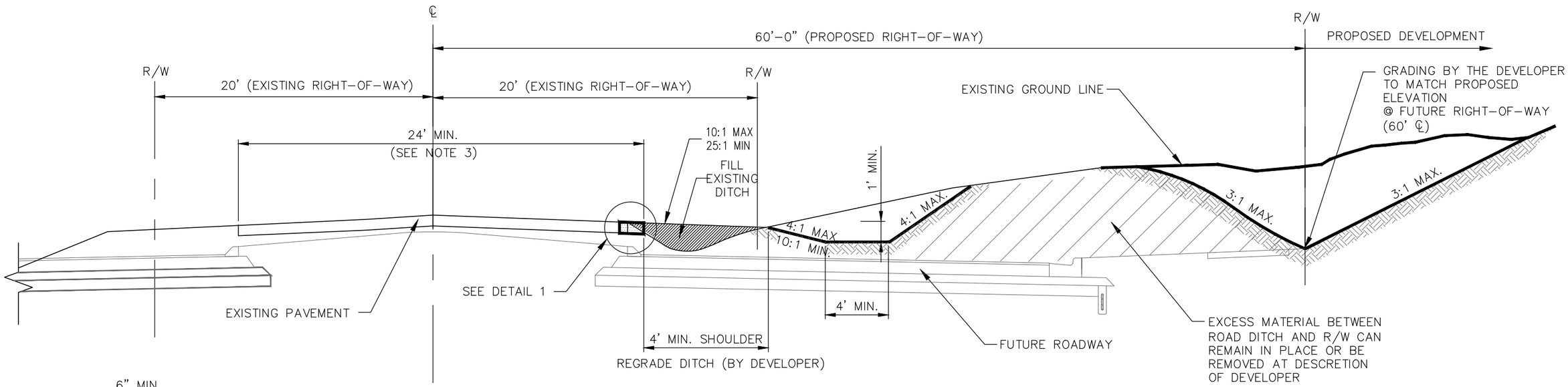
2015 Details

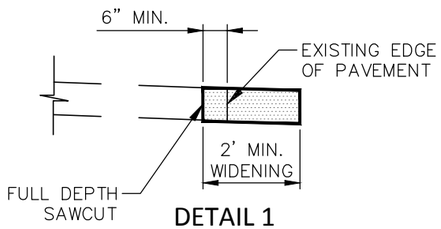
City of
BELTON
Missouri

PUBLIC WORKS

THOROUGHFARE MEDIAN NOSE

SCALE:	NO SCALE	REV.		
DETAIL NO:	STR-005			
DATE:	03-16-15			



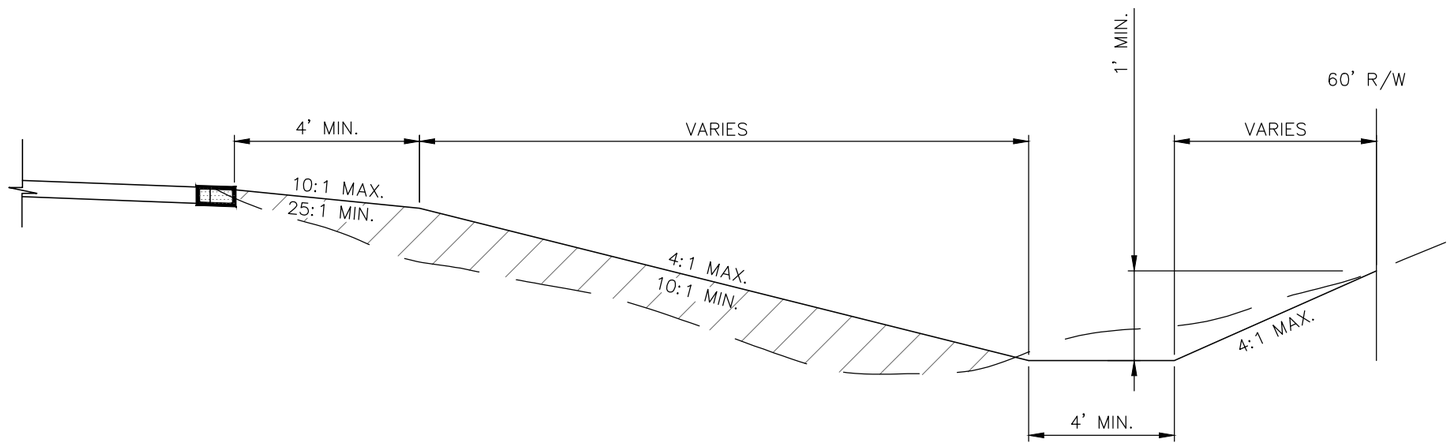


DETAIL 1

GRADING ALONG PLATTED SUBDIVISION ADJACENT TO UNIMPROVED THOROUGHFARE (CUT SECTION)

NOTES:

1. IN ACCORDANCE WITH OPMC CHAPTER 18.460.260, IF THE EXISTING PAVEMENT IS IRREGULAR, EXCESSIVLY DETERIORATED, OR CONSTRUCTED OF MATERIAL OTHER THAN ASPHALTIC CONCRETE, THE ENTIRE STREET SECTION SHALL BE OVERLAYED WITH 3 INCHES OF ASPHALTIC CONCRETE INTERMEDIATE COURSE (SURFACE). OVERLAY THICKNESS OF LESS THAN 3 INCHES MAY BE INSTALLED AS DETERMINED BY THE CITY ENGINEER.
2. IF THE EXISTING PAVEMENT SECTION IS LESS THAN 22 FEET IN WIDTH, THE PAVEMENT SHALL BE WIDENED FOR A MINIMUM OF 2 FEET TO A MINIMUM WIDTH OF 24 FEET.
3. ANY CROSS ROAD PIPES, DRIVEWAY OR STREET CULVERTS, AND OTHER CLEAR ZONE OBSTRUCTIONS ON THE WIDENED SIDE OF THE ROADWAY SHALL BE MODIFIED AS NECESSARY TO MEET THE REQUIREMENTS OF THE ROADSIDE DESIGN GUIDE. IF THIS IS NOT PRACTICAL, INSTALLATION OF GUARDRAILS MAY BE REQUIRED AS DETERMINED BY THE CITY ENGINEER.
4. SHOULDERS FOR THE WIDENED SECTION SHALL MATCH THE EXISTING SHOULDER MATERIALS WITHIN THE PROJECT LIMITS.
5. DITCH SECTIONS SHALL BE DESIGNED TO CARRY THE 10–YEAR DESIGN FLOW.
6. THE CONTRACTOR SHALL SOD ALL DISTURBED AREAS WITHIN THE PUBLIC STREET RIGHT–OF–WAY ADJACENT TO DEVELOPED PROPERTY. THE CONTRACTOR SHALL SOD OR SEED AND MULCH ALL DISTURBED AREAS WITHIN OR OUTSIDE OF THE PUBLIC STREET RIGHT–OF–WAY ADJACENT TO UNDEVELOPED PROPERTY.



FILL SECTION SHOULDER IMPROVEMENTS

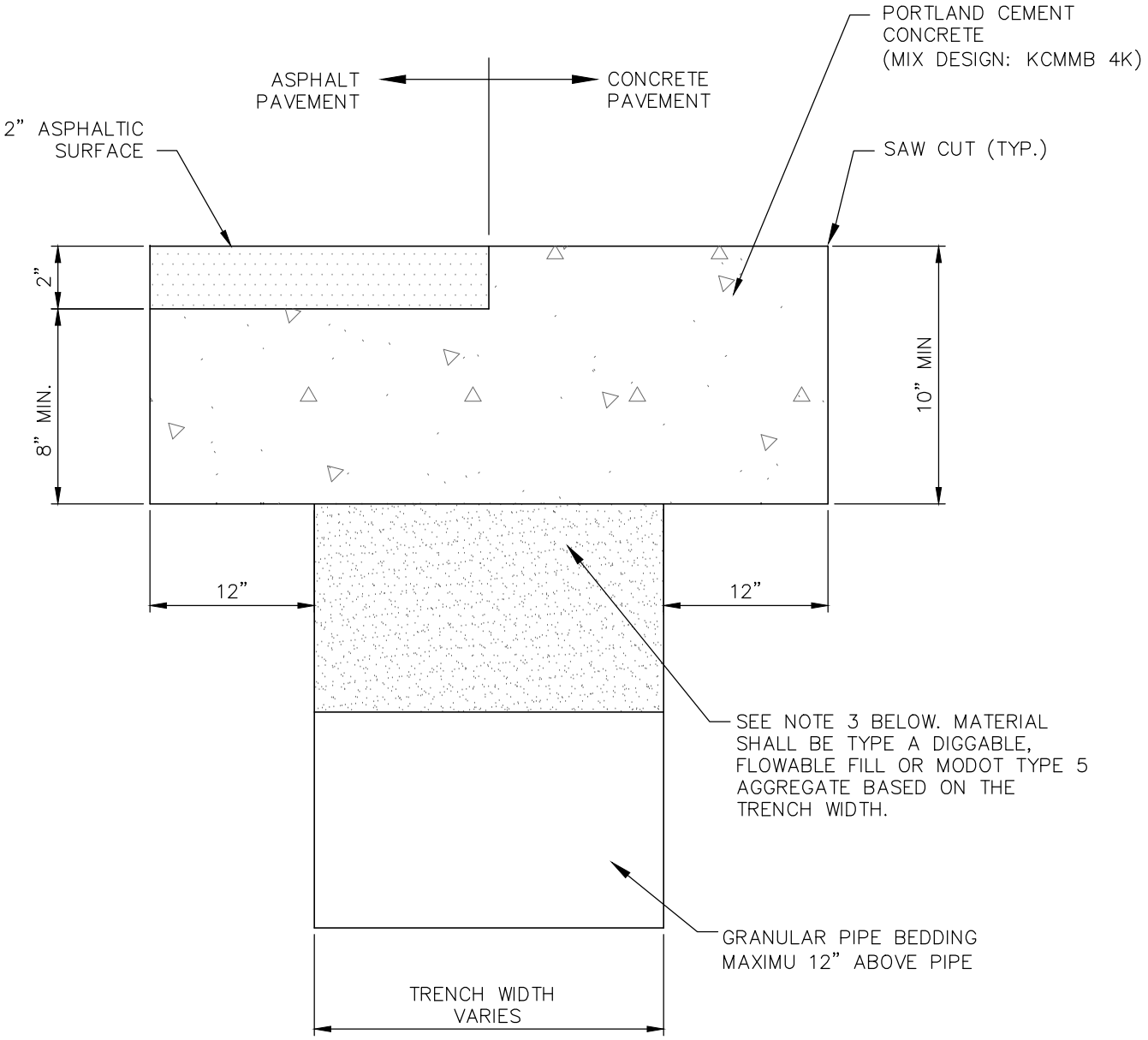
2015 Details

City of BELTON Missouri

PUBLIC WORKS

UNIMPROVED THOROUGHFARE GRADING

SCALE:	NO SCALE	REV.		
DETAIL NO:	STR-006			
DATE:	03-16-15			



STREET CUT REPAIR

NOTES:

1. ASPHALT PAVEMENT – PORTLAND CEMENT CONCRETE TO BE 8" MIN. DEPTH OR MATCH EXISTING PAVEMENT THICKNESS, WHICHEVER IS GREATER.
2. CONCRETE PAVEMENT – PORTLAND CEMENT CONCRETE TO BE 10" MIN. DEPTH OR MATCH EXISTING PAVEMENT THICKNESS, WHICHEVER IS GREATER.
3. IF THE TRENCH WIDTH IS GREATER THAN 24–INCHES, IT SHALL BE BACKFILLED WITH FLOWABLE FILL. FLOWABLE FILL MIX DESIGN TO BE APPROVED BY THE CITY PRIOR TO PLACEMENT.

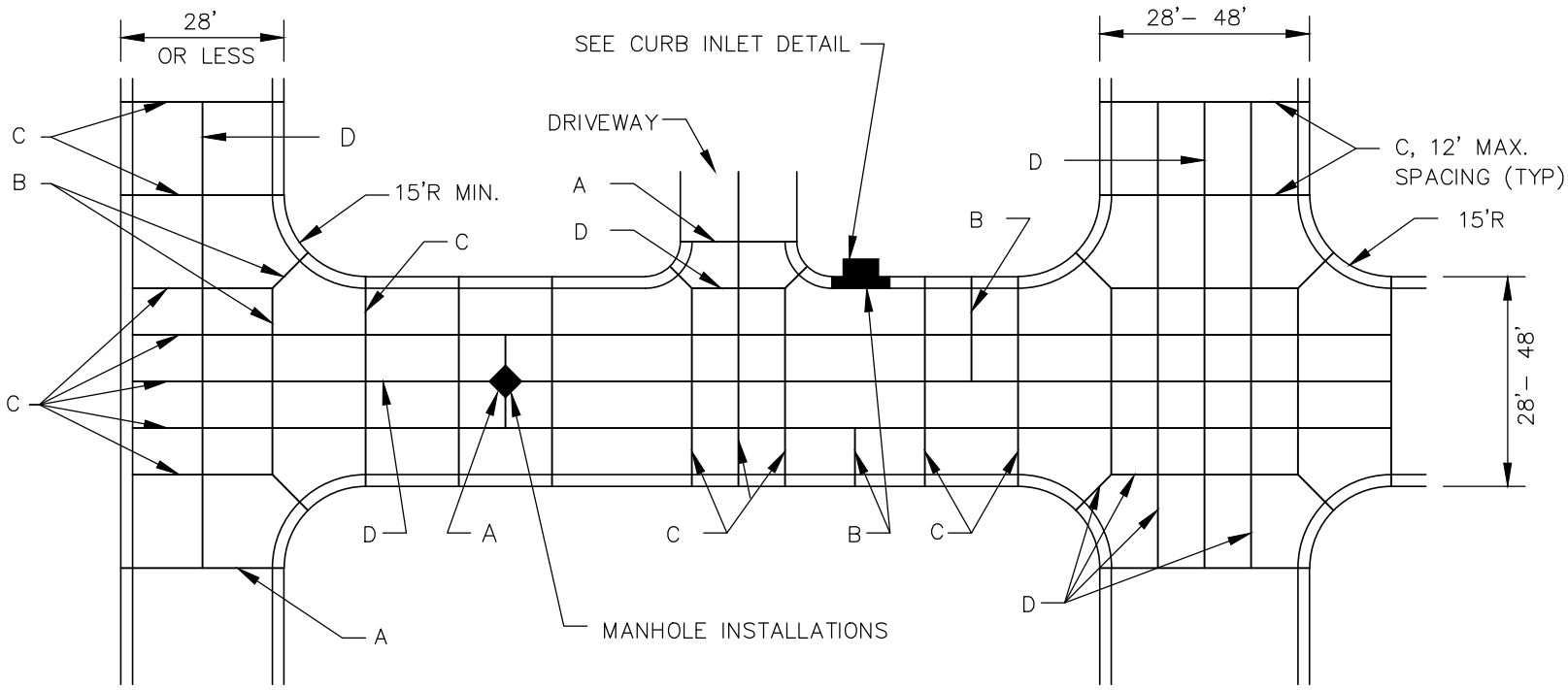
2015 Details

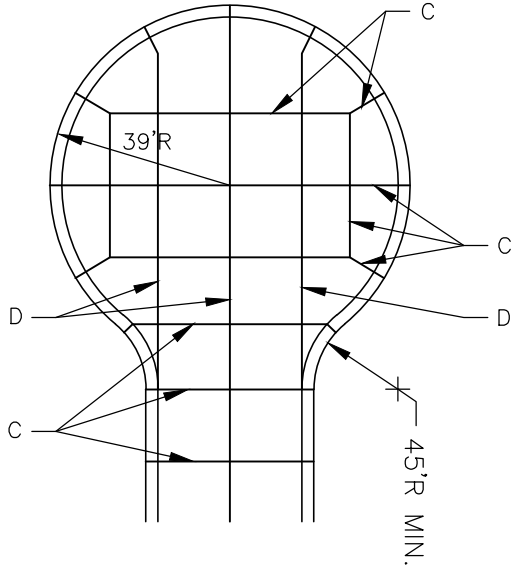
City of BELTON Missouri

PUBLIC WORKS

STREET CUT REPAIR

SCALE:	NO SCALE	REV.		
DETAIL NO:	STR-007			
DATE:	03-16-15			





LEGEND
A = EXPANSION JOINT
B = TRANSVERSE CONSTRUCTION JOINT
C = SAWED TRANSVERSE JOINT
D = LONGITUDINAL METAL CONSTRUCTION JOINT

SEE PAVEMENT JOINT DETAILS

2015 Details

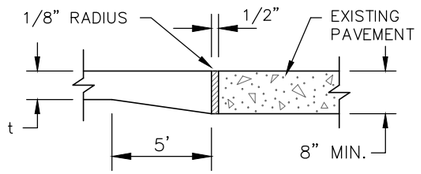
City of
BELTON
Missouri

PUBLIC WORKS

P.C.C. PAVEMENT SPECIAL DETAILS

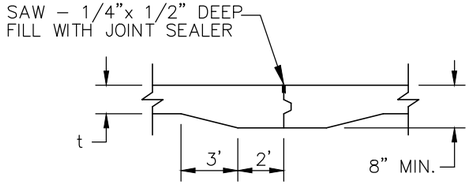
PAVEMENT JOINT LOCATIONS

SCALE:	NO SCALE	REV.		
DETAIL NO:	STR-008			
DATE:	03-16-15			



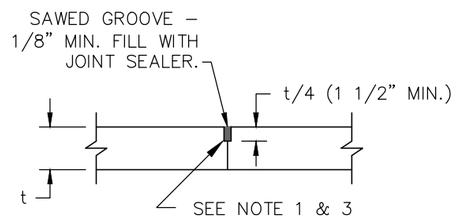
TYPE A

EXPANSION JOINT



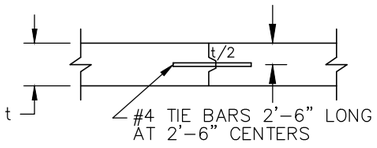
TYPE B

TRANSVERSE CONSTRUCTION JOINT



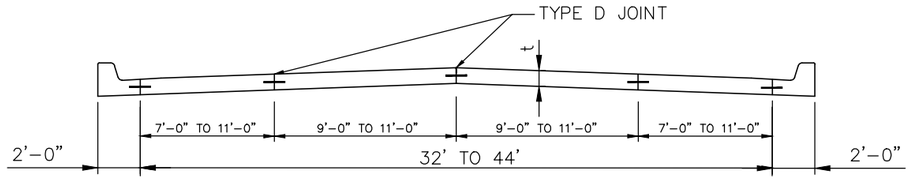
TYPE C

SAWED TRANSVERSE JOINT

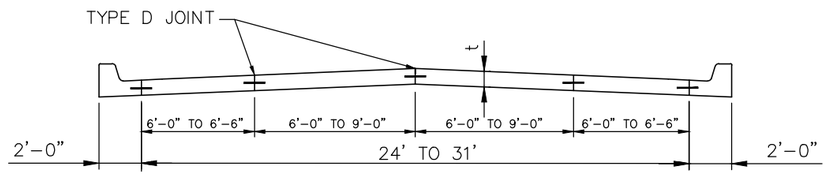


TYPE D

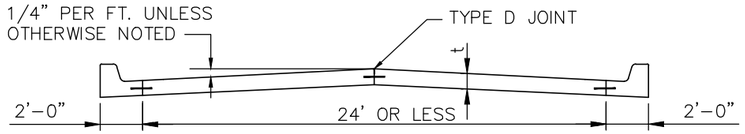
LONGITUDINAL METAL
CONSTRUCTION JOINT



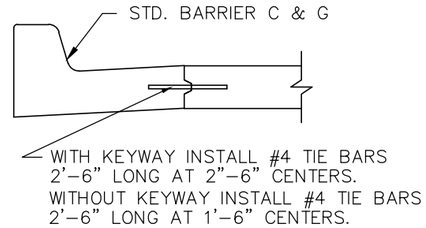
SECTION 36' TO 48' WIDE



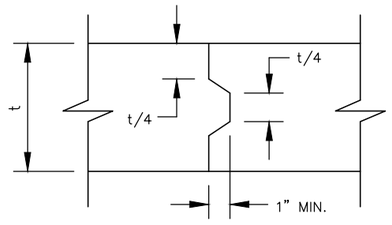
SECTION 28' TO 35' WIDE



SECTION 28' OR LESS



CURB DETAIL



TYPICAL KEYWAY DETAIL

NOTES:

1. FILL ALL SAWED JOINTS WITH APPROVED SEALANT.
2. FOR MANHOLE INSTALLATIONS CONSTRUCT 4' x 4' x (t + 2") PCC PAD AT A 45 DEGREE ANGLE TO JOINTS.
3. CONSTRUCT CONTRACTION JOINTS AT 12' MAX. INTERVALS.
4. t = PAVEMENT THICKNESS, SEE TYPICAL STREET SECTIONS

P.C.C. PAVEMENT SPECIAL SECTIONS

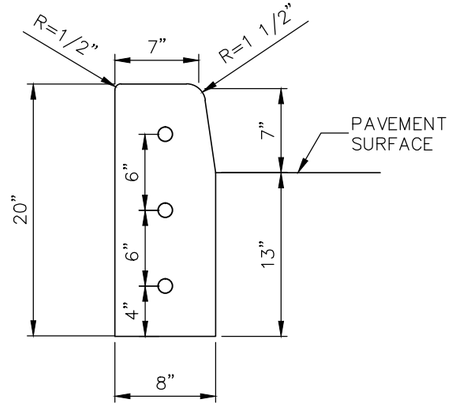
2015 Details

City of BELTON Missouri

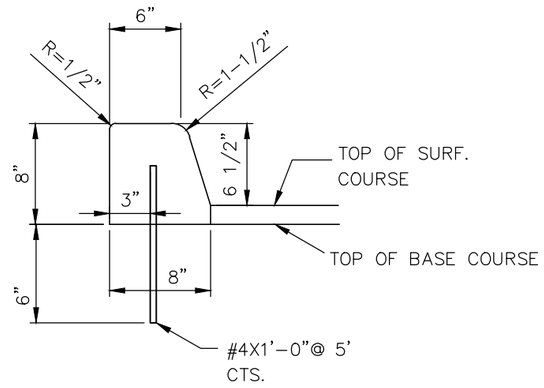
PUBLIC WORKS

PAVEMENT JOINT DETAILS

SCALE:	NO SCALE	REV.		
DETAIL NO:	STR-009			
DATE:	03-16-15			



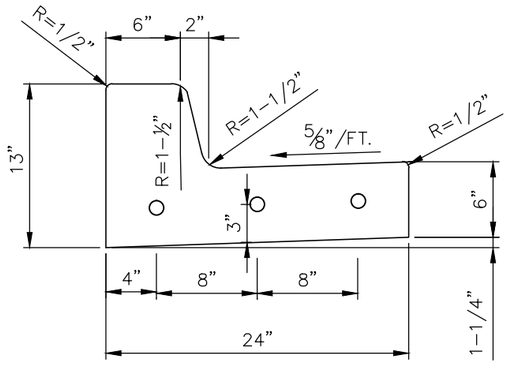
STRAIGHT CURB
(TYPE C–1)



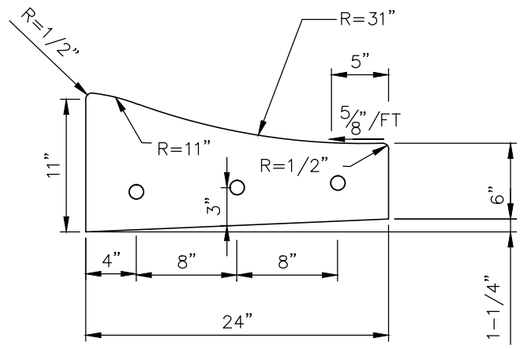
DOWELLED CURB
(TYPE DC)

GENERAL NOTES:

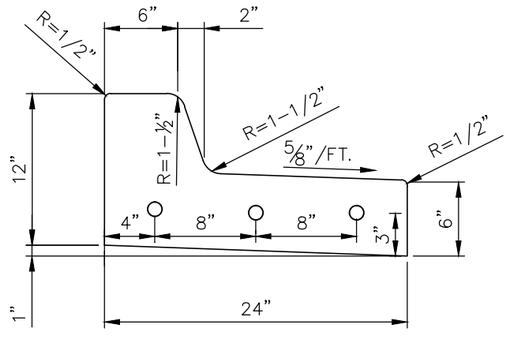
1. ¾" PREFORMED EXPANSION JOINTS WITH 3–#4 X 2' SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' MAXIMUM INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 2" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. FIX DOWEL BARS WITH BAR SUPPORTS.
4. DEPTH OF CURB SHALL BE A MINIMUM OF 8" THROUGH THE HANDICAP ACCESS RAMP.
5. CONCRETE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2208.2.B.
6. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.



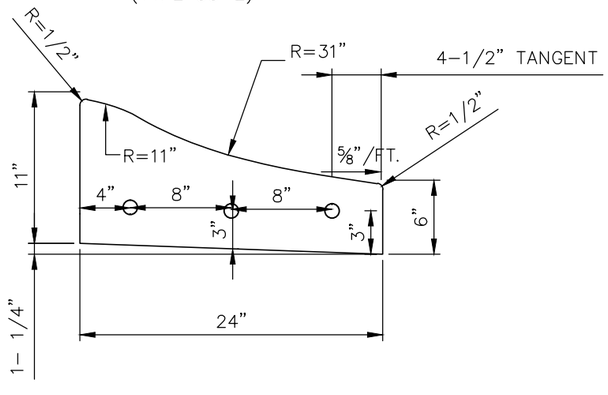
STRAIGHT BACK CURB & GUTTER
(TYPE CG–1)



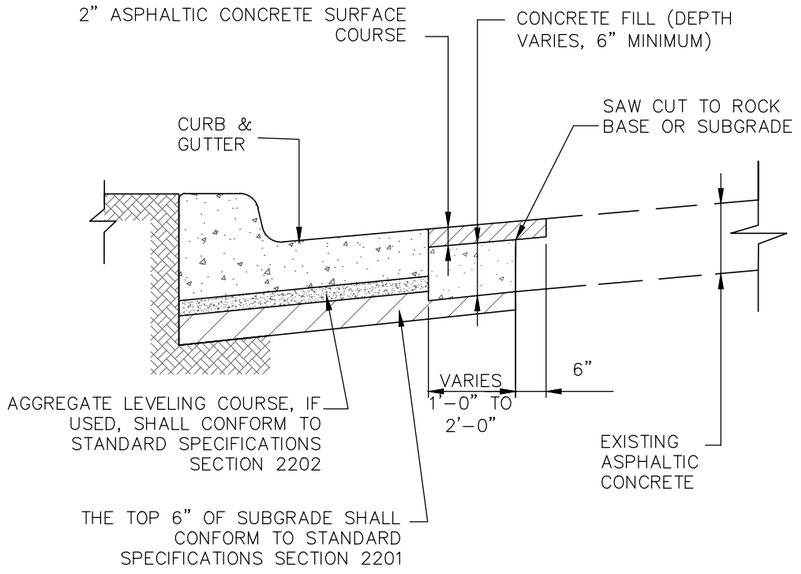
ROLL BACK CURB & GUTTER
(TYPE CG–2)



STRAIGHT BACK DRY CURB & GUTTER
(TYPE CG–1 DRY)



ROLL BACK DRY CURB & GUTTER
(TYPE CG–2 DRY)



CURB REPLACEMENT DETAIL

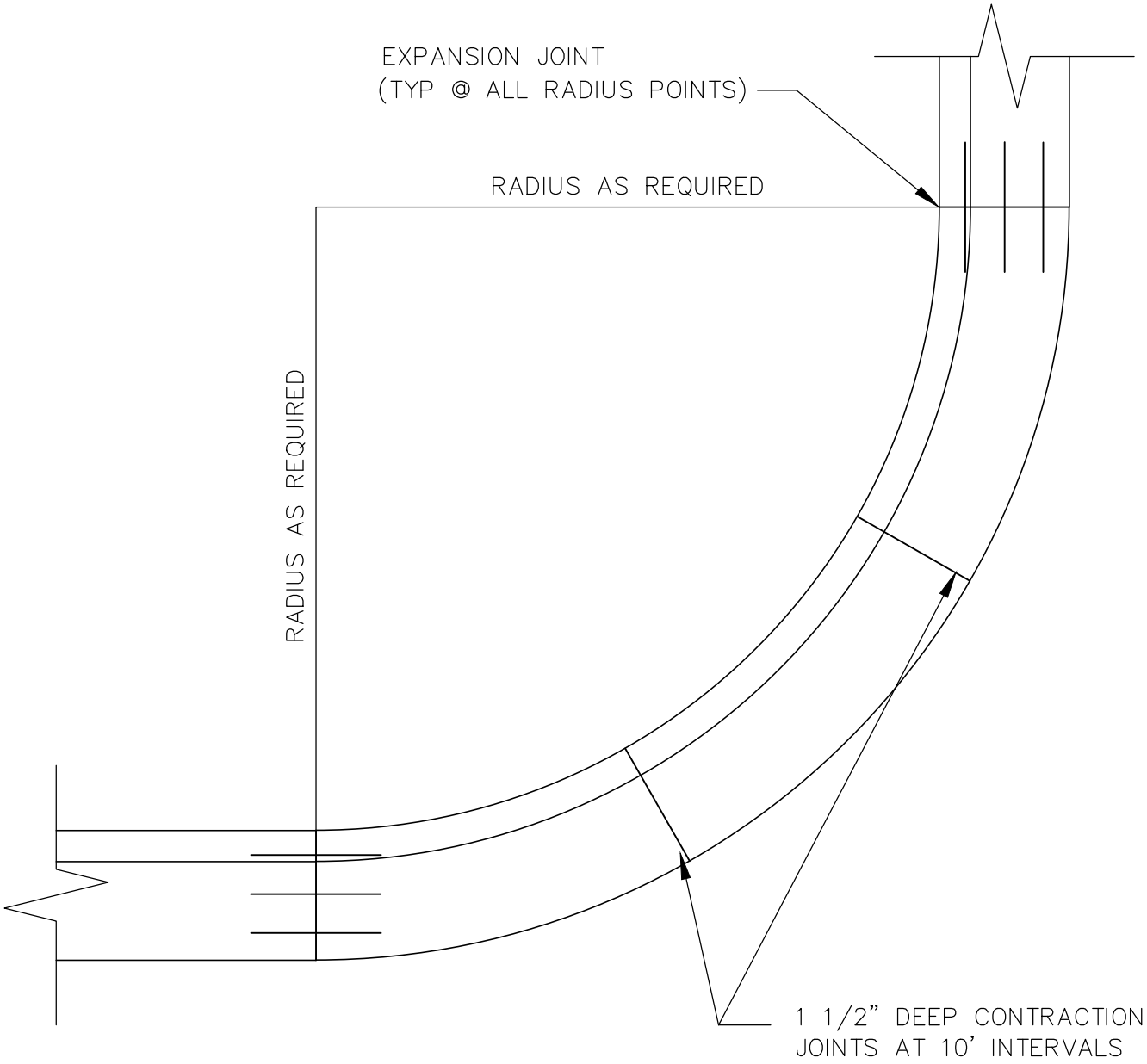
2015 Details

City of BELTON Missouri

PUBLIC WORKS

CURB DETAILS

SCALE:	NO SCALE	REV.	
DETAIL NO:	STR-010		
DATE:	03-16-15		



GENERAL NOTES:

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PLAN VIEW

EXPANSION JOINT LOCATION

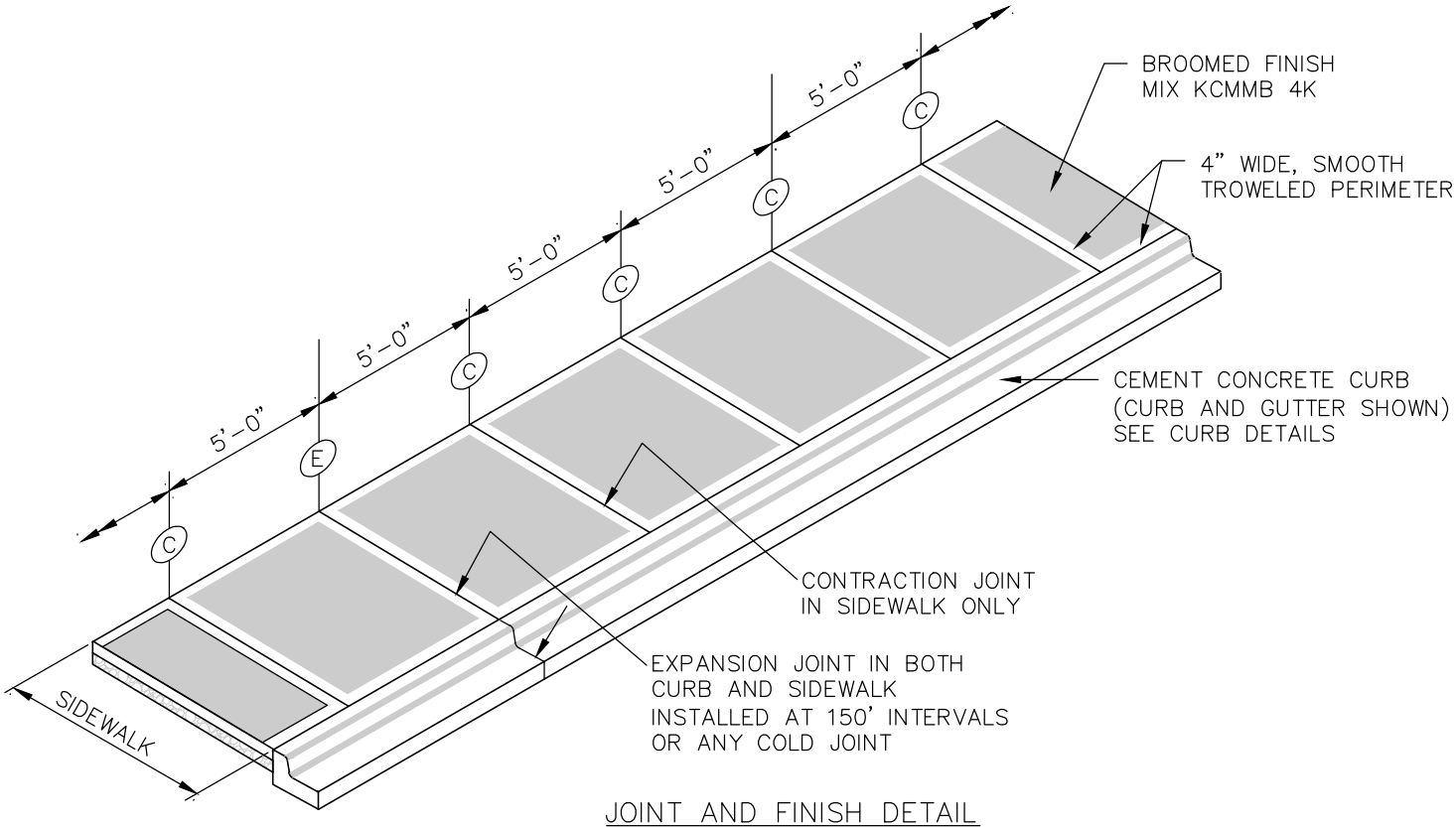
2015 Details

City of BELTON Missouri

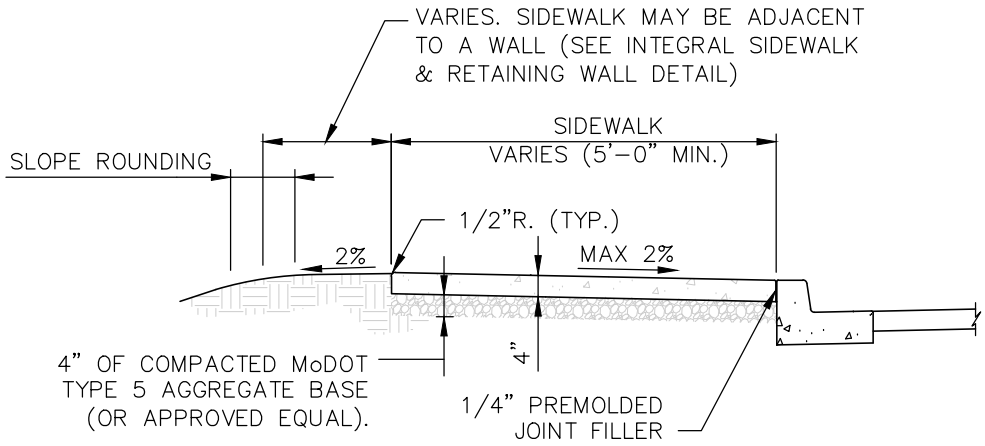
PUBLIC WORKS

CURB EXPANSION JOINTS

SCALE:	NO SCALE	REV.		
DETAIL NO:	STR-011			
DATE:	03-16-15			



JOINT AND FINISH DETAIL



CEMENT CONCRETE SIDEWALK
ADJACENT TO CURB

2015 Details

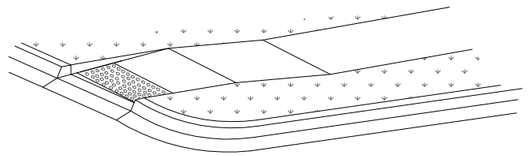
TYPICAL SIDEWALK

City of
BELTON
Missouri

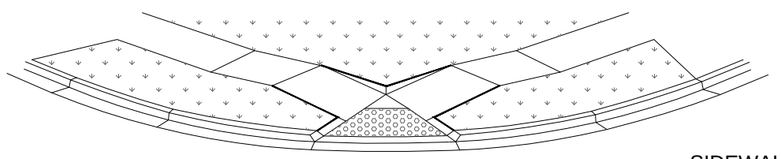
PUBLIC WORKS

TYPICAL SIDEWALK

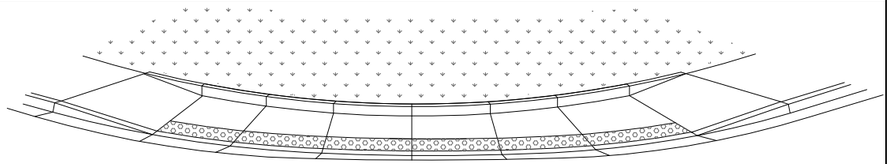
SCALE:	NO SCALE	REV.		
DETAIL NO:	STR-012			
DATE:	03-16-15			



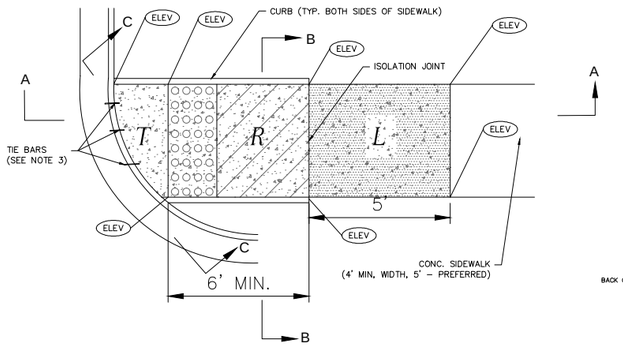
3-D VIEW TYPE A SIDEWALK RAMP



3-D VIEW TYPE B SIDEWALK RAMP



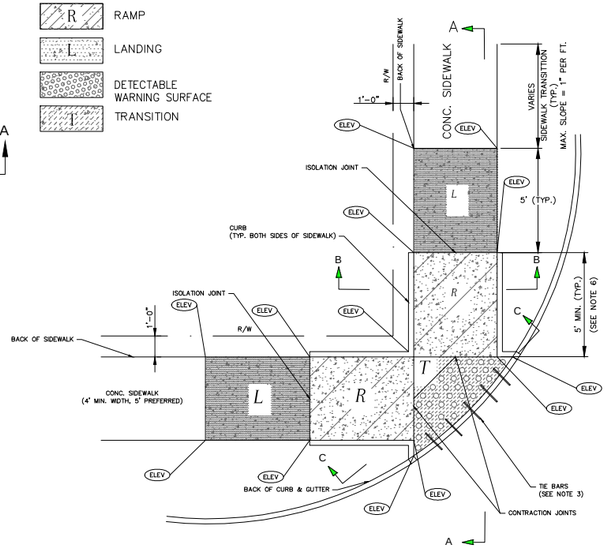
3-D VIEW TYPE C SIDEWALK RAMP



TYPE A SIDEWALK RAMP

LEGEND:

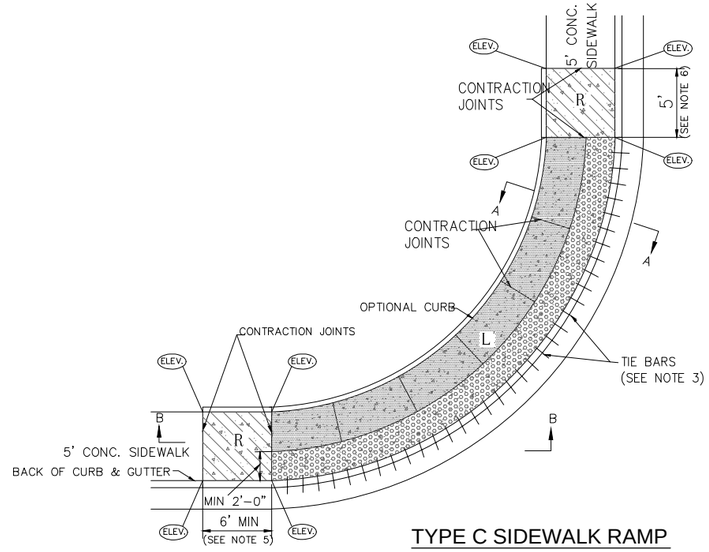
- R — RAMP
- L — LANDING
- DETECTABLE WARNING SURFACE
- T — TRANSITION



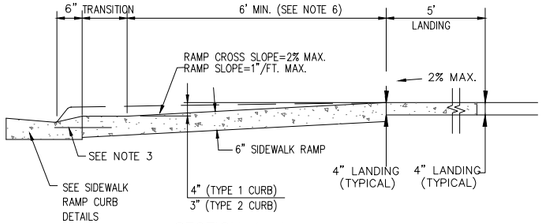
TYPE B SIDEWALK RAMP

SIDEWALK & SIDEWALK RAMP NOTES:

1. SIDEWALK RAMP LOCATION DETERMINED FROM THE INTERSECTION OF THE EXTENSION OF BACK OF SIDEWALK AND BACK OF CURB & GUTTER.
2. PLAN DRAWINGS SHALL INCLUDE A TABLE OF ELEVATIONS FOR ALL POINTS LABELLED AS (ELEV.)
3. KEY ALL CONSTRUCTION JOINTS OR USE TIE BARS #4 EPOXY COATED @ 12" O.C.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 250' CENTERS MAX.
6. SIDEWALK RAMP SHALL BE LENGTHENED TO PROVIDE ADA COMPLIANCE SLOPE BUT NEED NOT EXCEED 15'.
7. ADA MAXIMUM RAMP SLOPE = 1"/FT. ADA MAXIMUM CROSS SLOPE = 2%.
8. DETECTABLE WARNINGS TO COMPLY WITH ADA REQUIREMENTS.
9. LANDING FOR TYPE C RAMP ALONG THE ENTIRE CURB RETURN IS PREFERRED, BUT MAY BE SHORTENED TO MINIMUN ADA COMPLAINT DIMENSIONS.

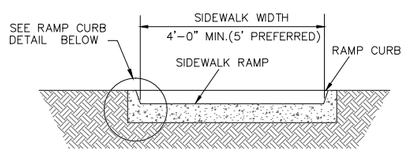


TYPE C SIDEWALK RAMP



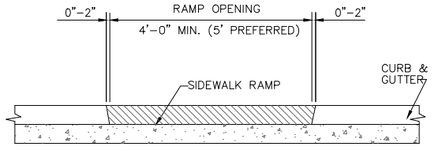
SECTION A–A

TYPE A & B SIDEWALK RAMP



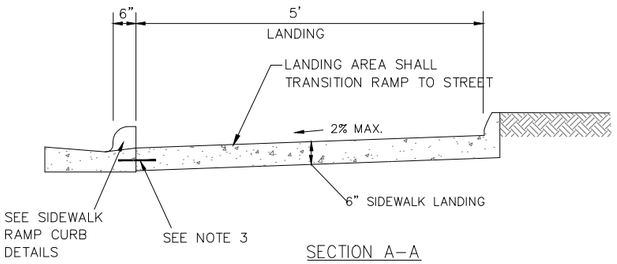
SECTION B–B

TYPE A & B SIDEWALK RAMP



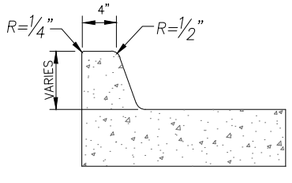
SECTION C–C

TYPE A & B SIDEWALK RAMP

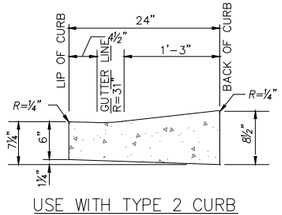


SECTION A–A

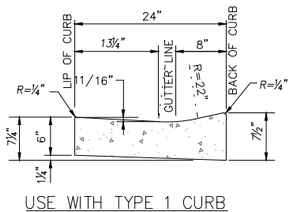
TYPE C SIDEWALK RAMP



RAMP CURB DETAIL

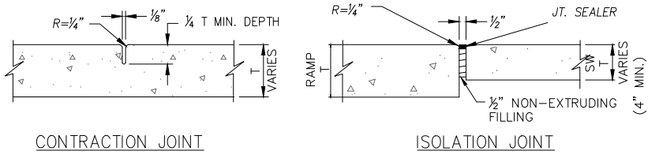


USE WITH TYPE 2 CURB



USE WITH TYPE 1 CURB

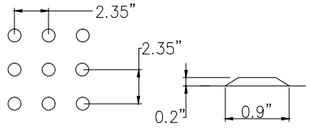
STREET CURB DETAIL AT RAMP



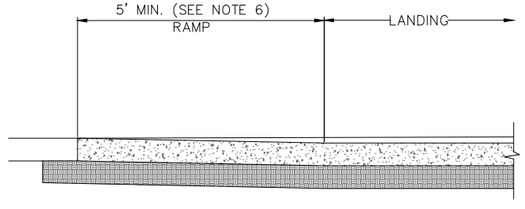
CONTRACTION JOINT

ISOLATION JOINT

JOINT DETAILS



DETECTABLE WARNING DOME SPACING SECTION



SECTION B–B

TYPE C SIDEWALK RAMP

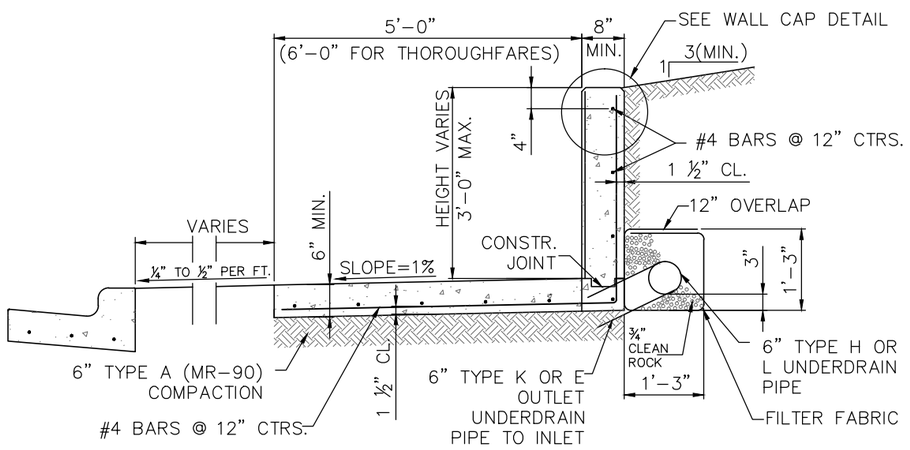
2015 Details

City of BELTON Missouri

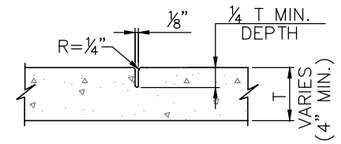
PUBLIC WORKS

SIDEWALK RAMPS

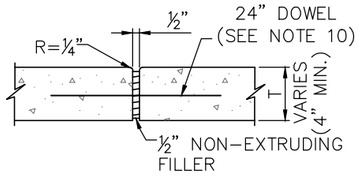
SCALE:	NO SCALE	REV.		
DETAIL NO:	STR-013			
DATE:	03-16-15			



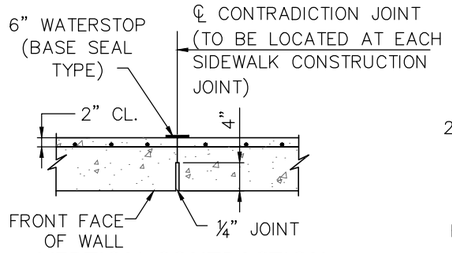
INTEGRAL SIDEWALK AND RETAINING WALL WITH UNDERDRAIN



TYPE A* (HORIZONTAL)

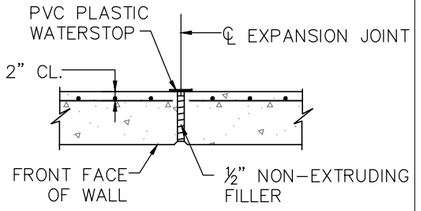


TYPE B** (HORIZONTAL)



VERTICAL CONTRACTION JOINT DETAIL

NOTE: PREFORMED CONTRACTION JOINTS AS APPROVED BY THE CITY ENGINEER SHALL BE USED



VERTICAL EXPANSION JOINT DETAIL

NOTE: VERTICAL EXPANSION JOINTS REQUIRED EVERY 100'

JOINT DETAILS

INTEGRAL SIDEWALK AND RETAINING WALL NOTES:

GENERAL:
1. ROCK BACKFILL AND TOPSOIL PLACEMENT SHALL BE CONSIDERED SUBSIDIARY TO INTEGRAL SIDEWALK AND RETAINING WALL CONSTRUCTION.
2. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES. ANY QUESTIONS REGARDING DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE CITY ENGINEER PRIOR TO CONSTRUCTION.
3. SEE PLANVIEW FOR UNDERDRAIN OR WEEPHOLE LOCATIONS.

CONCRETE:
4. CONCRETE USED IN THIS WORK SHALL BE KCMMB4K, AS APPROVED BY THE KANSAS CITY METROPOLITAN MATERIALS BOARD.
5. ALL EXPOSED WALL FACES SHALL BE HAND FINISHED WITH AN APPROVED GROUT WHILE THE WALL IS GREEN. FORM MARKS SHALL BE REMOVED PRIOR TO FINISHING WALL.
6. ALL FORM TIES SHALL BE RECESSED TYPE.

JOINTS:
7. * TYPE A JOINT SPACING SHALL BE 8'.
8. ** WHERE WALK ABUTS JUNCTION OF EXISTING WALK, CONCRETE CURBS, DRIVEWAYS, AND SIMILAR STRUCTURES, AND 100' CENTERS MAXIMUM.
9. TYPE B HORIZONTAL EXPANSION JOINTS SHALL HAVE ⅝" SMOOTH DOWEL ASSEMBLIES WITH GREASED CAPS @ 12" CTRS. MAX.
10. KEY ALL CONSTRUCTION JOINTS.

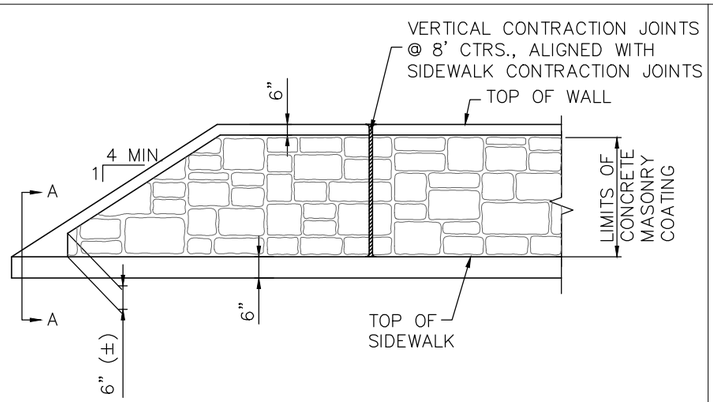
REINFORCING STEEL:
11. REINFORCING STEEL SHALL BE NEW BILLET, MINIMUM GRADE 40 AS PER ASTM A615, AND SHALL BE BENT COLD.
12. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BARS. 2" CLEARANCE SHALL BE PROVIDED THROUGHOUT UNLESS NOTED OTHERWISE. TOLERANCE OF +/- ⅛" SHALL BE PERMITTED.
13. ALL LAP SPLICES NOT SHOWN SHALL BE A MINIMUM OF 40 BAR DIAMETERS IN LENGTH.
14. ALL DOWELS SHALL BE ACCURATELY PLACED AND SECURELY TIED IN PLACE PRIOR TO PLACEMENT OF BOTTOM SLAB CONCRETE. STICKING OF DOWELS INTO FRESH OR PARTIALLY HARDENED CONCRETE WILL NOT BE ACCEPTABLE.
15. ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL BAR SUPPORTS @ 3'-0" MAXIMUM SPACING.

UNDERDRAIN CONSTRUCTION:
16. STOP UNDERDRAIN AT ENDS OF SIDEWALK / RW.
17. PROPOSED UNDERDRAIN PIPE LAYOUT, FLOWLINE ELEVATIONS, INLET CONNECTION POINTS, AND DETAILS SHALL BE APPROVED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND MATERIAL TESTS AS REQUIRED FOR APPROVAL BY THE CITY ENGINEER.
18. ALL UNDERDRAIN OUTLET PIPES SHALL BE TYPE K OR E WITH WATERTIGHT JOINTS. ALL OUTLET PIPES SHALL BE TIED INTO THE NEAREST STORM SEWER INLET AS APPROVED.
19. ALL UNDERDRAIN PIPES, TYPE H OR L, SHALL BE INSTALLED AT A MINIMUM SLOPE OF 1%.
20. ALL FILTER FABRIC USED FOR PIPE UNDERDRAIN CONSTRUCTION SHALL MEET THE REQUIREMENTS OF AASHTO M288 CLASS A OR APPROVED EQUAL.

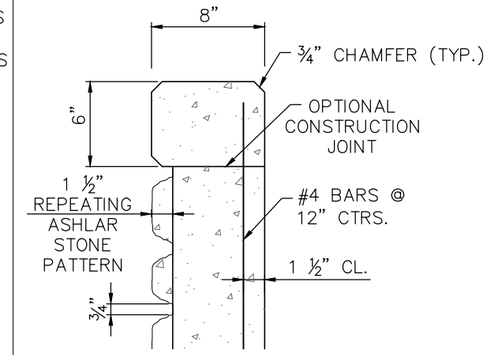
MATERIALS:
21. FORM LINER PATTERN SHALL BE SYMONS CORPORATION "SOUTHWEST ASHLAR STONE" OR APPROVED EQUAL.
22. PRIOR TO THE RETAINING WALL CONSTRUCTION, SUBMIT TO THE CITY ENGINEER A TEST PANEL (8'X6'X8") THAT EXHIBITS THE TEXTURE, COLOR AND UNIFORMITY OF FINISH.
23. PLACE FORM LINER SUCH THAT SIMULATED MORTAR JOINTS ARE HORIZONTAL (LEVEL) AND VERTICAL (PLUMP).
24. PENETRATING STAIN SHALL BE SHERWIN WILLIAMS H&C SHIELD PLUS ULTRA ACRYLIC CONCRETE STAIN OR APPROVED EQUAL.

FEDERAL STANDARD 595B (* NOTE EXCEPTION) LIMESTONE COLOR SHADES SHALL BE USED AS LISTED BELOW :
- ORANGE – #30257
- BASIC LIMESTONE – #33510
- DARK GRAY – #30318
- YELLOW – #33448
- GRAY JOINT – #36440

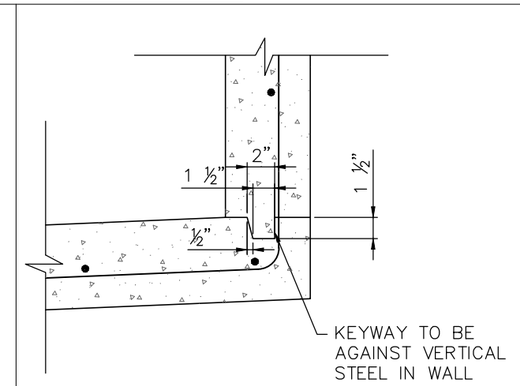
(*) #SW 6151 (SHERWIN-WILLIAMS "QUIVER TAN")



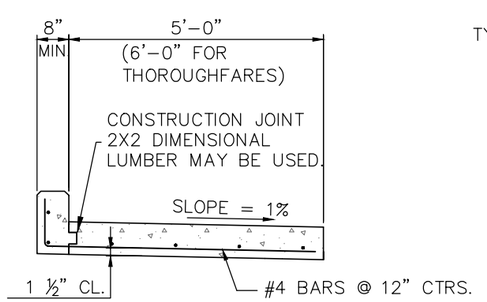
ELEVATION



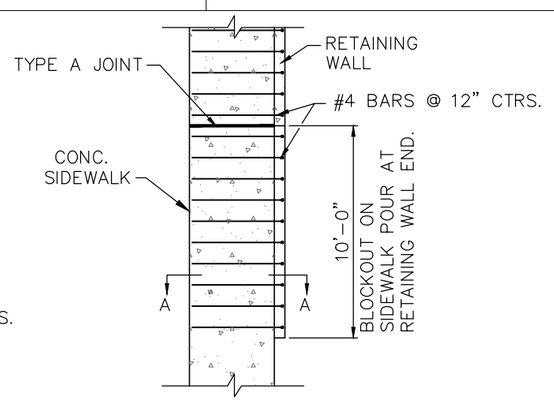
WALL CAP DETAIL



CONSTRUCTION JOINT DETAIL



SECTION A–A



END OF SIDEWALK RETAINING WALL BLOCKOUT DETAIL

INTEGRAL SIDEWALK AND RETAINING WALL				
STA. TO STA.	SIDE	LOCATION	HEIGHT FEET	LENGTH LIN. FEET
			TOTAL:	

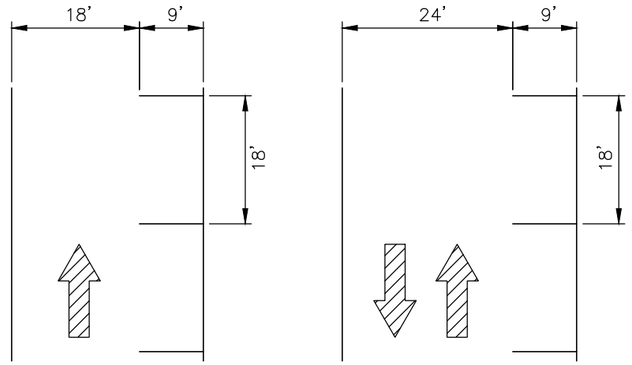
2015 Details

City of BELTON Missouri

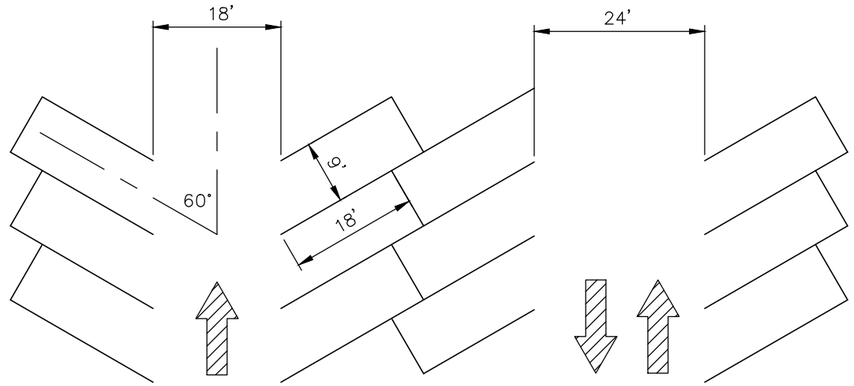
PUBLIC WORKS

INTERGRAL SIDEWALK AND RETAINING WALL

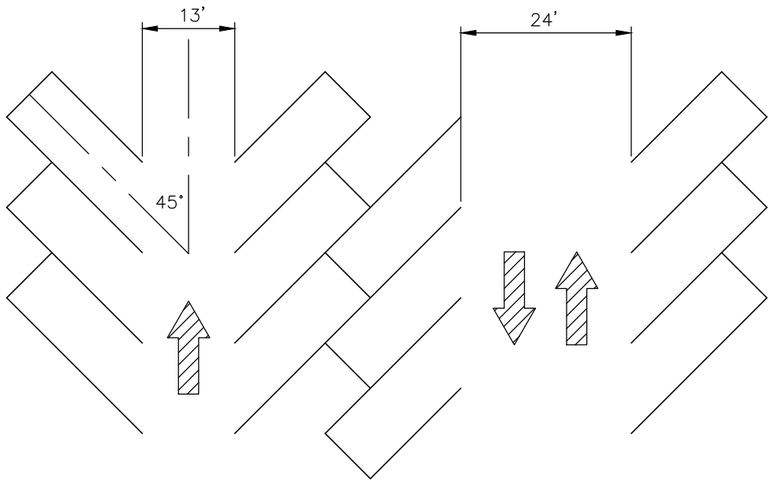
SCALE:	NO SCALE	REV.		
DETAIL NO:	STR-014			
DATE:	03-16-15			



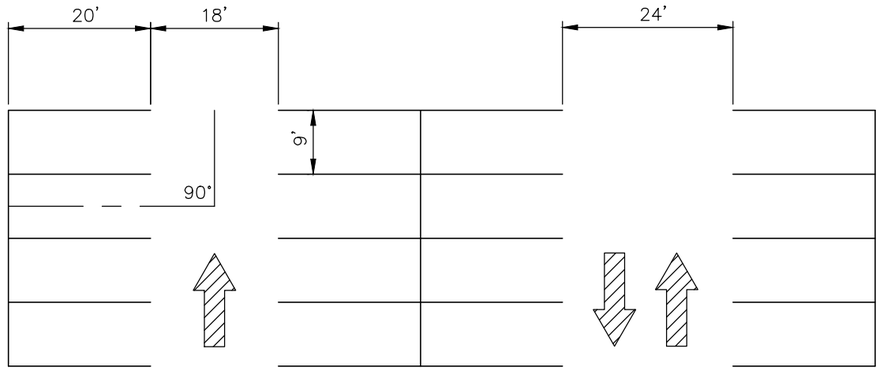
PARALLEL PARKING



60-DEGREE PARKING



45-DEGREE PARKING



90-DEGREE PARKING

NOTES:
1. OFF-STREET PARKING AREAS MUST COMPLY WITH DIMENSIONS SHOWN IN PARKING DIMENSIONS TABLE ON THIS SHEET.
2. EACH OFF-STREET PARKING SPACE MUST OPEN DIRECTLY ONTO AN AISLE THAT COMPLIES WITH THE AISLE WIDTH SPECIFIED IN THIS DETAIL.
3. ALL OFF-STREET PARKING AREAS ARE REQUIRED TO HAVE CONCRETE CURB AND GUTTER.
4. ALL REQUIRED OFF-STREET PARKING AND LOADING AREAS SHALL BE SURFACED WITH A PERMANENT MATERIAL SUCH AS ASPHALT, CONCRETE, PAVING BLOCKS, OR OTHER APPROVED MATERIAL MEETING THE STANDARDS OF THE CITY.
5. ALL PEDESTRIAN ACCESS TO PARKING SHALL MEET ADA STANDARDS.

PARKING DIMENSIONS TABLE				
DIMENSIONS (IN FEET)	PARALLEL	45-DEGREE	60-DEGREE	90-DEGREE
MINIMUM SPACE WIDTH	9	9	9	9
MINIMUM SPACE LENGTH	20	18	18	20
MINIMUM ONE-WAY AISLE WIDTH	20	20	20	20
MINIMUM TWO-WAY AISLE WIDTH	24	24	24	24

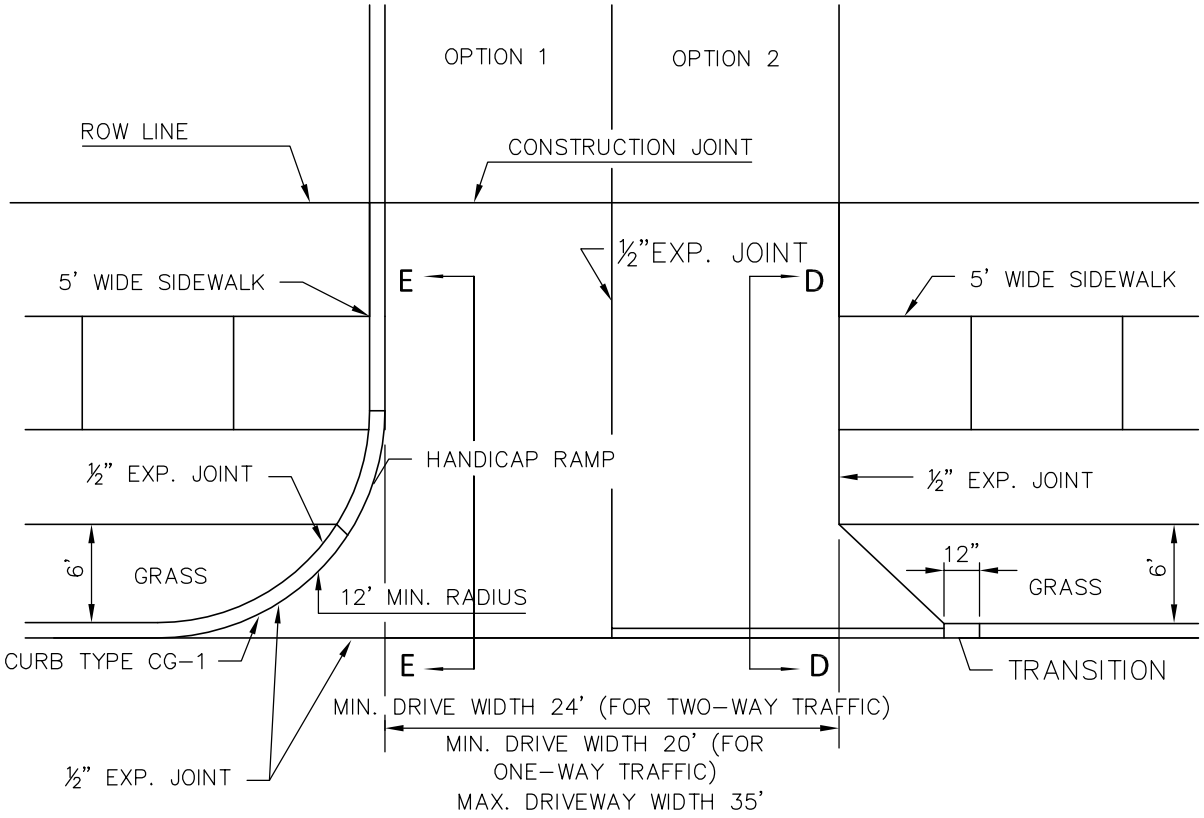
2015 Details

City of BELTON Missouri

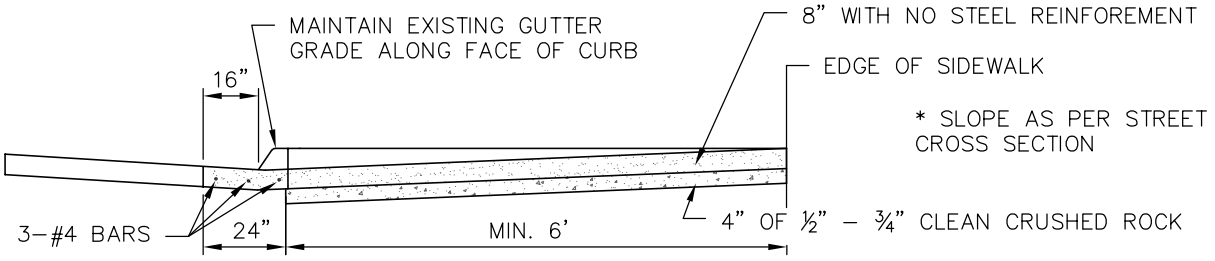
PUBLIC WORKS

OFF-STREET PARKING

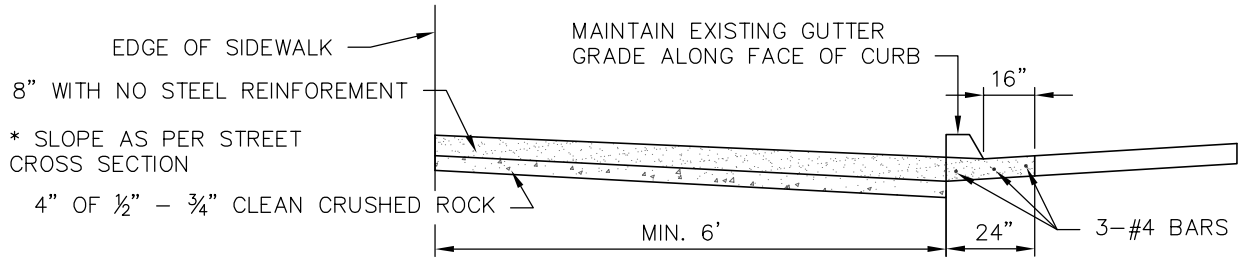
		REV.		
SCALE:	NO SCALE			
DETAIL NO:	STR-015			
DATE:	03-16-15			



PLAN VIEW



SECTION E-E



SECTION D-D

2015 Details

COMMERCIAL CONCRETE APPROACH

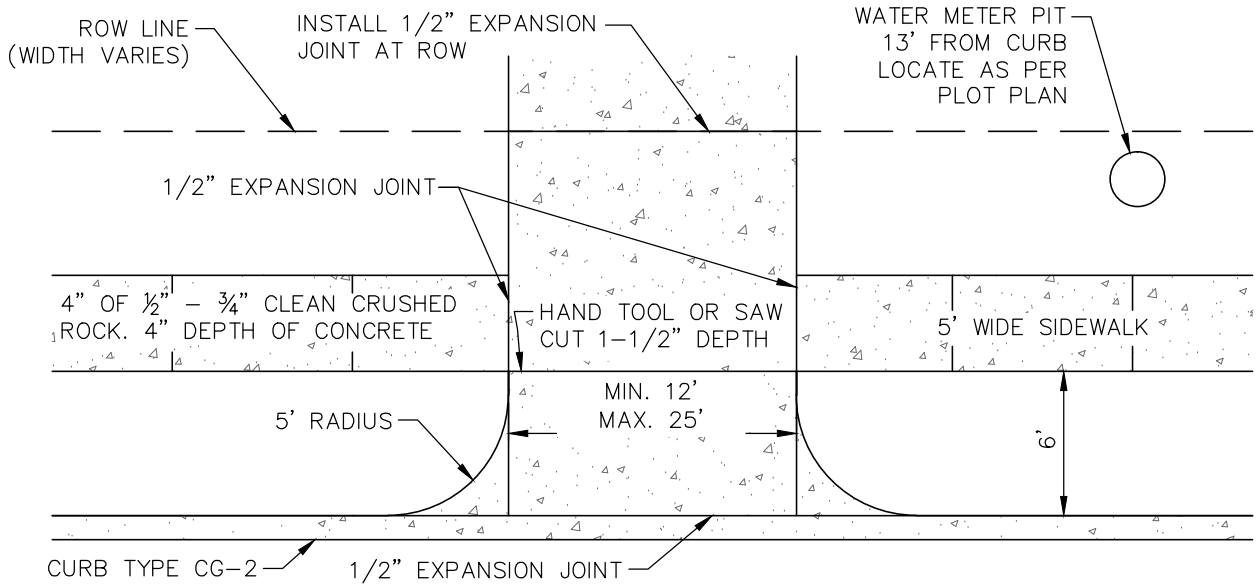
NOTE:
1. IF NEW CONSTRUCTION, MAXIMUM DRIVEWAY APPROACH SLOPE IS 2%. IF REMOVING AND REPLACING, MATCH EXISTING SLOPE.
2. CITY CONCRETE MIX DESIGN, KCMMB 4K.

PW Logo - Grayscale.tiff

City of
BELTON
Missouri

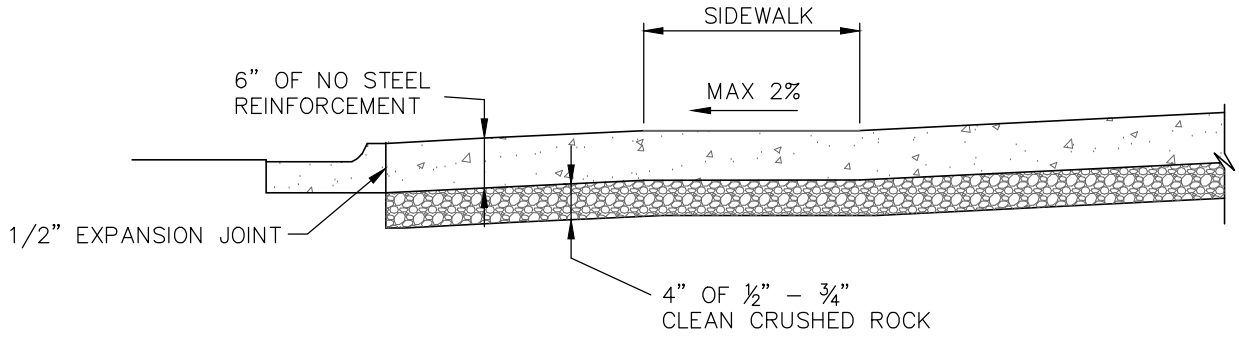
COMMERCIAL APPROACH

		REV.		
SCALE:	NO SCALE		7-14-15	NOTES.
DETAIL NO:	STR-016			
DATE:	03-16-15			



½' SLOPE FROM BACK OF CURB TO ROW LINE

PLAN



SECTION

RESIDENTIAL DRIVEWAY APPROACH

NOTE:

1. IF NEW CONSTRUCTION, MAXIMUM DRIVEWAY APPROACH SLOPE IS 2%. IF REMOVING AND REPLACING, MATCH EXISTING SLOPE.
2. CITY CONCRETE MIX DESIGN SHALL BE KCMMB 4K.

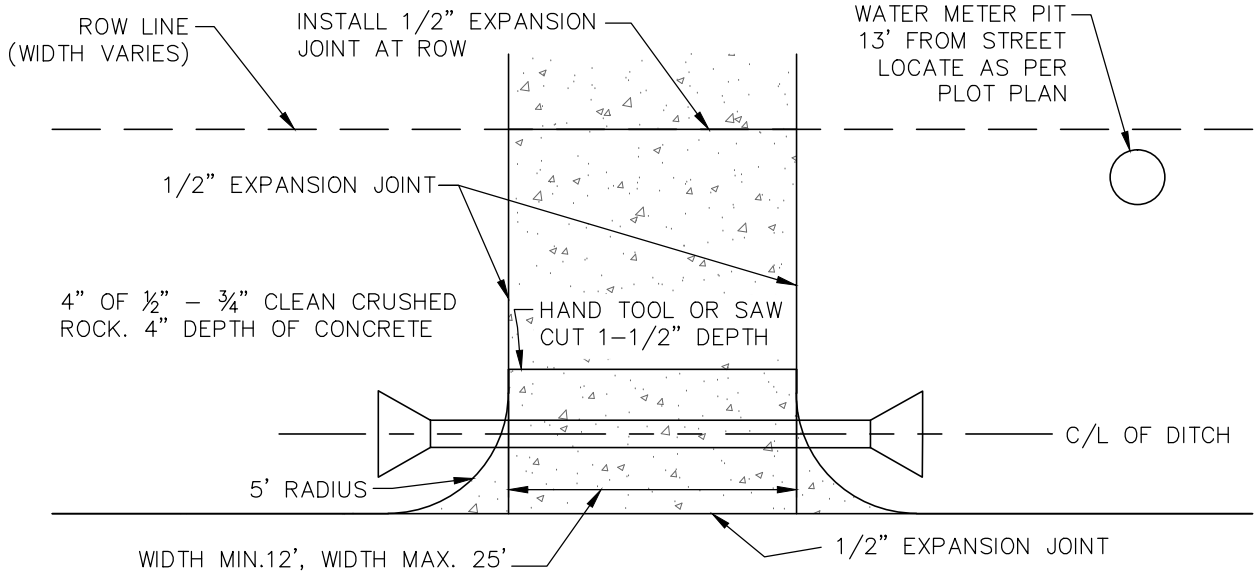
2015 Details

City of BELTON Missouri

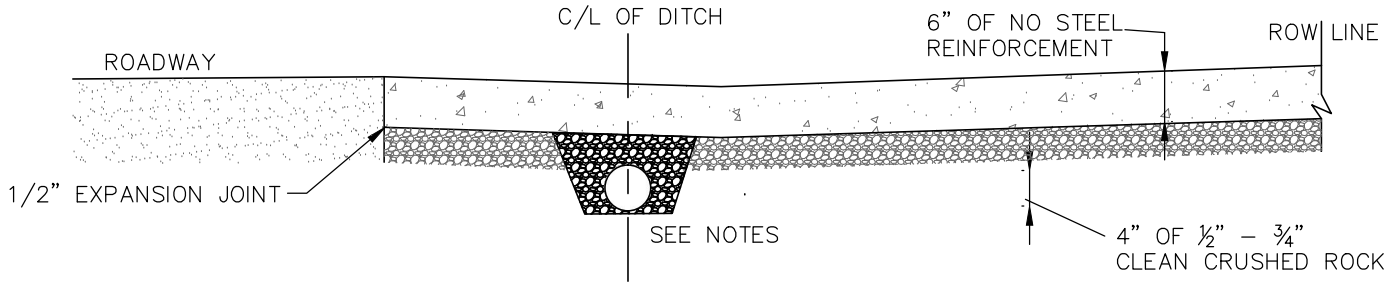
PUBLIC WORKS

RESIDENTIAL APPROACH

		REV.		
SCALE:	NO SCALE		7-14-15	NOTES.
DETAIL NO:	STR-017		8-25-16	CLARIFY WIDTH.
DATE:	03-16-15			



PLAN



SECTION

DRIVEWAY CULVERT

NOTE:

1. A RIGHT–OF–WAY PERMIT MUST BE OBTAINED FROM THE CITY'S ENGINEERING DIVISION IF COMPLETING WORK WITHIN THE CITY'S RIGHT–OF–WAY.
2. IF NEW CONSTRUCTION, MAXIMUM DRIVEWAY APPROACH SLOPE IS 2%. IF REMOVING AND REPLACING, MATCH EXISTING SLOPE.
3. CITY CONCRETE MIX DESIGN SHALL BE KCMMB 4K.
4. THE MINIMUM SIZE OF THE STORM DRAINAGE PIPE SHALL BE 12 INCHES IN DIAMETER AND AS DIRECTED BY CITY ENGINEER OR DESIGNEE.
5. DRAINAGE PIPE SHALL BE EITHER 16–GAUGE CMP OR CLASS III RCP.
6. PIPE SHALL BE OF LENGTH THAT THE SIDE SLOPE FROM THE EDGE OF THE DRIVE TO THE DITCH LINE CAN BE MAINTAINED ON A THREE TO ONE RATIO.
7. FLARED END SECTIONS OR HEADWALLS MANUFACTURED FOR SUCH PURPOSE AND APPROVED BY THE CITY ENGINEER SHALL BE INSTALLED ON THE ENDS OF DRIVEWAY STORM DRAINAGE PIPES.
8. THE PIPE SHALL EXTEND NO MORE THAN 5 FEET BEYOND THE DRIVE OPENINGS IN ADDITION TO THE FLARED END SECTIONS.
9. THERE SHALL BE MAINTAINED A MINIMUM OF 6 INCHES OF FILL OVER THE TOP OF THE DRAINAGE PIPE.

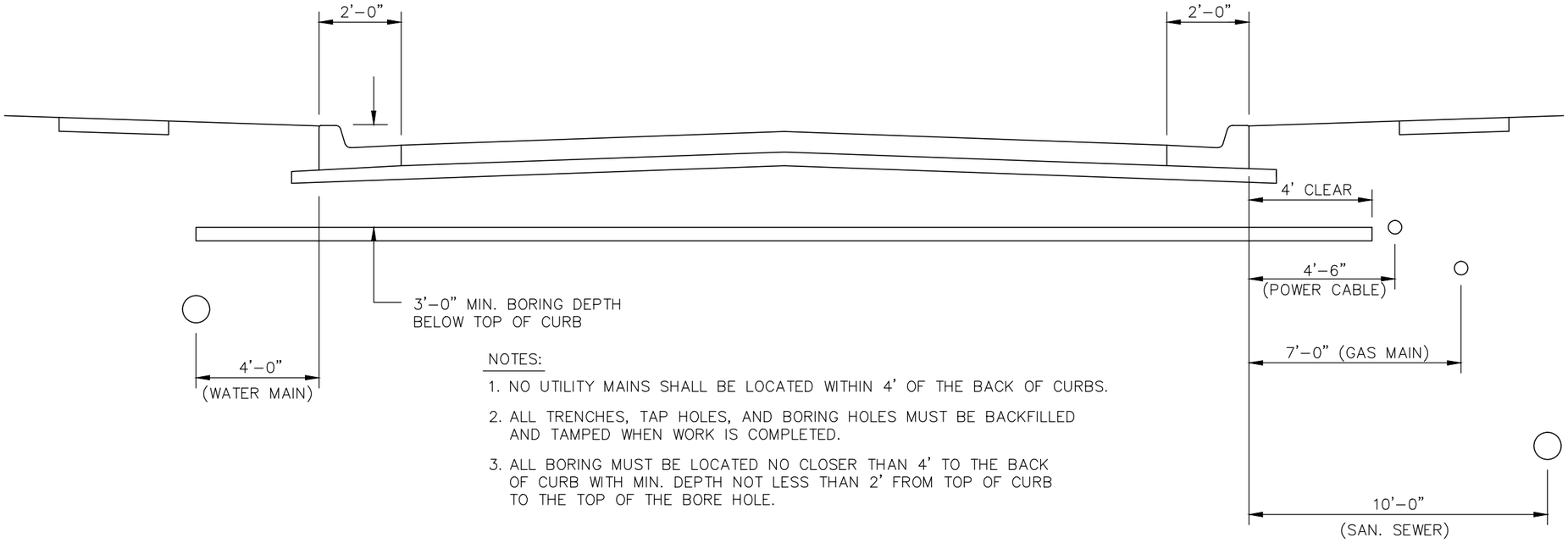
2015 Details

City of BELTON Missouri

PUBLIC WORKS

DRIVEWAY CULVERT

		REV.		
SCALE:	NO SCALE		7-14-15	CREATED.
DETAIL NO:	STR-018		8-12-15	ADDED NOTE 1.
DATE:	03-16-15		8-25-16	CLARIFY WIDTH.



NOTES:

1. NO UTILITY MAINS SHALL BE LOCATED WITHIN 4' OF THE BACK OF CURBS.
2. ALL TRENCHES, TAP HOLES, AND BORING HOLES MUST BE BACKFILLED AND TAMPED WHEN WORK IS COMPLETED.
3. ALL BORING MUST BE LOCATED NO CLOSER THAN 4' TO THE BACK OF CURB WITH MIN. DEPTH NOT LESS THAN 2' FROM TOP OF CURB TO THE TOP OF THE BORE HOLE.

STANDARD UTILITY LOCATION DETAIL

2015 Details

City of BELTON Missouri

PUBLIC WORKS

UTILITY LOCATIONS

SCALE:	NO SCALE	REV.	7-14-15	DRAWING NUMBER.
DETAIL NO:	STR-019			
DATE:	03-16-15			