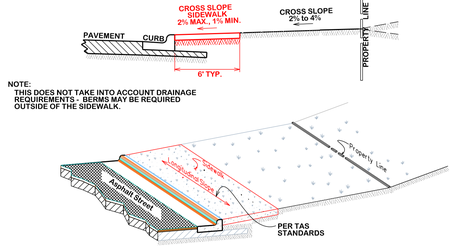
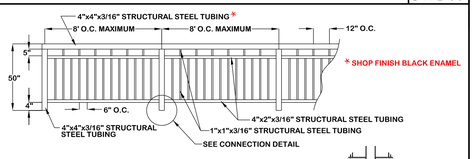


SIDEWALK SLOPE REQUIREMENTS

SW1-00



TYPICAL PEDESTRIAN GUARDRAIL

CONNECTION DETAIL

SW1-01

GENERAL NOTES:

ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 DAYS OF LAST DISTURBANCE.

APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.

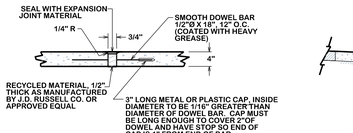
ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

ALL TRAFFIC SIGNALS AND APPURTENANCES, AND ALL PAVEMENT MARKINGS AND MARKERS SHALL BE IN ACCORDANCE WITH TXDOT STANDARDS

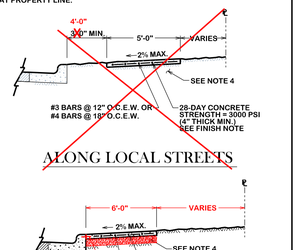
~~REFER TO SPEC 01 17 23.20 (PAVEMENT MARKING) FOR ADDITIONAL LOCAL REQUIREMENTS.~~

NOTES:

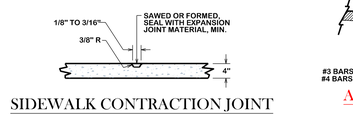
1. SIDEWALK PLACEMENT SHALL BE IN ACCORDANCE WITH B/CS UNIFIED DESIGN GUIDELINES.
2. FINISH: LIGHT BROOM FINISH. JOINTS TO BE TOOLED 1" DEEP AT AN INTERVAL EQUAL TO THE SIDEWALK WIDTH. EXPANSION JOINTS @ 40' O.C.,CONTRACTION JOINTS @ 4' O.C.
3. DOWEL IN AND TIE TO ANY CONCRETE STRUCTURE ADJACENT TO SIDEWALK (DRIVEWAY, INLET BOX, CURB, JUNCTION BOX, ETC.) WITH #3 x 12" BARS @ 12" O.C. OR #4 x 12" BARS @ 18" O.C. DOWELS IN CURB SHALL MAINTAIN MIN. 2" COVER FROM THE TOP OF CURB AND SHALL EXTEND INTO CURB A MIN. OF 2.5" AND A MAX OF 3.5". INCLUDE TYPE "G" EXPANSION JOINT AT CONNECTION WITH BACK OF CURB
4. SUBGRADE PREPARATION: LIME OR CEMENT STABILIZATION TO A MINIMUM DEPTH OF 6 INCHES UNDER ALL SIDEWALKS IS REQUIRED. COMPACTION: COMPACTED SUBGRADE MATERIAL COMPACTED TO A DENSITY AT LEAST 98% OF MAXIMUM DRY DENSITY AS DETERMINED BY PROCTOR COMPACTION TEST ASTM D698 (STANDARD) AND SHALL BE 0-4% WET OF THE OPTIMUM MOISTURE CONTENT
5. A MINIMUM CLEAR PEDESTRIAN WIDTH AS DEFINED BY TAS AND ADA SHALL BE PROVIDED FOR ENTIRE LENGTH OF SIDEWALK.
6. ALL SIDEWALKS, INCLUDING PRIVATELY-OWNED, PERPENDICULAR TO STREET SHALL HAVE TYPE "G" EXPANSION JOINTS AT CONNECTION WITH BACK OF CURB, BOTH SIDES OF LONGITUDINAL SIDEWALK, AND AT PROPERTY LINE.



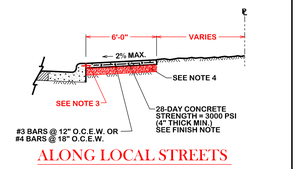
TYPE "G" SIDEWALK EXPANSION & CONSTRUCTION JOINT



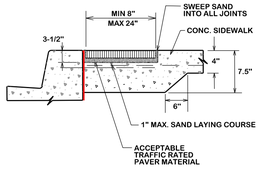
~~ALONG LOCAL STREETS~~



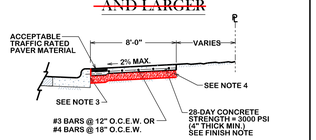
SIDEWALK CONTRACTION JOINT



~~ALONG LOCAL STREETS~~



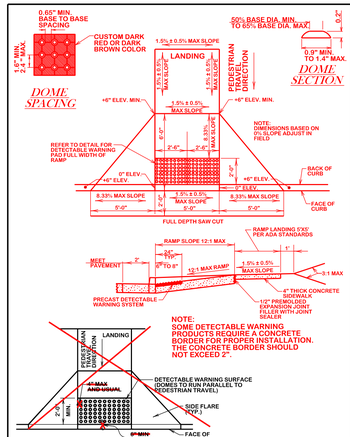
SIDEWALK PAVER SECTION



~~ALONG MINOR COLLECTORS AND LARGER~~

CONCRETE SIDEWALK

SW1-02

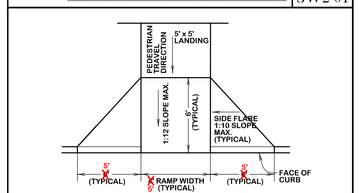


ADA ACCESSIBLE CURB RAMP

NOTE:
SOME DETECTABLE WARNING PRODUCTS REQUIRE A CONCRETE BORDER FOR PROPER INSTALLATION. THE CONCRETE BORDER SHOULD NOT EXCEED 2".

~~TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON SLOPING RAMP RUN~~

SW2-01



TYPICAL AMBULATORY RAMP W/ FLARED WINGS

SW2-02

CROSSWALKS:

CROSSWALK MARKINGS ARE IMPORTANT TRAFFIC CONTROL DEVICES AT CONTROLLED INTERSECTIONS. THESE DEVICES IDENTIFY THE APPROPRIATE LOCATION FOR PEDESTRIANS TO CROSS THE INTERSECTION AS WELL AS INFORMING DRIVERS WHERE PEDESTRIANS MAY BE PRESENT. NOT ALL LOCATIONS NEED THE CROSSWALKS MARKED, HOWEVER, TYPICALLY COLLECTOR AND ARTERIAL STREETS DO. AS STATED IN THE TMUTCD, AN ENGINEERING STUDY SHOULD BE PERFORMED BEFORE CROSSWALKS ARE INSTALLED AT LOCATIONS OTHER THAN CONTROLLED INTERSECTIONS.

THE CITY OF BRYAN'S PREFERENCE FOR MARKING CROSSWALKS IS THE LONGITUDINAL (OR "LADDER" STYLE). THE CITY OF COLLEGE STATION'S PREFERENCE IS THE TYPICAL "TRANSVERSE" STYLE; HOWEVER, IN THE NORTHGATE AREA, ADJACENT TO SCHOOL OR SCHOOL ZONES, AND OTHER HIGH VOLUME PEDESTRIAN CROSSINGS, THE LONGITUDINAL (OR "LADDER" STYLE) IS PREFERRED. DEVIATION FROM THESE PREFERENCES WILL BE ALLOWED ONLY WITH THE APPROVAL OF THE CITY ENGINEER.

THE LONGITUDINAL STYLE MARKING SHALL BE 24" WIDE AND 9 FEET IN LENGTH, SPACED 48-INCHES APART. THE TRANSVERSE MARKINGS SHALL CONSIST OF TWO 12-INCH WIDE LINES SEPARATED BY 6 FEET OF UNMARKED PAVEMENT. ALL CROSSWALK PAVEMENT MARKINGS SHALL ALWAYS MEET TxDOT'S SPECIFICATION FOR TYPE I MARKING UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

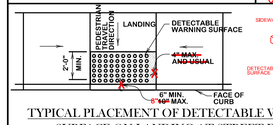
ADDITIONAL INFORMATION ABOUT CROSSWALK MARKINGS CAN BE FOUND IN THE TMUTCD.

CROSSWALKS WITH BRICK PAVERS, STAMPED ASPHALT, STAMPED CONCRETE, ETC., SHALL ALSO REQUIRE RETRO-REFLECTIVE, THERMOPLASTIC TRANSVERSE STRIPING.

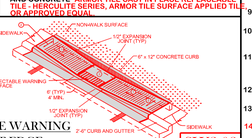
DETECTABLE WARNINGS GENERAL NOTES:

1. CURB RAMPS MUST CONTAIN A DETECTABLE WARNING SURFACE THAT CONSISTS OF RAISED TRUNCATED DOMES COMPLYING WITH ~~SECTION 4.29.2~~ OF THE 2012 TEXAS ACCESSIBILITY STANDARDS (TAS).

   ~~OBTAIN 70% CONTRAST VISIBILITY WITH ADJOINING SURFACE (LIGHT ON DARK OR DARK ON LIGHT SURFACE CONTRAST) AND PARKING AREA. THE SURFACE MUST CONTRAST VISUALLY WITH ADJOINING SURFACE. INCLUDING FLARES.~~ FURNISH DARK BROWN OR DARK RED DETECTABLE WARNING SURFACE ADJACENT TO UNCOLORED CONCRETE, UNLESS SPECIFIED ELSEWHERE IN THE PLANS.
2. DETECTABLE WARNING SURFACES MUST BE SLIP RESISTANT AND NOT ALLOW WATER TO ACCUMULATE.
3. ALIGN TRUNCATED DOMES IN THE DIRECTION OF PEDESTRIAN TRAVEL WHEN ENTERING THE STREET.
4. ~~SHADED AREAS ON SHEETS 3 AND 4 INDICATE THE APPROXIMATE LOCATION FOR THE DETECABLE WARNING SURFACE FOR EACH CURB RAMP TYPE.~~
5. DETECTABLE WARNING SURFACES SHALL BE A MINIMUM OF 24" IN DEPTH IN THE DIRECTION OF PEDESTRIAN TRAVEL, AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR LANDING WHERE THE PEDESTRIAN ACCESS ROUTE ENTERS THE STREET.
6. DETECTABLE WARNING SURFACES SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS A MINIMUM OF 6" AND A MAXIMUM OF 10" FROM THE EXTENSION OF THE FACE OF CURB. DETECTABLE WARNING SURFACES MAY BE CURVED ALONG THE CORNER RADIUS.
7. ACCEPTABLE PAVER MATERIAL SHALL BE ~~CLAY, VITRIFIED POLYMER COMPOSITE, PRECAST POLYMER CONCRETE AND CONCRETE~~. ARMOR TILE CAST IN PLACE REPLACEABLE TILE - HERCULITE SERIES, ARMOR TILE SURFACE APPLIED TILE OR APPROVED EQUAL.



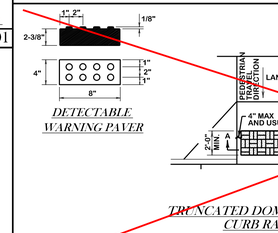
TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON LANDING AT STREET EDGE



SW2-03

PEDESTRIAN FACILITIES GENERAL NOTES:

1. ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL STILL DRAIN PROPERLY SHOULD BE USED. ADJUST CURB RAMP LENGTH OR GRADE OF APPROACH SIDEWALKS AS DIRECTED.
2. LANDINGS SHALL BE A 5' X 5' MINIMUM WITH A MAXIMUM 2% SLOPE IN ANY DIRECTION.
3. MANEUVERING SPACE AT THE BOTTOM OF CURB RAMPS SHALL BE A MINIMUM OF 4' X 4' WHOLLY CONTAINED WITHIN THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICULAR TRAVEL PATH.
4. MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALK AND CURB RAMP IS 2%.
5. CURB RAMPS WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP, EITHER BECAUSE THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE OR BECAUSE THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED. OTHERWISE, PROVIDE FLARED SIDES.
6. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT REFLECTIVE VALUE AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) ~~AND 16 TAC 68.102.~~
7. TO SERVE AS A PEDESTRIAN REFUGE AREA, THE MEDIAN SHOULD BE A MINIMUM OF 5' WIDE. MEDIANS SHOULD BE DESIGNED TO PROVIDE ACCESSIBLE PASSAGE OVER OR THROUGH THEM.
8. CROSSWALK DIMENSIONS, CROSSWALK MARKINGS AND STOP BAR LOCATIONS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS. AT INTERSECTIONS WHERE CROSSWALK MARKINGS ARE NOT REQUIRED, CURB RAMPS SHALL BE ALIGNED WITH THEORETICAL CROSSWALKS, OR AS DIRECTED BY THE ENGINEER.
9. EXISTING FEATURES THAT COMPLY WITH TAS MAY REMAIN IN PLACE UNLESS OTHERWISE SHOWN ON THE PLANS.
10. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS. PROVIDE CURB RAMPS WHEREVER AN ACCESSIBLE ROUTE CROSSES (PENETRATES) A CURB.
11. SEPARATE CURB RAMP AND LANDINGS FROM ADJACENT SIDEWALK AND ANY OTHER ELEMENTS WITH PREMOLD OR BOARD JOINT OF 3/4" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
12. PROVIDE A SMOOTH TRANSITION WHERE THE CURB RAMPS CONNECT TO THE STREET.
13. FLARE SLOPE SHALL NOT EXCEED 10% MEASURED ALONG CURB LINE.
14. CITY OF BRYAN STANDARD CURB RAMPS HAVE BEEN DEVELOPED WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND PUBLIC RIGHT OF WAY ACCESS GUIDELINES (PROWAG).



DETECTABLE WARNING PAVER

TRUNCATED DOME PATTERN CURB RAMP

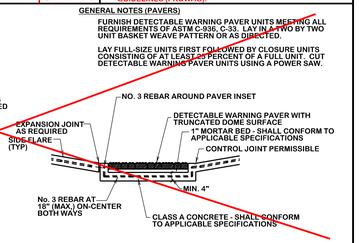
~~DETECTABLE WARNING PAVER~~

SW2-03

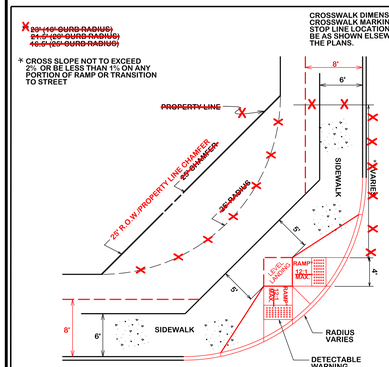
GENERAL NOTES (PAVERS)

FURNISH DETECTABLE WARNING PAVER UNITS MEETING ALL REQUIREMENTS OF ASTM C-936, C-33. LAY IN ~~A~~ TWO BY TWO UNIT BASKET WEAVE PATTERN OR AS DIRECTED.

LAY FULL-SIZE UNITS FIRST ~~FOLLOWED~~ BY CLOSURE UNITS CONSISTING OF AT LEAST 50 PERCENT OF A FULL UNIT. CUT DETECTABLE WARNING PAVER UNITS USING A POWER SAW.

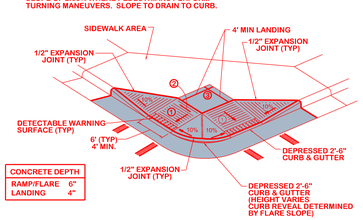


SECTION A-A



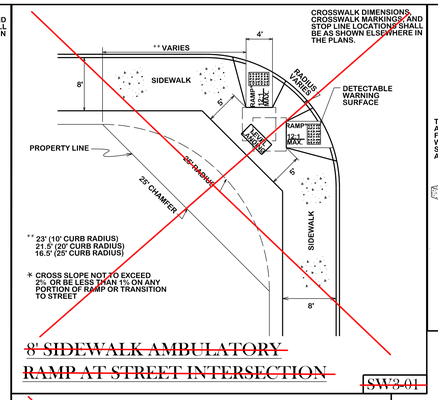
① 8.33% (12:1) MAX RAMP SLOPE
② CROSS SLOPE: 2.00%
③ CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

PAY LIMITS FOR CURB RAMP



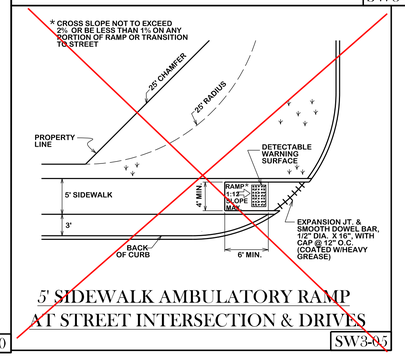
~~6'/8' X X SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION~~

SW3-00



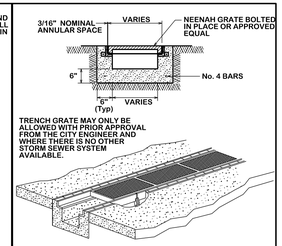
~~8' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION~~

SW3-01



~~5' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION & DRIVES~~

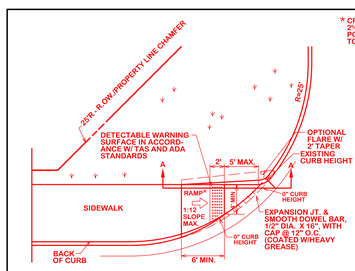
SW3-05

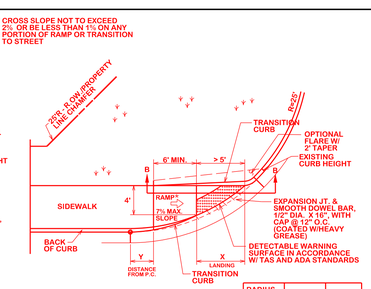


Isometric View

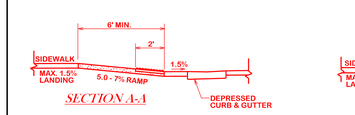
SIDEWALK DRAINAGE TRENCH GRATE

SW3-01

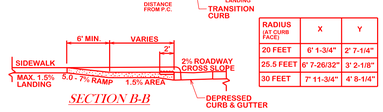




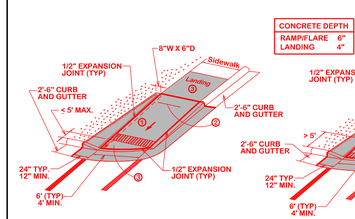
RADIUS (AT CURB FACE)	X	Y
20 FEET	6' 1-3/4"	2' 7-1/4"
25.5 FEET	6' 7-26/32"	3' 2-1/8"
30 FEET	7' 11-3/4"	4' 8-1/4"

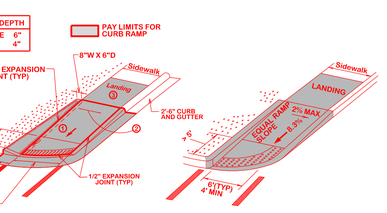


SECTION A-A



SECTION B-B

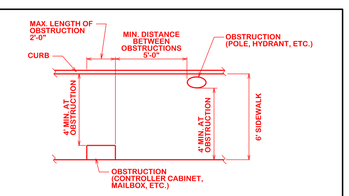




① 8.33% (12:1) MAX RAMP SLOPE
② CROSS SLOPE: 2.00%
③ CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB. IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO LANDING IS REQUIRED.

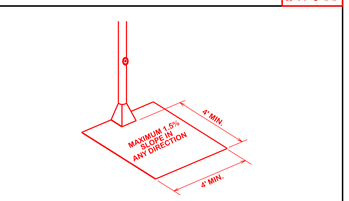
6'/8' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION & COMMERCIAL DRIVES

SW4-02



PLACEMENT OF STREET FIXTURES

SW4-00



CLEAR GROUND SPACE AT PEDESTRIAN PUSH BUTTON

SW4-01

REVISIONS:

BRYAN - COLLEGE STATION STANDARD SIDEWALK DETAILS

CITY OF COLLEGE STATION

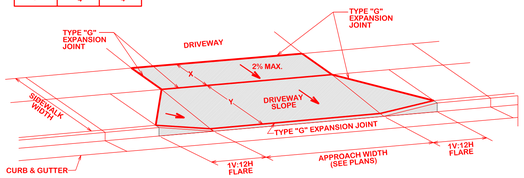
CITY OF BRYAN
The Good Life, Texas Style.

DRAWN BY: C.L.M.
DATE: 08-01-12
SCALE: N T S
APPROVED: W.P.K.

FIGURE:
SW

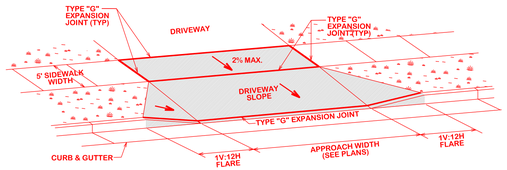
SHEET 1 OF 2

SIDEWALK WIDTH	X	Y
6'	4'	2'
8'	4'	4'

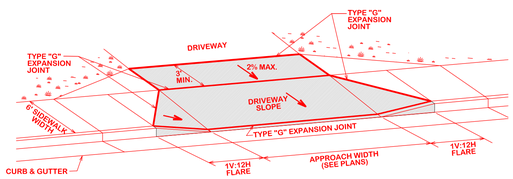


PEDESTRIAN SIDEWALK WITH INTERNAL BYPASS

(PREFERRED METHOD)

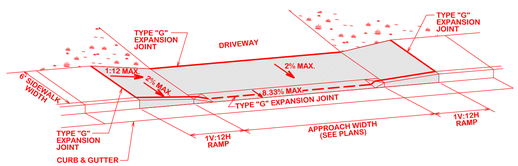


DETACHED PEDESTRIAN SIDEWALK



PEDESTRIAN SIDEWALK WITH EXTERNAL BYPASS

(USE FOR SIDEWALK ADJACENT TO CURB WHERE RIGHT-OF-WAY PERMITS CONSTRUCTION)



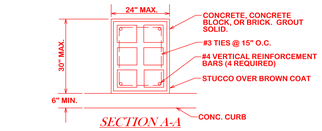
DEPRESSED PEDESTRIAN SIDEWALK

(USE WHEN DRAINAGE BEHIND SIDEWALK IS NOT A PROBLEM)

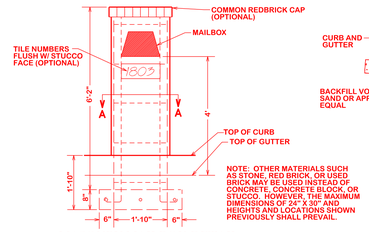
TYPICAL SIDEWALK TREATMENT AT DRIVEWAYS

FOR USE WHEN SIDEWALK AND CURB ARE EXISTING PRIOR TO DRIVEWAY PLACEMENT

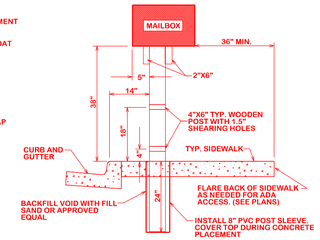
SW5-00



SECTION A-A



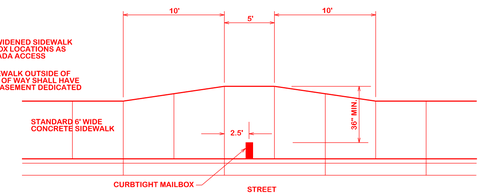
MASONRY MAILBOX DETAIL



MAILBOX POST IN SIDEWALK DETAIL

NOTE:

1. CONSTRUCT WIDENED SIDEWALK AT ALL MAILBOX LOCATIONS AS NEEDED FOR ADA ACCESS (SEE PLANS)
2. WIDENED SIDEWALK OUTSIDE OF PUBLIC RIGHT OF WAY SHALL HAVE A SIDEWALK EASEMENT DEDICATED TO THE CITY.



MAILBOX LOCATION

SW6-00

REVISIONS:

BRYAN - COLLEGE STATION STANDARD SIDEWALK DETAILS

CITY OF COLLEGE STATION

CITY OF BRYAN
The Good Life, Texas Style.

DRAWN BY: C.L.M.
DATE: 08-01-12
SCALE: N T S
APPROVED: W. P. K.
FIGURE:
SW