CITY OF ALBUQUERQUE, NEW MEXICO

INDEX

DESCRIPTION	SHEET No.

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL - SECTION II

PRINCETON PUMP STATION

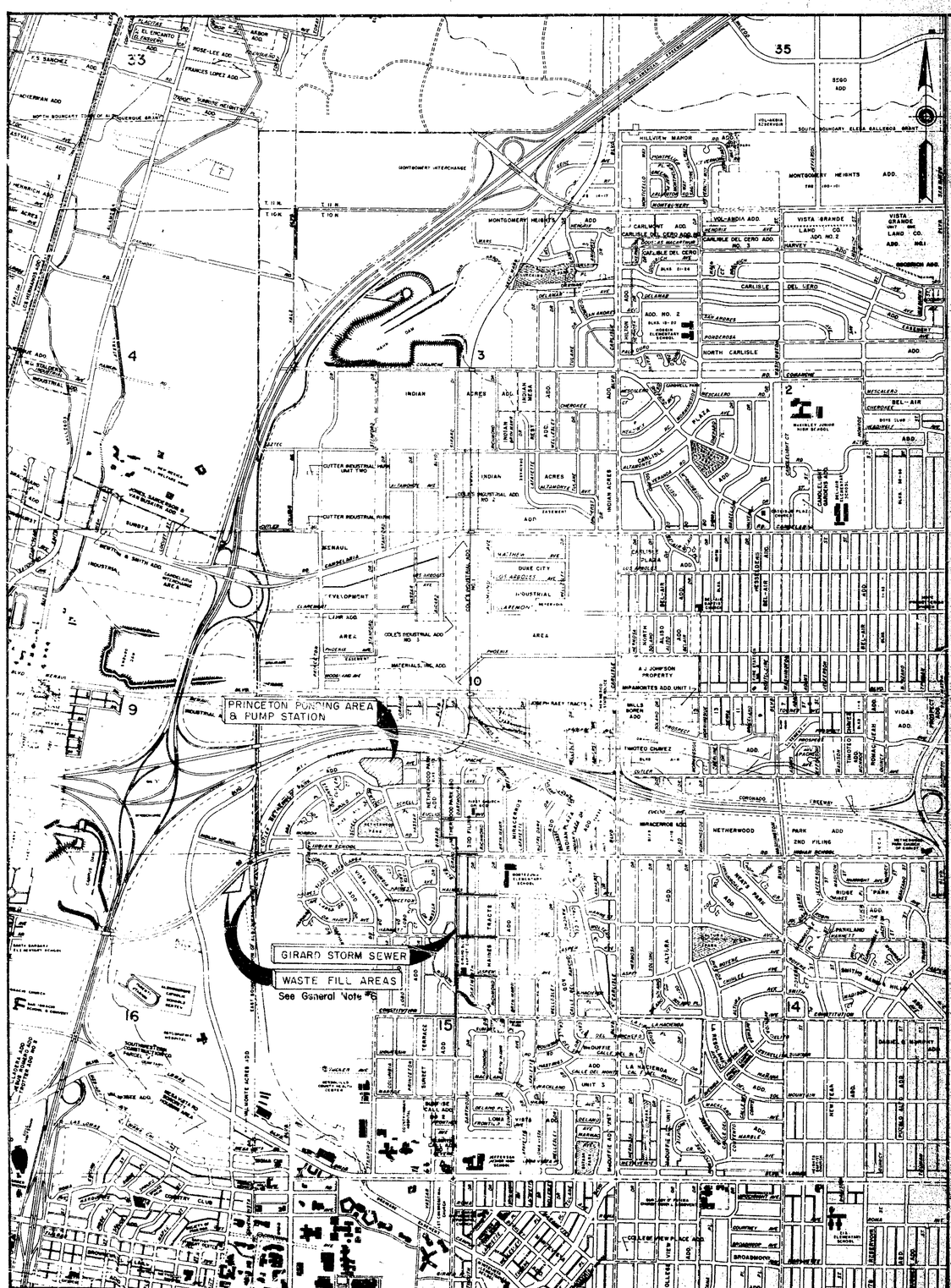
GIRARD STORM SEWER

WILLIAM MATOTAN & ASSOCIATES
ENGINEERS
ALBUQUERQUE NEW MEXICO

08 703 0170 20

AS BUILT

SHT No. 1



GENERAL NOTES

PRINCETON PUMP STATION

1. The Contractor shall coordinate any work by others in the construction area with the construction of this contract.
2. Existing grades and profiles may vary from those shown due to recent and current work done by others in the construction area.
3. The Princeton Ponding Area has been excavated and rough graded on a previous contract. Grading work on this contract shall include regrading on the berm road as shown on the road profile, including grading of ditch on the west, south, & east sides of ponding area for tree planting, regrading and dressing of side slopes of ponding area, regrading the bottom of the ponding area to obtain a uniform slope between the new contours shown, excavation, embankment and backfill at the pump station, regrading of the access ramp into the ponding area, and all other miscellaneous and appurtenant finish grading as required for a complete and neat appearing job. Also, all eroded areas on the ponding area slopes shall be cut out with minimum side slopes of 1:1 and backfilled with compacted material.
4. See sheet 15 for Structural Notes.
5. See specifications for soil stabilization requirements on bottom and side slopes of the Princeton Ponding Area.
6. Waste Fill areas shown are available for use by the Contractor. Contractor to contact Executive Engineer of the Albuquerque Metropolitan Arroyo Flood Control Authority for direction in placing waste fill in these areas.

GIRARD STORM SEWER

1. The Contractor shall coordinate any work required by others in the construction area with the construction of this contract.
2. All water valve boxes and sewer manholes in the construction area where street grades change are to be adjusted to finish grade under this contract.
3. Curb and Gutter shown as existing and not to be removed under this contract which is damaged or displaced by the Contractor shall be removed and replaced by the Contractor at his expense.
4. Where removal of existing curb and gutter or sidewalk is required, remove back to nearest joint.
5. Existing materials to be removed and paid for on a unit basis shall be measured and quantities approved by the Engineer prior to removing existing materials.
6. The Contractor shall notify the Telephone Co. by calling 842-1211 before commencing work in areas near underground telephone lines.
7. Existing profiles and grades shown may vary due to recent and current work done by others in the construction area.
8. Connections of new storm sewers to existing manholes shall be subsidiary to construction of storm sewers.
9. Any adjustment to grade of new manholes constructed under this contract shall be subsidiary to construction of the manhole.
10. Depth of manholes measured for payment shall be measured from the top of the frame to the bottom of the lowest pipe entering the manhole.
11. Depth of storm sewer trench measured for payment shall be computed on the following basis:

    Storm sewers installed under streets to be paved under this contract will be measured from bottom of pipe to new finish grades shown on the drawings. Storm sewers installed elsewhere shall be measured from bottom of pipe to natural ground or existing street surface as applicable.

12. All storm sewer lines to be abandoned under this contract shall be plugged with concrete at each end of the portion to be abandoned. Payment for such works will be considered subsidiary to other storm sewer construction items.
13. Prior to commencing work in a specific area the Contractor will be required to expose existing utility lines at locations determined by the Contractor or at locations required by the Resident Engineer where it is anticipated that possible conflicts of new street grades or storm sewers may occur.
14. All existing utilities shown where taken from record drawings and are located as accurately as possible from information available. It will be the Contractor's responsibility to protect, maintain in service, and at points required verify exact locations of these utilities during construction operations of this project.
15. The maximum allowable quantities for payment for replacement of paving where storm sewers are to be installed under existing paving will be computed by using trench widths tabulated in the specifications plus 24" unless otherwise approved by the Engineer. (See Pavement Cut Detail sheet 37) An exception to this will be on Girard Blvd. over the 84" RCP where the full width of paving shall be removed and replaced. (See Street Sections sheet 36)

LEGEND

SYMBOL	DESCRIPTION
	New finish grade spot elevations
	Existing grade spot elevations
F.H.	Existing Fire Hydrant
M.H.	Existing Manhole
M.H.	New Manhole
	Valve with valve box
G	Existing Underground Utility Lines: W -Water; G -Gas; S -Sanitary Sewer; SS -Storm Sewer
W	New Underground Utility Lines: W -Water; S -Sanitary Sewer; SS -Storm Sewer
P.P.	Overhead Power or Telephone Line with pole
	Guy Wire, Anchor, and Pole
	Section Number or Detail Letter; Sheet where section is shown; Sheet where section is taken
T	Existing Underground Telephone Cable
T	Abandoned Underground Telephone Cable

AS BUILT

ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

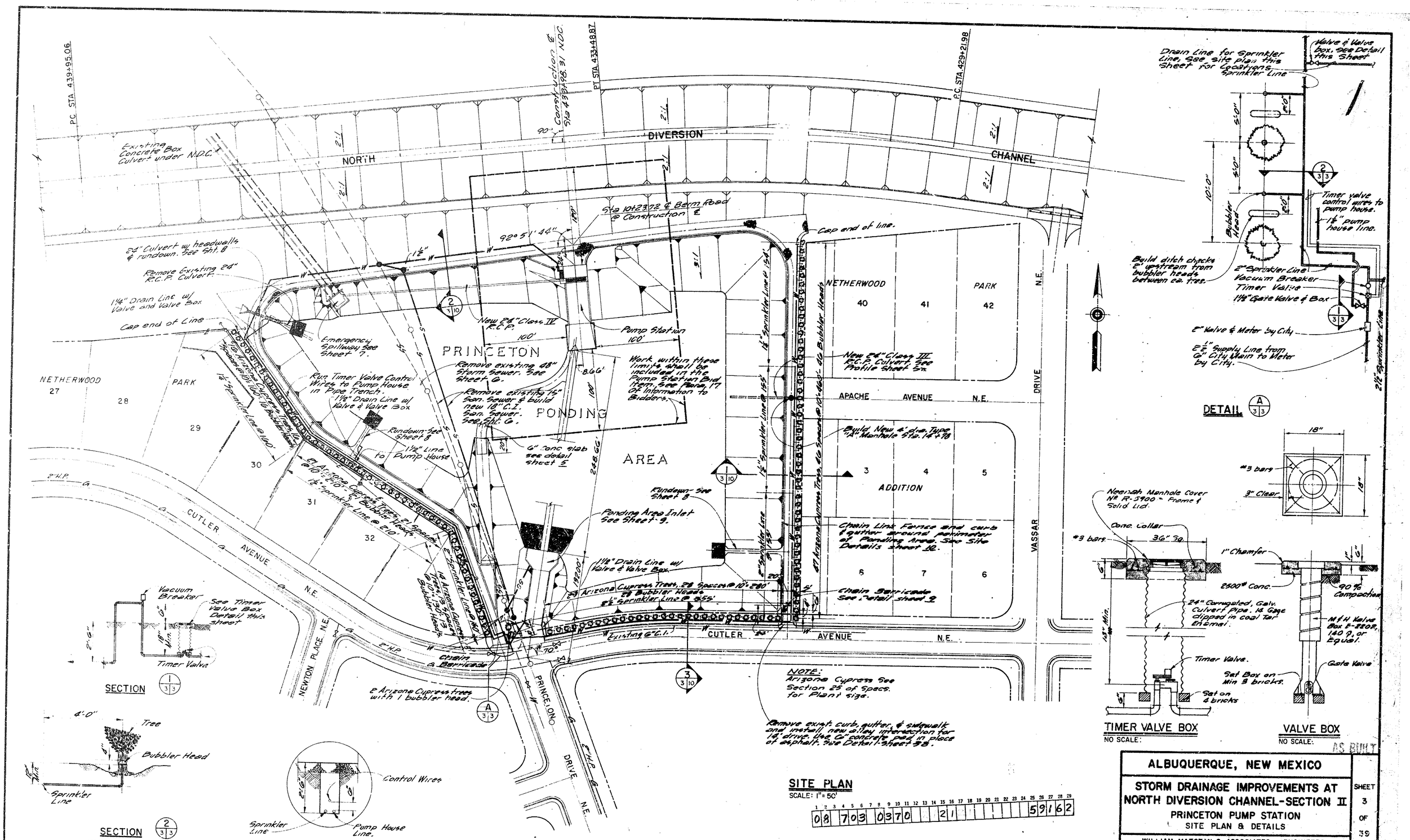
LOCATION MAP & GENERAL NOTES

WILLIAM MATOTAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: 1"=1000' | DRAWN: R.L. | CHECKED: J.A.A. | DATE: JAN. 1969

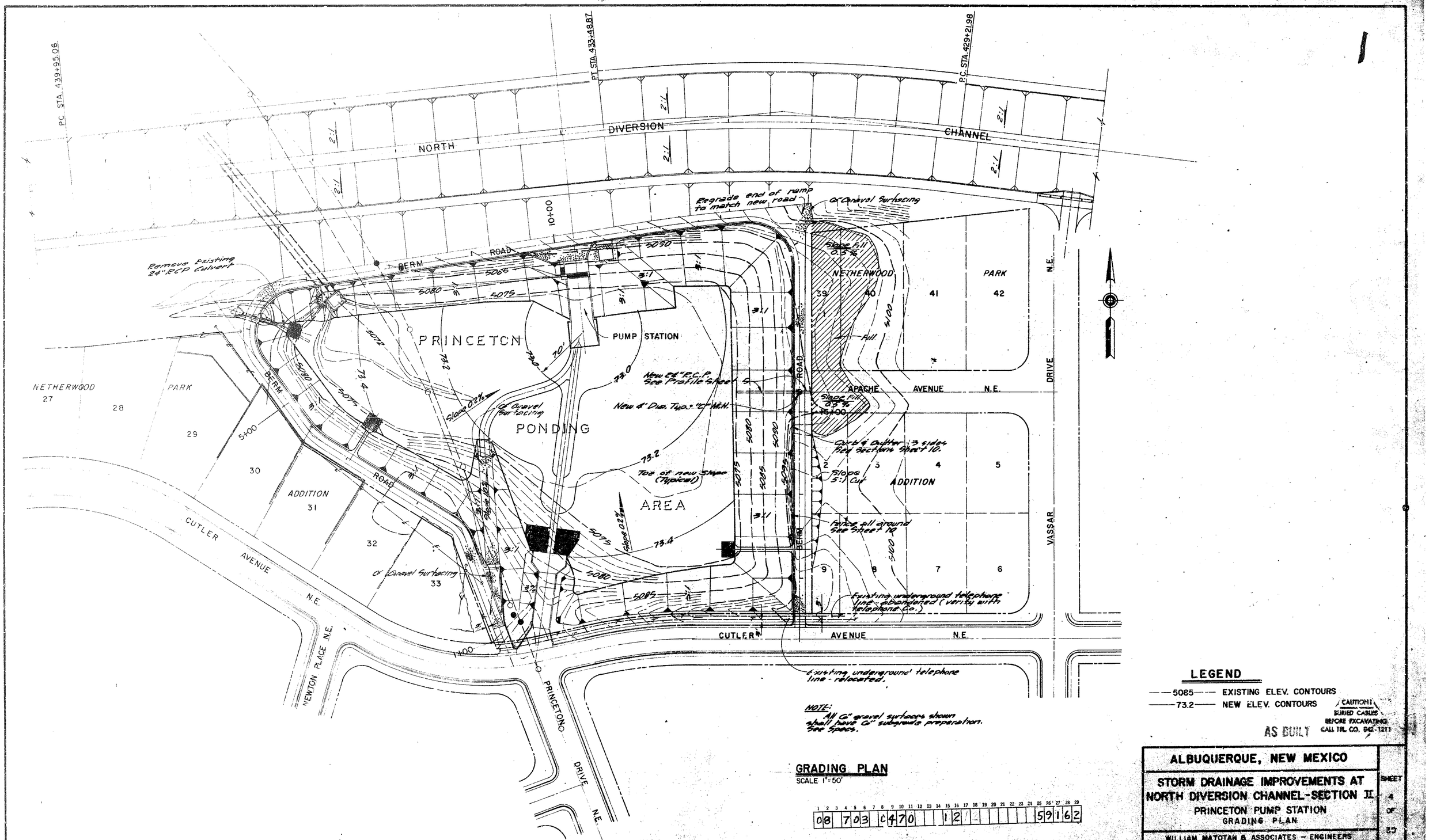
SHEET 2 OF 39

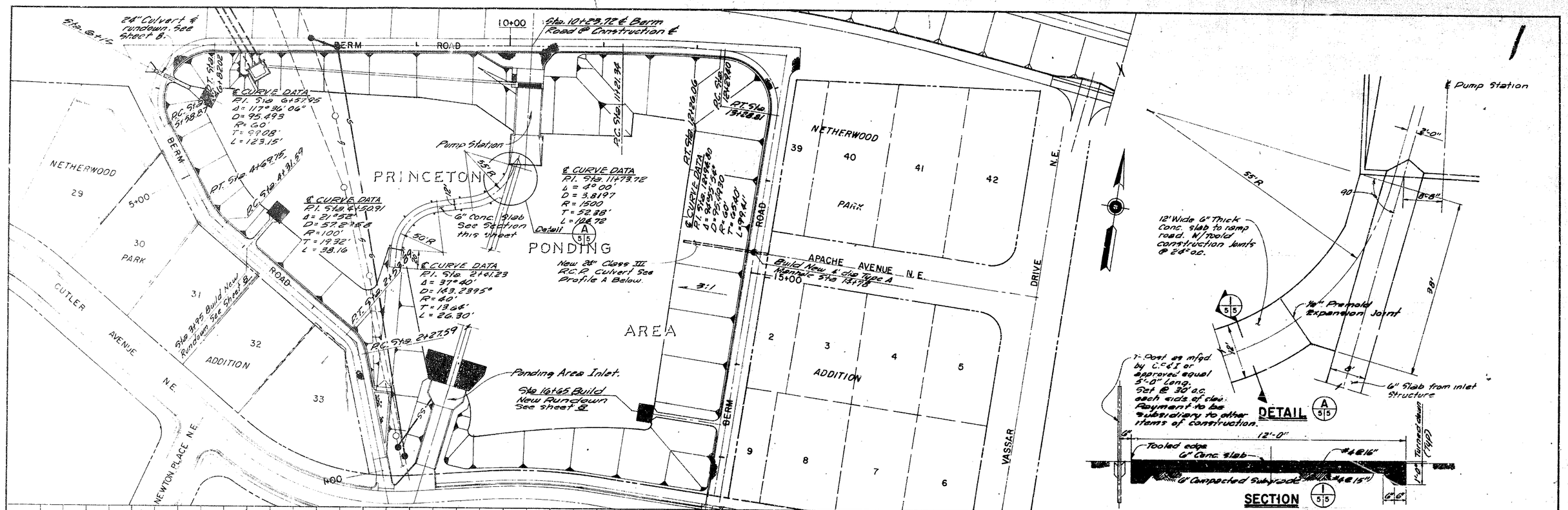
08 703 0270 2 21



ALBUQUERQUE, NEW MEXICO			SHEET 3 OF 39
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II PRINCETON PUMP STATION SITE PLAN & DETAILS			
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS ALBUQUERQUE, NEW MEXICO			
SCALE: AS SHOWN	DRAWN: R.T.S. CHECKED: J.A.A.	DATE: JAN., 1969	

08 703 0370 21 5916 2


P.C. STA. 439+95.06
P.T. STA. 433+48.87
P.C. STA. 429+21.98
NORTH DIVERSION CHANNEL
Regrade end of ramp to match new road
6" Gravel Surfacing
Remove Existing 24" RCP Culvert
BERM
ROAD
PRINCETON
PUMP STATION
PONDING
AREA
New 24" R.C.P. See Profile Sheet 6
New 4" Diam. Tap. "T" M.H.
Toe of new Slope (Typical)
Slope 0.2%
Slope Fill 0.5%
Cut & Gutter - 3 sides See Sections Sheet 10.
Slope 5:1 Cut
Fence all around See Sheet 12
Existing underground telephone line abandoned (verify with Telephone Co.)
Existing underground telephone line - relocated.
NETHERWOOD
PARK
ADDITION
APACHE AVENUE N.E.
CUTLER AVENUE N.E.
NEWTON PLACE N.E.
PRINCETON DRIVE N.E.
VASSAR DRIVE N.E.
Fill
NOTE:- All 6" gravel surfaces shown shall have 6" subgrade preparation. See Specs.
LEGEND
5085 EXISTING ELEV. CONTOURS
73.2 NEW ELEV. CONTOURS
CAUTION! BURIED CABLES BEFORE EXCAVATING CALL TEL. CO. 842-1211
AS BUILT
GRADING PLAN
SCALE 1"=50'
08 703 C470 12 5916 2
ALBUQUERQUE, NEW MEXICO
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II
PRINCETON PUMP STATION
GRADING PLAN
SHEET 4 OF 33
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO
SCALE: 1"=50'
DRAWN: R.T.S.
CHECKED: P.T.
DATE: JAN. 1968

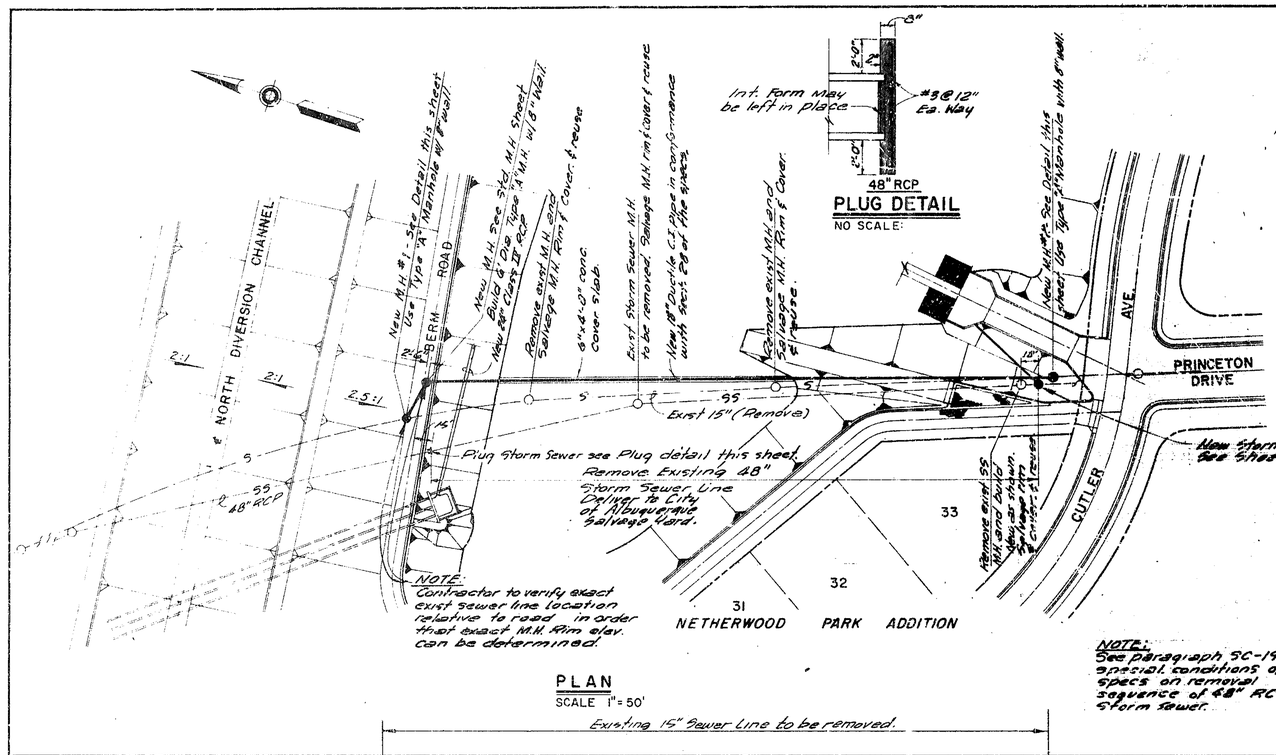


PLAN
SURVEYED
PLOTTED
NOTE BOOK
No.

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
No.

08 70 3 0570 12 5916 2

PRINCETON PUMP STATION — BERM ROAD PLAN & PROFILE SHEET 5 OF 39

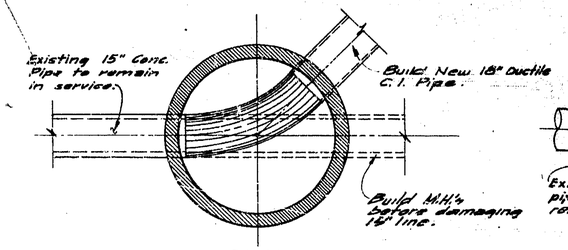


NOTE: Contractor to verify exact exist sewer line location relative to road in order that exact M.H. Rim elev. can be determined.

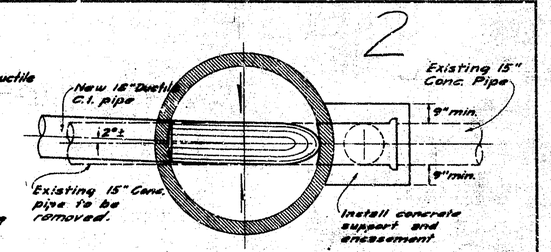
PLAN
SCALE 1" = 50'

PLUG DETAIL
NO SCALE

NOTE: See paragraph SC-19, special conditions of specs on removal sequence of 48" RCP Storm Sewer.



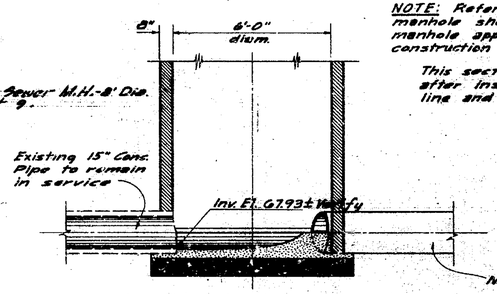
PLAN



PLAN

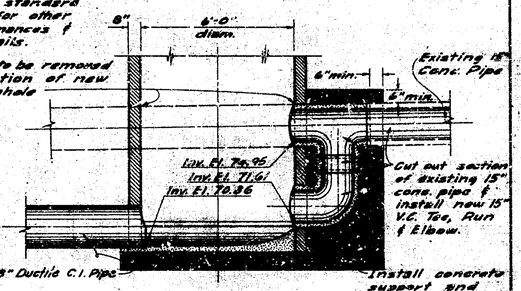
NOTE: Refer to standard manhole sheet for other manhole appurtenances & construction details.

This section to be removed after installation of new line and manhole



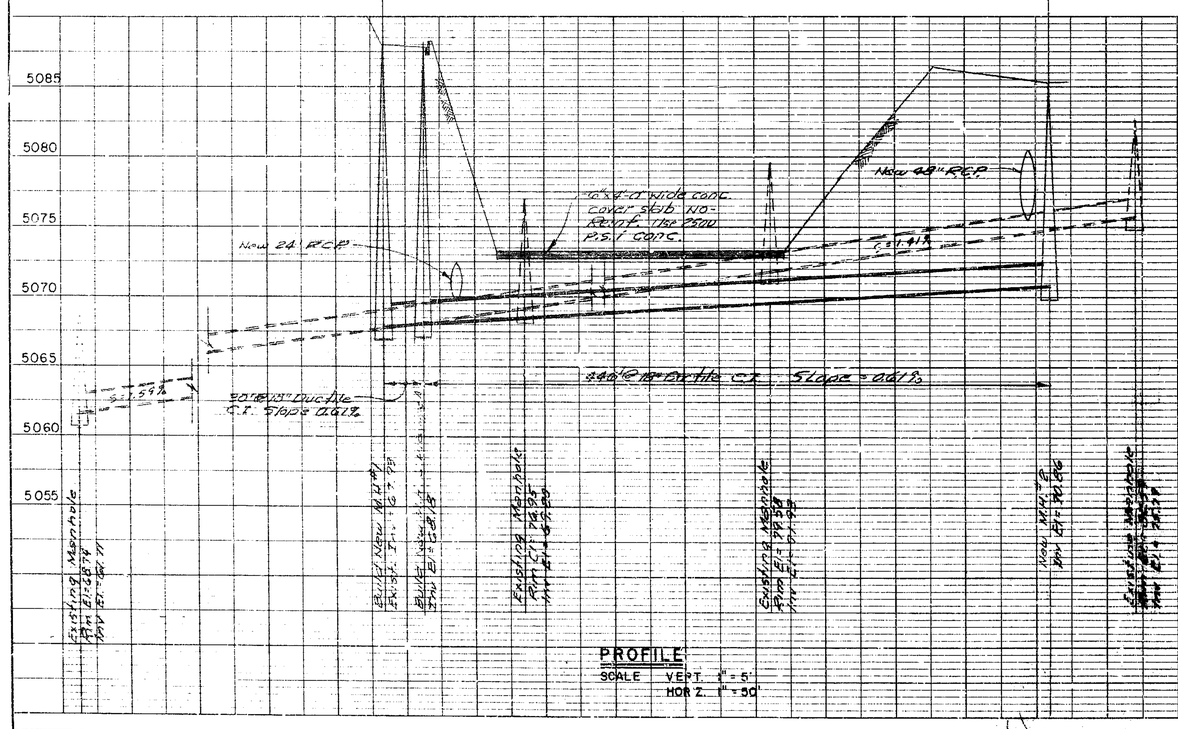
SECTION

MANHOLE No. 1
SCALE 3/8" = 1'-0"



SECTION

MANHOLE No. 2
SCALE 3/8" = 1'-0"

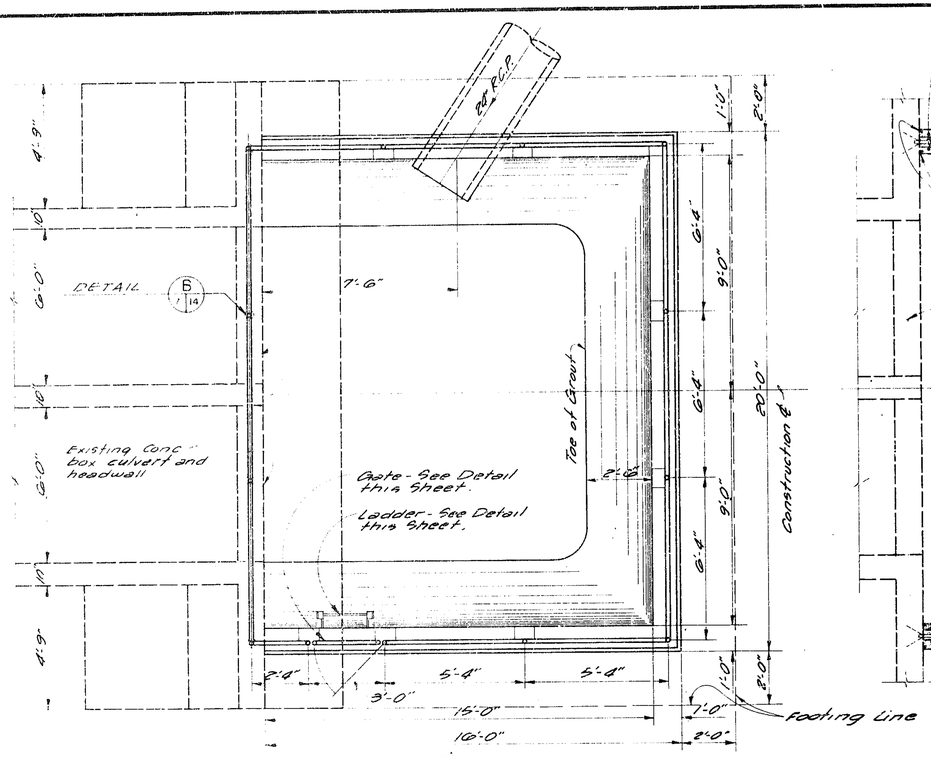


PROFILE
SCALE VERT. 1" = 5'
HORIZ. 1" = 50'

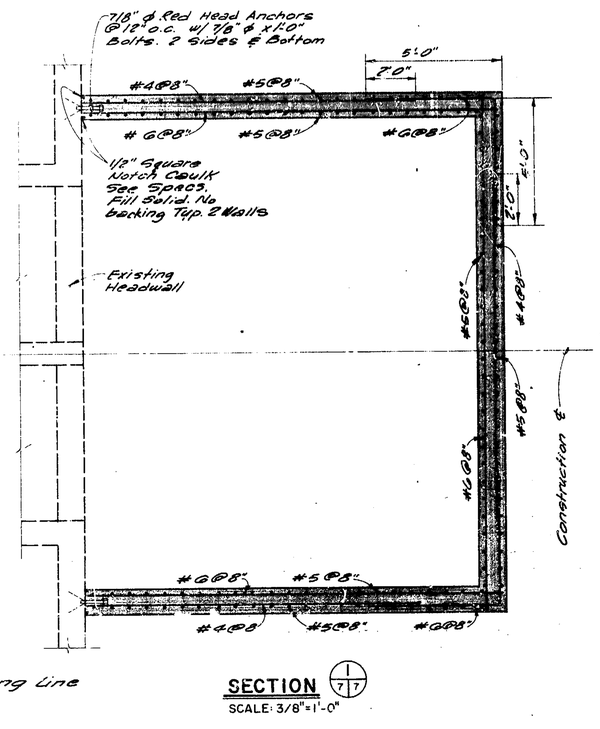
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
08	7	0	3		0	6	7	0		0	5													5	9	1	6	2
07																												

AS BUILT

PRINCETON PUMP STATION SANITARY SEWER PLAN & PROFILE SHEET 6 OF 39

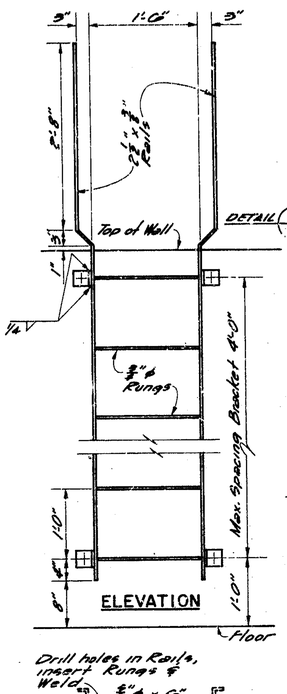


PLAN

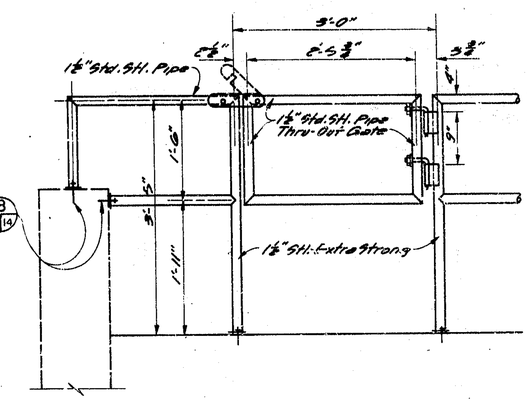


SECTION 1/7

SCALE: 3/8" = 1'-0"

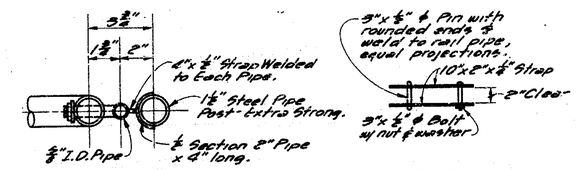


ELEVATION



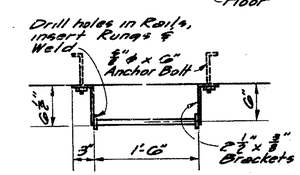
STEEL PIPE GATE

SCALE: 1" = 10'



PLAN

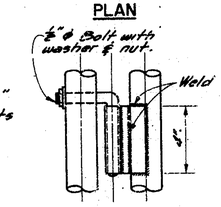
PLAN



PLAN

LADDER DETAIL

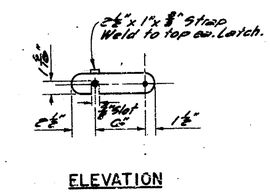
SCALE: 1" = 1'-0"



ELEVATION

HINGE DETAIL

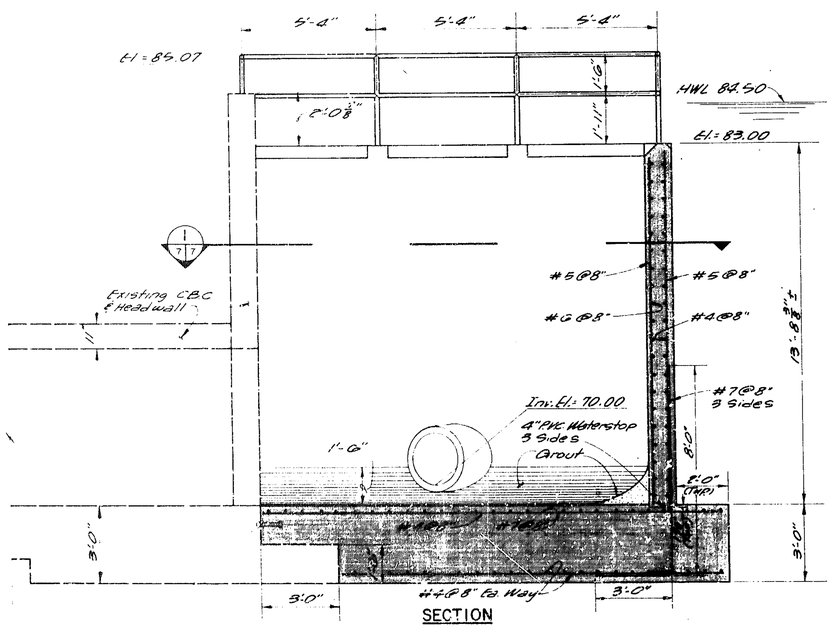
SCALE: 3" = 1'-0"



ELEVATION

GATE LATCH DETAILS

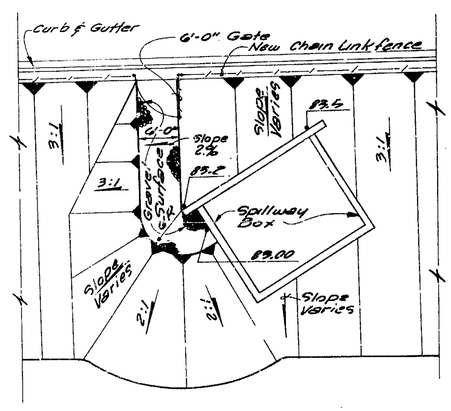
SCALE: 1 1/2" = 1'-0"



SECTION

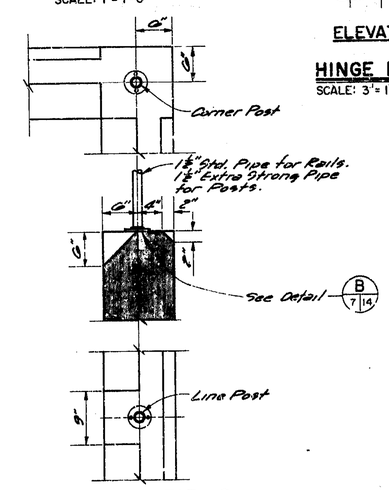
SPILLWAY BOX

SCALE: 3/8" = 1'-0"



GRADING PLAN

SCALE: 1" = 10'



TYPICAL WEIR & RAILING POST DETAILS

SCALE: 1" = 1'-0"

NOTE:
See paragraph 3C-19, special conditions of specs. on construction sequence of emergency spillway structure.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
0	8		7	0	3		0	7	7	0				1	2									5	9	1	6	2

AS BUILT

ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

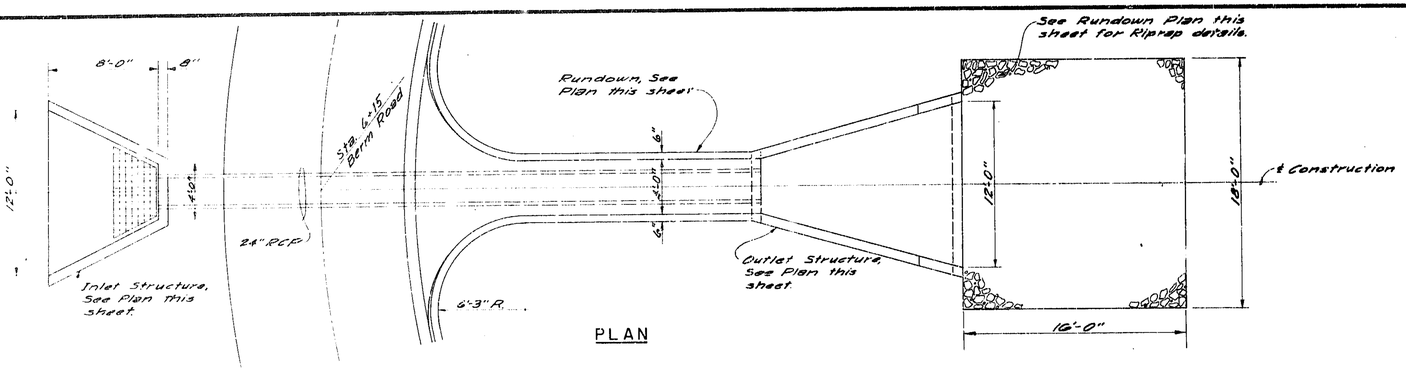
PRINCETON PUMP STATION

EMERGENCY SPILLWAY DETAILS

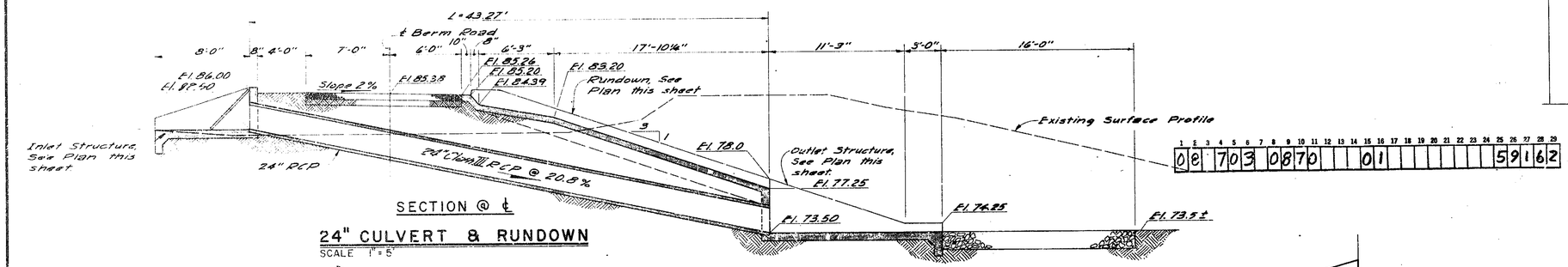
WILLIAM MATOIAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN | DRAWN: B.D.McG | CHECKED: L.D.V. | DATE: JAN., 1969

SHEET 7 OF 39



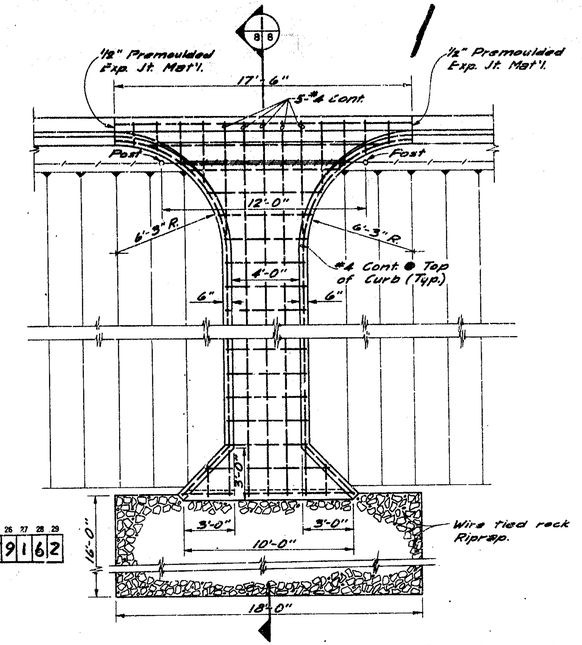
PLAN



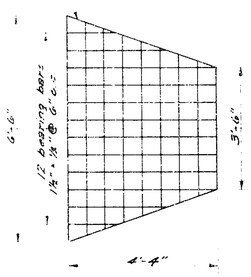
SECTION @ ℄

24" CULVERT & RUNDOWN

SCALE 1" = 5'

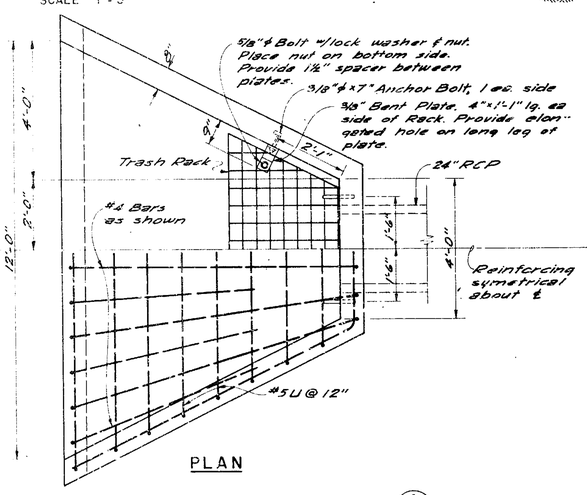


PLAN

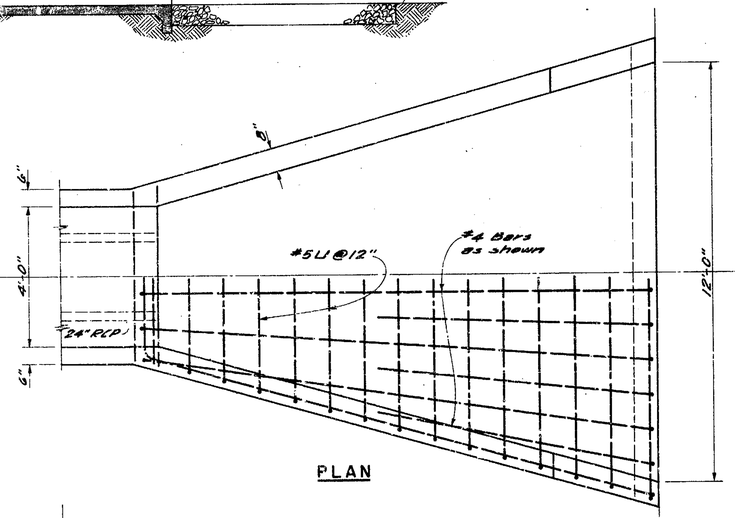


TRASH RACK PLAN

SCALE 1/2" = 1'-0"



PLAN



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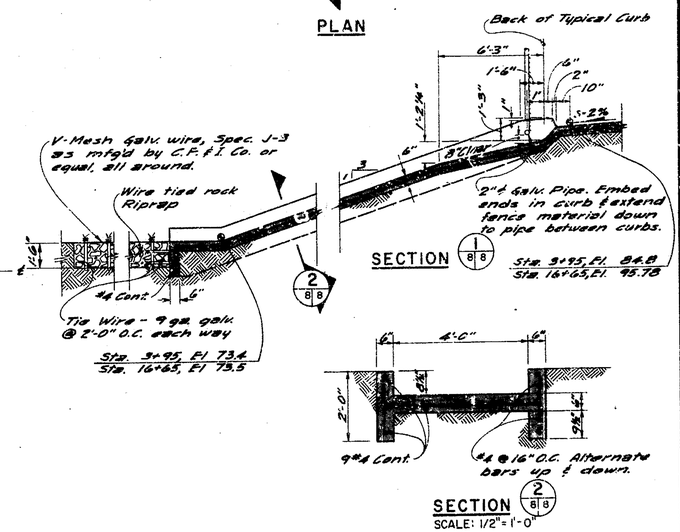


SECTION (1/8 8)

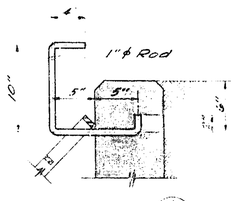
SECTION (2/8 8)

SECTION (2/8 8)

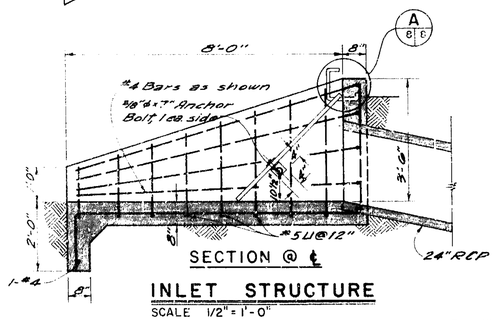
SCALE: 1/2" = 1'-0"

RUNDOWN DETAIL

SCALE: 1/4" = 1'-0"



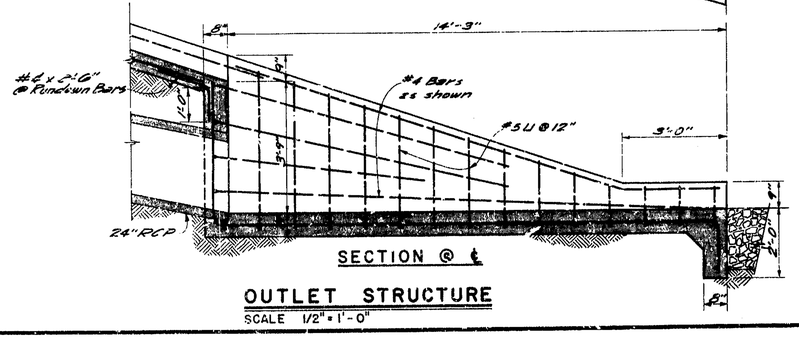
DETAIL (A/8 8)



SECTION @ ℄

INLET STRUCTURE

SCALE 1/2" = 1'-0"

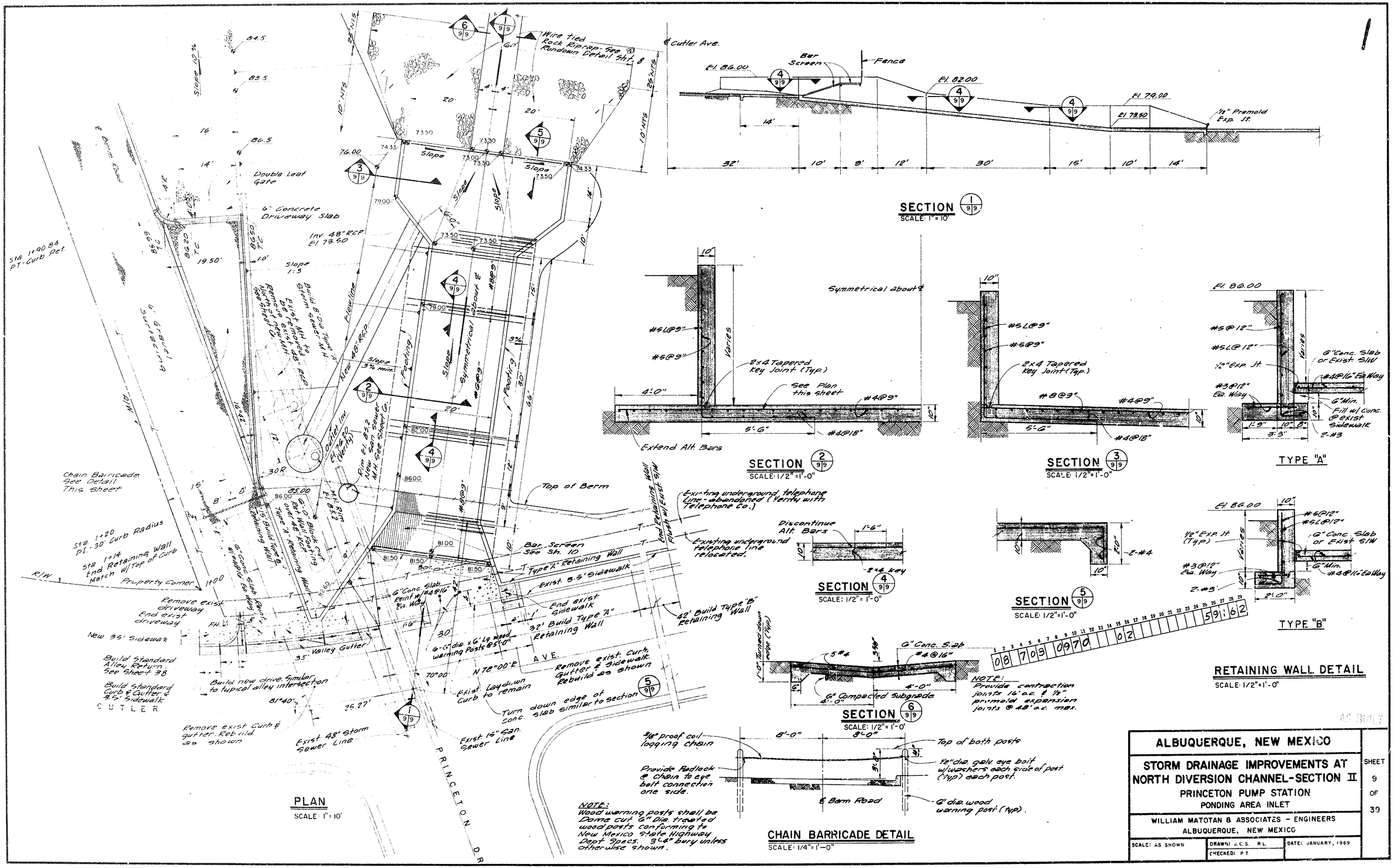


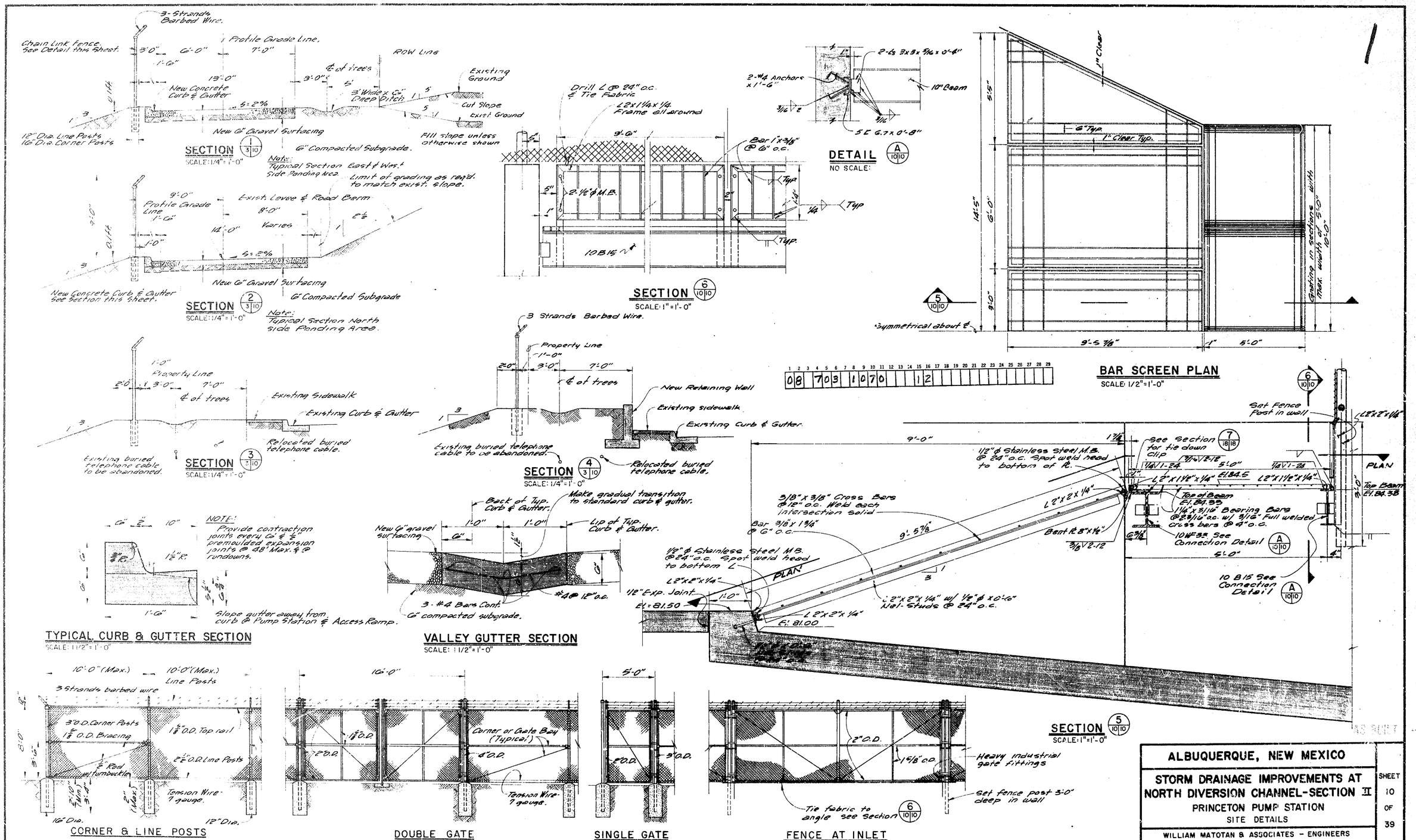
SECTION @ ℄

OUTLET STRUCTURE

SCALE 1/2" = 1'-0"

ALBUQUERQUE, NEW MEXICO		SHEET 8 OF 39
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II PRINCETON PUMP STATION CULVERT & RUNDOWN DETAILS		
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS ALBUQUERQUE, NEW MEXICO		
SCALE: AS SHOWN	DRAWN: J.C.S. CHECKED: L.D.V.	DATE: JAN, 1969


PLAN
SCALE: 1" = 10'
SECTION 1/9 9
SCALE: 1" = 10'
SECTION 2/9 9
SCALE: 1/2" = 1'-0"
SECTION 3/9 9
SCALE: 1/2" = 1'-0"
TYPE "A"
SECTION 4/9 9
SCALE: 1/2" = 1'-0"
SECTION 5/9 9
SCALE: 1/2" = 1'-0"
TYPE "B"
SECTION 6/9 9
SCALE: 1/2" = 1'-0"
RETAINING WALL DETAIL
SCALE: 1/2" = 1'-0"
CHAIN BARRICADE DETAIL
SCALE: 1/4" = 1'-0"
NOTE:
Provide contraction joints 16' o.c. & 1/2" primoid expansion joints @ 48' o.c. max.
NOTE:
Wood warning posts shall be Dome cut 6" Dia. treated wood posts conforming to New Mexico State Highway Dept Specs. 3'-6" bury unless otherwise shown.
ALBUQUERQUE, NEW MEXICO
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II
PRINCETON PUMP STATION
PONDING AREA INLET
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO
SCALE: AS SHOWN
DRAWN: J.C.S. R.L.
CHECKED: P.T.
DATE: JANUARY, 1969
SHEET 9 OF 39



ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

PRINCETON PUMP STATION

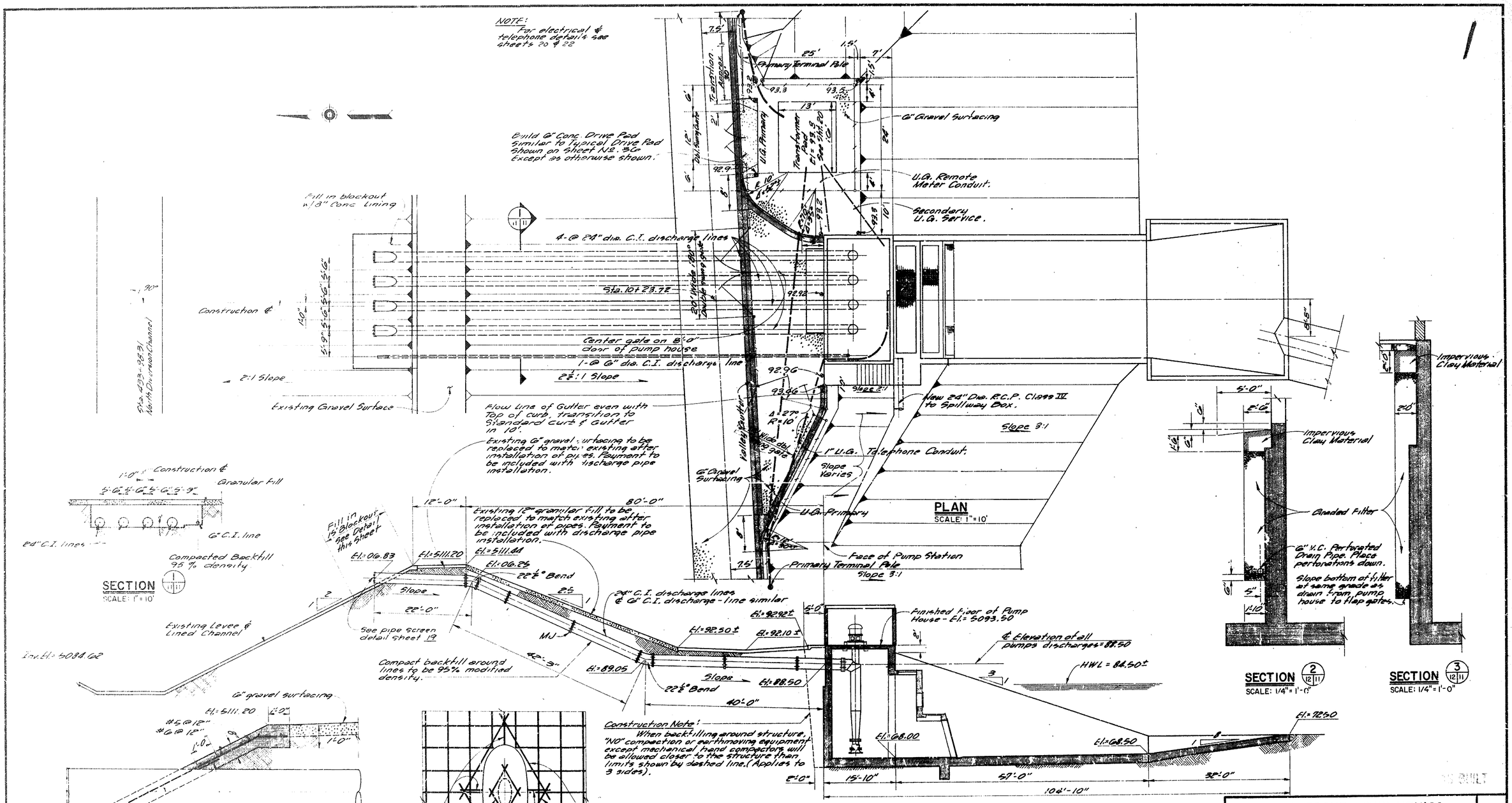
SITE DETAILS

WILLIAM MATOTAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN	DRAWN: B.D.MC	DATE: JAN., 1969
	CHECKED: J.A.A.	

SHEET 10 OF 39

NOTE:
For electrical & telephone details see sheets 20 & 22



PLAN
SCALE: 1" = 10'

SECTION 2/12|11
SCALE: 1/4" = 1'-0"

SECTION 3/12|11
SCALE: 1/4" = 1'-0"

SECTION
SCALE: 1" = 10'

SECTIONAL ELEVATION
SCALE: 1" = 10'

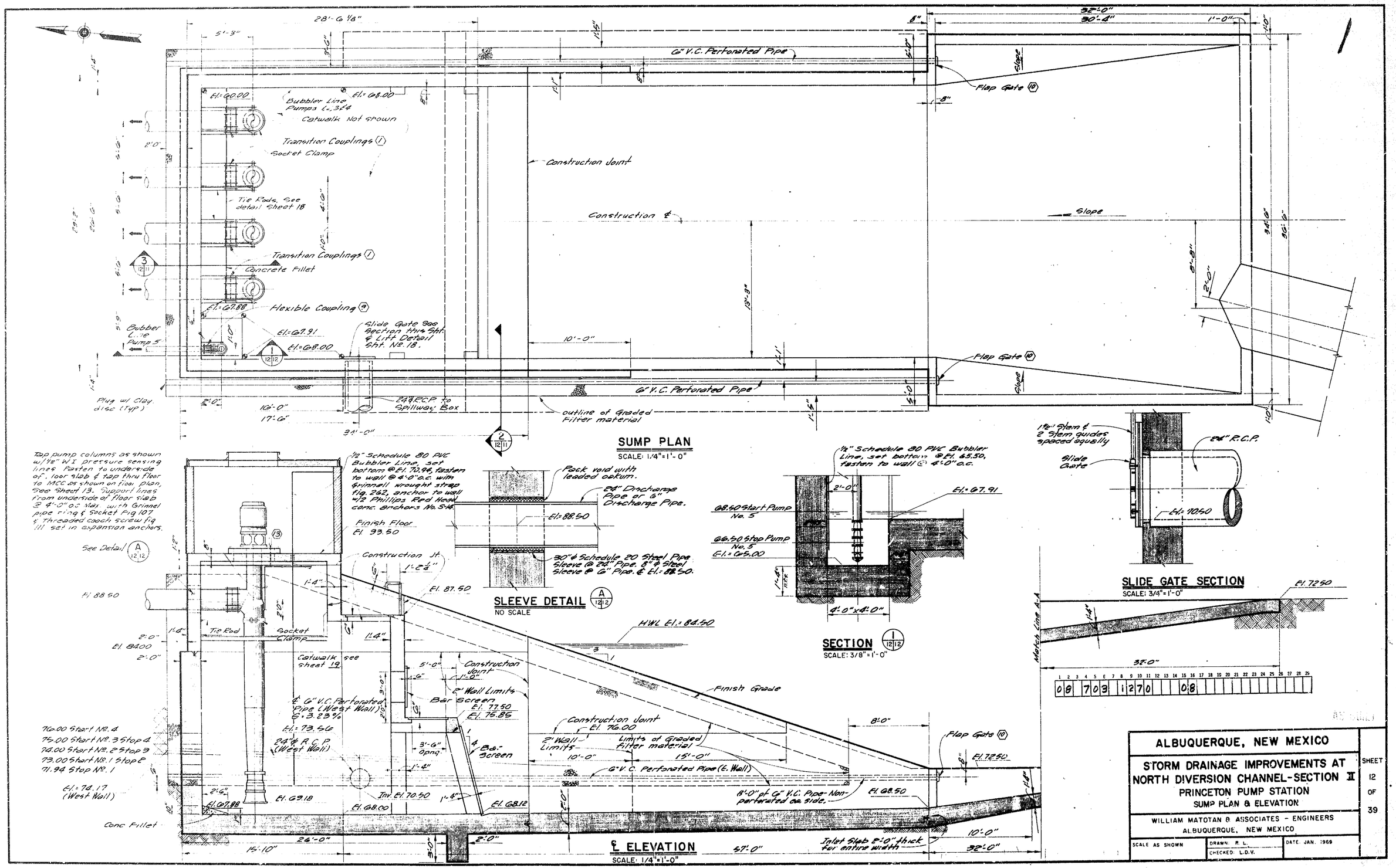
SECTION

PLAN

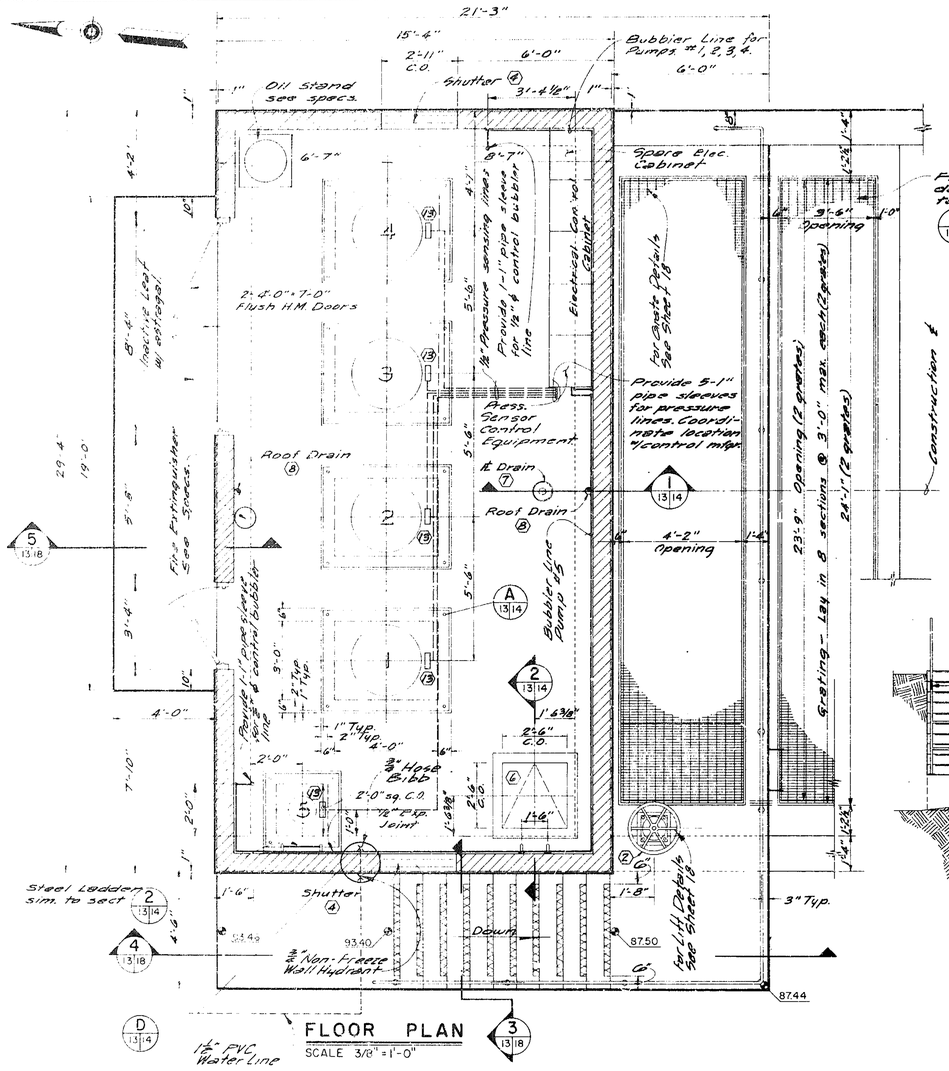
BLOCKOUT DETAIL
SCALE: 1/2" = 1'-0"

ALBUQUERQUE, NEW MEXICO	
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL - SECTION II PRINCETON PUMP STATION LAYOUT PLAN & SECTION	SHEET 11 OF 39
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS ALBUQUERQUE, NEW MEXICO	
SCALE: AS SHOWN / DRAWN: B.D.MC / CHECKED: L.D.V. / DATE: JAN., 1969	

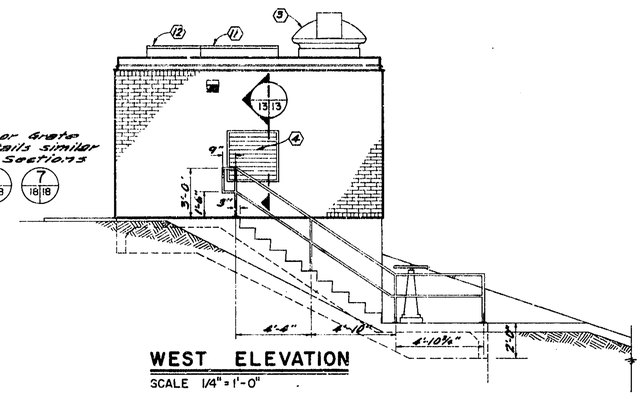
0 8 7 0 3 1 1 7 0 0 8



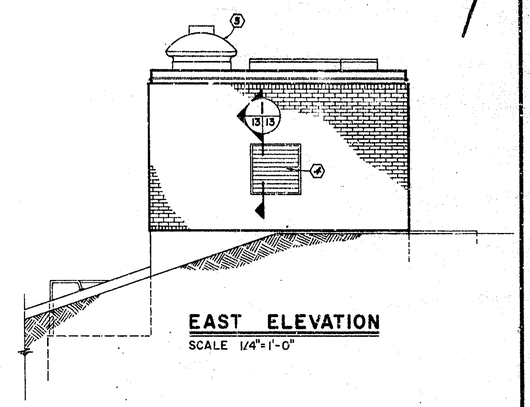
ALBUQUERQUE, NEW MEXICO	SHEET 12 OF 39
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II PRINCETON PUMP STATION SUMP PLAN & ELEVATION	
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS ALBUQUERQUE, NEW MEXICO	
SCALE AS SHOWN / DRAWN: R. L. / CHECKED: L.D.V. / DATE: JAN. 1969	



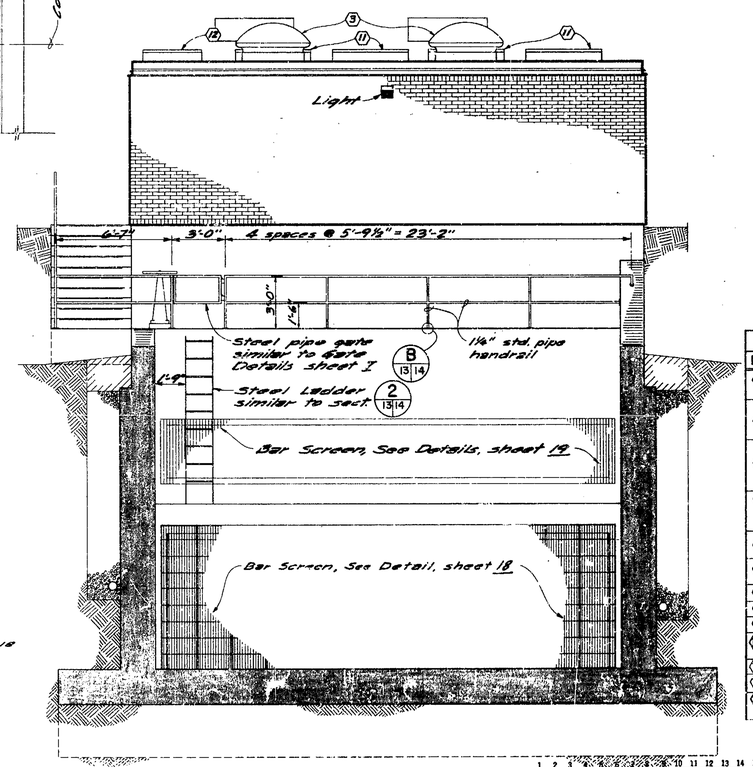
FLOOR PLAN
SCALE 3/8" = 1'-0"



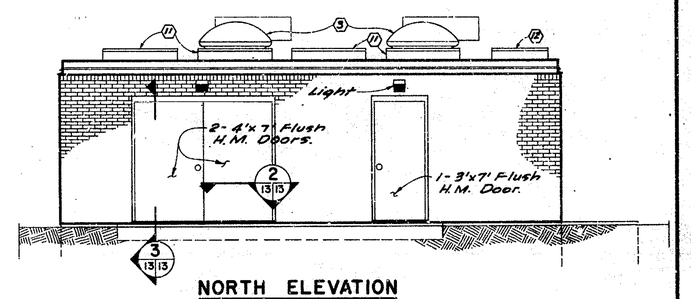
WEST ELEVATION
SCALE 1/4" = 1'-0"



EAST ELEVATION
SCALE 1/4" = 1'-0"



SOUTH ELEVATION
SCALE 1/4" = 1'-0"



NORTH ELEVATION
SCALE 1/4" = 1'-0"

EQUIPMENT SCHEDULE

No.	DESCRIPTION
1	Transition Couplings- "Dresser" Style 62, Coupling for nominal 24" steel to cast iron pipe & nominal 6" steel to cast iron pipe, or approved equal.
* 2	Slide Gate-"ARMCO" Medium Duty Slide Gate No.50-17, 24" gate w/spigot back, 1-1/2" bronze stem and HPB24 lift, or approved equal. Gate shall have bronze seating faces, fully machined contact surfaces, adjustable bronze wedges, cast iron slide, seat, & guide bars and bronze thrust nut.
3	Power Roof Supply Fan- curb-base mounted, V-belt drive, backdraft shutter, capacity to deliver 6750 cfm at 0.20 in. at 5000 ft. elevation; 1-1/2 HP, 1750 rpm, 460 volt, 60 cycle, three phase, totally enclosed, ball bearing motor. Furnish complete with unit mounted disconnect switch and bird screen. "Jenn Air" Model No.304AK (supply), or approved equal.
4	Motor Operated Shutter- Aluminum shutter blades w/felt strip seals for tight closing, interconnecting linkage, spring return damper motor mounted on frame. Nominal size 30 for use with 115 volt single phase current. "American Blower" 75PP304W, or approved equal.
5	Thermostat- Line voltage, cooling type set to energize the supply fan & open motor operated shutter at 100°F, with 60°-120° adjustable range. "Honeywell" T42B, or approved equal.
6	Access Door-"Bilco" Single Leaf, Type K-2 with removable key wrench topside and spoon handle deleted on bottomside.
7	Floor Drain- "Zurn" Z-500 cast iron drain for 3" pipe, or approved equal.
8	Roof Drain- "Zurn" ZG-180 cast iron drain w/12 sq.in. open area for 3" pipe, or approved equal.
9	Flexible Coupling- "Dresser" Style 38 for steel pipe Size 6" S (4 bolts) or approved equal.
10 *	Flap Gate-"Armco" Model 50C, 6" Gate w/spigot back, bronze seating faces, hinge bolts & bushings, and galvanized hinge bars, or approved equal.
11	Roof Hatch, "Milcor" single leaf, 5'-4"x4'-0" clear opening, or approved equal
12	Roof Hatch, "Milcor" single leaf, 3'-4"x3'-4" clear opening, or approved equal
13	Combination pressure and altitude gauge, "Ashcroft" type 1016. 0 to 100 psi, size 4 1/2", furnish with cut off cock.

* SEE NOTES SHEET 15

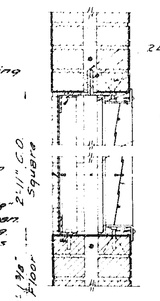
SEE SHEET 20 FOR HEATERS AND HEATER THERMOSTAT.

AS BUILT

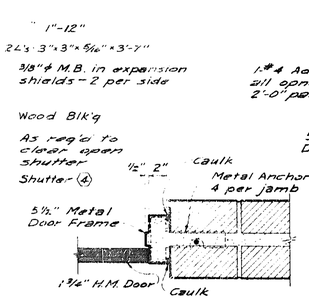
1 2 3	4 5 6 7 8 9	10 11 12	13 14 15	16 17 18	19 20 21	22 23 24	25 26 27	28 29
08	703	1370					08	

PUMP SCHEDULE

PUMP NUMBER	MAX STATIC LIFT	MAX TDH	MIN. GPM	MIN STATIC LIFT	MIN TDH	MAX. GPM	MAX RPM	MIN HP	MIN SOLIDS	VOLTS	PHASE	CYCLE	CONTROL	REMARKS
1, 2, 3, 4	33.5	36.7	13,000	22.3	25.5	15,750	860	150	1 7/8"	440	3	60	AUTO & MANUAL	20" SINGLE STAGE MIXED FLOW
5	41.0	43.7	175	-	-	-	1750	3	1/2"	440	3	60	AUTO & MANUAL	6" 4 STAGE SUMP PUMP 4" COL. W/6" DISCHARGE



SHUTTER SECTION
SCALE 1-1/2" = 1'-0"



JAMB SECTION
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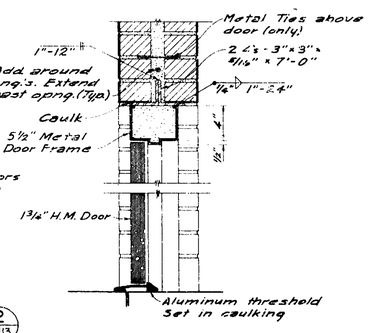


HEAD & THRESHOLD SECTION
SCALE 1-1/2" = 1'-0"

ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

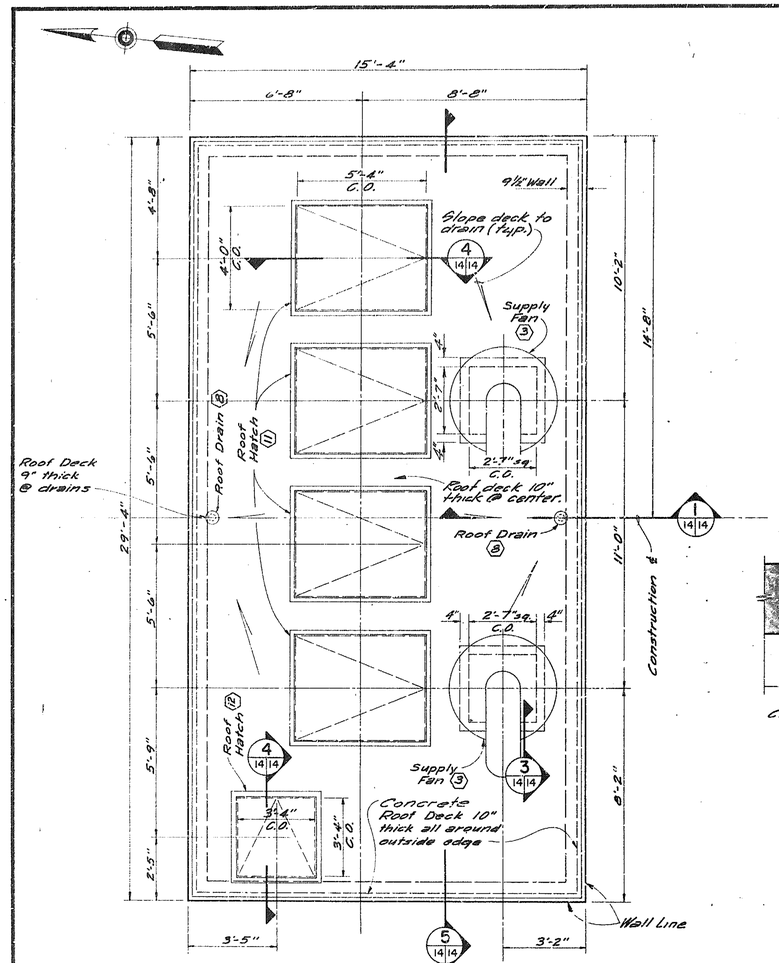
PRINCETON PUMP STATION

FLOOR PLAN & ELEVATIONS

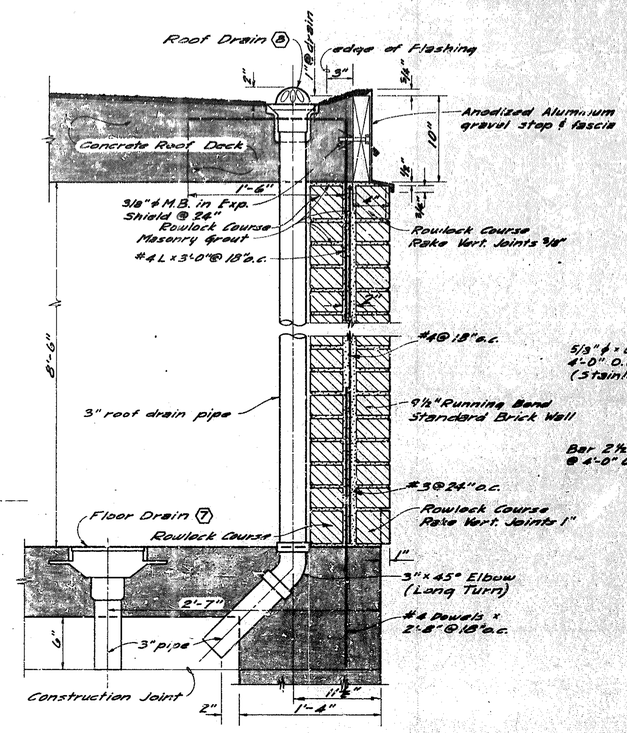
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN | DRAWN: J.C.S. | CHECKED: L.D.V. | DATE: JAN., 1969

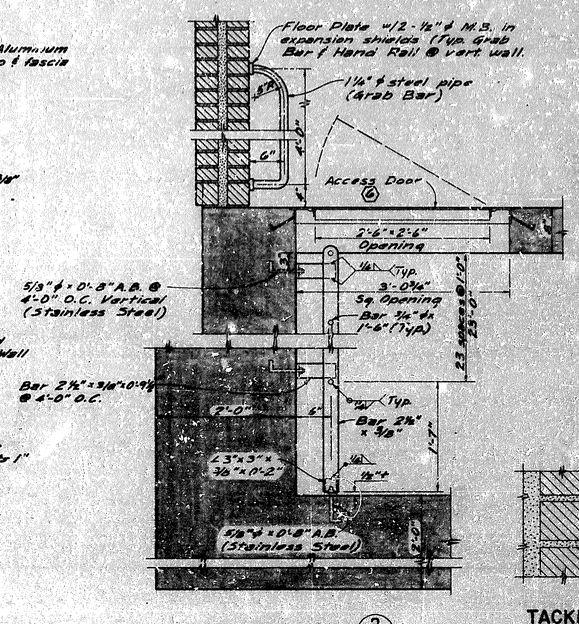
SHEET 13 OF 39



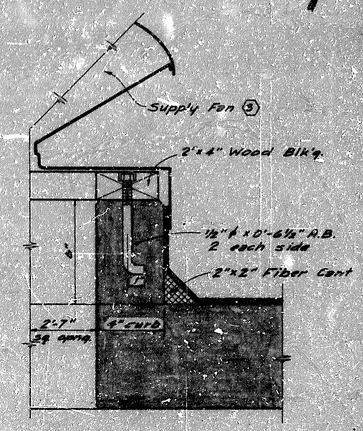
ROOF PLAN
SCALE 3/8" = 1'-0"



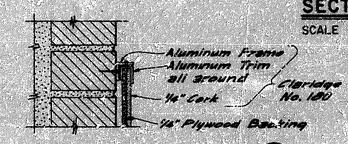
SECTION 1/14 1/13 14
SCALE 1 1/2" = 1'-0"



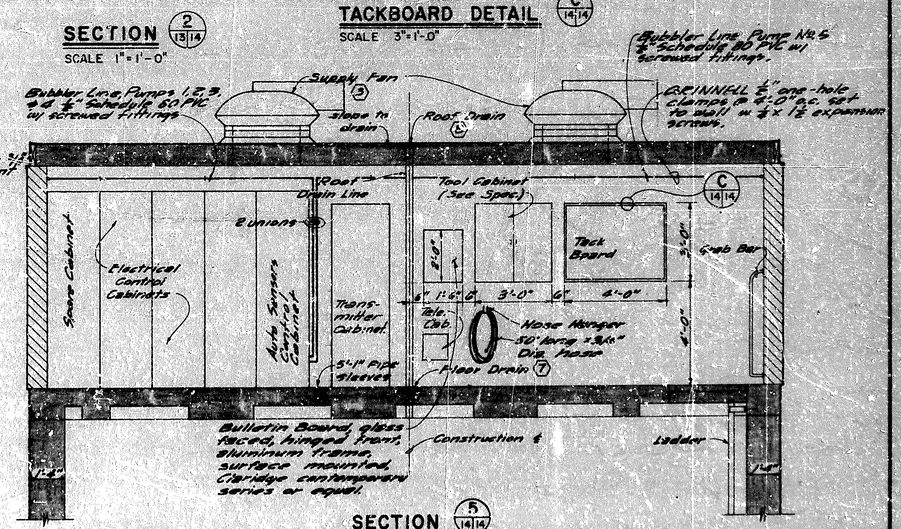
SECTION 2/13/14
SCALE 1" = 1'-0"



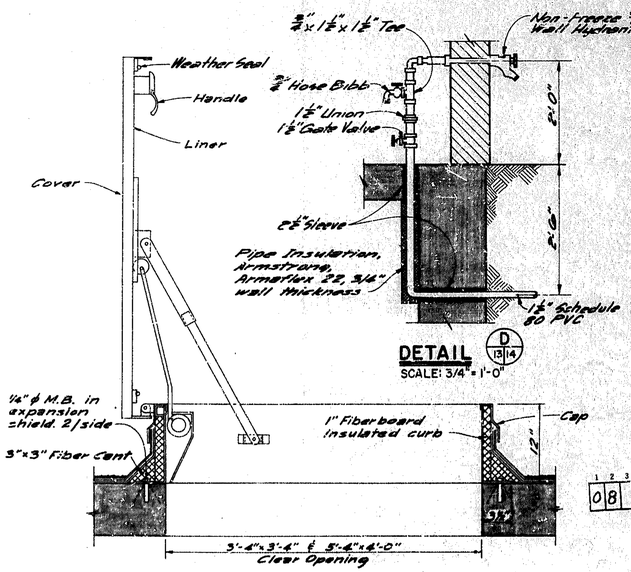
SECTION 3/14/14
SCALE 3" = 1'-0"



TACKBOARD DETAIL C/14/14
SCALE 3" = 1'-0"

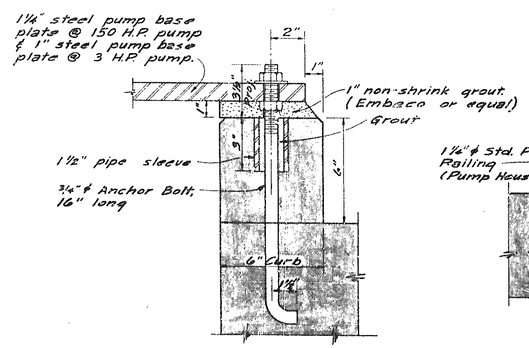


SECTION 5/14/14
SCALE 3/8" = 1'-0"

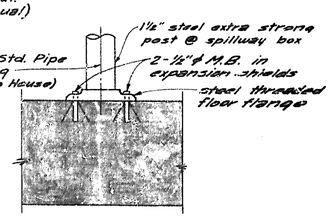


DETAIL D/13/14
SCALE: 3/4" = 1'-0"

SECTION 4/14/14
SCALE 1 1/2" = 1'-0"



DETAIL A/13/14
SCALE 3" = 1'-0"

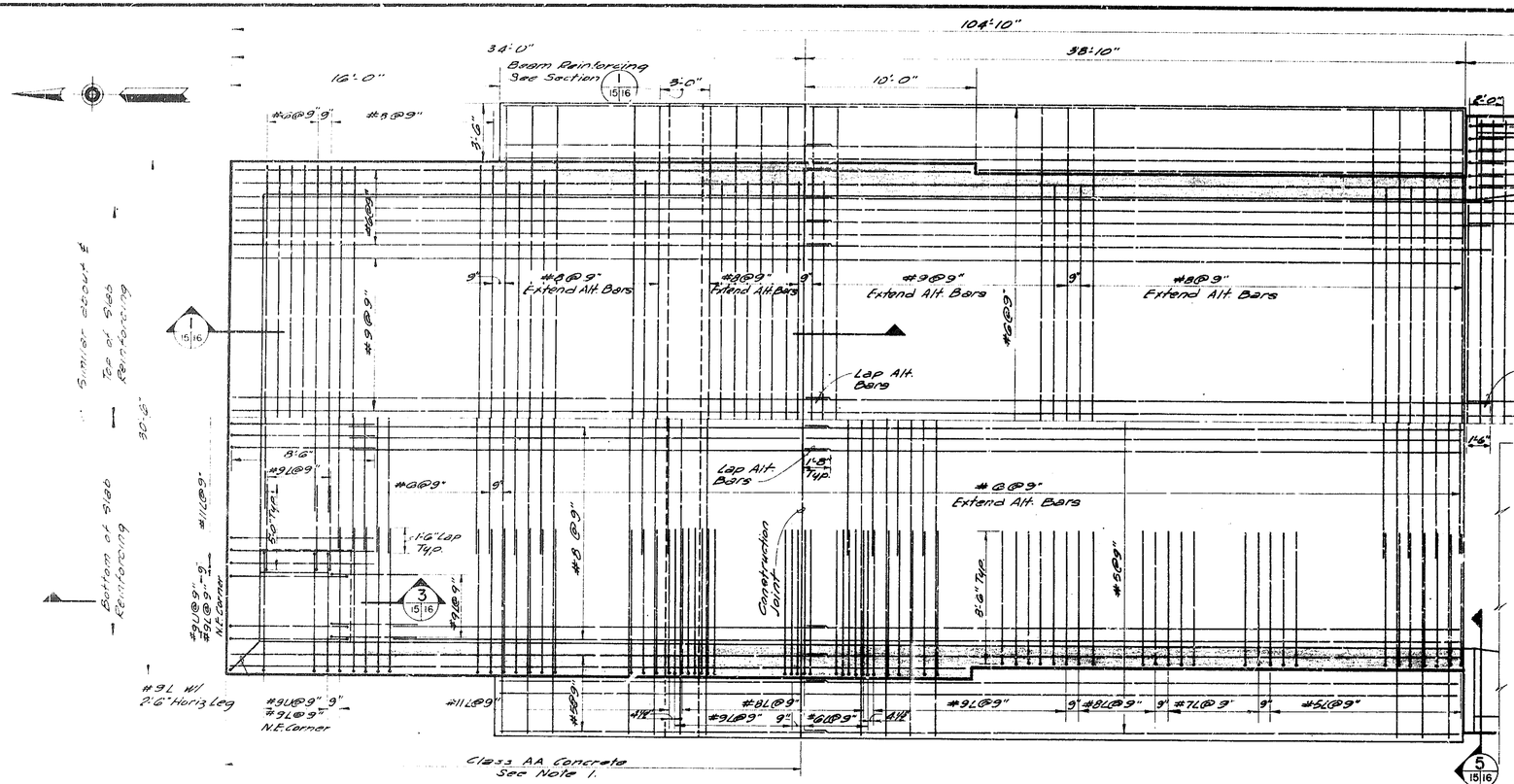


DETAIL B/7/14 B/13/14
SCALE 3" = 1'-0"

AS BUILT

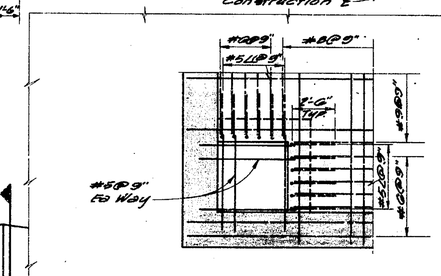
ALBUQUERQUE, NEW MEXICO	
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II PRINCETON PUMP STATION SECTIONS & DETAILS	SHEET 14 OF 39
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS ALBUQUERQUE, NEW MEXICO	
SCALE: AS SHOWN / DRAWN: J.C.S. / CHECKED: L.D.V. / DATE: JAN., 1969	

08 703 1470 08



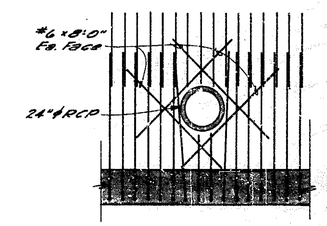
SUMP REINFORCING PLAN

SCALE: 1/4" = 1'-0"



PARTIAL SUMP PLAN TOP OF SLAB REINFORCING

SCALE: 1/4" = 1'-0"



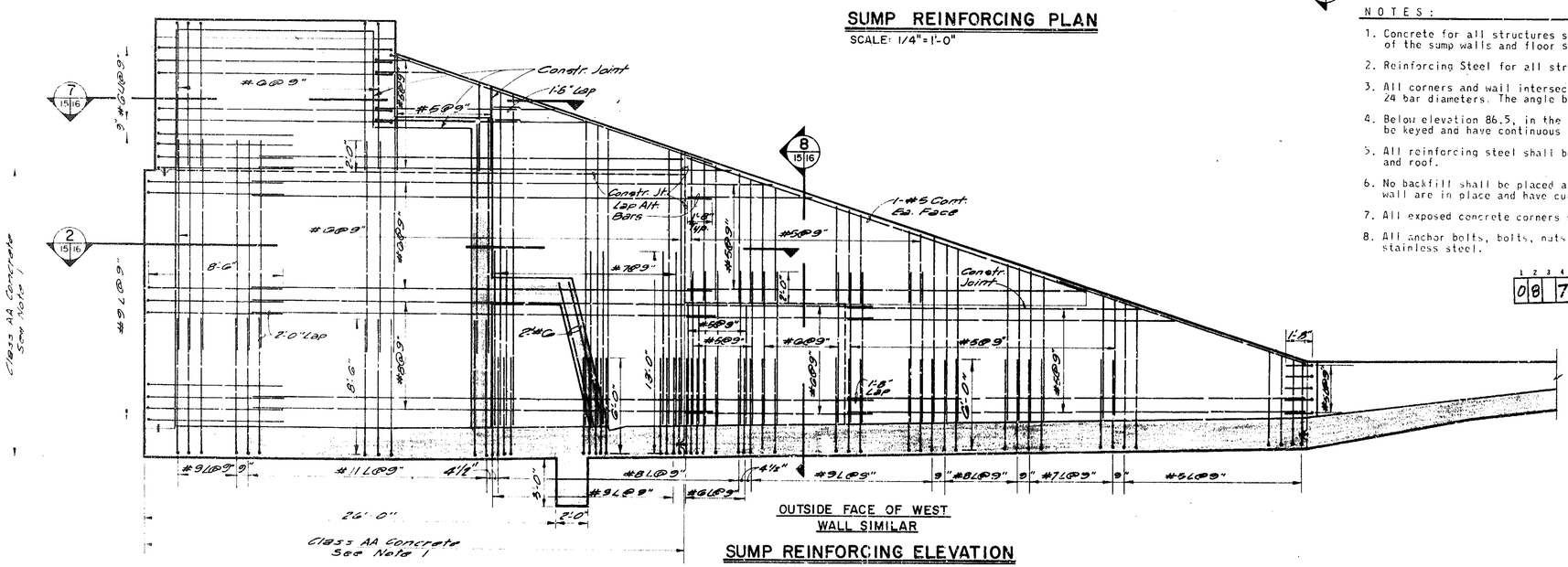
ELEVATION SOUTH WALL AT 24" RCP

SCALE 1/4" = 1'-0"

NOTES:

1. Concrete for all structures shall be class A (f'_c=5000 psi at 28 days) except that portion of the sump walls and floor shown which shall be class AA (f'_c=3750 psi at 28 days).
2. Reinforcing Steel for all structures shall have a minimum allowable tensile stress of 20,000 psi.
3. All corners and wall intersections not shown shall have angle bars which lap adjacent bars by 24 bar diameters. The angle bars shall be equal to the size of the smallest bars in the intersection.
4. Below elevation 86.5, in the sump, only those construction joints shown may be used and they shall be keyed and have continuous P.V.C. waterstops.
5. All reinforcing steel shall be placed exactly as shown with respect to position in the walls, floors, and roof.
6. No backfill shall be placed around the structure until the pumphouse floor and trashrack floor and wall are in place and have cured for 7 days.
7. All exposed concrete corners shall be chamfered 3/4".
8. All anchor bolts, bolts, nuts, and washers in all structures below elevation 84.50 shall be of stainless steel.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
0	8		7	0	3		1	5	7	0					0	8												



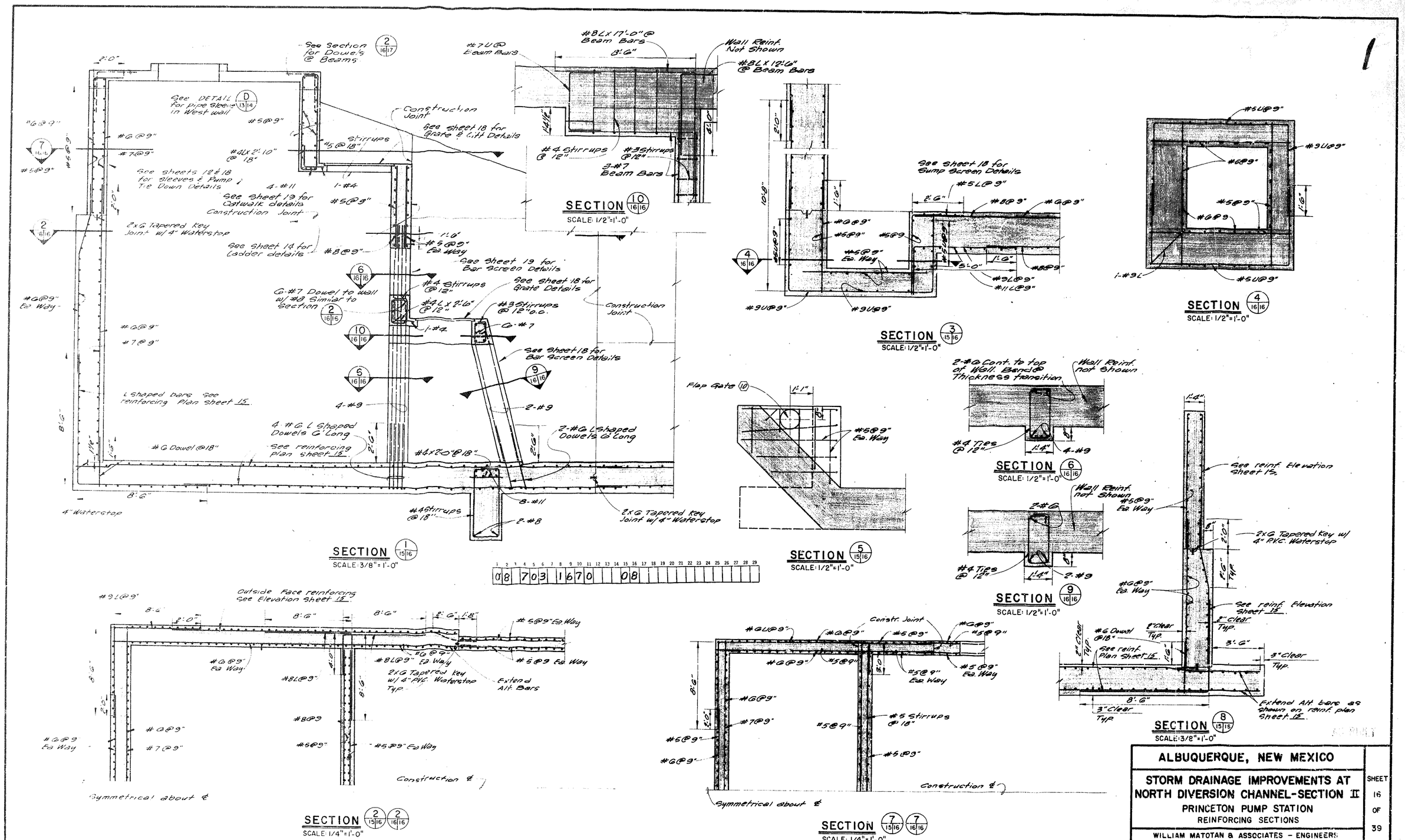
OUTSIDE FACE OF WEST WALL SIMILAR

SUMP REINFORCING ELEVATION OUTSIDE FACE OF EAST WALL

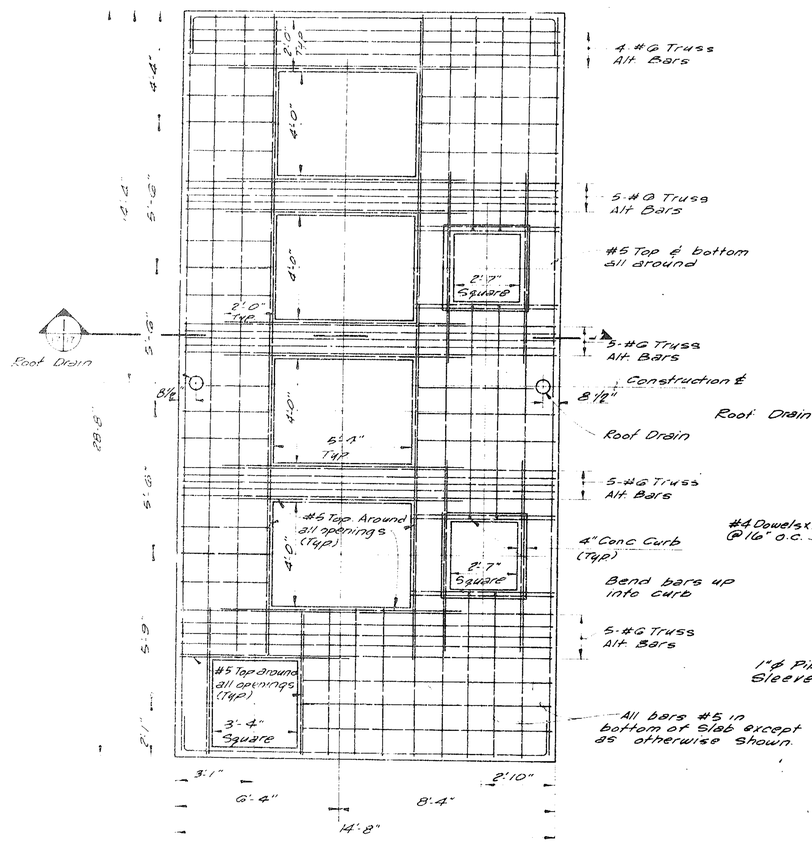
SCALE: 1/4" = 1'-0"

AS BUILT

ALBUQUERQUE, NEW MEXICO		SHEET 15 OF 39
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II PRINCETON PUMP STATION REINFORCING PLANS & ELEVATION		
WILLIAM MATOTAN & ASSOCIATES – ENGINEERS ALBUQUERQUE, NEW MEXICO		
SCALE: AS SHOWN	DRAWN: R. L. CHECKED: P.T.	DATE: JANUARY, 1969

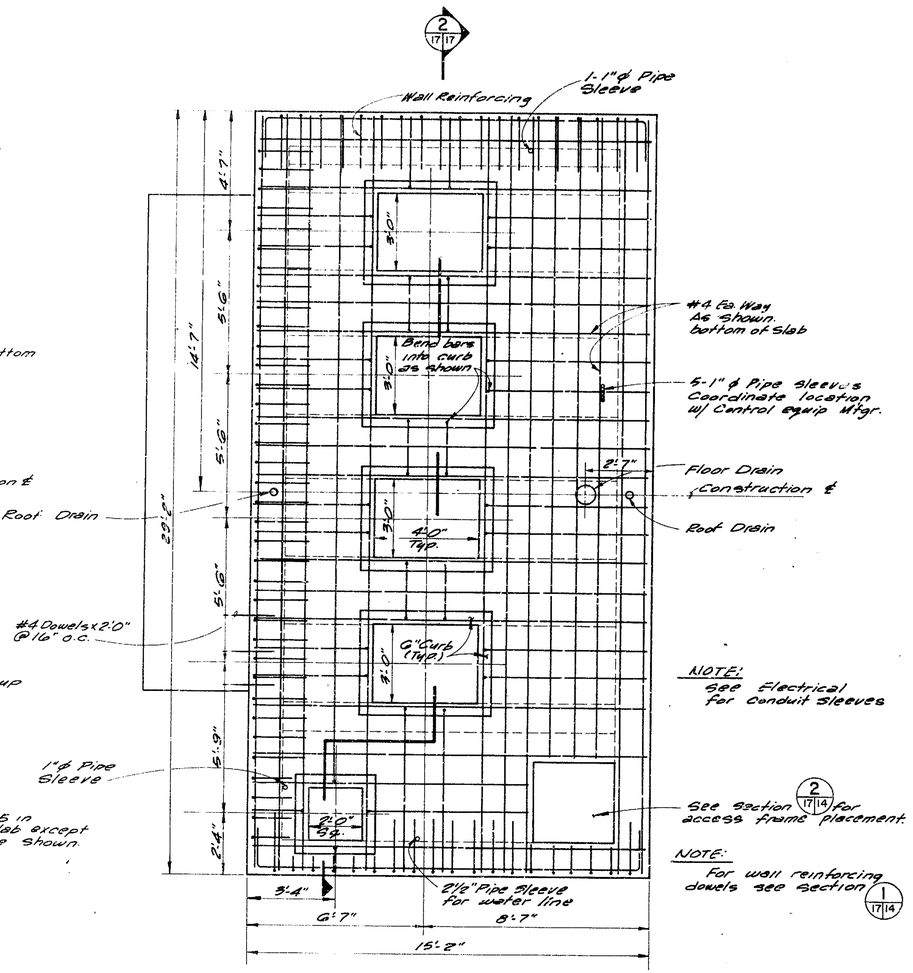


ALBUQUERQUE, NEW MEXICO	
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II PRINCETON PUMP STATION REINFORCING SECTIONS	SHEET 16 OF 39
WILLIAM MATOTAN & ASSOCIATES – ENGINEERS ALBUQUERQUE, NEW MEXICO	
SCALE: AS SHOWN / DRAWN: R. L. / CHECKED: P. T. / DATE: JANUARY 1969	



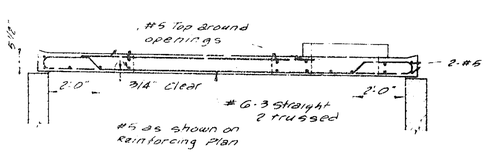
ROOF REINFORCING PLAN

SCALE 3/8" = 1'-0"



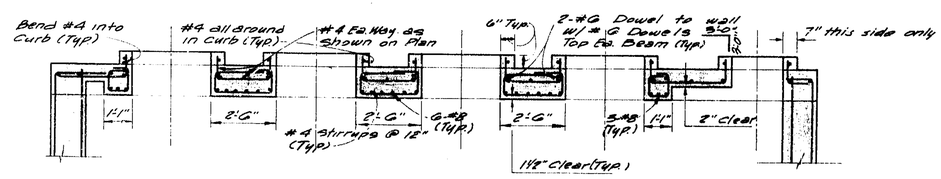
FLOOR REINFORCING PLAN

SCALE: 3/8" = 1'-0"



SECTION 1/17/17

SCALE 3/8" = 1'-0"



SECTION 2/17/17

SCALE: 3/8" = 1'-0"

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0	8	7	0	3		1	7	7	0					0	8													

AS BUILT

ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL - SECTION II

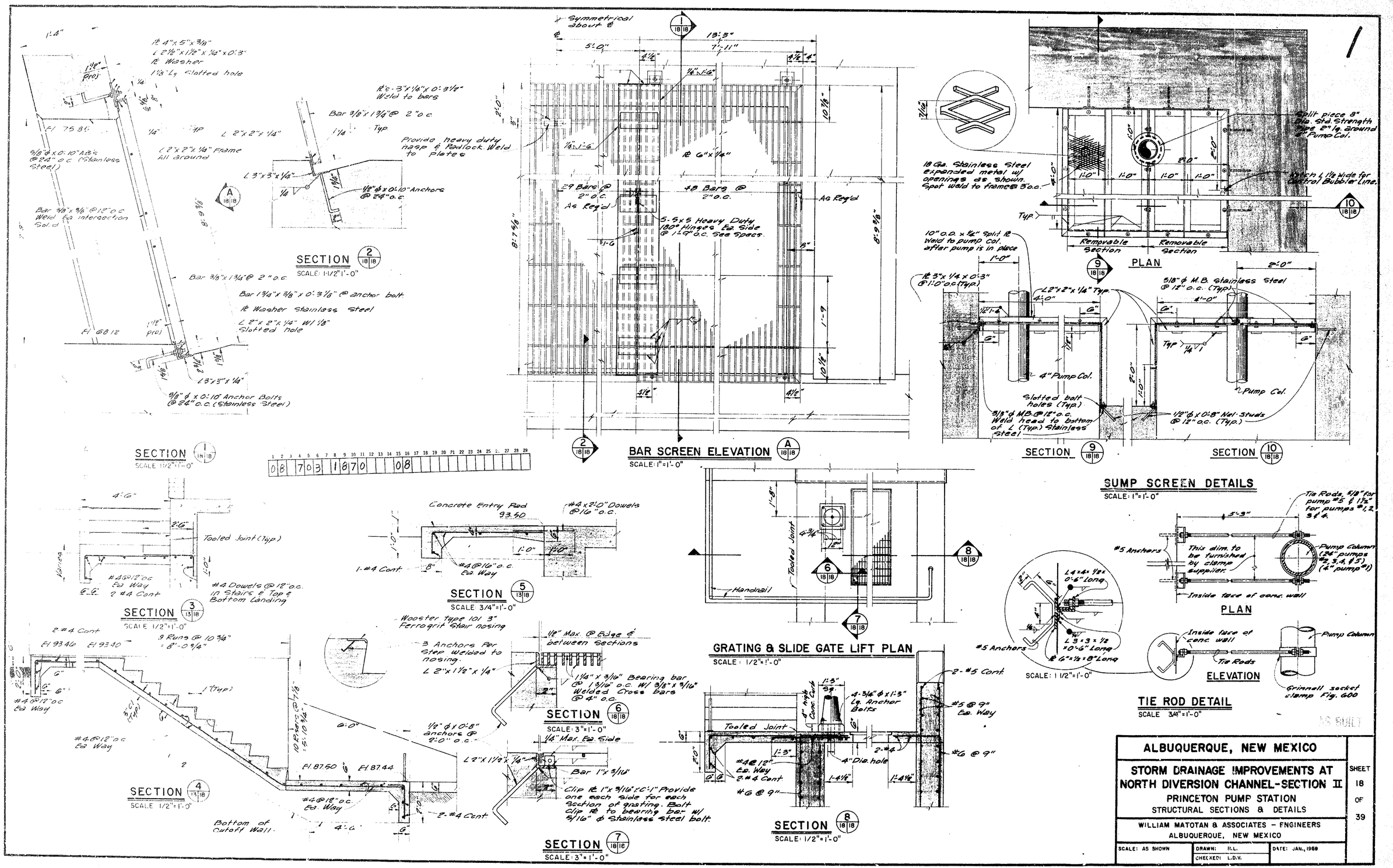
PRINCETON PUMP STATION

REINFORCING PLANS & SECTIONS

WILLIAM MATOTAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN	DRAWN: R.L.	DATE: JANUARY 1969
	CHECKED: P.T.	

SHEET 17 OF 39



ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

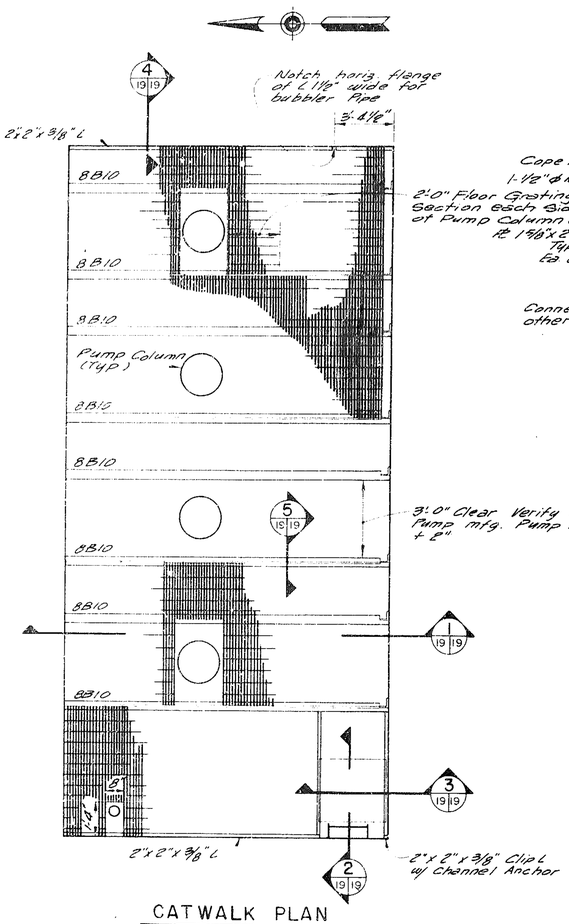
PRINCETON PUMP STATION

STRUCTURAL SECTIONS & DETAILS

WILLIAM MATOTAN & ASSOCIATES – ENGINEERS
ALBUQUERQUE, NEW MEXICO

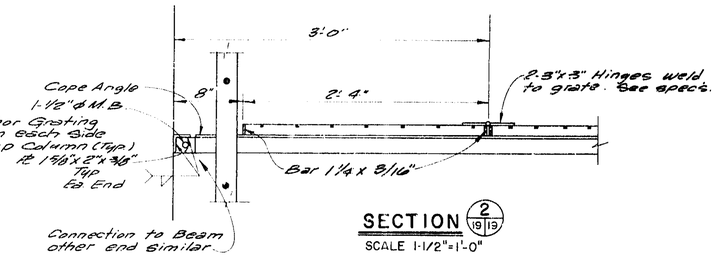
SCALE: AS SHOWN	DRAWN: H.L.	DATE: JAN., 1969
	CHECKED: L.D.V.	

SHEET 18 OF 39



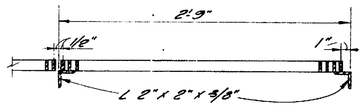
CATWALK PLAN

SCALE: 3/8" = 1'-0"



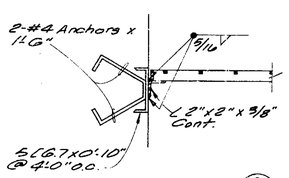
SECTION 2

SCALE 1-1/2" = 1'-0"



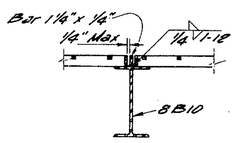
SECTION 3

SCALE: 1-1/2" = 1'-0"



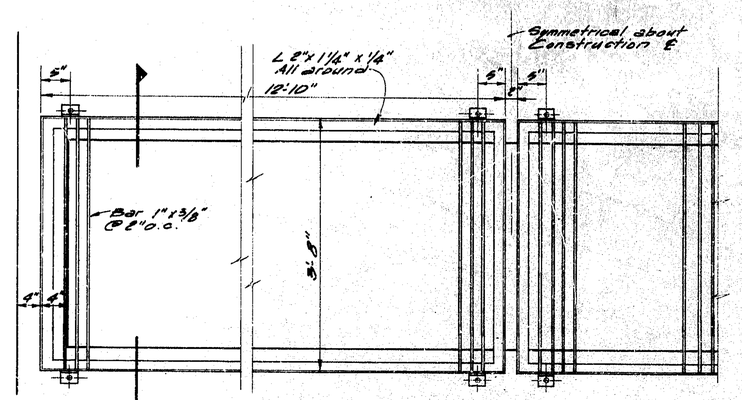
SECTION 4

SCALE: 1-1/2" = 1'-0"



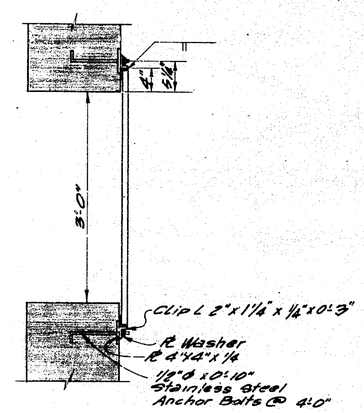
SECTION 5

SCALE: 1-1/2" = 1'-0"



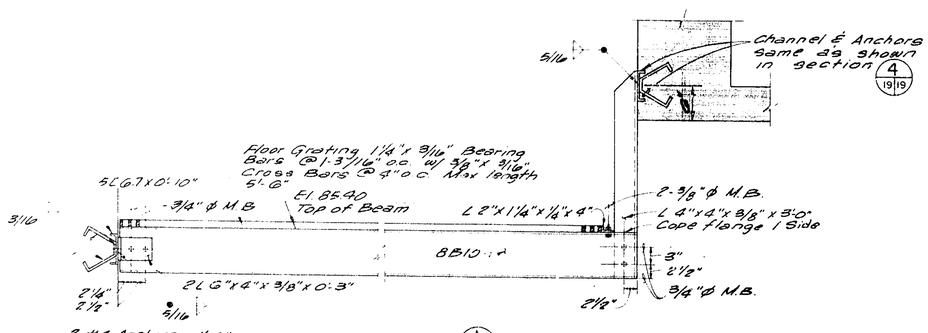
BAR SCREEN ELEVATION

SCALE: 1" = 1'-0"



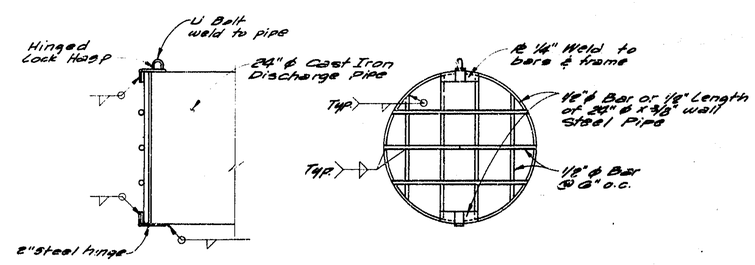
SECTION 6

SCALE: 1" = 1'-0"



SECTION 1

SCALE: 1" = 1'-0"



PIPE SCREEN DETAIL

SCALE: 1" = 1'-0"

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
0	8		7	0	3		1	9	7	0				0	8													

ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPPOVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

PRINCETON PUMP STATION

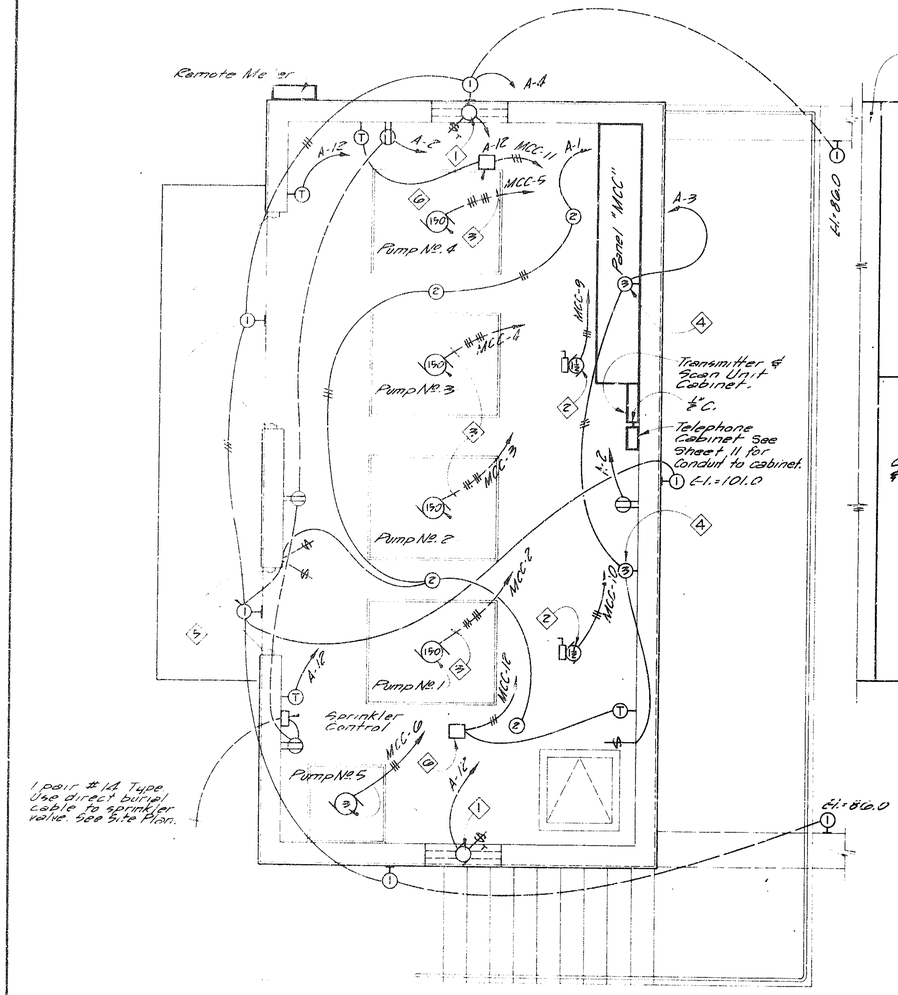
STRUCTURAL SECTIONS & DETAILS

WILLIAM MATOTAN & ASSOCIATES – ENGINEERS

ALBUQUERQUE, NEW MEXICO

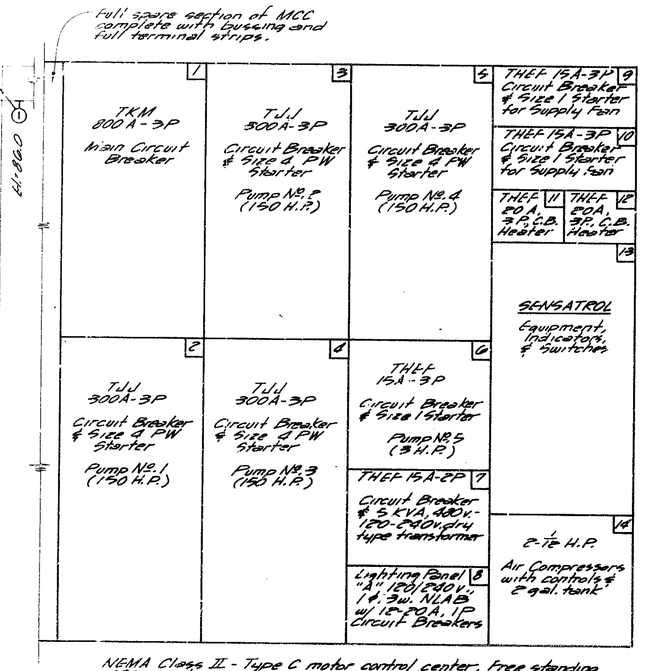
SCALE: AS SHOW	DRAWN: R.L.	DATE: JANUARY 1969
	CHECKED: P.T.	

SHEET 19 OF 39



ELECTRICAL PLAN

SCALE: 3/8" = 1'-0"



NEMA Class II - Type C motor control center, free standing 480v., 3 ϕ, 3w., 800 amp. horizontal & vertical busses braced for 25,000 amps. Master terminal blocks at bottom, front access only. 120 volt control power - cct. A-12.

PANEL "MCC"

NOTES:

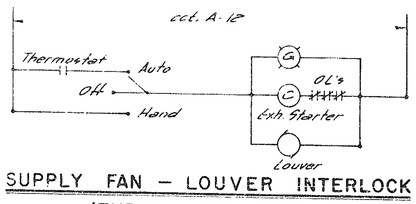
1. 115v. motor operated louver.
2. Supply fan on roof. Interlock with louvers - Note 1.
3. G # 4/0 THW in 3"C.
4. On wall - 3'-0" below floor.
5. This fixture only, to have "NL" 7C 7.1W night light, separately wired (not switched).
6. CHROMALOX #300 12-G w/ CR-330 contactor and # MHT-473L-10.7 thermostat.

FIXTURE SCHEDULE

No.	DESCRIPTION	MOUNTING	LAMPS
1	HOLOPHANE # 412-120-CG (See Note)	Wall-up 7'-9"	1-100w. G.E. Deluxe White M.V.
2	ART METAL #2686-2	Clg. Surface	1-200 IF
3	ART METAL #2681-2	Wall	1-200 IF

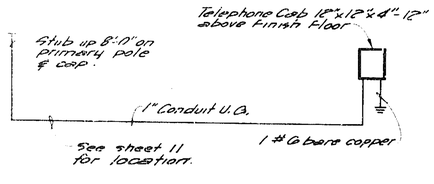
SYMBOL LEGEND

SYMBOL	DESCRIPTION
	Ceiling outlet & fixture, incandescent.
	Bracket outlet & fixture.
	Single pole wall switch.
	Thermal switch.
	Duplex convenience outlet, up 12" or as noted.
	Thermostat, up 5'-6".
	Motor.
	Safety Switch.
	Branch circuit in walls or ceiling.
	Branch circuit in walls or under floor.
	Home Run.

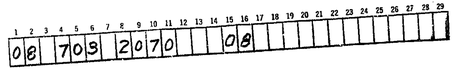


SUPPLY FAN - LOUVER INTERLOCK

(TYPICAL OF TWO)



TELEPHONE RISER



ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION I

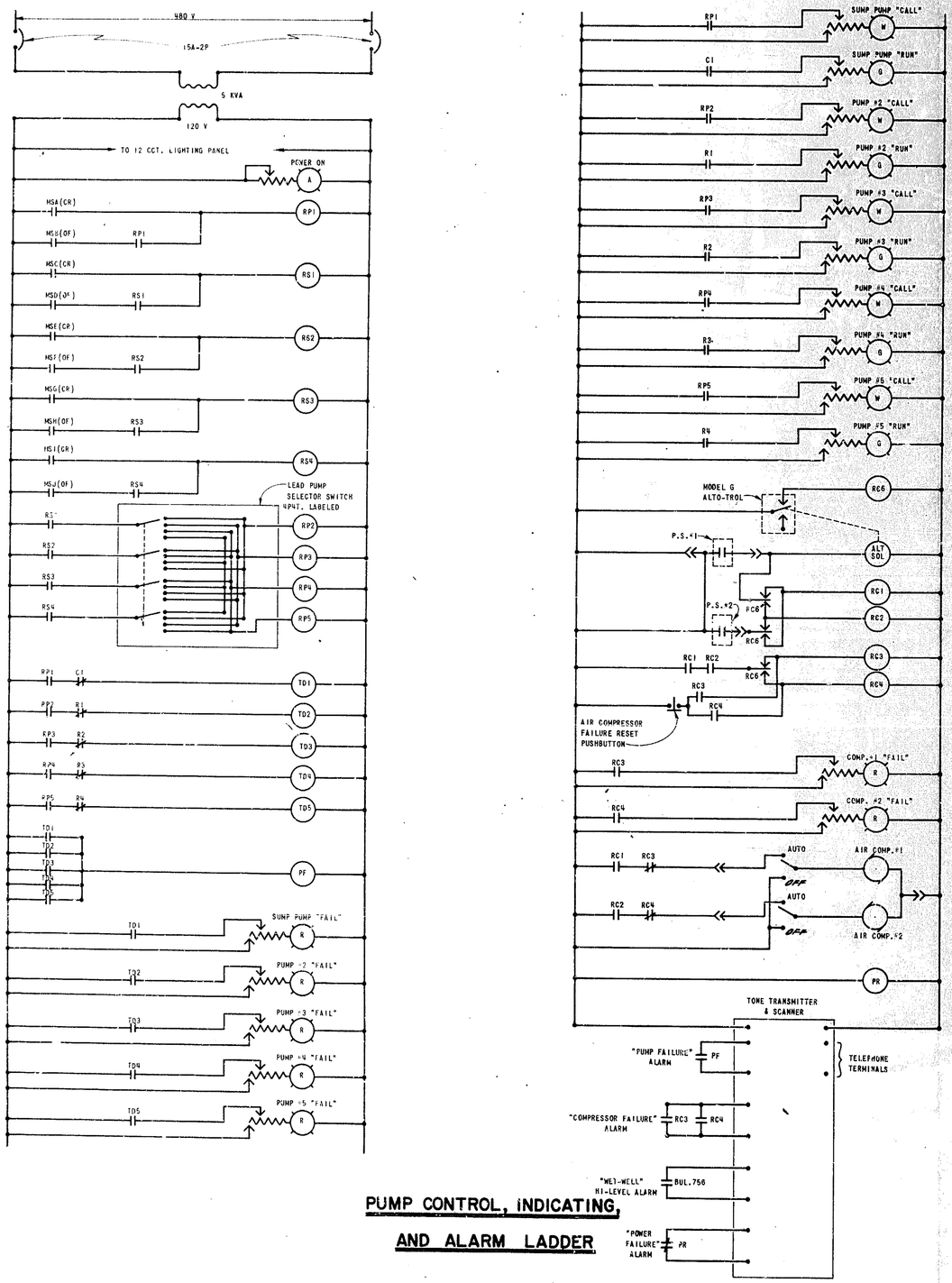
PRINCETON PUMP STATION

ELECTRICAL INTERIOR

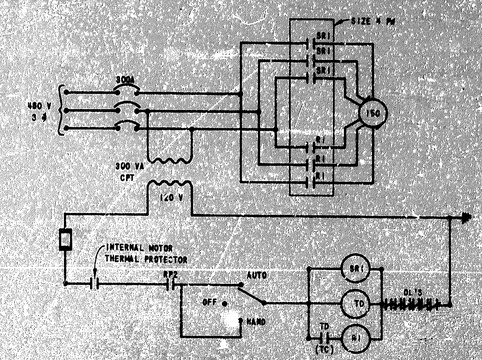
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN	DRAWN: B.D.MC	DATE: JAN., 1969
	CHECKED: W.D.P.	

SHEET 20 OF 39

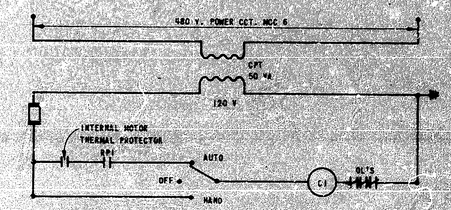


PUMP CONTROL, INDICATING, AND ALARM LADDER



PUMP Nº. 2 CONTROL

TYPICAL OF 4 (150 HP PUMPS)



SUMP PUMP (Nº.1) CONTROL

08 -03 2170 08

AS BUILT

ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

PRINCETON PUMP STATION

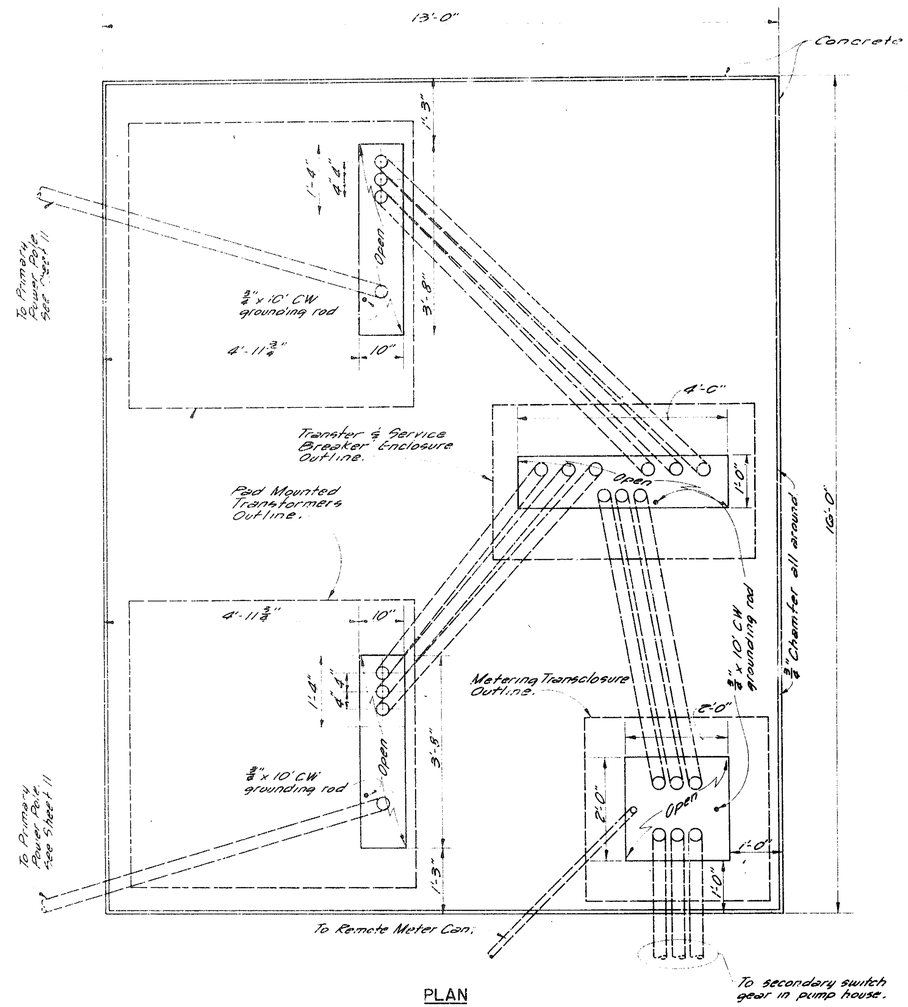
ELECTRICAL INTERIOR

WILLIAM MATOTAN & ASSOCIATES - ENGINEERS

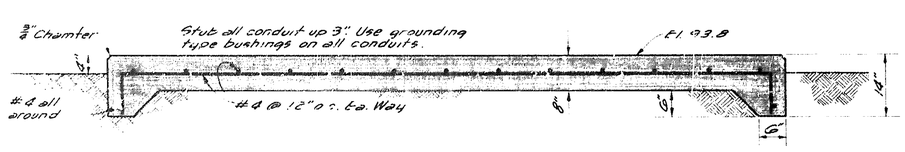
ALBUQUERQUE, NEW MEXICO

SCALE: NONE | DRAWN: B.D.M. | CHECKED: W.D.P. | DATE: FEB. 1969

SHEET 21 OF 39



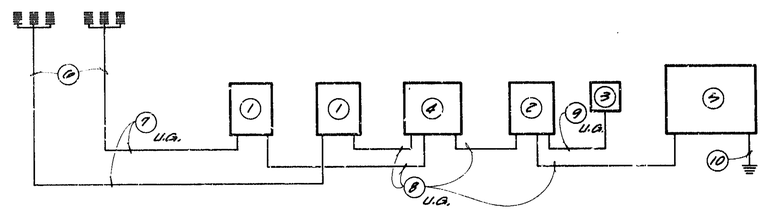
PLAN



SECTION

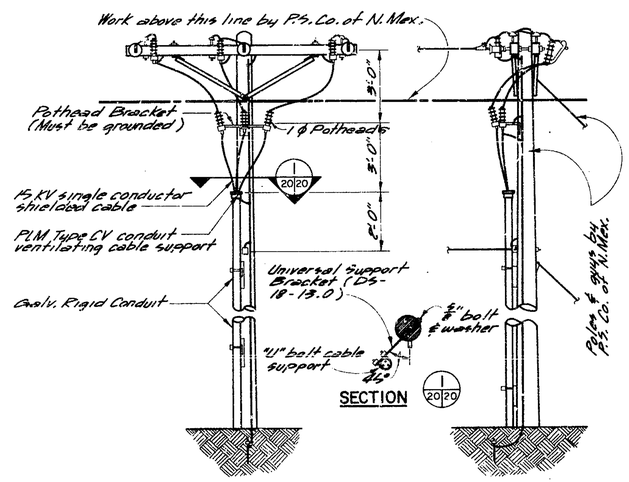
SUBSTATION DETAIL

SCALE: 3/4" = 1'-0"



POWER RISER

All items contractor furnished & installed.

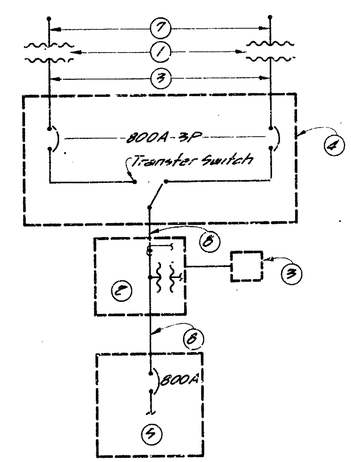


PRIMARY RISER DETAILS

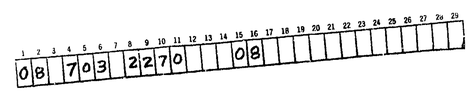
NOT TO SCALE

NOTES:

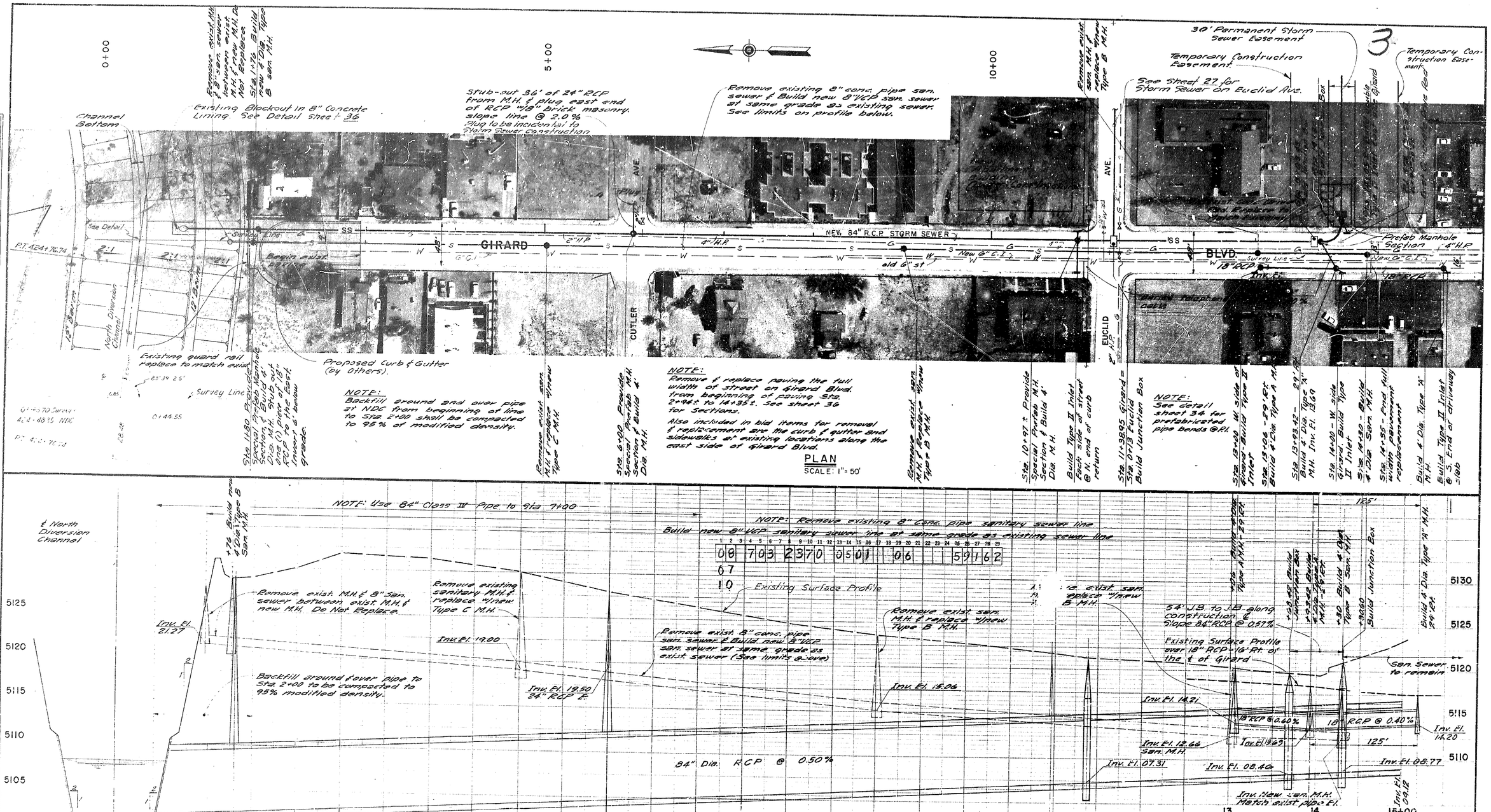
1. Pad mounted transformer. 500 KVA, G.E. # 7216UB0388. 12470v. - 277/480v., 3ϕ. Type HT with normal accessories.
2. L.M. Metering transclosure. L.M. # DU15E2.
3. Remote meter enclosure (triplex can DS-13-23.0) mounted on pump house wall.
4. Outdoor, weatherproof switchgear enclosure approximately 60" long, 30" deep, 60" high, with 2-800amp, 3p G.E. THKM frame molded case circuit breakers; and 1-800amp, 3p., mechanically held automatic transfer switch with the following features: 1 second time delay for transfer; 95% pickup & 90% dropout; Close Differential Relay protection on normal; test operation switch; Pilot lights to indicate "normal" and "emergency" positions.
5. Pumping station switchgear, Panel "MCC".
6. Primary riser on power pole - see detail this sheet.
7. 3 #2, 15 KV shielded & 1 #2 bare copper in 4" concrete encased fiberduct. Risers on pole & in substation to be 4" rigid steel.
8. 3 runs of 3 1/2" C. each w/ 3-350 mcm THW. AL.
9. 1" empty conduit.
10. 1 #2/0 bare copper in 1" C. to 4-3/4" x 10'-0" CW ground rods.

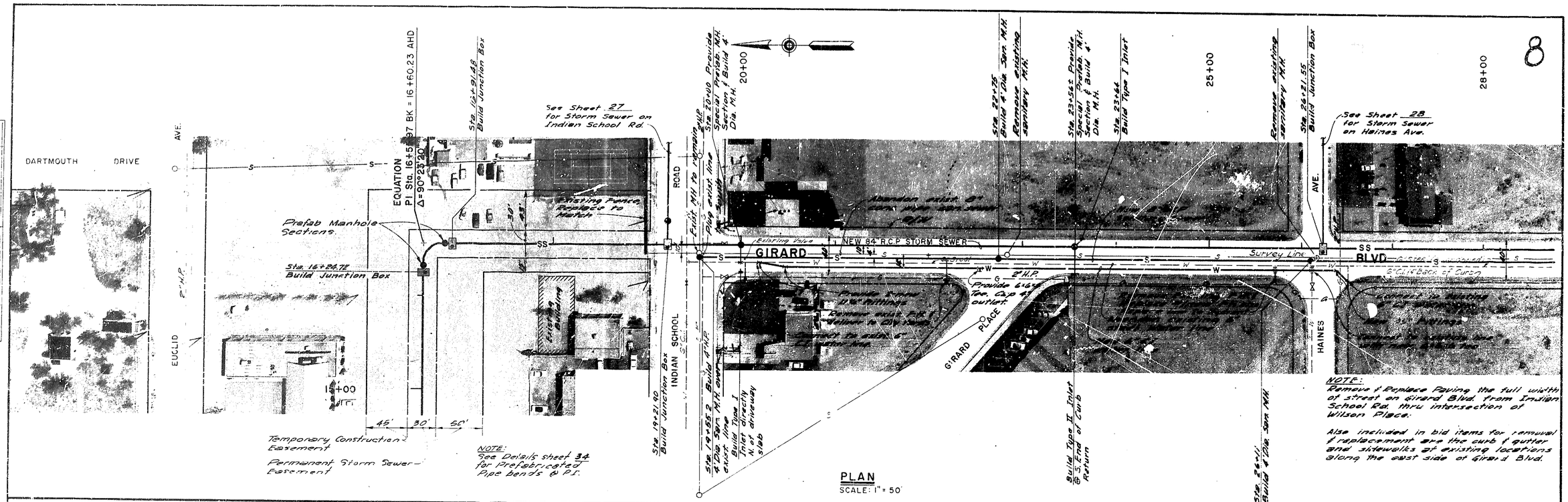


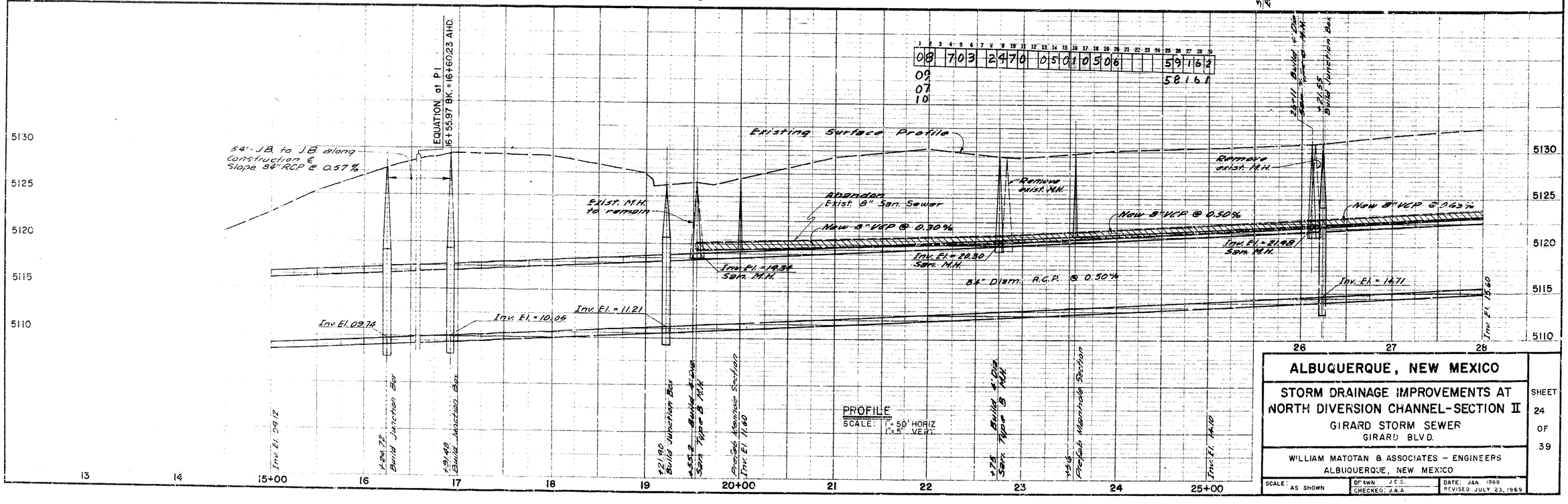
ONE LINE DIAGRAM



ALBUQUERQUE, NEW MEXICO		SHEET 22 OF 39
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II PRINCETON PUMP STATION ELECTRICAL EXTERIOR		
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS ALBUQUERQUE, NEW MEXICO		
SCALE: AS SHOWN	DRAWN: B.D.MG CHECKED: P.T.	DATE: JAN., 1969


PLAN
SCALE: 1" = 50'
GIRARD BLVD.
CUTLER AVE.
EUCLID AVE.
NEW 84" R.C.P. STORM SEWER
Channel Bottom
Existing Blockout in 8" Concrete Lining. See Detail sheet # 36
Stub-out 36' of 24" RCP from M.H. & plug east end of RCP w/8" brick masonry. slope line @ 2.0%
Plug to be inspected fall of Storm Sewer Construction
Remove existing 8" conc. pipe san. sewer & Build new 8" VCP san. sewer at same grade as existing sewer. See limits on profile below.
30' Permanent Storm Sewer Easement
Temporary Construction Easement
See Sheet 27 for Storm Sewer on Euclid Ave.
Temporary Construction Easement
Prefab Manhole Section
Existing guard rail replace to match exist.
Proposed Curb & Gutter (by Others).
NOTE: Backfill around and over pipe 2' NDC from beginning of line to Sta 2+00 shall be compacted to 95% of modified density.
NOTE: Remove & replace paving the full width of street on Girard Blvd. from beginning of paving Sta. 2+94± to 14+35±. See sheet 36 for Sections.
Also included in bid items for removal & replacement are the curb & gutter and sidewalks at existing locations along the east side of Girard Blvd.
NOTE: See detail sheet 34 for prefabricated pipe bends @ P.I.
NOTE: Use 84" Class IV Pipe to Sta 7+00
NOTE: Remove existing 8" Conc. pipe sanitary sewer line
Build new 8" VCP sanitary sewer line at same grade as existing sewer line
Existing Surface Profile
Remove exist. M.H. & 8" San. sewer between exist. M.H. & new M.H. Do Not Replace.
Remove existing sanitary M.H. & replace w/new Type C M.H.
Remove exist. 8" conc. pipe san. sewer & Build new 8" VCP san. sewer at same grade as exist. sewer (See limits above)
Remove exist. San. M.H. & replace w/new Type B M.H.
Backfill around sewer pipe to Sta. 2+00 to be compacted to 95% modified density.
Existing Surface Profile over 18" RCP 16' Rt. of the ℄ of Girard
84" J.B. to J.B. along construction ℄ Slope 84" RCP @ 0.67%
San. Sewer to remain
84" Dia. RCP @ 0.50%
18" RCP @ 0.60%
18" RCP @ 0.40%
8" Concrete Lining
Inv. El. 5033.85
Inv. El. 02.12
Inv. El. 04.12
Inv. El. 06.62
Inv. El. 08.77
Inv. New San. M.H. Match exist. pipe Fl.
PROFILE
SCALE 1" = 50' HORIZ.
1" = 5' VERT.
ALBUQUERQUE, NEW MEXICO
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II
GIRARD STORM SEWER
GIRARD BLVD.
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO
SCALE: AS SHOWN
DRAWN: J.C.S.
CHECKED: J.A.A.
DATE: JUN. 1969
REVISED: JULY 23, 1969
SHEET 23 OF 39





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08		7	0	3		2	4	7	0		0	5	0	1	0	5	0	6						5	9	1	6	2	
09																									5	8	1	6	1	
07																														
10																														

ALBUQUERQUE, NEW MEXICO

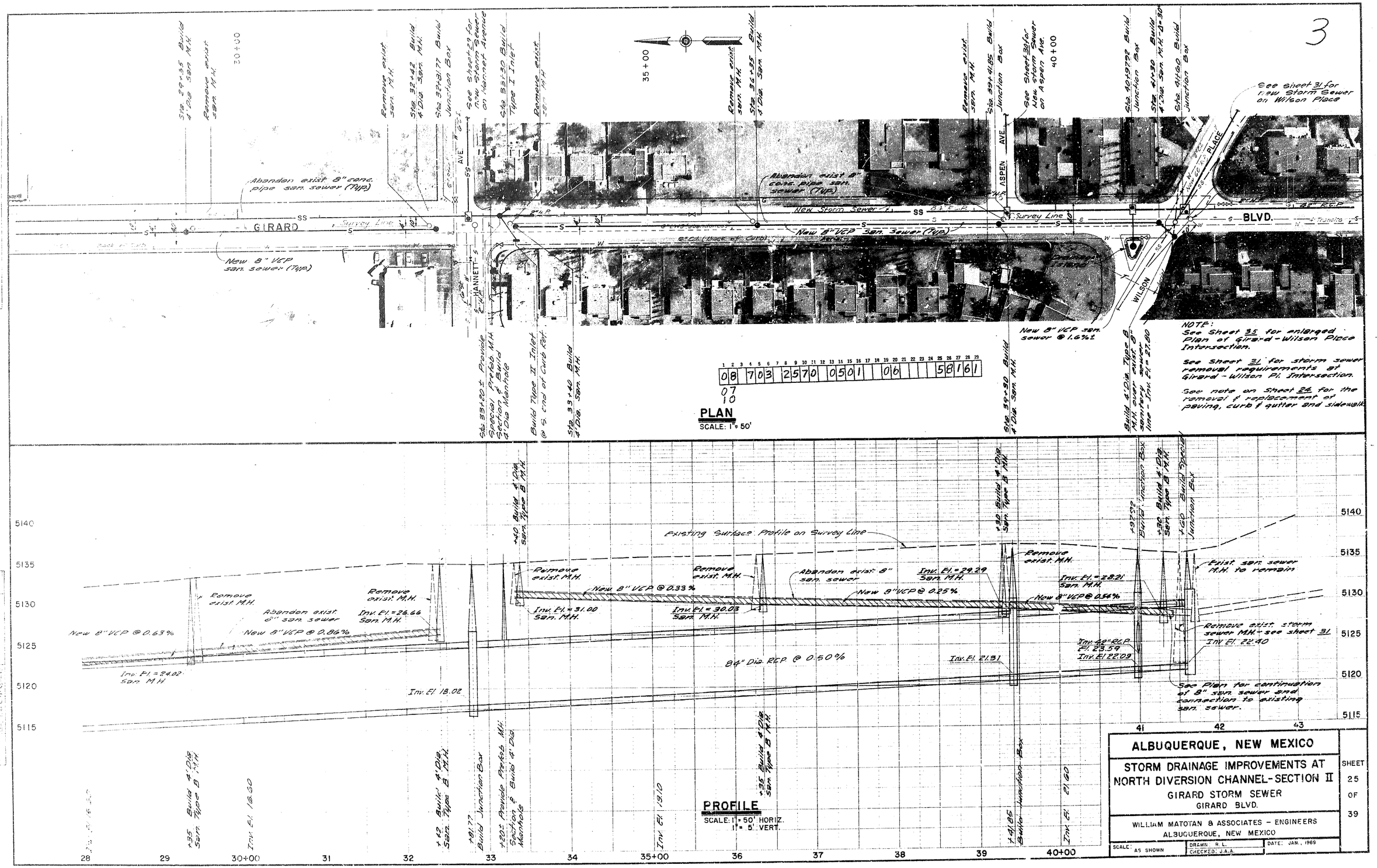
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

GIRARD STORM SEWER
GIRARD BLVD.

WILLIAM MATOTAN & ASSOCIATES – ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN | DRAWN: J.C.S. | CHECKED: J.A.A. | DATE: JAN 1969 | REVISED JULY 23, 1969

SHEET 24 OF 39



ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

GIRARD STORM SEWER

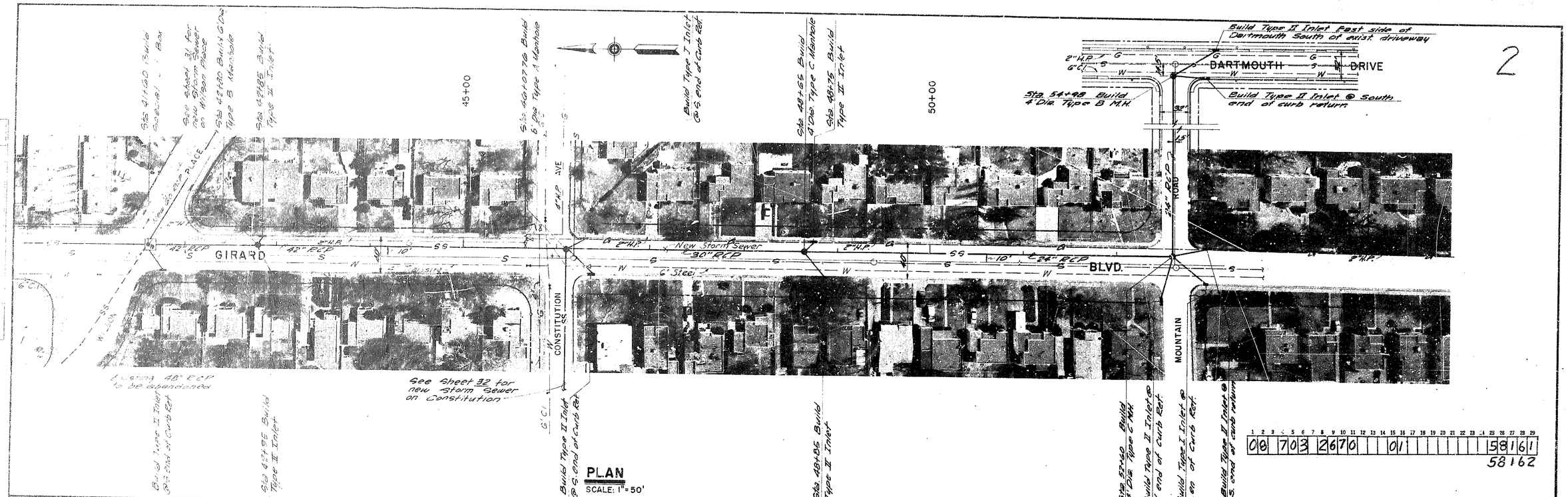
GIRARD BLVD.

WILLIAM MATOTAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO

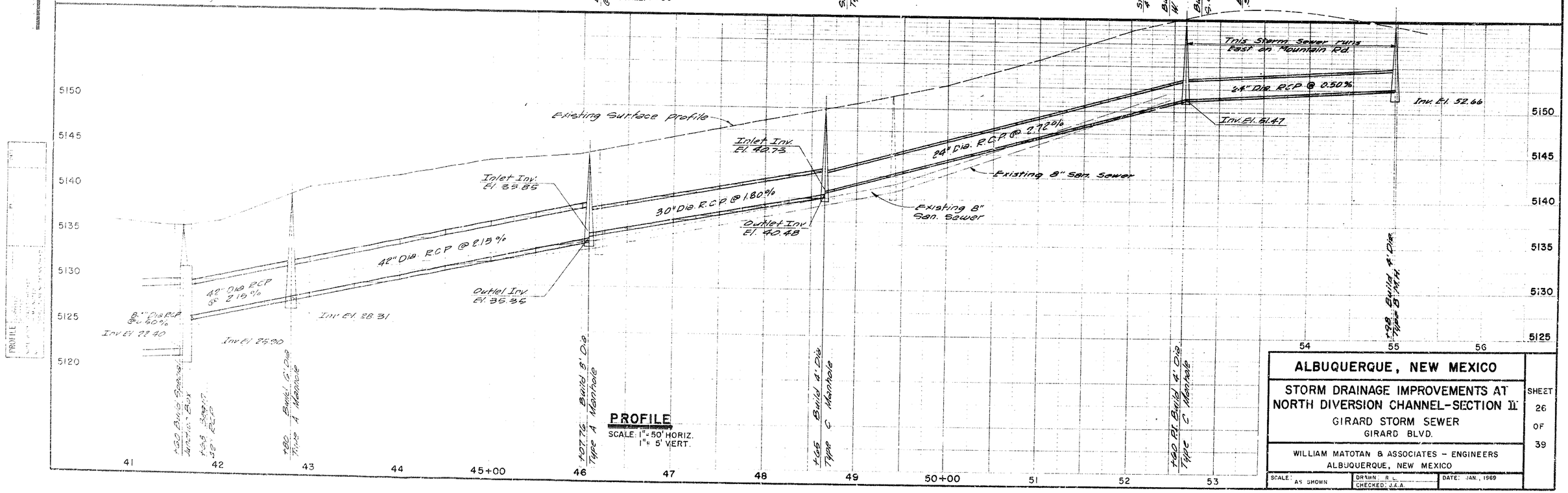
SCALE: AS SHOWN | DRAWN: R. L. | CHECKED: J.A.A. | DATE: JAN., 1969

SHEET 25 OF 39

2



PLAN
SCALE: 1" = 50'



PROFILE
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

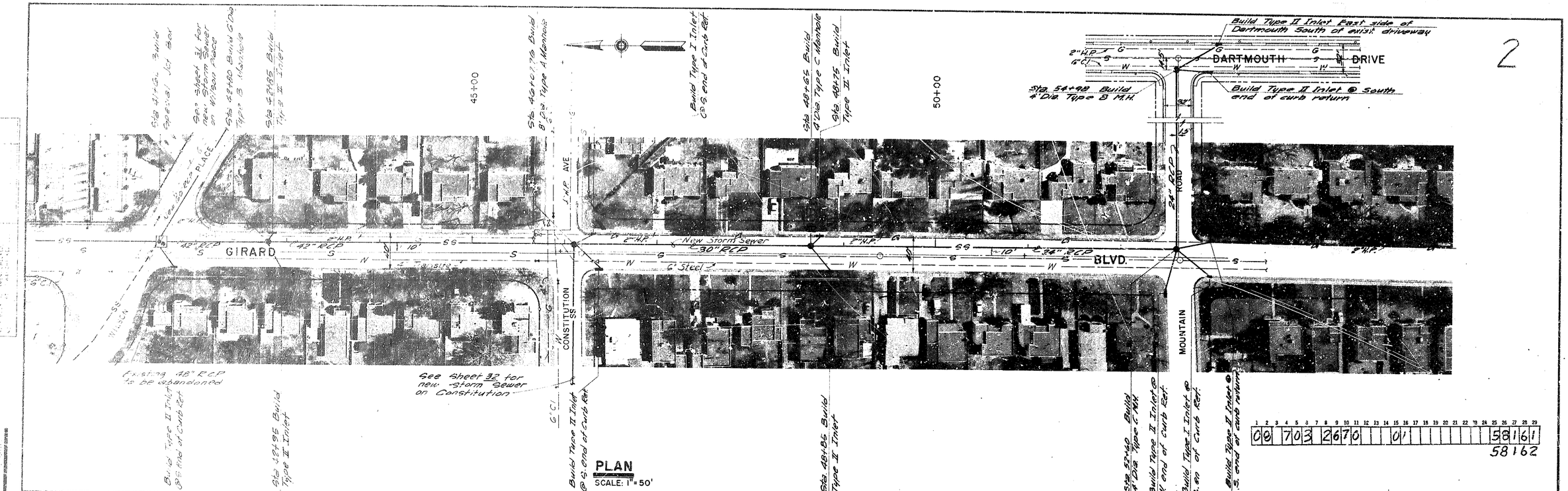
GIRARD STORM SEWER
GIRARD BLVD.

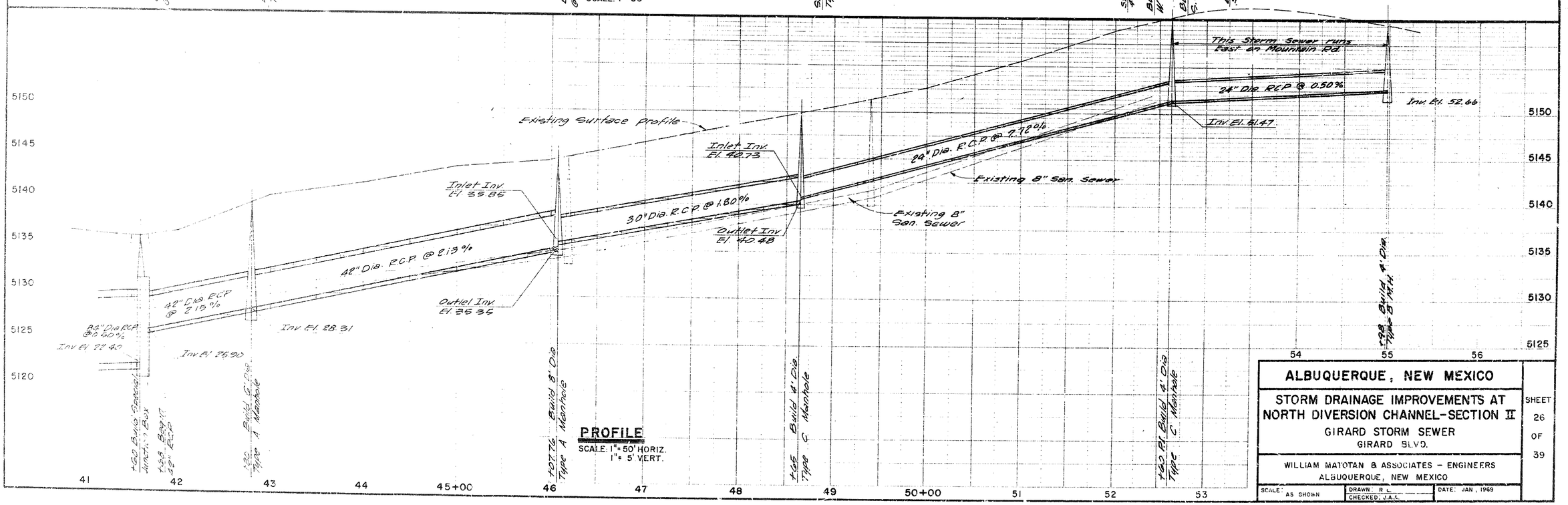
WILLIAM MATOTAN & ASSOCIATES – ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN	DRAWN: R. L. CHECKED: J.A.A.	DATE: JAN., 1969

SHEET 26 OF 39

2





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0	0		7	0	3		2	6	7	0				0	1										5	8	1	6	1

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ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

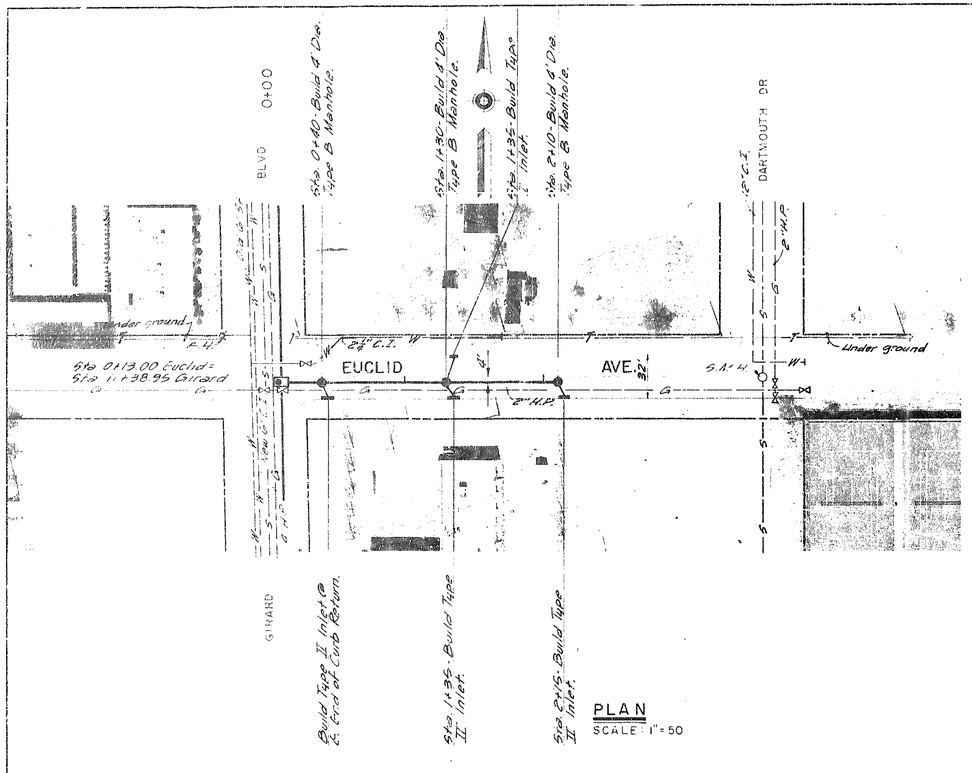
GIRARD STORM SEWER

GIRARD BLVD.

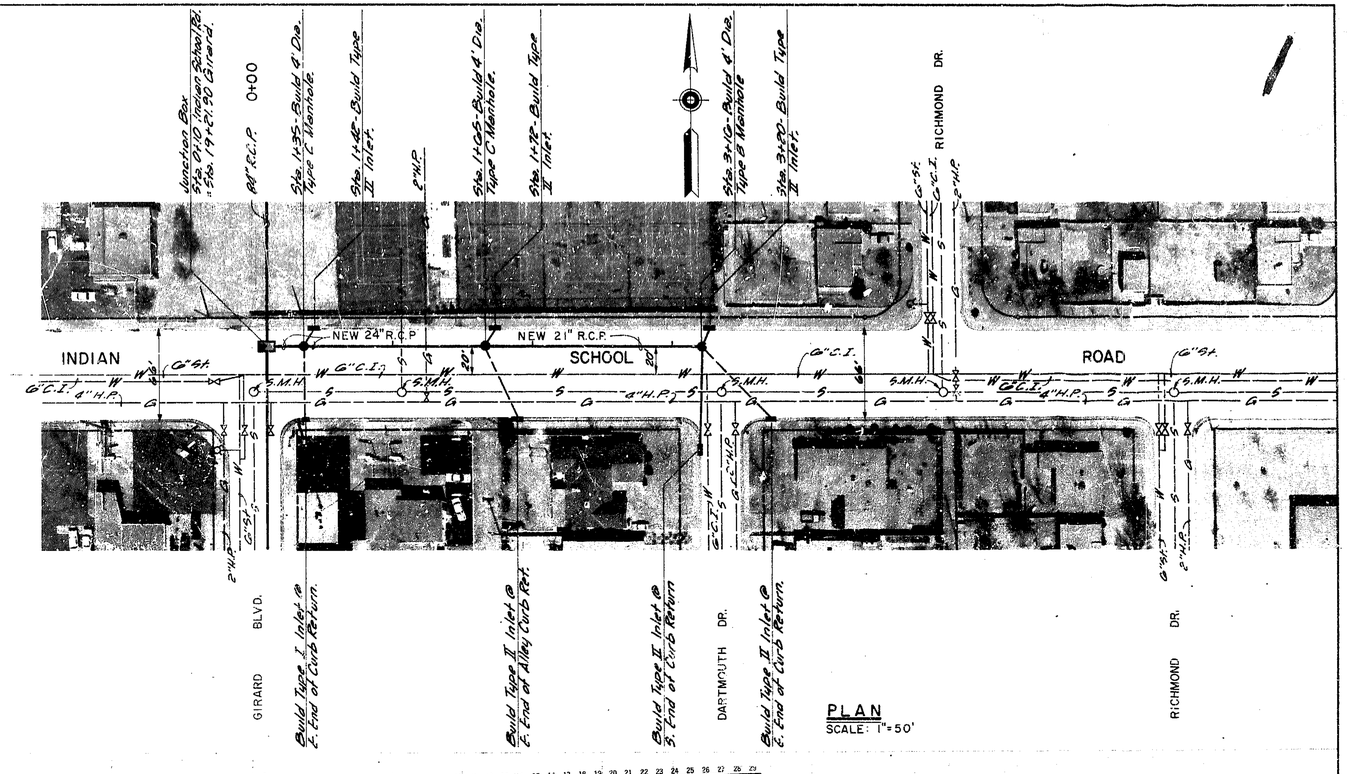
WILLIAM MATOTAN & ASSOCIATES – ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN | DRAWN: R.L. | CHECKED: J.A.S. | DATE: JAN., 1969

SHEET 26 OF 39

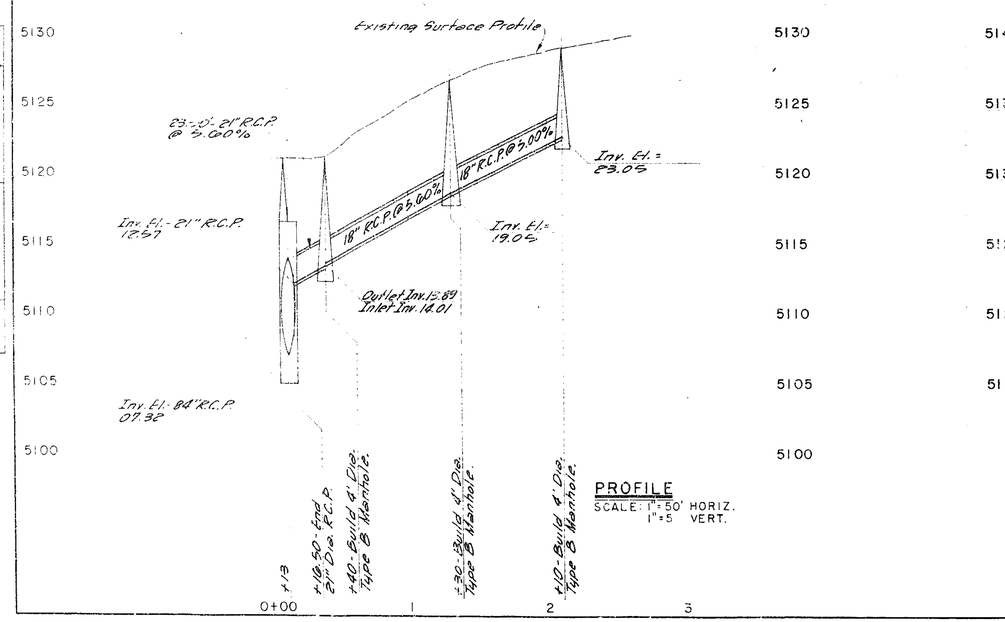


PLAN
SCALE: 1"=50

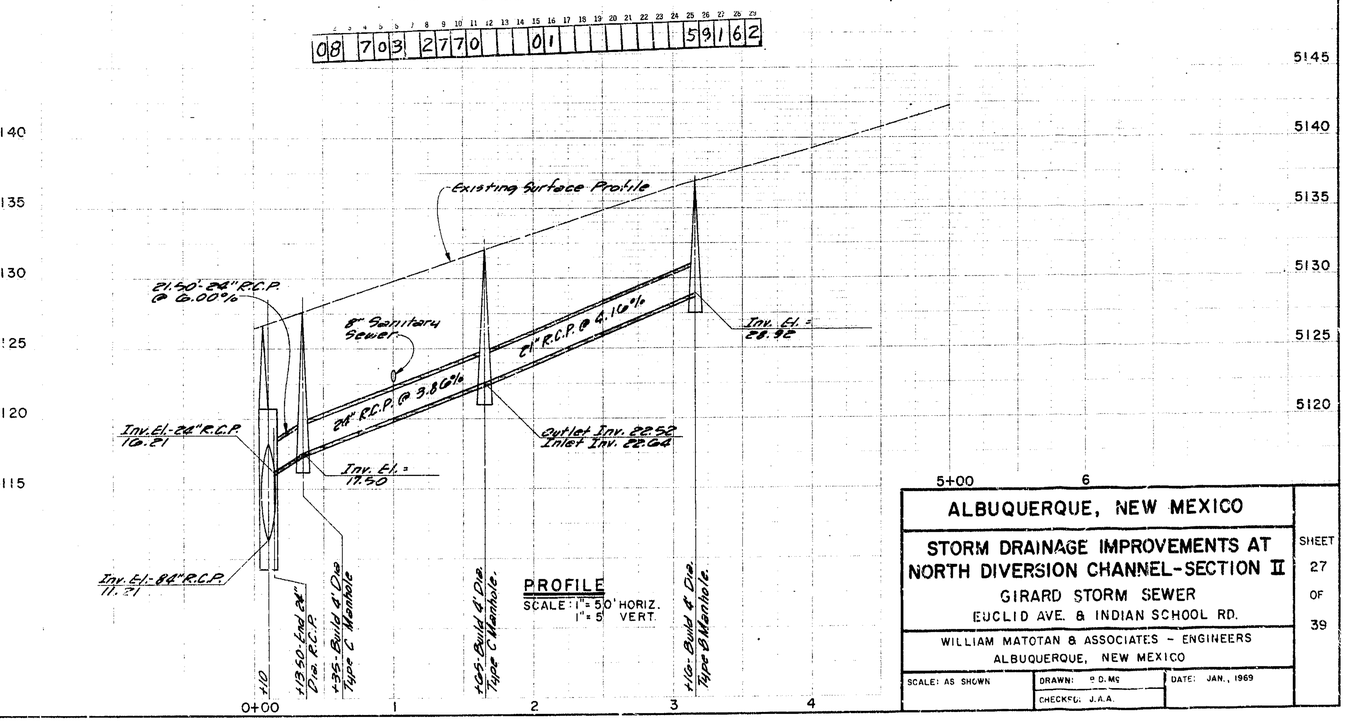


PLAN
SCALE: 1"=50'

08 703 2770 01 5916 2

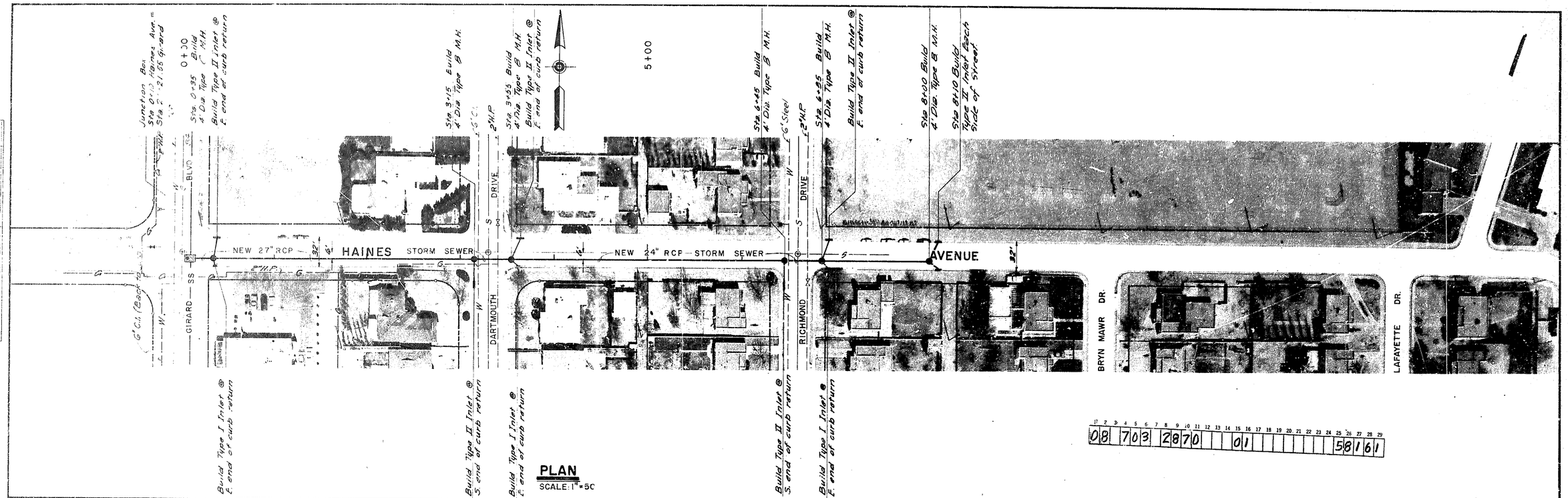


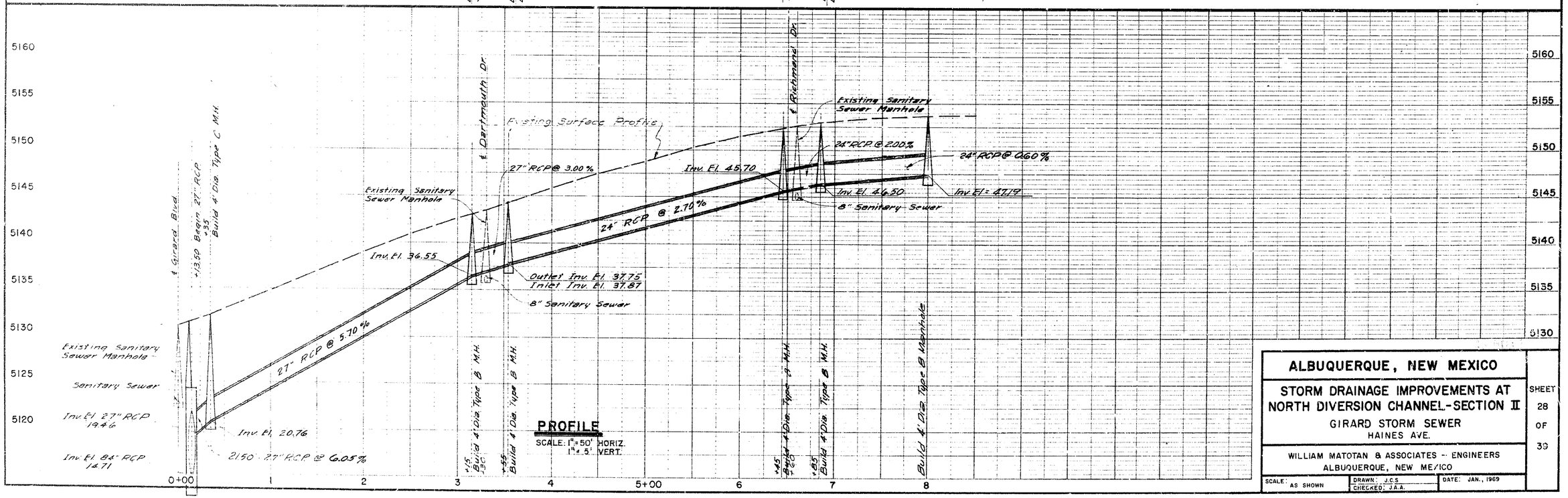
PROFILE
SCALE: 1"=50' HORIZ.
1"=5 VERT.



PROFILE
SCALE: 1"=50' HORIZ.
1"=5 VERT.

ALBUQUERQUE, NEW MEXICO		SHEET 27 OF 39
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II GIRARD STORM SEWER EUCLID AVE. & INDIAN SCHOOL RD.		
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS ALBUQUERQUE, NEW MEXICO		
SCALE: AS SHOWN	DRAWN: D.M.S. / CHECKED: J.A.A.	DATE: JAN., 1969





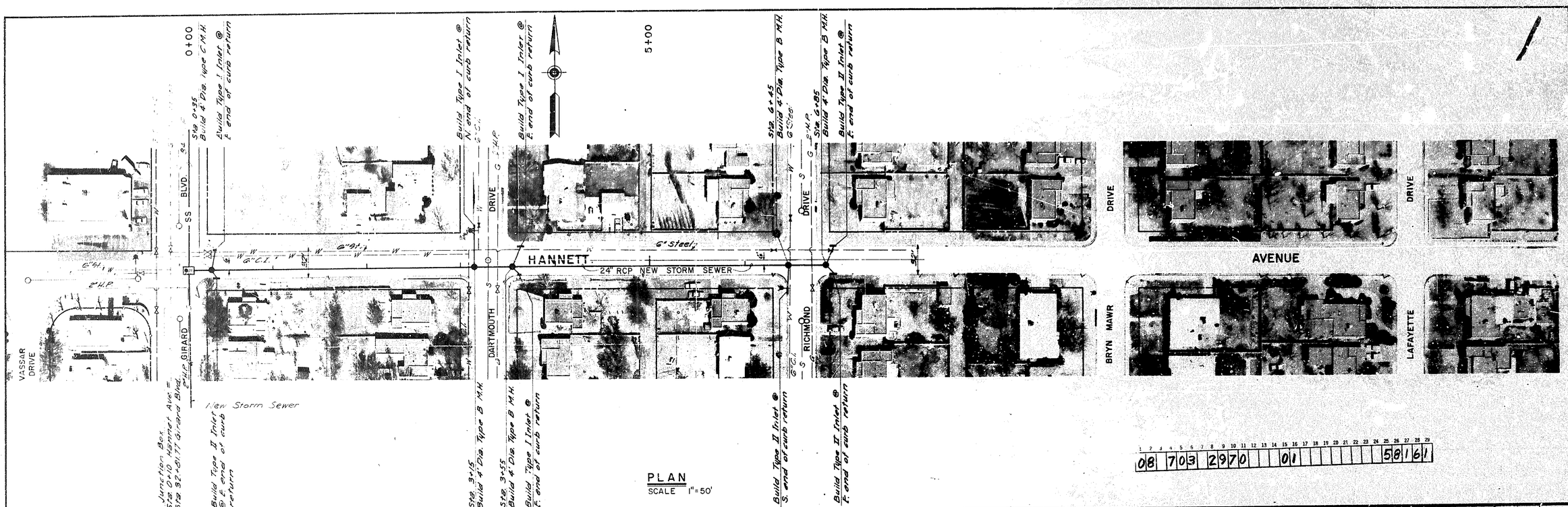
ALBUQUERQUE, NEW MEXICO

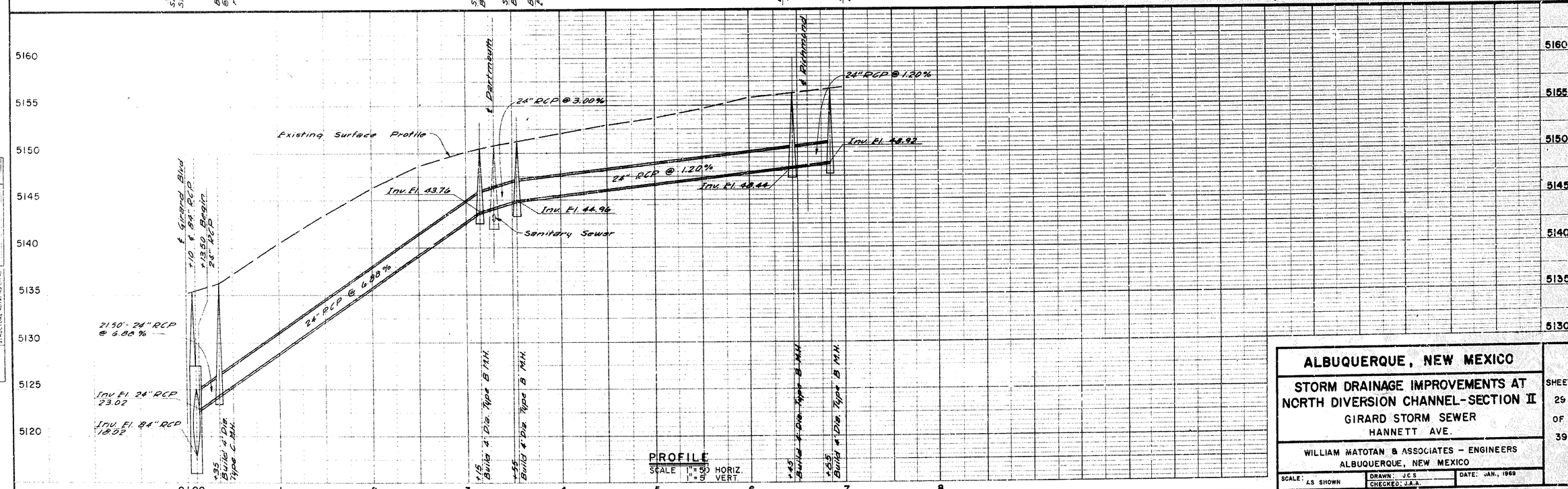
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL - SECTION II

GIRARD STORM SEWER
HAINES AVE.

WILLIAM MATOTAN & ASSOCIATES -- ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN	DRAWN: J.C.S. CHECKED: J.A.A.	DATE: JAN., 1969	SHEET 28 OF 39





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	PLOTTED	
	PROFILE CHECKED	
NOTE BOOK	ALIGNMENT CHECKED	
NO.	PT. OF VAR. CHECKED	

DATE	BY	

PROFILE	SURVEYED	
	PLOTTED	
	PROFILE CHECKED	
NOTE BOOK	(8-1-2 NOTED	
NO.	STRUCTURE NOTAT NS (H.K.)	

DATE	BY	

ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

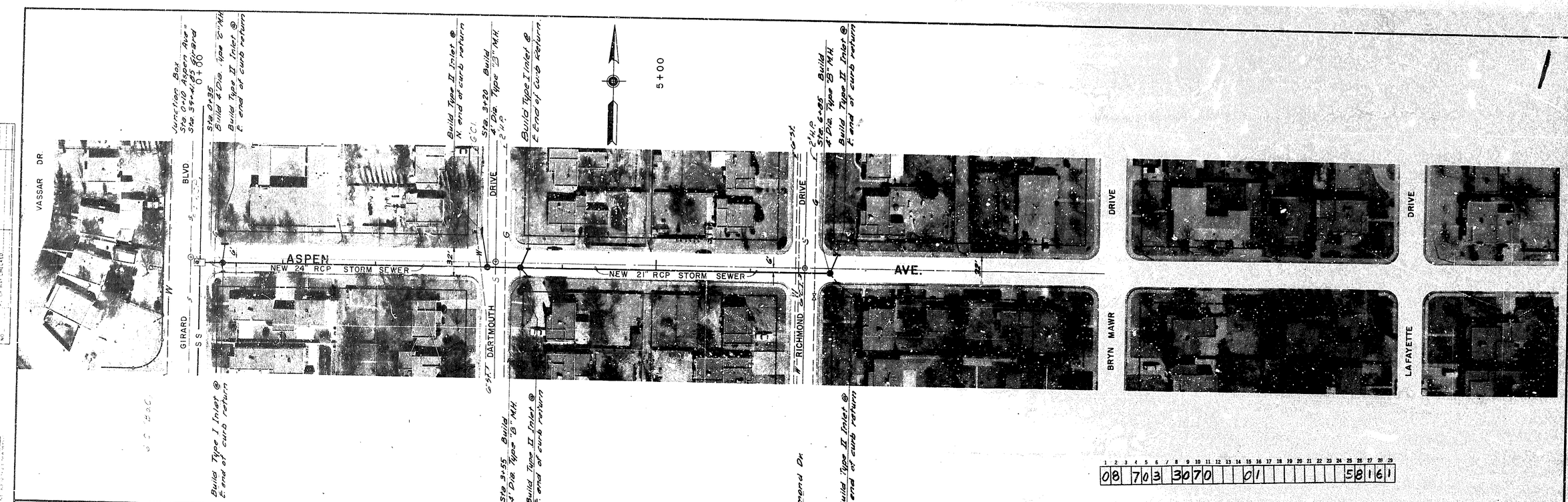
GIRARD STORM SEWER

HANNETT AVE.

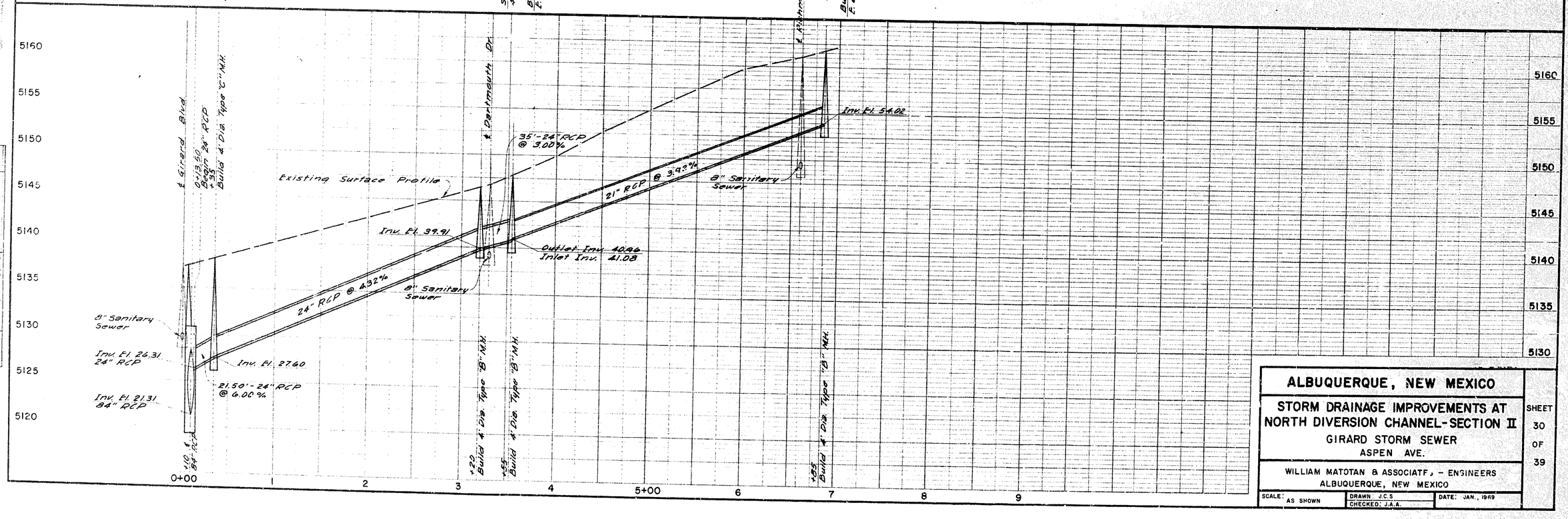
WILLIAM MATOTAN & ASSOCIATES – ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN | DRAWN: J.C.S. | CHECKED: J.A.A. | DATE: JAN., 1969

SHEET 29 OF 39



08 703 3070 01 58161



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	PLOTTED			
NOTE BOOK	GRADES CHECKED			
	AS-BUILT PLOTTED			
NO.	STRUCTURE NOTES CHECKED			

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	CORRECTED			
NOTE BOOK	AS-BUILT CHECKED			
	AS-BUILT PLOTTED			
NO.				

ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

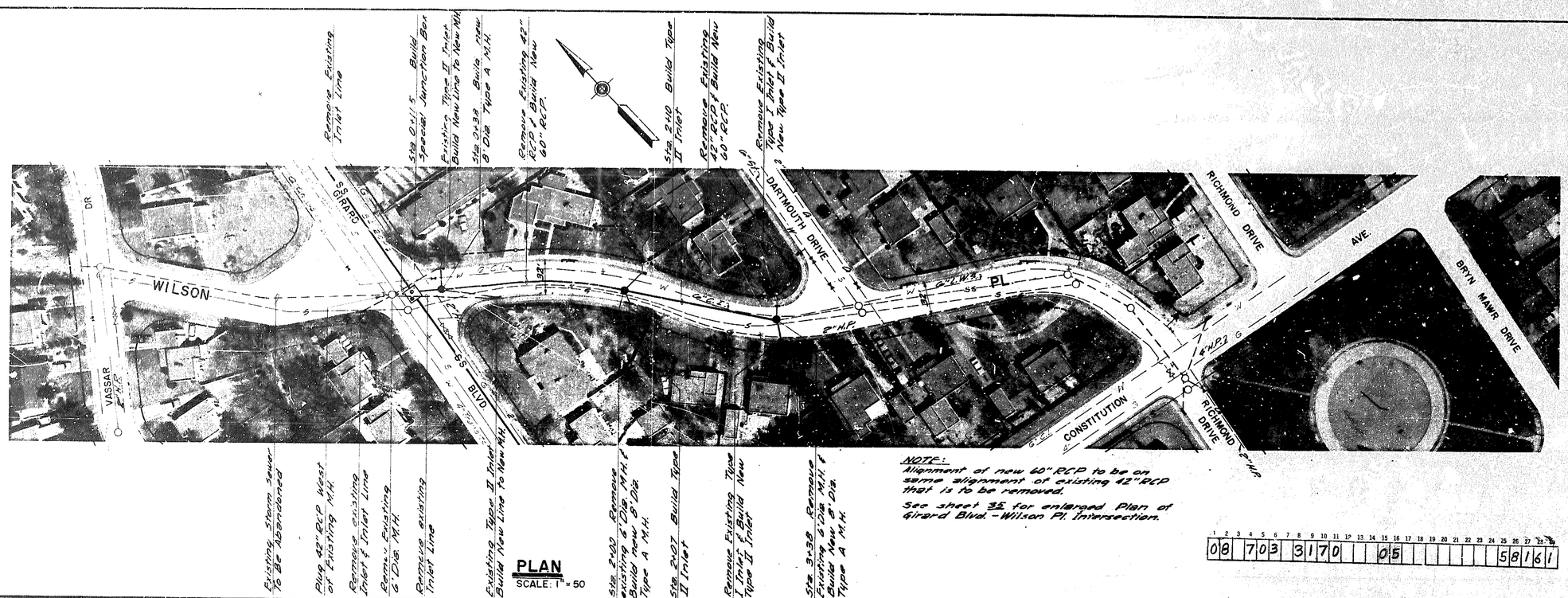
GIRARD STORM SEWER

ASPEN AVE.

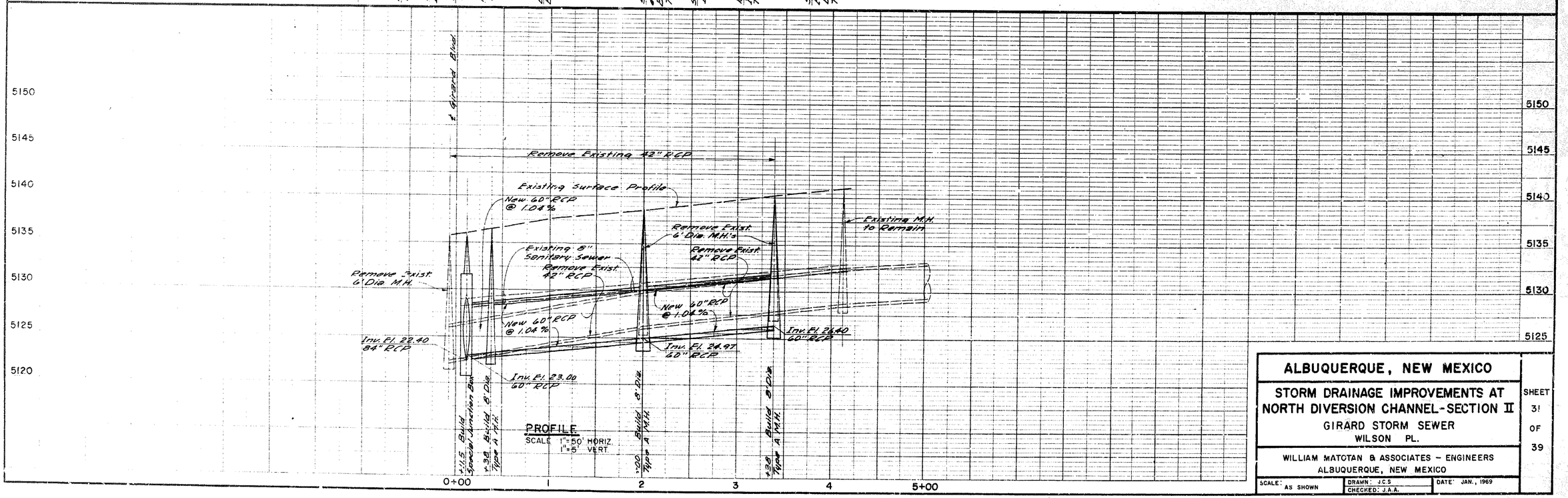
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN	DRAWN: J.C.S	DATE: JAN., 1969
	CHECKED: J.A.A.	

SHEET 30 OF 39



PLAN
SCALE: 1" = 50'



PROFILE
SCALE 1" = 50' HORIZ.
1" = 5' VERT.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
0	8		7	0	3		3	1	7	0				0	5									5	8	1	6	1

PLAN			
NOTE: BLUE PRINTS	SUBMITTED		DATE
	PLOTTED		
	CHECKED		
NO.	BY OF WAY CHECKED		

PROFILE			
NOTE: BLUE PRINTS	SUBMITTED	BY	DATE
	PLOTTED		
	CHECKED		
NO.	BY OF WAY CHECKED		
	STRUCTURE NOTES AS CHECKED		

ALBUQUERQUE, NEW MEXICO

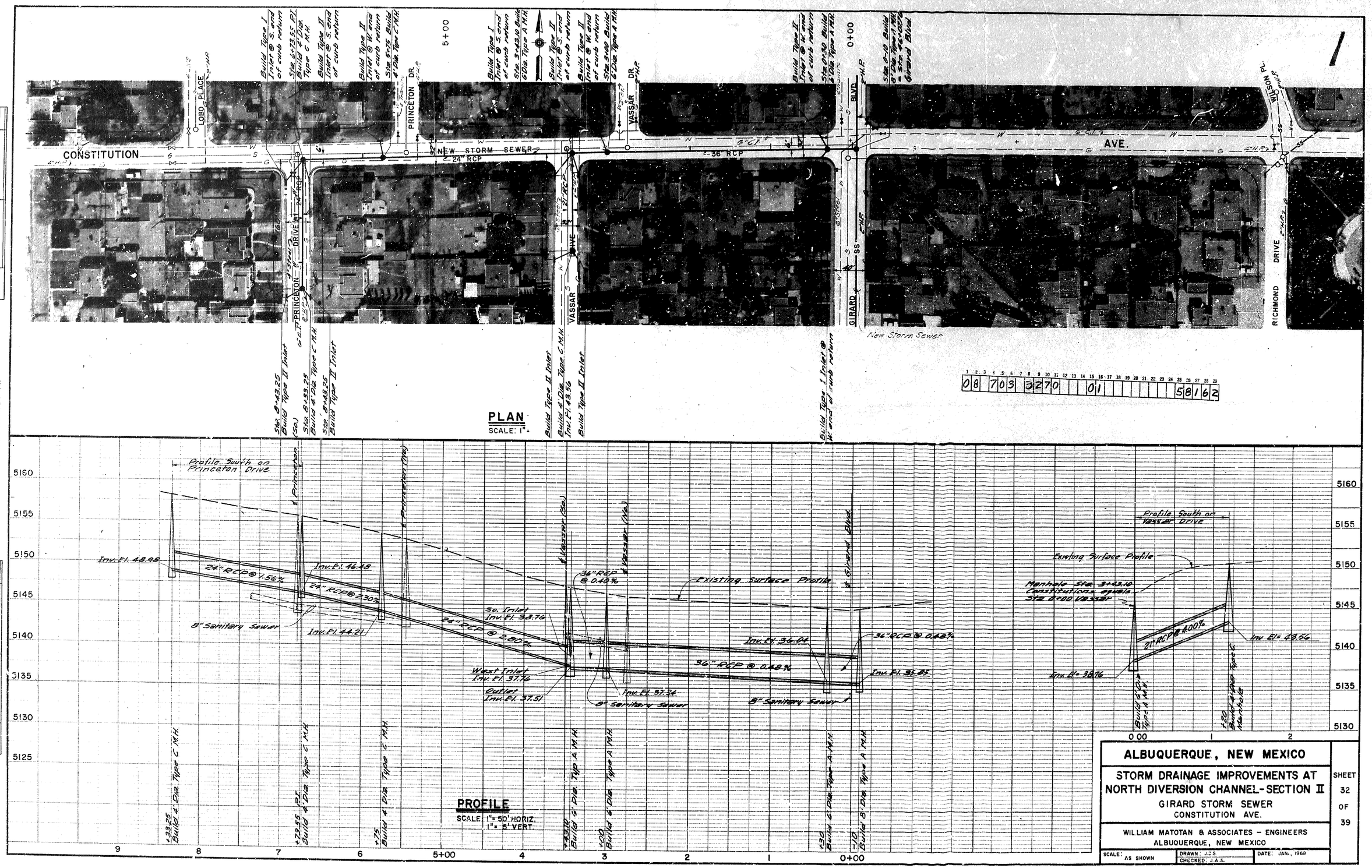
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

GIRARD STORM SEWER
WILSON PL.

WILLIAM MATOTAN & ASSOCIATES – ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN | DRAWN: J.C.S. | CHECKED: J.A.A. | DATE: JAN., 1969

SHEET 31 OF 39



PLAN			
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
	ALIGNMENT CHECKED		
	INT. OR MAT CHECKED		

PROFILE			
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
	GRADES CHECKED		
	B. M.'s NOTED		
	STRUCTURE NOTATIONS CH'KD.		

BY	DATE

ARCHITECTURE ENGINEERING
PLANNING
ROGGIE & FOULS ENGINEERING
ALBUQUERQUE, NEW MEXICO
5115 COPPER NE ALBUQUERQUE, NEW MEXICO

08 703 3270 011 5816 2

ALBUQUERQUE, NEW MEXICO

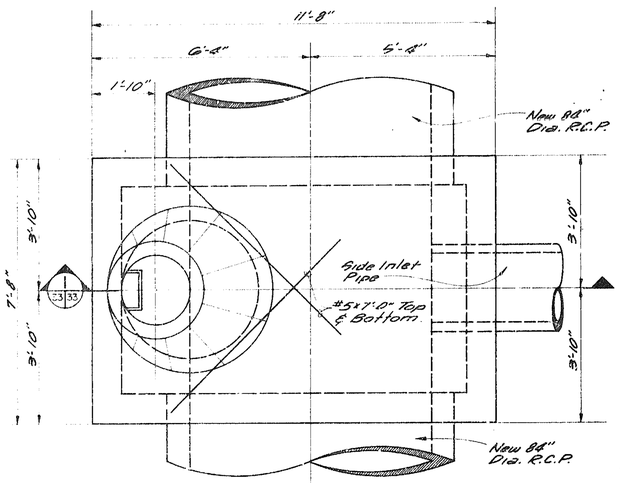
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

GIRARD STORM SEWER
CONSTITUTION AVE.

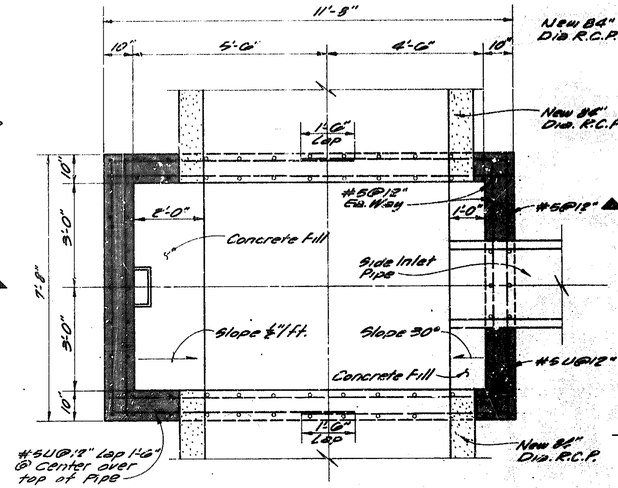
WILLIAM MATOTAN & ASSOCIATES – ENGINEERS
ALBUQUERQUE, NEW MEXICO

SCALE: AS SHOWN | DRAWN: J.C.S. | CHECKED: J.A.S. | DATE: JAN., 1969

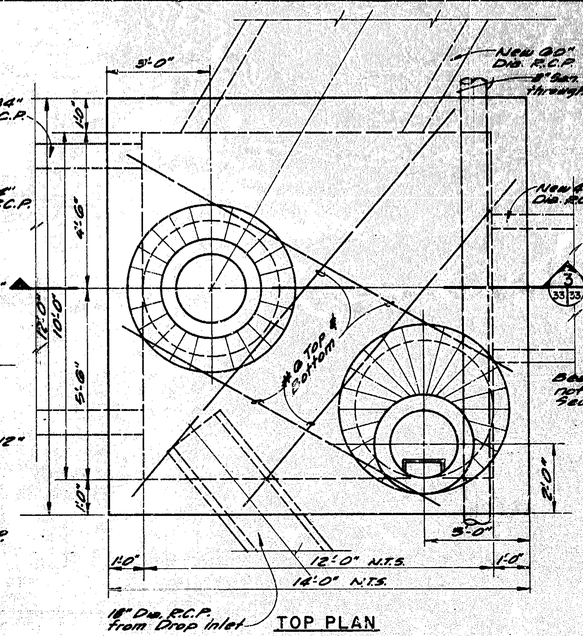
SHEET 32 OF 39



TOP PLAN



FLOOR PLAN



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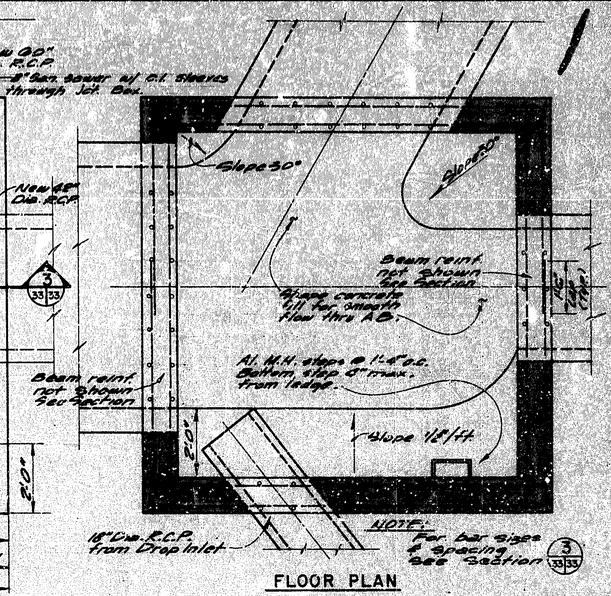
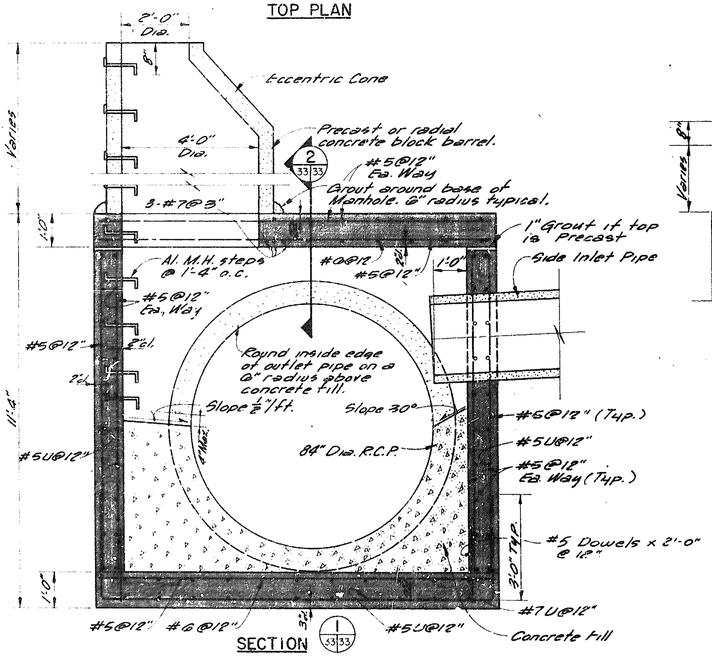


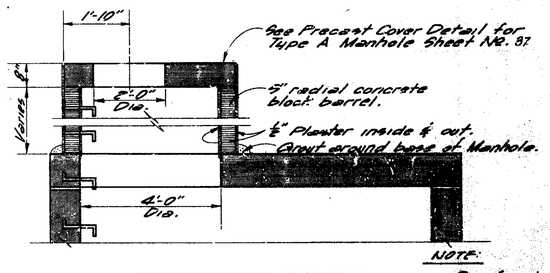
FLOOR PLAN



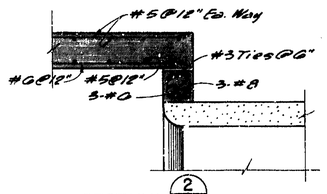
SECTION 1/33/33

JUNCTION BOX DETAILS

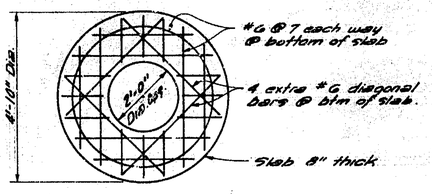
SCALE: 1/2" = 1'-0"



SHORT BARREL MANHOLE FOR JUNCTION BOX

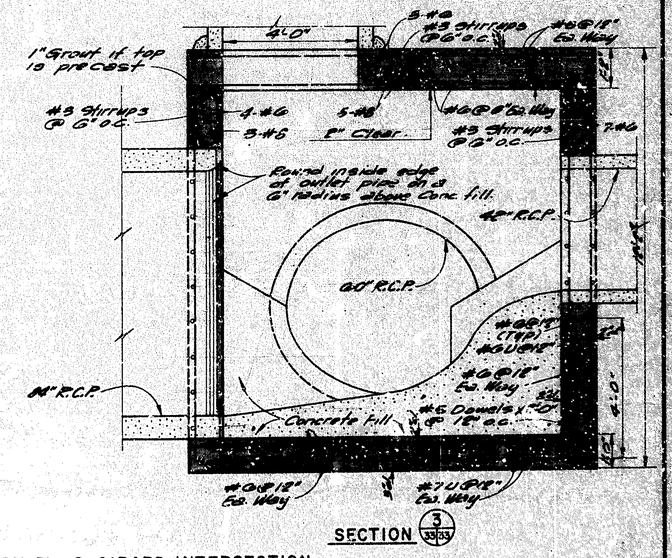


SECTION 2/33/33



ALTERNATE FOR CONCRETE CONE TOP SLAB FOR SHORT BARREL M.H.

SCALE: 1/2" = 1'-0"



SECTION 3/33/33

@ WILSON PL. & GIRARD INTERSECTION

SPECIAL JUNCTION BOX DETAILS

SCALE: 1/2" = 1'-0"

AS BUILT

ALBUQUERQUE, NEW MEXICO	
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II GIRARD STORM SEWER JUNCTION BOX DETAILS	SHEET 33 OF 39
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS ALBUQUERQUE, NEW MEXICO	
SCALE: AS SHOWN / DRAWN: B.D.M. R.L. / CHECKED: J.A.A. / DATE: JAN., 1969	

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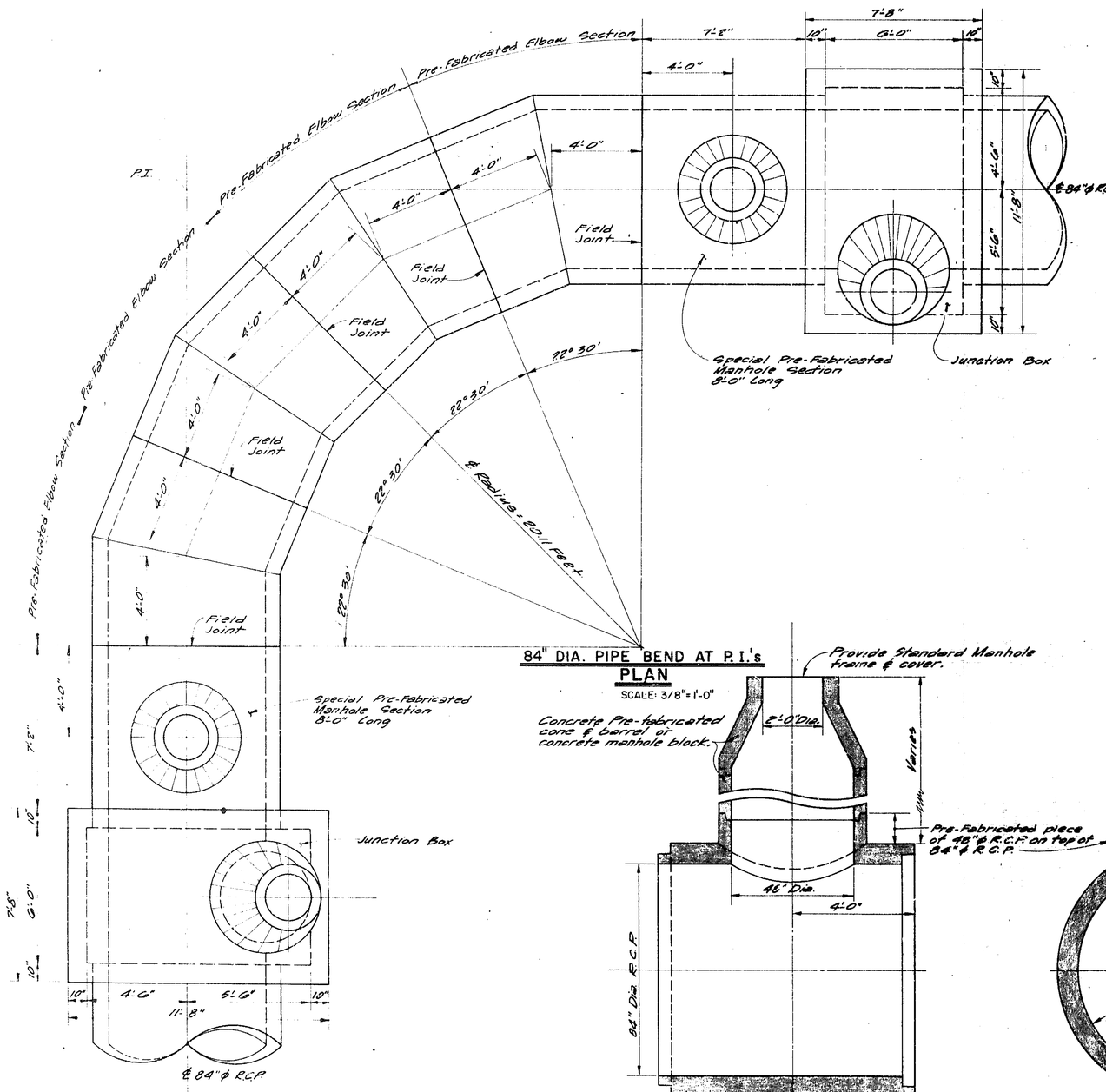
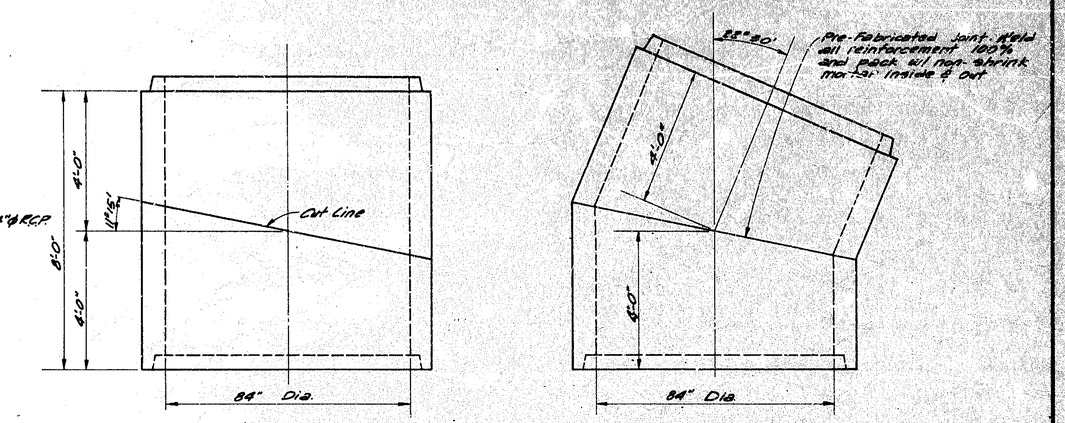


84" DIA. PIPE BEND AT P.I.'s

PLAN

SCALE: 3/8"=1'-0"

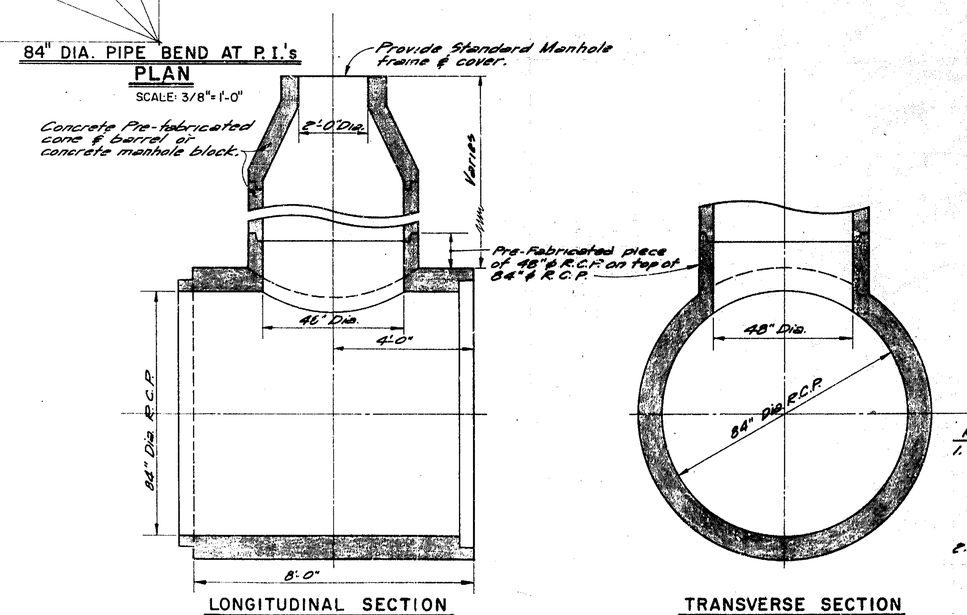


CUT DETAIL

FABRICATION DETAIL

PRE-FABRICATED ELBOW SECTION

SCALE: 1/2"=1'-0"



LONGITUDINAL SECTION

TRANSVERSE SECTION

SPECIAL PRE-FABRICATED MANHOLE SECTION

SCALE: 1/2"=1'-0"

NOTE:

1. Provide additional steel in pipes as required to withstand A.A.S.H.O. H20-S16 Loading. Contractor shall submit shop drawings and calculations and approval obtained prior to fabrication.
2. Flat slab as shown for Type A Manhole may be used where fill over pipe restricts building of cone.

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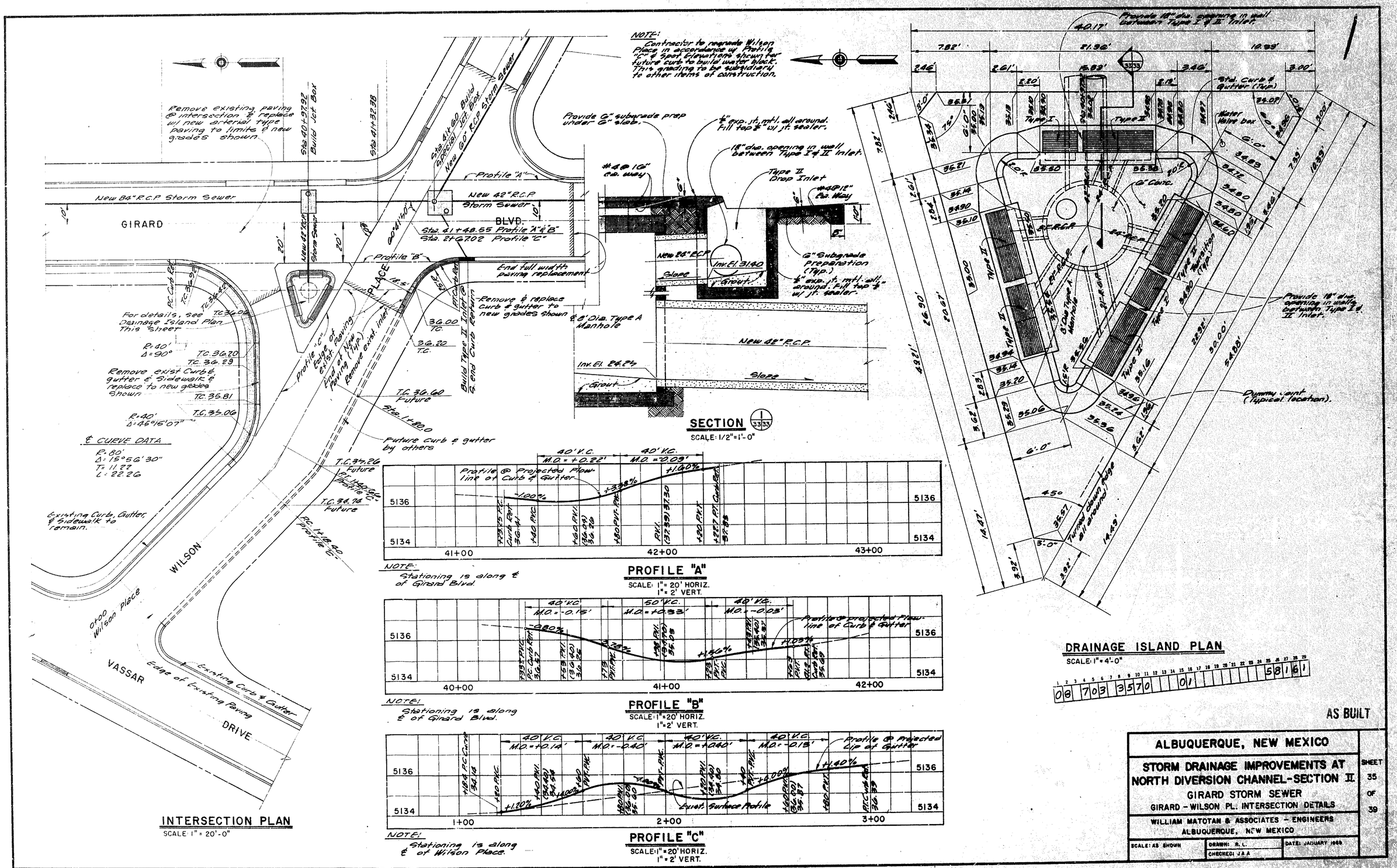
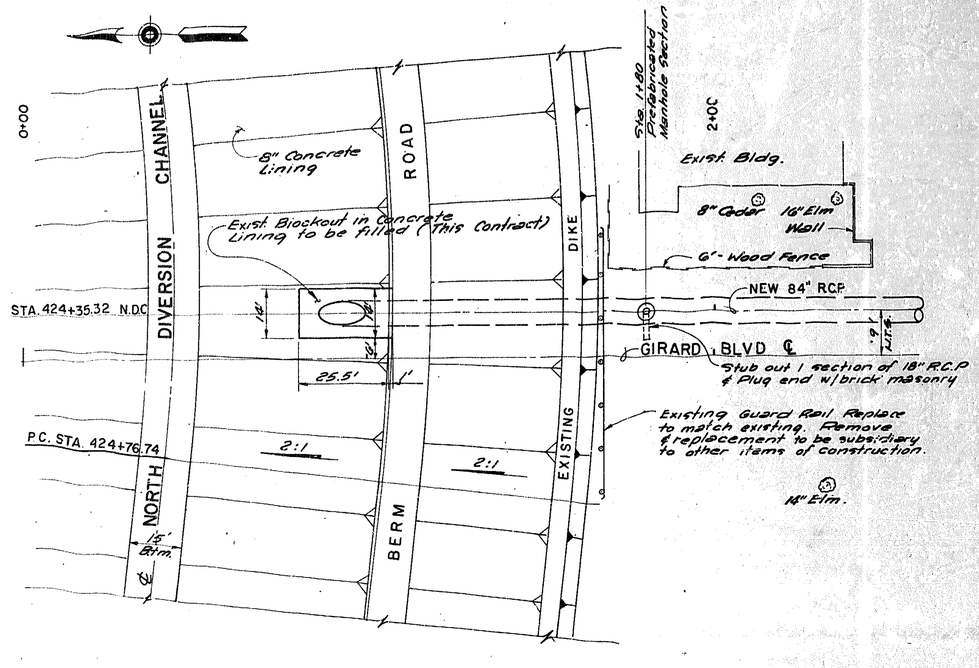
AS BUILT

ALBUQUERQUE, NEW MEXICO	SHEET 34 OF 39
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II GIRARD STORM SEWER PRE-FABRICATED PIPE DETAILS	
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS ALBUQUERQUE, NEW MEXICO	
SCALE: AS SHOWN / DRAWN: R. L. / CHECKED: J. A. A. / DATE: JAN., 1969	

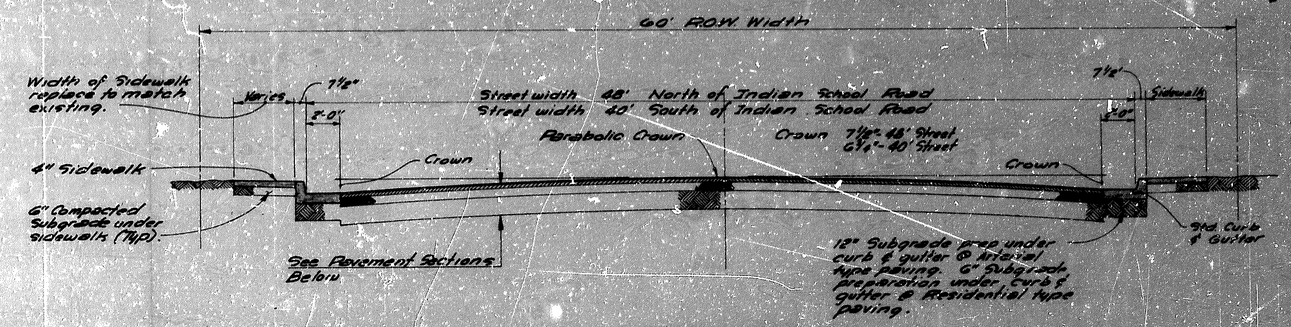

NOTE:
Contractor to regrade Wilson Place in accordance w/ Profile "C" & Spot Elevations shown for future curb to build water block. This grading to be subsidiary to other items of construction.
Remove existing paving @ intersection & replace w/ new arterial type paving to limits & new grades shown.
Sta. 40+37.92 Build Jct. Box
Sta. 41+32.98
Sta. 41+60 Build Special Jct. Box
New 60" R.C.P. Storm Sewer
Provide 6" subgrade prep under 6" slab.
#4@16" Ea. Way
4" exp. jt. mtl. all around. Fill top 4" w/ jt. sealer.
18" dia. opening in wall between Type I & II Inlet.
Type II Drop Inlet
#4@18" Ea. Way
New 84" R.C.P. Storm Sewer
GIRARD
BLVD.
New 42" R.C.P. Storm Sewer
Sta. 41+48.55 Profile "A" & "B"
Sta. 21+27.02 Profile "C"
Profile "A"
Profile "B"
PLACE
End full width paving replacement
Remove & replace curb & gutter to new grades shown
New 84" R.C.P.
Inv. El. 31.40
Slope
Grout
6" Subgrade Preparation (Typ.)
4" exp. jt. mtl. all around. Fill top 4" w/ jt. sealer.
New 42" R.C.P.
Inv. El. 24.24
Slope
Grout
SECTION
SCALE: 1/2" = 1'-0"
For details, see Drainage Island Plan This Sheet
Remove exist. Curb & gutter & Sidewalk & replace to new grades shown
Remove exist. Curb & gutter to new grades shown
Remove exist. inlet
Build Type II Inlet & End Curb Return
Future Curb & gutter by others
Existing Curb, Gutter, & Sidewalk to remain.
WILSON
Wilson Place
VASSAR
DRIVE
Edge of Existing Paving
Existing Curb & Gutter
INTERSECTION PLAN
SCALE: 1" = 20'-0"
Profile @ Projected Flow-line of Curb & Gutter
PROFILE "A"
SCALE: 1" = 20' HORIZ. 1" = 2' VERT.
NOTE: Stationing is along ℄ of Girard Blvd.
PROFILE "B"
SCALE: 1" = 20' HORIZ. 1" = 2' VERT.
NOTE: Stationing is along ℄ of Girard Blvd.
Profile @ Projected Lip of Gutter
Exist. Surface Profile
PROFILE "C"
SCALE: 1" = 20' HORIZ. 1" = 2' VERT.
NOTE: Stationing is along ℄ of Wilson Place.
Provide 18" dia. opening in wall between Type I & II Inlet.
Type I
Type II
Type II Transition (Typ.)
Water Valve Box
Dummy joint (Typical location).
Turning clearance (all around)
DRAINAGE ISLAND PLAN
SCALE: 1" = 4'-0"
AS BUILT
ALBUQUERQUE, NEW MEXICO
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II
GIRARD STORM SEWER
GIRARD - WILSON PL. INTERSECTION DETAILS
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO
SCALE: AS SHOWN
DRAWN: R. L.
CHECKED: J.A.A.
DATE: JANUARY 1969
SHEET 35 OF 39



PLAN

PIPE ENTRY AT NORTH DIVERSION CHANNEL

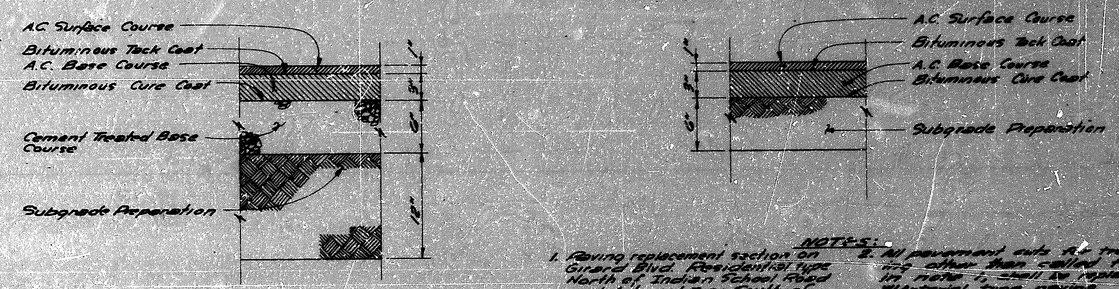
SCALE: 1" = 20'



STREET SECTION

GIRARD BLVD

SCALE: 1/4" = 1'-0"



ARTERIAL TYPE

RESIDENTIAL TYPE

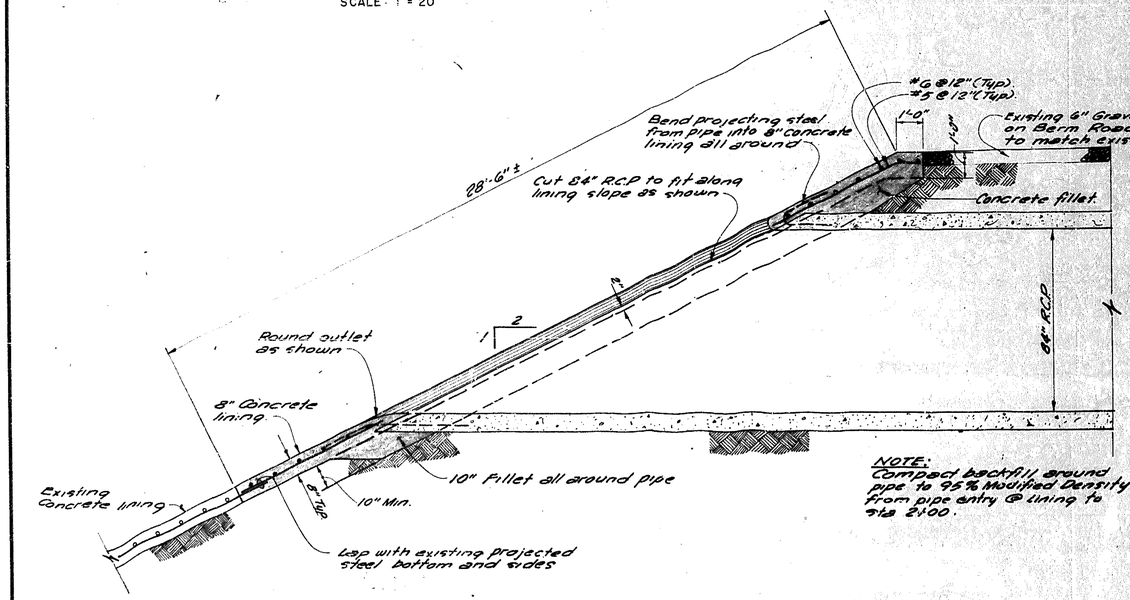
NOTES:

1. Paving replacement section on Girard Blvd. Residential type North of Indian School Road and Arterial type South of Indian School Road.

2. All pavement cuts for trench repair other than called for in note 1, shall be replaced w/Arterial type paving.

PAVEMENT REPLACEMENT SECTIONS

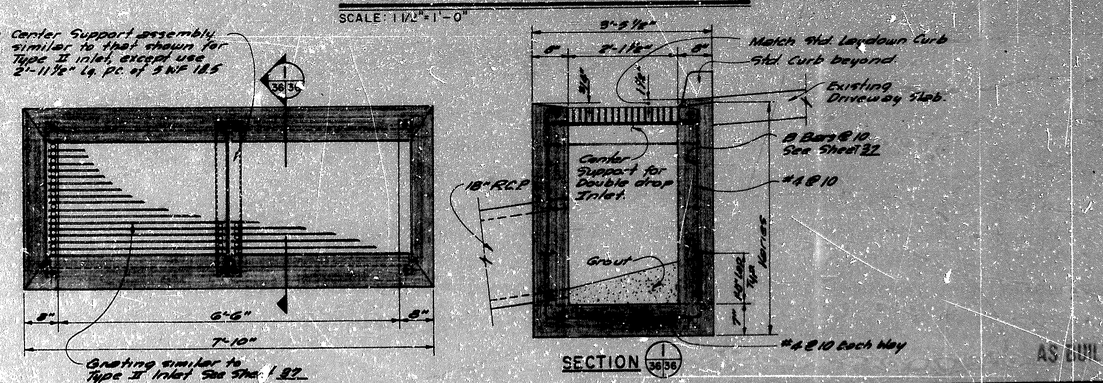
SCALE: 1½" = 1'-0"



NOTE:
Compact backfill around pipe to 95% Modified Density from pipe entry @ lining to sta. 2+00.

SECTION - 84" RCP AT CHANNEL LINING

SCALE: 3/8" = 1'-0"



PLAN - DOUBLE

TYPE D DROP INLET DETAILS

SCALE: 3/4" = 1'-0"

AS BUILT

ALBUQUERQUE, NEW MEXICO	SHEET 36 OF 39
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II GIRARD STORM SEWER PIPE ENTRY DETAILS AT NDC & STREET SECTIONS	
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS ALBUQUERQUE, NEW MEXICO	
SCALE: AS SHOWN / DRAWN: H.T.S. / CHECKED: J.A.A. / DATE: JAN. 1969	

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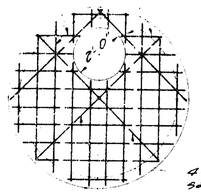
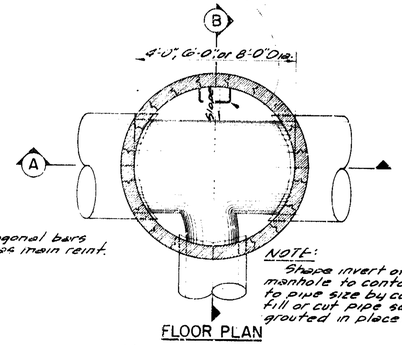
8' Dia. Manhole
Reinforce with #8 @ 8 each way @ bottom of slab.

4' or 6' Dia Manhole
Reinforce with #6 @ 8 each way @ bottom of slab.

Al. Manhole steps @ 16" o.c. Vertical top step 18" MAX. from top of frame where possible.



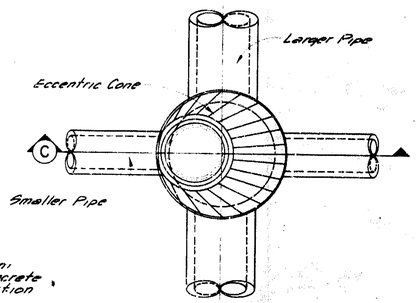
PLAN-PRECAST COVER



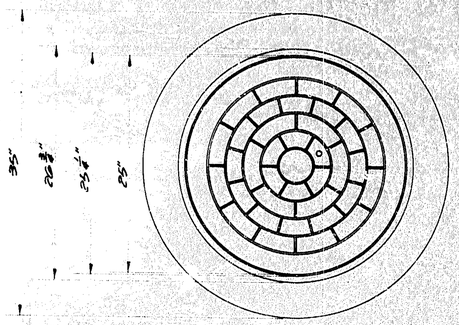
NOTE: Shape invert of manhole to conform to pipe size by concrete fill or cut pipe section grouted in place.

FLOOR PLAN

TYPICAL MANHOLE



TOP PLAN



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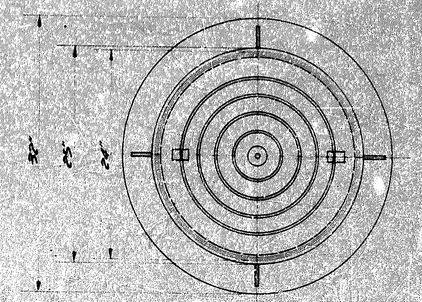

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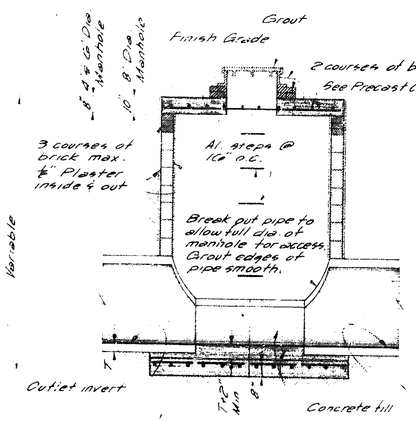
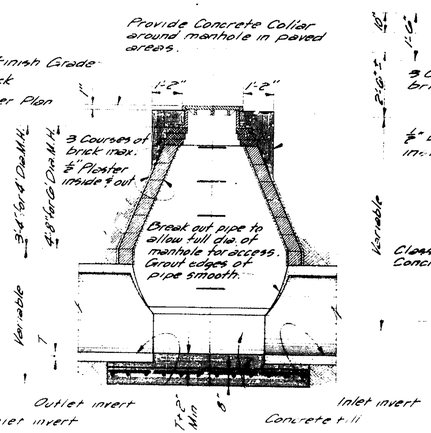
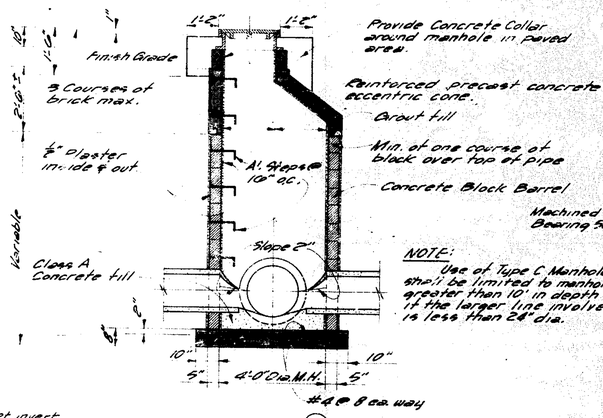


SECTION (A)

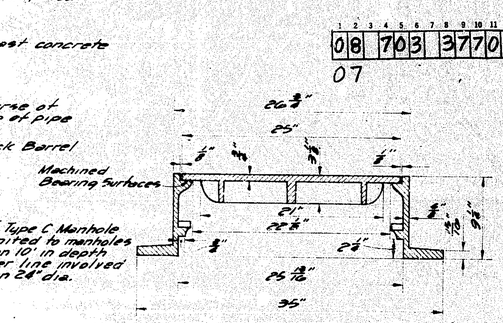


SECTION (A)



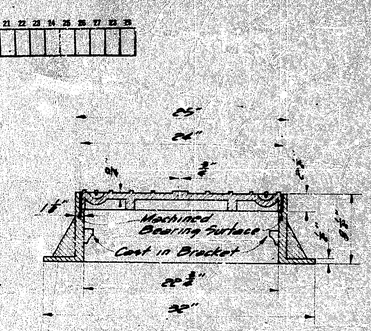
SECTION (C)

TYPE C MANHOLE
SCALE: 3/8" = 1'-0"



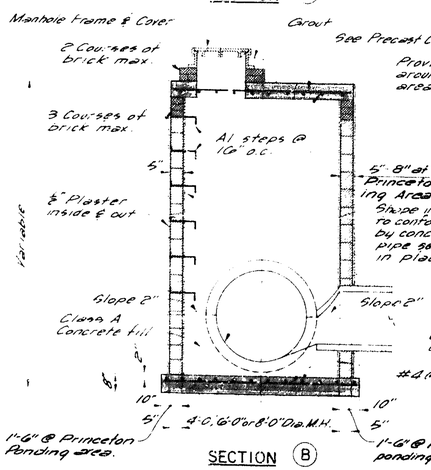
SECTION

ALTERNATE MANHOLE FRAME & COVER DETAILS
SCALE: 1 1/2" = 1'-0"



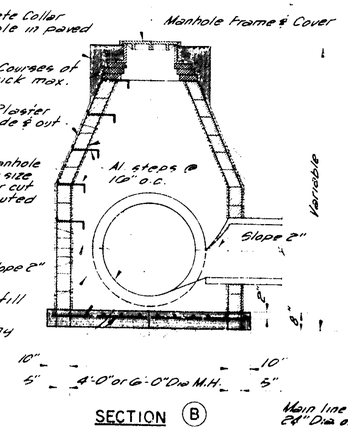
SECTION

TYPICAL CAST IRON FRAME & COVER DETAILS
SCALE: 1 1/2" = 1'-0"



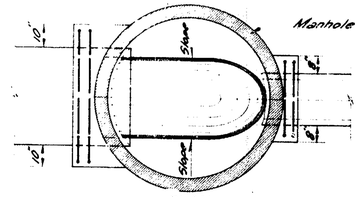
SECTION (B)

TYPE A MANHOLE
SCALE: 3/8" = 1'-0"



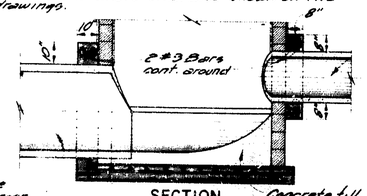
SECTION (B)

TYPE B MANHOLE
SCALE: 3/8" = 1'-0"



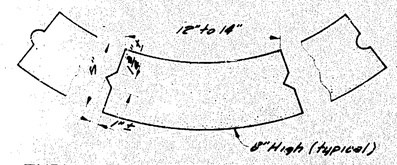
PLAN

NOTE: This detail shall apply when any pipe is connected to an existing or previously constructed manhole and where otherwise shown on the drawings.

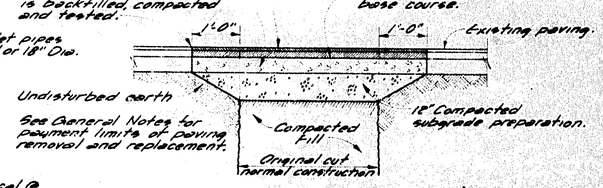


SECTION

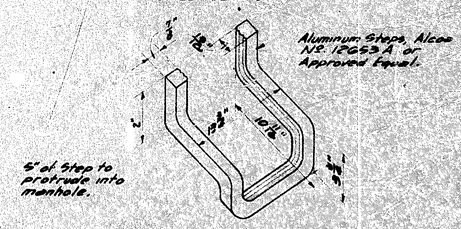
CONCRETE COLLAR DETAIL
SCALE: 3/8" = 1'-0"



TYPICAL CONCRETE BLOCK DETAIL
NOT TO SCALE

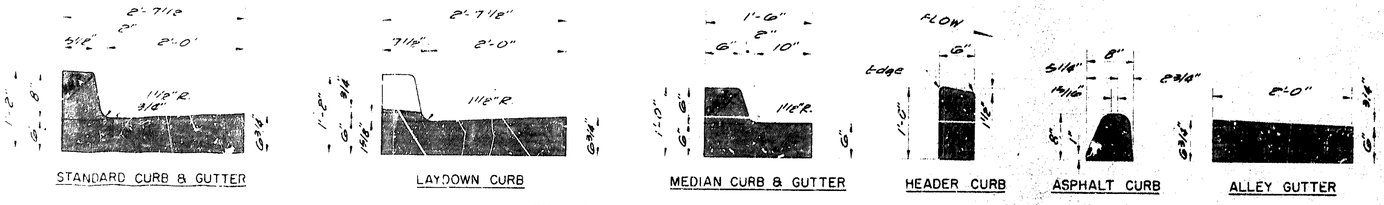


PAVEMENT CUT DETAIL
NOT TO SCALE

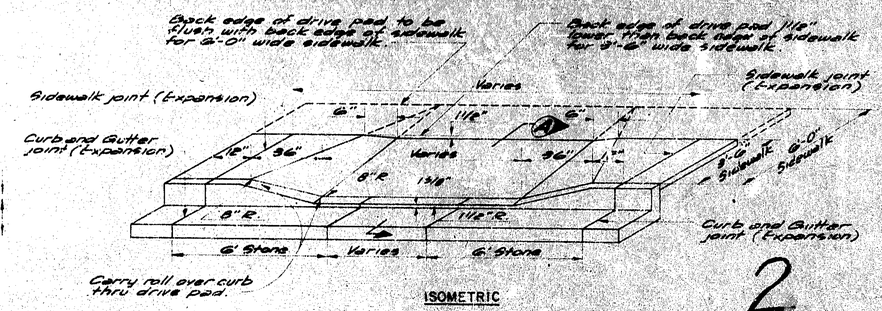


TYPICAL MANHOLE STEP DETAIL
SCALE: 3" = 1'-0"

ALBUQUERQUE, NEW MEXICO			
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II GIRARD STORM SEWER PAVEMENT CUT & MANHOLE DETAILS			SHEET 37 OF 39
WILLIAM MATOTAN & ASSOCIATES – ENGINEERS ALBUQUERQUE, NEW MEXICO			
SCALE: AS SHOWN	DRAWN: B.D.M.	DATE: JAN., 1969	
	CHECKED: J.A.A.		

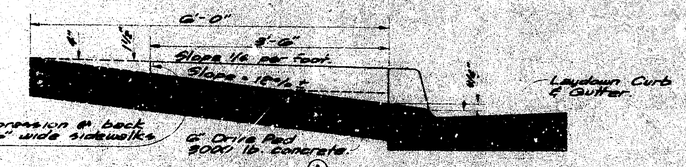


TYPICAL CURB & GUTTER DETAILS



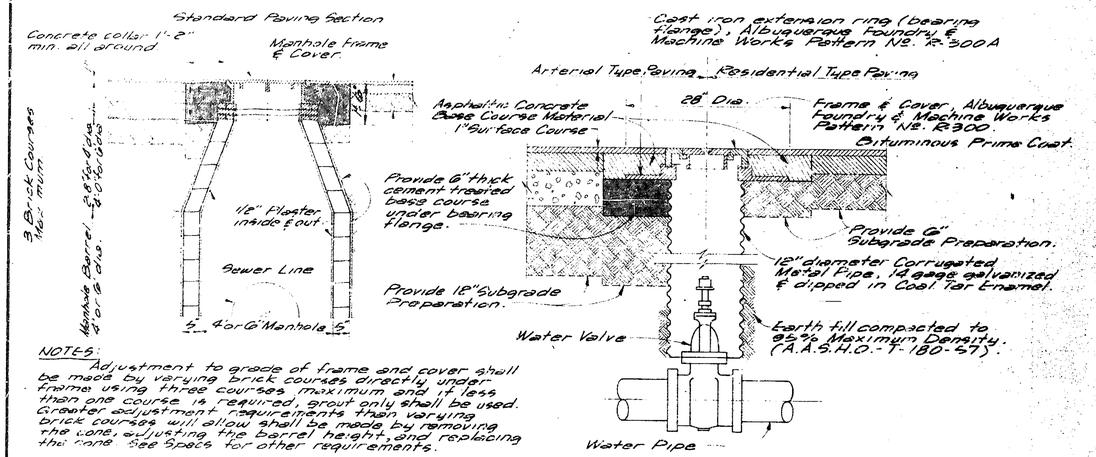
ISOMETRIC

2



SECTION (A)

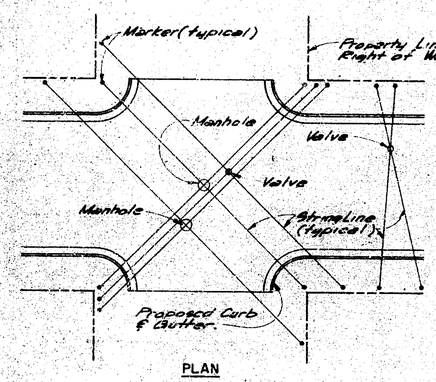
TYPICAL DRIVEWAY & LAY DOWN CURB



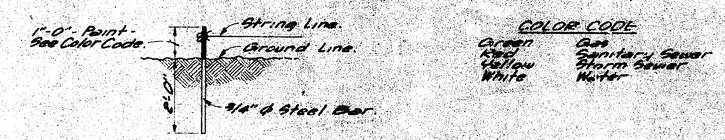
NOTES:
Adjustment to grade of frame and cover shall be made by varying brick courses directly under frame using three courses maximum and if less than one course is required, grout only shall be used. Greater adjustment requirements than varying brick courses will allow shall be made by removing the cone, adjusting the barrel height, and replacing the cone. See Specs for other requirements.

MANHOLE REGRADING DETAIL

VALVE BOX REGRADING DETAIL

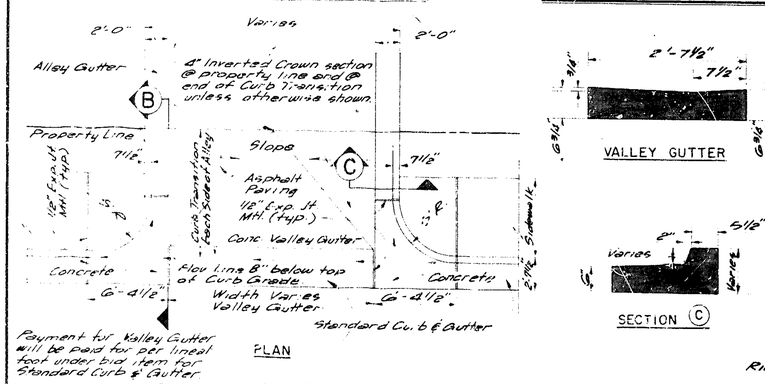


PLAN

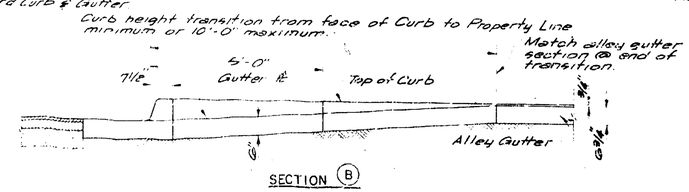


MARKER DETAIL

PLAN FOR LOCATING UNDERGROUND UTILITIES

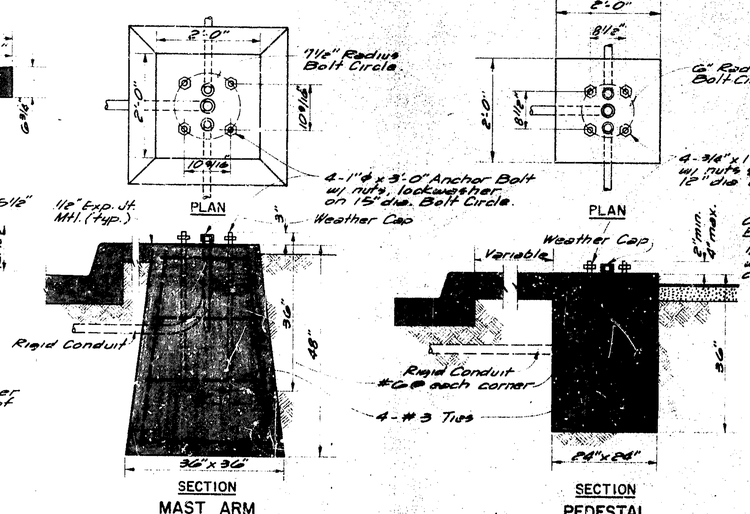


PLAN

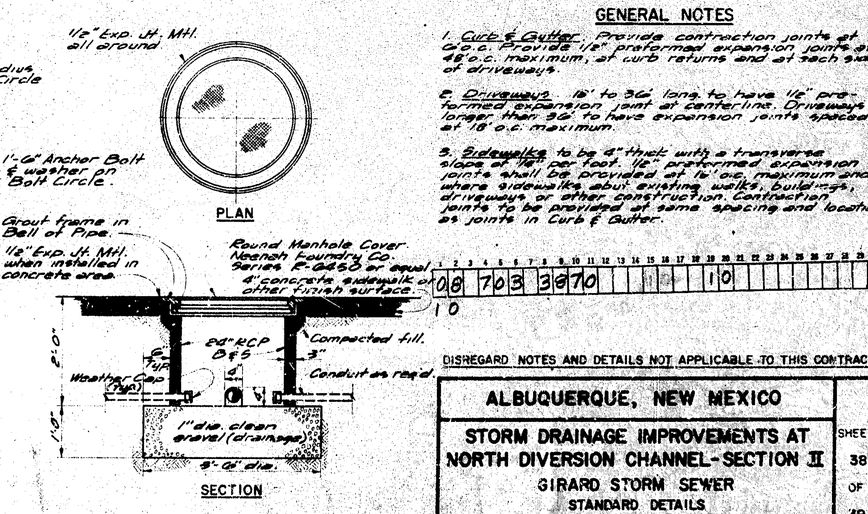


SECTION (B)

TYPICAL ALLEY INTERSECTION



TRAFFIC LIGHT FOUNDATION DETAILS



CONDUIT JUNCTION BOX DETAIL

AS BUILT

GENERAL NOTES

1. Curb & Gutter. Provide contraction joints at 6'0 o.c. Provide 1/2" preformed expansion joints at 48' o.c. maximum, at curb returns and at each side of driveways.

2. Driveways. 18' to 36' long to have 1/2" preformed expansion joint at centerline. Driveways longer than 36' to have expansion joints spaced at 18' o.c. maximum.

3. Sidewalks to be 4" thick with a transverse slope of 1/4" per foot. 1/2" preformed expansion joints shall be provided at 18' o.c. maximum and where sidewalks abut existing walks, buildings, driveways or other construction. Contraction joints to be provided at same spacing and location as joints in Curb & Gutter.

DISREGARD NOTES AND DETAILS NOT APPLICABLE TO THIS CONTRACT

ALBUQUERQUE, NEW MEXICO

STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II

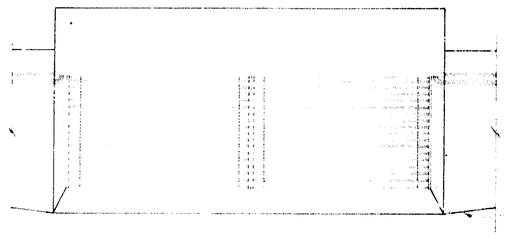
GIRARD STORM SEWER

STANDARD DETAILS

WILLIAM MATOTAN & ASSOCIATES - ENGINEERS
ALBUQUERQUE, NEW MEXICO

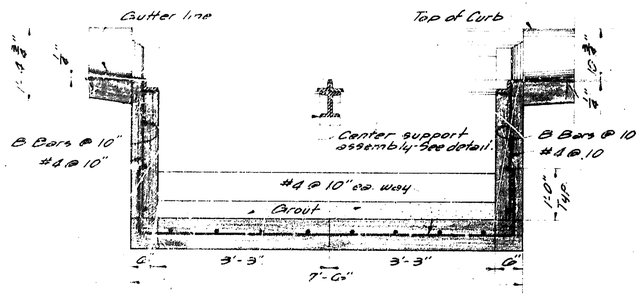
SCALE: NOT TO SCALE | DRAWN: B.D.M. | CHECKED: V.A. | DATE: JAN., 1968

SHEET 38 OF 39

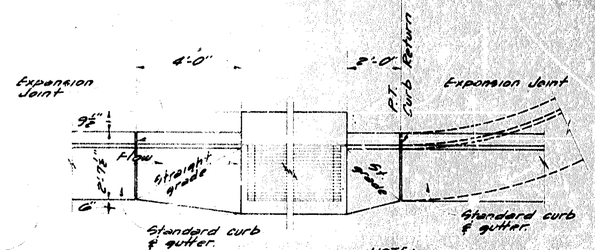


PLAN

For gutter transition see Detail for Placing Drop Inlet

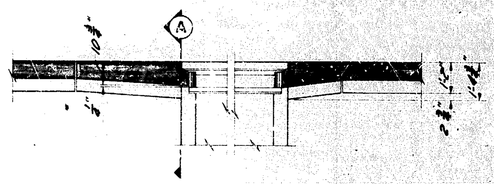


LONGITUDINAL SECTION



PLAN

NOTE:
Provide 4' transition each side of inlet when installing inlet @ low point of curb & gutter.

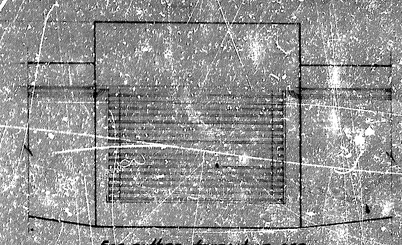


LONGITUDINAL SECTION

DETAIL FOR PLACING DROP INLET

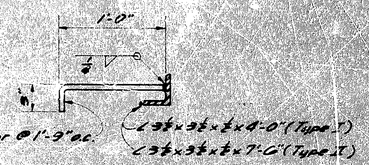
SCALE: 3/8" = 1'-0"

SECTION (A)



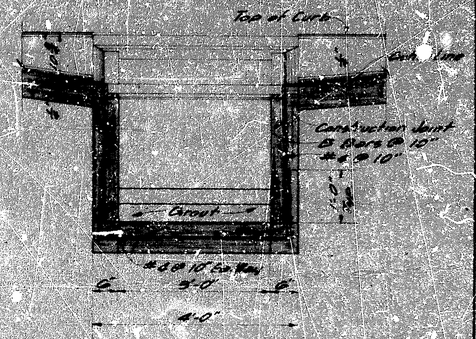
For gutter transition see Detail for Placing Drop Inlet

PLAN

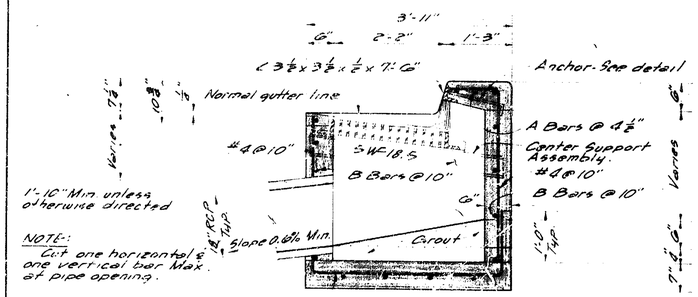


ANCHOR DETAIL

SCALE: 1 1/2" = 1'-0"



LONGITUDINAL SECTION

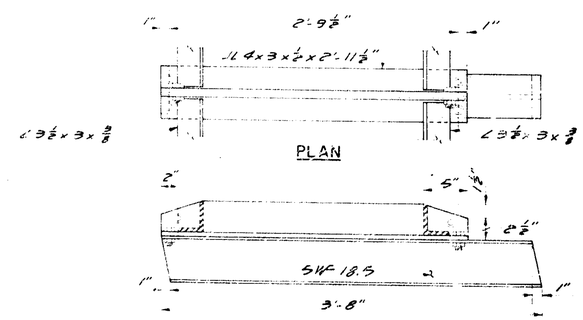


NOTE:
Cut one horizontal & one vertical bar Max. at pipe opening.

TRANSVERSE SECTION

TYPE II DROP INLET DETAILS

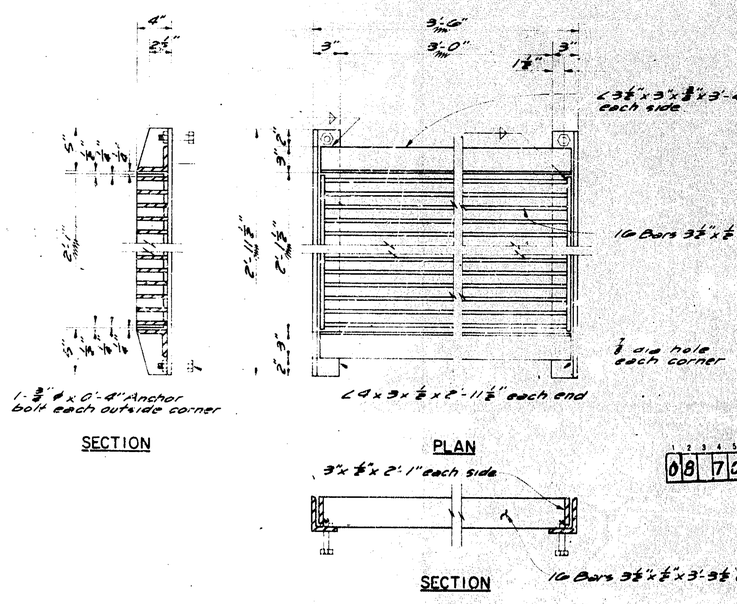
SCALE: 3/4" = 1'-0"



ELEVATION

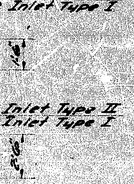
CENTER SUPPORT ASSEMBLY - TYPE II DROP INLET

SCALE: 1 1/2" = 1'-0"



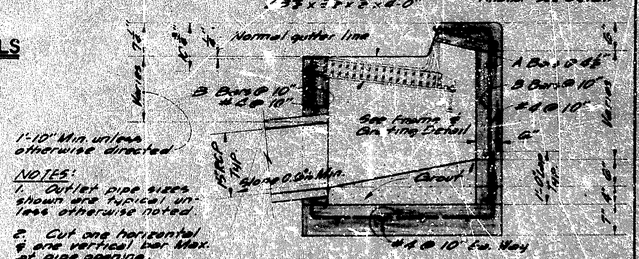
FRAME & GRATING DETAILS

SCALE: 1 1/2" = 1'-0"



BAR BENDING DETAILS

SCALE: 1/4" = 1'-0"

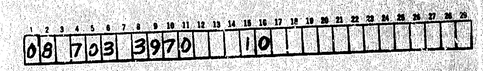


NOTES:
1. Outlet pipe sizes shown are typical unless otherwise noted.
2. Cut one horizontal & one vertical bar Max. at pipe opening.

TRANSVERSE SECTION

TYPE I DROP INLET DETAILS

SCALE: 3/4" = 1'-0"



DETAILS TYPICAL TO DROP INLETS TYPE I & II

ALBUQUERQUE, NEW MEXICO	
STORM DRAINAGE IMPROVEMENTS AT NORTH DIVERSION CHANNEL-SECTION II GIRARD STORM SEWER DROP INLET DETAILS	SHEET 39 OF 39
WILLIAM MATOTAN & ASSOCIATES - ENGINEERS ALBUQUERQUE, NEW MEXICO	
SCALE: AS SHOWN · DRAWN: J.F.M. · CHECKED: W.A.M. · DATE: JAN. 1969	