SHEET INDEX

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2	Index Map
3	Plot Plan at Office and Tank Yard
4	Piping at Pump Station I & Office Building Foundation
5	Architectural - Office & Shop Bldg.
6	Electrical & Schematic Details
7	100,000 gal. Wooden Storage Tank
8	Typical Details
9	Standard Details
10 - 25	Plan & Profile

LINE INDEX

LINE NO.	SHT. NO.	STREET NAME
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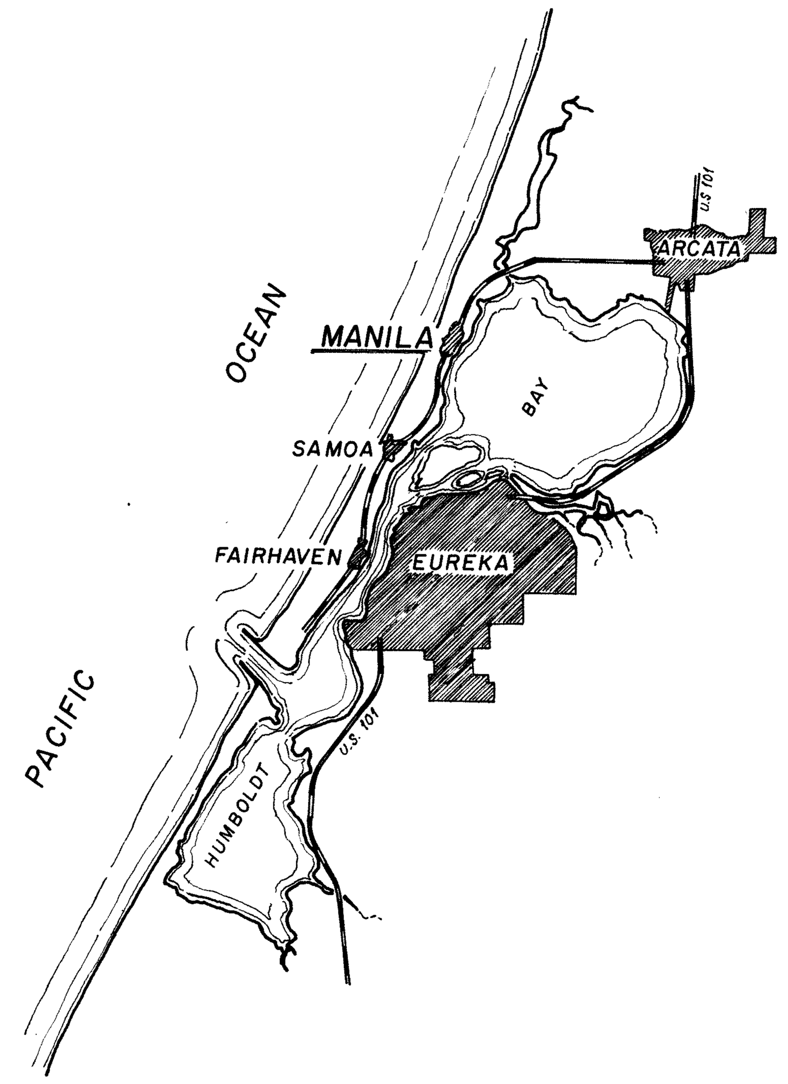
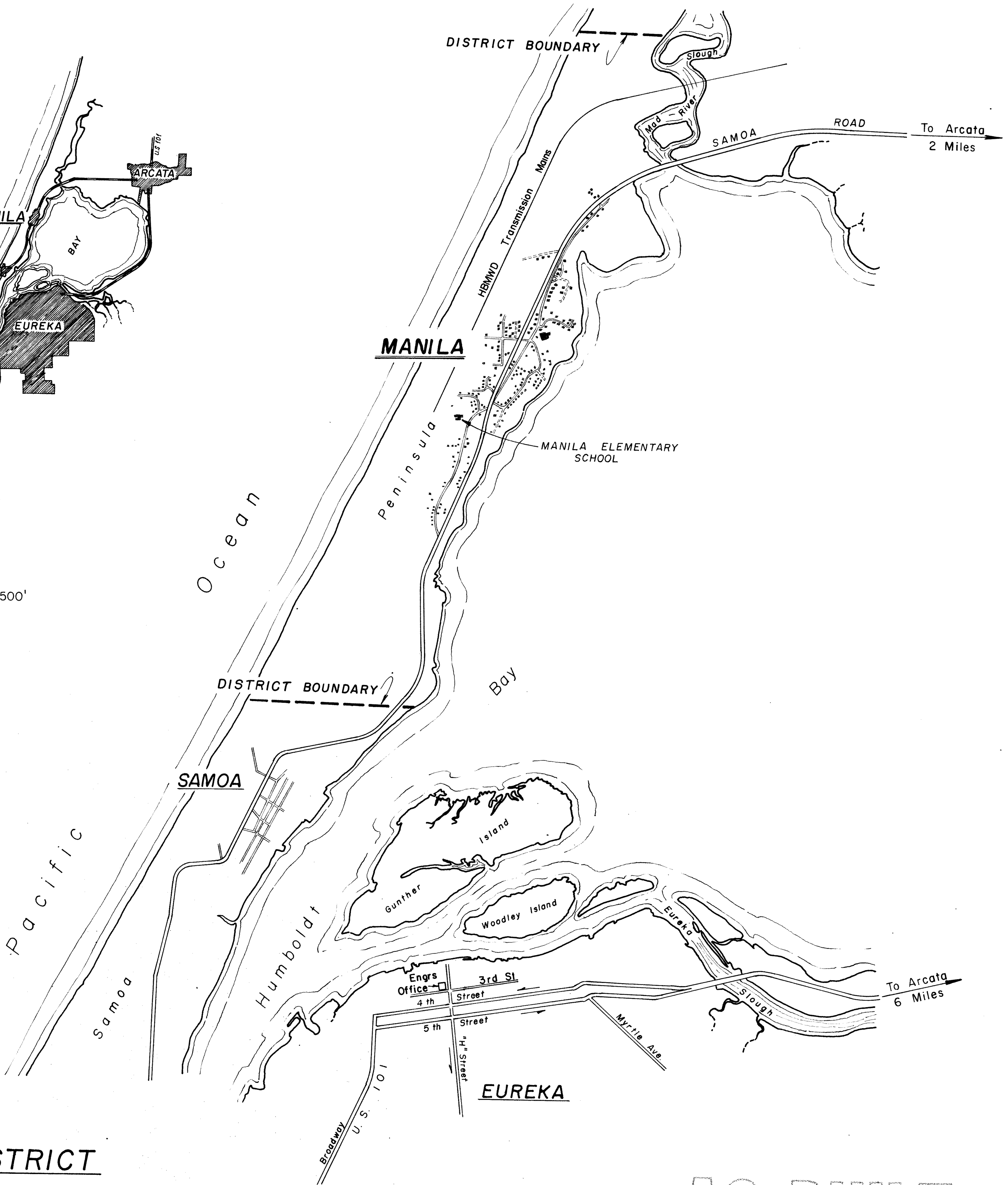
2	11, 12	Park St., Carr Dr., Raineri Lane, Pacific Blvd., Beach Dr., Wildwood St.
3	19	Carr Drive
4	19	Wildwood Drive
5	13	Park Street
6	13	Locke Street
7	14 - 18	Samoa Road
8	20	Young Lane
9	13	Hill Street
10	20	Phillips Court (deleted)
11	20	Darin Drive
12	20	Sandy Road
13	21	Mill Road, Peerless Avenue
14	22-23	Victor Blvd.
15	24	Melvin Ave., Laurel Dr., Holly Dr.
16	25	Melvin Ave.
17	25	Berry Lane
18	25	Dean Street
19	18	Orange Drive
20	19	Taylor Court
21	19	Pedro Lane (deleted)
22	19	Wilshire Lane
23	18	Jewel Street
24	19	Pebble Road
25	13	Shell Drive

AS BUILT



SCALE 1" = 14,500'



SCALE 1" = 2000'

AS BUILT

MANILA COMMUNITY SERVICES DISTRICT

WATER SYSTEM

Plans and Specifications approved by the Board of Directors of the Manila Community Services District, County of Humboldt, State of California, this 9th day of May 1967

Virgil L. McNutt
Virgil McNutt - President

Minerva Earlene Peterson
Earlene Peterson - Secretary

BOARD OF DIRECTORS

Virgil McNutt
Don Brasher
Franklin Wingo
Robert Young
Geraldine Borges

COMPLETE PLANS & SPECIFICATIONS
Plans consist of 1 thru 25 sheets
Specifications dated 5/9/67

ABBREVIATIONS

A.C.P. - Asbestos Cement Pipe
Anc. - Anchor
Brgs. - Bearings
℄ - Centerline
C.I.P. - Cast Iron Pipe
Cl. - Class
C.M.P. - Corrugated Metal Pipe
Conc. Bm. - Concrete Beam
Cont. - Continuous
Contr. Bldg. - Control Building
ctrs. - Centers
Cy. - Cycles
Det. - Detail
D.F. - Douglas Fir
ea. - each
Elev. - Elevation
Exc. - Excavations
Ext. - Exterior
Ext. Fin. - Exterior Finish
Fab. - Fabricate
Elevations shown are mean sea level. MSL

F.B. - Flat Bar
Fin. - Finish
Fin. Gr. - Finish Grade
Fl. - Floor
Ga. - Gage
Galv. - Galvanized
G.I.P. - Galvanized Iron Pipe
Grnd. - Ground
I.D. - Inner Diameter
Int. Fin. - Interior Finish
max. - maximum
M.B. - Metal Bolts
min. - minimum
M.M. - Millimeter
N.C. Thd. - National Coarse Thread
N.T.S. - not to scale
O.H. - over head
Pcs. - Pieces
Pl. ℙ - Plate
UGC - Underground Cable
CRB - Crusher Run Base

psi - pounds per square inch
R.C.P. - Reinforced Concrete Pipe
Rwd. Rdwd. } Redwood
R.R. Gravel - River Run Gravel
R.S.P. - Rock Slope Protection
Rqd. - Required
sht. - sheet
std. - standard
Thd. - Thread
Typ. - Typical
w/ - with
w/ Hvy. - with Heavy
W.M. - Wire Mesh
W.P. - Water Proof
I.P.S. - Iron Pipe Size
1/s - one sides
4/s - four sides
P.T. - Pacific Telephone
Incl - Included
G.V. - Gate Valve

NO.	DATE	REVISIONS	BY	APPR
△				
△				
△				
△				
△	1-17-68	REVISED TO AS BUILT CONDITION	N.K.	

DRAWN BY	CHECKED BY	SCALE	DATE
C.D.W.	K.	As Shown	5/9/67

MANILA COMMUNITY SERVICES DISTRICT
MANILA, CALIFORNIA

LOCATION MAP
WATER SYSTEMS

WINZLER & KELLY
CONSULTING ENGINEERS
633 - 3rd ST. EUREKA, CALIFORNIA 443-8326
Robert F. Kelly RCE 11005

JOB NO. 67-15A
SHEET 1 OF 25

NO. 1000H CLEARPRINT


HUMBOLDT BAY
MAD RIVER SLOUGH
TO ARCATA
Emmerson's Mill
Emmerson Road
NORTHWESTERN PACIFIC RAILROAD
SAMOA ROAD Line 7 - 8"
Young Lane
Line 8
Line 6"
HIGHWAY CROSSING
Phillips Ct.
Line 10 - 2" (deleted)
NEW NAVY BASE ROAD (HUMBOLDT COUNTY)
Darin Road
Line 11 - 6"
Line 7 - 8"
Line 7 - 10"
Sandy Road
Ward Street
Line 12 - 6"
"CONSTRUCT" RAILROAD CROSSING
SAMOA ROAD
Line 7 - 10"
Line 13 - 4"
Peerless Avenue
Line 13 - 6"
Mill Road
Mill St.
"CONSTRUCT" RAILROAD CROSSING
Victor Boulevard
Line 14 - 8"
"CONSTRUCT" RAILROAD CROSSING
MATCH LINE
Line 7 - 10"
Line 1 - 10"
Line 7 - 6"
"EXISTING" HIGHWAY CROSSING
Locke Street
Line 6 - 6"
Lupin
Line 1 - 10"
Line 2 - 8"
Drive
4' MH with Valve
Park Street
Line 5 - 6"
TANK SITE
AS BUILT
NORTH SECTION
AS BUILT
Melvin Avenue
Line 16 - 2"
Laurel Lane
Line 15 - 6"
Holly Drive
Victor Line 14 Boulevard
8"
Berry Lane
Line 17 - 4"
Line 17 - 2"
Dean Street
Line 18 - 4"
Line 14 - 8"
MATCH LINE
"CONSTRUCT" RAILROAD CROSSING
END LINE 14 CONTINUE LINE 7
NORTHWESTERN PACIFIC RAILROAD
NEW NAVY BASE ROAD (HUMBOLDT COUNTY)
TO SAMOA
SAMOA Line 7 - 6" ROAD
"EXISTING" HIGHWAY CROSSING
Pebble Road
Line 24 - 4"
Line 7 - 8"
Jewel Street
Line 23 - 4"
ROAD
Taylor Court
Line 20 - 2"
Pedro Lane
Line 21 - 2" (deleted)
Line 7 - 8"
Line 7 - 8"
Line 7 - 8"
Park Street
Line 2 - 8"
Line 2 - 8"
Carr Dr.
Raineri Lane
Line 2 - 8"
Line 4 - 2"
Line 3 - 2"
Wildwood Street
Line 2 - 8"
Pacific Boulevard
Line 2 - 8"
Line 22 2"
Beach Drive
Line 2 - 8"
Line 7 - 10"
Line 25 - 4"
Shell Drive
MANILA ELEMENTARY SCHOOL
Line 19 - 4
Orange Drive
2 # 14 To HBMWD
4' Manhole w/ 10" BF Valve
HBMWD TRANSMISSION LINES 42" & 15"
3 # 14 & 2 # 12 To Control Bldg
SAME
Lupin Drive
Line 9 - 2"
Hill ST
6' MANHOLE w/ METER
4" BYPASS
10" TYTON
2 # 14 To H.B.M.W.D.
SOUTH SECTION
INDICATES DITCH CLASS - see sht. 8
INDICATES ROAD SURFACING
1 = SAND
2 = GRAVEL
3 = ASPH. SURFACE
LEGEND
BLOW OFF
VALVE
FIRE HYDRANT
SINGLE SERVICE
DOUBLE SERVICE
FIRE HYDRANT w/ PUMPER NOZZLE
Elev Datum - MSL
WATER SYSTEM
MANILA COMMUNITY SERVICES DISTRICT
INDEX MAP
1-17-68 REVISED TO AS BUILT CONDITION N.K.
NO. DATE REVISIONS BY APPR
DRAWN BY C.D.W.
CHECKED BY W.E.S.
SCALE 1" = 200'
DATE 5/9/67
WINZLER & KELLY CONSULTING ENGINEERS
633 - 3rd ST. EUREKA, CALIFORNIA 443-8326
JOB NO. 67-15A
SHEET 2 OF 25


HUMBOLDT BAY
MAD RIVER SLOUGH
TO ARCATA
Emmerson's Mill
Emmerson Road
NORTHWESTERN PACIFIC RAILROAD
SAMOA ROAD
Line 7 - 8"
Line 7 - 10"
Line 7 - 6"
NEW NAVY BASE ROAD (HUMBOLDT COUNTY)
HIGHWAY CROSSING
Young Lane
Line 8
Line 8 - 6"
Phillips Ct.
Line 10 2" (deleted)
Darin Road
Line 11 - 6"
"CONSTRUCT" RAILROAD CROSSING
Sandy Road
Ward Street
Line 12 - 6"
Edwin Joe & Francis A Saltzman Lot Book Report No 54 40' Wide
Raymond & Flossie Cook Lot Book Report No 58 40' Wide
Line 13 - 4"
Peerless Avenue
Mill Road
Line 13 - 6"
Mill St.
Victor Boulevard
Line 14 - 8"
"EXISTING" HIGHWAY CROSSING
Line 1 - 10"
MATCH LINE
Albert & Nadine Jones Lot Book Report No 43 25'x62'
Locke Street
Line 6 - 6"
George & Arshnow Harless Lot Book Report No 40 20'x60'
Robert E Keeney & Paul Henning Lot Book Report No 25 25'x120' (Signed)
Park Street
Line 5 - 6"
TANK SITE
Lupin Drive
Line 2 - 8"
4' MH with Valve
Emmett Sifford Lot Book Report No 24 20'x64' (Signed)
Celtor Chemical Lot Book Report No 16 Parcel 3
NORTH SECTION
CONDEMNATION EASEMENTS
Melvin Avenue
Line 16 - 2"
Laurel Lane
Line 15 - 6"
Ben Clay Lot Book Report No 45 20'±x185'± (Signed)
Holly Drive
Wilford C & Mary M Moore Lot Book Report No 48 20'x180'
Victor Boulevard
Line 14
8"
Berry Lane
Line 17 - 4"
Line 17 - 2"
Richard E & Edna May Millsap Lot Book Report No 26 20'x80'± (Signed)
Dean Street
Line 18 - 4"
Line 14 - 8"
"CONSTRUCT" RAILROAD CROSSING
END LINE 14 CONTINUE LINE 7
TO SAMOA
"EXISTING" HIGHWAY CROSSING
Pebble Road
Line 24 - 4"
Jewel Street
Line 23 - 4"
Taylor Court
Line 20 - 2"
Pedro Lane
Line 21 - 2" (deleted)
2#14 To HBMWD
4' Manhole w/ 10" BF Valve
HBMWD TRANSMISSION LINES 42" & 15"
3#14 & 2#12(2) To Control Bldg
SAME
Park Street
Line 2 - 8"
Silver Valley Development Line Lot Book Report No 4 20'x100'
Carr Drive
Line 2 - 8"
Line 3 - 2"
Raineri Lane
Line 2 - 8"
Line 4 - 2"
Wildwood Street
Leroy Nuss Lot Book Report No 9 15'x100' (Signed)
Pacific Boulevard
Line 22 2"
Line 2 - 8"
Celtor Chemical Lot Book Report No 16 Parcel 2
Beach Drive
Julian & Elizabeth Cominotti Lot Book Report No 20
Line 7 - 10"
Shell Drive
Line 25 - 4"
John D & Rosalie F Hay Lot Book Report No 67 24'x382'
MANILA ELEMENTARY SCHOOL
Orange Drive
Line 19 - 4"
Charles E & Maxine C Sprout Lot Book Report No 62 20'x100'
Celtor Chemical Parcel 3 Lot Book Report No 16
Lupin Drive
Line 9 - 2"
Hill ST
6' MANHOLE w/ METER
4" BYPASS
Celtor Chemical Parcel 1 Lot Book Report No 16
To HBMWD
SOUTH SECTION
NOTE: Lot Book Report Numbers are Suffix Only. The Prefix is 121990 Example: 121990-16
(A) - INDICATES DITCH CLASS - see sht. 8
(1) - INDICATES ROAD SURFACING
(1) = SAND
(2) = GRAVEL
(3) = ASPH. SURFACE
LEGEND
BLOW OFF
VALVE
FIRE HYDRANT
SINGLE SERVICE
DOUBLE SERVICE
FIRE HYDRANT w/ PUMPER NOZZLE
Elev Datum - MSL
WATER SYSTEM
MANILA COMMUNITY SERVICES DISTRICT
INDEX MAP
NO. DATE REVISIONS BY APPR
DRAWN BY C.D.W.
CHECKED BY W.E.S.
SCALE 1" = 200'
DATE 5/9/67
WINZLER & KELLY CONSULTING ENGINEERS
633 - 3rd ST. EUREKA, CALIFORNIA 443-8326
JOB NO. 67-15A
SHEET 2 of 25
PRINTED ON DIEPO NO. 1000H CLEARPRINT
2303002
11 21001

Nail & Tin On Fence LINE ONLY
East 200.00
180.00
3/4" Iron Pipe
20.00
Existing 5' high Board Fence Do not disturb
Ground Elev. 14.0
Toe of Cut
Ground Elev. 14.5
Ground Elev. 15.0
Save Existing Pine Tree
Ground Elev. 14.4
1"=10'
North 184.875
Top of Fill
16' Gate
46'
Ground Elev. 14.8
Ground Elev. 14.8
2"x4" Redwood header at all edges of walk
4" Concrete Walk
70' of 8"x8" Bumper See Anchor Detail #1
Drain
8' 8'
2-50' Long Leach Lines 30" Cover
Drain
6" of Crusher Run Base
Fill to Join in existing Street to avoid ponding
North 184.875
6' Chain Link Fence
Walk Elev. 15.5
Ground Elev. 14.0
Ground Elev. 15.3
Ground Elev. 14.5
20' R/W (PARK STREET)
12' R/W
Flow Line Elev. 13.0
Ground Elev. 14.6
6" of Crusher Run Base
1200 Gal. Septic Tank Hilfiker or equal
Ground Elev. 15.6
Porch Slab Elev. 16.3
Concrete Porch
Walk Elev. 16.0
Floor Elev. 16.5
Office, Shop & Pump Building
Interior Piping See Sheet 4
24'-0"
37'-0"
Walk Elev. 14.5
4" Concrete Walk
R=10'
Slab EL 16.2
Manhole
100,000 Gal. Wooden Tank No 1
24'
Ground Elev. 14.4
Inlet & Outlet
High Pressure Air Line 3/4 Galv.
Note: 30" Minimum cover on all piping.
20' Set Back Lines
Ground Elev. 15.9
Ground Elev. 14.4
Pump Suction 6" ACP
Tank Fill Line
4" C.I
6x4x6 T
Tank Drain 4" C.I. Pipe
Overflow 6" C.I. Pipe
See Drain Riser Detail (This Sheet)
Pressure Tank (See Right)
Grade to Drain
Save Existing Pine Tree
TOP OF CUT
Chain Link Fence
Toe of Cut
drain
Flow Line Elev. 14.0
3/4" Iron Pipe
180.00
East 200.00
Yard Piping Ends at MAIN.
(Include in Yard Piping) Control Valve
LINE No 1 SHEET No 10
3/4" Iron Pipe
LUPIN DRIVE
LEGEND
FINISH GRADE — Item / Elev. 0.0
ORIGINAL CONTOUR
FINISH CONTOUR
ORIGINAL SPOT ELEV. (0.0)
Crusher Run Base = Class 2 Agg Base
Top of Staves
19'-0" Overflow Stand
4" Tank Drain Flush
6" Overflow
Note: Seal all pipes at Tank Slab per detail on Sheet 7.
6" Outlet & Inlet
Top of Tank Slab
Seal Collar - see sht 7
Bottom of Fnd'n. Ring
2½" Malleable Iron Street 'L' (Galv.)
2½" x 11" Reducing Flange
2½" NPT to 2½" Chicago hose Thread Nipple (Brass)
1'-9" Spool
6" C.I.
Elev. 12.0
DRAIN RISER
½" = 1'-0"
SECTION B-B
PIPE STANDS INSIDE OF TANK
¼" = 1'-0"
3" ø x 1" Deep Countersink
4" Concrete
6"x6" Penta-treated Fir or Redwood (S4S)
Crusher Run Base
Lap at timber ends only
2"x4" Header
3/4" ø x 24" Anchor Bolt w/ nut & Malleable Iron Washer.
Square or round Concrete anchor - Poured-in-place
1'-2"
Anchors to be 4'-0" Max C-C.
SECTION A-A
BUMPER ANCHOR DETAIL NO. 1
1" = 1'-0"
1" P.R.V.
2" Pipe Tap for Probes
48" Dia. x 12' long 1030 Gal. 125 Lb. Pressure Tank w/ 3/8" heads & shell.
3/4" Pipe Tap
Water Gauge
Probes
Baffle
Pressure Gauge
High Pressure Air Inlet
Drain, 2"
Gate Valve
13 - #4 Re-Bar @ 12" C-C
Elev. Top 16.4
2 layers of 90# Felt Paper
Concrete Footing
6" A.C.P.
6" C.I.
6" C.I.
Cast Valve Box Extension into Tank Base See Sheet 9 for Det.
6 - #4 Re-Bar @ equal spaces
SIDE VIEW
END VIEW
PRESSURE TANK
½" = 1'-0"
AS BUILT
WATER SYSTEM
MANILA COMMUNITY SERVICES DISTRICT
PLOT PLAN at OFFICE and TANK YARD
NO. | DATE | REVISIONS | BY | APPR
DRAWN BY WGS | CHECKED BY | SCALE 1"=10' & noted | DATE MAY 1967
WINZLER & KELLY CONSULTING ENGINEERS
633 - 3rd ST. EUREKA, CALIFORNIA 443-8326
JOB NO. 67 15 A
SHEET 3 of 25
PRINTED ON DIEPO NO. 1000H CLEARPRINT

General Note:
1. All 3", 4" & 6" Piping Shall be 125 Lb. Cast Iron Flanged Except as Noted.
2. All dimensions on Pump & Piping Details are for Berkeley Model 3WP25 Pump at Nº 1 and Berkeley Model 2WPH-15 at Nº 2. Verify for Alternate Pump if used.

WATER SYSTEM

MANILA COMMUNITY SERVICES DISTRICT

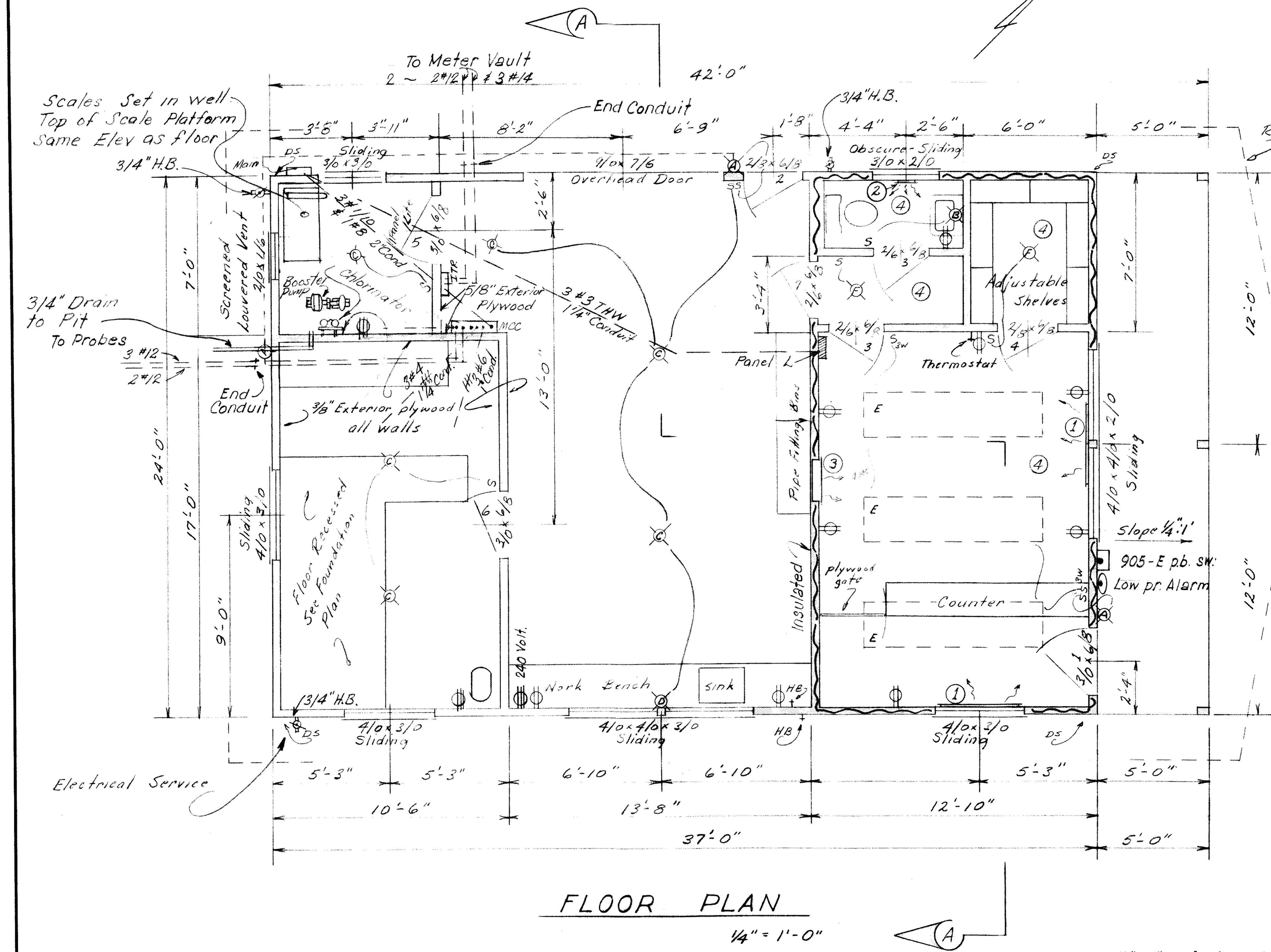
PIPING AT PUMP STATION NO. 1
FOUNDATION PLAN OFFICE BLDG.

NO.	DATE	REVISIONS	BY	APPR
DRAWN BY	CHECKED BY	SCALE	DATE	
WGS		NOTED	MAY 1967	

WINZLER & KELLY
CONSULTING ENGINEERS
633 - 3rd ST. EUREKA, CALIFORNIA 443-8326

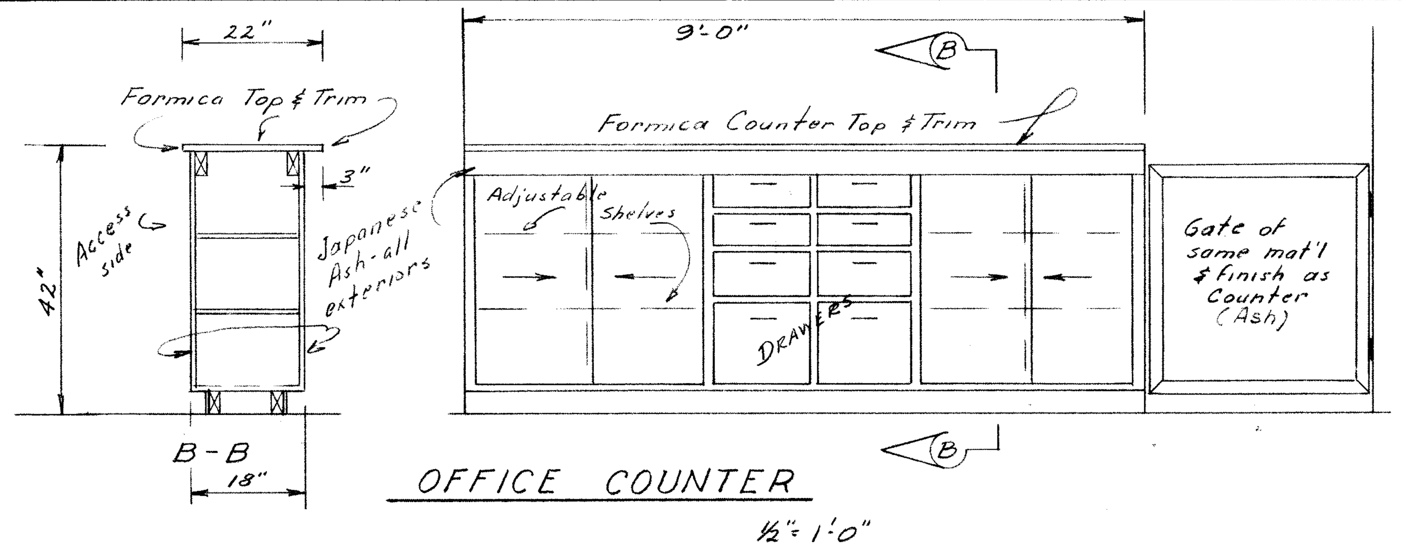
JOB NO. 67 15 A
SHEET 4 OF 25

PRINTED ON DIEPO NO. 1000H CLEARPRINT



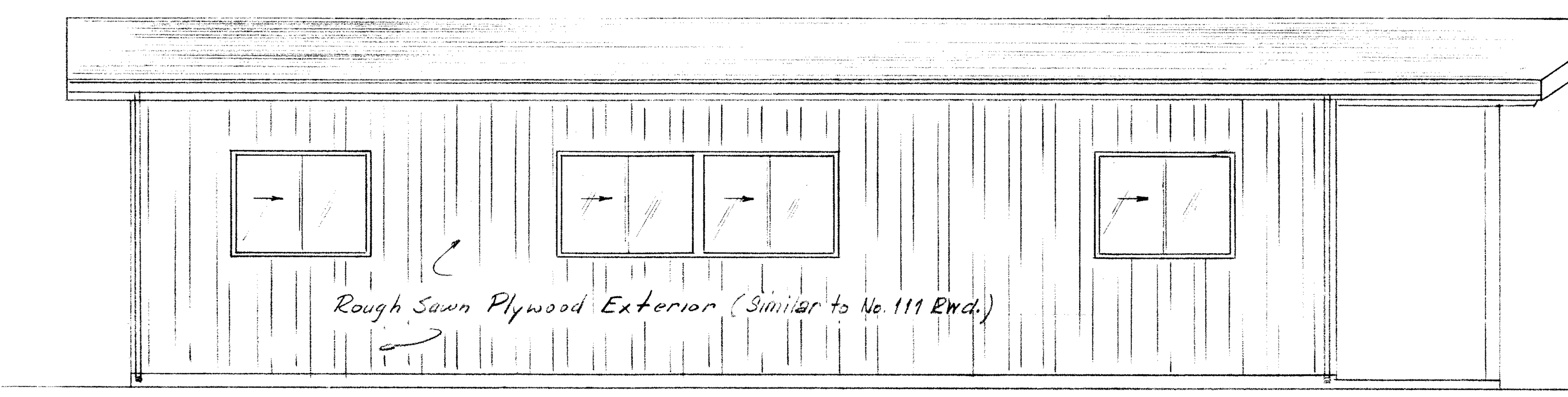
FLOOR PLAN

1/4" = 1'-0"

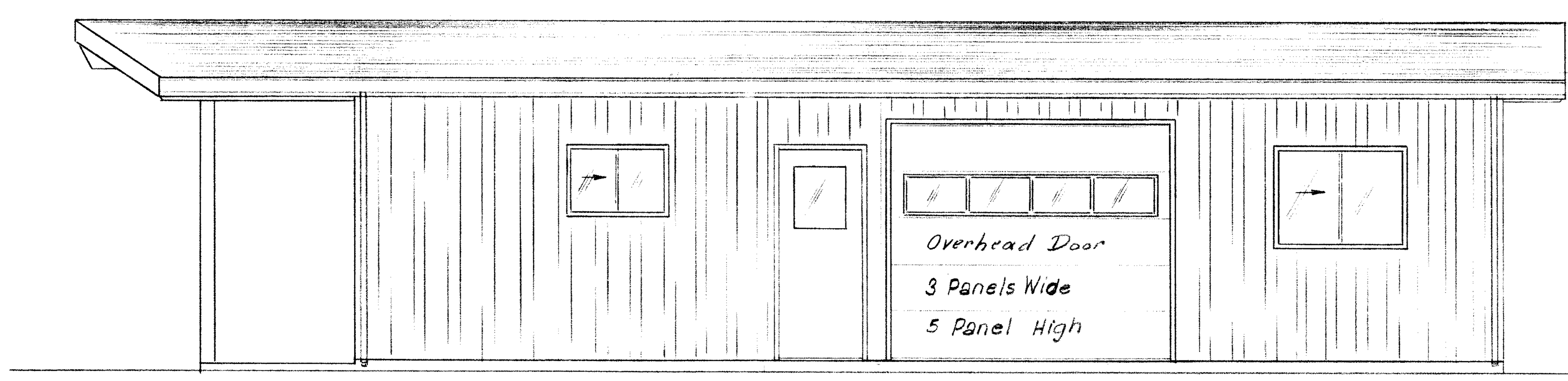


OFFICE COUNTER

1/2" = 1'-0"



SOUTH ELEVATION



NORTH ELEVATION

LIGHT SCHEDULE

	Req.	
A	2	Prescolite WB-28 Rear w/WG-8 Guard
B	1	" WB-2
C	5	Benjamin HN416-200
D	1	Porcelain Wall Mount w/pull chain
E	3	Benjamin Campus 2L-40 WRS Tandem CA7324-8
F	2	Prescolite CF-2

DOOR & HARDWARE

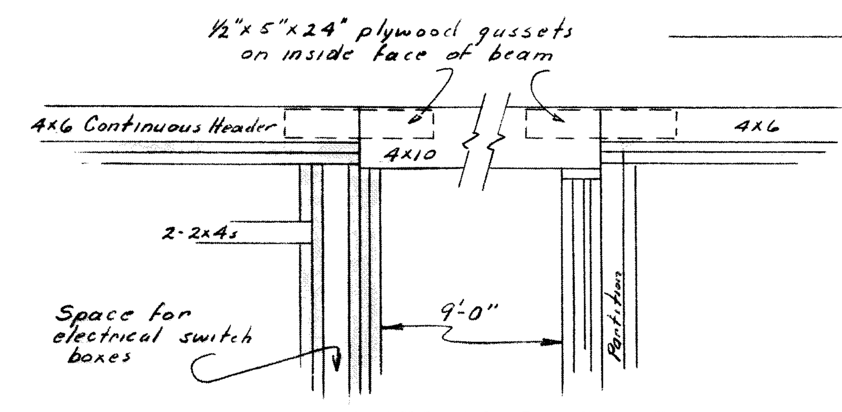
No	Req	Size	Th	Mat'l & Const.	Hardware
1	1	3/0x6/8	1 3/4	Solid Core 3 Lite	Yale 5304-US28
2	1	2/8x6/8	1 3/4	" " 1 Lite	"
3	2	2/6x6/8	1 3/8	Hollow Core	5301-5302 Lav.
4	1	2/8x6/8	1 3/8	" "	5301
5	1	3/0x6/8	1 3/8	" " 1 Lite	5301
6	1	3/0x6/8	1 3/8	Solid Core	5301
7	1	2/6x6/8	1 3/8	Solid Core 1 Lite	5301

PLUMBING

Lavatory Am. Std F350-40 18x20
Water Closet Am. Std Cadet F2110-11
Sink Am. Std. Flat Rim P7021-4 20x24

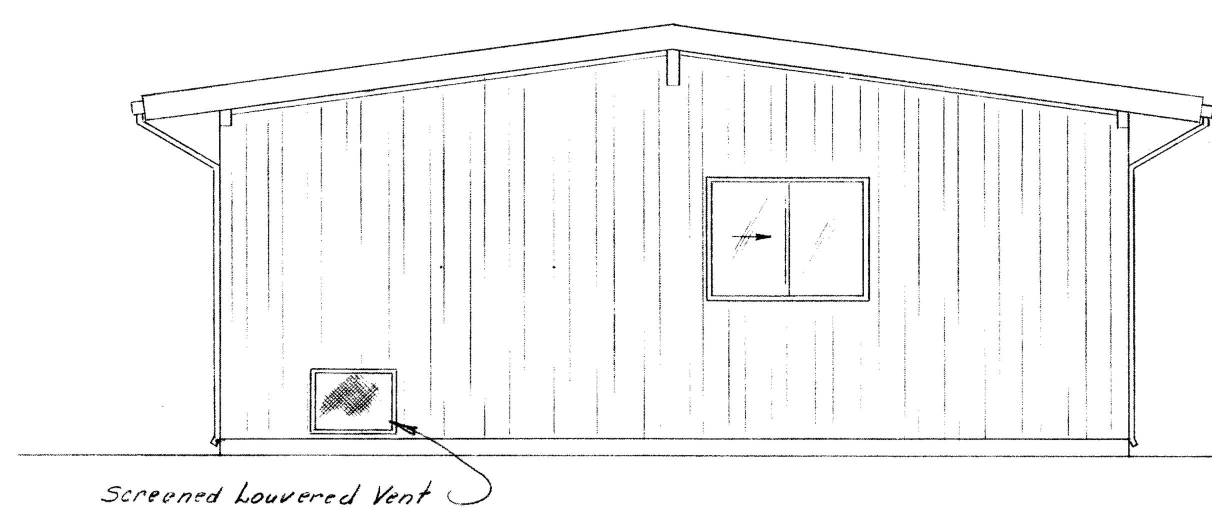
NOTES

1. Cavalier CBB-32D Baseboard Heater w/ CBB-TB Control Section 2 req'd
2. Cavalier CW-1.5-G Automatic wall insert heater 1500 watt 1 req'd
3. Cavalier CW-3-G Automatic wall insert heater 3000 watt 1 req'd
4. Vinyl Asbestos Floor Tile; Sheetrock walls & ceiling; 2" insulation all exterior walls & ceiling
5. Overhead Door - Wood Panel, Mortise & Tenon Construction, Sanded & Ready to Paint.

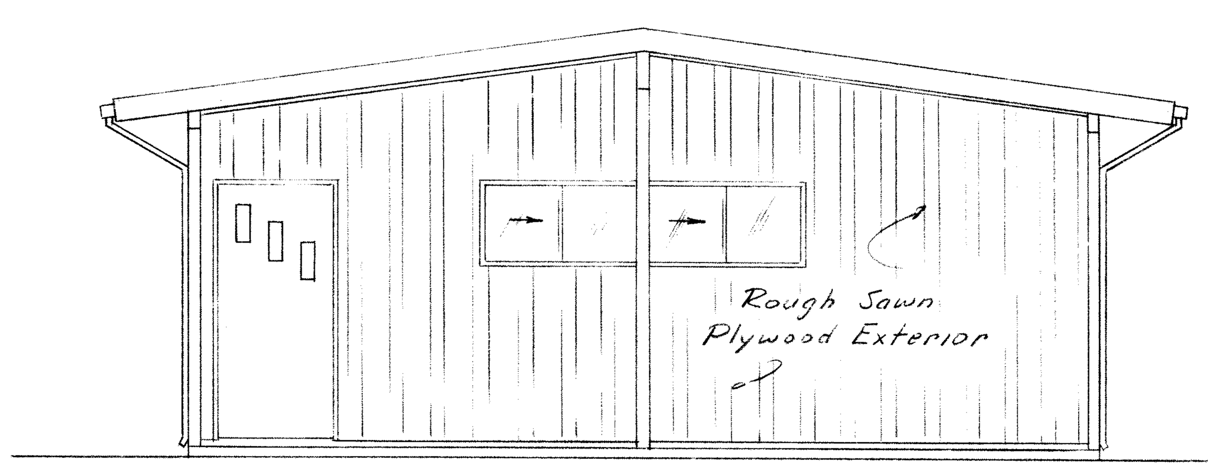


OVERHEAD DOOR HEADER DETAIL

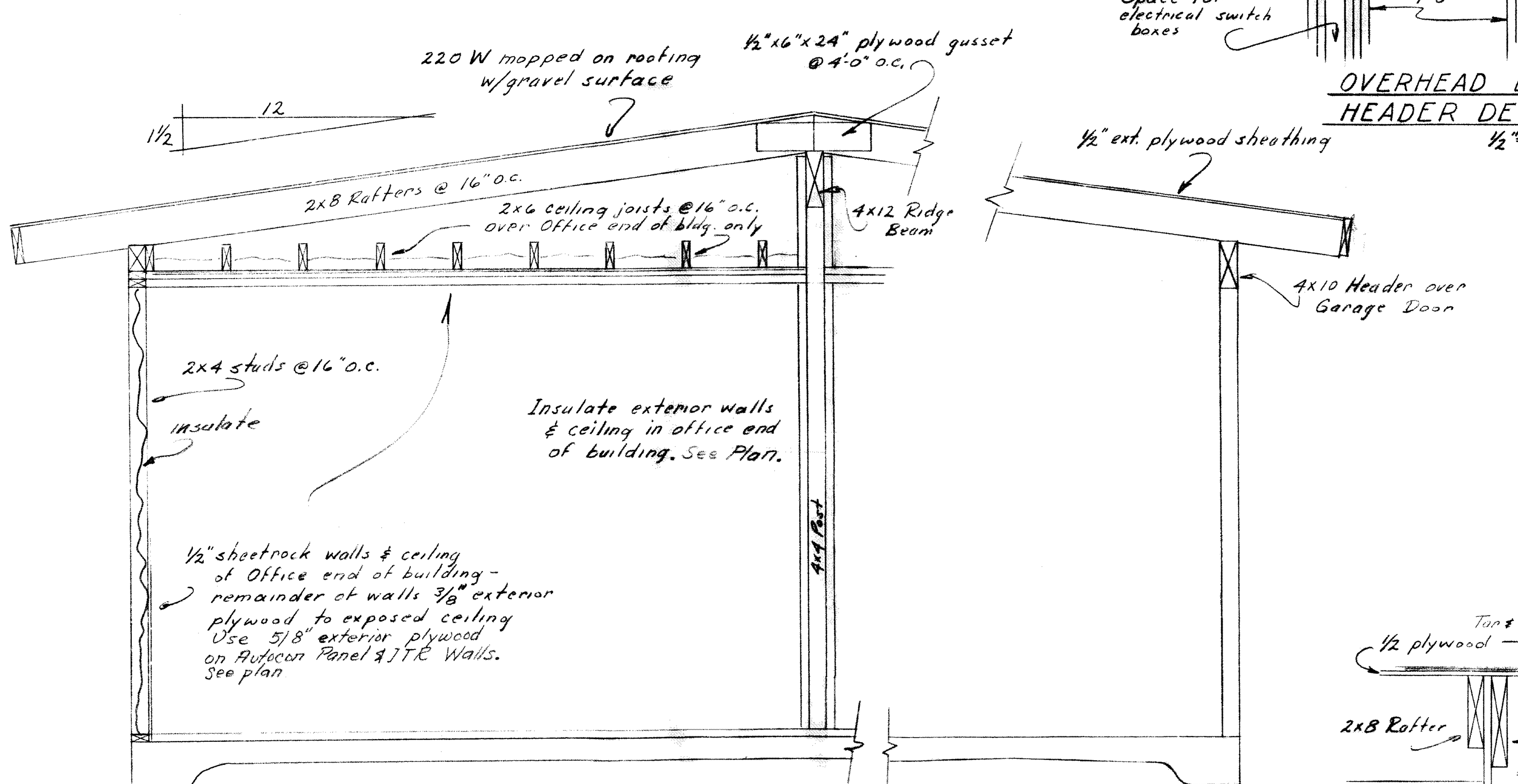
1/2" = 1'-0"



WEST ELEVATION

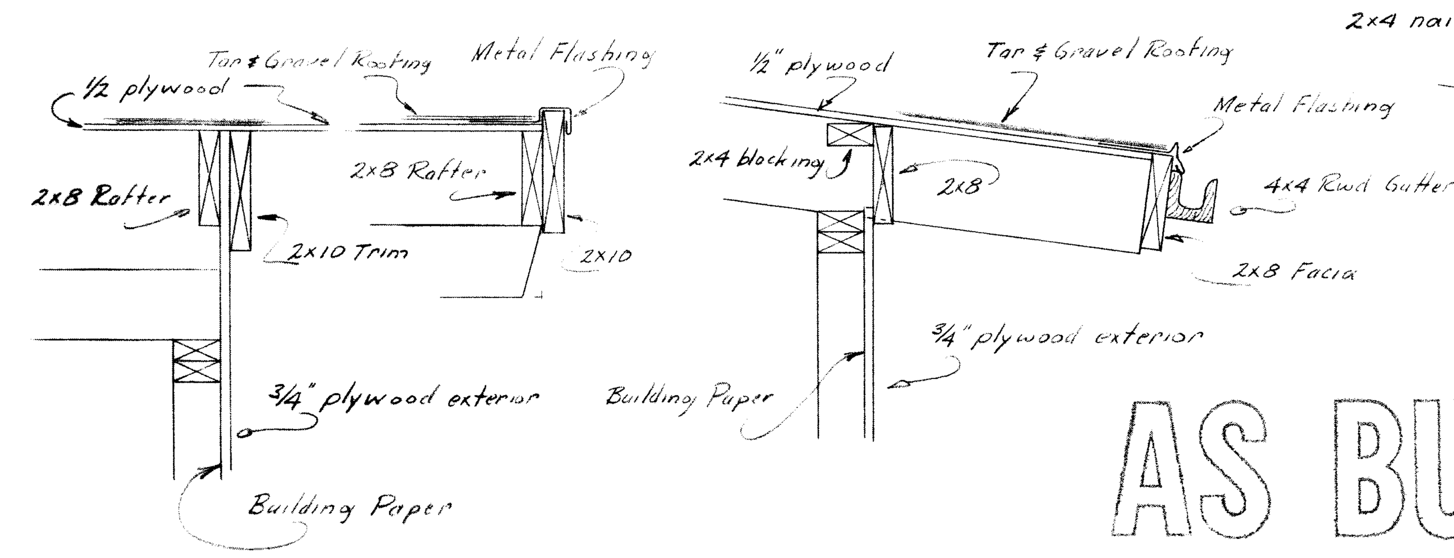


EAST ELEVATION



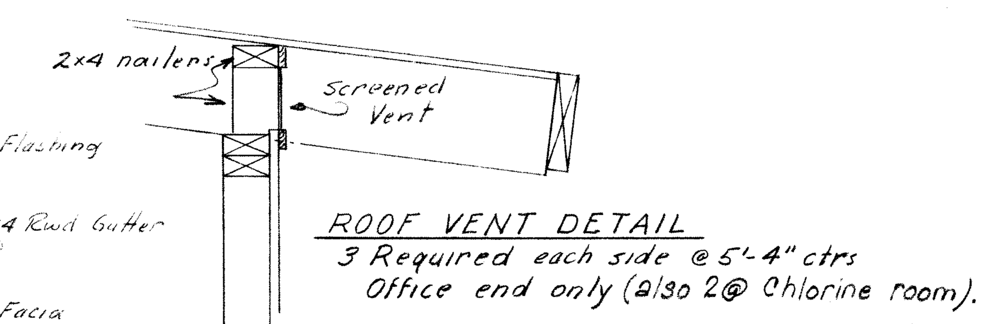
SECTION A-A

1/2" = 1'-0"



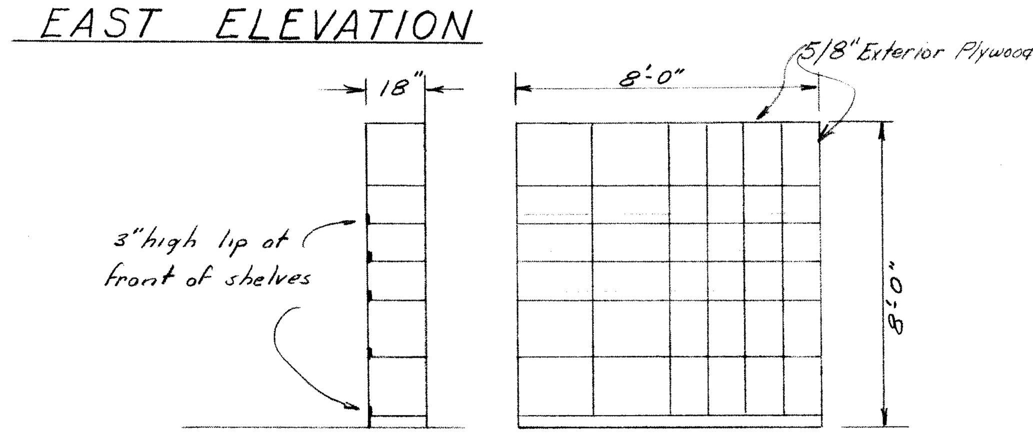
TYPICAL SECTIONS

1" = 1'-0"



ROOF VENT DETAIL

3 Required each side @ 5'-4" ctrs
Office end only (also 2 @ Chlorine room).



FITTING BINS

AS BUILT

WATER SYSTEM	MANILA COMMUNITY SERVICES DISTRICT
	ARCHITECTURAL OFFICE and SHOP BUILDING

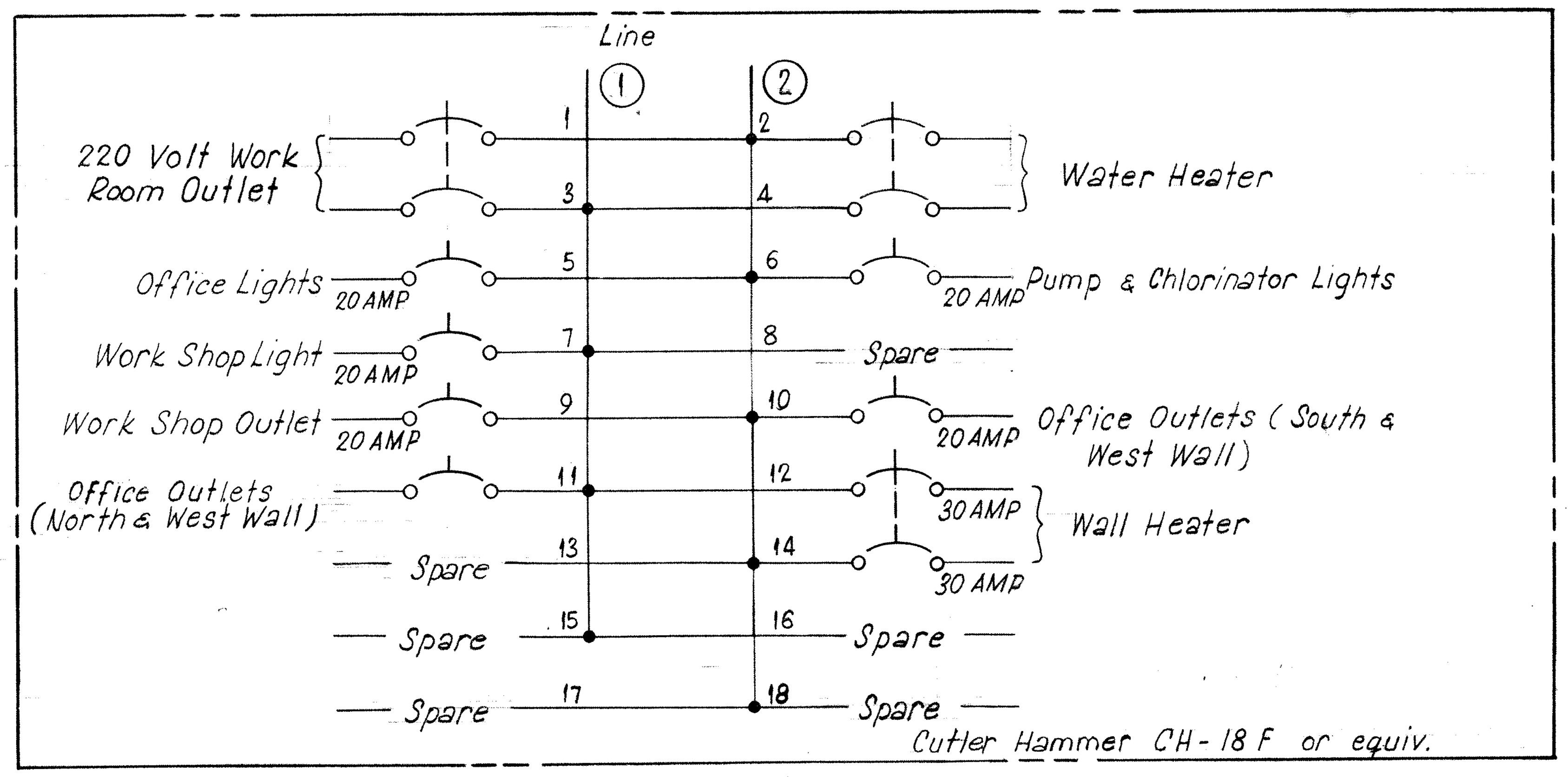
NO.	DATE	REVISIONS	BY	APPR
△				
△				
△				
△				
△				

DRAWN BY	CHECKED BY	SCALE	DATE
A.CE	K.	As Shown	5/9/67

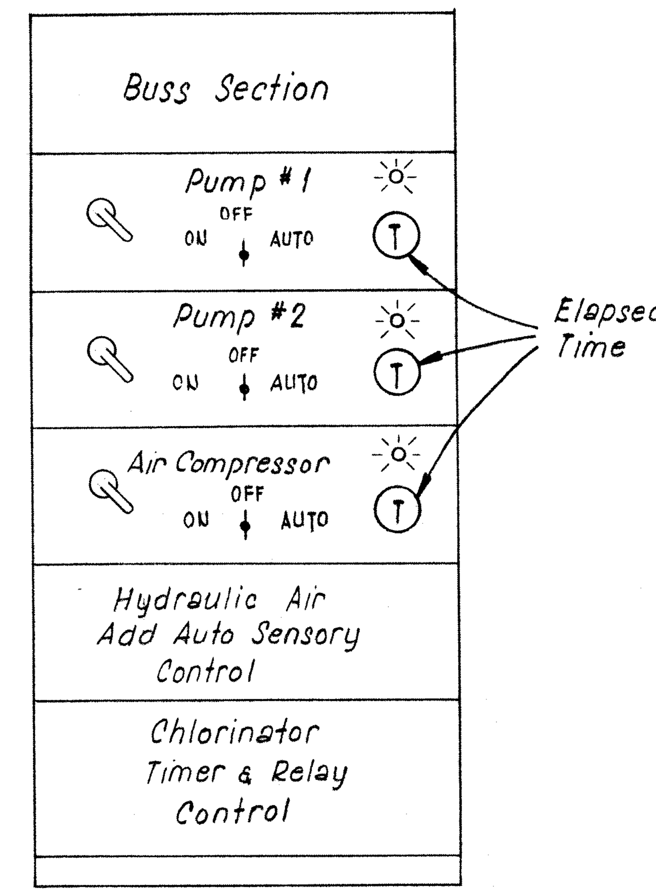
WINZLER & KELLY
CONSULTING ENGINEERS
633 - 3rd ST. EUREKA, CALIFORNIA 443-8326

JOB NO. 67-15A
SHEET 5 OF 25

PRINTED ON DIEPO NO. 1000H CLEARPRINT
2303001 11.01001

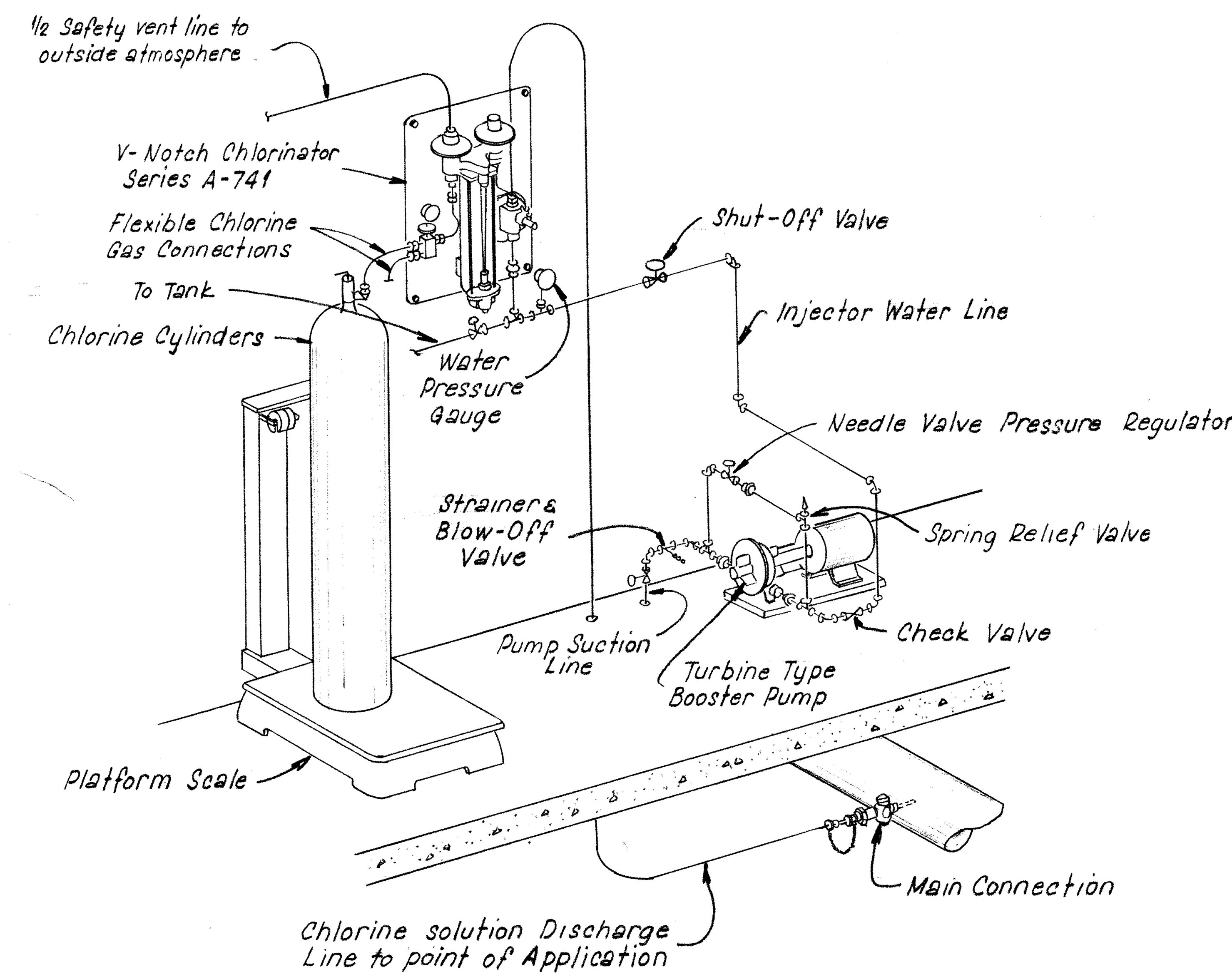


PANEL 'L' DIAGRAM

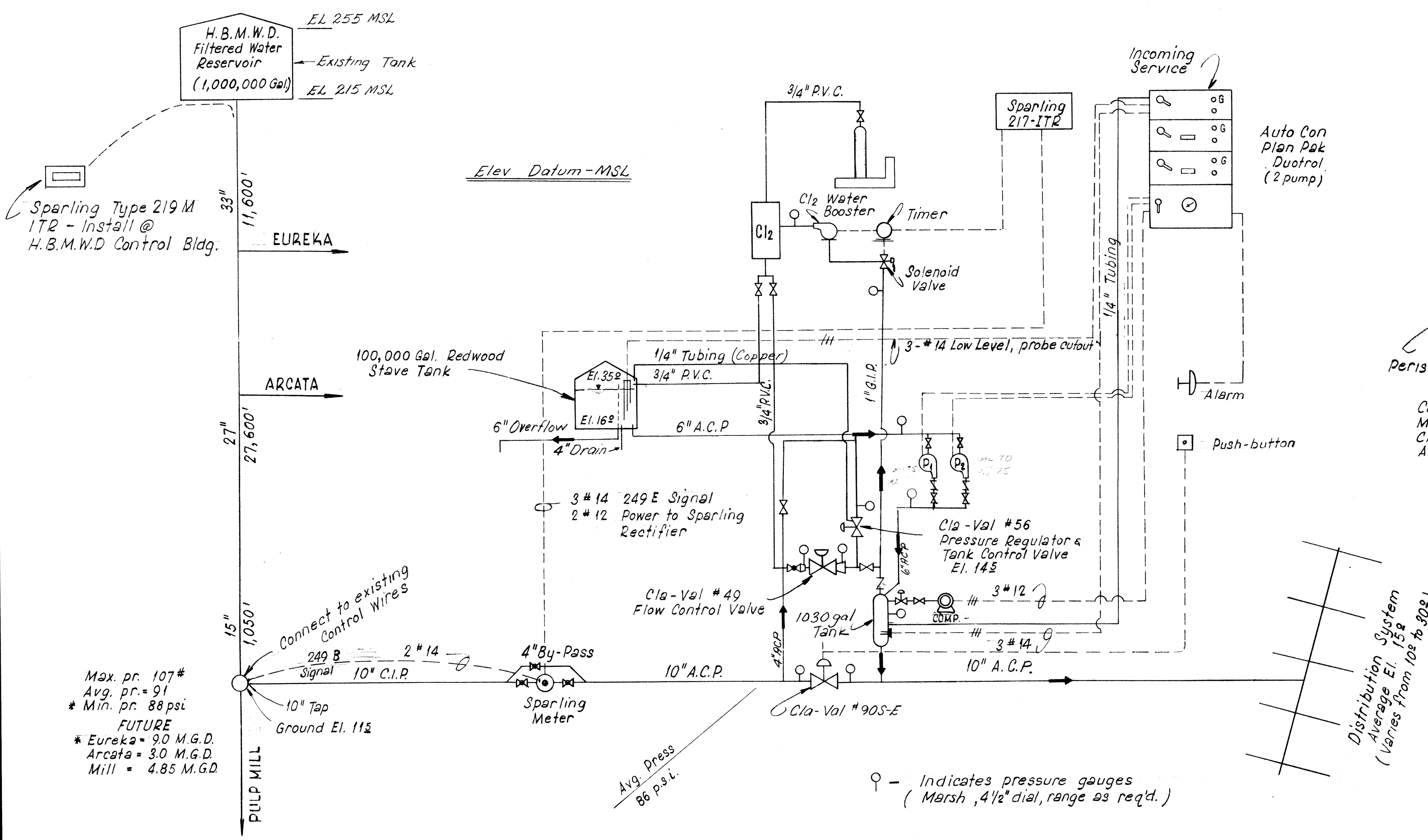


AUTOMATIC PUMP CONTROL

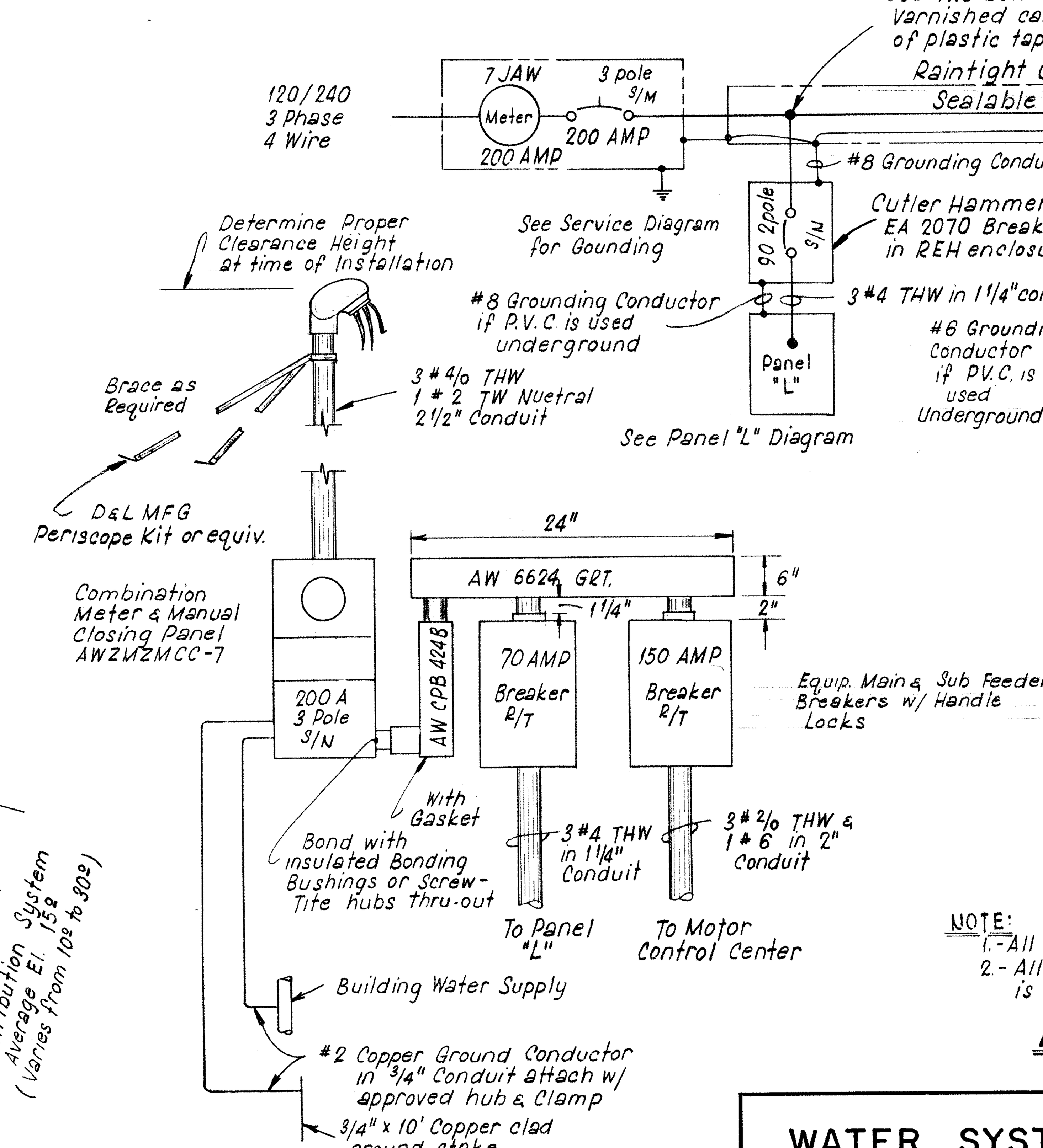
BOTTOM of TOP FEED, FRONT ACCESS



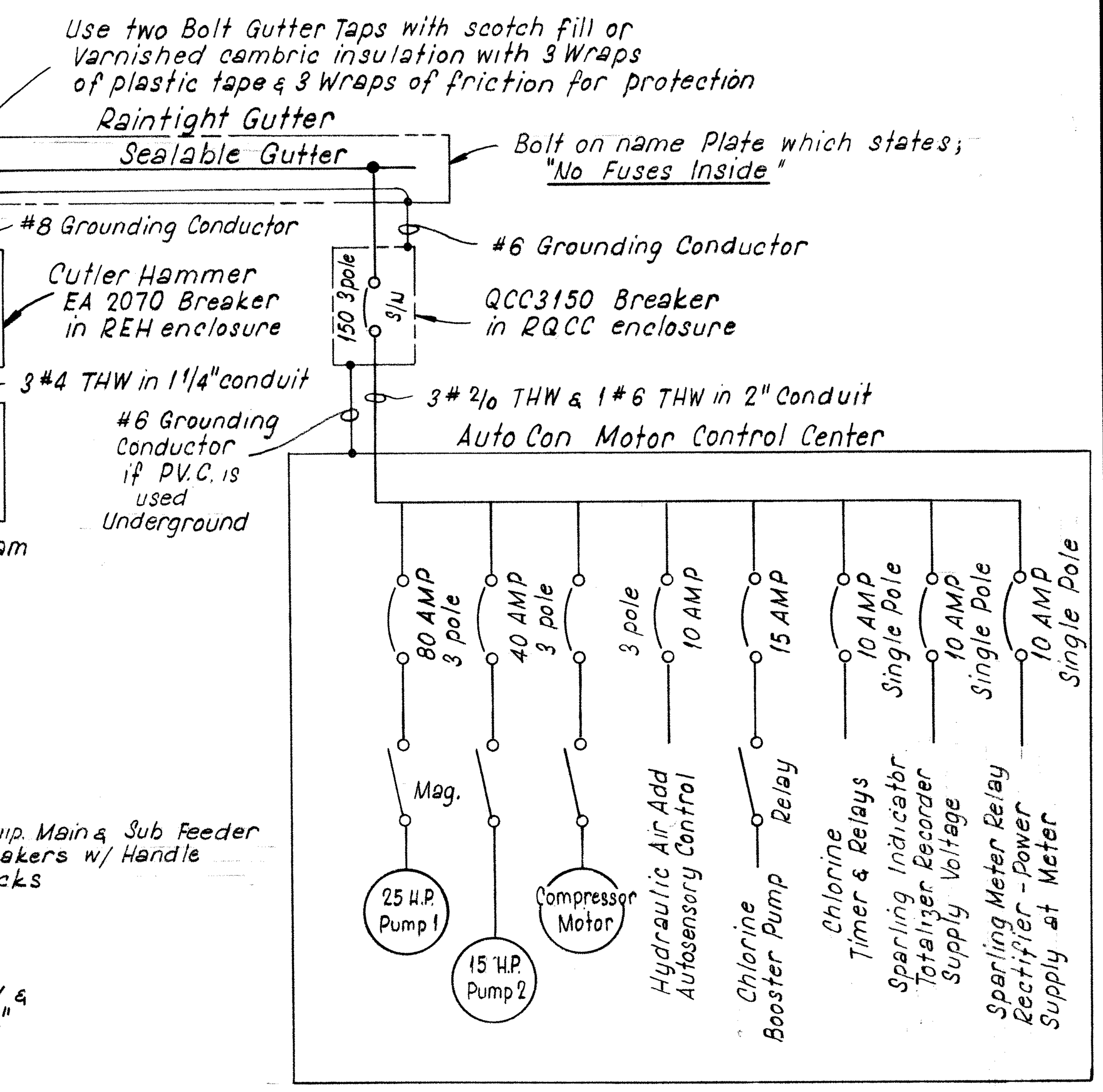
CHLORINATOR SCHEMATIC



SCHEMATIC LAYOUT



SERVICE & MAIN BREAKER



NOTE:
1. - All wire to be type THW copper.
2. - All wire to be color coded & the wild Leg is to be identified thru-out the system.

AUTOMATIC MOTOR CONTROL CENTER

AS BUILT

WATER SYSTEM	MANILA COMMMUNITY SERVICES DISTRICT
	ELECTRICAL & SCHEMATIC DETAILS

NO.	DATE	REVISIONS	BY	APPR

DRAWN BY	CHECKED BY	SCALE	DATE
CDW	J.C. & K.	none	4/67

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JOB NO. 67-15A
SHEET 6 OF 25

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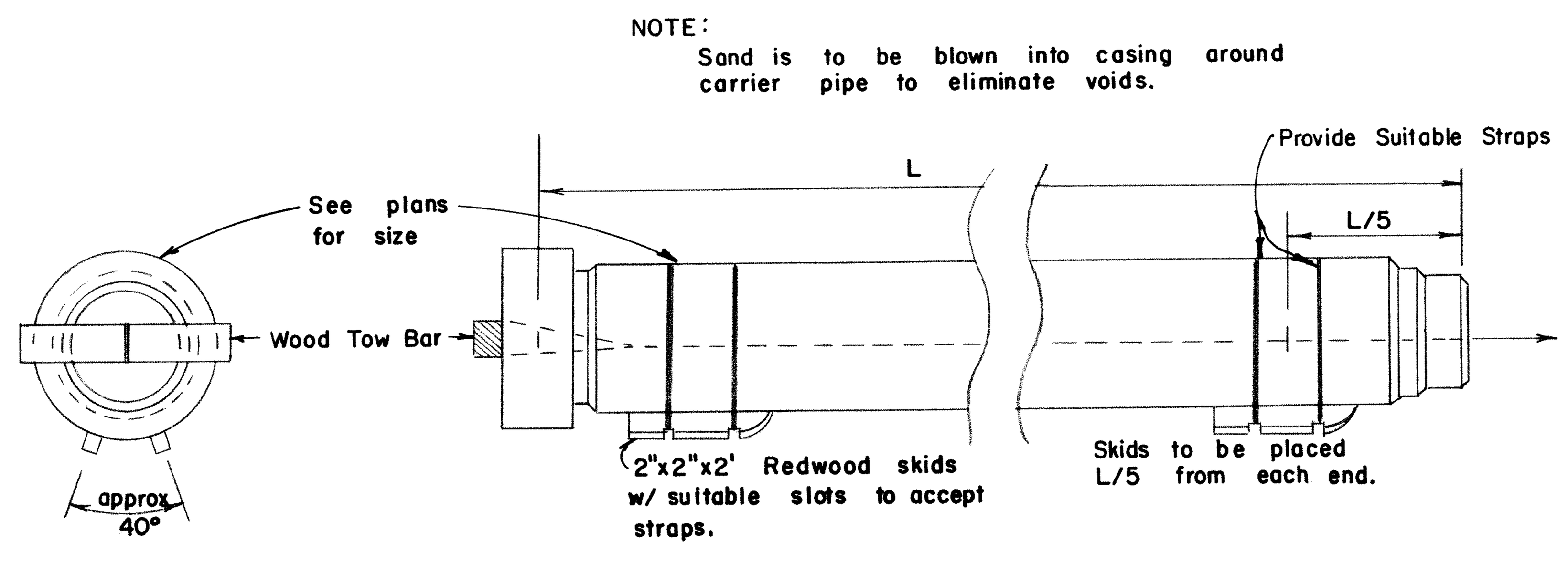
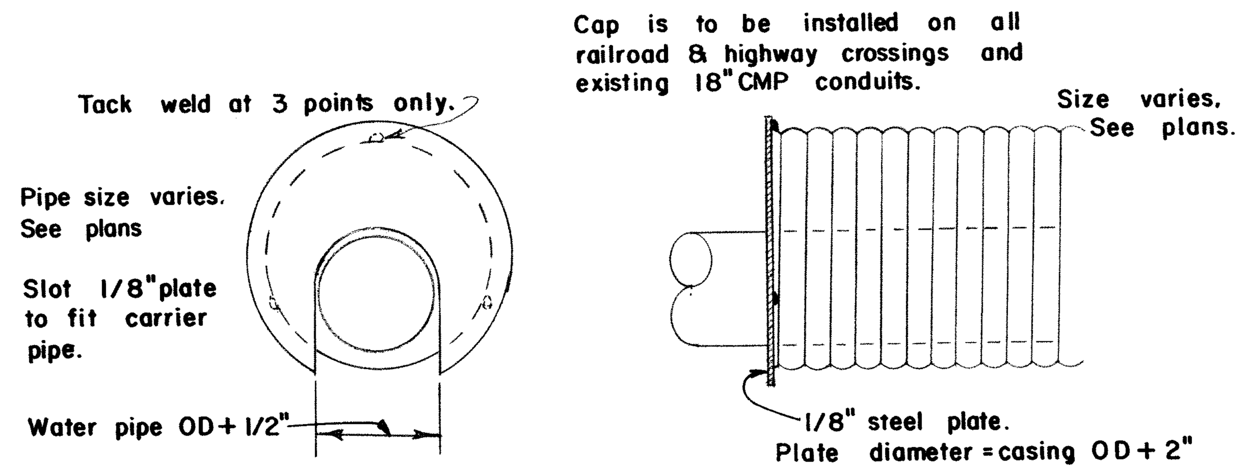


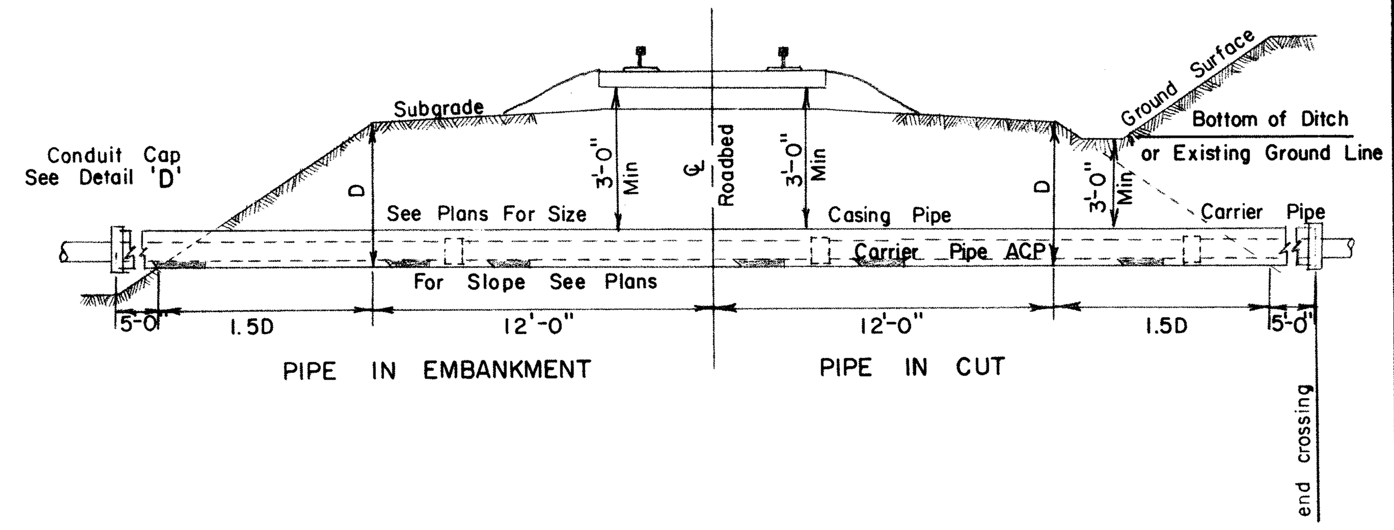
CONDUIT PIPE SKID DETAIL



DETAIL 'D'
CONDUIT CAP

NOTES:

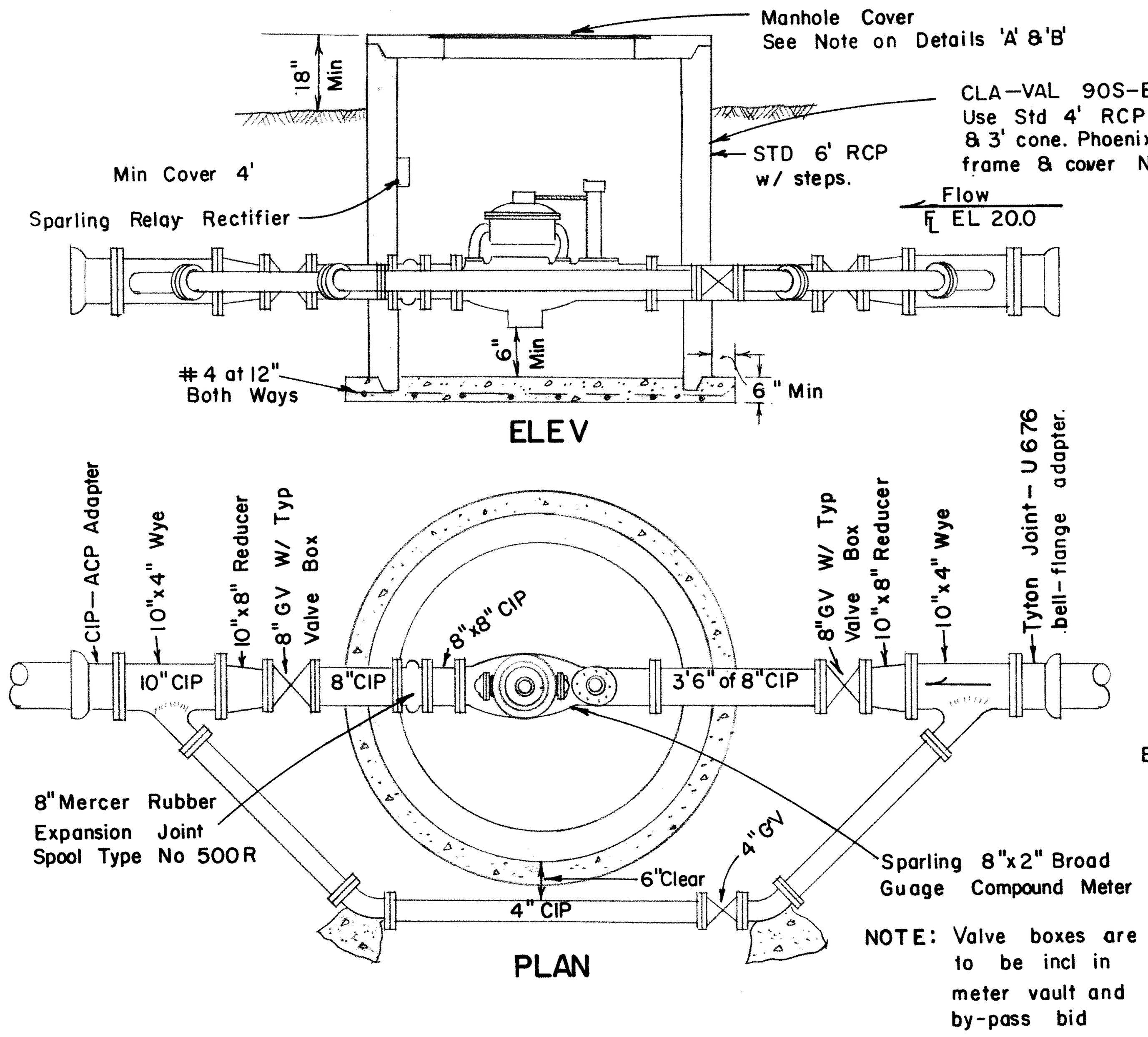
1. Casing shall be either 1/4" bituminous coated smooth steel pipe or 5/16" non-coated smooth steel pipe
2. Each casing joint to be field welded all around.
3. Sand is to be blown around water pipe to eliminate voids between carrier pipe and casing.
4. Casing to be installed by jacking and/or boring.
5. Detail conforms to Southern Pacific Lines Common Standard 1741



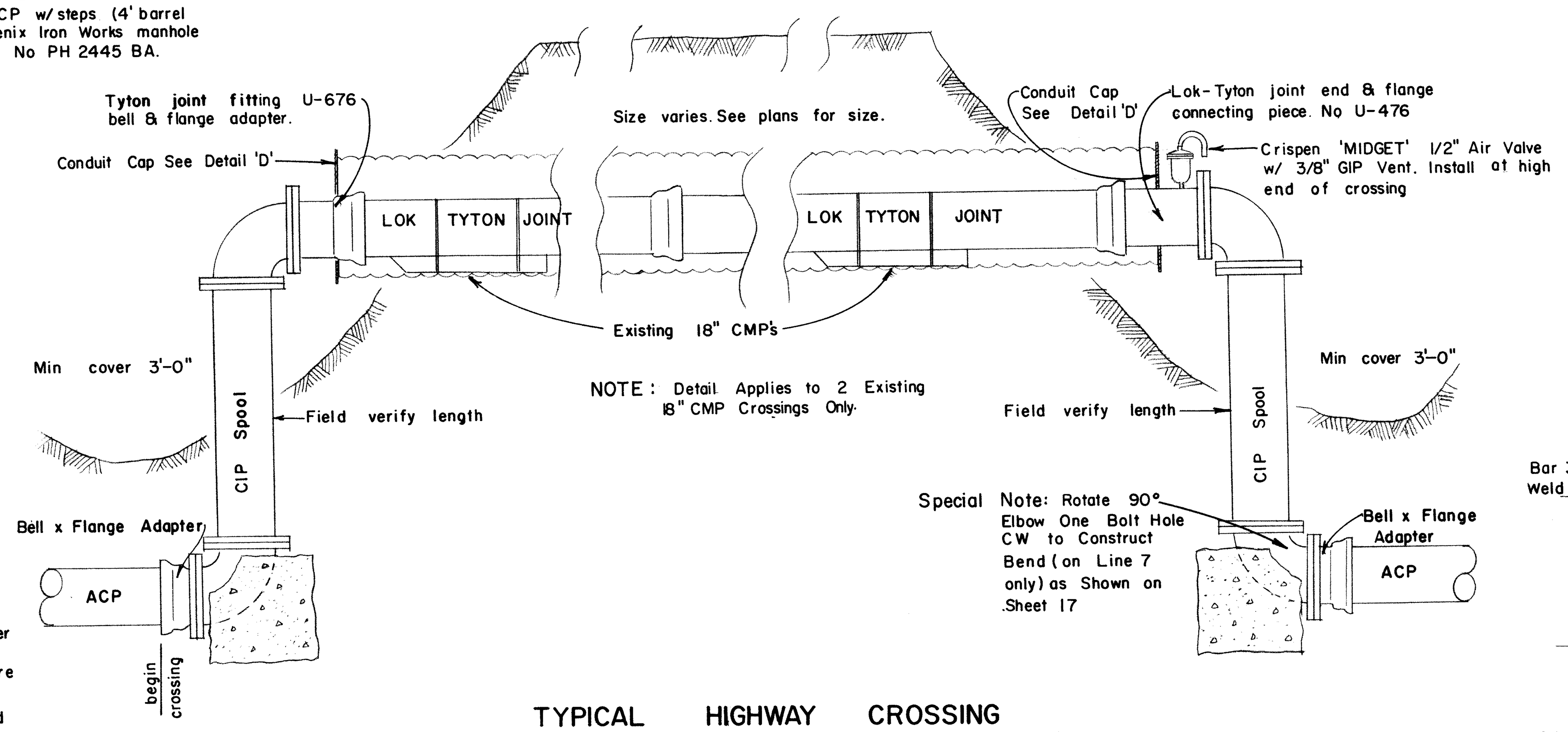
LINE NO	STREET	STA	* DEPTH	CARRIER SIZE	CASING SIZE	CASING LENGTH
12	Sandy Rd	1+80	8.0'	6" ACP	12" ID	60'
13	Mill Road	1+55	8.0'	6" ACP	12" ID	60'
14	Victor Blvd	1+60	5.0'	8" ACP	15" ID	50'
14	Victor Blvd	27+80	5.0	8" ACP	15" ID	50'
8**	Young Lane	3+00		6" ACP	12" ID	90'

* Depth is from ℄ of railroad track.
** Highway crossing. Similar to railroad crossing.

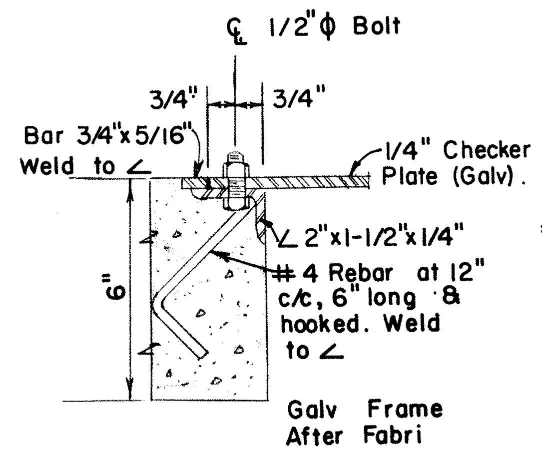
TYPICAL RAILROAD CROSSING



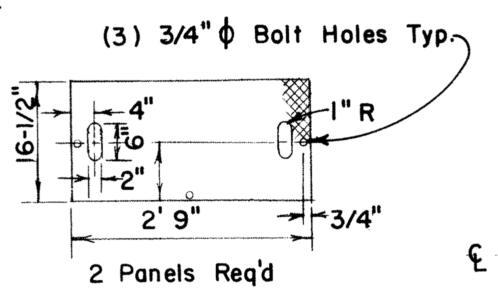
METER VAULT & BY-PASS



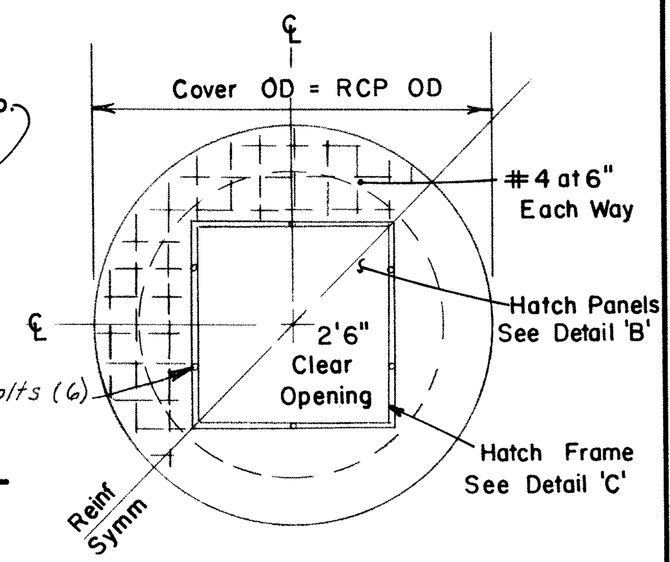
TYPICAL HIGHWAY CROSSING



DETAIL 'C'
HATCH COVER FRAME
NTS

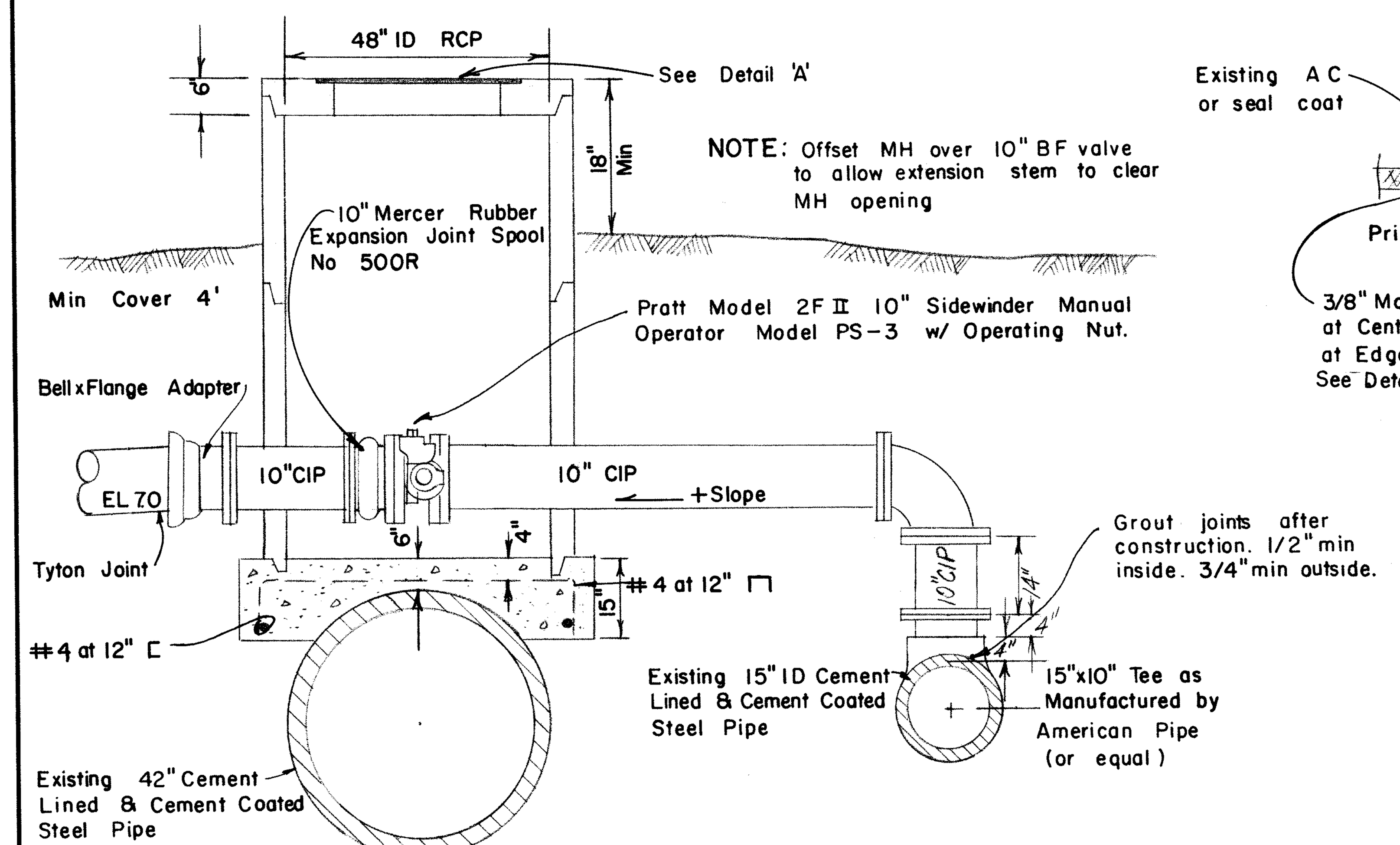


DETAIL 'B'
HATCH COVER PANEL
NTS

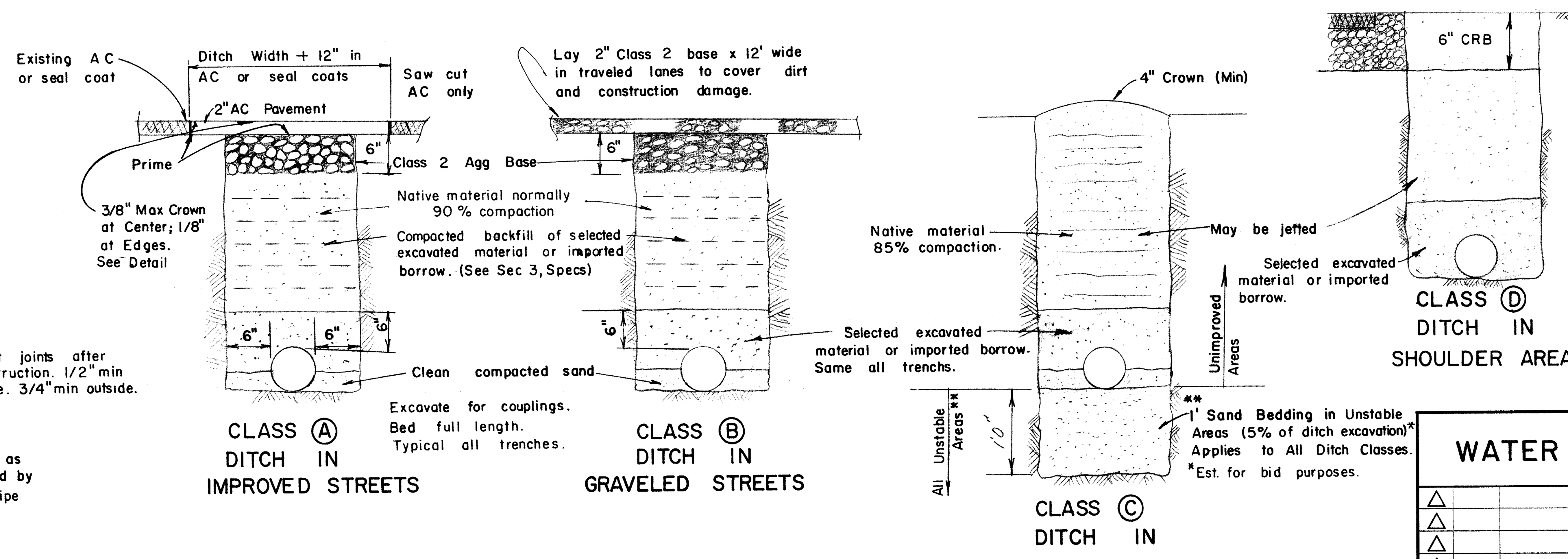


NOTE: Meter Vault Cover Similar. Clear opening of 4'-0". 2 Panels 2'-1 1/2" x 4' 3" Req'd.

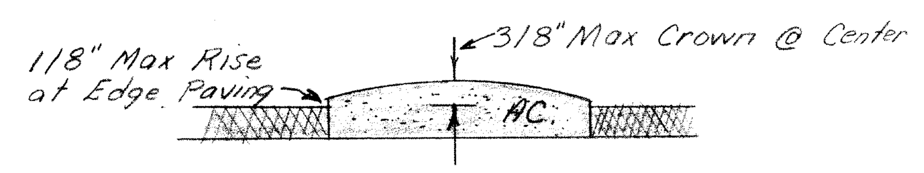
DETAIL 'A'
VAULT COVER
NTS



HBMWD PIPE TAP
& VALVE VAULT



PIPE BACKFILL DETAILS
NTS



TRENCH PAVING DETAIL
NTS

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WATER SYSTEM	MANILA COMM SERVICES DIST
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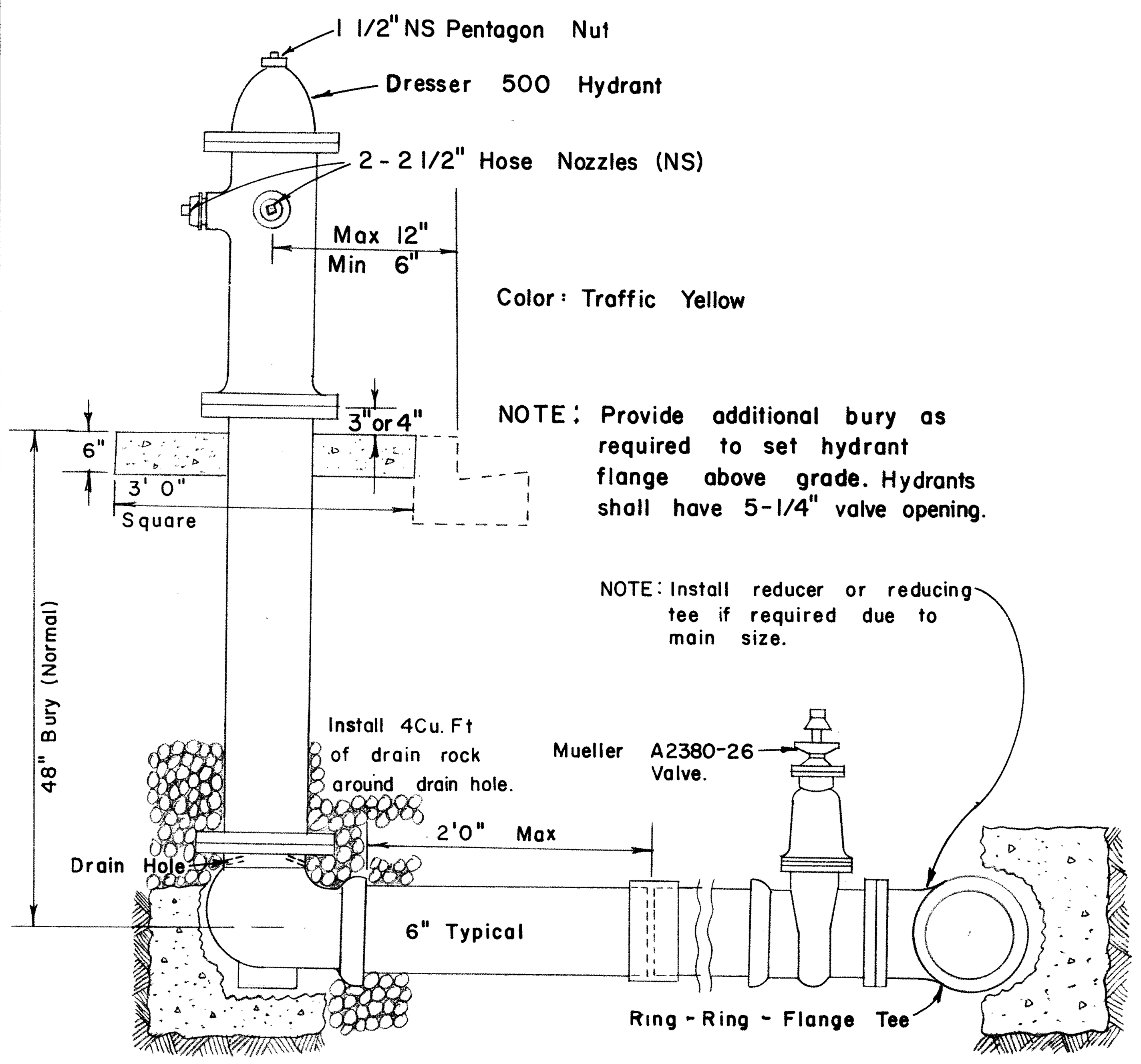
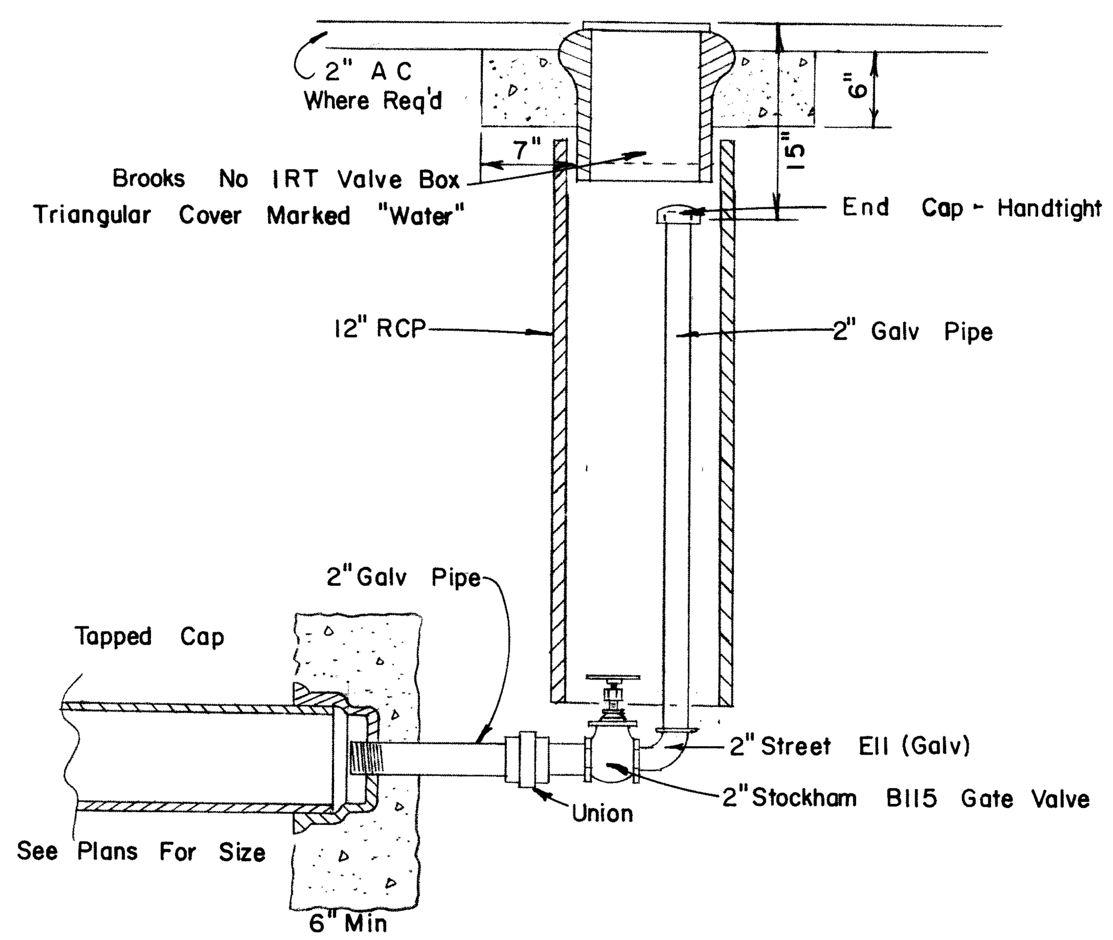
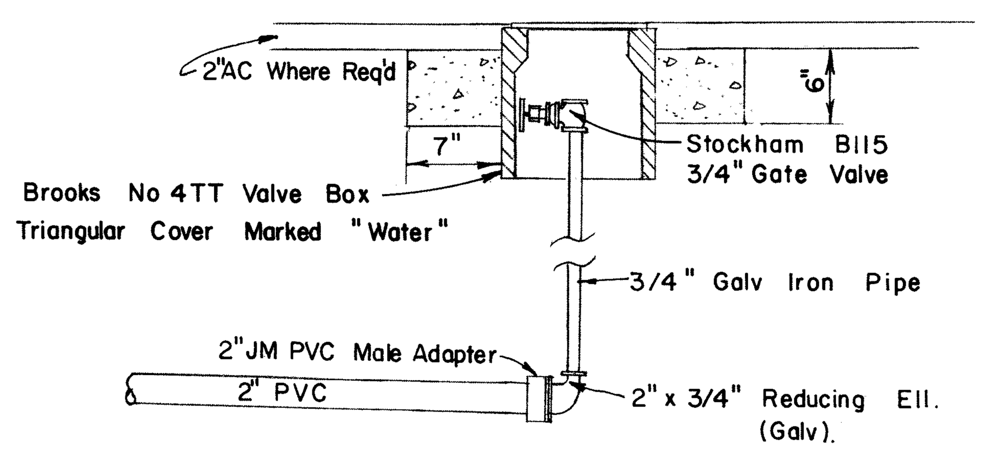


TYPICAL HYDRANT INSTALLATION



STANDARD 2" BLOW-OFF



STANDARD 3/4" BLOW-OFF

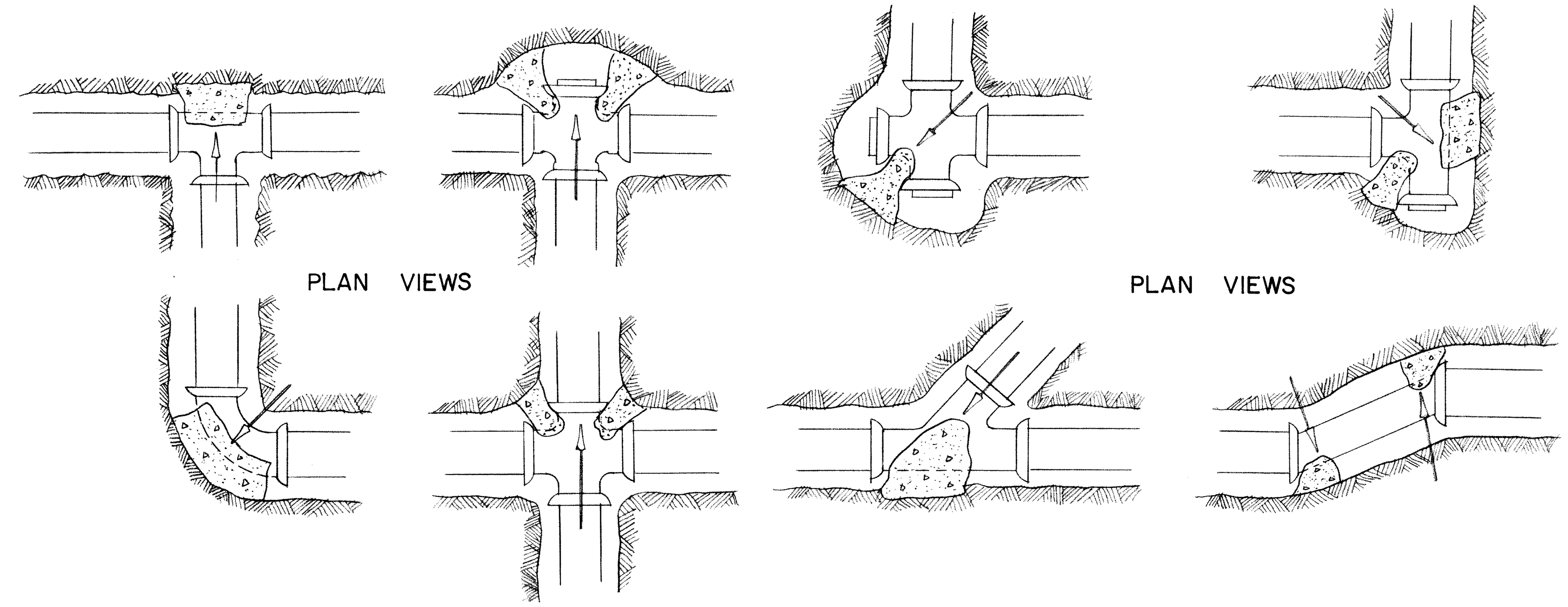


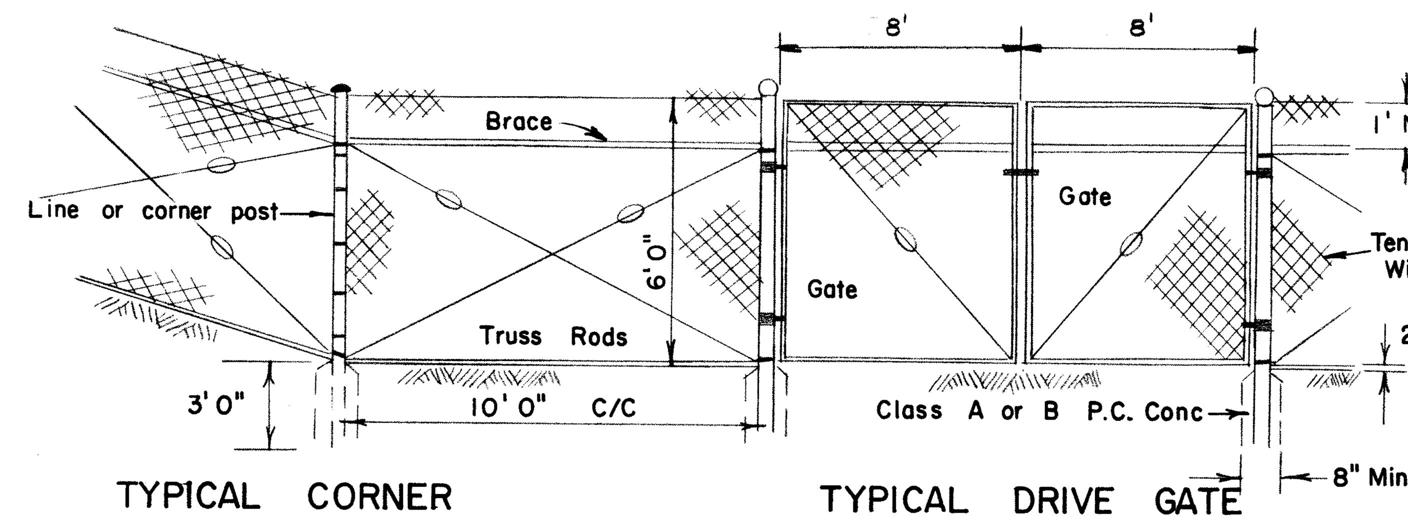
TABLE OF MINIMUM BEARING AREAS FOR CONCRETE THRUST BLOCKS FOR FITTINGS

AREA OF THRUST BLOCK REQUIRED				
Pipe Size	Tee	90° Bend	45° Bend	22 1/2° Bend
4"	2 sq. ft.	3 sq. ft.	2 sq ft	1 sq ft
6"	4	5	3	2
8"	7	9	5	3
10"	11	15	8	4
12"	15	22	12	6

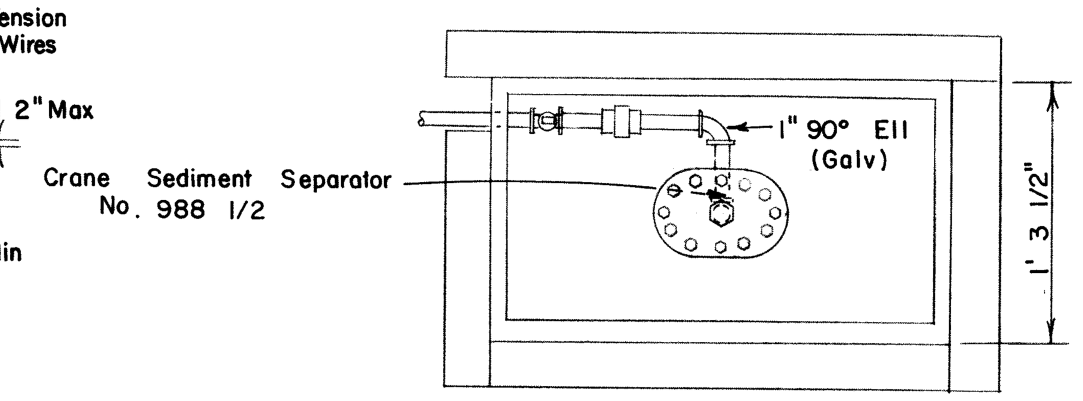
NOTE: Areas are minimum required. If pressure is over 100psi increase in proportion to pressure. Assumed soil of 1000 psf; increase in proportion if required.

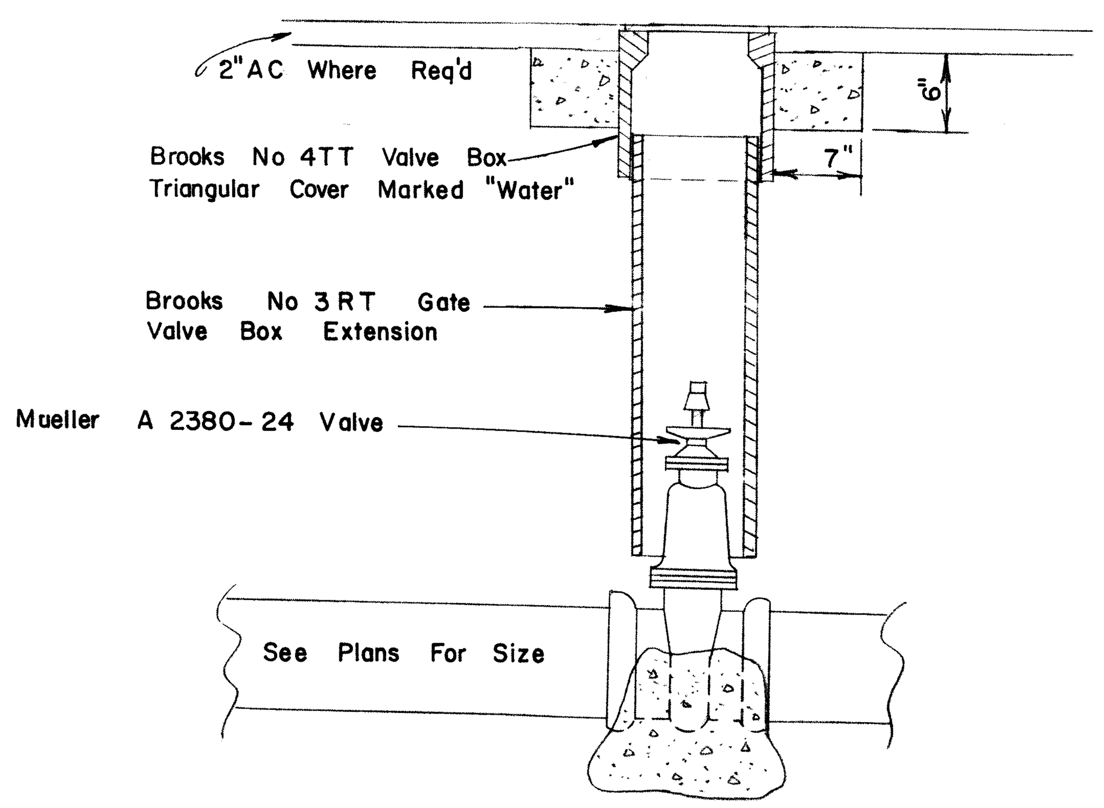
ELEV VIEWS

TYPICAL LOCATION OF THRUST BLOCKS

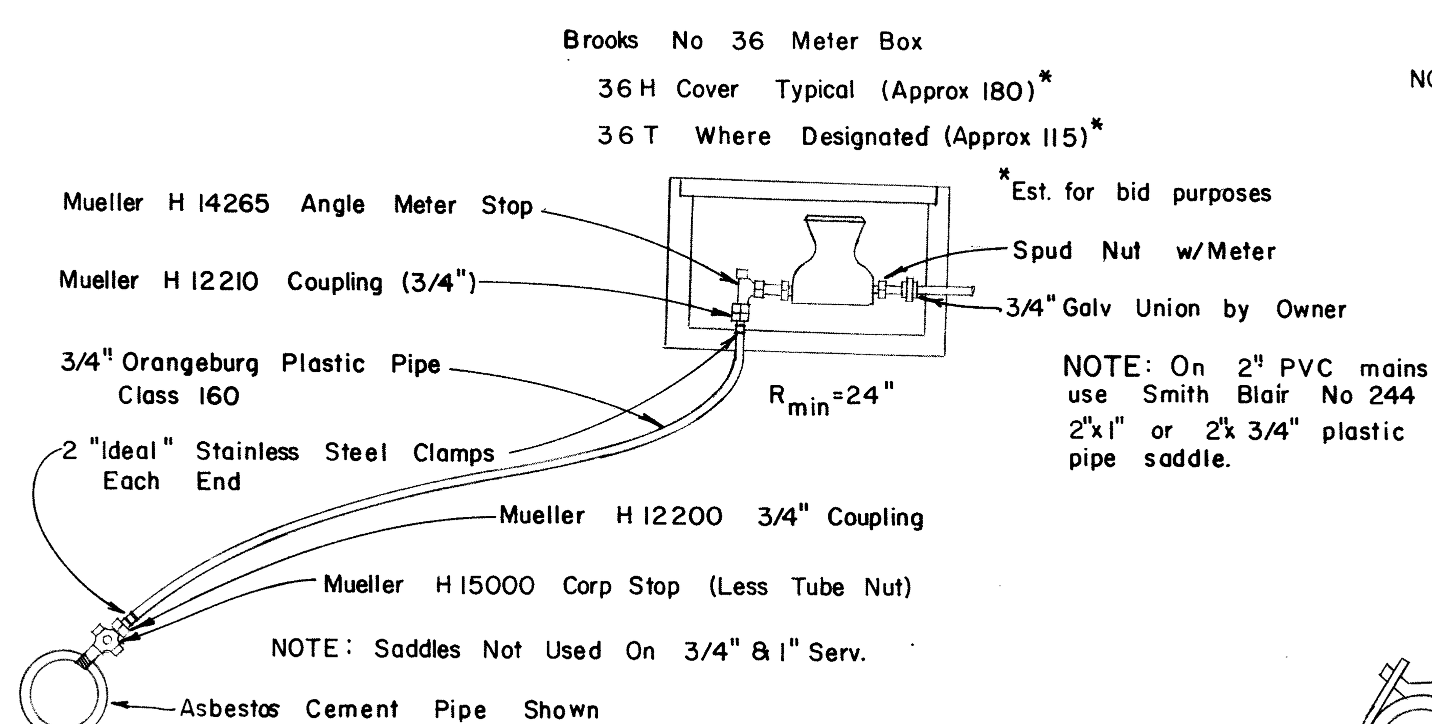


CHAIN LINK FENCE

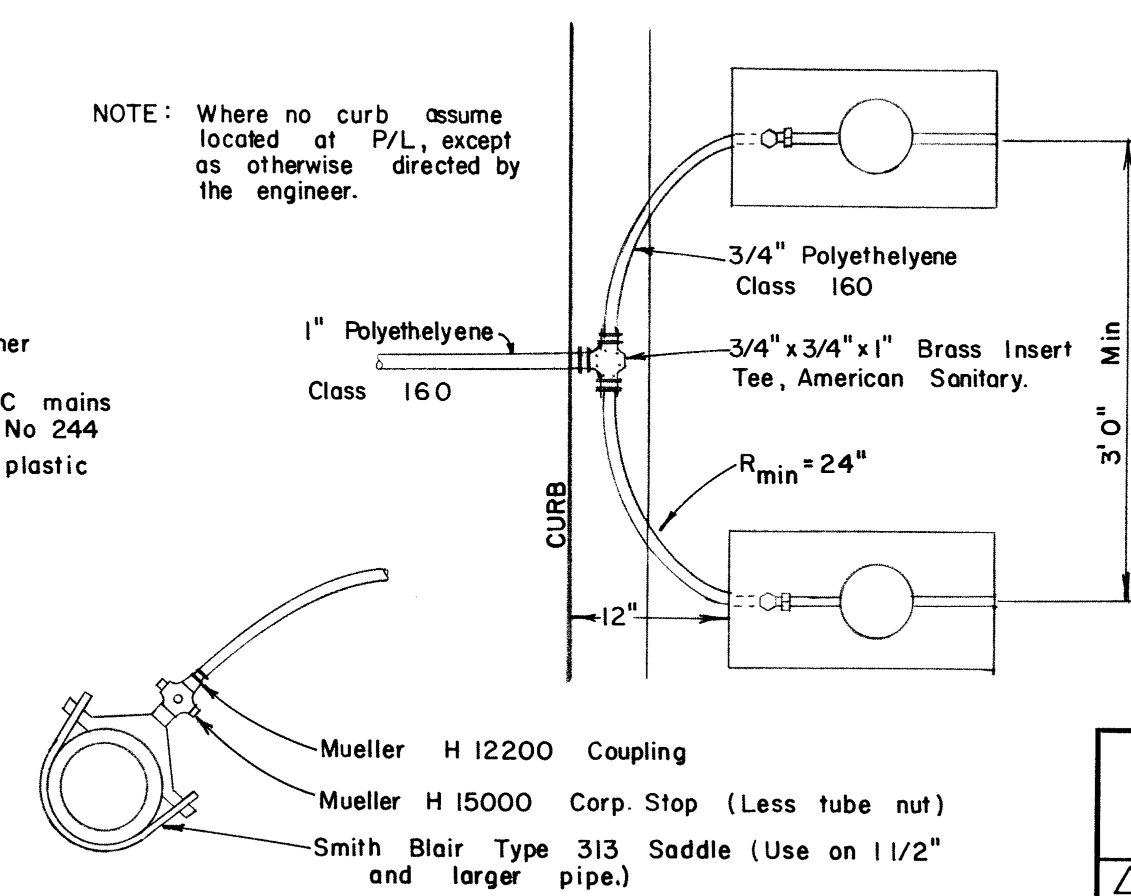




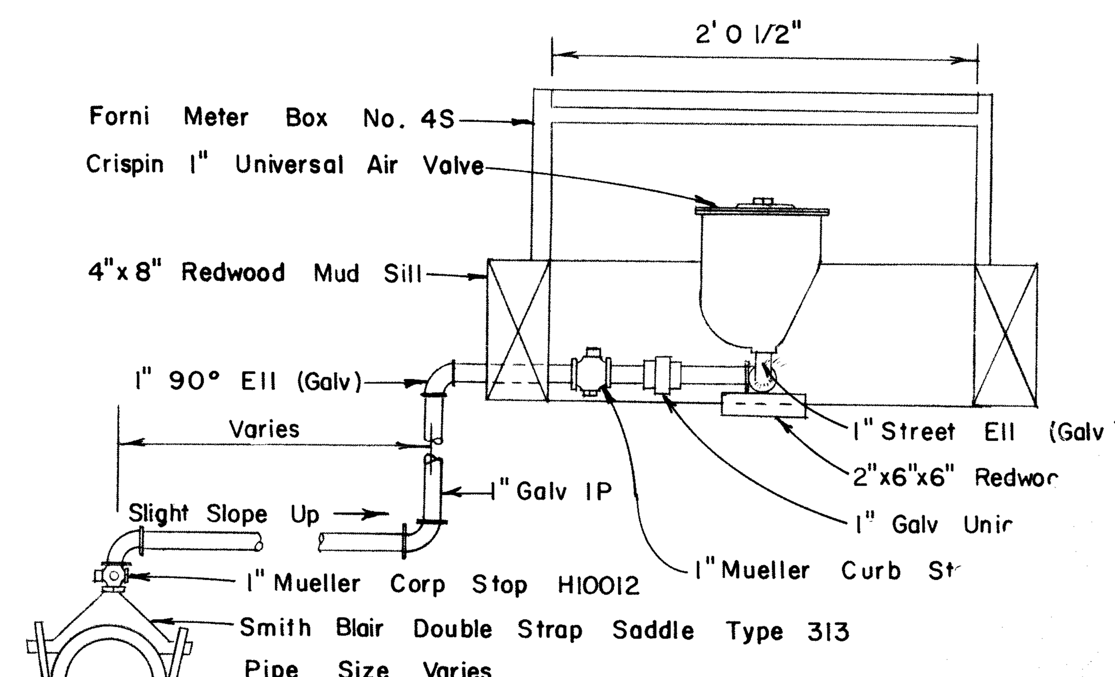
TYPICAL IN-LINE ASSEMBLY



TYPICAL SINGLE SERVICE



TYPICAL DOUBLE SERVICE



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WATER SYSTEM

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WATER SYSTEM				
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MANILA COMMUNITY SERVICES DISTRICT

PLAN & PROFILE

LINE I

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633 - 3rd ST. EUREKA, CALIFORNIA 443-8326

JOB NO. 67-15A
SHEET 10 OF 25

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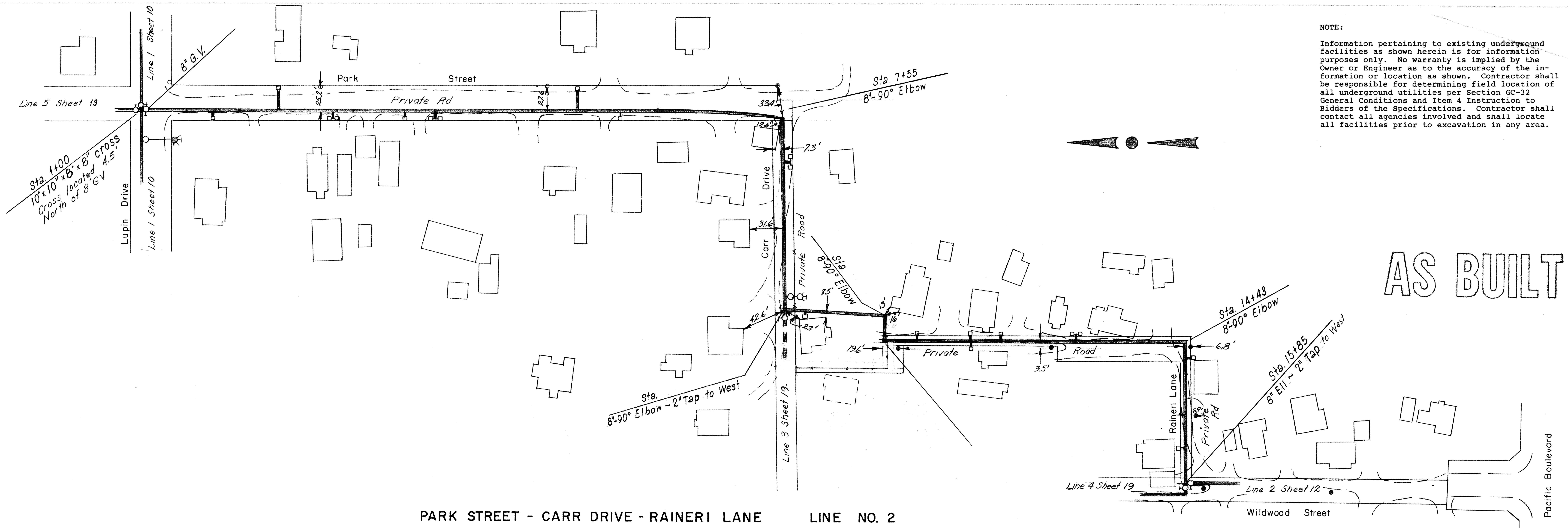

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AS BUILT

PARK STREET - CARR DRIVE - RAINERI LANE LINE NO. 2

WATER SYSTEM					MANILA COMMUNITY SERVICES DISTRICT
△					PLAN & PROFILE
△					LINE 2
△ 1-17-68	REVISED TO AS BUILT CONDITION		N.K.		
NO. DATE	REVISIONS		BY	APPR	WINZLER & KELLY CONSULTING ENGINEERS
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C.D.W.		1"= 50' Horz. 1"= 5' Vert.	5/9/67		JOB NO. 67-15A SHEET 11 OF 25

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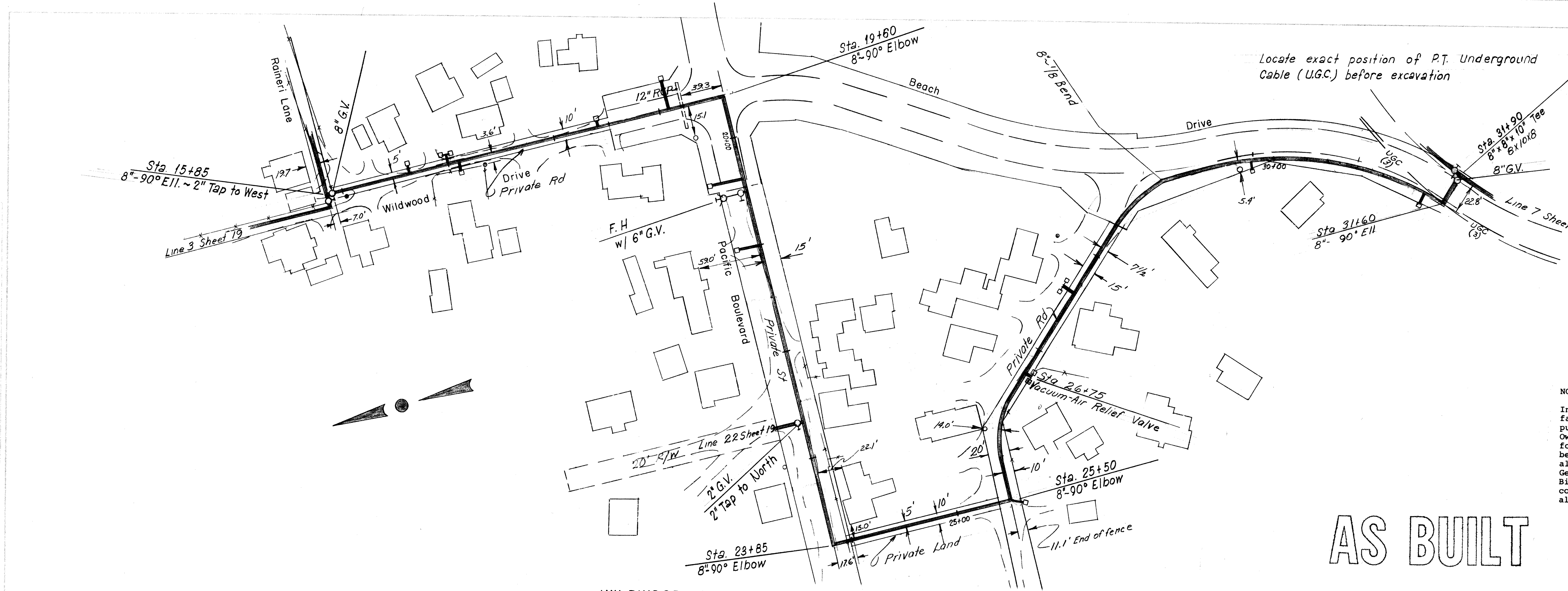

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AS BUILT

WILDWOOD STREET - PACIFIC BOULEVARD - BEACH DRIVE LINE NO. 2

WATER SYSTEM					
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△	1-17-68	REVISED TO AS BUILT CONDITION		N.K.	
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MANILA COMMUNITY SERVICES DISTRICT

PLAN & PROFILE

LINE 2

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JOB NO. 67-15 A
SHEET 12 of 25

PLATE 1 - PLAN - PROFILE - F.A.S.
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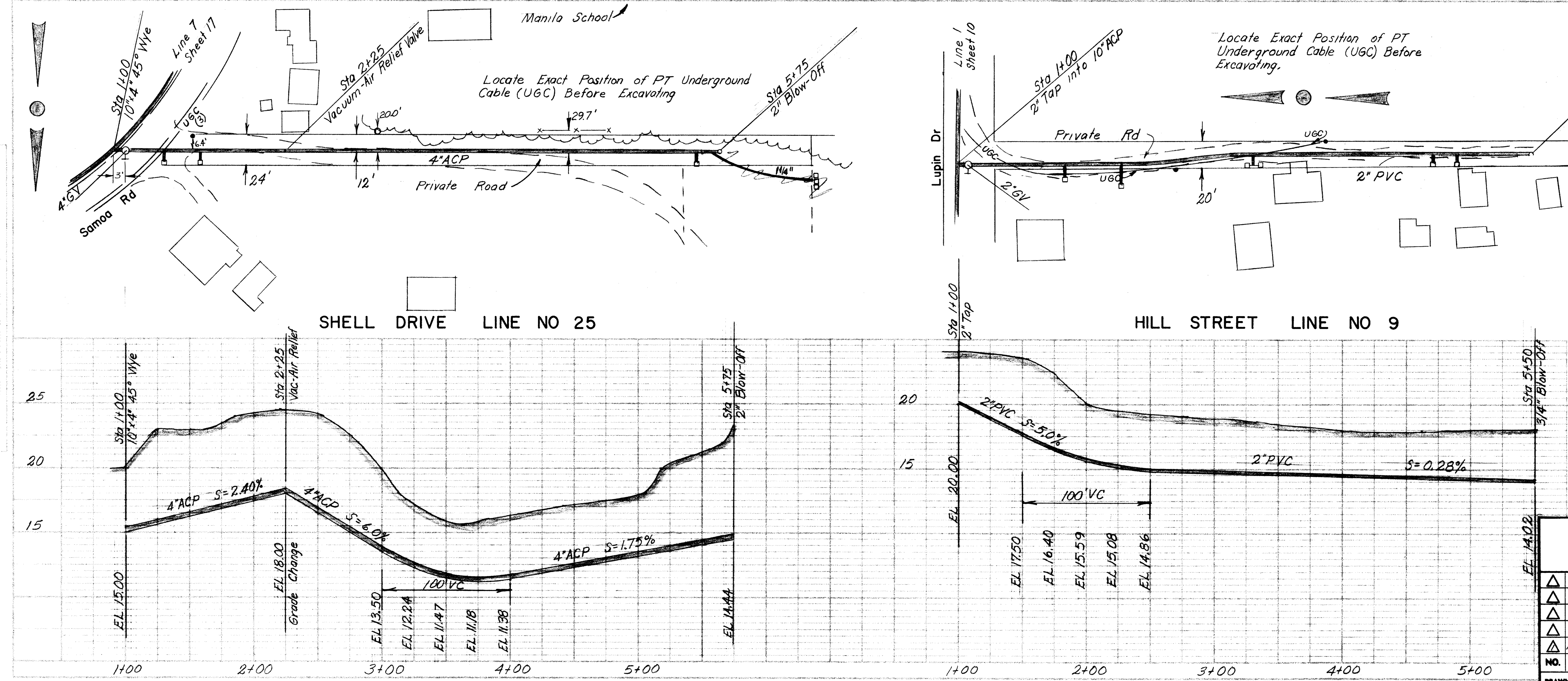

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WATER SYSTEM	MANILA COMMUNITY SERVICES DISTRICT
	PLAN & PROFILE LINES 5,6,9,25

NO.	DATE	REVISIONS	BY	APPR
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633 - 3rd ST. EUREKA, CALIFORNIA 443-8326

JOB NO. 67-15A
SHEET 13 of 25

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WATER SYSTEM

MANILA COMMUNITY SERVICES DISTRICT

PLAN & PROFILE
LINE 7

NO.	DATE	REVISIONS	BY	APPR
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JOB NO. 67-15A
SHEET 14 of 25

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WATER SYSTEM					MANILA COMMUNITY SERVICES DISTRICT	
NO.	DATE	REVISIONS	BY	APPR	PLAN & PROFILE LINE 7	
△ 1	1-17-68	REVISED TO AS BUILT CONDITION	N.K.		WINZLER & KELLY CONSULTING ENGINEERS 633 - 3rd ST. EUREKA, CALIFORNIA 443-8326	JOB NO. 67-15A
DRAWN BY	CHECKED BY	SCALE	DATE		R. F. Kelly	SHEET 15 OF 25
W.E.S.		1"=50' Horz 1"=5' Vert	5/9/67			

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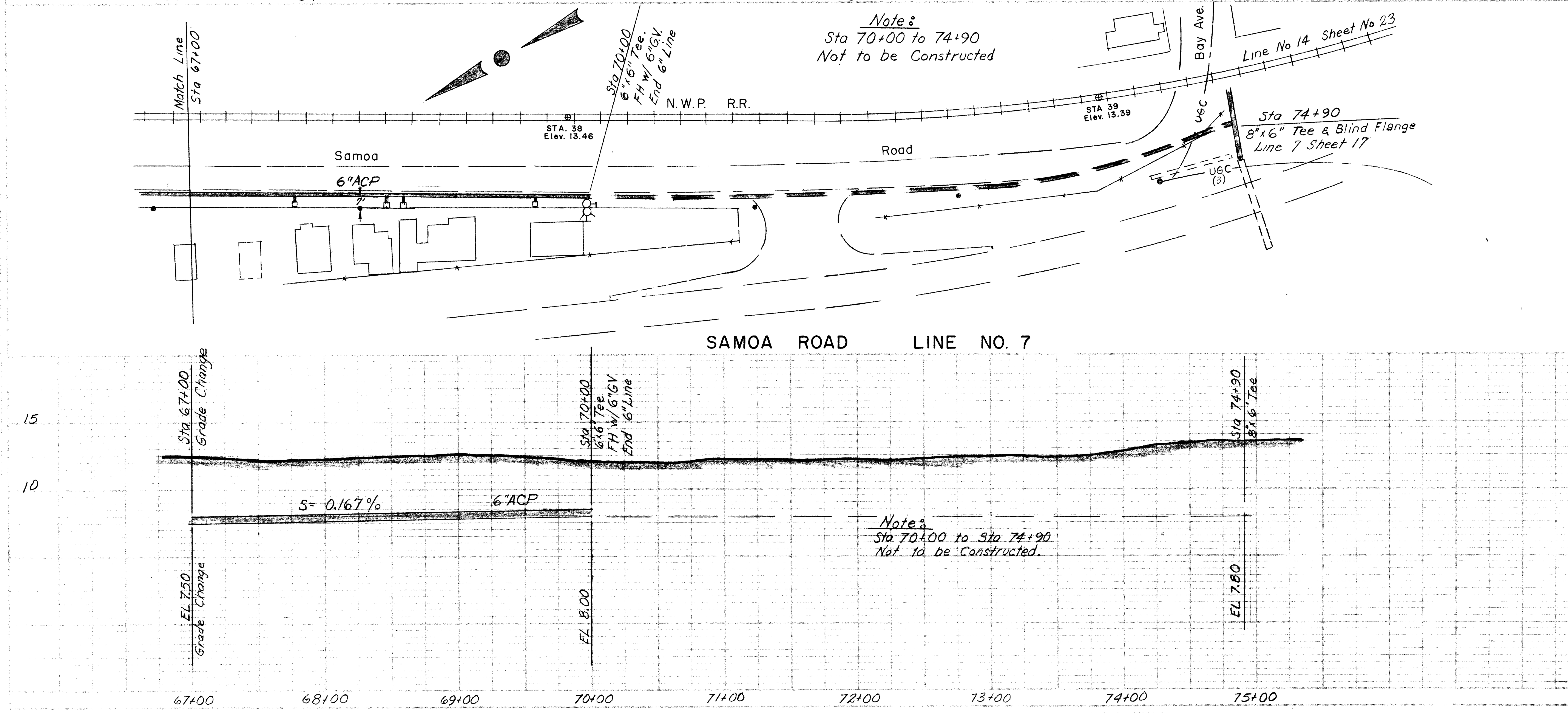

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PLAN & PROFILE

LINE 7

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JOB NO. 67-15A

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WATER SYSTEM

MANILA COMMUNITY SERVICES DISTRICT

PLAN & PROFILE

LINE 7

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JOB NO. 67-15A
SHEET 17 OF 25

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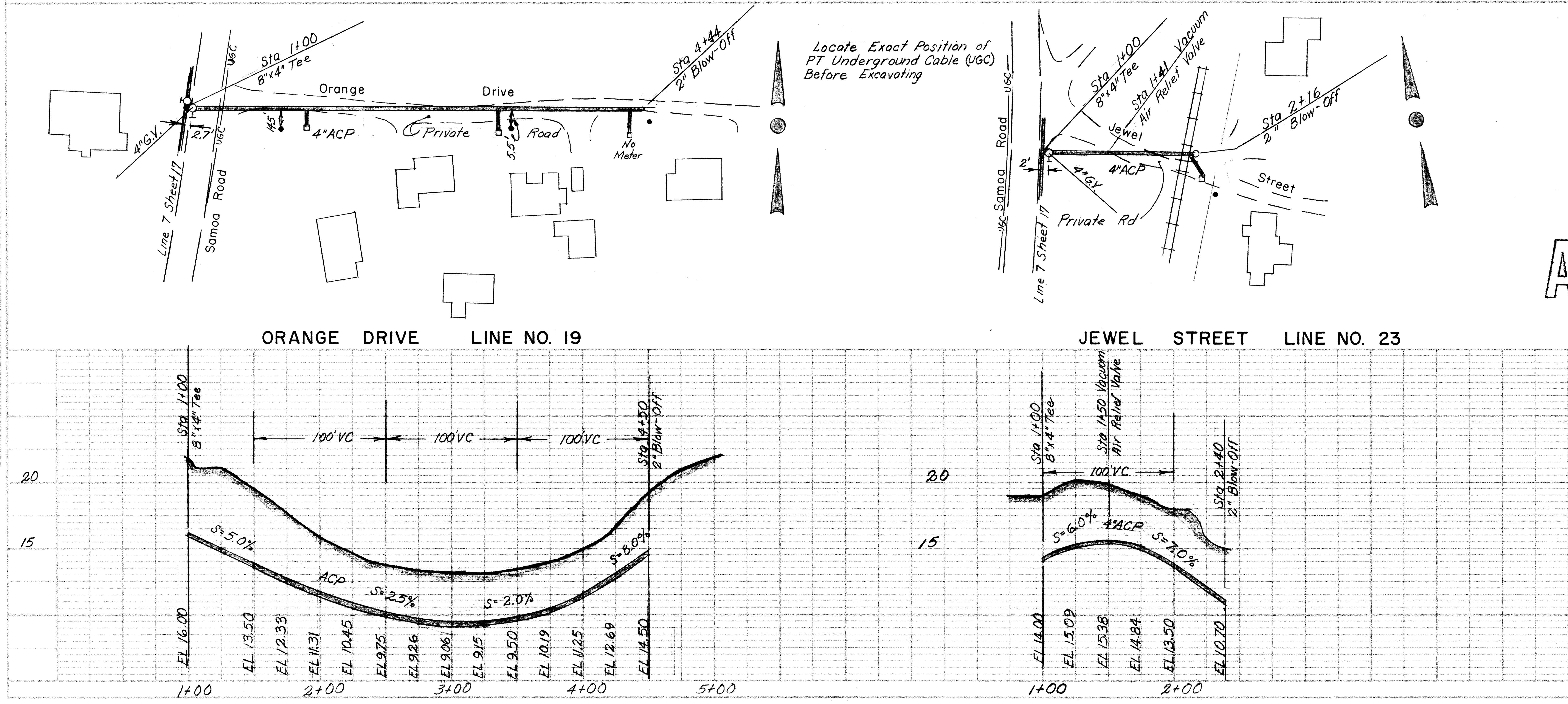

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WATER SYSTEM	MANILA COMMUNITY SERVICES DISTRICT
	PLAN & PROFILE LINES 7,19,23

NO.	DATE	REVISIONS	BY	APPR
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R. F. Kelly

JOB NO. 67-15A
SHEET 18 OF 25

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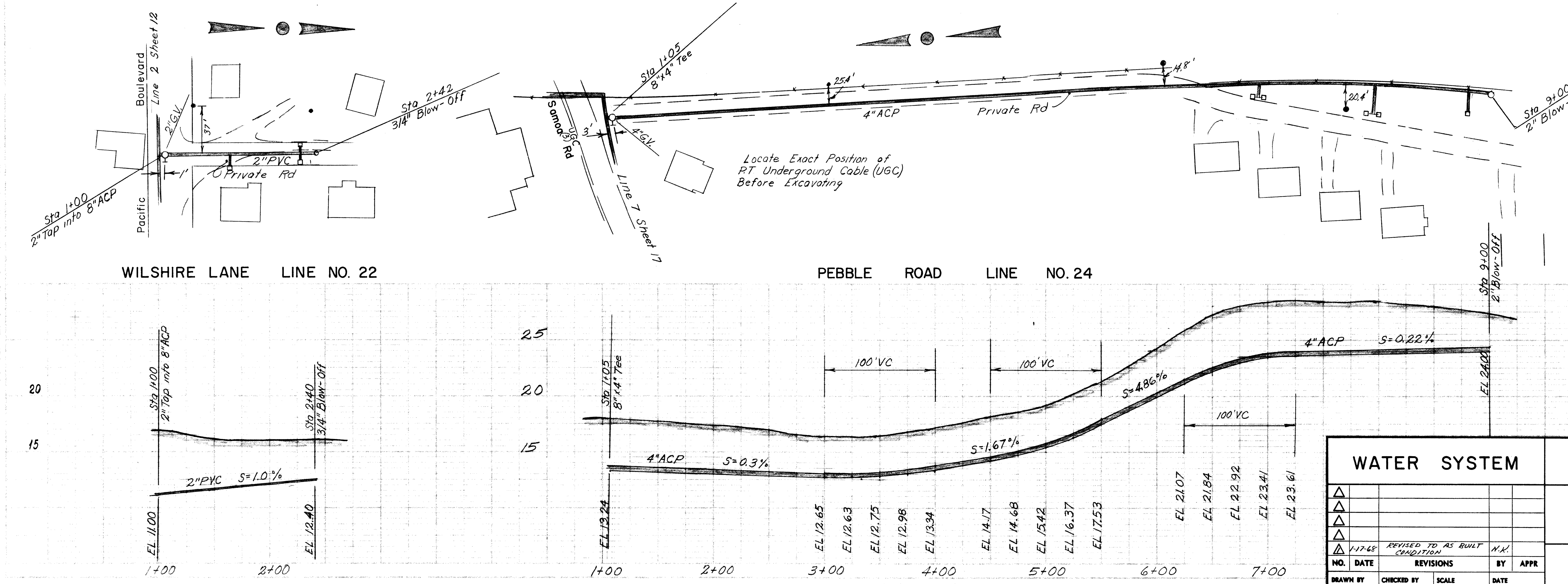

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WATER SYSTEM	MANILA COMMUNITY SERVICES DISTRICT
	PLAN & PROFILE LINES 3,4,20,21,22,24

NO.	DATE	REVISIONS	BY	APPR
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W.E.S.		1"=50' Horz 1"=5' Vert	5/9/67

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JOB NO. 67-15A
SHEET 19 OF 25

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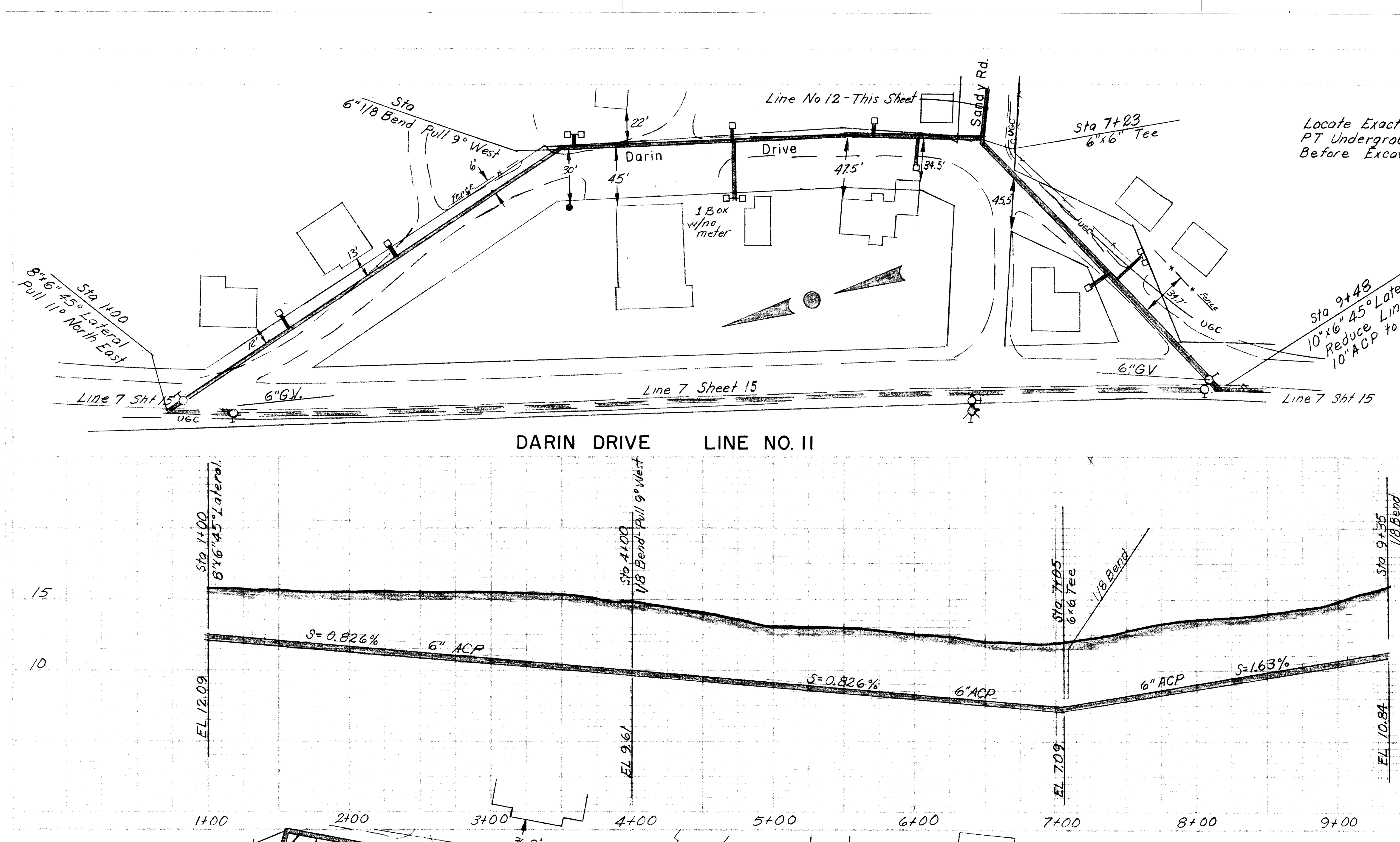

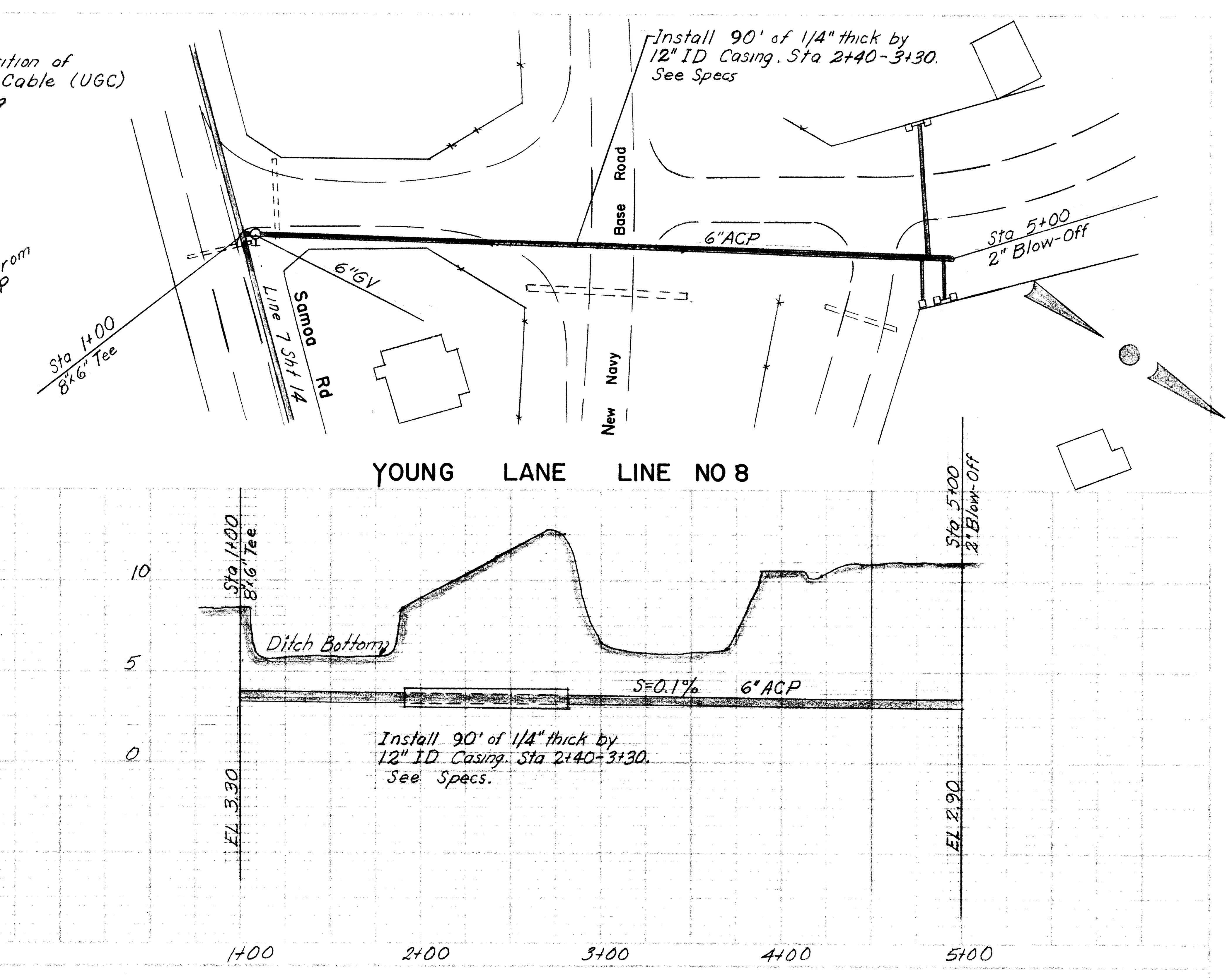

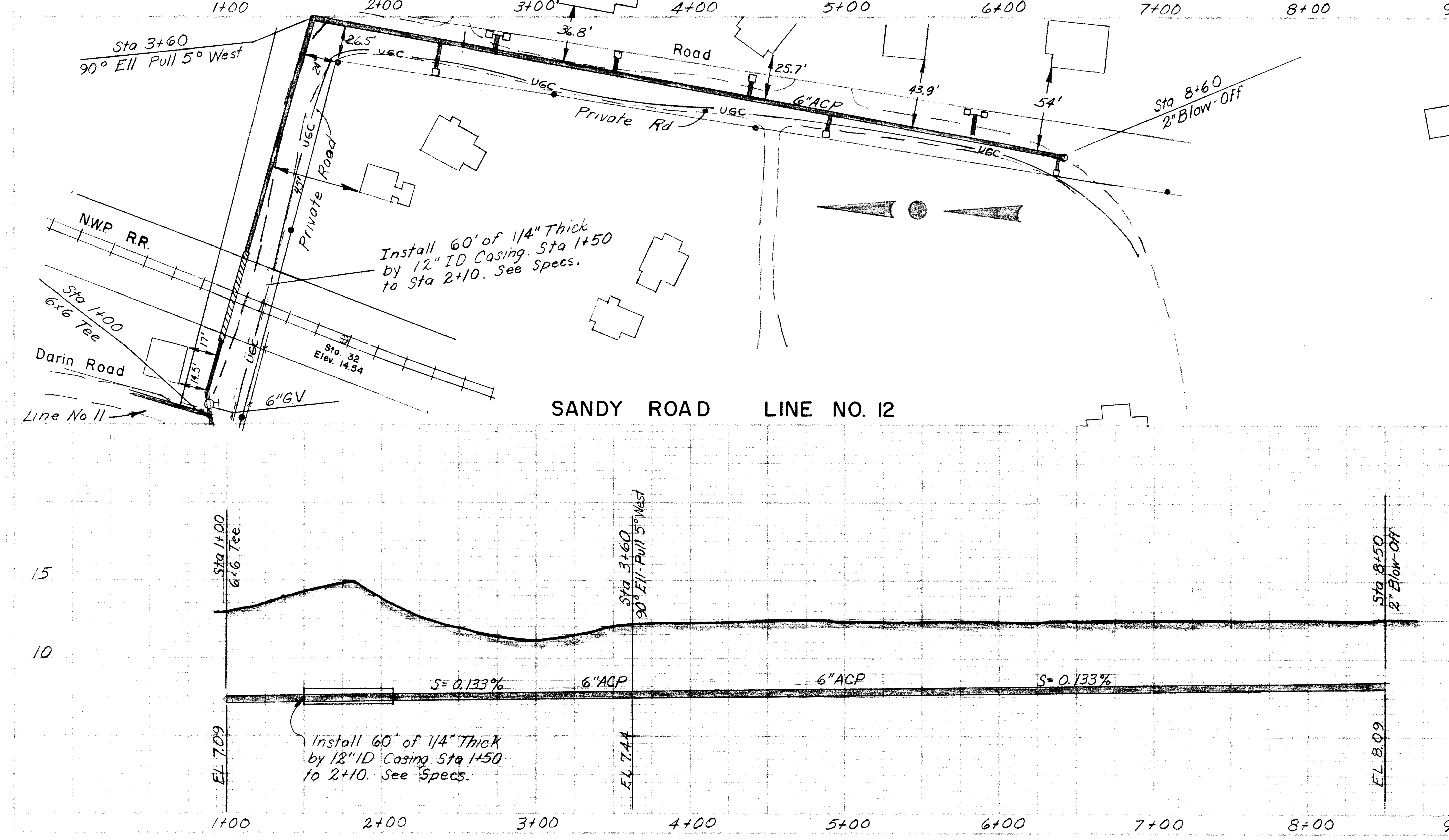

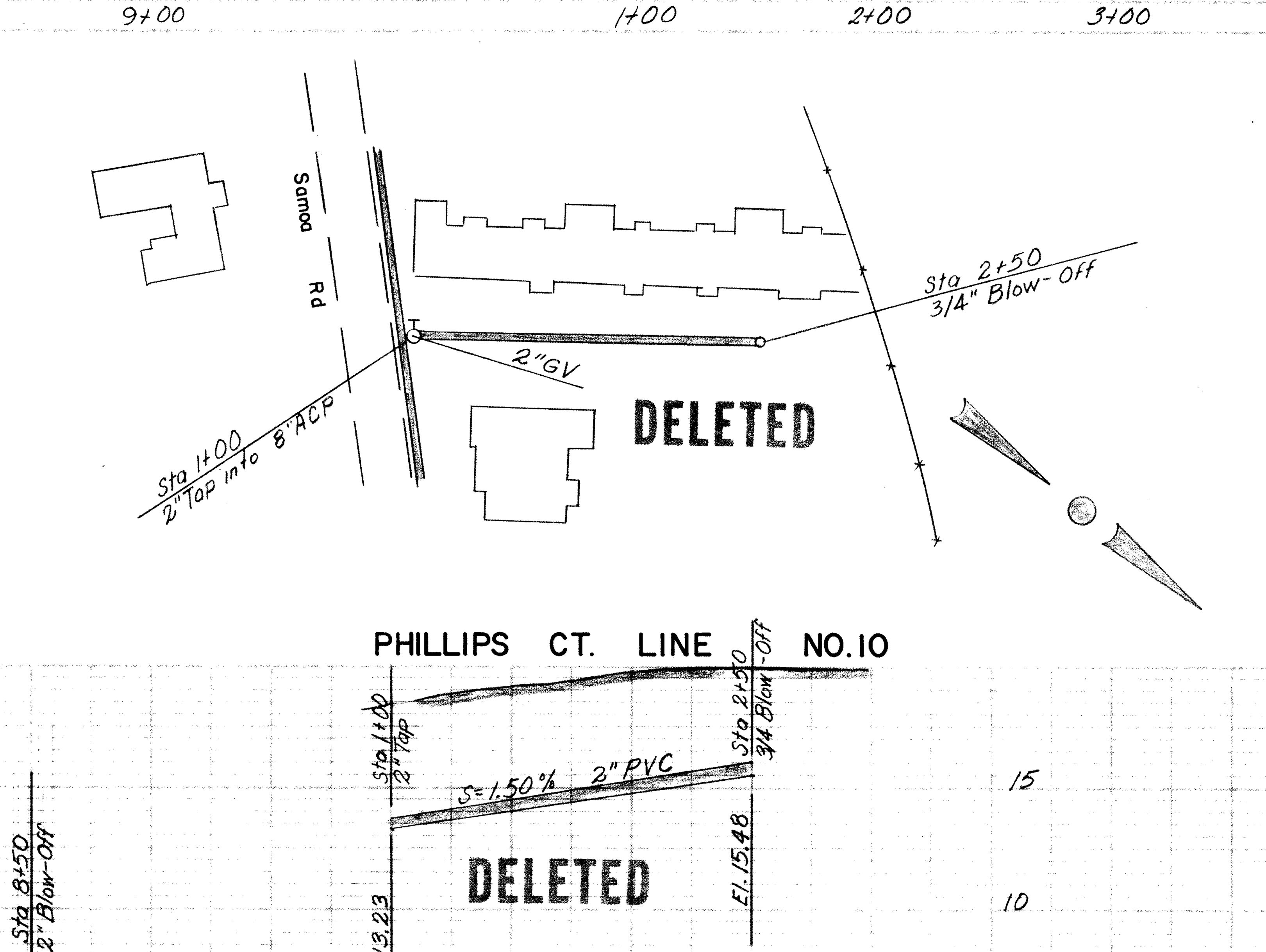

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WATER SYSTEM					MANILA COMMUNITY SERVICES DISTRICT	
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△	1-17-68	REVISED TO AS BUILT CONDITION	H.K.		WINZLER & KELLY CONSULTING ENGINEERS	JOB NO. 67-15A
NO.	DATE	REVISIONS	BY	APPR		SHEET 20
DRAWN BY W.E.S.	CHECKED BY	SCALE 1"=50' Horz 1"=5' Vert	DATE 5/9/67		633 - 3rd ST. EUREKA, CALIFORNIA 443-8326	OF 25

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NOTE:

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WATER SYSTEM				MANILA COMMUNITY SERVICES DISTRICT
1	1-17-68	REVISED TO AS BUILT CONDITION	NH.	PLAN & PROFILE LINE 13
NO.	DATE	REVISIONS	BY	APPR
DRAWN BY: W.E.S.	CHECKED BY	SCALE: 1"=50' Horz 1"=5' Vert	DATE: 5/9/67	WINZLER & KELLY CONSULTING ENGINEERS, 633 - 3rd ST. EUREKA, CALIFORNIA
JOB NO. 67-15A	SHEET 21	OF 25		

11.01001

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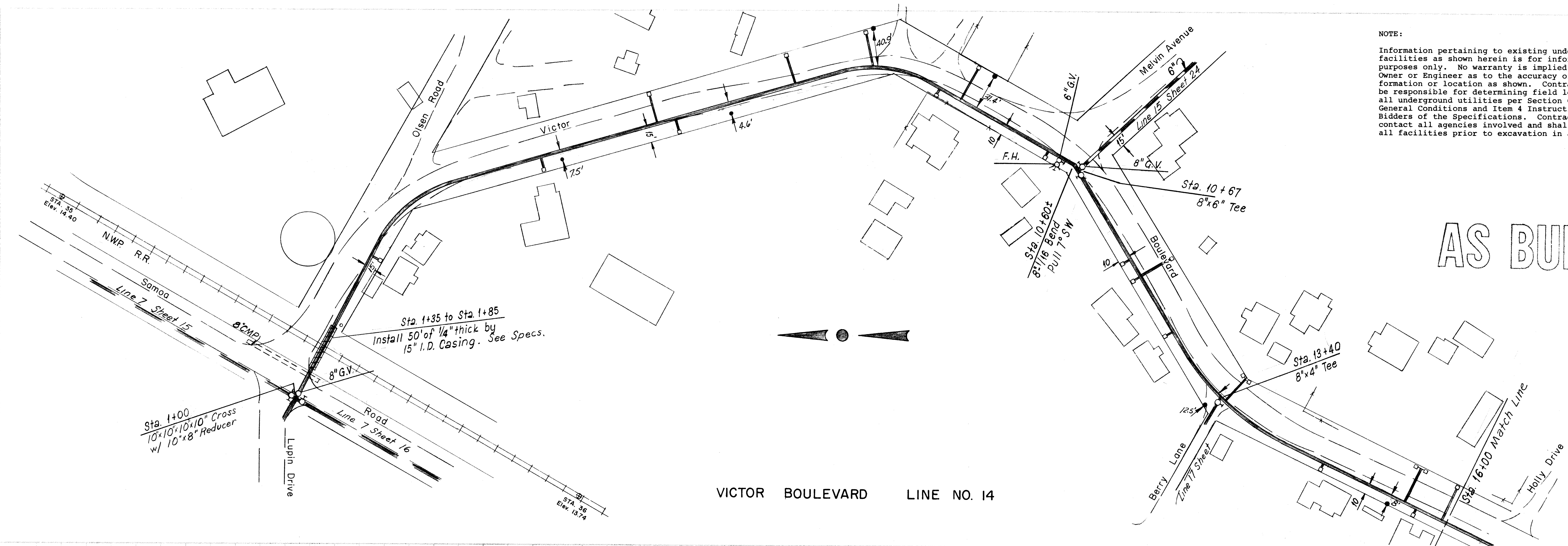
AS BUILT



WATER SYSTEM	MANILA COMMUNITY SERVICES DISTRICT
	PLAN & PROFILE
	LINE 14

NO.	DATE	REVISIONS	BY	APPR
△				
△				
△				
△				
△	1-17-68	REVISED TO AS BUILT CONDITION	NK.	

DRAWN BY	CHECKED BY	SCALE	DATE
W.E.S.		1"= 50' Horz. 1"= 5' Vert	5/9/67

WINZLER & KELLY
CONSULTING ENGINEERS
633 - 3rd ST. EUREKA, CALIFORNIA 443-8326

R. F. Kelly

JOB NO. 67-15A
SHEET 22
OF 25

11'.01001

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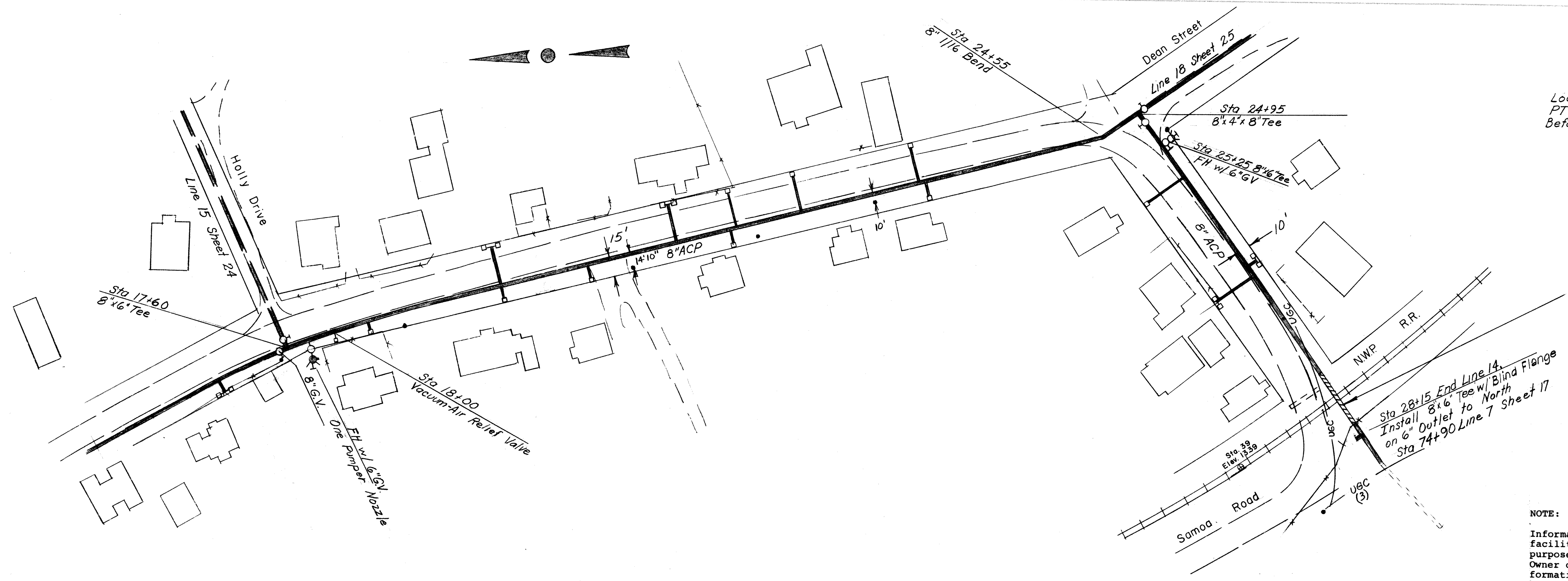

AS BUILT

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VICTOR BOULEVARD LINE NO. 14

WATER SYSTEM					MANILA COMMUNITY SERVICES DISTRICT	
					PLAN & PROFILE	
					LINE 14	
1	1-17-68	REVISED TO AS BUILT CONDITION	N.K.		WINZLER & KELLY CONSULTING ENGINEERS	JOB NO. 67-15A
NO.	DATE	REVISIONS	BY	APPR	633 - 3rd ST. EUREKA, CALIFORNIA 443-8326	SHEET 23
DRAWN BY N.E.S.	CHECKED BY	SCALE 1"=50' Horz 1"=5' Vert	DATE 5/9/67		R. F. Kelly	OF 25

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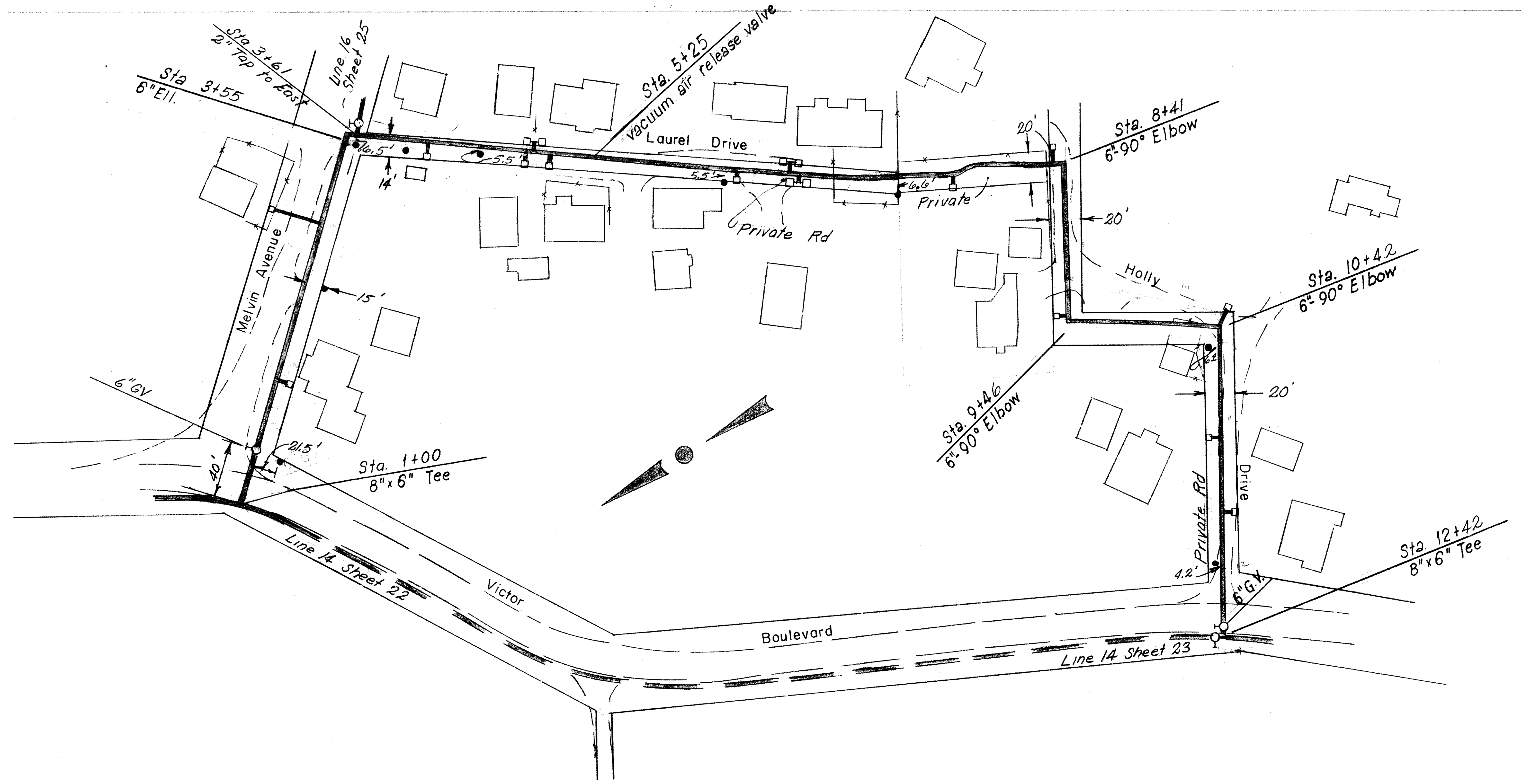
PLATE 1 - PLAN - PROFILE - F.A.S.
CLEARPRINT PAPER CO., S.F. CAL.



AS BUILT

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MELVIN AVENUE - LAUREL DRIVE - HOLLY DRIVE   LINE NO. 15

WATER SYSTEM

NO.	DATE	REVISIONS	BY	APPR
△	1-17-68	REVISED TO AS BUILT CONDITION	N.K.	

DRAWN BY	CHECKED BY	SCALE	DATE
W.E.S.		1" = 50' Horz. 1" = 5' Vert.	5/9/67

MANILA COMMUNITY SERVICES DISTRICT

PLAN & PROFILE
LINE 15

WINZLER & KELLY
CONSULTING ENGINEERS
633 - 3rd ST. EUREKA, CALIFORNIA 443-8326

JOB NO. 67-15A
SHEET 24 OF 25

PLATE 1 - PLAN - PROFILE - F.A.S.
CLEARPRINT PAPER CO., S. F. CAL.
NO. 1000H-1

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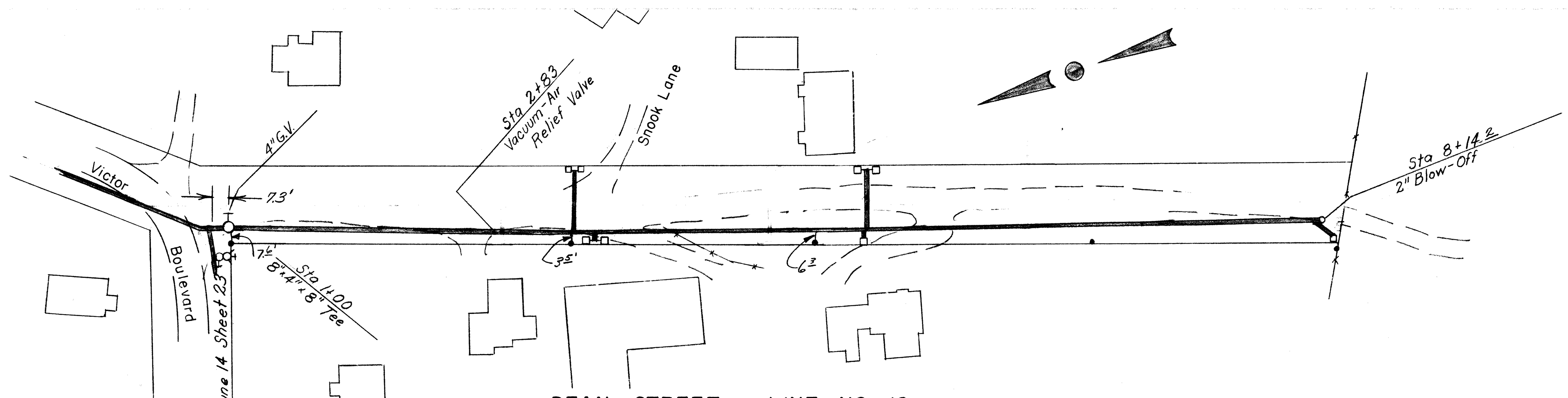
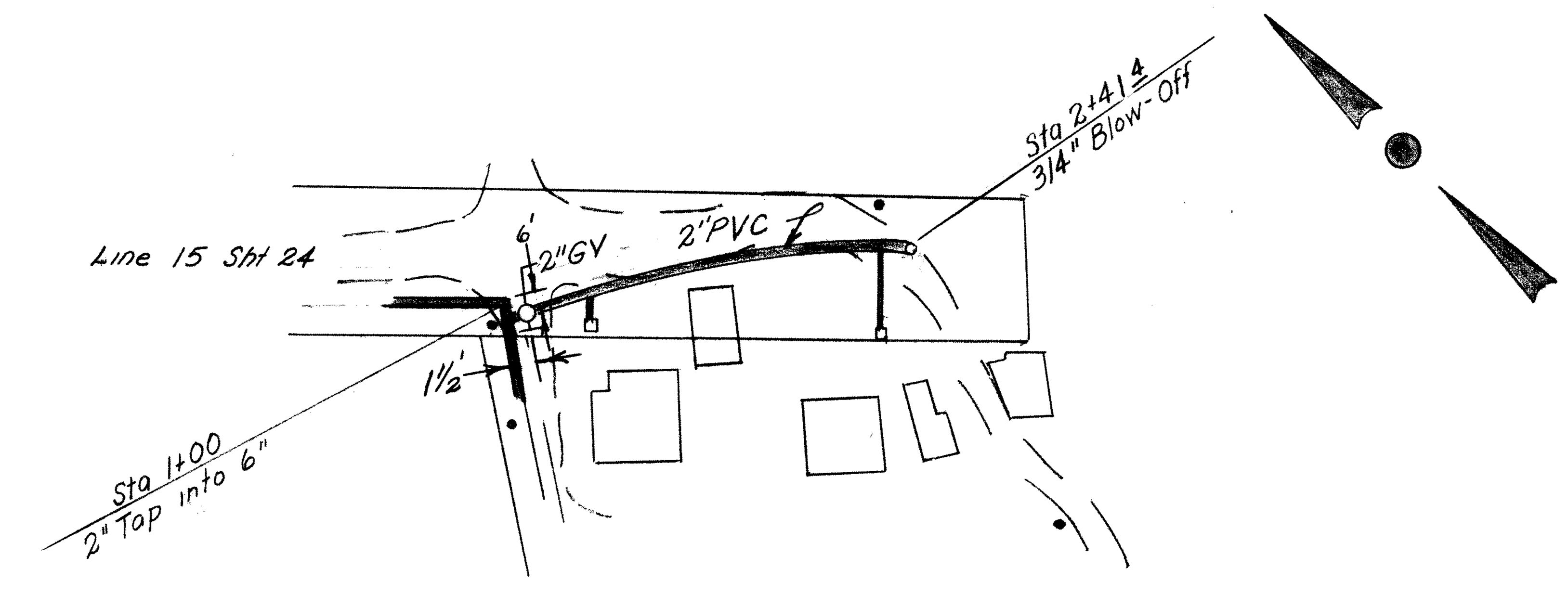
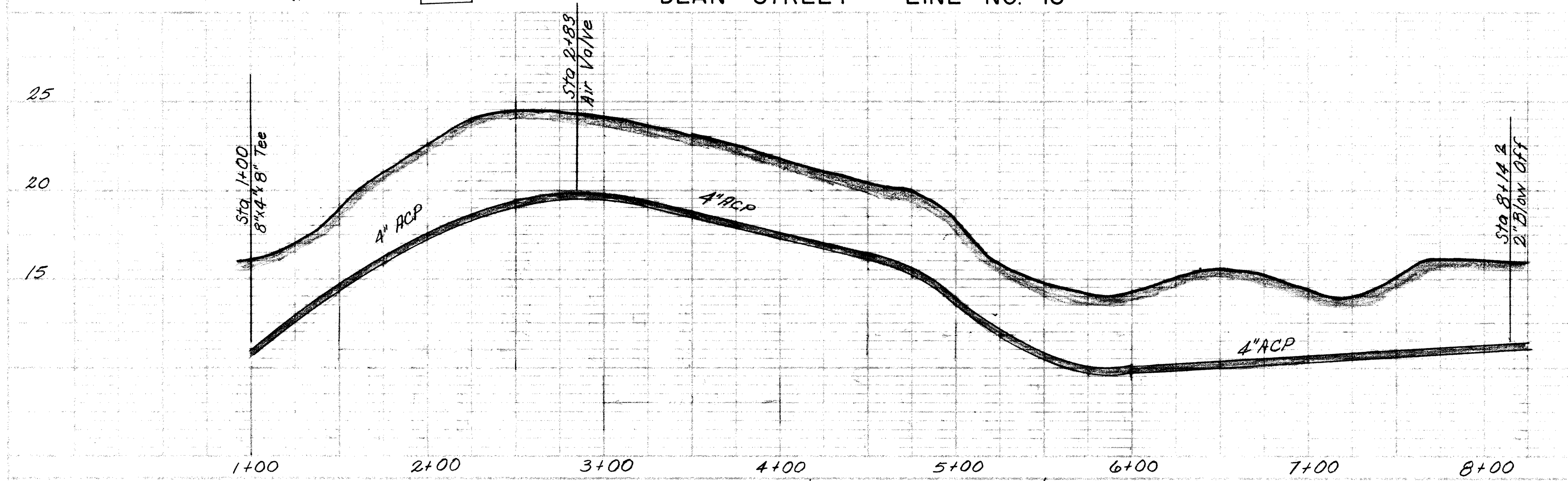
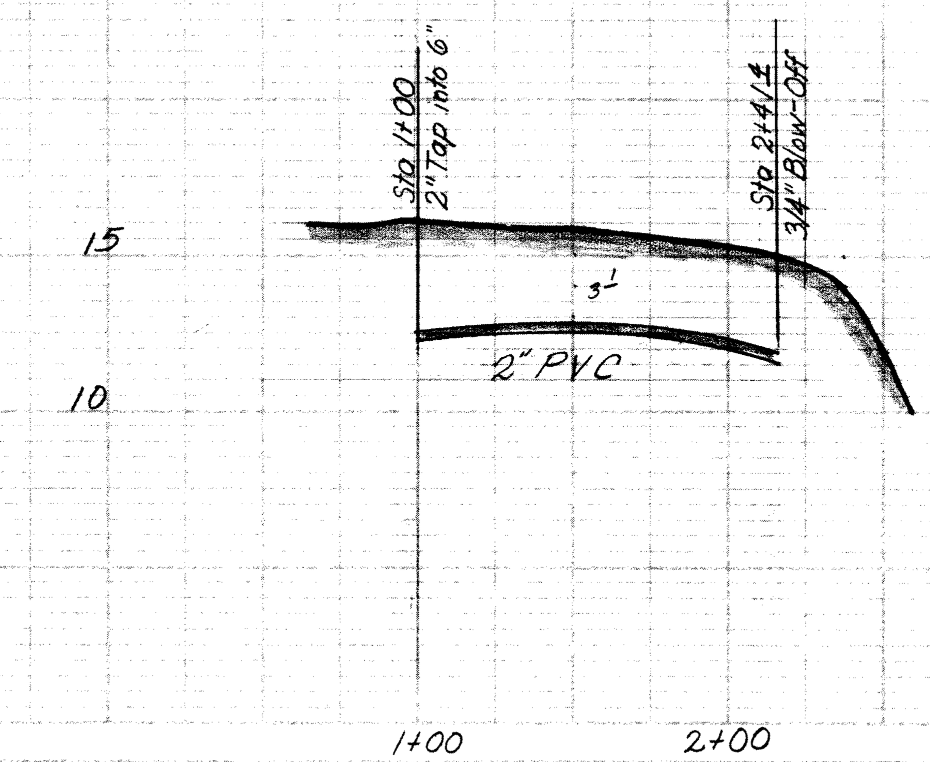


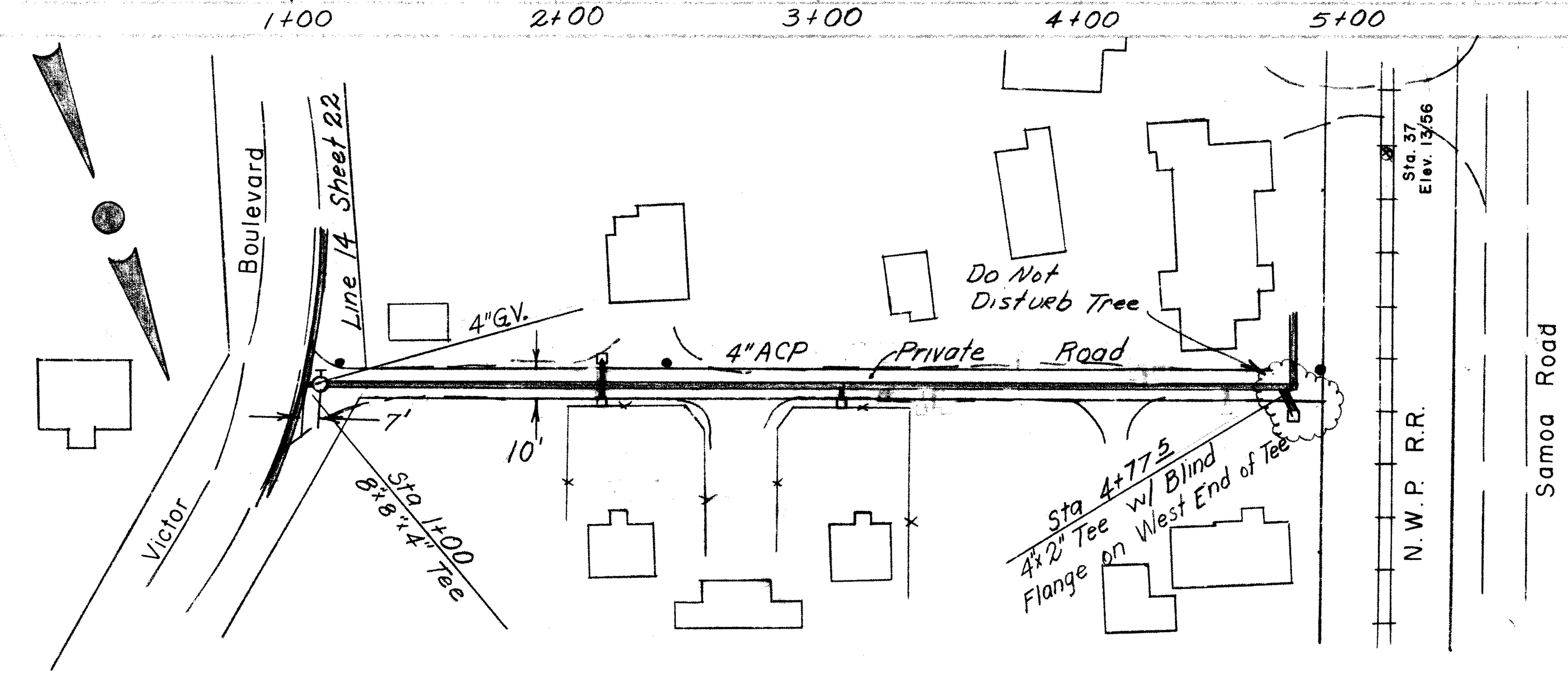
DEAN STREET LINE NO. 18



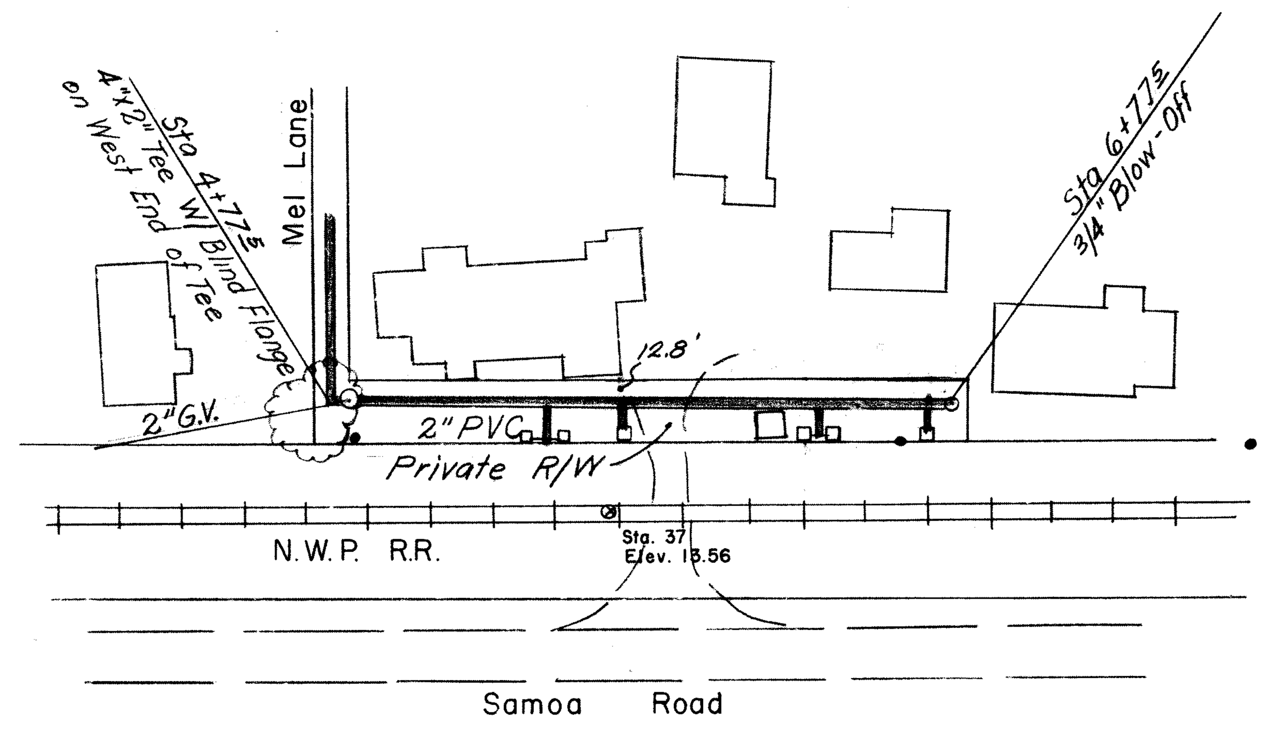
MELVIN AVENUE LINE NO. 16







BERRY LANE LINE NO. 17



LINE NO. 17

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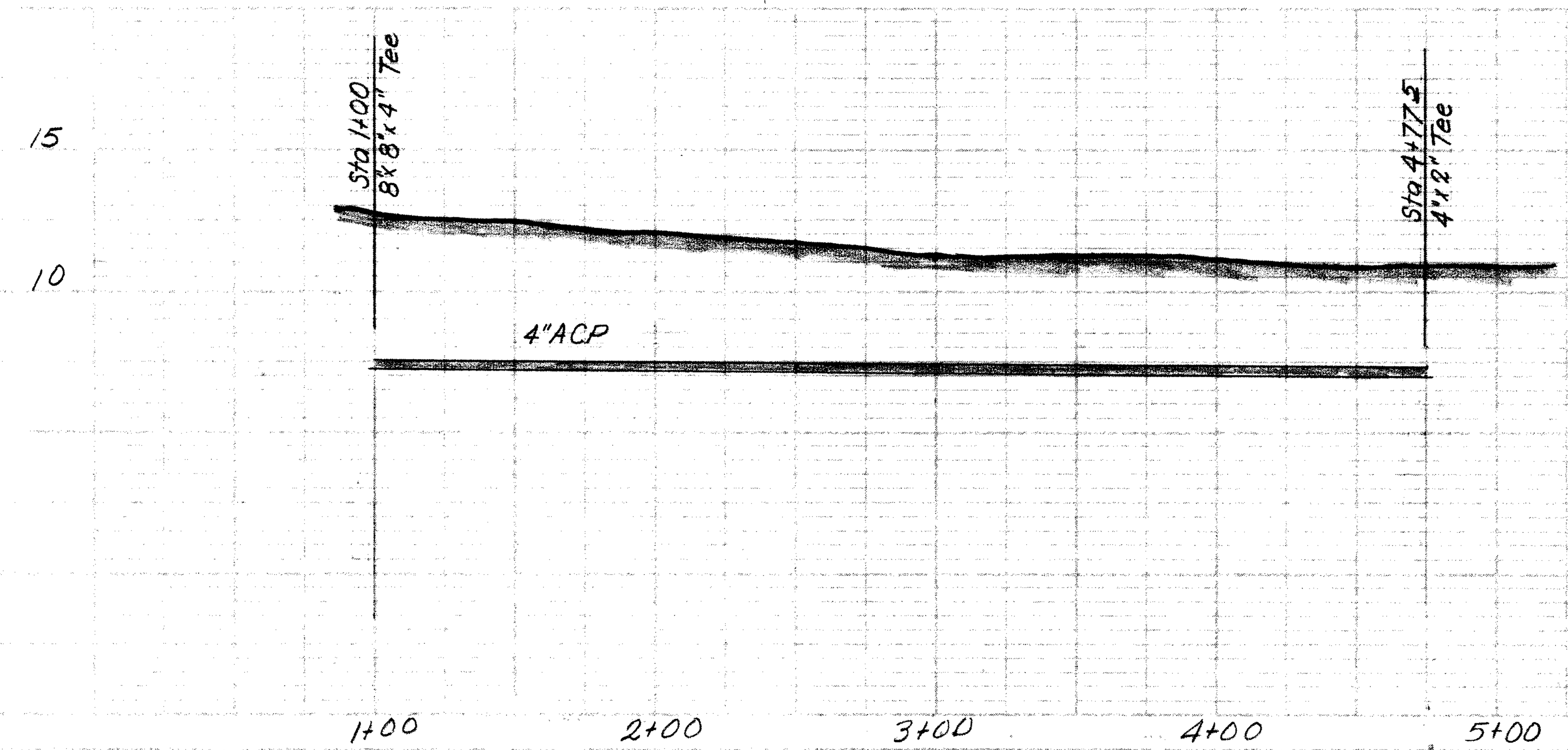
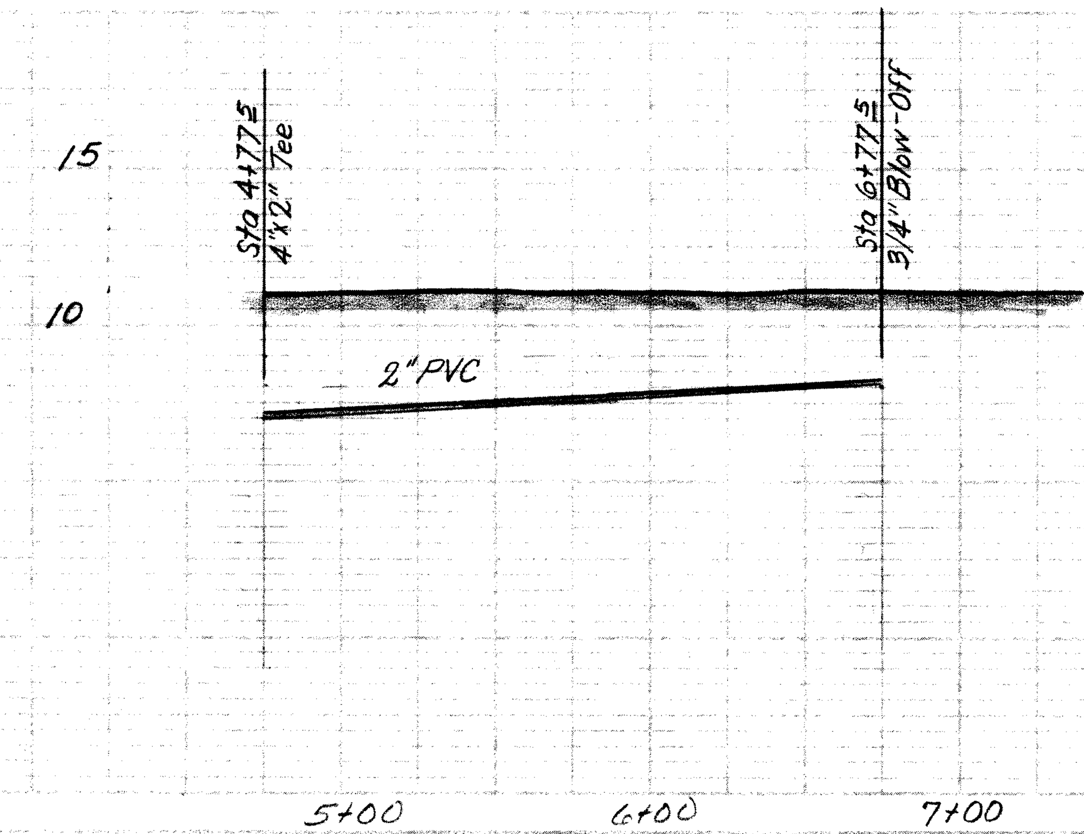
AS BUILT





WATER SYSTEM					MANILA COMMUNITY SERVICES DISTRICT
NO.	DATE	REVISIONS	BY	APPR	PLAN & PROFILE LINES 16,17,18
1	1-17-68	REVISED TO AS BUILT CONDITION	N.K.		WINZLER & KELLY CONSULTING ENGINEERS
DRAWN BY	CHECKED BY	SCALE	DATE		633 - 3rd ST. EUREKA, CALIFORNIA 443-8326
W.E.S.		1"=50' Horz 1"=5' Vert	5/9/67		JOB NO. 67-15A; SHEET 25 OF 25

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