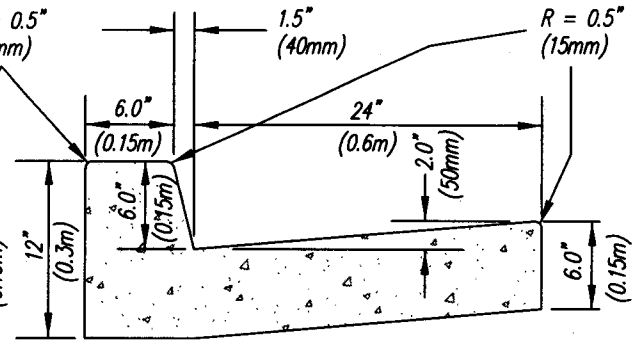
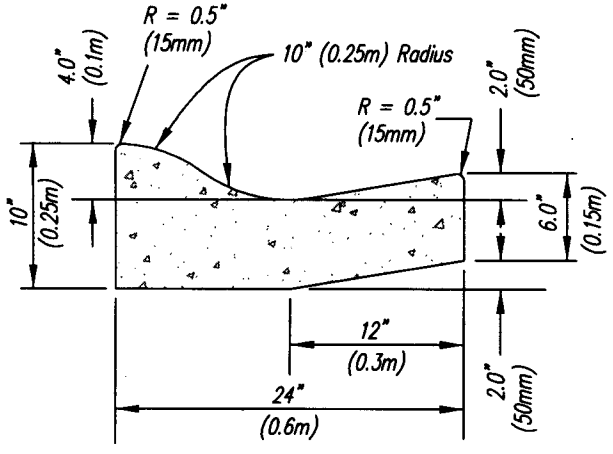


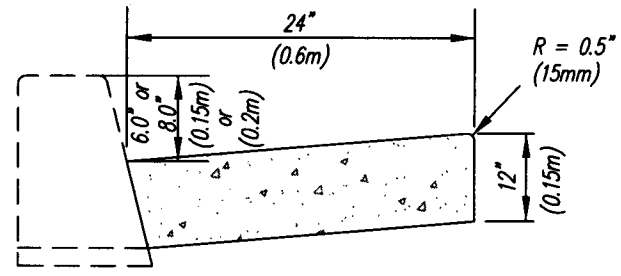
TYPE "A"



TYPE "B"



TYPE "C"



*GUTTER

*Gutter only allowed where approved by City Engineer.

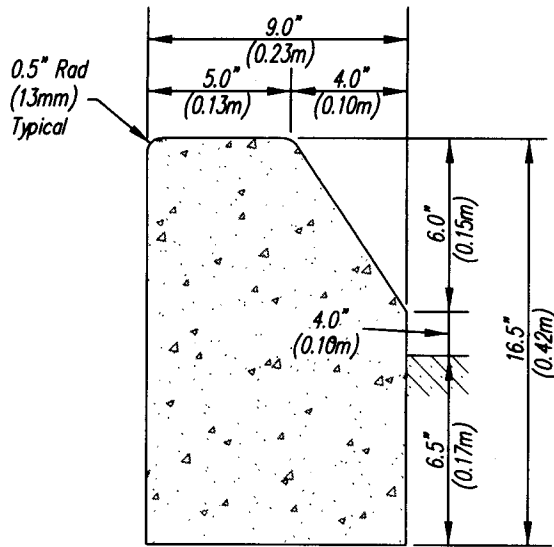
NOTES:

1. All work shall conform to the applicable sections of the "Standard Specifications, State of California, Department of Transportation", approved current edition, and the following general notes:
2. Subgrade preparation for Type "A", "B", and "C" curbs and gutters shall be constructed true to grade and cross section with compaction of 90% to a depth of 6.0" (0.15m) below the subgrade.
3. Concrete for curb and gutter shall be class "B" and shall be within 2.5" (65mm) to 5.5" (0.14m) slump.
4. Timber forms shall be surfaced on the on the side placed next to the concrete and shall not be less than 1.5" (40mm) thick after being surfaced.
5. Top and face shall be troweled smooth, then given a final fine brush finish.
6. Where existing curb and gutters are to be replaced, new construction shall match existing construction unless otherwise directed by the City Engineer.
7. Concrete shall contain no additives unless prior approval is obtained from the City Engineer.
8. Concrete shall be cured with a white pigmented curing compound complying to section 90-7.01B of the standard specifications.
9. Existing sections of curb and gutter shall be sawcut at the limits of the area to be reconstructed.

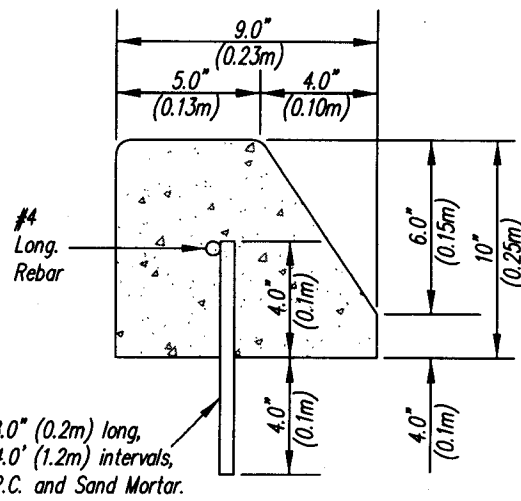
10. Weakened plane joints or cold joints shall be constructed at 15' (4.6m) intervals. Expansion joints shall be at each side of structures and at ends of curb returns.
11. Type "B" curb and gutter is required on all types of streets unless another is expressly permitted by the City Engineer.
12. Type "A" curb and gutter is permitted only where approved or required by the City Engineer.
13. Type "C" curb may be permitted by the City Engineer only in Mobile Home Parks, and R-S-2.5A (Residential Suburban Two-And-One-Half Acre Minimum Lot Size) Zone.
14. Permit for curb and gutter construction shall accompany actual work.
15. When constructing new curb and gutter, the existing pavement shall be sawcut a minimum of 2.0' (0.6m) from the lip of the gutter or as directed by the City Engineer.

FILENAME: ST-1REV

	<p>STANDARD CURBS & GUTTER TYPES "A", "B", & "C"</p>	DATE	6/2/99
	<p>CITY OF BAKERSFIELD CALIFORNIA</p>	DRAWN	JCU
		CHECKED	M. SHAW
		SCALE	N.T.S.
		SHEET NO.	ST-1
APPROVED	CITY ENGINEER	PUBLIC WORKS	DEPARTMENT



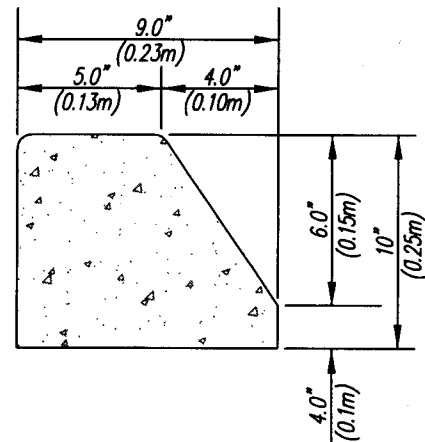
TYPE "M" MEDIAN CURB



TYPE "M-1" MEDIAN CURB
(FORMED)

NOTES:

1. All work shall conform to the applicable sections of the "Standard Specifications, State of California, Department of Transportation", approved current edition, and the following general notes:
2. Subgrade preparation shall be constructed true to grade and cross section with compaction of 90% to a depth of 0.5' (0.15m) below subgrade.
3. Concrete shall be Class "B" and shall be within 2.5" (65mm) to 5.5" (0.14m) slump.
4. Timber forms shall be surfaced on the side placed next to the concrete and shall be less than 1.5" (40mm) thick after being surfaced.
5. Top and Face shall be troweled smooth, then given a final fine brush finish.
6. Where existing curbs are to be replaced, new construction shall match existing construction unless otherwise approved by the City Engineer.
7. Concrete shall contain no additives unless prior approval is obtained from the City Engineer.
8. Concrete shall be cured with a white pigmented curing compound complying to section 90-7.01B of the Standard Specifications.
9. Existing sections of curb shall be sawcut at the limits of the area to be reconstructed.
10. Type "M-1" and "M-2" Median Curb only allowed as directed by the City Engineer.
11. Median curb to be constructed with forms or be controlled horizontally and vertically with stringline.



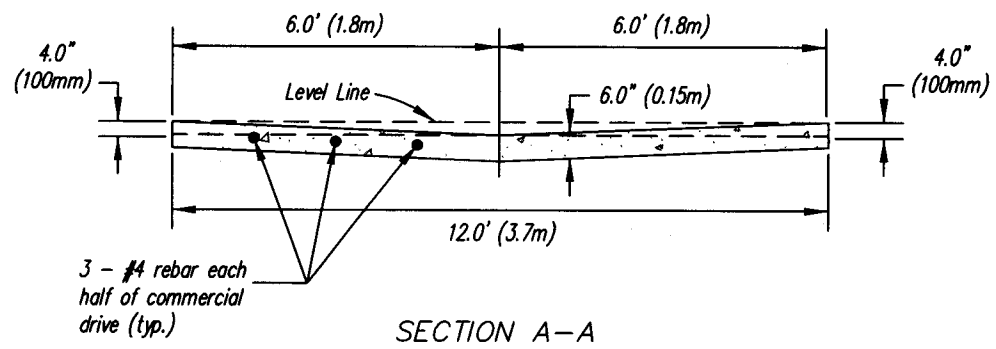
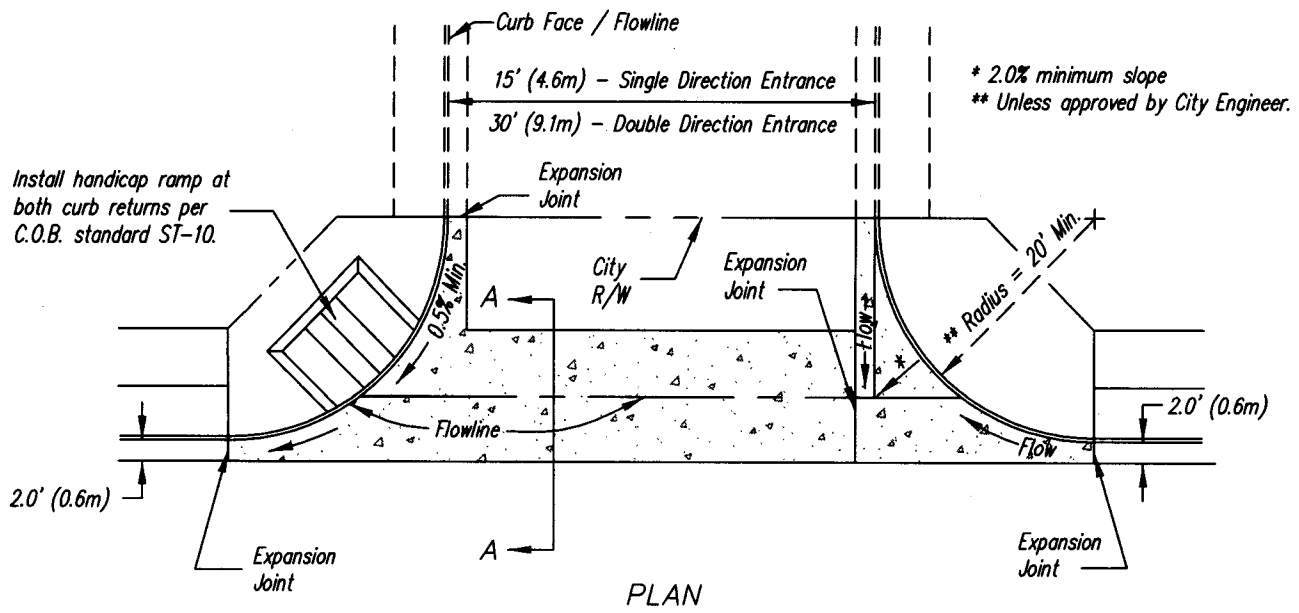
TYPE "M-2" MEDIAN CURB
(FORMED)

JOINTS:

- (a) Formed Curbs: Expansion joints shall be constructed every 30' (9.1m) with weakened plane joints at 15' (4.6m).
- (b) Extruded Curbs: Weakened plane joints shall be constructed at 15' (4.6m) intervals.
- (c) Two #4 longitudinal rebars shall be placed between the curb and the nose section. Bars shall have a 2.0" (50mm) minimum vertical clearance and shall be embedded 2.0' (0.6m) into the curb and nose section.

FILENAME: ST-2REV

APPROVED	STANDARD MEDIAN CURBS TYPE "M" "M-1" & "M-2"	DATE 6/2/99
		DRAWN JCU
CITY ENGINEER	CITY OF BAKERSFIELD CALIFORNIA	CHECKED M. SHAW
		SCALE N.T.S.
PUBLIC WORKS	DEPARTMENT	SHEET NO. ST-2



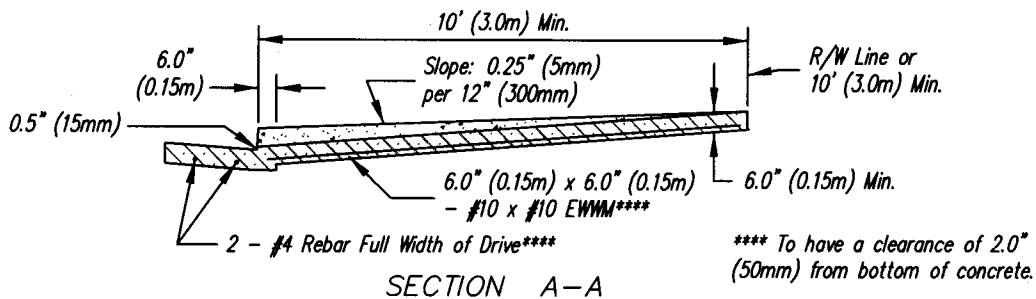
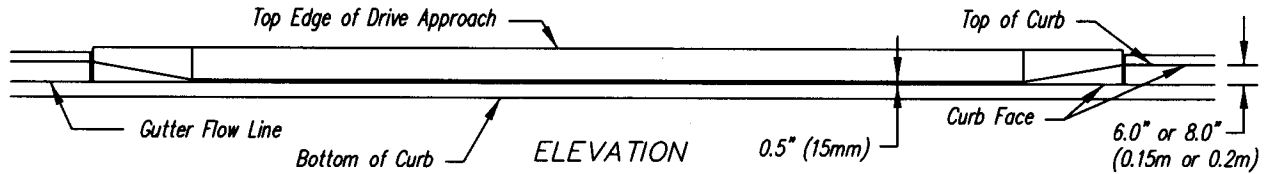
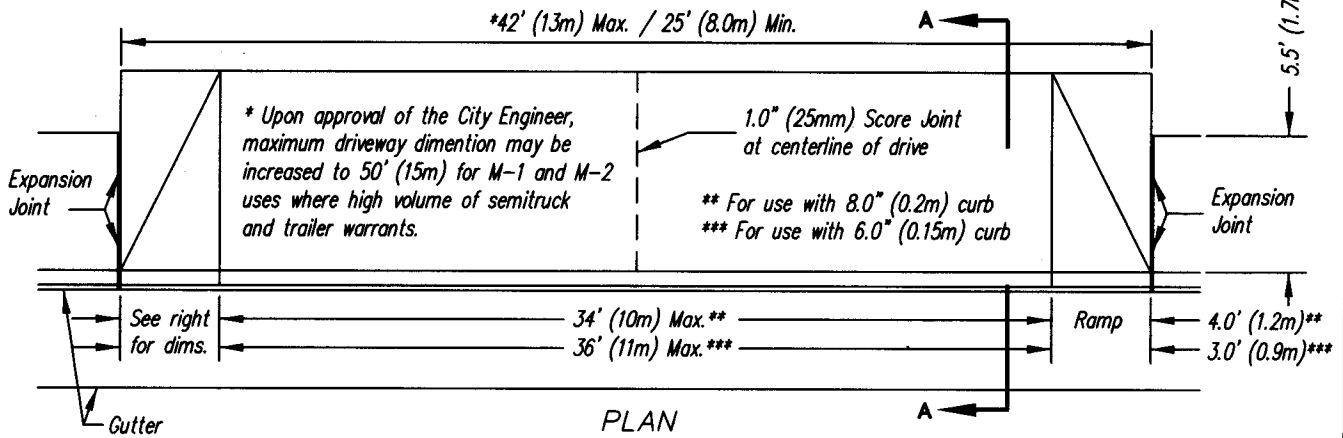
NOTES:

1. All work shall conform to the applicable sections of the specifications entitled "Standard Specifications, State of California, Department of Transportation", approved current edition.
2. Subgrade preparation for crossgutter shall conform to the requirements of the Standard Specifications.
3. Concrete for crossgutter shall be Class "A" and shall conform to the requirements of the Standard Specifications.
4. Expansion Joints shall be constructed at every 30' (9.0m) or as directed by the City Engineer.
5. For standard handicap ramp dimensions and notes, see City of Bakersfield Standard ST-10 or as directed by the City Engineer.
6. Concrete for gutter shall be within 2.5" (65mm) to 4.5" (110mm) slump.
7. Concrete shall contain no additives unless prior approval is obtained from the City Engineer.
8. Concrete shall be cured with a white pigmented curing compound complying with section 90-7.01B of the Standard Specifications.

9. An open street permit is required for all work done with the City of Bakersfield's right-of-way.
10. Bearing soil shall be compacted to 95% of maximum dry density as determined by A.S.T.M. D-1557 to a depth of 1.0' (0.3m) below crossgutter and 1.0' (0.3m) to each side of the crossgutter.
11. The minimum slope on all cross gutters is 0.6% unless approved otherwise by the City Engineer.
12. All crossgutter locations and sizes are to be approved by the City Engineer.
13. For major retail commercial centers, the 12' (3.6m) wide crossgutter shall be eliminated with the provision of other drainage facilities and with the approval of the City Engineer.

		FILENAME: ST-3REV	
		DATE	6/2/99
		DRAWN	JCU
		CHECKED	M. SHAW
		SCALE	N.T.S.
		SHEET NO.	
		ST-3	
APPROVED	STANDARD COMMERCIAL DRIVE APPROACH TYPE "A"		
CITY ENGINEER	CITY OF BAKERSFIELD CALIFORNIA		
	PUBLIC WORKS	DEPARTMENT	

Ramps and Driveway shall be constructed full width to the Right-of-Way line or 10' (3.0m), whichever is less. (See Section A-A and notes)



NOTES:

- All work shown shall conform to the applicable sections of the specifications entitled "Standard Specifications, State of California, Department of Transportation", approved current edition.
- Where driveway is to be constructed for a portion of sidewalk width (Section A-A), sidewalk shall be removed on each side of driveway for ramp construction. Subgrade preparation shall be constructed true to grade and cross section, with compaction of 95% to a depth of 6.0" (0.15m).
- Concrete for driveways shall be Class "A", and shall be within 2.5" (65mm) and 4.5" (0.11m) slump, 6.0" (0.15m) thick and with light broom finish.
- Expansion joints shall be installed as shown.
- All existing concrete curb, gutter, and sidewalk shall be saw cut at a right angle to the flow line.
- Total maximum allowable driveway width shall not exceed 60% of commercial property frontage. Driveway dimension as defined on plan shall be the basis of such determination.
- Use of Type "B" drive approach is only allowed by permission of the City Engineer.
- Permit for driveway construction shall accompany actual works.
- A minimum of 22' (6.1m) of full height curb shall separate driveways, except as noted on Traffic Standard T-20, or as approved by the City Engineer.
- No driveway construction is permitted in the street or in alley returns.
- No portion of the driveway or ramp is to be on adjacent property frontage without prior approval of the City Engineer.
- All driveway locations are subject to approval by the City Engineer.
- Concrete shall contain no additives unless prior approval is obtained from the City Engineer.
- Concrete shall be cured with a white pigmented curing compound complying to Section 90-7.01B of the Standard Specifications.

<p>APPROVED</p>		<p>STANDARD COMMERCIAL DRIVE APPROACH TYPE "B"</p>	<p>DATE 6/2/99</p>
			<p>DRAWN JCU</p>
<p>CITY OF BAKERSFIELD CALIFORNIA</p>		<p>CHECKED M. SHAW</p>	<p>SCALE N.T.S.</p>
		<p>SHEET NO.</p>	<p>ST-4</p>
<p>CITY ENGINEER</p>	<p>PUBLIC WORKS</p>	<p>DEPARTMENT</p>	<p>FILENAME: ST-4REV</p>

NOTES:

1. All work shall conform to the applicable sections of the specifications entitled "Standard Specifications, State of California, Department of Transportation", approved current edition and the following general notes:

2. All driveway locations are subject to approval by the Traffic Authority and City Engineer and as directed by traffic standard T-20.

3. No driveway construction shall be permitted in street or alley returns.

4. Subgrade preparation shall be constructed true to grade and cross section, with compaction of 95% to a depth of 6.0" (0.15m).

5. Concrete shall be Class "A" and shall have a slump between 2.5" (65mm) and 4.5" (0.11m).

6. Concrete shall contain no additives unless prior written approval is obtained from the City Engineer.

7. Concrete shall be cured with a white-pigmented curing compound complying to Section 90-7.01B of the Standard Specifications.

8. Expansion joint filler material shall consist of performed strips of a durable, resilient compound.

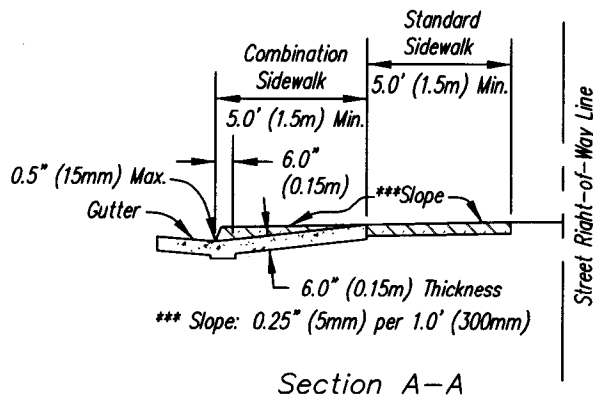
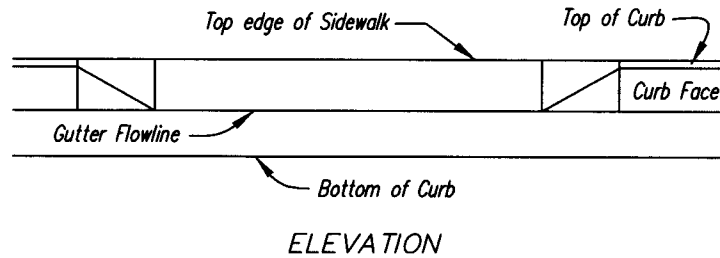
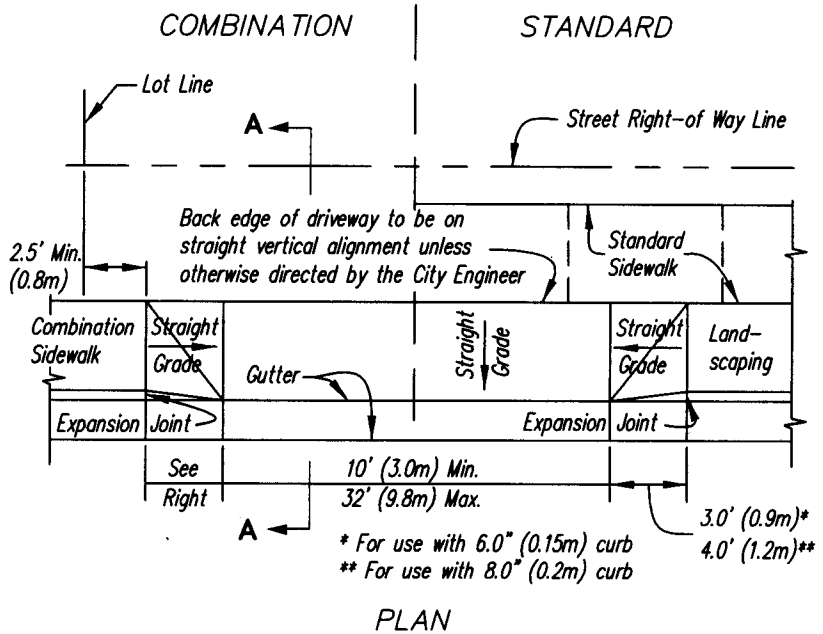
9. All existing concrete curb, gutter, and sidewalk across the face of any proposed driveway shall be sawcut and removed.

10. Existing pavement shall be sawcut and removed a minimum of 2.0' (0.6m) from the edge of the gutter except when the City Engineer has approved the pouring of a new gutter against the exposed edge of the existing pavement.

11. Pavement patching shall conform to City Standard ST-12.

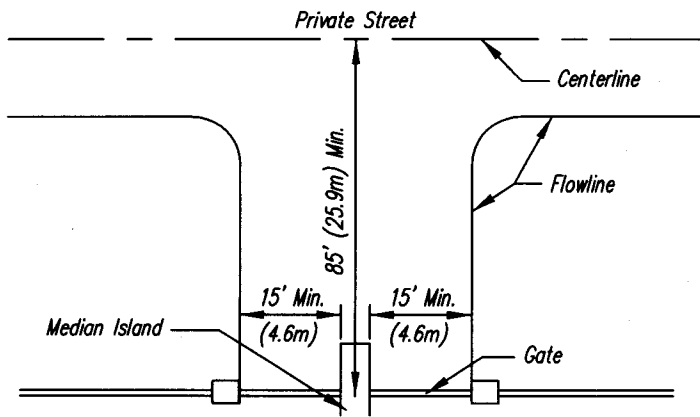
12. A permit for driveway construction shall be obtained prior to start of any work.

13. Existing driveways may be sawcut and widened on one side subject to approval by the City Engineer.

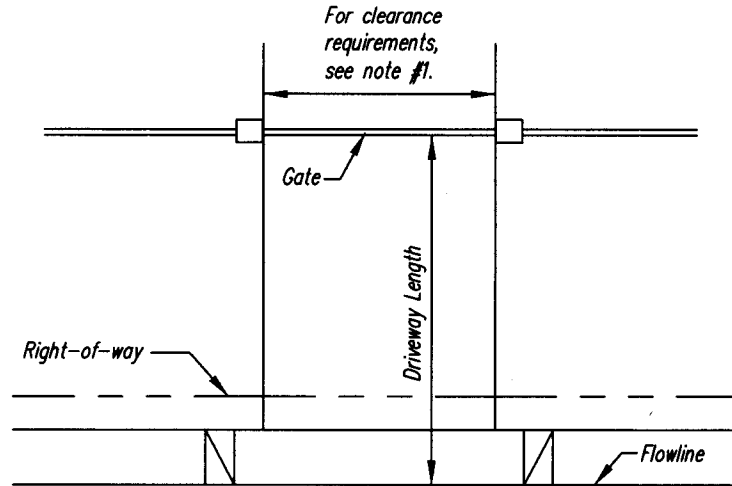


FILENAME: ST-5REV

APPROVED	STANDARD	DATE	6/2/99
		DRAWN	JCU
CITY ENGINEER	RESIDENTIAL DRIVE APPROACH	CHECKED	M. SHAW
		SCALE	NTS
PUBLIC WORKS	CITY OF BAKERSFIELD CALIFORNIA	SHEET NO.	ST-5
		DEPARTMENT	



DRIVE WITH MEDIAN ISLAND



DRIVE WITHOUT MEDIAN ISLAND

NOTES:

1. Sliding or swinging gates shall provide a minimum horizontal clearance of 15' (4.6m) for a one way drive with a median island, 20' (6.1m) for a one way drive without a median island, or 24' (7.3m) for a two way approach. All gates must have a minimum vertical of 14' (4.3m) when gate is in the full open position. Horizontal distance shall be measured perpendicular to the direction of travel on the driveway. Vertical distance shall be measured from the highest elevation of the driveway to the lowest overhead obstruction.

2. A firebox enclosure with an override switch to open the gate shall be installed at each gate location. The firebox shall be installed on the gate control pedestal or on the gate control box. The firebox shall be a N.E.M.A. Type 3R rain tight cabinet with a standard key lock. Standard key lock shall be approved by the City of Bakersfield Fire Department prior to installation. The override switch shall be mounted on a deadfront switch-board.

3. All electrical equipment for use in a firebox shall conform to Section 86-1.02 "Regulations and Code of the Standard Specifications, State of California, Department of Transportation", approved current edition.

4. The gate operator shall have a disconnect feature for manual operations of the gate when the power fails.

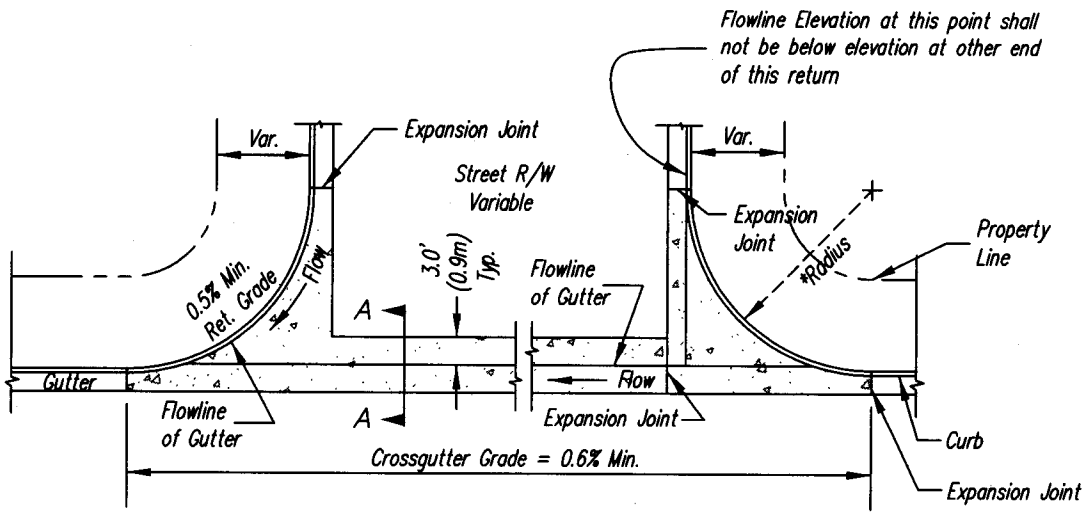
5. Minimum driveway length from the gate to the flowline of a public street shall be 50' (15.2m) or as per table 6.9.2 of the Subdivision Design Manual, whichever is greater. Multiple lanes in a driveway may be considered in reducing required driveway length, but in no case will the minimum length be less than 50' (15.2m).

6. Minimum roadway length from the gate to the centerline of the nearest perpendicular private street shall be 85' (25.9m) or greater due to the turning radius requirements of certain types of fire equipment.

7. Prior to issuance of Certificate of Occupancy, approval of all private gates and accesses must be obtained from the City of Bakersfield Fire Department.

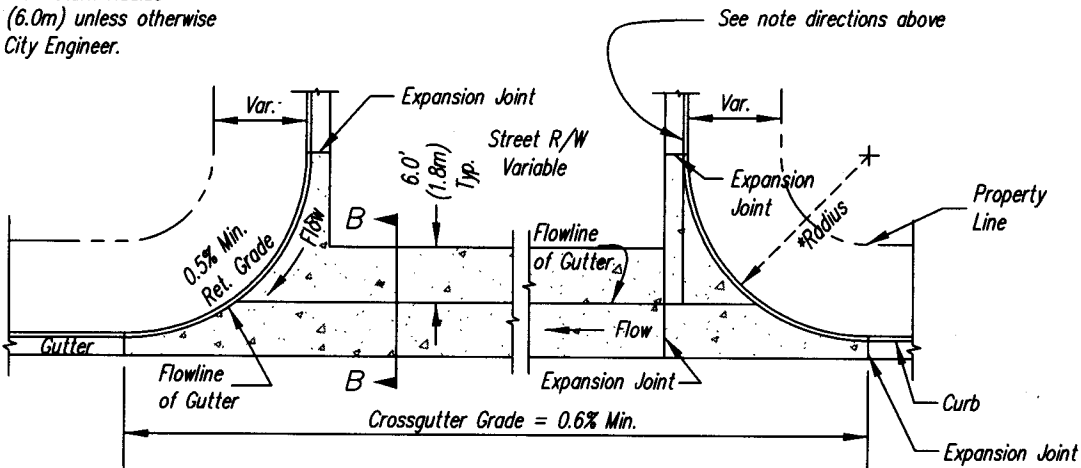
FILENAME: ST-6REV

	<p>STANDARD</p> <p>GATED ENTRY FOR PRIVATE STREETS</p> <p>CITY OF BAKERSFIELD CALIFORNIA</p>	DATE	6/2/99
		DRAWN	JCU
		CHECKED	M. SHAW
		SCALE	N.T.S.
APPROVED		SHEET NO.	ST-6
CITY ENGINEER	PUBLIC WORKS DEPARTMENT		

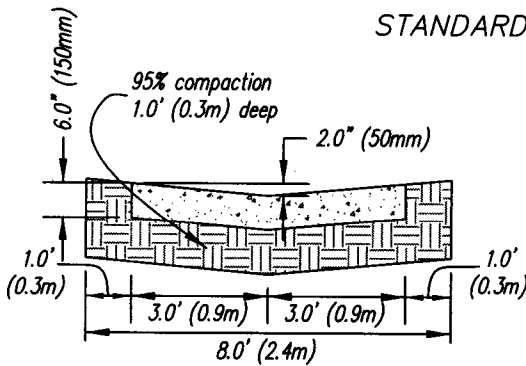


STANDARD 6.0' (1.8m) CROSS GUTTER

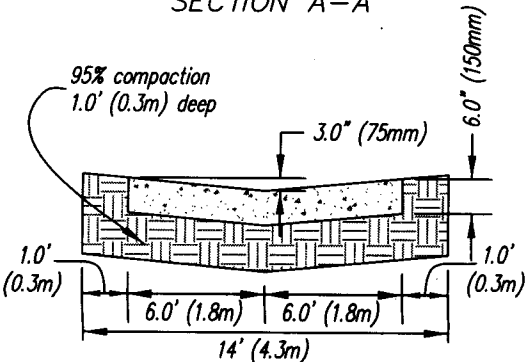
* Standard Curb Return Radius is to be 20' (6.0m) unless otherwise approved by City Engineer.



STANDARD 12.0' (3.7m) CROSS GUTTER



SECTION A-A



SECTION B-B

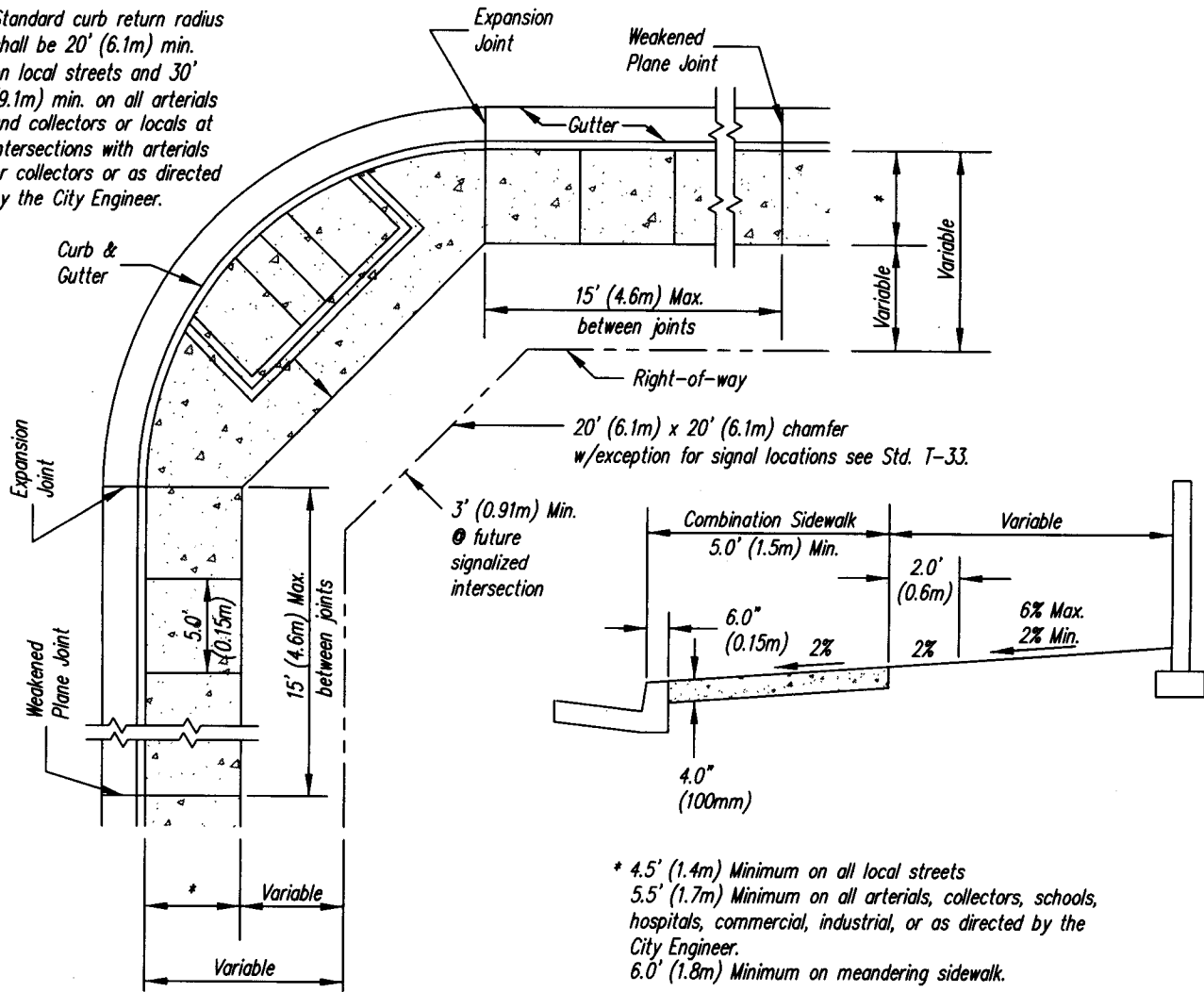
NOTES:

1. All work shall conform to the applicable sections of the specifications entitled "Standard Specifications, State of California, Department of Transportation", adopted current edition.
2. Concrete for cross gutter shall be Class "A" and shall conform to the requirements of the Standard Specifications.
3. Expansion joints shall be constructed every 30' (9.0m) or as directed by the City Engineer.
4. Concrete shall be class "A" and slump shall be within 2.5" (65mm) to 4.5" (0.11m)
5. All Crossgutter locations and sizes are to be approved by the City Engineer.
6. Bearing soil shall be compacted to 95% of maximum dry density as determined by A.S.T.M. D-1557 to a depth of 1' (0.3m) below crossgutter and 1.0' (0.3m) to each side of the crossgutter.
7. Concrete shall contain no additives unless prior approval is obtained from City Engineer.
8. Concrete shall be cured with a white pigmented curing compound complying to section 90-7.01B of the std. specifications.

FILENAME: ST-7REV

APPROVED	STANDARD RESIDENTIAL CROSS GUTTERS	DATE	6/2/99
		DRAWN	JCU
CITY ENGINEER	CITY OF BAKERSFIELD CALIFORNIA	CHECKED	M. SHAW
		SCALE	N.T.S.
PUBLIC WORKS	DEPARTMENT	SHEET NO.	ST-7

Standard curb return radius shall be 20' (6.1m) min. on local streets and 30' (9.1m) min. on all arterials and collectors or locals at intersections with arterials or collectors or as directed by the City Engineer.



- * 4.5' (1.4m) Minimum on all local streets
- 5.5' (1.7m) Minimum on all arterials, collectors, schools, hospitals, commercial, industrial, or as directed by the City Engineer.
- 6.0' (1.8m) Minimum on meandering sidewalk.

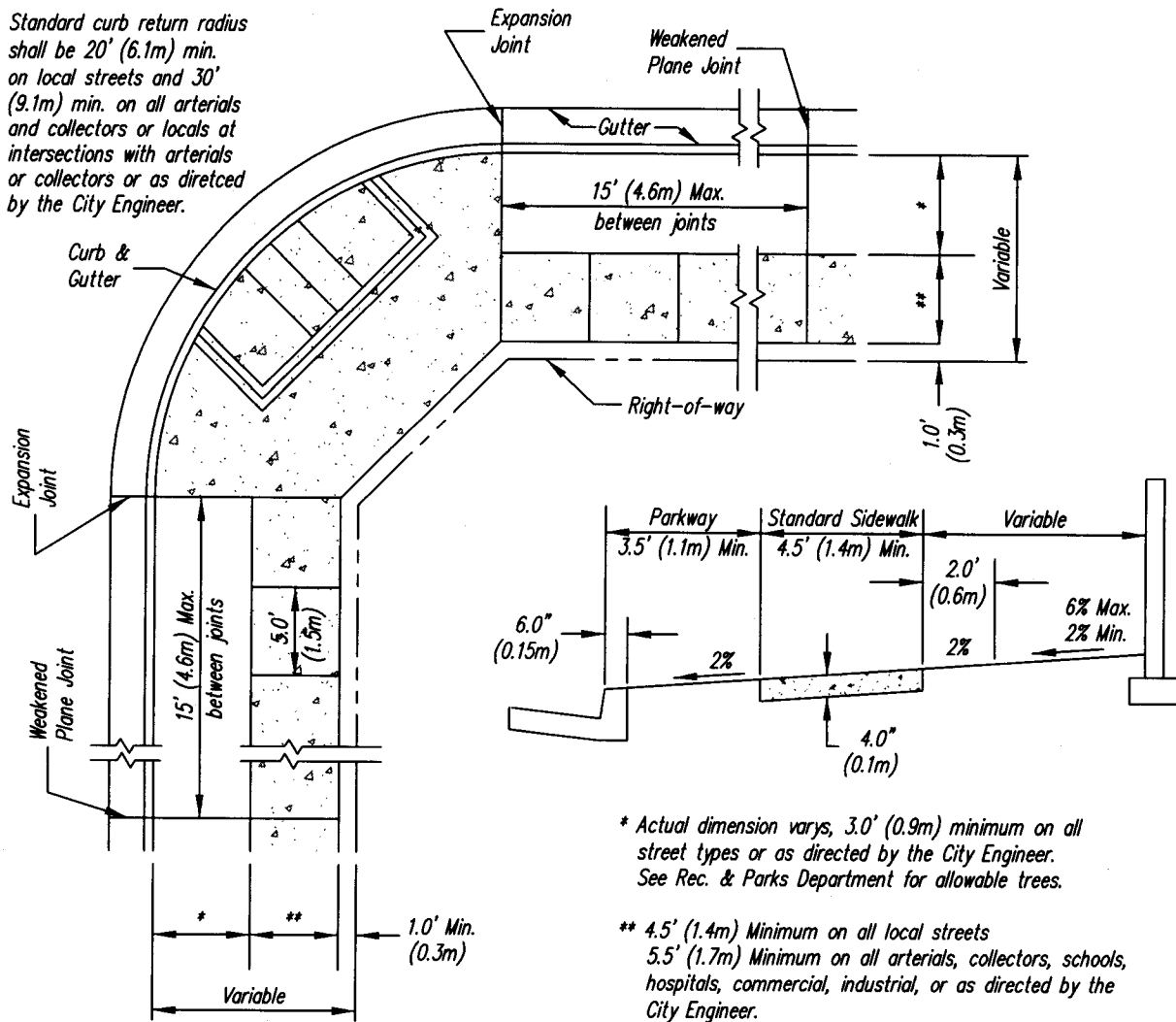
NOTES:

1. All work shall conform to the applicable sections of the specifications entitled "Standard Specifications, State of California, Department of Transportation", approved current edition.
2. Subgrade preparation shall be constructed true to grade and cross section, with compaction of 90% to a depth of 0.5' (0.15m).
3. Concrete shall be Class "A" and shall have a slump between 2.5" (65mm) and 5.5" (140mm). The surface shall be finished to grade and cross section with a float, troweled smooth, and finished with a broom.
4. Concrete shall contain no additives unless prior approval is obtained from the City Engineer.
5. Concrete shall be cured with a white-pigmented curing compound complying to Section 90-7.01B of the Standard Specifications.
6. Weakened Plane Joints shall be installed at 15' (4.6m) intervals and expansion joints at 60' (18.3m) intervals. Expansion joints shall be located each side of a structure and at the end of curb returns.
7. Expansion joint filler material shall consist of pre formed strips of a durable, resilient compound.
8. Sidewalks shall be scored to a minimum depth of 0.125" (5mm) unless otherwise directed by the City Engineer.
9. New sidewalk construction in blocks with existing sidewalk shall conform in dimension and location to those in place, or as directed by the City Engineer.
10. Existing sidewalk shall be sawcut and removed at the first scoring line at or beyond the planned joint.
11. A permit for sidewalk construction and reconstruction shall accompany actual work.
12. Any variance in finish, color, or material, from standard will require approval from the advisory agency.
13. Transitions in sidewalk types must be approved by the City Engineer.

FILENAME: ST-BREV

APPROVED	STANDARD	DATE	6/2/99
		DRAWN	JCU
CITY ENGINEER	COMBINATION SIDEWALK	CHECKED	M. SHAW
		SCALE	N.T.S.
		SHEET NO.	ST-8
	CITY OF BAKERSFIELD CALIFORNIA		
	PUBLIC WORKS	DEPARTMENT	

Standard curb return radius shall be 20' (6.1m) min. on local streets and 30' (9.1m) min. on all arterials and collectors or locals at intersections with arterials or collectors or as directed by the City Engineer.



* Actual dimension varies, 3.0' (0.9m) minimum on all street types or as directed by the City Engineer. See Rec. & Parks Department for allowable trees.

** 4.5' (1.4m) Minimum on all local streets
 5.5' (1.7m) Minimum on all arterials, collectors, schools, hospitals, commercial, industrial, or as directed by the City Engineer.
 6.0' (1.8m) Minimum on meandering sidewalk.

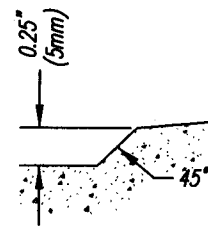
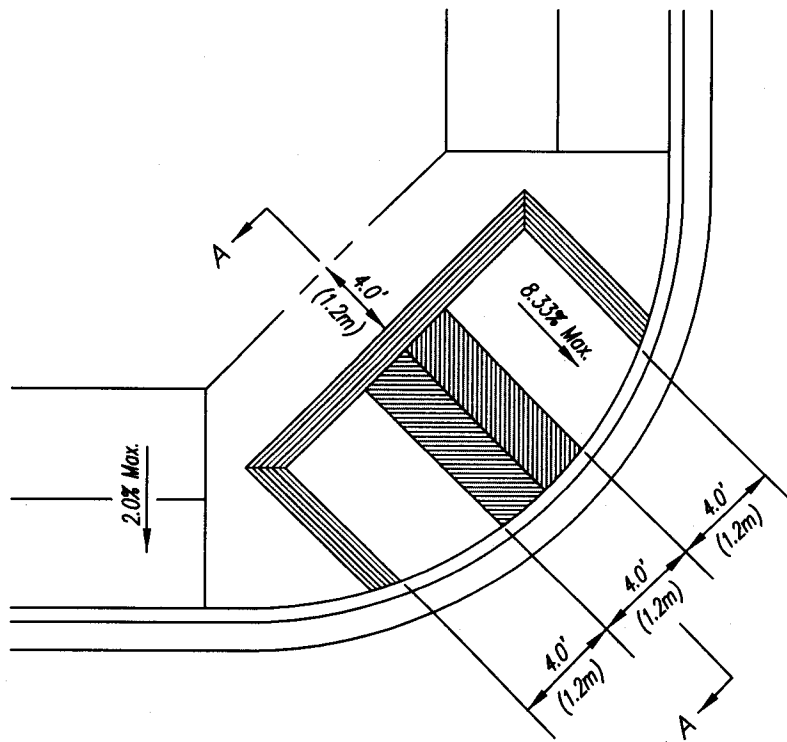
NOTES:

1. All work shall conform to the applicable sections of the specifications entitled "Standard Specifications, State of California, Department of Transportation", approved current edition.
2. Subgrade preparation shall be constructed true to grade and cross section, with compaction of 90% to a depth of 0.5' (0.15m).
3. Concrete shall be Class "A" and shall have a slump between 2.5" (65mm) and 5.5" (140mm). The surface shall be finished to grade and cross section with a float, troweled smooth, and finished with a broom.
4. Concrete shall contain no additives unless prior approval is obtained from the City Engineer.
5. Concrete shall be cured with a white-pigmented curing compound complying to Section 90-7.01B of the Standard Specifications.
6. Weakened Plane Joints shall be installed at 15' (4.6m) intervals and expansion joints at 60' (18.3m) intervals. Expansion joints shall be located each side of a structure and at the end of curb returns.
7. Expansion joint filler material shall consist of pre formed strips of a durable, resilient compound.

8. Sidewalks shall be scored to a minimum depth of 0.125" (5mm) unless otherwise directed by the City Engineer.
9. New sidewalk construction in blocks with existing sidewalk shall conform in dimension and location to those in place, or as approved by the City Engineer.
10. Existing sidewalk shall be sawcut and removed at the first scoring line at or beyond the planned joint.
11. A permit for sidewalk construction and reconstruction shall accompany actual work.
12. Any variance in finish, color, or material, from standard will require approval from the advisory agency.
13. Transitions in sidewalk types must be approved by the City Engineer.

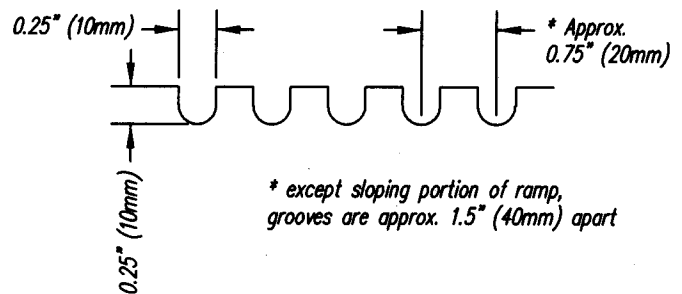
FILENAME: ST-9REV

	STANDARD	DATE	6/2/99
	STANDARD SIDEWALK	DRAWN	JCU
		CHECKED	M. SHAW
		SCALE	N.T.S.
APPROVED	CITY OF BAKERSFIELD CALIFORNIA	SHEET NO.	ST-9
CITY ENGINEER	PUBLIC WORKS	DEPARTMENT	



LIP DETAIL

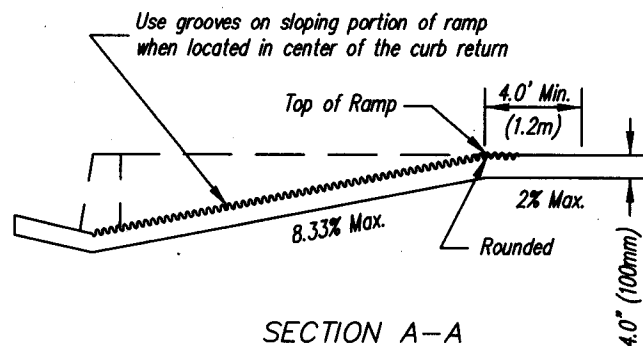
TYPE "A" RAMP



GROOVING DETAIL

NOTES:

1. The bottom of the ramp shall have a 0.25" (5mm) lip at 45 degrees.
2. The ramp shall have a 1.0' (0.3m) wide border with 0.25" (5mm) grooves approximately 0.75" (15mm) on center, see grooving detail. The surface of the ramp shall have a transverse broomed surface texture rougher than the surrounding sidewalk except when located in center of curb return.
3. When ramp is located in the center of the curb return, it shall be grooved in a herringbone pattern with 0.25" (10mm) grooves approximately 1.5" (40mm) O.C. See grooving detail. Grooves should be aligned parallel to crosswalk stripes to direct blind pedestrians into appropriate crosswalk.
4. Ramp side slope should vary uniformly from a max. of up to 12.5% at curb to conform with longitudinal sidewalk slope adjacent to top of the ramp. The platform may be eliminated if the grade does not exceed 8.33%.



SECTION A-A

FILENAME: ST-10REV

APPROVED CITY ENGINEER	<p>STANDARD HANDICAP RAMP</p> <p>CITY OF BAKERSFIELD CALIFORNIA</p>	DATE	6/2/99
		DRAWN	JCU
		CHECKED	M. SHAW
		SCALE	N.T.S.
		SHEET NO.	ST-10
	PUBLIC WORKS	DEPARTMENT	

NOTES:

1. If distance from curb to back of sidewalk is too short to accommodate ramp and 4.0' (1.2m) platform as in Case B1, the sidewalk may be depressed longitudinally as in Case B2 or may be widened as in case C1.

2. If sidewalk is less than 5.0' (1.5m) wide, the full width of the sidewalk shall be depressed as shown in Case C2.

3. If planting area width is equal to or greater than ramp length, ramp side slope "X" distance = 3.0' (0.9m - see Case C2).

4. For Case D1 and D2, the longitudinal portion of the sidewalk may need to be depressed as shown in Case B2.

5. If located on a curve, the sides of the ramp need not be parallel, but the minimum width of the ramp shall be 4.0' (1.2m).

6. The bottom of the ramp shall have a 0.25" (10mm) lip at 45°. See std. ST-10.

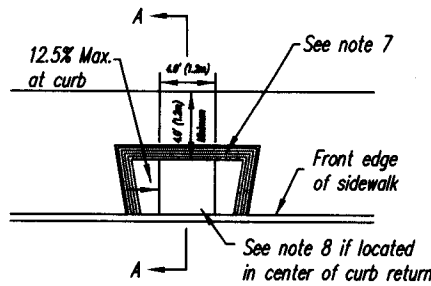
7. The ramp shall have a 1.0' (0.3m) wide border with 0.25" (10mm) grooves approximately 0.75" (20mm) O.C. See grooving detail on standard ST-19A. The surface of the ramp shall have a transverse broomed surface texture rougher than the surrounding sidewalk except when located in center of curb return.

8. When ramp is located in center of curb return, it shall be grooved in a herring-bone pattern with 0.25" (10mm) grooves approximately 1.5" (40mm) O.C. See grooving detail on standard ST-10. Grooves should be aligned parallel to crosswalk stripes to direct blind pedestrians into appropriate crosswalk.

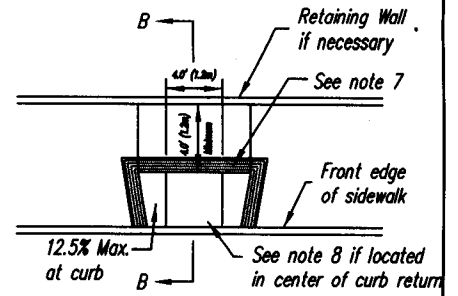
9. Ramp side slope varies uniformly from a maximum of up to 12.5% at curb to conform with longitudinal sidewalk slope adjacent to top of the ramp, except in Cases C2 & D2. The ramp platform may be eliminated if the grade does not exceed 8.33%.

10. **RETROFITS** - When a wheelchair ramp is added to an existing facility, the following changes are permitted:

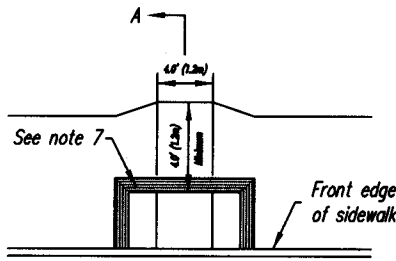
- (A) Ramp grade in Case C2 may be increased to 4%.
- (B) Other ramp grades may be increased to a maximum of 11.1% (however, they should be as flat as possible).
- (C) Where the 4.0' (1.2m) platform is not feasible, the width may be decreased to 3.0' (0.9m).
- (D) The platform may be eliminated if the grade does not exceed 8.33%.



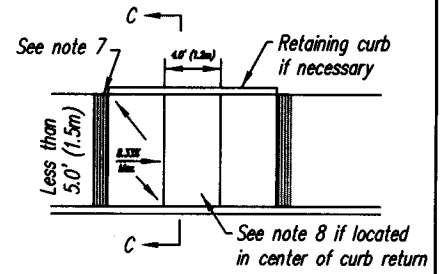
CASE B1



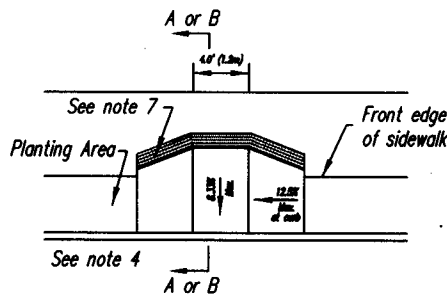
CASE B2



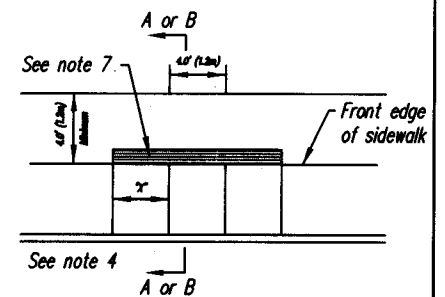
CASE C1



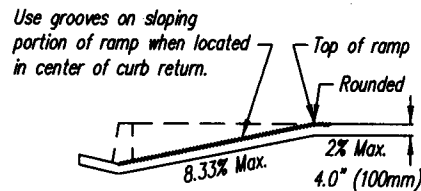
CASE C2



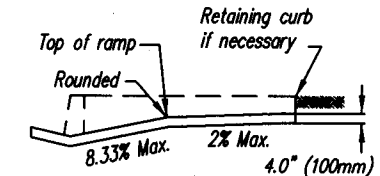
CASE D1



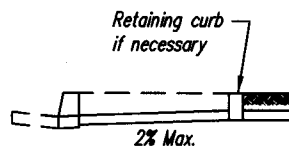
CASE D2



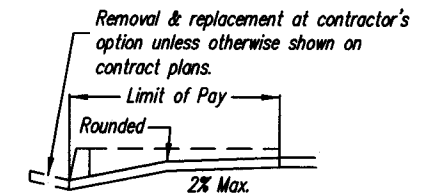
SECTION A-A



SECTION B-B



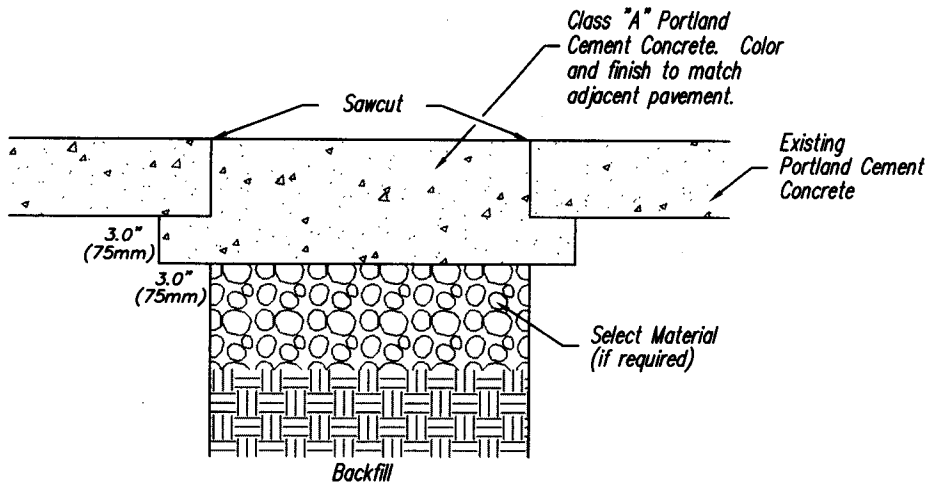
SECTION C-C



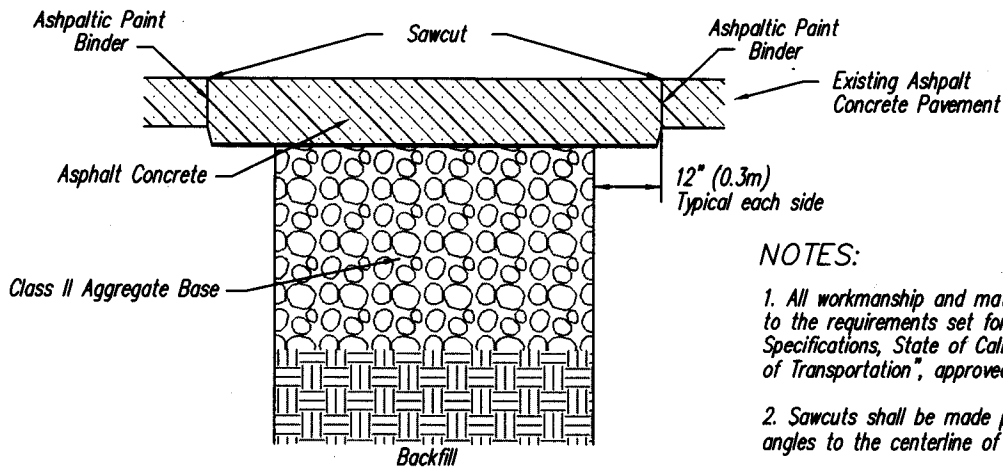
DETAIL H

FILENAME: ST-11REV

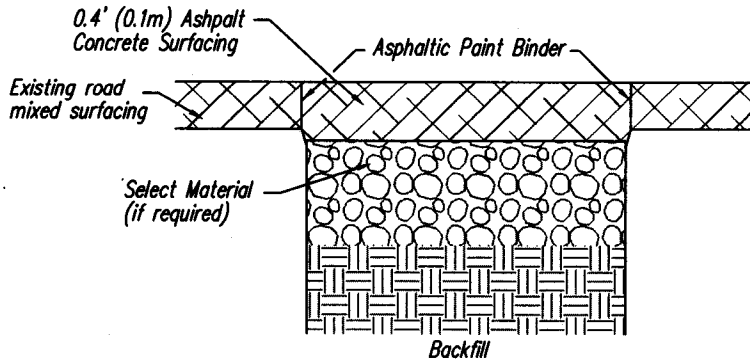
APPROVED	STANDARD HANDICAP RAMPS	DATE	6/2/99
		DRAWN	JCU
CITY ENGINEER	CITY OF BAKERSFIELD CALIFORNIA	CHECKED	M. SHAW
		SCALE	N.T.S.
PUBLIC WORKS	DEPARTMENT	SHEET NO.	ST-11



PATCH IN CONCRETE SURFACE



PATCH IN ASPHALT CONCRETE SURFACE



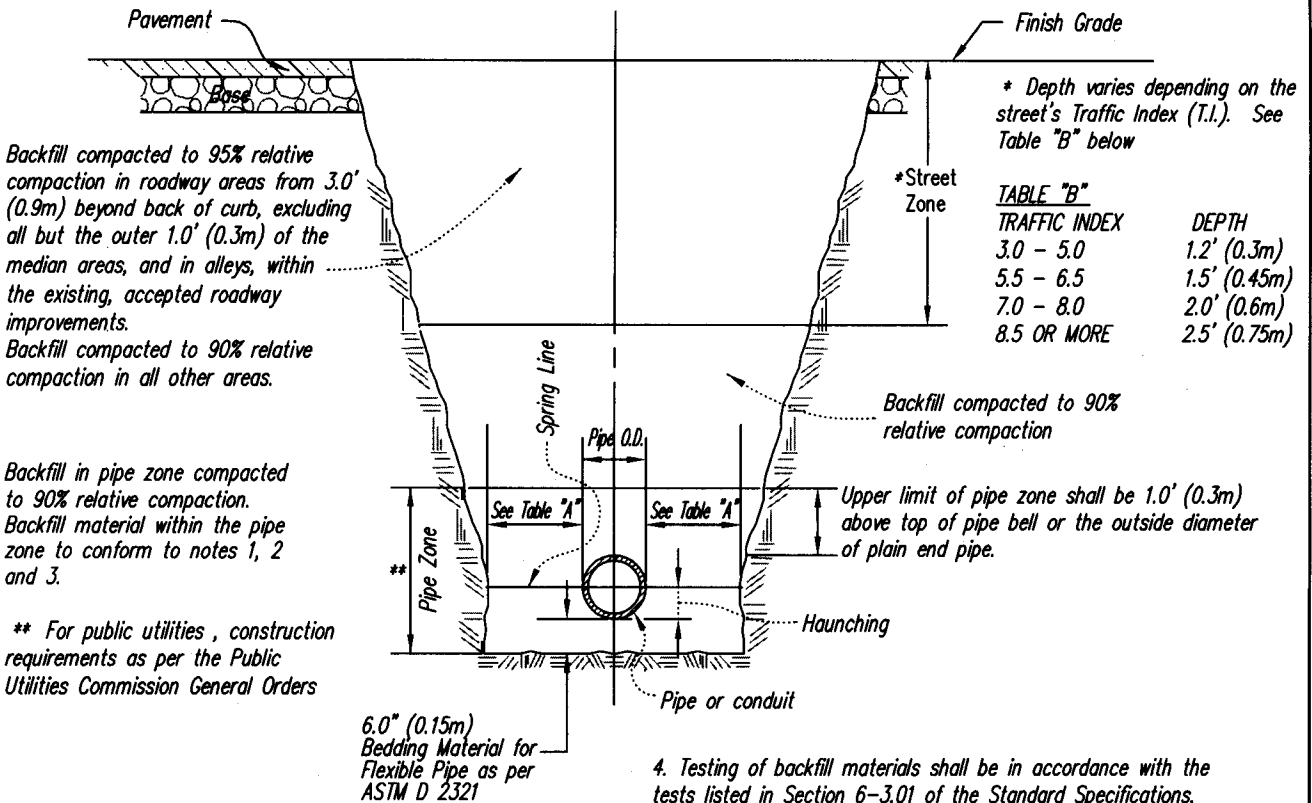
PATCH IN ROAD MIXED SURFACE

NOTES:

1. All workmanship and materials shall conform to the requirements set forth in the "Standard Specifications, State of California, Department of Transportation", approved current edition.
2. Sawcuts shall be made parallel or at right angles to the centerline of the street.
3. Depth of select material, if required, shall be determined in the field by the engineer.
4. Patches less than 2.0' (0.6m) from existing patches, edges of payment, or gutter shall be extended to include the intermediate isolated strip of existing pavement.
5. Minimum patch width shall be 2.0' (0.6m) at its smallest dimension, unless otherwise allowed by the city engineer.
6. Reference standards ST-13 and ST-14 for compaction requirements.
7. For patch in asphalt concrete unless otherwise allowed by the city engineer:
 - A. local streets minimum 0.4' (0.1m) asphalt concrete over 0.5' (0.15m) Class II aggregate base
 - B. Arterial and collector streets minimum 0.7' (0.2m) asphalt concrete over 1.0' (0.3m) Class II aggregate base.

FILENAME: ST-12REV

	STANDARD	DATE	6/2/99
	PAVEMENT PATCHES	DRAWN	JCU
		CHECKED	M. SHAW
		SCALE	N.T.S.
		SHEET NO.	
APPROVED	CITY OF BAKERSFIELD CALIFORNIA	ST-12	
CITY ENGINEER	PUBLIC WORKS	DEPARTMENT	



NOTES:

1. Backfill for Rigid Pipe.

Backfill material within the pipe zone shall be free of deleterious material and shall have a Sand Equivalent of not less than 20 and shall conform to the following grading:

Sieve Size	Percentage passing
3/4" (20mm)	100
No. 4	35-100
No. 30	20-100

This backfill material shall be placed in not to exceed one foot (1.0' loose)(0.3m) layers, simultaneously on each side of the pipe in such a manner as not to damage or disturb the pipe on its alignment and grade. Each layer shall be thoroughly compacted by mechanical tamping. Backfill material shall be properly compacted to springline prior to proceeding.

2. Backfill for flexible pipe.

Pipe and fittings shall be installed in accordance with the current ASTM specification D-2321. Only Class I and II embedment materials within the pipe zone will be considered suitable. Within the pipe zone, water flooding and jetting shall not be used for backfill compaction for flexible pipe. The bedding and haunching shall be hand placed to the Spring line of the pipe and properly compacted. For sewer mains, Class I bedding is required for bedding and haunching. Care shall be taken not to dislocate the pipe. The remaining backfill in the pipe zone shall be hand placed and compacted in lifts not to exceed 6.0" (0.15m) thickness. Backfill material shall be properly compacted to springline prior to proceeding.

3. Backfill material above the pipe zone shall be free of deleterious material and lumps or stones exceeding 4.0" (75mm) in greatest dimension and shall be placed in not to exceed one foot (1.0' loose) (0.3m) layers and each layer shall be thoroughly compacted by mechanical tamping.

4. Testing of backfill materials shall be in accordance with the tests listed in Section 6-3.01 of the Standard Specifications, (or ASTM D1557, Method "C") for trench width greater than 1.0' (0.3m). If trench width is less than 1.0' (0.3m), backfill with 2 sack slurry.

5. Compaction tests will be required and shall be the responsibility of the Developer / Subdivider / Contractor. The number and location of the tests shall be determined by the City Engineer. The tests shall be in accordance with the tests listed in Section 6-3.01 of the Standard Specifications, (or ASTM D1557, Method "C").

6. Each layer of backfill material shall meet the compaction, sand equivalent and gradation requirements before the next layer is placed.

7. For pavement patches within paved areas, see standard drawing ST-12 in this design manual.

TABLE "A"

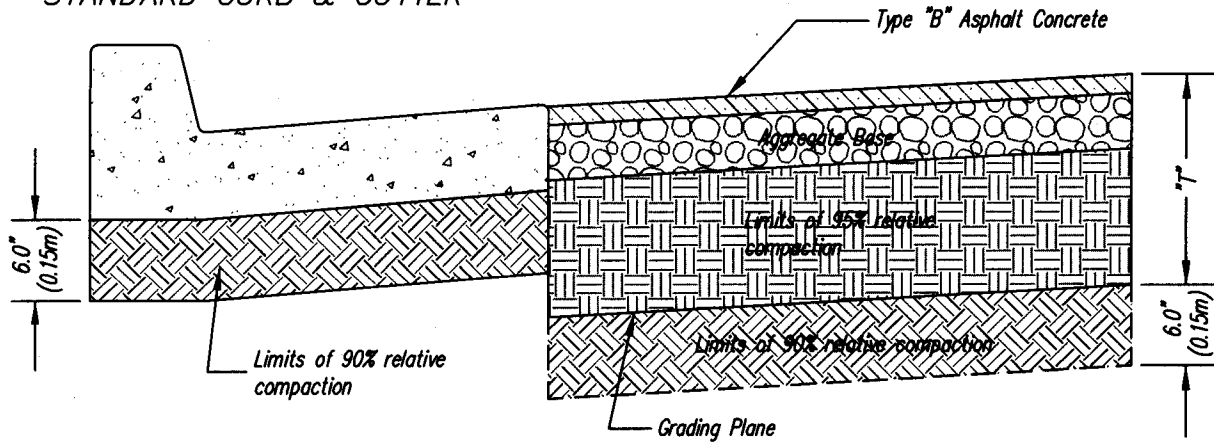
The following shall apply for trench widths:

PIPE	WIDTH	
	TAMPING	CLASS I BEDDING OR SLURRY
IN GREATEST DIMENSION		
1.0'(0.3m) or less	1.0'(0.3m) wider both sides	4.0" (75mm) wider both sides
1.0'(0.3m) up to 2.0' (0.6m)	1.0'(0.3m) wider both sides	6.0" (0.15m) wider both sides
2.0'(0.6m) or more	1.5'(0.45m) wider both sides	1.0'(0.3m) wider both sides

FILENAME: ST-13REV

APPROVED	CITY ENGINEER	STANDARD TRENCH BACKFILL AND COMPACTION REQUIREMENTS	DATE 6/2/99
			DRAWN JCU
CITY ENGINEER	PUBLIC WORKS	CITY OF BAKERSFIELD CALIFORNIA	CHECKED M. SHAW
			SCALE N.T.S.
			SHEET NO. ST-13
		DEPARTMENT	

STANDARD CURB & GUTTER



NOTES:

1. Pavement shall be Type "B" asphalt concrete meeting the requirements of section 39 of the "State of California, Department of Transportation, Standard Specifications", approved current edition, unless otherwise required by the City Engineer.

2. Aggregate base shall be Class II aggregate base conforming to Section 26 of the standard specifications.

3. Structural sections for all streets shall be designed using traffic indexes in accordance with the provisions of section 3.3.1.C of the Subdivision and Engineering Design Manual.

4. Soil test data used in the design calculation shall be furnished by a soil testing laboratory report to be signed and sealed by a licensed engineer.

5. Minimum A.C. thickness is to be 0.2' (60mm) Type "B" Minimum Agg. Base is to be 0.4' (0.12m).

6. A safety factor of 0.2 shall be applied in pavement calculations.

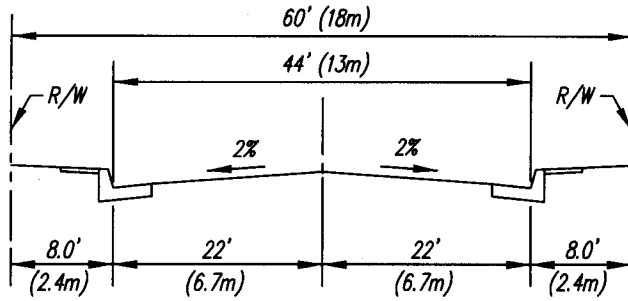
8. A compaction of 90% shall be obtained for a minimum of 6.0" (0.15m) below the Grading Plane. Depth "T" shall be in conformance with the following table:

Traffic Index	"T"
3.0 - 5.0	1.1' (0.34m)
5.5 - 6.5	1.5' (0.46m)
7.0 - 8.0	2.0' (0.6m)
8.5 or more	2.5' (0.76m)

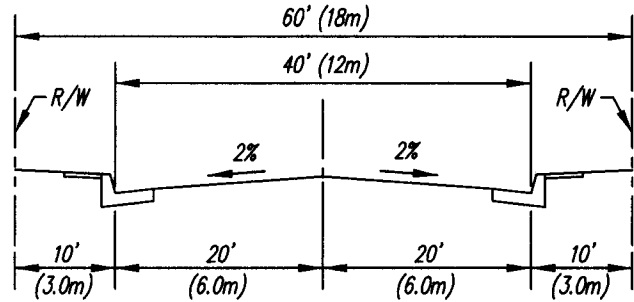
9. For Asphalt Paving Notes, see Standard Special Provisions located in the Subdivision Design Manual.

FILENAME: ST-14REV

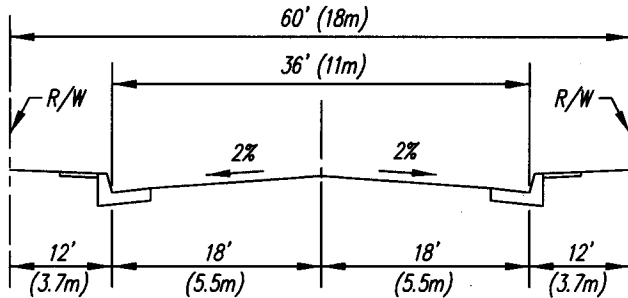
APPROVED	STANDARD STRUCTURAL PAVEMENT SECTION	DATE 6/2/99
		DRAWN JCU
CITY ENGINEER	CITY OF BAKERSFIELD CALIFORNIA	CHECKED M. SHAW
		SCALE N.T.S.
PUBLIC WORKS	DEPARTMENT	SHEET NO. ST-14



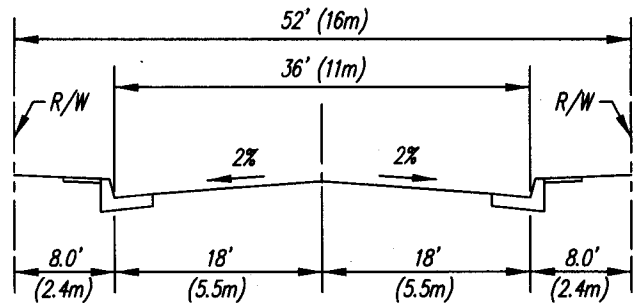
LOCAL COLLECTOR
See Note 3



LOCAL STREET
See Note 4



LOCAL STREET
See Note 5



LOCAL STREET
See Note 6

NOTES:

1. When conditions require opposite gutters to be at different elevations, the cross slopes shall not vary from the standard slopes by more than 0.5%.

2. Any deviation from the tolerances contained herein must be approved by the City Engineer.

3. 44' (13m) local collectors may be required where one or more of the following conditions exist:
 (1) Vehicular traffic is expected to exceed 750 veh/day
 (2) The street is approximately 0.5 mile (0.8km) in length
 (3) the zoning is industrial

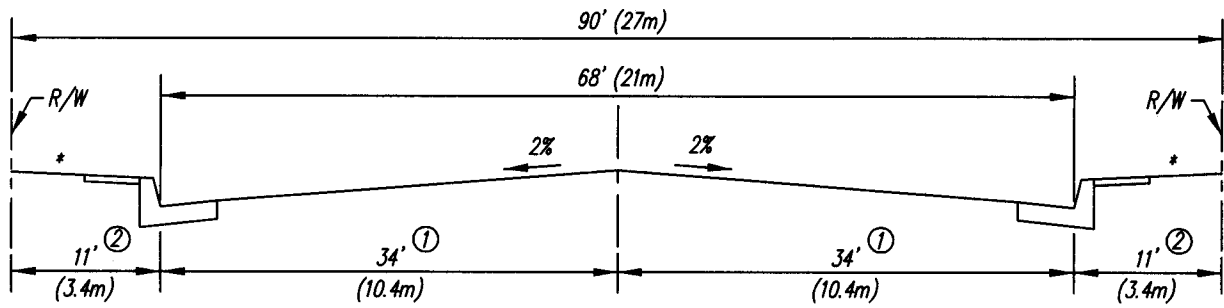
4. 40' (12m) local streets may be required where one or more of the following conditions exist:
 (1) Vehicular traffic is expected to exceed 500 veh/day
 (2) The street is approx. 0.25 mile (0.4km) in length
 (3) Where multiple residential or commercial zoning is proposed adjacent to the street
 (4) The street is utilized for school access

5. 36' (11m) local streets in 60' (18m) right-of-ways shall be constructed at all other locations except for private streets or as permitted by optional design standards.

6. 36' (11m) local streets in 52' (16m) right-of-ways may be permitted on cul-de-sacs and short streets which can not be extended and have a total length of less than 500' (152m) and is not a continuation of a 60' (18m) right-of-way street.

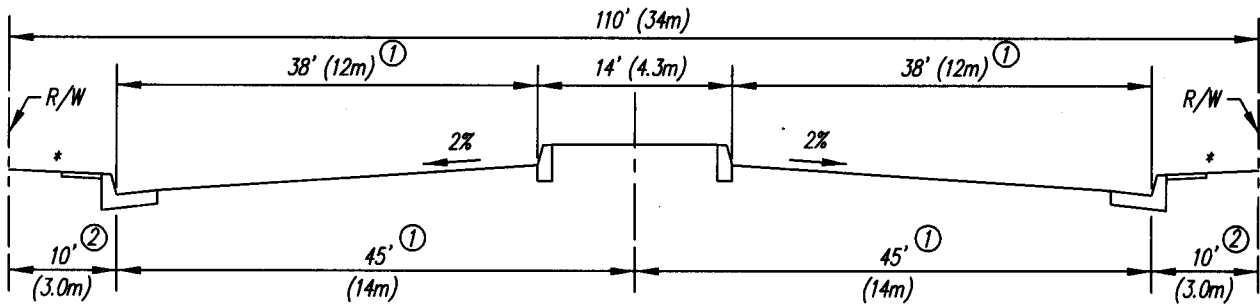
FILENAME: ST-15REV

	STANDARD	DATE 6/2/99
	LOCAL STREET CROSS SECTIONS	DRAWN JCU
		CHECKED M. SHAW
		SCALE N.T.S.
		SHEET NO. ST-15
CITY OF BAKERSFIELD CALIFORNIA	DEPARTMENT	
APPROVED	CITY ENGINEER	PUBLIC WORKS



COLLECTOR

See Note 1



ARTERIAL

See Notes 1 & 2

NOTES:

1. Major street systems shall be constructed where shown on the circulation element of the City of Bakersfield general plan.

2. Raised medians shall be constructed on all arterials. Temporary paved and striped medians may be permitted subject to approval of the traffic authority. See section 5.3.1 for median requirements.

3. When conditions require opposite gutters to be at different elevations, the cross slopes shall not vary from the standard slopes shown by more than 0.5%.

4. Any proposed deviation from the standard cross section beyond the tolerances contained herein must be approved by the City Engineer prior to construction.

5. See standard T-4 thru T-10 for expanded intersection details and dimensions.

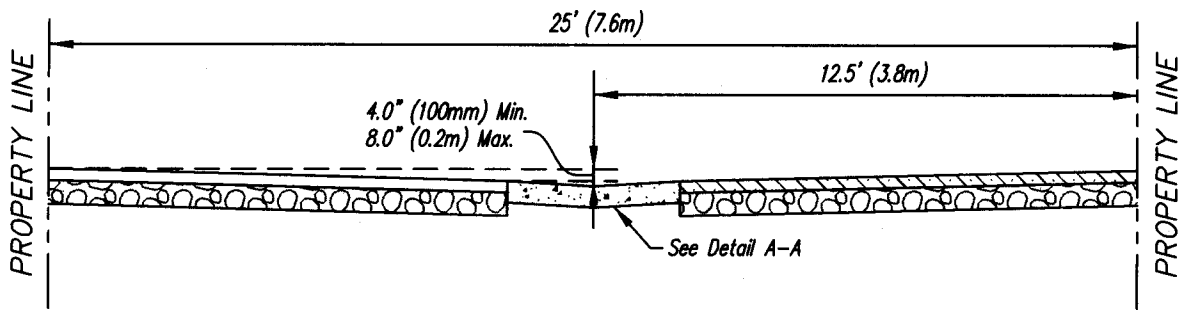
* Landscape Area

① +3' (0.9m) with Bikelane

② -3' (0.9m) with Bikelane

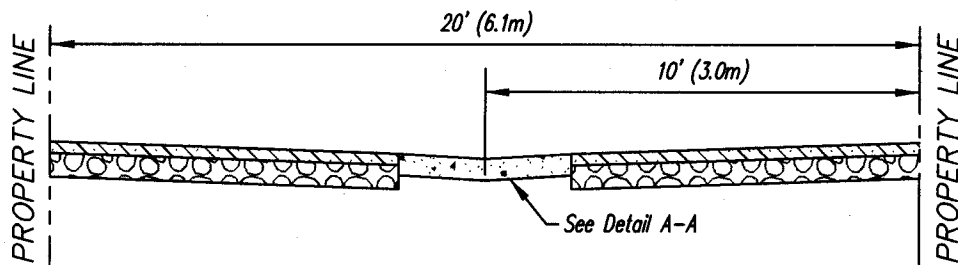
FILENAME: ST-16REV

APPROVED	STANDARD MAJOR STREET CROSS SECTIONS	DATE	6/2/99
		DRAWN	JCU
CITY ENGINEER	CITY OF BAKERSFIELD CALIFORNIA	CHECKED	M. SHAW
		SCALE	N.T.S.
		SHEET NO.	ST-16
	PUBLIC WORKS	DEPARTMENT	



COMMERCIAL ALLEY

T.I. = 3.0 (COMMERCIAL)
T.I. = 6.0 (INDUSTRIAL)

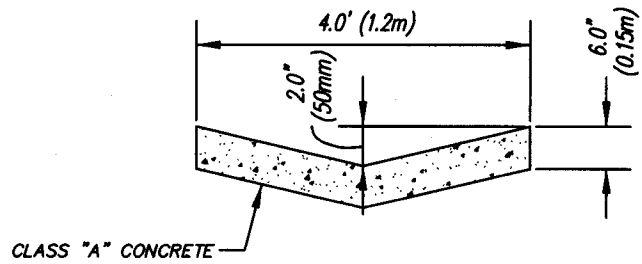


***RESIDENTIAL ALLEY**

T.I. = 3.0

NOTES:

1. All work shall conform to the applicable sections of the specifications entitled "Standard Specifications, State of California, Department of Transportation", approved current edition.
2. Subgrade shall be compacted to 95% to a depth of 6.0' (0.15m).
3. Concrete shall contain no additives unless prior written approval is obtained from the City Engineer.
4. Concrete shall be cured with a white pigmented curing compound complying to section 90-7.01B of the Standard Specifications.
5. Concrete shall be troweled smooth and given a fine brush finish.
6. Minimum pavement section to be 0.2' (60mm) A.C. over 0.4' (0.12m) Class II Aggregate Base.
7. Weakened plane joints or cold joints shall be constructed at 15' (4.6m) intervals. Expansion joints shall be at each side of structures and at ends of curb returns.
8. Structural sections for alleys shall be designed in accordance with the Subdivision and Engineering Design Manual.
9. Commercial alleys shall be constructed where multiple residential zoning is proposed.

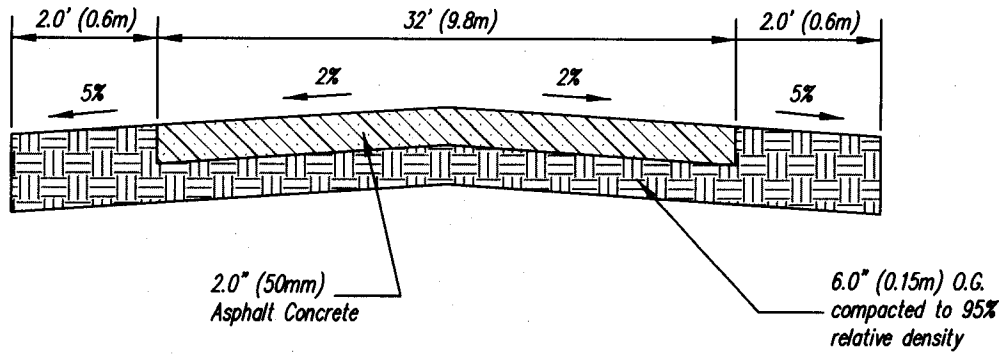


DETAIL A-A

* Proposed residential alleys having slopes less than 0.5% shall have a 4.0" (0.1m) concrete invert.

FILENAME: ST-17REV

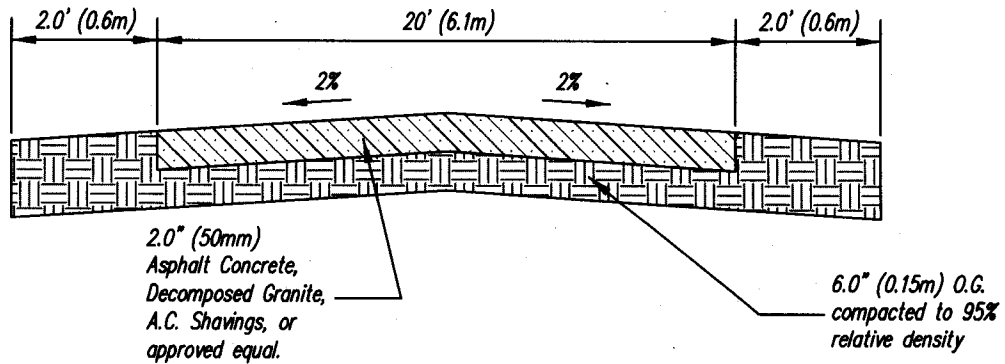
APPROVED	STANDARD ALLEY CROSS SECTION	DATE	6/2/99
		DRAWN	JCU
CITY ENGINEER	CITY OF BAKERSFIELD CALIFORNIA	CHECKED	M. SHAW
		SCALE	N.T.S.
		SHEET NO.	ST-17
PUBLIC WORKS	DEPARTMENT		



SECONDARY ACCESS

NOTES:

1. As required by the City Engineer for circulation.
2. Pavement section may be required to be a full depth designed section if in alignment with a future street.
3. A secondary access easement or street right-of-way dedication is required.



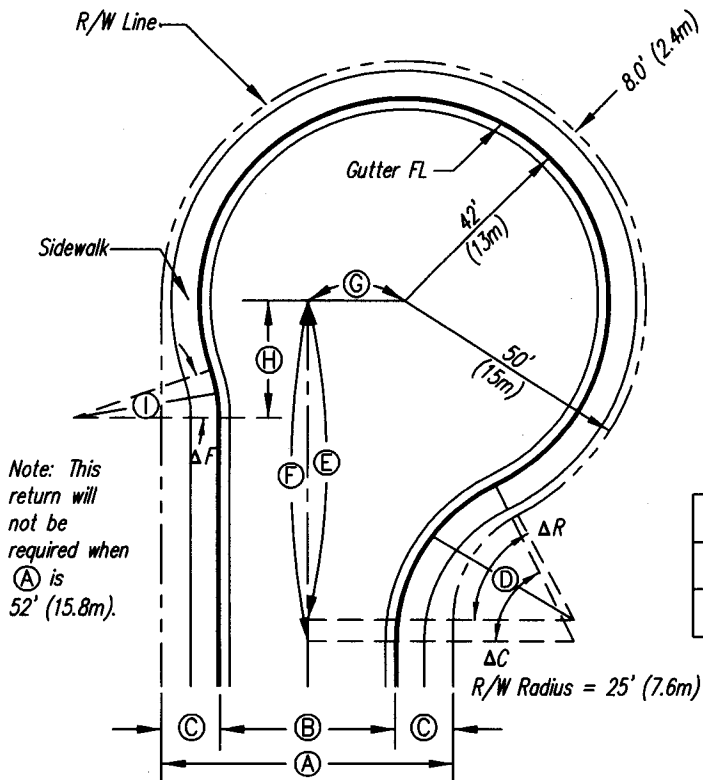
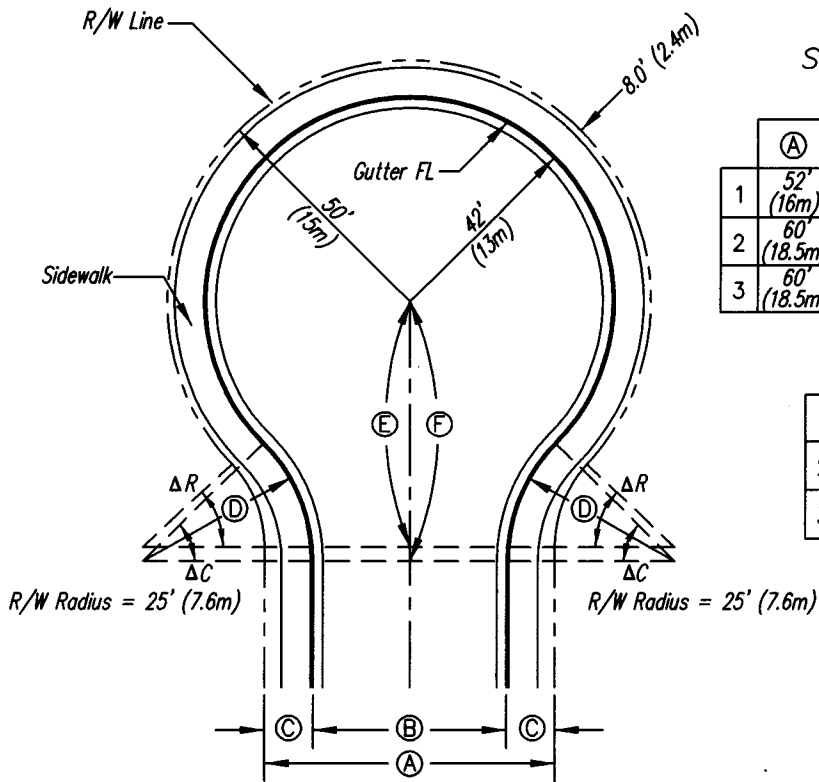
EMERGENCY ACCESS

NOTES:

1. As required by the Fire Department for all secondary accesses.
2. For emergency access, barricades may be required to restrict access.
3. An emergency access easement is required for all emergency accesses.

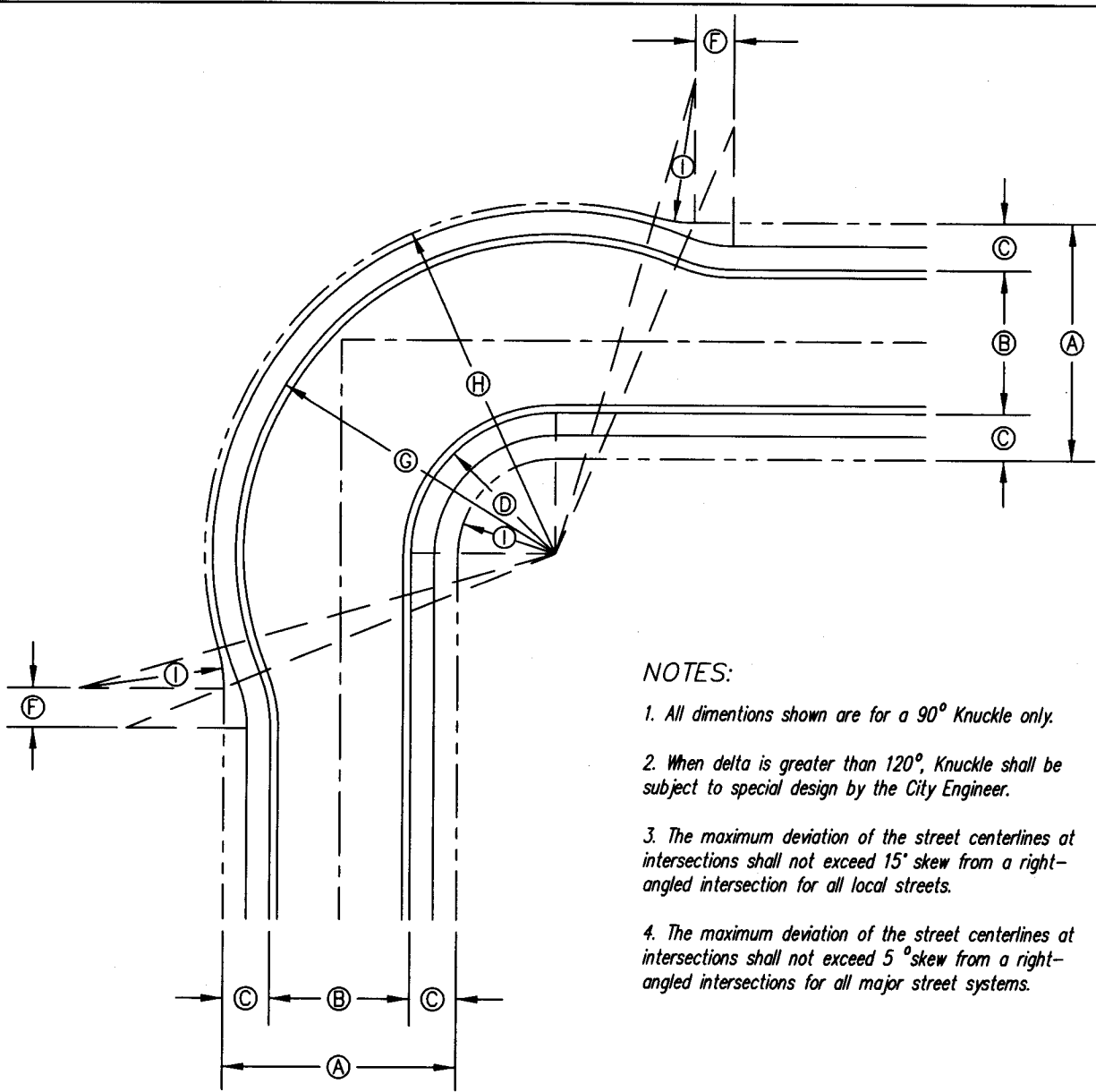
FILENAME: ST-18REV

APPROVED	<p>STANDARD SECONDARY AND EMERGENCY ACCESS</p> <p>CITY OF BAKERSFIELD CALIFORNIA</p>	DATE	6/2/99
		DRAWN	JCU
CITY ENGINEER	PUBLIC WORKS	CHECKED	M. SHAW
		SCALE	N.T.S.
		SHEET NO.	ST-18
	DEPARTMENT		



FILENAME: ST-19REV

APPROVED	CITY ENGINEER	PUBLIC WORKS	DEPARTMENT	DATE	6/2/99
				DRAWN	JCU
CITY ENGINEER	PUBLIC WORKS	DEPARTMENT	ST-19	CHECKED	M. SHAW
				SCALE	N.T.S.
STANDARD SYMMETRICAL AND OFFSET CUL-DE-SACS			SHEET NO.		



NOTES:

1. All dimensions shown are for a 90° Knuckle only.
2. When delta is greater than 120°, Knuckle shall be subject to special design by the City Engineer.
3. The maximum deviation of the street centerlines at intersections shall not exceed 15° skew from a right-angled intersection for all local streets.
4. The maximum deviation of the street centerlines at intersections shall not exceed 5° skew from a right-angled intersections for all major street systems.

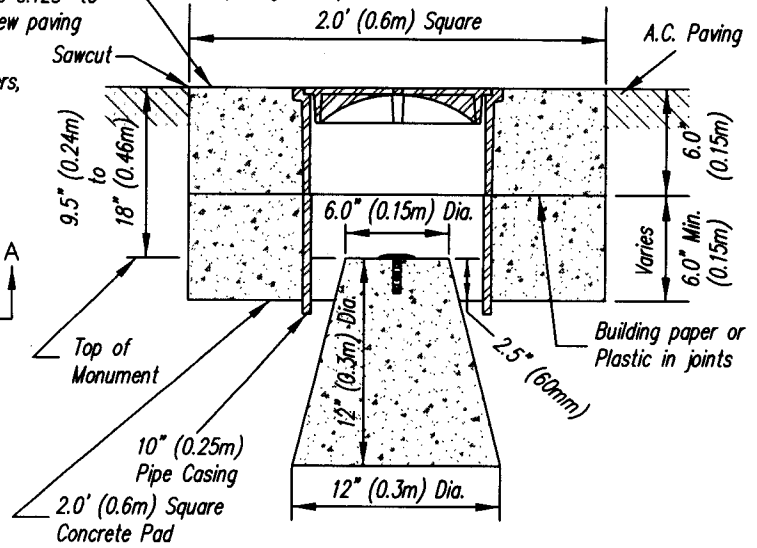
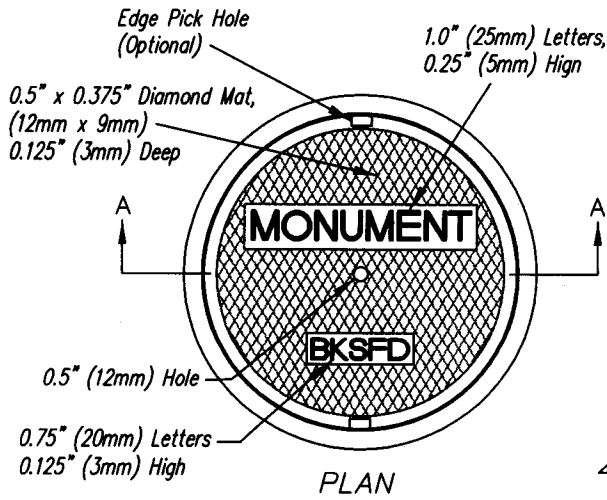
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
1	52' (16m)	36' (11m)	8.0' (2.5m)	33' (10m)	33' (10m)	0 (0m)	82' (25m)	90' (27.5m)	25' (7.5m)
2	60' (18.5m)	36' (11m)	12' (4.0m)	37' (11m)	37' (11m)	11.9' (3.5m)	82' (25m)	90' (27.5m)	25' (7.5m)
3	60' (18.5m)	40' (12m)	10' (3.0m)	35' (11m)	35' (11m)	5.5' (2.0m)	84' (25.5m)	92' (28m)	25' (7.5m)
4	60' (18.5m)	44' (13.5m)	8.0' (2.5m)	33' (10m)	33' (10m)	0 (0m)	86' (26m)	94' (28.5m)	25' (7.5m)

FILENAME: ST-20REV

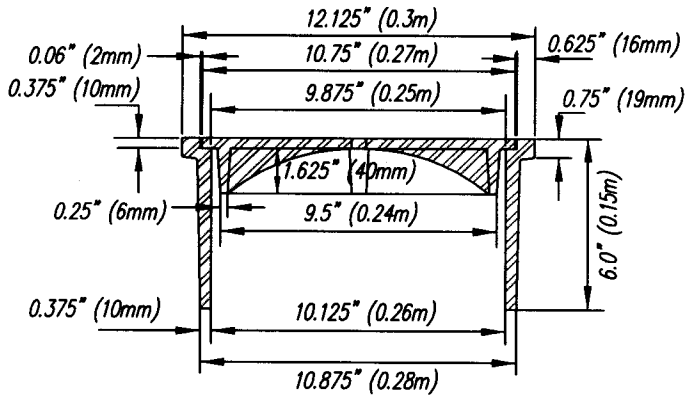
	STANDARD	DATE 6/2/99
	STREET KNUCKLE	DRAWN JCU
	CITY OF BAKERSFIELD CALIFORNIA	CHECKED M. SHAW
		SCALE N.T.S.
APPROVED		SHEET NO. ST-20
CITY ENGINEER	PUBLIC WORKS	DEPARTMENT

P.C.C. slab not to be poured until paving is in place. Slab and lid to be 0.125" to 0.25" (3mm to 7mm) below new paving

Note: PCC Slab not to be placed until paving is in place.



SECTION THRU MONUMENT

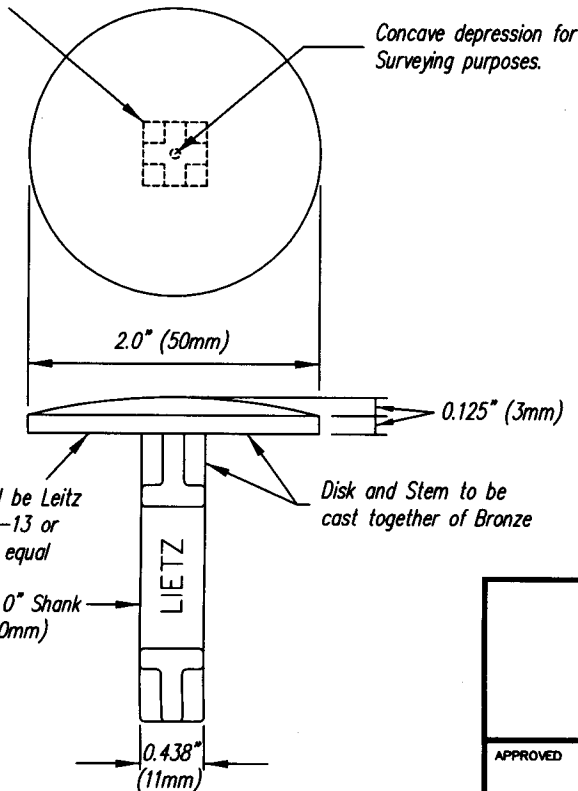


SECTION A-A

NOTES:

- All work shall conform to the applicable sections of the specifications entitled "Standard Specifications, State of California, Department of Transportation", approved current edition, and the following general notes:
- Castings shall conform to the provisions of the specifications for grey-iron castings, serial designation ASTM: A48, class no. 30B
- All frames and covers shall be tough, grey cast iron, free from warps, cracks, swells, and cold sheet, and shall have a workmanlike finish.
- The seats of frames and bearing faces of the covers shall be machined for a smooth, non-rocking fit between the two castings.
- Casting shall be thoroughly cleaned and dipped twice in a preparation of asphalt or coal tar and oil applied at 300° F to form a firm and tenacious seal.
- Concrete shall contain no additives unless prior written approval is obtained from the City Engineer.
- Concrete shall be cured with a white pigmented curing compound complying with section 90-7.01B of the Standard Specifications.
- The surface shall be finished to grade, troweled smooth, and given a light broom finish.
- All concrete used shall be Class "A".
- The name of the manufacturing company shall be on the underside of the cover.
- Pipe casing shall be 10" (0.25m) I.D. steel, A.B.S., or as directed by the City Engineer.

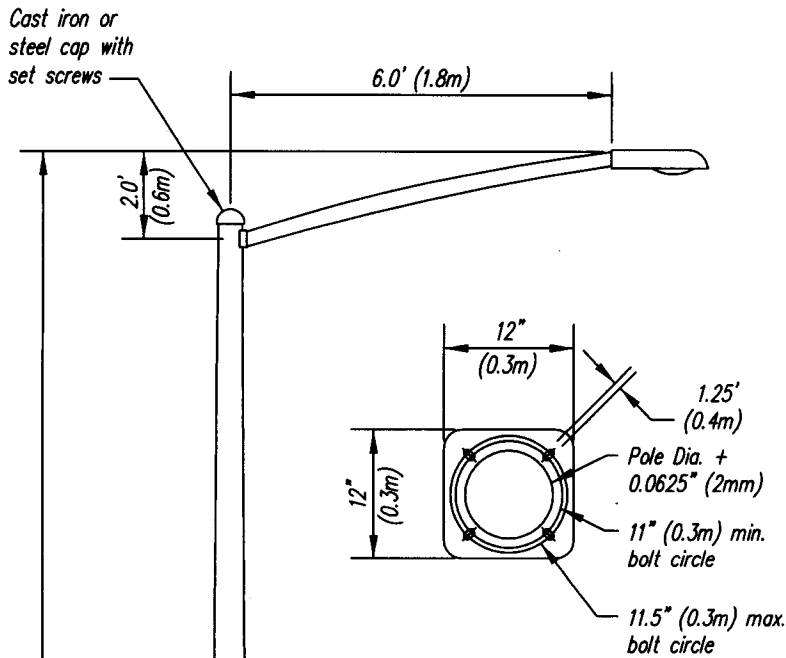
Stamp Disk with R.C.E. or L.S. Number.



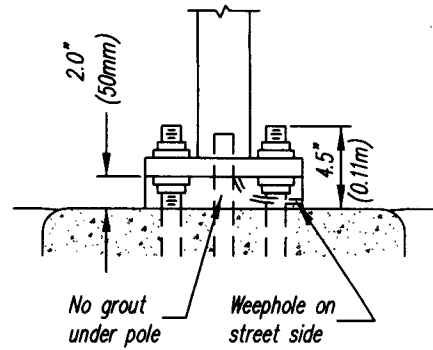
DOME HEAD DISK DETAIL

FILENAME: ST-21REV

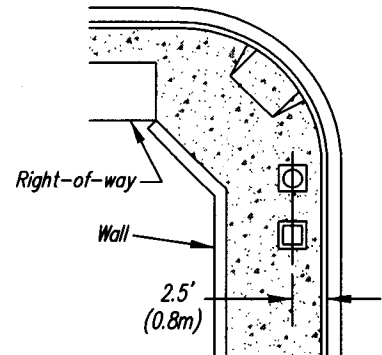
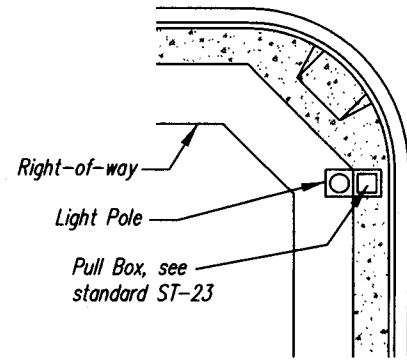
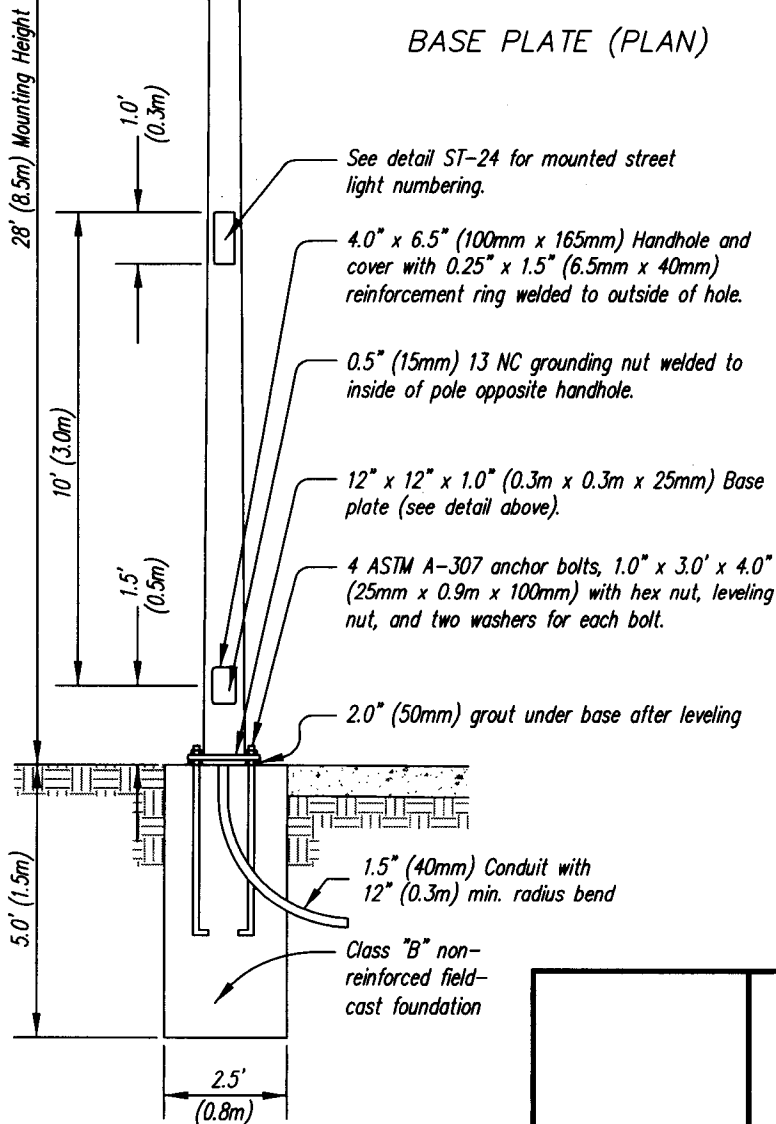
APPROVED	STANDARD SURVEY MONUMENT	DATE 6/2/99
		DRAWN JCU
		CHECKED M. SHAW
		SCALE N.T.S.
CITY ENGINEER	CITY OF BAKERSFIELD CALIFORNIA	SHEET NO. ST-21
		PUBLIC WORKS DEPARTMENT



BASE PLATE (PLAN)

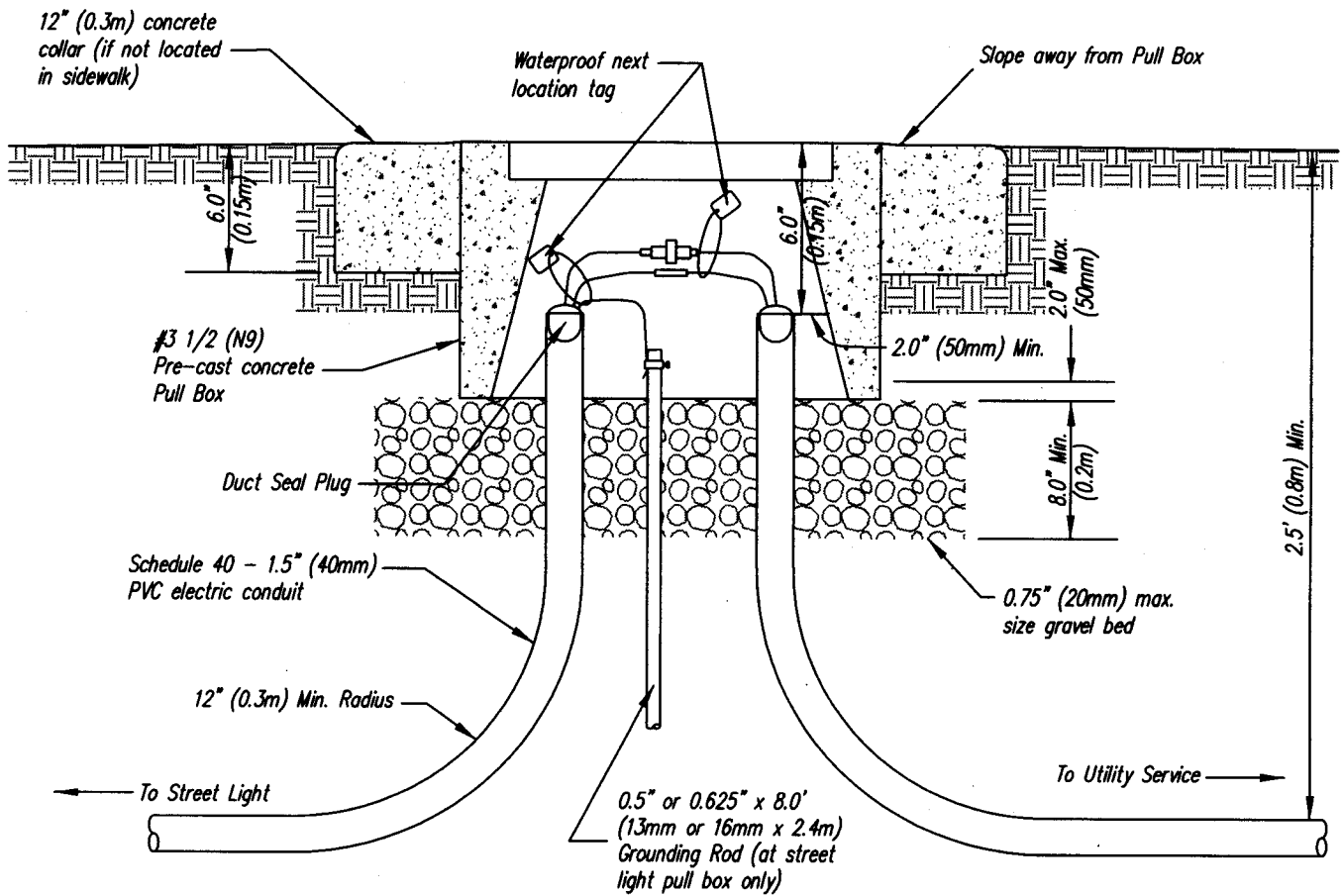


BASE PLATE (PROFILE)

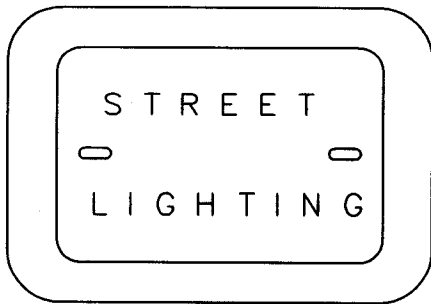


TYPICAL LOCATION DETAILS

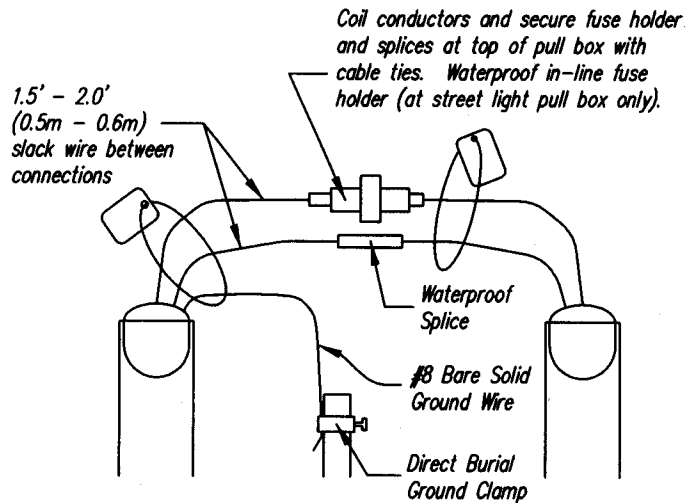
<p>APPROVED</p>		<p>STANDARD</p> <p>STREET LIGHT</p> <p>MAST ARM TYPE</p>		<p>FILENAME: ST-22REV</p>
				<p>DATE 6/2/99</p>
<p>CITY ENGINEER</p>		<p>CITY OF BAKERSFIELD</p> <p>CALIFORNIA</p>		<p>DRAWN JCU</p>
				<p>CHECKED M. SHAW</p>
<p>PUBLIC WORKS</p>		<p>DEPARTMENT</p>		<p>SCALE N.T.S.</p>
				<p>SHEET NO.</p>
				<p>ST-22</p>



PULL BOX DETAIL



COVER DETAIL



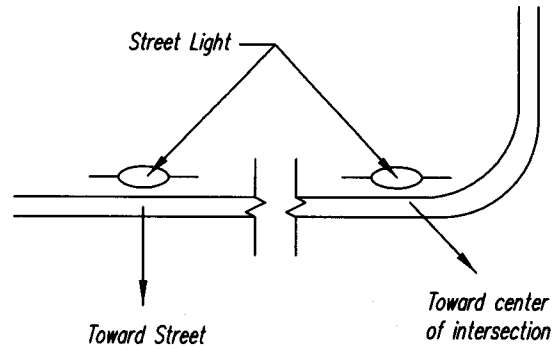
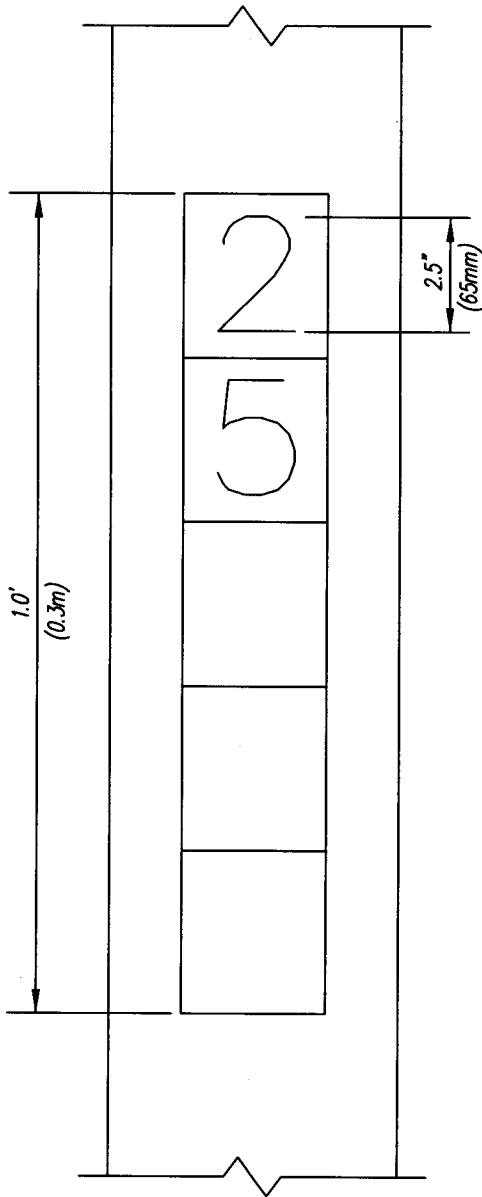
INNER BOX DETAIL

NOTES:

1. Locate street light pull box in sidewalk within 5.0' (1.5m) of street light standard.
2. Remove cover before placing concrete. Keep inside of box free of overspill.
3. Pull box shall be size 3 1/2 and shall be located within 5.0' (1.5m) of the street light and installed flush with the sidewalk. Gravel (0.75" or 20mm max.) shall be placed under the pull box for drainage. Pull box cover shall be marked to identify it as street lighting. Pull box shall be pre cast concrete.

FILENAME: ST-23REV

APPROVED	STANDARD STREET LIGHT PULL BOX DETAILS	DATE 6/2/99
		DRAWN GEG
CITY ENGINEER	CITY OF BAKERSFIELD CALIFORNIA	CHECKED M. SHAW
		SCALE N.T.S.
PUBLIC WORKS	DEPARTMENT	SHEET NO. ST-23



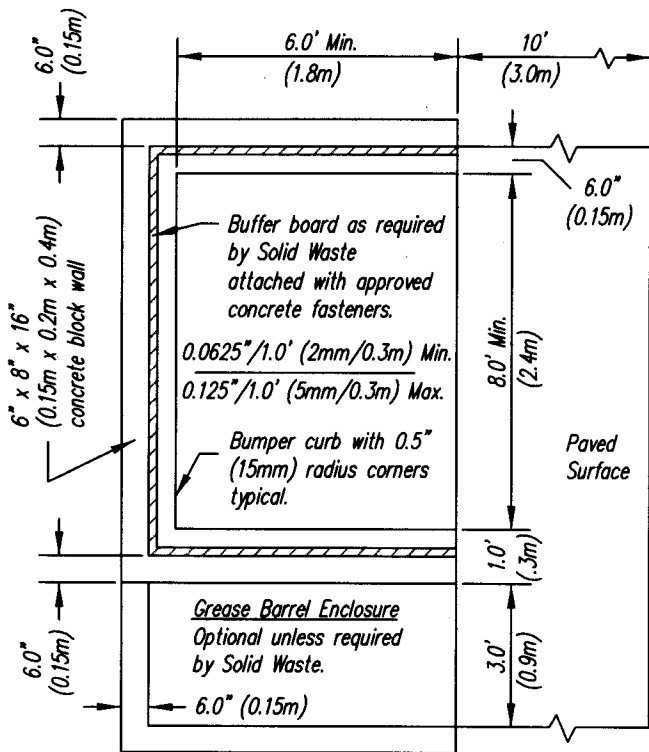
NUMBERING ORIENTATION

NOTES:

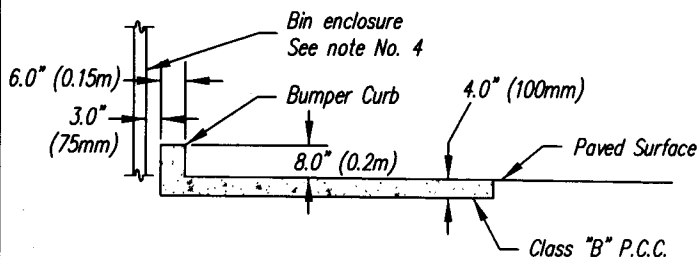
1. For metal poles, apply backing to a clean surface.
2. Backing plate shall be Almetek EMP - 2.5V5 or approved equal on all city approved poles.
3. Numbers used shall be Almetek PS - 2.5 series or approved equal.
4. Pressure sensitive markers of reflected scotchlite blue numbers on a white background.
5. Bottom of letter block is 9.0' (2.7m) from grade / sidewalk elevation, adjust as needed to clear hardware or appurtenances.
6. For street light pole standards, see detail ST-22.
7. Developer / contractor shall install city approved numbers on all street light poles.

FILENAME: ST-24REV

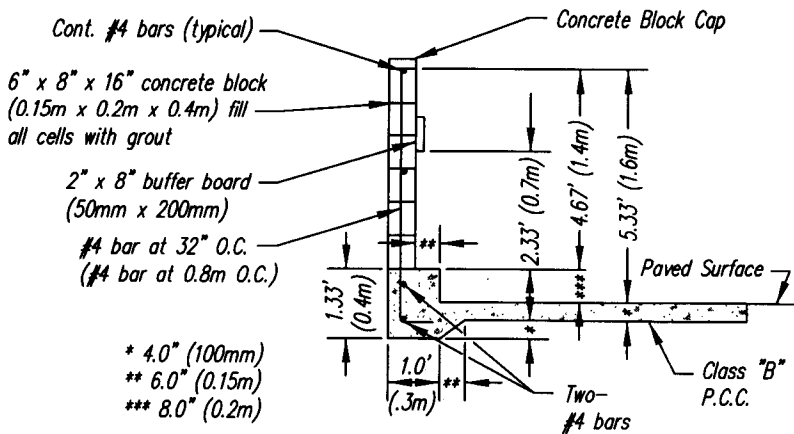
	<p>STANDARD</p> <p>POLE</p> <p>NUMBERING</p>	DATE	6/2/99
		DRAWN	JCU
		CHECKED	M. SHAW
		SCALE	N.T.S.
		SHEET NO.	ST-24
APPROVED	CITY OF BAKERSFIELD		
_____ CITY ENGINEER	CALIFORNIA		
	PUBLIC WORKS	DEPARTMENT	



PLAN



TYPICAL SECTION WITH CHAIN LINK FENCING



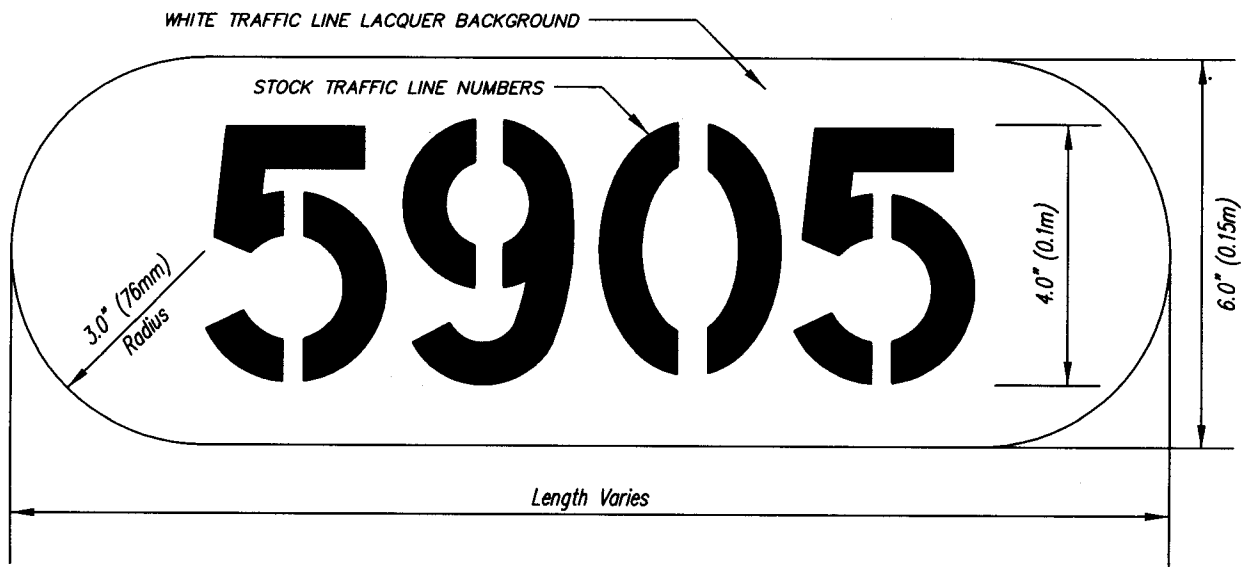
TYPICAL SECTION WITH CONCRETE BLOCK WALL

NOTES:

1. All work shall conform to the sections of the standard specifications entitled "Standard Specifications, State of California, Department of Transportation", approved current edition and the following general notes:
2. Subgrade preparation shall be constructed true to grade and cross section, with compaction of 90% to a depth of 6.0" (0.15m).
3. Concrete shall be class "B" and have a slump between 2.5" (65mm) and 5.5" (0.14m). The surface shall be finished to grade and cross section with a float, troweled smooth, and finished with a broom.
4. Concrete shall be cured with a white-pigmented curing compound complying to Section 90-7.01B of the standard specifications.
5. Concrete shall contain no additives unless prior written approval is obtained from the City Engineer.
6. If any place, premises or use of property accumulates or generates sufficient refuse to require more than four standard containers, the Solid Waste may require occupant to provide and install a detachable bin-box of sufficient capacity to hold accumulated refuse.
7. Detachable bin refuse containers shall be placed on a concrete refuse container pad at grade level.
8. Solid Waste may require an enclosed structure around detachable bin refuse containers if they determine an unenclosed bin to be unsightly.
9. The bin enclosure may be constructed of concrete block, per detail on this standard, chain-link fence per standard D-12 or other material. Material and design shall be subject to the Solid Waste approval.
10. Refuse container pads shall be constructed of 4" (100mm) thick concrete with an integral concrete bumper curb on three sides at least 8.0" (0.2m) in height and 6.0" (0.15m) in width. The minimum pad size to inside face of bumper curbs shall be 8.0' x 6.0' (2.4m x 1.8m). The pads and the 10' (3.0m) wide area in front of them shall slope away from the rear bumper curb at between one-sixteenth (0.0625") and one-eighth (0.125") inch per foot. (2mm and 5mm per 0.3m)
11. Where there is an alley abutting the premises, refuse containers shall be placed adjacent to the alley.
12. Any deviations from this standard must be approved by the Solid Waste prior to construction.

FILENAME: ST-25REV

APPROVED	STANDARD	DATE	6/2/99
		DRAWN	JCU
CITY ENGINEER	REFUSE CONTAINER PAD	CHECKED	M. SHAW
		SCALE	N.T.S.
PUBLIC WORKS	CITY OF BAKERSFIELD CALIFORNIA	SHEET NO.	ST-25
		DEPARTMENT	

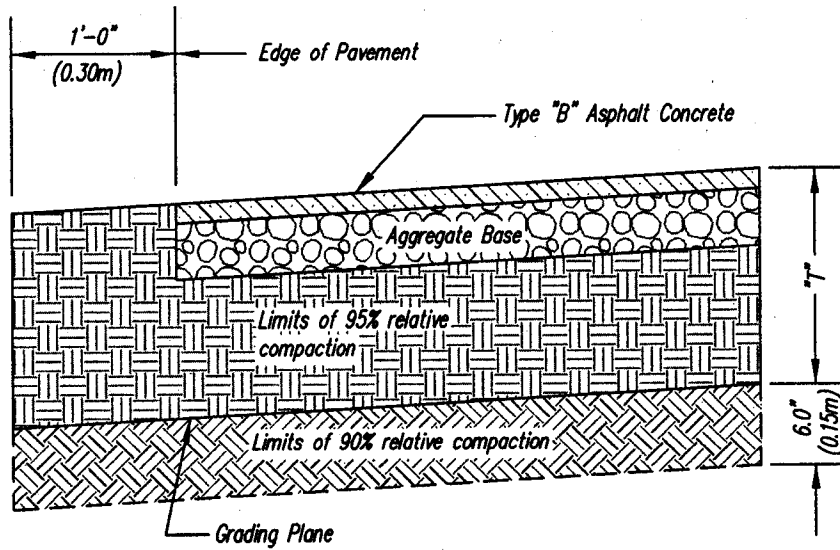


NOTES:

1. Permit and license issued by the Treasurer's Office as required in Chapter 5.28 of the Bakersfield Municipal Code.
2. Size of panel and numbers as shown above.
3. Paint used shall meet State of California, Department of Transportation, Current Edition Specification for Rapid Water Borne Plant.
4. Curb markings shall be clearly visible to all emergency vehicles and personnel.

FILENAME: ST-26REV

	STANDARD	DATE	6/2/99
		DRAWN	JCU
	HOUSE NUMBERS FOR CURBS	CHECKED	M. SHAW
		SCALE	N.T.S.
APPROVED	CITY OF BAKERSFIELD CALIFORNIA	SHEET NO.	ST-26
CITY ENGINEER		PUBLIC WORKS	DEPARTMENT



NOTES:

1. Refer to standard ST-14, Structural Pavement Section detail for all paving and compaction details.
2. This detail shall be used when street construction with out curb and gutter is allowed by the City Engineer.

FILENAME: ST-XXX

	<p>STANDARD EDGE CONDITION DETAIL PAVEMENT SECTION</p>	<p>DATE 2/2/00</p>
		<p>DRAWN JCU/BW</p>
		<p>CHECKED M. SHAW</p>
		<p>SCALE N.T.S.</p>
		<p>SHEET NO. ST-XXX</p>
<p>APPROVED</p>	<p>CITY OF BAKERSFIELD CALIFORNIA</p>	
<p>_____ CITY ENGINEER</p>	<p>PUBLIC WORKS</p>	<p>DEPARTMENT</p>