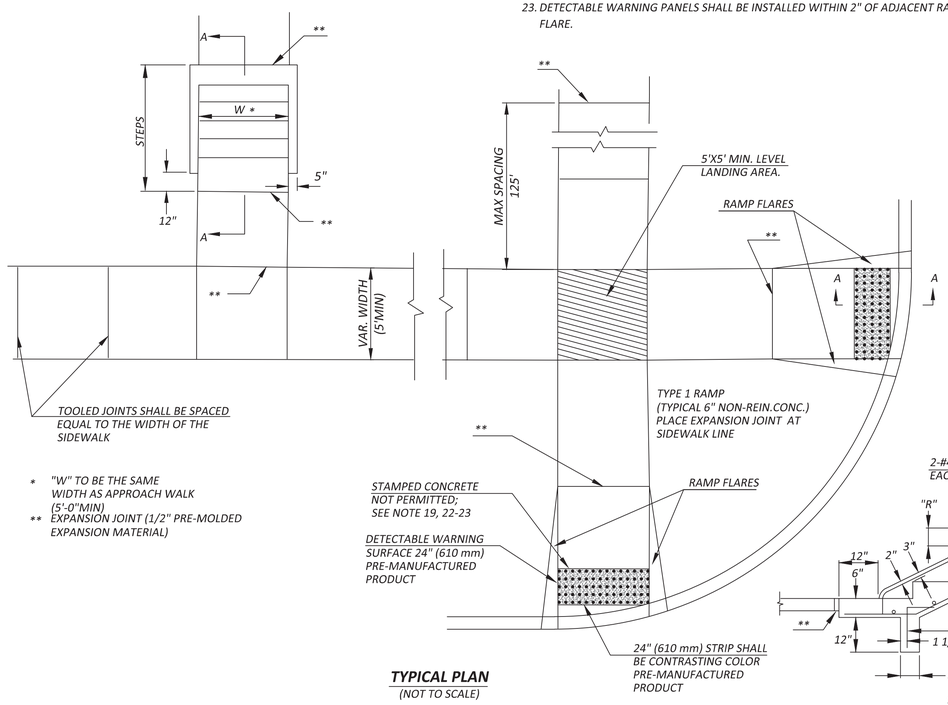
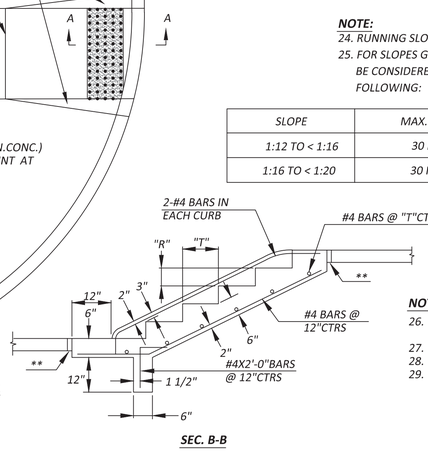
GENERAL NOTES:

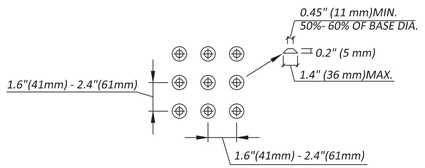
1. DETAILS SHOWN ON THIS PLAN APPLY TO ALL CONSTRUCTION OR RECONSTRUCTION OF STREETS, CURBS OR SIDEWALKS.
2. CURB CUT RAMPS ARE TO BE LOCATED AS SHOWN ON THE PLANS OF AS DIRECTED BY THE CITY ENGINEER.
3. RAMPS SHALL BE PROVIDED AT ALL CORNERS OF STREET INTERSECTIONS WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB.
4. SURFACE TEXTURE OF THE RAMP SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 in, A HEIGHT OF NOMINAL 0.2 in AND A CENTER-TO-CENTER SPACING OF 1.6 in - 2.4 in .
5. DETECTABLE WARNING AREA SHALL BE A CONTRASTING COLOR. THE CONTRASTING COLOR SHALL BE BY DAVIS COLORS OR APPROVED EQUAL AVAILABLE FROM CONCRETE ACCESSORIES (800) 233-3298.
6. TILE RED 3 LBS. #1117/94 LB. SACK OF CEMENT TYPE 1A.
7. NO CALCIUM CHLORIDE SHALL BE USED IN CONCRETE MIX.
8. SEAL: DAVIS COLOR SEAL II ASTM C-309. APPLY 200 SF/GAL. USE SAME COLOR AS USED IN CONCRETE. USE AIRLESS SPRAYER WITH LIGHT FOGGING ACTION. PROTECT ADJACENT SURFACES FROM OVER SPRAY.
9. SIDEWALKS SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.
10. CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP, FREE OF SAGS AND SHORT GRADE CHANGES.
11. IF POSSIBLE, DRAINAGE STRUCTURES SHOULD NOT BE PLACED IN LINE 8. WITH THE RAMP, EXCEPT WHERE EXISTING DRAINAGE STRUCTURES ARE BEING UTILIZED IN THE NEW CONSTRUCTION.
12. THE LOCATION OF THE RAMP SHOULD TAKE PRECEDENCE OVER THE LOCATION OF DRAINAGE STRUCTURES.
13. USE OF SIDEWALK RAMP TYPE 2 SHALL BE RESTRICTED TO LOCATIONS WHERE IT IS NOT FEASIBLE TO USE TYPE 1 OR TYPE 3 RAMPS.
14. THE NORMAL GUTTER LINE PROFILE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.
15. SIDEWALK RAMPS THAT ARE CONSTRUCTED WITHIN THE ECR'S AT INTERSECTIONS SHALL BE CONSTRUCTED OF 6'' NON-REINFORCED CONCRETE.
16. IN FLUSH RUNS, EXPANSION JOINTS SHALL BE 1/2'' PREMOLDED EXPANSION MATERIAL, FLUSH WITH THE SURFACE AND AT A MAXIMUM SPACING OF 125'.
17. THIS SAME JOINT SHALL BE USED AT SIDEWALK JUNCTIONS AS SHOWN IN TYPICAL PLAN.
18. WHERE THE SIDEWALK IS PARALLEL AND ADJACENT TO A RIGID STRUCTURE, A 1/2'' PREMOLDED EXPANSION MATERIAL FLUSH WITH THE SURFACE SHALL BE USED.
19. SIDEWALKS SHALL SLOPE TO MATCH EXISTING DRAINAGE PATTERNS. THE RATE OF CROSS-SLOPE IS 1:50 MAX..
20. WHERE SIDEWALK IS SHOWN TO BE CONSTRUCTED THROUGH AN ENTRANCE, IT SHALL BE 5'' THICK AND MAINTAIN 1:50 CROSS-SLOPE.
21. ALL PHASES OF DESIGN AND CONSTRUCTION SHALL COMPLY WITH THE ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES MANUAL AS CURRENTLY ADOPTED BY THE CITY OF MANHATTAN.
22. ADA TRUNCATED DETECTABLE DOMES AT SIDEWALK RAMPS SHALL BE A MANUFACTURED PRODUCT SUCH AS BRICKS, PRE-CAST CONCRETE, CAST IRON OR CAST ALUMINUM, POLYCARBONATE, OR FIBERGLASS.
23. DETECTABLE WARNING PANELS SHALL BE INSTALLED WITHIN 2" OF ADJACENT RAMP FLARE.



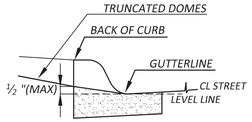
TYPICAL PLAN
(NOT TO SCALE)



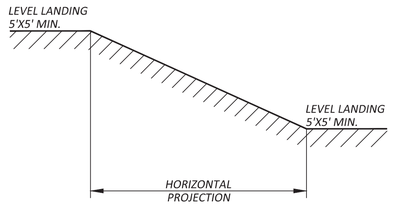
SEC. B-B



DETECTABLE WARNING SURFACE PATTERN



SIDEWALK RAMP CURB CUT SECTION DETAIL A-A



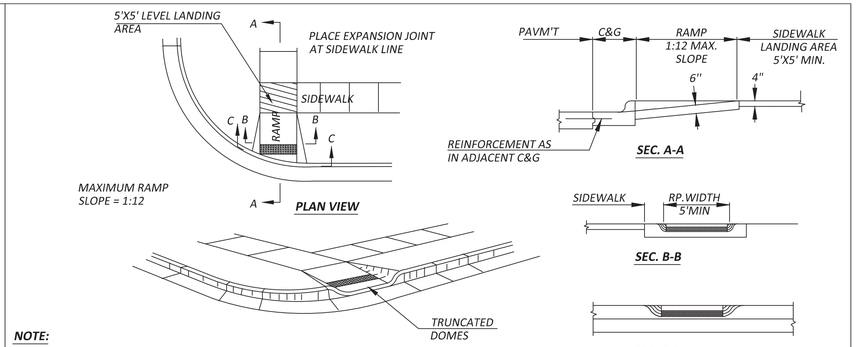
NOTE:

24. RUNNING SLOPE OF SIDEWALK SHALL NOT EXCEED 1:20.
25. FOR SLOPES GREATER THAN 1:20 THE SIDEWALK SHALL BE CONSIDERED A RAMP AND CONFORM TO THE FOLLOWING:

SLOPE	MAX. RISE	MAX. HORIZONTAL PROJECTION
1:12 TO < 1:16	30 IN.	30 FT.
1:16 TO < 1:20	30 IN.	40 ft.

NOTE:

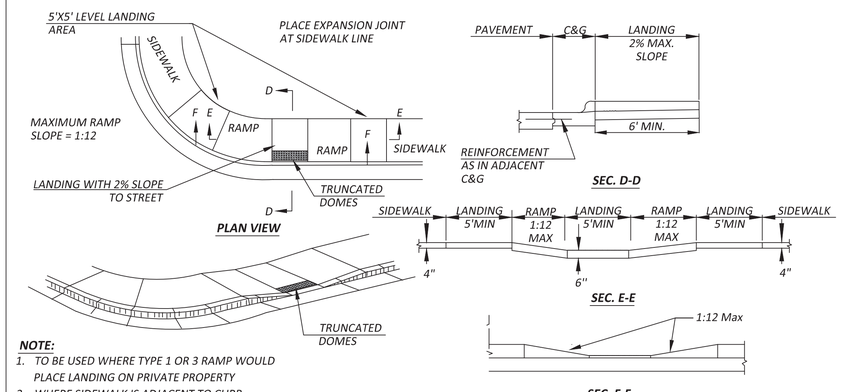
26. REINFORCING BARS SHOWN ARE TO BE USED ONLY WHEN MORE THAN FOUR STEPS ARE NECESSARY.
27. STEP FORMULA : "R"x"T" = "S"
28. "S" SHALL BE LESS THEN 75 AND GREATER THEN 70
29. REQUIREMENTS:
    THE MAXIMUM "R"=7 3/4"
    THE MINIMUM "T"= 9"



NOTE:

1. STANDARD RAMP IN RESIDENTIAL AREAS
2. 5' RAMP SHALL BE STANDARD FOR ALL NEW SIDEWALK CONSTRUCTION
3. AT THE DISCRETION OF THE CITY ENGINEER 4' RAMPS SHALL BE ALLOWED WHEN REPLACING EXISTING SIDEWALK

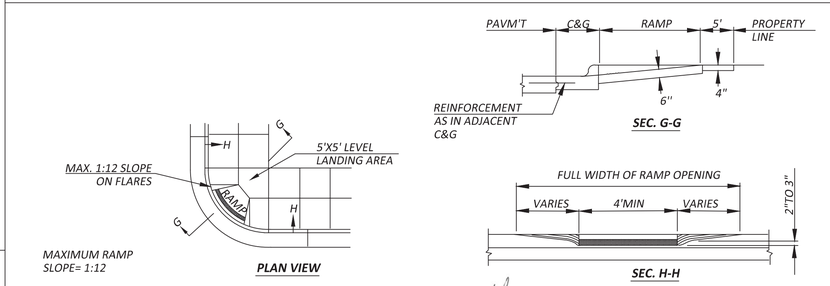
SIDEWALK RAMP TYPE 1
(NOT TO SCALE)



NOTE:

1. TO BE USED WHERE TYPE 1 OR 3 RAMP WOULD PLACE LANDING ON PRIVATE PROPERTY
2. WHERE SIDEWALK IS ADJACENT TO CURB
3. RAMP MAY BE PROVIDED ON EITHER OR BOTH SIDES OF CURB LANDING
4. RAMPS MUST MAINTAIN 1:12 SLOPE OR LESS

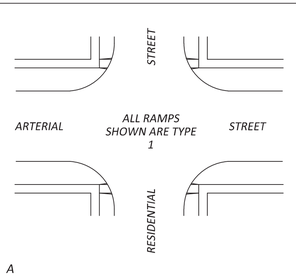
SIDEWALK RAMP TYPE 4
(NOT TO SCALE)



NOTE:

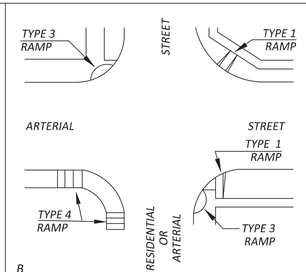
1. TO BE USED WHERE SIDEWALK OCCUPIES ENTIRE AREA BETWEEN CURB AND PROPERTY LINE
2. LANDING AREA MAY BE PROVIDED EITHER SIDE 1:12 SLOPES ON FLARES MUST BE MAINTAINED.

SIDEWALK RAMP TYPE 3
(NOT TO SCALE)



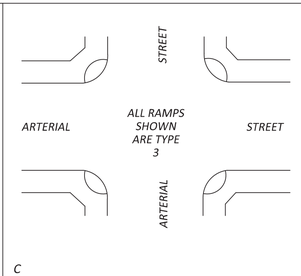
A

HEAVY TRAFFIC ON ARTERIAL NO TRAFFIC SIGNAL



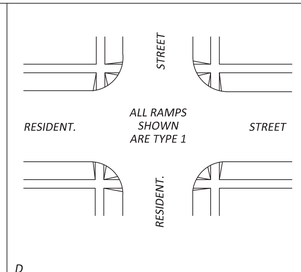
B

SIGNALIZED INTERSECTION TYPICAL RAMP TREATMENTS



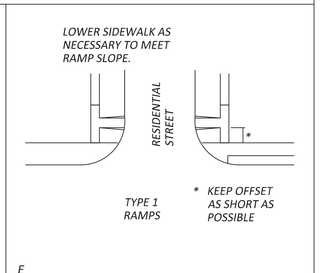
C

TRAFFIC CONTROL ON BOTH STREETS MIN 6' WIDE SIDEWALKS



D

NORMAL TREATMENT IN RESIDENTIAL AREA



E

MAY BE USED ONLY WHERE TRAFFIC VOLUME IS LOW AND WHERE OTHER FEATURES MAKE DETAIL D IMPRACTICAL.

NO.	DATE	DESCRIPTION	BY
.	.	.	.

BRIAN D. JOHNSON LICENSED 20469 6-1-15 KANSAS PROFESSIONAL ENGINEER

City of Manhattan Kansas
PUBLIC WORKS
1101 POYNTZ AVE., MANHATTAN, KS 66502 (785) 587-2415

MANHATTAN STANDARD DETAILS
MSD 2710 INCIDENTAL CONSTRUCTION

CITY ENGINEER: BRIAN JOHNSON, P.E.	DESIGN BY:
CITY PROJ. #:	
DATE:	DRAWN BY: / PAGE OF

PLOTTED BY: RICK PETRIE
PLOT DATE: 7/30/2015 3:59 PM
X:\PUBLICWORKS\ENGINEERING\ENGINEERING STANDARDS\DETAILS\CURRENT\DWGS\MSD 2710 INCIDENTAL CONSTRUCTION (2015-08).DWG