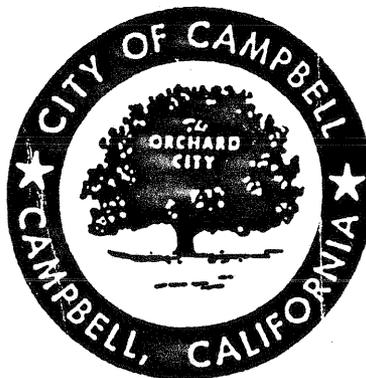


CITY OF CAMPBELL

STANDARD DETAILS

FOR

PUBLIC WORKS CONSTRUCTION



JULY 1994

CITY OF CAMPBELL - DEPARTMENT OF PUBLIC WORKS

TABLE OF CONTENTS

TABLE OF CONTENTS i

FORWARD v

GENERAL PROVISIONS 1

SECTION 1 DEFINITIONS AND TERMS 1

1-1.01A General 1

1-1.02 Abbreviations 2

1-1.03 Acceptance 2

1-1.09 Contract 2

1-1.10 Contractor 2

1-1.15 Director of Public Works 2

1-1.17 Encroachment Permit 3

1-1.18 Engineer 3

1-1.29 Plans 3

1-1.37 Special Provisions 3

1-1.38 Specifications 3

SECTION 2 PROPOSAL REQUIREMENTS AND CONDITIONS 3

2-1.01 Contents of Proposal Forms 3

2-1.056 City Employees and Design Engineers May Not Bid
on Construction Contract 3

2-1.11 Eligibility to Contract 3

2-1.12 General Warranty 4

SECTION 3 AWARD AND EXECUTION OF CONTRACT 4

3-1.02 Contract Bonds 4

3-1.02B Contractor's Payment Bond 5

3-1.09 Protesting of Award of Bid 5

SECTION 5 GENERAL 5

5-1.07 Lines and Grades 5

5-1.13 Final Inspection 6

SECTION 6 CONTROL OF MATERIALS 6

6-3.01 General 6

6-3.01A Failed Tests 6

6-3.01B Permit Testing 6

OBSOLETE - SEE UPDATED
 GENERAL PROVISIONS
 ON CITY'S WEBSITE

SECTION 7 LEGAL RELATIONS AND RESPONSIBILITY	6
7-1.01A(4) Labor Nondiscrimination	6
7-1.01C(1) City Business License	7
7-1.06 Safety and Health Provisions	7
7-1.08 Public Convenience	7
7-1.09 Public Safety	7
7-1.122 Insurance Requirements	7
7-1.15 Relief from Maintenance and Responsibility	10
7-1.166 Substantial Completion	10
7-1.17 Acceptance of Contract	10
SECTION 8 PROSECUTION AND PROGRESS	11
8-1.03 Beginning of Work	11
8-1.04 Progress Schedule	11
8-1.06A Saturday, Sunday, Holiday and Night Work	12
SECTION 9 MEASUREMENT AND PAYMENT	13
9-1.06 Partial Payments	13
9-1.07A Payment Prior to Proposed Final Estimate	13
9-1.07B Final Payment and Claims	13

TECHNICAL PROVISIONS	15
SECTION 12 CONSTRUCTION AREA TRAFFIC CONTROL DEVICES	15
12-1.02 Traffic Control Public Convenience	15
12-1.03 Traffic Control Public Safety	15
SECTION 15 EXISTING FACILITIES	16
15-2.05B Miscellaneous Facilities	16
SECTION 16 CLEARING AND GRUBBING	16
16-1.01 Description	16
SECTION 21 SUBGRADE REPAIR/GRUBBING	17
21.05 Compaction	17
SECTION 26 AGGREGATE BASES	17
26-1.01 Description	17
26-1.05 Compacting	17
SECTION 39 ASPHALT CONCRETE	18
39-1.01 Description	18
39-2.02 Aggregate	18
39-4.02 Prime Coat and Paint Binder (Tack Coat)	18

39-5.01	Spreading Equipment	18
39-6.01	General Requirements	19
SECTION 56 SIGNS		19
56-2.01	Description	19
SECTION 73 CONCRETE CURBS AND SIDEWALKS		19
73-1.05F	Backfilling	19
SECTION 84 TRAFFIC STRIPES AND PAVEMENT MARKINGS		20
84-1.02	Control of Alignment and Layout	20
84-2.01	Description	20
84-3.02	Materials	20
84-3.05	Application	20
84-3.05A	Temporary Striping	20
84-3.05B	Removal of Existing Traffic Stripes and Pavement Markings	21
SECTION 86 SIGNALS, LIGHTING AND ELECTRICAL SYSTEMS		21
86-1.05	Maintaining Existing and Temporary Electrical Systems	21
86-2.04	Standards, Steel Pedestal and Posts	22
86-2.04A	Octafluted Lighting Standards	22
86-2.04B	Signal Standards	22
86-2.05	Conduit	22
86-2.05B	Use	22
86-2.05C	Installation	23
86-2.06B	Cover Markings	23
86-2.09C	Connectors and Terminals	23
86-2.09E	Splice Insulation	23
86-2.09F	Fused Splice Connector	24
86-2.09G	Traffic Signal Communications Cable	24
86-2.09G3	Traffic Signal Communications Cable Testing	24
86-2.11	Service	25
86-2.16	Painting	25
86-4.05B	Front Screen	25
86-4.06	Signal Mounting Assemblies	25
86-5.01	Vehicle Detectors	26
86-5.02	Pedestrian Push Buttons	26
86-6.00	Luminaire Class and Types	26
SECTION 1301 TRENCH EXCAVATION, BEDDING AND BACKFILL		26
1301-1.4	Survey Monuments and Points	26
1301-1.6	Backfill and Surface Restoration Methods	27

SEE TECHNICAL PROVISIONS
ON CITY'S WEBSITE

1301-4.1.1	Type of Bedding	27
1301-4.2	Backfill and Surface Restoration	27
1301-4.2.1	Method A Backfill and Surface Restoration	27
1301-4.2.2	Method B Backfill and Surface Restoration	27
1301-4.2.3	Method C Backfill	27
1301-4.2.6	Water Densified Backfill	27

SECTION 1307	ACCEPTANCE TESTS FOR SEWERS	28
1307-3	Television Inspection	28
1307-4	Measurement and Payment	28

SECTION 1308	CLEANING PIPELINES	28
1308-3	Flushing and Cleaning	28
1308-3	Measurement and Payment	28

DETAILS	29
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DETAIL 1	Curb, Gutter & Sidewalk Configurations
DETAIL 2	Sidewalk Widening to Clear Obstructions
DETAIL 3	Driveway Approach
DETAIL 4	Alley-Type Approach
DETAIL 5	Drainage Inlet
DETAIL 6	Flat Grate Inlet
DETAIL 7	Method A Backfill and Surface Restoration
DETAIL 8	Method B Backfill and Surface Restoration
DETAIL 9	Signal, Lighting and Electrical Conduit Installation - Pavement Areas
DETAIL 10	Signal, Lighting and Electrical Conduit Installation - Walkway Areas
DETAIL 11	Signal, Lighting and Electrical Conduit Installation - Unimproved/Landscaped Areas
DETAIL 12	Standard Tree Planting and Staking Detail
DETAIL 13	Standard Tree Planting Notes

APPENDIX	33
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FORWARD TO CITY OF CAMPBELL STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION

This 1994 edition of the City of Campbell Standard Specifications for Public Works Construction, issued by the Department of Public Works, is a complete revision of and supersedes the previous publication entitled "General Conditions, Standard Construction Provisions and Standard Construction Details for Public Works Construction".

The City of Campbell Standard Specifications and Details for Public Works Construction (CCSS) incorporates by reference the City of San Jose Standard Specifications, July 1992 (SJSS) and Standard Details, July 1992 (SJSP). In turn, by reference, the SJSS incorporates by reference much of the State of California Standard Specifications (SS) and Standard Plans (SP), and the American Public Works Association Standard Specifications for Public Works Construction, 1991 (Green Book). Portions of each of these documents will be necessary for construction within the City of Campbell. References to the SS and SP shall be to the July 1992 editions.

Modifications to the SJSS are presented in the CCSS. It is the duty of the bidder, developer, and contractor to follow the CCSS and determine the appropriate sections of the SJSS, SJSP, SP, SS, and Green Book that may apply to their particular construction.

DETAILS

The City of San Jose Standard Details (SJSD) dated July 1992 are hereby incorporated with the following revisions and additions.

<u>SJSD #</u>	<u>REVISION</u>
All	All references to the City of San Jose shall be revised to read City of Campbell. All abbreviations "CSJ" shall be revised to read "CAMPBELL".
R-2	Replace with City of Campbell Details 1 and 2.
R-5, R-6, R-7	Replace with City of Campbell Details 3 and 4.
R-8, R-9, R-10, R-11	Replace with CalTrans Standard Plans NSP A88 and A89.
D-5	Replace with City of Campbell Detail 5.
D-6	Replace with City of Campbell Detail 6.
L-3	Quick coupling valve shall be installed below the finished grade in a pcc irrigation box.
L-13	Tree planting shall conform to City of Campbell Details 12 and 13.
L-14	Replace with City of Campbell Details 12 and 13.
All W Details	Delete.
All E Details	All references contained in the City of San Jose Electrical, Signals, and Lighting Details to octaflute standards shall be revised to read Type 15 standards (per CalTrans Standards Plans).
	Pull boxes are required at the base of all standards.
	All conduit entering foundations of controller cabinets, lighting standards, and signal standards shall be GRS.

- E-07 Detail shall be revised to incorporate the fuse splice connector (fuse holder as shown in SJSD E-08) in the pull box.
- E-08 Detail shall eliminate fuse splice connector (fuse holder). Fuse holder to be located in pull box adjacent to standard.
- Fuses for 240V application as shown shall be rated 3A, not 10A.
- Conduit into foundation shall be GRS, not PVC as shown.
- Delete note #2.
- E-9, E-11,
E-12, E-13,
E-14 Replace octaflute lighting standard with galvanized Type 15 and foundation dimensions per CalTrans Standard Plans ES-6B for Type 15.
- E-15 Delete
- E-16 Delete
- E-17 Delete
- E-18 Foundation dimensions shall be per CalTrans Standard Plans ES-6B for Type 15. All other details shown on SJSD E-18 shall apply.
- E-19 Delete
- E-20 Delete
- E-23 Delete
- E-24 Delete
- E-25 Delete
- E-26 Delete
- E-27 Delete
- E-28 Delete
- E-29 Delete
- E-30 Delete
- E-31 Delete
- E-32 Delete
- E-33 Delete
- E-34 Revise detail to remove connection between neutral and ground rod. Do not connect any neutral in any pull box to ground rod.
- All street lighting shall be 2-wire 240V.
- E-35 Delete

- E-36 Revise detail to remove connection between neutral and ground rod. Do not connect any neutral in any pull box to ground rod.
- All street lighting shall be 2-wire 240V.
- E-37 Delete notes 12 and 13.
- E-38 Delete
- E-39 Delete
- E-41 Delete item #15. (Do not splice service neutral to pole bonding system.)
- E-42 Delete item #22. (Do not splice neutral to pole bonding system.)
- E-43 Delete
- E-44 Delete
- E-45 Delete
- E-46 Conduit in standard foundation shall be GRS not PVC as shown.
- E-47 Conduit in standard foundation shall be GRS not PCGRS as shown.
- E-48 Delete #8 AWG neutral conductor from ground clamp up pole. (Do not bond pole to service neutral.)
- E-49 Conduit in standard foundation shall be GRS not PVC.
- E-50 Conduit in standard foundation shall be GRS not PCGRS.
- E-51 Conduit in cabinet foundation shall be GRS not PVC.
- E-52 Conduit in cabinet foundation shall be GRS not PCGRS.
- E-53 Note 7 shall be replaced with the following:
- Fuses for individual street light fusing applications shall be general purpose, non-time delay types "BAF" or "BAN" and shall be rated 6A, 250V AC for 120V applications and 3A, 250V AC for 240V applications.
- Note 8 shall be replaced with the following:
- Fuse each street light luminaire individually as specified in note 7 of this detail.

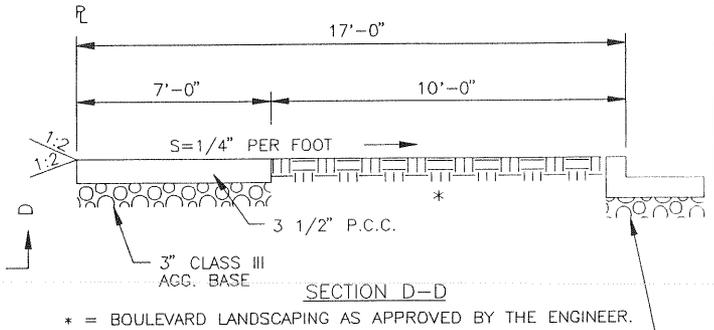
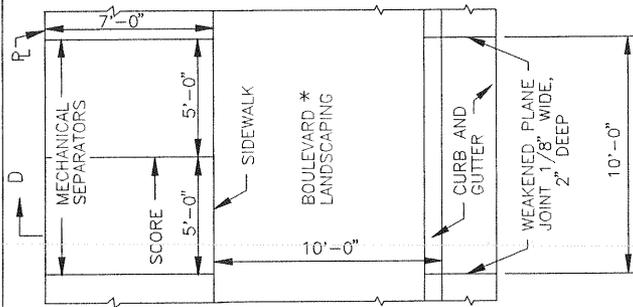
Note 11 shall be revised to reflect fuses installed in the pull box.

E-55	Delete
E-57	Delete
E-58	Delete
E-59	Delete
E-62	Delete
E-63	Delete
E-64	Delete
E-65	Delete
E-66	Delete
E-67	Delete
E-69	Delete
E-70	Delete

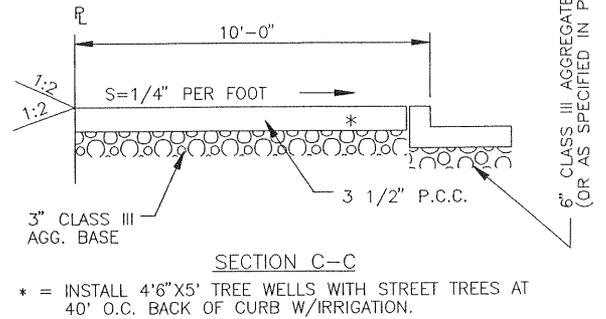
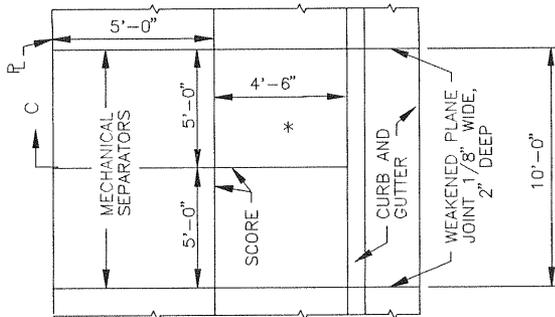
The following additional details are also hereby added:

Detail 7	Trench Restoration - Method A Backfill and Surface Restoration
Detail 8	Trench Restoration - Method B Backfill and Surface Restoration
Detail 9	Signal, Lighting, and Electrical Conduit Installation Rockwheel Trench - Pavement Areas
Detail 10	Signal, Lighting, and Electrical Conduit Installation Walkway Areas
Detail 11	Signal, Lighting, and Electrical Conduit Installation Unimproved/Landscaped Areas

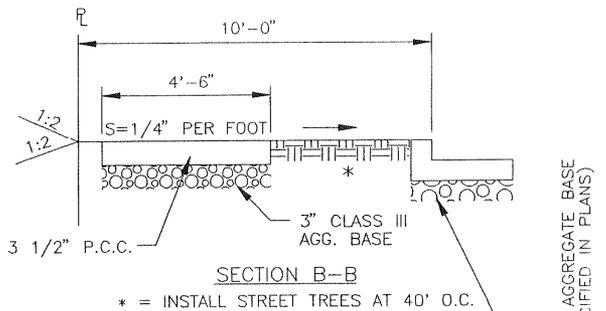
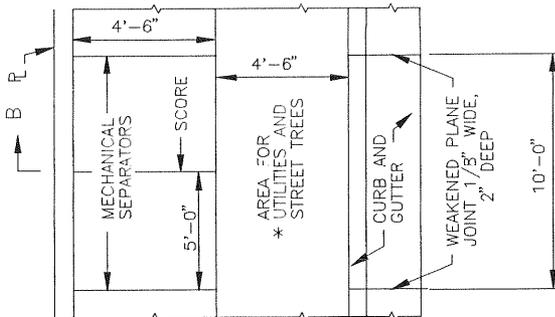
BOULEVARD WALK



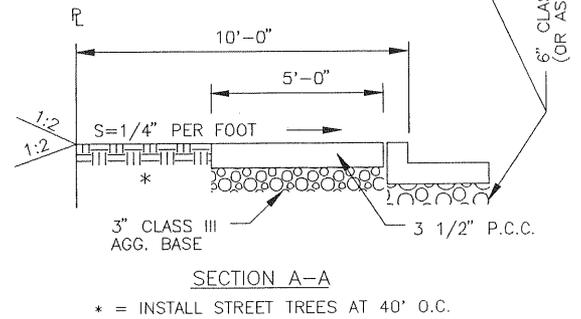
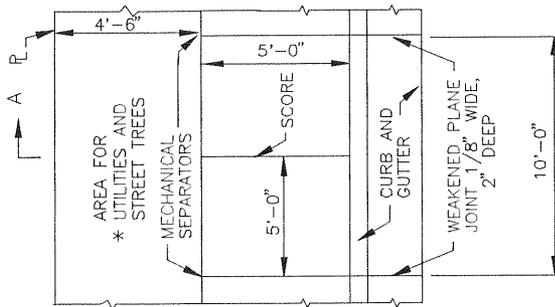
COMMERCIAL WALK



RESIDENTIAL SEPARATED WALK



RESIDENTIAL MARGINAL WALK



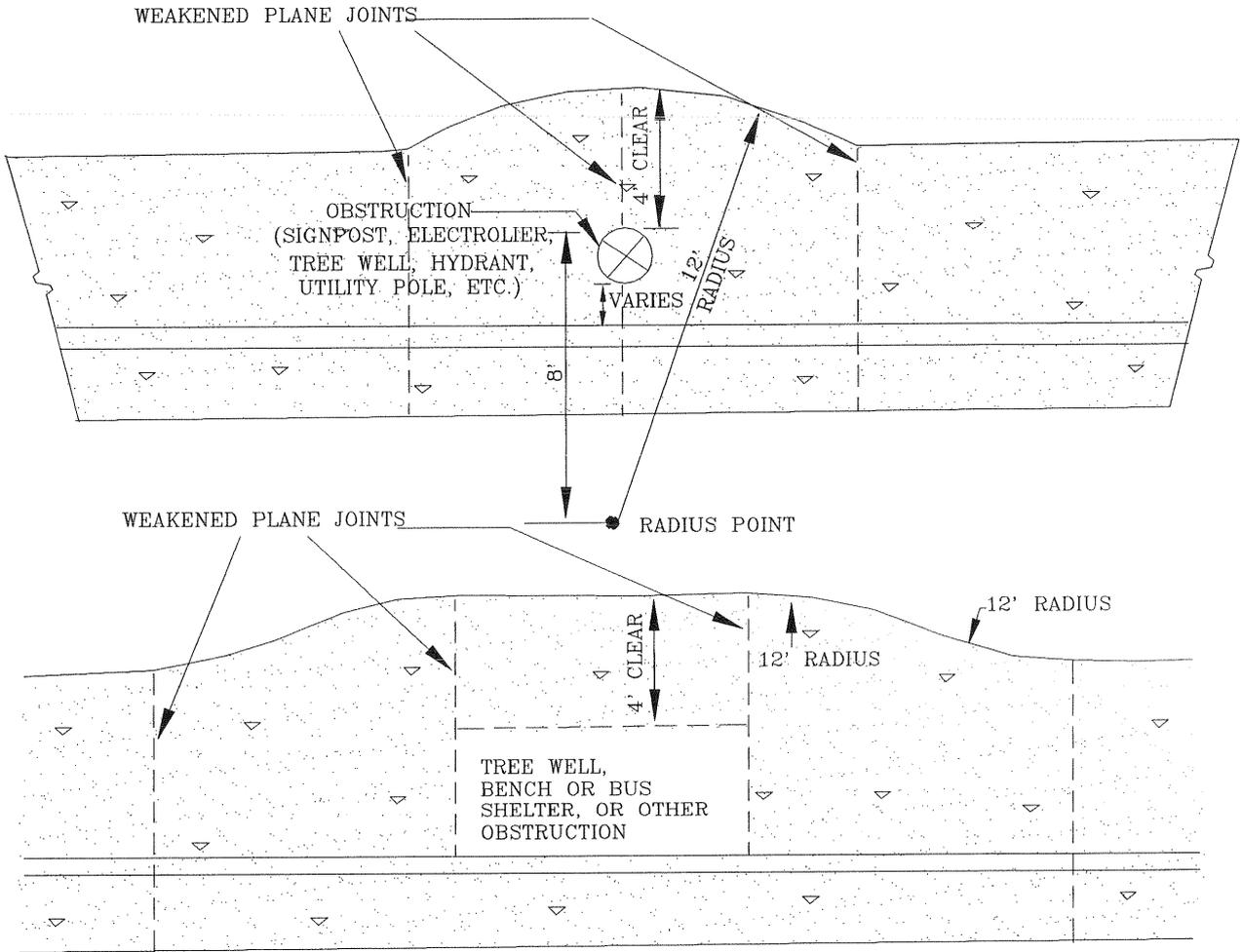
CURB, GUTTER, AND SIDEWALK CONFIGURATIONS

REVISED
DATE: JULY 1994

DRAWN BY: *CSA* CHECKED BY: *MD*
APPROVED: *[Signature]*

CITY OF CAMPBELL

DETAIL 1



NOTE: WIDEN SIDEWALK AS SHOWN WHEN ANY PART OF AN OBSTRUCTION IS WITHIN 4 FEET OF THE BACK OF WALK AND LESS THAN 5 FEET FROM THE FACE OF CURB.

PEDESTRIAN EASEMENT DEDICATION IS NECESSARY IF WIDENING EXTENDS BEYOND THE PUBLIC RIGHT OF WAY.

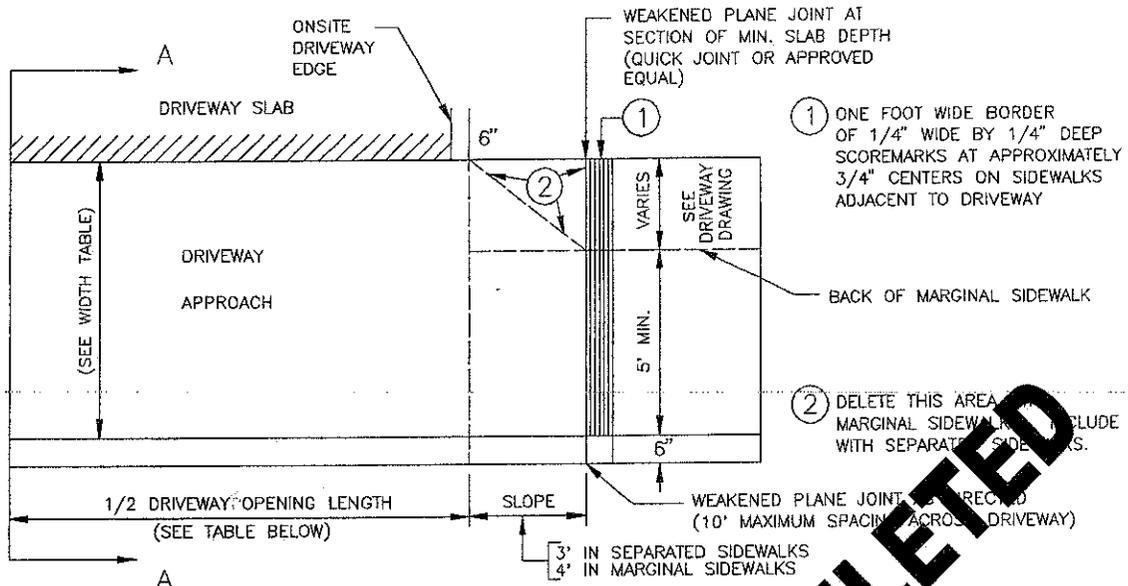
SIDEWALK WIDENING TO CLEAR OBSTRUCTIONS

REVISED
DATE: JULY 1994

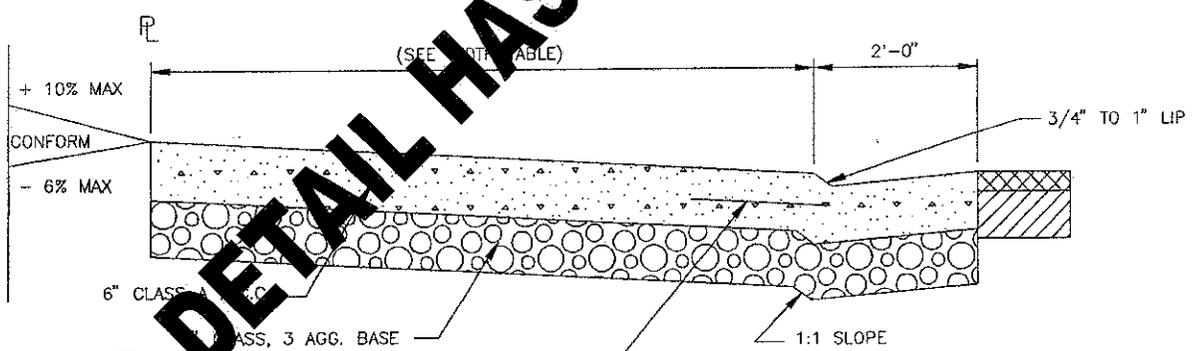
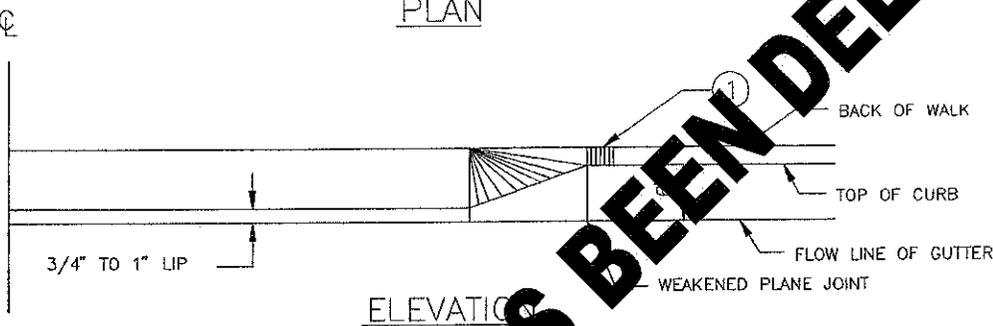
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APPROVED *JLR*

CITY OF CAMPBELL

DETAIL 2



DRIVEWAY SYMMETRICAL ABOUT CL



WHEN THE DRIVEWAY IS NOT POURED AT SAME TIME AS CURB AND GUTTER, 12" OF NO. 4 REBAR AT 4' INTERVALS SHALL BE INSTALLED AS SHOWN. (REBARS TO BE BENT DOWN AND COVERED UNTIL USED.)

LAND USE		1/2 LENGTH	WIDTH
COMMERCIAL & MULTI-RESIDENTIAL	MIN	7'-0" ONE-WAY 12'-6" TWO-WAY	TO PROP. LINE
	MAX	20'-0"	WITH 8'-0" MIN.
SINGLE-FAMILY RESIDENTIAL	MIN	6'-0"	TO PROP. LINE
	MAX	12'-6"	WITH 5'-6" MIN.

NOTES:

DRIVEWAY APPROACHES (EXCEPT SINGLE FAMILY) SHALL HAVE 6" X 6" X 10/10 WELDED WIRE FABRIC 3" ABOVE BOTTOM OF CONCRETE.

DOWEL ALL NEW CONCRETE IMPROVEMENTS TO EXISTING CONCRETE IMPROVEMENTS.

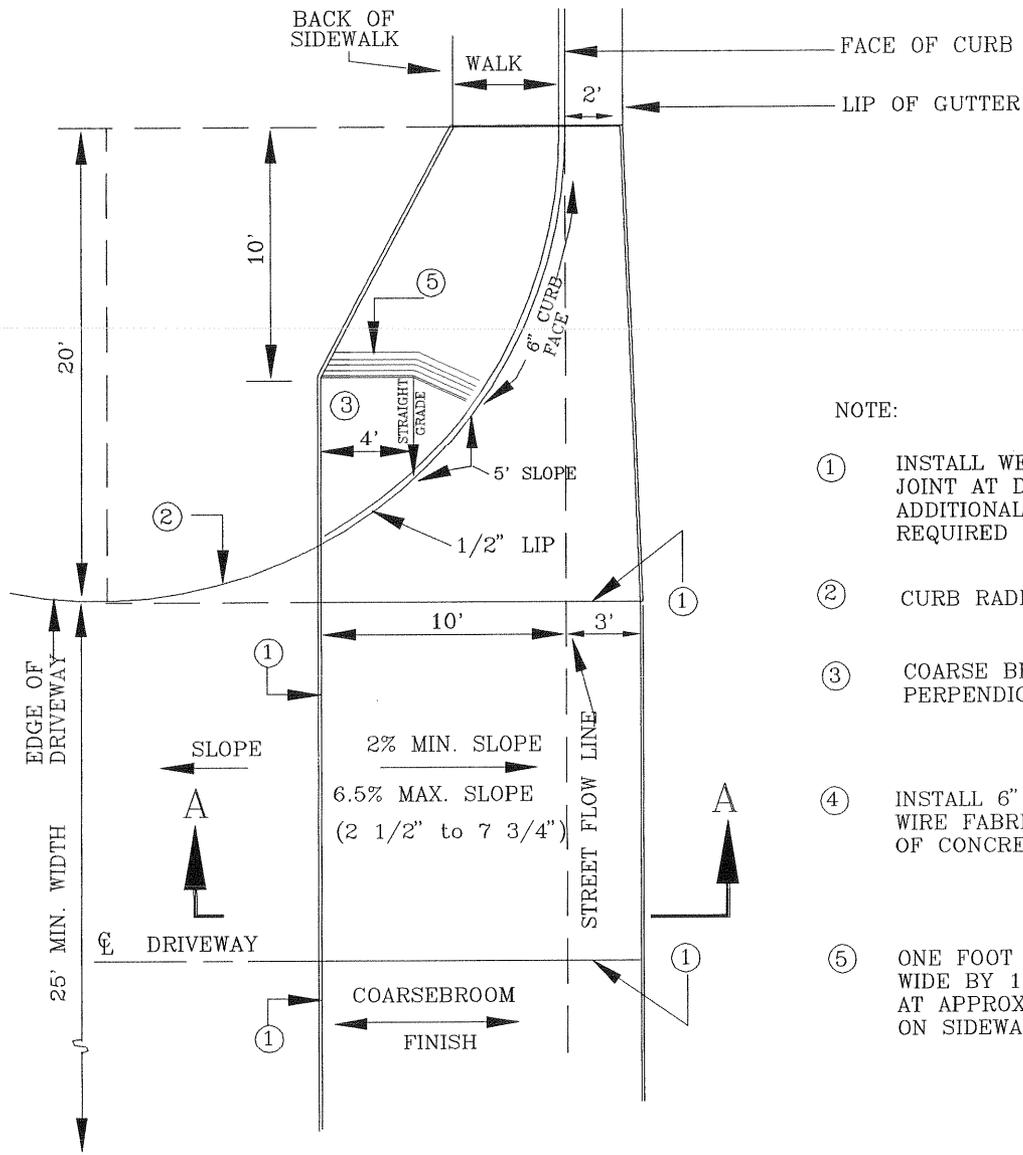
DRIVEWAY APPROACH

REVISED
DATE: JULY 1994

DRAWN BY: CAP
CHECKED BY: *me*
APPROVED: *SJA*

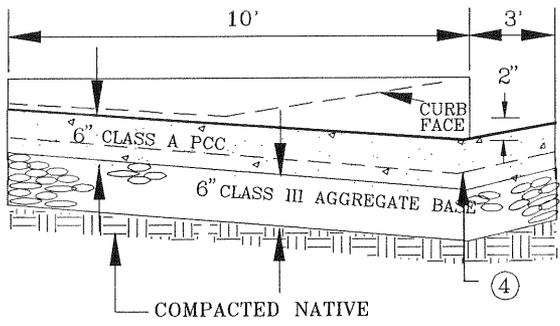
CITY OF CAMPBELL

DETAIL 3



NOTE:

- ① INSTALL WEAKENED PLANE DEEP JOINT AT DRIVEWAY CENTERLINE. ADDITIONAL JOINTS MAY BE REQUIRED IN WIDER APPROACHES.
- ② CURB RADIUS SHALL BE 20 FEET.
- ③ COARSE BROOM FINISH PERPENDICULAR TO STREET.
- ④ INSTALL 6" x 6" 10/10 WELDED WIRE FABRIC 3" ABOVE BOTTOM OF CONCRETE.
- ⑤ ONE FOOT WIDE BORDER OF 1/4" WIDE BY 1/4" DEEP SCOREMARKS AT APPROXIMATELY 3/4" CENTERS ON SIDEWALK ADJACENT TO RAMP.



SECTION A-A

ALLEY-TYPE APPROACH MAY BE USED ONLY WHERE SPECIFICALLY APPROVED BY THE PUBLIC WORKS DEPARTMENT.

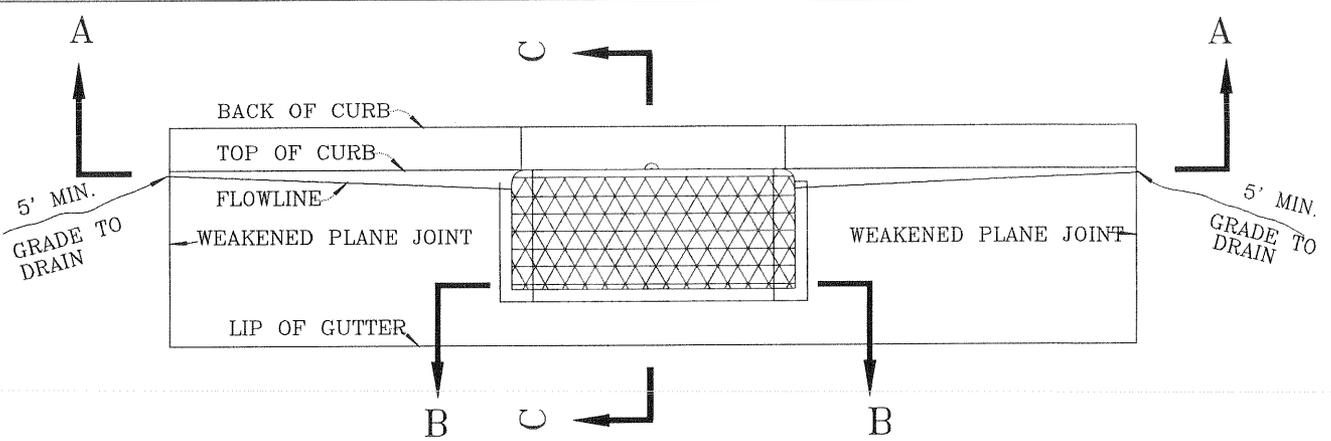
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APPROVED *[Signature]*

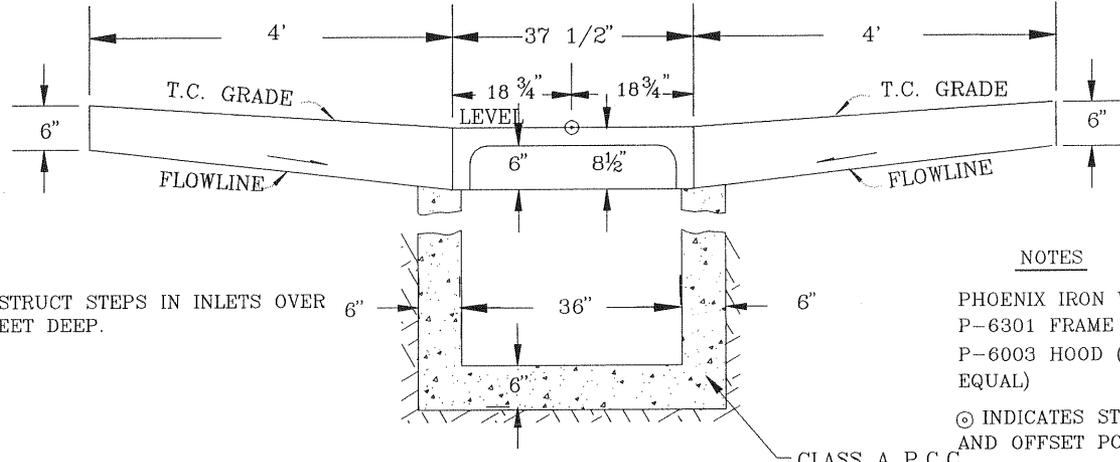
ALLEY-TYPE APPROACH

CITY OF CAMPBELL

DETAIL 4



PLAN

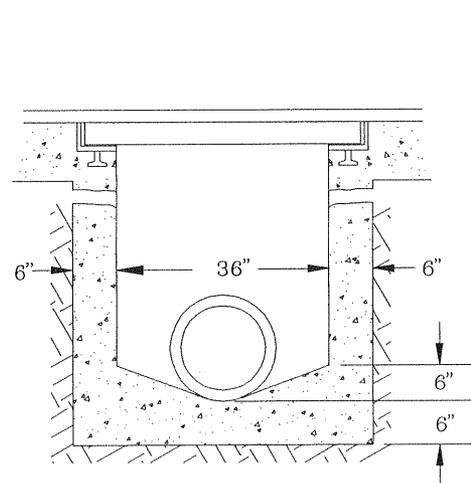


CONSTRUCT STEPS IN INLETS OVER 3 FEET DEEP.

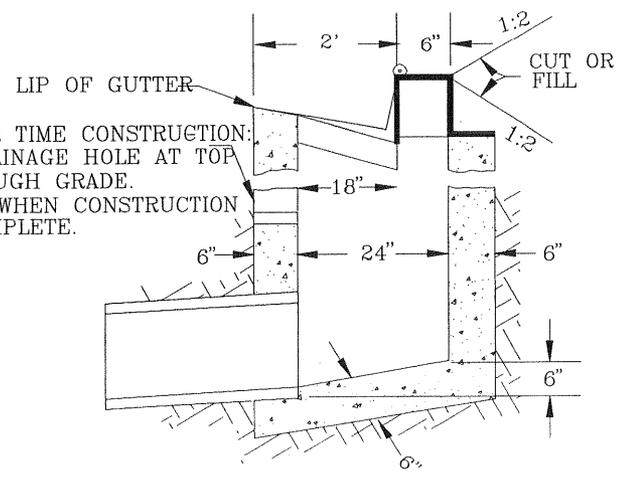
NOTES

PHOENIX IRON WORKS NO. P-6301 FRAME AND GRATE P-6003 HOOD (OR APPROVED EQUAL)
 © INDICATES STATION, GRADE, AND OFFSET POINT.

SECTION A-A



SECTION B-B

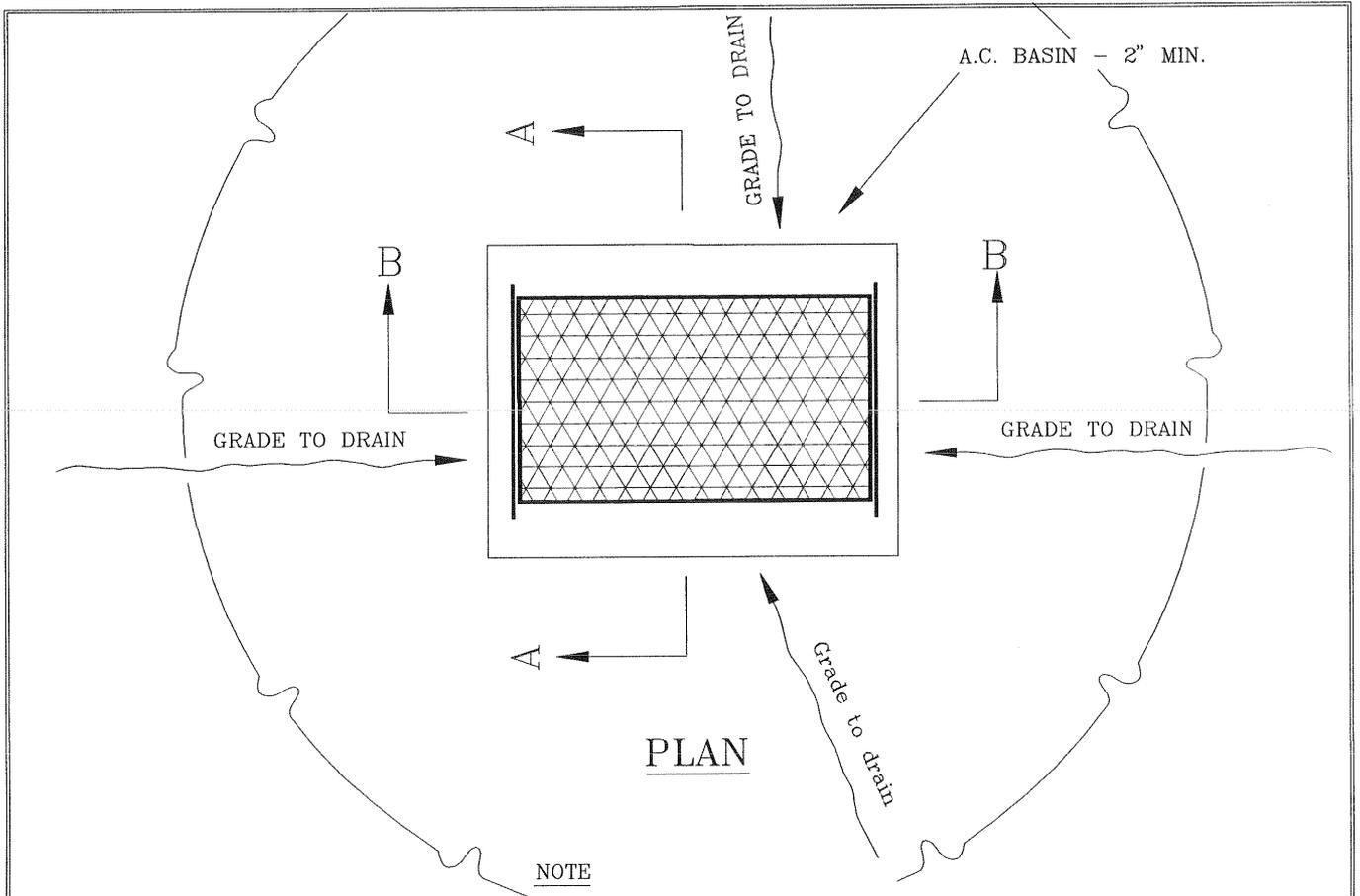


SECTION C-C

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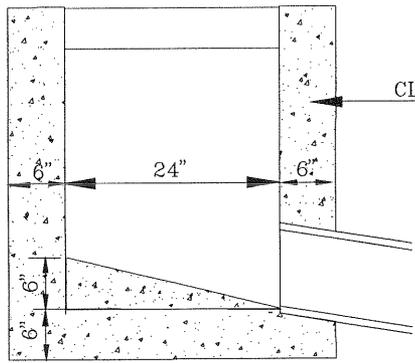
DRAINAGE INLET
CITY OF CAMPBELL

DETAIL 5



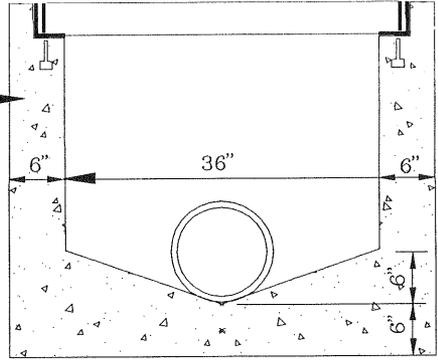
NOTE

1. INSTALL PHOENIX IRON WORKS P6302 FRAME AND GRATE (OR APPROVED EQUAL).
2. INSTALL A.C. BASIN IN A 5' RADIUS AROUND INLET.
3. GRADE TO DRAIN, 5' MIN. PAST BASIN IN ALL DIRECTIONS, UNLESS OTHERWISE SPECIFIED.



SECTION A-A

CLASS A P.C.C.



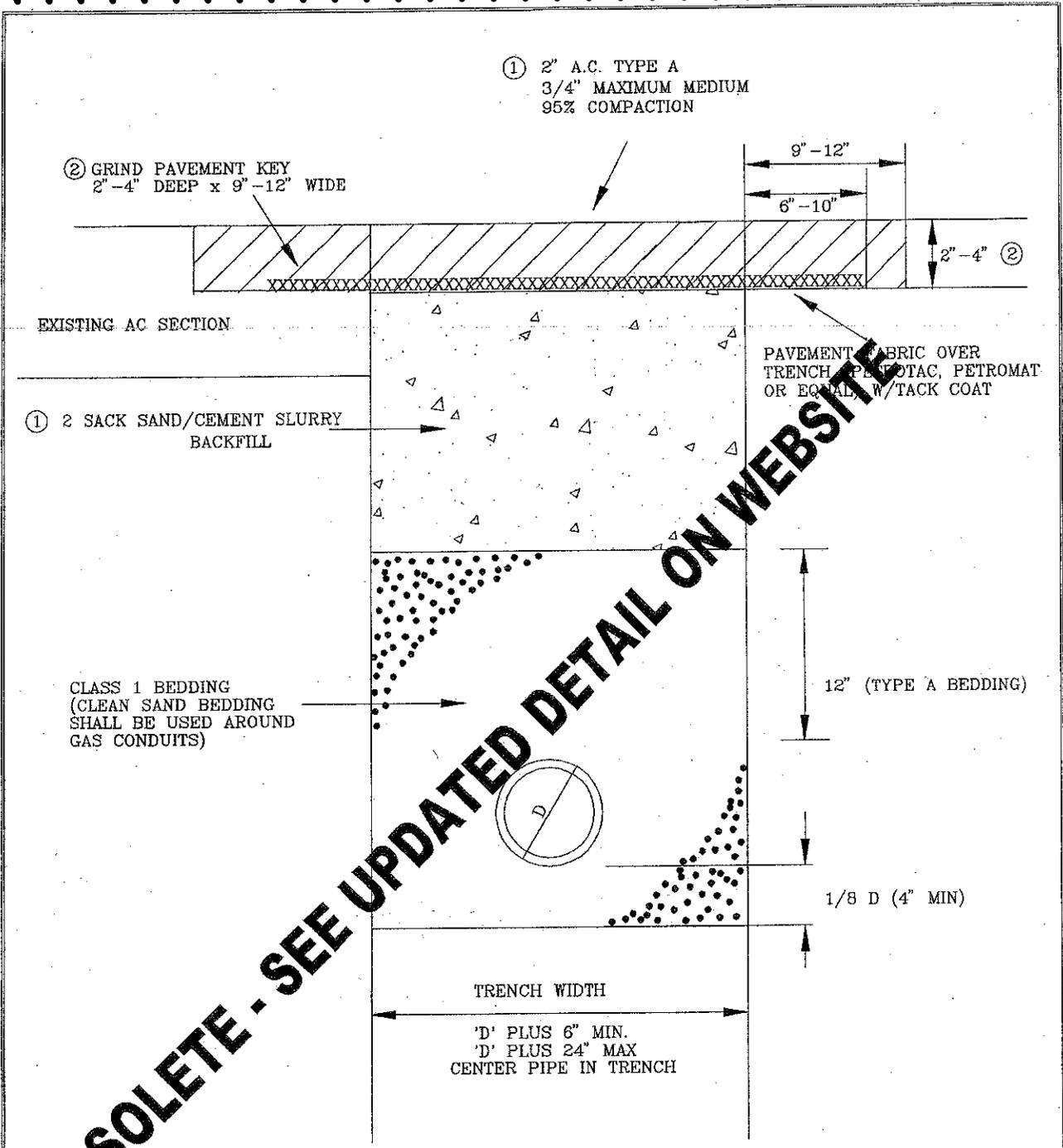
SECTION B-B

REVISED
DATE: JULY 1994

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APPROVED *[Signature]*

FLAT GRATE INLET
CITY OF CAMPBELL

DETAIL 6



OBSOLETE - SEE UPDATED DETAIL ON WEBSITE

① 2" A.C. TYPE A
 3/4" MAXIMUM MEDIUM
 95% COMPACTION

② GRIND PAVEMENT KEY
 2"-4" DEEP x 9"-12" WIDE

EXISTING AC SECTION

① 2 SACK SAND/CEMENT SLURRY
 BACKFILL

CLASS 1 BEDDING
 (CLEAN SAND BEDDING
 SHALL BE USED AROUND
 GAS CONDUITS)

PAVEMENT FABRIC OVER
 TRENCH: PETOTAC, PETROMAT
 OR EQUAL W/TACK COAT

12" (TYPE A BEDDING)

1/8 D (4" MIN)

TRENCH WIDTH
 'D' PLUS 6" MIN.
 'D' PLUS 24" MAX
 CENTER PIPE IN TRENCH

- NOTES: ① PLACE PERMANENT PAVEMENT WITHIN FIVE (5) DAYS AFTER BACKFILLING AN EXCAVATION. (STEEL PLATING REQUIRED DURING CURING PERIOD OF 3 DAYS MIN. - 5 DAYS MAX.)
- ② IF EXISTING AC SECTION IS LESS THAN 4". GRIND AC KEY TO FULL DEPTH OF EXISTING AC AND REPLACE FULL DEPTH AC SECTION (MIN. 2")
- ③ THIS DETAIL DOES NOT APPLY TO ELECTRICAL CONDUIT INSTALLATION

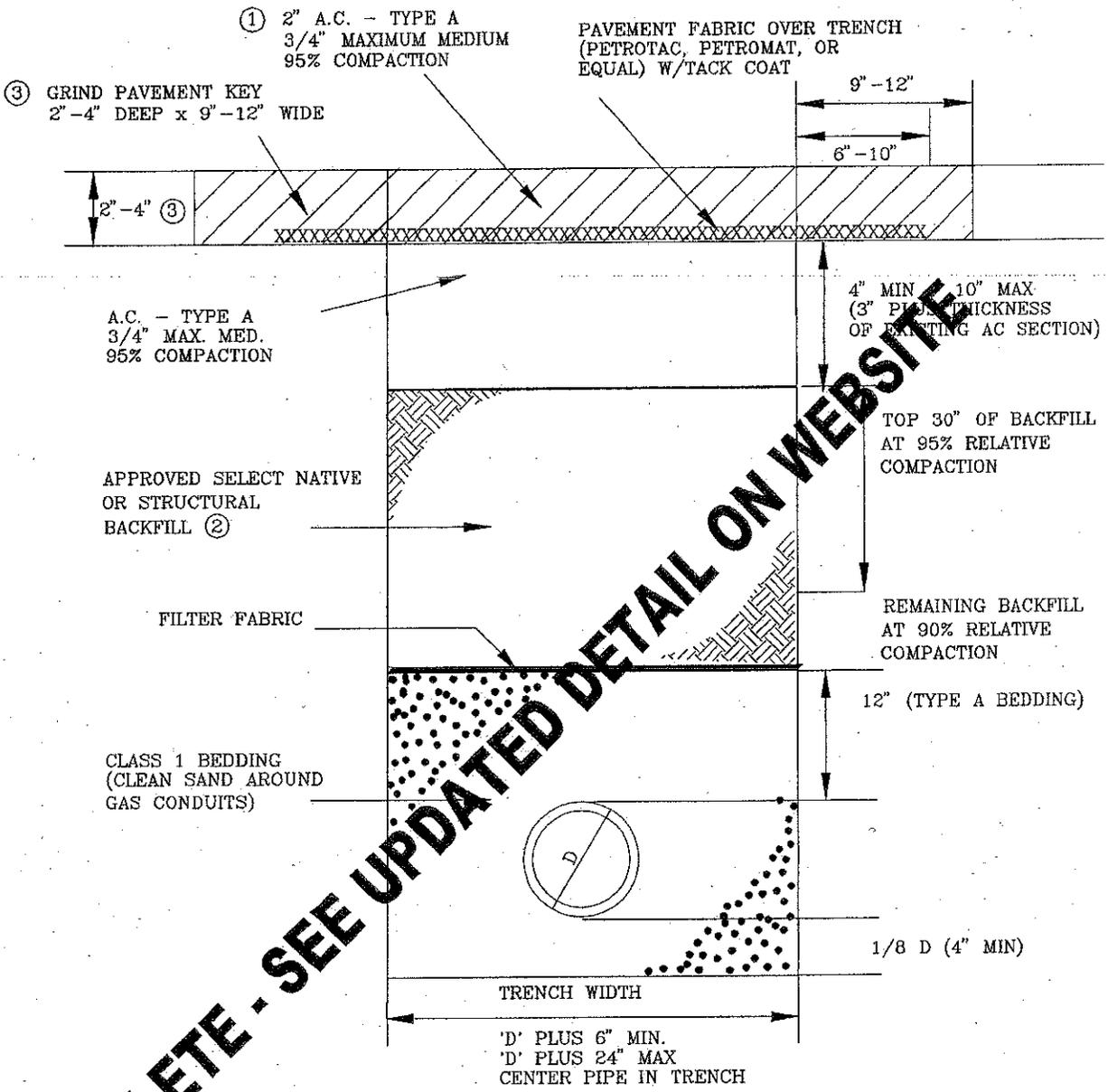
TRENCH RESTORATION - METHOD A
Backfill and Surface Restoration

REVISED
 DATE: JULY 1994

DRAWN BY CAD CHECKED BY MO
 APPROVED [Signature]

CITY OF CAMPBELL

DETAIL 7



OBSOLETE - SEE UPDATED DETAIL ON WEBSITE

- NOTES:
- ① PLACE PERMANENT PAVEMENT WITHIN THIRTY (30) DAYS AFTER BACKFILLING. INSTALL TEMPORARY AC TO FINISH GRADE UNTIL PERMANENT AC IS PLACED
 - ② BACKFILL SHALL BE COMPACTED BY MECHANICAL TAMPING IN 0.75' (MAX) LIFTS. TRENCH BACKFILL TO BE COMPACTED TO 90% R.C. WITH TOP 30" COMPACTED TO 95% R.C.
 - ③ IF EXISTING AC SECTION IS LESS THAN 4", GRIND AC KEY TO FULL DEPTH OF EXISTING AC AND REPLACE FULL DEPTH AC SECTION (MIN 2")
 - ④ IF OUTSIDE TRAVELED WAY, ELIMINATE AC AND REPLACE SURFACE IMPROVEMENTS TO MATCH EXISTING
 - ⑤ THIS DETAIL DOES NOT APPLY TO ELECTRICAL CONDUIT INSTALLATION

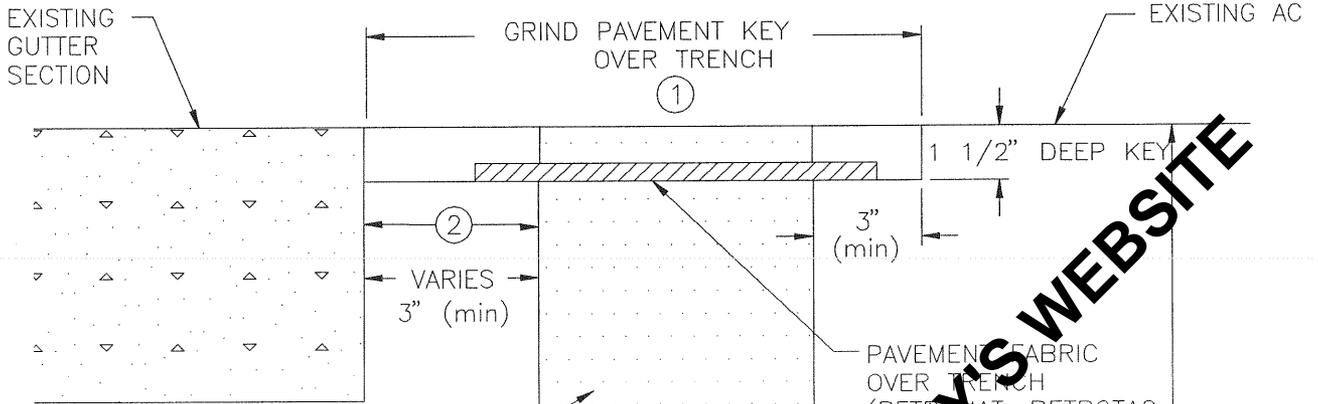
TRENCH RESTORATION - METHOD B
Backfill and Surface Restoration

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CITY OF CAMPBELL

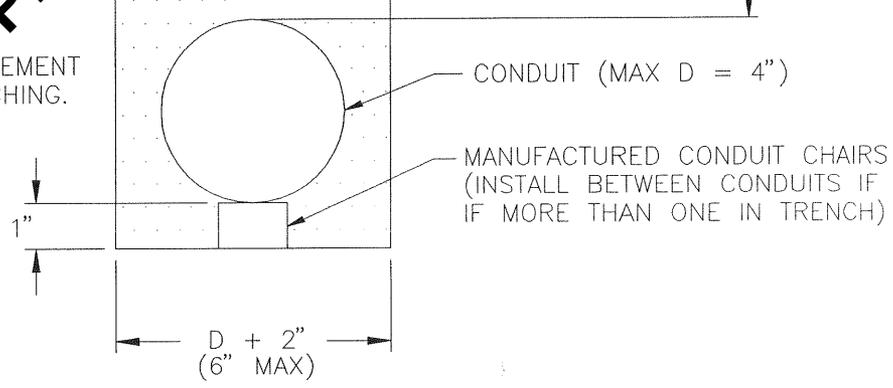
DETAIL 8



2 SACK SAND/CEMENT SLURRY
BARRICADING REQUIRED DURING
CURING PERIOD.

NOTES

- ① FOLLOWING CONDUIT AND SLURRY
INSTALLATION, EXISTING AC
PAVEMENT AND SLURRY TO BE
GROUND AND REPLACED WITH
PERMANENT AC SURFACE
(1-1/2" A.C. - TYPE A
1/2" MAXIMUM, MEDIUM,
95% COMPACTION).
- ② EXISTING AC PAVEMENT
BETWEEN LIP OF GUTTER AND
TRENCH SHALL BE GROUND
AND REPLACED WITH KEY
- ③ PLACE PERMANENT PAVEMENT
WITHIN 10 DAYS OF TRENCHING.



OBSOLETE - SEE UPDATED DETAIL ON CITY'S WEBSITE

LEGEND

D = CONDUIT OUTSIDE DIAMETER

NOT TO SCALE

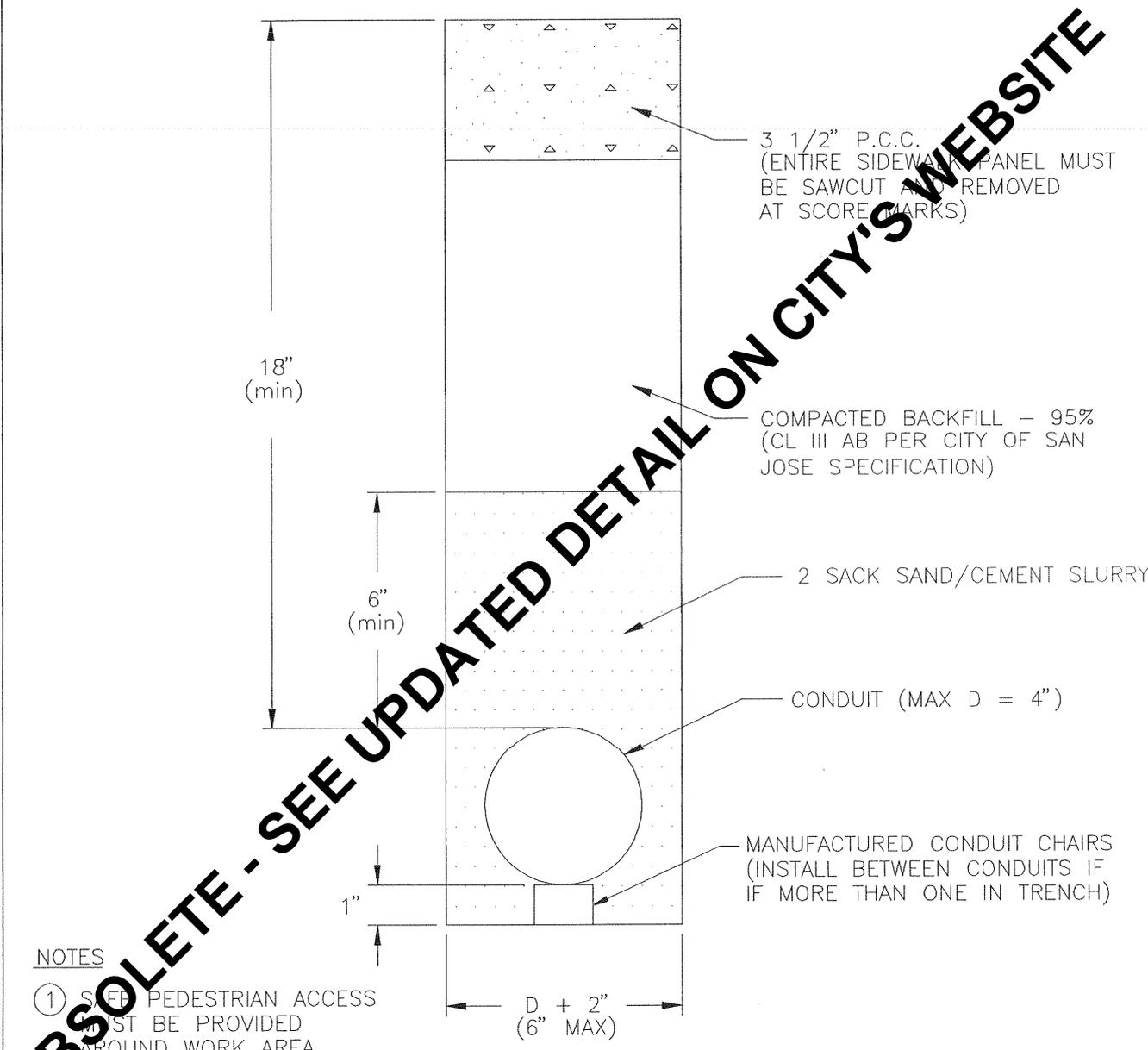
SIGNAL, LIGHTING, AND ELECTRICAL CONDUIT INSTALLATION
TRENCH LAID CONDUIT-PAVEMENT AREAS

REVISED
DATE: JULY 1994

DRAWN BY: *CAO* CHECKED BY: *MQ*
APPROVED: *[Signature]*

CITY OF CAMPBELL

DETAIL 9



OBSOLETE - SEE UPDATED DETAIL ON CITY'S WEBSITE

NOTES

- ① SEE PEDESTRIAN ACCESS MUST BE PROVIDED AROUND WORK AREA.
- ② PERMANENT IMPROVEMENTS SHALL BE INSTALLED WITHIN 5 DAYS OF TRENCHING.

NOT TO SCALE

LEGEND

D = CONDUIT OUTSIDE DIAMETER

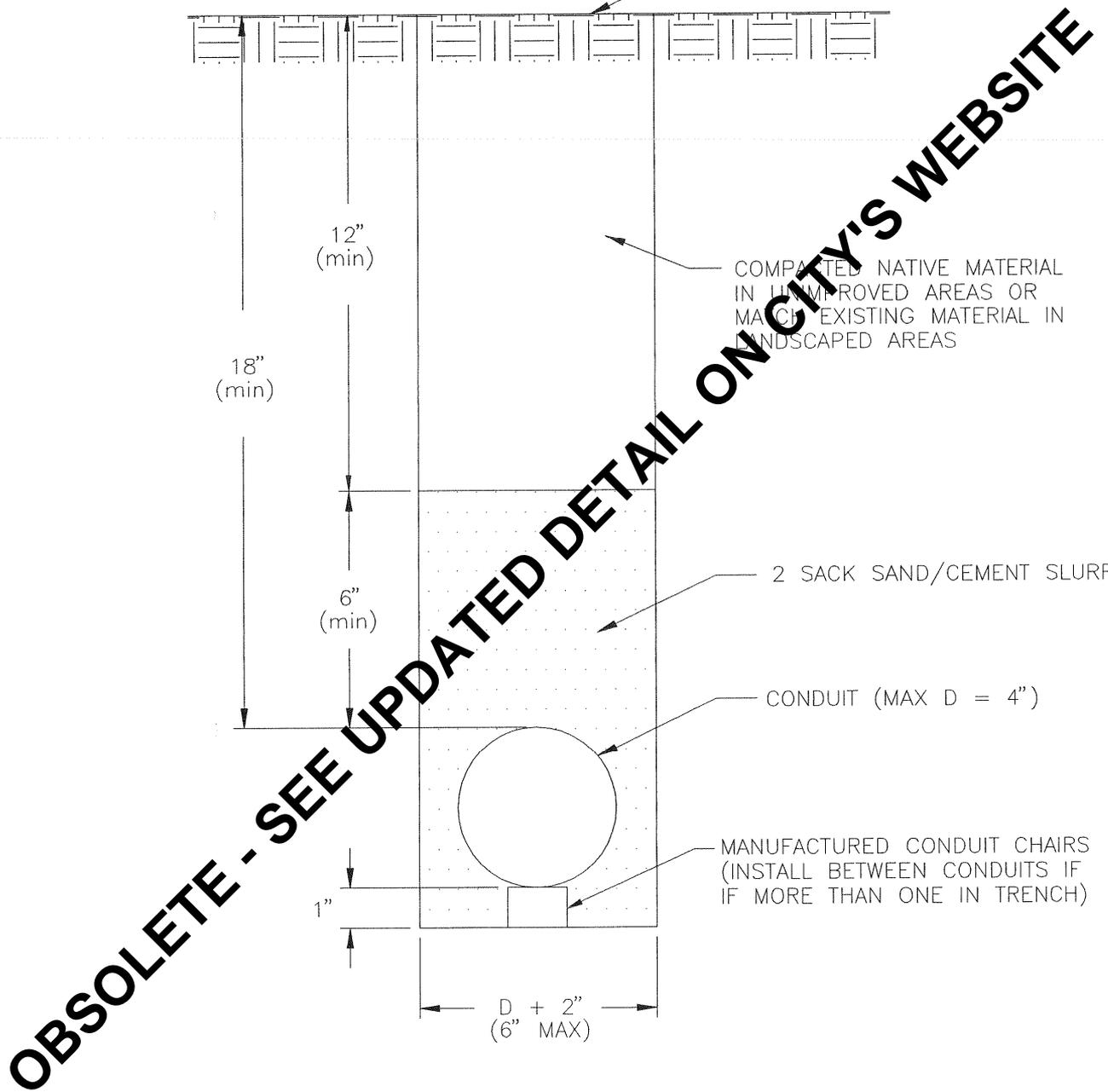
SIGNAL, LIGHTING, AND ELECTRICAL CONDUIT INSTALLATION
WALKWAY AREAS

REVISED
DATE: JULY 1994

DRAWN BY: *CAD* CHECKED BY: *MD*
APPROVED: *[Signature]*

CITY OF CAMPBELL

DETAIL 10



OBSOLETE - SEE UPDATED DETAIL ON CITY'S WEBSITE

NOT TO SCALE

LEGEND

D = CONDUIT OUTSIDE DIAMETER

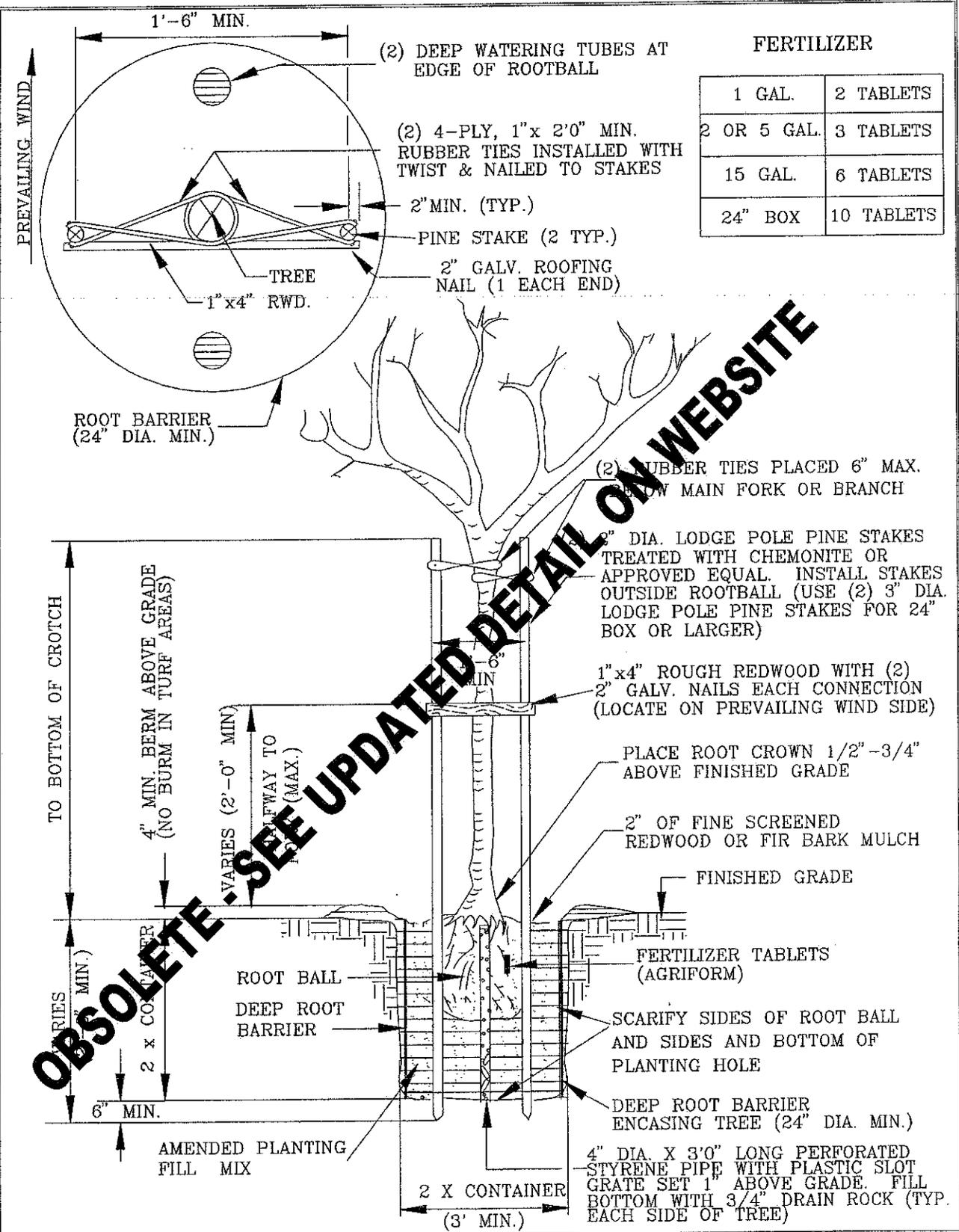
SIGNAL, LIGHTING, AND ELECTRICAL CONDUIT INSTALLATION
UNIMPROVED/LANDSCAPED AREAS

REVISED
DATE: JULY 1994

DRAWN BY: *CAO* CHECKED BY: *MA*
APPROVED: *[Signature]*

CITY OF CAMPBELL

DETAIL 11



FERTILIZER

1 GAL.	2 TABLETS
2 OR 5 GAL.	3 TABLETS
15 GAL.	6 TABLETS
24" BOX	10 TABLETS

OBSOLETE - SEE UPDATED DETAIL ON WEBSITE

REVISED DATE: JULY 1994
 DRAWN BY *CPD* CHECKED BY *MD*
 APPROVED *[Signature]*

STREET TREE PLANTING & STAKING DETAIL

CITY OF CAMPBELL

DETAIL 12

NOTES; (unless otherwise specified in the plans or special provisions)

1. All trees shall be 15-gallon size and of the variety indicated on the plans or specified by the City Engineer.
2. Each tree shall be approved by the Engineer prior to planting. Contractor may request Engineer to pre-approve tree at local nursery.
3. The exact location of each tree shall be approved by the Engineer prior to planting.
4. Vertically cut the root ball at three or four places to loosen roots and discourage circling. Vertically scarify sides and bottom of planting hole.
5. When planting, hold tree so that previous planting level is even with sidewalk level and gradually place top soil about the root ball.
6. When hole is three-quarters full, fill with water to compact the soil and eliminate air pockets.
7. Fill planting hole with loose soil to ground level.
8. Construct a watering basin around each tree as shown.
9. Planting operations must be followed by a deep, thorough watering of each tree.
10. Substitutions in tree varieties are permitted only upon writer authorization from the City Engineer.
11. All street trees installed in commercial and industrial shall be installed with an irrigation system (fed from on-site).
12. Deep root barriers (Deep Root Partners Deep Root RB 24-2) or approved equal shall be installed at all tree planting locations adjacent to sidewalk.

OBSOLETE - SEE UPDATED DETAIL ON WEBSITE

REVISED
DATE: JULY 1994

STREET TREE PLANTING NOTES

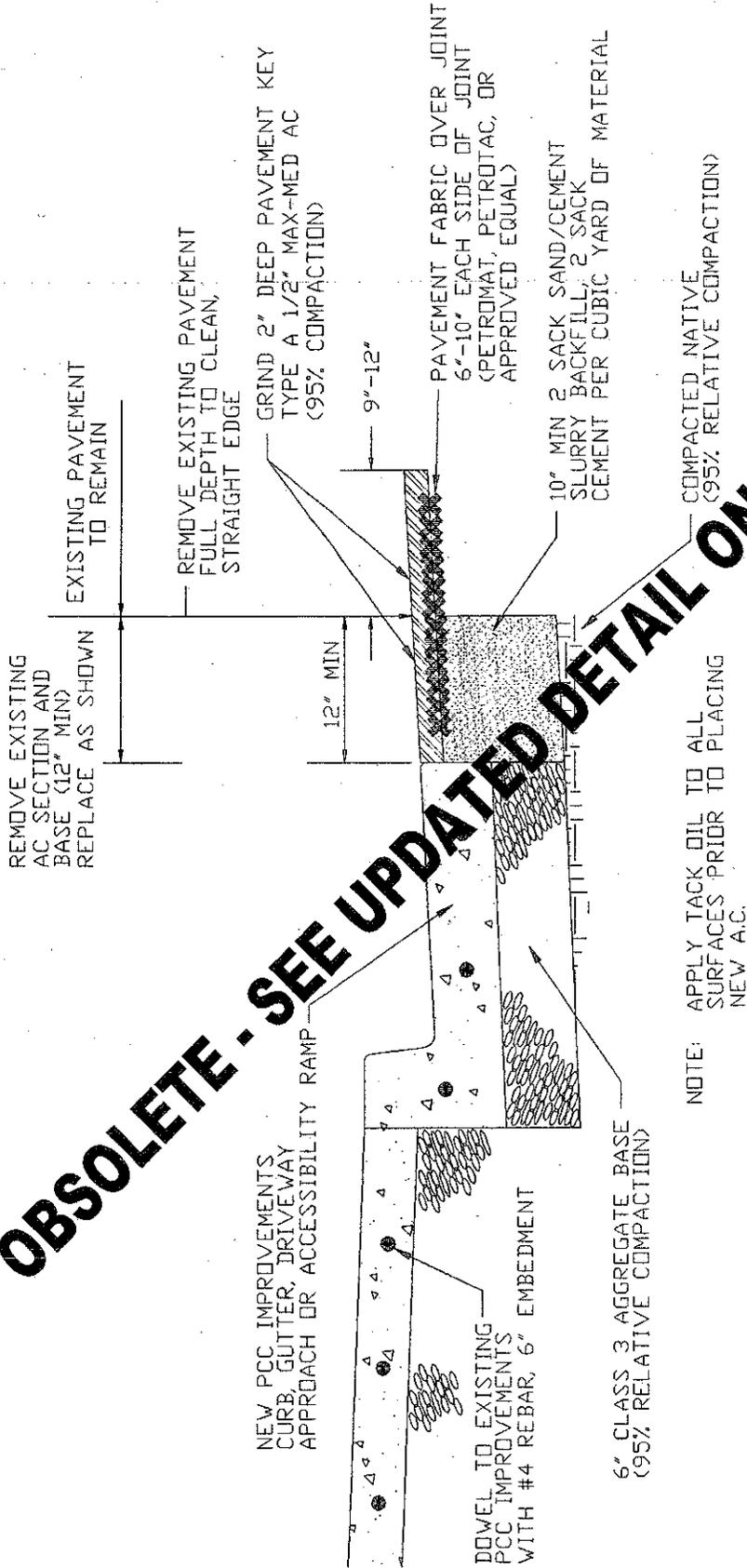
DRAWN BY CAO CHECKED BY MA
APPROVED SJA

CITY OF CAMPBELL

DETAIL 13

APPENDIX

OBSOLETE - SEE UPDATED DETAIL ON WEBSITE

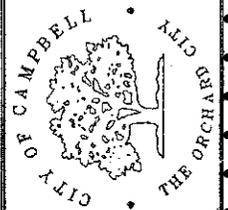


NOTE: APPLY TACK OIL TO ALL SURFACES PRIOR TO PLACING NEW A.C.
 COMPACTED NATIVE (95% RELATIVE COMPACTION)

DETAIL
 A-3

A.C. PAVEMENT REMOVAL & RESTORATION AT
 NEW PCC IMPROVEMENTS

DRAWN BY: *[Signature]*
 CHECKED BY: *[Signature]*
 APPROVED BY: *[Signature]*
 REVISED: _____
 DATE: MARCH 1996



DISTRICT ENGINEER
 STATE OF CALIFORNIA
 DIVISION OF HIGHWAYS
 SAN FRANCISCO, CALIF.

PROJECT NO. 1932
 DATE APPROVED: 11/11/32

COUNTY: ...
 SHEET: ...
 OF: ...

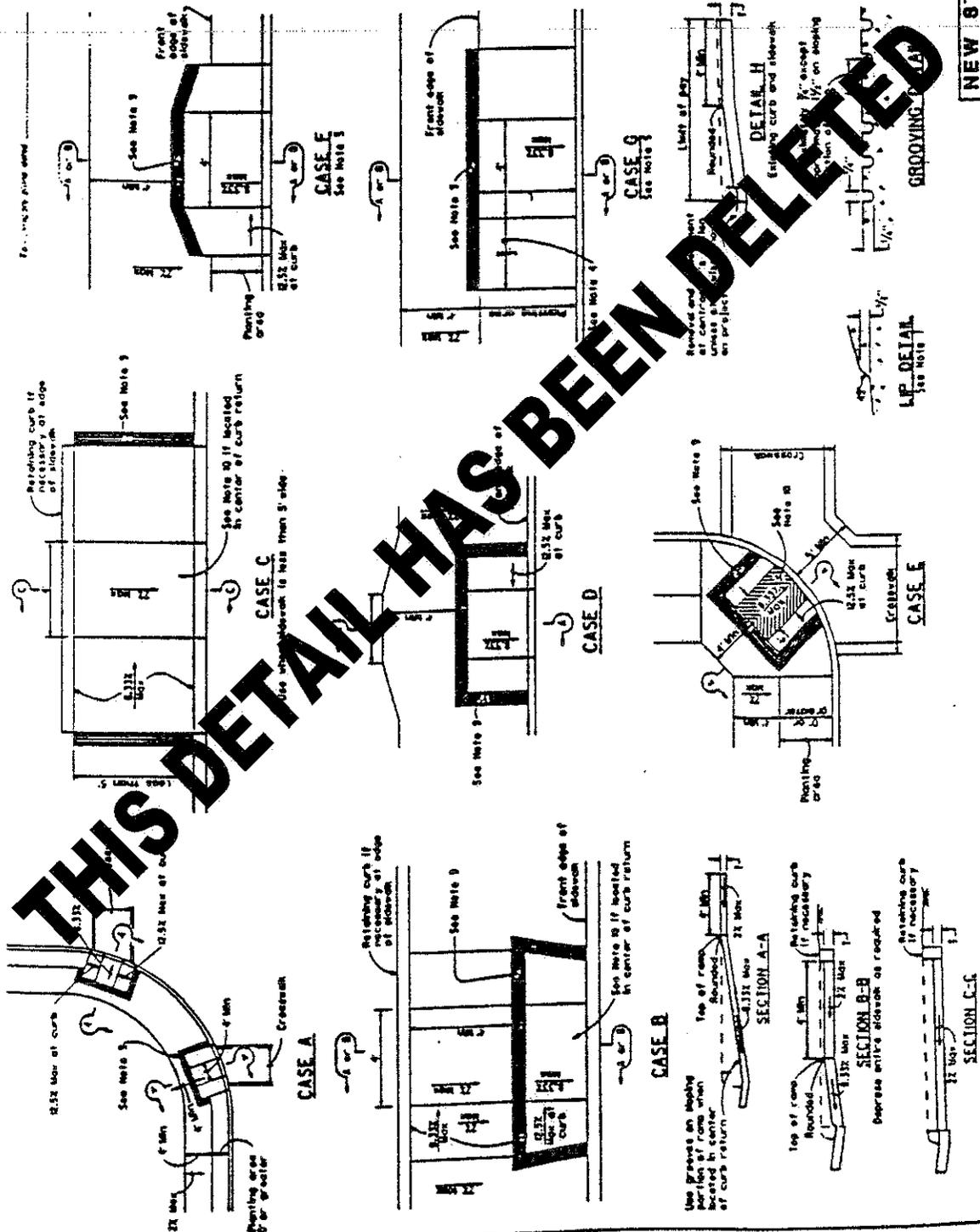
APPROVED: *[Signature]*
 DISTRICT ENGINEER

NOTES

- If distance from curb to back of sidewalk is the same in all directions, the ramp and curb shall be depressed longitudinally as in Case B or C or may be widened as in Case D.
- If sidewalk is less than 5' wide, the full width of the sidewalk shall be depressed as shown in Case C.
- When ramp is located in center of curb return, or outside configuration must be similar to that shown on the plan to accommodate wheelchair.
- If planting area width is equal to or greater than ramp length, ramp shall slope in distance = 3' (see Case C).
- For Cases 7 and 8, the longitudinal portion of the sidewalk may need to be depressed as shown in Case E.
- If located on a curve the sides of the ramp need not be parallel, but the minimum width of the ramp shall be 4'.
- The bottom of the ramp shall have a 1/4" R at 4'.
- Sidewalk and ramp thickness, "T", shall be 3/4".
- The ramp shall have a 3/4" wide border with 1/4" rounded corners; 1/2" on center. See grooving detail. The surface of ramp shall be rougher than the surrounding sidewalk except when located in center of curb return.
- When ramp is located in center of curb return, it shall be grooved in a herringbone pattern with 1/4" grooves approximately 1/4" on center. See grooving detail. Grooves shall be depressed around to concrete base as shown in the perspective view. Curbs shall have 1/4" on center.
- Ramp shall have 1/4" wide utility trim, 1/4" on center. Utility trim shall be set back 1/4" from the longitudinal sidewalk slope adjacent to top of the ramp, except in Cases C and E.
- Utility and base concrete, curbs and all shall be finished with the same surface as the curb ramp which it is to be replaced by after 1 year in conjunction with curb ramp construction.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
CURB RAMP
DETAILS NO. 1
 NO. SCALE

NEW STANDARD PLAN N&P A88

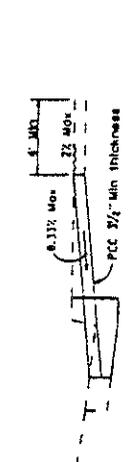


DATE	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6	NO. 7	NO. 8	NO. 9	NO. 10
PROJECT APPROVAL DATE: July 1, 1952 PROJECT APPROVAL BY: [Signature] COUNTY: [Blank] ROUTE: [Blank] LOCAL DISTRICT: [Blank]										



- NOTES**
1. AC ramp slope shall be a maximum of 3/4."
 2. 4" drain shall be 0.33" minimum thickness steel slope. This shall conform to radius of curb and be beveled to conform to side slope.
 3. Concrete finish for Case 3 shall have a transverse broomed surface texture rougher than the surrounding sidewalk.
 4. Utility poles, manholes, vaults, and all other utility facilities within the boundaries of the curb ramp shall be relocated by others prior to, or in conjunction with, curb ramp construction.

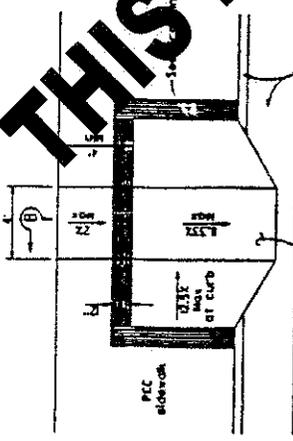
To accompany plan sheet _____



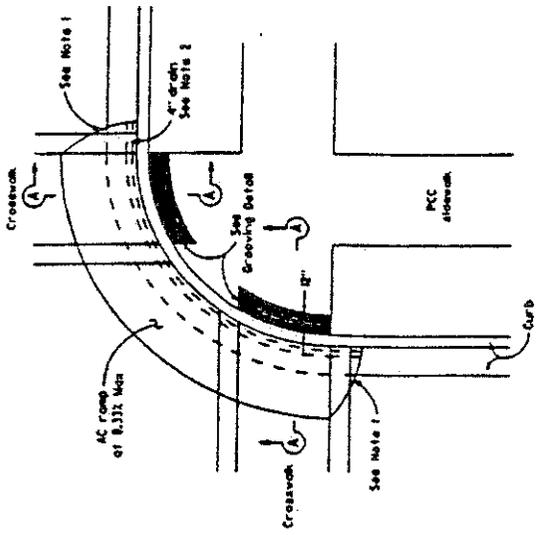
SECTION B-B



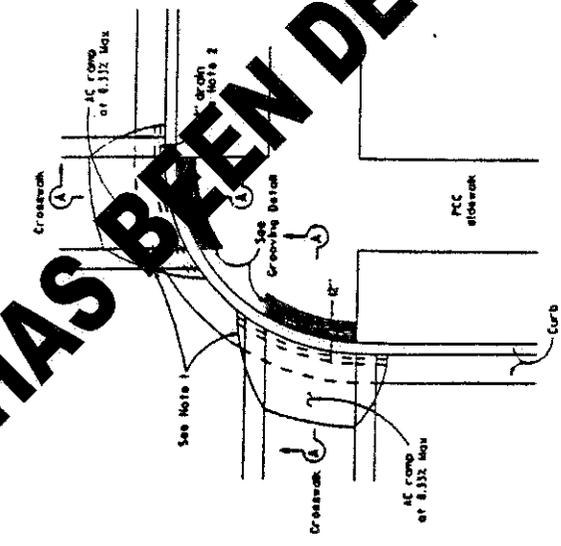
GROOVING DETAIL



CASE 1



CASE 1



CASE 2



SECTION A-A

THIS DETAIL HAS BEEN DELETED

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
CURB RAMP DETAILS NO. 2

NO. SCALE

NEW STANDARD PLAN NSP A89