MANHOLE

Location	Quantity
SACRAMENTO BLVD.	
Sta.6+55 (Rt.)	1 EA.
Sta.7+33 (Rt.)	1 EA.
PINE STREET	
Sta.8+43 (Rt.)	1 EA.
Sta.10+42 (Rt.)	1 EA.
Total	4 EA.

FRAME & COVER (Manhole)

Location	Quantity
SACRAMENTO BLVD.	
Sta.6+55 (Rt.)	1 EA.
Sta.7+33 (Rt.)	1 EA.
PINE STREET	
Sta.8+42 (Rt.)	1 EA.
Sta.10+42 (Rt.)	1 EA.
Total	4 EA.

FRAME & GRATE (18" S.D.I.)

Location	Quantity
SACRAMENTO BLVD.	
Sta.7+10 (Lt.)	1 EA.
PINE STREET	
Sta.7+95 (Lt.)	1 EA.
Sta.8+42 (Rt.)	1 EA.
Sta.10+42 (Rt.)	1 EA.
Total	4 EA.

FRAME & GRATE STANDARD (STD. S.D.I.)

Location	Quantity
SACRAMENTO BLVD.	
Sta.6+19 (Lt.)	1 EA.
Total	1 EA.

ALTERNATIVE SEWER PIPE

Allowable Pipe Material

DESIGNATION	PVC		RCP		
	SIZE	SDR	SIZE	CLASS	
12" Alt. Pipe	12"	35	12"	III	
18" Alt. Pipe			18"	III	
21" Alt. Pipe			21"	III	
36" Alt. Pipe			36"	III	
39" Alt. Pipe			39"	III	
60" Alt. Pipe			60"	III	

RECORD DRAWING
Corrected By Thom T. Hart Co.
No Changes
Date 11-19-92
Any Person Using This Drawing For Any Purpose Agrees To Indemnify The Engineer Of Work

30" DIA. ALTERNTIVE PIPE

Location	Quantity
SACRAMENTO BLVD.	
Sta.7+33 (Rt.)	8 L.F.
Total	8 L.F.

36" DIA. ALTERNTIVE PIPE

Location	Quantity
SACRAMENTO BLVD.	
Sta.6+55 (Rt.)	8 L.F.
Total	8 L.F.

42" DIA. ALTERNATIVE PIPE

Location	Quantity
SACRAMENTO BLVD.	
Sta.6+55 (Rt.)	8 L.F.
Total	8 L.F.

60" DIA. ALTERNATIVE PIPE

Location	Quantity
SACRAMENTO BLVD.	
Sta.6+55 (M.H.) to Sta.7+33 (M.H.)	76 L.F.
Sta.7+33 (M.H.) to Exist. Sta.11+35.64	383 L.F.
Exist. Stub Sta.11+35.64	-8 L.F.
Total	451 L.F.

18" STORM DRAIN INLET

Location	Quantity
SACRAMENTO BLVD.	
Sta.7+10 (Lt.)	1 EA.
PINE STREET	
Sta.7+95 (Lt.)	1 EA.
Sta.8+42 (Rt.)	1 EA.
Sta.10+42 (Rt.)	1 EA.
Total	4 EA.

STANDARD STORM DRAIN INLET

Location	Quantity
SACRAMENTO BLVD.	
Sta.6+19 (Lt.)	1 EA.
Total	1 EA.

A.C. MISC. AREAS (Trench Repair 0.70')

Location	Quantity
SACRAMENTO BLVD.	
Sta.6+55 (M.H.) to Sta.7+33 (M.H.)	123 S.Y.
Sta.7+33 (M.H.) to Sta. 9+30 (E.P.)	187 S.Y.
PINE STREET	
Sta.8+43 (M.H.) to Sta.12+46 (E.P.)	187 S.Y.
Sta.9+30 (X-Drain)	13 S.Y.
Total	510 S.Y.

EARTHWORK MISC. AREAS

Location	Quantity
SACRAMENTO BLVD.	
Sta.7+05 (Lt.) to Sta.7+55 (Lt.)	0.50 Sta.
PINE STREET	
Sta.7+65 (Lt.) to Sta.8+75 (Lt.)	1.10 Sta.
Sta.8+22 (Rt.) to Sta.8+62 (Rt.)	0.40 Sta.
Sta.10+12 (Rt.) to Sta.10+72 (Rt.)	0.60 Sta.
Total	2.60 Sta.

12" DIA. ALTERNATIVE PIPE

Location	Quantity
SACRAMENTO BLVD.	
Sta.6+19 (Lt.) Lateral	55 L.F.
Sta.7+10 (Lt.) Lateral	75 L.F.
Sta.7+33 (Rt.) Stub N.E. Corner	8 L.F.
PINE STREET	
Sta.7+95 (Lt.) Lateral	49 L.F.
Sta.8+42 (Rt.) Lateral	15 L.F.
Sta.10+42 (Rt.) Lateral	18 L.F.
Total	220 L.F.

18" DIA. ALTERNATIVE PIPE

Location	Quantity
PINE STREET	
Sta.8+43 (Rt.) to Sta.10+42 (Rt.)	199 L.F.
Total	199 L.F.

21" DIA. ALTERNATIVE PIPE

Location	Quantity
PINE STREET	
M.H. Sta.10+42 (Rt.) to Exist. M.H. Sta.12+51.04	197 L.F.
Total	197 L.F.

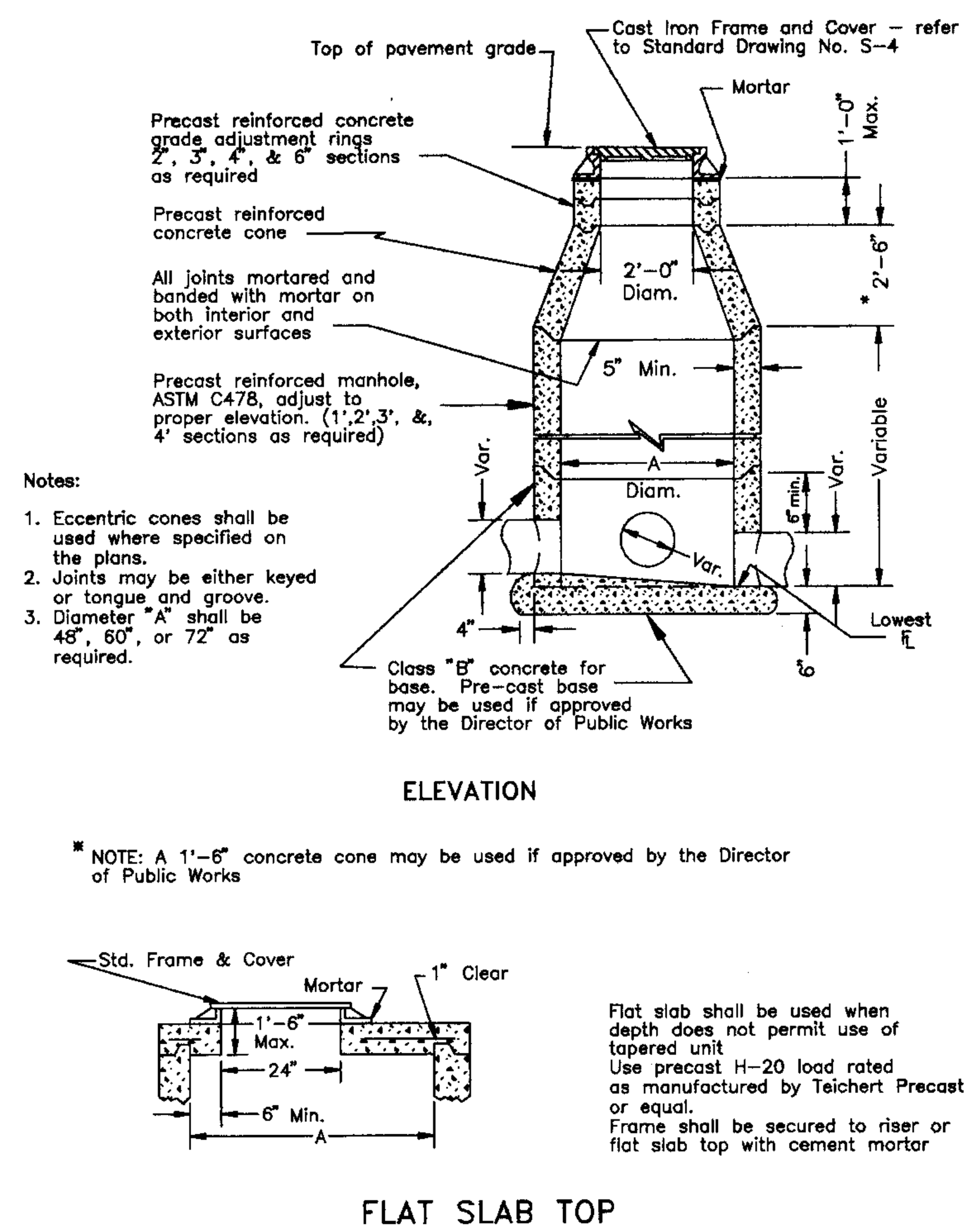
S112032

REVISIONS | DATE

DRAWN BY	DATE	PROJECT ENGINEER	DATE	CHECKED	DATE	SUBMITTED	DATE	APPROVED	DATE
K.C. WHITE	12/26/91	J.C. White	2/7/92	Dean Wilson	2/7/92	Manuel Stair	2/7/92	M. R.	2/9/92

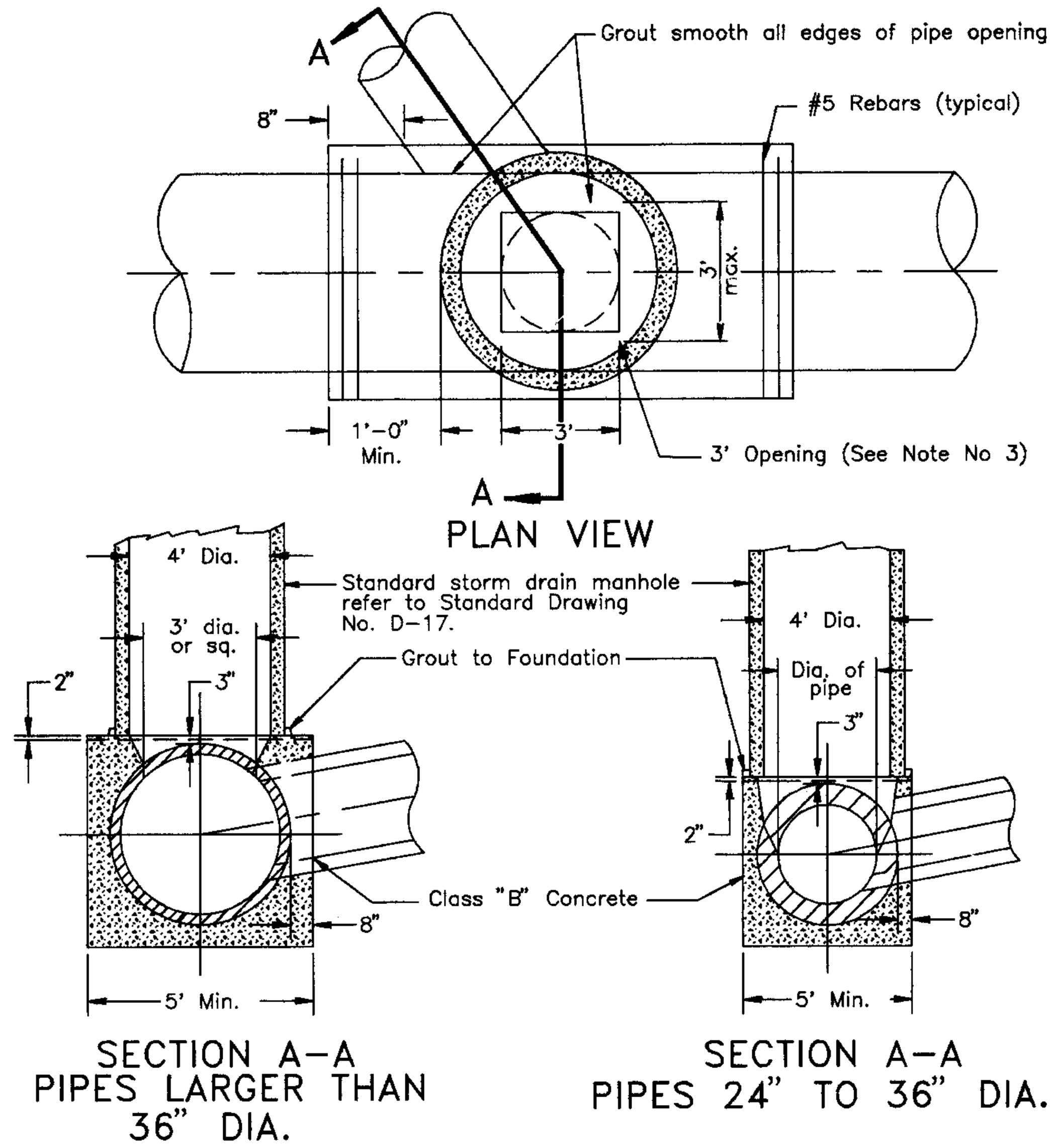
FILE NAME	DRAWER	SHEET NO.	ACAD
			D:\THORNTON\CONSTNTS

COUNTY OF SAN JOAQUIN | PLAN SCALE: As Shown | CONSTRUCTION NOTES | THORNTON DRAINAGE PROJECT PHASE 3 | SHEET NO. 6 | TOTAL SHEETS 6



Top of pavement grade
Cast Iron Frame and Cover – refer to Standard Drawing No. S-4
Mortar
1'-0" Max.
Precast reinforced concrete grade adjustment rings 2", 3", 4", & 6" sections as required
Precast reinforced concrete cone
2'-0" Diam.
All joints mortared and banded with mortar on both interior and exterior surfaces
5" Min.
Precast reinforced manhole, ASTM C478, adjust to proper elevation. (1',2',3', & 4' sections as required)
Diam.
Var.
Variable
Lowest
Notes:
1. Eccentric cones shall be used where specified on the plans.
2. Joints may be either keyed or tongue and groove.
3. Diameter "A" shall be 48", 60", or 72" as required.
Class "B" concrete for base. Pre-cast base may be used if approved by the Director of Public Works
ELEVATION
* NOTE: A 1'-6" concrete cone may be used if approved by the Director of Public Works
Std. Frame & Cover
Mortar
1" Clear
1'-6" Max.
24"
6" Min.
Flat slab shall be used when depth does not permit use of tapered unit
Use precast H-20 load rated as manufactured by Teichert Precast or equal.
Frame shall be secured to riser or flat slab top with cement mortar
FLAT SLAB TOP

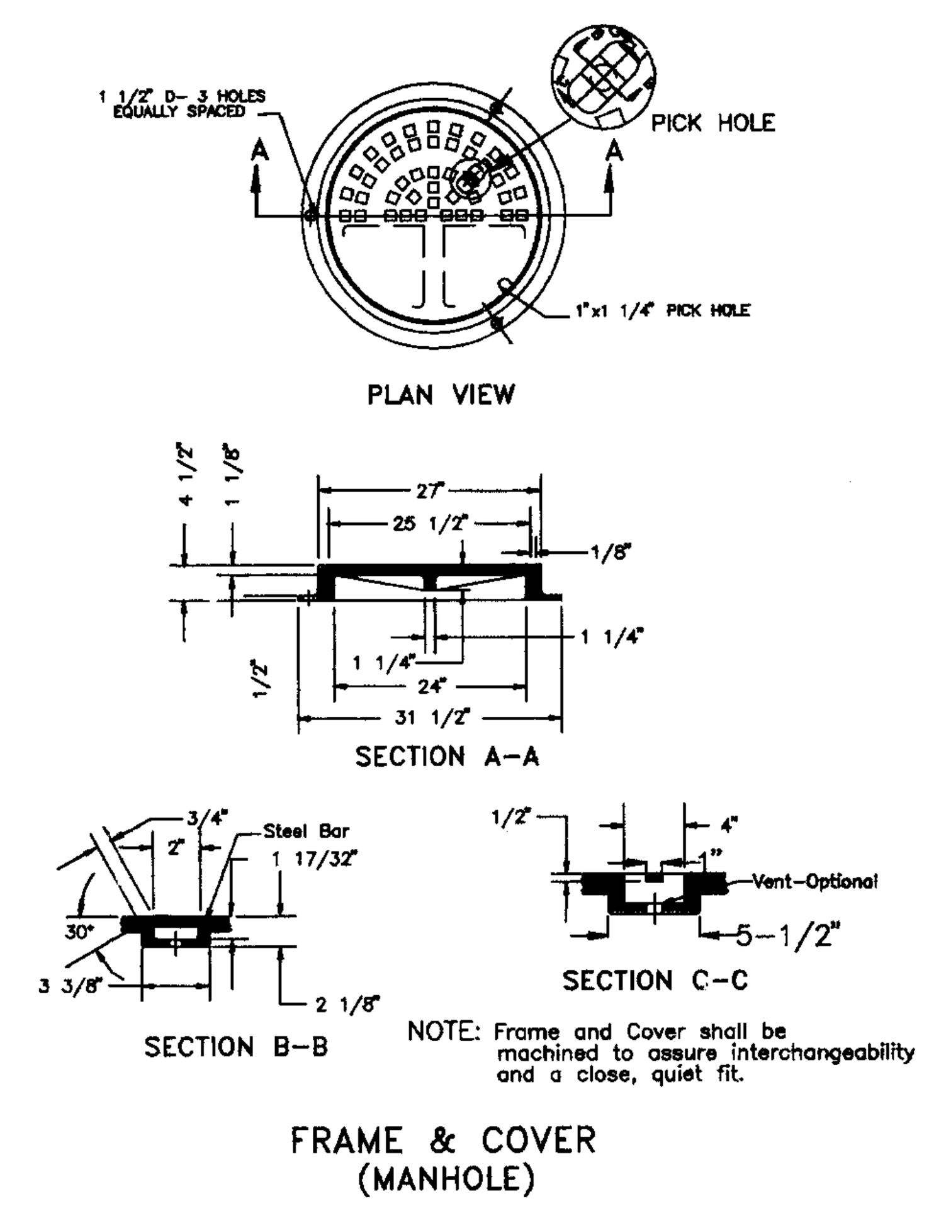
STANDARD STORM DRAIN MANHOLE



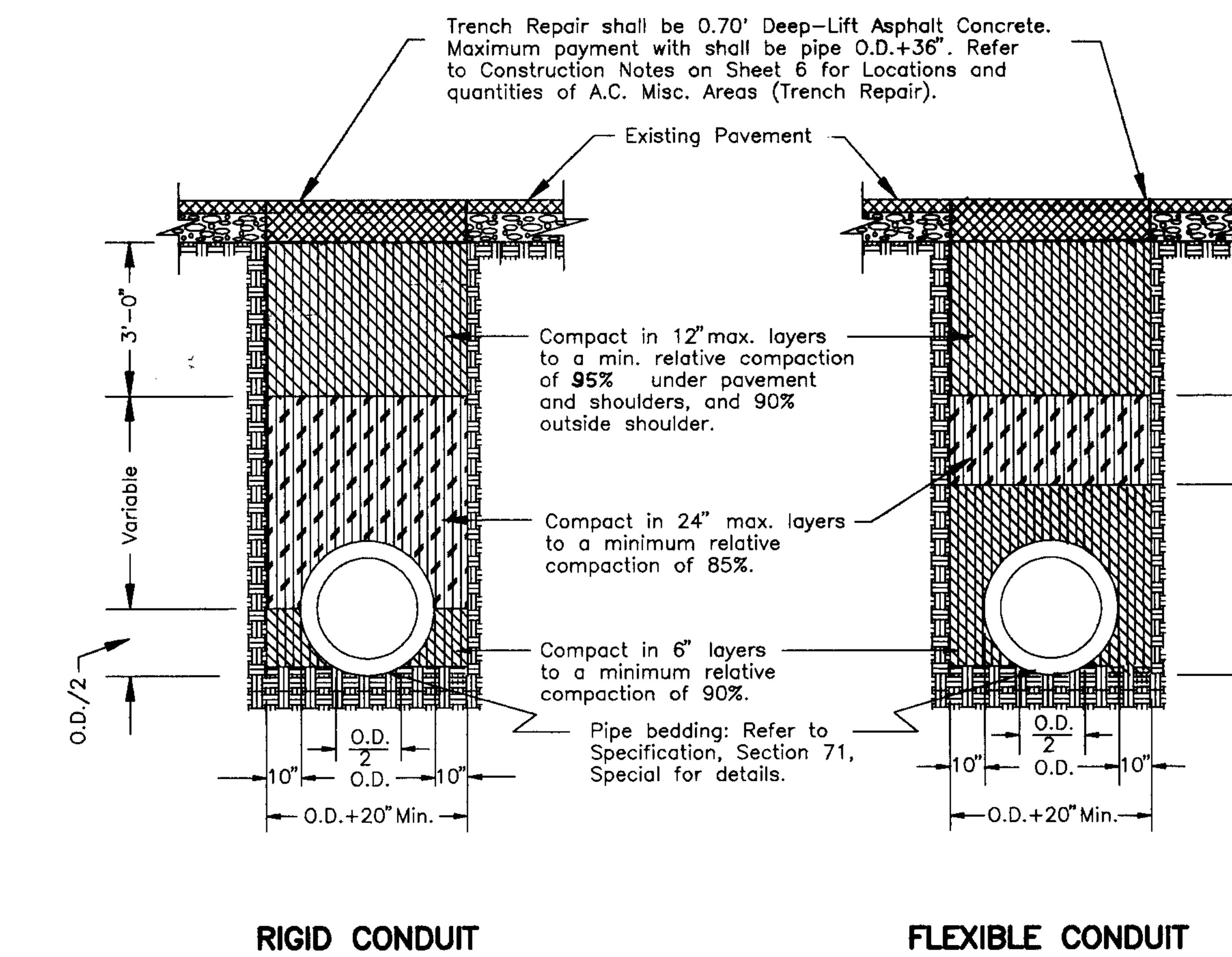
Grout smooth all edges of pipe opening
#5 Rebars (typical)
8"
3' max.
1'-0" Min.
3'
3' Opening (See Note No 3)
PLAN VIEW
4' Dia.
Standard storm drain manhole refer to Standard Drawing No. D-17.
3' dia. or sq.
Grout to Foundation
Dia. of pipe
Class "B" Concrete
5' Min.
SECTION A-A
PIPES LARGER THAN 36" DIA.
SECTION A-A
PIPES 24" TO 36" DIA.

NOTES:
1. The foundation shall be a minimum of 5' for 44" O.D. pipe and smaller.
2. For pipe larger than 44" O.D., the foundation shall extend a minimum of 8" beyond each side of the pipe.
3. Opening to be 3' long x (I.D. of pipe) wide, up to 36" I.D. pipe. For pipes larger than 36" I.D., opening to be 36" diameter or square.

SADDLE-TYPE MANHOLE FOR PIPE 24" DIA. AND LARGER



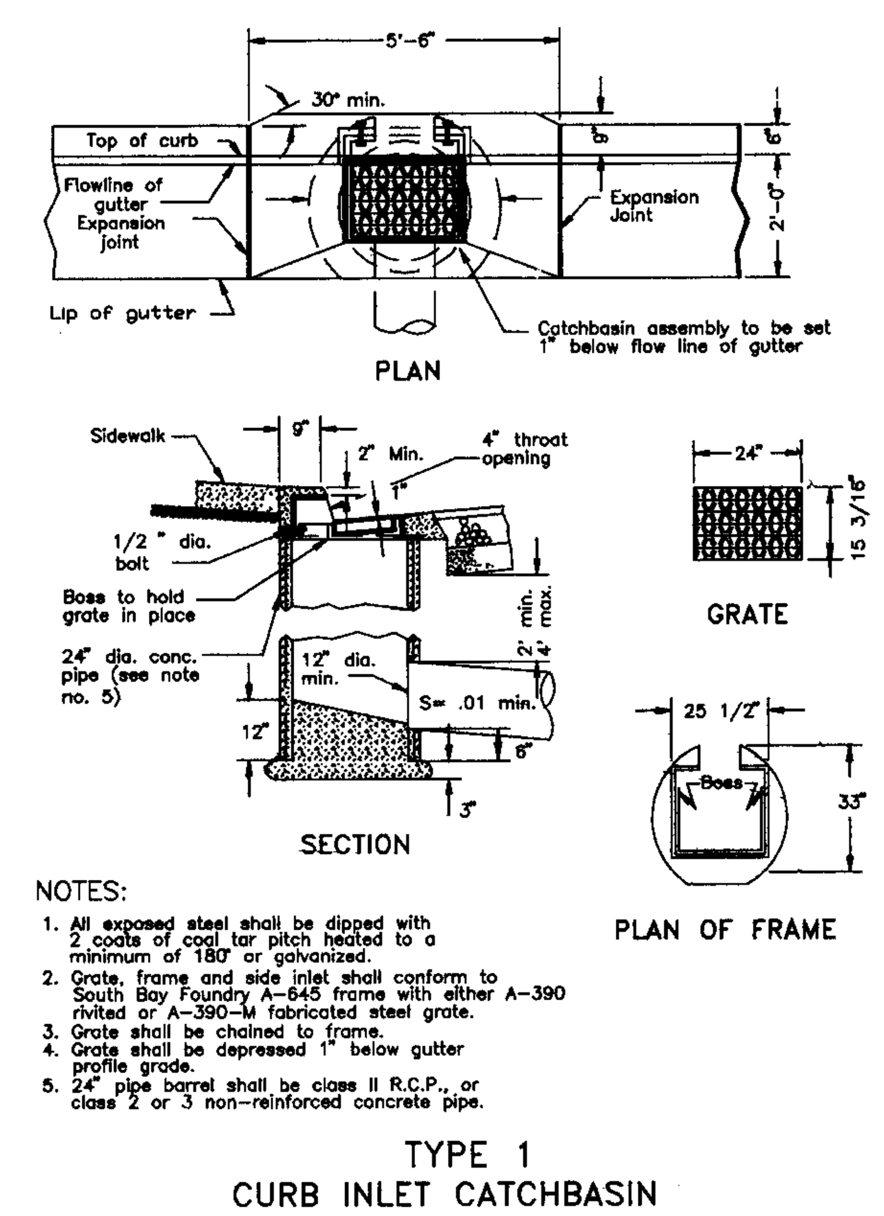
FRAME & COVER (Manhole)



Trench Repair shall be 0.70' Deep-Lift Asphalt Concrete. Maximum payment with shall be pipe O.D.+36". Refer to Construction Notes on Sheet 6 for Locations and quantities of A.C. Misc. Areas (Trench Repair).
Existing Pavement
Compact in 12" max. layers to a min. relative compaction of 95% under pavement and shoulders, and 90% outside shoulder.
Compact in 24" max. layers to a minimum relative compaction of 85%.
Compact in 6" layers to a minimum relative compaction of 90%.
Pipe bedding: Refer to Specification, Section 71, Special for details.
3'-0"
Variable
Var.
D+12"
O.D./2
10"
O.D.
O.D.+20" Min.
RIGID CONDUIT
FLEXIBLE CONDUIT

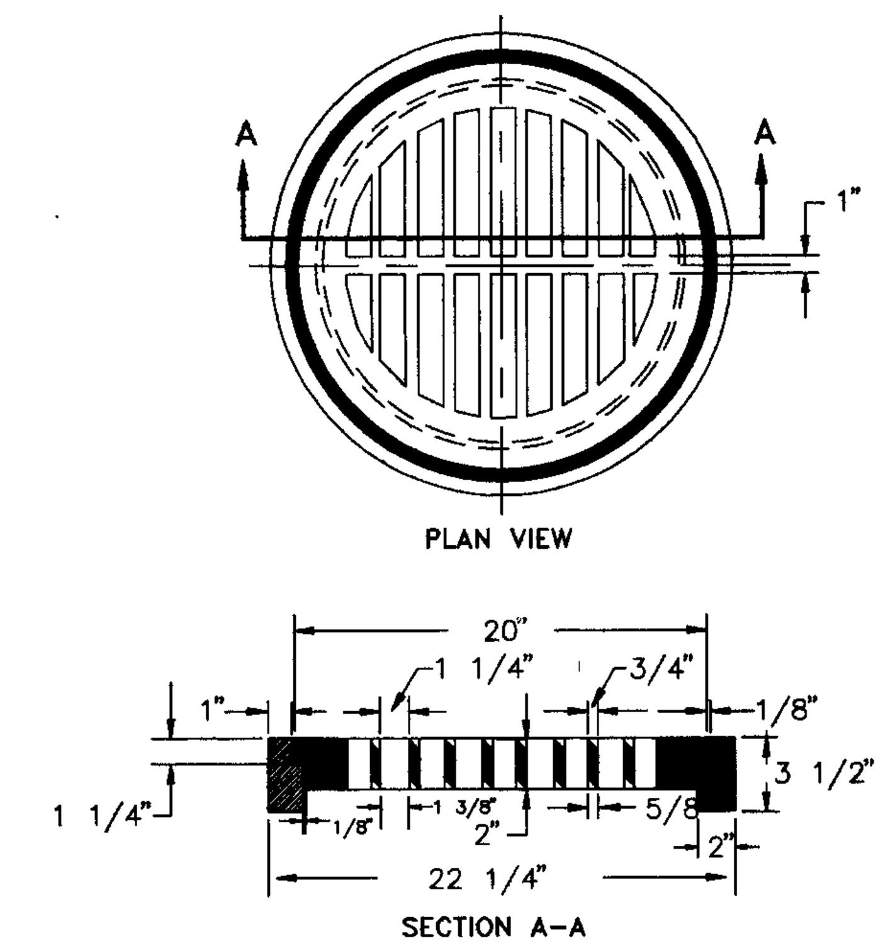
NOTES:
1. Relative compaction of materials shall be tested by the State of California, Dept. of Transportation Testing Manual, test method No. California 216 or 231.
2. All existing pavement shall be neatly cut to line prior to trench excation.

TYPICAL TRENCH DETAIL



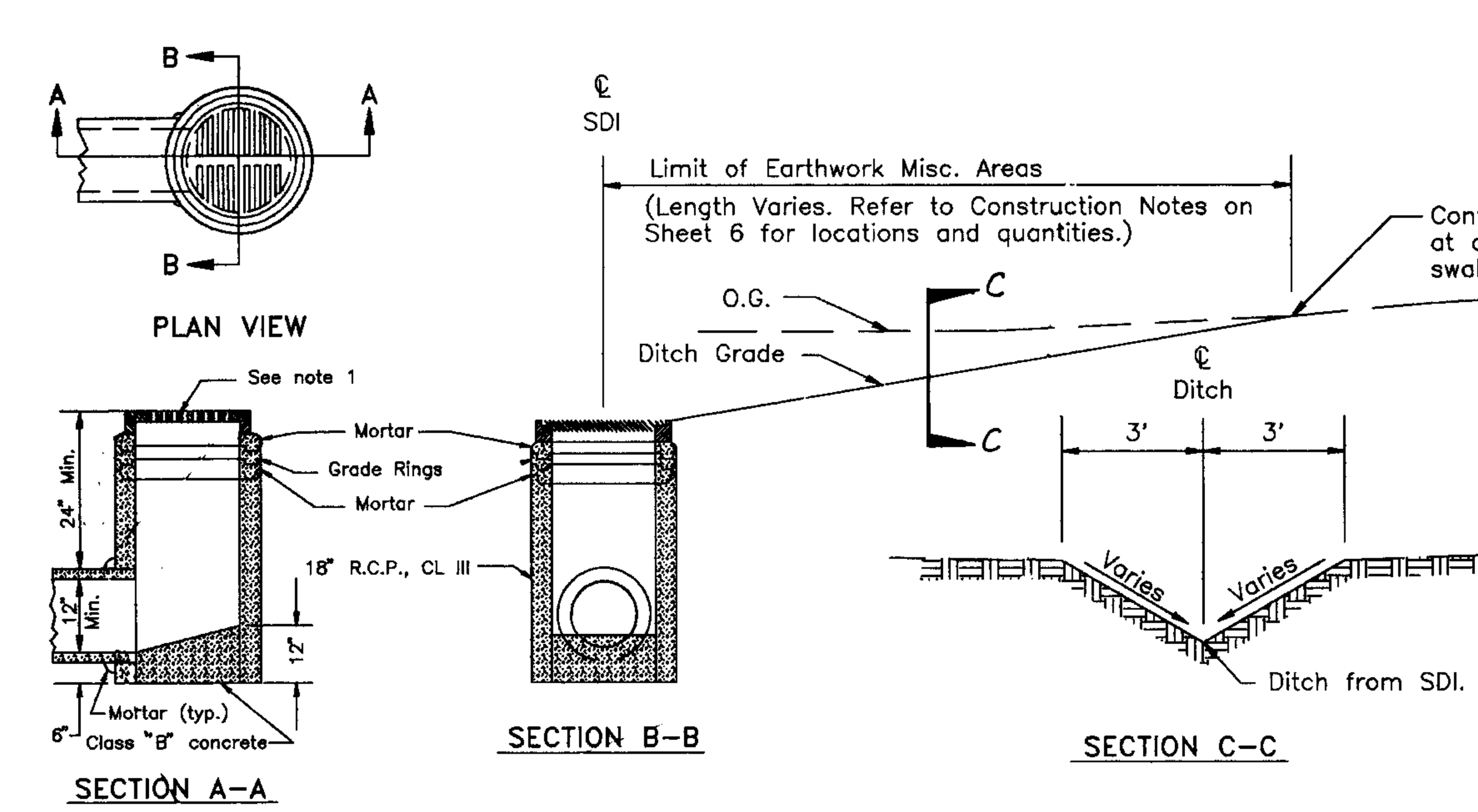
5'-6"
Top of curb
Flowline of gutter
Expansion Joint
Lip of gutter
PLAN
Catchbasin assembly to be set 1" below flow line of gutter
Sidewalk
4" throat opening
1/2" dia. bolt
24" dia. conc. pipe (see note no. 5)
12" dia. min.
S= .01 min.
SECTION
GRATE
PLAN OF FRAME
NOTES:
1. All exposed steel shall be dipped with 2 coats of coal tar pitch heated to a minimum of 180° or galvanized.
2. Grate, frame and side inlet shall conform to South Bay Foundry A-645 frame with either A-390 rivited or A-390-M fabricated steel grate.
3. Grate shall be chained to frame.
4. Grate shall be depressed 1" below gutter profile grade.
5. 24" pipe barrel shall be class II R.C.P., or class 2 or 3 non-reinforced concrete pipe.
TYPE 1
CURB INLET CATCHBASIN

STANDARD STORM DRAIN INLET



NOTE:
Grate shall be fastened to frame with 18" of 1/4" heat-treated chain

FRAME & GRATE (18" Storm Drain Inlet)



PLAN VIEW
See note 1
Mortar
Grade Rings
Mortar
18" R.C.P., CL III
Mortar (typ.)
Class "B" concrete
SECTION A-A
SECTION B-B
SDI
Limit of Earthwork Misc. Areas
(Length Varies. Refer to Construction Notes on Sheet 6 for locations and quantities.)
Conform to Original Ground (O.G.) at center line of exist. ditch or swale.
O.G.
Ditch Grade
Ditch
3'
Varies
Ditch from SDI.
SECTION C-C

18" STORM DRAIN INLET

RECORD DRAWING
11-19-92

SW2633

DRAWN BY	DATE	PROJECT ENGINEER	DATE	CHECKED	DATE	SUBMITTED	DATE	APPROVED	DATE	COUNTY OF SAN JOAQUIN	PLAN SCALE: As Shown	CONSTRUCTION DETAILS	THORNTON DRAINAGE PROJECT PHASE 3	SHEET NO.	TOTAL SHEETS
J.C. WHITE	8/29/91	J.C. White	2/7/92	[signature]	2/7/92	Manuel Solorio	2/7/92	[signature]	2/10/92					5	6

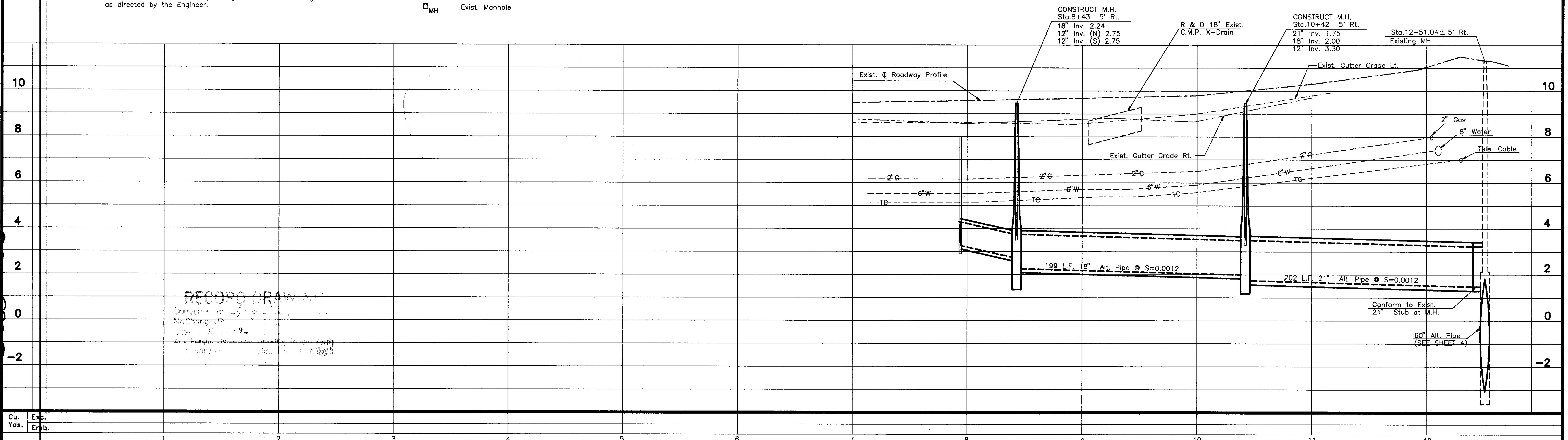
FILE NAME	DRAWER	SHEET NO.	ACAD
			D:\THORNTON\CONSTDET

LEGEND

Exist. Tree	Exist. Underground Telephone Cable (— TC —)
Exist. Water Meter	Exist. Gas Line (— G —)
Exist. Water Valve	Exist. Water Line (— 8"W —)
Exist. Fire Hydrant	Exist. Drainage
Exist. Power Pole	
Exist. Fence	
Exist. Street Sign	
Exist. Manhole (MH)	

Notes:

1. See Construction Notes on Sheet 6 for locations of A.C. Misc. Areas (Trench Repair).
2. Alt. Pipe denotes Alternative Storm Sewer Pipe.
3. The Contractor shall remove, salvage and reinstall all signs as directed by the Engineer.



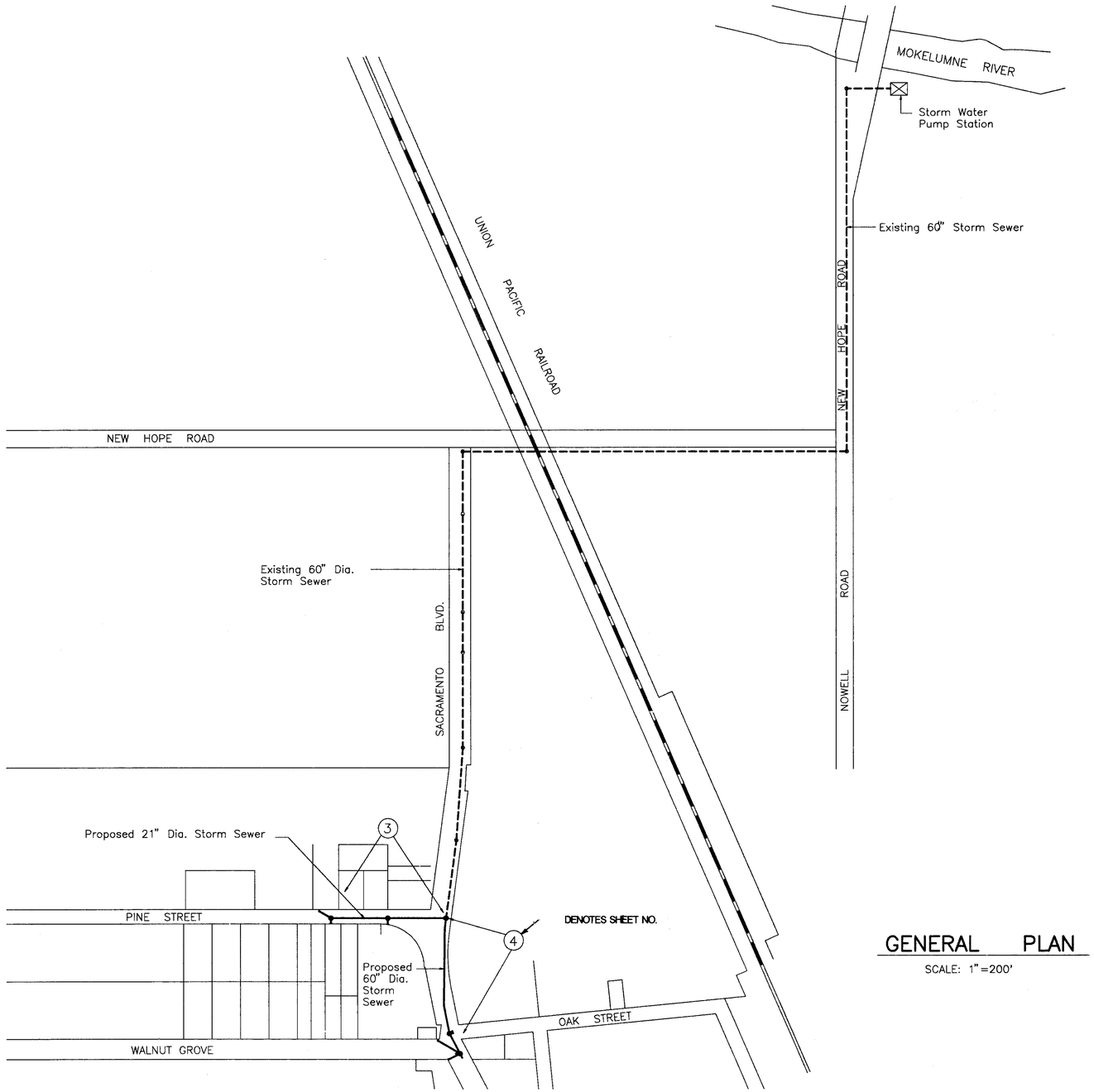
DRAWN BY	DATE	PROJECT ENGINEER	DATE	CHECKED	DATE	SUBMITTED	DATE	APPROVED	DATE					
J.C. WHITE	12/26/91	J.C. White	2/7/92	Dean Gilmore	2/7/92	Manuel Soto	2/7/92	[signature]	2/10/92	COUNTY OF SAN JOAQUIN	PLAN SCALE: 1"= 40'	PROFILE SCALE: HORIZONTAL 1"= 40' VERTICAL 1"= 2'	PROJECT	THORNTON DRAINAGE PROJECT PHASE 3

SHEET NO.	TOTAL SHEETS
3	6

FILE NAME	DRAWER	SHEET NO.	ACAD
			D:\THORNTON\PPA3A3

REVISIONS DATE

SJ 21025



LEGEND

- 8"W Water Line & Size
- 2"G Gas Line & Size
- TC Telephone Cable
- Utility Pole
- Storm Drain Inlet

GENERAL PLAN

SCALE: 1"=200'

RECORD DRAWING
Corrections By
No Changes By Dan T. 11-19-92
Date 11-19-92
Any Person Using This Drawing Should Verify All Information By Inspecting The Site Of Work

SW2403A

REVISIONS	DATE

DRAWN BY	DATE	PROJECT ENGINEER	DATE	CHECKED	DATE	SUBMITTED	DATE	APPROVED	DATE
J. C. WHITE	12/27/91	J.C. White	2/7/92	Dan Nelson	2/1/92	Manuel Lopez	2/1/92	M. Lopez	2/10/92

FILE NAME	DRAWER	SHEET NO.	ACAD
			D:\THORNTON\GENPLAN1

COUNTY OF SAN JOAQUIN

PLAN SCALE: 1"= 200'

GENERAL PLAN & NOTES

PROJECT

SHEET NO.	TOTAL SHEETS
2	6

COUNTY OF SAN JOAQUIN

DEPARTMENT OF PUBLIC WORKS

STOCKTON, CALIFORNIA

PROJECT PLANS FOR

THORNTON DRAINAGE PROJECT PHASE 3

TO BE SUPPLEMENTED BY STANDARD PLANS DATED JANUARY 1988

COUNTY OF SAN JOAQUIN

Submitted February 10, 1992

Henry M. Hirata

HENRY M. HIRATA R.C.E. 21258
Director of Public Works

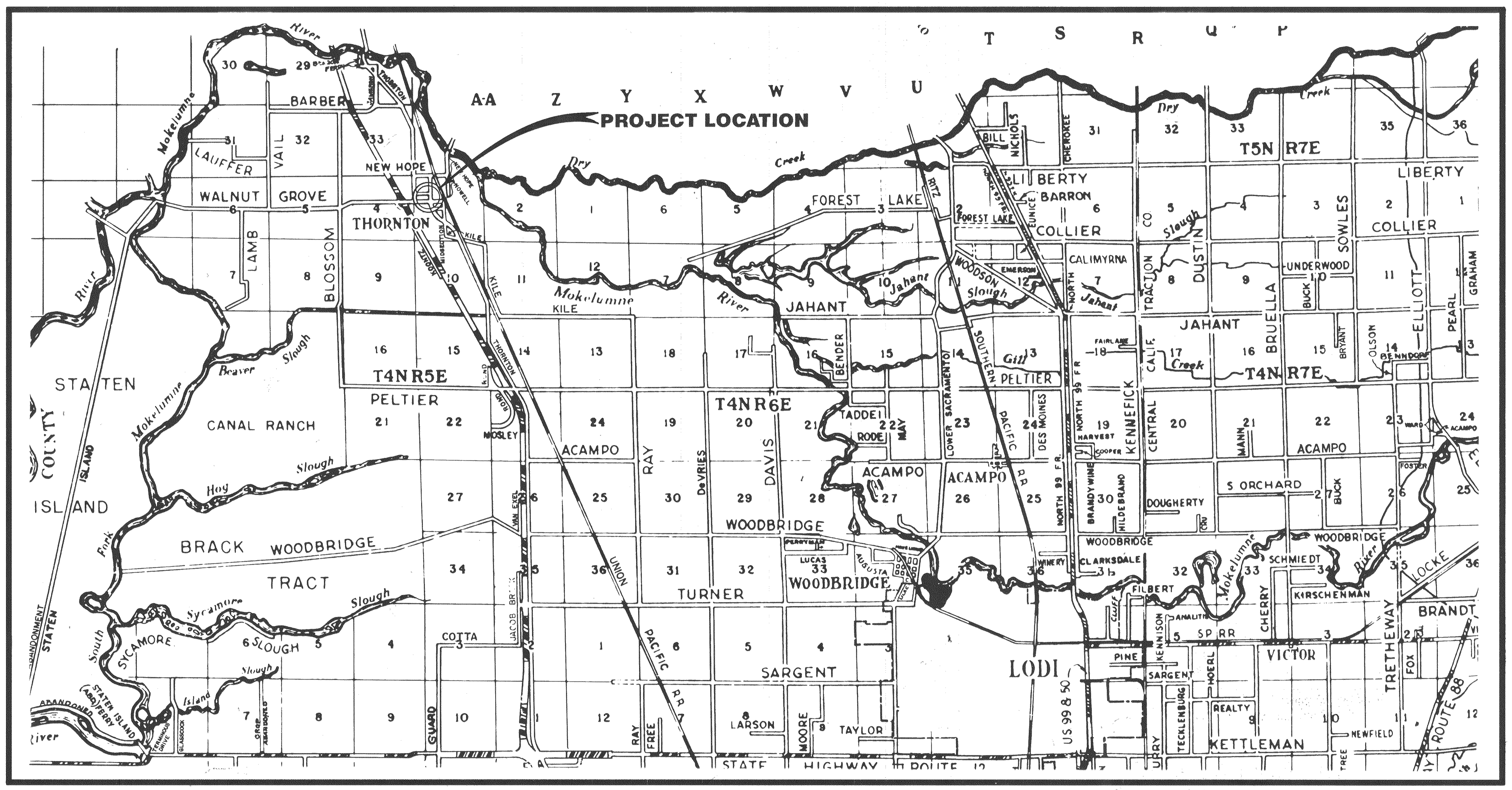
REGISTERED PROFESSIONAL ENGINEER HENRY M. HIRATA No. 21258 Exp. 9-30-93 CIVIL STATE OF CALIFORNIA

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	Title Sheet
2	General Plan & Notes
3	Plan & Profile (Pine Street)
4	Plan & Profile (Sacramento Blvd.)
5	Construction Details
6	Construction Notes

- ABBREVIATIONS -

A.B.	=	Aggregate Base
ALT.	=	Alternative
A.C.	=	Asphalt Concrete
A.C.P.	=	Asbestos Cement Pipe
A.S.	=	Aggregate Subbase
BIT. CD.	=	Bituminous Coated
C.I.P.	=	Cast In Place
C.L. or ℄	=	Center Line
C.P.	=	Concrete Pipe
CONST.	=	Construct/Construction
C.S.P.	=	Corrugated Steel Pipe
C.S.P.A.	=	Corrugated Steel Pipe Arch
D.I.	=	Drainage Inlet
DIA.	=	Diameter
DR.	=	Driveway
E.P.	=	Edge of Pavement
E.T.W.	=	Edge of Traveled Way
F.L.	=	Flow Line
GALV.	=	Galvanized
HDPE	=	High Density Poly Ethylene
L.F.	=	Linear Feet
M.H.	=	Manhole
N.R.C.P.	=	Non-Reinforced Concrete Pipe
O.G.	=	Original Ground
P.C.C	=	Portland Cement Concrete
P.L.	=	Property Line
P.M.S.	=	Plant Mixed Surfacing
PVC	=	PolyVinyl Chloride
R.C.P.	=	Reinforced Concrete Pipe
R. & D.	=	Remove and Dispose
R. & S.	=	Remove and Salvage
R. / W.	=	Right of Way
S.-DR.	=	Side Drain
S.D.I.	=	Storm Drain Inlet
S.P.	=	Standard Plans
TC	=	Telephone Cable
TYP.	=	Typical
WW.	=	Walkway
X-DR.	=	Cross Drain



PROJECT LOCATION MAP

0 1 2 3

Scale: 1" = 1 Mile

RECORD DRAWING

REVISIONS NO.	DESCRIPTION	DRWN BY	CKD BY	APP BY	DATE

Project Engineer	Date	Senior Engineer	Date	Approval Recommended By	Date
J.C. White	2/7/92	Manuel Soria	2/7/92	P.M. R.	2/10/92
FILE NAME		DRAWER	SHEET NO.	ACAD	
				C:\Thornton\Titlesht	