



# CITY OF LOMPOC CALIFORNIA

## STANDARD REQUIREMENTS FOR THE DESIGN AND CONSTRUCTION OF SUBDIVISIONS AND SPECIAL DEVELOPMENTS

### SECTION 6 CONSTRUCTION OF STREETS

REVISED: JULY 3, 1990

SECTION 6  
CONSTRUCTION OF STREETS

GENERAL

All references following to Standard Specifications are to Standard Specifications of the State of California, Department of Public Works, Division of Highways, latest edition.

The Contractor's attention is directed to Section 7, Paragraph 7-1.12 of the Standard Specifications of the Department of Public Works, Division of Highways. The provisions thereof are incorporated in this section as though recited in full herein.

In the event of a conflict between these Specifications and the Standard Specifications of California hereinbefore mentioned, the decision of the engineer will be final.

SUSPENSION OF WORK

The Engineer shall have the authority to suspend the work wholly or in part, for such period of time as may be necessary because of the failure of the Contractor to carry out orders from the Engineer to comply with any of the provisions of these Specifications. Upon receipt of a written notice from the Engineer, the Contractor shall immediately suspend operations. Only upon written instructions from the Engineer shall the Contractor resume construction. Upon receipt of such written instructions to resume work, he shall immediately proceed with the work. No claim for damages or additional compensation will be allowed as a result of any such suspension of the work.

DRAWINGS AND SPECIFICATIONS

In case of conflict between the Drawings and Specifications, the Specifications shall govern. Figure dimensions on drawings shall govern over scale dimensions and detailed drawings shall govern over General Drawings.

Any discrepancies found between the Drawings and Specifications and site conditions or any inconsistencies or ambiguities in the Drawings or Specifications shall be immediately reported to the City Engineer in writing, who shall promptly correct such inconsistencies or ambiguities in writing by the developer's engineer. Work done by the Contractor after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the Contractor's risk.

OTHER REGULATIONS

Occupational Safety and Health Act and Administration (OSHA) rules and regulations of both the Federal and State (CalOSHA) governments and shall be followed by the Contractor.

## WATERING

Furnishing and anolving water shall conform to the provisions is Section 10 and 17 of the Standard Specifications and these Sniecifications.

Water provided by the City through a City approved fire hydrant shall he metered and paid for by the contractor at the current rate charged by the City of Lompoc.

The Contractor shall furnish the application of water for the purpose of controlling dust caused by the Contractor's operations or by public traffi c.

## PUBLIC ACCESS AND CONVENIENCE

The Contractor shall expedite the passage of any necessary traffic around the work. The Contractor shall furnish, install and maintain signs, detours, lights, flares, barricades, and shall furnish flagmen and other facilities for the convenience and direction of public traffi c. The cost of maintaining traffic, furnishing such signs, detours, lights, flares, barricades, flagmen and other facilities shall he furnished and paid for by the Contractor.

## PUBLIC CONVENIENCE

The Contractor shall conduct his operations as to offer the least possible obstruction and inconvenience to the public, and he shall have under construction no greater amount of work than he can prosecute properly with due regard to the rights of the public.

Spillage resulting from hauling or ditching operations along or across any public traveled way shall he removed daily at the Contractor's expense.

Construction operations shall he conducted in such a manner as to cause as little inconvenience as possible to abutting property owners. Convenient access to driveways, houses, and buildings along the line of the work shall be maintained. Streets shall not be closed to traffic without approval of the City Engineer and then only for as short a period as possible to complete the work. All closed streets shall be barricaded at all intersecting streets with Type III barricades which shall he illuminated at night by a flashing device.

## PUBLIC SAFETY

Whenever the Contractor's operations create a condition hazardous to the public, he shall furnish, erect, and maintain, at his expense and without cost to the City, such fences, barricades, lights, signs and other devices as are necessary to prevent accidents or damage or injury to the public. The Contractor shall also furnish such flagmen and guards as are necessary to give adequate warning to traffic or to the public of any dangerous conditions to be encountered. The equipment shall be furnished and kept clean and in good repair throughout the time of construction by the Contractor at his expense. Signs, lights, flags and other warning requirements set forth in the current Manual of Warning Signs, Lights and Devices for Use in Performance of Work Upon Highways, issued by the California State Department of Transportation. Any such signs shall not obscure the visibility of nor conflict in intent and meaning with City-furnished signs and shall be approved by the City engineer as to size and wording.

Should the Contractor appear to be neglectful or negligent in furnishing warning and protective measures as above provided, the Engineer may direct attention to the existence of a hazard, and the necessary warning and protective measures shall be furnished and installed by the Contractor at his expense, without cost to the City.

No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic, and at the end of each day's work and at other times when construction operations are suspended for any reason, the Contractor shall remove all equipment and other obstructions from that portion of the roadway open for use by public traffic.

## INSPECTION AND TESTING

All construction control testing as deemed necessary shall be done by a Soils Engineer approved by the City, and the Contractor shall pay for all tests. All testing shall be under the control of the City Engineer or his authorized representative.

Inspections, tests or approvals of the Engineer shall not relieve the Contractor from his obligations to perform the work in accordance with the requirements of these Plans and Specifications.

The City Engineer or his representatives will at all times have access to the work. The Contractor will provide proper facilities for such access and observation of the work and also for any inspection or testing thereof.

## COOPERATION

The Contractor is hereby advised that other forces and/or agencies may be engaged in construction and installation of utilities and locating, protecting, repairing or relocating facilities within the area.

## SUPERVISION BY CONTRACTOR

The Contractor will supervise and direct the work. He will be solely responsible for the means, methods and techniques, sequences, and procedures of construction. The Contractor will employ and maintain on the work, a qualified supervisor or superintendent. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the work.

## DUST CONTROL

All work shall be done in conformance to the City's Standard Specifications. In regard to noise, dust and cleanup, the work will be carried out in conformance with Sections 23-44 and 23-52 of the Lompoc City Code.

## DISPOSAL OF EXCESS MATERIAL

Where material is excavated in excess of that required for the site, such excess materials shall be removed and disposed of by the Contractor as directed by the Engineer. All excess materials shall be removed from the right-of-way and disposed of by the Contractor. The location of the disposal site shall be the responsibility of the Contractor and shall be subject to approval of the City Engineer, with written approval of the disposal site owner and a grading permit issued by the affected public agency must be provided. Removal of excess material shall be done immediately following operations. Any spoils piles, bedding gravel, base material and the like shall be properly lighted and barricaded for traffic safety. In all cases, such piles shall be placed as far out of the traveled way as is possible, and shall be removed within 24 hours.

## WORKMANSHIP

Contractor shall employ men skilled in their respective trades and skilled in the field of methods, tools, and appliances developed in order to obtain the highest quality of workmanship throughout the project. Any person the City may deem unacceptable or disorderly must be promptly removed by the Contractor and not employed on the project.

## EXISTING FACILITIES

The destruction, obliterating, removing, remodeling, modifying, relaying, resetting, as required or indicated on the Plans, of any facility including, but not limited to, all existing utilities and survey monuments and street signs shall be done by the Contractor and shall conform to Section 15 of the Standard Specifications and to the Standard Drawings of the City.

The fact that any underground utility or facility is not shown on the plans shall not relieve the Contractor of his responsibility to ascertain the existence of any underground improvements or facilities which may be subject to damage by reason of his operations.

Furnishing all labor, materials, tools, equipment, incidentals, and for doing all the work involved in protecting, restoring, or repairing property as above specified shall be considered the responsibility of the contractor.

#### CLEARING AND GRUBBING

Shall conform to the provisions in Section 16 of the Standard Specifications and Section 2 of these Specifications.

#### EARTHWORK AND SUBGRADE

Shall conform to the provisions in Section 19 of the Standard Specifications and these Specifications, except that compaction of the subgrade shall be 95% in the top 6" only, utilizing California Test Method 216-G.

It shall be the responsibility of the Contractor to correct any instability or "pumping" in the subgrade to a depth of 2.0 foot below subgrade at his cost and furnish compaction tests that are 95% or better for fill and for subgrade preparation.

#### FINISHING ROADWAY

Shall conform to the provisions in Section 22 of the Standard Specifications.

#### AGGREGATE BASE

Shall be Class 2 with 3/4" maximum aggregate and shall conform to the provisions in Section 25 of the Standard Specifications and these special provisions except:

The percent passing No. 200 sieve shall not exceed 12.

#### PENETRATION TREATMENT

Penetration treatment of the aggregate base shall conform to the provisions in Section 36 of the Standard Specifications and these special provisions.

Liquid asphalt shall be SC-70 and shall be applied at the approximate rate of 0.25 gallons per square yard in one application. When new pavement is placed against or over old asphaltic concrete, SS-1 binder must be applied to the existing asphalt prior to paving and shall conform to the provisions in Section 39 of the Standard Specifications.

### ASPHALT CONCRETE

Shall be AR8000 Type B with 1/2" or 3/4" as required by the City Engineer, medium aggregate and shall conform to the provisions in Section 39 of the Standard Specifications and these special provisions. The minimum amount of asphalt shall be 6%. Attention is directed particularly to the rolling requirement of Section 39.

### SEALING OF SURFACE

A fog seal coat shall be applied in accordance with Section 37 of the Standard Specifications and these special provisions; the fog seal to be placed on all new paving at a rate of 0.20 to 0.33 gallon per square yard.

### COMPACTION TESTS

Shall be furnished to the City by the Contractor and paid for by the Contractor. All tests are to be made by a testing laboratory approved by the Engineer. The Contractor shall furnish one compaction test for each 200 linear feet of prepared subgrade at locations approved by the Engineer. The Contractor shall furnish one compaction test for each 200 linear feet of compacted base material placed at locations approved by the Engineer, along with the required standard material tests required by the Engineer, including a screen analysis on all base material, compaction curves on native material or whatever tests are necessary to ensure uniform and required compaction over the entire project. In the event of failure to pass test, the work shall be redone until passing tests are produced, all at the Contractor's expense.

### CONCRETE CURBS AND SIDEWALKS

Portland Cement Concrete curbs, gutters, local depressions, access ramps, sidewalks, and driveways shall conform to the provisions in Section 73," Concrete Curbs and Sidewalks," of the Caltrans Standard Specifications and the Lompoc Standard Drawings and these special provisions.

The cement content of the minor concrete shall be not less than 517 pounds per cubic yard (5.5 sack mix) and shall be designed to have a 28 day compressive strength of no less than 3000 pounds per square inch.

Attention is directed particularly to the subgrade preparation and finishing requirements of Section 73.

### ADJUSTING OF MANHOLE AND VALVE BOXES

Shall conform to the Standards set forth by the City of Lompoc in these standards.

## SIDEWALK OR DRIVEWAYS

Removal of such sidewalk and driveways shall conform to Section 15-3.02 of the Standard Specifications and shall be to the nearest joint line unless indicated on the Plans or directed by the Engineer.

Replacement of sidewalks or driveways shall conform to Section 73 of the Standard Specifications and these special provisions: line and grade for replacement will be established by the Contractor and approved by the Engineer. Particular attention is directed to Section 73-1.03 of the Standard Specifications and the Standard Drawings of the City.

## METHODS OF CURING

All newly placed concrete shall be cured in accordance with provisions of Section 90-7 of the Standard Specifications.

## HANDICAPPED CURB RAMPS

Note: For special conditions, refer to State Building Code (Part 2, Title 24, C.A.C.)

- (a) Curb ramps shall be constructed at each corner of street intersections and where a pedestrian way crosses a curb. The preferred and recommended location for curb ramps is in the center of the crosswalk of each street corner. Where it is necessary to locate a curb ramp in the center of the curb return and the street surfaces are marked to identify pedestrian crosswalks, the lower end of the curb ramps shall terminate (for example, within such crosswalk areas.)
- (b) Curb ramps shall be a minimum of 4 feet in width and shall lie, generally, in a single sloped plane, with a minimum of surface warping and cross slope.
- (c) The slope of curb ramps shall not exceed 1 vertical to 12 horizontal. The slope of the fanned or flared sides of curb ramps shall not exceed 1 vertical to 8 horizontal.
- (d) A level landing 4 feet deep shall be provided at the upper end of each curb ramp over its full width to permit safe egress from the ramp surface, or the slope of the fanned or flared sides of the curb ramp shall not exceed one vertical to 12 horizontal.
- (e) The lower end of each curb ramp shall have a 1/2 inch lip beveled at 45 degrees.
- (f) The surface of each curb ramp and its flared sides shall be slip-resistant and shall be of a contrasting finish from that of the adjacent sidewalk.

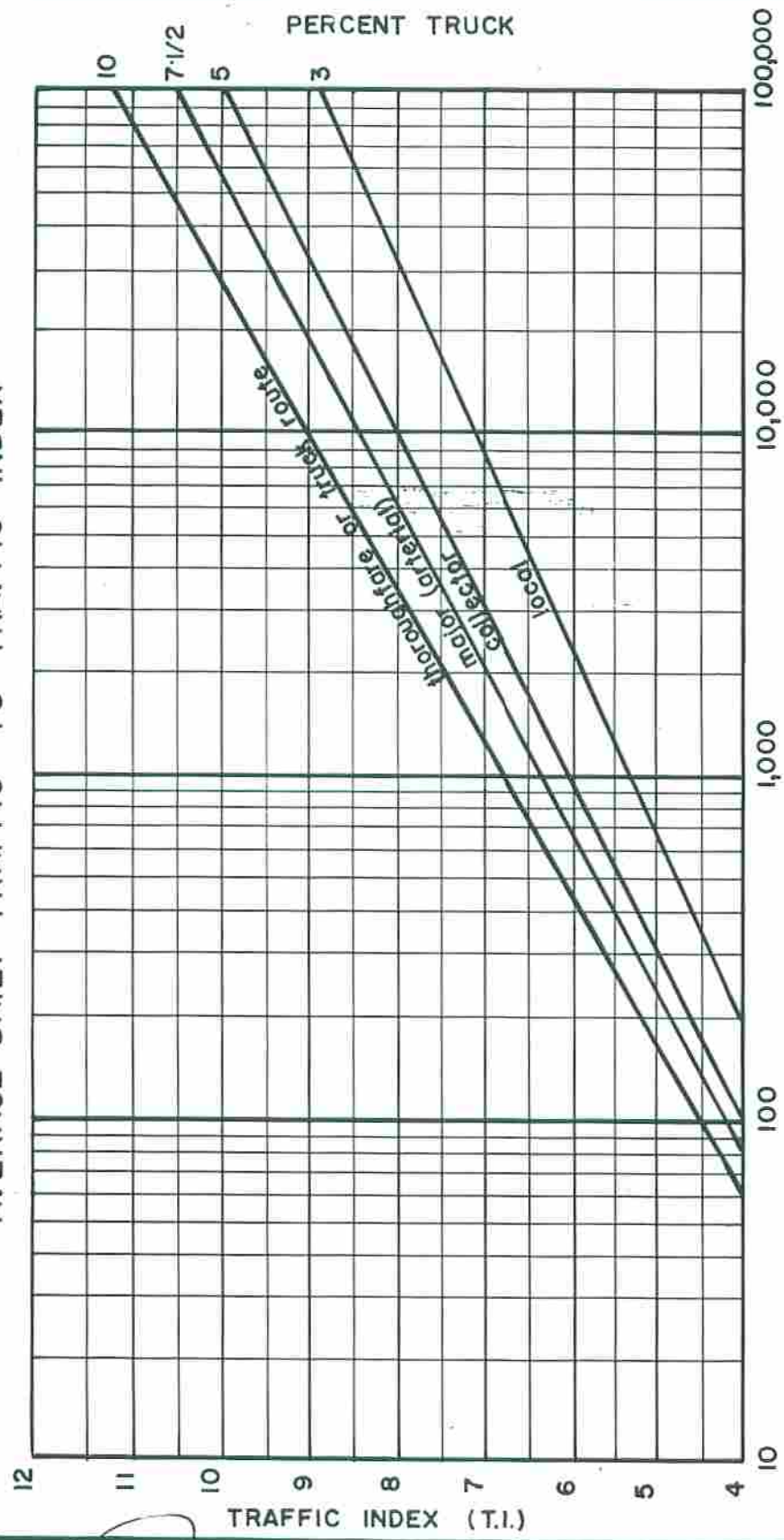


- g) The surface of each curb ramp located in the center of the curb return shall be grooved parallel to the centerline of the crosswalks typically in two directions with 1/4 inch x 1/4 inch grooves approximately 1-1/2 inches on center.
- (h) All curb ramps shall have a grooved border 12 inches wide at the level surface of the sidewalk along the top and each side approximately 3/4 inch on center.
- (i) All curb ramps constructed between the face of the curb and the street shall have a grooved border at the level surface of the sidewalk.

**GUARANTEE**

The Contractor shall guarantee all work and materials for a period of one year after acceptance by the City.

CONVERSION CHART  
AVERAGE DAILY TRAFFIC TO TRAFFIC INDEX



NOTES:

- Use 20 year ADT to determine reconstruction or overly design  
20 year ADT = Present ADT x 1.50  
Present ADT to be furnished by Engineering Division
- Use designated 20 year T.I. to determine new construction design

STREET CLASS	NON-TRUCK	TRUCK
Minor or residential alley	4	7-8
Local	5	7-8
Collector or commercial alley	6	9
Major or industrial alley	8	10
Thoroughfare	10	4
Parking lot	4	

APPROVED

*[Signature]*  
CITY ENGINEER

DATE 7-3-84  
R.C.E. 24658

CITY OF LOMPOC  
ENGINEERING DIV.

TRAFFIC INDEX COMPUTATION

STANDARD DRAWING NO. 600

RESOLUTION NO. 3366 (84)

SHT. 1 OF 3

MARK	REVISIONS	APPR.	DATE

**STRUCTURAL DESIGN CHART**

**AC - LTB (78R)**

TI	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10
AC	.17	.17	.17	.17	.18	.21	.23	.26	.28	.32	.34	.37	.39
LTB 35	.40	.43	.52	.63	.69	.74	.81	.86	.92	.98	1.03	1.09	1.15
30	.40	.49	.58	.70	.77	.83	.90	.96	1.03	1.08	1.16	1.22	1.28
25	.45	.55	.65	.78	.85	.92	.99	1.06	1.13	1.20	1.28	1.34	1.42
20	.51	.61	.72	.85	.93	1.00	1.08	1.16	1.24	1.32	1.39	1.47	1.55
15	.56	.67	.78	.93	1.01	1.09	1.18	1.26	1.35	1.43	1.52	1.59	1.68
10	.61	.73	.85	.99	1.09	1.18	1.28	1.36	1.45	1.54	1.63	1.73	1.82
5	.67	.79	.92	1.07	1.17	1.27	1.37	1.46	1.56	1.65	1.76	1.85	1.95


↑ R - value of basement soil having P.I. of 10 or greater

**STRUCTURAL DESIGN CHART**

**FULL DEPTH AC**

TI	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10
AC 35	.33	.38	.42	.49	.54	.63	.68	.78	.83	.94	.99	1.11	1.16
30	.36	.40	.45	.53	.58	.68	.73	.84	.89	1.01	1.07	1.19	1.25
25	.38	.43	.48	.57	.62	.73	.79	.90	.96	1.08	1.14	1.27	1.34
20	.41	.46	.51	.61	.66	.78	.84	.96	1.02	1.15	1.22	1.36	1.43
15	.44	.49	.54	.65	.70	.83	.89	1.02	1.09	1.22	1.30	1.44	1.52
10	.46	.52	.58	.68	.74	.87	.95	1.08	1.15	1.29	1.37	1.53	1.61
5	.48	.55	.61	.72	.78	.93	.99	1.14	1.21	1.36	1.45	1.62	1.70

↑ R - value of basement soil

APPROVED		DATE <u>7-3-84</u>
	CITY ENGINEER	R.C.E. <u>24658</u>
MARK	REVISIONS	APPR. DATE

**CITY OF LOMPOC**  
ENGINEERING DIV.

**STREET STRUCTURAL  
DESIGN CHART**

STANDARD DRAWING NO. 600

RESOLUTION NO. 3366(84)      SHT. 2 OF 3

**STREET STRUCTURAL DESIGN CHART  
THICKNESS IN FEET  
AC - AB (78R) - ASB (60R)**

TI	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10
AC	.17	.17	.17	.17	.18	.21	.23	.26	.28	.32	.34	.37	.39
AB	.40	.40	.40	.40	.40	.40	.40	.40	.42	.45	.47	.50	.53
ASB 35	.40	.40	.40	.40	.40	.45	.53	.59	.65	.68	.72	.76	.80
30	.40	.40	.40	.40	.48	.56	.64	.71	.77	.81	.87	.91	.96
25	.40	.40	.40	.46	.58	.66	.75	.83	.90	.95	1.01	1.06	1.12
20	.40	.40	.42	.55	.68	.77	.87	.95	1.03	1.09	1.15	1.21	1.28
15	.40	.40	.50	.64	.77	.87	.98	1.07	1.16	1.22	1.30	1.36	1.44
10	.40	.44	.58	.80	.87	.98	1.09	1.19	1.28	1.36	1.44	1.52	1.60
5	.44	.51	.66	.81	.96	1.08	1.20	1.31	1.41	1.49	1.59	1.67	1.76

R-value of basement soil

**STRUCTURAL DESIGN CHART  
AC - AB (78R)**

TI	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10
AC	.17	.17	.17	.17	.18	.21	.23	.26	.28	.32	.34	.37	.39
AB 35	.40	.47	.56	.69	.75	.81	.88	.94	1.00	1.07	1.12	1.19	1.25
30	.43	.54	.64	.76	.85	.91	.98	1.05	1.11	1.18	1.26	1.33	1.40
25	.49	.60	.71	.85	.93	1.00	1.07	1.16	1.23	1.31	1.40	1.46	1.55
20	.55	.67	.78	.93	1.01	1.09	1.18	1.26	1.35	1.44	1.52	1.60	1.69
15	.61	.73	.85	1.01	1.10	1.19	1.29	1.37	1.47	1.56	1.66	1.73	1.83
10	.67	.80	.93	1.08	1.19	1.29	1.41	1.48	1.58	1.67	1.79	1.89	1.98
5	.73	.87	1.00	1.17	1.28	1.39	1.48	1.59	1.70	1.80	1.92	2.02	2.13

R-value of basement soil

**NOTES:**

- AC = Asphalt concrete
- AB = Aggregate base
- ASB = Aggregate subbase
- LTB = Lime treated base

APPROVED  DATE 7-3-84  
CITY ENGINEER R.C.E. 24658

**CITY OF LOMPOC  
ENGINEERING DIV.**

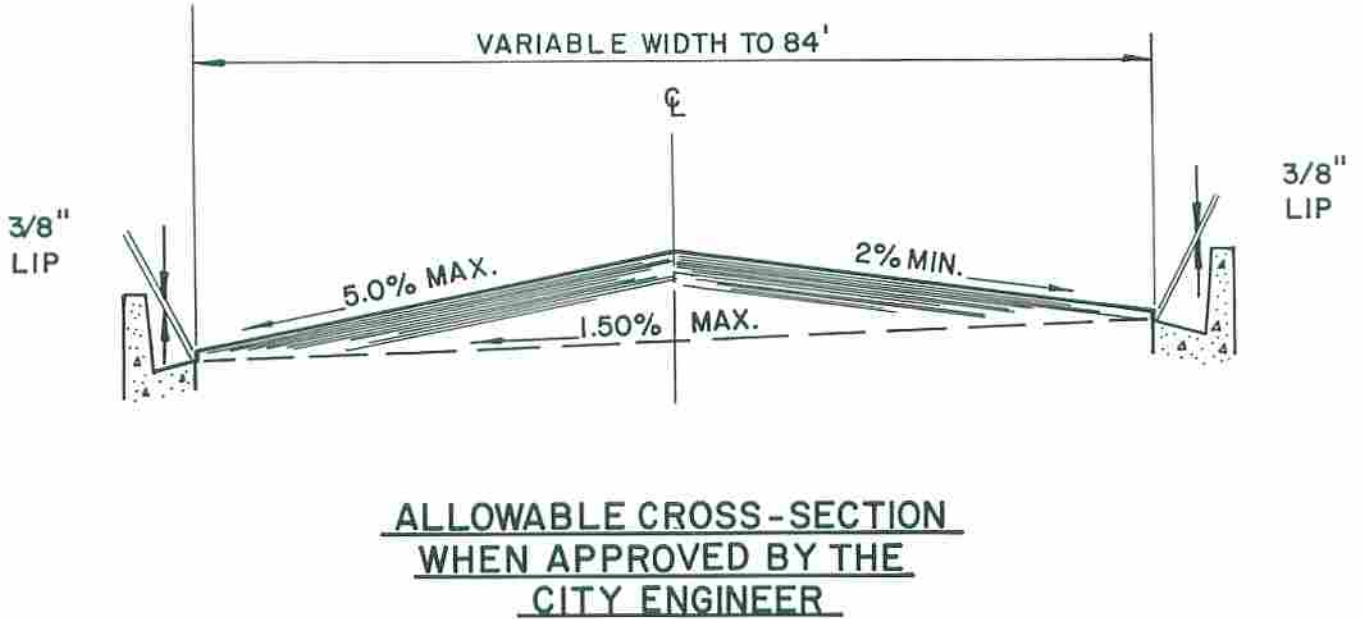
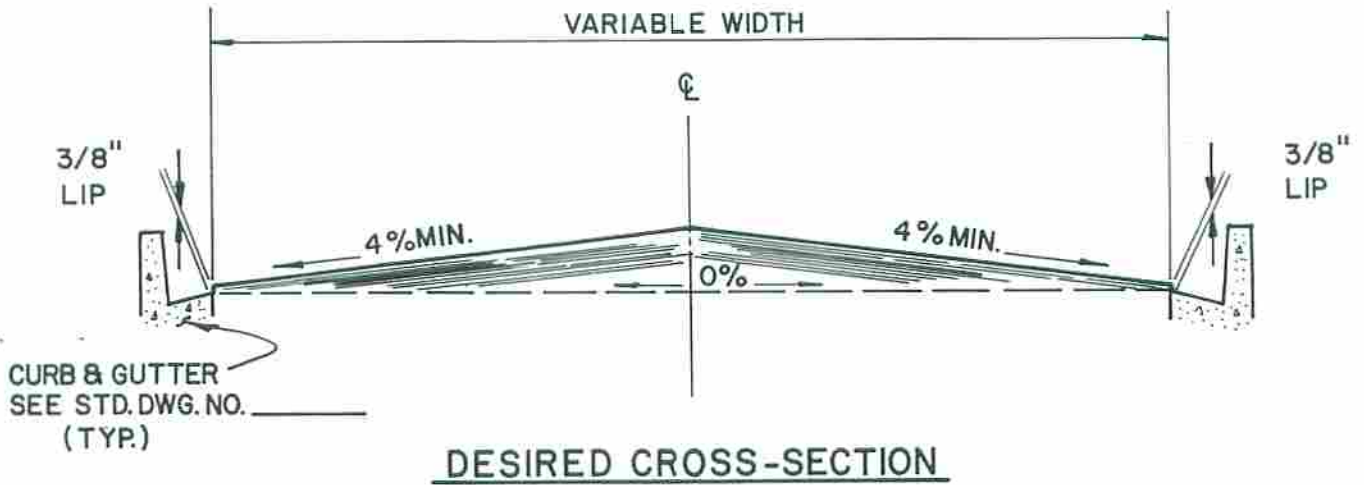
**STREET STRUCTURAL  
DESIGN CHART**


STANDARD DRAWING NO. 600

RESOLUTION NO. 3366(84) SHT. 3 OF 3

MARK	REVISIONS	APPR.	DATE





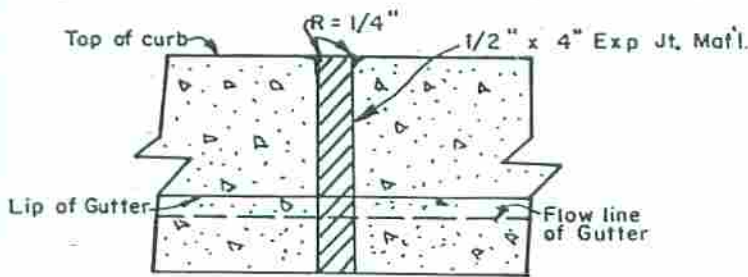
APPROVED		DATE 7-3-84
	CITY ENGINEER	R.C.E. 24658
MARK	REVISIONS	APPR. DATE

**CITY OF LOMPOC**  
**ENGINEERING DIV.**

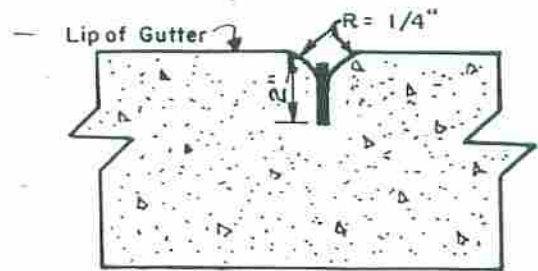
**STREET PAVEMENT**  
**CROSS-SECTION**

STANDARD DRAWING NO. 601

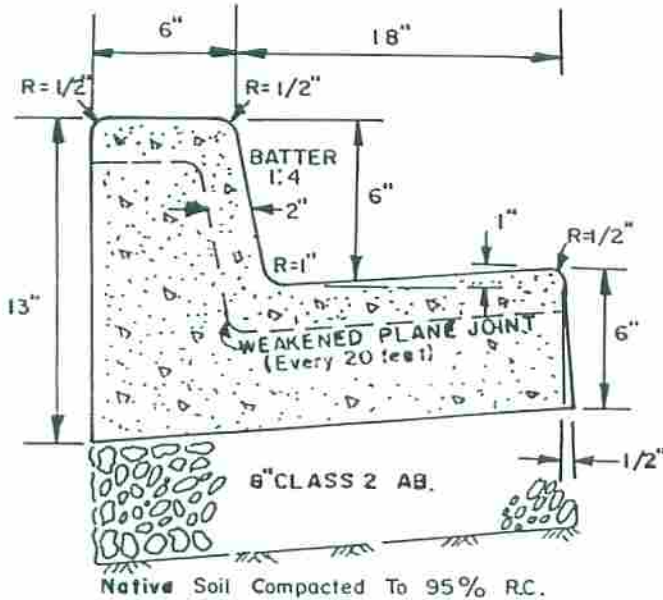
RESOLUTION NO. 3366 (84)      SHT. 1 OF 1



**EXPANSION JOINT**  
(Every 60 feet)



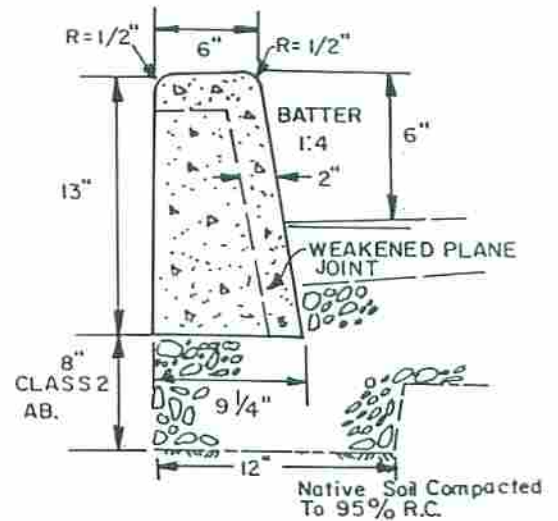
**WEAKENED PLANE JOINT**  
(DEEP JOINT Every 20 feet)



**CURB AND GUTTER**

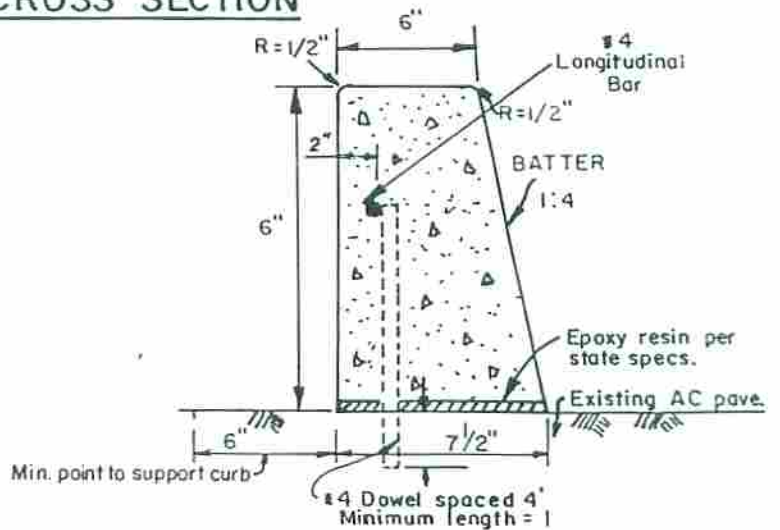
**NOTES:**

1. Concrete shall be a 5.5 sack mix with a 4" min. slump by Calif. Test Method 519 A.
2. Concrete shall be cured, as specified by the Standard Specifications.
3. After forms are stripped, exposed surfaces shall be finished smooth with a steel trowel and a fine brush finish with strokes parallel to the curb.
4. Median curb shall have rebar, epoxy resin, or both as directed by the City Engineer.
5. Asphaltic curbs, when required, shall comply with median curb standards.



**CURB ONLY**

**CROSS SECTION**



**MEDIAN CURB**

APPROVED *[Signature]* DATE 7-3-84  
CITY ENGINEER R.C.E. 24658

**CITY OF LOMPOC**  
**ENGINEERING DIV.**

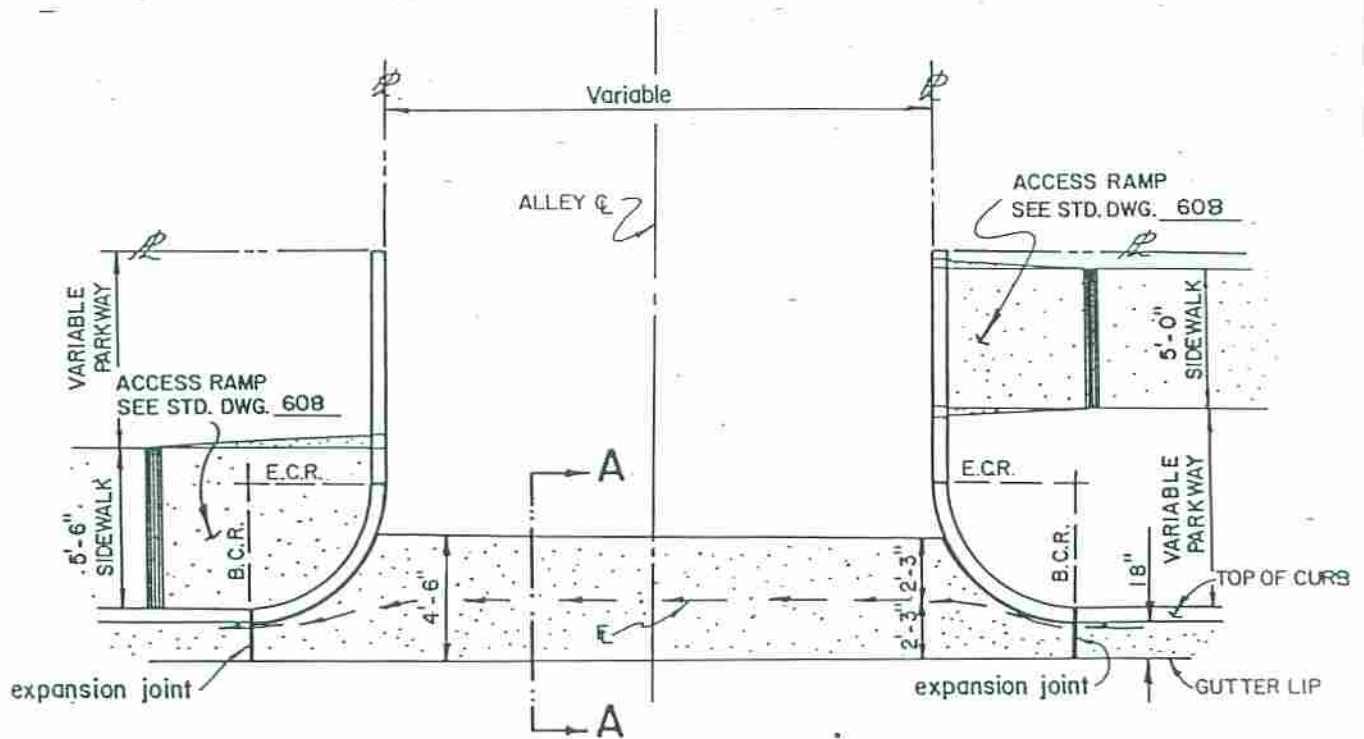
NOTES REVISED		7-13-90
MARK	REVISIONS	APPR. DATE

**6" CURB & GUTTER**

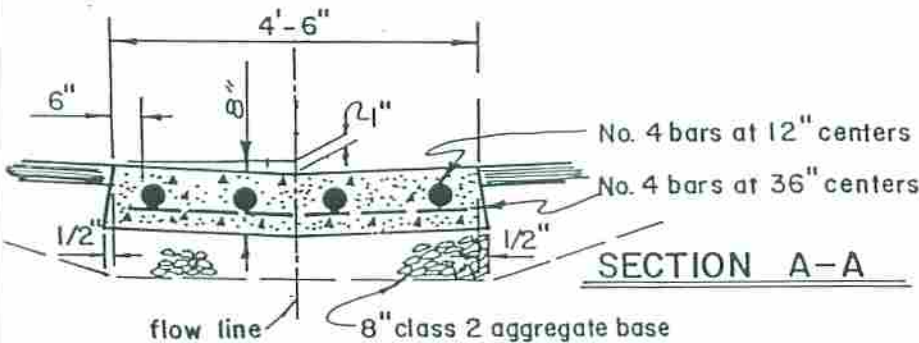
STANDARD DRAWING NO. 602

RESOLUTION NO. 3366(84)

SHT. 1 OF 1



PLAN OF ALLEY CROSS GUTTER



NOTES:

1. Concrete shall be a 5.5 sack mix with a 4" min. slump by Calif. Test Method 519 A.
2. Concrete shall be cured, as specified by the Standard Specifications.
3. Curb and spandral to be monolithic.
4. Cross gutter to be installed prior to street paving.
5. Finish cross gutter with light broom finish.

APPROVED	<i>[Signature]</i> CITY ENGINEER	DATE 7-3-84	R.C.E. 24658
L.R.	Ref. to Std. Dwg. 608		1-13-85
	NOTES REVISED		1-13-90
MARK	REVISIONS	APPR.	DATE

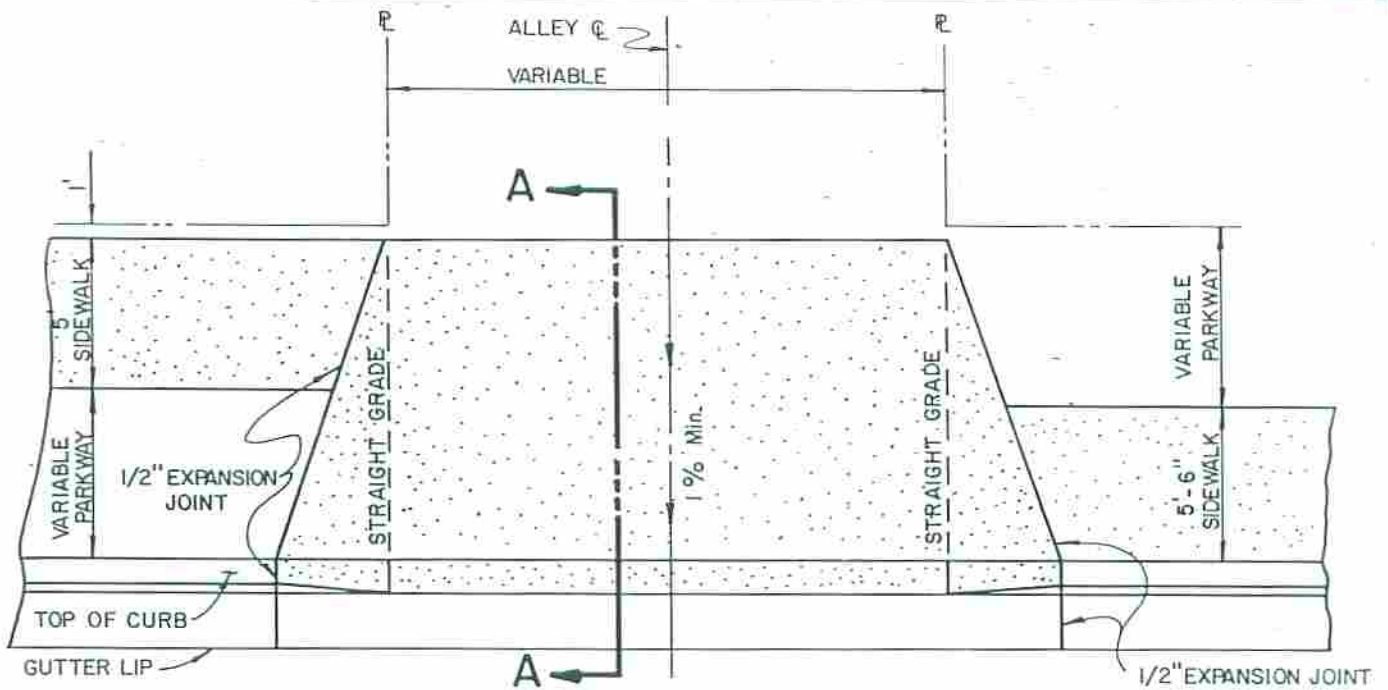
**CITY OF LOMPOC**  
ENGINEERING DIV.

**ALLEY INTERSECTION**  
**TYPE I**

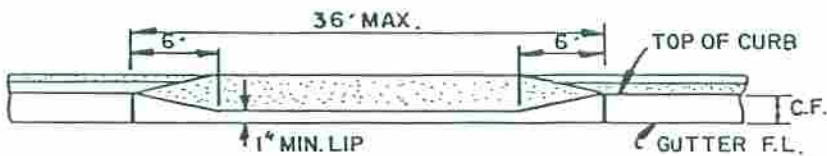
STANDARD DRAWING NO. 603

RESOLUTION NO. 3366 (84) SHT. 1 OF 1





**PLAN**  
NOT TO SCALE

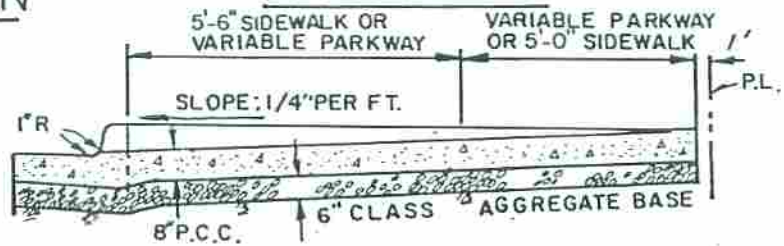


**ELEVATION**  
NOT TO SCALE

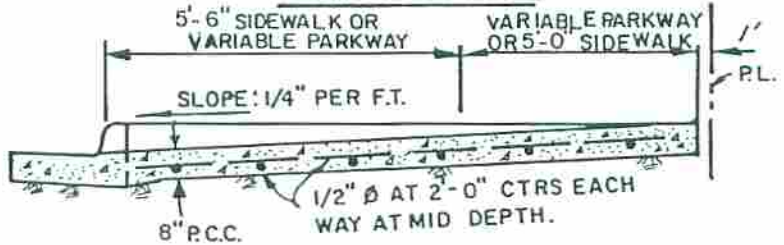
**NOTES:**

1. Concrete shall be a 5.5 sack mix with a 4" min. slump by Calif. Test Method 519 A.
2. Concrete shall be cured, as specified by the Standard Specifications.
3. When breaking into existing curb or sidewalk, sawcut or remove curb or sidewalk to nearest existing vertical joint.
4. Driveway approach shall have a coarse broom finish.
5. See Sawcut Detail No. 609.
6. A minimum of 2" fine sand shall be used for leveling under driveways (Alternate II).

**ALTERNATE I**



**ALTERNATE II**



**SECTION A-A**  
NOT TO SCALE

APPROVED

*[Signature]*  
CITY ENGINEER

DATE 7-3-84  
R.C.E. 24658

NOTES REVISED

7-13-90

**CITY OF LOMPOC**  
ENGINEERING DIV.

**ALLEY INTERSECTION**  
**TYPE II**

STANDARD DRAWING NO. 604

RESOLUTION, NO. 3366(84)

SHT. 1 OF 1

MARK

REVISIONS

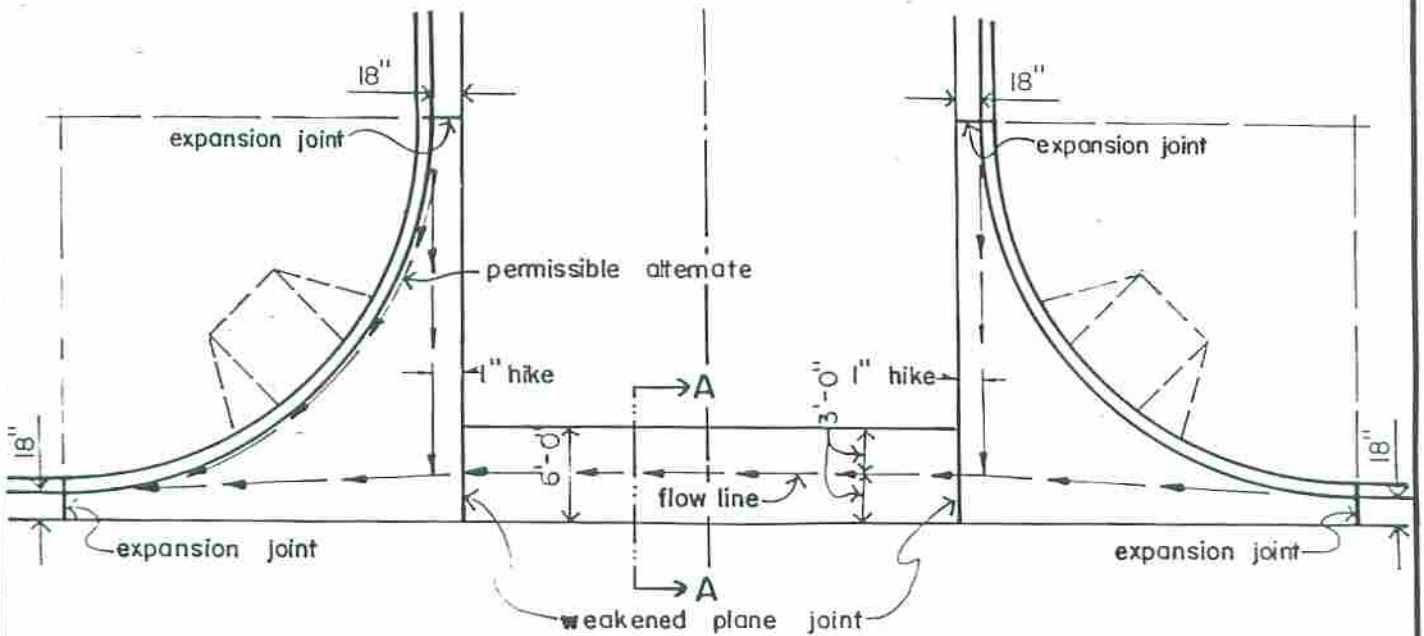
APPR.

DATE

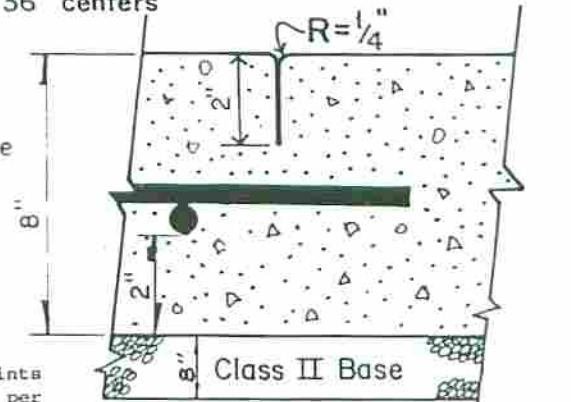
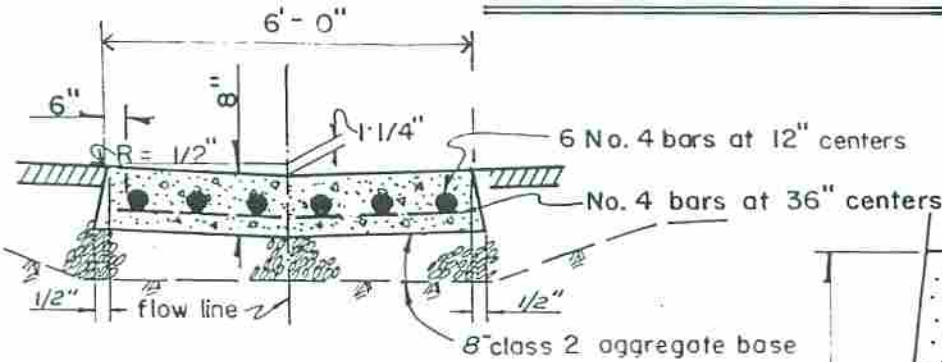


**NOTE:**

1. Curb radius is to face of curb and shall be approved by the City Engineer.



**PLAN OF CROSS GUTTER**



**WEAKENED PLANE JOINT**

**OR COLD JOINT**

**NOTES:**

1. Concrete shall be a 5.5 sack mix with a 4" min. slump by Calif. Test Method 519 A.
2. Concrete shall be cured, as specified by the Standard Specifications.
3. Curb and spandral to be monolithic.
4. Cross gutter to be installed prior to street paving.
5. Finish cross gutter and spandral with light broom finish.
6. Weakened plane joints to be constructed per Section 73 of the Standard Specifications.

APPROVED		DATE	8-24-78
	CITY ENGINEER	R.C.E.	2465B
REN			8-78
			<del>7-8-87</del>
	NOTES REVISED		7-13-90
MARK	REVISIONS	APPR.	DATE

**CITY OF LOMPOC**  
ENGINEERING DIV.

**CROSS GUTTERS**

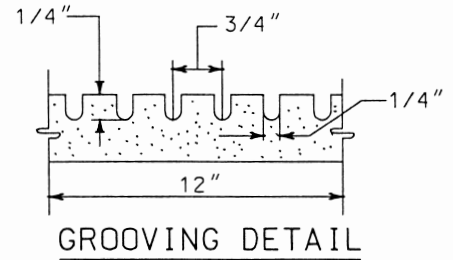
STANDARD DRAWING NO. 605

RESOLUTION NO. 3366 (84)

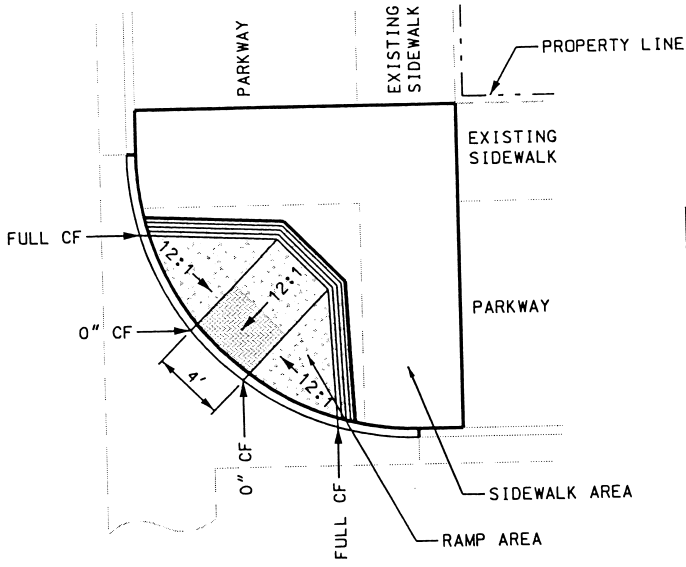
SHT. 1 OF 1

GENERAL RAMP NOTES:

1. INSTALL RAMP AT ALL INTERSECTIONS WHERE NEW CURB AND/OR SIDEWALK IS CONSTRUCTED.
2. ALL CURB RADII TO BE APPROVED BY CITY ENGINEER.
3. ADJACENT SIDEWALK, CURB AND GUTTER SHALL BE CONSTRUCTED ACCORDING TO CITY STANDARDS.
4. EXISTING CURB AND GUTTER REMOVED FOR RAMP INSTALLATION SHALL BE SAWCUT PER DETAIL 609-A, OR AS DIRECTED BY THE CITY ENGINEER.
5. SAWCUT AND REMOVE 24" WIDE SECTION OF ASPHALT (6" DEPTH) TO ACCOMMODATE FOR CONCRETE FORMS AND PROPER ASPHALT COMPACTION.
6. RAMPS SHALL HAVE A 12" WIDE BORDER WITH 1/4" GROOVES AT 3/4" CENTERS. THE REMAINDER OF RAMP SHALL HAVE A TRANSVERSE BROOMED SURFACE TEXTURE ROUGHER THAN THE SURROUNDING SIDEWALK.
7. WHERE CONDITIONS DO NOT ALLOW THESE CONFIGURATIONS, DEVIATIONS MAY BE USED IF APPROVED BY CITY ENGINEER PROVIDED THAT RAMP SLOPE DOES NOT EXCEED 12:1 AND LANDING IS PROVIDED AT TOP OF RAMP, WITH MINIMUM DIMENSION OF 36".
8. CONCRETE SHALL BE 5.5 SACK MIX WITH 4" MAX. SLUMP BY CALIF. TEST METHOD 519 A.
9. DEPTH OF CONCRETE RAMP SHALL BE 4" WITH A MIN. 2" OF FINE SAND USED FOR LEVELING UNDER ACCESS RAMPS.
10. INSTALL SAFETY YELLOW, 3' TALL x RAMP WIDTH, CAST-IN-PLACE PREFABRICATED DETECTABLE WARNING SURFACE (TRUNCATED DOMES). CERTAIN SITUATIONS, SMALL CORNER RADII OR ALLEY RAMPS RD5 AND RD7, WILL REQUIRE A LARGER DETECTABLE WARNING SURFACE. DETACHABLE WARNING SURFACES SHALL BE:
  - A. ARMOR-TILE AS MANUFACTURED BY ENGINEERED PLASTICS, INC.
  - B. CAST-IN-PLACE PAVER, AS MANUFACTURED BY ADA SOLUTIONS, INC.
  - C. OR APPROVED EQUAL.

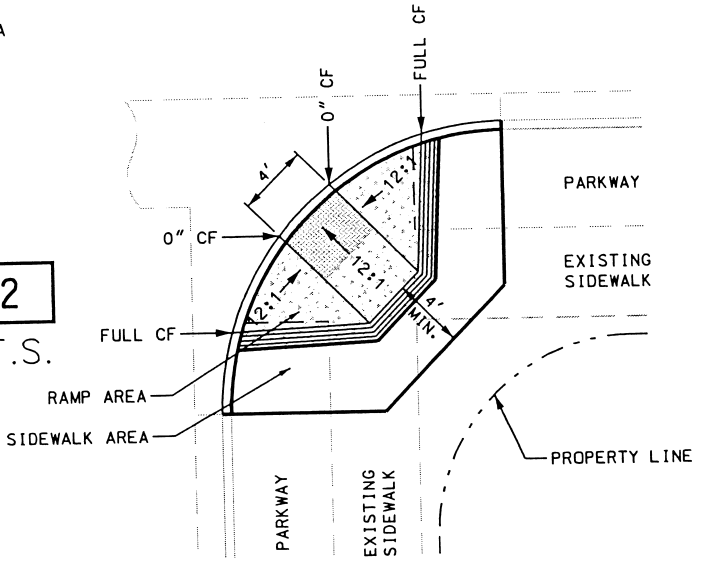


APPROVED <u>LAWRENCE McPHERSON</u> CITY ENGINEER		DATE <u>7/13/90</u> R.C.E. <u>21157</u>	<h2 style="margin: 0;">CITY OF LOMPOC</h2> <p style="margin: 0;">Engineering Division</p>	
10/06	REPLACE STD DRW NO. 606, 607, & 608	KM	10/06	<h1 style="margin: 0;">ACCESS RAMP DETAILS</h1>
01/07	REVISE NOTE 10	KM	12/07	
STANDARD DRAWING NO.606				Resolution No. 3967 (90) <span style="float: right;">SHEET 1 OF 3</span>
MARK	REVISIONS	APPR.	DATE	

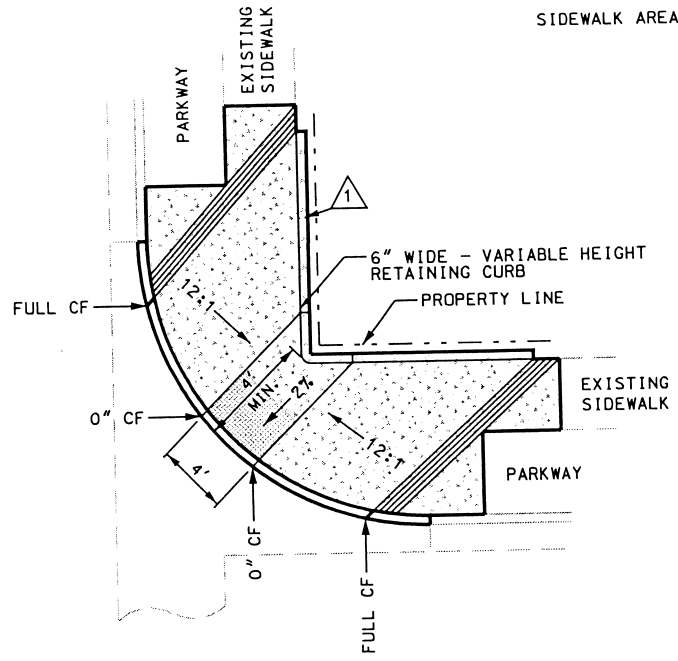


**RD1**  
N.T.S.

**RD2**  
N.T.S.



**RD3**  
N.T.S.



APPROVED	LAWRENCE McPHERSON	DATE	7/13/90
	CITY ENGINEER	R.C.E.	21157
10/06	REPLACE STD DRW NO. 606, 607, & 608	KM	10/06
1	MOVE RETAINING CURB TO BACK OF WALK	KM	12/07
MARK	REVISIONS	APPR.	DATE

CITY OF LOMPOC  
Engineering Division

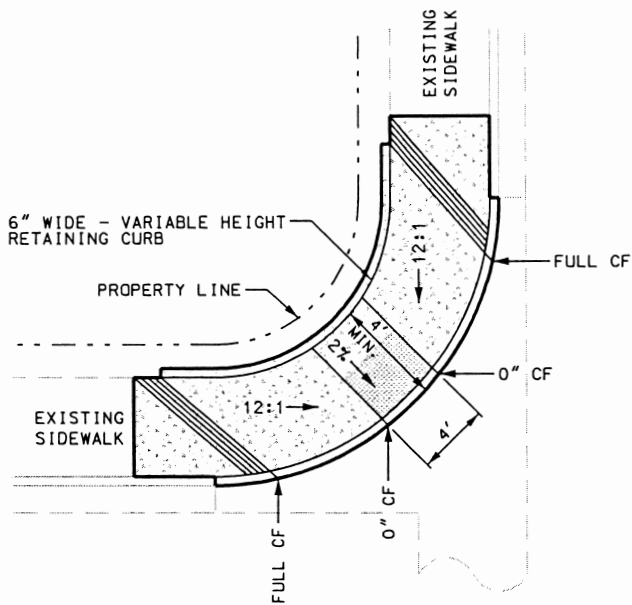
ACCESS RAMP DETAILS

STANDARD DRAWING NO.606

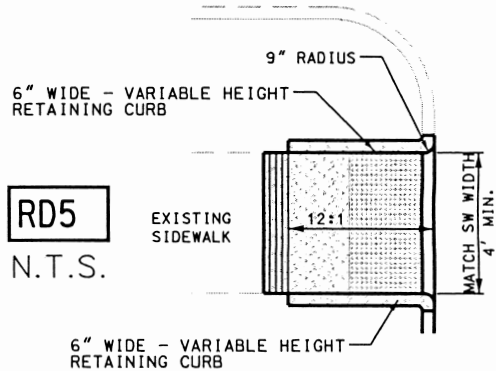
Resolution No. 3967 (90)

SHEET 2 OF 3

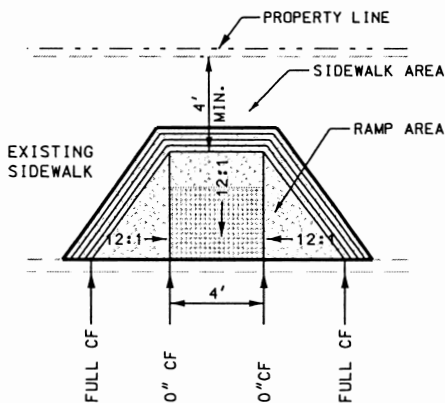
FILE: M:\City Standard Plans\Engineering\Access Ramp Details No 606-2 of 3.vb.dwg



**RD4**  
N.T.S.

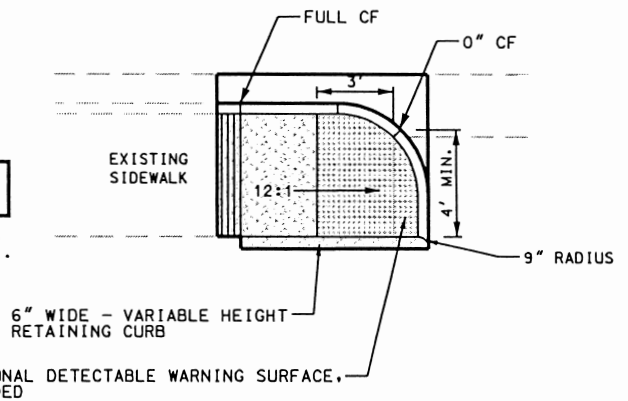


**RD5**  
N.T.S.



**RD6**  
N.T.S.

**RD7**  
N.T.S.



APPROVED		LAWRENCE McPHERSON		DATE	7/13/90
		CITY ENGINEER		R.C.E.	21157
10/06	REPLACE STD DRW NO. 606, 607, & 608	KM	10/06		
	ADD RD7 DETAIL	KM	12/07		
MARK	REVISIONS	APPR.	DATE		

**CITY OF LOMPOC**  
Engineering Division

**ACCESS RAMP DETAILS**

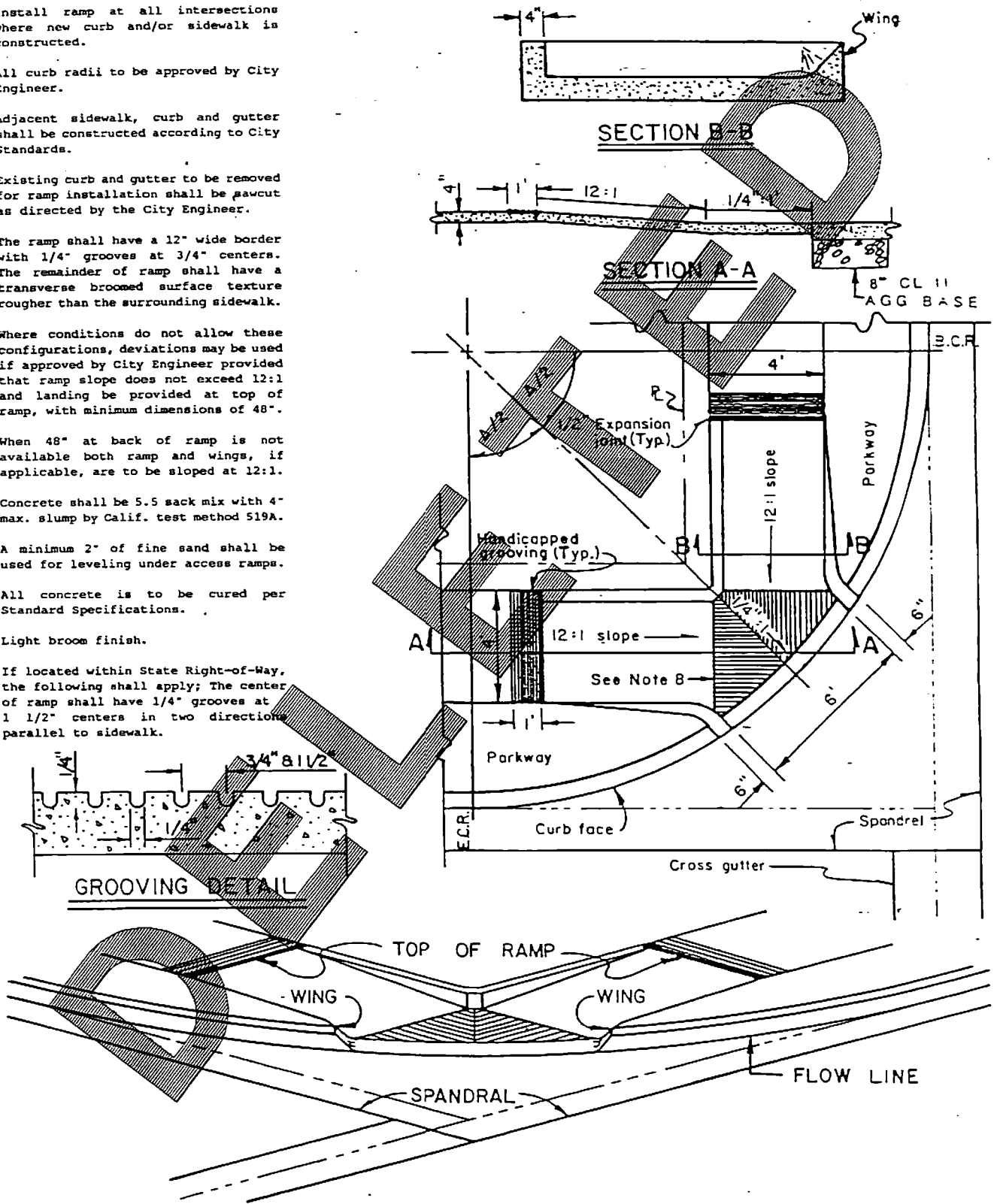
STANDARD DRAWING NO.606

Resolution No. 3967 (90) SHEET 3 OF 3

FILE: M:\City Standard Plans\Engineering\Access Ramp Detail No 606-2 of 2 v8.dgn

**NOTES:**

1. Install ramp at all intersections where new curb and/or sidewalk is constructed.
2. All curb radii to be approved by City Engineer.
3. Adjacent sidewalk, curb and gutter shall be constructed according to City Standards.
4. Existing curb and gutter to be removed for ramp installation shall be sawcut as directed by the City Engineer.
5. The ramp shall have a 12" wide border with 1/4" grooves at 3/4" centers. The remainder of ramp shall have a transverse broomed surface texture rougher than the surrounding sidewalk.
6. Where conditions do not allow these configurations, deviations may be used if approved by City Engineer provided that ramp slope does not exceed 12:1 and landing be provided at top of ramp, with minimum dimensions of 48".
7. When 48" at back of ramp is not available both ramp and wings, if applicable, are to be sloped at 12:1.
8. Concrete shall be 5.5 sack mix with 4" max. slump by Calif. test method 519A.
9. A minimum 2" of fine sand shall be used for leveling under access ramps.
10. All concrete is to be cured per Standard Specifications.
11. Light broom finish.
12. If located within State Right-of-Way, the following shall apply; The center of ramp shall have 1/4" grooves at 1 1/2" centers in two directions parallel to sidewalk.



APPROVED		DATE 7-13-90
	CITY ENGINEER	R.C.E. 21157
	DETAIL DELETED	10/06 KPM
MARK	REVISIONS	APPR DATE

**CITY OF LOMPOC**  
ENGINEERING DIV.

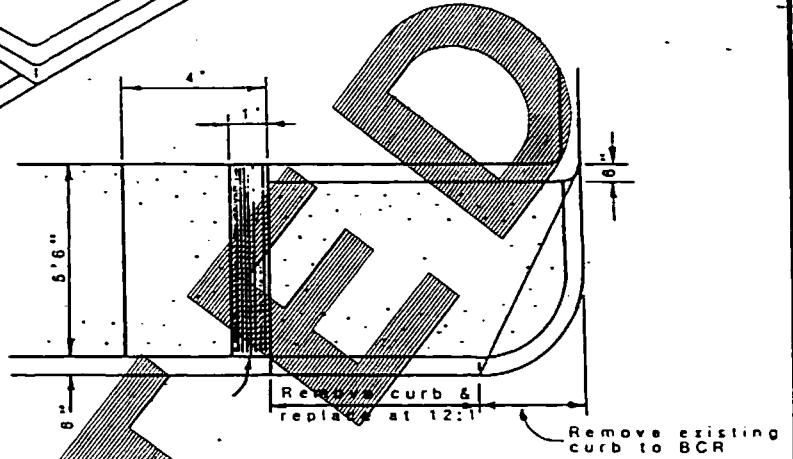
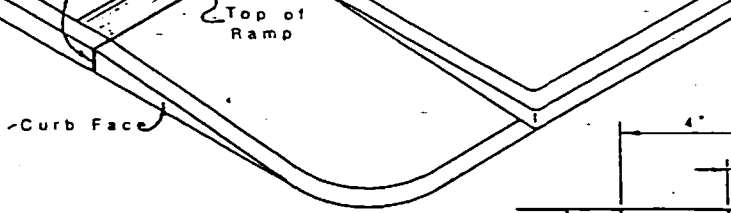
**ACCESS RAMP DETAILS-SPECIAL**  
WHERE R/W IS RESTRICTED

STANDARD DRAWING NO. 607

RESOLUTION NO. 3967(90)      SHT. 1 OF 1

1/2" Expansion joint

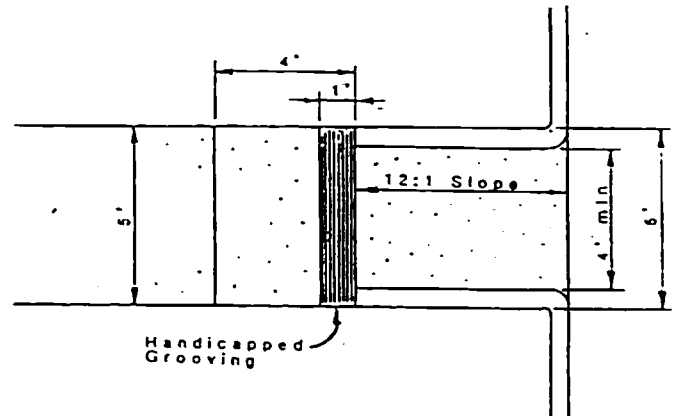
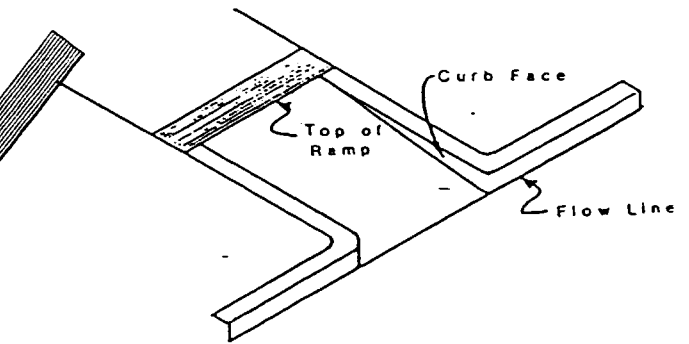
ALTERNATE ONE

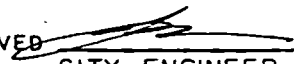


NOTES:

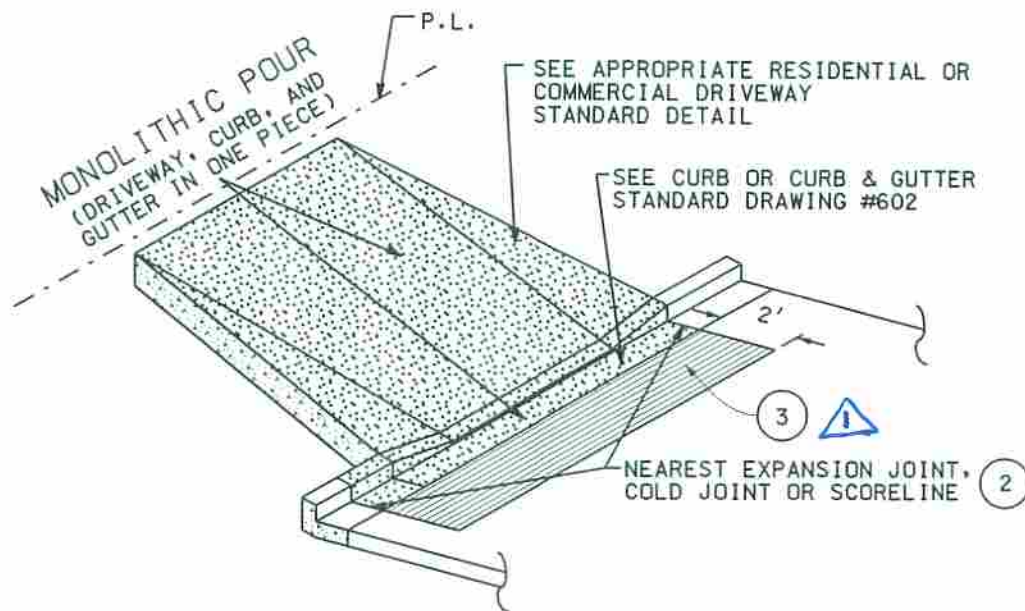
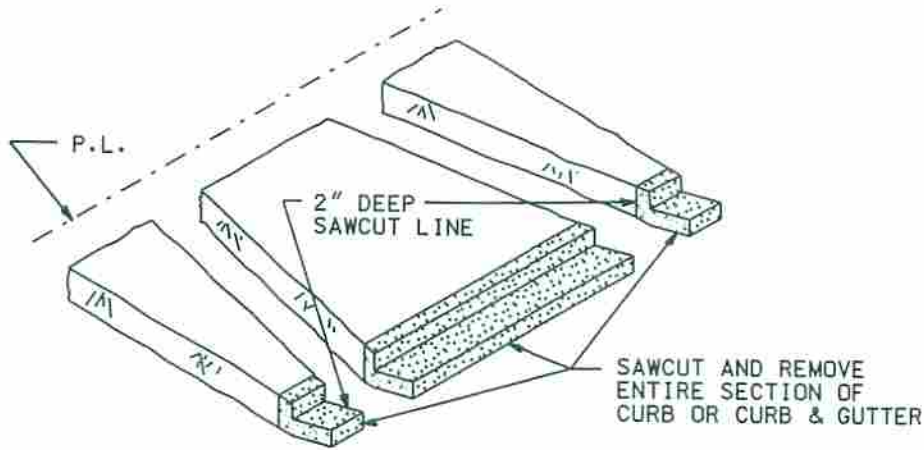
1. Install ramp at all intersections where new curb and/or sidewalk is constructed.
2. All curb radii to be approved by City Engineer.
3. Adjacent sidewalk, curb and gutter shall be constructed according to City Standards.
4. Existing curb and gutter to be removed for ramp installation shall be sawcut as directed by the City Engineer.
5. The ramp shall have a 12" wide border with 1/4" grooves at 3/4" centers. The remainder of ramp shall have a transverse broomed surface texture rougher than the surrounding sidewalk.
6. Where conditions do not allow these configurations, deviations may be used if approved by City Engineer provided that ramp slope does not exceed 12:1 and landing be provided at top of ramp, with minimum dimensions of 48".
7. When 48" at back of ramp is not available both ramp and wings, if applicable, are to be sloped at 12:1.
8. Concrete shall be 5.5 sack max with 4" max. slump by Calif. test method 519A.
9. A minimum 2" of fine sand shall be used for leveling under access ramps.
10. All concrete is to be cured per Standard Specifications.
11. Light broom finish.
12. If located within State Right-of-Way, the following shall apply; The center of ramp shall have 1/4" grooves at 1 1/2" centers in two directions parallel to sidewalk.

ALTERNATE TWO



APPROVED 		DATE 7-13-90		CITY OF LOMPOC ENGINEERING DIV.	
CITY ENGINEER		R.C.E. 21157			
NOTES REVISED				ACCESS RAMPS FOR ALLEYS STANDARD DRAWING NO. 608 RESOLUTION NO. 3967(90) SHT. 1 OF 1	
DETAIL DELETED		KPM	10/06		
MARK	REVISIONS	APPR	DATE		






**NOTES:**

1. CONTRACTOR IS RESPONSIBLE FOR RE-SAWCUTTING AND REPLACING ANY CURB OR CURB & GUTTER DAMAGED DUE TO REMOVAL OPERATIONS.
2. REMOVE CURB OR CURB & GUTTER TO THE NEAREST EXPANSION JOINT, COLD JOINT OR SCORELINE.
3. TO ACCOMMODATE FOR CONCRETE FORMS AND PROPER ASPHALT COMPACTION, SAWCUT AND REMOVE A 2' WIDE SECTION OF ASPHALT.

APPROVED JIM DIXON 7/3/84  
 CITY ENGINEER R.C.E. 24658 DATE

 NO SAWCUTTING @ FL KH 2/2006  
 2' WIDE A.C. PATCH KH 2/2006

MARK	REVISIONS	APPR.	DATE

**CITY OF LOMPOC**  
 Engineering Division

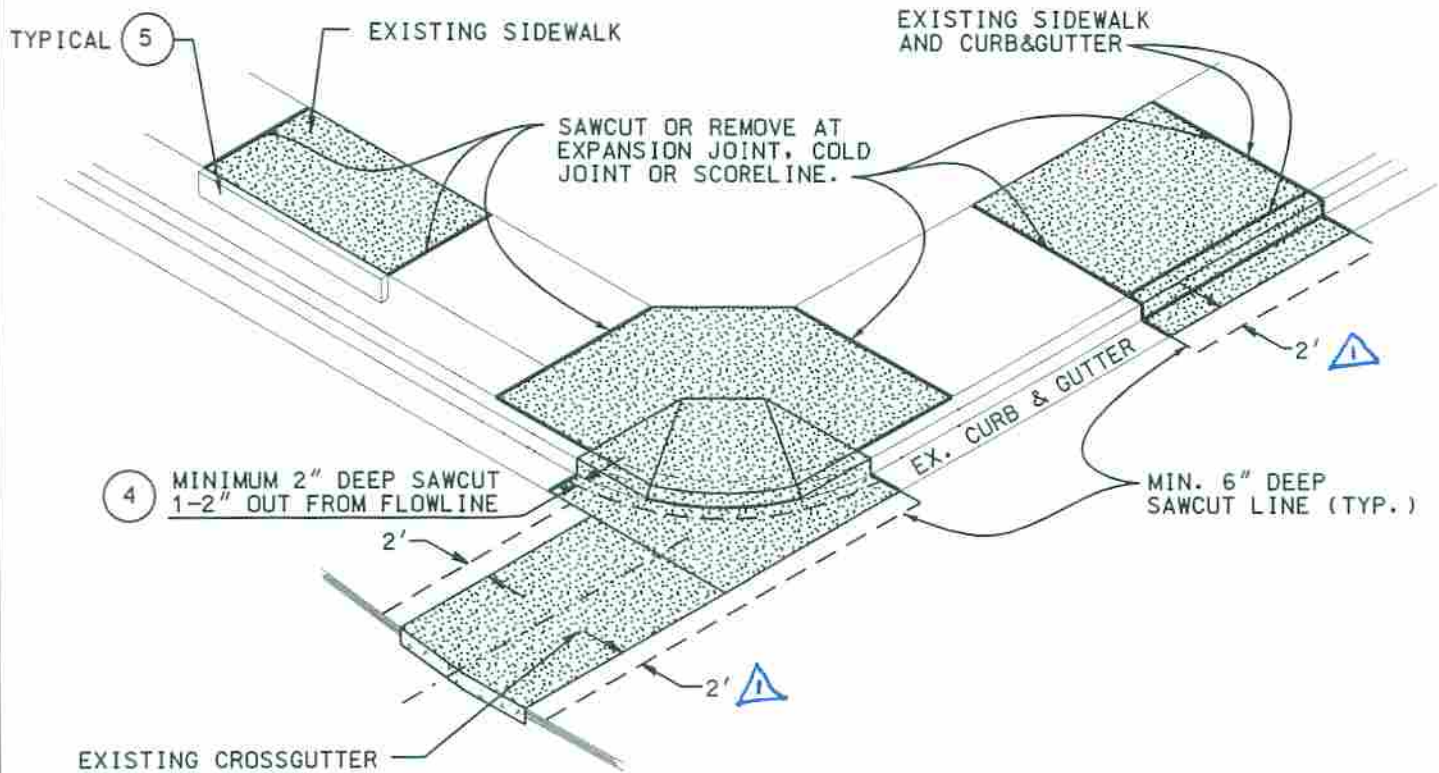
**SAWCUT DETAILS  
 FOR DRIVEWAY  
 & CURB DEPRESSION**

**PLAN  
 609**  
 SHEET  
 1 OF 2

Resolution No. 3366 (84)

**NOTES:**

1. CONTRACTOR IS RESPONSIBLE FOR RE-SAWCUTTING AND REPLACING ANY SIDEWALK, CURB, CURB AND GUTTER OR CROSS GUTTER DAMAGED DUE TO REMOVAL OPERATIONS.
2. REMOVE SIDEWALK, CURB, CURB AND GUTTER OR CROSS GUTTER TO NEAREST EXPANSION JOINT, COLD JOINT OR SCORELINE.
3. TO ACCOMMODATE FOR CONCRETE FORMS AND PROPER ASPHALT COMPACTION, SAWCUT AND REMOVE A 2' WIDE SECTION OF ASPHALT (6" DEPTH).
4. THE CONTRACTOR MUST FIRST GET APPROVAL FROM THE CITY INSPECTOR PRIOR TO SAWCUTTING AT THE FLOWLINE OF THE SPANDRAL.
5. EARTH BACKFILL, ADJACENT TO RECENTLY PLACED CONCRETE, SHALL BE AN APPROVED TOP SOIL. TOP SOIL SHALL BE PLACED AT THE TIME THE FORMS ARE REMOVED.



APPROVED	JIM DIXON	7/3/84
	CITY ENGINEER R.C.E. 24658	DATE
	2' AC PATCH	KM 2/roads
MARK	REVISIONS	APPR. DATE

**CITY OF LOMPOC**  
Engineering Division

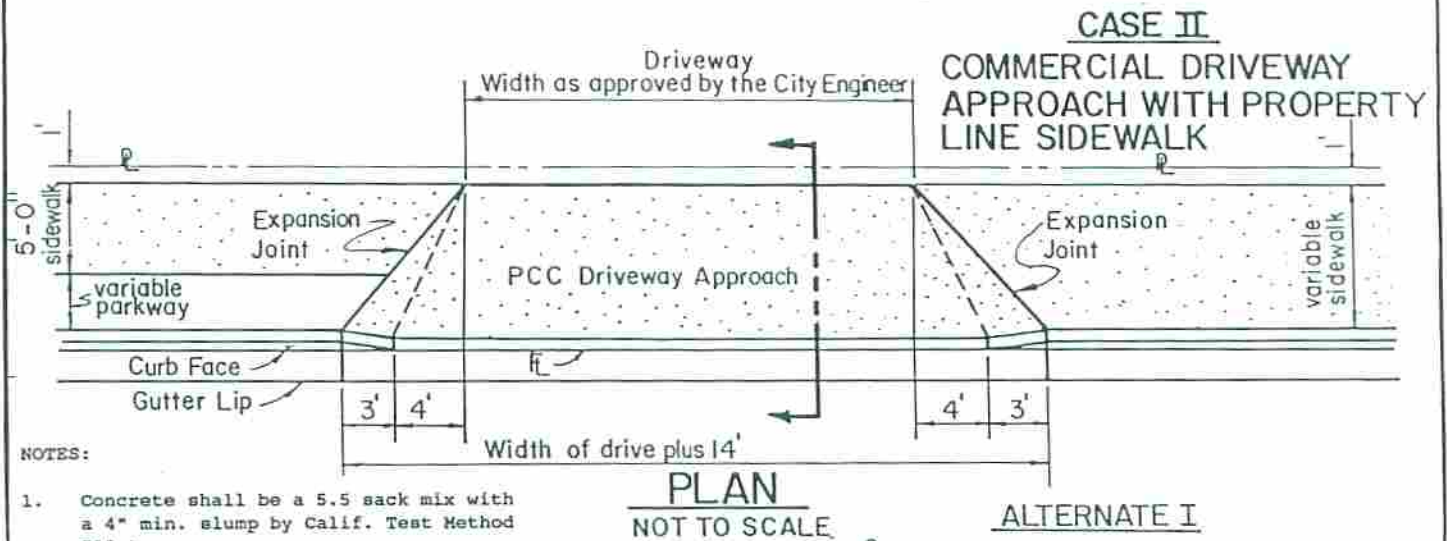
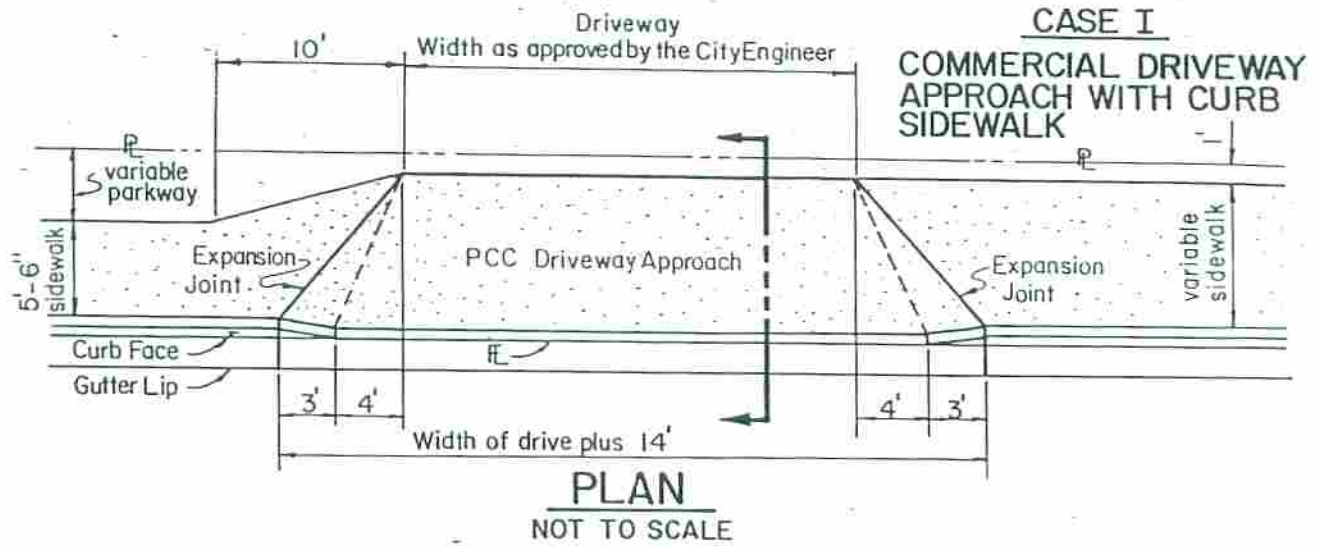
**SAWCUT DETAILS**

**CROSS GUTTER, SIDEWALK AND CURB & GUTTERS**

**PLAN 609-A**  
SHEET 2 OF 2

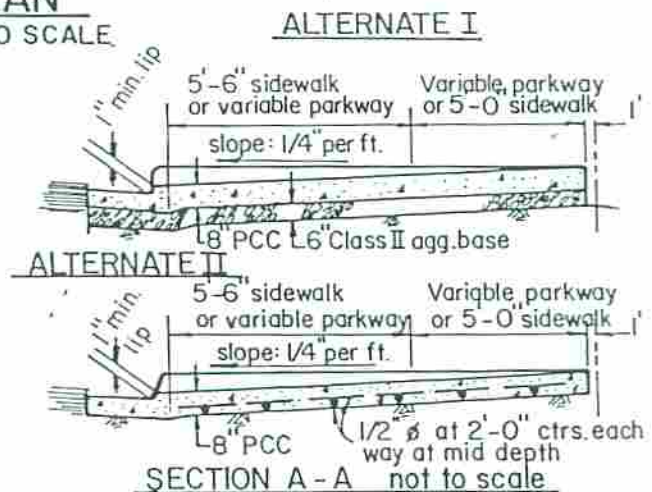
Resolution No. 3366 (84)





**NOTES:**

1. Concrete shall be a 5.5 sack mix with a 4" min. slump by Calif. Test Method 519 A.
2. Concrete shall be cured, as specified by the Standard Specifications.
3. When breaking into existing curb or sidewalk, sawcut or remove curb or sidewalk to nearest existing vertical joint.
4. Driveway approach shall have a coarse broom finish.
5. See Sawcut Detail No. 609.
6. A minimum of 2" fine sand shall be used for leveling under commercial driveways (Alternate II).



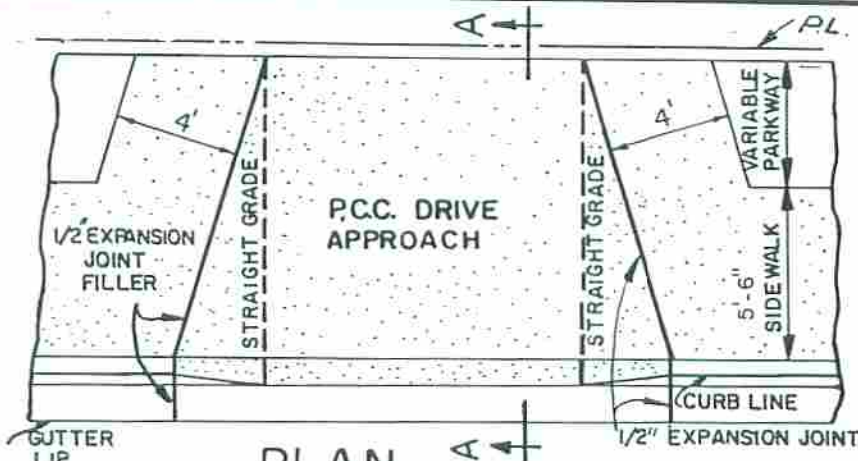
APPROVED	<i>[Signature]</i>	DATE	7-3-84
	CITY ENGINEER	R.C.E.	24658
NOTES REVISD	<i>[Signature]</i>		7-13-90
MARK	REVISIONS	APPR.	DATE

**CITY OF LOMPOC**  
ENGINEERING DIV.

**COMMERCIAL DRIVEWAY - TYPE I**

STANDARD DRAWING NO. 610

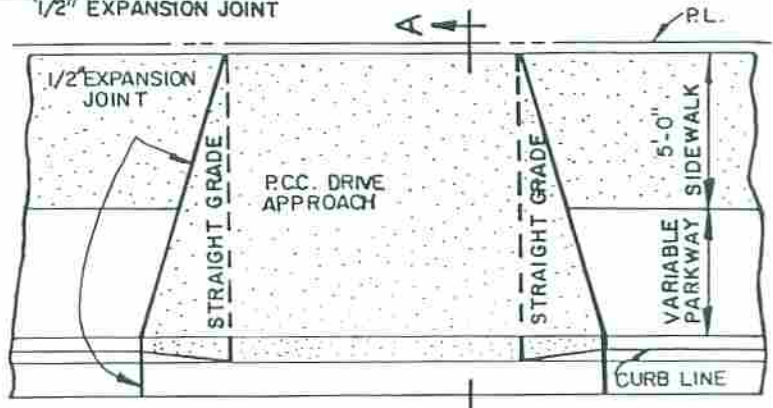
RESOLUTION NO. 3366 (84)



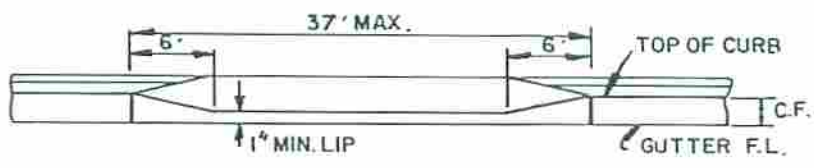
**PLAN**  
NOT TO SCALE

**CASE I**  
**COMMERCIAL**  
**DRIVEWAY**  
**APPROACH**  
**WITH**  
**CURB**  
**SIDEWALK**

**CASE II**  
**COMMERCIAL**  
**DRIVEWAY**  
**APPROACH**  
**WITH**  
**PROPERTY LINE**  
**SIDEWALK**



**PLAN**  
NOT TO SCALE

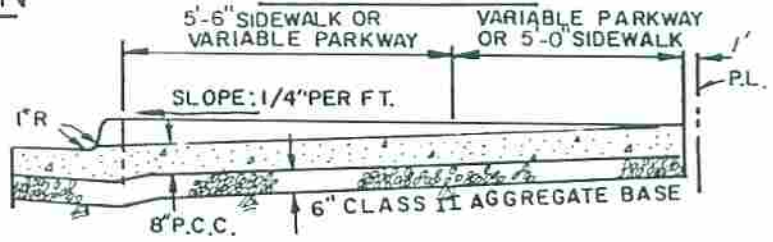


**ELEVATION**  
NOT TO SCALE

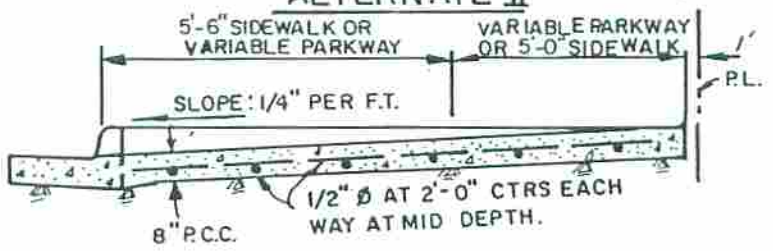
**NOTES:**

1. Concrete shall be a 5.5 sack mix with a 4" min. slump by Calif. Test Method 519 A.
2. Concrete shall be cured, as specified by the Standard Specifications.
3. When breaking into existing curb or sidewalk, sawcut or remove curb or sidewalk to nearest existing vertical joint.
4. Driveway approach shall have a coarse broom finish.
5. See Sawcut Detail No. 609.
6. A minimum of 2" fine sand shall be used for leveling under commercial driveways (Alternate II).

**ALTERNATE I**



**ALTERNATE II**



**SECTION A-A**  
NOT TO SCALE

APPROVED		DATE	7-3-84
	CITY ENGINEER	R.C.E.	24658
NOTES REVISED			7-13-96
MARK	REVISIONS	APPR.	DATE

**CITY OF LOMPOC**  
**ENGINEERING DIV.**

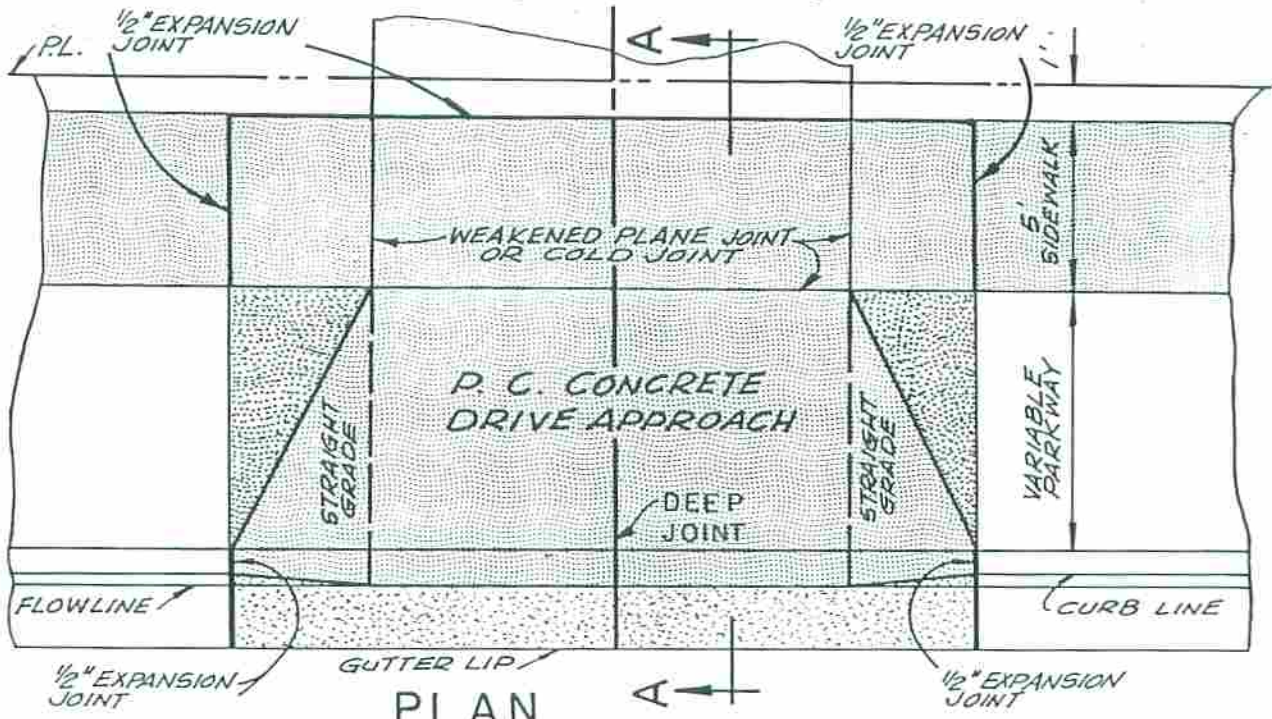
**COMMERCIAL**  
**DRIVEWAYS - TYPE II**

STANDARD DRAWING NO. 611

RESOLUTION NO. 3366 (84)

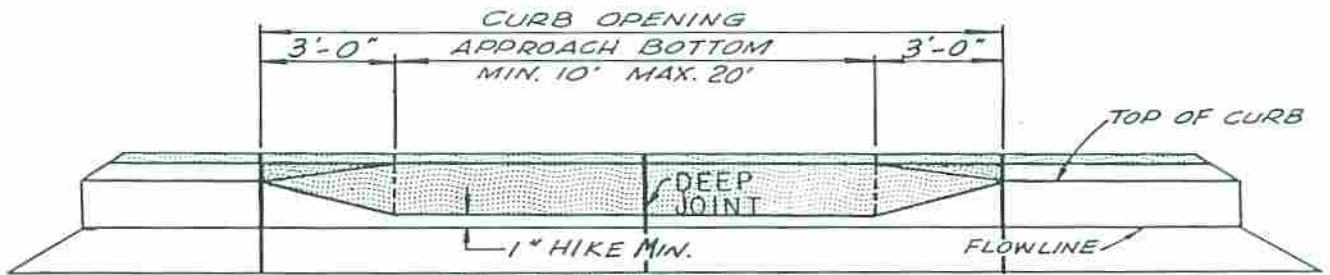
SHT 1 OF 1





**PLAN**

NOT TO SCALE

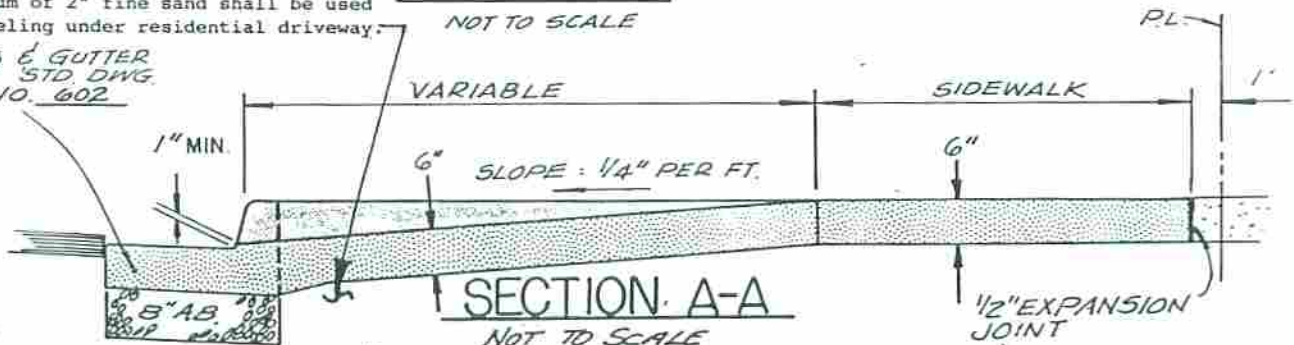


**ELEVATION**

NOT TO SCALE

A minimum of 2" fine sand shall be used for leveling under residential driveway.

CURB & GUTTER SEE STD. DWG. NO. 602



**SECTION A-A**

NOT TO SCALE

NOTES:

- Concrete shall be a 5.5 sack mix with a 4" min. slump by Calif. Test Method 519 A.
- Concrete shall be cured, as specified by the Standard Specifications.
- When breaking into existing curb or sidewalk, sawcut or remove curb or sidewalk to nearest existing vertical joint.
- Driveway approach shall have a coarse broom finish.
- See Sawcut Detail No. 609.

APPROVED		DATE 7-3-84
	CITY ENGINEER	R.C.E. 24658
NOTES REVISED		7-13-90
MARK	REVISIONS	APPR. DATE

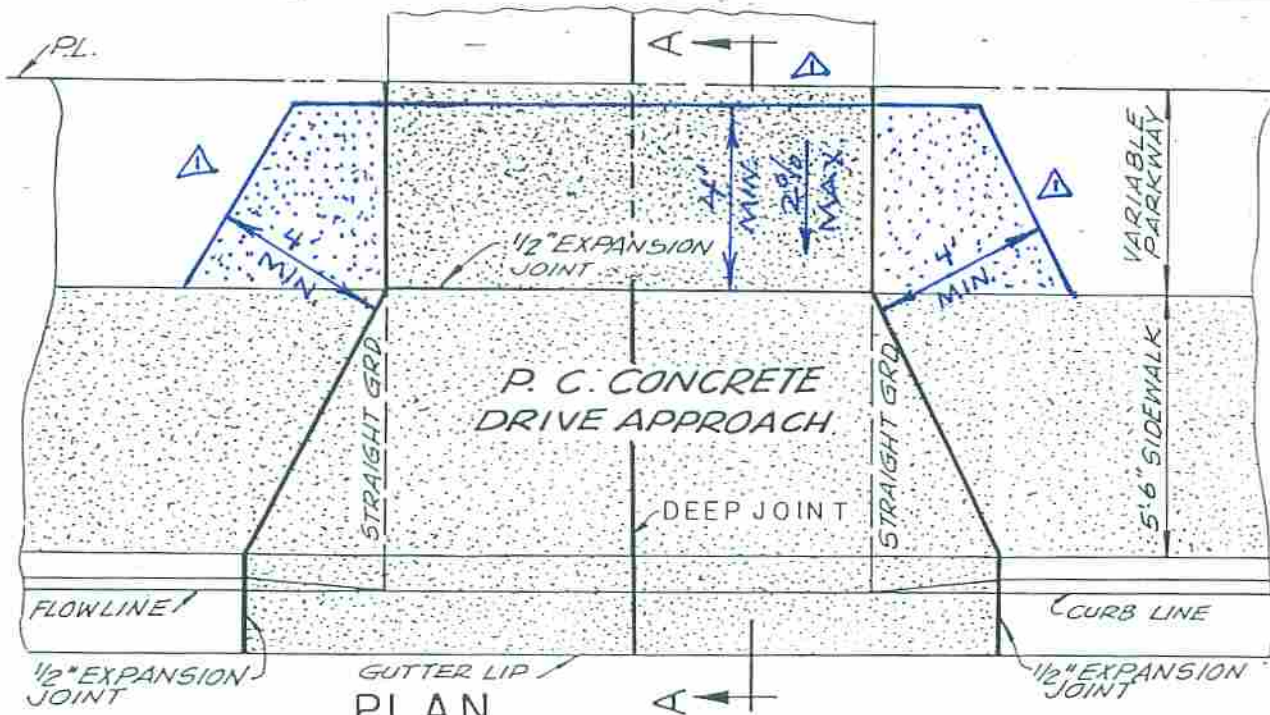
**CITY OF LOMPOC**  
ENGINEERING DIV.

**RESIDENTIAL DRIVEWAY**  
**APPROACH TYPE I**

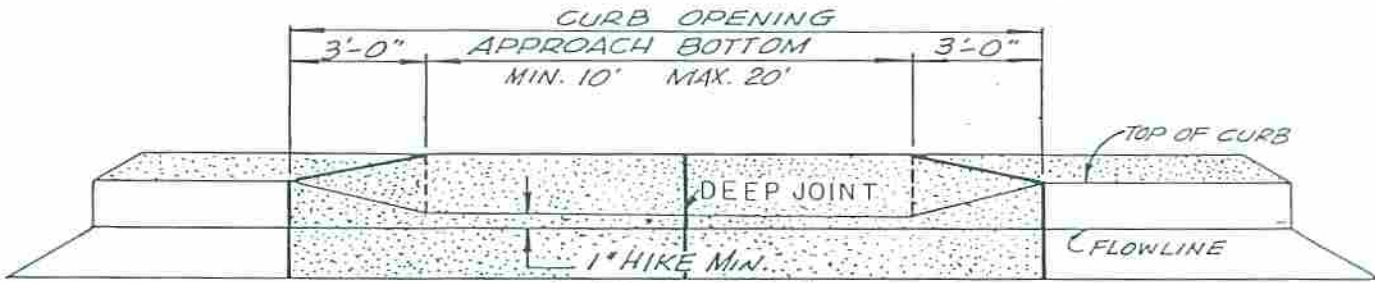
STANDARD DRAWING NO. 612

RESOLUTION NO. 3366 (84) SHT. 1 OF 1

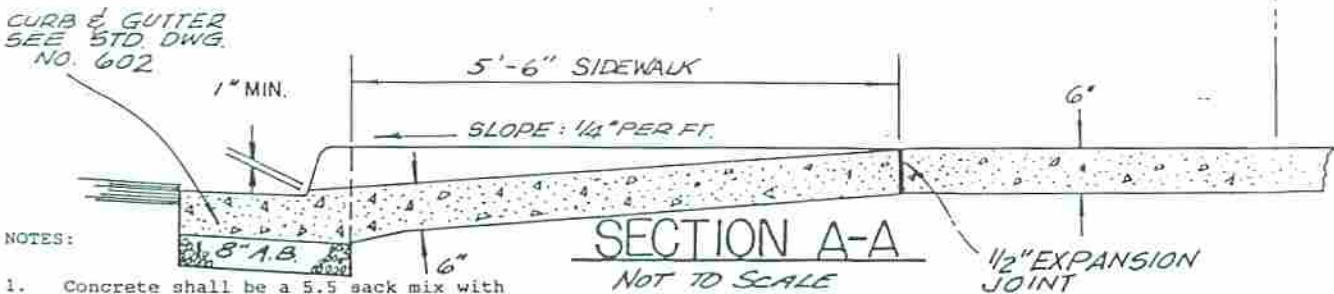




**PLAN**  
NOT TO SCALE



**ELEVATION**  
NOT TO SCALE



**SECTION A-A**  
NOT TO SCALE

**NOTES:**

1. Concrete shall be a 5.5 sack mix with a 4" min. slump by Calif. Test Method 519 A.
2. Concrete shall be cured, as specified by the Standard Specifications.
3. When breaking into existing curb or sidewalk, sawcut or remove curb or sidewalk to nearest existing vertical
4. Driveway approach shall have a coarse broom finish.
5. See Sawcut Detail No. 609.
6. A minimum of 2" fine sand shall be used for leveling under residential driveway.

APPROVED		DATE 7-3-84
	CITY ENGINEER	R.C.E. 24658
NOTES REVISD		7-13-90
	4" LANDING @ 2% MAX.	KPM 1/11/05
MARK	REVISIONS	APPR. DATE

**CITY OF LOMPOC**  
ENGINEERING DIV.

**RESIDENTIAL DRIVEWAY**  
**APPROACH TYPE II**

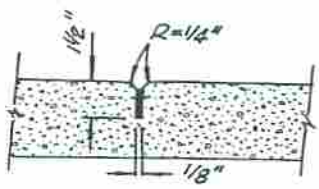
STANDARD DRAWING NO. 613

RESOLUTION NO. 3366 (84)      SHT. 1 OF 1



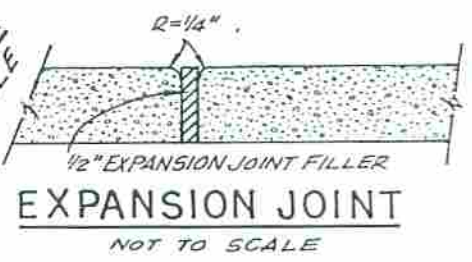
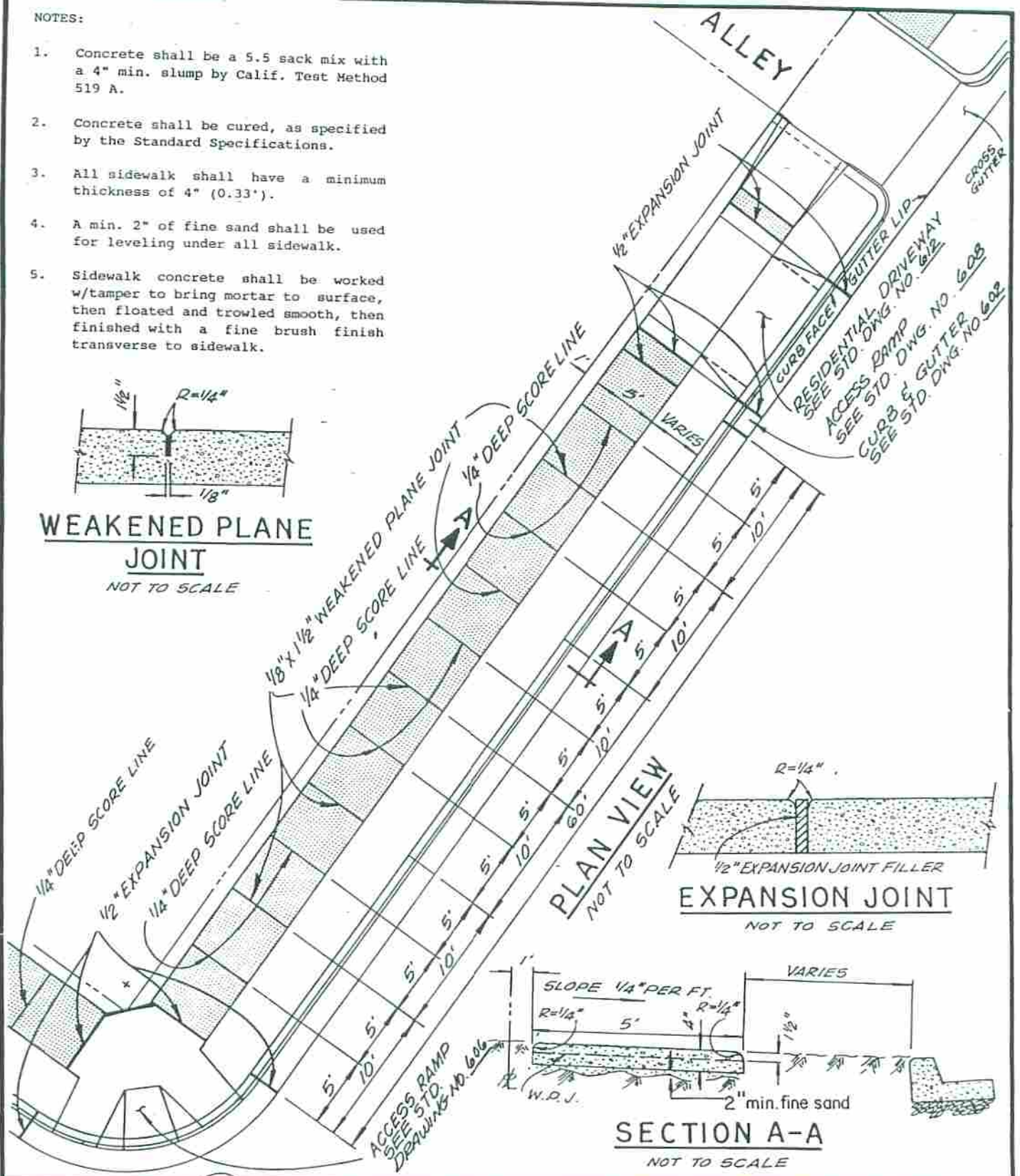
NOTES:

1. Concrete shall be a 5.5 sack mix with a 4" min. slump by Calif. Test Method 519 A.
2. Concrete shall be cured, as specified by the Standard Specifications.
3. All sidewalk shall have a minimum thickness of 4" (0.33').
4. A min. 2" of fine sand shall be used for leveling under all sidewalk.
5. Sidewalk concrete shall be worked w/tamper to bring mortar to surface, then floated and trowled smooth, then finished with a fine brush finish transverse to sidewalk.

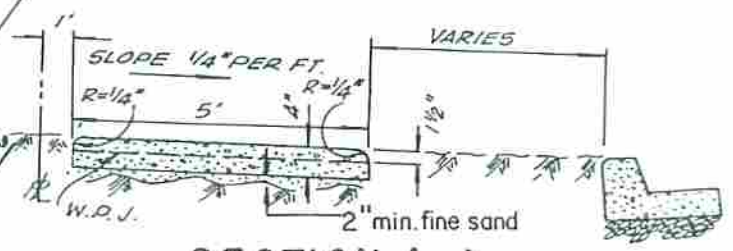


**WEAKENED PLANE JOINT**  
NOT TO SCALE

ALLEY



**EXPANSION JOINT**  
NOT TO SCALE



**SECTION A-A**  
NOT TO SCALE

APPROVED	<i>[Signature]</i>	DATE	7-3-84
	CITY ENGINEER		R.C.E. 24658
L.R.	ADD 2" FINE SAND NOTE 5	<i>[Signature]</i>	8/14/84
	NOTES REVISED		7-13-90
MARK	REVISIONS	APPR.	DATE

**CITY OF LOMPOC**  
ENGINEERING DIV.

**PROPERTY LINE**  
**SIDEWALK DETAILS**

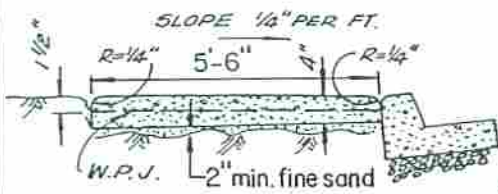
STANDARD DRAWING NO. 614

RESOLUTION NO. 3366 (84)      SHT. 1 OF 1



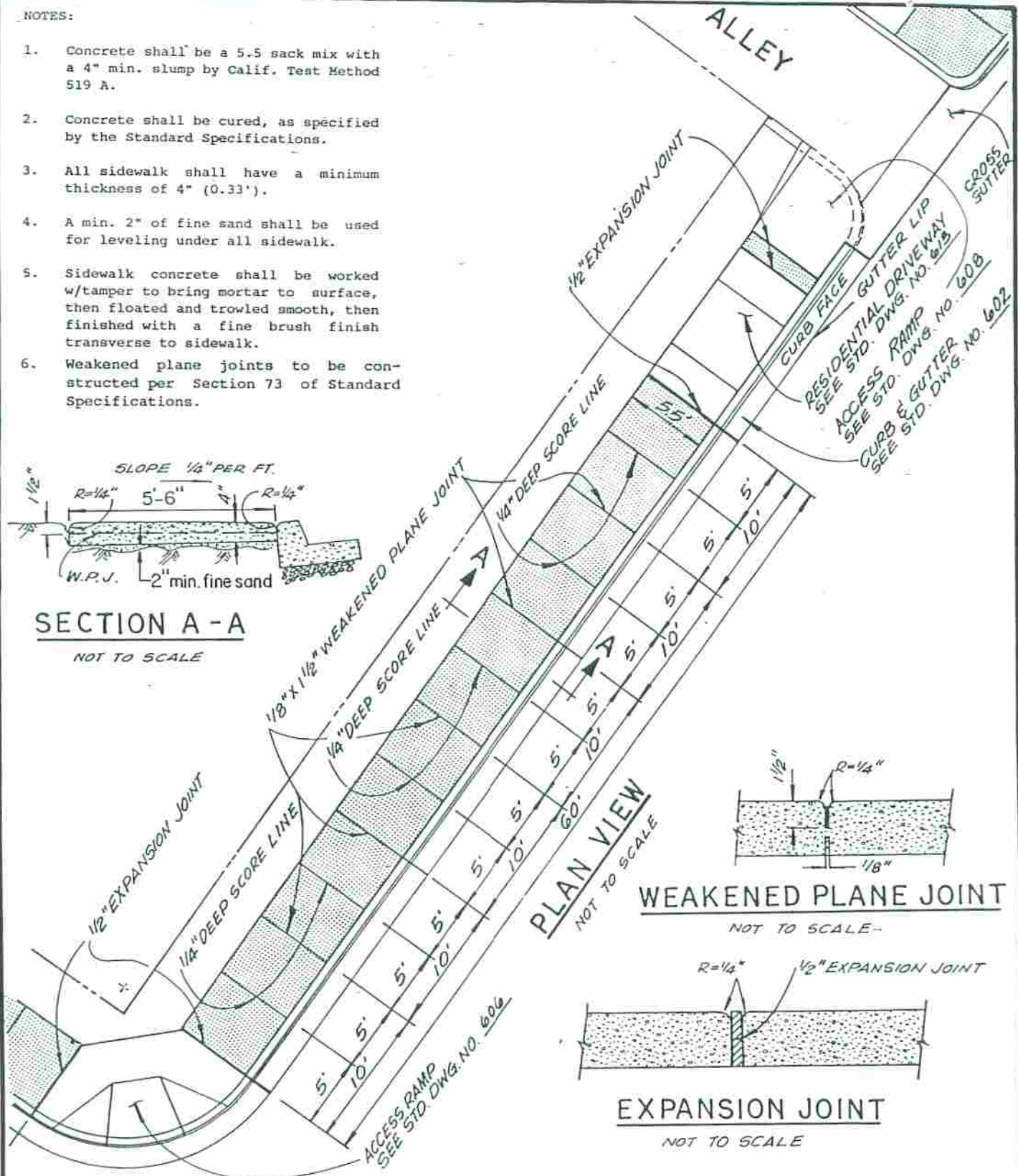
NOTES:

- Concrete shall be a 5.5 sack mix with a 4" min. slump by Calif. Test Method 519 A.
- Concrete shall be cured, as specified by the Standard Specifications.
- All sidewalk shall have a minimum thickness of 4" (0.33').
- A min. 2" of fine sand shall be used for leveling under all sidewalk.
- Sidewalk concrete shall be worked w/tamper to bring mortar to surface, then floated and trowled smooth, then finished with a fine brush finish transverse to sidewalk.
- Weakened plane joints to be constructed per Section 73 of Standard Specifications.

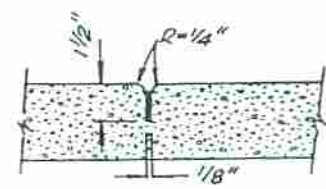


**SECTION A - A**

NOT TO SCALE

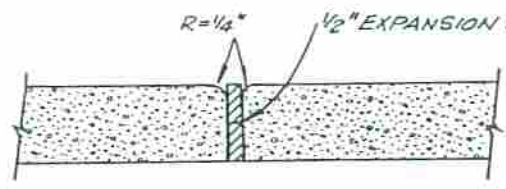


**PLAN VIEW**  
NOT TO SCALE



**WEAKENED PLANE JOINT**

NOT TO SCALE



**EXPANSION JOINT**

NOT TO SCALE

APPROVED		DATE	5-24-82
	CITY ENGINEER	R.C.E.	29658
D.A.A.	Driveway		6-82
L.R.	ADD 2" FINE SAND NOTE 5 NOTES REVISED		7-84 8/14/84 7-13-90
MARK	REVISIONS	APPR.	DATE

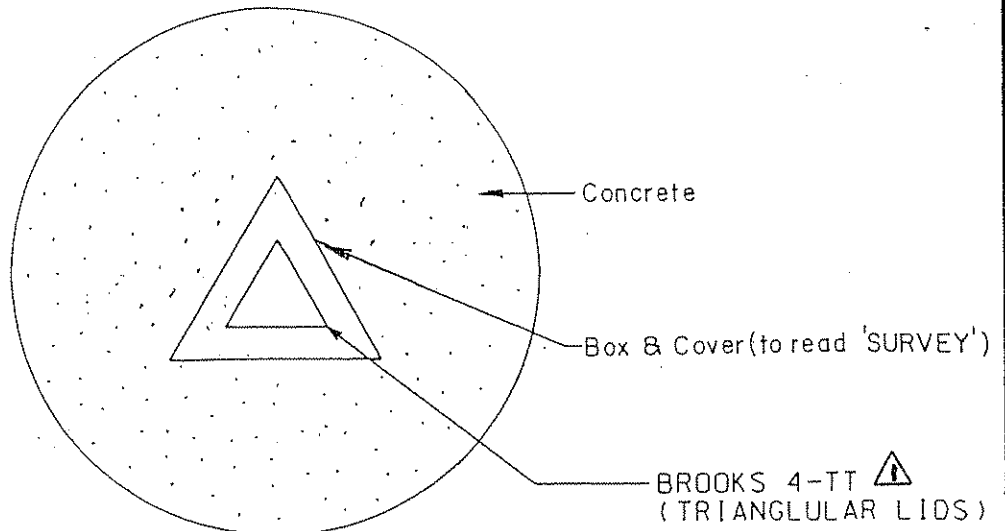
**CITY OF LOMPOC**  
ENGINEERING DIV.

**CURB SIDEWALK DETAILS**

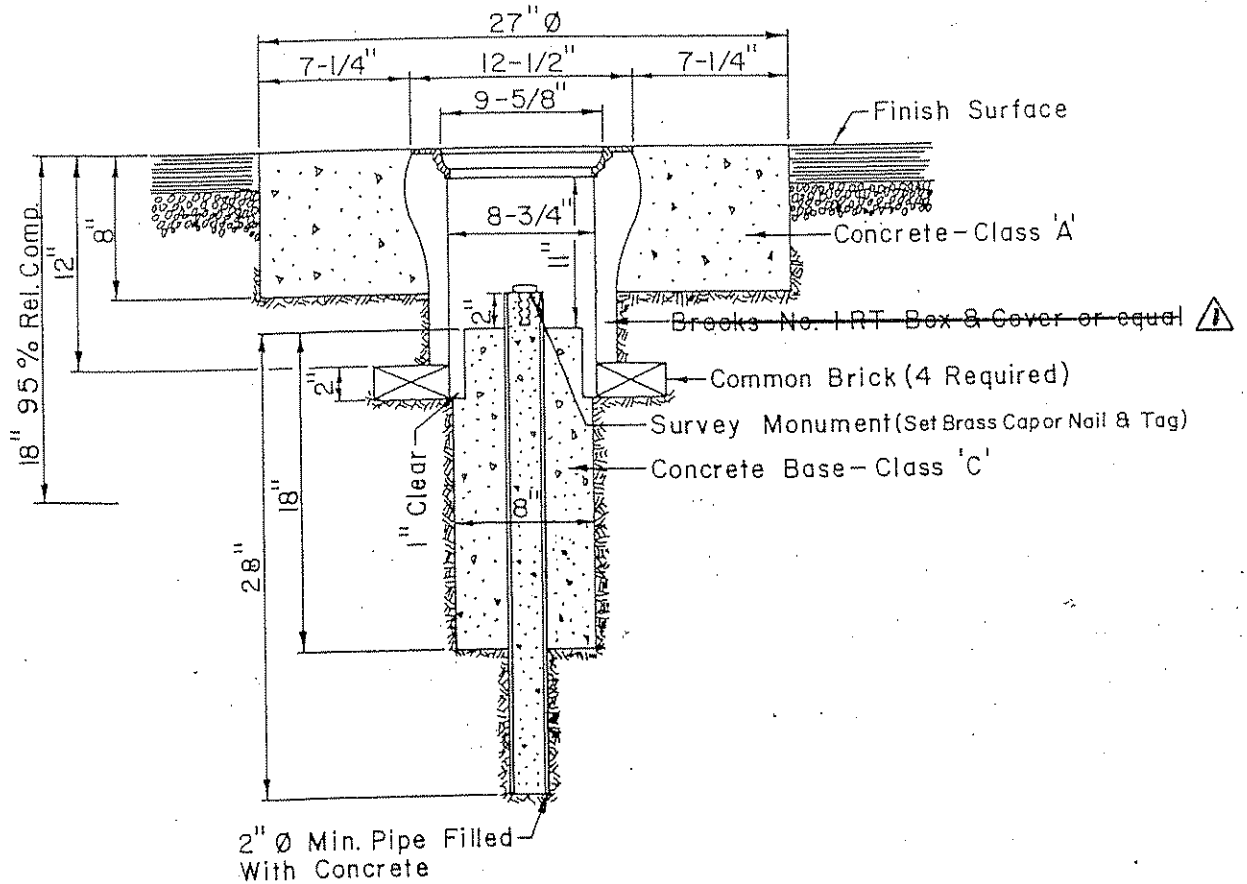
STANDARD DRAWING NO. 615

RESOLUTION NO. 3366 (84)

SHT. 1 OF 1



**PLAN OF MONUMENT**



**SECTION OF MONUMENT**  
NOT TO SCALE

APPROVED	<i>[Signature]</i>	DATE 7-3-84
	CITY ENGINEER	R.C.E. 24658
EDIT BOX & COVER TYPE		KM 6/25/84
MARK	REVISIONS	APPR. DATE

**CITY OF LOMPOC**  
ENGINEERING DIV.

**STANDARD STREET SURVEY MONUMENT**

STANDARD DRAWING NO. 616

RESOLUTION NO. 3366(84) SHT. 1 OF 1