

# STANDARD PLANS AND SPECIFICATIONS

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Appendix A - Soil Conservation Service Soils Legend with Shrink/Swell Potentials

Appendix B - Soil Conservation Service Soils Map for Porterville Area

RESOLUTION NO. 9826. A Resolution of the City Council of the City of Porterville Authorizing the Use of the Standard Specifications for Public Works Construction (Green Book) as the City Standard Specifications.

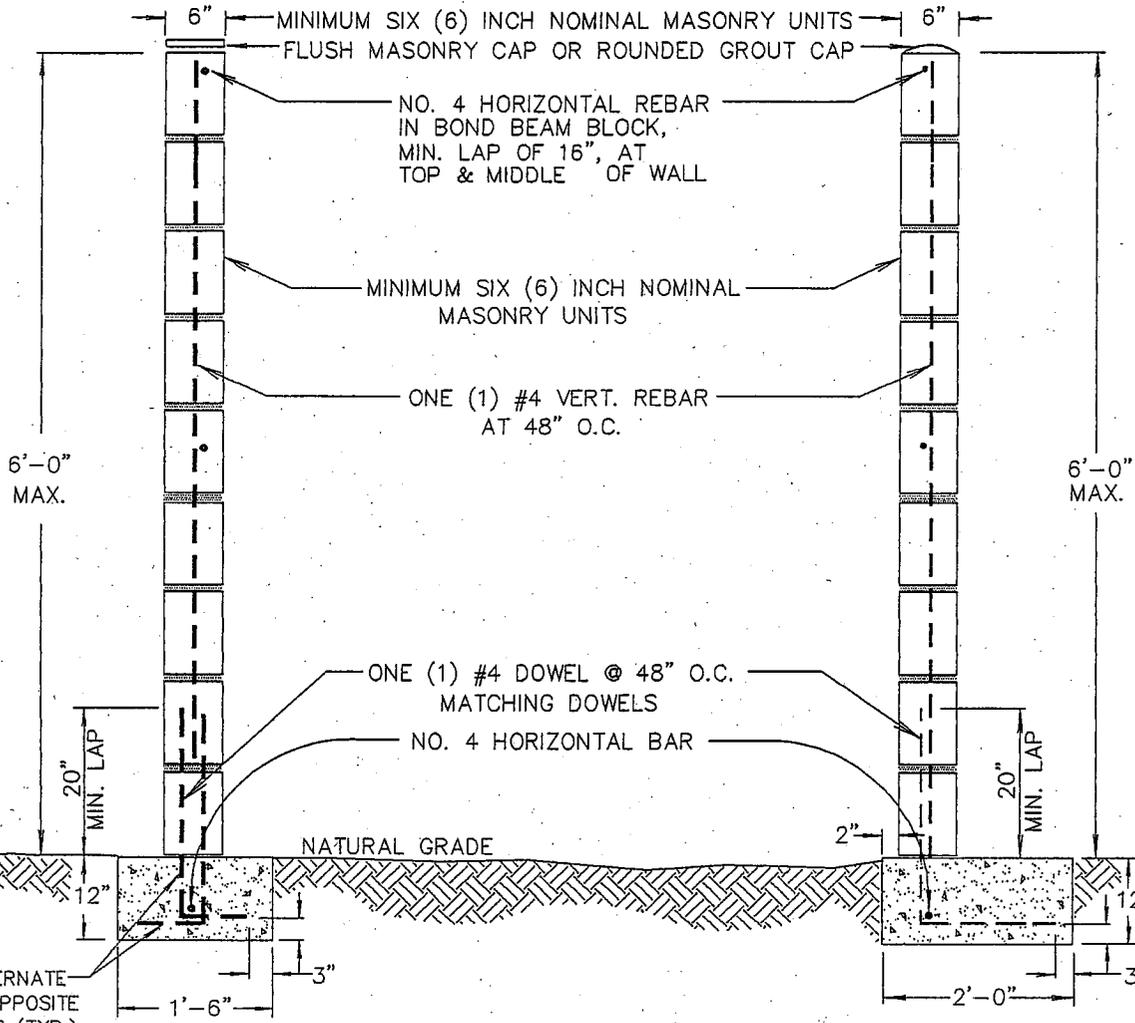
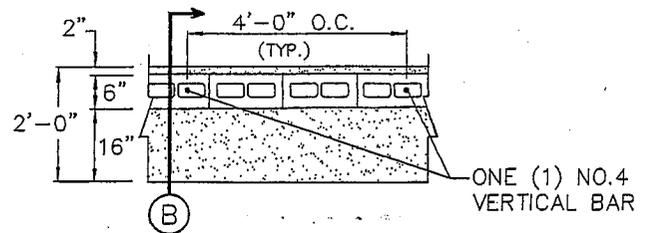
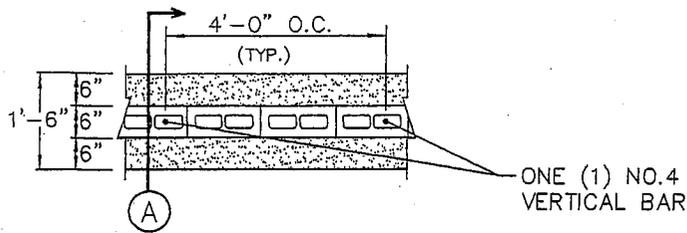
RESOLUTION NO. 74-90. Adopting Standard Specifications for Public Works Construction as Amended.

RESOLUTION NO. 6-93. A Resolution of the City Council of the City of Porterville Adopting the Manual of Traffic Controls for Construction and Maintenance Work Zones.

**FENCES**

**MASONRY FENCE**

**B-1**



NOTE:  
BEND ALTERNATE  
BARS IN OPPOSITE  
DIRECTIONS (TYP.)

(A) WALL SECTION  
ALTERNATE (1) ONE

(B) WALL SECTION  
ALTERNATE (2) TWO

- NOTES:**
1. COMPLY WITH THE PORTERVILLE MUNICIPAL CODE, SEC. 17-16 REGARDING OBSTRUCTION TO VISIBILITY.
  2. GROUT ALL CELLS CONTAINING REINFORCING STEEL.
  3. ALL MASONRY UNITS SHALL COMPLY WITH THE LATEST ADOPTED UNIFORM BUILDING CODE AND UBC STANDARD 24-4 GRADE N.
  4. ALL MASONRY WALLS SHALL BE INSPECTED IF HEIGHT EXCEEDS THREE (3) FEET.
  5. DEPTH OF FOOTINGS ARE INTO NATURAL UNDISTURBED SOIL OR TESTED AND APPROVED COMPACTED FILL.
  6. ALL MASONRY UNITS SHALL BE MINIMUM TM=1350 P.S.I.
  7. REINFORCING STEEL SHALL BE DEFORMED BARS MINIMUM GRADE 40.
  8. FOOTING CONCRETE SHALL BE A MINIMUM 2000 P.S.I. AT 28 DAYS.
  9. THIS DESIGN SHALL NOT BE USED FOR RETAINING EARTH.
  10. MORTAR SHALL BE TYPE-S (MIN. 1800 P.S.I. AT 28 DAYS)  
ONE (1) PART CEMENT, TYPE 1  
ONE-HALF (1/2) PART LIME PUTTY OR HYDRATED LIME  
FOUR AND ONE-HALF (4 1/2) PARTS SAND (MAXIMUM)
  11. GROUT SHALL BE A MINIMUM 2000 P.S.I. AT 28 DAYS  
ONE (1) PART CEMENT  
THREE (3) PARTS SAND  
TWO (2) PARTS PEA GRAVEL
  12. STACK BOND UPON SUBMITTAL ONLY.

CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 4-16-99  
CITY ENGINEER R.C.E. 20186 DATE

MASONRY FENCE

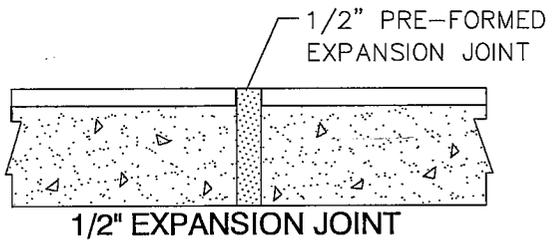
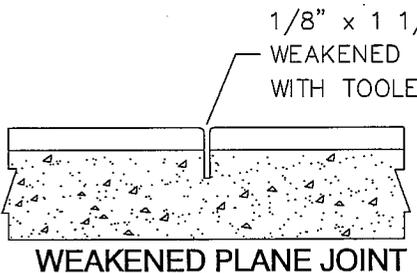
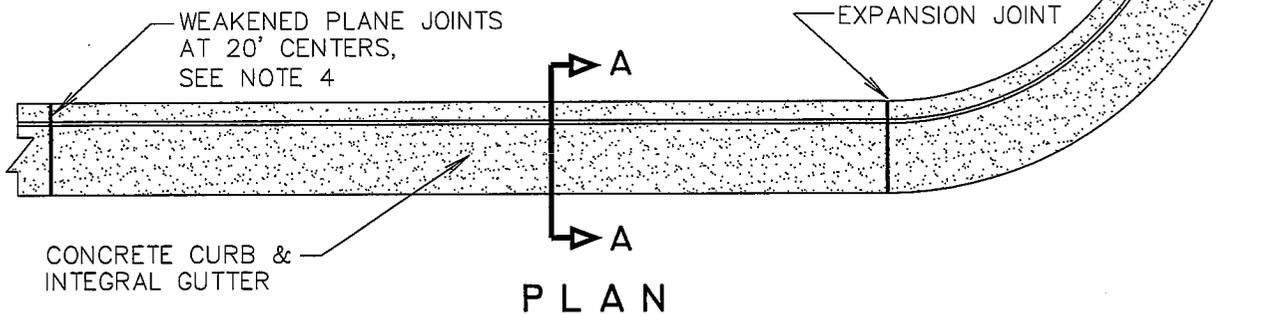
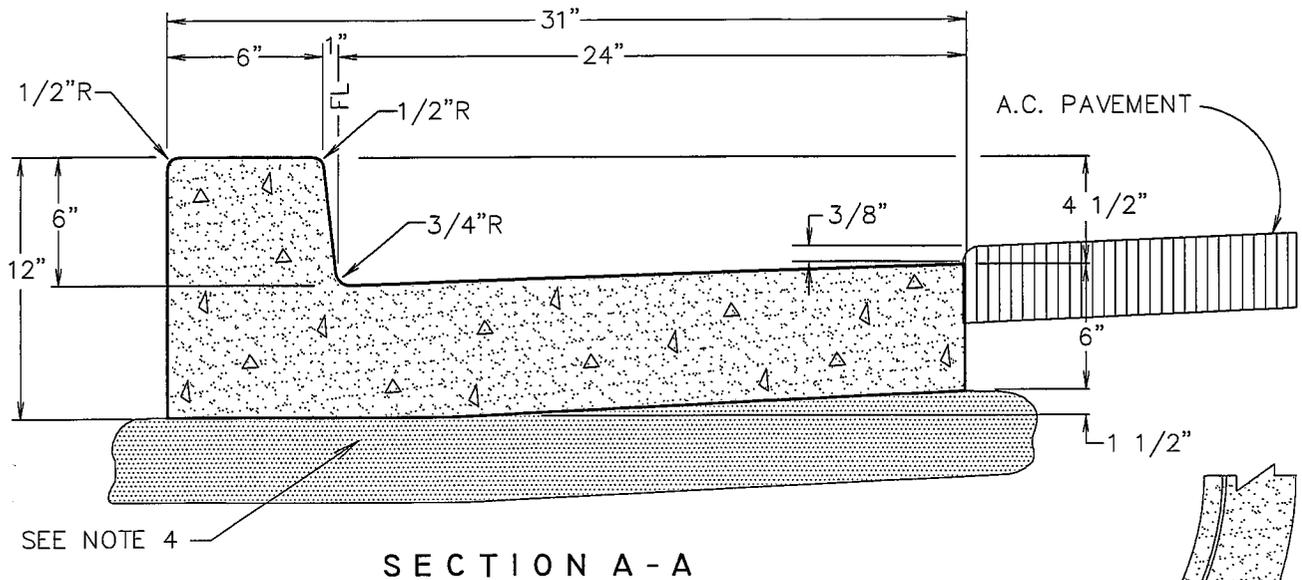
B-1

REV.

**CURB, GUTTER AND SIDEWALK**

**C-1 THROUGH C-13**

**CURB, GUTTER & SIDEWALK (C-1 THROUGH C-13)**



**NOTES :**

1. CONCRETE WORK SHALL BE 2500 P.S.I. DESIGN (5 SACK MIX). 4" MAX. SLUMP.
2. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH, EXCEPT AS NOTED.
3. EXPANSION JOINTS AT CURB RETURN ENDS AND CURVE AT WALK RETURNS.
4. WEAKENED PLANE JOINTS AT DRIVEWAY APPROACHES, AND AT 20' SPACING, PER STANDARD SPECIFICATIONS. (SEE STD. DWG. C-12). WEAKENED PLANE JOINTS SHALL BE A MIN. DEPTH OF 1 1/2" AND SHALL BE FINISHED WITH A SCORING TOOL LEAVING THE EDGES ROUNDED.
5. REFER TO STANDARD PLAN C-13.
6. FINISHED SURFACES SHALL BE TREATED WITH CLEAR CURING COMPOUND COMPLYING WITH SECTION 201-4 OF THE STANDARD SPECIFICATIONS.
7. EXTRUDED CURB SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO PLACEMENT. CONCRETE USED FOR EXTRUDED CURB AND GUTTER SHALL HAVE A MAX. SLUMP OF 1 1/2".
8. ALL EXPOSED SURFACES OF CURB AND GUTTER SHALL NOT VARY IN EXCESS OF .02' WHEN AN 8' STRAIGHT EDGE IS PLACED ON THE SURFACE, EXCEPT AT GRADE CHANGES OR CURVES.
9. REPAIRS SHALL BE MADE BY REMOVING & REPLACING THE ENTIRE UNIT BETWEEN JOINTS.

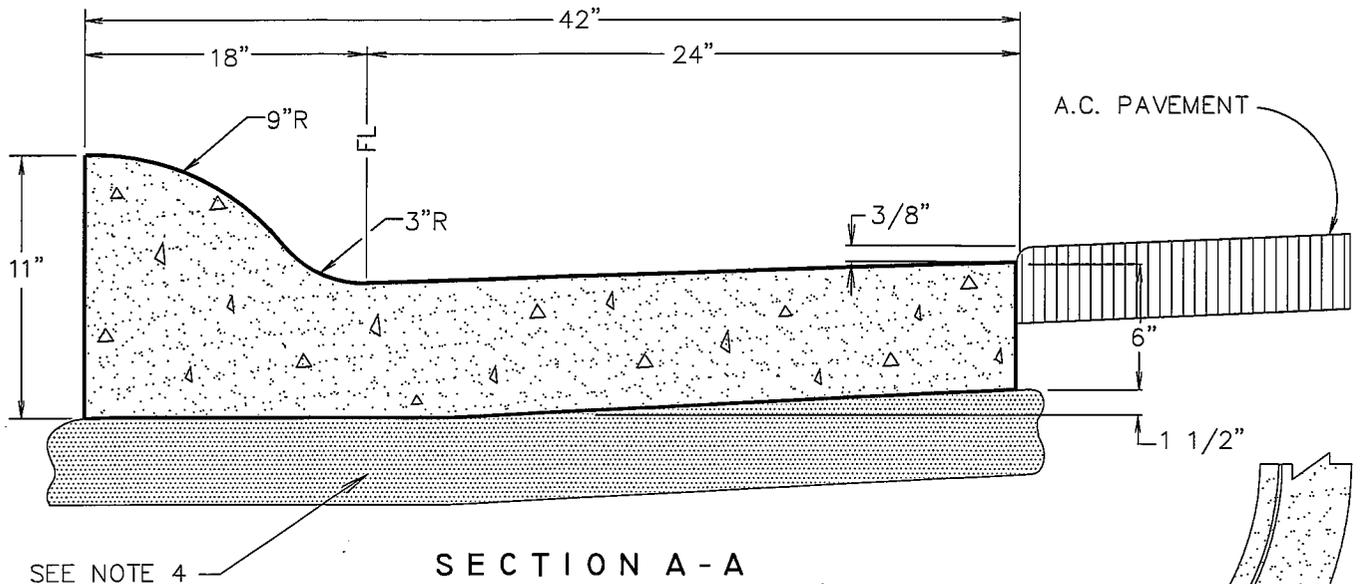
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ENGINEERING DIVISION

*Baldness Rodriguez* 9-04  
DIRECTOR OF PUBLIC WORKS R.C.E. 45304 DATE

**CURB AND GUTTER  
BARRIER TYPE**

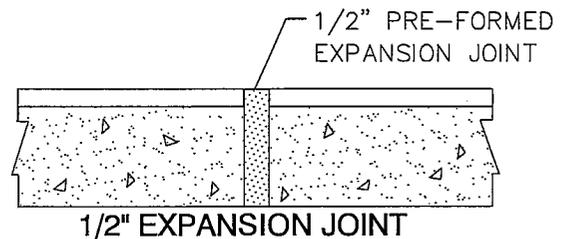
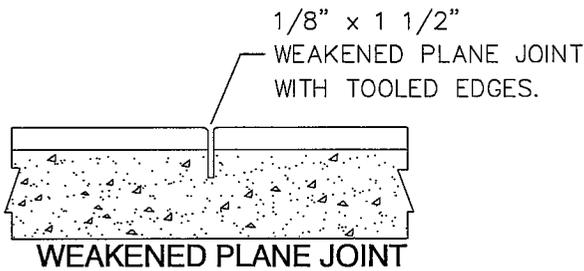
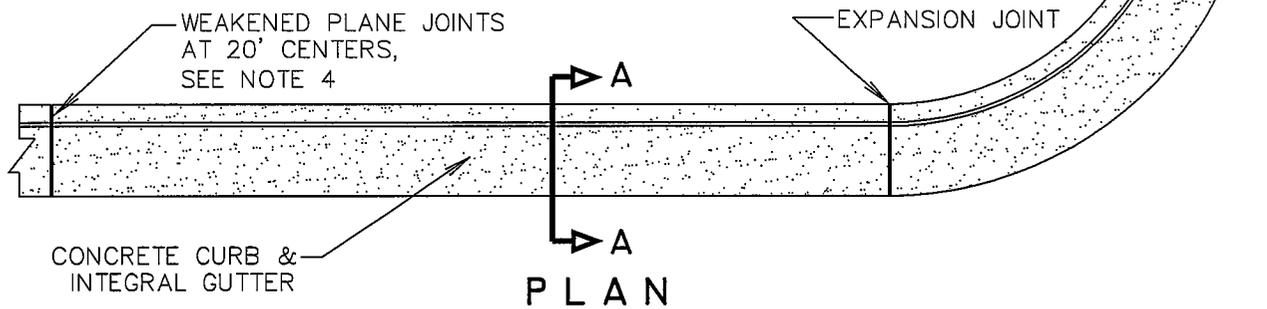
**C-1**

REV.



SEE NOTE 4

SECTION A - A



NOTES :

1. CONCRETE WORK SHALL BE 2500 P.S.I. DESIGN (5 SACK MIX). 4" MAX. SLUMP.
2. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH, EXCEPT AS NOTED.
3. EXPANSION JOINTS AT CURB RETURN ENDS AND CURVE AT WALK RETURNS.
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7. EXTRUDED CURB SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO PLACEMENT. CONCRETE USED FOR EXTRUDED CURB AND GUTTER SHALL HAVE A MAX. SLUMP OF 1 1/2".
8. ALL EXPOSED SURFACES OF CURB AND GUTTER SHALL NOT VARY IN EXCESS OF .02' WHEN AN 8' STRAIGHT EDGE IS PLACED ON THE SURFACE, EXCEPT AT GRADE CHANGES OR CURVES.
9. REPAIRS SHALL BE MADE BY REMOVING & REPLACING THE ENTIRE UNIT BETWEEN JOINTS.

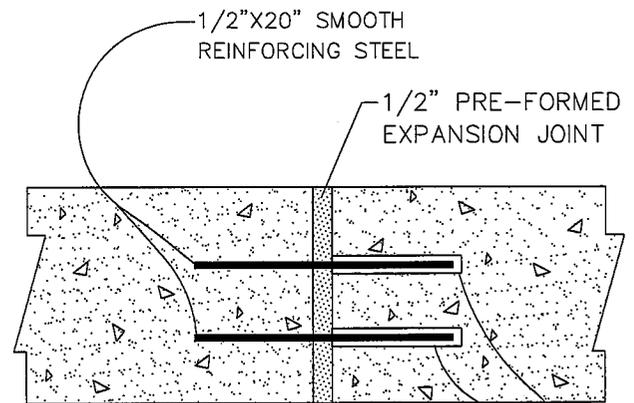
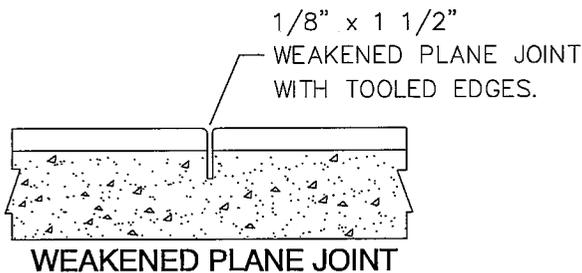
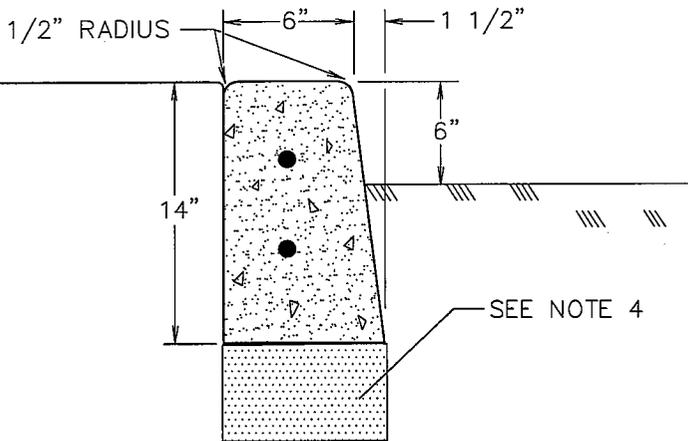
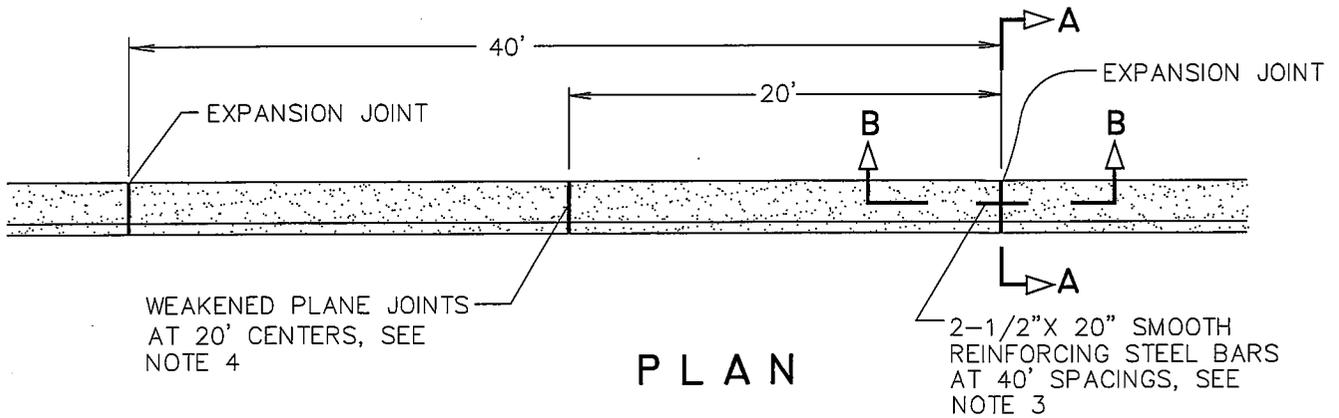
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Baldemar Rodriguez*  
DIRECTOR OF PUBLIC WORKS R.C.E. 45304 9-04  
DATE

**CURB AND GUTTER  
ROLL TYPE**

**C-2**

REV.



ONE END OF REINFORCING STEEL TO BE WRAPPED WITH BUILDING PAPER & GREASED OR 10" METAL SLEEVE OR PVC TO PERMIT MOVEMENT.

SECTION B-B  
1/2" EXPANSION JOINT  
LOCATIONS : BARRIER CURB

**NOTES:**

1. CONCRETE WORK SHALL BE 2500 P.S.I. DESIGN (5 SACK MIX). 4" MAX. SLUMP.
2. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH, EXCEPT AS NOTED.
3. 1/2" EXPANSION JOINT AT END OF CURVE AND BEGINNING OF CURVE OF WALK RETURNS, AT DRIVEWAY APPROACHES, AND AT 40' SPACING, PER STD.PLAN C-12.
4. WEAKENED PLANE JOINTS AT DRIVEWAY APPROACHES AND AT 20' SPACING PER STANDARD SPECIFICATIONS. (SEE STD. DWG. C-12) WEAKENED PLANE JOINTS SHALL BE A MIN. DEPTH OF 1 1/2" AND SHALL BE FINISHED WITH A SCORING TOOL LEAVING THE EDGES ROUNDED.
5. REFER TO STANDARD PLAN C-13.
6. FINISHED SURFACES SHALL BE TREATED WITH CLEAR CURING COMPOUND COMPLYING WITH SECTION 201-4 OF THE STANDARD SPECIFICATIONS.
7. EXTRUDED CURB SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO USE. MAX. SLUMP OF THE CONCRETE SHALL BE 1 1/2". THE EXPANSION JOINTS IN NOTE 3 ARE NOT REQUIRED.
8. REPAIRS SHALL BE MADE BY REMOVING & REPLACING THE ENTIRE UNIT BETWEEN JOINTS.

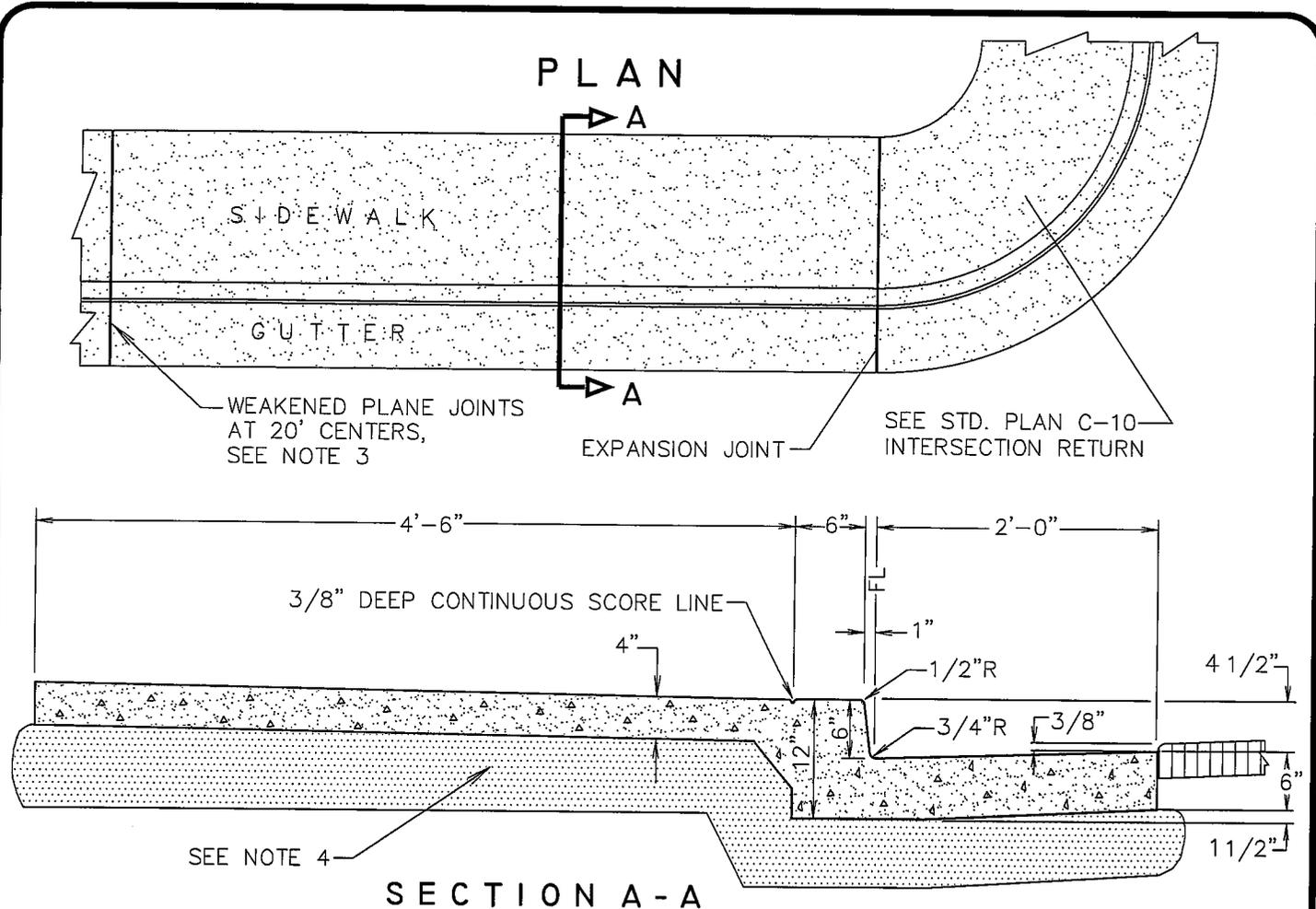
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**CURB  
BARRIER TYPE**

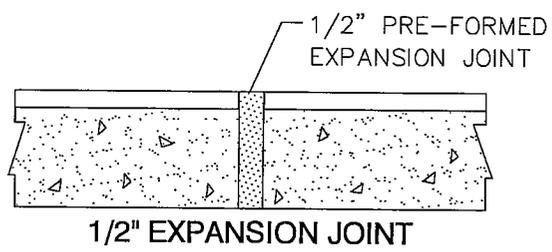
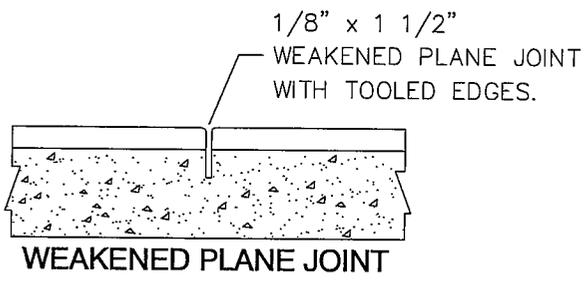
**C-3**

REV.



SEE NOTE 4

**SECTION A - A**



**NOTES:**

1. CONCRETE WORK SHALL BE 2500 P.S.I. DESIGN (5 SACK MIX). 4" MAX. SLUMP.
2. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH, EXCEPT AS NOTED.
3. 1/2" EXPANSION JOINT AT END OF CURVE AND BEGINNING OF CURVE OF WALK RETURNS, AT DRIVEWAY APPROACHES, AND AT 40' SPACING, PER STD.PLAN C-12.
4. WEAKENED PLANE JOINTS AT DRIVEWAY APPROACHES AND AT 20' SPACING PER STANDARD SPECIFICATIONS. (SEE STD. DWG. C-12) AND SHALL BE FINISHED WITH A SCORING TOOL LEAVING THE EDGES ROUNDED.
5. REFER TO STANDARD PLAN C-13.
6. FINISHED SURFACES SHALL BE TREATED WITH CLEAR CURING COMPOUND COMPLYING WITH SECTION 201-4 OF THE STANDARD SPECIFICATIONS.
7. EXTRUDED CURB SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO USE. MAX. SLUMP OF THE CONCRETE SHALL BE 1 1/2". THE EXPANSION JOINTS IN NOTE 3 ARE NOT REQUIRED.
8. REPAIRS SHALL BE MADE BY REMOVING & REPLACING THE ENTIRE UNIT BETWEEN JOINTS.

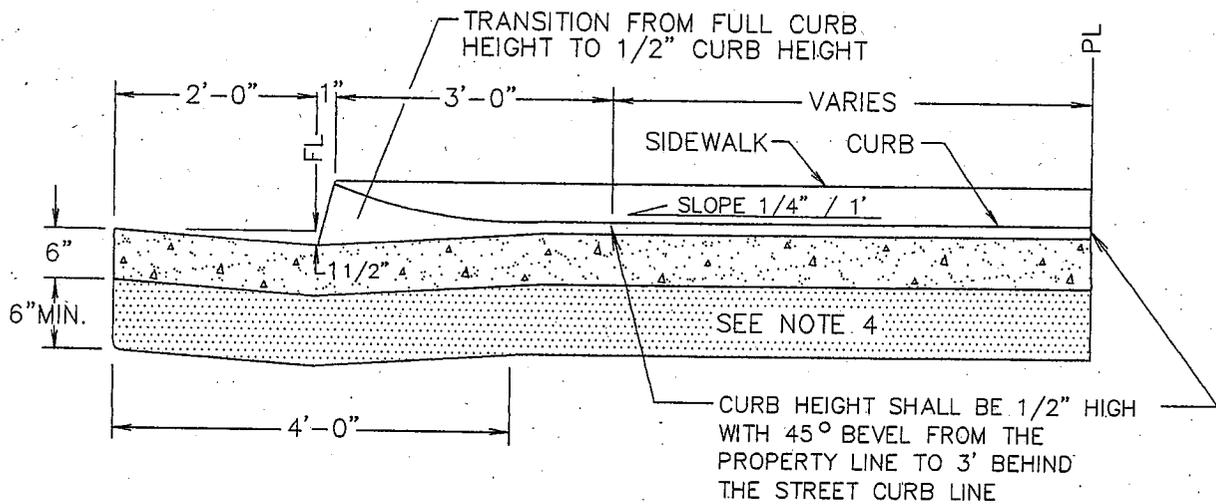
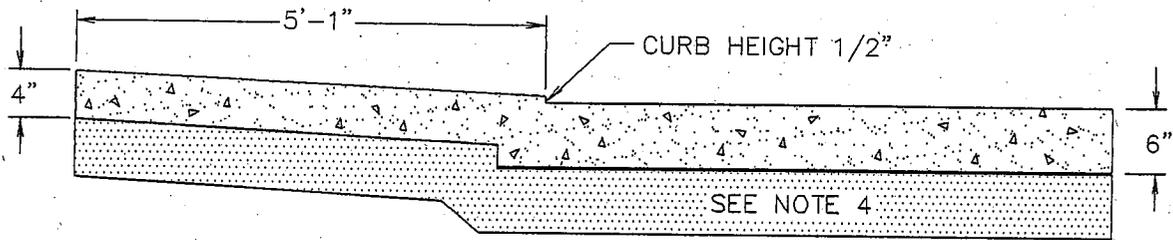
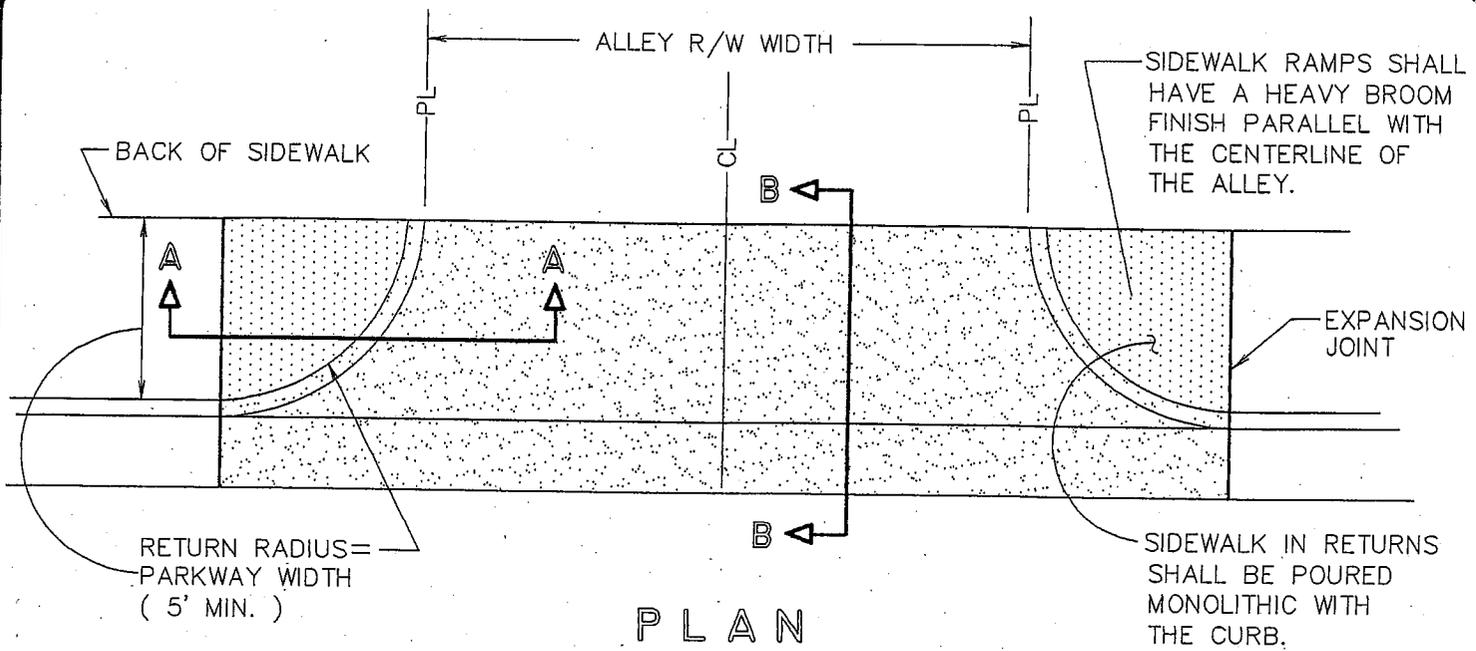
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*Baltimore Rodriguez* 9-04  
DIRECTOR OF PUBLIC WORKS R.C.E. 45304 DATE

**MONOLITHIC CURB,  
GUTTER & SIDEWALK**

**C-4**

REV.



NOTES :

1. CONCRETE WORK SHALL BE 2500 P.S.I. DESIGN (5 SACK MIX). 4" MAX. SLUMP.
2. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH, EXCEPT AS NOTED.
3. 1/2" EXPANSION JOINT AT END OF CURVE AND BEGINNING OF CURVE OF WALK RETURNS PER STD. PLAN C-12.
4. REFER TO STANDARD PLAN C-13.
5. FINISHED SURFACES SHALL BE TREATED WITH CLEAR CURING COMPOUND COMPLYING WITH 201-4 OF THE STANDARD SPECIFICATIONS.

CITY OF PORTERVILLE  
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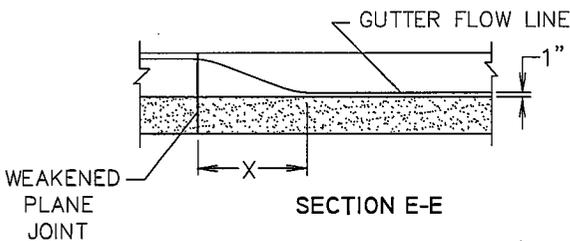
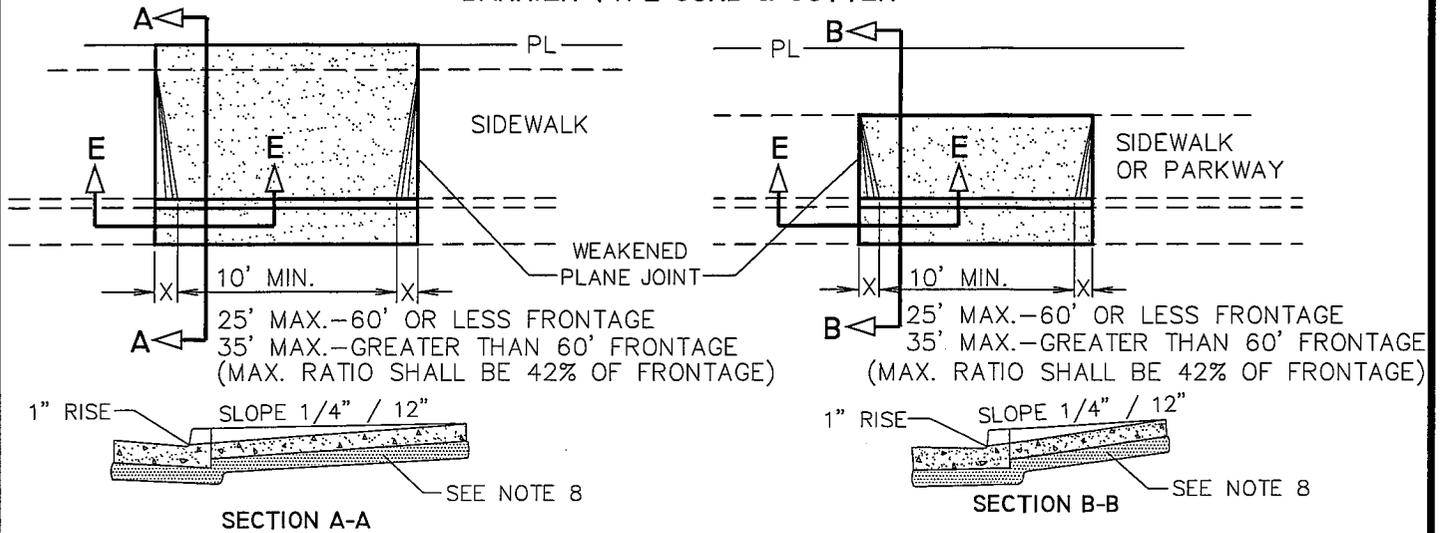
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CITY ENGINEER R.C.E. 20186 DATE 5-16-96

ALLEY APPROACH

C-5

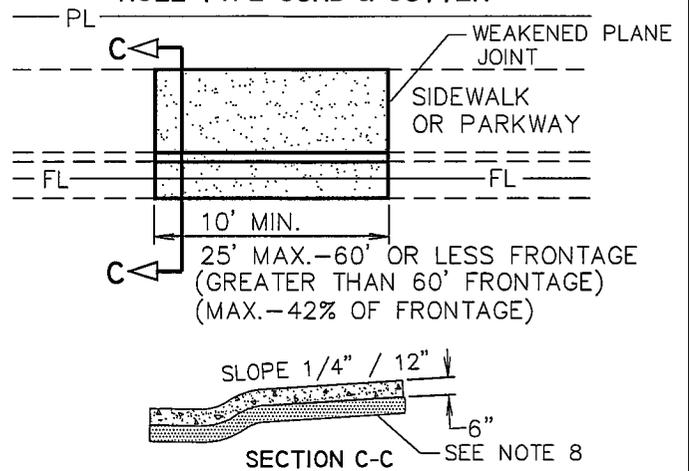
REV.

**RESIDENTIAL DRIVEWAY  
BARRIER TYPE CURB & GUTTER**



CURB HEIGHT	X DIMENSION
6"	3'-0"
8"	3'-6"
10"	4'-0"
12"	4'-6"

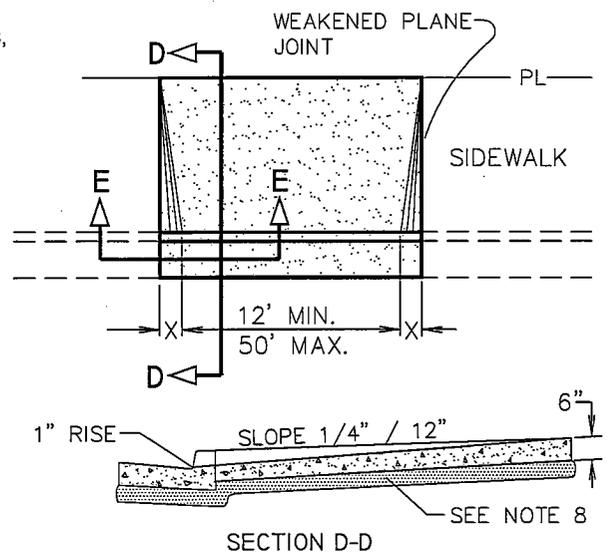
**ROLL TYPE CURB & GUTTER**



**NOTES:**

1. CONCRETE SHALL BE 2500 P.S.I. (5 SACK MIX), (4" MAX. SLUMP)
2. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH.
3. WEAKENED PLANE JOINTS AT DRIVEWAY APPROACHES AND AT 20' SPACING, PER STANDARD SPECIFICATIONS. (SEE STD. DWG. C-12) WEAKENED PLANE JOINTS SHALL BE A MIN. DEPTH OF 1 1/2" AND SHALL BE FINISHED WITH A SCORING TOOL LEAVING THE EDGES ROUNDED.
4. REFER TO STD. DWG. C-11 FOR DRIVEWAY SPACING.
5. BACK OF DRIVE APPROACH MAY BE SET 3" LOWER THAN THE BACK OF WALK TO FACILITATE LOT DRAINAGE.
6. ALL COMMERCIAL DRIVE APPROACHES SHALL EXTEND TO PROPERTY LINE.
7. ALL RESIDENTIAL DRIVE APPROACHES AND ALLEY APPROACHES IN RESIDENTIAL ZONE SHALL EXTEND TO THE BACK OF SIDEWALK AS ESTABLISHED IN THE BLOCK, IF SIDEWALK IS NOT EXISTING IN BLOCK, MINIMUM OF 5' FROM FACE OF CURB.
8. REFER TO STANDARD PLAN C-13.
9. FINISHED SURFACES SHALL BE TREATED WITH CURING COMPOUND COMPLYING WITH SECTION 201-4 OF THE STANDARD SPECIFICATIONS.
10. REPAIRS SHALL BE MADE BY REMOVING & REPLACING THE ENTIRE UNIT BETWEEN JOINTS.

**COMMERCIAL DRIVEWAY  
BARRIER TYPE CURB & GUTTER**



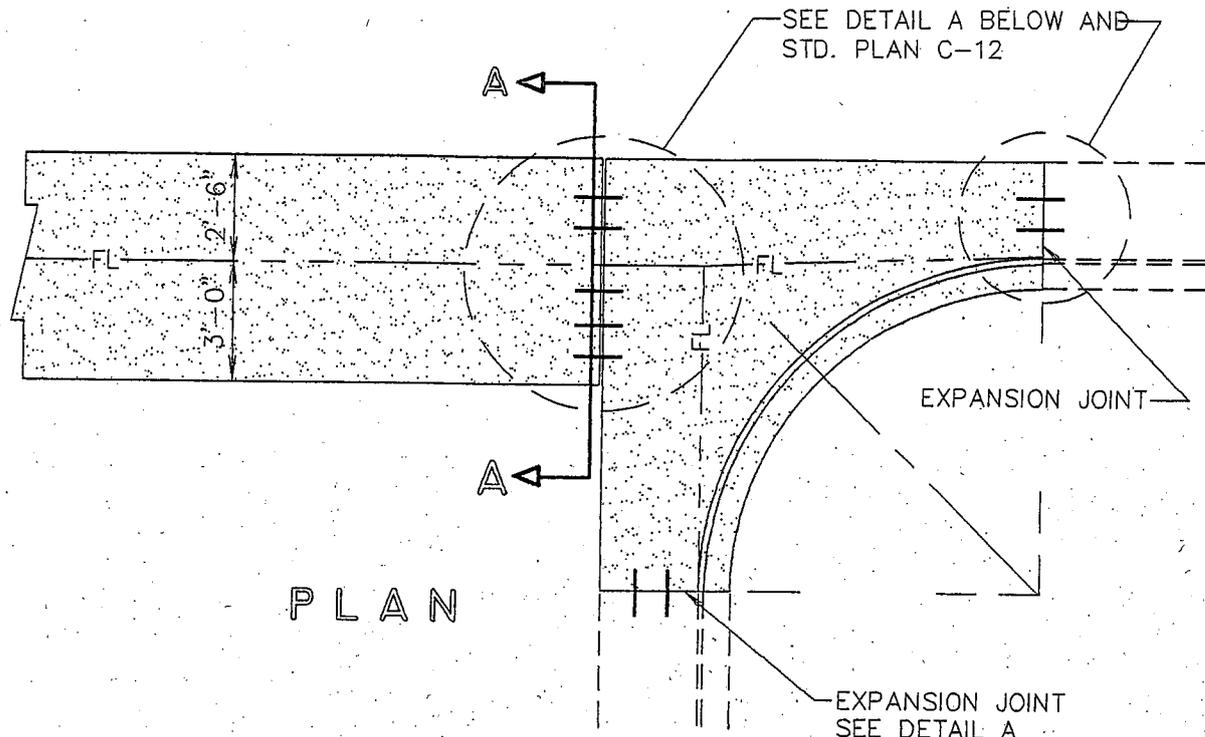
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DIRECTOR OF PUBLIC WORKS R.C.E. 45304 DATE

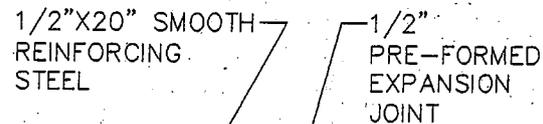
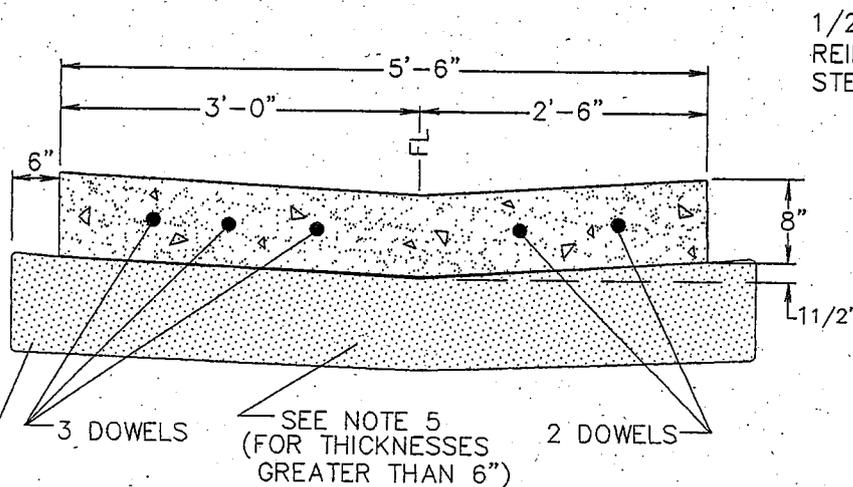
**P.C.C. DRIVEWAYS**

**C-6**

REV.



PLAN



ONE END OF REINFORCING STEEL TO BE WRAPPED WITH BUILDING PAPER, GREASED OR 10" METAL SLEEVE TO PERMIT MOVEMENT.

DETAIL A

6" MIN. CL. 2 A.B. COMPACTED TO 95% RELATIVE COMPACTION. SATURATE WITH WATER PRIOR TO POURING CONCRETE.

SECTION A-A

NOTES:

1. CONCRETE WORK SHALL BE 2500 P.S.I. DESIGN (5 SACK MIX). 4" MAX. SLUMP.
2. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH, EXCEPT AS NOTED.
3. 1/2" EXPANSION JOINT AT END OF CURVE AND BEGINNING OF CURVE OF WALK RETURNS PER DETAIL "A" AND STD. PLAN C-12.
4. FINISHED SURFACES SHALL BE TREATED WITH CLEAR CURING COMPOUND COMPLYING WITH SECTION 201-4 OF THE STANDARD SPECIFICATIONS.
5. REFER TO STANDARD PLAN C-13.

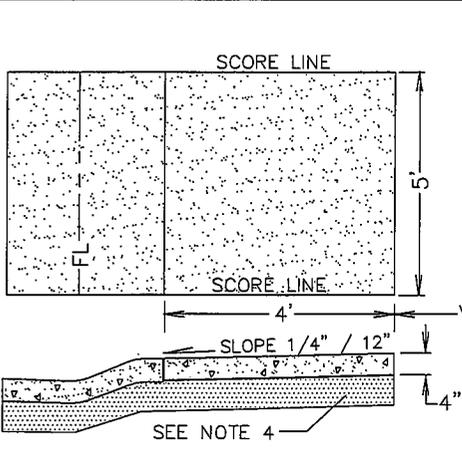
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

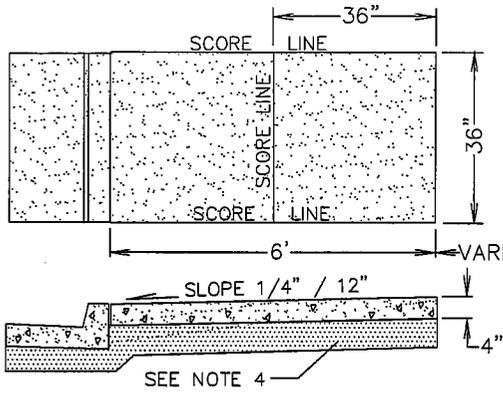
P.C.C. CROSS GUTTER

C-7

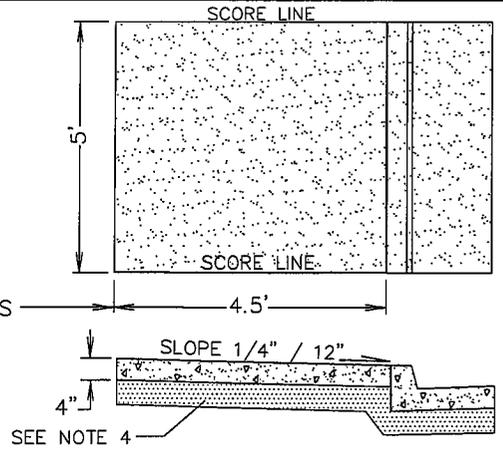
REV.



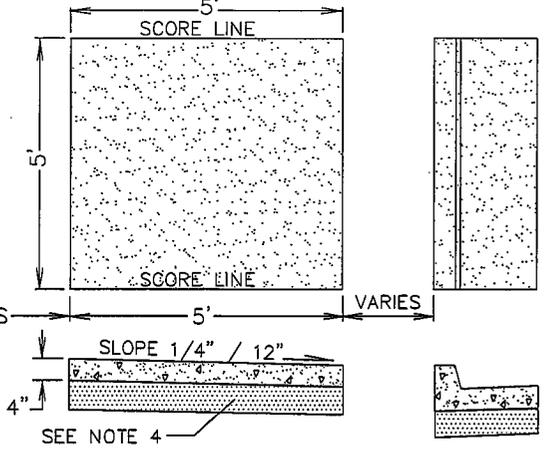
**RESIDENTIAL**  
WITH EXISTING ROLL TYPE  
CURB & GUTTER



**P-O ZONES**

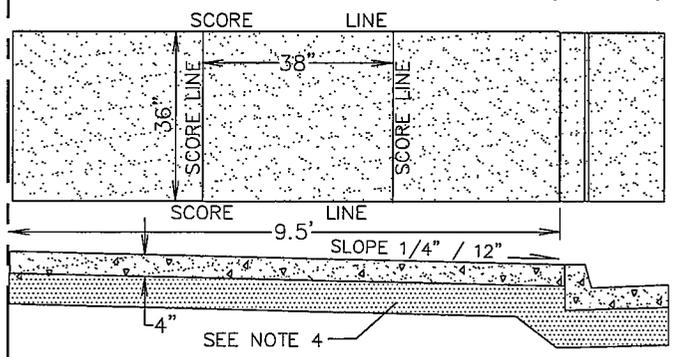


**RESIDENTIAL (NEW)**



**RESIDENTIAL (OLDER)**

R/W



**COMMERCIAL ZONES**

**NOTES :**

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4. REFER TO STANDARD PLAN C-13.
5. FINISHED SURFACES SHALL BE TREATED WITH CLEAR CURING COMPOUND COMPLYING WITH SECTION 201-4 OF THE STANDARD SPECIFICATIONS.
6. ALIGN SIDEWALK EXPANSION JOINTS, WEAKENED PLANE JOINTS AND SCORE LINES WITH CURB AND GUTTER EXPANSION JOINTS AND WEAKENED PLANE JOINTS.
7. WHERE WARRANTED BY SURROUNDING CONDITIONS, COMMERCIAL & P-O ZONE SIDEWALK WIDTH MAY BE REDUCED BY WRITTEN APPROVAL OF THE CITY ENGINEER.
8. IN RESIDENTIAL (OLDER) AREAS, MAILBOX POST SHALL BE CONFINED TO AN AREA FROM 6" TO 12" BEHIND THE FACE OF CURB. IN RESIDENTIAL (NEW) AREAS SEE STD. PLAN U-3.
9. REPAIRS SHALL BE MADE BY REMOVING & REPLACING THE ENTIRE UNIT BETWEEN JOINTS.

CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Balthasar Rodriguez* 9-04  
DIRECTOR OF PUBLIC WORKS R.C.E. 45304 DATE

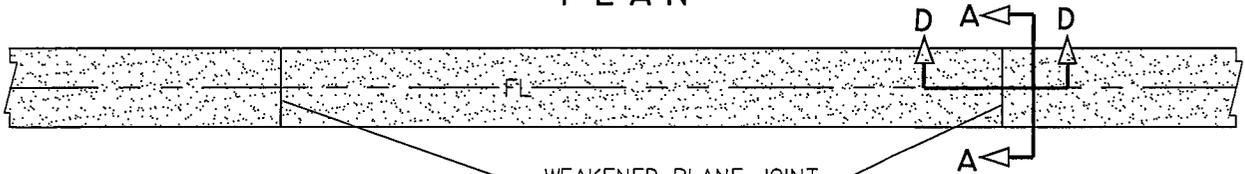
**CONCRETE  
SIDEWALKS**

**C-8**

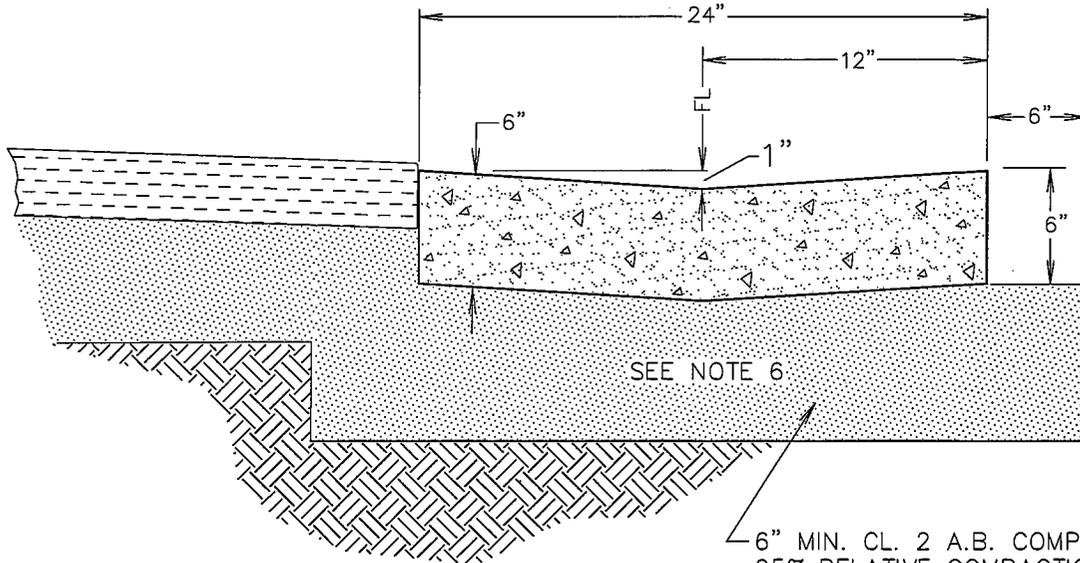
REV.

FOR SECTION D-D  
SEE STD. PLAN C-12

PLAN

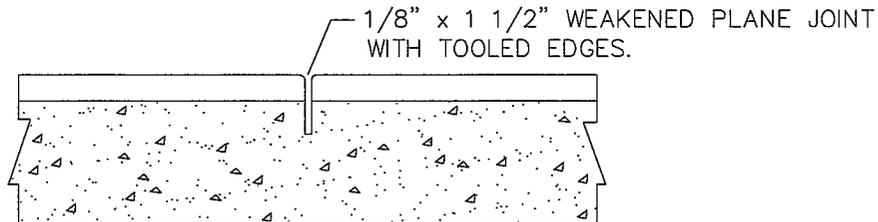


WEAKENED PLANE JOINT  
AT 20' O.C., 1 1/2" DEEP  
WITH TOOLED CORNERS



6" MIN. CL. 2 A.B. COMPACTED TO  
95% RELATIVE COMPACTION.  
SATURATE WITH WATER PRIOR  
TO POURING CONCRETE.

SECTION A-A



1/8" x 1 1/2" WEAKENED PLANE JOINT  
WITH TOOLED EDGES.

SECTION D-D  
WEAKENED PLANE JOINT

LOCATIONS : DRIVE APPROACHES, SIDEWALK AT 20' O.C.,  
CURB & GUTTER AT 20' O.C. AND V-GUTTER AT 20' O.C.

NOTES :

1. CONCRETE WORK SHALL BE 2500 P.S.I. DESIGN (5 SACK MIX). 4" MAX. SLUMP.
2. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH, EXCEPT AS NOTED.
3. 1/2" EXPANSION JOINT AT CONNECTION TO ALLEY APPROACH, SEE STD. PLAN C-12.
4. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 20' CENTERS AND SHALL BE A MIN. DEPTH OF 1 1/2" AND SHALL BE FINISHED WITH A SCORING TOOL LEAVING THE EDGES ROUNDED. SEE STD. PLAN C-12.
5. FINISHED SURFACES SHALL BE TREATED WITH CLEAR CURING COMPOUND COMPLYING WITH SECTION 201-4 OF THE STANDARD SPECIFICATIONS.
6. REFER TO STANDARD PLAN C-13.
7. REPAIRS SHALL BE MADE BY REMOVING & REPLACING THE ENTIRE UNIT BETWEEN JOINTS.

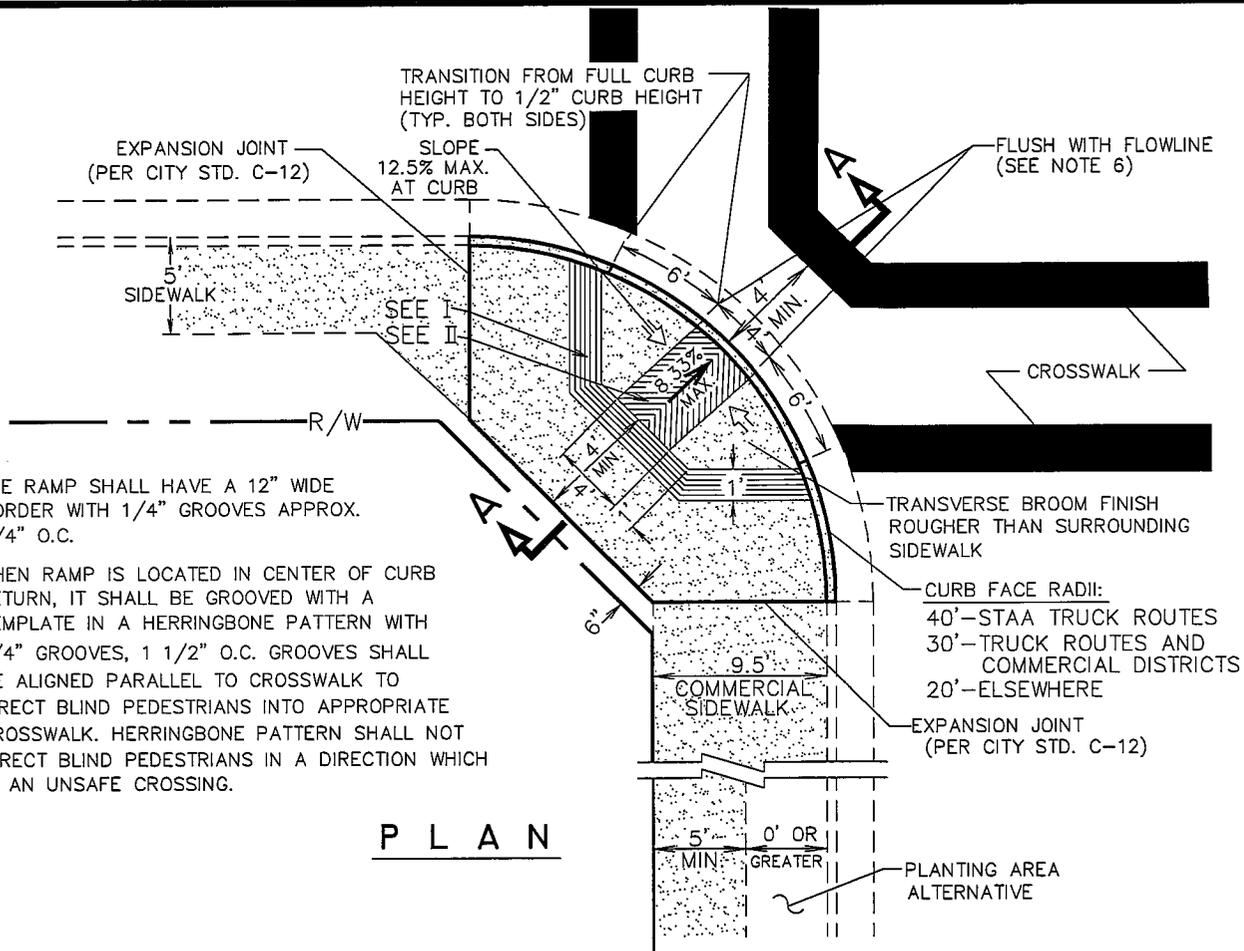
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Baldomero Rodriguez* 9-04  
DIRECTOR OF PUBLIC WORKS R.C.E. 45304 DATE

CONCRETE  
"V" GUTTER

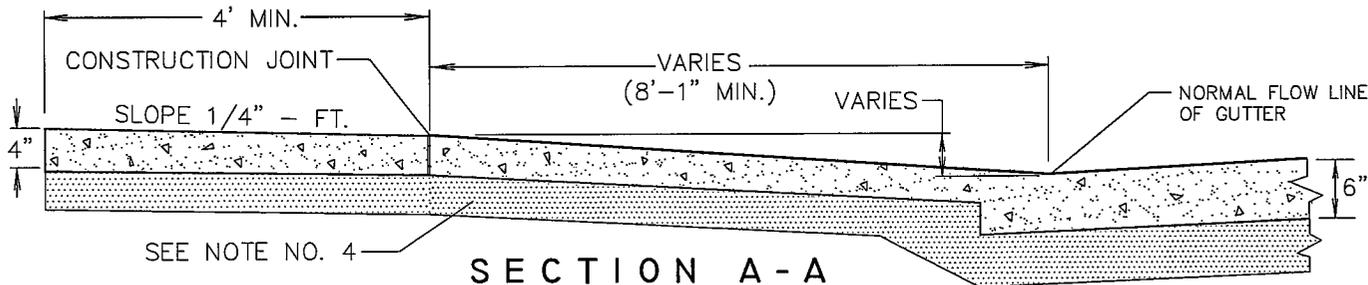
C-9

REV.

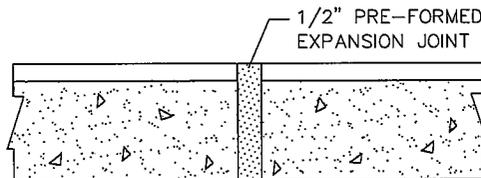


- I THE RAMP SHALL HAVE A 12" WIDE BORDER WITH 1/4" GROOVES APPROX. 3/4" O.C.
- II WHEN RAMP IS LOCATED IN CENTER OF CURB RETURN, IT SHALL BE GROOVED WITH A TEMPLATE IN A HERRINGBONE PATTERN WITH 1/4" GROOVES, 1 1/2" O.C. GROOVES SHALL BE ALIGNED PARALLEL TO CROSSWALK TO DIRECT BLIND PEDESTRIANS INTO APPROPRIATE CROSSWALK. HERRINGBONE PATTERN SHALL NOT DIRECT BLIND PEDESTRIANS IN A DIRECTION WHICH IS AN UNSAFE CROSSING.

**P L A N**



**SECTION A - A**



**1/2" EXPANSION JOINT**

**NOTES:**

1. CONCRETE WORK SHALL BE 2500 P.S.I. DESIGN (5 SACK MIX), 4" MAXIMUM SLUMP.
2. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH, EXCEPT AS NOTED.
3. EXPANSION JOINT AT END OF CURVE AND BEGINNING OF CURVE OF RETURN.
4. REFER TO CITY STANDARD PLAN C-13.
5. FINISHED SURFACES SHALL BE TREATED WITH CLEAR CURING COMPOUND COMPLYING WITH SECTION 201-4 OF THE STANDARD SPECIFICATIONS.
6. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS OR STREET SHALL BE FLUSH & FREE OF ABRUPT CHANGES.
7. REPAIRS SHALL BE MADE BY REMOVING & REPLACING THE ENTIRE UNIT BETWEEN JOINTS.

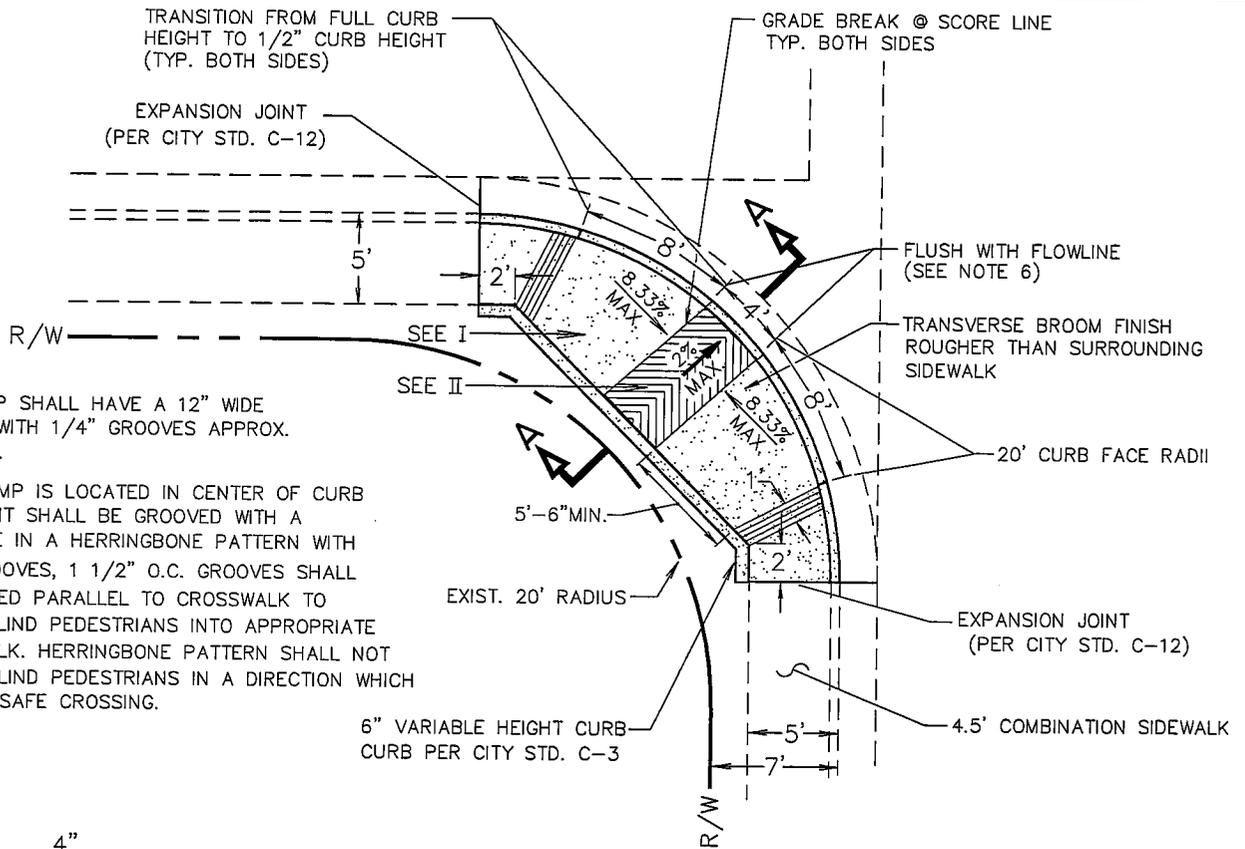
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Baldemar Rodriguez*  
DIRECTOR OF PUBLIC WORKS R.C.E. 45304 DATE **9-04**

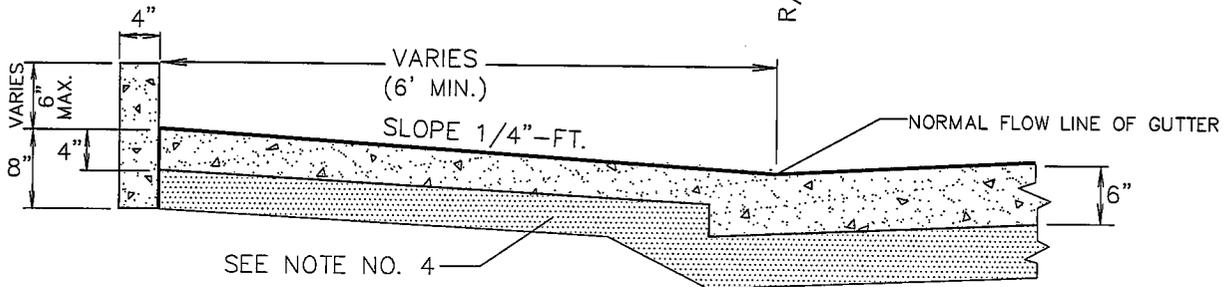
**STREET INTERSECTION RETURN  
5' OR 10' - SIDEWALK**

**C-10**

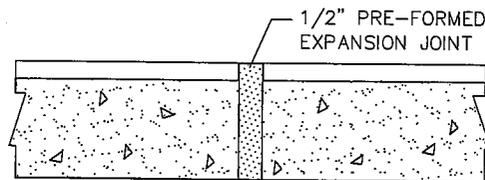
REV.



- I THE RAMP SHALL HAVE A 12" WIDE BORDER WITH 1/4" GROOVES APPROX. 3/4" O.C.
- II WHEN RAMP IS LOCATED IN CENTER OF CURB RETURN, IT SHALL BE GROOVED WITH A TEMPLATE IN A HERRINGBONE PATTERN WITH 1/4" GROOVES, 1 1/2" O.C. GROOVES SHALL BE ALIGNED PARALLEL TO CROSSWALK TO DIRECT BLIND PEDESTRIANS INTO APPROPRIATE CROSSWALK. HERRINGBONE PATTERN SHALL NOT DIRECT BLIND PEDESTRIANS IN A DIRECTION WHICH IS AN UNSAFE CROSSING.



SECTION A - A



1/2" EXPANSION JOINT

NOTES:

1. CONCRETE WORK SHALL BE 2500 P.S.I. DESIGN (5 SACK MIX), 4" MAXIMUM SLUMP.
2. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH, EXCEPT AS NOTED.
3. EXPANSION JOINT AT END OF CURVE AND BEGINNING OF CURVE OF RETURN.
4. REFER TO CITY STANDARD PLAN C-13.
5. FINISHED SURFACES SHALL BE TREATED WITH CLEAR CURING COMPOUND COMPLYING WITH SECTION 201-4 OF THE STANDARD SPECIFICATIONS.
6. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS OR STREET SHALL BE FLUSH & FREE OF ABRUPT CHANGES.
7. REPAIRS SHALL BE MADE BY REMOVING & REPLACING THE ENTIRE UNIT BETWEEN JOINTS.

CITY OF PORTERVILLE  
ENGINEERING DIVISION

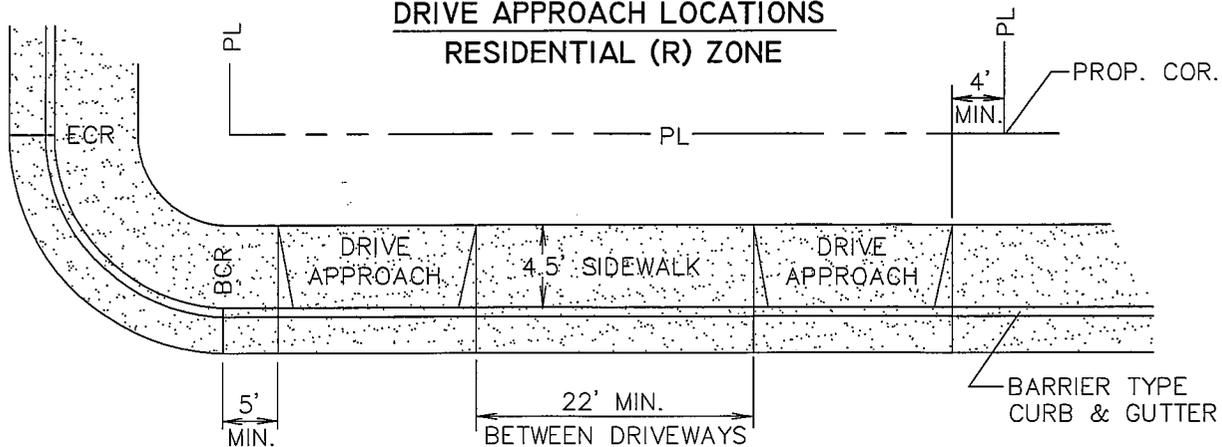
*Baldemar Rodriguez* 9-04  
DIRECTOR OF PUBLIC WORKS R.C.E. 45304 DATE

**STREET INTERSECTION RETURN  
IN EXIST. 7' PARKWAYS & 20' RADIUS**

**C-10.1**

REV.

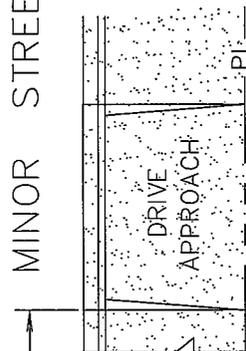
**DRIVE APPROACH LOCATIONS  
RESIDENTIAL (R) ZONE**



**NOTES:**

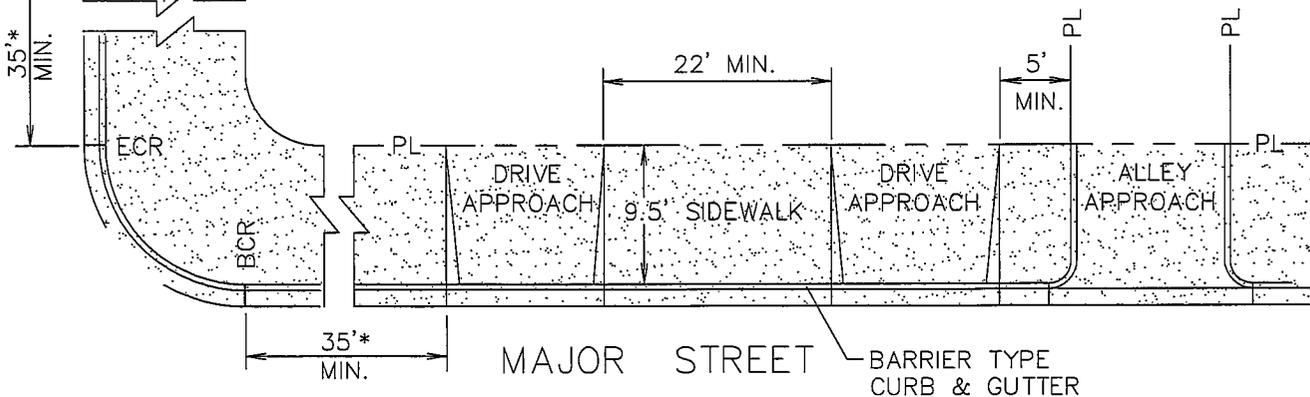
1. CONCRETE WORK SHALL BE 2500 P.S.I. DESIGN (5 SACK MIX), 4" MAXIMUM SLUMP.
  2. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH, EXCEPT AS NOTED.
  3. EXPANSION JOINTS 1/2" WIDE SHALL BE INSTALLED ON BOTH SIDES OF APPROACH AT RIGHT ANGLES TO BACK OF CURB. (SEE STD. PLAN C-12)
  4. MAXIMUM WIDTH OF DRIVE APPROACH SHALL BE 25' FOR RESIDENTIAL WHERE THE FRONTAGE IS 60' OR LESS. WHERE THE FRONTAGE IS GREATER THAN 60' A 42% FRONTAGE RATIO MAY BE USED, NOT TO EXCEED A 35' MAXIMUM. MAXIMUM WIDTH FOR COMMERCIAL SHALL BE 50'. THE DRIVE APPROACH SHALL BE LOCATED A MINIMUM OF 4' FROM PROPERTY LINE.
  5. BACK OF DRIVE APPROACH MAY BE SET A MAXIMUM OF 3" LOWER THAN THE BACK OF WALK TO FACILITATE LOT DRAINAGE.
  6. ALL COMMERCIAL DRIVE APPROACHES SHALL EXTEND 10' BEHIND THE CURB.
  7. ALL RESIDENTIAL DRIVE APPROACHES AND ALLEY APPROACHES IN RESIDENTIAL ZONE SHALL EXTEND TO THE BACK OF SIDEWALK AS ESTABLISHED IN THE BLOCK, IF SIDEWALK IS NOT EXISTING IN BLOCK, MINIMUM OF 5' FROM BACK OF CURB.
  8. NOT MORE THAN 50% OF FRONTAGE SHALL BE USED AS A DRIVE APPROACH.
- \* SETBACK IS REQUIRED FOR TRAFFIC SAFETY CONSIDERATIONS. AREA MAY BE DESIGNATED 'NO PARKING' OR TURNING RESTRICTIONS FROM DRIVEWAYS MAY BE IMPOSED IN HIGH TRAFFIC LOCATIONS. COMPLY WITH DRIVEWAY REQUIREMENTS IN THE CIRCULATION ELEMENT.

MINOR STREET



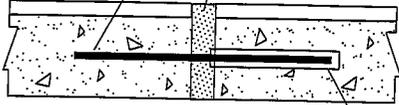
**DRIVE APPROACH LOCATIONS**

**COMMERCIAL, PROFESSIONAL-OFFICE, & MANUFACTURING ZONES  
( ZONE C, P-O, & M )**



1/2"X20" SMOOTH REINFORCING STEEL

1/2" PRE-FORMED EXPANSION JOINT



ONE END OF REINFORCING STEEL TO BE WRAPPED WITH BUILDING PAPER, GREASED OR 10" METAL SLEEVE TO PERMIT MOVEMENT.

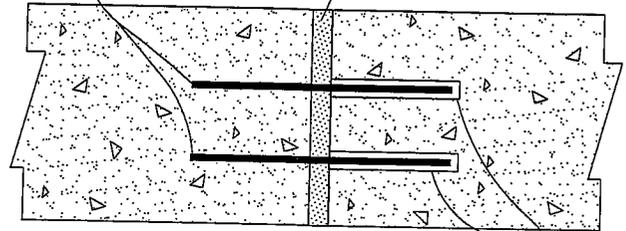
**DETAIL A**

**1/2" EXPANSION JOINT**

LOCATIONS : ALLEY APPROACH AT CURB & GUTTER,  
X-GUTTER AT CURB & GUTTER

1/2"X20" SMOOTH REINFORCING STEEL

1/2" PRE-FORMED EXPANSION JOINT



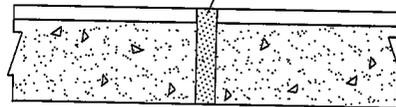
ONE END OF REINFORCING STEEL TO BE WRAPPED WITH BUILDING PAPER & GREASED OR 10" METAL SLEEVE OR PVC TO PERMIT MOVEMENT.

**SECTION B-B**

**1/2" EXPANSION JOINT**

LOCATIONS : BARRIER CURB

1/2" PRE-FORMED EXPANSION JOINT

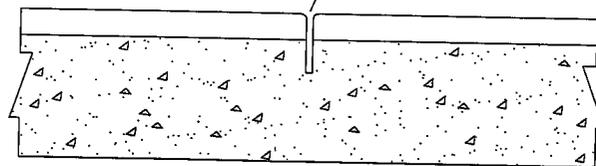


**SECTION C-C**

**1/2" EXPANSION JOINT**

LOCATIONS : V-GUTTER AT ALLEY APPROACHE, CATCH BASINS  
AND MISC. STRUCTURES

1/8" x 1 1/2" WEAKENED PLANE JOINT WITH TOOLED EDGES.



**SECTION D-D**

**WEAKENED PLANE JOINT**

LOCATIONS : DRIVE APPROACHES, SIDEWALK AT 20' O.C.,  
CURB & GUTTER AT 20' O.C. AND V-GUTTER AT 20' O.C.

**NOTES :**

1. 1/2" EXPANSION JOINT AT CONNECTION TO ALLEY APPROACH, CATCHBASINS AND MISC. STRUCTURES.
2. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 20' CENTERS AND SHALL BE A MIN. DEPTH OF 1 1/2" AND SHALL BE FINISHED WITH A SCORING TOOL LEAVING THE EDGES ROUNDED.

CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Baltomew Rodriguez* 9-04  
DIRECTOR OF PUBLIC WORKS R.C.E. 45304 DATE

**EXPANSION JOINT  
DETAILS**

**C-12**

REV.

**BASE MATERIAL REQUIRED IN REFERENCE TO THE EXPANSION INDEX :**

**EXPANSION INDEX LESS THAN 21**

1. VERY LOW EXPANSION POTENTIAL SOILS,  
NON-EXPANSIVE BASE MATERIAL IS NOT REQUIRED.

**EXPANSION INDEX 21 TO 50**

2. LOW EXPANSION POTENTIAL SOILS,  
PLACE A MIN. OF 4" OF NON-EXPANSIVE BASE MATERIAL  
BENEATH CONCRETE STRUCTURES. SATURATE THE BASE MATERIAL AND  
SUBGRADE WITH WATER 24 HOURS PRIOR TO POURING CONCRETE.

**EXPANSION INDEX 51 TO 90**

3. MEDIUM EXPANSION POTENTIAL SOILS,  
PLACE A MINIMUM OF 8" OF NON-EXPANSIVE BASE MATERIAL  
BENEATH CONCRETE STRUCTURES. SATURATE THE BASE MATERIAL  
AND SUBGRADE BY PONDING WATER ON IT FOR 24 HOURS PRIOR  
TO POURING CONCRETE.

**EXPANSION INDEX GREATER THAN 90**

4. VERY HIGH EXPANSION POTENTIAL SOILS,  
PLACE A MINIMUM OF 16" OF NON-EXPANSIVE BASE MATERIAL BENEATH  
CONCRETE STRUCTURES. SATURATE THE BASE MATERIAL AND SUBGRADE  
WITH WATER 24 HOURS PRIOR TO POURING CONCRETE. PLACE TWO NUMBER  
FOUR REINFORCING BARS IN THE CURB, CONTINUOUSLY. A PRELIMINARY SOILS  
REPORT CONTAINING RECOMMENDATIONS FOR MITIGATION CONCERNING SIDEWALK,  
CURB AND GUTTER CONSTRUCTION IS REQUIRED, IN ORDER TO GAIN APPROVAL  
OF AN ALTERNATIVE TO THE USE OF 16" OF NON-EXPANSIVE MATERIAL.

NOTE: IN ANY SUBDIVISION WHERE ANY INDIVIDUAL SOIL SAMPLE HAS AN EXPANSION INDEX GREATER THAN 50, THE CITY ENGINEER MAY REQUIRE ADDITIONAL SOIL SAMPLES AND TESTS, UP TO ONE SET PER THREE ACRES, FOR THE PURPOSE OF DETERMINING THE EXPANSIVE INDEX(ES) FOR THE PROPOSED DEVELOPMENT.

**SHRINK/SWELL POTENTIALS :**

**BASE MATERIAL REQUIRED IN REFERENCE TO THE SOIL CONSERVATION SERVICE CRITERIA**

1. AREAS WITH LOW SHRINK/SWELL POTENTIAL. NON-EXPANSIVE MATERIAL IS NOT REQUIRED. NO SOILS REPORT IS REQUIRED FOR BUILDING PERMITS.
2. AREAS CONTAINING SOIL THAT HAS A LOW TO MODERATE SHRINK/SWELL POTENTIAL, REQUIRES A MINIMUM OF 4 INCHES OF NON-EXPANSIVE MATERIAL BENEATH CONCRETE STRUCTURES. SATURATE THE BASE MATERIAL AND SUBGRADE WITH WATER 24 HOURS PRIOR TO POURING CONCRETE. A SOILS REPORT IS REQUIRED FOR ALL BUILDING PERMITS EXCEPT SINGLE FAMILY RESIDENTIAL.
3. AREAS CONTAINING SOIL THAT HAS A MODERATE SHRINK/SWELL POTENTIAL, REQUIRES A MINIMUM OF 8 INCHES OF NON-EXPANSIVE MATERIAL BENEATH CONCRETE STRUCTURES. SATURATE THE BASE MATERIAL AND SUBGRADE WITH WATER 24 HOURS PRIOR TO POURING CONCRETE. A SOILS REPORT IS REQUIRED FOR ALL BUILDING PERMITS.
4. AREAS CONTAINING SOIL THAT HAS A HIGH SHRINK/SWELL POTENTIAL, REQUIRES 16 INCHES OF NON-EXPANSIVE MATERIAL BENEATH CONCRETE STRUCTURES. SATURATE THE BASE MATERIAL AND SUBGRADE WITH WATER 24 HOURS PRIOR TO POURING CONCRETE. PLACE TWO NUMBER FOUR REINFORCING BARS IN CURB, CONTINUOUSLY. A SOILS REPORT IS REQUIRED FOR ALL BUILDING PERMITS.

NOTE: SEE APPENDIX A FOR SOIL CONSERVATION SERVICE SOILS LEGEND WITH SHRINK/SWELL POTENTIALS AND APPENDIX B FOR SOIL CONSERVATION SERVICE SOILS MAP FOR PORTERVILLE AREA (SEE POCKET AT THE BACK OF THESE STANDARDS).  
BASE MATERIAL WILL BE AS SHOWN ABOVE OR AS DETERMINED BY THE CITY ENGINEER.

CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 5-7-96  
CITY ENGINEER R.C.E. 20186 DATE

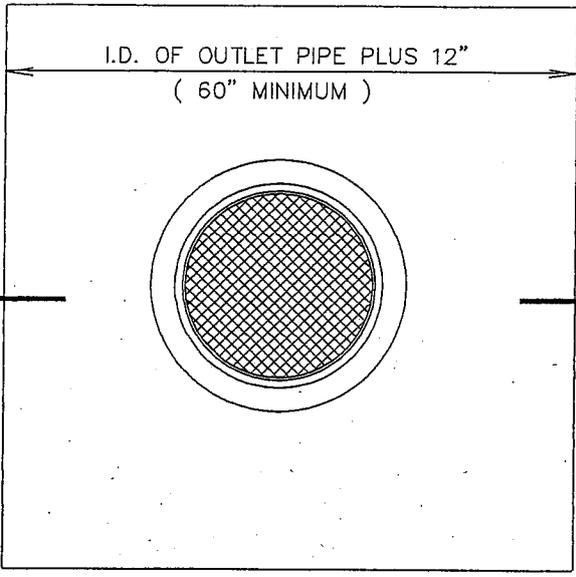
SPECIFICATIONS FOR CONSTRUCTION  
OF CONCRETE IMPROVEMENTS  
ON EXPANSIVE SOILS

C-13

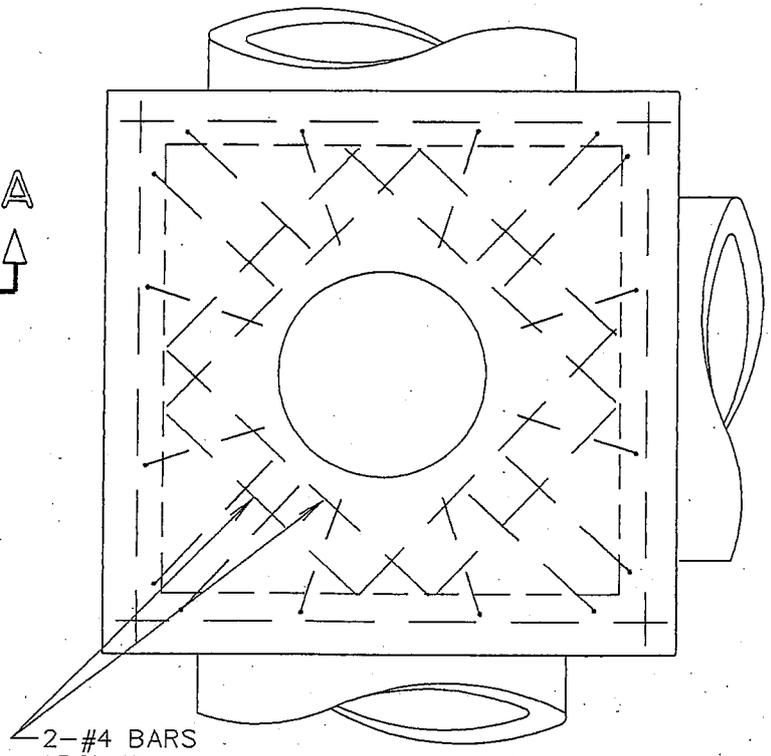
REV.

**CATCH BASINS**  
**D-1 THROUGH D-9**

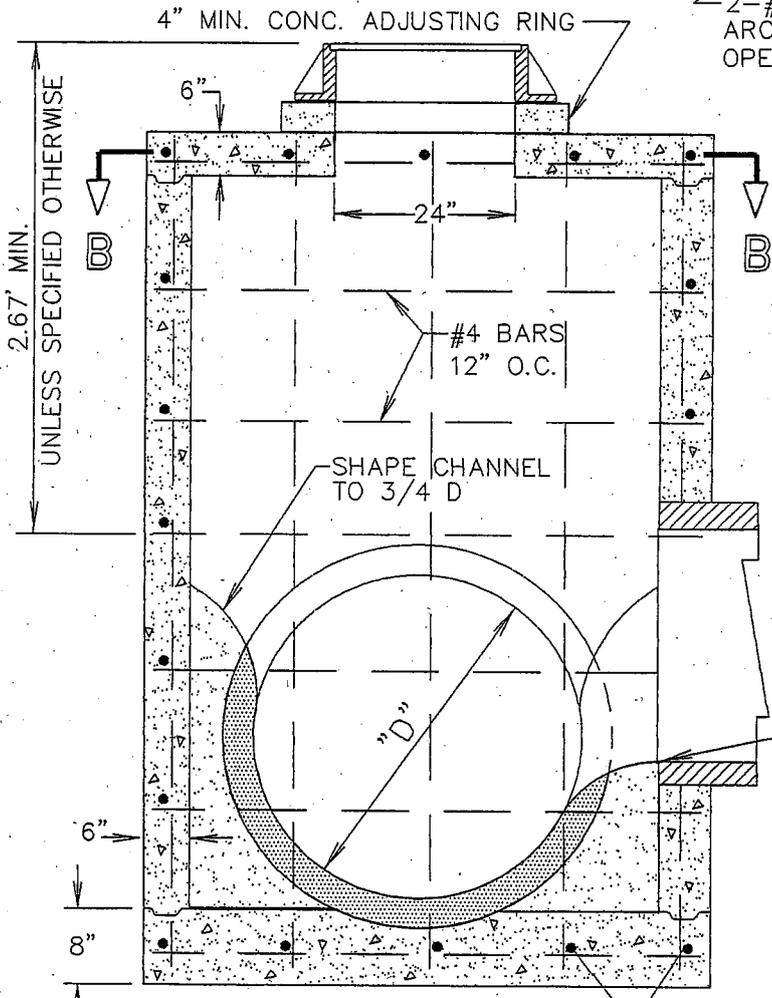
**CATCH BASINS (D-1 THROUGH D-9)**



**PLAN**  
CAST IRON MANHOLE COVER & LID  
PER STD. DWGS



**SECTION B-B**  
( SHOWING REINFORCEMENT PATTERN )



**SECTION A-A**

**NOTES :**

1. FLOOR OF BASIN SHALL BE TROWELED TO A HARD, SMOOTH SURFACE, AND SHALL SLOPE FROM ALL DIRECTIONS TO THE OUTLET.
2. REINFORCING STEEL IN WALL AND FLOOR SHALL BE NO. 4 BARS AT 12" CENTERS PLACED 1 1/2" CLEAR TO INSIDE OF BOX.
3. CONCRETE SHALL BE 6 SACK 3000# DESIGN MIX.

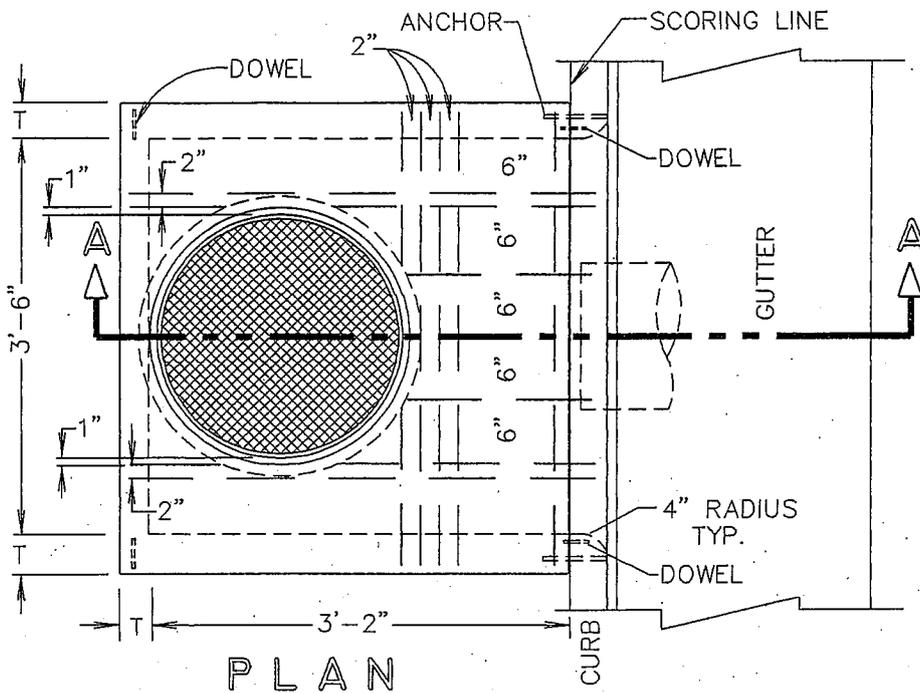
ELEVATION TO BE SHOWN ON PLANS

1/2" DIA. REINFORCEMENT BARS @ 12" O.C.

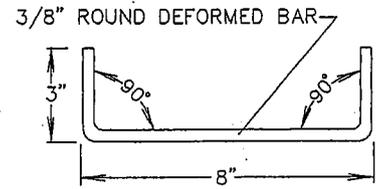
CITY OF PORTERVILLE  
ENGINEERING DIVISION  
*Harold L. Hill*  
CITY ENGINEER R.C.E. 20186 DATE 2-15-99

STANDARD SQUARE  
MANHOLE

D-1  
REV.

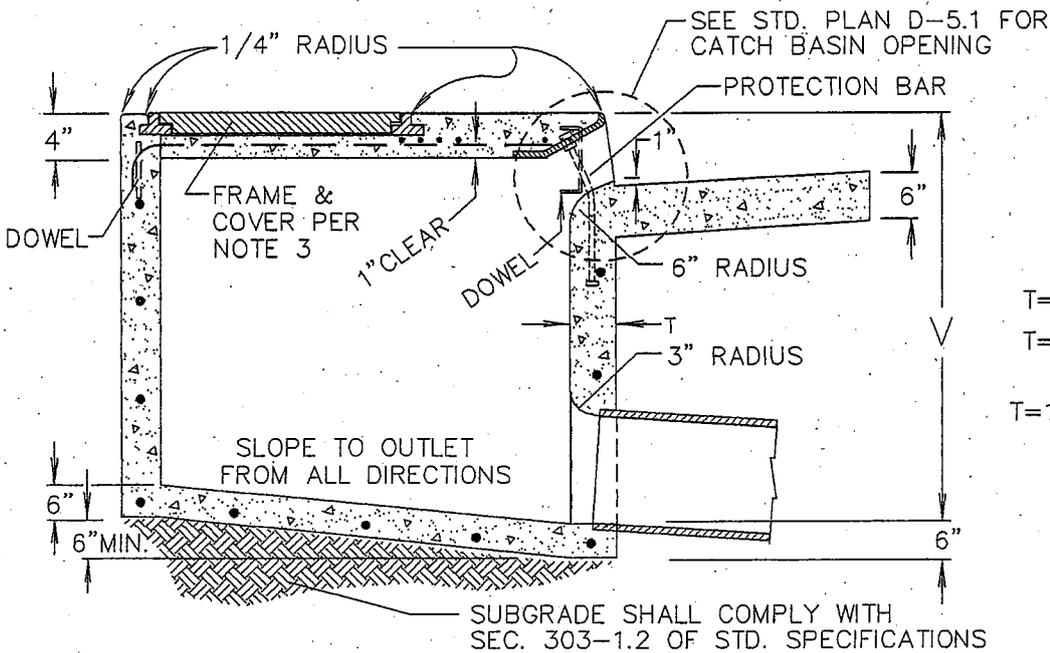


PLAN



DETAIL OF DOWEL

TO BE USED WHEN TOP IS POURED SEPARATE, ONE AT EACH CORNER



SECTION A-A

DIMENSIONS :

- T=6" IF "V" 4'-0" OR LESS
- T=8" IF "V" IS BETWEEN 4'-0" AND 8'-0"
- T=10" IF "V" IS 8'-0" OR MORE

NOTES :

1. FLOOR OF BASIN SHALL BE TROWELED TO A HARD, SMOOTH SURFACE, AND SHALL SLOPE FROM ALL DIRECTIONS TO THE OUTLET.
2. MANHOLE SHALL BE PLACED ALONG BACK WALL NEAR OUTLET.
3. FRAME AND COVER, PINKERTON NO. A-335 OR APPROVED EQUAL.
4. REINFORCING STEEL IN WALL AND FLOOR SHALL BE NO. 4 BARS AT 12" CENTERS PLACED 1 1/2" CLEAR TO INSIDE OF BOX, (NOT REQUIRED UNLESS "V"=4' OR MORE).
5. REINFORCING STEEL IN TOP SHALL BE NO. 3 BARS AS DRAWN 1" CLEAR TO INSIDE OF BOX.
6. FACE ANGLE PER STD. PLAN D-5.1
7. CONCRETE SHALL BE 6 SACK 3000# DESIGN MIX.
8. SEE STD. PLAN D-6 FOR LOCAL DEPRESSION.
9. SEE STANDARD PLAN D-7 FOR PROTECTION BAR.

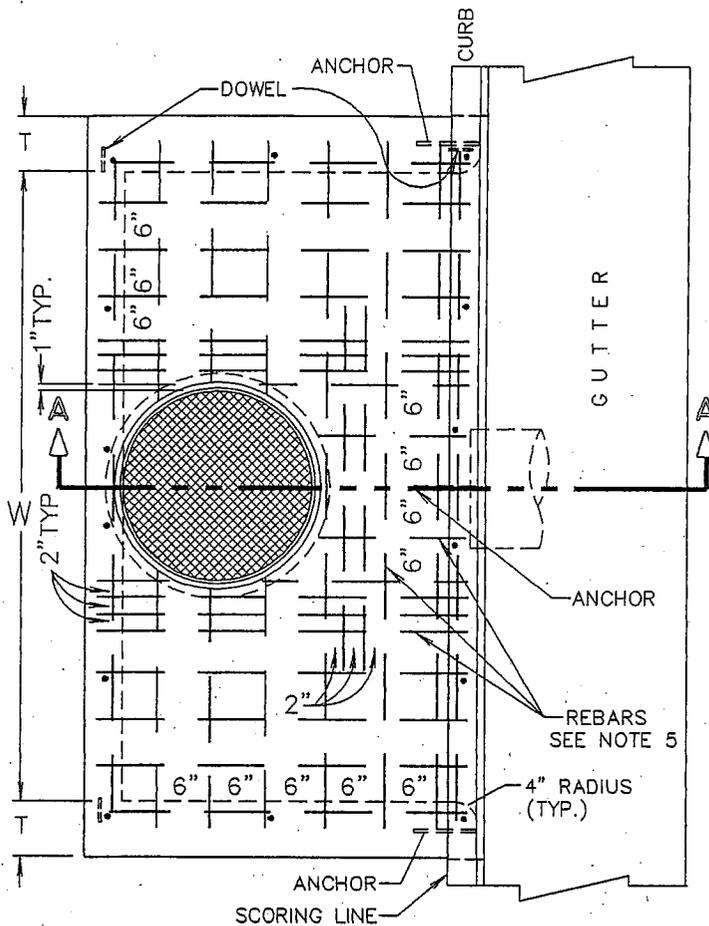
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill*  
CITY ENGINEER R.C.E. 20186 DATE 2-15-99

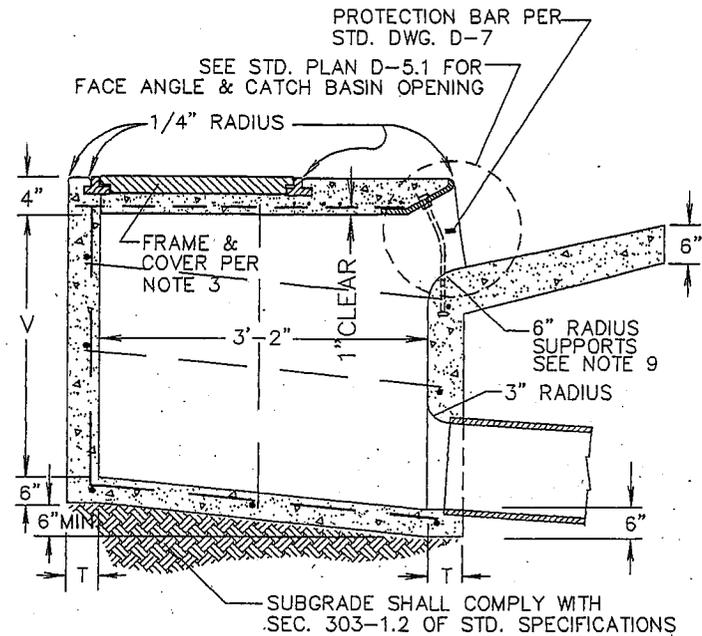
CATCH BASIN

D-2

REV.



PLAN



SECTION A-A

**DIMENSIONS :**

- T=6" IF "V" 4'-0" OR LESS
- T=8" IF "V" IS BETWEEN 4'-0" AND 8'-0"
- T=10" IF "V" IS 8'-0" OR MORE
- W=21' MAXIMUM

**NOTES :**

1. FLOOR OF BASIN SHALL BE TROWELED TO A HARD, SMOOTH SURFACE, AND SHALL SLOPE FROM ALL DIRECTIONS TO THE OUTLET.
2. MANHOLE SHALL BE PLACED ALONG BACK WALL NEAR OUTLET.
3. FRAME AND COVER, PINKERTON NO. A-335 OR APPROVED EQUAL.
4. REINFORCING STEEL IN WALL AND FLOOR SHALL BE NO. 4 BARS AT 12" CENTERS PLACED 1 1/2" CLEAR TO INSIDE OF BOX.
5. REINFORCING STEEL IN TOP SHALL BE NO. 3 BARS AS DRAWN 1" CLEAR TO INSIDE OF BOX.
6. FACE ANGLE PER STD. PLAN D-5.1
7. CONCRETE SHALL BE 6 SACK 3000# DESIGN MIX.
8. REINFORCING STEEL NOT REQUIRED IN WALL OR FLOOR FOR "W" ≤ 7' AND "V" ≤ 4'.
9. CURB OPENINGS LONGER THAN 7' SHALL HAVE ONE CURB SUPPORT FOR EACH 7' INCREMENT OR FRACTION THEREOF, EVENLY SPACED, 1" GALVANIZED ROD.
10. SEE STD. PLAN D-6 FOR LOCAL DEPRESSION.
11. SEE STANDARD PLAN D-2 AND D-7 FOR DETAILS OF DOWEL AND ANCHOR.
12. SEE STANDARD PLAN D-7 FOR PROTECTION BAR.

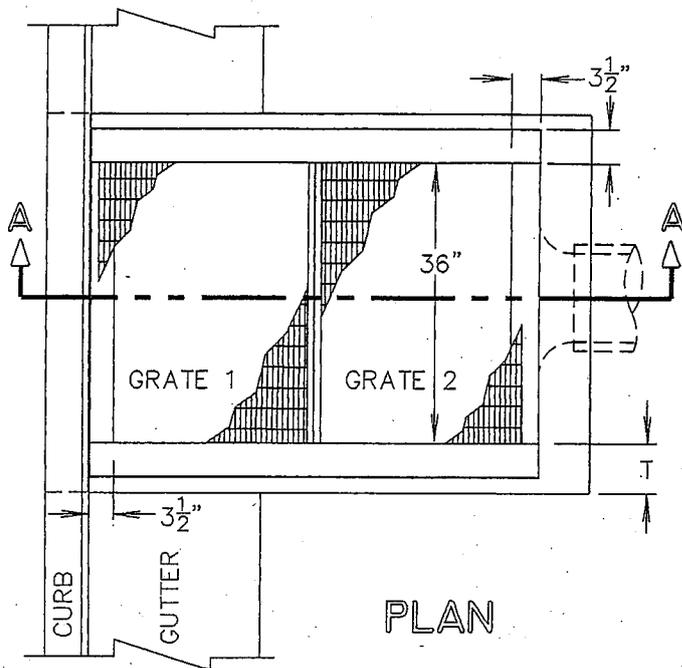
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill*  
CITY ENGINEER R.C.E. 20186 DATE 2-15-99

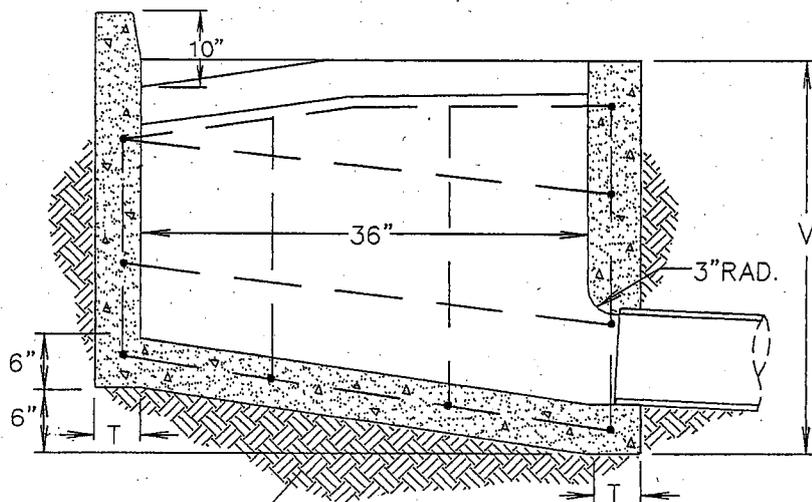
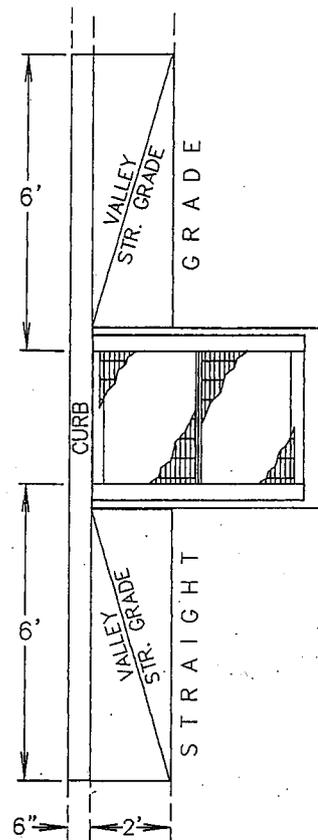
CATCH BASIN

D-3

REV.



PLAN



SUBGRADE SHALL COMPLY WITH SEC. 303-1.2 OF THE STD. SPECIFICATIONS

SECTION A-A

NOTES :

1. FLOOR OF BASIN SHALL BE TROWELED TO A HARD, SMOOTH SURFACE, AND SHALL SLOPE FROM ALL DIRECTIONS TO THE OUTLET.
2. USE HEAVY DUTY STEEL FRAMES/GRATES BY CHRISTY-NO. 71W452, 375# OR APPROVED EQUAL.
3. REINFORCING STEEL IN WALL AND FLOOR SHALL BE NO. 4 BARS AT 12" CENTERS EACH WAY, PLACED 1 1/2" CLEAR TO INSIDE OF BOX.
4. DIMENSION :  
 T=6" IF "V" 4'-6" OR LESS  
 T=8" IF "V" IS BETWEEN 4'-6" AND 8'-0"  
 T=10" IF "V" IS 8'-0" OR MORE
5. TOP OF BOX AND GRATES TO MATCH FINISHED PAVEMENT.
6. REINFORCING STEEL IN TOP SHALL BE NO. 3 BARS AS DRAWN 1" CLEAR TO INSIDE OF BOX.
7. CONCRETE SHALL BE 6 SACK 3000# DESIGN MIX.
8. PROVIDE VANDAL PROOF LOCKING BOLTS.
9. GRATES SHALL BE HOT DIP GALVANIZED FINISH.

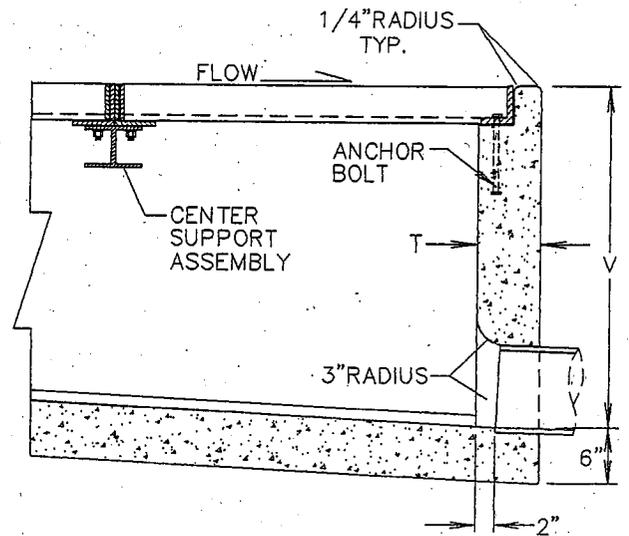
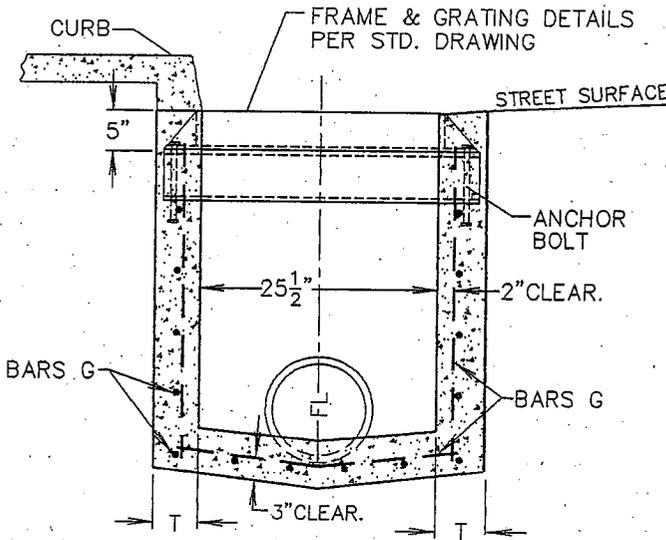
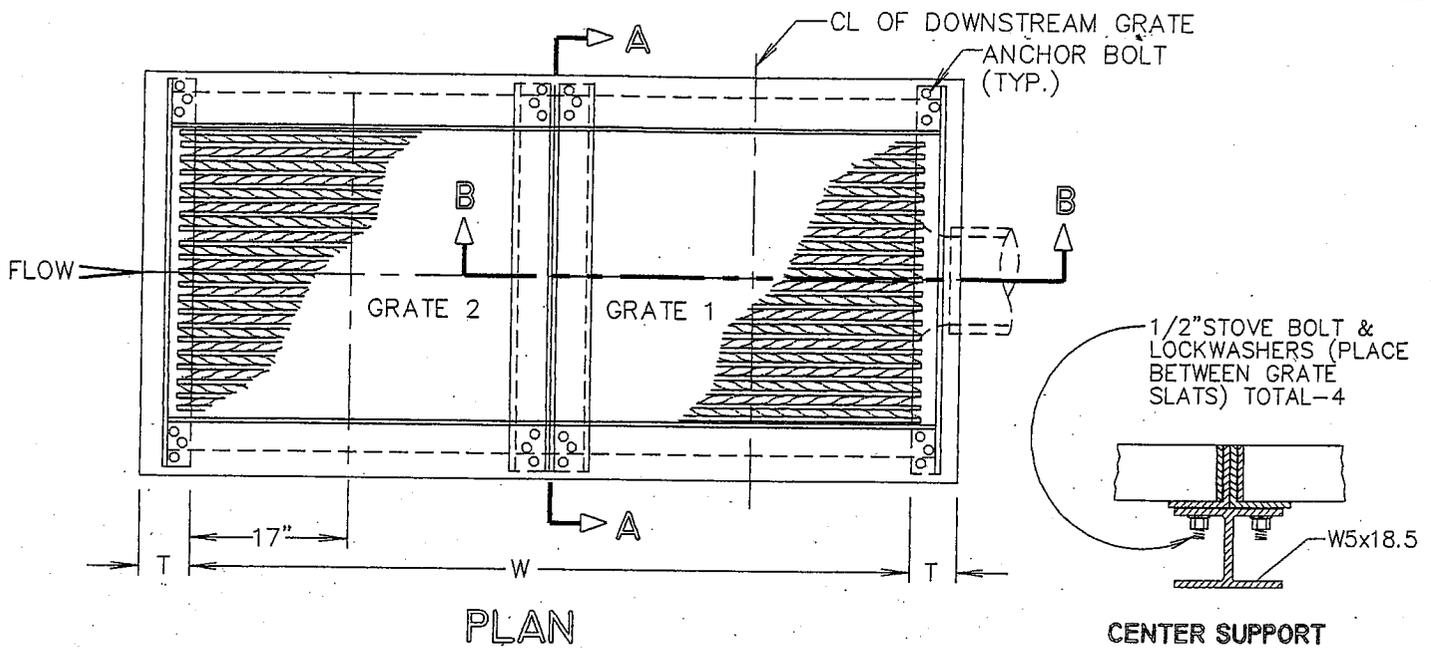
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill*  
CITY ENGINEER R.C.E. 20186 DATE 2-15-99

CATCH BASIN

D-4

REV.



**NOTES:**

**SECTION A-A**

**SECTION B-B**

1. **GRATING:**  
GRATE AND FRAME, CHRISTY FOUNDRY COMPANY NO. 71W432 (285#) OR APPROVED EQUAL.
2. **CONNECTOR PIPE:**  
PIPE SHALL BE LOCATED AT THE FLOOR & DOWNSTREAM END OF THE BASIN. PIPE SHALL BE TRIMMED TO FINAL LENGTH AND SHAPE BEFORE THE PLACEMENT OF CONCRETE.
3. **CONCRETE:**  
CONCRETE SHALL BE 6 SACK 3000# DESIGN MIX. FLOOR OF THE BASIN SHALL SLOPE FROM ALL WALLS TO THE OUTLET AND SHALL BE GIVEN A STEEL-TROWELED FINISHED SURFACE. WALLS OF THE BASIN CHAMBER SHALL BE POURED TO THE ELEVATION AND SLOPE OF THE EXISTING STREET SURFACE.

4. **DIMENSIONS:**

T=6" IF "V" 4'-6" OR LESS  
 T=8" IF "V" IS 4'-6" TO 8'-0"  
 T=10" IF "V" IS 8'-0" OR MORE  
 W=2'-11<sup>3</sup>/<sub>8</sub>" FOR ONE GRATE,  
 ADD 3'-5<sup>3</sup>/<sub>8</sub>" FOR EA. ADDITIONAL GRATE.

5. **REINFORCEMENT:**

V (FEET)		T (IN.)	SIDE & END WALL STEEL BARS G
FROM	TO (INCL.)		
	4	6	#3 @ 6"
4	8	8	#4 @ 6"
8	12	10	#5 @ 6"

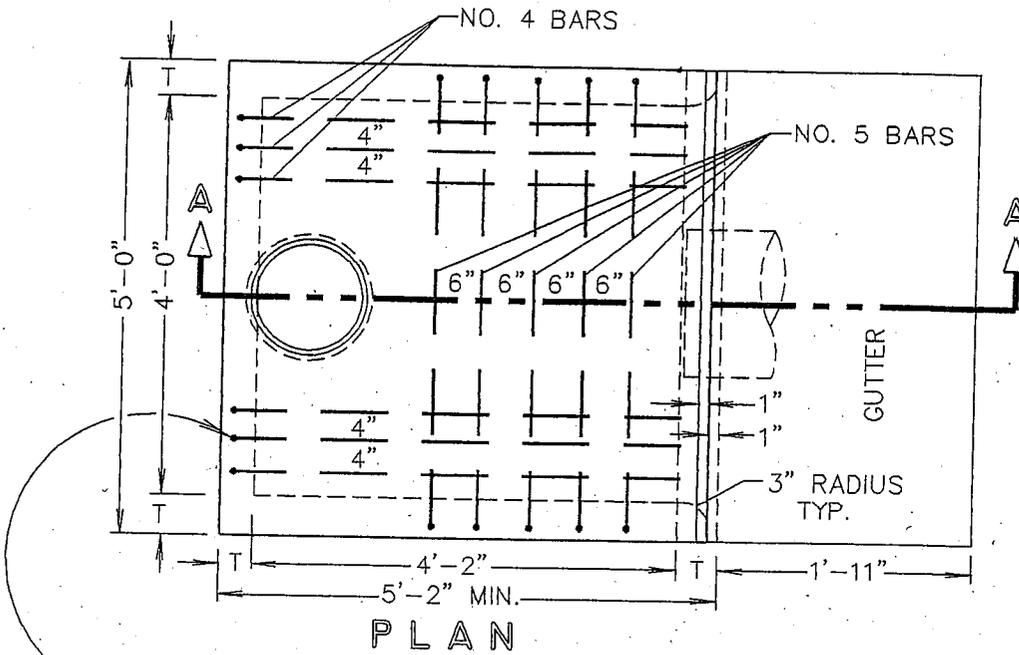
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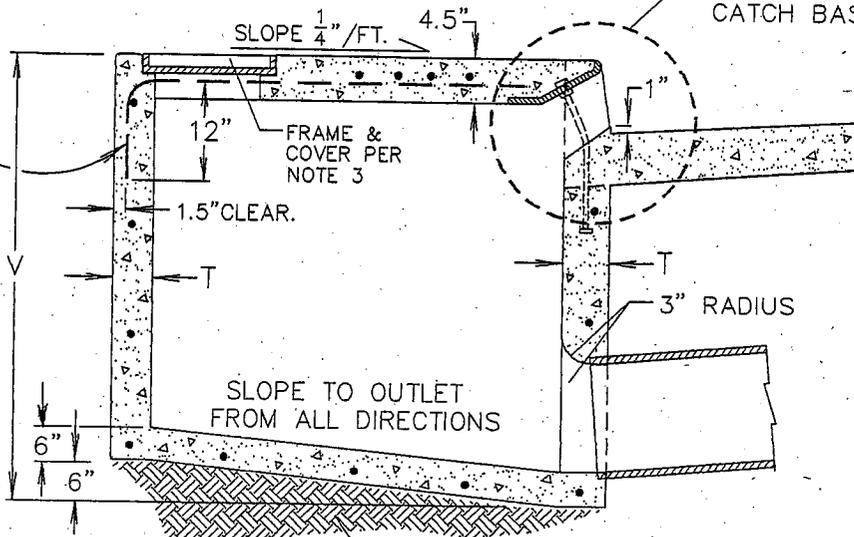
**GRATING  
 CATCH BASIN**

**D-4.1**

REV.



ALL TOP HORIZONTAL BARS BENT DOWN AND EMBEDDED IN THE WALL 12", TYP.



SUBGRADE SHALL COMPLY WITH SEC. 303-1.2 OF STD. SPECIFICATIONS

**SECTION A-A**

**DIMENSIONS :**

- T=6" IF "V" 4'-0" OR LESS
- T=8" IF "V" IS BETWEEN 4'-0" AND 8'-0"
- T=10" IF "V" IS 8'-0" OR MORE

**NOTES :**

1. FLOOR OF BASIN SHALL BE TROWELED TO A HARD, SMOOTH SURFACE, AND SHALL SLOPE FROM ALL DIRECTIONS TO THE OUTLET.
2. MANHOLE SHALL BE PLACED ALONG BACK WALL NEAR OUTLET.
3. FRAME AND COVER, PINKERTON NO. A-335 OR APPROVED EQUAL.
4. REINFORCING STEEL IN WALL AND FLOOR SHALL BE NO. 4 BARS AT 12" CENTERS PLACED 1 1/2" CLEAR TO INSIDE OF BOX, (NOT REQUIRED UNLESS "V"=4' OR MORE).
5. REINFORCING STEEL IN TOP SHALL BE NO. 4 & 5 BARS AS DRAWN, 1" CLEAR TO INSIDE OF BOX.
6. CONCRETE SHALL BE 6 SACK 3000# DESIGN MIX.
7. PLACE ONE SUPPORT BOLT AT CENTER OF CURB OPENING PER STD. DWG. D-5.1

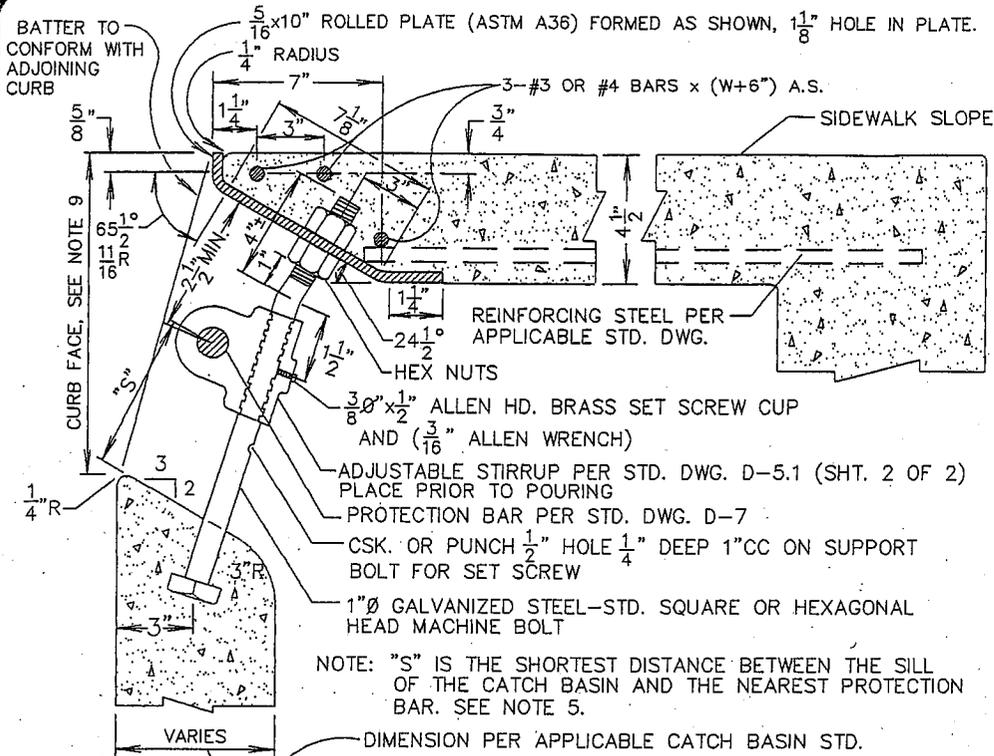
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**STANDARD SIPHON  
OUTLET STRUCTURE**

**D-5**

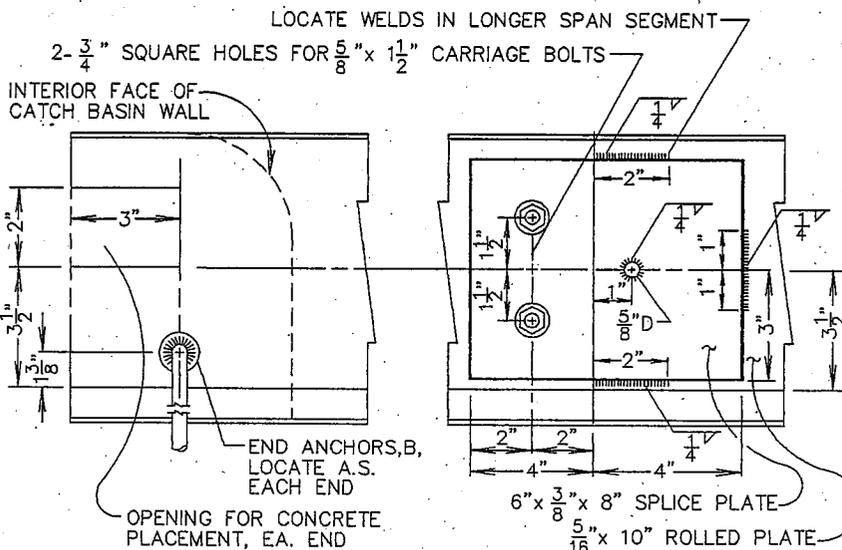
REV.



**CATCH BASIN OPENING SECTION**

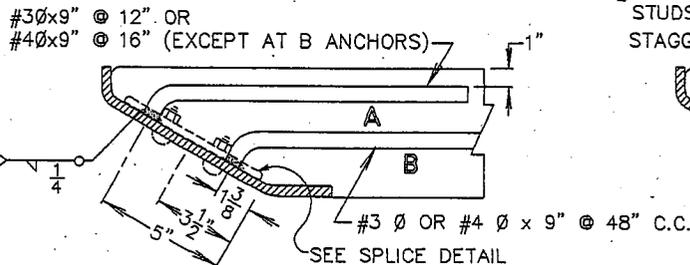
**NOTES:**

1. SUPPORT BOLT ANGLE "α" SHALL VARY TO CONFORM WITH BATTER OF ADJOINING CURB.
2. PROTECTION BAR SHALL BE INSTALLED, AND SUPPORT BOLTS SPACED ACCORDING TO STANDARD DRAWING.
3. SUPPORT BOLTS SHALL BE EQUAL IN LENGTH TO CURB FACE + 4" ± FOR ALL CURB BATTERS.
4. ALL EXPOSED METAL PARTS SHALL BE GALVANIZED AFTER FABRICATION.
5. PROTECTION BAR SPACING: PROTECTION BAR(S) SHALL BE INSTALLED WHEN THE MINIMUM CLEAR OPENING OF THE CATCH BASIN EXCEEDS 6". BAR(S) SHALL BE PLACED SUCH THAT NO MINIMUM CLEAR OPENING EXCEEDS 6".
  - (A) WHEN ONE BAR IS REQUIRED (S) SHALL BE 6 3/8"; HOWEVER, THIS SHALL BE REDUCED IF NECESSARY, SO THAT THE CENTER OF THE PROTECTION BAR IS NOT LESS THAN 2 1/2" FROM THE ROLLED PLATE.
  - (B) WHEN TWO OR MORE BARS ARE REQUIRED "S" SHALL BE 6 3/8" WITH REMAINING BAR SPACED AT 6 3/2" C.C. THE SPACING OF THE TOP BAR SHALL BE REDUCED, IF NECESSARY, SO THAT THE CENTER OF THE BAR IS NOT LESS THAN 2 1/2" FROM THE ROLLED PLATE.



**FACE PLATE END & SPLICE DETAILS**

6. WHERE CATCH BASINS ARE TO BE CONSTRUCTED ON CURVES, THE MAX. CHORD LENGTH FOR FACE PLATE SHALL BE SUCH THAT THE MAX. DIMENSION FROM SAID CHORD (MEASURED PERPENDICULAR THERETO) TO THE TRUE CURVE WILL NOT EXCEED ONE INCH. WHEN MORE THAN ONE CHORD IS REQUIRED, CHORD LENGTHS SHALL BE EQUAL.
7. WHEN LENGTH OF FACE PLATE IS BETWEEN 22' AND 43', THREE SECTIONS MAY BE USED. SECTIONS SHALL BE SPLICED ACCORDING TO THE SPLICE DETAIL. SPLICES SHALL BE PLACED ONE FOOT FROM SUPPORT BOLT.
8. LENGTH OF FACE PLATE IS W+12" FOR ALL CATCH BASINS EXCEPT THE DRIVEWAY CATCH BASINS.
9. CURB FACE SHALL BE AS REQUIRED BY STANDARD DRAWINGS OR AS SHOWN ON THE GENERAL PLAN.
10. SPACING OF ALL ANCHORAGE:
  - A. SET END ANCHORS 3" FROM ENDS OF FACE PLATE.
  - B. PLACE ONE "A" ANCHOR AT EA. SIDE OF ANY AND ALL SPLICE JOINTS AND WITHIN 6" THEREOF.



1/2" Ø x 8" (LENGTH AFTER WELD) ELECTRICALLY WELDED STUDS, NELSON H 4F SHEAR CONNECTOR, OR EQUAL; STAGGER AS INDICATED BELOW

NOTE: REINFORCING STEEL & SPLICE NOT SHOWN. SPACE 'A' ANCHORS APPROX. EVENLY AT 15" MAX. O.C. BETWEEN END ANCHORS AND ANCHORS AT SPLICE JOINTS EXCEPT OMIT AT 'B' ANCHOR LOCATION. SPACE 'B' ANCHORS AT APPROX. 45° MAX. BETWEEN END ANCHORS.

NOTE: CATCH BASIN TOP SLAB REINFORCING STEEL NOT SHOWN.

**ALTERNATE METHODS FOR FACE PLATE ANCHORAGE**

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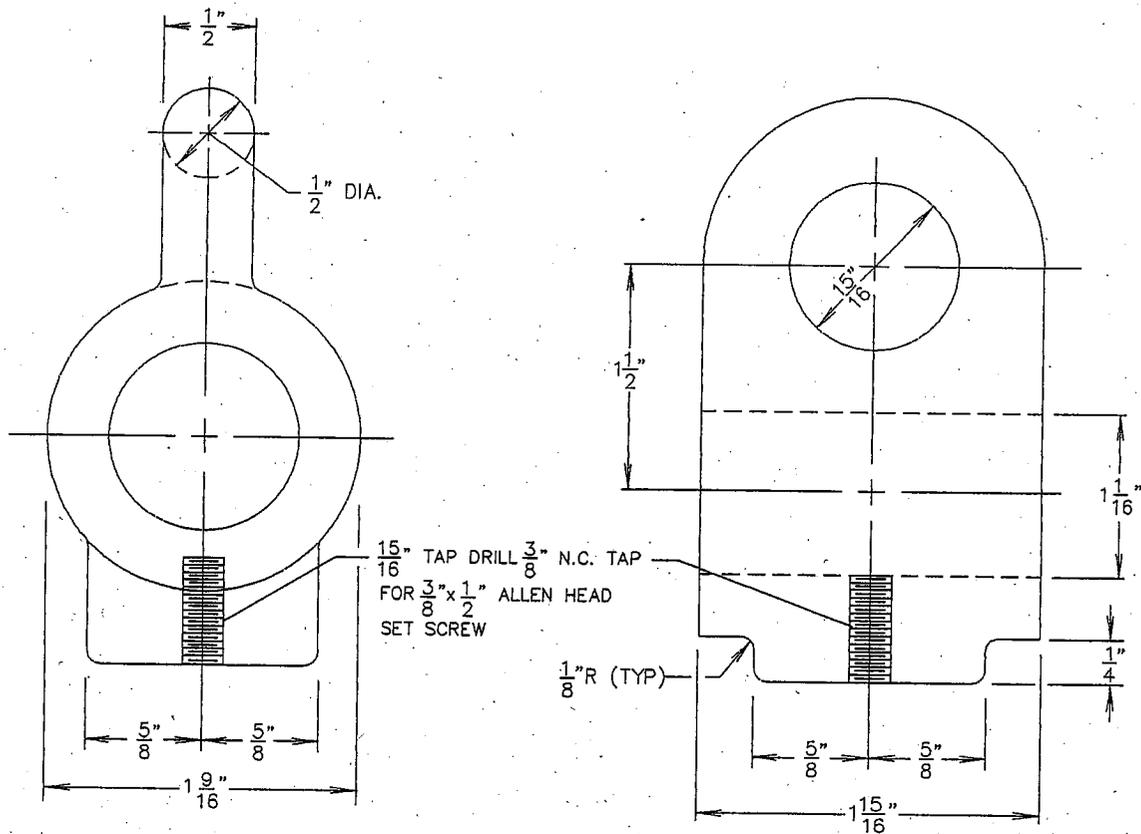
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**CATCH BASIN OPENING**

**D-5.1**

1 OF 2

REV.



- NOTE:
1. MATERIAL SHALL BE CAST STEEL.
  2. STIRRUPS SHALL BE GALVANIZED.
  3. FOR INSTALLATION DETAILS SEE STANDARD DRAWING.

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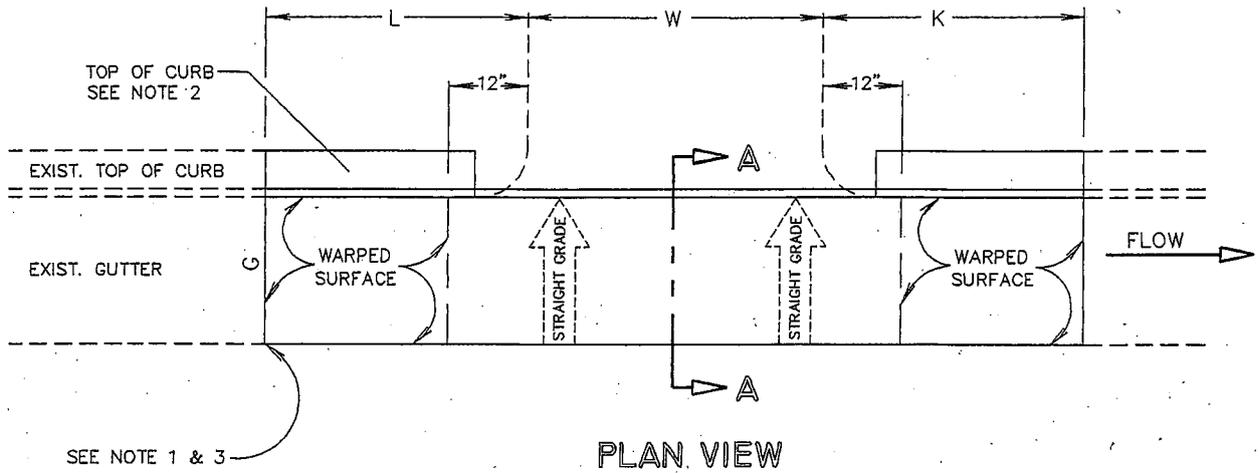
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ADJUSTABLE  
PROTECTION BAR STIRRUP

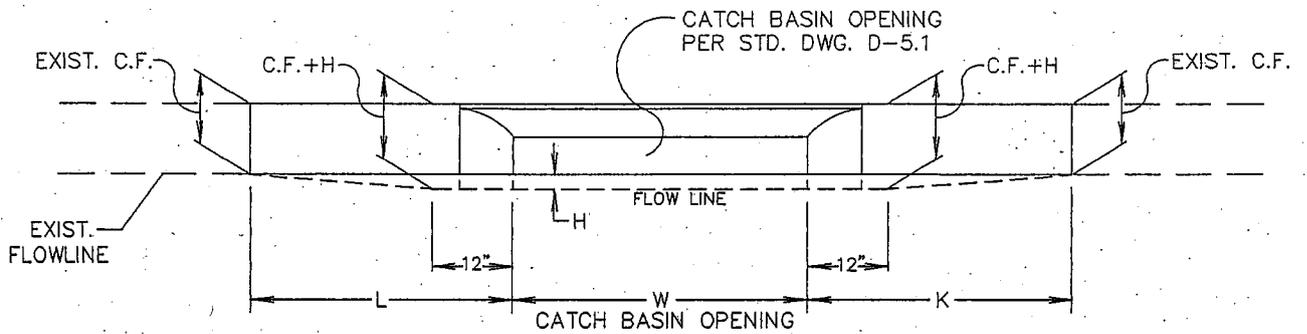
D-5.1

2 OF 2

REV.

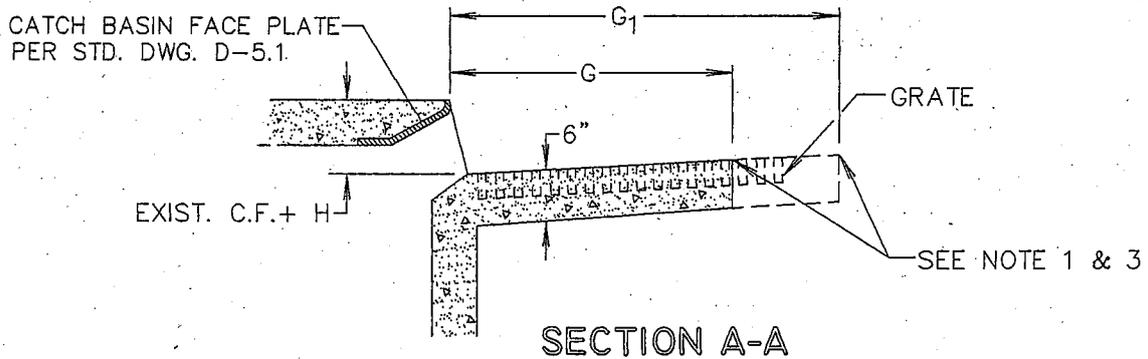


PLAN VIEW



ELEVATION

NOTE: TAKEN ALONG GUTTER FLOW LINE



SECTION A-A

**NOTES:**

1. ELEVATIONS AT OUTER CORNERS AND OUTER EDGE SHALL CONFORM TO FINISHED STREET SURFACE UNLESS OTHERWISE SHOWN ON PROJECT DRAWINGS.
2. WHERE NO CURB EXISTS, CURBS SHALL BE CONSTRUCTED BETWEEN ENDS OF LOCAL DEPRESSION. THE CURB SECTION SHALL CONFORM TO THAT OF THE CONTROLLING AGENCY.
3.  $G$  = EXISTING GUTTER.  
 $G_1$  = MEASURED TO OUTER EDGE FOR GRATING CATCH BASINS (SEE STD. DWG. D-4.1)  
 $L = K = 6$  FEET UNLESS OTHERWISE SPECIFIED ON PROJECT DRAWINGS.  
 $H = 1$  INCH WHEN  $G = 1$  FOOT.  
 $H = 2$  INCHES FOR LENGTHS OF  $G$  GREATER THAN 1 FOOT.
4. THIS STANDARD MAY BE USED TO INTERCEPT FLOWS FROM BOTH DIRECTIONS.

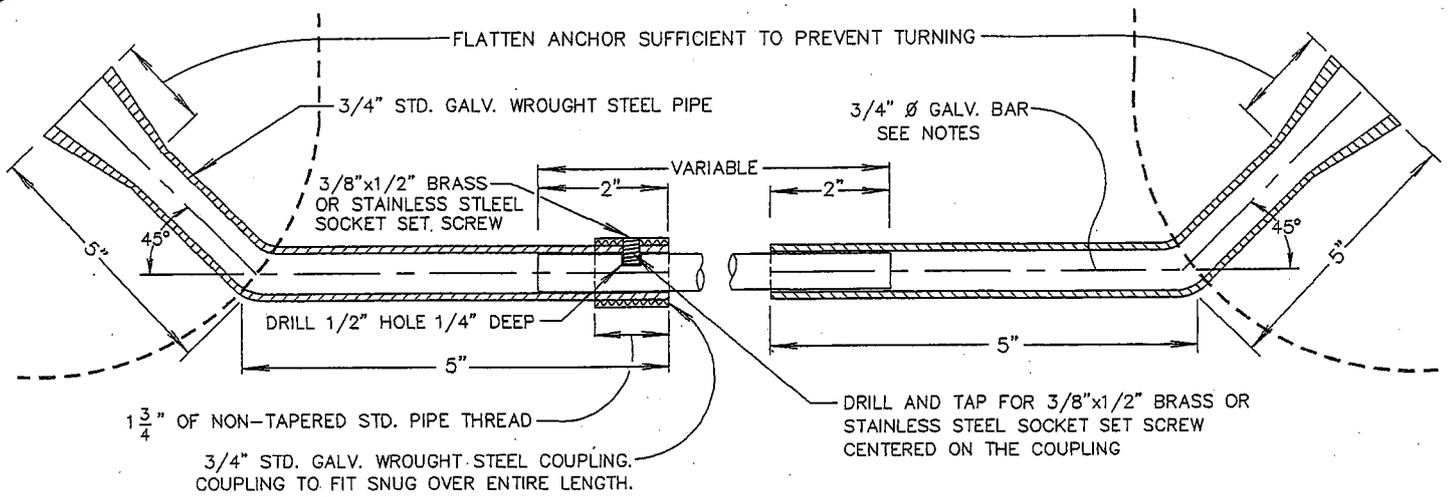
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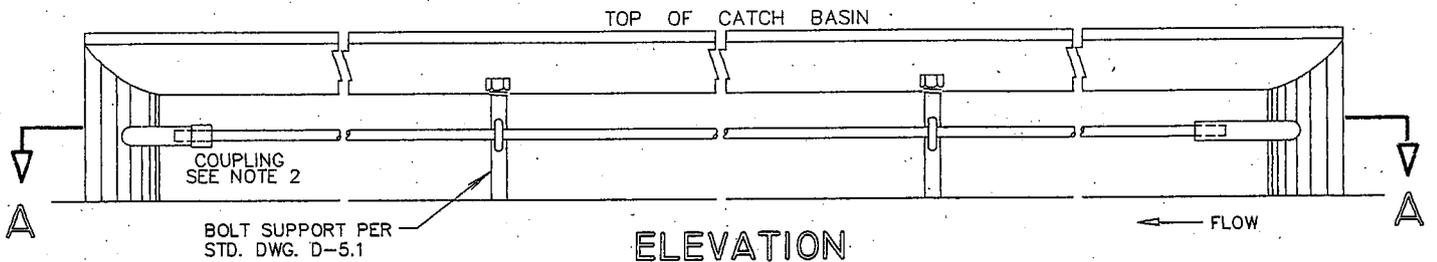
LOCAL DEPRESSION

D-6

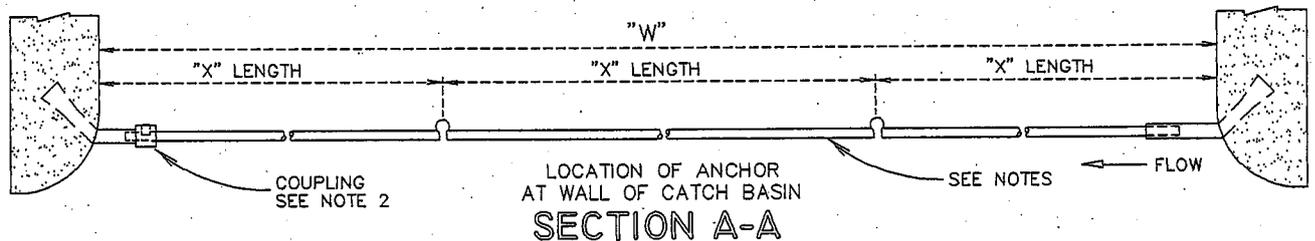
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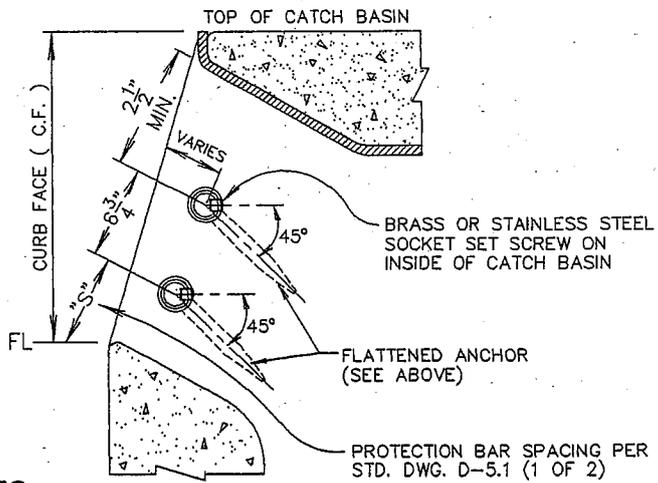
DETAIL OF ANCHOR



ELEVATION



SECTION A-A



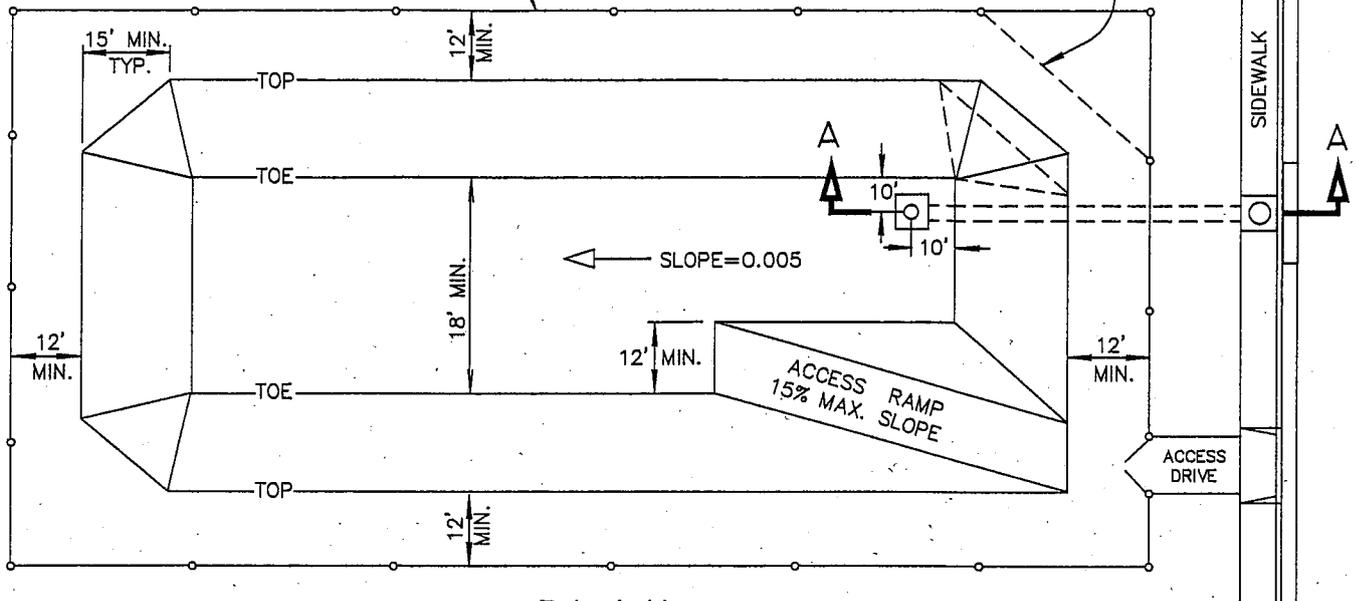
"W" ( INCL )	NUMBER OF SUPPORT BOLTS	NUMBER OF "X" LENGTHS
5' TO 10'	1	2
10' TO 15'	2	3
15' TO 20'	3	4
20' TO 25'	4	5
25' TO 30'	5	6

NOTES:

1. ALL BARS SHALL BE 3/4" GALV., HOT-ROLLED STEEL PER A.S.T.M. DESIGNATION A-36 BAR. LENGTHS SHALL NOT EXCEED 21' AND SHALL BE CUT TO FIT IN THE FIELD. WHEN "W" IS OVER 21', PROTECTION BAR SHALL CONSIST OF TWO OR MORE SECTIONS DEPENDING ON LENGTH OF BASIN. LOCATION OF SPECIAL SUPPORT BARS AND ADDITIONAL SOCKET SET SCREW SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. INSTALL COUPLING AT DOWNSTREAM END OF CATCH BASIN OPENING.

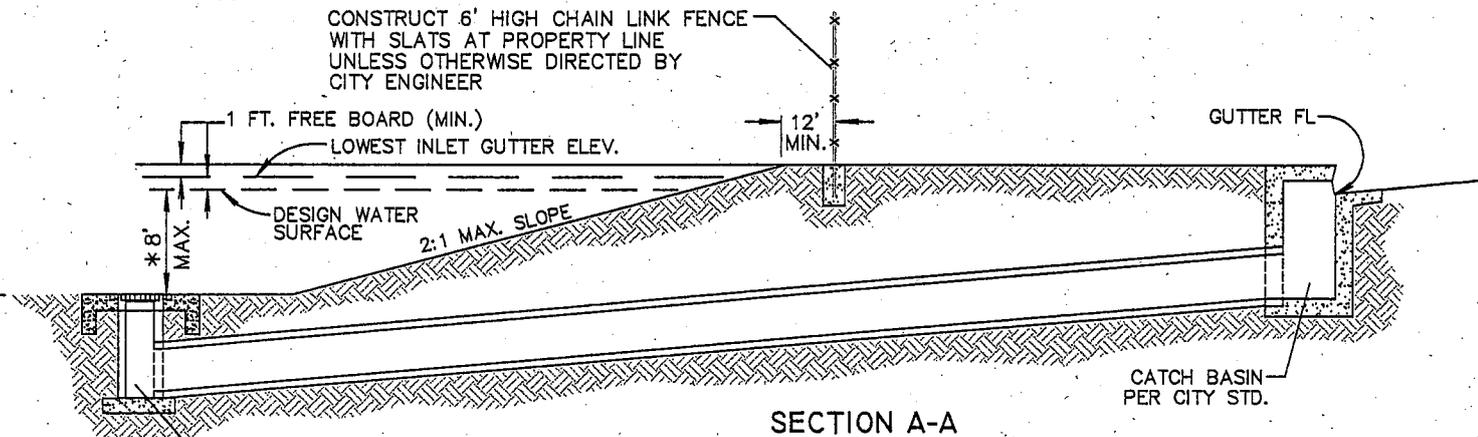
6' CHAIN LINK FENCE W/ APPROVED SLATS

FENCE CUTOFF AT STREET CORNERS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY TRAFFIC ENGINEER



PLAN

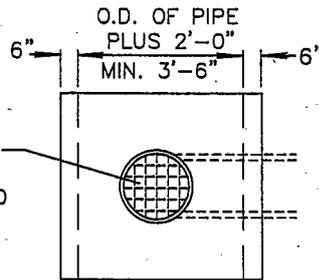
NOTE : LOCATION AND NUMBER OF DRIVE AND WALK GATES IN FENCE IS TO BE DETERMINED BY THE CITY ENGINEER



SECTION A-A

\* UNLESS OTHERWISE ALLOWED

PIPE OUTLET STRUCTURE SEE SHEET 2 OF 2



PLAN OUTLET STRUCTURE

NOTES :

SEE STD. PLAN D-9 FOR SPECIFIC DRAINAGE RESERVOIR DESIGN AND CONSTRUCTION REQUIREMENTS.

PIPE SHALL BE RCP III WITH GASKET JOINTS.

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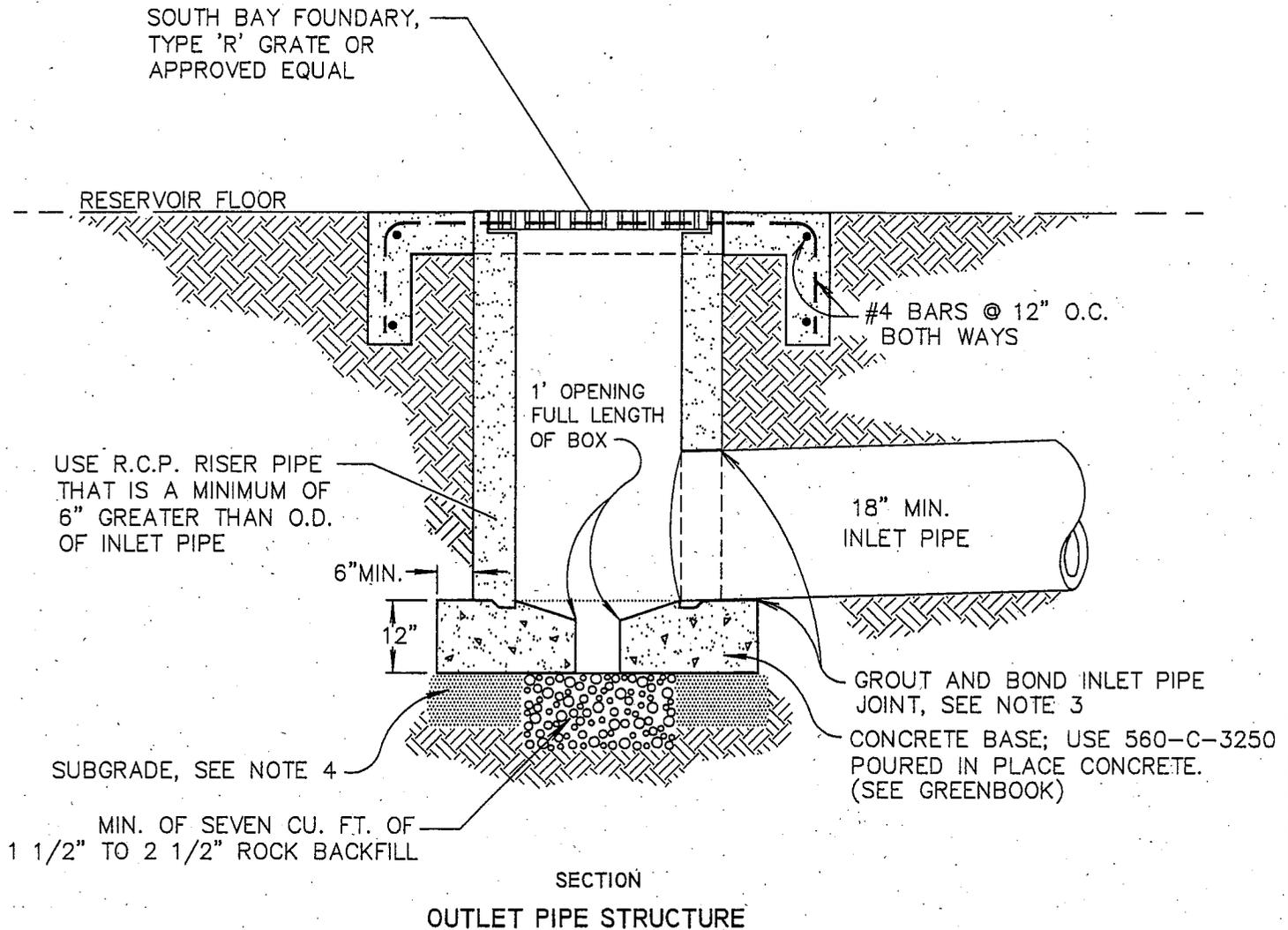
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# DRAINAGE RESERVOIR

D-8

1 OF 2

REV.



NOTES :

1. TROWEL CONCRETE TO A HARD, SMOOTH SURFACE.
2. CONSTRUCT R.C.P. RISER PIPE IN ACCORDANCE WITH ASTM DESIGNATION C-478. FOR STRUCTURES EXCEEDING 4'-6" IN DEPTH, FORM BAR LADDER INTO WALL.
3. USE A GROUT MIXTURE THAT IS ONE PART CEMENT PER TWO PARTS SAND.
4. MAKE SUBGRADE COMPLY WITH SECTION 303-1.2 OF STANDARD SPECIFICATIONS.

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**DRAINAGE RESERVOIR**

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REV.

SPECIFIC CONSTRUCTION REQUIREMENTS AND DESIGN CRITERIA FOR DRAINAGE SYSTEMS MUST COMPLY WITH THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (STANDARD SPECIFICATIONS), LATEST EDITION AND THE FOLLOWING REQUIREMENTS:

1. MASTER PLAN RETENTION RESERVOIRS WILL BE DEEDED IN FEE TO THE CITY OF PORTERVILLE. TEMPORARY RETENTION AND DETENTION RESERVOIRS WILL BE DEEDED AS AN EASEMENT TO THE CITY OF PORTERVILLE.
2. PERMANENT DRAINAGE RESERVOIRS WILL BE IN LOCATIONS DESIGNATED BY THE CITY'S LATEST ADOPTED STORM DRAIN MASTER PLAN OR AS DETERMINED BY THE CITY ENGINEER. TEMPORARY RESERVOIRS WILL ONLY BE ALLOWED WHEN DETERMINED BY THE CITY ENGINEER THAT IMPLEMENTATION OF THE STORM DRAIN MASTER PLAN IS NOT PRACTICAL.
3. LOCATE SECURITY FENCES 20 FEET FROM THE FRONT PROPERTY LINE, ON THE SIDE AND REAR PROPERTY LINES, AND 12 FEET FROM STREET SIDE PROPERTY LINE OF REVERSE CORNER LOTS.
4. SIDE SLOPES SHALL NOT EXCEED THE ANGLE OF REPOSE OF THE SOIL OR 2:1, WHICHEVER FLATTER.
5. ALL EXPOSED METAL IN THE OUTLET STRUCTURE WILL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
6. THE OUTLET STRUCTURE SHALL BE CONSTRUCTED WITH CONCRETE CLASS 560-C-3250, AS SPECIFIED IN SUBSECTION 201-I, "PORTLAND CEMENT CONCRETE", OF THE STANDARD SPECIFICATIONS. NO CONCRETE ADDITIVES ALLOWED UNLESS PRIOR APPROVAL IS OBTAINED FROM THE CITY ENGINEER.
7. EACH MASTER PLAN RESERVOIR MUST BE ENCLOSED WITH A CLASS 1, CHAIN LINK FENCE WITH APPROVED SLATS, CONSTRUCTED ACCORDING TO SUBSECTION 304-3, "CHAIN LINK FENCE", OF THE STANDARD SPECIFICATIONS AND STANDARD PLAN F-I. TEMPORARY DRAINAGE RESERVOIRS SHALL HAVE A MASONRY FENCE, ALONG STREET FRONTAGES, THAT CONFORMS TO STANDARD PLAN B-I. THE REMAINING THREE SIDES SHALL BE ENCLOSED BY A CLASS 1A CHAIN LINK FENCE, WITH APPROVED SLATS, IN ACCORDANCE WITH STANDARD PLAN F-I.
8. TEMPORARY DRAINAGE RESERVOIRS, THAT STORE STORM WATER AT A DEPTH OF 30-INCHES OR LESS, WILL NOT REQUIRE SECURITY FENCING. THESE SMALL TEMPORARY DRAINAGE RESERVOIRS REQUIRE ANNEXATION TO THE LANDSCAPE AND LIGHTING DISTRICT FOR MAINTENANCE PURPOSES.
9. DRAINAGE RESERVOIRS WITH STREET FRONTAGE(S) ARE TO BE IMPROVED WITH STREET PAVEOUT (3/4 STREET WIDTH, MINIMUM), CURB, GUTTER, SIDEWALK, AND A TWELVE (12) FOOT WIDE DRIVEWAY FROM THE BACK OF SIDEWALK TO THE ACCESS GATE. DRIVEWAYS TO TEMPORARY DRAINAGE RESERVOIRS SHALL BE ALL WEATHER. DRIVEWAYS TO MASTER PLAN DRAINAGE RESERVOIRS SHALL BE CONCRETE.

CITY OF PORTERVILLE  
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## CRITERIA FOR DRAINAGE SYSTEMS

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10. ALL NEW DRAINAGE RESERVOIRS, INCLUDING THE AREA BETWEEN THE FENCE AND BACK OF SIDEWALK SHALL BE STERILIZED WITH A PERMANENT STERILANT SUCH AS HYVAR X. ADDITIONAL TREATMENT TO THE AREA BETWEEN THE FENCE AND SIDEWALK, IF REQUIRED WITHIN ONE YEAR OF ACCEPTANCE, WILL BE AS DIRECTED BY THE CITY ENGINEER. USE AN APPLICATION RATE OF TWENTY-FIVE (25) POUNDS PER ACRE.
  
11. THE OPEN AREA BETWEEN THE FENCE AND THE BACK OF SIDEWALK IS TO BE IMPROVED WITH LANDSCAPING AND AN AUTOMATIC IRRIGATION SYSTEM THAT IS ACCEPTABLE TO THE PARKS DIRECTOR. ALL LANDSCAPING AND IRRIGATION SYSTEMS MUST BE PREPARED AND SUBMITTED BY A REGISTERED ENGINEER, ARCHITECT, OR LANDSCAPE ARCHITECT FOR THE PARKS DIRECTOR'S APPROVAL.
  
12. TEMPORARY DRAINAGE RESERVOIRS WILL BE ANNEXED INTO THE CITY'S LANDSCAPE AND LIGHTING DISTRICT.
  
13. DRY WELLS WILL BE REQUIRED AT THE CITY ENGINEER'S DISCRETION.
  
14. ALL NEW DRAINAGE RESERVOIRS WILL BE CONSTRUCTED AT MAXIMUM DEPTH THAT IS 10 FEET ABOVE THE HIGHEST HISTORICAL WATER TABLE.
  
15. THE REQUIRED STORAGE VOLUME OF A TEMPORARY RETENTION RESERVOIR (NON-MASTER PLAN RESERVOIR WITH NO OUTLET) WILL BE DETERMINED BY THE FOLLOWING (100-YEAR STORMS, 10- DAY DURATION) FORMULA:
 

V=CRA	V= VOLUME IN ACRE-FEET
	C= RUNOFF COEFFICIENT
	R= RAINFALL IN FEET $\frac{(6.45)}{12}$
	A= AREA OF WATERSHED IN ACRES
  
16. MODIFICATION OF THE REQUIRED STORAGE VOLUME, TO ACCOUNT FOR PERCOLATION, WILL BE CONSIDERED FOR TEMPORARY RETENTION RESERVOIRS. PERCOLATION TESTS & A WATER BALANCE ANALYSIS FOR THE 1, 2, 3, 5, & 10 DAY / 100 YR. EVENTS MUST BE PROVIDED. NOT MORE THAN 50 PERCENT OF THE PERCOLATION RATE WILL BE ALLOWED.
  
17. ALL RESERVOIRS WILL BE SIZED SO THAT THERE WILL BE A MINIMUM OF ONE (1) FOOT OF FREE BOARD BETWEEN THE CALCULATED WATER SURFACE AND THE LOWEST GUTTER INLET ELEVATION WITHIN THE DRAINAGE AREA.
  
18. SIZING DRAINAGE FACILITIES MUST COMPLY WITH THE LATEST ADOPTED STORM DRAIN MASTER PLAN.

19. THE RATIONAL FORMULA MAY BE USED FOR DETERMINING THE PEAK FLOWS OF STORM WATER THROUGH INDIVIDUAL DEVELOPMENTS THAT ARE LESS THAN 40 ACRES FOR THE PURPOSES OF DESIGNING DRAINAGE FACILITIES.

THE RATIONAL FORMULA IS AS FOLLOWS:

Q = CIA :      Q = PEAK RATE OF FLOW, IN CUBIC FEET PER SECOND.  
 C = RUNOFF COEFFICIENT.  
 I = INTENSITY OF RAINFALL IN INCHES PER HOUR DURING THE TIME OF CONCENTRATION.  
 A = AREA IN ACRES CONTRIBUTING TO THE FLOW

FOR LARGER AREAS, SUCH AS THE LARGE BASINS SHOWN ON THE CITY STORM DRAIN MASTER PLAN MAPS, THE SOIL CONSERVATION SERVICE (SCS) METHODOLOGY SHALL BE UTILIZED.

20. THE FOLLOWING ARE RETURN PERIODS FOR SIZING STORM WATER COLLECTION STRUCTURES, CHANNELS, PIPES AND RESERVOIRS:

<u>TYPE OF STRUCTURE</u>	<u>STORM RETURN FREQUENCY</u>
ALL STORAGE RESERVOIRS	1/100 YEARS
COMMERCIAL AND INDUSTRIAL AREAS	1/10 YEARS
ALL OTHER USES	1/2 YEARS

21. THE FOLLOWING CRITERIA SHALL BE USED FOR CALCULATING THE TIME OF CONCENTRATION:

- A. LOT TO STREET = 20 MINUTES (RESIDENTIAL).
- B. LOT TO STREET = 10 MINUTES (COMMERCIAL AND INDUSTRIAL).
- C. GUTTER VELOCITY = 2 FEET PER SECOND.
- D. GUTTER VELOCITY FOR STEEP TERRAIN WITHIN THE HILLSIDE AREAS OF PORTERVILLE REQUIRES SPECIFIC CALCULATIONS.

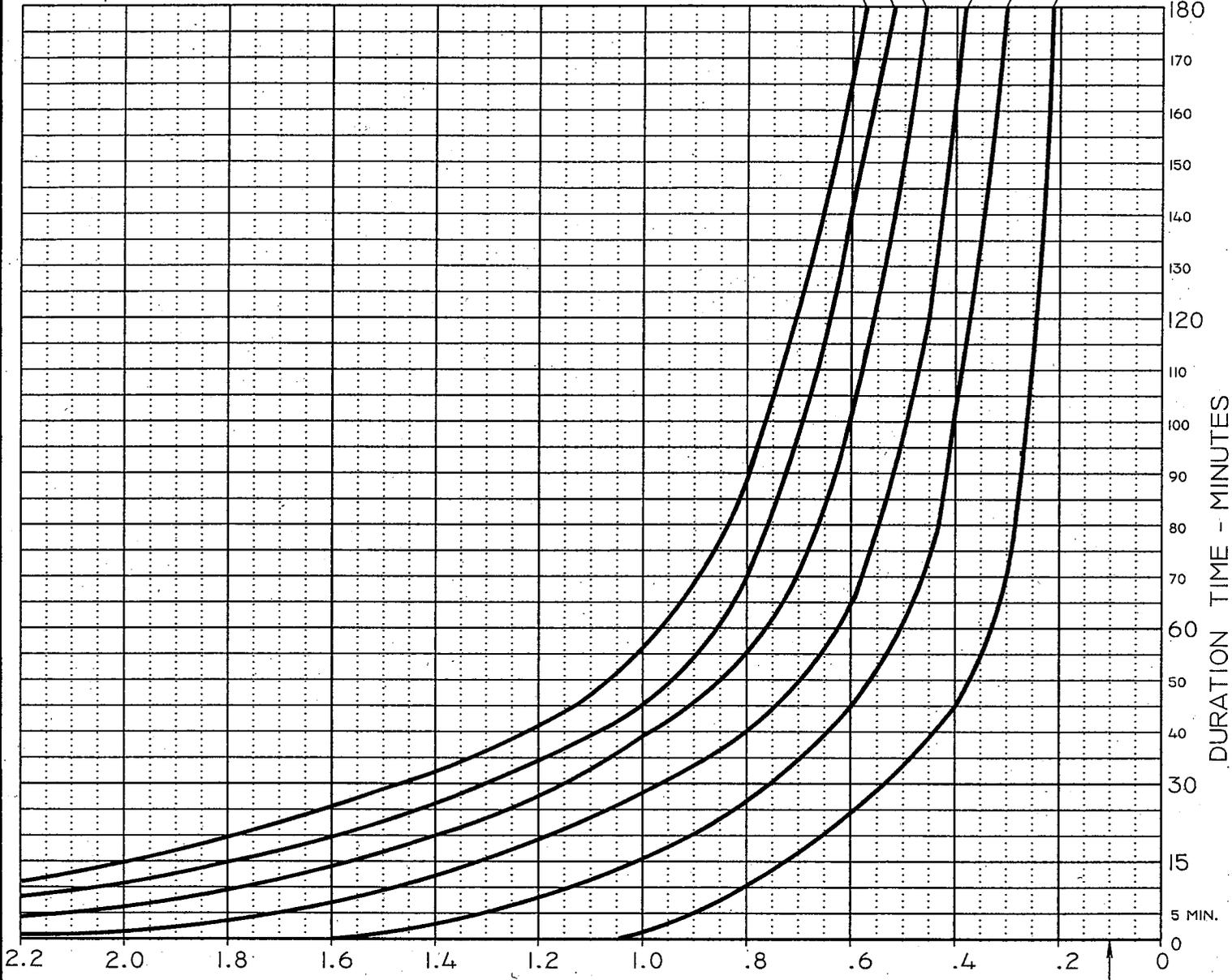
22. COSTS FOR MASTER PLAN FACILITIES ARE REIMBURSABLE. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF TEMPORARY DRAINAGE FACILITIES WILL BE THE RESPONSIBILITY OF EACH DEVELOPER. A MINIMUM OF TWO BONA FIDE BIDS ARE REQUIRED FOR REIMBURSEMENT.

23. DEVELOPERS ARE RESPONSIBLE FOR PAYING ALL STORM DRAINAGE FEES AS REQUIRED BY SECTION 19A-40, OF THE PORTERVILLE CITY CODE.

SOURCE: BASIC DATA FROM "BULLETIN 195",  
 STATE OF CALIF., DEPT. OF WATER  
 RESOURCES; BASED ON SUCCESS DAM  
 GAUGE MAINTAINED BY U.S.C.E.

STORM  
 RETURN PERIOD

25 YR.  
 50 YR.  
 100 YR.  
 10 YR.  
 5 YR.  
 2 YR.



RAINFALL INTENSITY - INCHES PER HOUR  
 ( AVERAGE RATE DURING DURATION TIME INDICATED )

.1 INCH  
 OF RAIN  
 (30 SCALE)

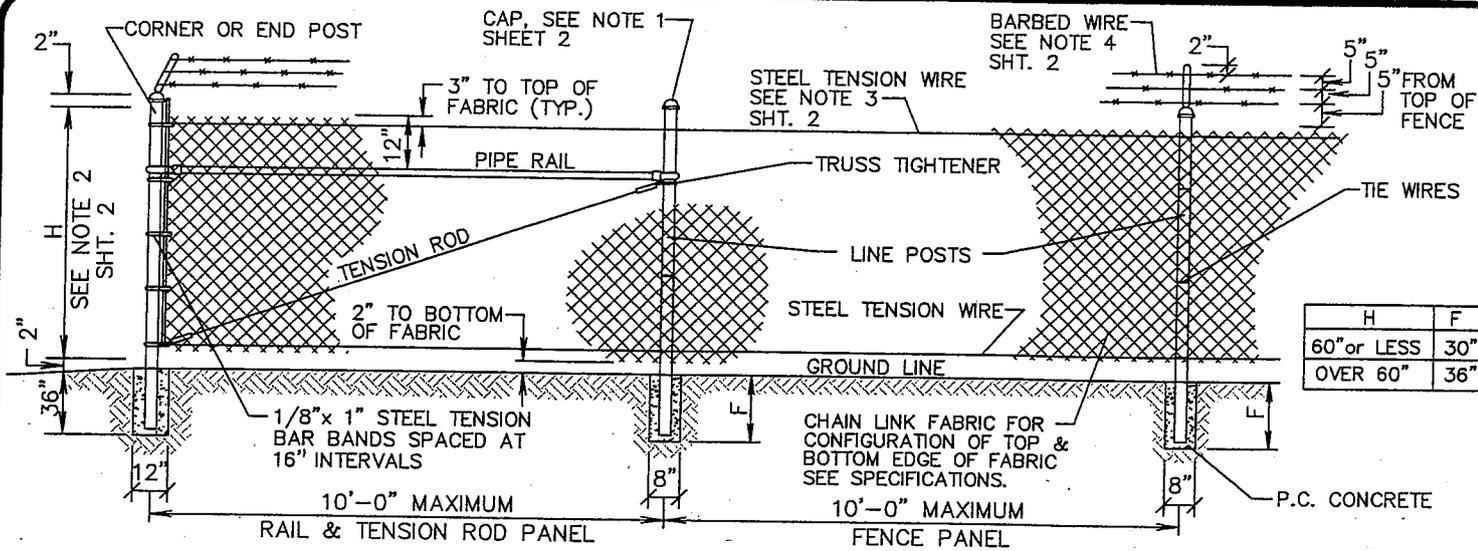
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 8-2002  
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PRECIPITATION INTENSITY,  
 FREQUENCY, DURATION CURVES

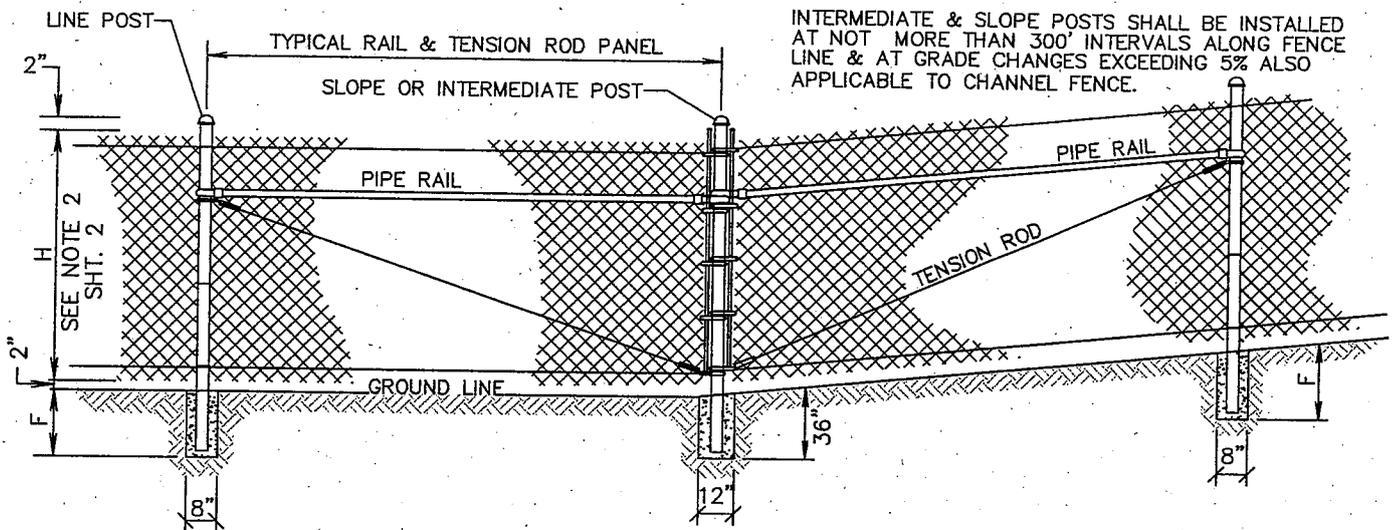
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**FENCES & GATES**  
**CHAIN LINK AND GATES**

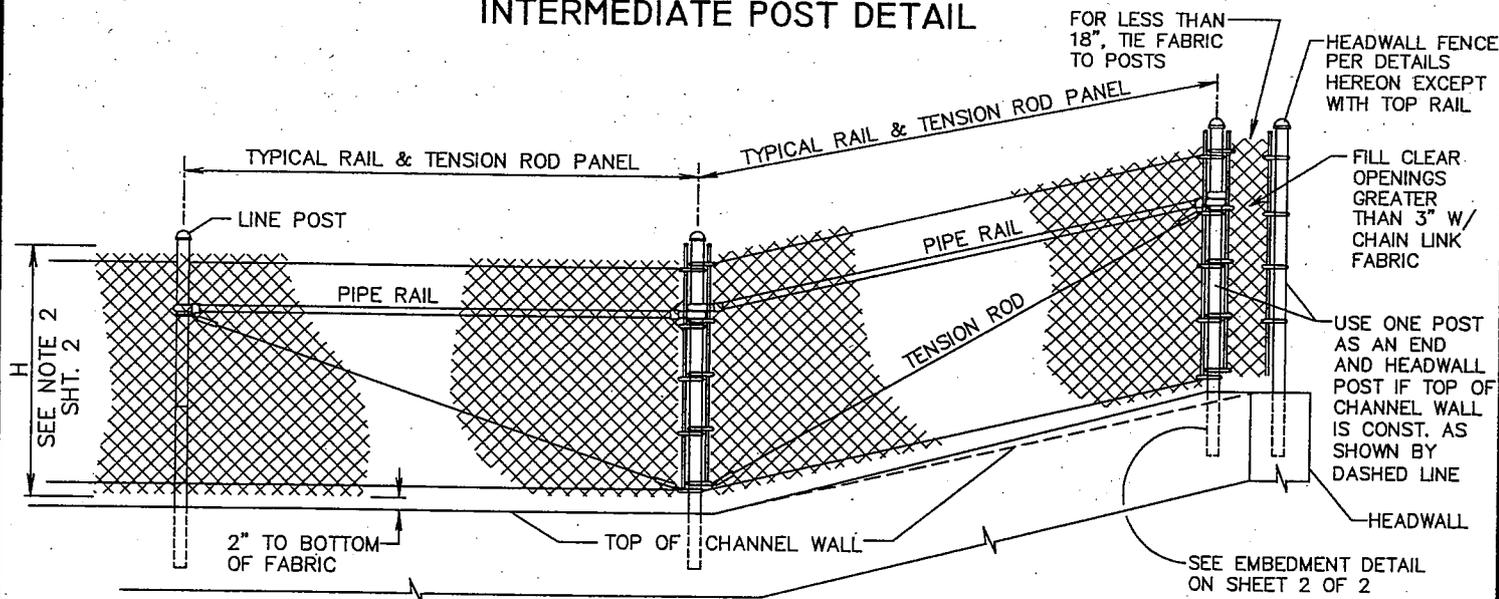
**F-1**



**TYPICAL FENCE ELEVATION**



**INTERMEDIATE POST DETAIL**



**CHANNEL WALL FENCE**

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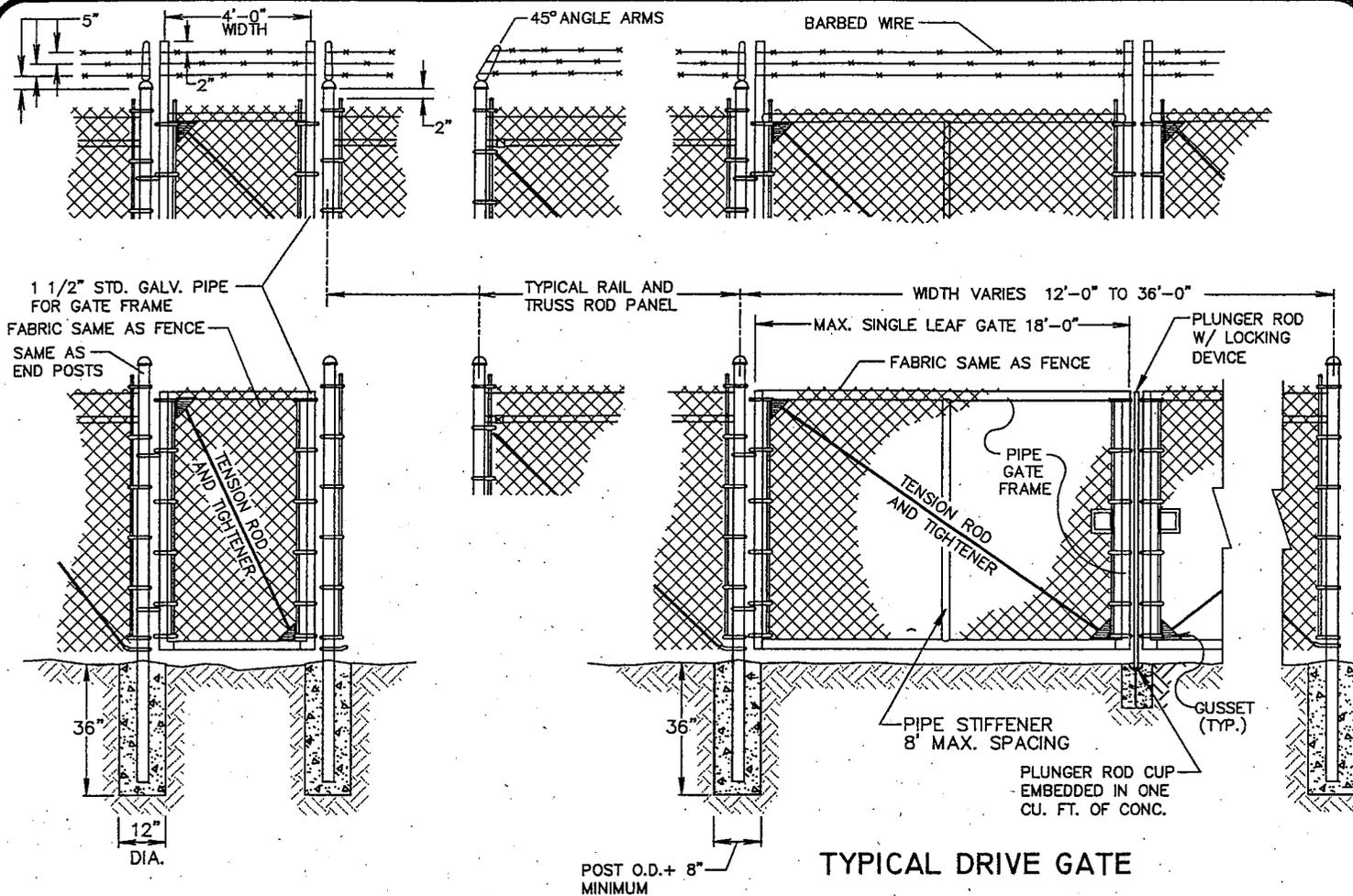
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**CHAIN LINK FENCE  
AND GATES**

**F-1**

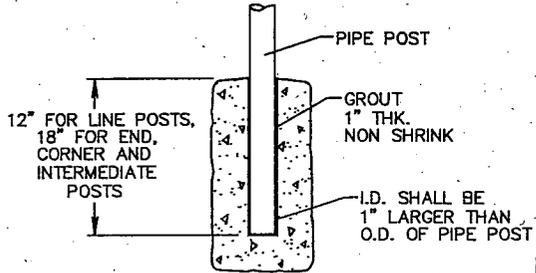
1 OF 2

REV.

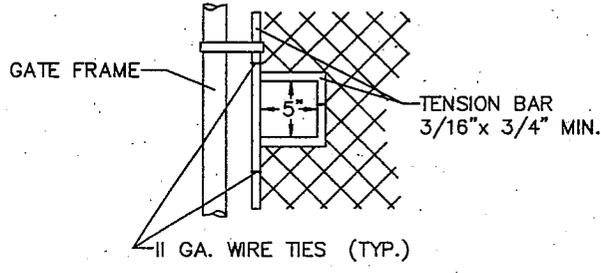


TYPICAL WALK GATE

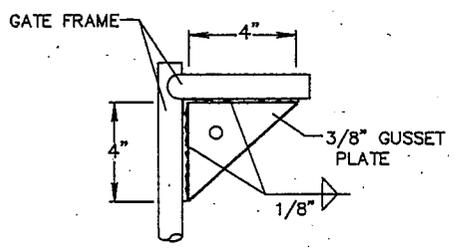
TYPICAL DRIVE GATE



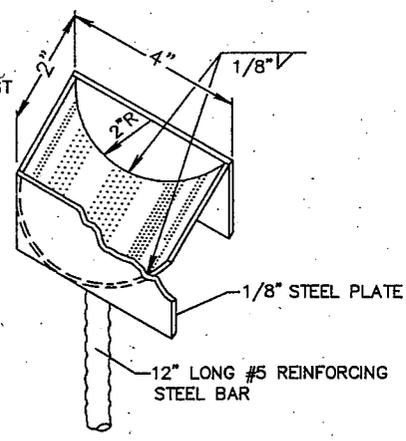
POST EMBEDMENT DETAIL  
CONCRETE HEADWALLS, RETAINING & CHANNEL WALLS, ETC.



CHAIN & LOCK CUT-OUT  
DETAIL



GUSSET DETAIL



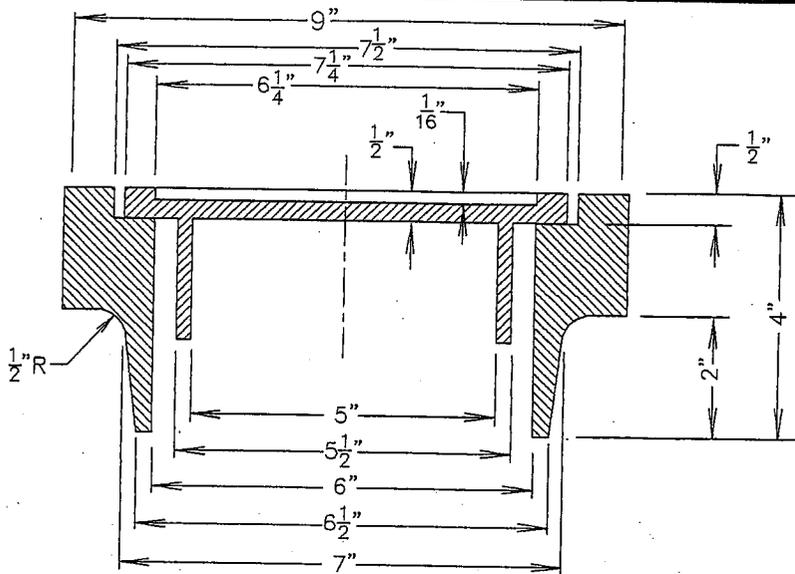
PLUNGER ROD  
CUP DETAIL

NOTES

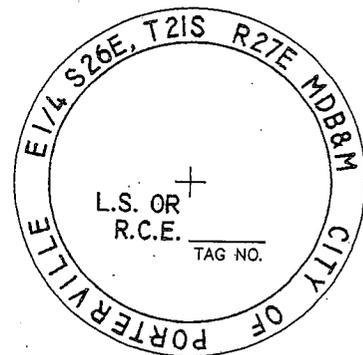
1. SECURE DRIVE FIT GALVANIZED CAP TO POST WITH 1/4" ROUND HEAD RIVET.
2. H DENOTES FABRIC WIDTH AND NOMINAL FENCE HEIGHT. H SHALL BE 6'-0" UNLESS OTHERWISE SPECIFIED.
3. IF CHAIN LINK FENCE WITH TOP RAIL IS SPECIFIED, DELETE STEEL TENSION WIRE AT TOP AND THE PIPE RAILS AT INTERMEDIATE, END AND CORNER POSTS. EXTEND TENSION ROD TO THE TOP RAIL.
4. BARBED WIRE SHALL BE USED ONLY WHEN SPECIFIED.
5. ALL DATA SHOWN ON TYPICAL DETAILS SHALL BE APPLICABLE TO OTHER PERTINENT DETAILS.

**MONUMENTS**

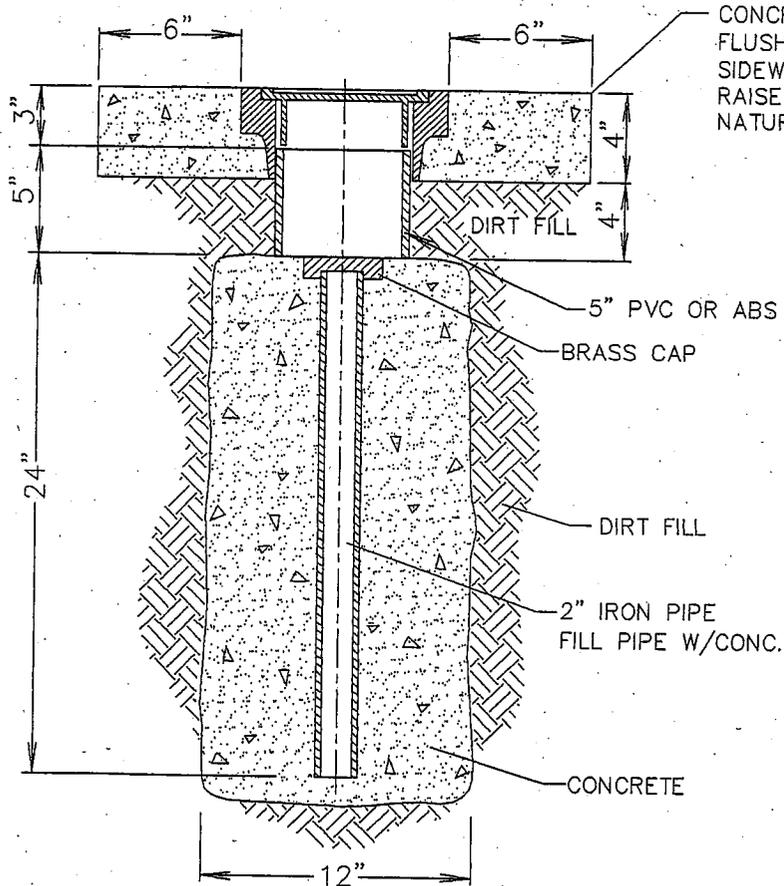
**M-1 THROUGH M-2**



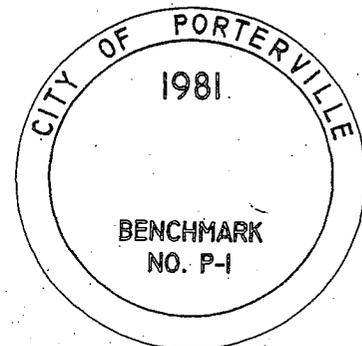
**CAST IRON  
MONUMENT CASE**



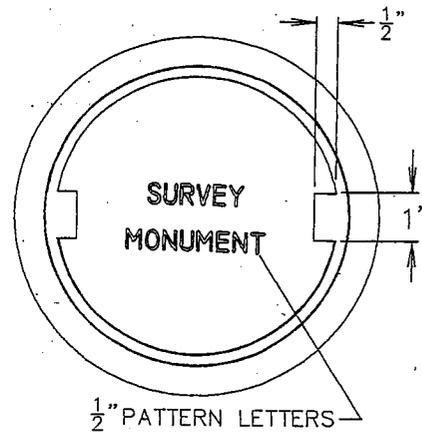
**HORIZONTAL CONTROL BRASS**  
( LIETZ CAT. NO. 8134-06 2 1/2" FLAT )



**SECTION OF MONUMENT**



**BENCHMARK BRASS CAP**  
( LIETZ CAT. NO. 8134-16 2 1/2" DOME )



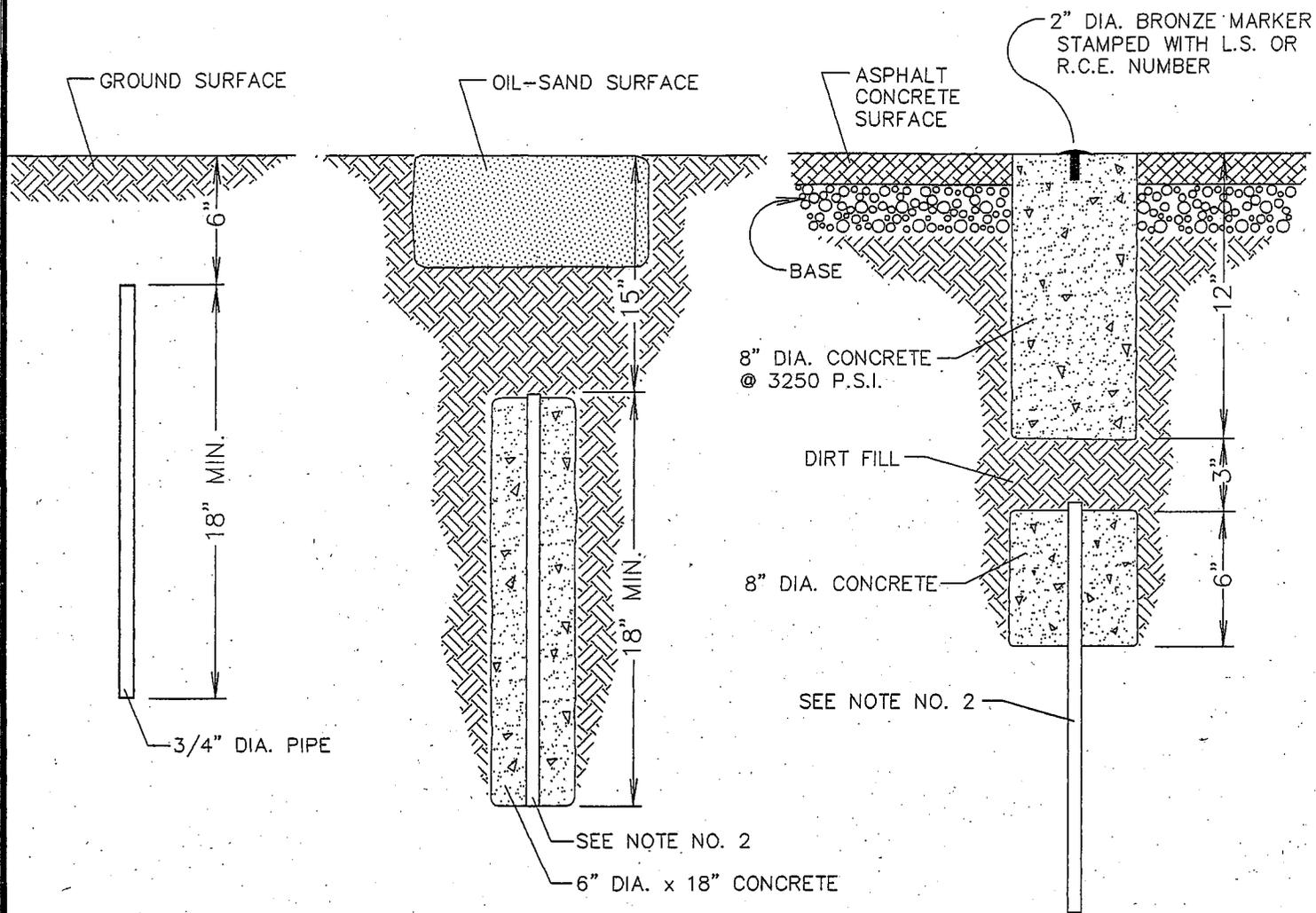
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill*  
CITY ENGINEER R.C.E. 20186 DATE 4-19-99

**STANDARD MONUMENT**

**M-1**

REV.



TYPE 'A'  
LOT CORNERS

TYPE 'B'  
STREET MONUMENTS

TYPE 'C'  
STREET MONUMENTS

NOTES:

1. LOT CORNERS SHALL BE MARKED WITH MONUMENT 'A'. STATE LAW REQUIRES ALL CORNERS TO BE TAGGED WITH SURVEYOR'S NUMBER.
2. STREET MONUMENTS FOR GOVERNMENT CORNERS AND SUBDIVISION BOUNDARY CORNERS SHALL BE 2" x 18" MINIMUM. OTHER STREET MONUMENTS FOR CENTERLINE, INTERSECTIONS, ETC...SHALL BE 3/4" x 18" MINIMUM.
3. TYPE 'C' STREET MONUMENTS SHALL BE USED TO LOCATE ALL ANGLE AND CURVE POINTS ON THE CENTERLINES OF ASPHALT CONCRETE SURFACED SUBDIVISION STREETS.
4. ADDITIONAL MONUMENTS MAY BE REQUIRED AT THE DISCRETION OF THE CITY ENGINEER.
5. CONCRETE SHALL BE CLASS 560-C-3250 W/4" SLUMP MAX. PER SECTION 201 OF STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (CURRENT EDITION).

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SURVEY MONUMENTS

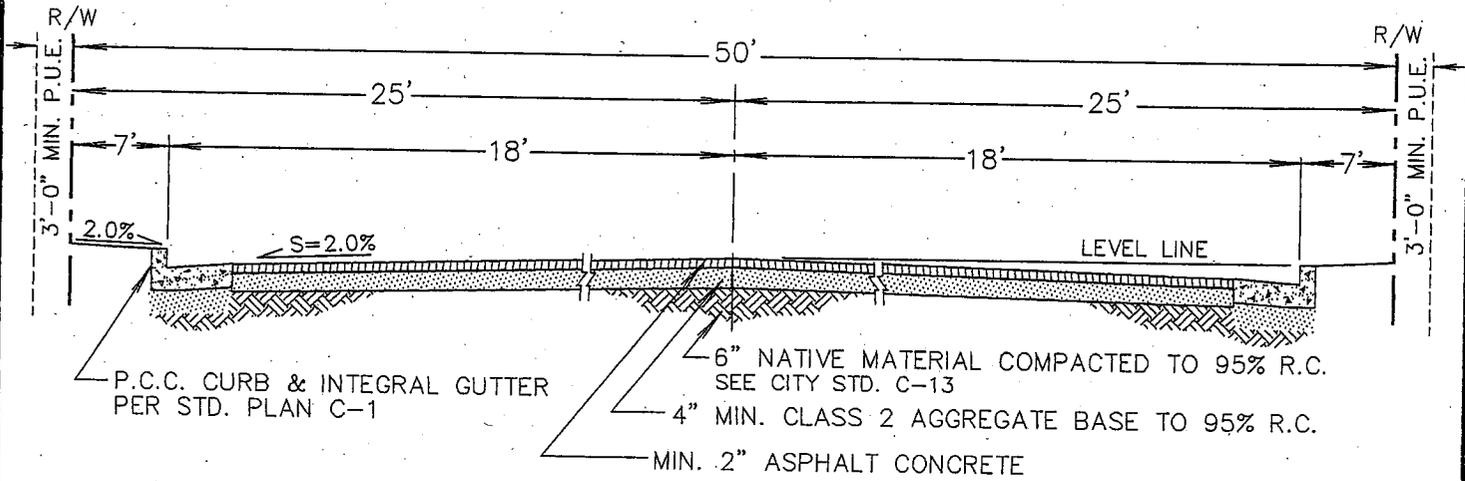
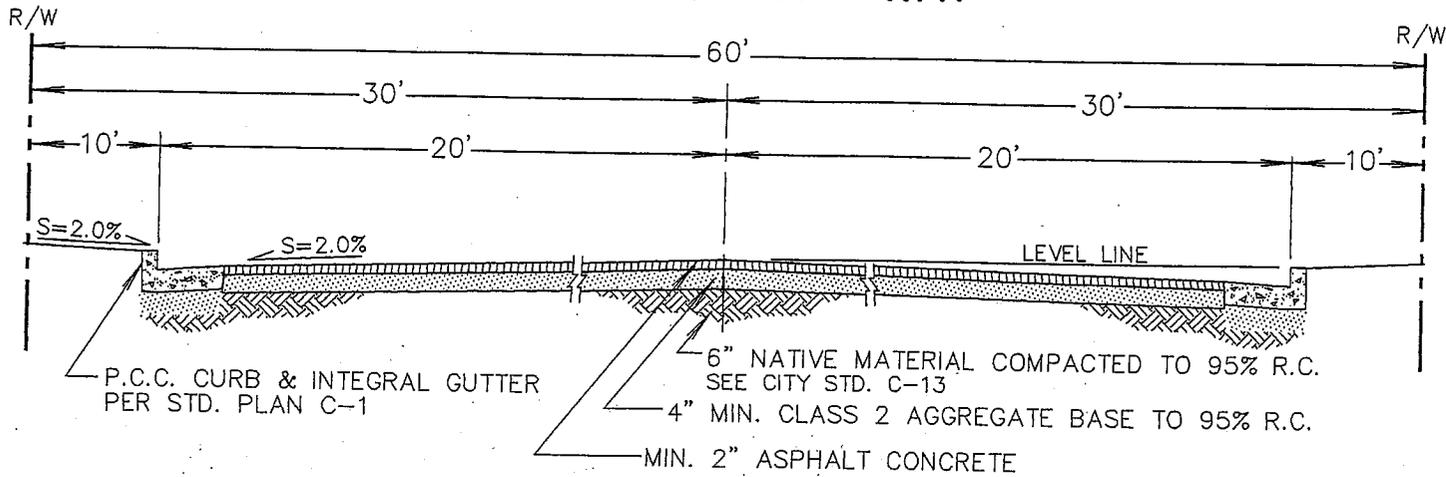
M-2

REV.

**PAVEMENT**  
**P-1 THROUGH P-9**

**PAVEMENT (P-1 THROUGH P-9)**

## 60' RIGHT - OF - WAY



## 50' RIGHT - OF - WAY

CUL-DE-SAC AND DEAD-END

### NOTES:

1. STRUCTURAL SECTIONS SHALL BE DESIGNED BY STATE DEPT. OF TRANSPORTATION FLEXIBLE PAVEMENT DESIGN METHODS WITH TRAFFIC INDEX (T.I.) = 4.0 MINIMUM (LOCAL) OR 5.5 MINIMUM (COLLECTOR).
2. DISINTEGRATED GRANITE CONFORMING TO SECTION 400-2.3 OF THE STD. SPEC'S. FROM SOURCE APPROVED BY CITY ENGINEER HAVING AN 'R' VALUE OF 73 OR GREATER MAY BE SUBSTITUTED FOR CLASS 2 AGGREGATE BASE WITH A 10% INCREASE IN THE REQUIRED BASE THICKNESS AND 90% COMPACTION IN THE SUBBASE FOR THE NATIVE SOIL WITH AN AVERAGE 'R' VALUE GREATER THAN 30 AND NO LESS THAN R=20 ON ANY ONE TEST. NO SUBSTITUTION PERMITTED FOR SOIL WITH AN AVERAGE 'R' VALUE OF 30 OR LESS, AND/OR AN EXPANSION INDEX POTENTIAL OF 51 OR GREATER.
3. CONFORM TO SECTION 26 & 39 OF CALTRANS STANDARD SPECIFICATIONS USING TYPE B (3/4" MAX.) AR-4000 ASPHALT.

CITY OF PORTERVILLE  
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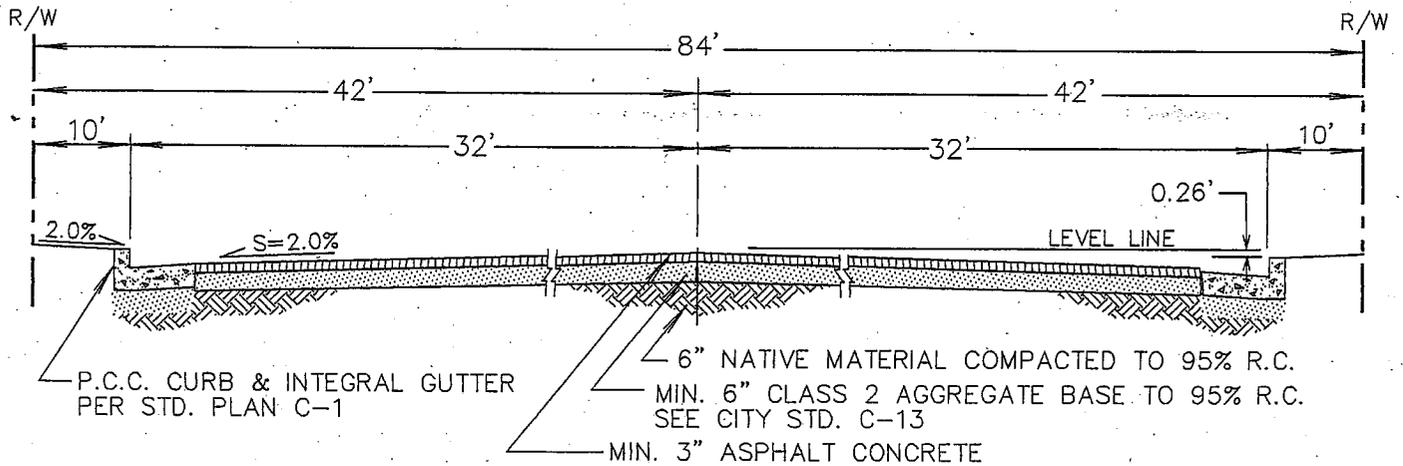
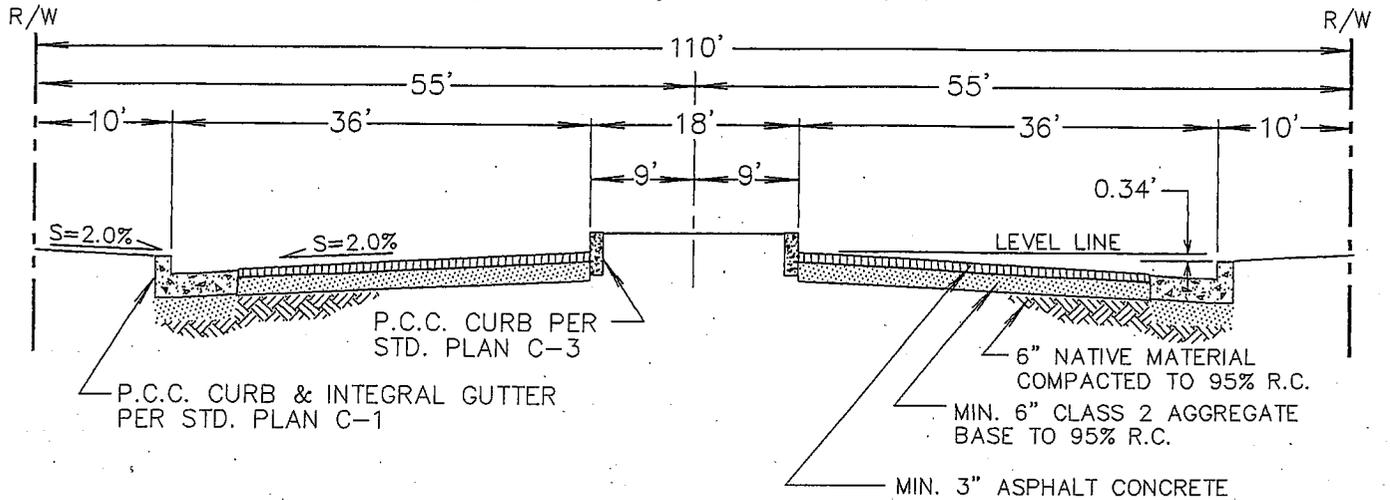
*Harold L. Hill*      4-19-99  
CITY ENGINEER      R.C.E. 20186      DATE

TYPICAL STREET SECTIONS  
LOCAL / COLLECTOR

P-1

REV.

# 110' RIGHT - OF - WAY



# 84' RIGHT - OF - WAY

## NOTES:

1. STRUCTURAL SECTIONS SHALL BE DESIGNED BY STATE DEPT. OF TRANSPORTATION FLEXIBLE PAVEMENT DESIGN METHOD WITH TRAFFIC INDEX (T.I.) = 7.0 MINIMUM
2. CONFORM TO SECTION 26 & 39 OF CALTRANS STANDARD SPECIFICATIONS USING ASPHALT CONCRETE THAT IS TYPE A (3/4" MAX.) IN THE BOTTOM LIFT AND TYPE B (1/2" MAX.) IN THE TOP LIFT. USE AR-4000 ASPHALT. ATMOSPHERIC TEMPERATURE SHALL BE 50°F AND RAISING FOR PLACEMENT OF A.C.

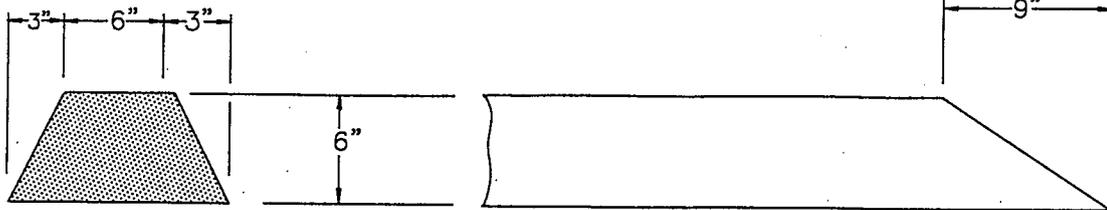
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 4-19-99  
CITY ENGINEER R.C.E. 20186 DATE

TYPICAL STREET SECTIONS  
ARTERIALS

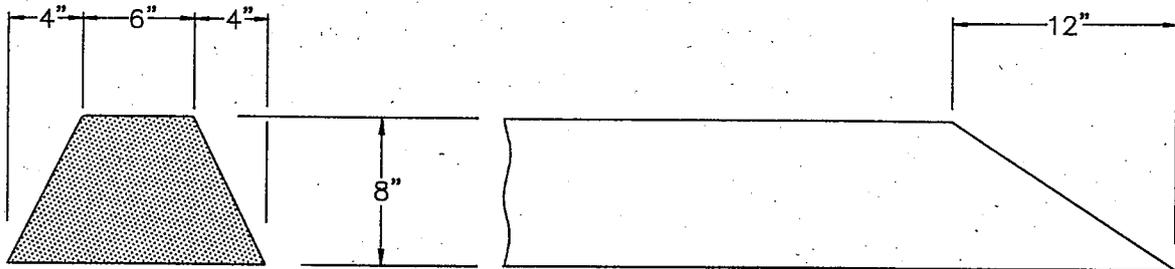
P-2

REV.



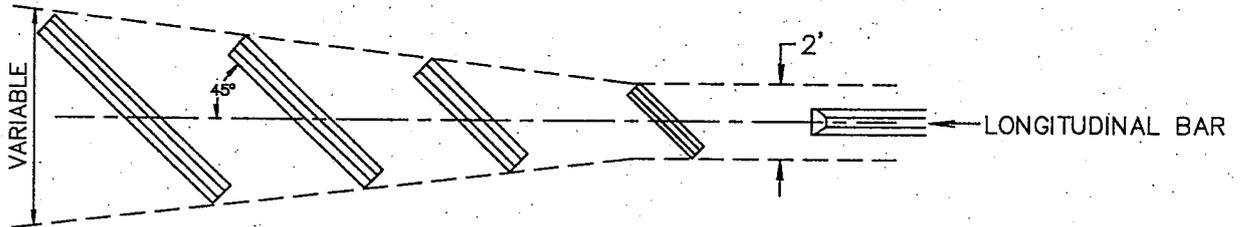
ASPHALT

6" DIKE

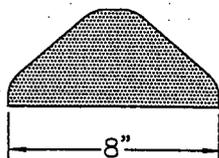


ASPHALT

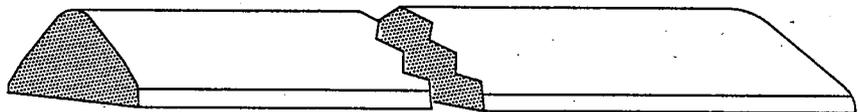
8" DIKE



RAISED TRAFFIC BAR



CROSS SECTION



- PORTLAND CEMENT CONCRETE
  - PAINT TRAFFIC WHITE
  - SET ON PAVEMENT WITH APPROVED ADHESIVE
- SIDE VIEW

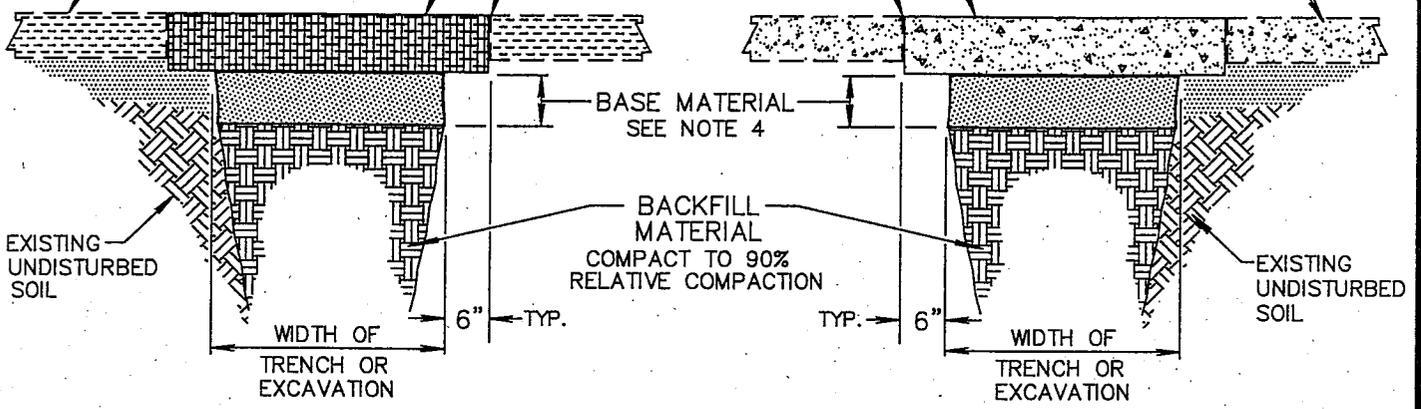
TYPE B AR-4000 ASPHALT CONCRETE, EQUAL TO EXIST. THICKNESS PLUS 1", 3" MIN. TO 5" MAX. WITH 1/2" SIZE AGGREGATE.

EXISTING ASPHALT CONCRETE PAVEMENT

1 1/2" MIN. DEPTH SAWCUT TYPICAL ALL EDGES

PORTLAND CEMENT CONCRETE, CLASS B (5 SACK MIX), EQUAL TO EXISTING THICKNESS PLUS 1" WITH A 4" MIN. AND A 6" MAXIMUM.

EXIST. CONC. PAVEMENT



**PATCH ASPHALT CONC. PAVEMENT**

**PATCH CONCRETE PAVEMENT**

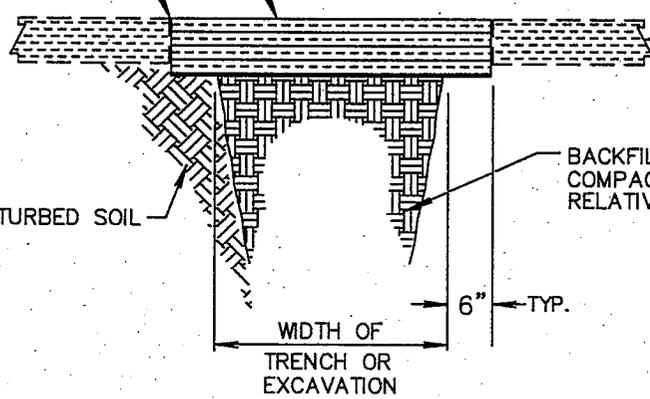
STRAIGHT AND VERTICAL EDGE (TYP. ALL EDGES)

ROADMIXED ASPHALT SURFACING, EQUAL TO EXIST. THICKNESS PLUS 1" WITH A 3" MIN. AND 6" MAX. (SC-800 OR SC-3000 LIQUID ASPHALT PER CITY ENGINEER)

EXIST. ROADMIXED ASPHALT PAVEMENT

EXIST. UNDISTURBED SOIL

BACKFILL MATERIAL COMPACT TO 90% RELATIVE COMPACTION



**PATCH ROADMIXED ASPHALT PAVEMENT**

**NOTES:**

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO CITY STANDARD SPECIFICATIONS.
2. SUITABILITY OF BACKFILL MATERIAL SHALL BE AT THE DISCRETION OF THE CITY ENGINEER.
3. BACKFILL COMPACTION OUTSIDE OF ROADWAY OR ALLEYWAY STRUCTURAL SECTION SHALL BE 85% . (EXAMPLE: BEHIND BACK OF CURB OR WITHIN EASEMENTS)
4. SEE CITY STANDARD C-13.
5. PATCHES LESS THAN TWO FEET FROM EXIST. PATCHES, EDGES OF PAVEMENT OR GUTTERS SHALL BE EXTENDED TO INCLUDE THE INTERMEDIATE ISOLATING STRIP OF EXIST. PAVEMENT.
6. CONFORM TO SEC. 26 & 39 OF THE CALTRANS STANDARD SPECIFICATIONS FOR MATERIALS SUPPLIED.

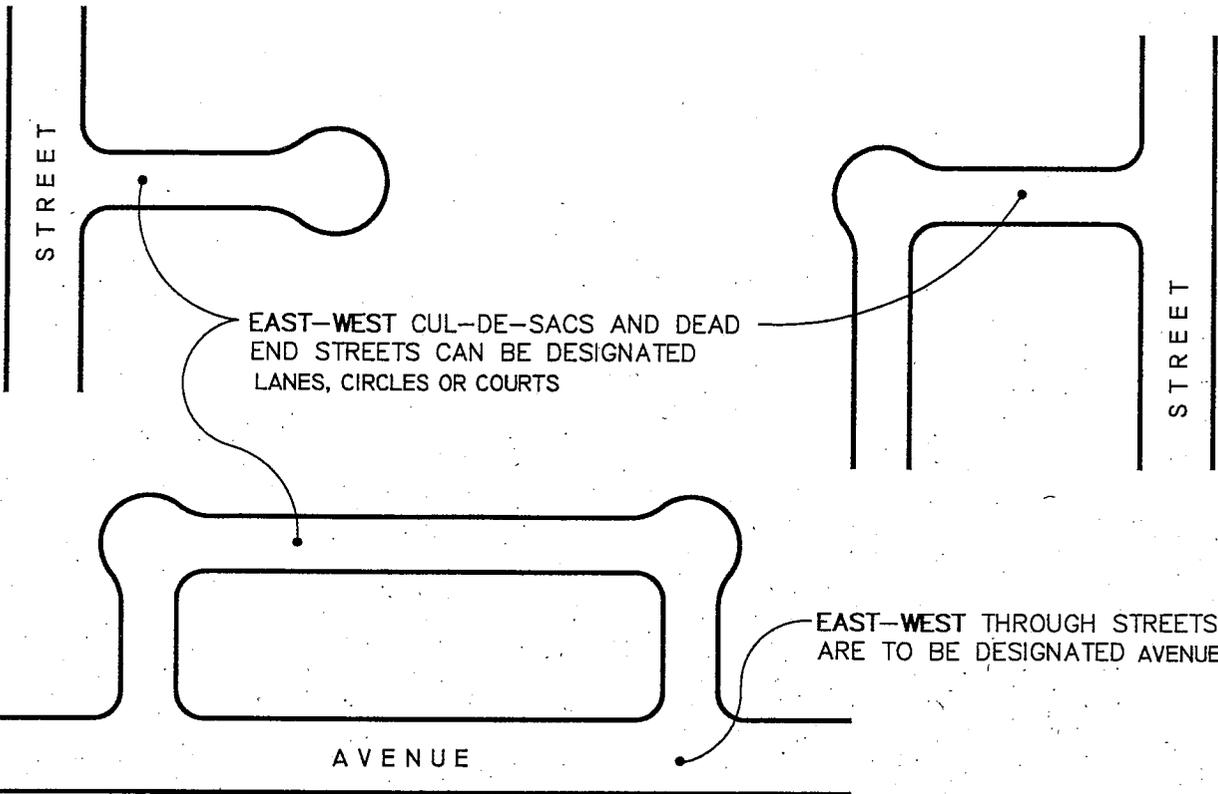
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill*  
CITY ENGINEER R.C.E. 20186 DATE 4-19-99

**PAVEMENT PATCHES AND BACKFILL COMPACTION**

**P-4**

REV.

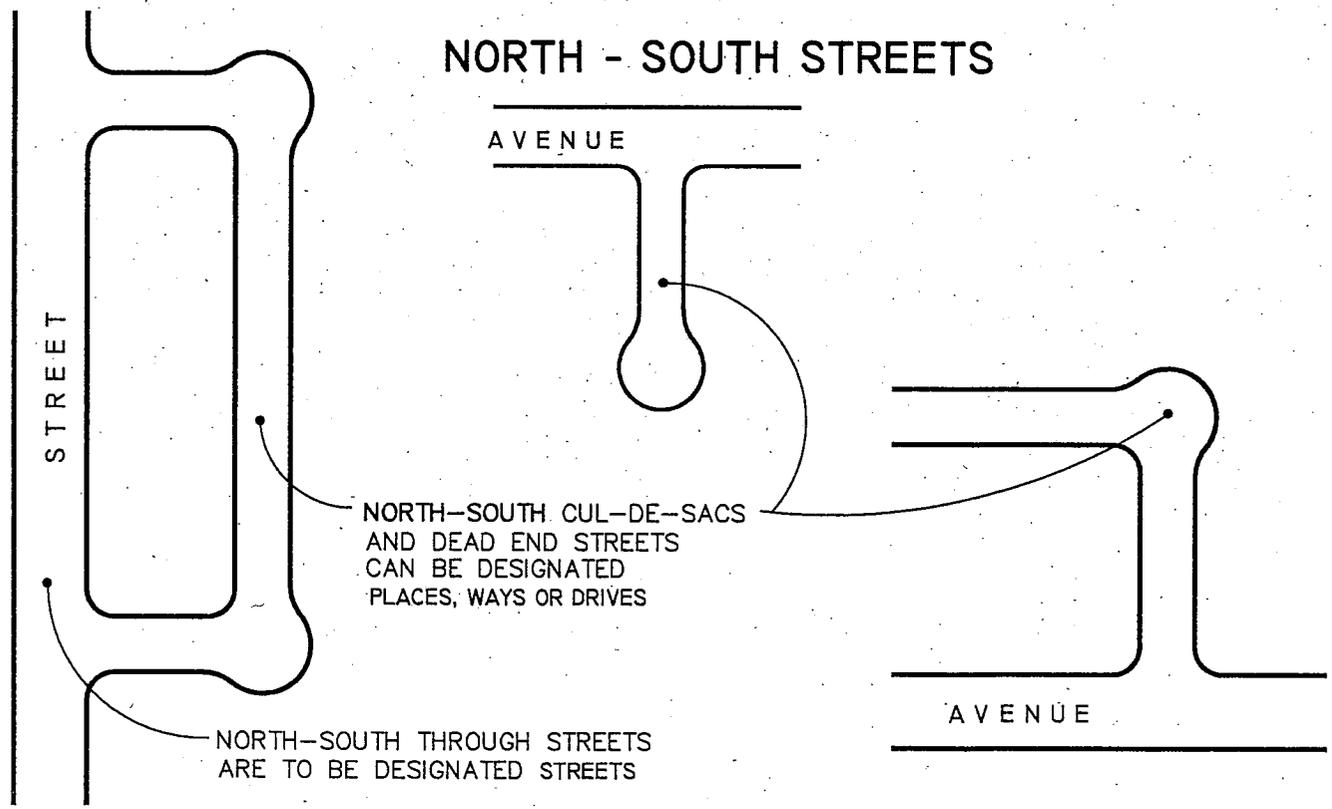


EAST-WEST CUL-DE-SACS AND DEAD  
END STREETS CAN BE DESIGNATED  
LANES, CIRCLES OR COURTS

EAST-WEST THROUGH STREETS  
ARE TO BE DESIGNATED AVENUE

AVENUE

**EAST - WEST STREETS**



**NORTH - SOUTH STREETS**

AVENUE

NORTH-SOUTH CUL-DE-SACS  
AND DEAD END STREETS  
CAN BE DESIGNATED  
PLACES, WAYS OR DRIVES

NORTH-SOUTH THROUGH STREETS  
ARE TO BE DESIGNATED STREETS

AVENUE

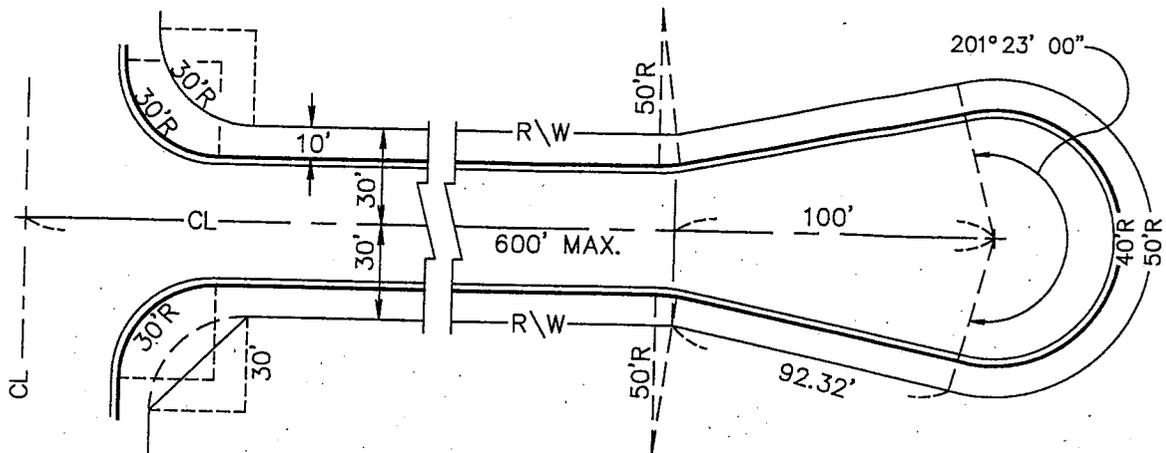
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 4-19-99  
CITY ENGINEER R.C.E. 20186 DATE

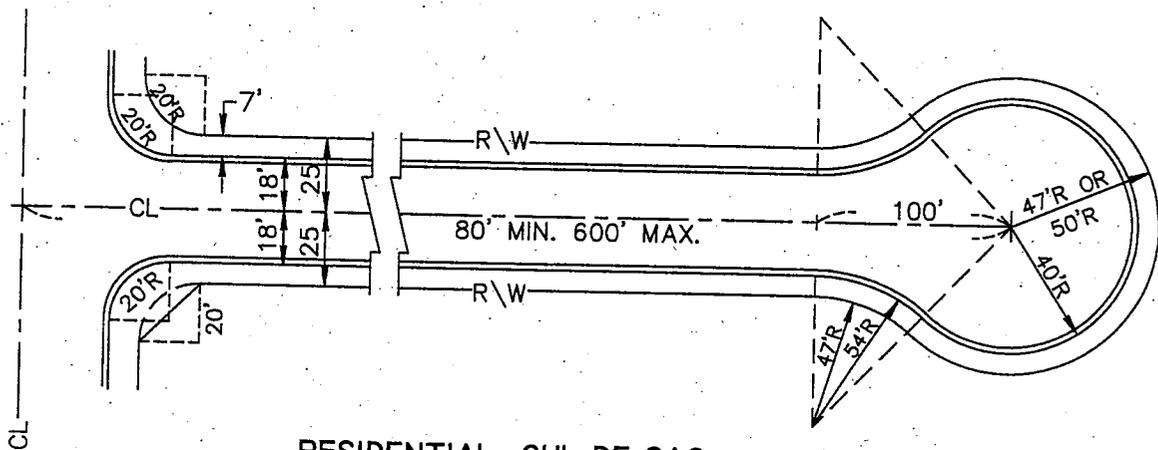
**LOCAL STREET  
NAME DESIGNATIONS**

**P-5**

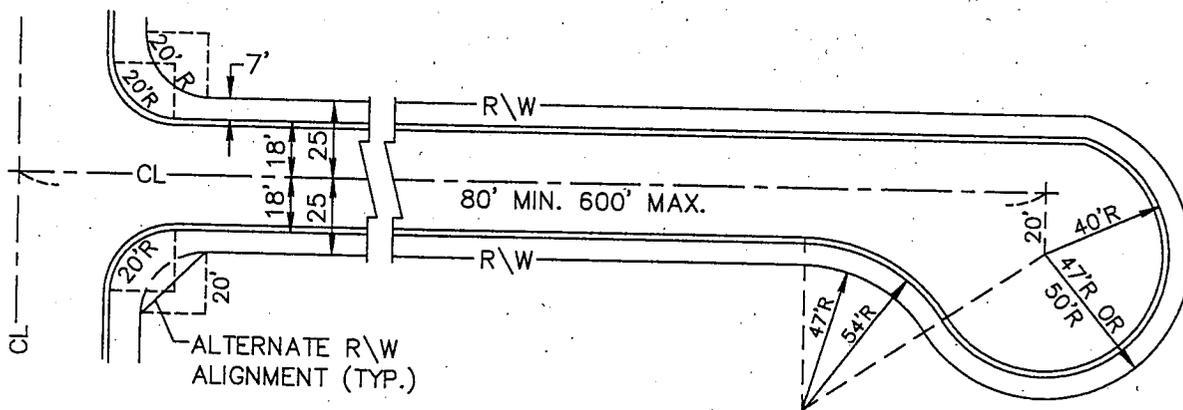
REV.



COMMERCIAL & INDUSTRIAL CUL-DE-SAC



RESIDENTIAL CUL-DE-SAC



RESIDENTIAL CUL-DE-SAC

CITY OF PORTERVILLE  
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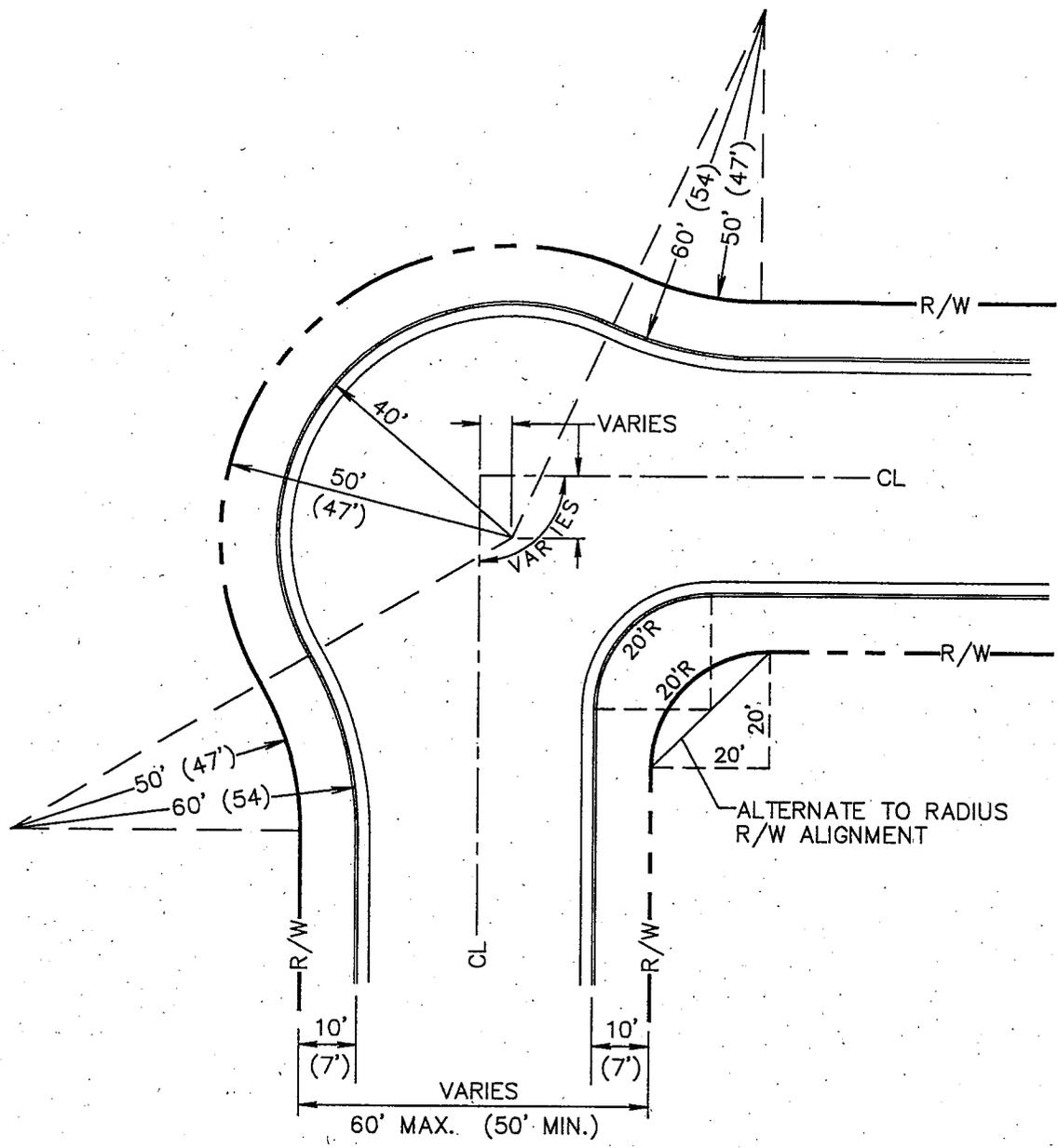
CITY ENGINEER R.C.E. 20186

DATE

CUL - DE - SAC

P-6

REV.



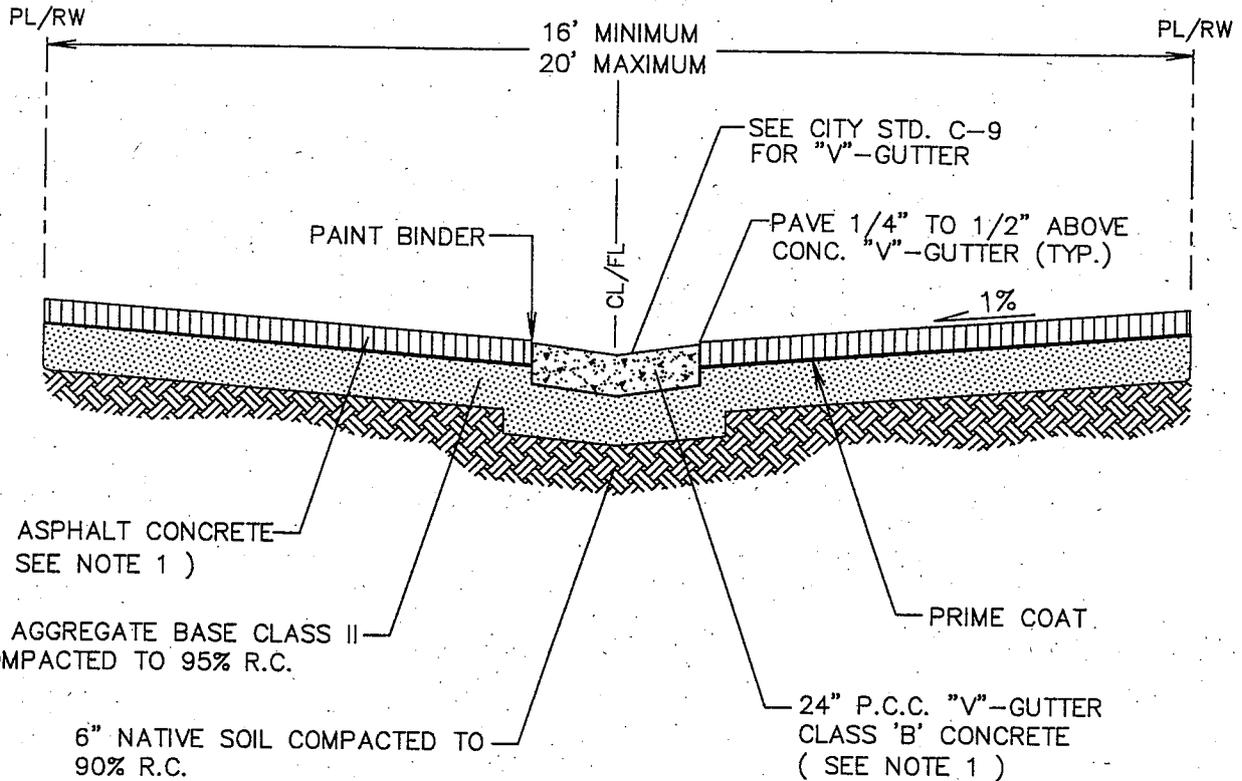
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 4-19-99  
CITY ENGINEER R.C.E. 20186 DATE

# STREET BULB CONNECTION

**P-7**

REV.



NOTE :

1. CONFORMS TO SECTIONS 26 & 29 OF CALTRANS STANDARD SPECIFICATIONS FOR MATERIALS SUPPLIED. USE AR-4000, 3/4" MAXIMUM, COURSE ASPHALT CONCRETE.

CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill*

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# ALLEY CONSTRUCTION DETAILS

**P-8**

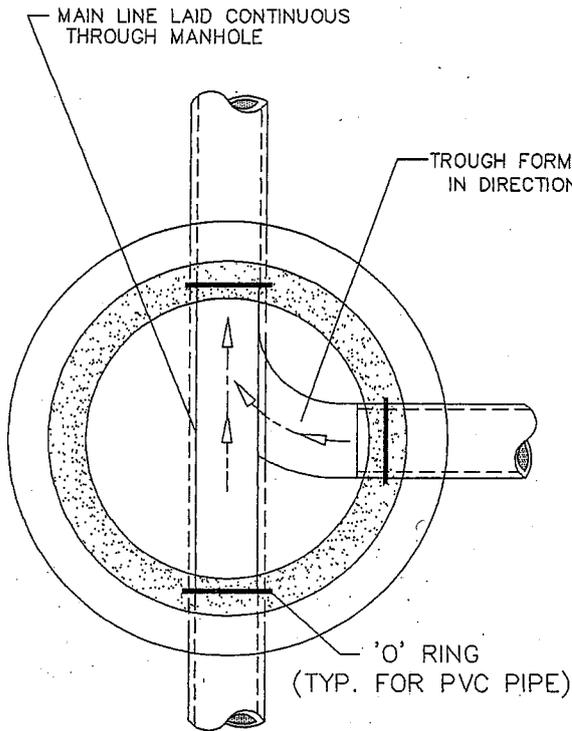
REV.



**SEWER MANHOLE**

**S-1 THROUGH S-12**

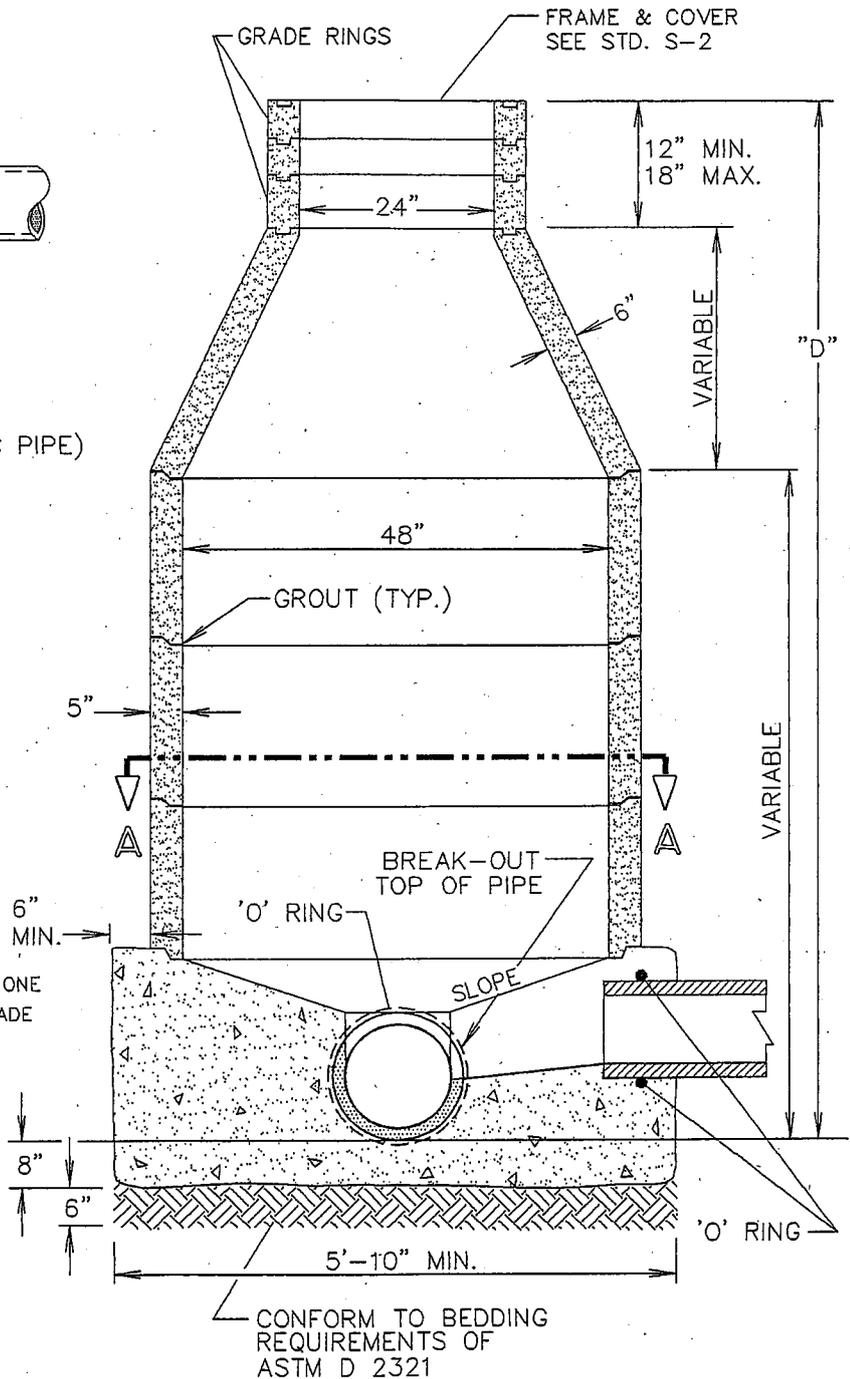
**SEWER MANHOLE (S-1 THROUGH S-12)**



SECTION A-A

NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE STD. SPECIFICATIONS.
2. PRECAST REINFORCED CONCRETE MANHOLE SHALL BE CONSTRUCTED IN ACCORDANCE WITH PROVISIONS OF ASTM DESIGNATION C-478.
3. ALL CONCRETE SHALL BE 2500# (5 SACK MIX).
4. GROUT AND BOND ALL PIPE JOINTS. GROUT MIXTURE ONE PART CEMENT PER TWO PARTS SAND. CONE AND GRADE RINGS SHALL BE PRECAST REINFORCED CONCRETE AS PER ASTM C-478. KENT SEAL CAN BE USED IN LIEU OF GROUT AT PIPE JOINTS AND NOTE 5 IS REQUIRED.
5. INSIDE SHALL BE MORTARED TO SMOOTH FINISH.



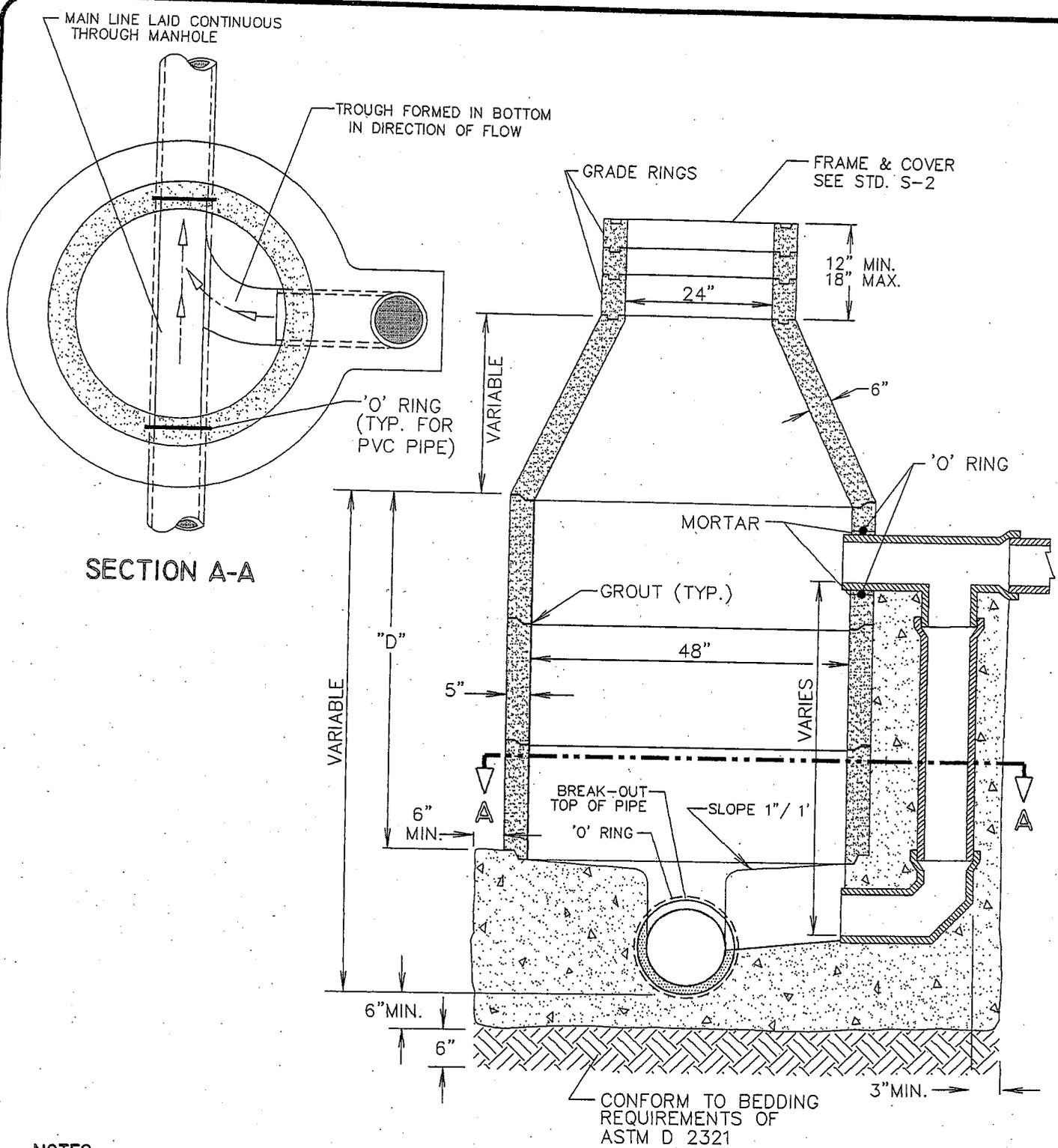
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

SANITARY SEWER  
MANHOLE

S-1

REV.



- NOTES:**
1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.
  2. PRECAST REINFORCED CONCRETE MANHOLE SHALL BE CONSTRUCTED IN ACCORDANCE WITH PROVISIONS OF ASTM DESIGNATION C-478.
  3. ALL CONCRETE SHALL BE 2500# (5 SACK MIX).
  4. GROUT AND BOND ALL PIPE JOINTS. GROUT MIXTURE ONE PART CEMENT PER TWO PARTS SAND. CONE AND GRADE RINGS SHALL BE PRECAST REINFORCED CONCRETE AS PER ASTM C-478. KENT SEAL CAN BE USED IN LIEU OF GROUT AT PIPE JOINTS AND NOTE 5 IS REQUIRED.
  5. INSIDE SHALL BE MORTARED TO SMOOTH FINISH.

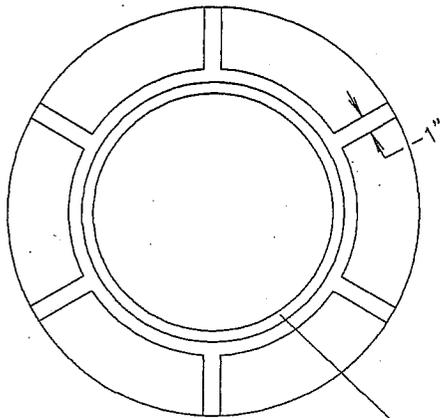
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Gerald L. Hill* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

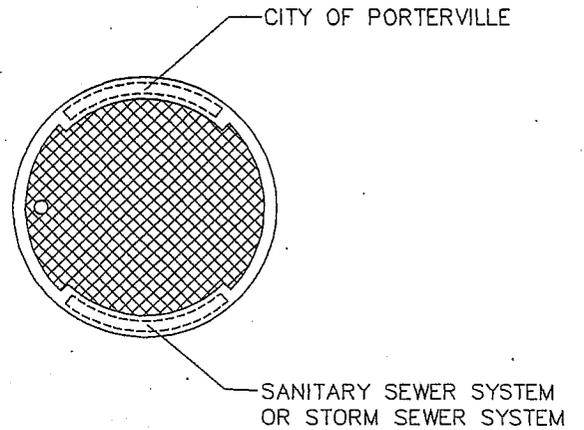
SANITARY DROP  
MANHOLE

S-1.1  
REV.

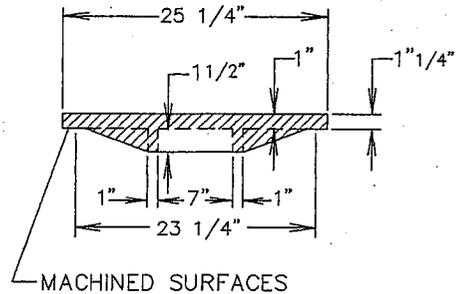
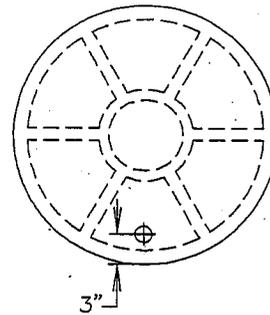
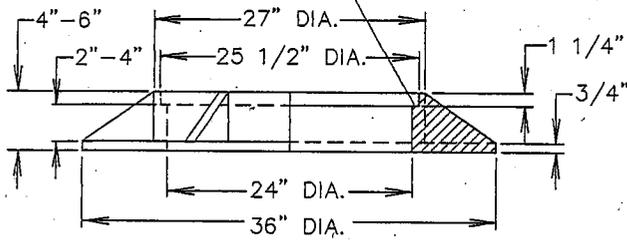
# FRAME



# COVER



MACHINED SURFACES



### NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.
2. MANHOLE COVER TO BE PINKERTON A-283 OR APPROVED EQUAL.

CITY OF PORTERVILLE  
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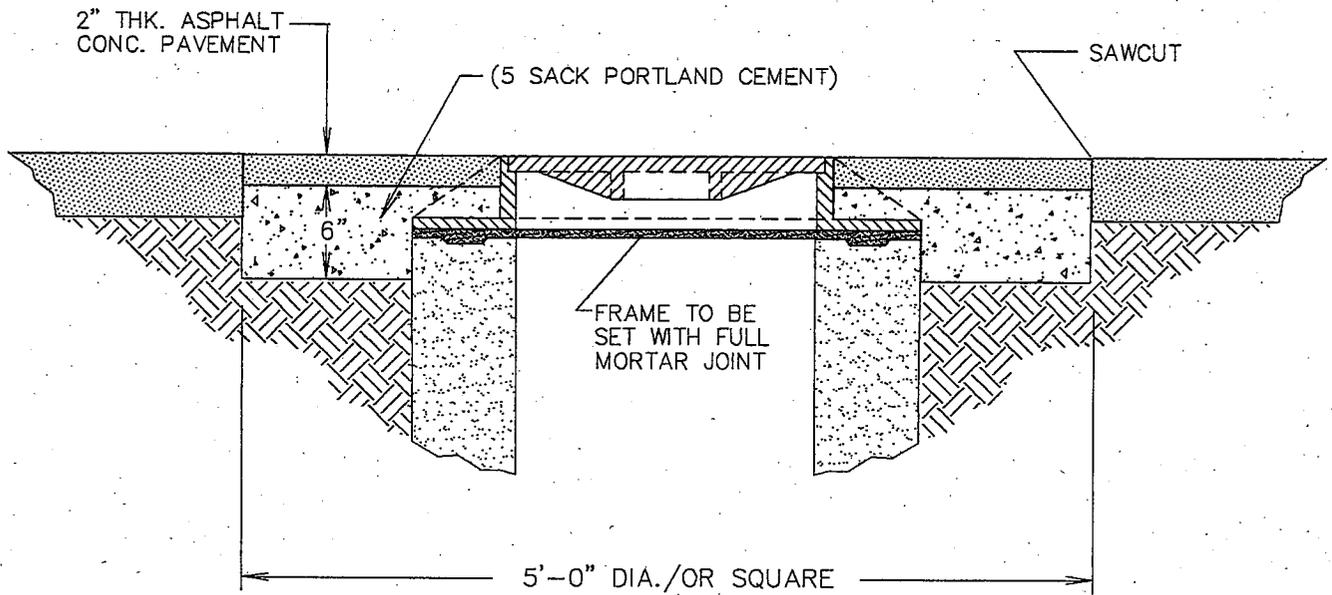
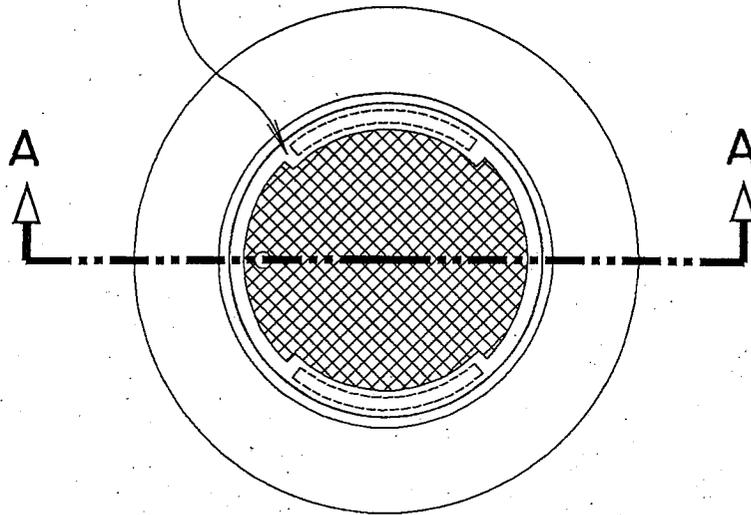
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CITY ENGINEER R.C.E. 20186 DATE

# MANHOLE FRAME & COVER

# S-2

REV.

FRAME & COVER PER  
STANDARD DRAWING S-2



SECTION A-A

NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.
2. ALL CONCRETE SHALL BE 2500# (5 SACK MIX).

CITY OF PORTERVILLE  
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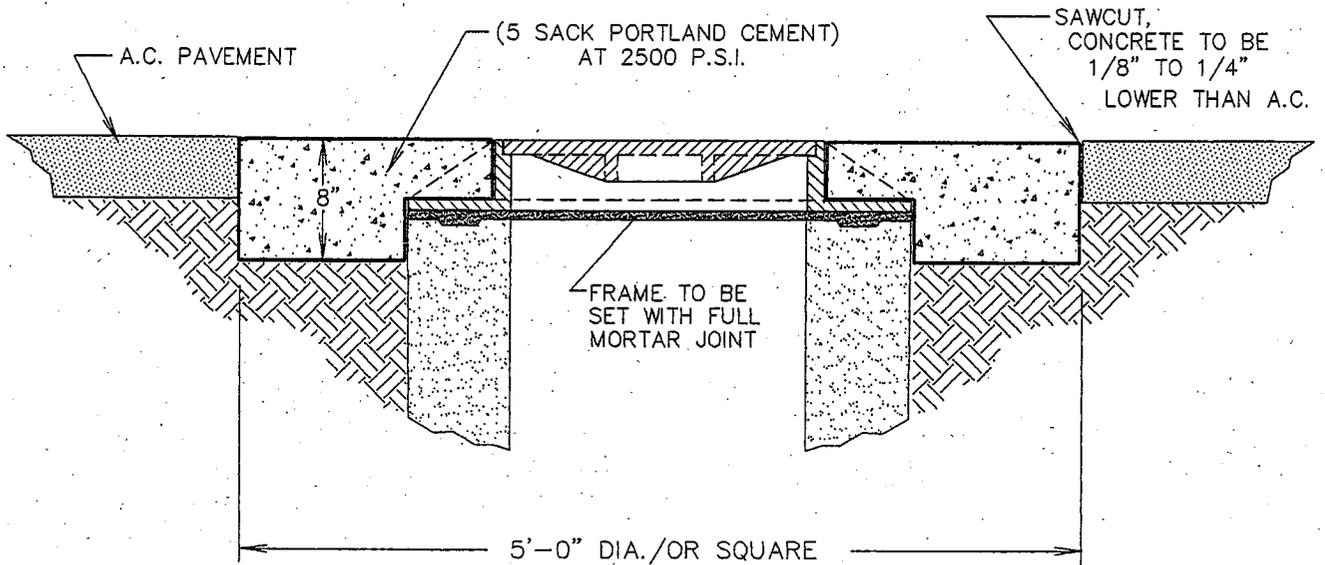
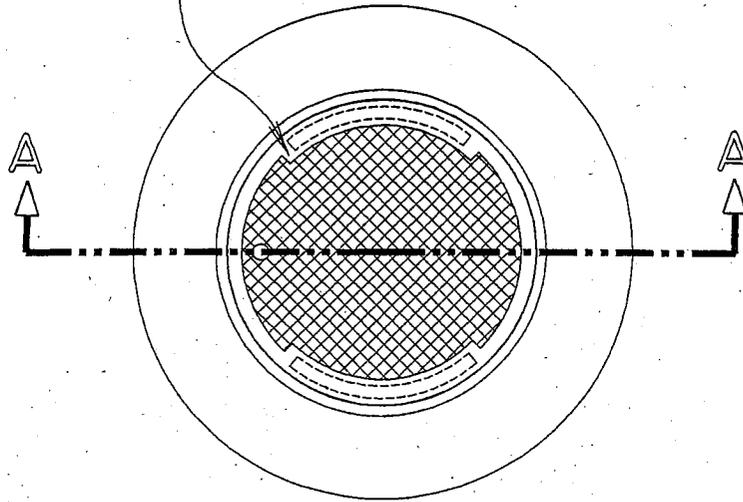
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CITY ENGINEER R.C.E. 20186 DATE

**MANHOLE FRAME & COVER  
ADJUSTMENT DETAILS**

**S-3**

REV.

FRAME & COVER PER  
STANDARD DRAWING S-2



SECTION A-A

NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.
2. ALL CONCRETE SHALL BE .2500# (5 SACK MIX).
3. MIX 8 TO 10 POUNDS OF LAMP BLACK CONCRETE COLORING PER CUBIC YARD OF CONCRETE.

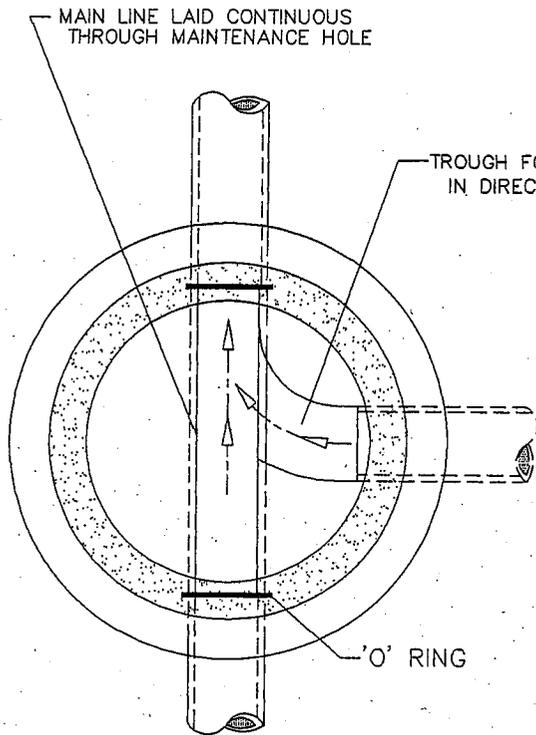
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

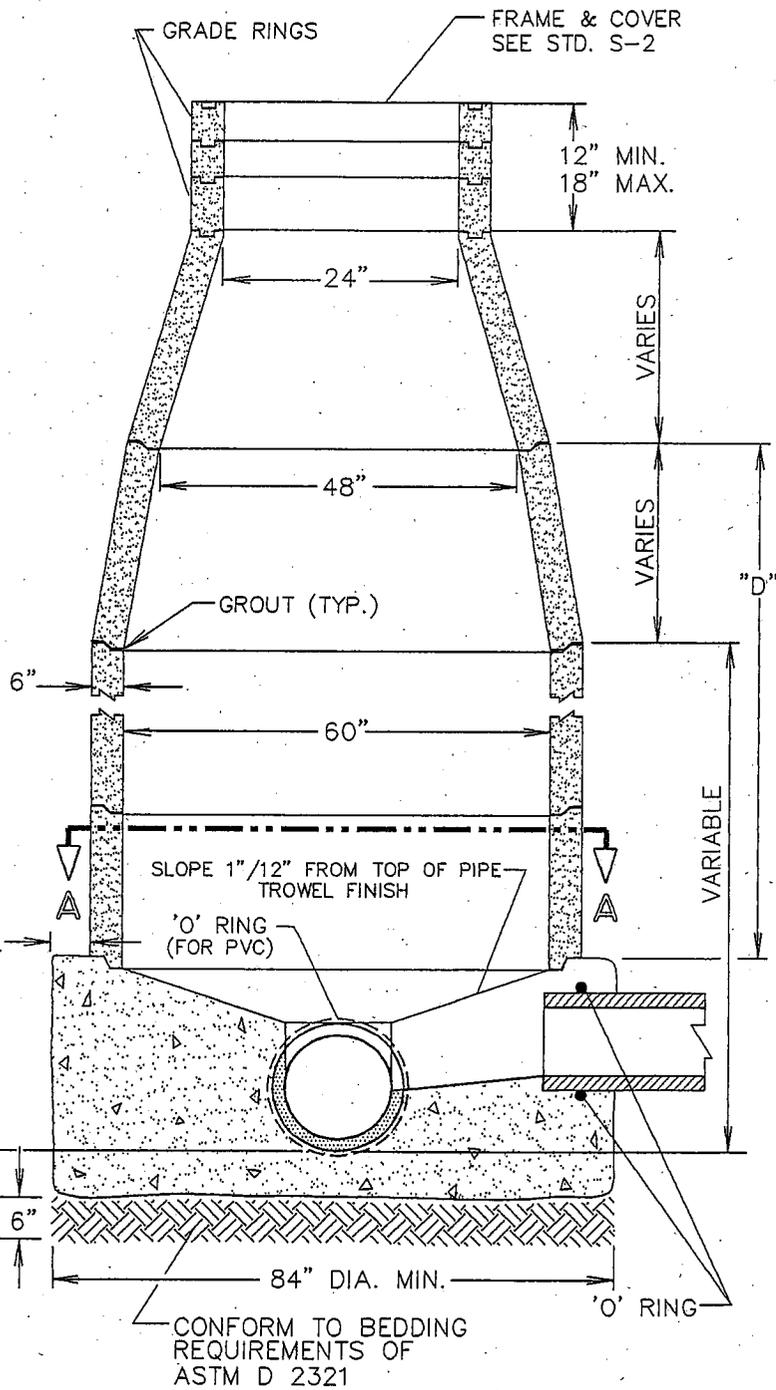
MANHOLE FRAME & COVER  
ADJUSTMENT DETAILS

S-3.1

REV.



SECTION A-A



NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE STD. SPECIFICATIONS.
2. PRECAST REINFORCED CONCRETE MAINT. HOLE SHALL BE CONSTRUCTED IN ACCORDANCE WITH PROVISIONS OF ASTM DESIGNATION C-478.
3. ALL CONCRETE SHALL BE 2500# (5 SACK MIX).
4. GROUT ALL PIPE JOINTS. GROUT MIXTURE ONE PART CEMENT PER TWO PARTS SAND. CONE AND GRADE RINGS SHALL BE PRECAST REINFORCED CONCRETE AS PER ASTM C-478. KENT SEAL CAN BE USED IN LIEU OF GROUT AT BARREL JOINTS AND NOTE 5 IS REQUIRED.
5. INSIDE SHALL BE MORTARED TO SMOOTH FINISH.

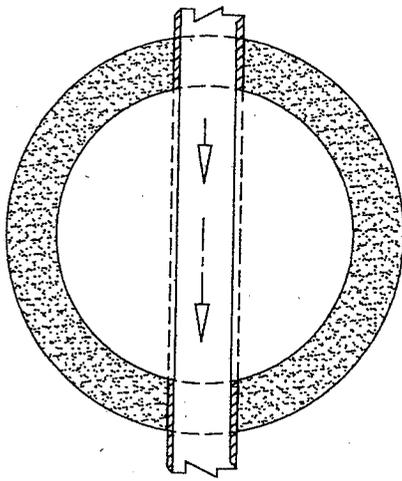
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

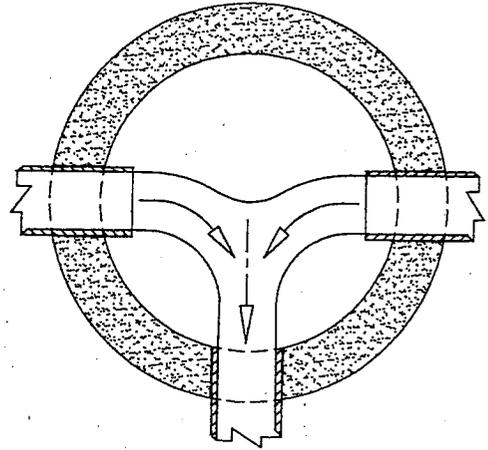
60"  
MANHOLE

S-4

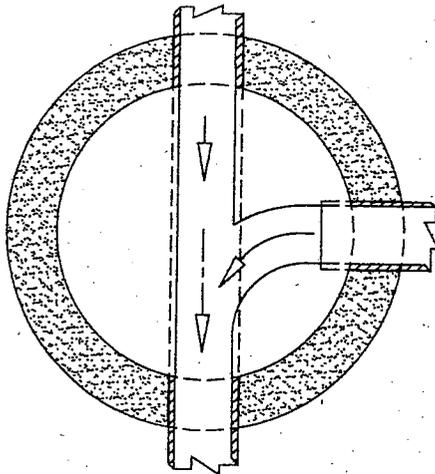
REV.



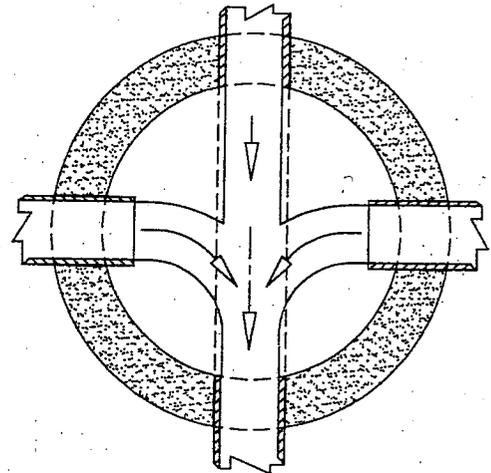
TYPE A



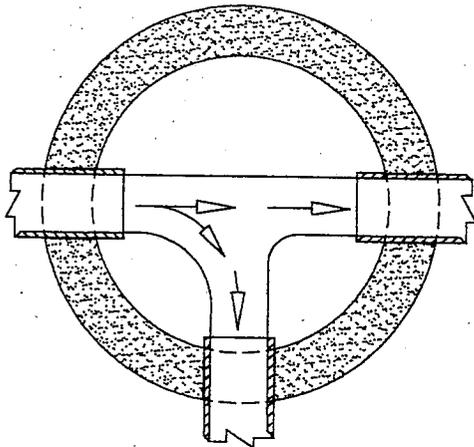
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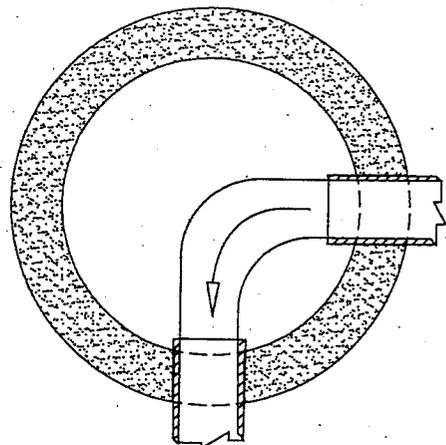
TYPE C



TYPE D



TYPE E



TYPE F

CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

FLOW CHANNELS  
STANDARD MANHOLES

S-5

REV.

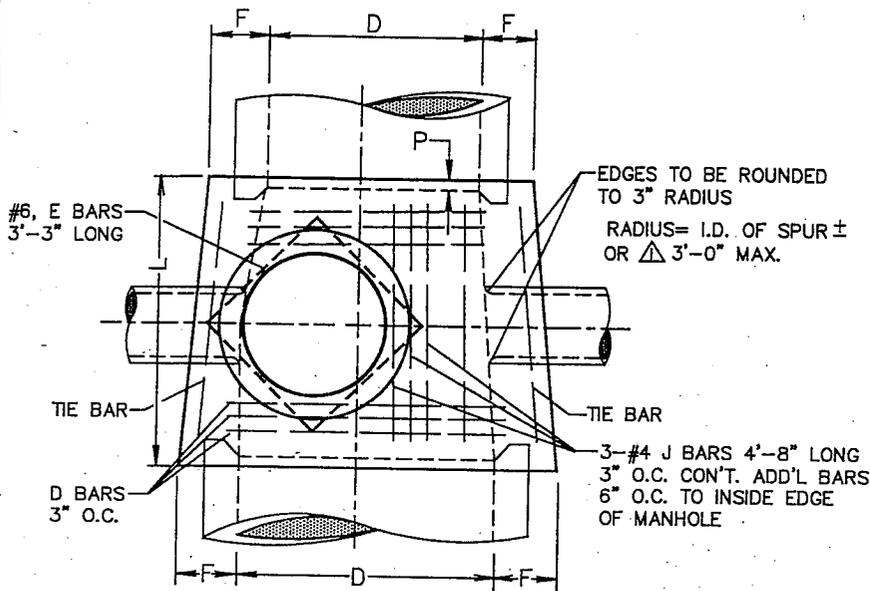
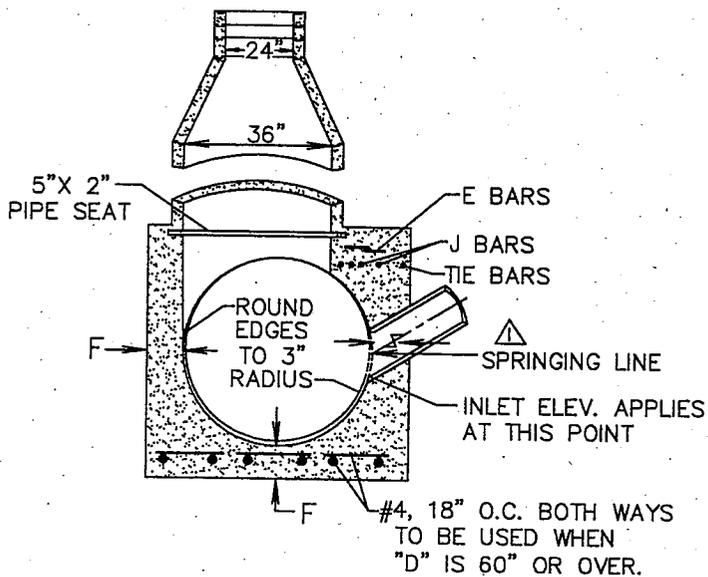
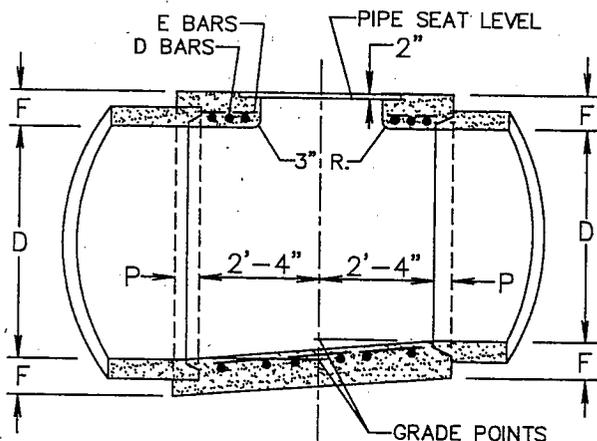


TABLE OF VALUES FOR (F)			
D	F	D	F
36"	6.5"	78"	11.75"
39"	7"	84"	12.5"
42"	7.5"	90"	13.25"
45"	7.75"	96"	14"
48"	8"	102"	15.5"
51"	8.5"	108"	16"
54"	9"	114"	16.5"
57"	9.25"	120"	17"
60"	9.5"	126"	17"
63"	10"	132"	17.5"
66"	10.25"	138"	17.5"
69"	10.75"	144"	18"
72"	11"		



NOTES:

1. REINFORCING STEEL TO BE 1 1/2" CLEAR FROM FACE OF CONCRETE UNLESS SHOWN OTHERWISE.
2. RINGS, REDUCER AND PIPE FOR ACCESS SHAFT SHALL BE SEATED IN MORTAR AND NEATLY POINTED OR WIPED INSIDE THE SHAFT.
3. STATION OF MANHOLES SHOWN ON PLAN APPLY AT CENTER OF SHAFT. ELEVATIONS SHOWN AT STATIONS REFER TO PROLONGED INVERT GRADE LINES.
4. FLOOR OF MANHOLE SHALL BE STEEL TROWELED TO SPRINGING LINE.
5. BODY OF MANHOLE SHALL BE POURED IN ONE CONTINUOUS OPERATION, EXCEPT THAT A CONSTRUCTION JOINT WITH A LONGITUDINAL KEYWAY MAY BE PLACED AT THE SPRINGING LINE.
6. LENGTH L AND EMBEDMENT P SHALL HAVE THE FOLLOWING VALUES UNLESS OTHERWISE SHOWN ON PLAN.  
FOR D=96" OR LESS, L=5'-6", P=5"  
D OVER 96", L=6'-0", P=8"
7. D BARS SHALL BE #4 FOR D = 39" OR LESS,  
#5 FOR D = 42" TO 84" INCLUSIVE  
AND #6 FOR D = 90" OR OVER, TIE BARS SHALL BE #3 BARS.
- △ 8. CENTERLINE OF INLET PIPE TO INTERSECT INSIDE FACE OF CONE AT SPRINGING LINE UNLESS OTHERWISE SHOWN.



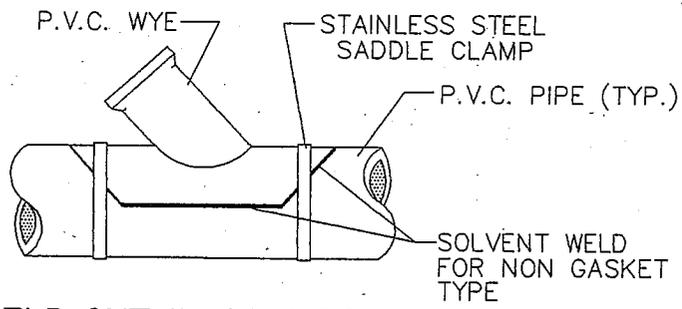
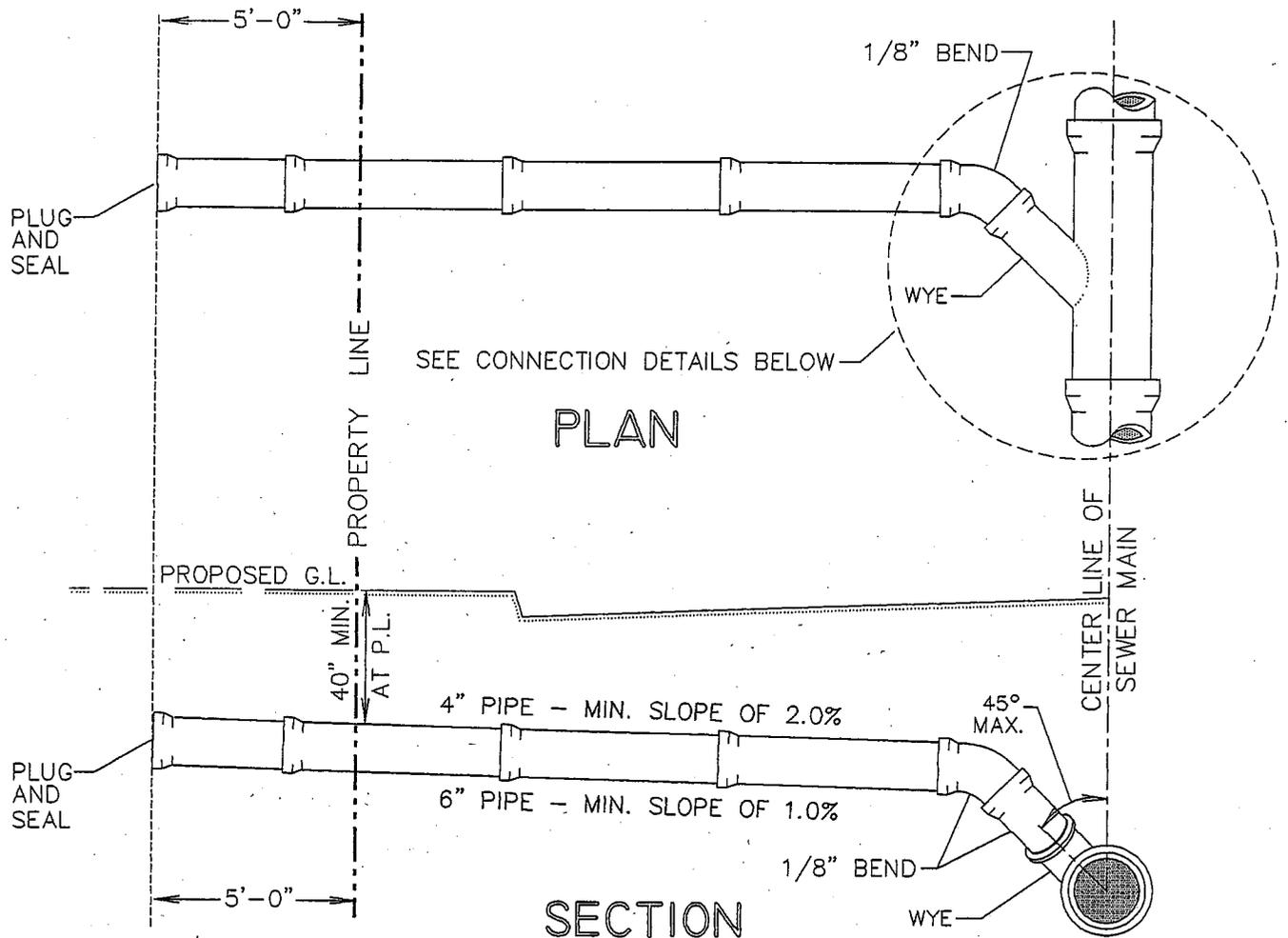
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 9-3-85  
CITY ENGINEER R.C.E. 20186 DATE

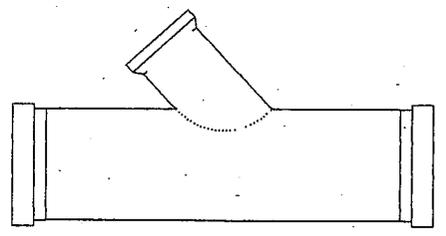
MANHOLE

S-6

REV.



**FIELD CUT-IN CONNECTION**



**IN-LINE CONNECTION**

**NOTES:**

1. THE SEWER CONNECTIONS SHALL BE 4" OR 6" EXTRA STRENGTH VETRIFIED CLAY OR DUCTILE IRON WITH PLASTISOL, C.P.I., JC-60 OR EQUAL JOINTS. ABS AND PVC PIPE MAY ALSO BE USED AND SHALL BE JOINED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. SADDLES FOR "CUT-IN" LATERALS SHALL BE SECURED BY STAINLESS STEEL BANDS.
2. THE GRADE OF SEWER LATERALS SHALL BE A MINIMUM OF 2.0% FOR 4" PIPE AND 1.0% FOR 6" PIPE.
3. THE ENDS OF THE LATERALS SHALL BE PLUGGED BEFORE BACKFILL WITH A CAP APPROVED BY THE MANUFACTURER OF THE PIPE FOR USE WITH PRODUCT.
4. STAMP "S" IN THE CURB WHERE EACH LATERAL IS INSTALLED.
5. CONTRACTOR TO TEST SEWER MAIN AND LATERAL AFTER UTILITIES ARE INSTALLED.

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**HOUSE LATERAL**

**S-7**

REV.

LEUPOLD STEVENS MODEL 61-R  
ELECTRIC FLOW RECORDER

LOCKABLE AND REMOVABLE METAL BOX  
OR USE STEVENS MODEL TF 132-0 BOX

48" REINFORCED  
CONCRETE PIPE

1" PIPE

18"

INLET

OUTLET

3" MIN.  
6" MAX.

6"

CLASS 'B' CONCRETE  
POURED IN PLACE

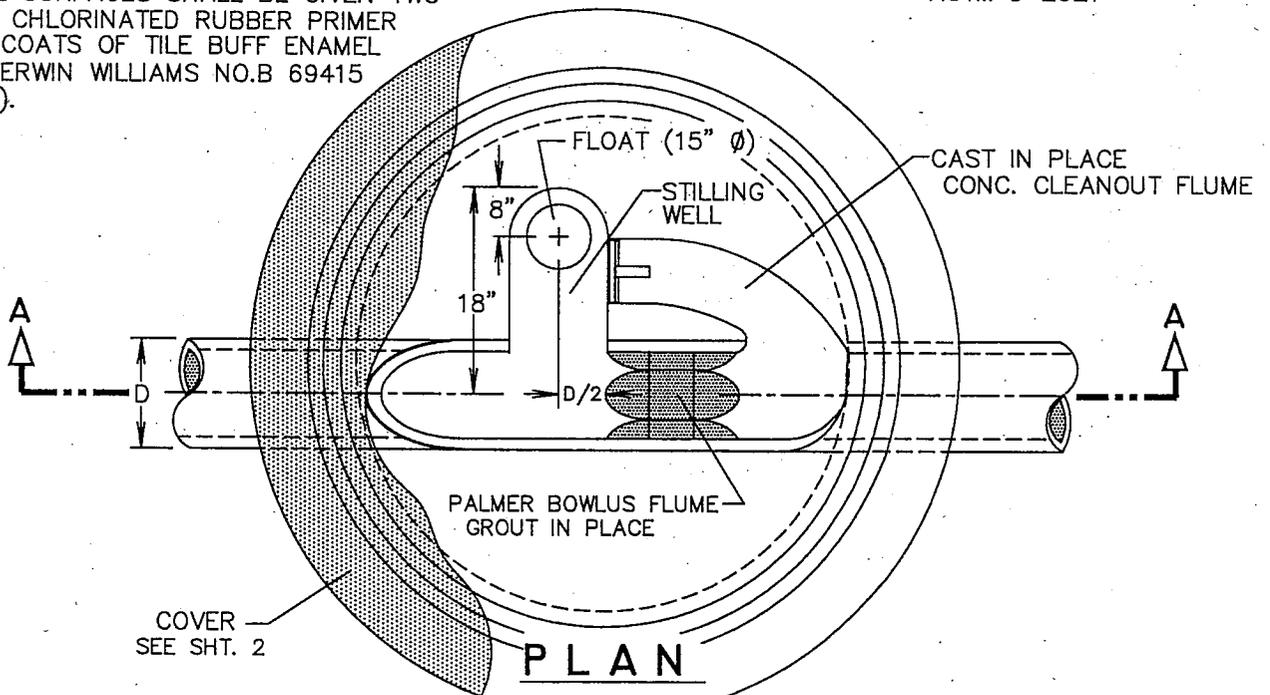
69"

**SECTION A-A**

CONFORM TO BEDDING  
REQUIREMENTS OF  
ASTM D 2321

**NOTE :**

ALL METAL SURFACES SHALL BE GIVEN TWO  
COATS OF CHLORINATED RUBBER PRIMER  
AND TWO COATS OF TILE BUFF ENAMEL  
PAINT (SHERWIN WILLIAMS NO.B 69415  
OR EQUAL).



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**INDUSTRIAL FLOW  
METERING STATION**

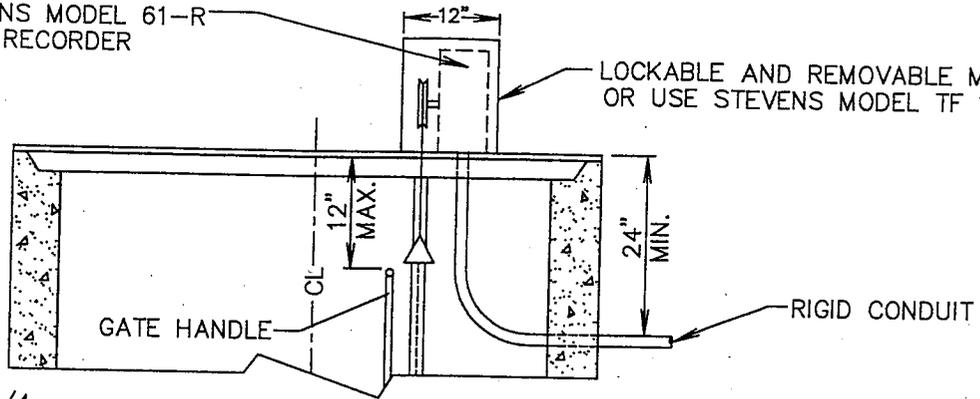
**S-9**

1 OF 2

REV.

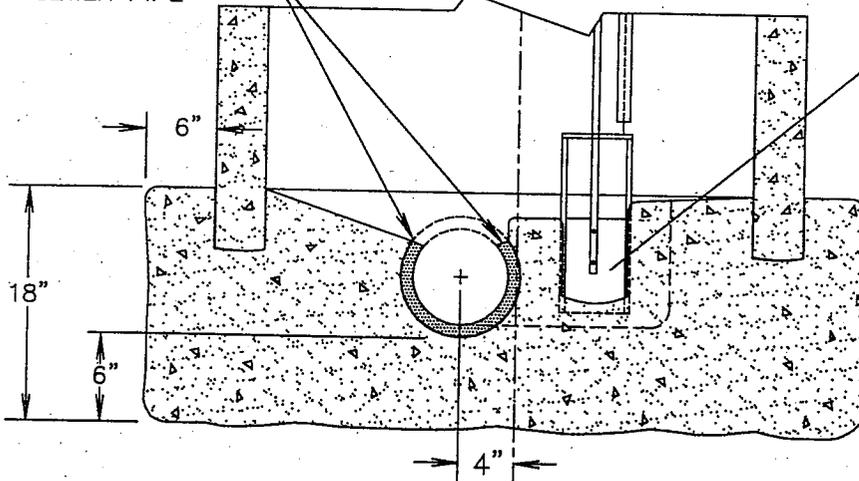
LEUPOLD STEVENS MODEL 61-R  
ELECTRIC FLOW RECORDER

LOCKABLE AND REMOVABLE METAL BOX  
OR USE STEVENS MODEL TF 132-0 BOX



BREAKOUT TOP 1/4  
OF SEWER PIPE

6" BRASS SLIDE GATE  
WATERMAN MODEL NO. C-68  
OR EQUAL

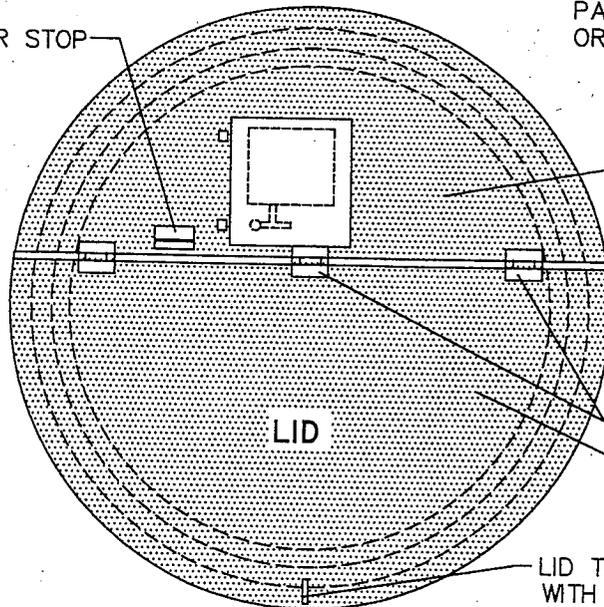


**SECTION B-B**

NOTE :

ALL METAL SURFACES SHALL BE GIVEN TWO  
COATS OF CHLORINATED RUBBER PRIMER  
AND TWO COATS OF TILE BUFF ENAMEL  
PAINT (SHERWIN WILLIAMS NO.B 69415  
OR EQUAL).

ANGLE IRON COVER STOP  
3" x 3" x 3/8"



TO BE SECURED IN PLACE

HINGES WELDED TO COVER

STEEL COVER 1/4" THK.  
4'9" ± DIA. WITH BATTLE  
PLATE NON SKID SURFACE

LID TO BE EQUIPPED  
WITH LOCKING DEVICE

COVER

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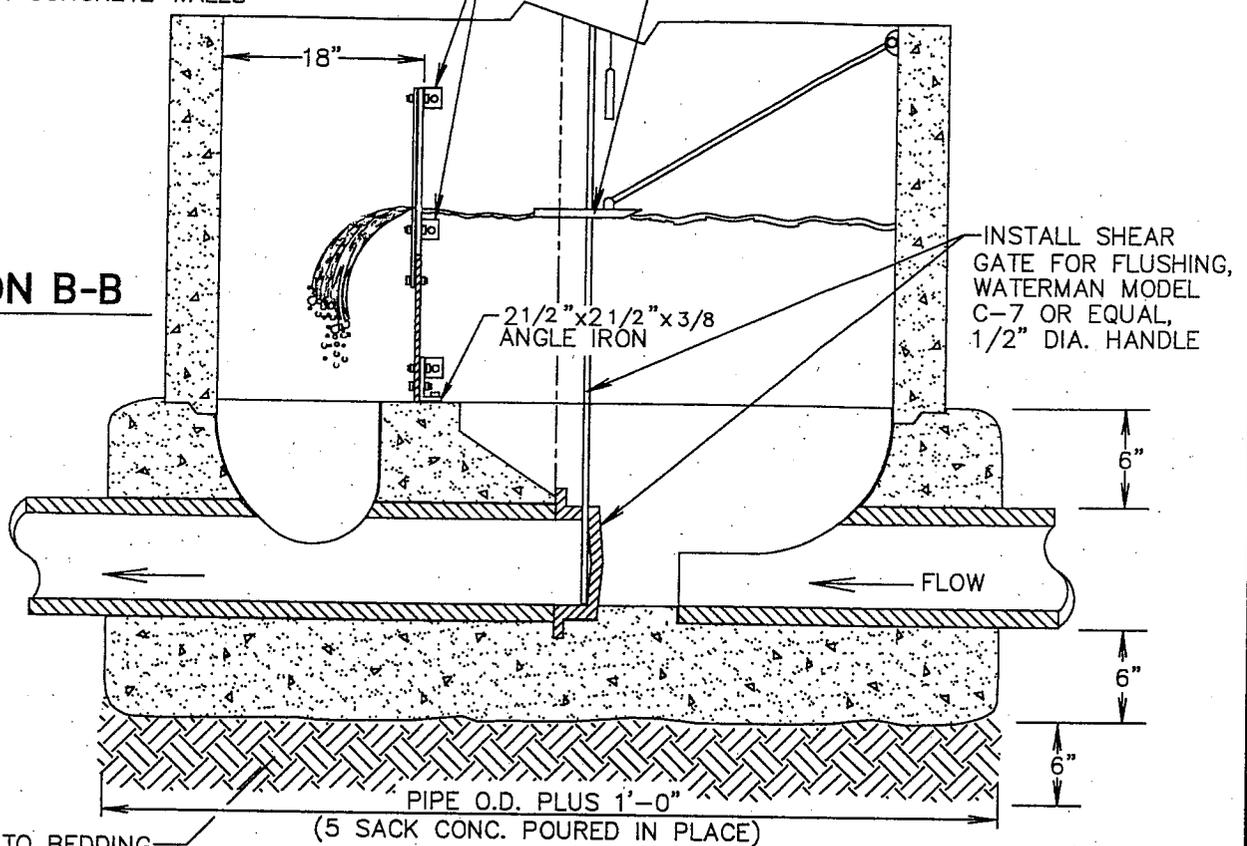
**INDUSTRIAL FLOW  
METERING STATION**

**S-9**  
2 OF 2  
REV.

STRAP TO CONC. WALLS @ 1'-0" CENTERS (MAX.) USE 3/8" BOLTS AND EXPANDING SHIELDS IN CONCRETE WALLS

INSTALL LEUPOLD STEVENS SCOW AND METER (MODEL 61-R)

**SECTION B-B**



CONFORM TO BEDDING REQUIREMENTS OF ASTM D 2321

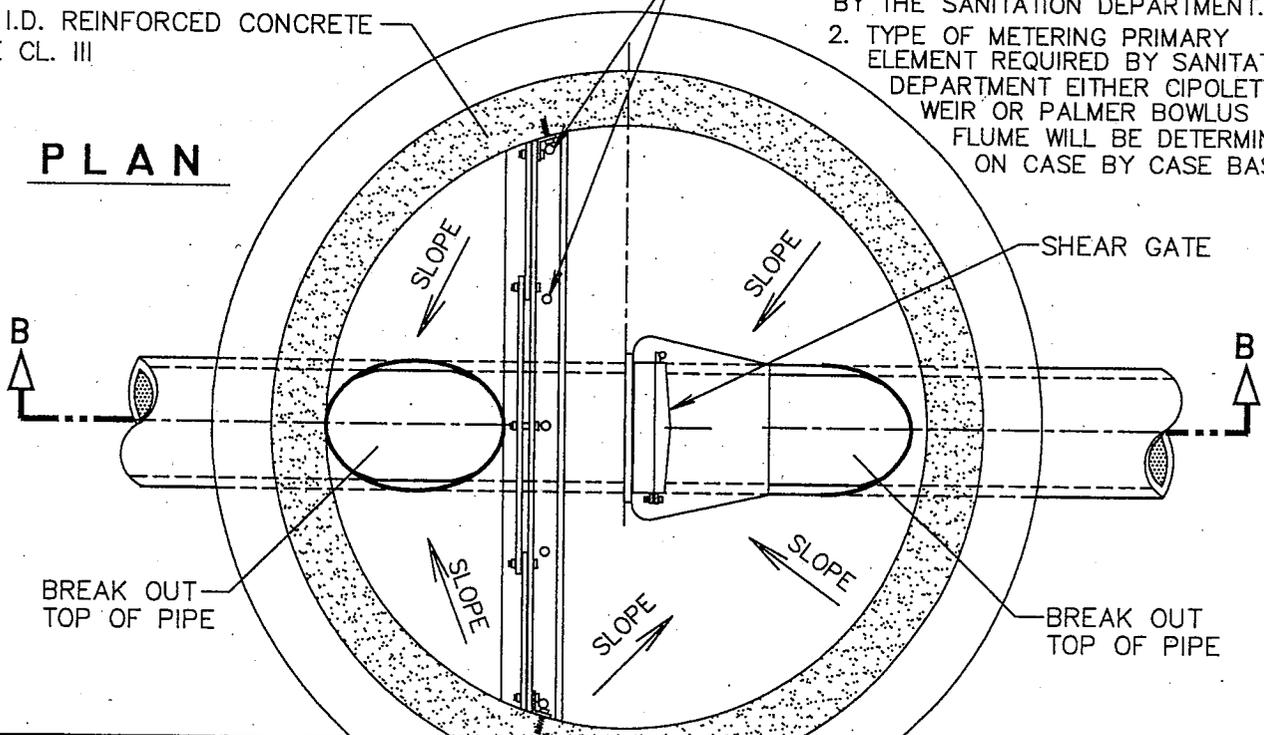
ATTACH 2 1/2" x 2 1/2" x 3/8" ANGLE IRON TO CONCRETE

60" I.D. REINFORCED CONCRETE PIPE CL. III

**NOTES :**

1. ELEV. OF WEIR WILL BE DETERMINED BY THE SANITATION DEPARTMENT.
2. TYPE OF METERING PRIMARY ELEMENT REQUIRED BY SANITATION DEPARTMENT EITHER CIPOLETTI WEIR OR PALMER BOWLUS FLUME WILL BE DETERMINED ON CASE BY CASE BASIS.

**PLAN**



CITY OF PORTERVILLE  
ENGINEERING DIVISION

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**SANITARY SEWER  
" CIPOLETTI WEIR "  
METERING STATION**

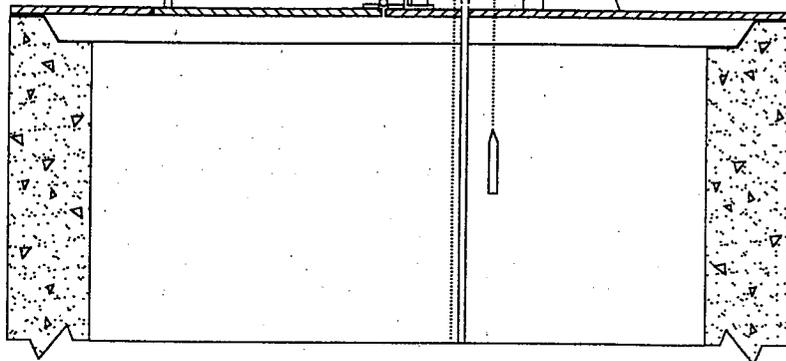
**S-10**  
1 OF 3  
REV.

LEUPOLD STEVENS METER MODEL NO. 61-R  
ELECTRIC FLOW RECORDER

LOCKABLE AND REMOVEABLE METAL BOX  
OR STEVENS MODEL TF 132-0 BOX

ANGLE IRON LID STOP  
TEE HANDLE

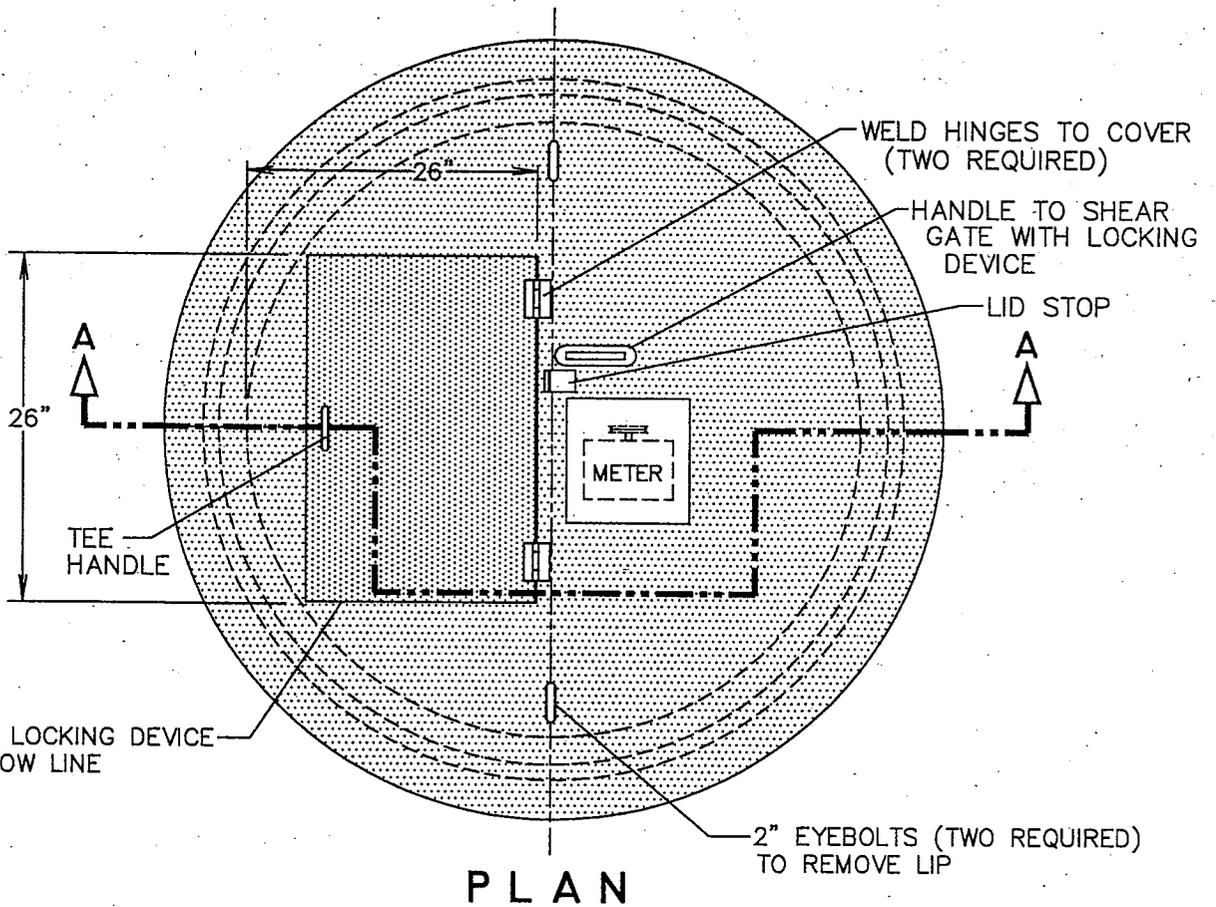
1/4" STEEL COVER W/ NON-SKID  
SURFACE OR 1/4" ALUMINUM  
NON-SKID SURFACE, SECURE  
IN PLACE



SECTION A-A

NOTE :

PAINT ALL EXTERIOR METAL SURFACES WITH 2 COATS OF CHLORINATED RUBBER PRIMER  
AND 2 COATS OF TILE BUFF ENAMEL PAINT, SHERWIN WILLIAMS NO. B69415 OR EQUAL.  
ALL INSIDE METAL SURFACES SHALL RECEIVE 2 COATS OF BITUMASTIC SEALER; ALUMINUM  
NO PAINTING REQUIRED.



PLAN

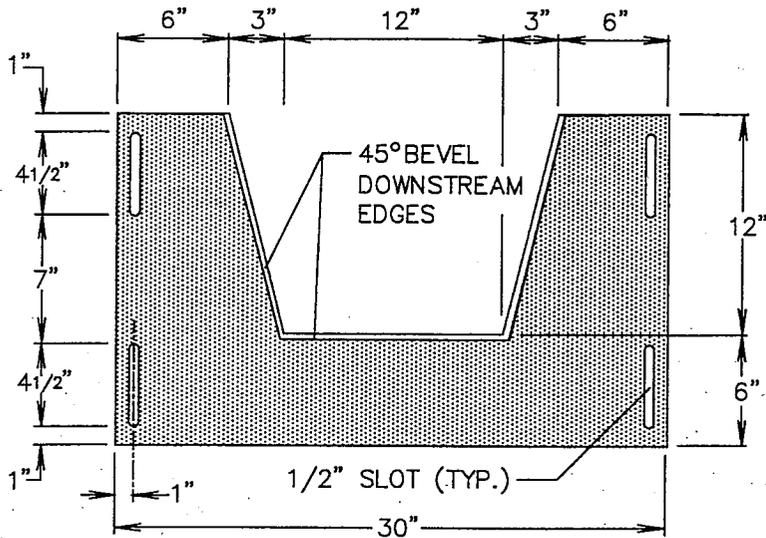
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill*  
CITY ENGINEER R.C.E. 20186

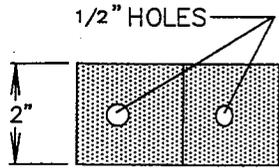
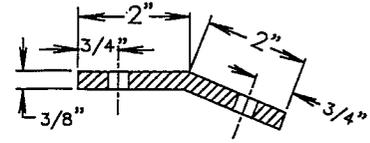
9-3-85  
DATE

**SANITARY SEWER  
"CIPOLETTI WEIR"  
METERING STATION**

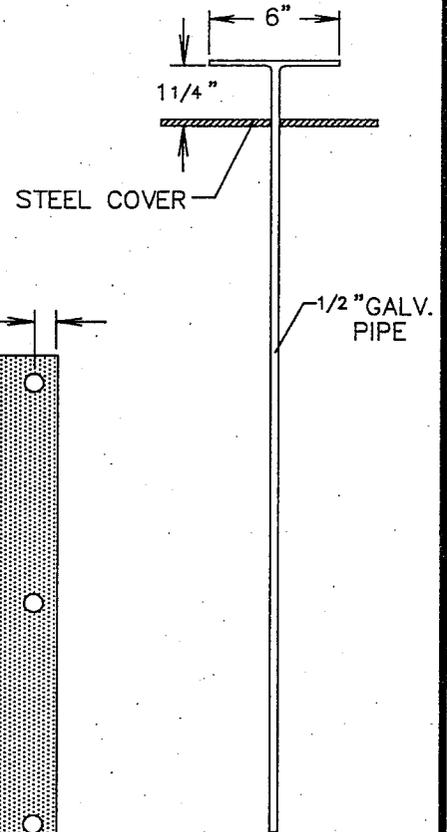
**S-10**  
2 OF 3  
REV.



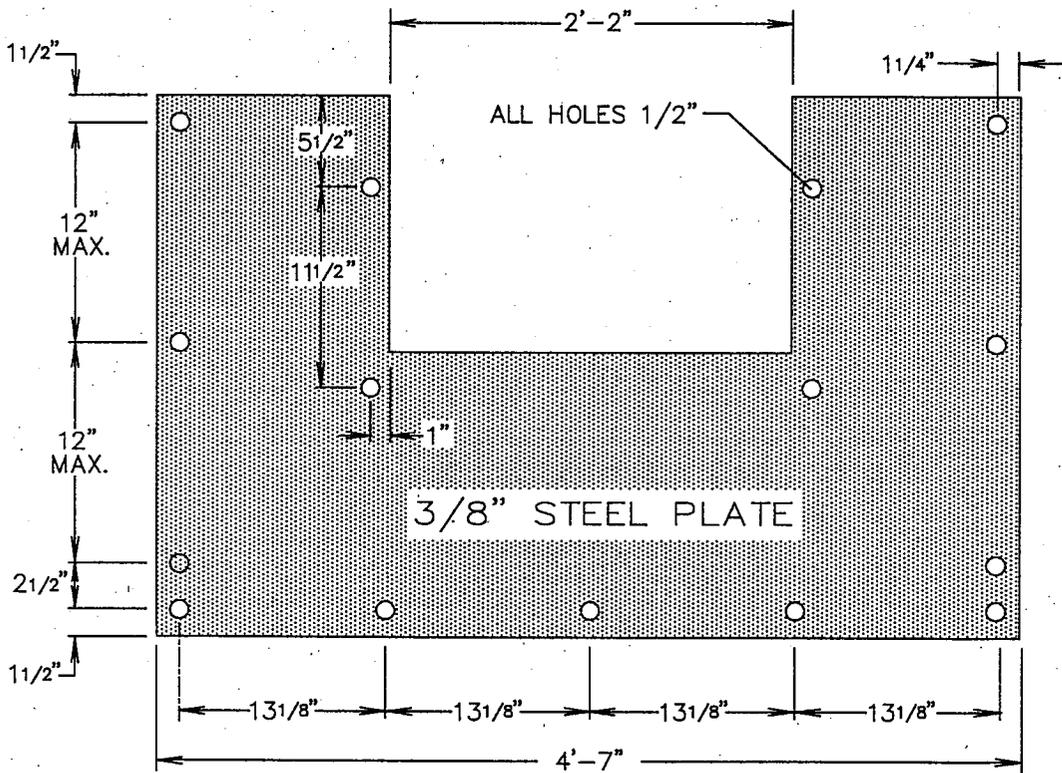
**WEIR**



**WEIR PLATE BRACKETS**



**SHEAR GATE HANDLE**



**WEIR PLATE**

NOTE :  
 FOR APPROVED EQUALS OR TYPE OF MATERIALS CONTACT CITY OF PORTERVILLE  
 ENGINEERING DEPT. PHONE (209) 7827462

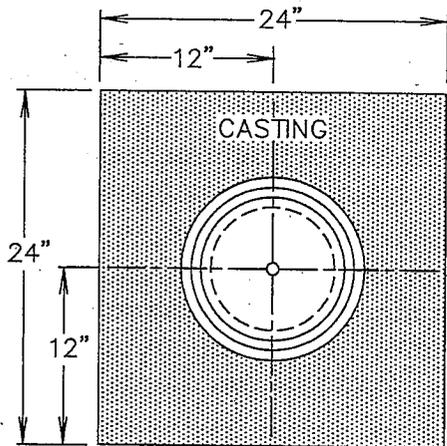
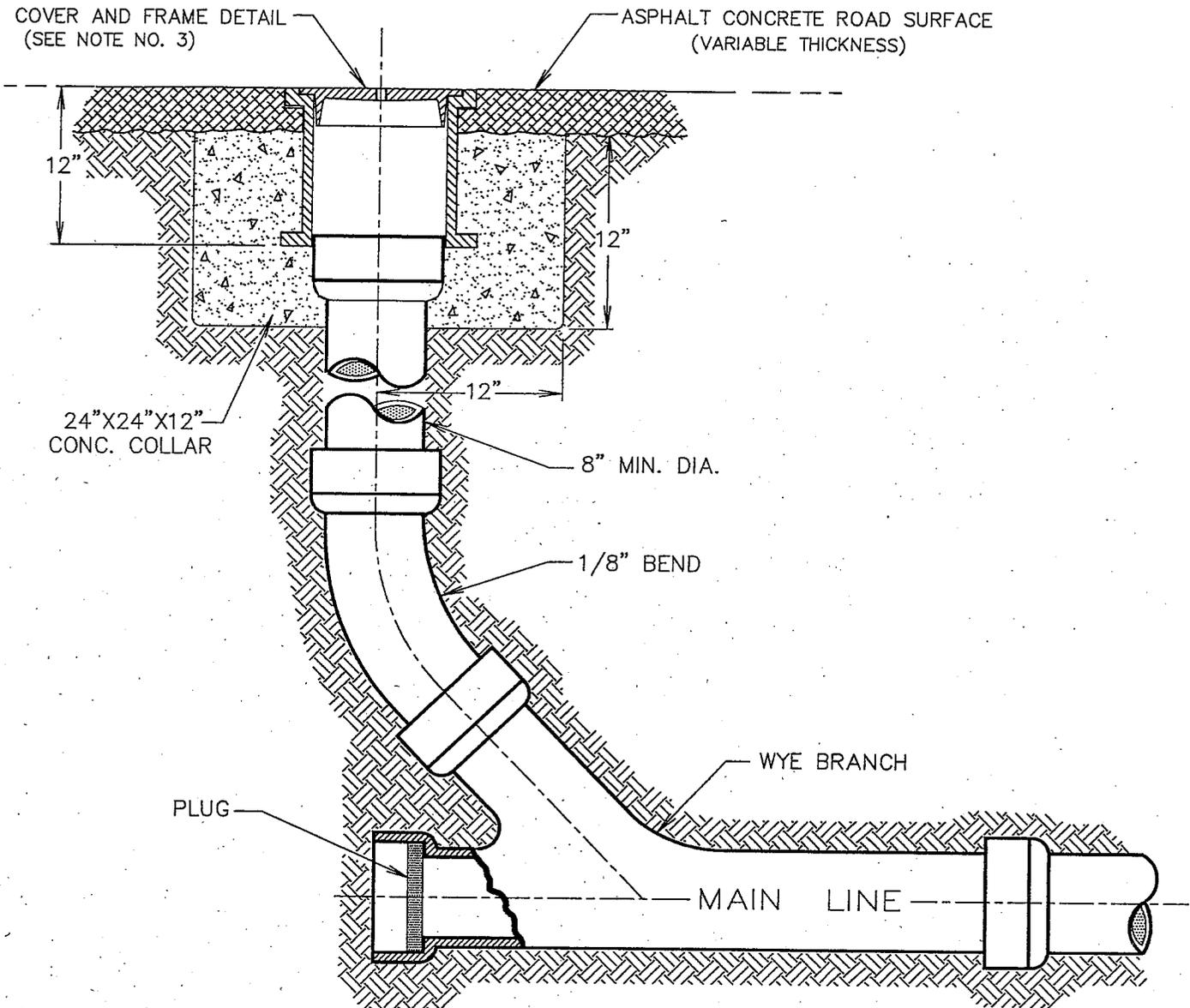
CITY OF PORTERVILLE  
 ENGINEERING DIVISION

*Harold L. Hill* 9-3-85  
 CITY ENGINEER R.C.E. 20186 DATE

**SANITARY SEWER  
 "CIPOLETTI WEIR"  
 METERING STATION**

**S-10**  
 3 OF 3  
 REV.

# TYPICAL SECTION OF TERMINAL CLEAN-OUT



PLAN

NOTE :

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.
2. CLEAN-OUT PIPE MUST BE SAME DIAMETER AS MAIN LINE SEWER.
3. CASTING SHALL BE ALHAMBRA FOUNDRY NO. A-1240 OR EQUAL.
4. ALL CONCRETE SHALL BE 2500# (5 SACK MIX).

The following are required specifications, design and operational features for the sewer system:

1. Underground installation of flexible thermoplastic sewer pipe shall be in accordance with ASTM D 2321.
2. The design of gravity flow system and the wet well upstream from a force main shall provide storage capacity for the effluent for a minimum of three hours. Storage capacity shall be calculated using average flows in the service area and a maximum effluent elevation of six inches below the lowest street elevation at a manhole at any point in the system.

The storage time for a sewage lift station without a force main, and with an acceptable emergency overflow system, shall be a minimum of two hours.

The definition of a lift station with a force main is a system having a distance between the incoming gravity manhole and the outgoing gravity manhole that exceeds 25 feet.

3. A sewer vent shall be located 18 inches behind curb face in the low point of the gravity system upstream from the lift station. The vent shall have the ability to equal flows in the upstream system.
4. The design of the force main shall be two times the working pressure, a safety factor of 2.5 for resisting external loads or a minimum of class 150 pipe, whichever is greater. Pipe material shall be ductile iron or poly vinyl chloride.
5. Minimum force main size shall be six inches unless approved in writing by the City Engineer.
6. Pipe design shall avoid any "sags" in the force main. The force main shall be laid in a straight line between pipe cleanouts. Curves in force mains between pipe cleanouts will not be allowed.
7. Cleanouts for the force main shall be provided at all changes of direction and at intervals not to exceed 660 feet.
8. Installation requirements shall include 150 PSI hydrostatic testing on all pressure pipe and force mains. Hydrostatic testing shall comply with the Standard Specifications for Public Works Construction.

CITY OF PORTERVILLE  
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## SEWER SYSTEM SPECIFICATIONS

**S-12**

1 OF 2

REV.

9. Pipe design shall provide for non-turbulent discharge to minimize hydrogen sulfide gas.
10. Lift stations may consist of a wet well with dual submersible pumps rather than a dry well package station. Each pump shall run on alternate cycles and each pump shall have the ability to handle flows individually.

The submission of a minimum of three manufacturers of submersible pumps and a minimum of two manufacturers of dry well pack lift stations is required. The submission shall include specifications and efficiency calculations for each pump and motor.

11. An alarm system shall be included to notify sewer maintenance personnel by telephone regarding emergencies. The alarm system shall send the high water level, pump failure, commercial power failure and standby alternator/generator if a fixed set is at the site.
12. A control pedestal, included in the electrical panel, shall be provided within the paved station enclosure to :
  - a. Observe the level in the wet well.
  - b. Observe which pump is running.
  - c. Control the operation of each pump.
  - d. Include a running time in hours for each pump and motor.
  - e. Provide a quick connect and disconnect for external power.
  - f. An electronic bubbler shall be used to control the pumps and monitor the liquid level.
13. The lift station site shall also include :
  - a. One inch water service with hose bib for wash-down and general housekeeping.
  - b. Two each duplex weather-proof electrical convenience outlets.

CITY OF PORTERVILLE  
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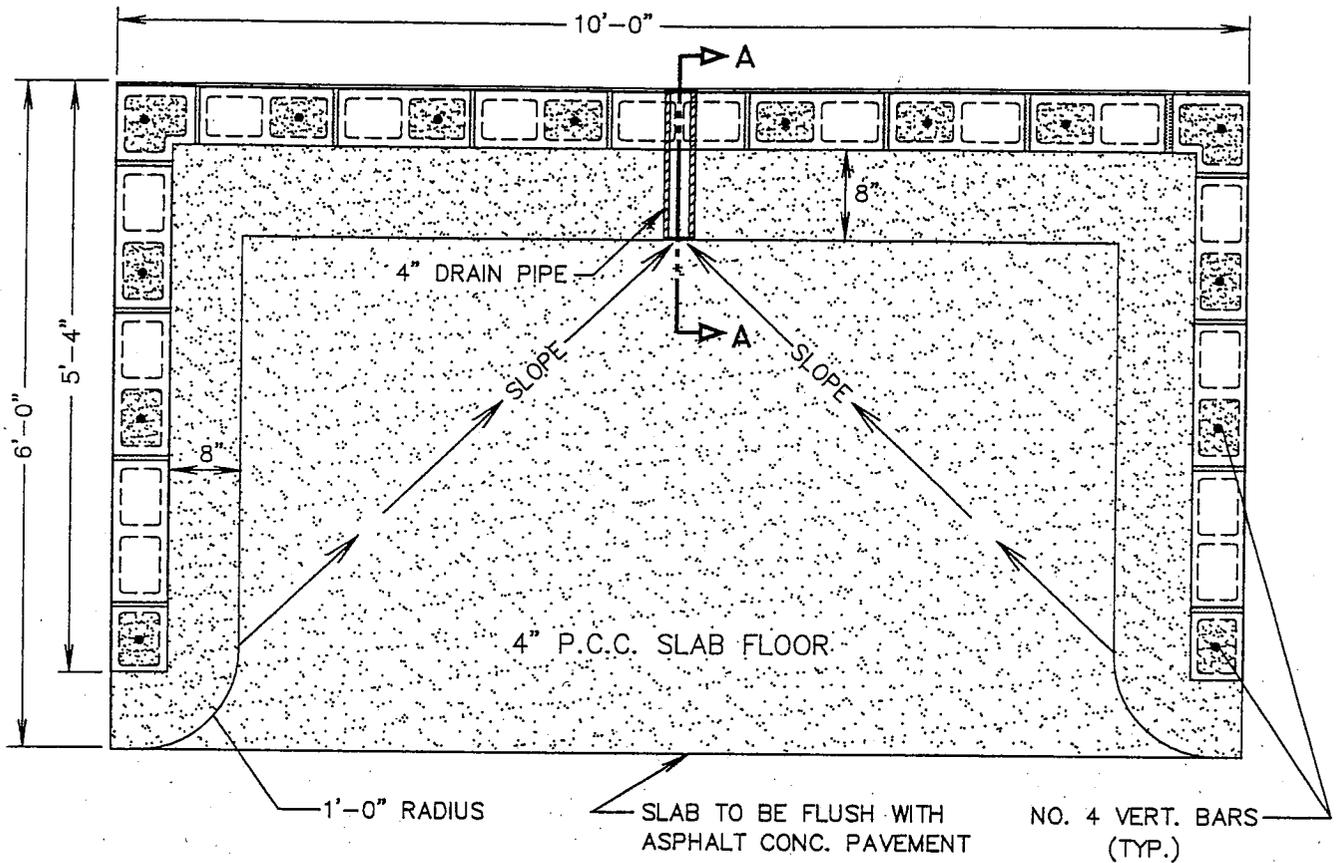
*Harold L. Hill* 7-7-87  
CITY ENGINEER R.C.E. 20186 DATE

## SEWER SYSTEM SPECIFICATIONS

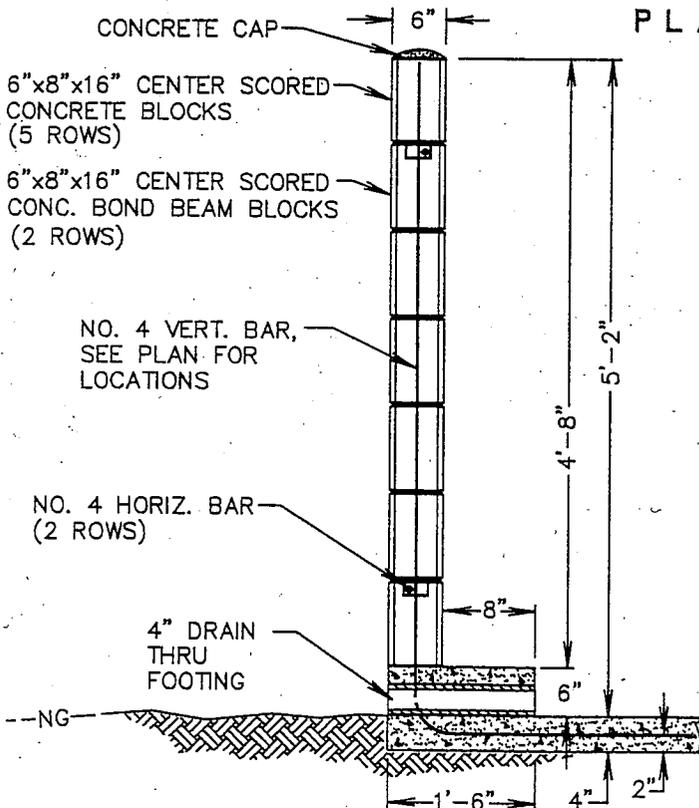
**S-12**  
2 OF 2  
REV.

**MASONRY**  
**TRASH ENCLOSURES**  
**T-2 THROUGH T-2.1**

**MASONRY TRASH ENCLOSURES (T-2 THROUGH T-2.1)**



PLAN



SECTION A-A

NOTES:

1. ALL CELLS IN CONCRETE BLOCKS WITH STEEL SHALL BE FILLED SOLID WITH COARSE GROUT.
2. CORNER BLOCK ENDS AND CENTER WEB SHALL BE CUT TO FORM CONTINUOUS BOND SEAM.
3. ALL HORIZONTAL AND VERTICAL JOINTS SHALL BE RAKED TO MATCH CENTER SCORED BLOCK.
4. CONCRETE BLOCK, MORTAR AND COARSE GROUT SHALL CONFORM WITH SECTION 24 OF THE UNIFORM BUILDING CODE 1976 EDITION.
5. SLAB FLOOR AND FOOTING SHALL BE 2500# (5 SACK MIX) PORTLAND CONCRETE CEMENT.
6. GROUND TO BE SLOPED AWAY FROM WALLS.
7. THIS STANDARD IS FOR SINGLE 3 CU.YD. OR SMALLER BINS. SUBMIT DRAWINGS TO THE CITY ENGINEER FOR LARGER OR MULTIPLE BIN ENCLOSURES.

CITY OF PORTERVILLE  
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CITY ENGINEER R.C.E. 20186

9-3-85  
DATE

**MASONRY**  
**TRASH CONTAINER ENCLOSURE**

**T-2**

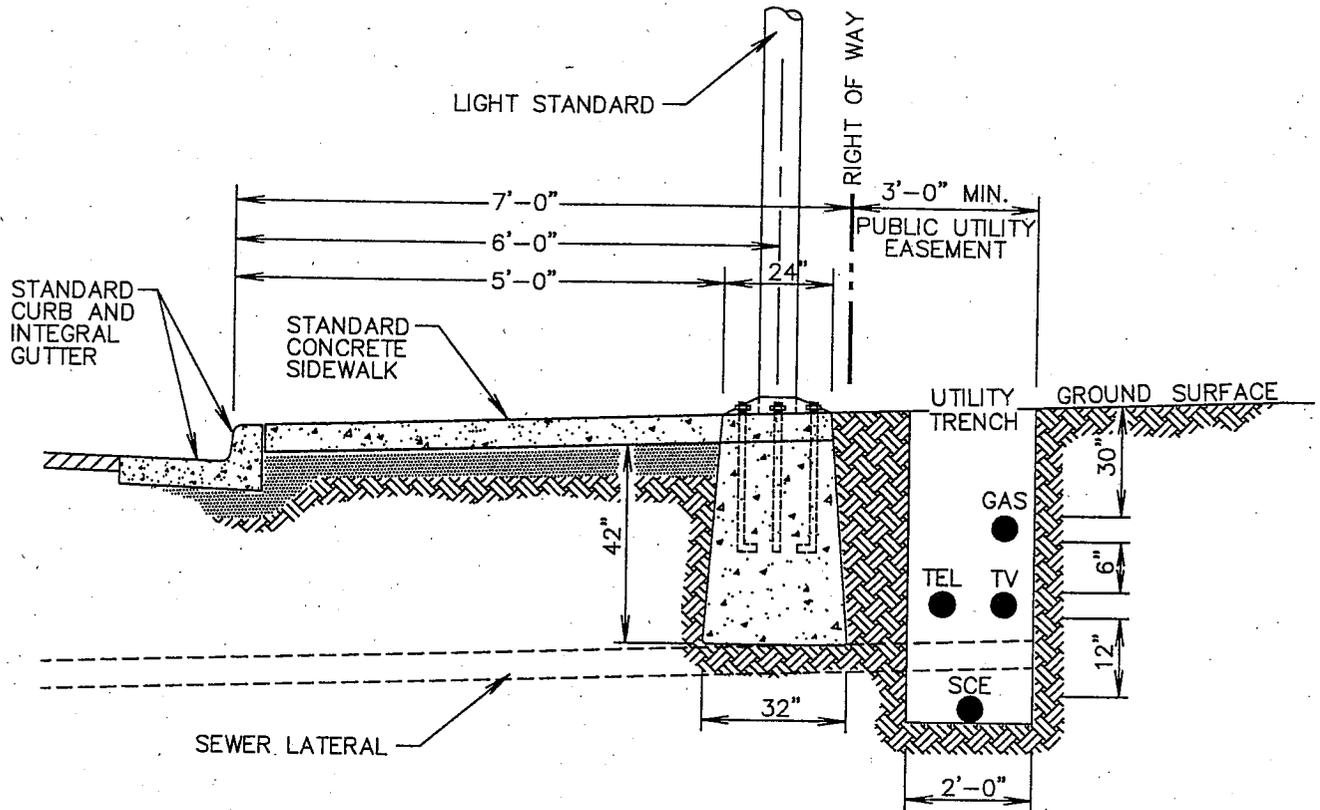
REV.



**UTILITY LOCATION**

**U-1 THROUGH U-3**

**UTILITY LOCATION (U-1 THROUGH U-3)**



NOTES:

1. ALL TRENCHES AND LINE DEPTHS ARE MINIMUM DEPTHS.
2. THE TELEVISION, TELEPHONE AND ELECTRIC LINES SHALL BE SEPARATED BY A MINIMUM OF 1' IN/ON SOIL WITH A RELATIVE COMPACTION OF 90% .

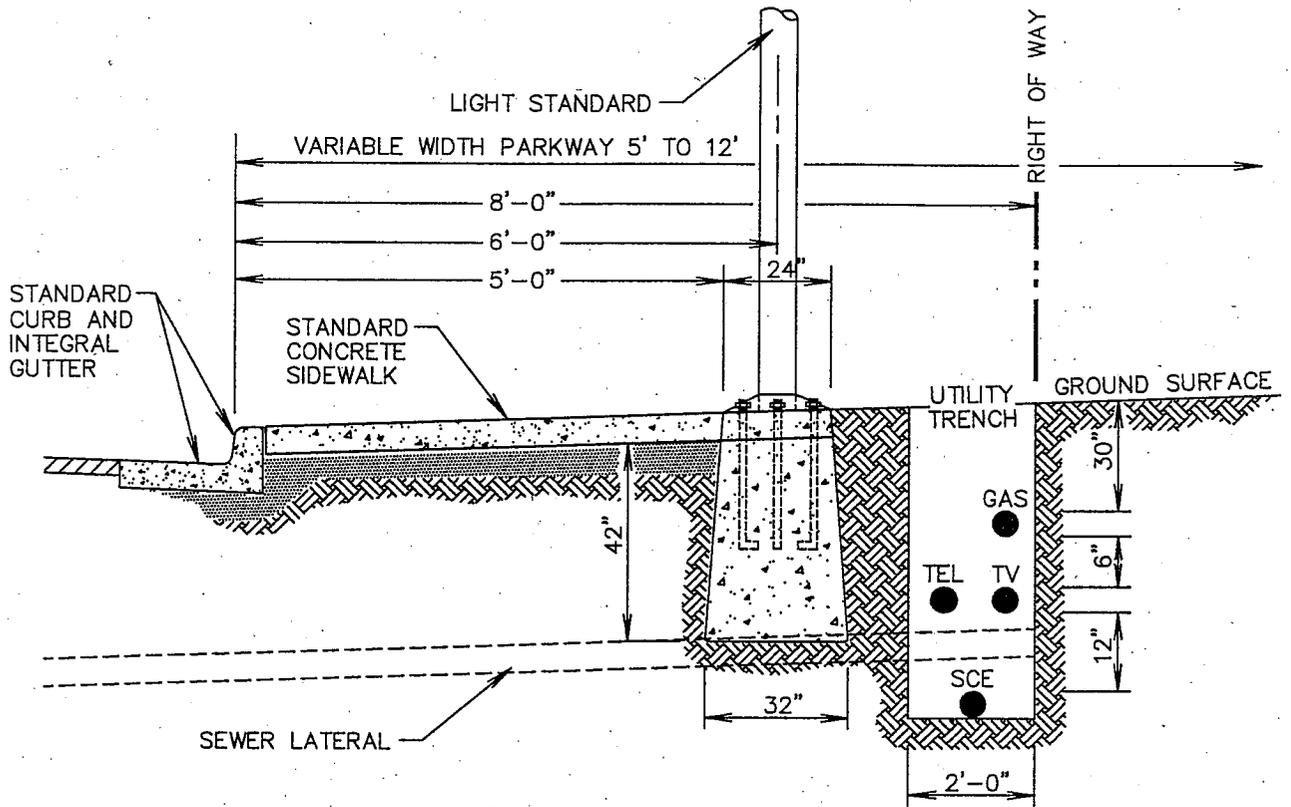
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 10-12-90  
CITY ENGINEER R.C.E. 20186 DATE

**50' RIGHT OF WAY  
UTILITY LOCATION**

**U-1**

REV.



NOTES:

1. ALL TRENCHES AND LINE DEPTHS ARE MINIMUM DEPTHS.
2. THE TELEVISION, TELEPHONE AND ELECTRIC LINES SHALL BE SEPARATED BY A MINIMUM OF 1' IN/ON SOIL WITH A RELATIVE COMPACTION OF 90% .

CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill*

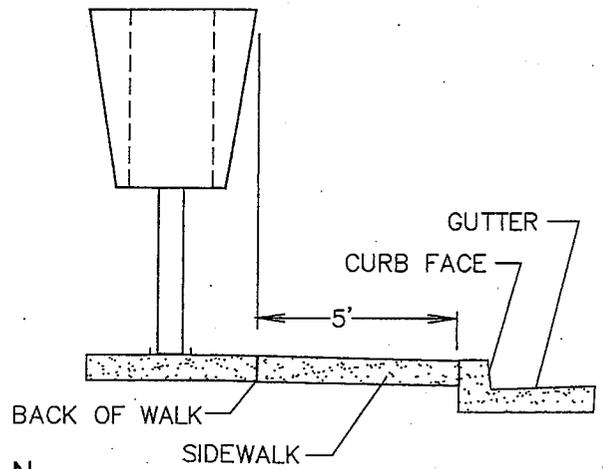
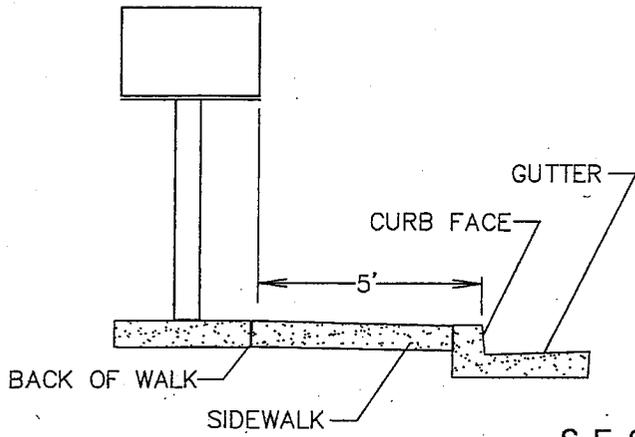
10-12-90

CITY ENGINEER R.C.E. 20186 DATE

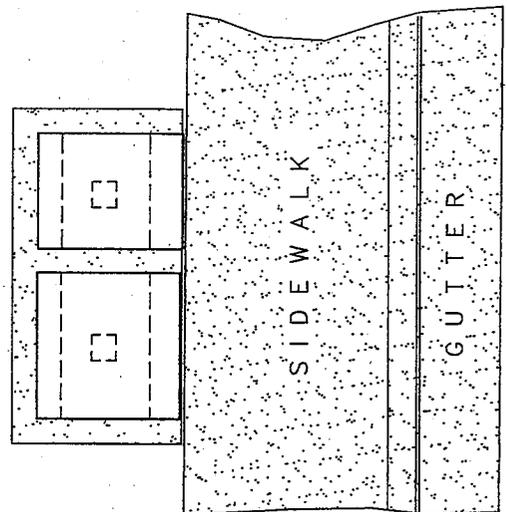
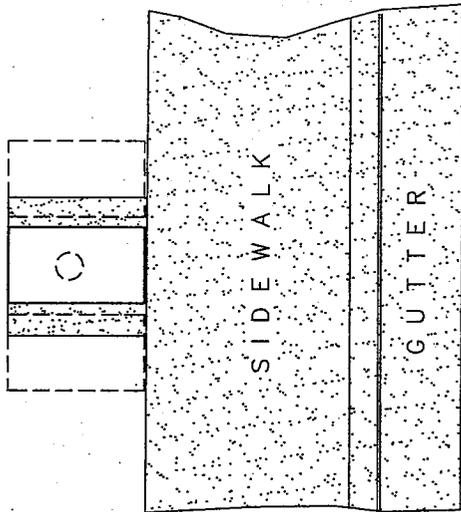
**60' RIGHT OF WAY  
UTILITY LOCATION**

**U-2**

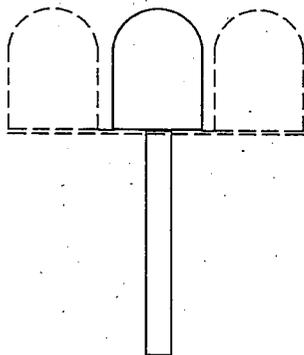
REV.



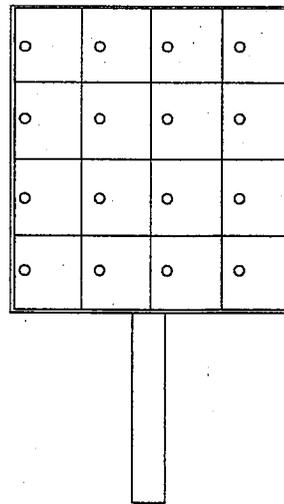
SECTION



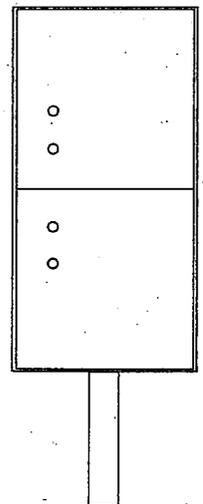
PLAN VIEW



COMMON MAIL BOX



NEIGHBORHOOD BOX UNIT



PARCEL LOCKERS

FRONT ELEVATION

CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill*

CITY ENGINEER R.C.E. 20186

1-6-89

DATE

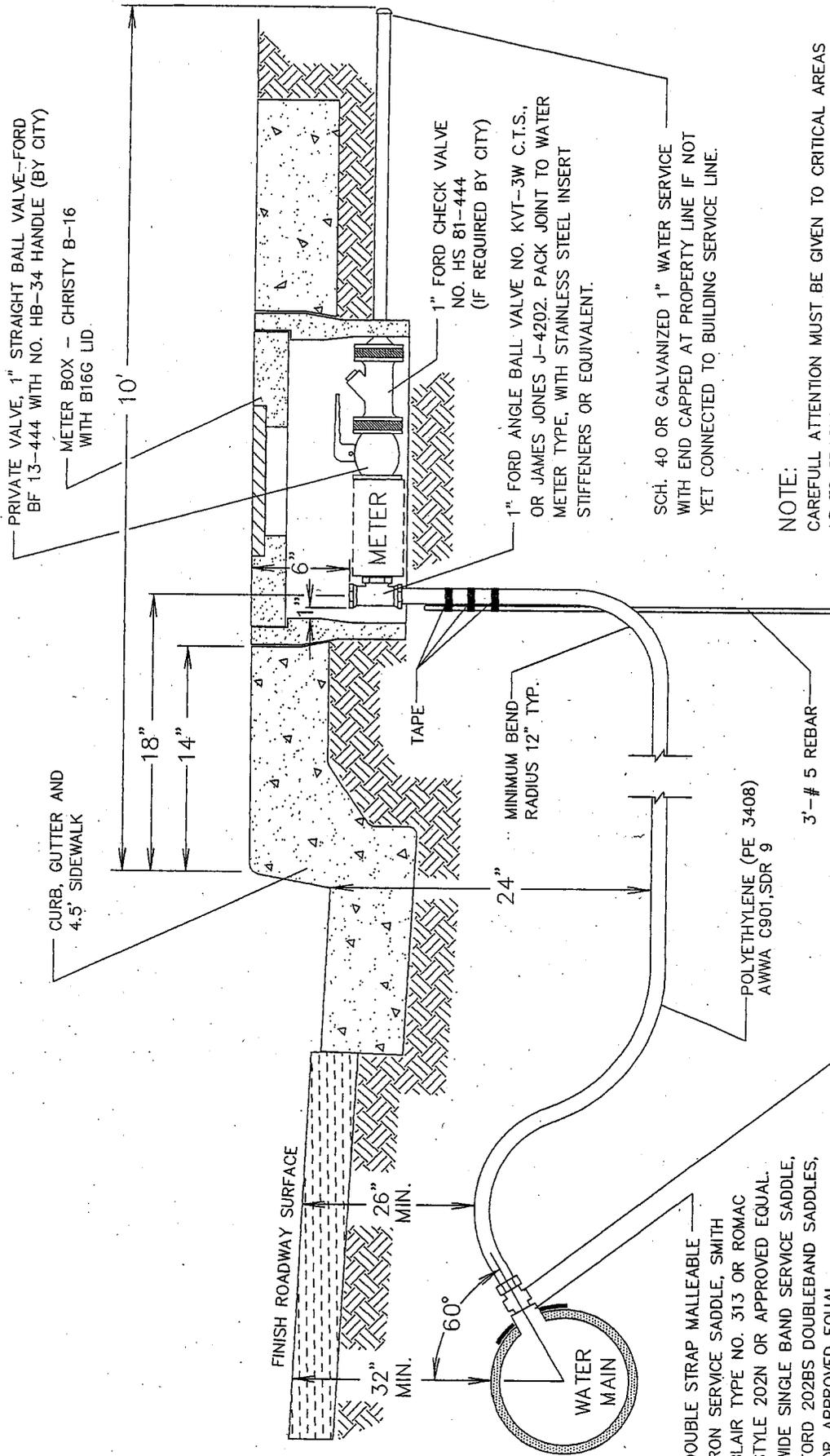
**POSTAL FACILITY  
LOCATION**

**U-3**

REV.

**WATER SERVICE**  
**W-1 THROUGH W-12**

**WATER SERVICE (W-1 THROUGH W-12)**



PRIVATE VALVE, 1" STRAIGHT BALL VALVE-FORD  
BF 13-444 WITH NO. HB-34 HANDLE (BY CITY)  
METER BOX - CHRISTY B-16  
WITH B16G LID

CURB, GUTTER AND  
4.5' SIDEWALK

18"

14"

10'

METER

TAPE

1" FORD CHECK VALVE  
NO. HS 81-444  
(IF REQUIRED BY CITY)

1" FORD ANGLE BALL VALVE NO. KVT-3W C.T.S.,  
OR JAMES JONES J-4202. PACK JOINT TO WATER  
METER TYPE, WITH STAINLESS STEEL INSERT  
STIFFENERS OR EQUIVALENT.

SCH. 40 OR GALVANIZED 1" WATER SERVICE  
WITH END CAPPED AT PROPERTY LINE IF NOT  
YET CONNECTED TO BUILDING SERVICE LINE.

NOTE:  
CAREFULL ATTENTION MUST BE GIVEN TO CRITICAL AREAS  
AS TO SPACING AND MEASUREMENTS OF METER BOX AND  
VALVE.  
TUBING STIFFENER INSERTS MUST BE USED IN ALL  
CONNECTION FITTINGS. 24" MIN. SEPARATION BETWEEN  
SERVICES AT PROPERTY LINE.

SUBSTITUTION OF ANY PARTS OR MATERIALS REQUIRES  
PRIOR APPROVAL BY THE CITY ENGINEER.

MINIMUM BEND  
RADIUS 12" TYP.

POLYETHYLENE (PE 3408)  
AWWA C901, SDR 9

3'-# 5 REBAR

FINISH ROADWAY SURFACE

32" MIN.

26" MIN.

60°

WATER  
MAIN

DOUBLE STRAP MALLEABLE  
IRON SERVICE SADDLE, SMITH  
BLAIR TYPE NO. 313 OR ROMAC  
STYLE 202N OR APPROVED EQUAL.  
WIDE SINGLE BAND SERVICE SADDLE,  
FORD 202BS DOUBLEBAND SADDLES,  
OR APPROVED EQUAL.

MUELLER 110 CORP STOP  
NO. H-15023 I.P. INLET TO  
COMPRESSION OUTLET W/STAINLESS  
STEEL INSERT STIFFENERS NO. 506139 OR  
JAMES JONES J-1937 CORP-STOP W/  
STAINLESS STEEL STIFFENER OR FORD  
FB 1000 CORP. STOP W/ STAINLESS  
STEEL STIFFENER.

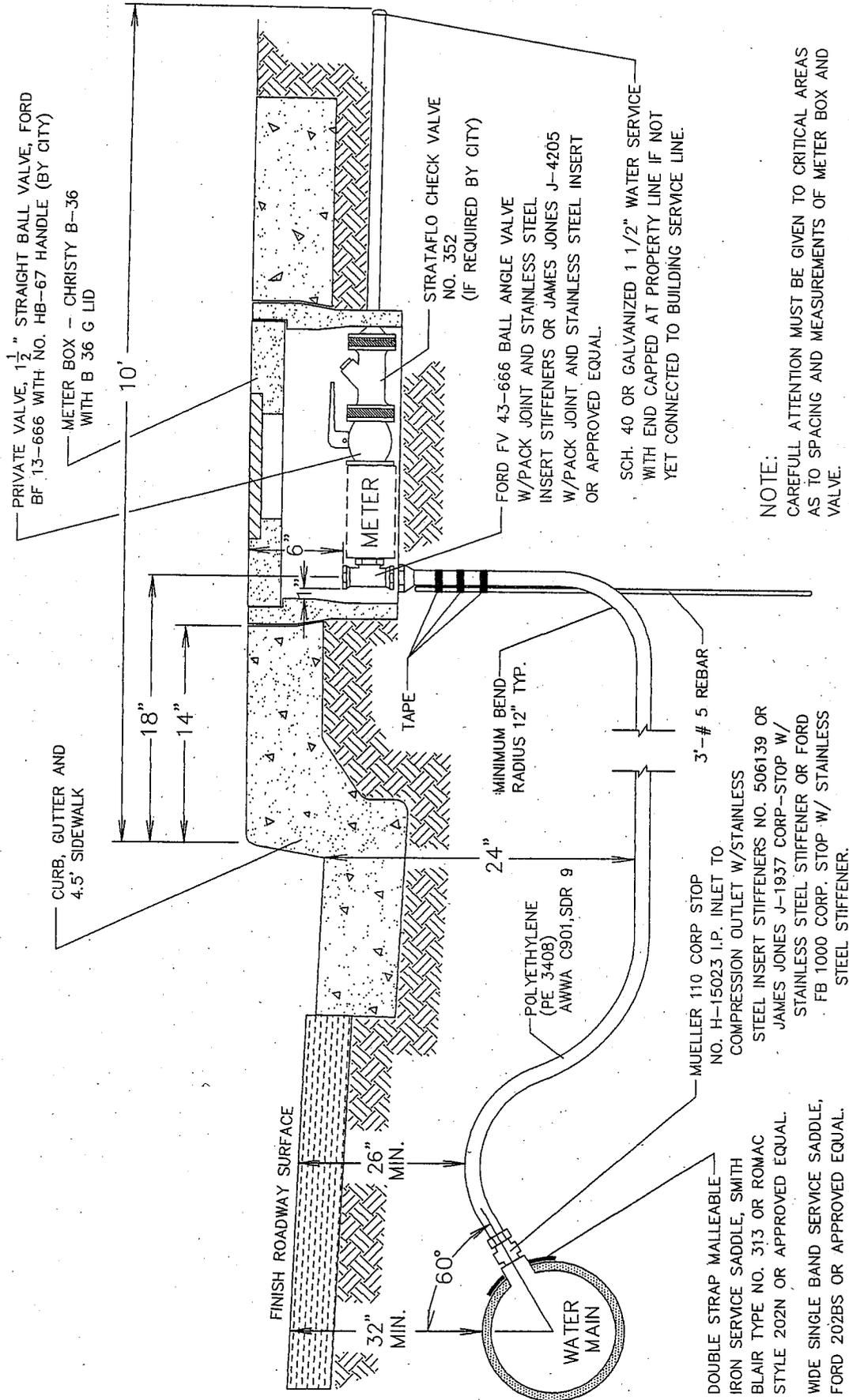
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

# 1" WATER SERVICE

W-1

REV.



NOTE:  
 CAREFULL ATTENTION MUST BE GIVEN TO CRITICAL AREAS AS TO SPACING AND MEASUREMENTS OF METER BOX AND VALVE.

TUBING STIFFENER INSERTS MUST BE USED IN ALL CONNECTION FITTINGS. 24" MIN. SEPARATION BETWEEN SERVICES AT PROPERTY LINE.

TYPE OF METER DETERMINED BY WATER USED.

SUBSTITUTION OF ANY PARTS OR MATERIALS REQUIRES PRIOR APPROVAL BY THE CITY ENGINEER.

CITY OF PORTERVILLE  
 ENGINEERING DIVISION

*Harold L. Hill*

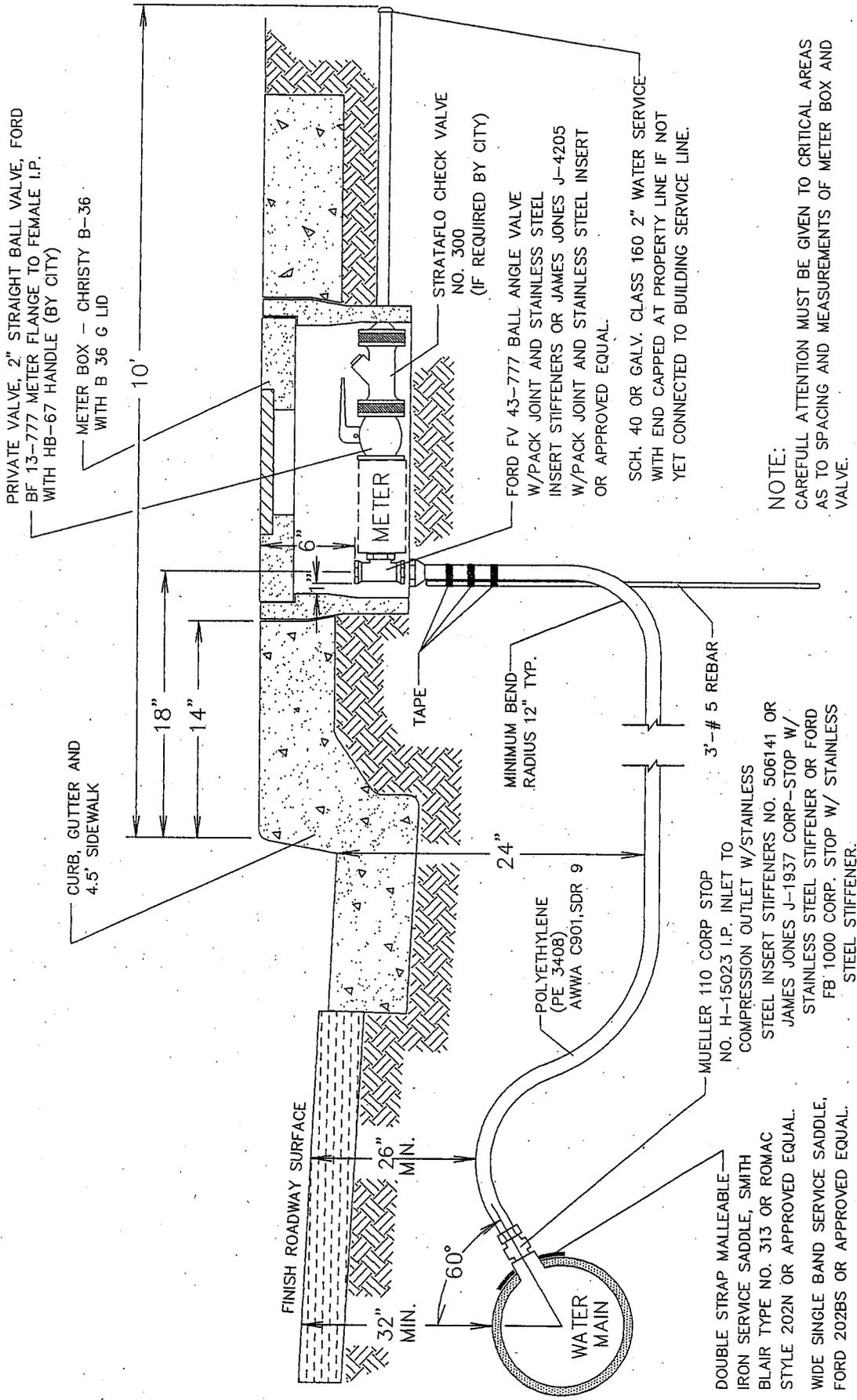
2-15-99

CITY ENGINEER R.C.E. 20186 DATE

# 1 1/2" WATER SERVICE

# W-2

REV.



PRIVATE VALVE, 2" STRAIGHT BALL VALVE, FORD  
BF 13-777 METER FLANGE TO FEMALE I.P.  
WITH HB-67 HANDLE (BY CITY)

METER BOX - CHRISTY B-36  
WITH B 36 G LID

CURB, GUTTER AND  
4.5' SIDEWALK

18"

14"

10'

TAPE

STRATAFLO CHECK VALVE  
NO. 500  
(IF REQUIRED BY CITY)

FORD FV 43-777 BALL ANGLE VALVE  
W/PACK JOINT AND STAINLESS STEEL  
INSERT STIFFENERS OR JAMES JONES J-4205  
W/PACK JOINT AND STAINLESS STEEL INSERT  
OR APPROVED EQUAL.

SCH. 40 OR GALV. CLASS 160 2" WATER SERVICE  
WITH END CAPPED AT PROPERTY LINE IF NOT  
YET CONNECTED TO BUILDING SERVICE LINE.

MINIMUM BEND  
RADIUS 12" TYP.

24"

3'-# 5 REBAR

MUELLER 110 CORP STOP  
NO. H-15023 I.P. INLET TO  
COMPRESSION OUTLET W/STAINLESS  
STEEL INSERT STIFFENERS NO. 506141 OR  
JAMES JONES J-1937 CORP-STOP W/  
STAINLESS STEEL STIFFENER OR FORD  
FB 1000 CORP. STOP W/ STAINLESS  
STEEL STIFFENER.

DOUBLE STRAP MALLEABLE  
IRON SERVICE SADDLE, SMITH  
BLAIR TYPE NO. 313 OR ROMAC  
STYLE 202N OR APPROVED EQUAL.  
WIDE SINGLE BAND SERVICE SADDLE,  
FORD 202BS OR APPROVED EQUAL.

NOTE:  
CAREFULL ATTENTION MUST BE GIVEN TO CRITICAL AREAS  
AS TO SPACING AND MEASUREMENTS OF METER BOX AND  
VALVE.

TUBING STIFFENER INSERTS MUST BE USED IN ALL  
CONNECTION FITTINGS. 24" MIN. SEPARATION BETWEEN  
SERVICES AT PROPERTY LINE.

TYPE OF METER DETERMINED BY WATER USED.  
SUBSTITUTION OF ANY PARTS OR MATERIALS REQUIRES  
PRIOR APPROVAL BY THE CITY ENGINEER.

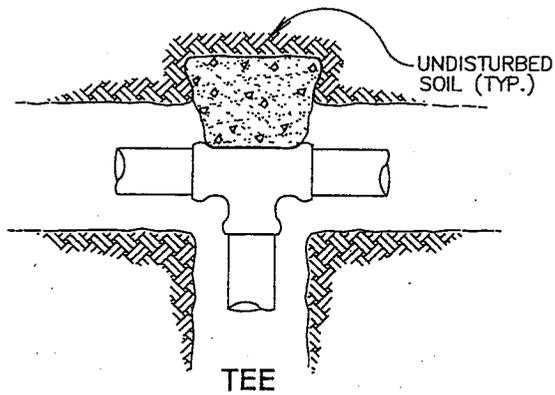
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ENGINEERING DIVISION

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CITY ENGINEER R.C.E. 20186 DATE

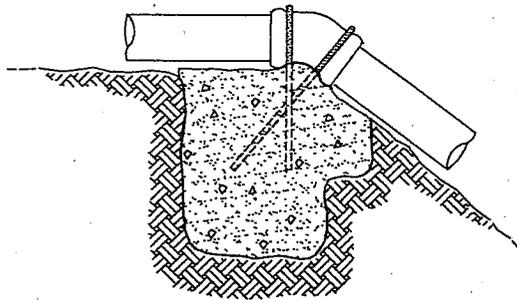
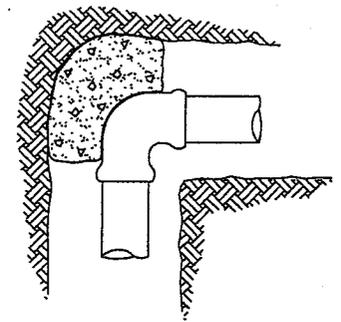
2" WATER SERVICE

W-3

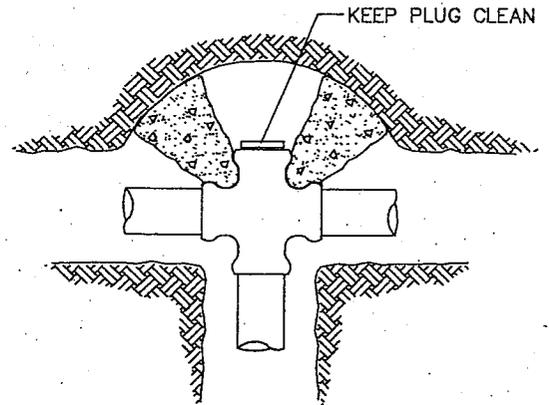
REV.



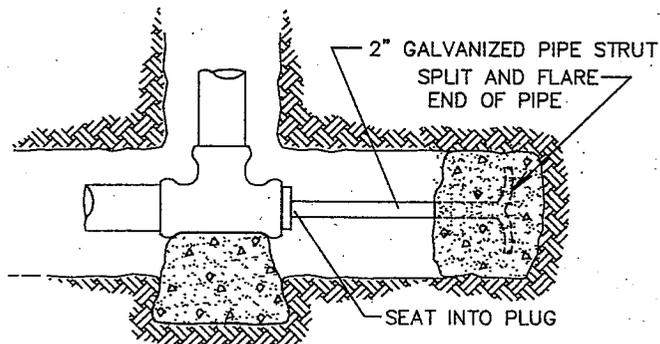
HORIZONTAL BEND



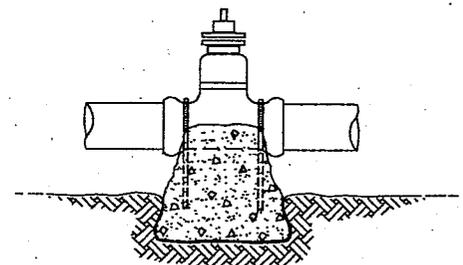
VERTICAL BEND



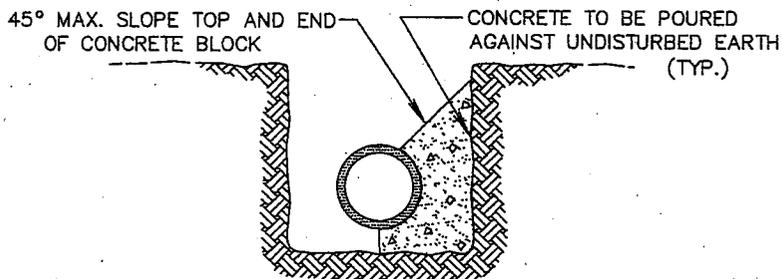
PLUGGED CROSS



PLUGGED TEE



VALVE



SECTION OF THRUST BLOCK

NOTE :

USE STD. W-4.1 FOR DETERMINING THRUST BLOCK BEARING AREA.

CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Apoll* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

# THRUST BLOCK DETAILS

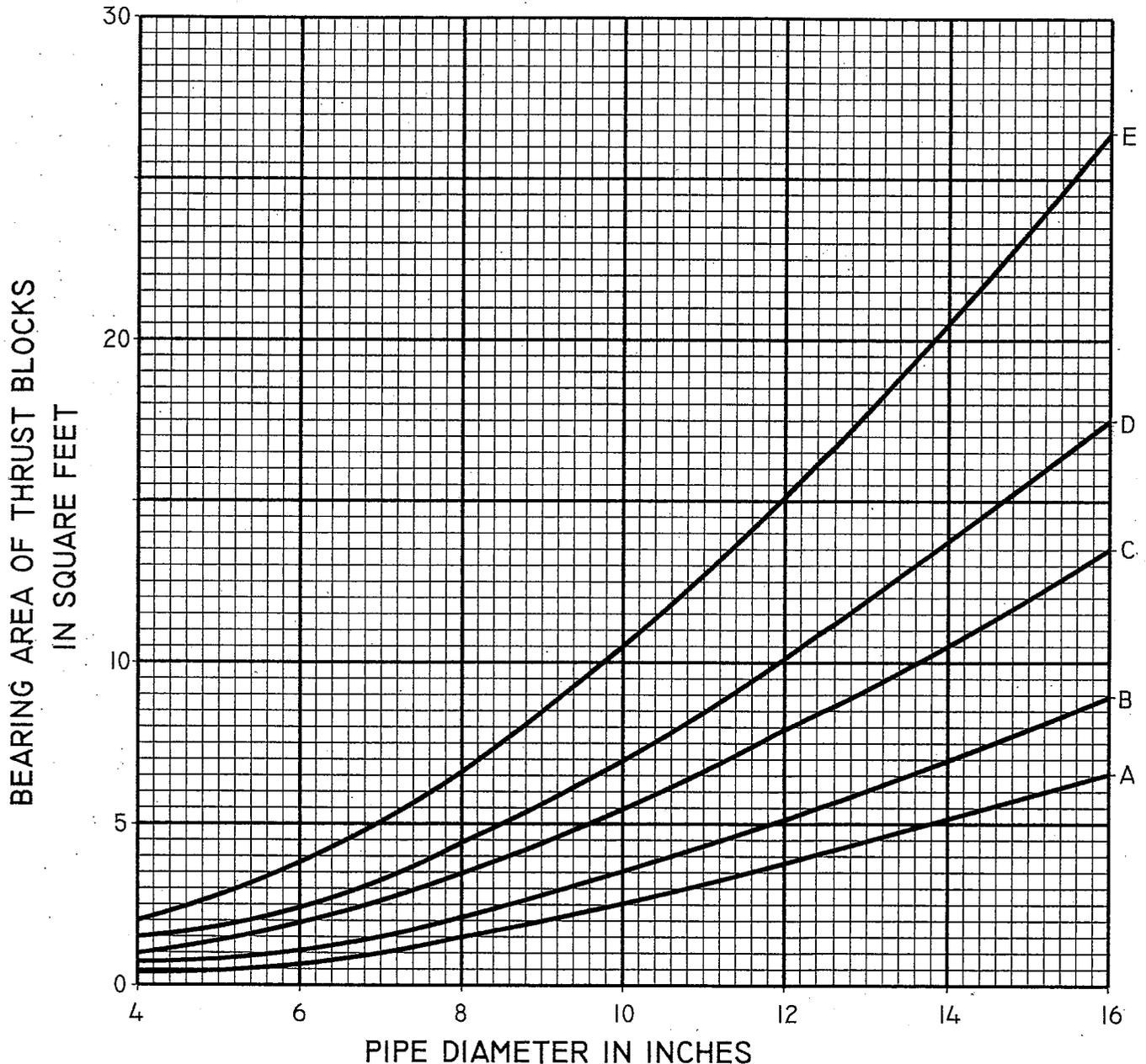
**W-4**

1 OF 2

REV.

NOTES:

1. HORIZONTAL THRUST AT FITTINGS ARE BASED ON 150 PSI OF WATER PRESSURE.
2. VALUES FROM CURVES ARE FOR TEES AND DEAD ENDS, I.E. STRAIGHT LINE THRUST. FOR OTHER FITTINGS, MULTIPLY THE BEARING AREA OBTAINED FROM CURVES BY THE FOLLING FACTORS : FOR 90° BEND, 1.4  
FOR 45° BEND, 0.8  
FOR 22½° BEND, 0.4
3. SAFE BEARING LOADS ON UNDISTURBED SOIL ARE AS FOLLOWS :  
 CURVE A = 4,000 PSF, MASSIVE CRYSTALLINE BEDROCK.  
 CURVE B = 3,000 PSF, SEDIMENTARY AND FOLIATED BEDROCK.  
 CURVE C = 2,000 PSF, SANDY GRAVEL AND/OR GRAVEL.  
 CURVE D = 1,500 PSF, SAND, SILTY SAND OR GRAVEL AND CLAYEY SAND OR GRAVEL.  
 CURVE E = 1,000 PSF, CLAY, SANDY CLAY, SILTY CLAY, AND CLAYEY SILT.
4. THRUST BLOCKS FOR CONDITIONS NOT COVERED BY CURVES SHALL BE APPROVED BY THE CITY ENGINEER.



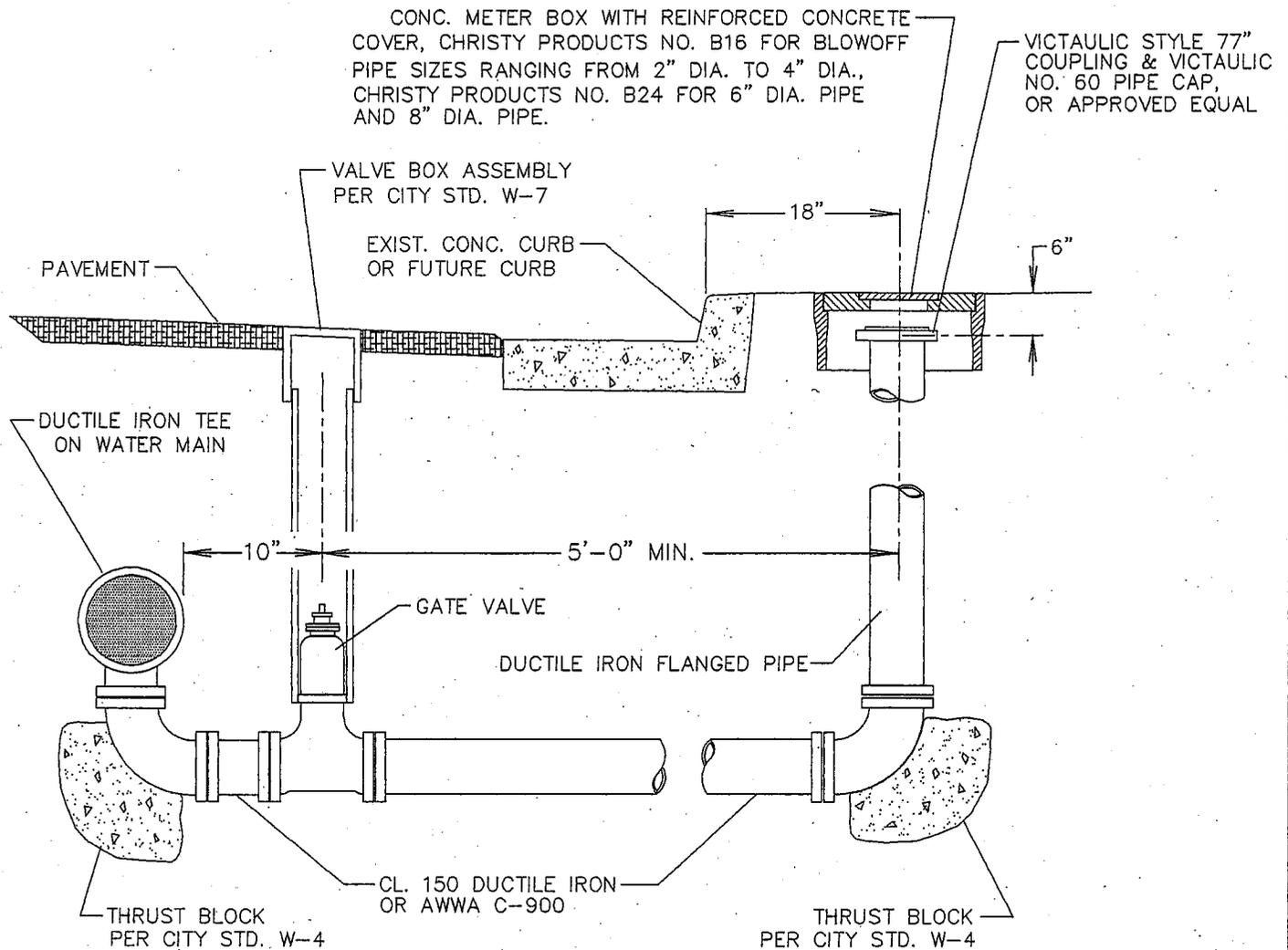
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

# BEARING AREA OF THRUST BLOCKS

**W-4**

2 OF 2  
REV.



NOTE:

1. REFER TO CITY STD. W-11 (2 OF 2) FOR FLUSHING VELOCITY AND BLOWOFF SIZE.

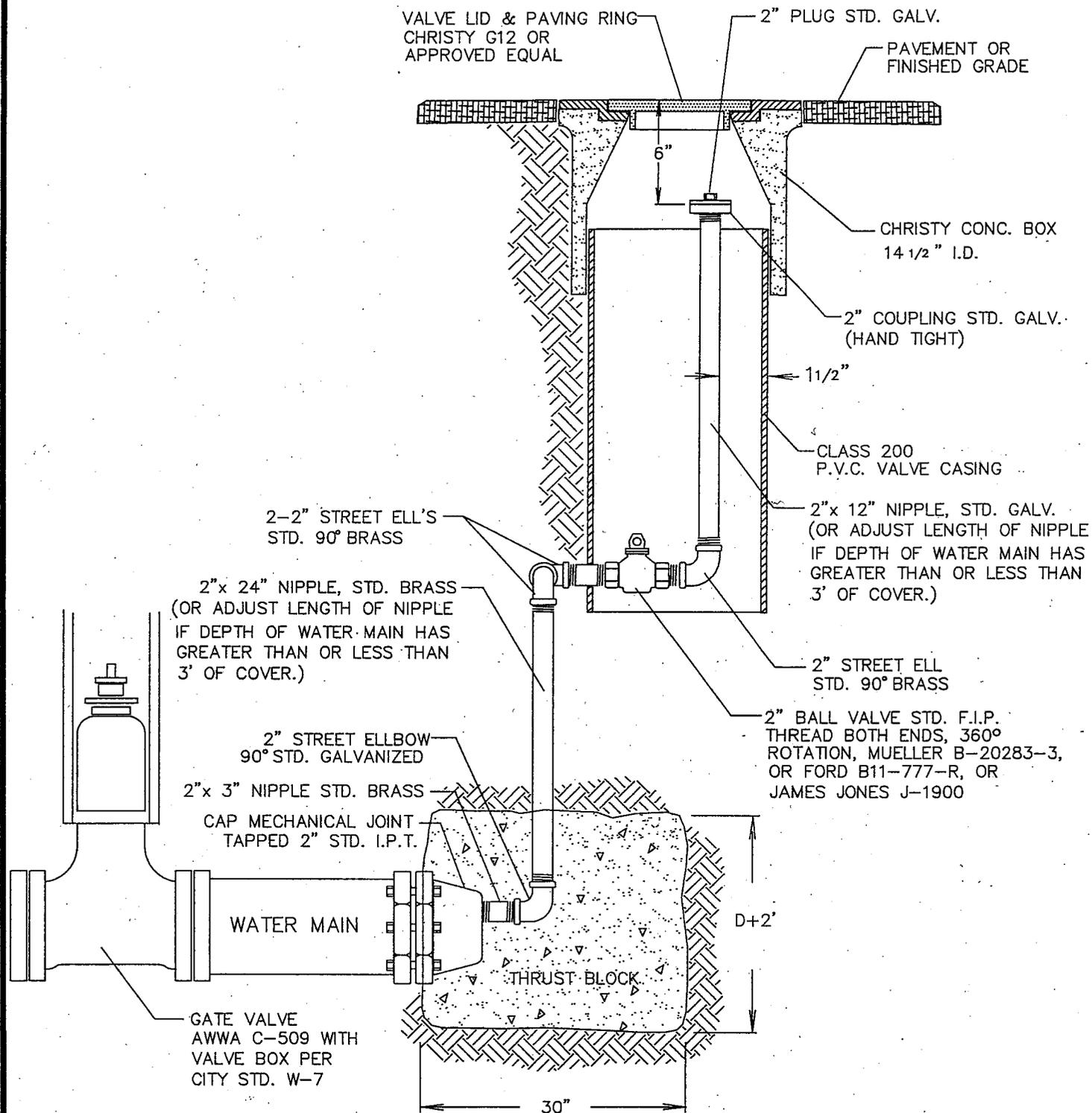
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CITY ENGINEER R.C.E. 20186 DATE

PERMANENT  
WATER BLOWOFF

W-5

REV.



NOTE:  
THRUST BLOCK TO BE POURED  
AGAINST UNDISTURBED SOIL.

NOTE:

1. TO BE USED FOR 6", 8" & 10" WATER MAINS. ADJUST BLOWOFF PIPE DIA. SIZES PER CITY STD. W-11.

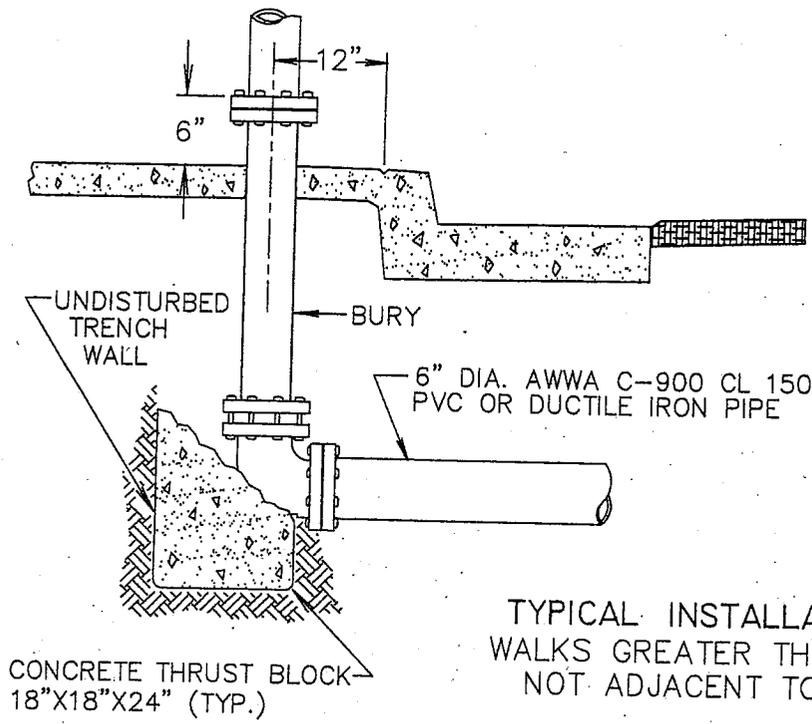
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

## STANDARD TEMPORARY WATER BLOWOFF

W-5.1

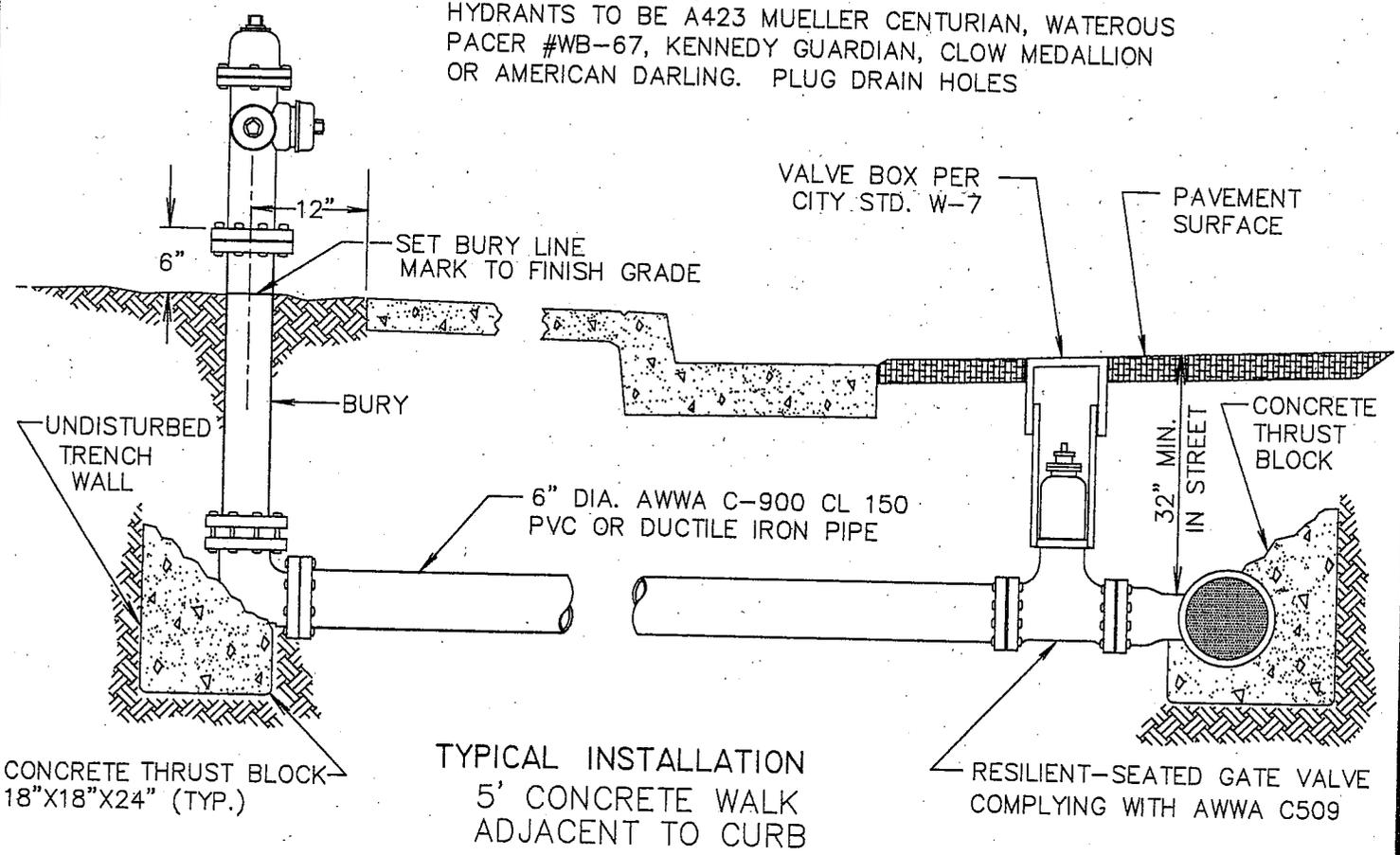
REV.



TYPICAL INSTALLATION  
WALKS GREATER THAN 5' OR  
NOT ADJACENT TO CURB

- GENERAL NOTES :
1. ALL HYDRANTS SHALL HAVE 2-2 1/2" N.S.T. HOSE NOZZLES AND 1-4" N.S.T. PUMPER NOZZLE.
  2. HYDRANT VALVE OPENING SHALL BE 5 1/4" MINIMUM.
  3. BURY SHALL BE 42".
  4. BURY SHALL HAVE RING TIGHT INLET.
  5. HYDRANT OPERATING NUT & CAP NUT TO BE STANDARD PENTAGON.
  6. HYDRANT BODY TO BE PAINTED "SAFETY YELLOW".
  7. INSTALL BLUE TWO-WAY REFLECTIVE TRAFFIC MARKER OPPOSITE F.H. LOCATION, 6" FROM ROAD CENTERLINE TOWARD F.H.

HYDRANTS TO BE A423 MUELLER CENTURIAN, WATEROUS PACER #WB-67, KENNEDY GUARDIAN, CLOW MEDALLION OR AMERICAN DARLING. PLUG DRAIN HOLES

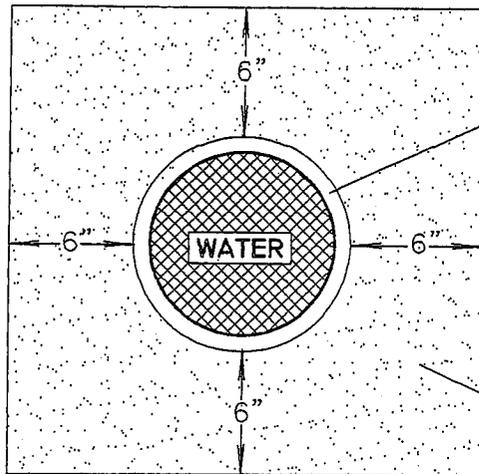


TYPICAL INSTALLATION  
5' CONCRETE WALK  
ADJACENT TO CURB

CITY OF PORTERVILLE  
ENGINEERING DIVISION  
*Harold L. Apell*  
CITY ENGINEER R.C.E. 20186  
2-15-99  
DATE

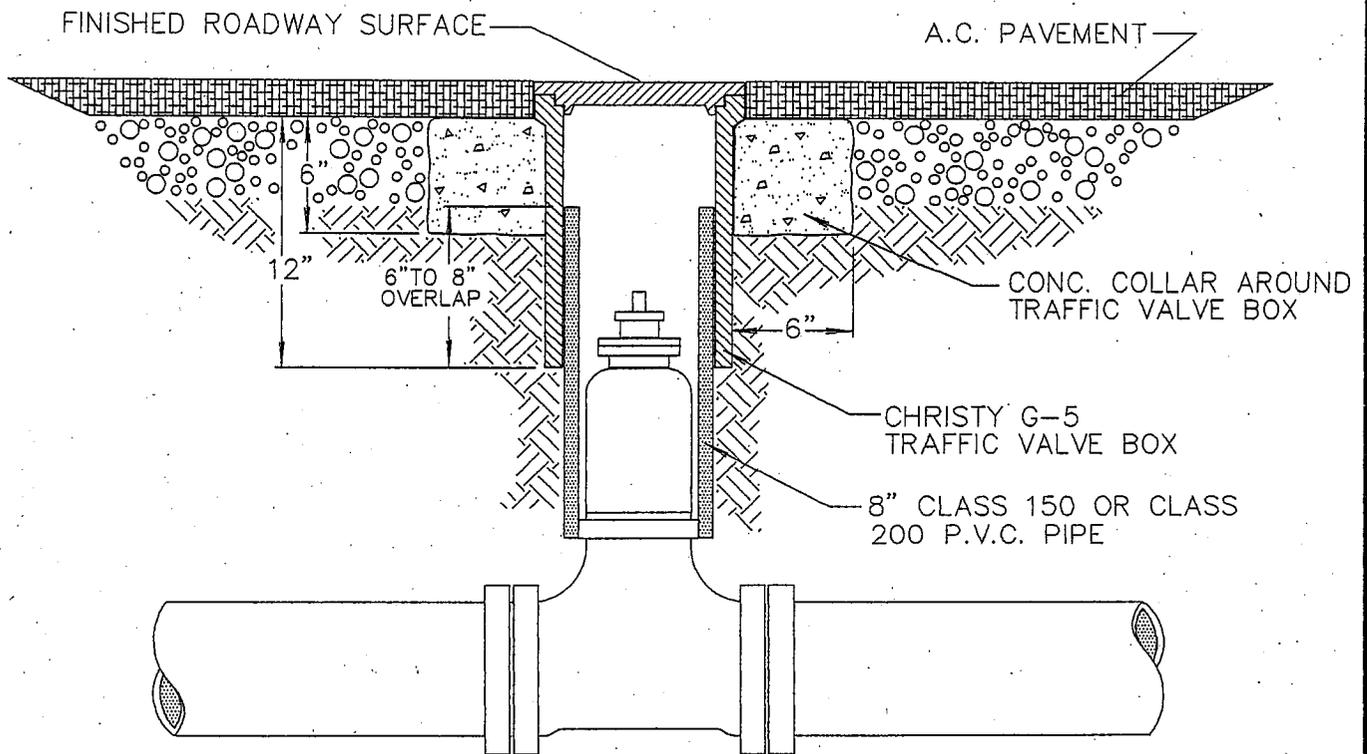
**STANDARD  
FIRE HYDRANT ASSEMBLY**

**W-6**  
REV.



'CHRISTY' CAST IRON  
TRAFFIC LID NO. C275

CONC. COLLAR AROUND  
TRAFFIC VALVE BOX



FINISHED ROADWAY SURFACE

A.C. PAVEMENT

CONC. COLLAR AROUND  
TRAFFIC VALVE BOX

CHRISTY G-5  
TRAFFIC VALVE BOX

8" CLASS 150 OR CLASS  
200 P.V.C. PIPE

NOTE:

VALVE BOX SHALL BE SET TO SURFACE OF UNCOMPACTED ASPHALT CONCRETE AND SHALL BE ADJUSTED TO FINAL GRADE BY ROLLING OVER THE VALVE BOX AS THE PAVEMENT IS COMPACTED.

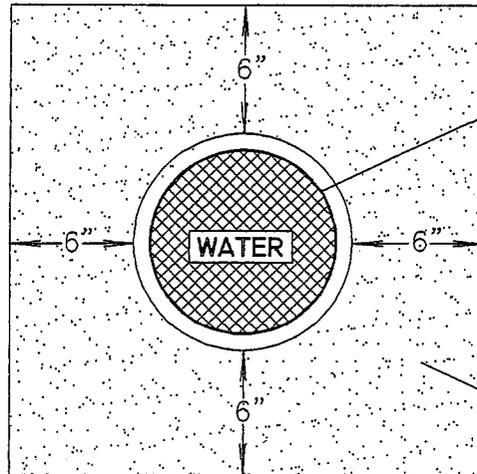
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

VALVE BOX

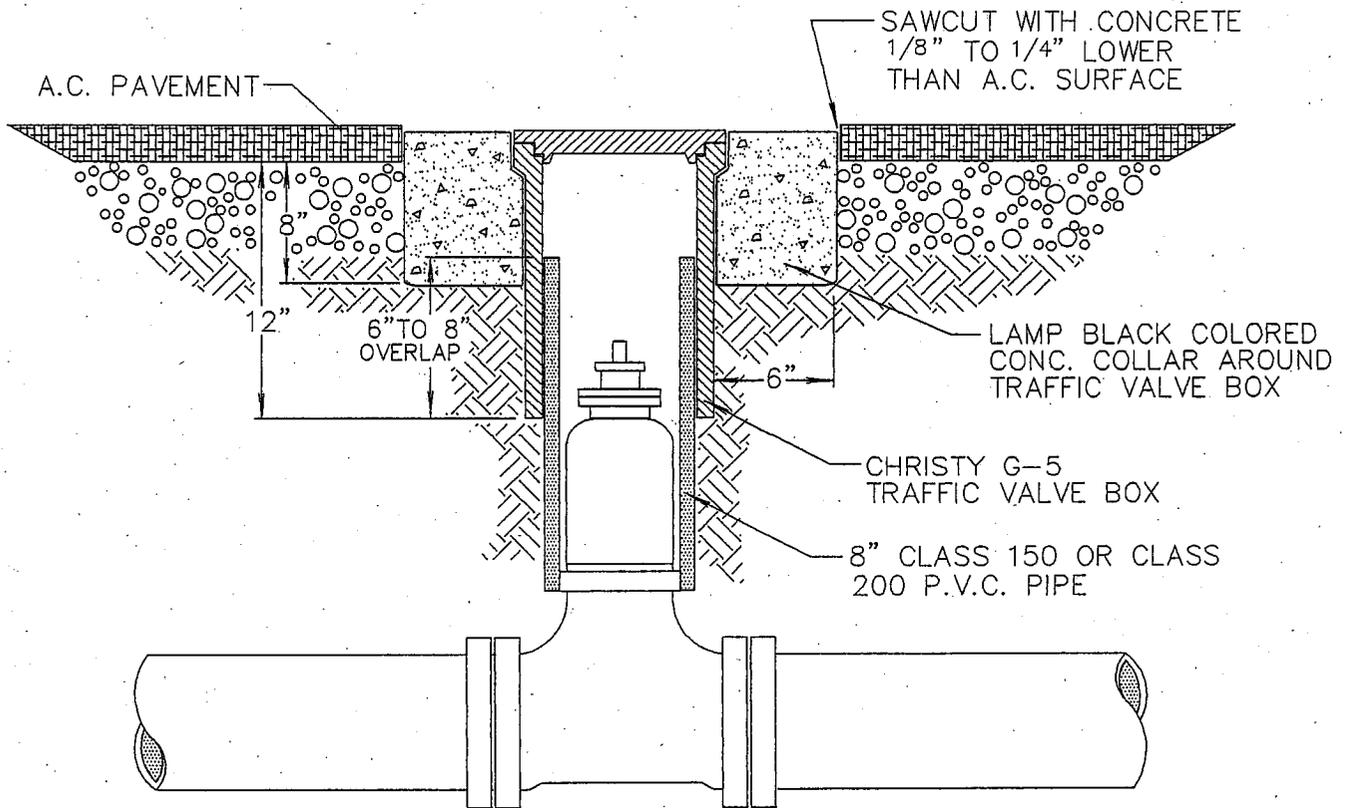
W-7

REV.



'CHRISTY' CAST IRON  
TRAFFIC LID NO. C275

CONC. COLLAR AROUND  
TRAFFIC VALVE BOX



SAWCUT WITH CONCRETE  
1/8" TO 1/4" LOWER  
THAN A.C. SURFACE

A.C. PAVEMENT

LAMP BLACK COLORED  
CONC. COLLAR AROUND  
TRAFFIC VALVE BOX

CHRISTY G-5  
TRAFFIC VALVE BOX

8" CLASS 150 OR CLASS  
200 P.V.C. PIPE

NOTE:

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENT OF THE STANDARD SPECIFICATIONS.
2. MIX 8 TO 10 POUNDS OF LAMP BLACK CONCRETE COLORING PER CUBIC YARD OF CONCRETE.
3. ALL CONCRETE SHALL BE 2500 PSI (5 SACK MIX).

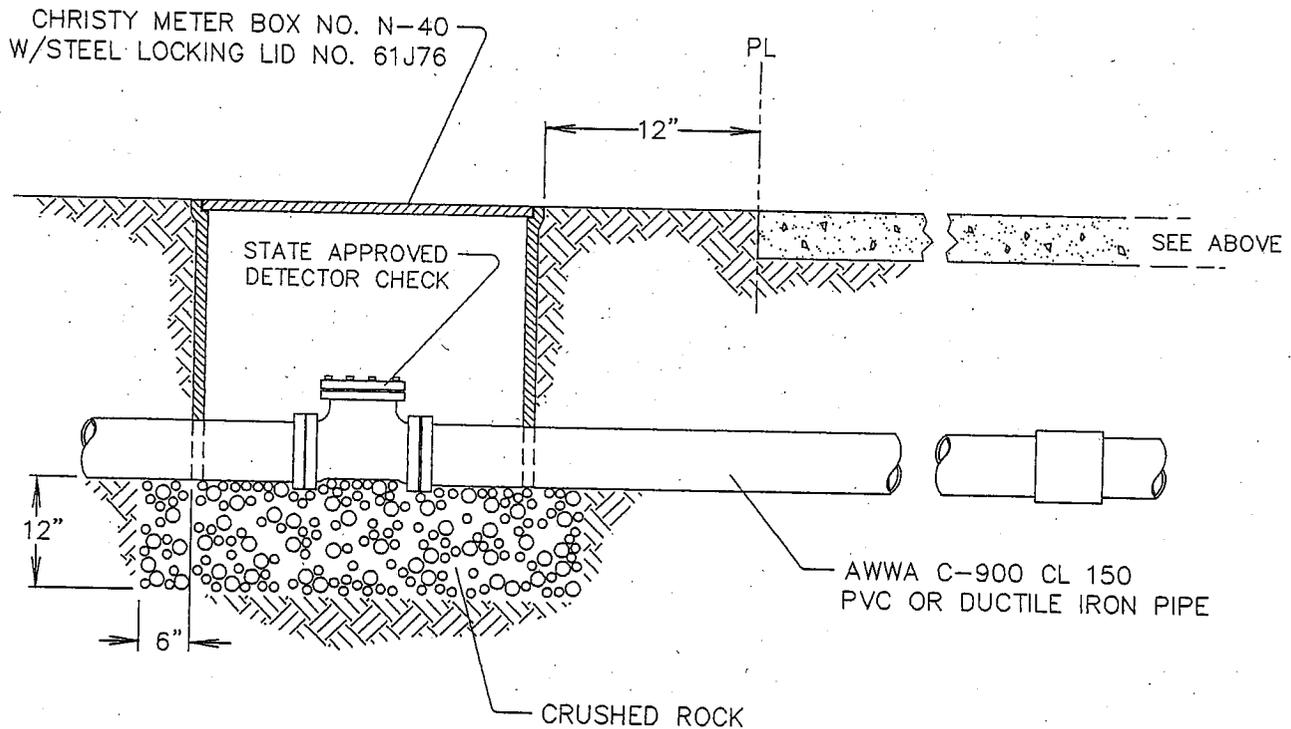
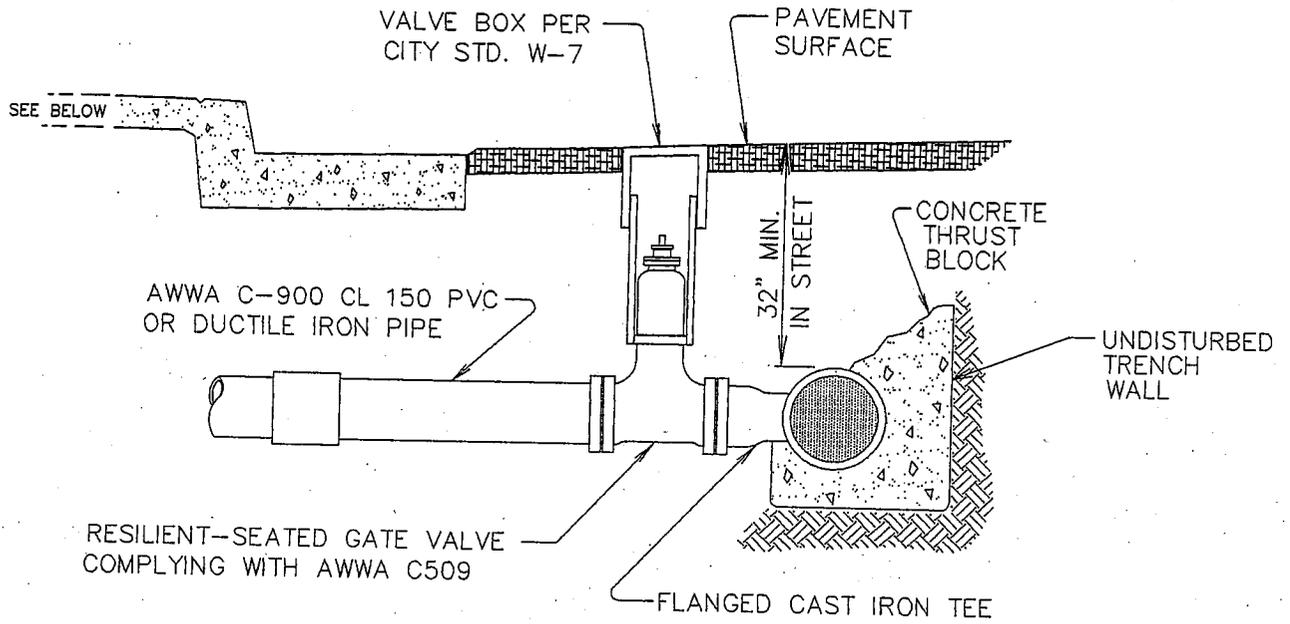
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

VALVE BOX

W-7.1

REV.



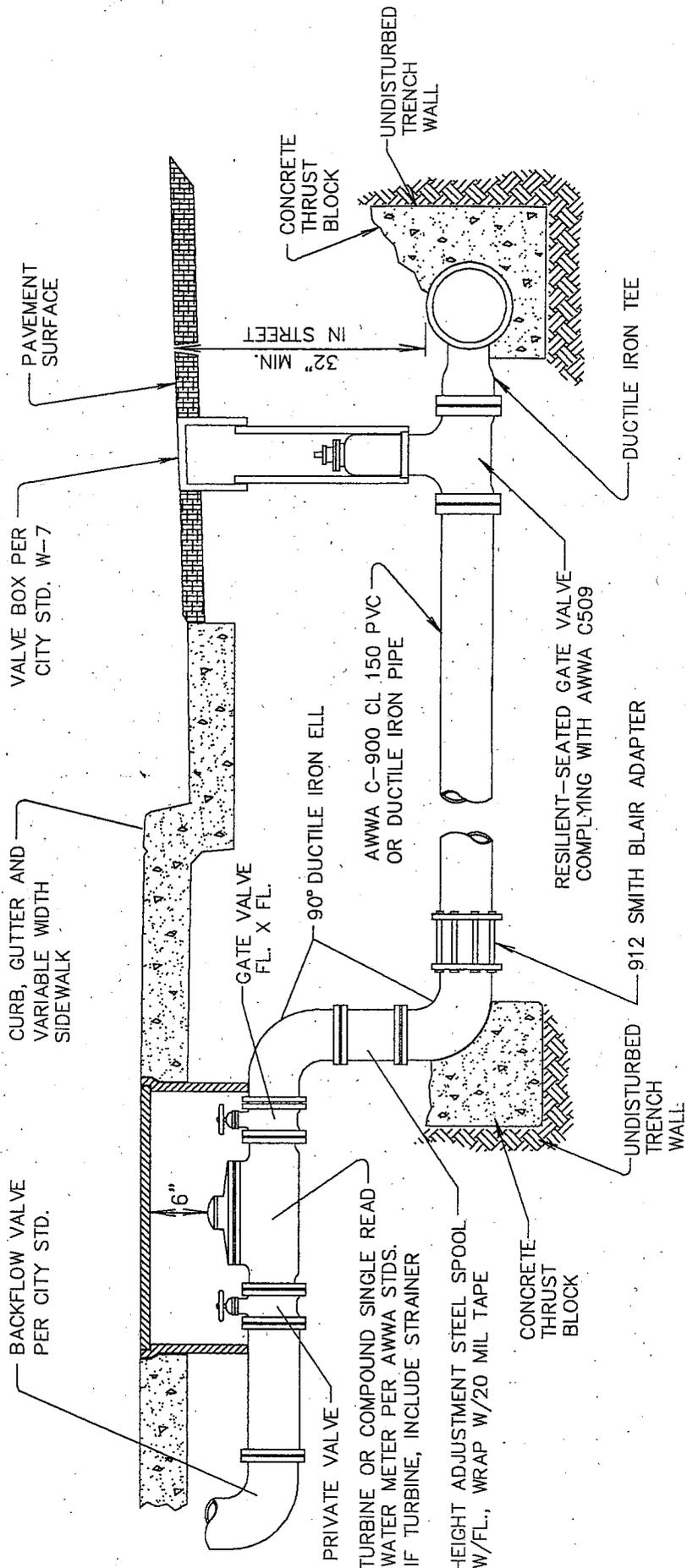
CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 2-15-99  
CITY ENGINEER R.C.E. 20186 DATE

6", 8" AND 10"  
FIRE SERVICE

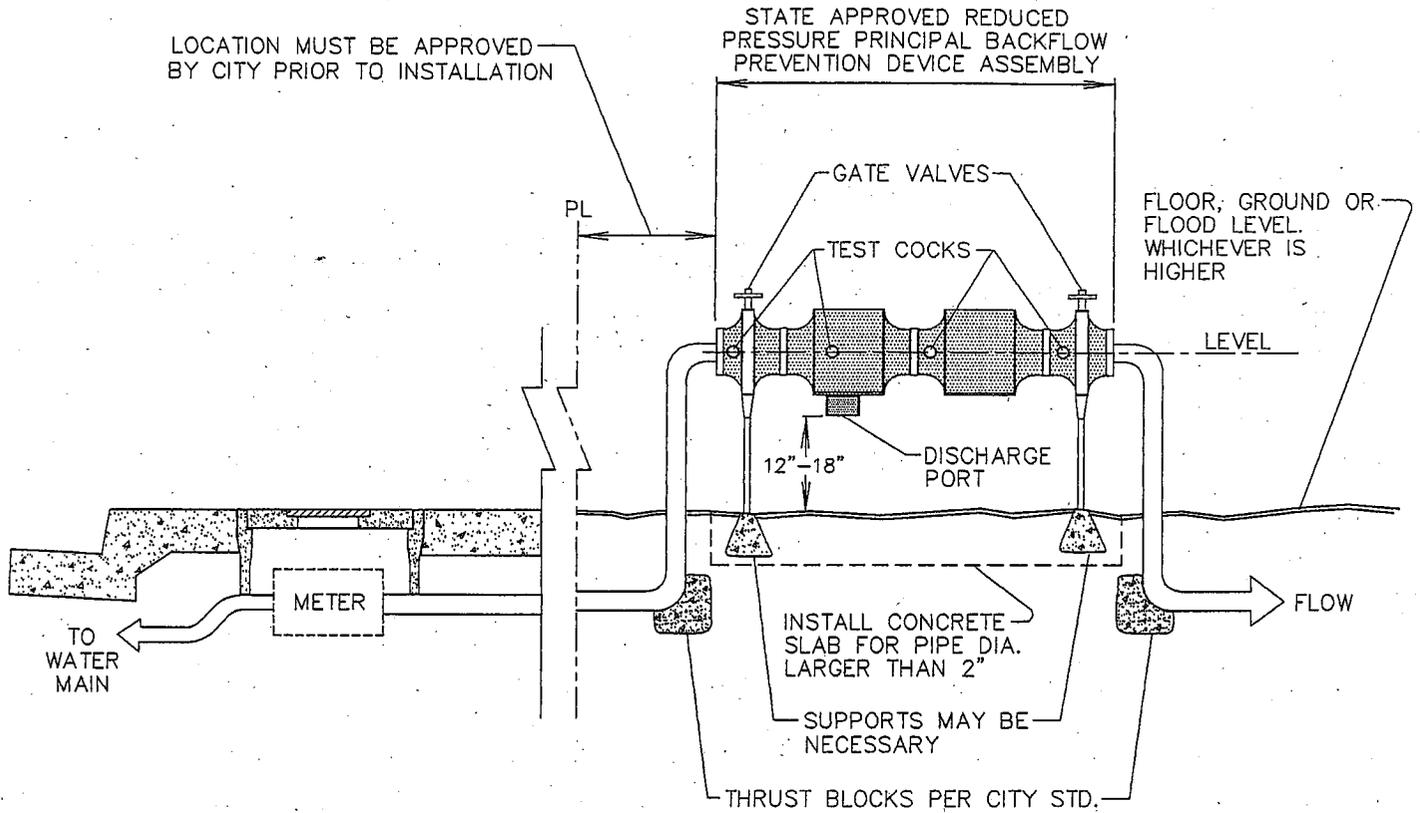
W-8

REV.

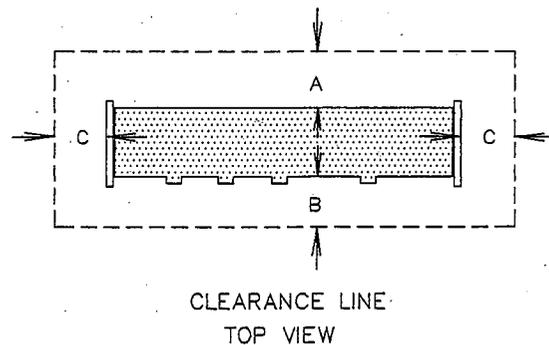


**NOTE:**

1. FOR 3", 4" & 6" WATER SERVICE INSTALLATIONS, USE B48 CHRISTY METER BOX WITH 2M 85 LID.
2. WHEN INSTALLING 3" WATER SERVICE USE 4" CL. 150 PVC PIPE AND FITTINGS. REDUCE TO 3" AT STEEL SPOOL BY USING 4" TO 3" REDUCING FLANGE.
3. CITY MUST APPROVE METER TYPE PRIOR TO INSTALLATION.



MINIMUM CLEARANCE			
SIZE / DC	A	B	C
1" - 3"	12"	18"	12"
4" & UP	24"	24"	12"



CITY OF PORTERVILLE  
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REDUCED PRESSURE  
BACKFLOW PREVENTER

W-10

REV.

**WATER MAIN** All mains shall be PVC pressure pipe, Class 150 (DR18) and shall conform to the provision of AWWA C900 or ductile iron. Joints for PVC pipe shall be elastomeric-gasket type per ASTM D-3139. System shall be looped in accordance with Section 64626 of the California Waterworks Standard.

**FITTINGS** Fittings shall be ductile iron, Class 250 per ASTM C-110 (ANSI A21.10) with mechanical or push-on joints, conforming to AWWA C-111 (ANSI A21.11). Fittings shall be cement mortar lined in accordance with AWWA C104 (ANSI A21.4). The inside and outside of the fittings shall be bituminous coated. Nuts and bolts shall conform to the provisions of ANSI specifications B18.2.

**VALVES** Counter-clockwise opening gate valves shall be iron body, resilient seat, non-rising stem type and shall conform to AWWA C509 and shall be installed in accordance with Appendix A of AWWA C509.

**INSTALLATION** Pipe shall be installed in accordance with "Recommended Practice for the Installation of Polyvinyl Chloride (PVC) Pressure Pipe" (UNI-B-3-84) published by the Uni-Bell PVC Pipe Association.

**JOINTS** Assemble the coupling as recommended by the manufacturer of the coupling. Use pipe with one coupling already factory pre-assembled to the end of pipe. Use the same type of gasket as the factory pre-assembled gasket to complete the joint. When the joint is assembled, the gasket shall be compressed to form a water-tight seal without the aid of internal pressure. Perform any necessary cutting of pipe in a neat workmanlike manner that is in accordance with the manufacturer's instructions.

**CONNECTIONS** The contractor shall not make connections to the existing water mains without prior approval of the City Water Superintendent. Any construction on existing in-service mains shall be accomplished in the presence of the City Water Superintendent, or his authorized representative, at the expense of the applicant.

**OPERATION OF VALVES** The contractor will not be permitted to operate any valves in the existing system. The City of Porterville Water Division shall be notified of the requirements, and they will operate the necessary valves upon request.

**EXISTING WELLS** Any well on-site must be abandoned in accordance with California Department of Water Resource Bulletin No. 74, Chapter II, Part III, or install an approved reduced principle backflow preventer in accordance with City standards prior to connection to the City water system.

**DISINFECTING WATER MAINS** All water mains shall be disinfected in accordance with AWWA Standard C651, "Disinfecting Water Mains", with the following modifications:

( SEE W-11, SHEET 2 OF 2 )

CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill* 2-15-99  
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WATER SYSTEM  
CONSTRUCTION SPEC'S.

W-11

1 OF 2

REV.

1. A chlorine concentration of approximately 100 parts of chlorine per million parts of water is introduced into the water mains to produce a residual chlorine concentration of not less than 25 PPM after 24 hours.\*
2. Twenty-four to forty-eight hours after introduction of chlorinated water, treated water is flushed from the water mains. ( See Blowoff Schedule Below )
3. Forty-eight hours after flushing the system, water samples are taken by City agents for bacteriological tests.\* Any water use from the new system during this period will invalidate the tests, resulting in restarting test procedure at Step 2.
4. Ninety-six hours after samples are taken, confirmed tests are available.
5. If the bacteriological test shows the absence of coliform bacteria, the water mains are considered clear. In the event coliform bacteria is present, sterilization procedure is commenced again within twenty-four hours.

\*Should the end of any of the foregoing periods fall on a City non-working day, the order of procedure will be continued to the next regular City working day.

### BLOWOFF SCHEDULE

MAIN SIZE	REQUIRED GPM	MIN. TEMPORARY BLOWOFF SIZE
6"	264	2"
8"	470	2 1/2"
10"	734	3"
12"	1057	4"
14"	1439	6"
16"	1879	6"
18"	1378	8"

CITY OF PORTERVILLE  
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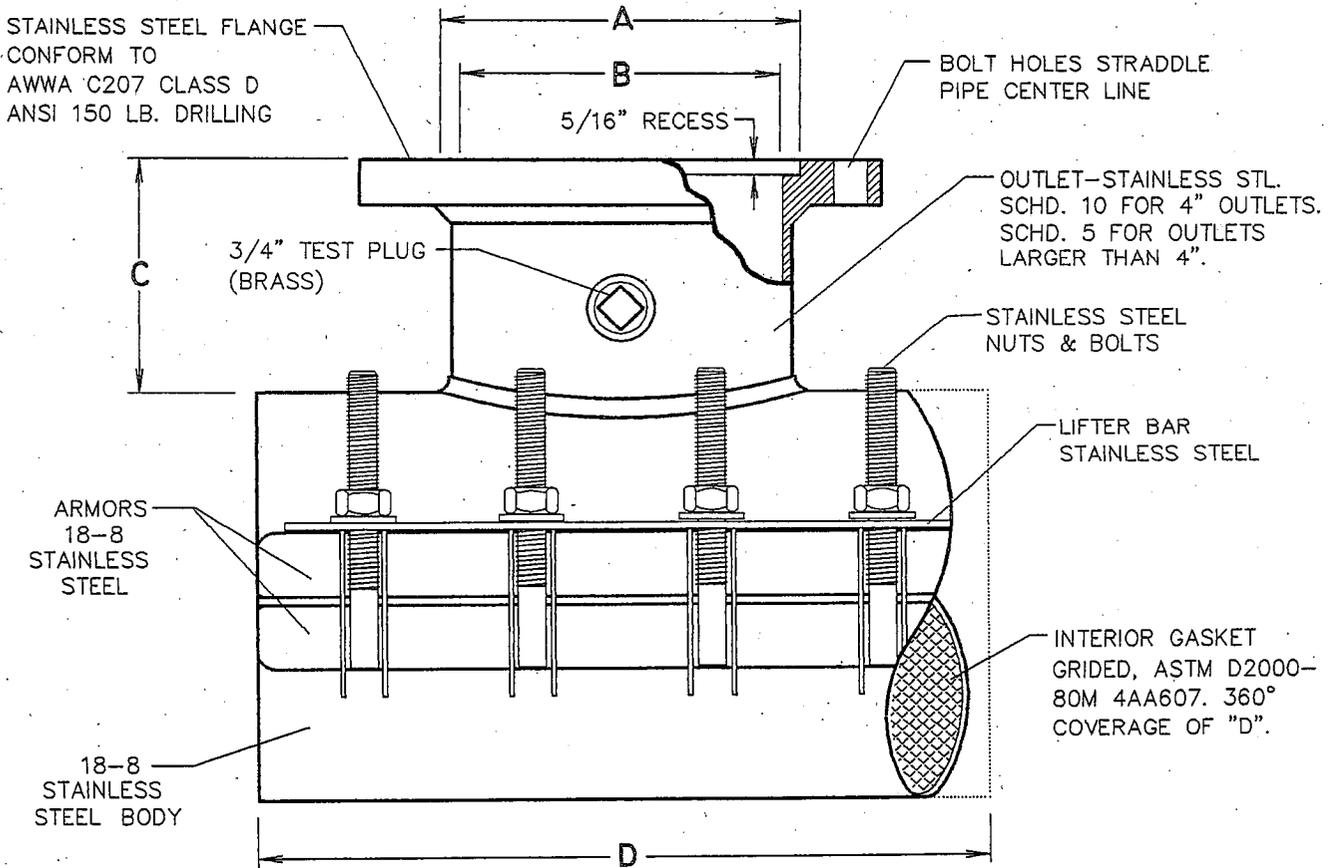
WATER SYSTEM  
CONSTRUCTION SPEC'S.

W-11  
2 OF 2

REV.

NOTE: ALL DIMENSIONS ARE IN INCHES.

NOM. PIPE SIZE	FLANGE SIZE	A	B	C	D	BOLT SIZE	NO. OF BOLTS
4" THRU 12"	4"	5-1/32	4-1/4	5-3/16	15	5/8	8
	6"	7-1/32	6-3/8	5-1/2	15	5/8	8
	8"	9-1/32	8-3/16	5-5/8	20	5/8	12
	10"	11-1/32	10-1/4	6-1/8	20	3/4	12
	12"	13-1/32	12-1/4	6-1/4	24	3/4	14
14"	4"	5-1/32	4-1/4	5-3/16	15	5/8	8
	6"	7-1/32	6-3/8	5-1/2	15	5/8	8
	8"	9-1/32	8-3/16	5-5/8	20	5/8	12
	10"	11-1/32	10-1/4	6-1/8	20	3/4	12
	12"	13-1/32	12-1/4	6-1/4	24	3/4	14
16"-18"	4"	5-1/32	4-1/4	5-3/16	15	5/8	8
	6"	7-1/32	6-3/8	5-1/2	15	5/8	8
	8"	9-1/32	8-3/16	5-5/8	20	5/8	12
	10"	11-1/32	10-1/4	6-1/8	20	3/4	12
	12"	13-1/32	12-1/4	6-1/4	24	3/4	14
20"-24"	4"	5-1/32	4-1/4	5-3/16	15	5/8	8
	6"	7-1/32	6-3/8	5-1/2	15	5/8	8
	8"	9-1/32	8-3/16	5-5/8	20	5/8	12
	10"	11-1/32	10-1/4	6-1/8	20	3/4	12
	12"	13-1/32	12-1/4	6-1/4	24	3/4	14



NOTE: FORD STYLE "FAST" TAPPING SLEEVE OR EQUAL APPROVED BY CITY ENGINEER.

CITY OF PORTERVILLE  
ENGINEERING DIVISION

*Harold L. Hill*  
CITY ENGINEER R.C.E. 20186 DATE 2-15-99

TAPPING SLEEVE

W-12

REV.

**APPENDIX A**

**SOIL CONSERVATION SERVICE SOILS LEGEND**

**WITH SHRINK/SWELL POTENTIALS**

**APPENDIX A - SOIL CONSERVATION  
SERVICE SOILS LEGEND WITH SHRINK/  
SWELL POTENTIALS**

APPENDIX A  
SOIL CONSERVATION SERVICE SOIL LEGEND

Soil Symbol/ Number	Soil Name and Description	Shrink/Swell Potential
ExA	Exeter Loam, 0 to 2% slopes generally 9± inches sandy loam overlying sandy day loam, duripan and sandy loam.	Moderate
Rw	Riverwash, generally consists of areas of sand and gravel.	Generally low
TuA	Tujunga Loamy Sand, 0 to 2% slope, generally 14± inches of loamy sand overlying sand to loamy sand	Low
YeA	Yettem Sandy Loam, 0 to 2% slope, generally sandy loam.	Low
TaA	Tagus Loam, 0 to 2 % slopes generally 17± inches loam over loam to sandy loam	Low
NoA	Nord-Fine Sandy Loam, 0 to 2% slope generally 11 inches, a fine sandy loam overlying sandy loam/loam and sand. Grades to silt loam at depth greater than 50± inches.	Low
FmA	Flaman Loam, 0 to 2 % slopes generally 12 inches loam overlying clay loam, sandy loam or loam and divipan	Moderate
109	Centerville Clay, 0 to 2 percent slopes, surficial material (3± feet) generally consists of a brown and reddish brown clay and sandy clay.	High
110	Centerville Clay, 2 to 9 percent slopes, surficial material (3± feet) generally consists of a dark grayish brown, brown and reddish brown clay and sandy clay.	High
113	Cibo Clay, 15 to 30 percent slopes, surficial material (3± feet) generally consists of brown and reddish brown clay.	High
114	Cibo Clay, 30 to 50 percent slopes, surficial material (3± feet) generally consists of brown and reddish brown clay.	High

APPENDIX A  
SOIL CONSERVATION SERVICE SOIL LEGEND

Soil Symbol/ Number	Soil Name and Description	Shrink/Swell Potential
115	Cibo Rock Outcrop Complex, 15 to 50 percent slopes, generally consists of gabbro rock outcrops within a Cibo soil matrix (approximately 50 percent soil).	High
124	Exeter Loam, 0 to 2 percent slopes, generally consists of 14± inches of brown and dark yellowish brown loam overlying 16± inches of yellowish red clay loam. A hardpan layer (13± inches thick) and sand/gravelly sand generally exist below the surficial loam.	Low to Moderate
125	Exeter Loam, 2 to 9 percent slope, generally consists of 14± inches of brown and dark yellowish brown loam overlying 16± inches of reddish brown sandy clay loam and/or yellowish red clay loam. A hardpan layer (13± inches thick) and sand/gravelly sand generally exist below the surficial loam.	Low to Moderate
132	Greenfield Sandy Loam, 0 to 2 percent slopes, generally consists of brown and dark yellowish brown sandy loam.	Low
135	Havala Loam, 2 to 5 percent slopes, generally consists of loam, sandy clay loam, and clay loam.	Low to Moderate
139	Honcut sandy loam, 0 to 2 percent slopes, generally consists of brown and pale brown sandy loam.	Low
147	Porterville Clay, 0 to 2 percent slopes, generally consists of 32± inches of brown and dark reddish brown clay overlying dark reddish gray clay and sandy clay.	High
148	Porterville Clay, 2 to 9 percent slopes, generally consists of 32± inches of brown and dark reddish brown clay overlying dark reddish gray clay and sandy clay.	High

APPENDIX A  
SOIL CONSERVATION SERVICE SOIL LEGEND

Soil Symbol/ Number	Soil Name and Description	Shrink/Swell Potential
149	Porterville Clay, 9 to 15 percent slopes, generally consists of 32± inches of brown and dark reddish brown clay overlying dark reddish gray clay and sandy clay.	High
150	Porterville Cobbly Clay, 2 to 15 percent slopes, generally consists of 7± inches of brown cobbly clay overlying dark reddish brown, brown and light brown clay.	High
152	Rock Outcrop, predominately outcrops of granitic, gabbro and mica schist rock.	Not Rated
153	San Emigdio Loam, generally consists of brown and grayish brown loam and sandy loam.	Low
154	San Joaquin Loam, 0 to 2 percent slopes, generally consists of 13± inches of loam overlying sandy clay loam, clay and hardpan.	Low to High
155	San Joaquin Loam, 2 to 9 percent slopes, generally consists of 13± inches of loam overlying sandy clay loam and clay and hardpan.	Low to High
164	Tujunga Sand, generally consists of light brownish gray, grayish brown and very pale brown sand.	Low
168	Vista Rock Outcrop, generally consists of 27± inches of sandy loam overlying weathered quartz diorite (where soil exists).	Low
175	Xerofluviants, generally consists of sandy loam to silty clay loam with gavels, cobbles and boulders.	Estimated Low to High

**APPENDIX B**

**SOIL CONSERVATION SERVICE SOILS MAP**

**FOR PORTERVILLE AREA**

**APPENDIX B – SOIL CONSERVATION  
SERVICE SOILS MAP FOR THE PORTERVILLE AREA**

RESOLUTION NO. 9826

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PORTERVILLE AUTHORIZING THE USE OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK) AS THE CITY STANDARD SPECIFICATIONS

WHEREAS, on April 18, 1978, the City Council adopted the "Standard Specifications for Public Works Construction" published by Building News, Inc. as the City of Porterville Standard Construction Specifications for Public Works Projects;

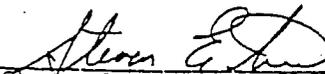
WHEREAS, on August 17, 1982, the City Council rescinded the "Standard Specifications for Public Works Construction and adopted the "CAL-TRANS" specifications;

WHEREAS, the use of the "Green Book" will not degrade the quality of public works projects;

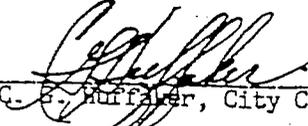
WHEREAS, the use of the "Green Book" will expand the types of construction covered by the adopted specifications;

WHEREAS, there is a trend of the cities in the San Joaquin Valley to use the "Green Book" or to adopt both sets of specifications for public works projects;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Porterville that the City Council Resolution No. 9737 A be rescinded, and the Council adopt the most recent issue of the "Standard Specifications for Public Works Construction" (Green Book) as published by Building News, Inc. as the primary specifications for use by the City for the construction of public works projects; and, further, adopt the most recent issue of the "CAL-TRANS Standard Specifications" as the secondary specifications for use as designated by the City Engineer.

  
\_\_\_\_\_  
Steven E. Tree, Mayor

ATTEST:

  
\_\_\_\_\_  
C. E. Huffaker, City Clerk

RESOLUTION NO. 74-90

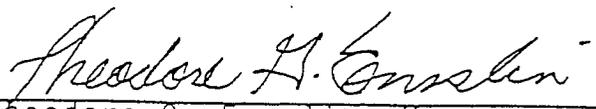
ADOPTING STANDARD SPECIFICATIONS  
FOR PUBLIC WORKS CONSTRUCTION AS AMENDED

WHEREAS, The City Council adopted the Standard Specifications for Public Works construction by Resolution No. 8968 on April 18, 1978: and

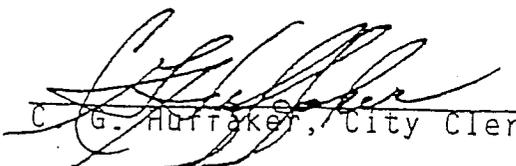
WHEREAS, A copy of said specifications is on file in the City Clerk's office and the office of the City Engineer; and

WHEREAS, In the interest of improving the quality of paving in cold weather the minimum temperature for paving in Subsection 302-5.5 shall be increased from 40°F to 50°F.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Porterville, hereby, adopts the "Standard Specifications for Public Works Construction", latest edition, published by Building News, Inc., as amended above, as the City of Porterville Standard Specifications for Construction of Public Works Projects.

  
Theodore G. Ensslin, Mayor

Attest:

  
C. G. Hufferaker, City Clerk

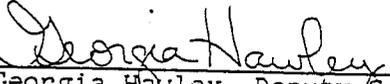
STATE OF CALIFORNIA)  
(SS  
COUNTY OF TULARE )

I, C. G. HUFFAKER, the duly appointed City Clerk of the City of Porterville, do hereby certify and declare that the foregoing is a full, true and correct copy of a resolution duly and regularly passed and adopted at a regular meeting of the Porterville City Council called and held on the 3rd day of July, 1990.

THAT said resolution was duly passed and adopted by the following vote:

AYES: COUNCILMEN: Pruitt, Lok, Leavitt, Gifford, Ensslin  
NOES: COUNCILMEN: None  
ABSENT: COUNCILMEN: None

C. G. HUFFAKER, City Clerk

  
\_\_\_\_\_  
Georgia Hawley, Deputy City Clerk

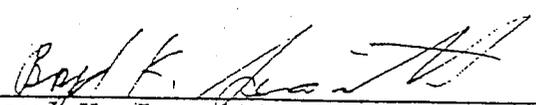
RESOLUTION NO. 6-93

A RESOLUTION OF THE CITY COUNCIL OF THE CITY  
OF PORTERVILLE ADOPTING THE MANUAL OF TRAFFIC  
CONTROLS FOR CONSTRUCTION AND MAINTENANCE  
WORK ZONES

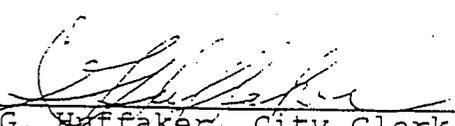
WHEREAS, the Work Area Traffic Control Handbook presently used  
for public works construction is outdated and needs to be replaced  
in the City's Standard Plans and Specifications, and

WHEREAS, the State of California, Department of  
Transportation's Manual of Traffic Controls for Construction and  
Maintenance Work Zones is more up-to-date;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the  
City of Porterville hereby repeals the use of the Work Area Traffic  
Control Handbook and adopts in its place the Manual of Traffic  
Controls for Construction and Maintenance Work Zones and  
incorporates it into the Standard Plans and Specifications for the  
City of Porterville's public works projects.

  
Boyd K. Leavitt, Mayor

ATTEST:

  
G. G. Haffaker, City Clerk

