

INTERSECTION IMPROVEMENTS 2ND STREET / GRIEGOS ROAD

FEDERAL AID URBAN PROJECT
NO. M-4035 (4)

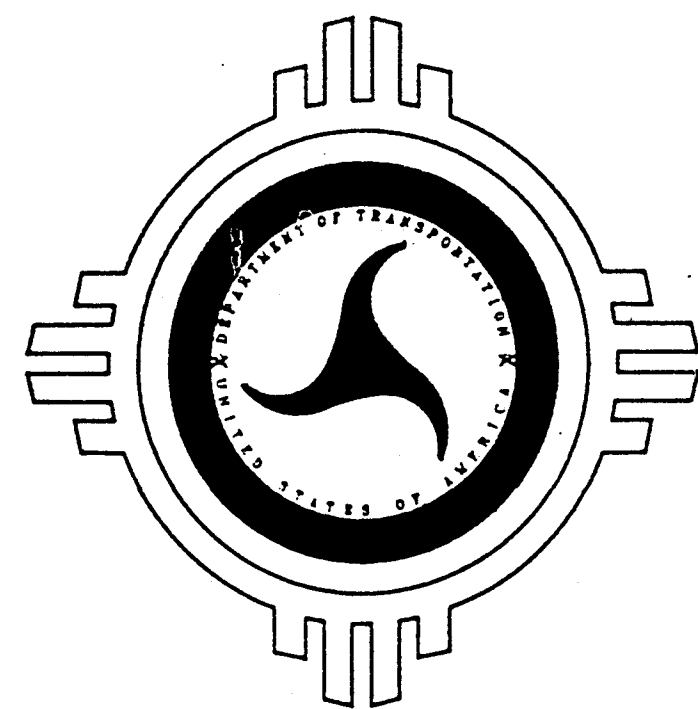
CITY OF ALBUQUERQUE PROJECT
NO. 3203.91

BERNALILLO COUNTY

Approved *John D. Dickey* Date 9-12-91
DIVISION ADMINISTRATOR

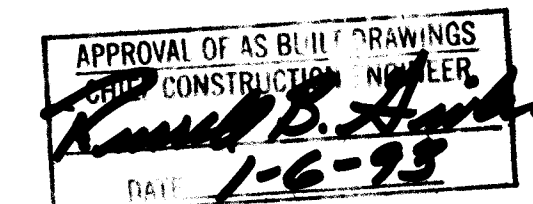
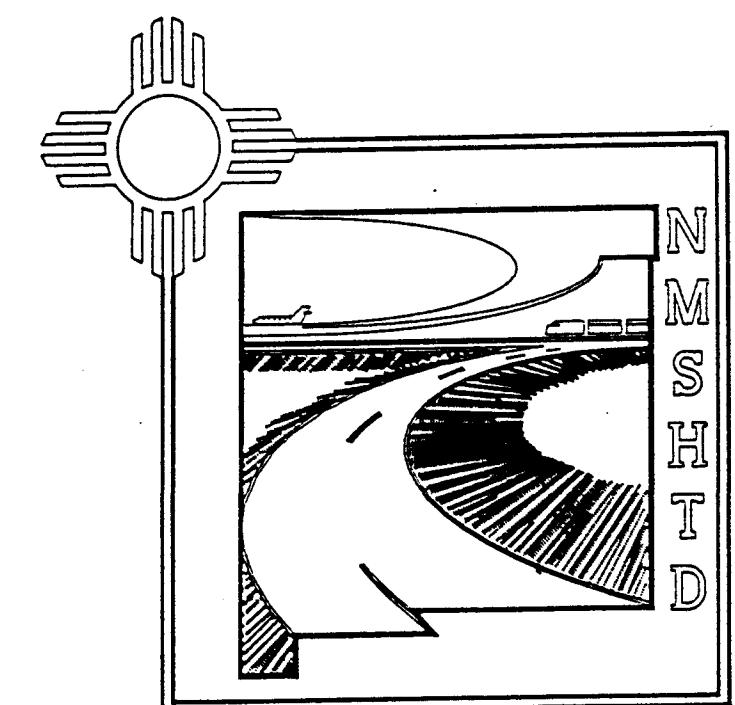
Approved *John D. Dickey* Date 8-22-91
CITY ENGINEER

Approved *Ronald E. Linder* Date 10-11-91
DESIGN DIVISION DIRECTOR



TERMINI
INTERSECTION, SECOND STREET
AND GRIEGOS ROAD.
ALBUQUERQUE, NEW MEXICO

26 3203.910193



RECORD COPY
SCANLON & ASSOCIATES, INC.
11/20/92

SET No. _____
JOB No. 86111

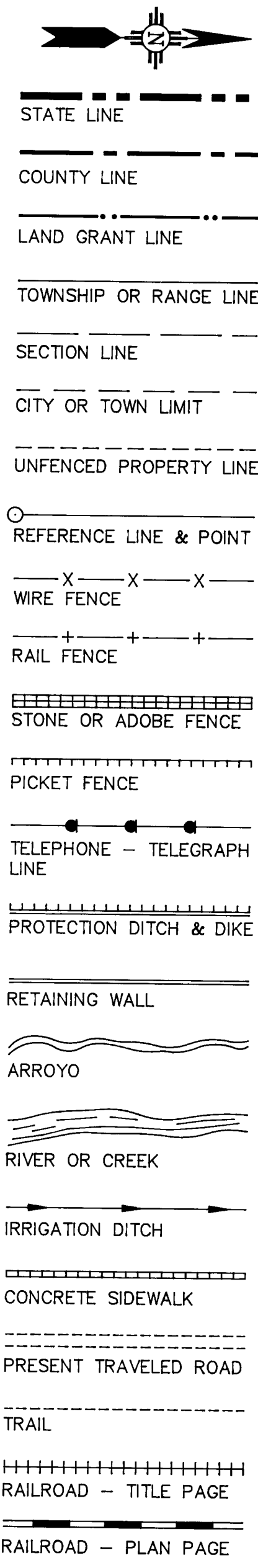
CITY OF ALBUQUERQUE N.M.
PUBLIC WORKS DEPT.
ENGINEERING GROUP/TRANSPORTATION

REV.	SHEETS	CITY ENGR.	DATE	USER	DEPT.	DATE	USER	DEPT.	DATE

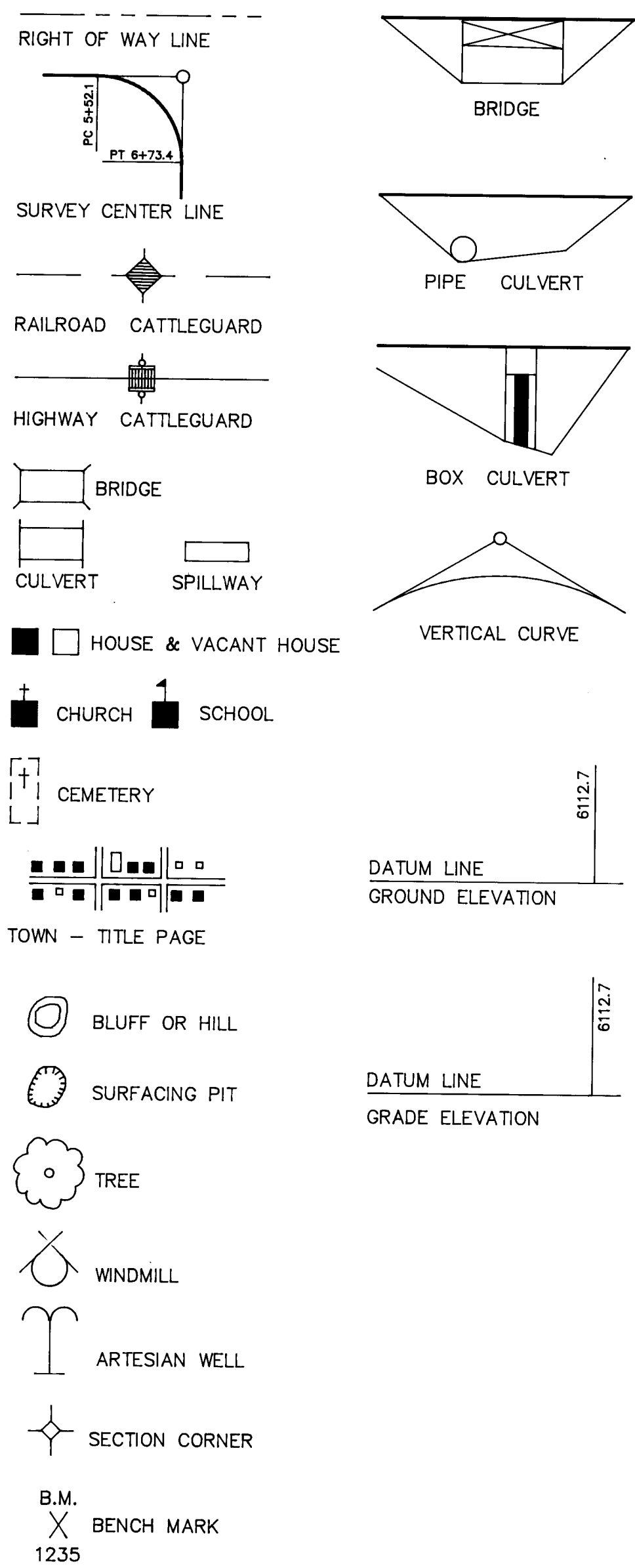
		APPROVED FOR CONSTRUCTION <u><i>John D. Dickey</i></u> 8-22-91 SHEET 1-1 OF ____
--	--	--

CONVENTIONAL SIGNS

ON PLAN



ON PROFILE

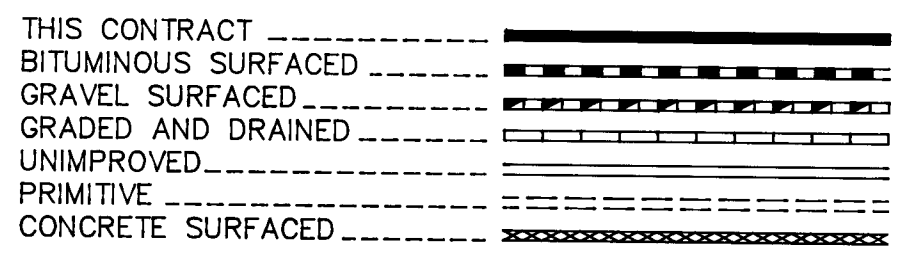


BOOK NUMBERS
NONE

SCALES { PLAN 1"=20' HORIZ.
PROFILE 1"=5' VERT.
LAYOUT SEE BAR SCALE

SHIPPING POINTS
ALBUQUERQUE, NEW MEXICO

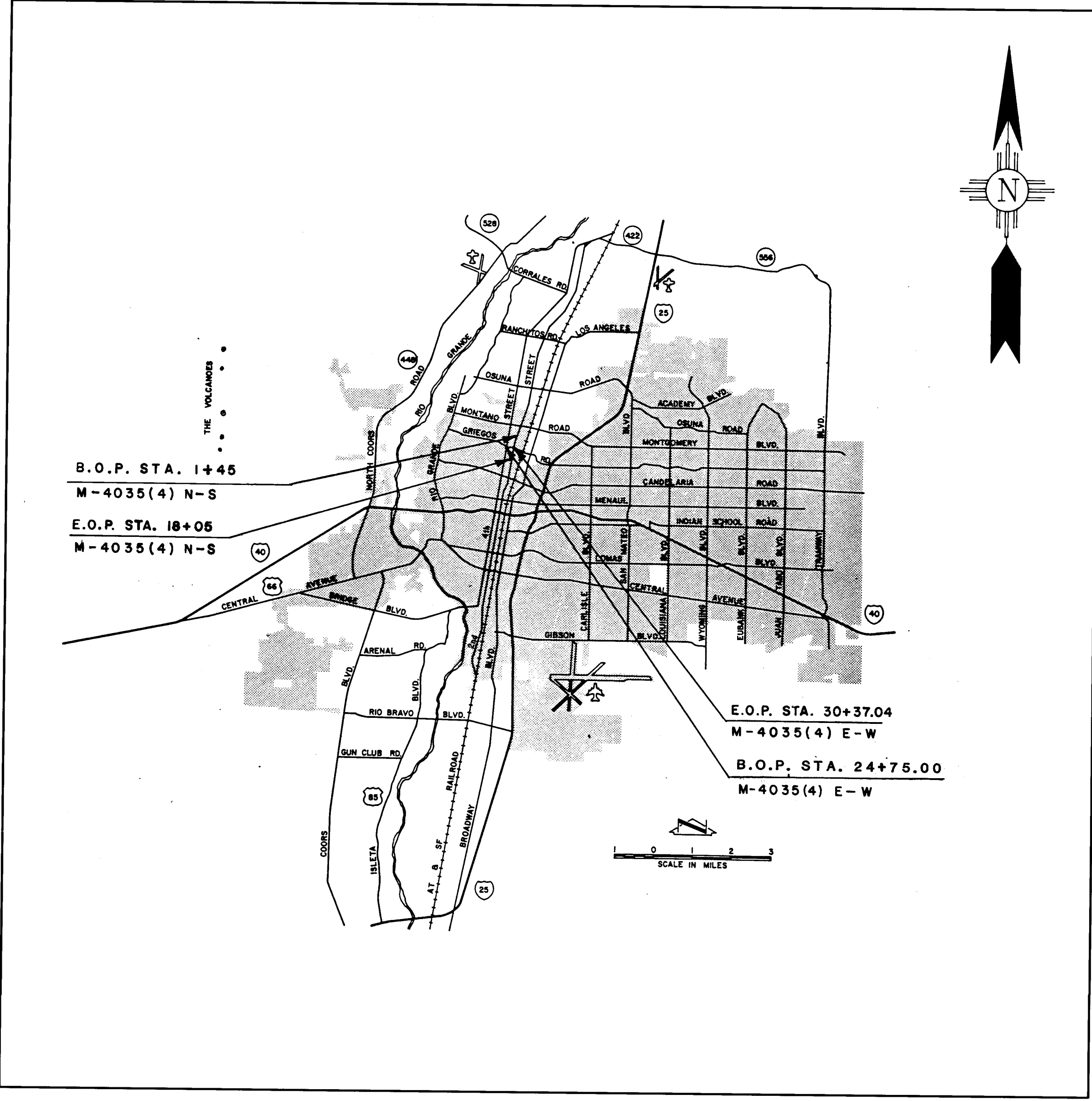
LEGEND



CONTACT PERSONS

SCANLON AND ASSOCIATES - RICHARD LOVATO, P.E.
PHONE NO. (505) 265-6941
CITY OF ALBUQUERQUE - BRETT LOCKE, P.E.
PHONE NO. (505) 768-3621

LENGTH OF PROJECT 0.421 MILES



PROJECTED SECTIONS 4 AND 5, TOWNSHIP 10N, RANGE 3E AND SECTIONS 32 AND 33, TOWNSHIP 11N, RANGE 3E
TOWN OF ALBUQUERQUE GRANT

PROJECT VICINITY

TYPE OF CONSTRUCTION

GRADE, DRAIN, CONCRETE PAVEMENT, BASE COURSE, PMBP, OGFC, CURB & GUTTER, SIDEWALK, SIGNALIZATION AND MISCELLANEOUS CONSTRUCTION.

NOTE:
BORROW & SURFACING MATERIAL REQUIRED FOR THIS PROJECT SHALL BE OBTAINED FROM ANY APPROVED SOURCE.

F.H.W.A. Region No.	STATE	M-4035(4)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		1-2	

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

No.	DESCRIPTION	DATE	BY
6			
5			
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO
STATE HIGHWAY DEPARTMENT

VICINITY MAP
SECOND STREET / GRIEGOS ROAD

DATE	JOB NO.	SCALE	DRAWN	CHECKED	SHEET
APRIL 1991	86111	NONE	JGL	RL	1-2



SCANLON & ASSOCIATES, INC.
CONSULTING ENGINEERS

INDEX OF SHEETS

F.H.W.A. Region No.	STATE	M-4035(4)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		1-3	

SHEET NO.	DESCRIPTION	SERIAL	REVISION DATE
1-1	Cover Sheet		
1-2	Project Vicinity Map		
1-3	Index of Sheets		
1-4 to 1-5	Summary of Quantities		
1-6	General Notes and Legend		
1-7	Spec. Prov.-Supp. Spec. & List of Incidentals		
1-8	Geometrics Plan		
1-9	Right-of-Way Map		
	Subtotal - Sheets 9		
2-1	Roadway Typical Sections		
2-2	Existing Roadway Typical Sections and Misc. Details		
2-3	Surfacing Schedule		
2-4	Structure Quantities (Drainage)		
2-5	Structure Quantities (Water)		
2-6 to 2-7	Miscellaneous Quantities		
2-8	Miscellaneous Details		
2-9	Intersection Grading & Concrete Joint Details		
	Subtotal - Sheets 9		
3-1 to 3-3	Paving Plan and Profile Sheets, Second Street		
3-4 to 3-5	Paving Plan and Profile Sheets, Griegos Road		
3-6 to 3-8	Utility Plan and Profile Sheets, Second Street		
3-9 to 3-10	Utility Plan and Profile Sheets, Griegos Road		
3-11	Water Valve Shut Off Plan		
	Subtotal - Sheets 11		
4-1 to 4-11	Construction Traffic Control Plans		
	Subtotal - Sheets 11		
5-1 to 5-6	Permenant Signing & Striping		
	Subtotal - Sheets 6		
6-1 to 6-10	Signalization		
	Subtotal - Sheets 10		
7-1 to 7-3	Lighting		
	Subtotal - Sheets 3		
8-1 to 8-4	Structure Placement Sections and Details		
	Subtotal - Sheets 4		
9-1 to 9-5	Cross Sections		
	Subtotal - Sheets 5		

[illegible][illegible]

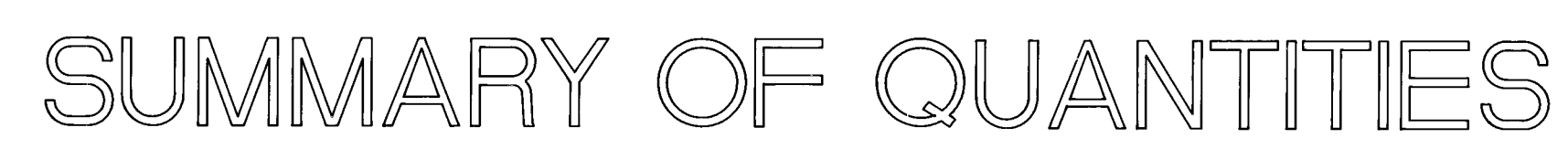
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE:		INDEX OF SHEETS			
		SECOND STREET / GRIEGOS ROAD			
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Raymond</i>	<i>8-21-91</i>	WATER	<i>W.H. Lee</i>	<i>8-21-91</i>
TRANSPORTATION	<i>Alfonso</i>	<i>8-15-91</i>	WASTE WATER	<i>W.H. Lee</i>	..
HYDROLOGY	<i>L.K. Loyd</i>	<i>8-16-91</i>			
PROJECT M-4035(4)		MAP	SHEET		OF
NO. COA PROJ. No. 3203.91		NO. G-14	1-3		

26 3203.910393

11/20/92

RECORD COPY
SCANLON & ASSOCIATES, INC.

Time: 12:45:35
Date: 8/07/1991
Drawing File: INDXGRIE
Directory: C:\A-CAD\86111\



F.H.W.A. Region No.	STATE	M-4035(4)	SHEET NO.	TOTAL SHEETS						
6	NEW MEXICO		1-5							
					AS BUILT INFORMATION		CONTRACTOR		DATE	
					DATE STAGED BY		DATE			
					INSPECTOR'S FIELD NO.		DATE			
					FIELD VERIFICATION BY		DATE			
					APPROVED BY		DATE			
					MICRO-FILM INFORMATION		RECORDED BY			
					NO.		DATE			
					BENCH MARKS					
					SURVEY INFORMATION		FIELD NOTES			
					NO.		BY			
DATE										

1. This project shall be constructed in accordance with the NEW MEXICO STATE HIGHWAY DEPARTMENT Standard Specifications for Road and Bridge Construction, Edition of 1984, except as modified herein. All utility construction, storm drain, curb and gutter, sidewalk and drive pad construction shall be performed in accordance with the City of Albuquerque Standard Specifications for Public Works Construction, 1986 edition, except as modified herein. In case of discrepancies or conflicts between the two Specifications, the more stringent shall govern as determined by the Project Manager. General conditions of the CITY OF ALBUQUERQUE Standard Specification will be used for administration of the contract.
2. All data shown herein concerning existing utilities has been obtained from the owners of the utilities, from records of the City of Albuquerque, and from field observations. These may or may not be accurate. The Contractor is cautioned that he is responsible for determining the exact locations and for protection of all lines during construction. Utility relocations required by the construction of this project are to be coordinated by the Contractor. No additional compensation will be allowed for delays or inconvenience caused by utility company work crews. The Contractor may be required to reschedule his activities to allow utility crews to perform their required work. Any damage to lines, valves, meters, etc., will be repaired or replaced by the Contractor at his expense.
3. Quantities shown herein for the various bid items are for the Contractor's information only. Payment shall be based on actual quantities as constructed.
4. Access to local businesses and residences shall be provided at all times. Access closures must be scheduled at least twenty-four (24) hours in advance with property owners and approved by the Project Manager. Access for fire protection and emergency services must be open at all times. Schedules for the release of work will be determined at the pre-construction conference. Additional or supplemental schedules may be required as the project progresses, as requested by the Project Manager.
5. It is the contractors responsibility to know and comply with the "Occupational Safety and Health Act of 1970", as ammended.
6. The Air Pollution Control Regulations of the ALBUQUERQUE BERNALILLO COUNTY AIR QUALITY CONTROL BOARD limit emission of particulate matter and the use of cut back asphalt. It is the responsibility of the Contractor to clarify these restrictions with the ENVIRONMENTAL HEALTH DEPARTMENT prior to submittal of bids to avoid conflicts with the regulations. Any required permits will be the responsibility of the CONTRACTOR.
7. All Excavation shall be governed by Federal State and Local Laws, rules and regulations concerning CONSTRUCTION SAFETY and HEALTH.
8. All Signs, Pavement Markings and Coding will be in accordance with the "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" current edition. Published by the U.S. DEPARTMENT OF TRANSPORTATION.
9. Noise Suppression Devices shall be kept in working order on all equipment in accordance with all Federal and State Regulations and City Ordinances throughout the course of CONSTRUCTION.
10. Work performed by the CONTRACTOR on the Alameda Drain Crossing at Giegas Road shall be coordinated with the MIDDLE RIO GRANDE CONSERVANCY DISTRICT. Phone NO. 243-6796.
11. The Contractor shall confine his operations to the right-of-way of the project and will be held responsible for any damage caused by his operation to public or private property, including utilities.
12. Watering for Dust Control, as required, shall be considered incidental to construction, and no measurement or payment shall be made therefor. Construction areas shall be watered or otherwise kept at all free. The Contractor shall use watering equipment for dust pollution abatement as directed by the Project Manager.
13. All work noted as proposed, "build", "relocate", "adjust", and "remove" is to be performed by the Contractor under this contract.
14. During non-working hours, construction equipment shall not obstruct driveway openings onto private properties and shall not be parked within the right-of-way. The Construction Clear Zone for this Project is 15 feet from the edge of the driving lane. The CONTRACTOR shall not store any equipment or material within the Construction Clear Zone.
15. A minimum of two (2) working days prior to any excavation the Contractor must contact ONE CALL line locating service (260-1990) for field locations of existing utilities.
16. The CONTRACTOR is to exercise care when removing existing pavement to avoid disturbing any existing underground utilities. It shall be his responsibility to coordinate with the UTILITY COMPANIES in order to prevent any service disruption. Any existing utilities or service lines that do not require relocation and are damaged by the CONTRACTOR shall be removed and replaced at the CONTRACTORS EXPENSE. This expense shall be considered incidental to the project and no separate payment will be made.
17. CURB and GUTTER, SIDEWALKS and DRIVEPADS shown as existing and not to be removed under this CONTRACT, which are damaged or displaced by the CONTRACTOR, shall be removed and replaced by the CONTRACTOR at his expense.
18. The CONTRACTOR shall be responsible for protecting, supporting and maintaining in service all existing utilities.
19. The CONTRACTOR is responsible for any damage caused by him to existing valve boxes, traffic conduit and manholes during construction and shall repair or replace same at his own expense. The CONTRACTOR shall protect the curb and gutter from incidental splashing during tack coat application and CONTRACTOR shall be responsible for cleaning the same at his own expense in the event of splashing.
20. All ties to existing pavement shall be a neat line saw cut joint. Saw cut existing pavement to a straight line and at right angles to remove any broken or cracked pavement. This work shall be considered incidental to construction and no direct payment will be made therefor.
21. Existing concrete driveways, asphaltic driveways and paved parking lots shall be saw cut to a neat line where matched to new construction. This work shall be considered incidental to Construction and no direct payment will be made therefor. Curb and gutter and sidewalks shall be removed to nearest joint.
22. The FIRE DEPARTMENT shall be notified 48 hours in advance by the CONTRACTOR whenever a fire hydrant is to be removed or is to be out of service.
23. All Gas Valves Boxes, Gas Manholes, Electrical Manholes, Telephone Manholes and Utility Poles will be adjusted to grade or relocated by others.
24. Utility adjustments will be done concurrent with construction by Utility Companies involved. The CONTRACTOR is hereby advised that he shall coordinate his work with respective Utility Companies with enough time so as not to impede his work.
25. The City of Albuquerque Traffic Division will remove all existing above ground traffic signal equipment deemed salvageable by the City. Remaining signal items (traffic detectors, concrete bases, conduit, pull boxes, etc.) shall be removed by the Contractor as a part of the removal bid item NO. 202001. All removal of traffic equipment shall be coordinated by the Contractor with the City.
26. Prior to construction in any phase, the Contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the Contractor shall notify the Project Manager so that the conflict can be resolved with minimum amount of delay. This work shall be considered incidental to construction and no direct payment will be made therefor.

BARRICADE	
CURVE DATA REFERENCE	
TEXTURED CONCRETE MEDIAN PAVEMENT	
FRICTION COURSE LIMITS	

TRANSPORTATION	<i>R. K. Lough</i>	8-15-91	WASTE WATER	<i>NAC</i>	"
HYDROLOGY	<i>K. K. Lough</i>	8-16-91			
PROJECT M-4035(4)			MAP F-14		
NO. COA PROJ NO. 3203.91			SHEET OF		
			1-6		

MODIFYING NEW MEXICO STATE HIGHWAY AND TRANSPORTATION
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION:

MODIFYING DIVISION 100 - SUBSTITUTE CITY OF ALBUQUERQUE GENERAL CONDITIONS
MODIFYING SECTION 401 - PLANT MIX BITUMINOUS PAVEMENT (9-11-91)
MODIFYING SECTION 402 - BITUMINOUS MATERIALS (4-8-87)
MODIFYING SECTION 404 - OPEN GRADED FRICTION COURSE (9-11-91)
MODIFYING SECTION 407 - TACK COAT (2-1-91)
MODIFYING SECTION 408 - PRIME COAT (2-1-91)
MODIFYING SECTION 501 - PIPE CULVERT AND UNDERDRAINS (10-20-90)
MODIFYING SECTION 503 - PORTLAND CEMENT CONCRETE (1-22-91)
MODIFYING SECTION 504 - STEEL REINFORCEMENT (2-1-91)
MODIFYING SECTION 605 - UNDERDRAINS (10-25-88)
MODIFYING SECTION 618 - TRAFFIC CONTROL MANAGEMENT (2-11-91)
MODIFYING SECTION 701 - TRAFFIC SIGNS AND SIGN STRUCTURES (4-16-91)
MODIFYING SECTION 702 - TRAFFIC CONTROL DEVICES FOR DETOURS (9-20-89)
FOR SUBGRADE EXCAVATION AND REPLACEMENT (4-19-88)
FOR ASPHALT TREATED OPEN-GRADED BASE COURSE (3-15-88)
FOR GEOTEXTILE SEPARATOR FABRIC (4-22-87)

MODIFYING CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS
FOR PUBLIC WORKS CONSTRUCTION:

MODIFYING SECTION 101 - PORTLAND CEMENT CONCRETE (10-30-90)
MODIFYING SECTION 801 - INSTALLATION OF WATER TRANSMISSION,
COLLECTOR AND DISTRIBUTION LINES (8-01-90)

MODIFYING NEW MEXICO STATE HIGHWAY AND TRANSPORTATION
STANDARD SPECIFICATIONS:

MODIFYING DIVISION 100 - SUBSTITUTE CITY OF ALBUQUERQUE GENERAL CONDITIONS
MODIFYING SECTION 203 - EXCAVATION, BORROW, EMBANKMENT (6-30-86)
MODIFYING SECTION 304 - BASE COURSE AND SUBBASE (6-21-90)
MODIFYING SECTION 401 - PLANT MIX BITUMINOUS PAVEMENT (1-8-91)
MODIFYING SECTION 402 - BITUMINOUS MATERIAL (4-19-91)
MODIFYING SECTION 404 - OPEN GRADED FRICTION COURSE (1-8-91)
MODIFYING SECTION 408 - PRIME COAT (2-2-87)
MODIFYING SECTION 501 - PIPE CULVERTS AND UNDERDRAINS (6-30-86)
MODIFYING SECTION 503 - PORTLAND CEMENT CONCRETE (9-26-88)
MODIFYING SECTION 509 - CONCRETE STRUCTURES (2-19-87)
MODIFYING SECTION 603 - RIPRAP (2-26-90)
MODIFYING SECTION 615 - PAINT (9-25-85)
MODIFYING SECTION 621 - MOBILIZATION (9-19-84)
MODIFYING SECTION 702 - TRAFFIC CONTROL DEVICES FOR DETOURS (6-1-87)
MODIFYING SECTION 704 - PAVEMENT MARKINGS (2-6-90)
MODIFYING SECTION 711 - WIRING (6-30-89)
MODIFYING SECTION 713 - DETECTORS (5-19-86)
MODIFYING SECTION 718 - REFLECTORIZED PLASTIC PAVEMENT SYMBOLS,
LEGENDS, STRIPES, MARKINGS (7-14-86)
SPECIAL DRAWING P-24-2 - TEMPORARY TAPERS (CITY)

ENVIRONMENTAL REQUIREMENTS

NO REQUIREMENTS

Ant. J. [Signature] 7-7-81

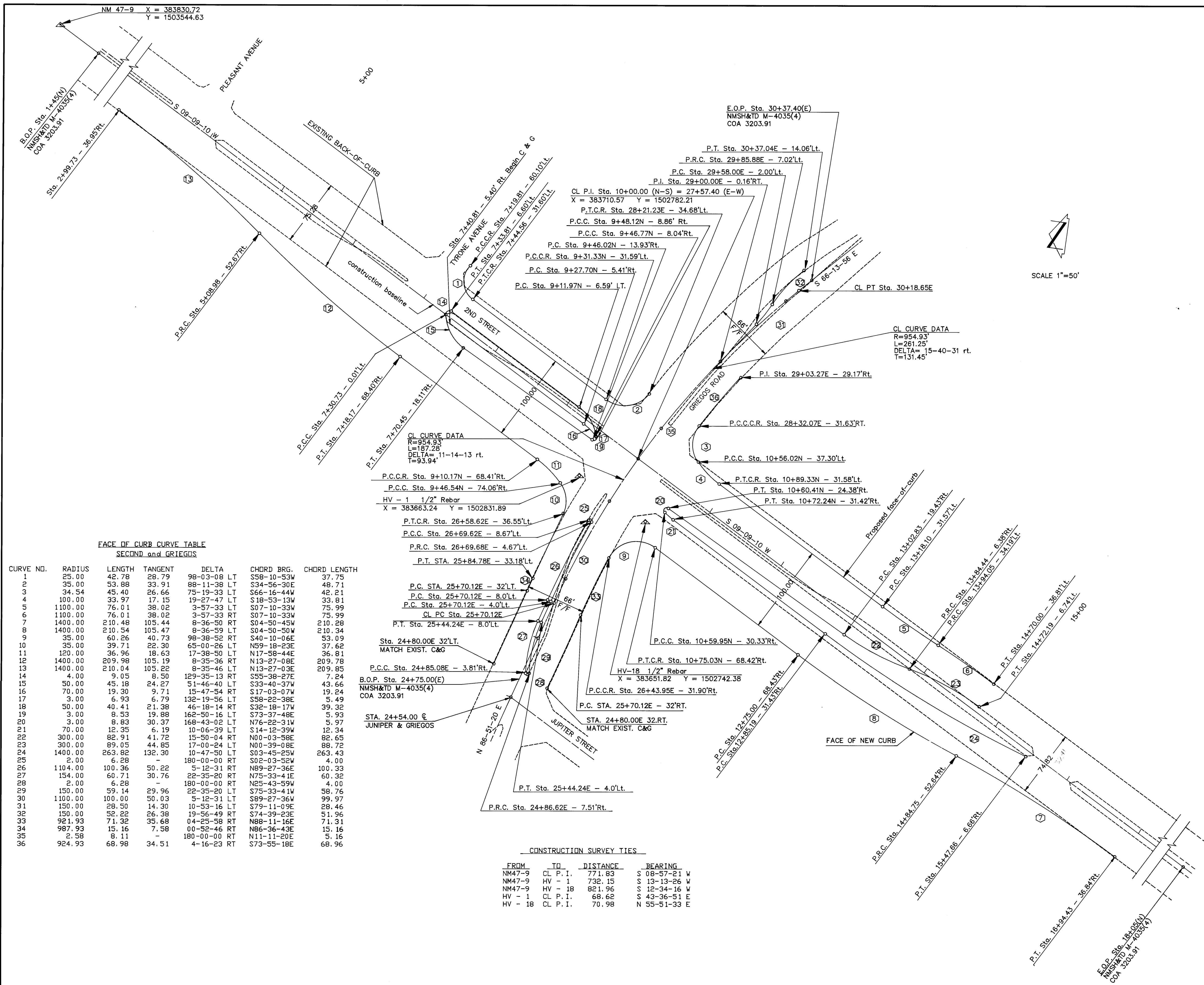
ENVIRONMENTAL PROGRAM MANAGER
NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPT.

1. PROVIDE NEWS MEDIA INFORMATION REGARDING CONSTRUCTION ACTIVITY. SEE TRAFFIC CONTROL NOTE NO. 1 ON SHEET 4-3.
2. COORDINATING CONTRACTORS WORK WITH UTILITY COMPANY WORK. SEE GENERAL NOTE NO. 24 ON SHEET 1-6.
3. WATERING FOR DUST CONTROL. SEE GENERAL NOTE NO. 12 ON SHEET 1-6.
4. EXISTING IMPROVEMENTS DAMAGED OR INADVERTENTLY DISTURBED BY THE CONTRACTOR INCLUDING SIGNALS, UTILITIES, PAVEMENT, CURBS, SIDEWALKS, MANHOLES, VALUE BOXES, TRAFFIC CONDUIT, FENCES AND LANDSCAPING. SEE GENERAL NOTES NO'S 16, 17, 18 AND 19 ON SHEET 1-6.
5. SAW CUTTING EXISTING ASPHALT AND CONCRETE PAVEMENT. SEE GENERAL NOTES NO'S 20 & 21 ON SHEET 1-6.
6. EXPLORATORY EXCAVATION OF EXISTING UNDERGROUND LINES TO DETERMINE EXACT HORIZONTAL AND VERTICAL LOCATION. SEE GENERAL NOTE NO. 26 ON SHEET 1-6.
7. SUBGRADE PREPARATION UNDER NEW CURB AND GUTTER, MEDIAN PAVEMENT, SIDEWALK AND DRIVEPADS. SEE GENERAL NOTE NO. 32 ON SHEET 1-6.
8. DISPOSAL OF MATERIALS REMOVED IN CONJUNCTION WITH CONSTRUCTION AND EXCESS MATERIAL FROM WITHIN CONSTRUCTION AREA. SEE GENERAL NOTE NO. 35 ON SHEET 1-6.
9. JOINTS REQUIRED FOR CONCRETE PAVEMENT, CURB & GUTTER AND SIDEWALK INCLUDING SAWING, CLEANING, BITUMINOUS MATERIALS, STEEL AND JOINT FILLERS.
10. INSTALLATION OF TRANSITION FROM CONCRETE CURB TO ASPHALT PAVEMENT TRANSITION. SEE DETAIL SHEET 2-8.
11. PAINTING MEDIAN CURB REFLECTORIZED YELLOW. SEE NOTE, SHEET 2-7.
12. MODIFICATION TO EXISTING PLANTER AND HEADER CURB AT NORTHEAST CORNER ON INTERSECTION. SEE NOTE 4, SHEET 3-2.
13. GEOTEXTILE FABRIC WRAPPED AROUND PERFORATED DRAIN AND OPEN GRADED BASE AROUND DRAIN. SEE NOTE 2, SHEET 2-8.
14. CONNECTION OF NEW STORM DRAIN LINE TO EXISTING MANHOLE SEE NOTE 3, SHEET 8-4.
15. SUPPLY AND INSTALL 90 LF OF 6 FT. CHAIN LINK FENCE. SEE DETAIL AND NOTE 7, SHEET 3-2.

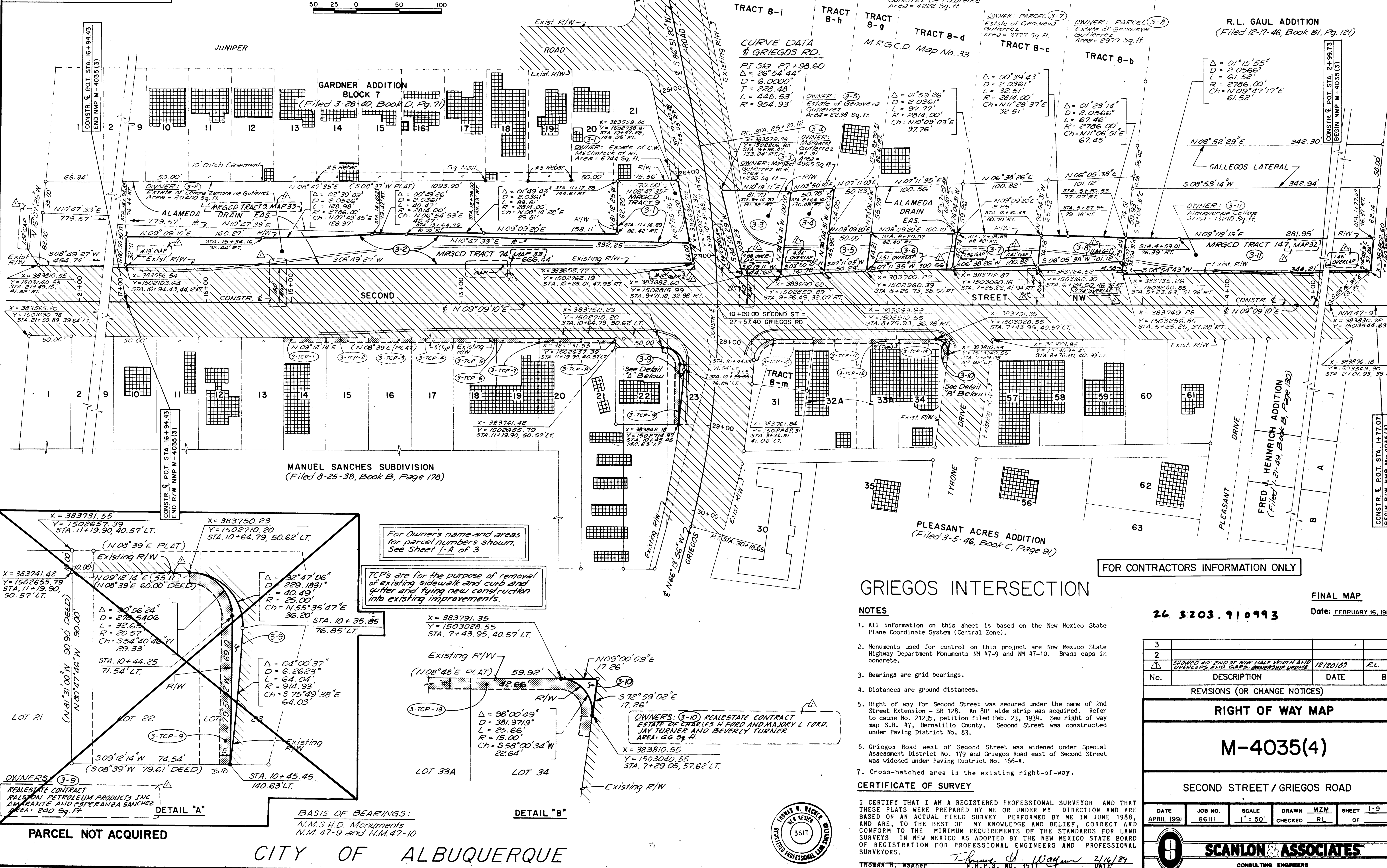
* THIS INFORMATION IS FOR CONTRACTORS USE ONLY AND MAY NOT BE ALL INCLUSIVE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE ITEMS WHICH ARE INCIDENTAL PRIOR TO PREPARATION OF THIS BID.

* THIS INFORMATION IS FOR CONTRACTORS USE ONLY AND MAY NOT BE ALL INCLUSIVE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE ITEMS WHICH ARE INCIDENTAL PRIOR TO PREPARATION OF THIS BID.

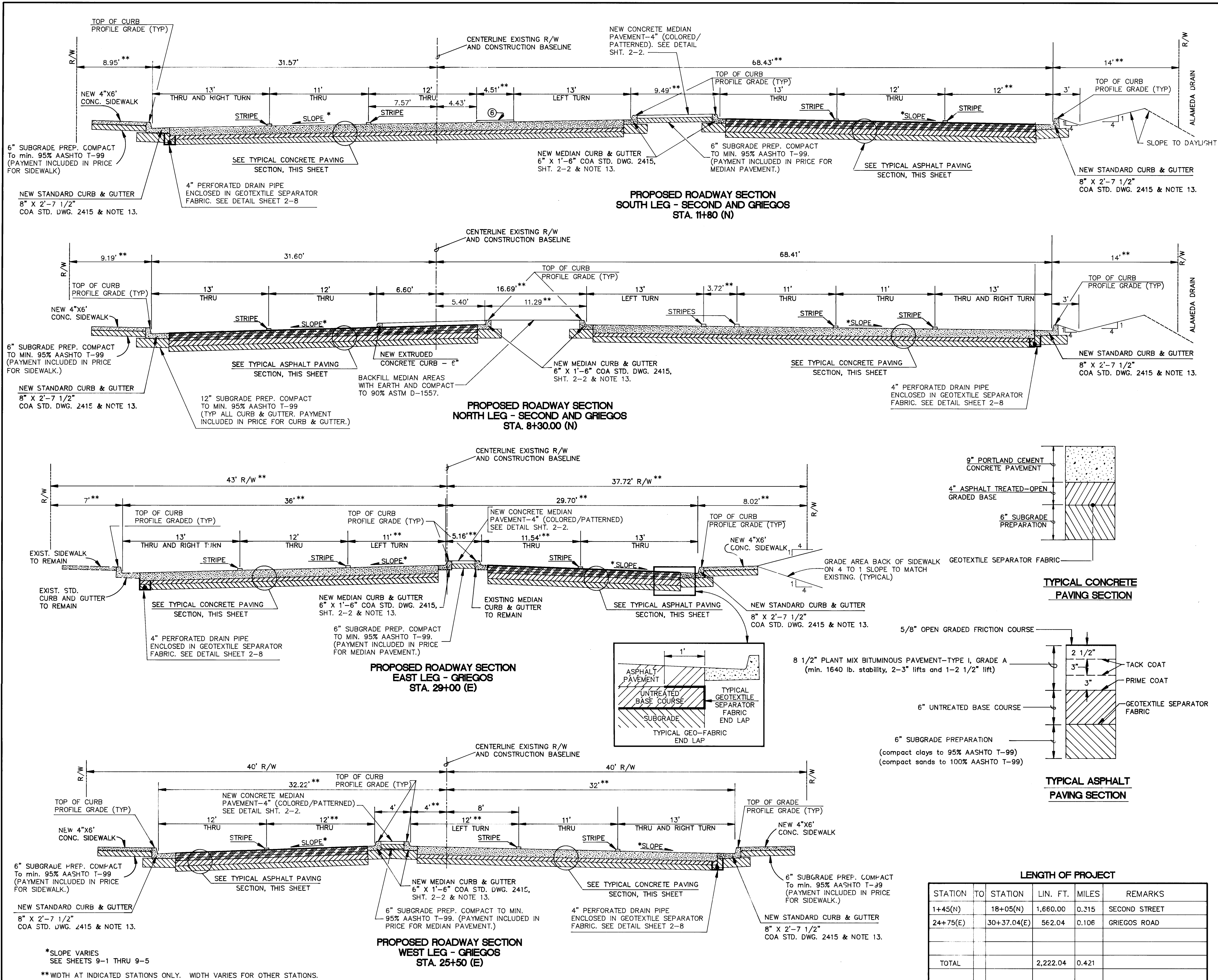
F.H.W.A. Region No.	STATE	M-4035(4)	SHEET NO.	TOTAL SHEETS	
6	NEW MEXICO		1-7		
26 3203.910793 11/20/92 RECORD COPY SCANLON & ASSOCIATES, INC. CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: SPECIAL PROVISIONS, SUPPLEMENTAL SPECIFICATIONS, LIST OF INCIDENTALS SECOND STREET / GRIEGO ROAD					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Roy A. Brown</i>	<i>8-21-91</i>	WATER	<i>V. C. Llanos</i>	<i>8-21-91</i>
TRANSPORTATION	<i>K. L. Gault</i>	<i>8-15-91</i>	WASTE WATER	<i>RL</i>	"
HYDROLOGY	<i>K. L. Gault</i>	<i>8-16-91</i>			
PROJECT M-4035(4) NO. COA PROJ No. 3203.91			MAP NO. F-14 G-14		
SHEET OF			1-7		



F.H.W.A. Region No.		STATE	M-4035(4)	SHEET NO.	TOTAL SHEETS				
6		NEW MEXICO		1-8					
						CONTRACTOR		AS BUILT INFORMATION	
						WORK STARTED BY		DATE	
						FIELD INSPECTION BY		DATE	
						DRAWINGS CORRECTED BY		DATE	
						MICRO-FILM INFORMATION		RECORDED BY	
						NO.		NO.	
						BENCH MARKS		FIELD NOTES	
						NMSHC BRASS TABLET STAMPED "STA. NM47-9" SET IN A CONCRETE POST, LOCATED IN THE MEDIAN OF SECOND STREET, 1254' NORTH OF THE CENTERLINE OF PLEASANT AVENUE, N.W. ELEVATION 4972.038 FEET (SLD 1929)		DATE	
						BY		DATE	
NO.		NO.							
ENGINEER'S SEAL		REVISIONS							
		DESIGN							
NO.		DATE							
BY		DATE							
REMARKS		DATE							
DESIGNED BY		DATE							
DRAWN BY		DATE							
CHECKED BY		DATE							
26 3203.910893									
11/20/92									
RECORD COPY SCANLON & ASSOCIATES, INC.									
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP									
TITLE: GEOMETRICS PLAN SECOND STREET / GRIEGOS ROAD									
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE				
ORC CHAIRMAN	<i>Ray A. Ryan</i>	8-21-91	WATER	<i>William</i>	8-21-91				
TRANSPORTATION	<i>W. Hays</i>	8-15-91	WASTE WATER	<i>W. Hays</i>	"				
HYDROLOGY	<i>E. K. Coyne</i>	8-16-91							
PROJECT NO.	M-4035(4)	MAP NO.	F-14 G-14	SHEET	OF				
COA PROJ. NO. 3203.91				1-8					



Drawn: 8/18/92
Date: 8/18/92
Checked: 8/18/92
Reviewed: 8/18/92



F.H.W.A. Region No.	STATE	M-4035(4)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		2-1	

NOTES:

- Typical sections on Second Street are taken looking south along Second Street.
- Typical sections on Griegos are taken looking east.
- Plant mix Bituminous pavement shall have a min. Marshall stability of 1640 pounds.
- The requirement for 6" subgrade prep. is based on existing materials having a min. R-value = 20. Where existing subgrade is not acceptable it will be removed and replaced with select subgrade materials meeting this min. requirement. The limits of removal and replacement will be determined in the field by the Project Engineer based on testing performed after existing surfacing is removed. This work to be paid for under bid item No. 203005, Subgrade excavation and replacement.
- TRAFFIC DATA:
2ND AND GRIEGOS:
design speed = 40 mph
ADT actual (1988)=18,500
ADT (2010) = 33,900
DHV (2010) = 3390
24HC (1988) = 5.5%
24HC (2010) = 6.3%
24HC during DHV = 29%
ADL (2010) = 414 flex
- 8" White solid "CHEVRON" striping. See Permanent Signing and Striping plan for details.
- 8 1/2" PMBP course shall be finished to match lip of gutter grade.
- All cut / fill slopes at back-of-curb or back-of-sidewalk shall be 4:1 max. to natural ground unless otherwise noted in the plans.
- Paved areas between back of sidewalk and R/W line to be paved with like surfacing to match existing.
- Crown slope varies from 1.0% minimum to 2.5% maximum. See Paving Plan and Profile sheets and Cross Sections.
- Subgrade Material with Plasticity index (PI) of 10 and above to be considered a clay and is to be compacted to 95% AASHTO T-99. All other subgrade material to be compacted to 100% AASHTO T-99.
- Profile grade shown on plan and profile sheets is top of median curb and top of standard curb and gutter.
- Subgrade for new concrete curb and gutter shall be 12" deep and shall extend 12" back of curb. Compact to min. 95% AASHTO T-99. (Payment included in price for curb and gutter.)
- See sheet 10-3, COA Standard Dwg. 2415, for curb and gutter details.

26 3/20/31 9/1/093

11/20/92

RECORD COPY

SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP

TITLE: ROADWAY TYPICAL SECTIONS SECOND STREET / GRIEGOS ROAD

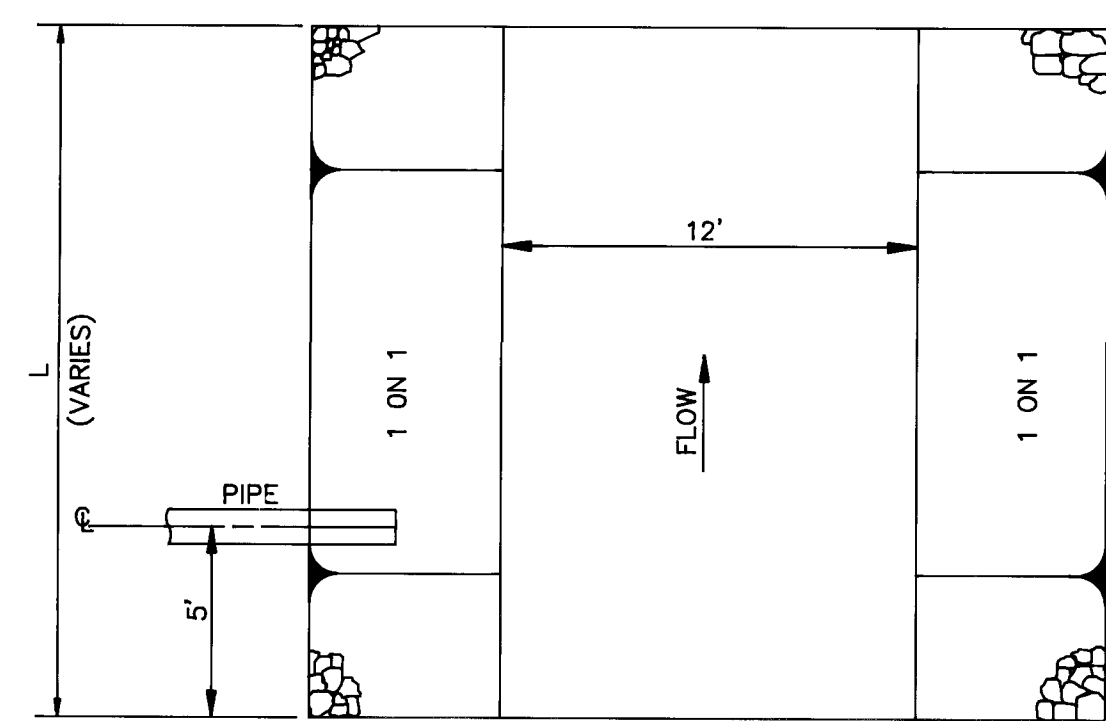
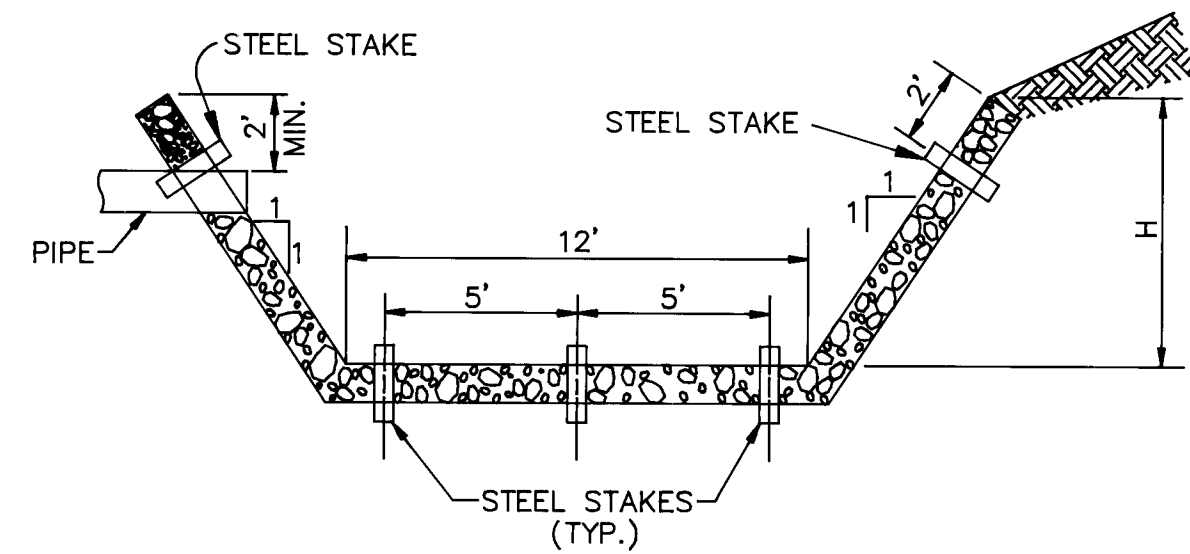
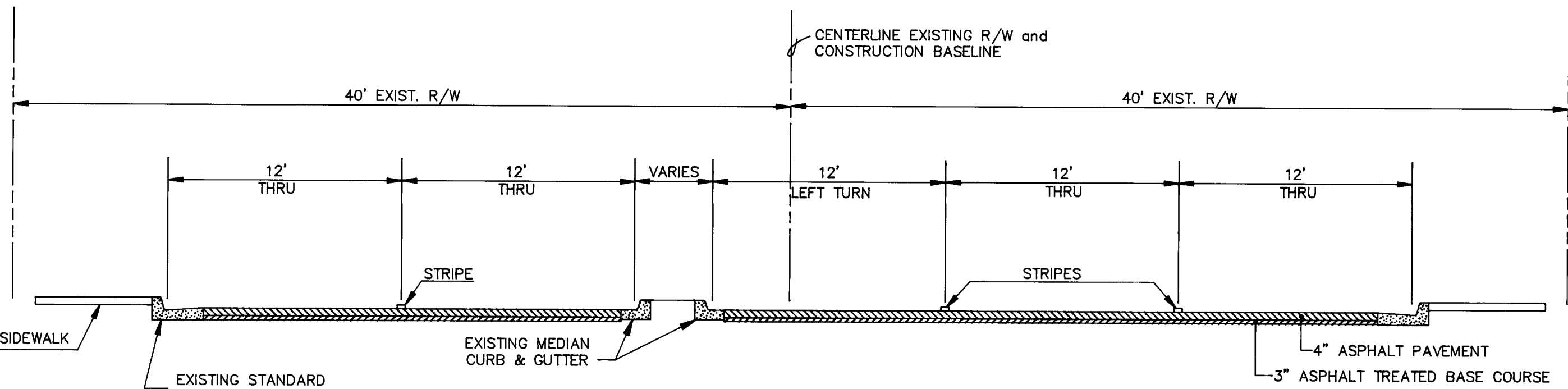
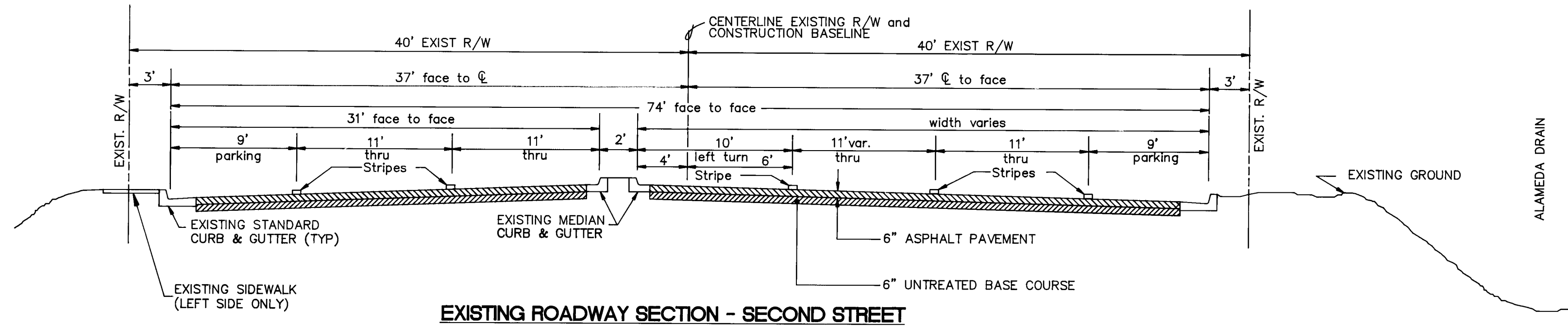
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	Rogelio	8-21-91	WATER	H.C. G.	8-21-91
TRANSPORTATION	Rogelio	8-25-91	WASTE WATER	H.C. G.	
HYDROLOGY	H.C. G.	8-16-91			

PROJECT M-4035(4) NO. COA PROJ NO. 3203.91

MAP F-14 NO. G-14

SHEET 2-1 OF

F.H.W.A. Region No.	STATE	MAP NO.	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	M-4035(4)	2-2	



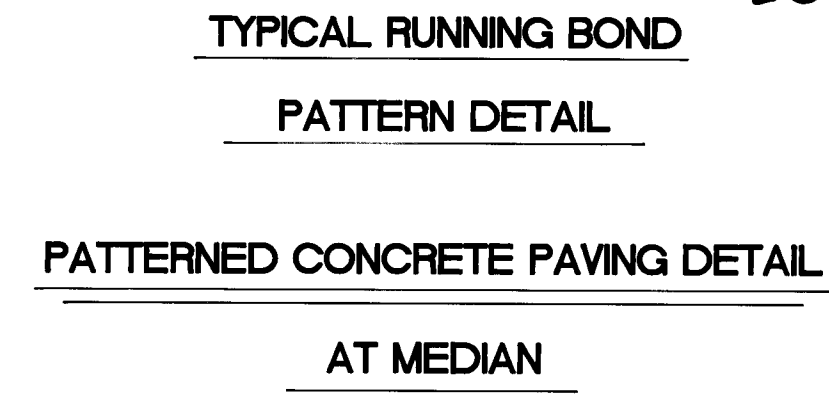
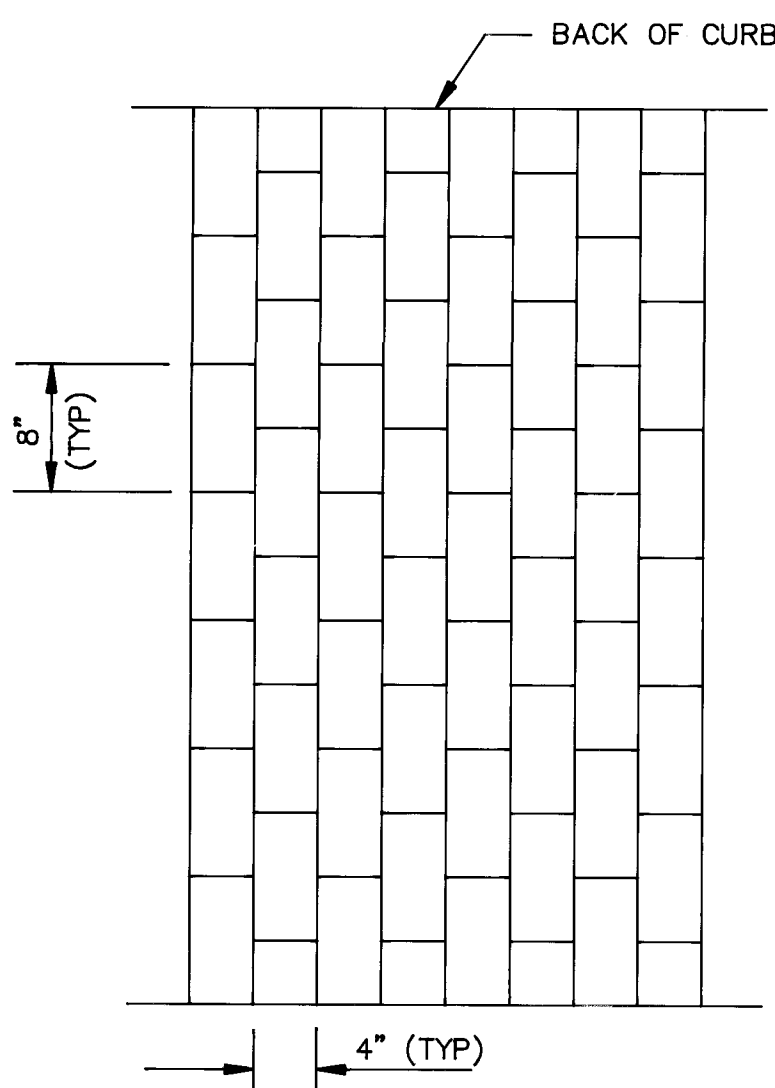
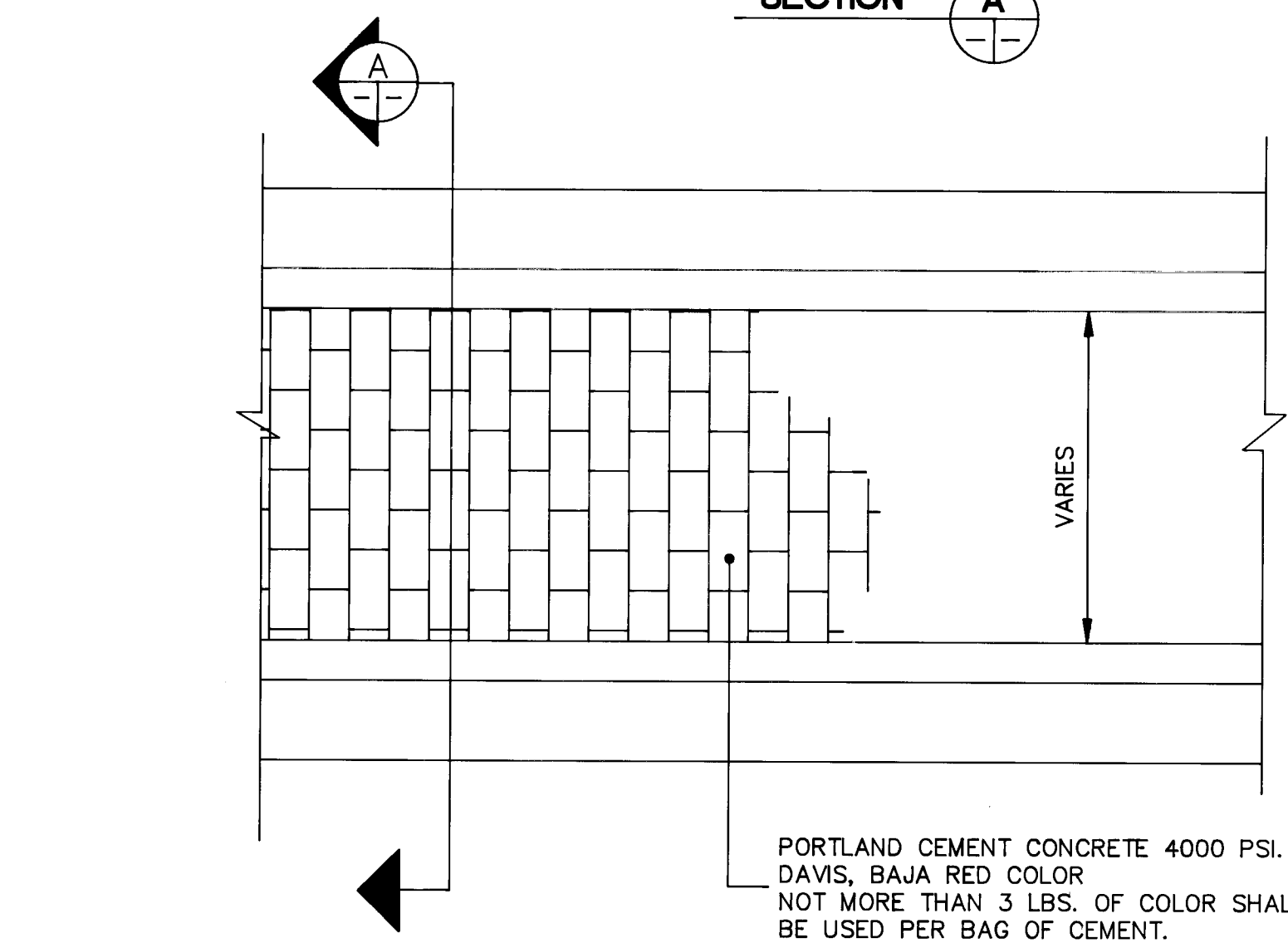
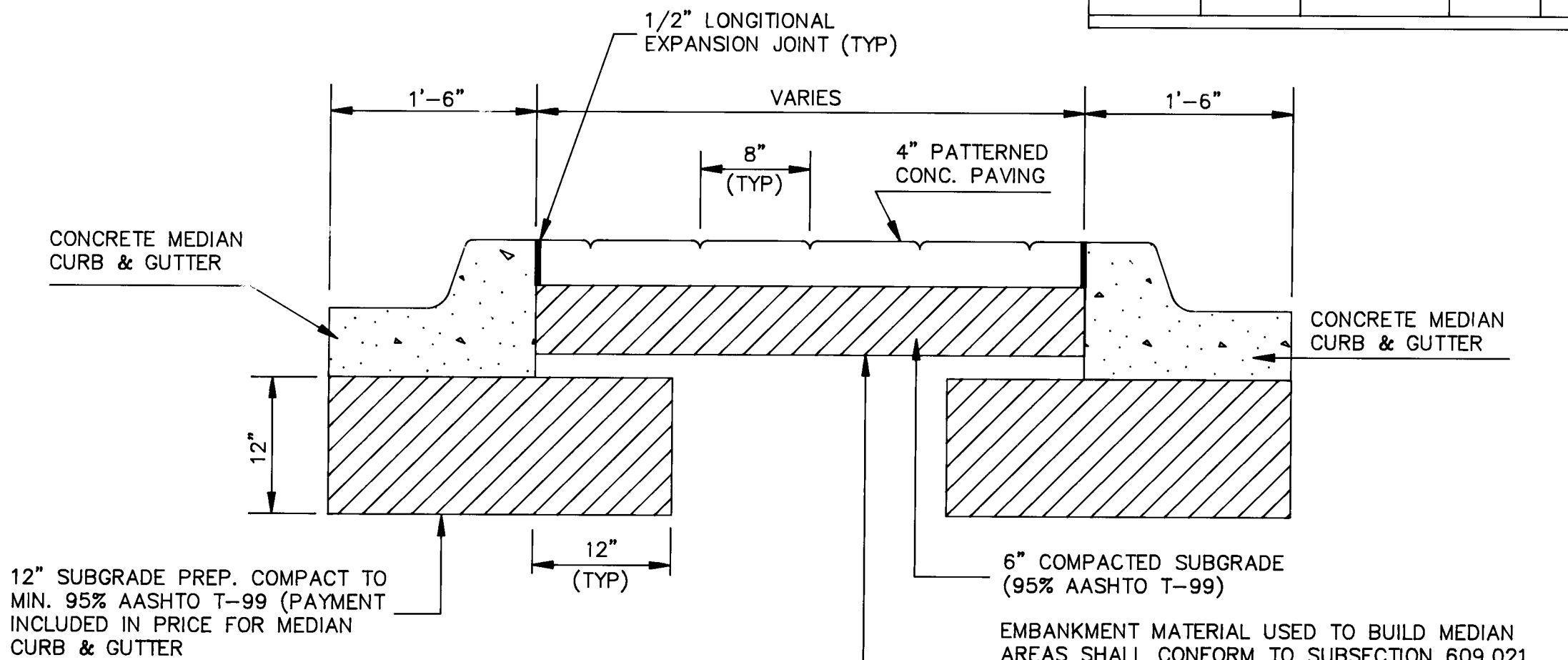
STATION TO STATION		"H"	"L"	SLOPE	TOP RIPRAP ELEV.	RIPRAP CU.YD.	WIRE FABRIC* FOR RIPRAP LB.	STEEL* STAKES EA.
4+65	4+92	5'	27'	1:1	62.17	26.14	727	20
7+20	7+40	6'	20'	1:1	61.97	21.46	604	15
9+00	9+18	7.5'	18'	1:1	61.93	22.14	620	15
12+63	12+83	7'	20'	1:1	61.56	23.55	661	15
TOTAL						93.29	2612	65
USE						94.00	2612	65

* FOR CONTRACTOR'S INFORMATION ONLY
NOTE: WIRE ENCLOSED RIPRAP SHALL CONFORM TO NMSHD SERIAL BRR-001-07

STORM SEWER DISCHARGE RIPRAP

STATION TO STATION	LOC.	CONCRETE SQ. / FT.	ASPHALT SQ. / FT.	REMARKS
7+82	8+02	LT.	100	
8+02	9+60	LT.	700	4" ASPHALT
10+63	11+87	LT.	575	

NOTE: QUANTITIES INCLUDED IN SIDEWALK AND SURFACING QUANTITIES.



- PATTERNED CONCRETE PAVING SHALL BE DELETED AT WHEELCHAIR RAMPS.
- PATTERNED CONCRETE PAVING SHALL BE 4000 P.S.I. PORTLAND CEMENT CONCRETE. COLOR SHALL BE DAVIS, BAJA RED, OR APPROVED EQUAL. RATE OF APPLICATION SHALL BE NOT MORE THAN 3 LBS. OF COLOR PER BAG OF CEMENT.
- RUNNING BOND PATTERN FOR CONCRETE PAVING SHALL AT ALL LOCATIONS BE PERPENDICULAR TO THE CURB AND GUTTER, AND SHALL BE 8" X 4" RECTANGULAR SHAPES.

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: EXIST. ROADWAY TYP. SECTION / MISC. DETAILS SECOND STREET / GRIEGOS ROAD					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	Rogel	8-21-91	WATER	Miller	8-21-91
TRANSPORTATION	Rogel	8-15-91	WASTE WATER	Miller	8-15-91
HYDROLOGY	h. b. Goyat	8-16-91			
PROJECT M-4035(4)		MAP F-14		SHEET 2-2	
NO. COA PROJ NO. 3203.91		NO. G-14			

DRAINAGE

* FOR CONTRACTORS INFORMATION ONLY - NO DIRECT PAYMENT

3	
2	
1	
No.	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)	

[illegible]

ESTIMATED
STRUCTURE
QUANTITIES
WATER LINE IMPROVEMENTS

STRUCTURE	EA	EA	EA	EA.	EA.			EA.	EA.			LF	LB.	215#	220#	220#	115#	140#	60#	85#	30#		55#		7F.	L.F.	LB.	CU. YD.	EA.	EA.	EA.			
STA. 3+35 TO STA. 9+75 INSTALL 1-6" X 640 LF PVC WATERLINE	1	3		1				3	3			685					2	1	1	2	1		1			640								
STA. 9+20 - 10' RT. TO 75' RT. INSTALL 1-6" X 65 LF PVC																										65								
STA. 9+35 - 75' RT. INSTALL NEW 2" PVC PIPE X 58 LF AND NEW METER BOX																													1					
STA. 9+42 TO STA. 10+80 - 78' RT. INSTALL 2-6" X 138 LF PVC FOR IRRIGATION																										276								
STA. 11+00 - 27' RT. TO 75' RT. INSTALL 1-6" X 48 LF PVC																										48								
STA. 11+26.5 - 39' LT. REMOVE AND RESET EXISTING FIRE HYDRANT																													1					
STA. 26+08 TO STA. 27+10 INSTALL 1-12" X 125 LF DUCTILE PIPE WATERLINE ENCASE FIVE FT. EACH SIDE OF NEW CBC.			2		1							125	1315	1	2	3										85	2.02							
WATER SERVICE 3/4" - 1" (TO BE DETERMINED IN FIELD)																												3						
TOTAL	1	3	2	1	1			3	3			125	2000	1	2	3	2	1	1	2	1		1			1029	85	2.02	3	1	1			

* INCLUDE PRICE IN PRICE BID STRUCTURAL CONCRETE CLASS "A"

26 3203.911493

M-4035 (4)

3			
2			
1			
No.	DESCRIPTION	DATE	BY
	REVISIONS (OR CHANGE NOTICES)		

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: STRUCTURE QUANTITIES (WATER)
SECOND STREET / GRIEGOS ROAD

APPROVALS

ENGINEER

DATE

APPROVALS

ENGINEER

DATE

DRC CHAIRMAN

TRANSPORTATION

HYDROLOGY

8-21-91

8-15-91

8-16-91

WATER

WASTE WATER

8-21-91

NO

..

DESIGNED BY

DRAWN BY

CHECKED BY

RL

DATE

8/21/91

DATE

8/21/91

DATE

8/21/91

PROJECT M-4035(4)
NO. COA PROJ No. 3203.91

MAP F-14
NO. G-14

SHEET 2-5 OF

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

AS BUILT INFORMATION

BENCH MARKS

SURVEY INFORMATION

ENGINEER'S SEAL

CONTRACTOR

WORK

STAMPED BY

DATE

ACCEPTANCE BY

DATE

FIELD CONTROL BY

DATE

DRAWINGS

CORRECTED BY

DATE

RECORDED BY

DATE

NO.



REMOVAL OF STRUCTURES AND OBSTRUCTIONS

* INCLUDED IN SIDEWALK
** SEE GENERAL NOTE NO. 25, SHEET 1-6

CONCRETE SIDEWALK - 4"

ADJUST VALVE BOXES TO GRADE

Time: 14:47:36
Date: 8/08/1991
Drawing File: MISQRIE
Directory: C:\A-CAD\86111\

REMOVAL OF SURFACING

DRIVE PAD - 6"

STATIONARY GUARD POST

ADJUST MANHOLES TO GRADE

WATERLINE PIPE REMOVAL

WHEELCHAIR RAMP

FOR CONTRACTORS INFORMATION ONLY

RECORD COPY

PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE:

MISCELLANEOUS QUANTITIES

SECOND STREET / GRIEGOS ROAD

PROJECT M-4035(4)	MAP F-14	SHEET	OF
NO. COA PROJ No. 3203.91	NO. G-14	2-6	

			704010	704010	718002	718004	718002	
STATION TO STATION		LENGTH	4" SOLID WHITE (PAINT)	4" BROKEN WHITE (PAINT)	8" SOLID WHITE (PLASTIC)	12" SOLID WHITE (PLASTIC)	8" CHEVRON (PLASTIC)	REMARKS
1+45	9+05	760	2180	400	218	60		2ND STREET
10+50	18+05	755	1500	430	218	60	500	2ND STREET
SUB-TOTAL			3680	830	436	120	500	
21+25	26+72	547	570	250	166	40		GRIEGOS ROAD
28+03	34+60	657	735	330	160	40		GRIEGOS ROAD
SUB-TOTAL			1305	580	326	80		
TOTAL			4985	1410	762	200	500	
GRAND TOTAL		-	6395 X 2	APPLICATION				
USE			12790					
USE			13000					

609091
8' EXTRUDED CONCRETE CURB

STATION TO STATION		LOC.	LIN.FT.	DESCRIPTION
2+99.73	5+08.98	2ND ST. -RT.	210.04	EAST SIDE
5+08.98	7+18.17	2ND ST. -RT.	210.00	EAST SIDE
12+75.00	16+94.43	2ND ST. -RT.	421.02	EAST SIDE
13+18.10	14+70.00	2ND ST. -LT.	151.90	WEST SIDE
TOTAL			992.96	

STATION TO STATION		LOC.	LIN.FT.	DESCRIPTION
1+45.00	3+43.50	MEDIAN	197.50	LT. SIDE - 2ND STREET
1+45.00	3+43.50	MEDIAN	197.50	RT. SIDE - 2ND STREET
3+43.50	3+45.00	MEDIAN	3.53	NOSE - 2ND STREET
7+33.81	9+47.52	MEDIAN	218.54	LT. SIDE - 2ND STREET
12+85.19	15+47.66	MEDIAN	263.82	RT. SIDE - 2ND STREET
13+02.83	14+70.00	MEDIAN	171.66	LT. SIDE - 2ND STREET
16+05.00	16+11.00	MEDIAN	18.05	NOSE - 2ND STREET
16+11.00	18+05.00	MEDIAN	194.00	LT. SIDE - 2ND STREET
16+11.00	18+05.00	MEDIAN	194.00	RT. SIDE - 2ND STREET
TOTAL			1458.60	

STATION TO STATION		LOC.	LIN.FT.	TYPE	DESCRIPTION
7+18.17	9+10.17	RT.	192.0	8'	WEST SIDE 2ND ST.
9+10.17	9+46.54	RT.	36.96	8'	WEST SIDE 2ND ST.
9+46.54	26+58.62	RT.	39.71	8'	CURB RETURN 2ND & GRIEGOS RD.
24+80.00	26+58.62	LT.	178.62	8'	GRIEGOS RD.
24+80.00	26+43.95	RT.	163.95	8'	GRIEGOS RD..
26+43.95	10+75.03	RT.	60.26	8'	CURB RETURN 2ND ST.
10+75.03	12+75.00	RT.	200.00	8'	WEST SIDE 2ND ST.
7+19.81	7+44.56	LT.	42.78	8'	EAST SIDE 2ND ST. CURB RETURN
7+44.56	9+31.33	LT.	186.77	8'	EAST SIDE 2ND ST.
9+31.33	28+21.23	LT.	53.88	8'	CURB RETURN
28+25.86	29+03.27	RT.	75.01	8'	GRIEGOS RD.
28+25.86	10+56.02	RT.	37.93	8'	CURB RETURN GRIEGOS RD.
10+56.02	10+89.33	LT.	33.93	8'	CURB RETURN 2ND ST.
10+89.33	13+18.10	RT.	228.77	8'	EAST SIDE 2ND ST.
SUBTOTAL			1530.57		
LESS CATCH BASINS			47.2		
TOTAL			1483.37		

609060
6" CONCRETE MOUNTABLE MEDIAN CURB AND GUTTER

STATION TO STATION		LOC.	LIN.FT.	DESCRIPTION
7+30.73	7+70.18	MEDIAN	54.23	NOSE - 2ND STREET
7+33.81	9+31.33	MEDIAN	197.52	LT. SIDE - 2ND STREET
7+70.45	9+46.54	MEDIAN	176.09	RT. SIDE - 2ND STREET
9+31.33	9+48.02	MEDIAN	33.03	NOSE - 2ND STREET
10+58.45	10+72.24	MEDIAN	33.01	NOSE - 2ND STREET
10+72.24	12+85.19	MEDIAN	212.95	LT. SIDE - 2ND STREET
10+72.24	13+02.83	MEDIAN	230.59	RT. SIDE - 2ND STREET
SUB-TOTAL			937.42	
24+84.08	24+86.62	MEDIAN	6.28	NOSE - GRIEGOS ROAD
24+85.08	26+69.62	MEDIAN	186.95	LT. SIDE - GRIEGOS ROAD
24+86.62	26+69.68	MEDIAN	185.02	RT. SIDE - GRIEGOS ROAD
26+69.82	26+69.00	MEDIAN	6.28	NOSE - GRIEGOS ROAD
28+07.50	28+09.00	MEDIAN	6.28	NOSE - GRIEGOS ROAD
28+09.00	29+00.00	MEDIAN	91.00	RT. SIDE - GRIEGOS ROAD
28+09.00	29+85.88	MEDIAN	145.88	LT. SIDE - GRIEGOS ROAD
SUB-TOTAL			627.69	
TOTAL			1565.11	

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Rogers</i>	8-21-91	WATER	<i>W. L. L. L.</i>	8-2-91
TRANSPORTATION	<i>R. L. L.</i>	8-15-91	WASTE WATER	<i>W. L. L.</i>	
HYDROLOGY	<i>W. L. L.</i>	8-16-91			

PROJECT M-4035(4)	MAP F-14	SHEET 2-7	OF
NO. COA PROJ No. 3203.91	NO. G-14		

NO.		DATE	REMARKS	BY
REVISIONS				
			DESIGN	
DESIGNED BY			DATE	
DRAWN BY JCL			DATE	8/18/91

AS BUILT INFORMATION

BENCH MARKS

SURVEY INFORMATION

ENGINEER'S SEAL

DATE	DATE
------	------

DATE	BY	DATE

CHARD LOYALTY

[illegible][illegible]

--	--	--

83.
Shard
6825

NO.	DATE	REMARKS	BY
-----	------	---------	----

DATE _____
DRAWINGS _____
CORRECTED BY _____

--	--

1960
REGISTER

DESIGN REVISIONS

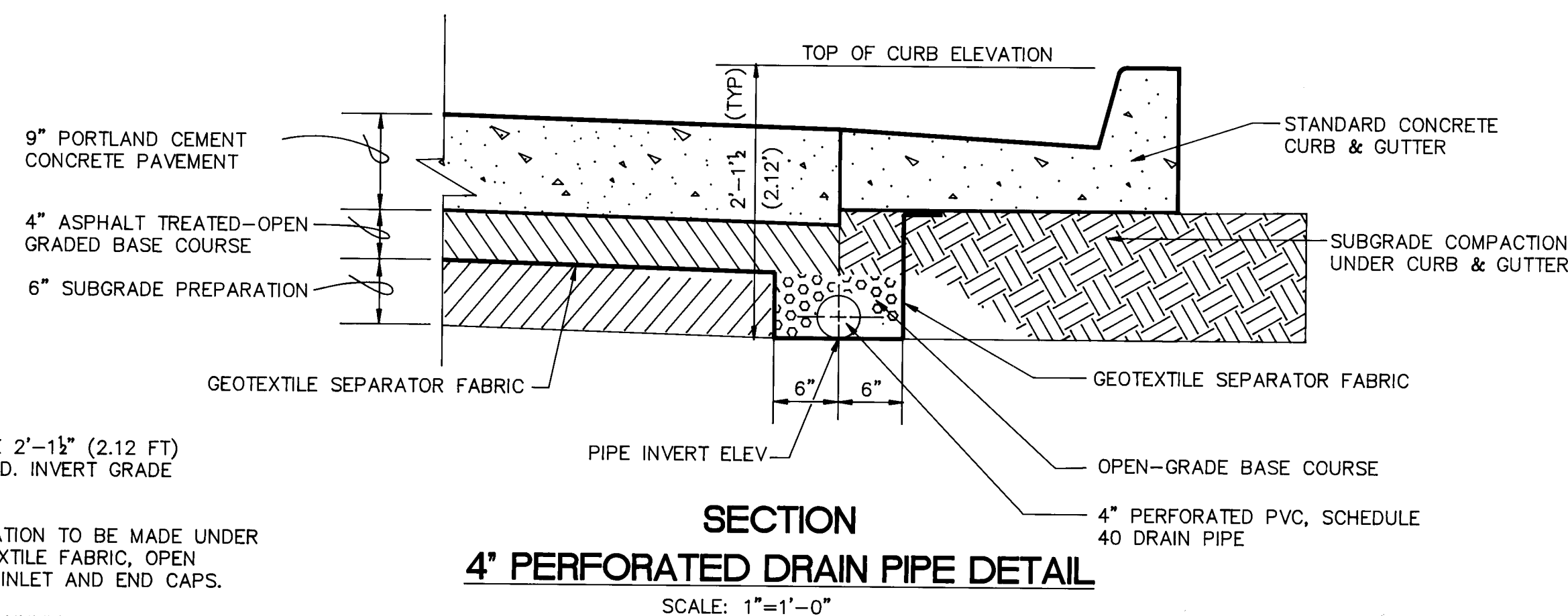
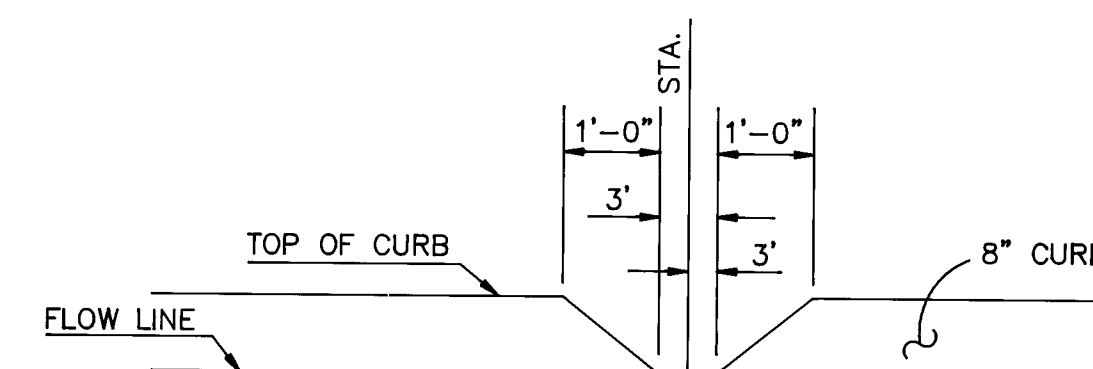
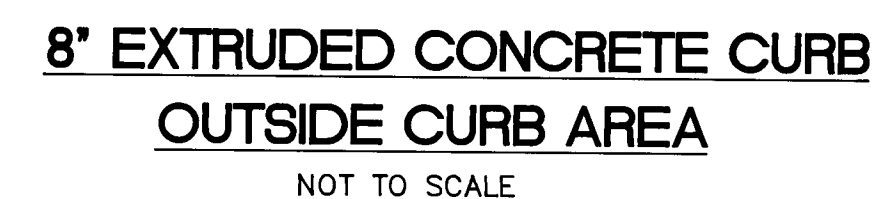
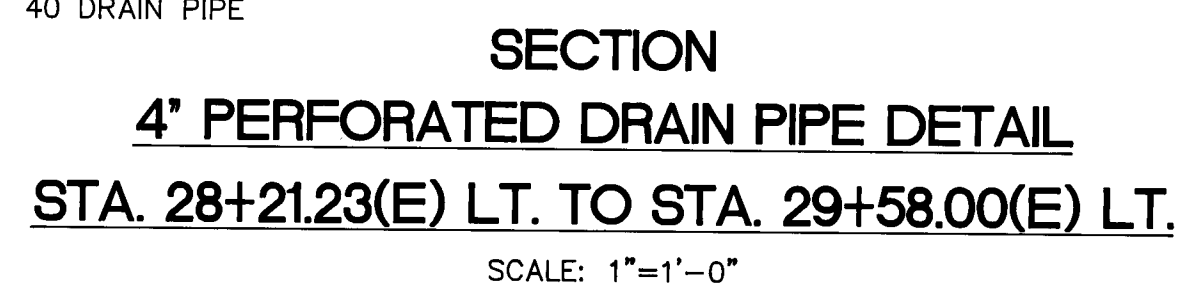
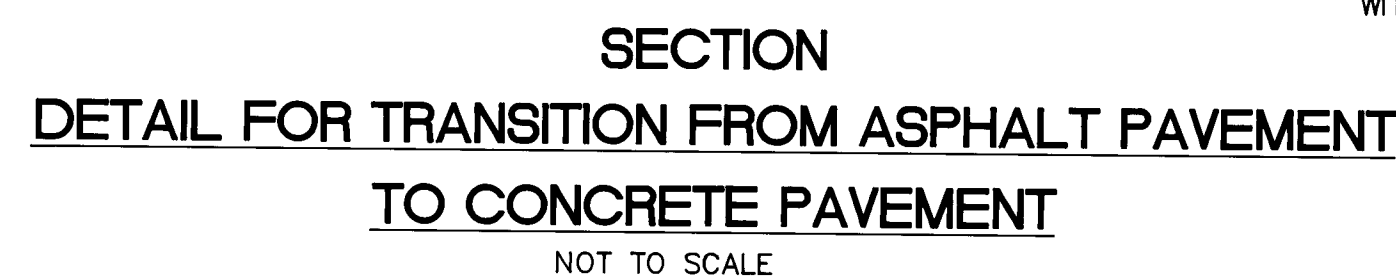
RECORDED BY _____ DATE _____

--	--	--	--

RECEIVED

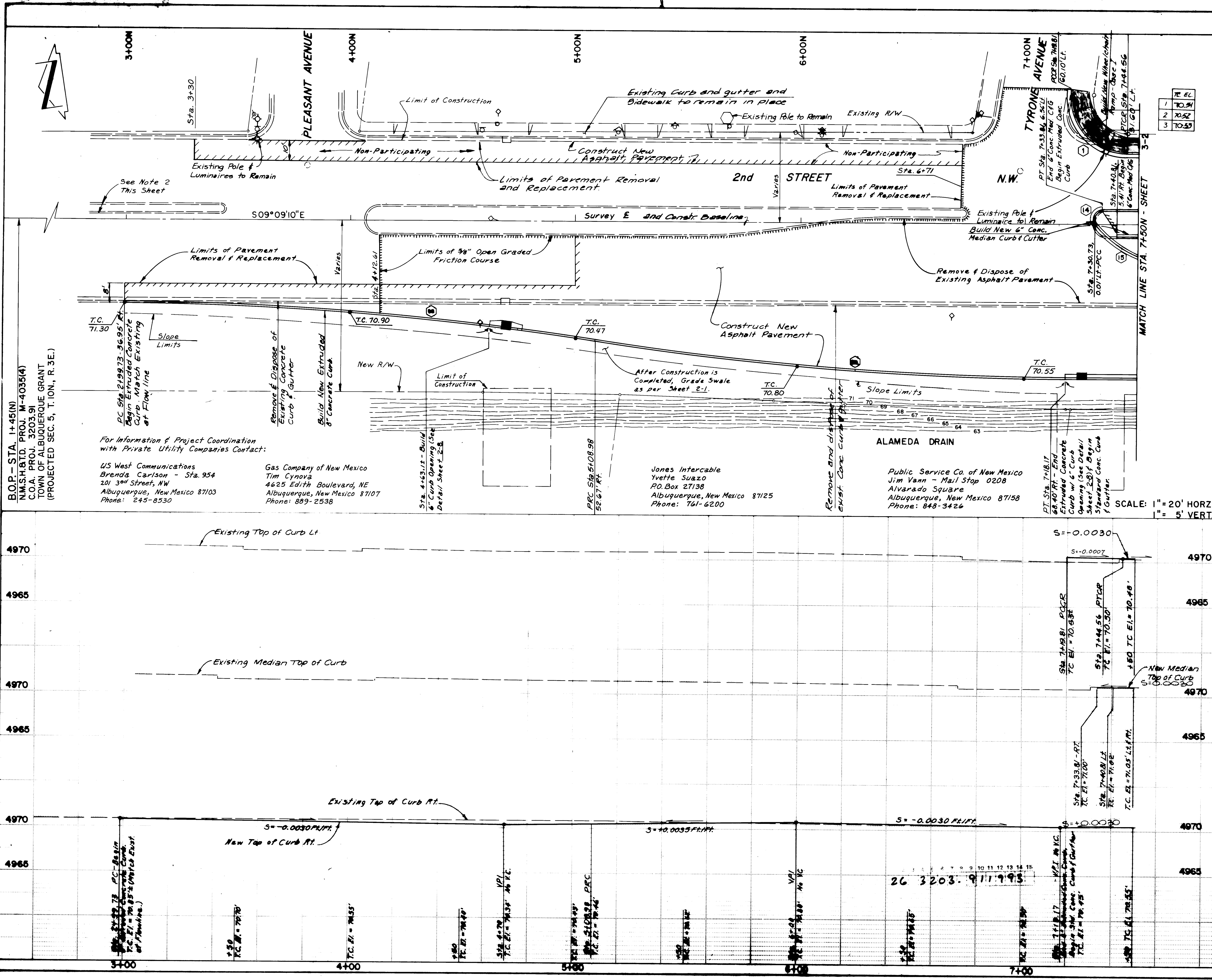
DESIGNED BY	DATE
-------------	------

Time: 6:43:3
Date: 8/08/1991
Drawing File: MISQGR12
Directory: C:\A-CAD\86111\



F.H.W.A. Region No.	STATE	M-4035(4)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		2-8	
AS BUILT INFORMATION				
CONTRACTOR				
WORKED BY DATE				
INSPECTORS DATE				
ACCEPTANCE BY DATE				
REVISION VERIFICATION BY DATE				
DRAWINGS BY DATE				
MICRO-FILM INFORMATION				
RECORDED BY DATE				
NO.				
BENCH MARKS				
SURVEY INFORMATION				
FIELD NOTES				
DATE				
BY				
NO.				
ENGINEER'S SEAL				

Time: 13:25:39
Date: 8/08/1991
Drawing File: MISQGRU3
Directory: C:\A-CAD\86111\



- NOTES:**
- Permanent Median Landscaping will be provided by the City of Albuquerque. The Contractor shall backfill Median Areas with Earth and Compact to 90% ASTM D-1557.
 - Prior to Removal of this Median, the Contractor shall Set Horizontal Reference Stakes. Remove & Dispose of Southern 200 Ft. of this Median. Install 4" Temporary Asphalt Pavement. When Construction is Complete, Install 6" Extruded Concrete Curb, Backfill Median Area with Earth and Compact to 90% ASTM D-1557.
 - See Sheet 7-2 For New Lighting System Layouts.
- TC Top of Curb Elev. are as built Elev. provided by C.O.A. Survey.

B.O.P - STA. 1+45(N)
 N.M.S.H.D. PROJ. M-4035(4)
 C.O.A. PROJ. 3203.91
 TOWN OF ALBUQUERQUE GRANT
 (PROJECTED SEC. 5, T. 10N., R. 3E.)

For Information of Project Coordination with Private Utility Companies Contact:

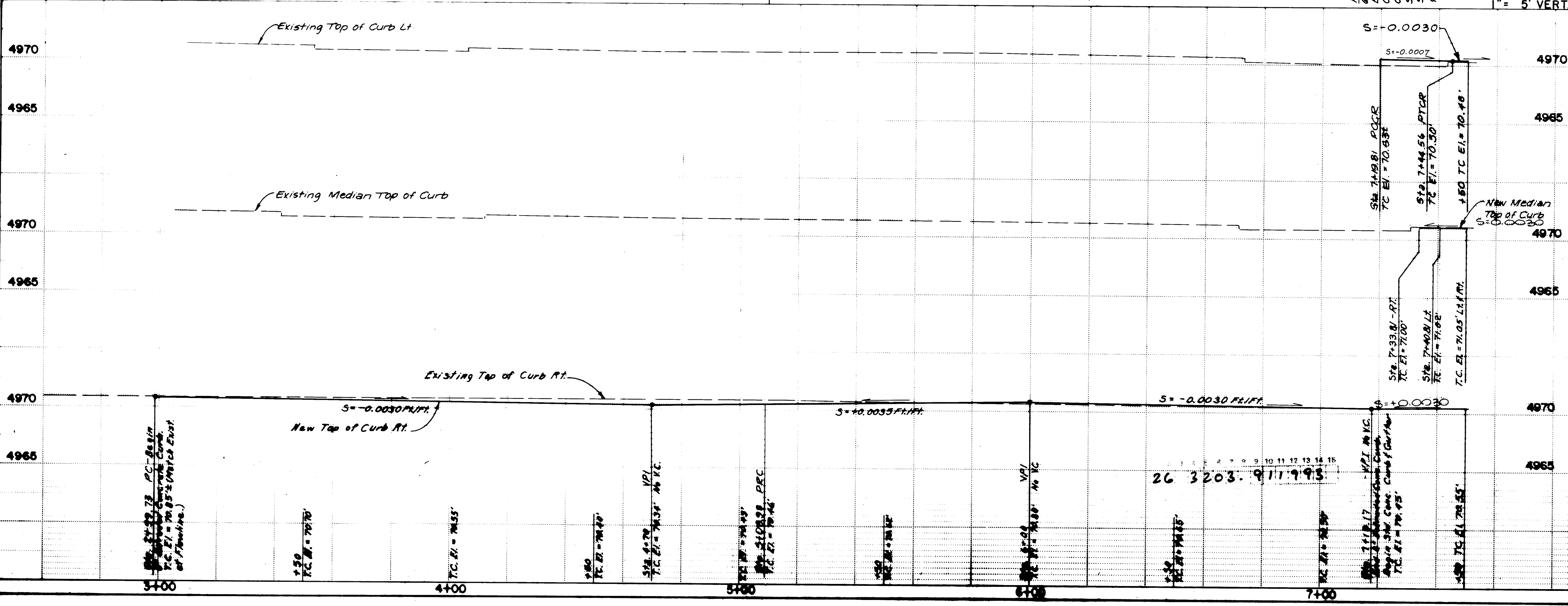
US West Communications
 Brenda Carlson - Sta. 954
 201 3rd Street, NW
 Albuquerque, New Mexico 87103
 Phone: 245-8530

Gas Company of New Mexico
 Tim Cynova
 4625 Edith Boulevard, NE
 Albuquerque, New Mexico 87107
 Phone: 889-2538

Jones Intercable
 Yvette Suazo
 P.O. Box 27138
 Albuquerque, New Mexico 87125
 Phone: 761-6200

Public Service Co. of New Mexico
 Jim Vann - Mail Stop 0208
 Alvarado Square
 Albuquerque, New Mexico 87158
 Phone: 848-3426

SCALE: 1" = 20' HORIZ.
 1" = 5' VERT.



EAGE OF CURVE TABLE			
CURVE NO.	RADIUS	LENGTH	DELTA
1	25.00	42.78	94.32-08 LT
2	1400.00	210.04	8-35-36 LT
3	1400.00	210.04	8-35-36 LT
4	4.00	9.05	129-35-13 RT
5	50.00	45.18	51-46-40 LT

CHORD BRG.			
CHORD BRG.	CHORD LENGTH	CHORD BRG.	CHORD LENGTH
37.75	37.75	37.75	37.75
209.78	209.78	209.78	209.78
207.24	207.24	207.24	207.24
43.66	43.66	43.66	43.66

11/20/92

RECORD COPY
 SCANLON & ASSOCIATES, INC.

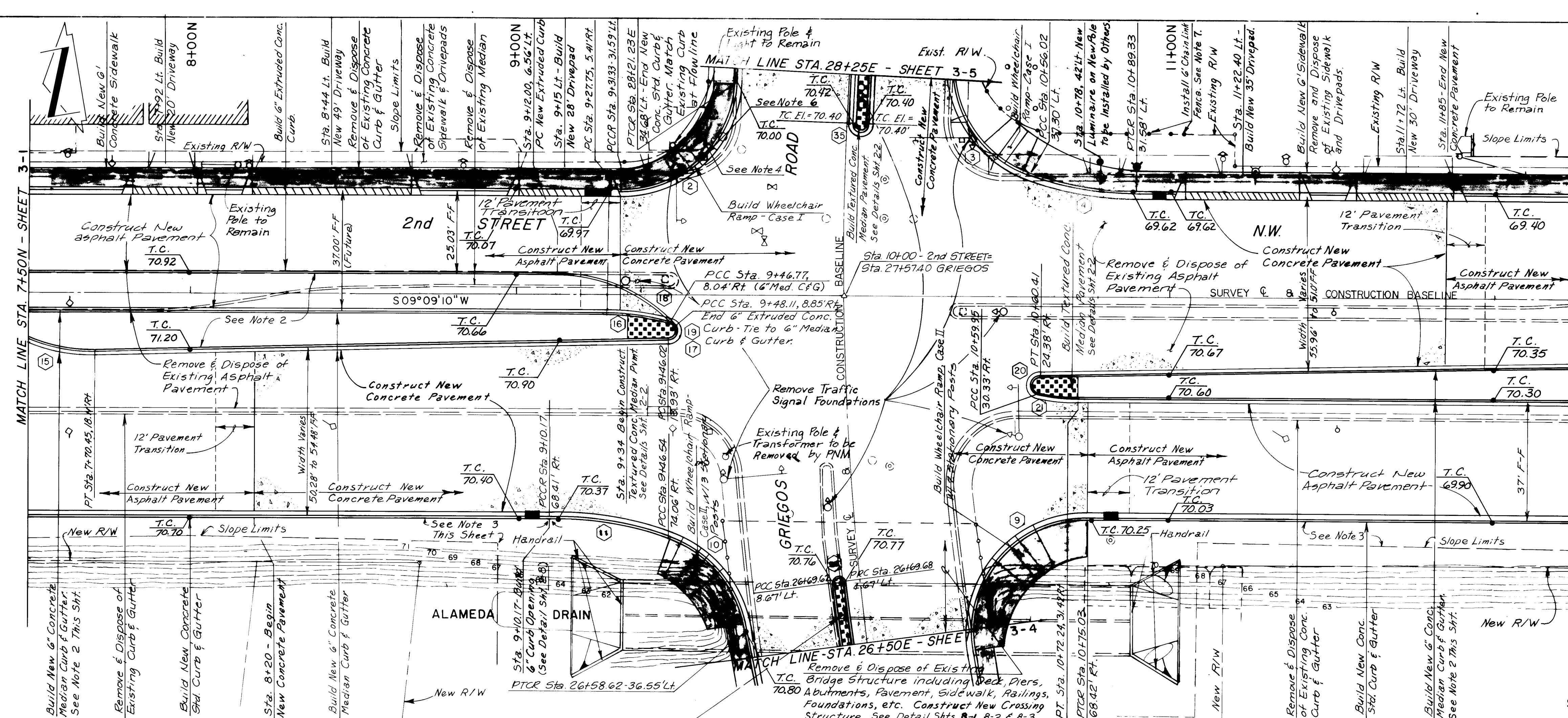
CITY OF ALBUQUERQUE
 MUNICIPAL DEVELOPMENT DEPARTMENT
 ENGINEERING DIVISION

TITLE:
 2nd STREET AT GERRARD - STA. 6000 - 7000

PAVED PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER
City Engineer	Roy L. Shaw	8-31-91	Liquid Waste	4/10/91
A.C.E. Design			Traffic	4/10/91
A.C.E. Hydrology	6.6. Lopez	8-16-91	Water	4/10/91

NO. 4035(4) MAP NO. 3203.91 F-14, 6-14



SCALE: 1" = 20' HORIZ.
1" = 5' VERT.

F.H.W.A. Region No. 6		STATE NEW MEXICO	M-4035(4)	SHEET NO. 3-2	TOTAL SHEETS 3
-----------------------	--	------------------	-----------	---------------	----------------

NOTES:

- See Sheet 2-9 for Intersection Grading.
- Permanent Median Landscaping will be provided by the City of Albuquerque. The Contractor shall Backfill Median Areas with Earth and Compact to 90% ASTM D-1557.
- After Construction is Completed, the Contractor shall Grade the Swale as per Detail Sht. 2-1.
- Remove and Dispose of Portion of Existing Concrete Planter as Required. Build New Concrete Planter Wall at Back of New Sidewalk/Wheelchair Ramp Using Similar Materials and Workmanship as Existing. This work is considered incidental and no direct payment will be made therefor.
- See Sheet 7-2 for New Lighting System Layout.
- Contractor to remove existing Controller Base after New Controller is activated.
- Contractor to Furnish and Install 90' of New 6" Chain Link Fence on Existing R/W Line from North Edge of New Driveway on 2nd St. to West Edge of New Driveway on Griegos Rd. Prior to Removal of Sidewalk or Driveways in this Area. This Work to be Incidental Construction and No Direct Payment will be Made Therefor.

T.C. Top of Curb Elev's are as built Elev's provided by C.O.A. Survey.

CONTRACTOR		AS BUILT INFORMATION	
DATE	DATE	DATE	DATE
DATE	DATE	DATE	DATE

BENCH MARKS		SURVEY INFORMATION	
NO.	DATE	NO.	DATE
NO.	DATE	NO.	DATE

ENGINEER'S SEAL	
REMARKS	BY
REVISIONS	DATE
DESIGNED BY	DATE
CHECKED BY	DATE

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

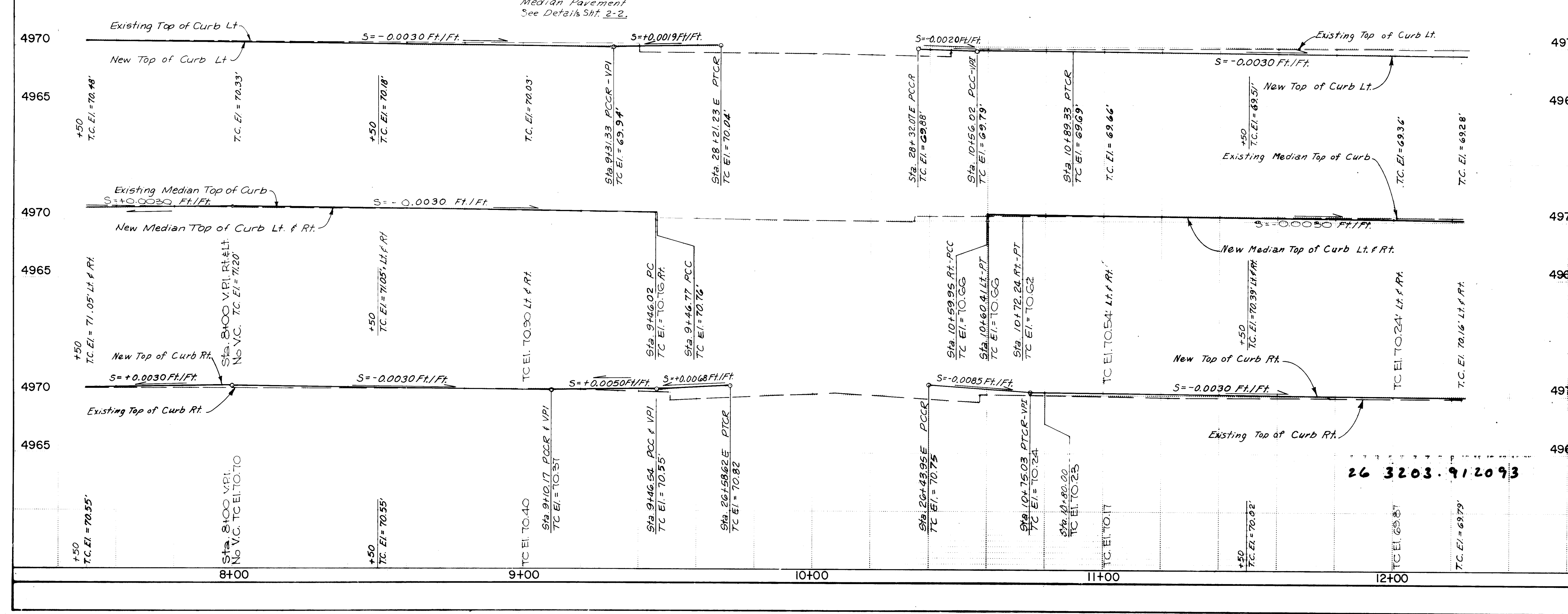
TITLE:
2nd STREET/GRIEGOS ROAD - STA. 7+00N - 12+20N

26 3203.912093

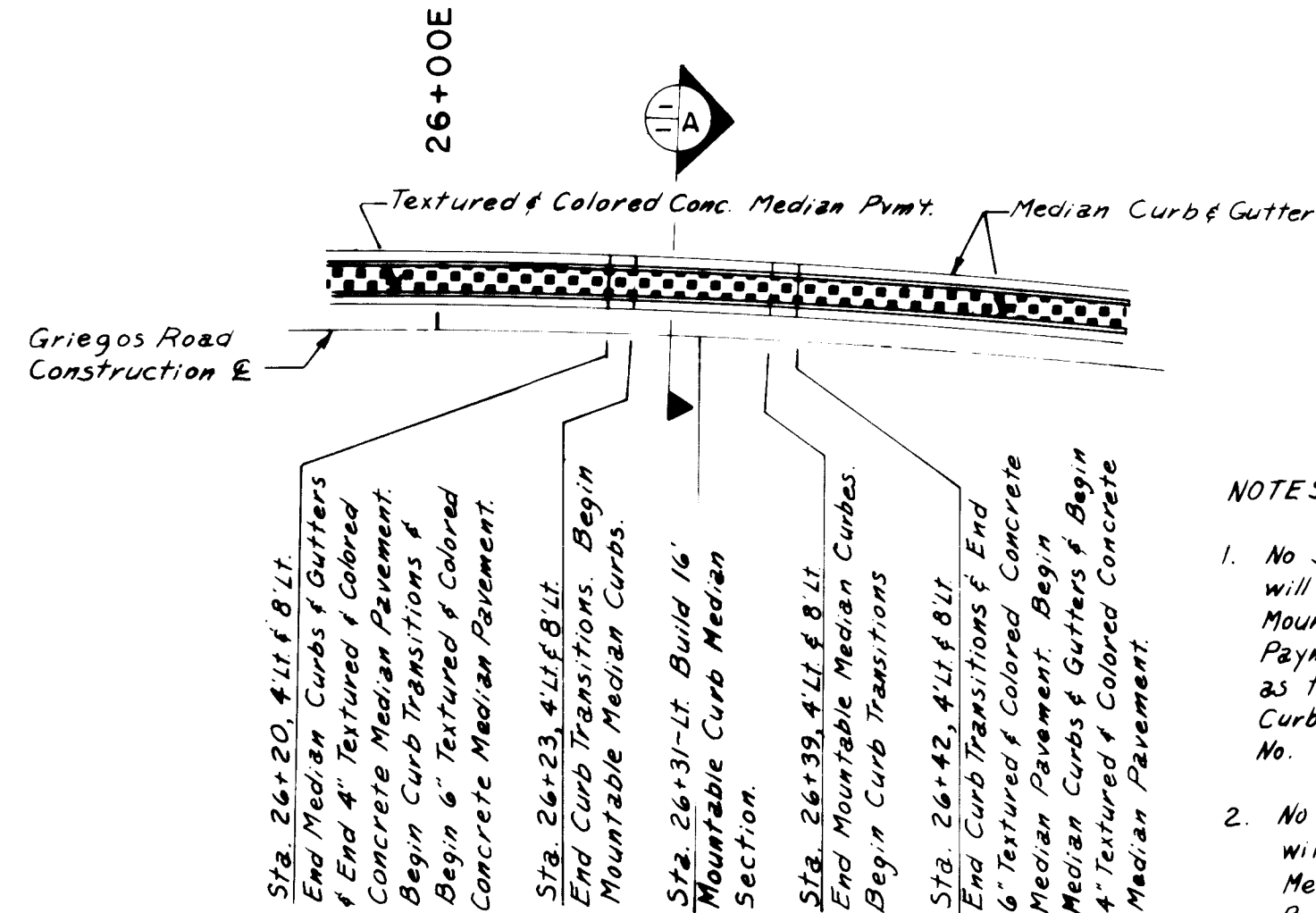
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
CITY Engineer			Liquid Waste		
ACE-Design			Traffic		
ACE-Hydrology			Water		

DRAWING NO. M-4035(4) MAP NO. F-14, G-14 SHEET 3-2 OF 3

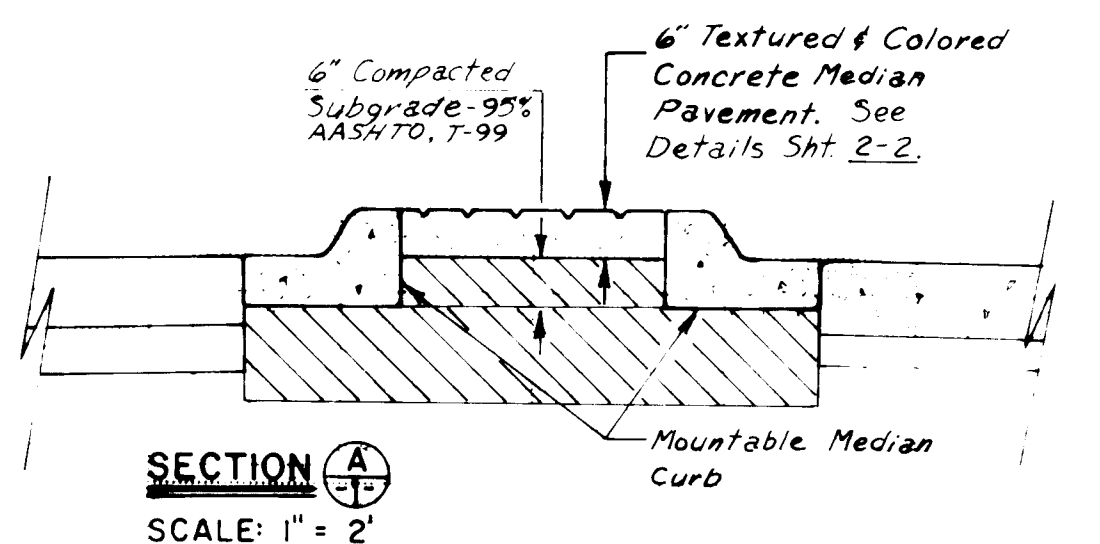
RECORD COPY 11/20/92
SCANLON & ASSOCIATES, INC.



SCALE: 1" = 20' Horz.
1" = 5' Vert.



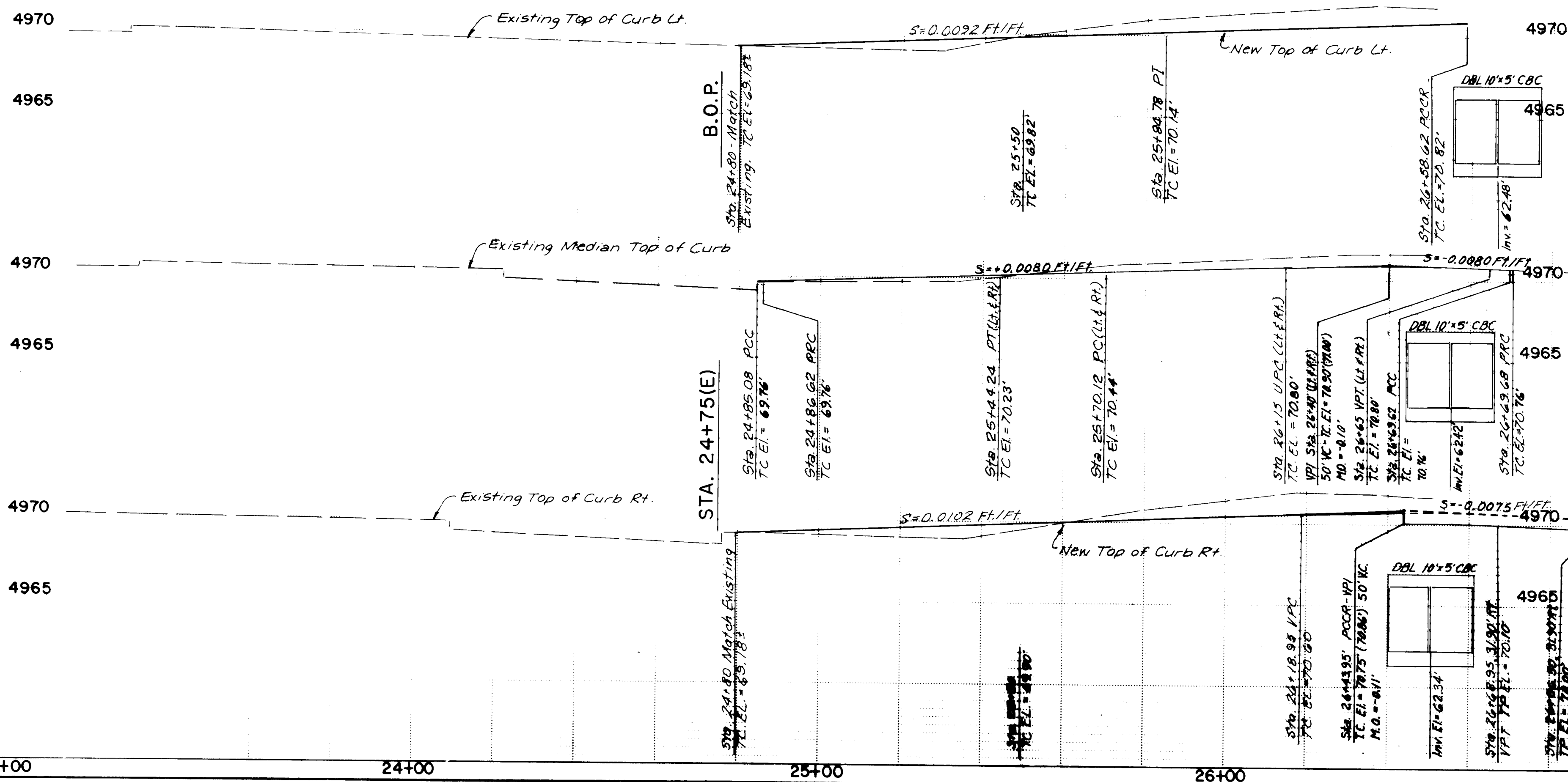
MOUNTABLE MEDIAN CURB CROSSOVER DETAIL



NOTES:

- No Separate Payment will be made for Mountable Median Curb. Payment will be made as though it were Median Curb under Bid Item No. 609060.
- No Separate Payment will be made for 6" Median Pavement. Payment will be made as though it were 4" Median Pavement under Bid Item No. 608136.

B.O.P. - STA. 24+75 (E)
N.M.S.H.&T.D. PROJ. No. M-4035(4)
C.O.A. PROJ. No. 3203.91
TOWN OF ALBUQUERQUE GRANT
(PROJ. SEC. 5, T. 10N., R. 3E.)



NOTES:

- Contractor Shall Set Horiz. Reference Stakes Prior to Removal of Existing Curb & Gutter and Sidewalk.
- See Sheet 7-2 for New Lighting System Layout.
- See Sheet 7-2 for Details of Power Service for New Street Lighting System to be Provided from this Pole.

T.C. 69.0
Top of Curb Elevs are as built Elevs provided by C.O.A. Survey.

CHORD LENGTH	CHORD BRG.	DELTA	TANGENT	LENGTH	RADIUS	CURVE NO.
53.09	S40-10-06E	98-38-52 RT	40.73	60.26	35.00	9
100.33	N89-27-36E	5-12-31 RT	50.22	100.36	1104.00	26
60.32	N75-33-41E	22-35-20 RT	30.76	60.71	154.00	27
4.00	N25-43-59W	180-00-00 RT	29.96	6.28	2.00	28
58.76	S75-33-41W	22-35-20 LT	29.04	150.00	150.00	29
99.97	S88-27-36W	0-22-59 RT	71.32	191.32	191.32	30
11.31	N88-36-45E	00-52-46 RT	7.58	15.16	587.93	34

FACE OF CURB CURVE TABLE
SECOND AND GRIEGOS

26 3203.91 2293

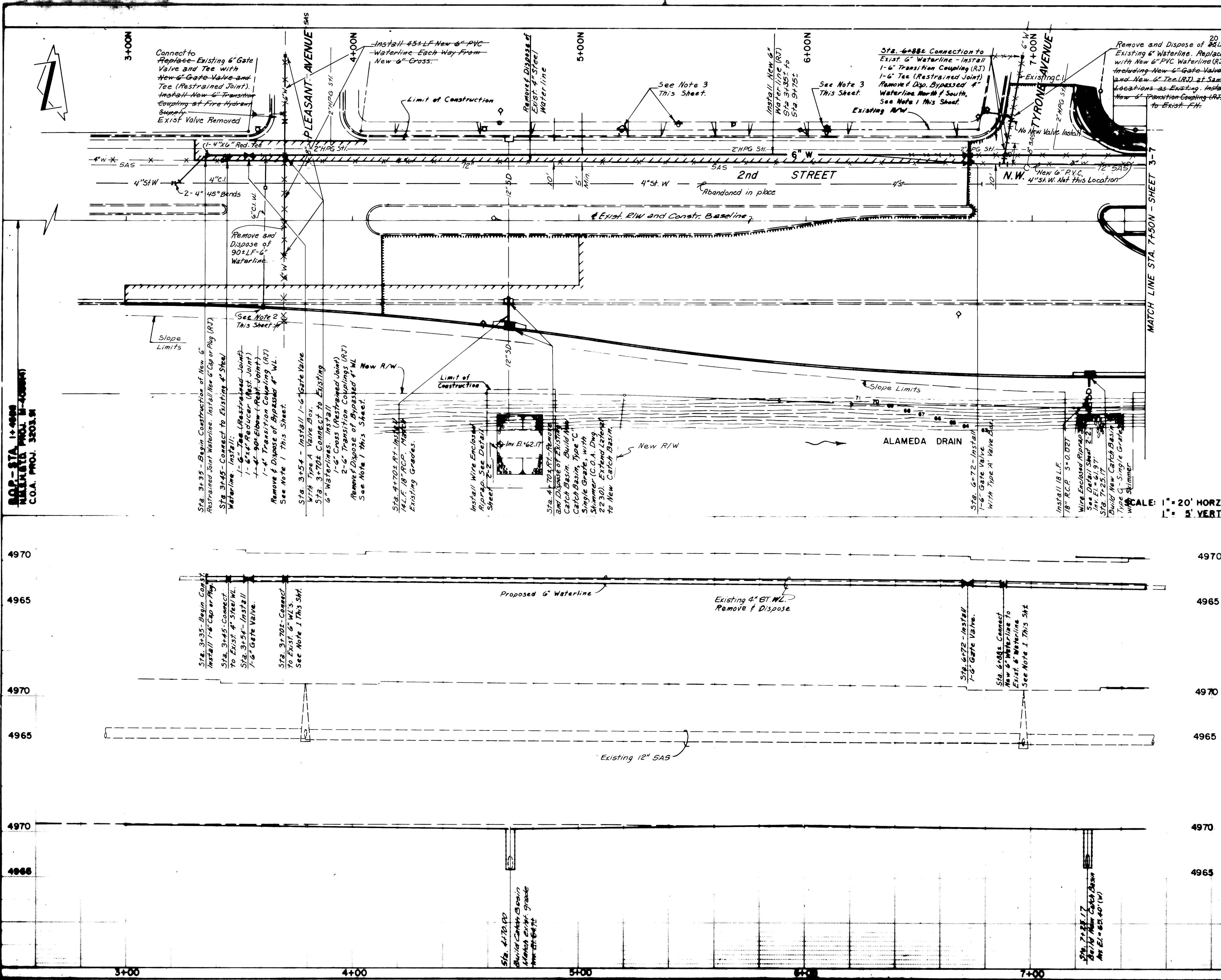
CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	Robert H. ...	8-11-91	Liquid Waste	...	8-11-91
A.C.E. - Design	...	8-15-91	Traffic	...	8-15-91
A.C.E. - Hydrology	...	8-21-91	Water	...	8-21-91

DRAWING NO. M-4035(4) MAP NO. C.O.A. No. 3203.91 F-14, G-14 SHEET 3-4 OF

RECORD COPY
SCANLON & ASSOCIATES, INC.

11/20/92



NOTES:

- Contractor shall excavate to determine exact location of existing Waterlines.
- Contractor Shall Field Locate Valve Before Beginning Construction in This Area.
- All Existing Old Style Water Meters And Boxes Along New 6" Waterlines Shall Be Upgraded So As To Conform With C.O.A. Standard Drawings 2361 and 2362.



26 3203.912493

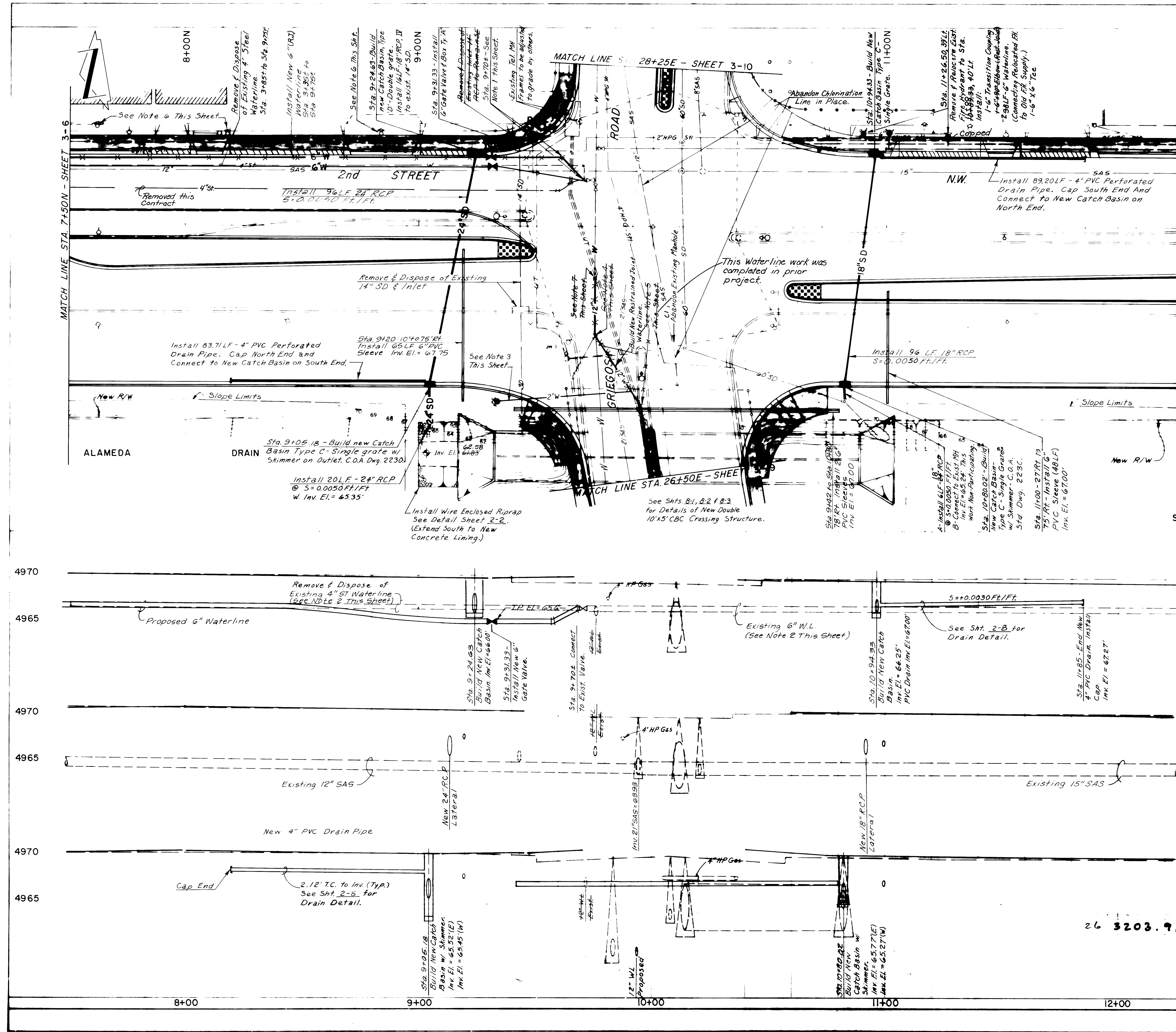
RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE:
2nd STREET AT CINEGOS CROSSING
UTILITY PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	DATE
City Engineer	Richard L. Scanlon	8-2-91	Liquid Waste	
ACE - Design			Public	
ACE - Construction	K. K. Goyal	8-16-91	Water	

11/20/92
C.O.A. PROJECT NO. 26 3203.912493



F.H.W.A. Region No. 6		STATE NEW MEXICO	SHEET NO. 3-7		TOTAL SHEETS 3-7
-----------------------	--	------------------	---------------	--	------------------

Notes:

- Sta. 9+70± - End Construction of New 6" Restrained Joint Waterline. Connect New WL to existing 6" FLX MJ valve (remove valve box, open valve and abandon valve in place). Install 2'-6" x 2'-6" Elbows (Restrained Joint). Remove and Dispose of Bypassed 4" Steel Water After Service is Transferred to New 6" Waterline.
- Contractor shall excavate to determine exact locations of existing waterlines.
- Install new 2" water service to new meter box at Sta. 9+35±-75' Rt. per C.O.A. Std. Dwg. 2363 & 58-2" Pipe.
- Sta. 27+10(E)±, 27±Lt. Install:
1-12" x 11/4" Elbow (Restrained Joint)
1-12" x 22 1/2" Elbow (Restrained Joint)
Top of Pipe Elevation: 4966.93'
- Sta. 26+78.20, 7±Lt. - Install
1-12" x 26 1/2" Elbow (Restrained Joint).
- All Existing Old Style Watermeters and Boxes Along New 6" Waterlines Shall be Upgraded so as to Conform with C.O.A. Standard Drawings 2361 and 2362.
- Sta. 27+35(E), 25±Lt. - End 12" Restrained Joint Waterline. Install 1-12" Transition Coupling (Restrained Joint). The Contractor shall excavate to determine exact location of existing 12" waterline.

ENGINEER'S SEAL

RECORD COPY

CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION

TITLE
2nd/GRIEGOS INTERSECTION 7+50N-12+25N
UTILITY PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
CITY Engineer	[Signature]	11-21-91	Liquid Waste	[Signature]	11-21-91
ACE - Design	[Signature]	11-21-91	Traffic	[Signature]	11-21-91
ACE - Hydrology	[Signature]	11-21-91	Water	[Signature]	11-21-91

DRAWING NO. M-4035(4) **MAP NO.** F-14, 6-14 **SHEET** 3-7



This is a detailed street map of a neighborhood in Los Angeles, California. The map shows a grid of streets and lots. Key streets include SHANNON PLACE, HERREIRA, GUBD, RE GAUL, ADDN, NEW 6' W.L., NEW 2' W.L., RIVIERA, GARDEN, ADDN, BROOK, ADDN, GREATER, MANUEL SANCHEZ SUBD, HERMANOS, and RAILROAD. The map also shows various lot numbers, street names, and a railroad line running along the bottom right. The map is oriented with North at the top.

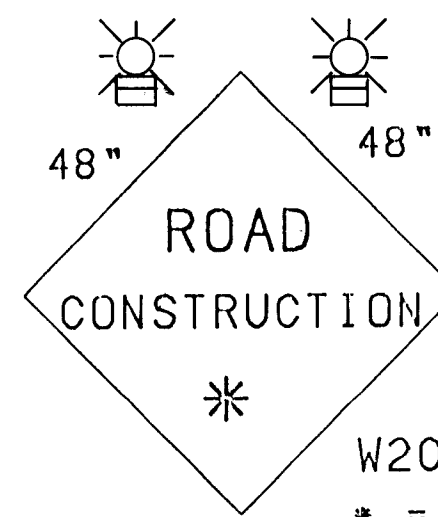
This is a detailed street map of a neighborhood in Los Angeles, California. The map shows a grid of streets and lots. Key streets include SHANNON PLACE, HERREIRA, GUBD, RE GAUL, ADDN, NEW 6' W.L., NEW 2' W.L., RIVIERA, GARDEN, ADDN, BROOK, ADDN, GREATER, MANUEL SANCHEZ SUBD, HERMANOS, and RAILROAD. The map also shows various lot numbers, street names, and a railroad line running along the bottom right. The map is oriented with North at the top.

Time: 18:26:55
Date: 5/22/1991
Drawing File: ALB-STAN
Directory: C:\A-CAD\86111\

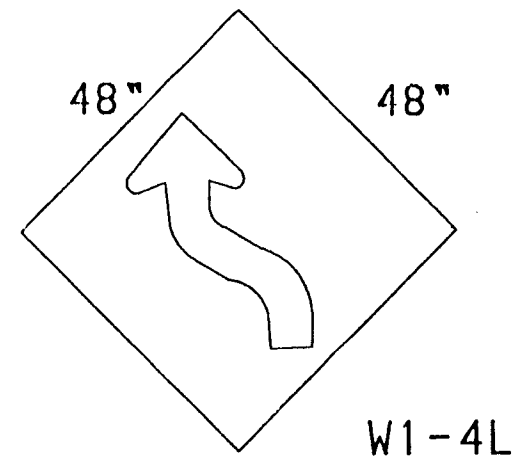
SIGN FACE DETAILS *

* - NOT ALL SIGNS UTILIZED IN THESE PLANS

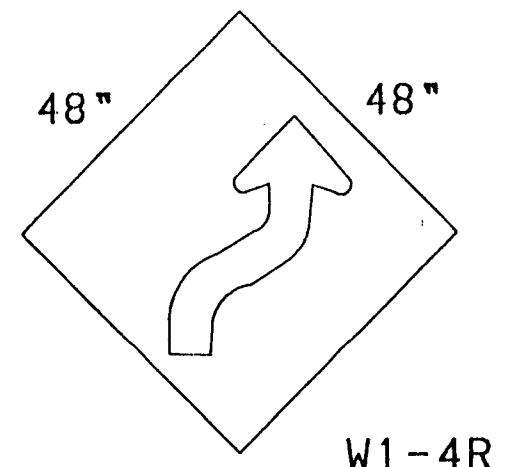
F.H.W.A. REGION NO. 6
NEW MEXICO PROJECT NO.
M-4035(4)
SHEET NO. 4-1



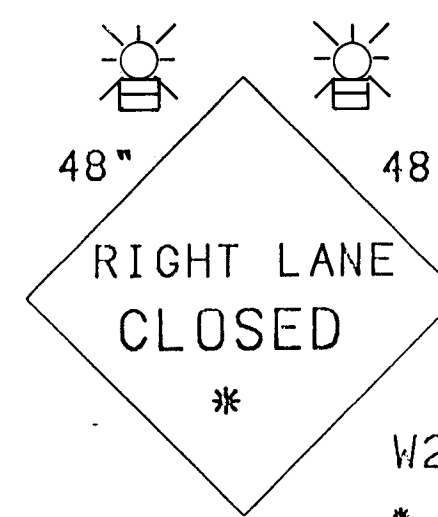
W20-1 (*)
* = 1/2 MILE
1 MILE AHD
1500'
1000'
750'
500'



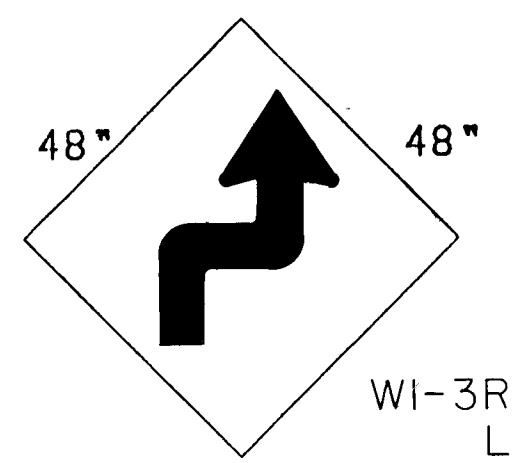
W1-4L



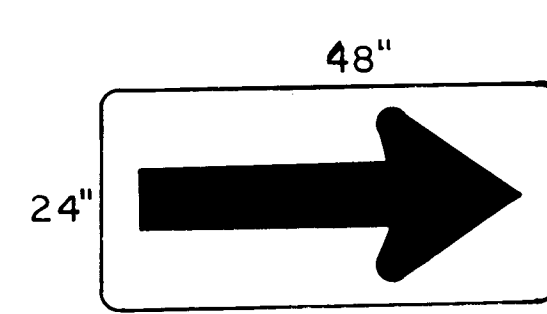
W1-4R



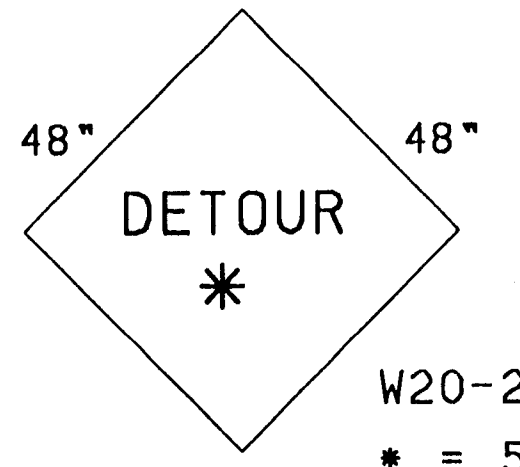
W20-5R (*)
* = 1500'
1000'
1/2 MILE
AHEAD



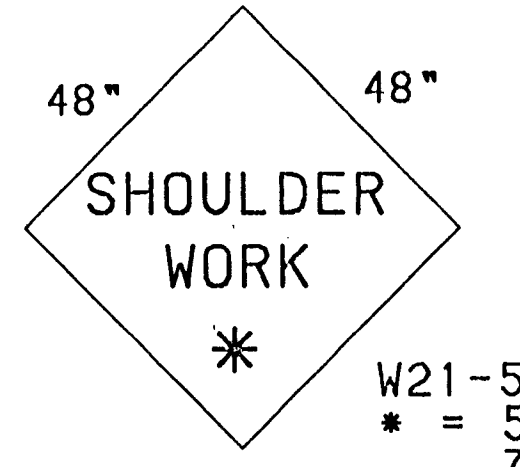
W1-3R
L



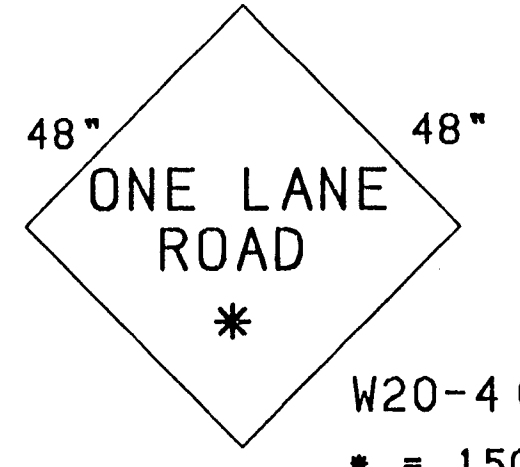
W1-6



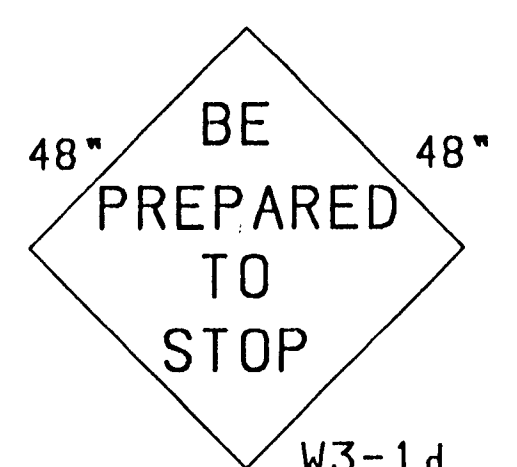
W20-2 (*)
* = 500'
750'
1000'
1500'



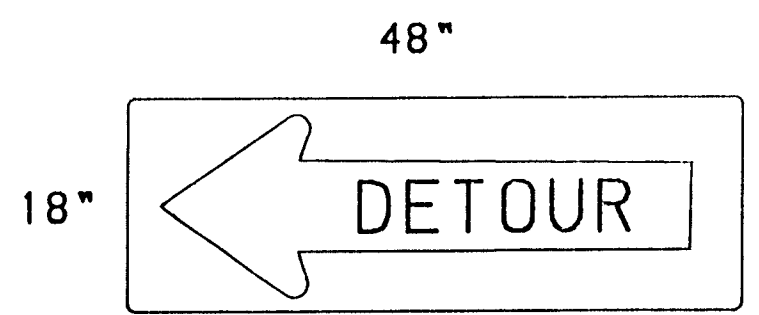
W21-5 (*)
* = 500'
750'
1/2 MILE
AHEAD



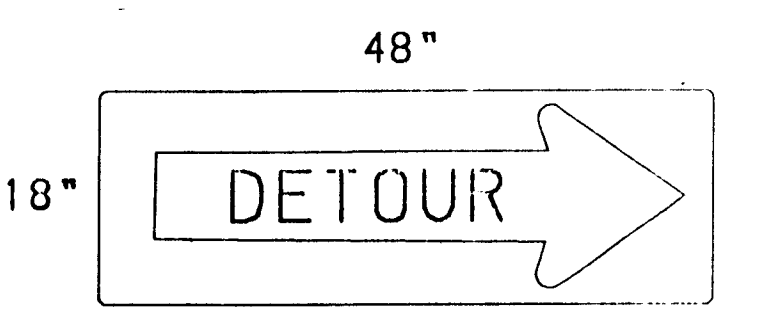
W20-4 (*)
* = 1500'
1000'
1/2 MILE
1 MILE



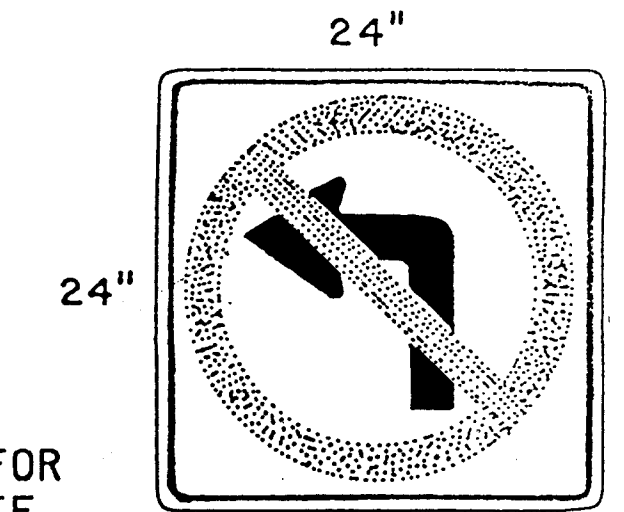
W3-1d



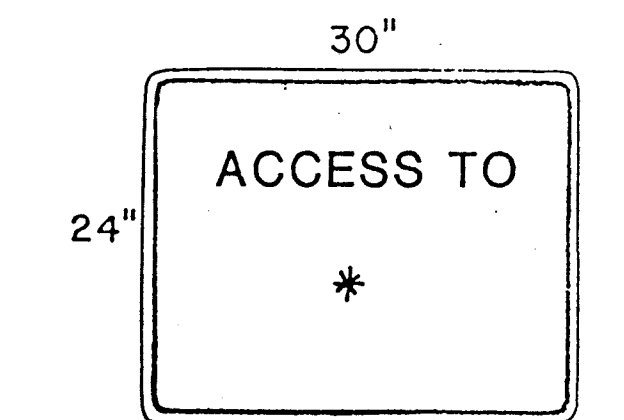
M4-10 (L)



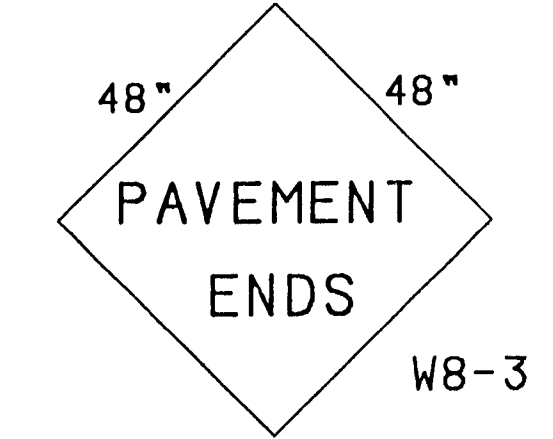
M4-10 (R)



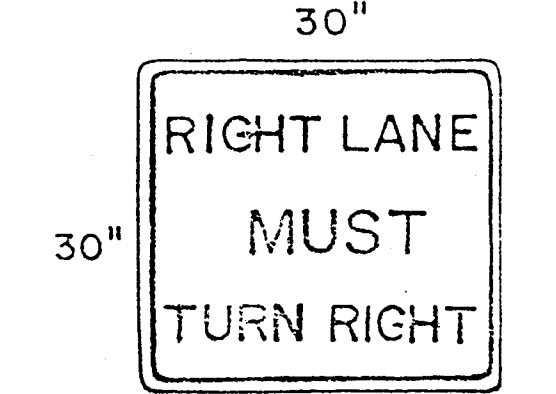
R3-2 **



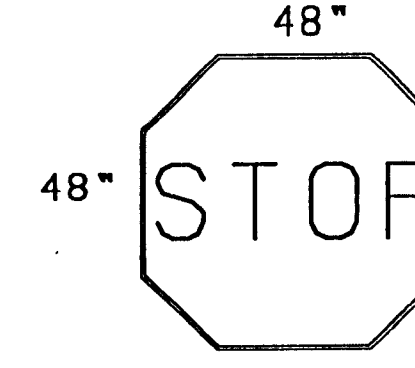
R8-4a B/W, RB



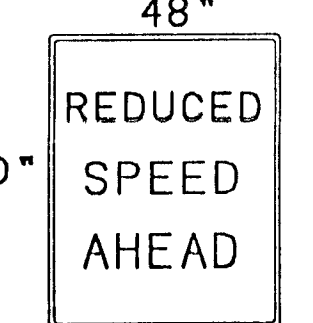
W8-3



R3-7R B/W, RB



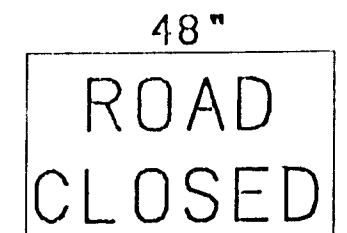
R1-1
W/R, RL-RB



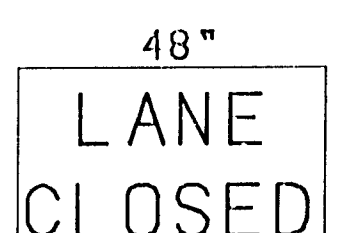
R2-5a
B/W, RB



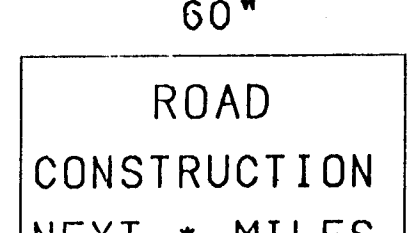
R3-7L
30" x 30"



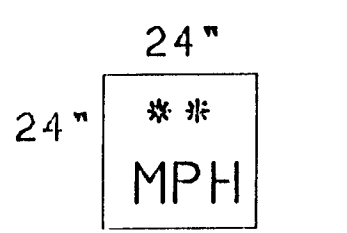
R11-2



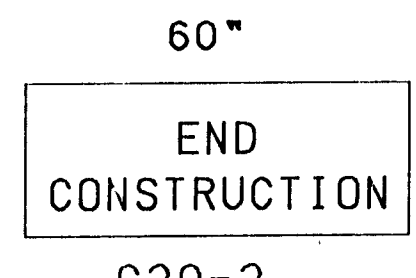
R11-2a



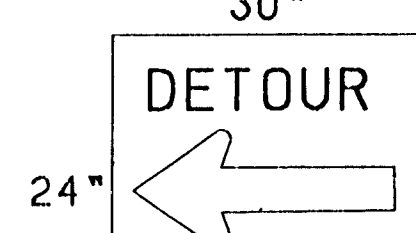
G20-1



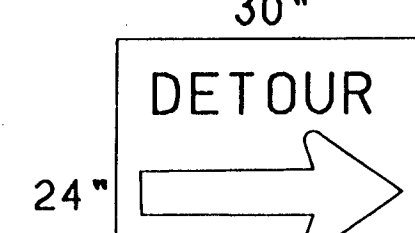
W13-1 (*)
* = 45
= 35
= 25



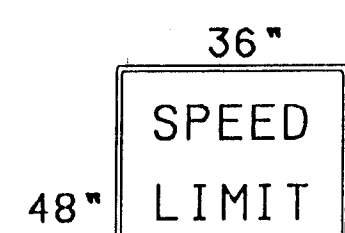
G20-2



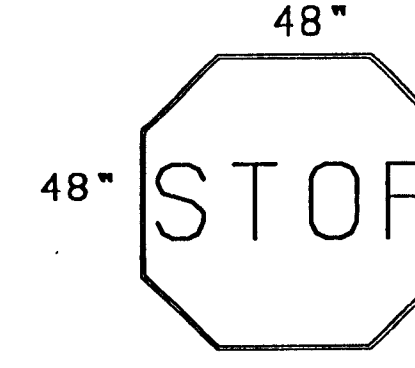
M4-9L



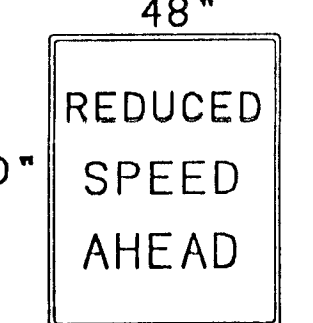
M4-9R



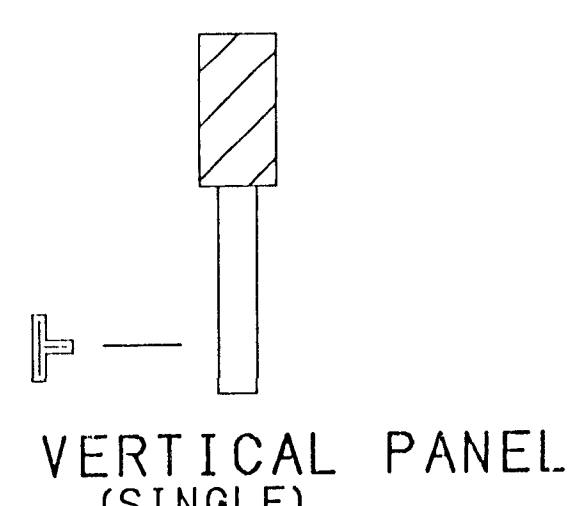
R2-1 (*)
B/W, RB
* = 65
= 55
= 45
= 35



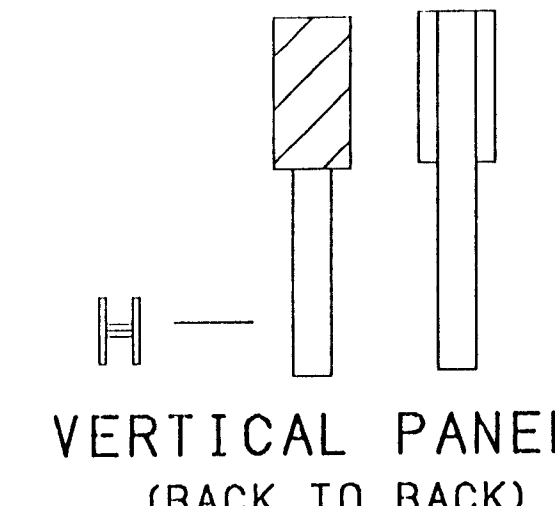
R1-1
W/R, RL-RB



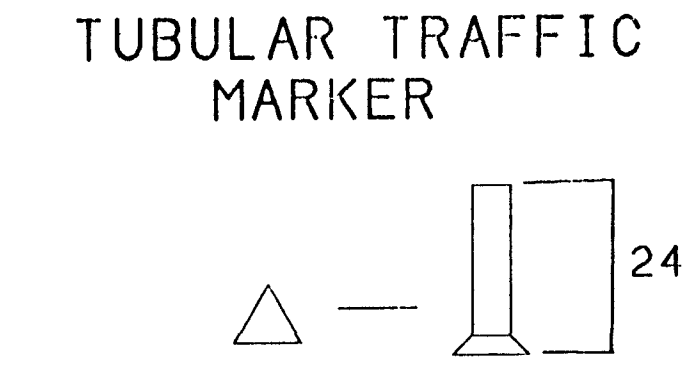
R2-5a
B/W, RB



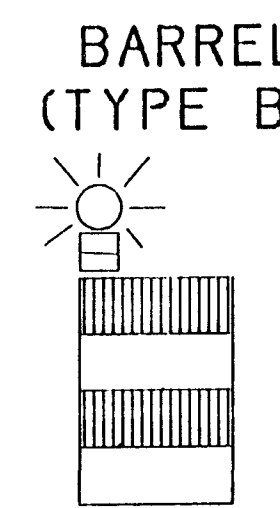
VERTICAL PANEL (SINGLE)



VERTICAL PANEL (BACK TO BACK)



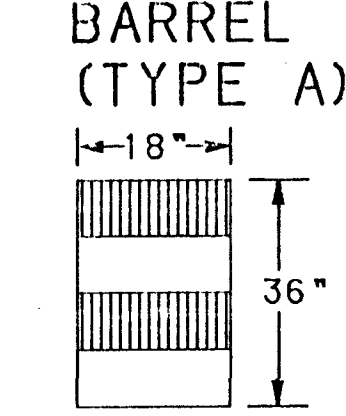
TUBULAR TRAFFIC MARKER



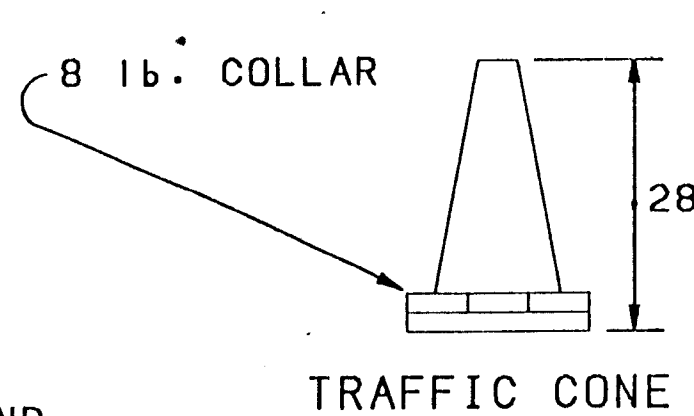
BARREL (TYPE B)



BARREL SYMBOL

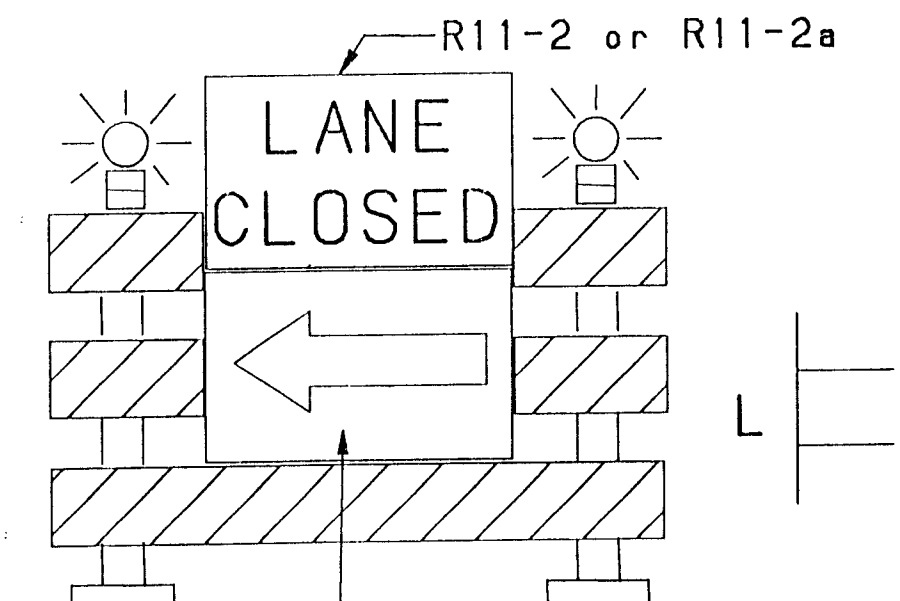


BARREL (TYPE A)

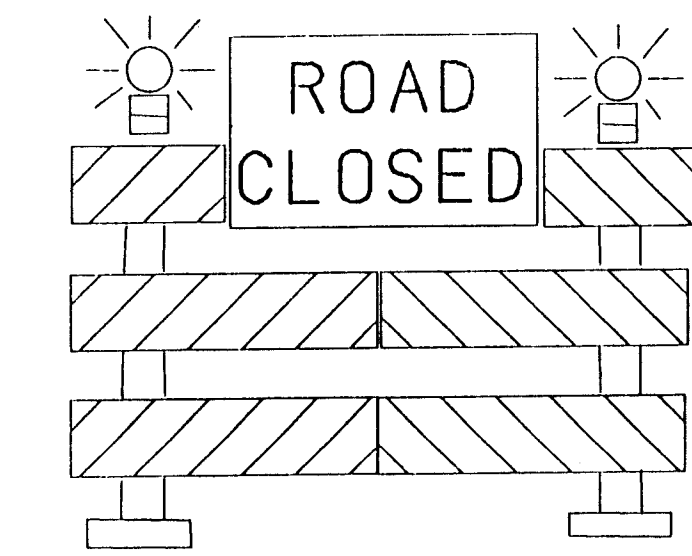


TRAFFIC CONE

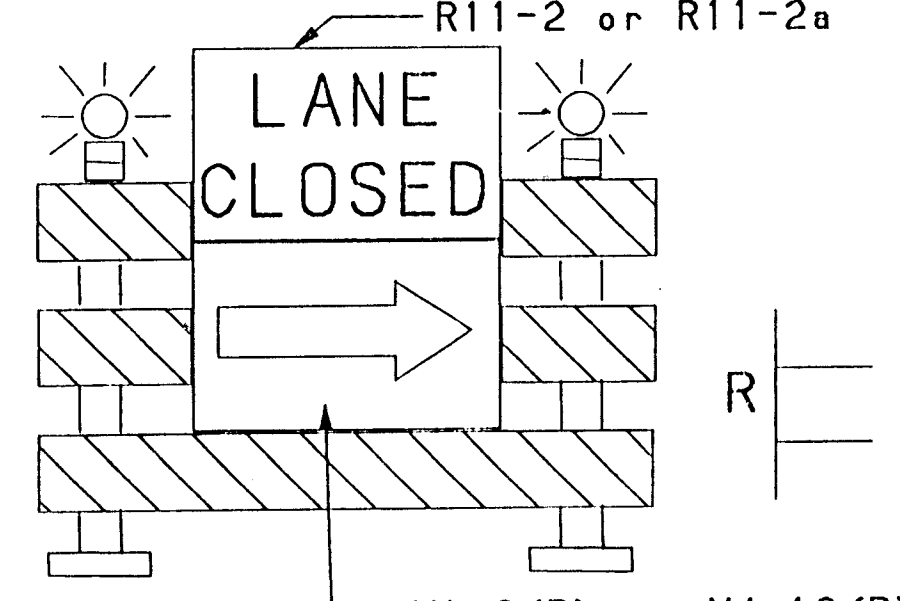
TYPE "A, B" BARRELS SHALL BE BALLASTED WITH SAND BAGS(S) A MAXIMUM OF 100LBS. OF BALLAST SHALL BE USED.



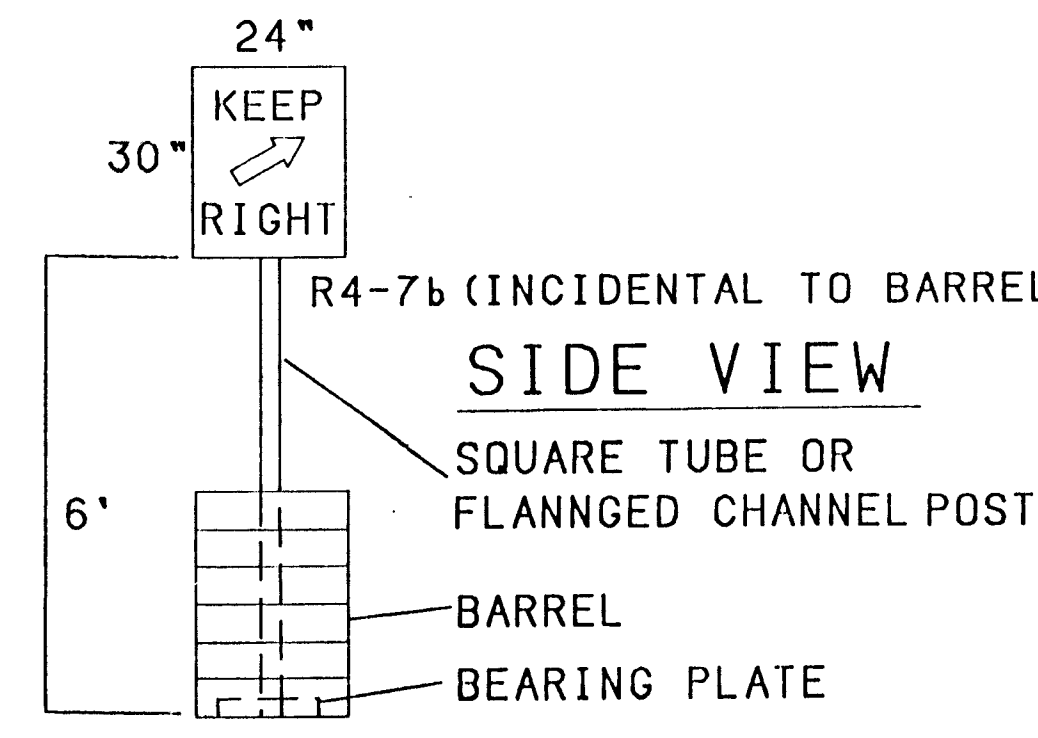
TYPE III BARRICADE (8 FT.) LEFT



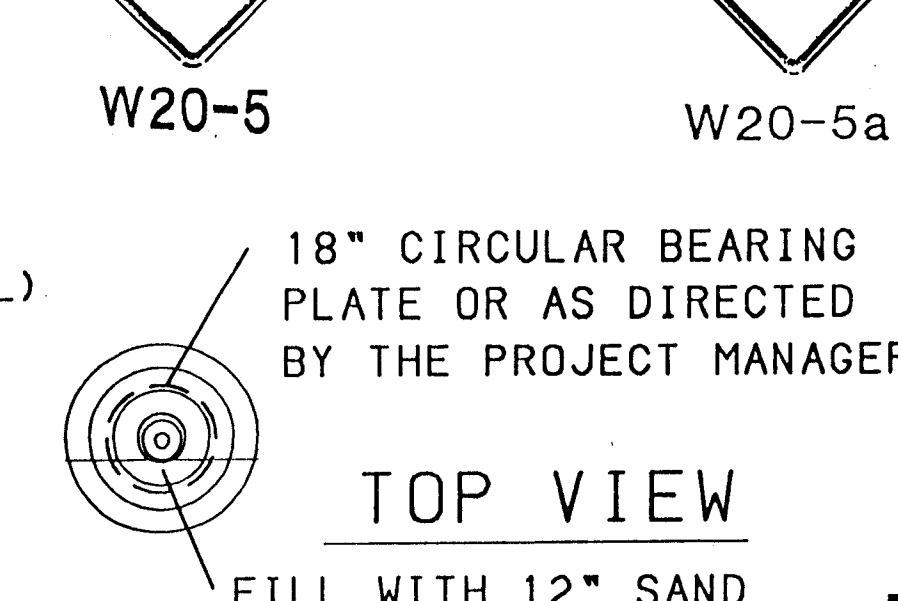
TYPE III BARRICADE (8 FT.)



TYPE III BARRICADE (8 FT.) RIGHT



SIDE VIEW



TOP VIEW

FILL WITH 12" SAND

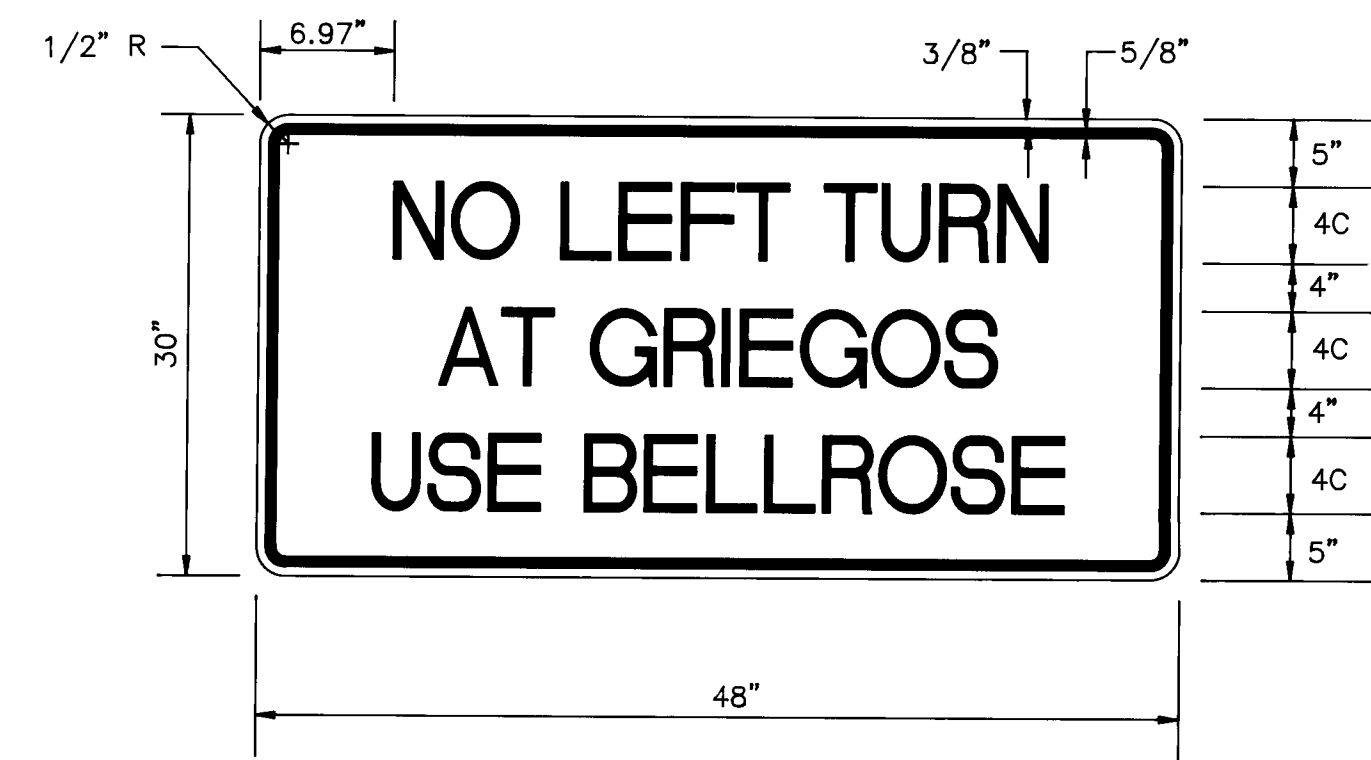
26 3203-913093

NOT TO SCALE

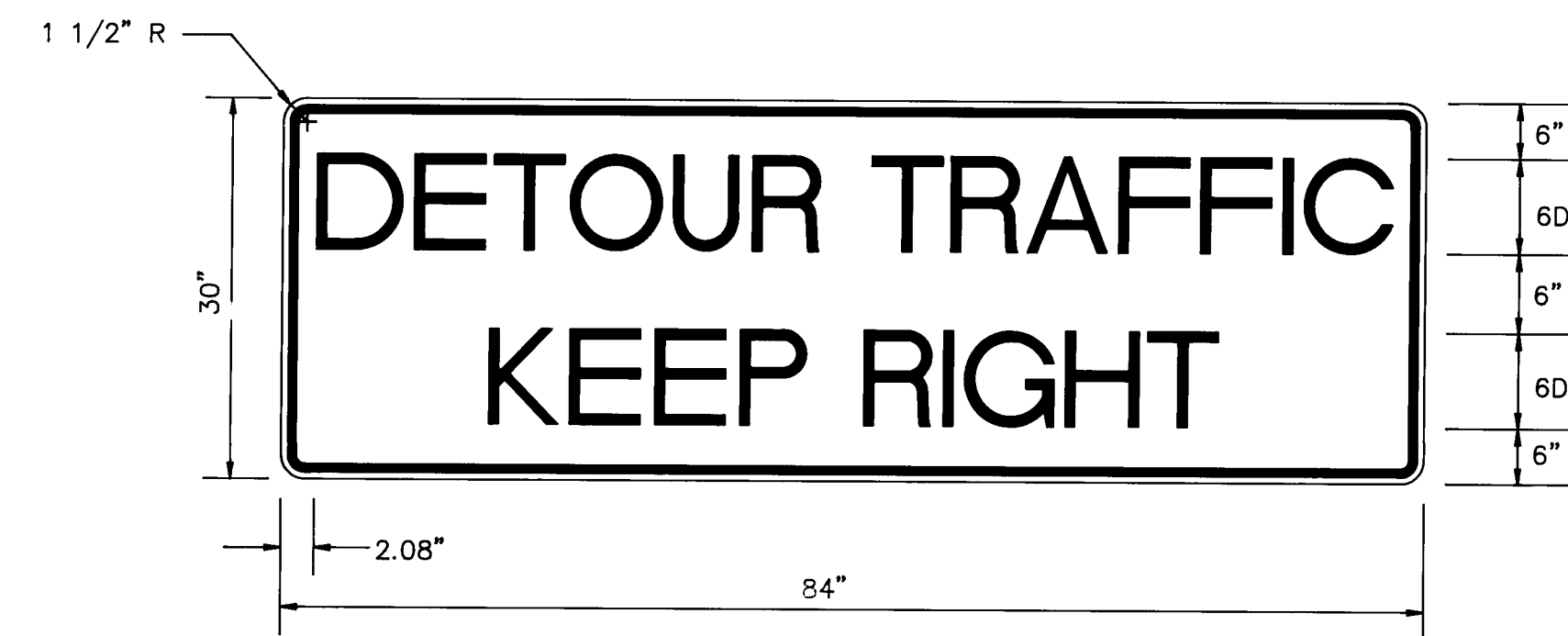
RECORD COPY
SCANLON & ASSOCIATES, INC.

NO.	DESCRIPTION	DATE	BY
3			
2			
1			

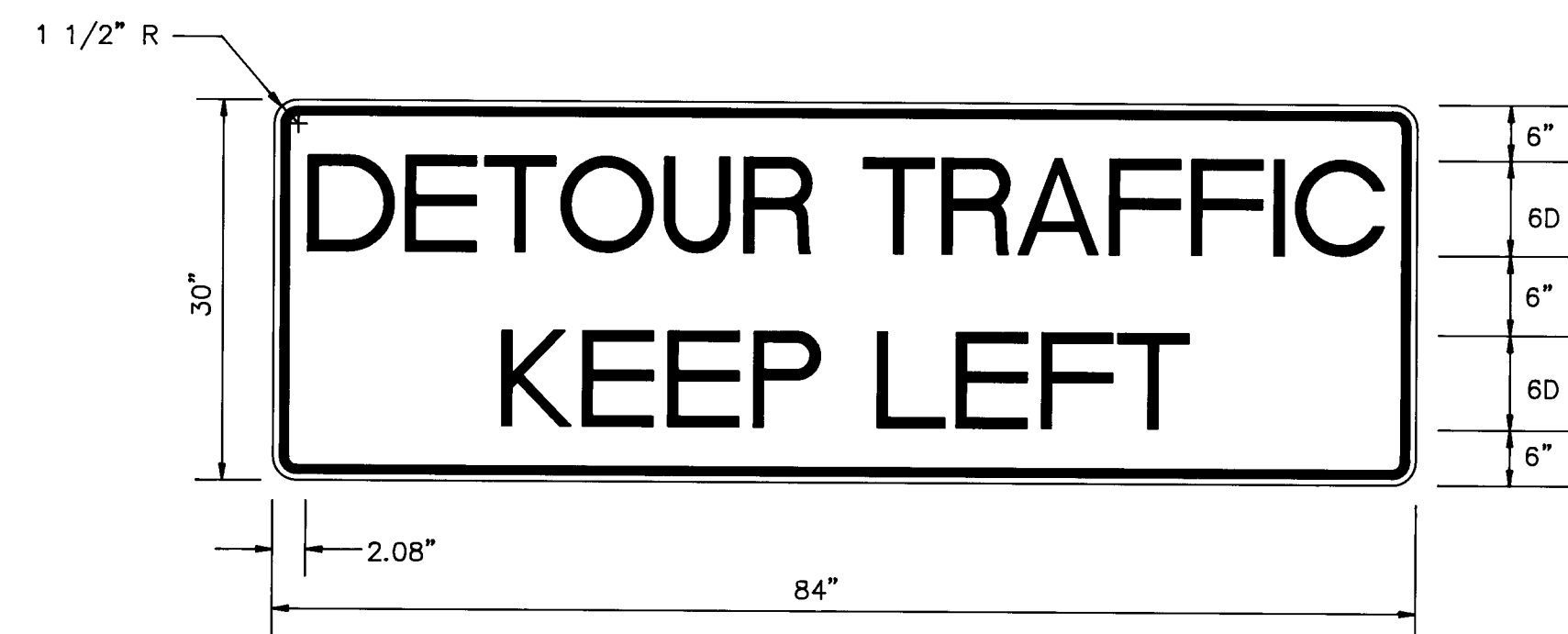
NEW MEXICO STATE
HIGHWAY AND TRANSPORTATION
DEPARTMENT
TRAFFIC DESIGN SECTION
SIGN FACE DETAILS
CONST. TRAFFIC
CONTROL PLAN
M-4035(4)
C.O.A. 3203.91
SHEET 4-1



LEGEND - BLACK (NON REFL.)
BACKGROUND - ORANGE (REFL.)



LEGEND - BLACK (NON REFL.)
BACKGROUND - ORANGE (REFL.)

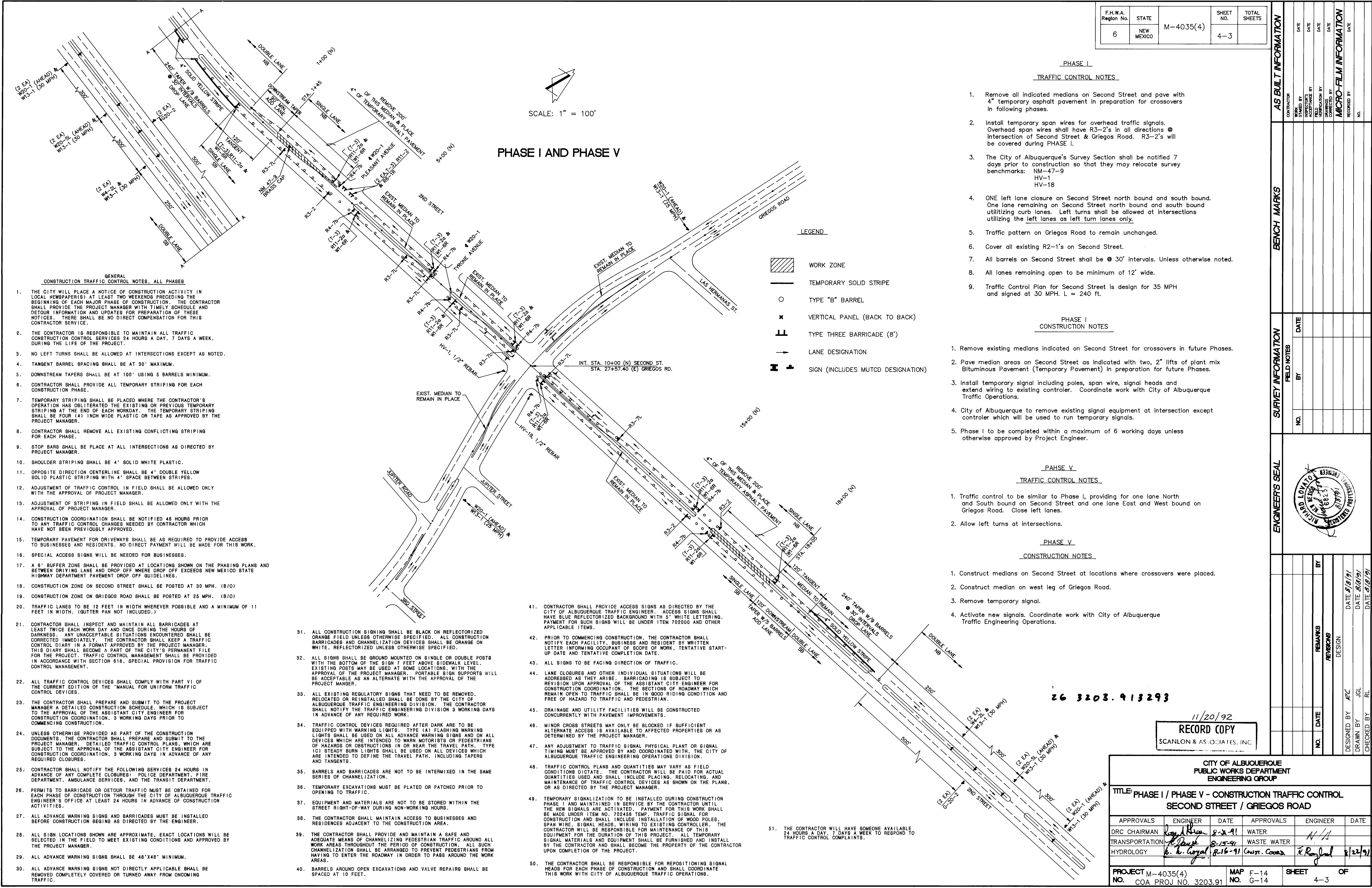


SP - 3

LEGEND - BLACK (NON REFL.)
BACKGROUND - ORANGE (REFL.)

NOTE: SPECIAL SIGNS SP-1, SP-2, AND SP-3 TO BE MAINTAINED
IN PLACE FOR ENTIRE DURATION OF PROJECT.

F.H.W.A. Region No.		STATE	M-4035(4)	SHEET NO.	TOTAL SHEETS
6		NEW MEXICO		4-2	
11/20/92 RECORD COPY SCANLON & ASSOCIATES, INC.					
AS BUILT INFORMATION			BENCH MARKS		
CONTRACTOR NAME STARTED BY INSPECTOR'S FIELD VERIFICATION BY DATE CORRECTED BY DATE RECORDED BY DATE NO.			SURVEY INFORMATION FIELD NOTES NO. BY DATE		
ENGINEER'S SEAL					
NO. DATE REVISIONS DESIGN DRAWN BY CHECKED BY			DATE 8/18/91 DATE 8/18/91 DATE 8/18/91		
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE:					
CONSTRUCTION SIGNING SECOND STREET / GRIEGOS ROAD					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>[Signature]</i>	8-21-91	WATER		
TRANSPORTATION	<i>[Signature]</i>	8-15-91	WASTE WATER	N/A	
HYDROLOGY	<i>[Signature]</i>	8-16-91	<i>[Signature]</i>	RR	8/22/91
PROJECT NO.	M-4035(4) COA PROJ. NO. 3203.91	MAP NO.	F-14 G-14	SHEET	OF
				4-2	



F.H.W.A. Region No.	STATE	M-4035(4)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		4-3	

PHASE I
TRAFFIC CONTROL NOTES

- Remove all indicated medians on Second Street and pave with 4" temporary asphalt pavement in preparation for crossovers in following phases.
- Install temporary span wires for overhead traffic signals. Overhead span wires shall have R3-2's in all directions @ intersection of Second Street & Griegos Road. R3-2's will be covered during PHASE I.
- The City of Albuquerque's Survey Section shall be notified 7 days prior to construction so that they may relocate survey benchmarks: NM-47-9
HV-1
HV-18
- ONE left lane closure on Second Street north bound and south bound. One lane remaining on Second Street north bound and south bound utilizing curb lanes. Left turns shall be allowed at intersections utilizing the left lanes as left turn lanes only.
- Traffic pattern on Griegos Road to remain unchanged.
- Cover all existing R2-1's on Second Street.
- All barrels on Second Street shall be @ 30' intervals. Unless otherwise noted.
- All lanes remaining open to be minimum of 12' wide.
- Traffic Control Plan for Second Street is design for 35 MPH and signed at 30 MPH. L = 240 ft.

PHASE I
CONSTRUCTION NOTES

- Remove existing medians indicated on Second Street for crossovers in future Phases.
- Pave median areas on Second Street as indicated with two, 2" lifts of plant mix Bituminous Pavement (Temporary Pavement) in preparation for future Phases.
- Install temporary signal including poles, span wire, signal heads and extend wiring to existing controller. Coordinate work with City of Albuquerque Traffic Operations.
- City of Albuquerque to remove existing signal equipment at intersection except controller which will be used to run temporary signals.
- Phase I to be completed within a maximum of 6 working days unless otherwise approved by Project Engineer.

PHASE V
TRAFFIC CONTROL NOTES

- Traffic control to be similar to Phase I, providing for one lane North and South bound on Second Street and one lane East and West bound on Griegos Road. Close left lanes.
- Allow left turns at intersections.

PHASE V
CONSTRUCTION NOTES

- Construct medians on Second Street at locations where crossovers were placed.
- Construct median on west leg of Griegos Road.
- Remove temporary signal.
- Activate new signals. Coordinate work with City of Albuquerque Traffic Engineering Operations.

26 3203.913293

11/20/92

RECORD COPY
SCANLON & ASSOCIATES, INC.

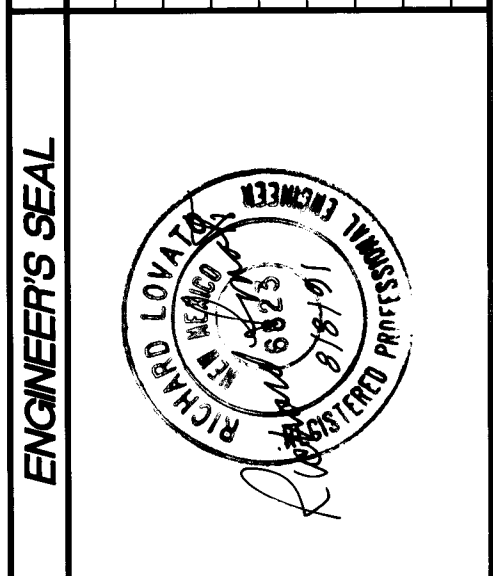
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP				
TITLE: PHASE I / PHASE V - CONSTRUCTION TRAFFIC CONTROL SECOND STREET / GRIEGOS ROAD				
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER
DRC CHAIRMAN	<i>[Signature]</i>	8-2-91	WATER	<i>[Signature]</i>
TRANSPORTATION	<i>[Signature]</i>	8-15-91	WASTE WATER	<i>[Signature]</i>
HYDROLOGY	<i>[Signature]</i>	8-16-91	Const. Comm.	<i>[Signature]</i>
PROJECT NO.	M-4035(4) COA PROJ NO. 3203.91	MAP NO.	F-14 G-14	SHEET OF 4-3

F.H.W.A. Region No.	STATE	M-4035(4)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		4-4	

PHASE II
TRAFFIC CONTROL NOTES

- All work will be on the west side of Second Street with NB and SB traffic to be shifted to the east side of Second Street. One lane on each direction. No left turns allowed.
- Left turn lanes on Griegos Road to be blocked off. Two lanes in each direction on Griegos Road. No left turns allowed.
- The reverse curve areas on Second Street shall have barrels at 25' intervals.
- All other barrels shall be at 30' intervals unless otherwise noted on plan.
- Pave and stripe the west side of Second Street after Phase II and Phase IIA are completed in preparation for Phase III. Solid double yellow striping shall be used to delineate NB and SB traffic and shall follow the alignment of the west side curb and gutter. The SB lane shall be 12' and the NB lane shall be 12'.
- All W13-1's shall be designated with 30 MPH for Second Street and 25 MPH for Griegos Road unless otherwise noted.

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION	
CONTRACTOR	DATE	BY	DATE	NO.	DATE
WORK STARTED BY	DATE	BY	DATE		
ACCEPTANCE BY	DATE	BY	DATE		
DESIGNATION BY	DATE	BY	DATE		
CORRECTION BY	DATE	BY	DATE		
RECORDED BY	DATE	BY	DATE		
NO.					



REVISIONS	REMARKS	BY	DATE
1	DESIGN	JGL	8/18/91
2	CHECKED	RL	8/22/91

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: PHASE II - CONSTRUCTION TRAFFIC CONTROL SECOND STREET / GRIEGOS ROAD					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	Ray Loya	8-21-91	WATER	N/A	
TRANSPORTATION	R. Loya	8-15-91	WASTE WATER		
HYDROLOGY	G. K. Loya	8-16-91	CONST. COORD.	E. Raul	8/22/91
PROJECT NO.	M-4035(4) COA PROJ NO. 3203.91	MAP NO.	F-14 G-14	SHEET NO.	4-4

- LEGEND
- WORK ZONE
 - TEMPORARY SOLID STRIPE
 - TYPE "B" BARREL
 - VERTICAL PANEL (BACK TO BACK)
 - TYPE THREE BARRICADE (8')
 - LANE DESIGNATION
 - SIGN (INCLUDES MUTCD DESIGNATION)

SCALE: 1" = 100'

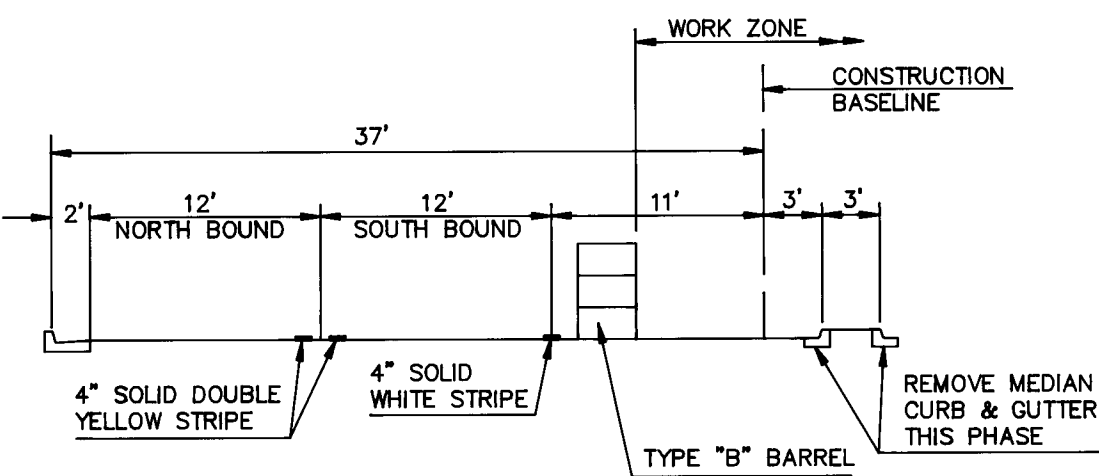
PHASE II

PHASE II
CONSTRUCTION NOTES

- Place into operation temporary traffic signals using existing controller. Coordinate work with COA Traffic Engineering operations. Temporary signal heads to be approximately located on the temporary span wire at the center of each open lane. A minimum of two signal heads is required for Traffic Control in each direction. (Typical, all Phases)
- Perform removals on Second Street north and south of Griegos Road within work zone.
- Perform new construction north and south of Griegos Road within work zone.
- Modify traffic control to close Griegos Road between Jupiter Street south and Second Street. Leave traffic control for Second Street in place except for changes at intersection shown in Phase IIA. Proceed with construction Phase IIA.

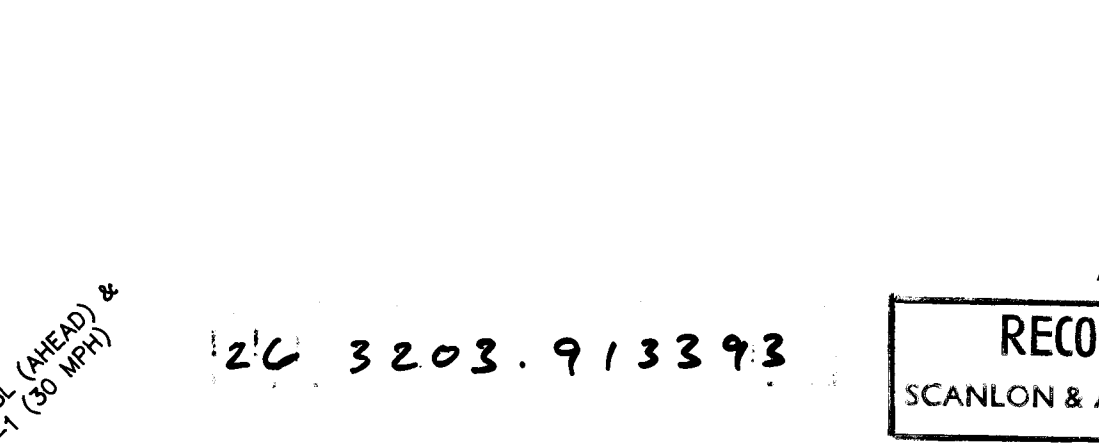
SECTION A

SCALE: 1" = 10'



SECTION B

SCALE: 1" = 10'



F.H.W.A. Region No.	STATE	M-4035(4)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		4-5	

TRAFFIC CONTROL NOTES

PHASE IIA

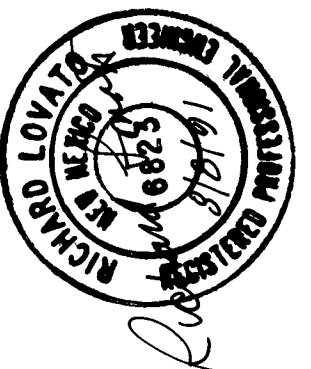
- 1) Traffic control on Second Street to be same as in Phase II except at intersection as shown.
- 2) Griegos Road to be closed off between Jupiter Street and Second Street.
- 3) Traffic on Griegos Road to be detoured as shown on Detour Route.
- 4) Left turn at Second Street for westbound Griegos Road will be allowed.
- 5) Eastbound Griegos Road to be reduced to one lane at 4th Street. Allow only local traffic eastbound on Griegos Road between 4th Street and Jupiter Street.

AS BUILT INFORMATION

BENCH MARKS

SURVEY INFORMATION

ENGINEER'S SEAL



NO.	DATE	REVISIONS	BY
		DESIGN	
		DATE 8/8/91	
		DRAWN BY JGL	
		CHECKED BY RL	
		DATE 8/8/91	

SECTION A

SCALE: 1" = 10'

SECTION B

SCALE: 1" = 10'

11/20/92

RECORD COPY

SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: PHASE IIA - CONSTRUCTION TRAFFIC CONTROL SECOND STREET / GRIEGOS ROAD					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>R. Loya</i>	8-21-91	WATER	N/A	
TRANSPORTATION	<i>R. Loya</i>	8-15-91	WASTE WATER		
HYDROLOGY	<i>K. K. Lopez</i>	8-16-91	Const. Coord.	<i>R. Loya</i>	8/27/91
PROJECT NO.	M-4035(4)	MAP NO.	F-14 G-14	SHEET	OF
NO.	COA PROJ NO. 3203.91			4-5	

SCALE: 1" = 100'

PHASE IIA

PHASE IIA

CONSTRUCTION NOTES

- 1) Perform removals between Jupiter Street south and Second Street within work zone.
- 2) Remove bridge structure.
- 3) Install 12" replacement waterline.
- 4) Build double 10'x5' CBC and wingwalls in Alameda Drain.
- 5) Backfill and compact structure.
- 6) Build new street improvements within work zone.
- 7) Phase II and Phase IIA must be completed within a maximum 60 calendar days. Griegos Road between Jupiter Street and Second Street to be closed for a maximum of 45 calendar days unless otherwise approved by Project Engineer. Contractor may perform Phase II and Phase IIA construction at same time or separately at his option providing time limitations described above are met.
- 8) Modify traffic control to implement Phase III.

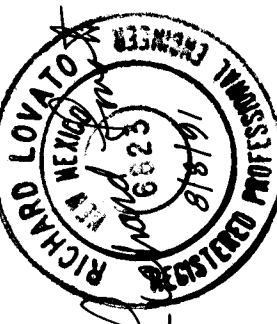
- LEGEND
- WORK ZONE
 - TEMPORARY SOLID STRIPE
 - TYPE "B" BARREL
 - VERTICAL PANEL (BACK TO BACK)
 - TYPE THREE BARRICADE (8')
 - LANE DESIGNATION
 - SIGN (INCLUDES MUTCD DESIGNATION)

F.H.W.A. Region No.	STATE	M-4035(4)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		4-6	

AS BUILT INFORMATION	
CONTRACTOR	DATE
DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE
RECORDED BY	DATE
NO.	

BENCH MARKS	
CONTRACTOR	DATE
DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE
RECORDED BY	DATE
NO.	

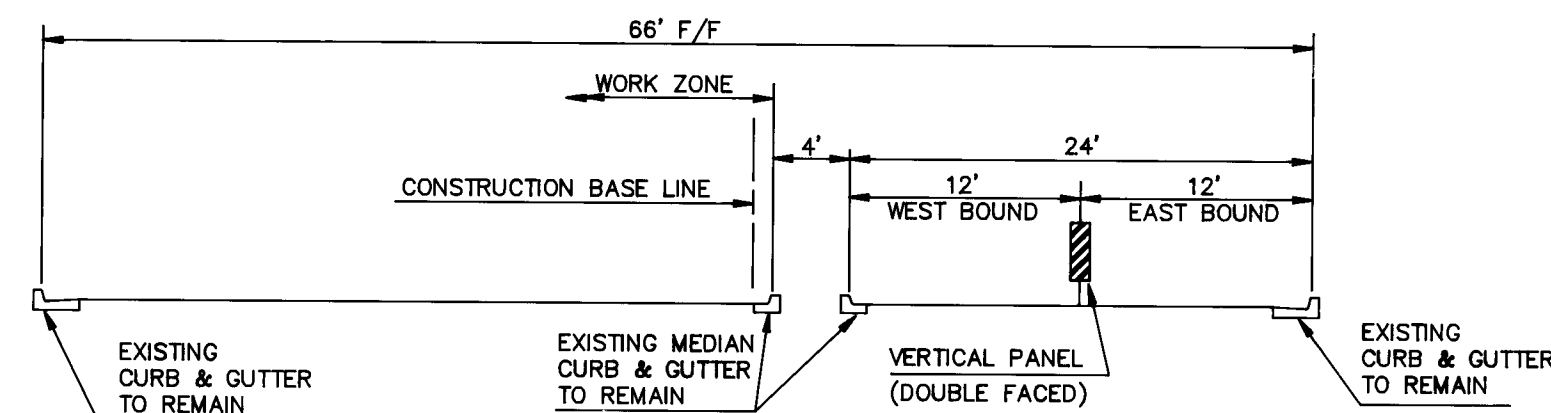
SURVEY INFORMATION	
FIELD NOTES	DATE
BY	
NO.	

ENGINEER'S SEAL	
	

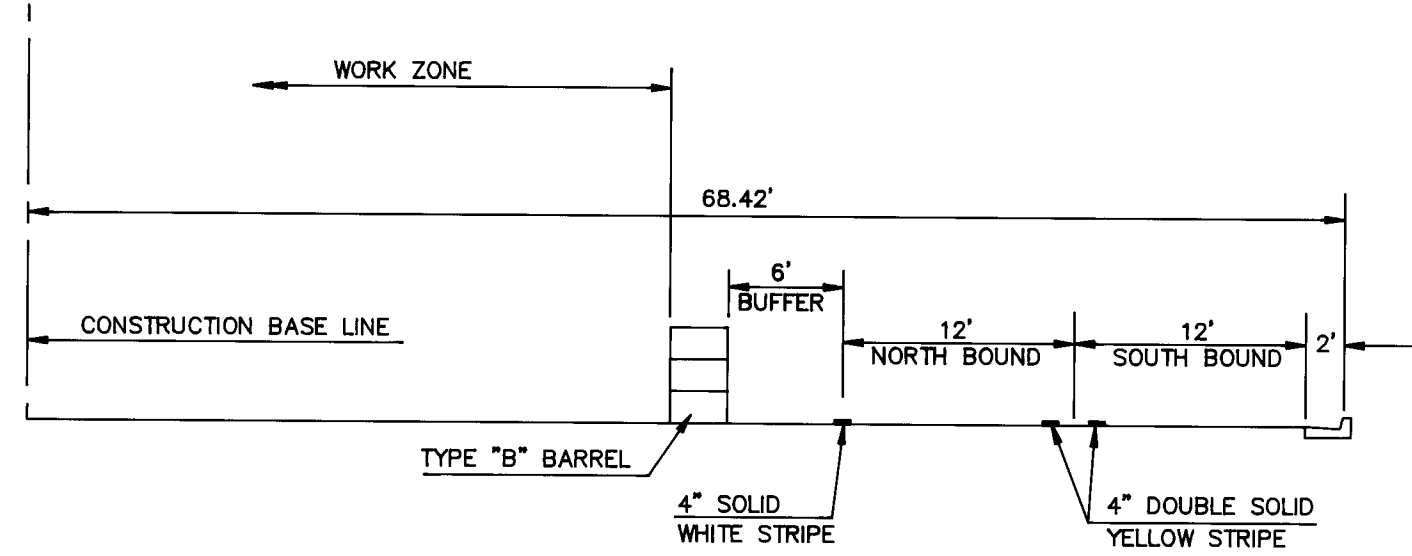
REMARKS	
DESIGN	DATE 8/6/91
DESIGNED BY	DATE 8/6/91
DRAWN BY	DATE 8/6/91
CHECKED BY	DATE 8/6/91

PHASE III TRAFFIC CONTROL NOTES

- 1) Work zone will be on the east side of Second Street, full length of project, and the north side of Griegos Road on east leg only.
- 2) Buffer of 6' or curb separation from work zone shall be in place throughout project.
- 3) One lane in all directions with no left turns at intersections.
- 4) This phase has shifting tapers instead of reverse curves in the crossover areas. There is adequate distance in this Phase to use 1/2 L.
- 5) Access to Tyrone Avenue and Pleasant Avenue shall be open at all times except to cross intersections with new waterline. During construction of the new water line across these two intersections, access to Second Street may be closed off for a maximum of one day at each intersection. Contractor to provide Traffic Control Closure Plan and obtain a permit from City for these closures.



SECTION B
SCALE: 1" = 10'



SECTION A
SCALE: 1" = 10'

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: PHASE III - CONSTRUCTION TRAFFIC CONTROL SECOND STREET / GRIEGOS ROAD					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	R. J. J. 8-21-91		WATER		
TRANSPORTATION	R. J. J. 8-21-91		WASTE WATER		
HYDROLOGY	R. J. J. 8-21-91		CONSTR. COORD.	R. J. J. 8-21-91	
PROJECT NO.	M-4035(4) COA PROJ NO. 3203.91	MAP NO.	F-14 G-14	SHEET NO.	4-6

26 3203.913592

SCALE: 1" = 100'

PHASE III

PHASE III CONSTRUCTION NOTES

- 1) Perform removals and new paving construction items within work zones provided on East side of Second Street and on North side of Griegos Road.
- 2) Install new 6" waterline in Second Street from Pleasant Avenue to Griegos Road.
- 3) Complete storm drain laterals and construct catch basins on East side of Second Street.
- 4) Construct median modification on East leg of intersection on Griegos Road.

LEGEND

- WORK ZONE
- TEMPORARY SOLID STRIPE
- TYPE "B" BARREL
- VERTICAL PANEL (BACK TO BACK)
- TYPE THREE BARRICADE (8')
- LANE DESIGNATION
- SIGN (INCLUDES MUTCD DESIGNATION)



SIGN CODE	NO. OF SIGNS	TOTAL SIGN AREA SQ. FT.	POST LENGTHS				MOUNTING REQUIREMENTS				BASE POSTS	
			LEFT	CTR.	RIGHT	TOTAL	CHANNEL	DRIVEDOWN POSTS 0.1345 THICK	PORTABLE SIGN SUPPORT	NO.	TOTAL LENGTH	
PHASE I & V												
G 20-2	4	40	11		11	88	✓		✓		8	28.0
R 3-7L	8	50		9.5		76	✓				8	28.0
R 4-7b	8	40	8 BARRELS									
R 8-4a	80	400	ON BARRELS									
R 11-2a	10	100	ON BARRICADES									
W 1-6R	10	80	ON BARRICADES									
W 4-2L	4	64	11		11	88	✓		✓		8	28.0
* W 13-1 (30)	4	16										
W 20-1	2	32	11		11	44	✓		✓		4	14.0
W 20-1	6	96	11		11	132					12	42.0
* W 13-1 (25)	2	8										
* W 13-1 (30)	4	16										
W 20-5L	4	64	11		11	88	✓		✓		8	28.0
* W 13-1 (30)	4	16					✓					
BARRICADE TYPE III 8FT	10											
BARRELS TYPE "B" PHASE I & V SUB-TOTAL	137	1022				516	✓		✓			168.0
PHASE II												
G 20-2	(4)	(40)	11		11	(88)	✓		✓		(8)	(28.0)
R 3-2	7	28		9		63	✓		✓		7	24.5
R 4-7a	3	15		11		33	✓		✓		3	10.5
* R 3-2	2	8										
R 4-7b	(3)	(15)	(8 BBLS)									
* R 3-2	1	4										
R 8-4a	(80)	(400)										
R 11-2a	(3)	(30)	ON BARRICADES									
W 1-3L	1	9		11		11	✓		✓		1	3.5
* W 13-1 (30)	1	(4)				-						
W 1-3R	1	9		11		11	✓		✓		1	3.5
W 1-6L	5	40	ON BARRICADES									
W 1-6R	(1)	(4)	ON BARRICADE									
W 4-2L	(2)	(32)	11		11	(44)	✓		✓		(4)	(14)
* W 13-1 (30)	(2)	(8)				-						
											42	

SIGN CODE	NO. OF SIGNS	TOTAL SIGN AREA SQ. FT.	POST LENGTHS				MOUNTING REQUIREMENTS				BASE POSTS	
			LEFT	CTR.	RIGHT	TOTAL	FLANGED CHANNEL	DRIVEDOWN POSTS 0.1345 THICK	PORTABLE SIGN SUPPORT	NO.	TOTAL LENGTH	
PHASE II (CONT)												
W 4-2R	2	32	11		11	44	✓		✓		2	7.0
* W 13-1 (30)	(2)	(8)										
W 6-1	1	9		10		10	✓		✓		1	3.5
W 6-3	4	36		10		40	✓		✓		4	14.0
W 20-1	1 (8)	8 (128)	11		11 (176)	22	✓		✓		2	7.0
* W 13-1 (25)	(2)	(8)										
* W 13-1 (30)	(2)	(8)										
W 20-2	2	32	11		11	44	✓		✓		4	14.0
W 20-5L	(2)	(32)	11		11 (44)						(4)	(14.0)
* W 13-1 (30)	(2)	(8)										
W 20-5R	2	32	11		11	44	✓		✓		4	14.0
BARRICADE TYPE III 8FT.	10 (10)											
BARRELS	(85)											
PHASE II SUB-TOTAL		306(725)				(262) 322					(49)	101.5
</												

() SIGN(S) AND/OR SUPPORT(S) USED IN OTHER CONSTRUCTION PHASE(S). NO ADDITIONAL PAYMENT THEREFORE.
 • NO ADDITIONAL POST NEEDED. SIGN TO BE MOUNTED ON COMMON POST WITH ANOTHER SIGN.

26 3203.913793

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

3	
2	
1	
NO.	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)	
NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT TRAFFIC DESIGN SECTION TRAFFIC CONTROL DEVICES FOR CONSTRUCTION SUMMARY OF QUANTITIES M-4035(4) C.O.A. 320391	
DATE	SHEET 4-8

SIGN CODE	NO. OF SIGNS	TOTAL SIGN AREA SQ. FT.	POST LENGTHS				MOUNTING REQUIREMENTS				BASE POSTS		
			LEFT	CTR.	RIGHT	TOTAL	FLANGED CHANNEL	DRIVEDOWN POSTS	PORTABLE SIGN SUPPORT	NO.	TOTAL LENGTH		
PHASE IIA													
G 20-2	(4)	(40)	11		11	(88)						(8)	(280)
M 4-9L	4	20		9.0		36.0	✓		✓			4	14.0
M 4-9R	3	15		9.0		27.0	✓		✓			3	10.5
M 4-10L	3	18		9.0		27.0	✓		✓			3	10.5
M 4-10R	3	18		9.0		27.0	✓		✓			3	10.5
R 3-1	3	8		9.0		27.0	✓		✓			3	10.5
R 3-2	(10)	(40)		(9.0)		(23.0) 27.0	✓		✓			(7) 3	(24.5) 10.5
R 3-7L	(4)	(20)		(9.5)		(38.0)						(4)	(14.0)
R 3-7R	4	20		9.5		38.0	✓		✓			4	14.0
R 4-7a	2 (3)	10 (15)		11.0		(33.0) 22.0	✓		✓			(3) 2	(10.5) 7.0
R 4-7b	(2)	(10)		(2 BBL)									-
R 8-4a	(80)	(400)		ON BARRELS									-
R 11-2	4	40		ON BARRICADES									-
R 11-2a	2 (10)	20 (100)		ON BARRICADES									-
SP-2	1	12	9.0		9.0	18.0	✓		✓			2	7.0
SP-3	1	12	9.0		9.0	18.0	✓		✓			2	7.0
W 1-3L	(1)	(9)		12.0		(12.0)						(1)	(3.5)
* W 13-1(30)	(1)	(4)					✓		✓				-
W 1-3R	(1)	(9)		1 BARREL									-
* W 13-1(30)	(1)	(4)											-
W 1-6L	1 (5)	8 (48)		ON BARRICADES									-
W 1-6R	1 (10)	8 (88)		ON BARRICADES									-
W 4-2L	(2)	(32)	11		11	(44)						(4)	(14.0)
* W 13-1(30)	(2)	(8)											-
W 4-2R	(2)	(32)	11		11	(44)						(4)	(14.0)
* W 13-1(30)	(2)	(8)											-
W 6-1	1	9		11		11	✓		✓			1	3.5
W 6-3	(4)	(36)		11		(44)						(4)	(14.0)
* W 13-1(30)	(4)	(16)											-
W 20-1	(9)	(144)	11		11	(198)						(18)	(63.0)
* W 13-1(25)	(2)	(8)				-							-
* W 13-1(30)	(4)	(16)				-							-
W 20-2	1 (2)	16 (32)	11		11	(44) 22	✓		✓			(4) 2	(14.0) 7.0
* W 13-1(25)	(2)	(8)											-

SIGN CODE	NO. OF SIGNS	TOTAL SIGN AREA SQ. FT.	POST LENGTHS				MOUNTING REQUIREMENTS				BASE POSTS	
			LEFT	CTR.	RIGHT	TOTAL	FLANGED CHANNEL	DRIVEDOWN POSTS 0.1345 THICK 2-3/16 2-1/2 2-3/16 2-1/2	PORTABLE SIGN SUPPORT	NO.	TOTAL LENGTH	
PHASE IIA (CONT)												
W 20-5L	1 (2)	16 (32)	11		11	(44) 22	✓			✓	(4) 2	(14.0) 7.0
* W 13-1(25)	(1)	(4)										-
* W 13-1(30)	(2)	(8)										-
W 20-5R	1 (2)	16 (32)	11		11	(44) 22	✓			✓	(4) 2	(14.0) 7.0
* W 13-1(30)	(2)	(8)										-
W 20-3	1	16	11		11	22	✓			✓	2	7.0
* W 13-1(25)	(1)	(4)										-
BARRICADE TYPE III BFT	(20)											
BARRELS TYPE "B"	(112)											
PHASE IIA SUB-TOTAL		282(1219)				(700) 366						(199.5) 133
					</							

() SIGN(S) AND/OR SUPPORT(S) USED IN OTHER CONSTRUCTION PHASE(S). NO ADDITIONAL PAYMENT THEREFORE.
* NO ADDITIONAL POST NEEDED. SIGN TO BE MOUNTED ON COMMON POST WITH ANOTHER SIGN.

3
2
1
NO. DESCRIPTION
REVISIONS (OR CHANGE NOTICES)

NEW MEXICO STATE
HIGHWAY AND TRANSPORTATION
DEPARTMENT
TRAFFIC DESIGN SECTION
TRAFFIC CONTROL DEVICES
FOR CONSTRUCTION
SUMMARY OF QUANTITIES
M-4035(4)
C.O.A. 3203.91

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 3003.913893
11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.
DATE
SHEET 4-9

SIGN CODE	NO. OF SIGNS	TOTAL SIGN AREA SQ. FT.	NOTES			MOUNTING REQUIREMENTS				BASE POSTS	
			LEFT	RIGHT	TOTAL	RAISED CHANNEL	DRIVE DOWN POSTS	PORTABLE SIGN SUPPORT	NO.	TOTAL LENGTH	
PHASE III											
G 20-2	(4)	(40)	11	11	(88)					(8)	(28)
M 4-9 L	(1)	(5)	9.0		(9)					(1)	(3.5)
M 4-10 R	(1)	(6)	9.0		(9)					(1)	(3.5)
R 3-2	(8)	(32)	11	11	(72)	22	✓		✓	(8)	(28)
R 4-7a	(7)	(35)	1 BARREL (6 BARRELS)								
R 4-7b	(2)	(10)	(2 BARRELS)								
R 8-4a	(80)	(400)	ON BARRELS								
R 11-2	5 (4)	50 (40)	ON BARRICADES								
R 11-2a	(9)	(90)	ON BARRICADES								
SP-1	1	8	9.0		9.0	✓		✓		1	3.5
W 1-3 L	(1)	(9)	12.0		(12)					(1)	(3.5)
*W 13-1(25)	(1)	(4)									
W 1-3 R	(1)	(9)	12.0		(12)					(1)	(3.5)
*W 13-1(30)	(1)	(4)									
W 1-6 L	5 (6)	40 (48)	ON BARRICADES								
W 1-6 R	4 (11)	32 (88)	ON BARRICADES								
W 4-2 L	(3)	(48)	11	11	(66)					(6)	(21)
*W 13-1(25)	(1)	(4)									
*W 13-1(30)	(2)	(8)									
W 4-2 R	1 (2)	16 (32)	11	11	(44)	22	✓		✓	(4)	(14)
*W 13-1(25)	(1)	(4)									
*W 13-1(30)	(2)	(8)									
W 6-3	5 (4)	45 (36)	11.0		(44)	55.0	✓		✓	(4)	(14)
*W 13-1(25)	(6)	(24)									
*W 13-1(30)	(3)	(12)									
W 20-1	(9)	(144)	11	11	(198)					(18)	(63)
*W 13-1(25)	(2)	(8)									
*W 13-1(30)	(4)	(16)									
W 20-5 L	(3)	(48)	11	11	(66)					(6)	(21)
*W 13-1(25)	(1)	(4)									
*W 13-1(30)	(2)	(8)									
W 20-5 R	1 (3)	16 (48)	11	11	(66)	22	✓		✓	(6)	(21)
*W 13-1(25)	(2)	(4)									
*W 13-1(30)	(2)	(4)									
BARRICADE TYPE III	8 FT	30(20)									
VERTICAL PANELS	BACK TO BACK	12									
BARRELS TYPE "B"	43(137)										
		223(276)			(690)	135					(245)

[illegible]

() SIGN(S) AND/OR SUPPORT(S) USED IN OTHER CONSTRUCTION
PHASE(S). NO ADDITIONAL PAYMENT THEREFORE.

* NO ADDITIONAL POST NEEDED. SIGN TO BE MOUNTED ON COMMON POST WITH ANOTHER SIGN.

3			
2			
1			
NO.	DESCRIPTION	DATE	BY

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO STATE
HIGHWAY AND TRANSPORTATION
DEPARTMENT
TRAFFIC DESIGN SECTION
TRAFFIC CONTROL DEVICES
FOR CONSTRUCTION
SUMMARY OF QUANTITIES

M-4035(4)
C.O.A. 3203.9I

DATE 1987. SHEET 4-10

ITEM N°	BID	ITEM	UNITS		TOTAL
702000	CONSTRUCTION SIGNING	SQ. FT.	USE 1830	1826	
702103	STEEL POSTS AND BASE POSTS FOR CONSTRUCTION SIGNING	LIN. FT.		1827	
702205	BARRICADE, TYPE I	EACH			
702210	BARRICADE, TYPE II	EACH			
702215	BARRICADE, TYPE III 8 FT.	EACH		50	
702214	BARRICADE TYPE III 6 FT.	EACH			
702330	VERTICAL PANEL, SINGLE TYPE	EACH			
702335	VERTICAL PANEL, BACK TO BACK TYPE	EACH		13	
702360	CONSTRUCTION TRAFFIC MARKER	EACH			
702145	PORTABLE SIGN SUPPORT	EACH			
702349	CHANNELIZATION DEVICE - (BARREL)-TYPE "A"	EACH			
702350	CHANNELIZATION DEVICE (BARREL)-TYPE "B"	EACH		180	
702400	SEQUENTIAL ARROW DISPLAY	EACH			
703210	REFLECTIVE BARRIER DELINEATOR	EACH			
703120	TUBULAR TRAFFIC MARKER	EACH			
702365	TRAFFIC CONES	EACH			
704010	REFLECTORIZED PAINTED MARKINGS	LIN. FT.			
704015	ADHESIVE MARKING TAPE FOR CONSTRUCTION ZONES	LIN. FT.		8500	
704016	ADHESIVE NON-METALLIC MARKING TAPE	LIN. FT.			
720015	SAND-BARREL VEHICULAR IMPACT ATTENUATOR UNIT	EACH			
721001	REMOVAL OF PAVEMENT STRIPE	LIN. FT.			
606402	PRECAST CONCRETE WALL BARRIER	LIN. FT.			
606012	W-BEAM / BARREL BARRIER	LIN. FT.			
606405	HAULING PRECAST CONCRETE WALL BARRIER	LIN. FT.			
606410	RESETTING OF PRECAST WALL BARRIER	LIN. FT.			
717140	TEMPORARY REFLECTIVE PAVEMENT MARKER TYPE "TD"	EACH			
INCIDENTAL TO ITEM 702000	CLEANING OF REFLECTIVE SURFACES ON TRAFFIC CONTROL DEVICES	SQ. FT.		2969	

RECORD COPY
SCANLON & ASSOCIATES, INC.

3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			

NEW MEXICO
STATE HIGHWAY DEPARTMENT
TRAFFIC DESIGN SECTION
TRAFFIC CONTROL DEVICES
FOR CONSTRUCTION
SUMMARY OF QUANTITIES

M-4035(4)
C.O.A. 3203.91

SHEET 4-11

NO. _____ SHEET NO. _____

SIGN CODE	NO OF SIGNS	TOTAL SIGN AREA SQ. FT.	POST LENGTHS				MOUNTING REQUIREMENTS						BASE-POSTS	
			LEFT	CTR.	RIGHT	TOTAL	FLANGED CHANNEL			DRIVEDOWN POSTS 0.1345 THICK		PORTABLE SIGN SUPPORT	N ²	TOTAL LENGTH
						2.25 LB/FT.	3.00 LB/FT.	4.00 LB/FT.	2 3/8 X 2 3/16	2 1/2 X 2 1/2				
				PHASE	IV									
G 20-2	(2)	(40)	11		11	(88)							(8)	(28)
M 4-10R	(1)	(6)		9.0		(9)							(1)	(3.5)
R1-1	1	(1) 16	11		11	(22) 22		✓		✓			2	7.0
R3-2	(8)	(82)		9.0		(72)							(5)	(28)
R4-7a	(5)	(25)	(5)	BARRELS										
R4-7b	(2)	(10)	(2)	BARRELS										
R6-1R	1	9		ON BARRICADE										
R8-4a	1	(80) 400		ON BARRELS										
R11-1	1	5		ON BARRICADE										
R11-2	1	(9) 10		ON BARRICADE										
R11-2a	(6)	(60)		ON BARRICADE										
W1-3L	(2)	(18)		11		(22)							(2)	(7)
*W13-1(25)	(1)	(4)												
*W13-1(30)	(1)	(4)												
W1-3R	(2)	(18)		11		(22)							(2)	(7)
*W13-1(25)	(1)	(4)												
*W13-1(30)	(1)	(4)												
W1-6L	(8)	(24)		ON BARRICADES										
W1-6R	(9)	(72)		ON BARRICADES										
W4-2 L	(3)	(48)	11		11	(66)							(6)	(21)
*W13-1(25)	(1)	(4)												
*W13-1(30)	(2)	(8)												
W4-2 R	(3)	(48)	11		11	(66)							(6)	(21)
*W13-1(25)	(1)	(4)												
*W13-1(30)	(2)	(8)												
W6-3	(7)	(63)		11		(77)							(7)	(52.5)
*W13-1(25)	(2)	(5)												
*W13-1(30)	(5)	(20)												
W13-1(30)	1	4		9		9		✓		✓			1	3.5
W20-1	(9)	(144)	11		11	(198)							(18)	(63)
*W13-1(25)	(2)	(8)												
W13-1(30)	(4)	(16)												
W20-5L	(3)	(48)	11		11	(66)							(6)	(21)
*W13-1(25)	(1)	(4)												
*W13-1(30)	(2)	(8)												
W20-5R	(3)	(48)	11		11	(66)							(6)	(21)
*W13-1(25)	(1)	(4)												

() SIGN (S) AND/OR SUPPORT () USED IN OTHER CONSTRUCTION PHASE (S). NO ADDITIONAL PAYMENT THEREFOR.

* NO ADDITIONAL POST NEEDED. SIGN TO BE MOUNTED ON COMMON POST WITH ANOTHER SIGN.

1) TRAFFIC CONTROL PLAN AND QUANTITIES MAY VARY AS FIELD CONDITIONS DICTATE. THE CONTRACTOR WILL BE PAID FOR ACTUAL QUANTITIES USED. PLACING, RELOCATION, AND MAINTENANCE OF TRAFFIC CONTROL DEVICES AS SHOWN ON THE PLAN, OR AS DIRECTED BY THE PROJECT MANAGER ARE TO BE INCIDENTAL TO THE UNIT BID PRICE.

ALL TRAFFIC CONTROL DEVICES FOR DETOURS SHALL COMPLY WITH STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION - SECTION 702 (1984 EDITION) AND CHAPTER VI OF THE 1988 EDITION MUTCD AND CURRENT REVISIONS.

3.) ALL CONSTRUCTION SIGNING SHALL BE BLACK ON REFLECTIVE ORANGE UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION BARRICADES AND CHANNELIZATION DEVICES SHALL BE ORANGE ON WHITE REFLECTORIZED UNLESS OTHERWISE SPECIFIED.

4.) BID ITEM - (STEEL POSTS AND BASE POSTS FOR DETOUR SIGNS). THE CONTRACTOR SHALL HAVE THE OPTION OF SUPPLYING EITHER THE FLANGED CHANNEL OR THE DRIVEDOWN POST AS PER NEW MEXICO STANDARD SERIALS. REFER TO SERIALS SM 75-1, TBAC-001-10 AND TBAC-002-11.

5.) BID ITEM - (TYPE III BARRICADE - 6' OR 8'). TYPE III BARRICADES SHALL BE ORANGE ON WHITE REFLECTORIZED. ATTACHED TYPE "A" FLASHING BEACONS ARE TO BE INCIDENTAL TO BID PRICE. BID UNIT - PER EACH.

6.) BID ITEM - (TYPE I BARRICADE-8'). TYPE I BARRICADE SHALL BE ORANGE ON WHITE REFLECTORIZED. ATTACHED HIGH INTENSITY FLASHING BEACON ARE TO BE INCIDENTAL TO BID PRICE. BID UNIT - PER EACH.

7.) BID ITEM - (VERTICAL PANELS, SINGLE TYPE OR BACK TO BACK 8"X24"). VERTICAL PANELS SHALL BE ORANGE ON WHITE REFLECTORIZED SHEETING .060 MIN 6061 T-6. PANELS TO BE MOUNTED ON DRIVE-DOWN POST EITHER 3' DRIVE OR ON STANCHION. BID UNIT - PER EACH.

8.) FLAGGING SHALL BE PROVIDED FOR SAFETY AND, OR AS DIRECTED BY THE PROJECT MANAGER. FLAGGERS SHALL USE STOP/SLOW PADDLES (18"x18" MIN.) IN ACCORDANCE WITH THE MUTCD. THE FLAGGER, APPLICABLE SIGNS AND OTHER RELATED ITEMS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, NO PAYMENT OR MEASUREMENT WILL BE MADE THEREFORE.

9.) BID ITEM - (CHANNELIZATION DEVICE BARREL TYPE "A" OR TYPE "B"). CHANNELIZATION DEVICE BARRELS SHALL BE ORANGE ON WHITE REFLECTORIZED. TYPE "A" REQUIRES NO BEACON. TYPE "B" SHALL BE EQUIPPED WITH BEACON AS SPECIFIED IN THE STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 702.021 (a), 1984 EDITION.

(C) THE PROVISIONS AS INCLUDED IN THE PLANS AND SPECIFICATIONS FOR HANDLING AND CONTROLLING TRAFFIC DURING CONSTRUCTION OF THE PROJECT MAY BE CHANGED BY THE DISTRICT HIGHWAY ENGINEER IF, BECAUSE OF FIELD CONDITION AS ACTUALLY ENCOUNTERED, SUCH CHANGES ARE DESIRABLE AT THE DISCRETION OF THE PROJECT MANAGER. THESE CHANGES WILL BE MADE BY WRITTEN INSTRUCTION TO THE CONTRACTOR, AND SHALL BE CONSIDERED AN AMENDMENT TO THE PLANS AND SPECIFICATIONS AS OF THE DATE OF THE CHANGE.

II.) THE CONTRACTOR SHALL SUBMIT ANY PROPOSED CHANGES IN THE TRAFFIC CONTROL PLAN TO THE PROJECT MANAGER FOR APPROVAL.

2) NO PAYMENT WILL BE MADE FOR ANY ADDITIONAL COST RESULTING FROM APPROVED TRAFFIC CONTROL PLAN CHANGES REQUESTED BY THE CONTRACTOR.

(3) ITEM 704010 IS INCLUDED FOR PAVEMENT STRIPING BETWEEN SURFACING LIFTS AS DIRECTED BY THE PROJECT MANAGER.

(4) BID ITEM-(SAND BARREL VEHICULAR IMPACT ATTENUATOR UNIT). SAND BARREL VEHICULAR ATTENUATOR UNLESS OTHERWISE SPECIFIED, SHALL BECOME THE PROPERTY OF STATE OF NEW MEXICO AT COMPLETION OF CONSTRUCTION AND SHALL NOT REVERT TO THE CONTRACTOR. THIS ITEM SHALL BE DELIVERED AND STOCK-PILED AT LOCATIONS DIRECTED BY THE PROJECT MANAGER.

15.) THE CONTRACTOR SHALL HAVE A RESPONSIBLE PERSON ON SITE DURING WORKING HOURS AND ON CALL DURING NON WORKING HOURS TO INSPECT AND MAINTAIN PROJECT TRAFFIC CONTROL, OR AS DIRECTED BY PROJECT MANAGER.

(6) ALL NON-APPLICABLE SIGNING SHALL BE REMOVED OR COVERED COMPLETELY WITH AN OPAQUE NON-LIGHT TRANSMITTING MATERIAL. ALL REMAINING, NON-APPLICABLE TRAFFIC CONTROL DEVICES ARE TO BE REMOVED AND STORED AT LOCATIONS DESIGNATED BY THE PROJECT MANAGER.

7.) BID ITEM - (PRECAST CONCRETE WALL BARRIER). PRECAST CONCRETE WALL BARRIER WHEN USED FOR TRAFFIC CONTROL PURPOSES, SHALL BECOME THE PROPERTY OF THE STATE OF NEW MEXICO AT COMPLETION OF THE PROJECT. PRECAST CONCRETE WALL BARRIER SHALL NOT REVERT TO THE CONTRACTOR OR UNLESS OTHERWISE SPECIFIED.

PRECAST CONCRETE WALL BARRIER SHALL BE FABRICATED IN EITHER 10' UNITS OR 12.5' UNITS TO THE DEMENSIONS SHOWN ON PLANS. ALL PRECAST CONCRETE WALL BARRIER UTILIZED IN THE WORK SHALL BE OF THE SAME LENGTH AND DESIGN, INTERMIXING WILL NOT BE ALLOWED. WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF SECTION 503 - PORTLAND CEMENT CONCRETE, SECTION 504.022(C) - STEEL REINFORCEMENT.

WHEN NEW PRECAST CONCRETE WALL BARRIER IS CALLED FOR ON PLAN, THE WALL BARRIER SHALL BE DELIVERED TO THE DESIGNATED AREA AND SITE AT COMPLETION OF WORK. CONTRACTOR IS TO UNLOAD AND STOCKPILE PRECAST CONCRETE WALL BARRIER AS DIRECTED BY THE PROJECT MANAGER. HUALING AND STOCKPILING OF NEW PRECAST CONCRETE WALL BARRIER TO DESIGNATED AREA AND SITE SHALL BE INCIDENTAL TO THE ITEM FOR PRECAST CONCRETE WALL BARRIER. THE DESIGNATED AREA IS

18. THE FOLLOWING PROCEDURES SHALL GOVERN ALL TRAFFIC CONTROL PLANS INVOLVING SINGLE LANE TRAFFIC, THE REGULATORY AND ADVISORY SPEED LIMIT POSTINGS, AS PART OF THESE TRAFFIC CONTROL PLANS ARE SHOWN ON THE SIGN FACE DETAIL SHEET. FOR VARIATION IN THE TRAFFIC CONTROL PLAN, AN ENGINEERING STUDY SHALL BE DONE AT THE PROJECT. THE ENGINEERING STUDY SHALL BE PERFORMED BY THE DISTRICT TRAFFIC ENGINEER, IN ACCORDANCE WITH SECTION 2B-10 OF THE 1988 EDITION OF THE MUTCD AND CURRENT REVISION.

19. EACH SIGN FACE SHOWN ON PLANS SHALL MEET THE SPECIFICATIONS IN THE STANDARD HIGHWAY SIGNS MANUAL (1988 EDITION) FOR PROPER ARRANGEMENT, SPACING OF LETTERS, LETTER HEIGHT, LETTER SERIES, SYMBOLS, AND BORDERS FOR THE SPECIFIED SIZE AND MESSAGE AS SHOWN ON THE PLANS.

BRASS TABLET STAMPED NM 47=9 X = 383830.72
Y = 1503544.63

PLEASANT AVENUE

5+00

1+45(10)±
MATCH EXIST. STRIPING

S 09-09-10 W

HV-1 1/2" Rebar
X = 383663.24 Y = 1502831.89

HV-18 1/2" Rebar
X = 383651.82 Y = 1502742.38

- LEGEND
- BACK OF EXISTING CURB & GUTTER TO REMAIN
 - FACE OF NEW CURB
 - o POINT OF CURVATURE
 - SOLID PAINTED STRIPE
 - DASHED PAINTED STRIPE
 - >>>> CHEVRON STRIPING
 - ▲ REFLECTORIZED ARROWS

- KEYED NOTES
- (A) 4" WIDE WHITE SOLID STRIPE
 - (B) 4" WIDE WHITE BROKEN STRIPE (10' STRIPE, 30' SKIP)
 - (C) 8" WIDE WHITE SOLID PLASTIC CROSSWALK
 - (D) 12" WIDE WHITE SOLID PLASTIC STRIPE (STOP BAR)
 - (E) 8" WIDE WHITE SOLID PLASTIC STRIPE (CHEVRON)
 - (F) 4" WIDE WHITE BROKEN STRIPE (2' STRIPE, 4' SKIP)
 - (G) 4" WIDE YELLOW SOLID STRIPE
 - (H) WORD PAVEMENT MARKING, WHITE PLASTIC

- NOTES
1. ALL MEDIAN NOSE FACE OF CURB TO BE PAINTED YELLOW. (INCIDENTAL WORK)
 2. MEDIAN ISLANDS TO BE MARKED WITH 4" WIDE SOLID YELLOW STRIPE AT 6" AWAY FROM FACE OF CURB OR LIP OF GUTTER.
 3. DIAGONAL STRIPES AND CHEVRON STRIPES WITHIN PAINTED MEDIAN ISLANDS TO BE 8" WIDE SOLID WHITE PLASTIC STRIPE.

SCALE 1"=50'

F.H.W.A. Region No. 6		STATE NEW MEXICO	M-4035(4)		SHEET NO. 5-1	TOTAL SHEETS
AS BUILT INFORMATION						
BENCH MARKS						
SURVEY INFORMATION						
FIELD NOTES						
ENGINEER'S SEAL						
REMARKS						
DESIGN						
DESIGNED BY RZL DATE 8/8/91						
DRAWN BY JGL DATE 8/8/91						
CHECKED BY RL DATE 8/8/91						

26 3203.914193

11/20/92

RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

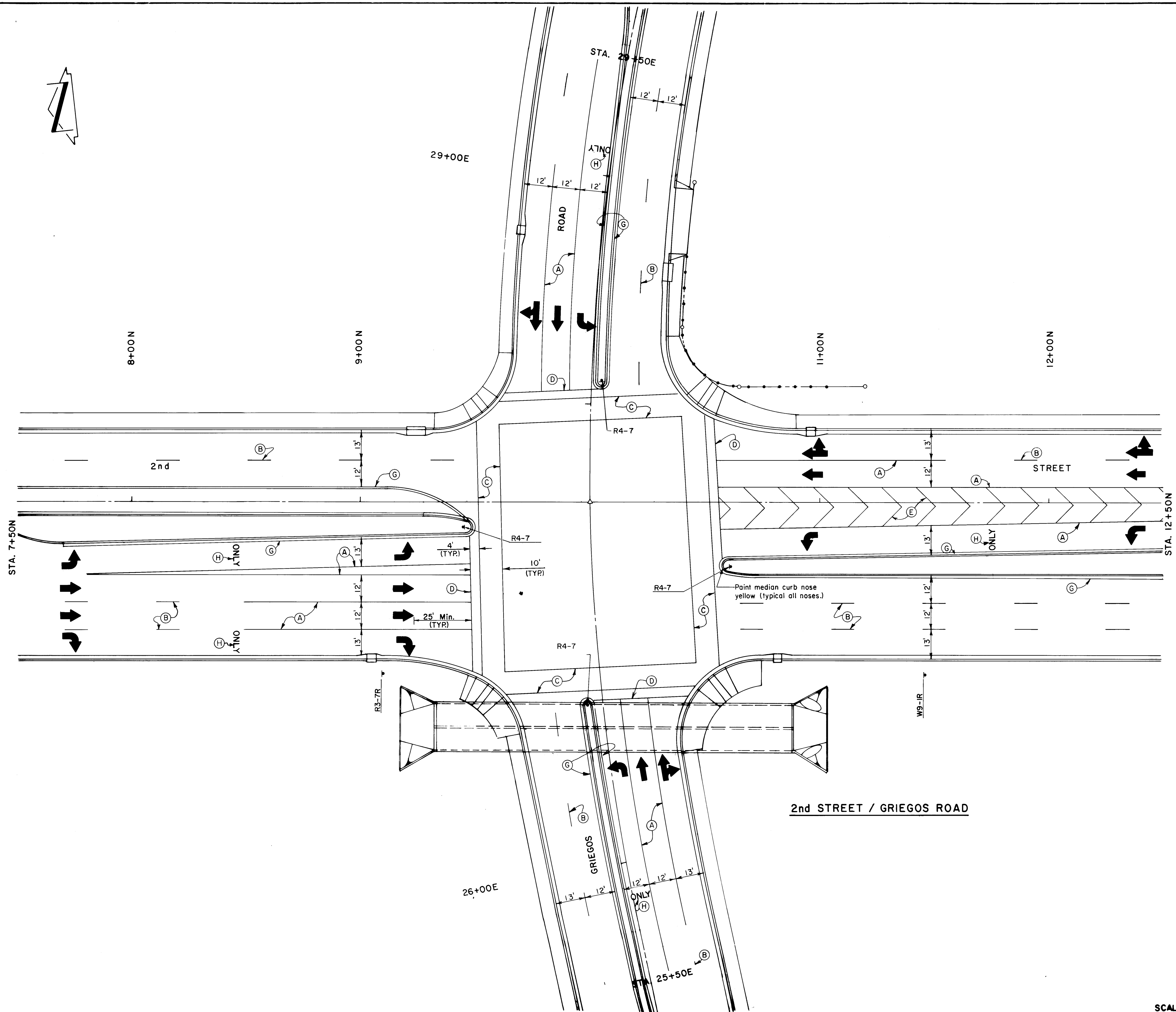
TITLE: PERMANENT SIGNING AND STRIPING PLAN
SECOND STREET / GRIEGOS ROAD

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG CHAIRMAN	Roy J. B...	8-21-91	WATER	N/A	
TRANSPORTATION	R. B...	8-15-91	WASTE WATER		
HYDROLOGY	K. K. G...	8-16-91			

PROJECT M-4035(4)
NO. COA PROJ. NO. 3203.91

MAP F-14
NO. G-14

SHEET 5-1 OF



STRIPING LEGEND

- A 4" White Solid Stripe
- B 4" White Broken Stripe
- C 8" White Broken (Cross Walk)
- D 12" White Solid (Stop Bar)
- E 8" White Solid (Chevron)
- F 4" White Broken Stripe 2' Strips, 4' Space
- G 4" Yellow Solid Stripe
- H Word Pavement Marking, White

26 3203.914293

11/20/92

RECORD COPY

SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DESIGN (TRANSPORTATION)

TITLE: INTERSECTION / STRIPING PLAN
2nd. STREET / GRIEGOS ROAD

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste	N/A	
A.C.E. - Design	R. J. [Signature]	8-21-91	Traffic	R. J. [Signature]	8-15-91
A.C.E. - Hydrology	B. B. [Signature]	8-16-91	Water	N/A	

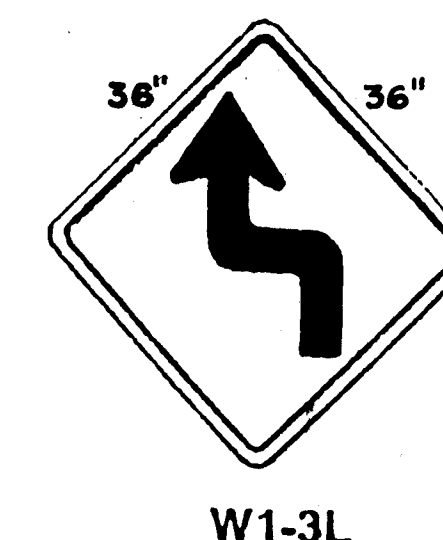
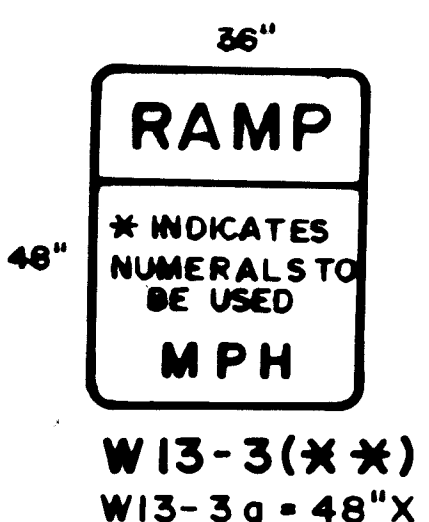
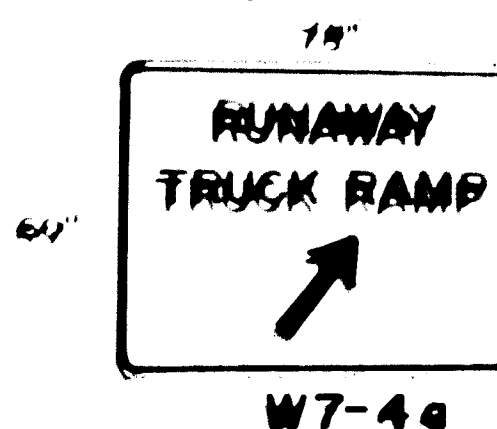
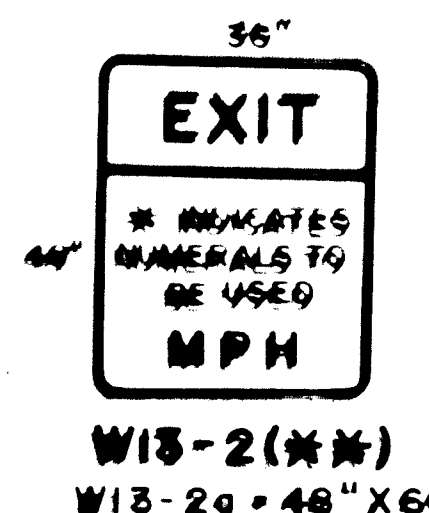
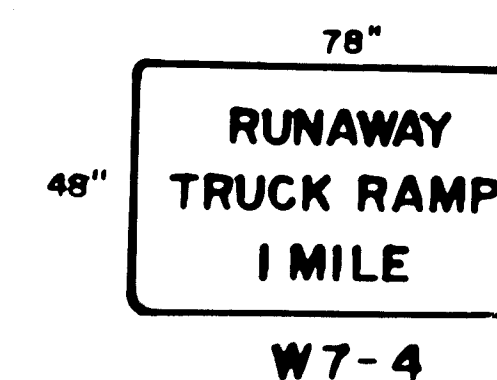
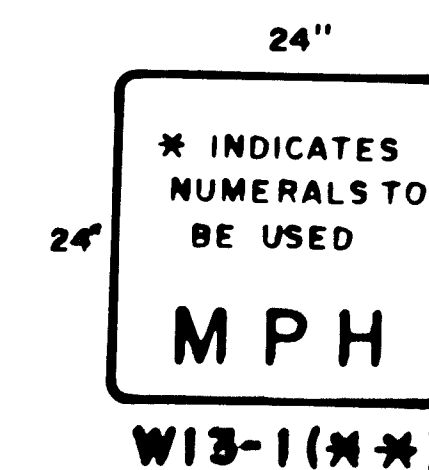
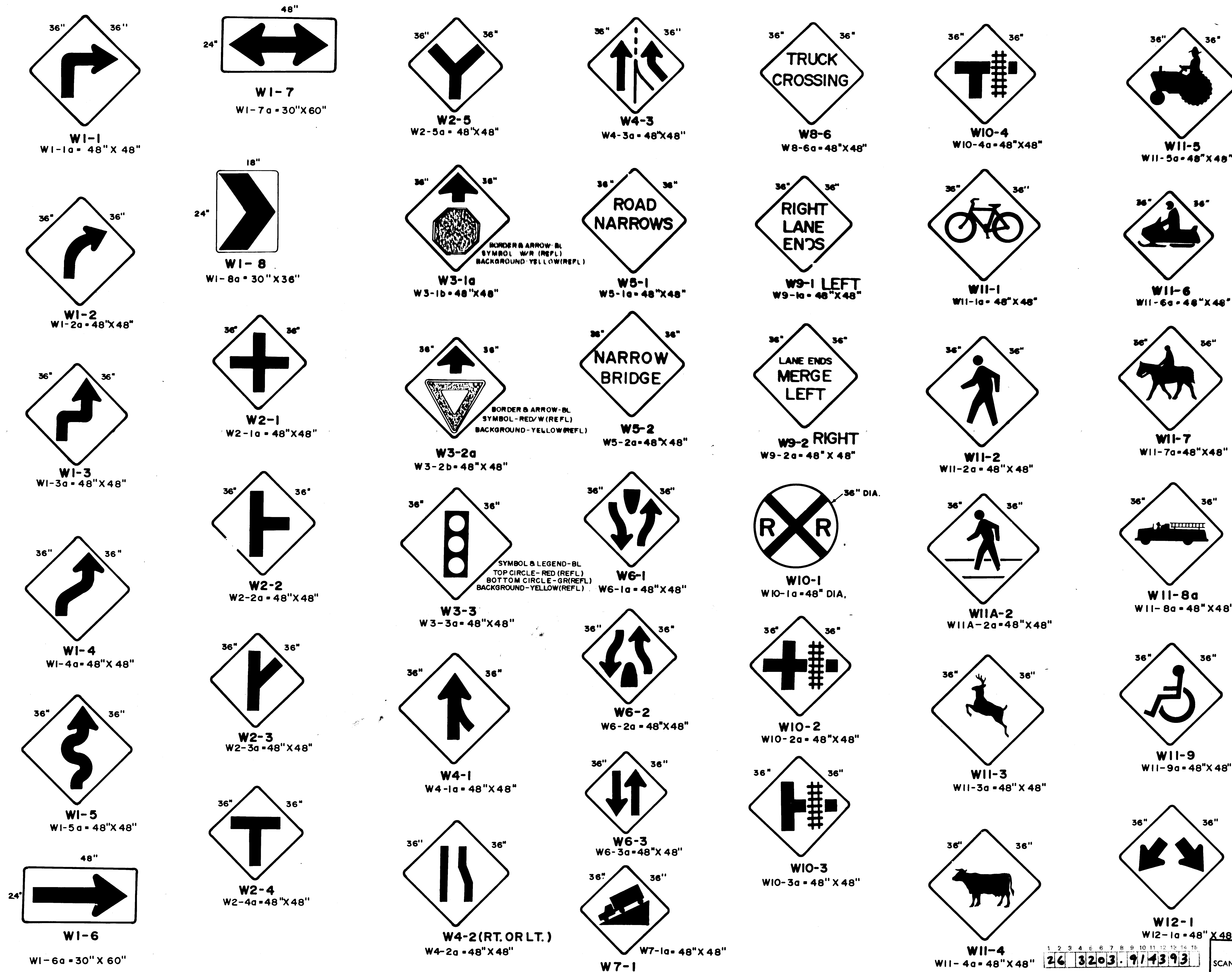
PROJECT	W-4038(4)	MAP NO.	F-14, G-14	SHEET	5-2
NO.	C.O.A. No. 380491				

SCALE: 1"=20'

DESIGNED BY _____ DRAWN BY _____
CHECKED BY _____

BRINING 4411V 02/98

F.N.W.A. Region No.	STATE	NMP	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	M-4035(4)	5-3	



NOTES

1. ALL "W" CODE SIGNS ARE BLACK LEG-END WITH REFLECTIVE YELLOW BACK-GROUND.
2. FOR FURTHER INFORMATION AND DETAIL SEE THE STANDARD HIGHWAY SIGN MANUAL AND THE CURRENT EDITION OF THE M.U.T.C.D.

No.	DESCRIPTION	DATE	BY
1			
2			
3			

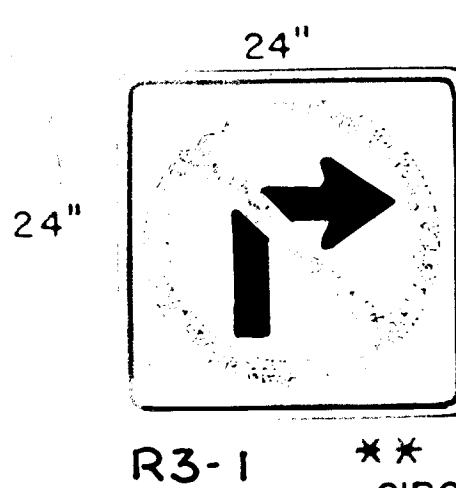
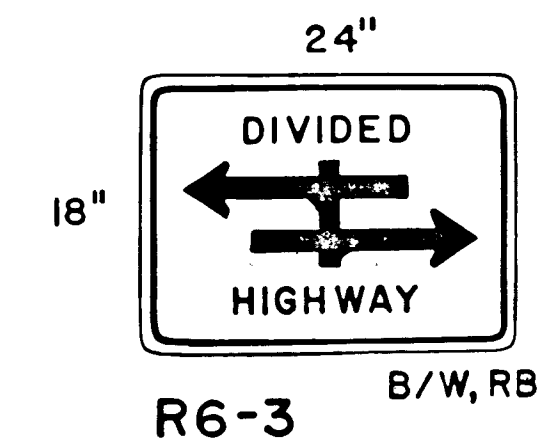
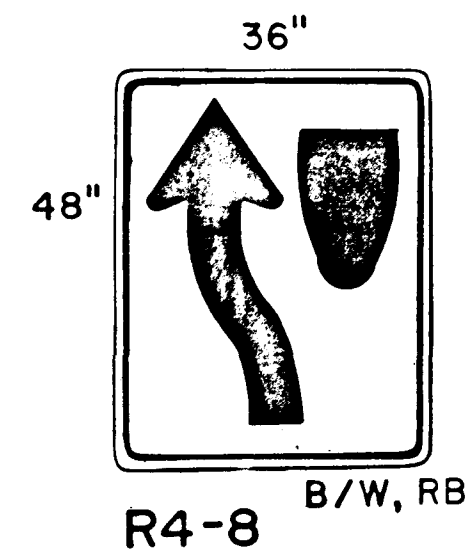
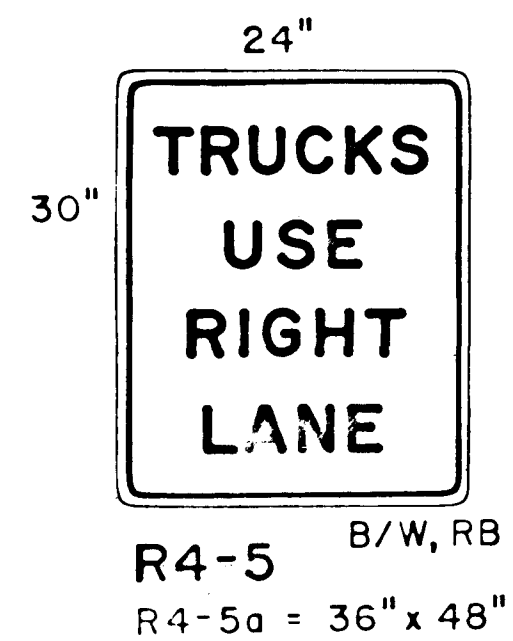
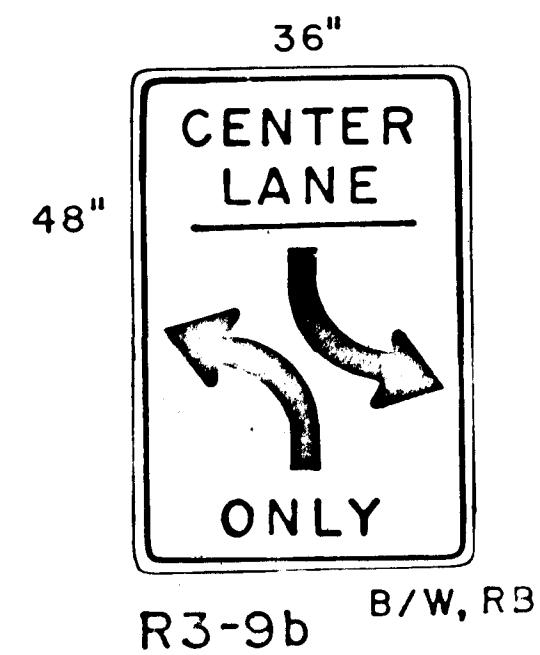
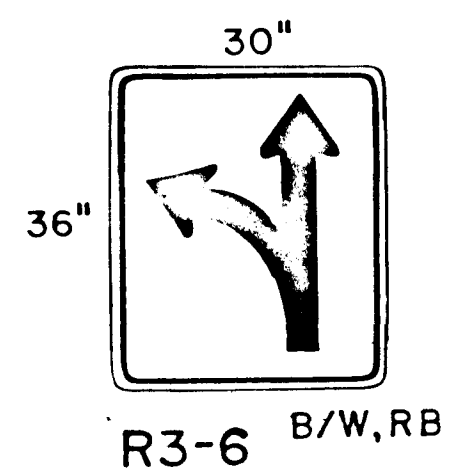
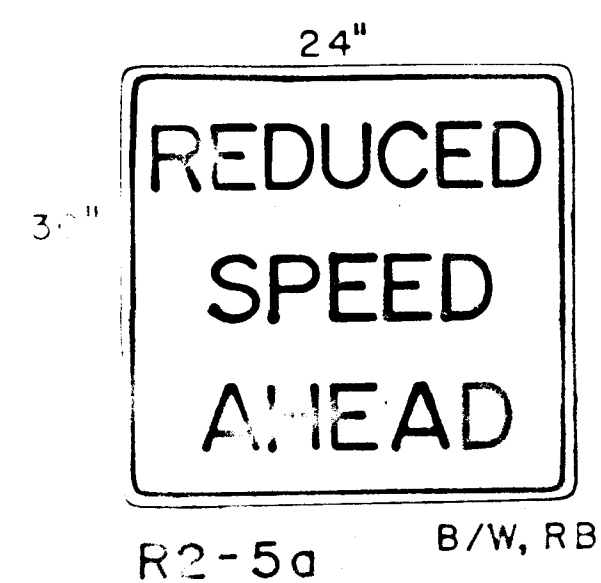
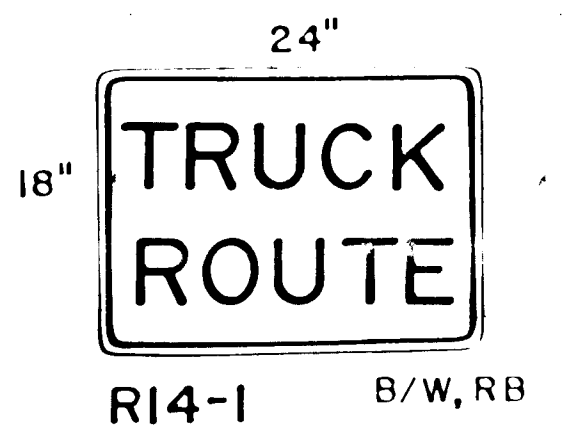
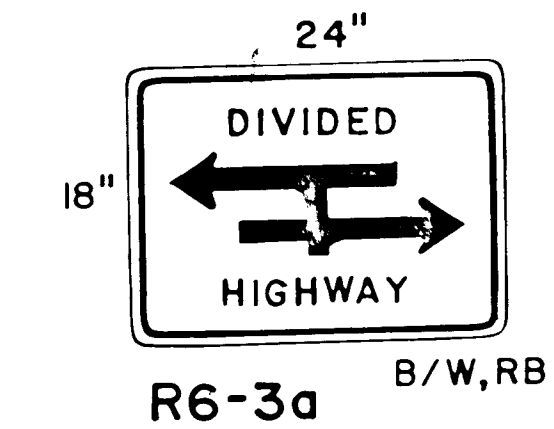
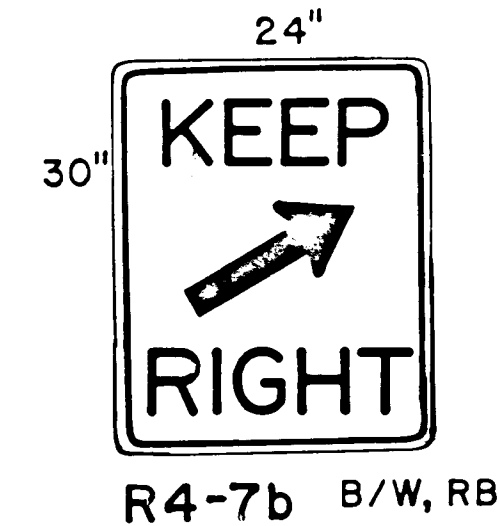
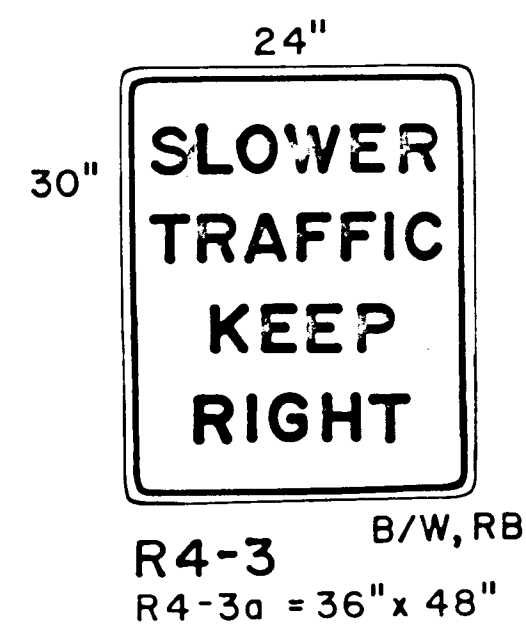
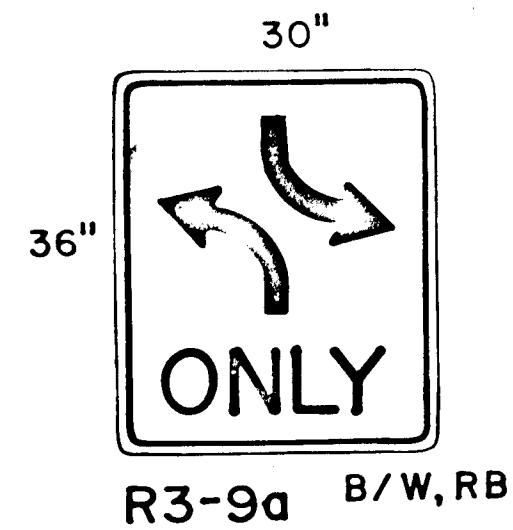
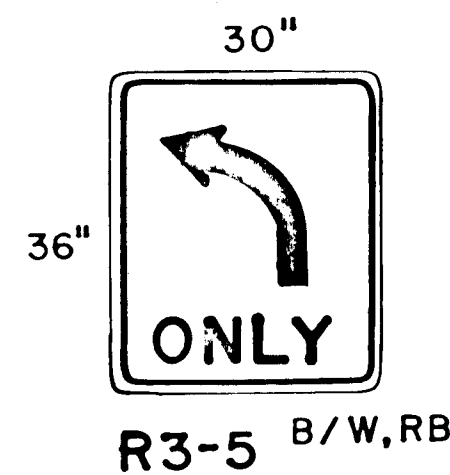
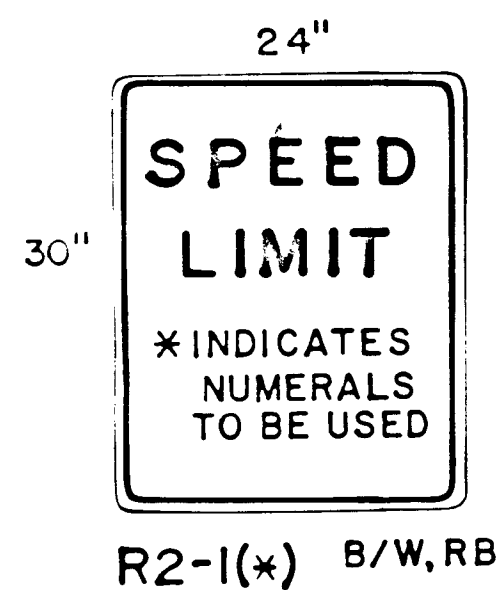
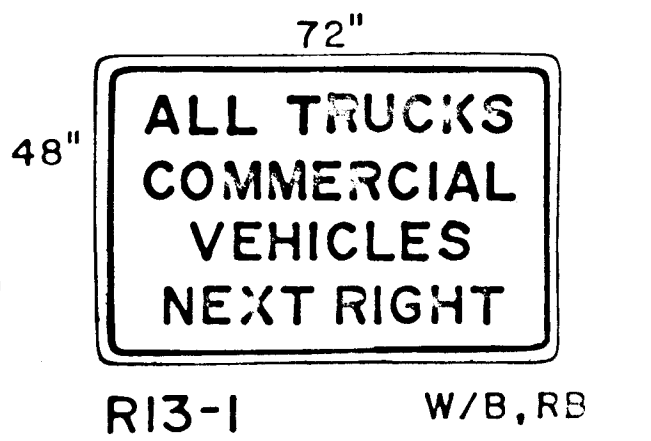
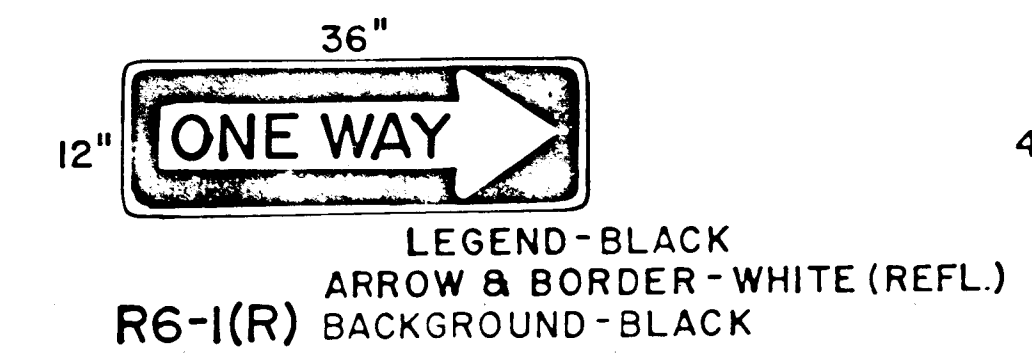
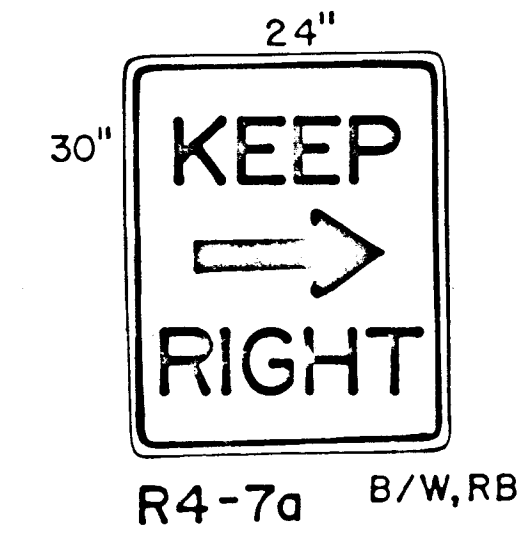
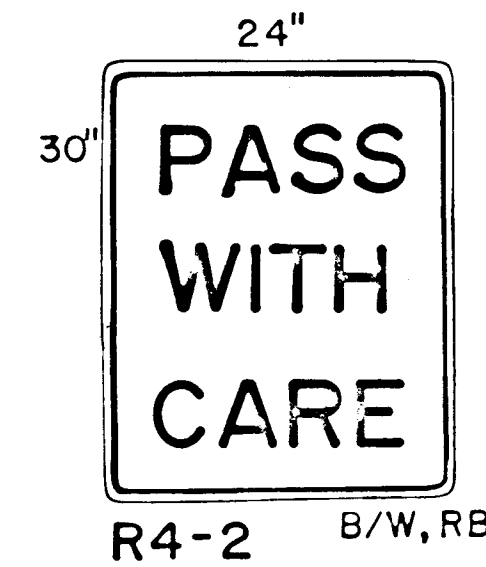
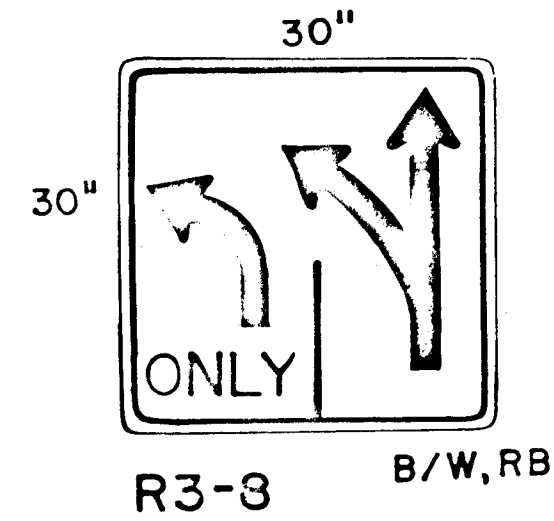
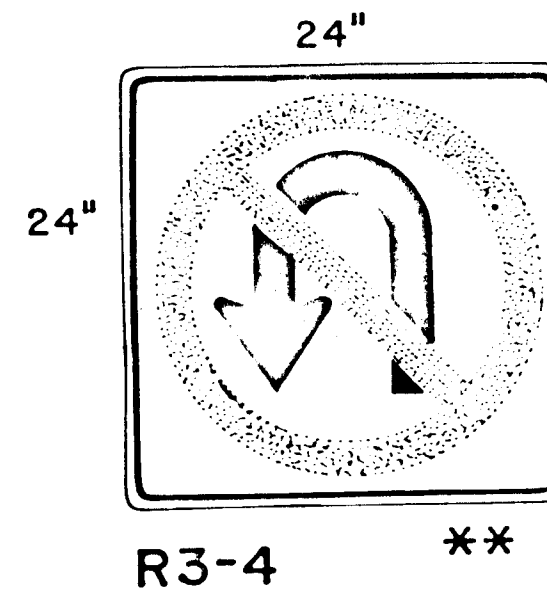
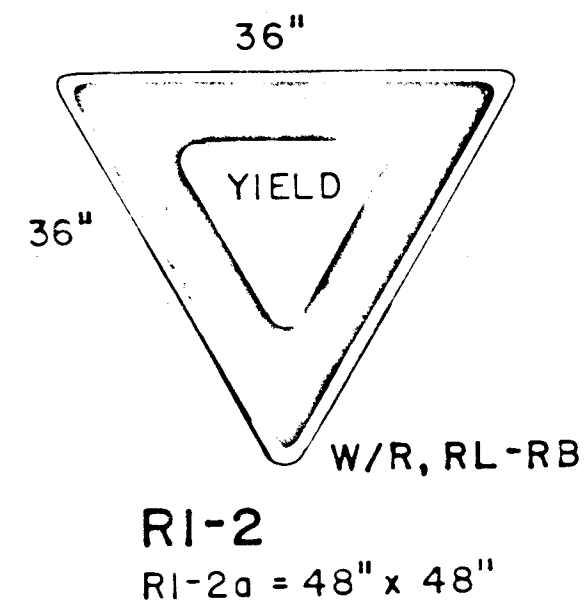
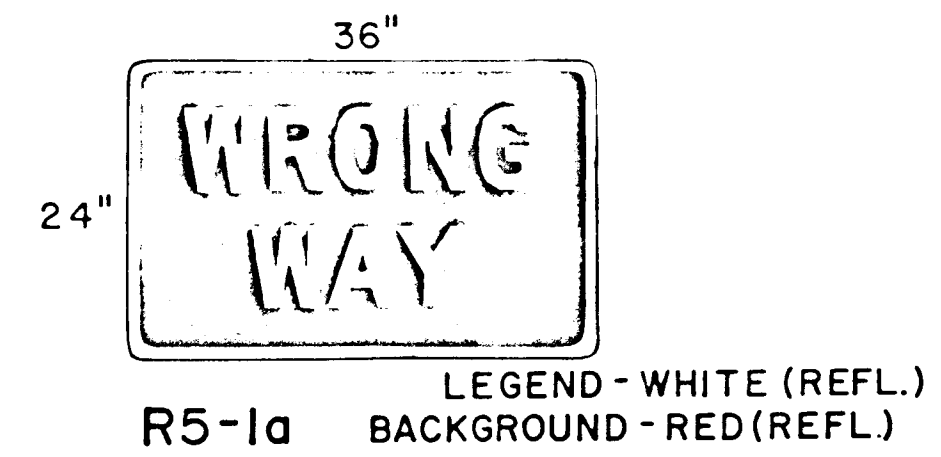
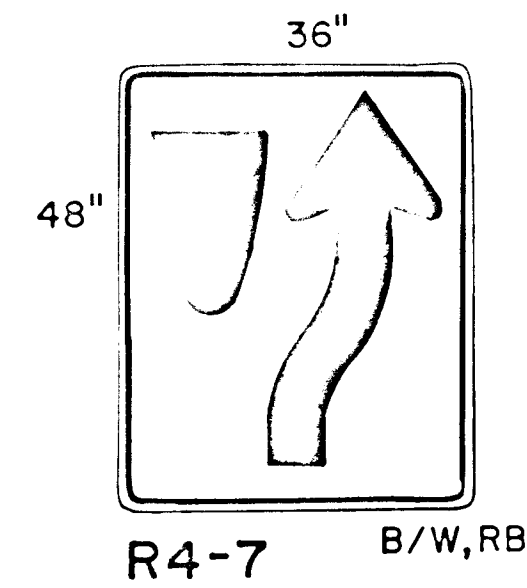
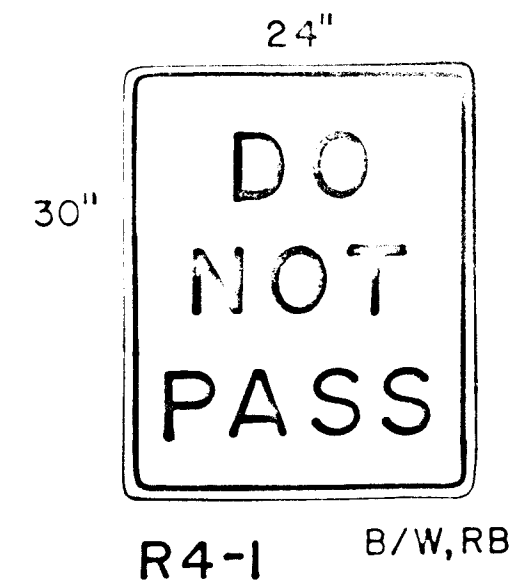
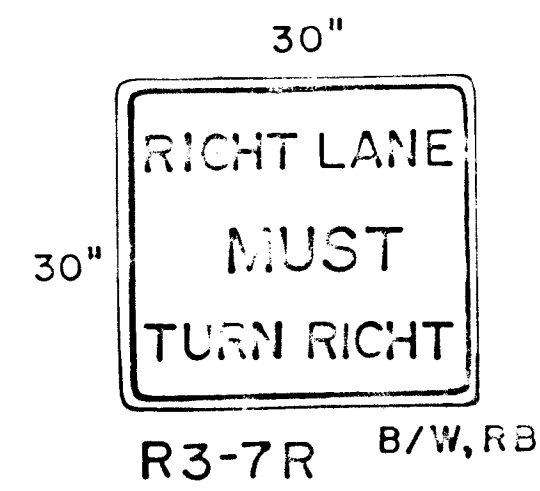
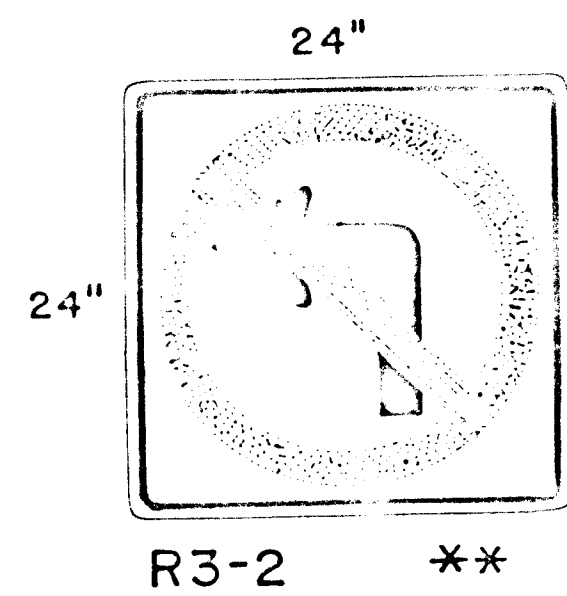
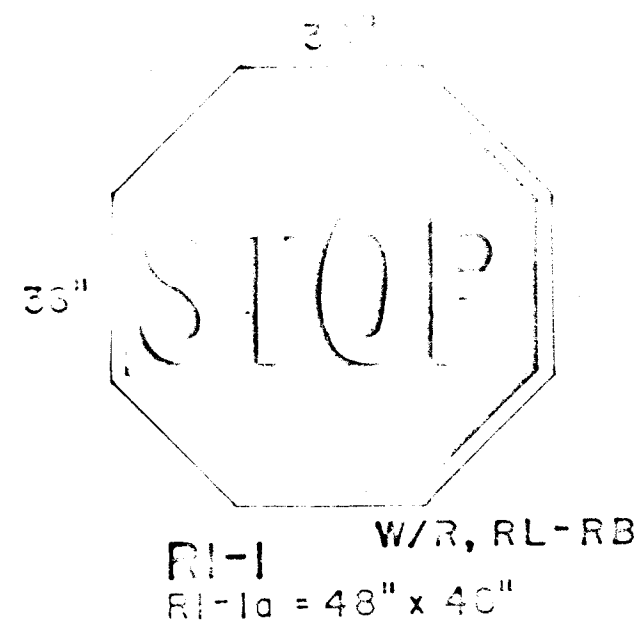
NEW MEXICO
STATE HIGHWAY DEPARTMENT
TRAFFIC DESIGN SECTION
STANDARD HIGHWAY
SIGN FACE DETAILS
"W" CODE SIGNS

M-4035(4)
C.O.A. 3203.91

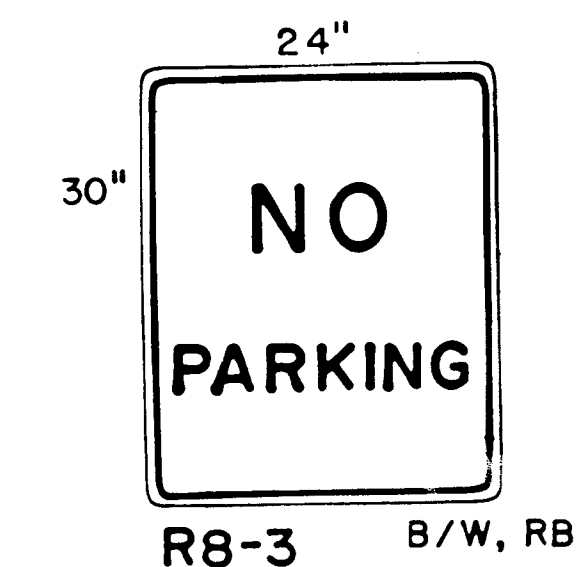
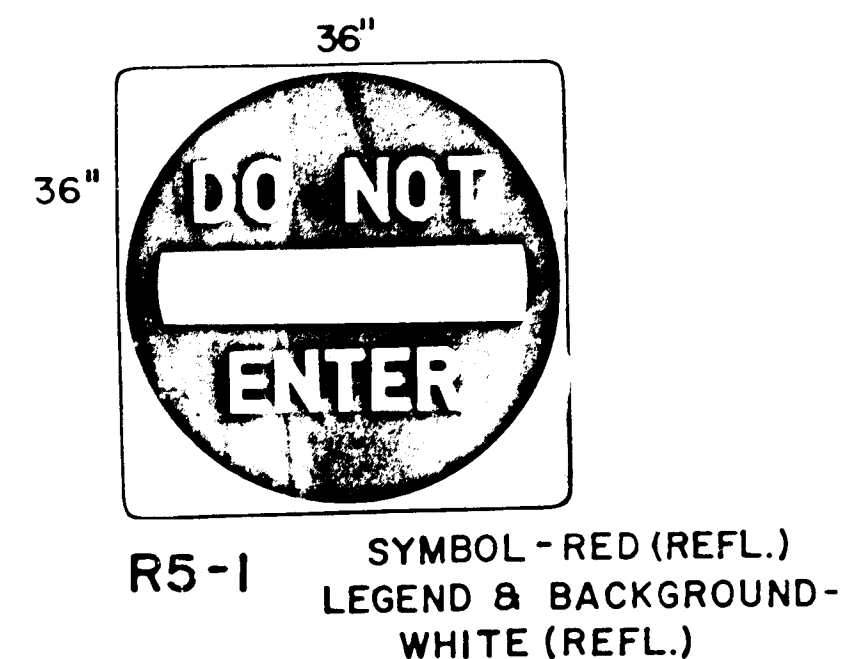
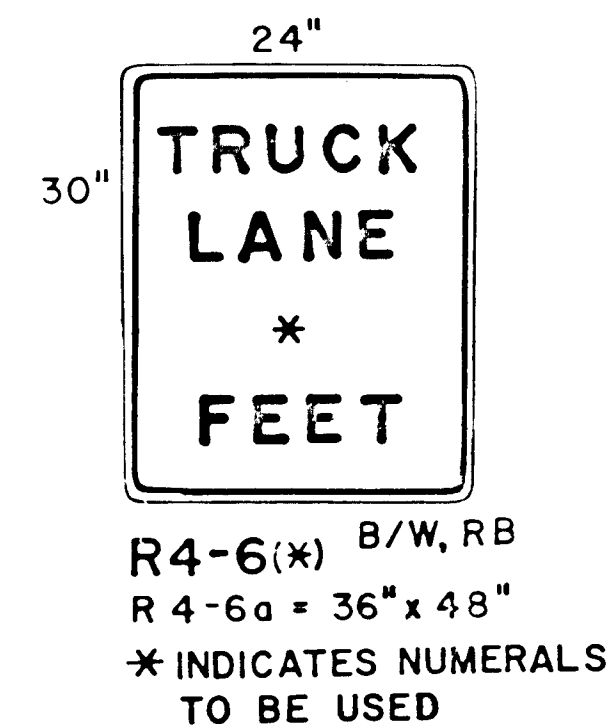
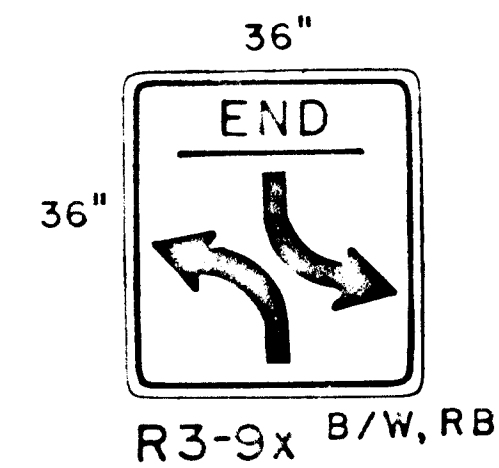
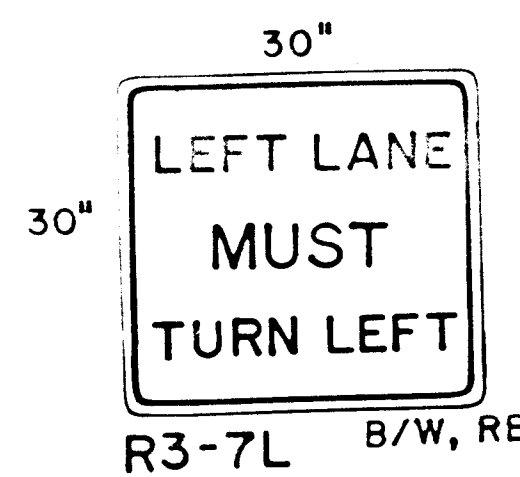
SHEET 5-3

RECORD COPY
SCANLON & ASSOCIATES, INC.

11/20/92
26 3203.91 4393



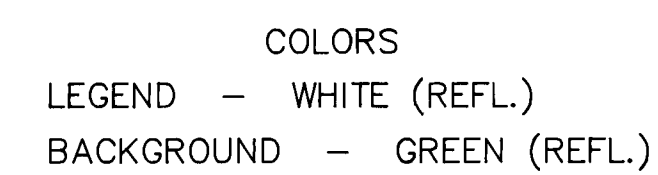
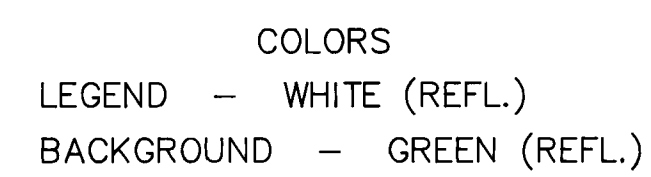
CIRCLE & DIAGONAL-RED (REFL.)
ARROW, BORDER, LEGEND-BLACK
BACKGROUND - WHITE (REFL.)



NOTE:
FOR FURTHER INFORMATION AND
DETAILS SEE THE HIGHWAY SIGN
MANUAL AND THE CURRENT
EDITION OF THE M.U.T.C.D.

26 3203.9 1/1/93

3	
2	
1	
No.	DESCRIPTION
REVISIONS (OR CHANGE) NOTICES	
NEW MEXICO STATE HIGHWAY DEPARTMENT TRAFFIC DESIGN SECTION STANDARD HIGHWAY SIGN FACE DETAILS "R" CODE SIGNS M-4035(4) C.O.A. 3203.91	
11/20/92 RECORD COPY SCANLON & ASSOCIATES, INC.	
SHEET 5-4	



RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: PERMANENT SIGNING
SECOND STREET / GRIEGOS ROAD

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>[Signature]</i>	8-21-91	WATER	<i>[Signature]</i>	8-21-91
TRANSPORTATION	<i>[Signature]</i>	8-15-91	WASTE WATER	<i>[Signature]</i>	"
HYDROLOGY	<i>[Signature]</i>	8-16-91			

PROJECT NO.	M-4035(4) COA PROJ. NO. 3203 91	MAP NO.	F-14 G-14	SHEET	OF
				5-5	

Time: 9:25:41
Date: 8/08/991
Drawing File: C-SINGER
Directory: C:\A-CAD\86111\

	REMARKS
	REVISIONS
	DESIGN

DESIGNED BY		DATE
DRAWN BY		DATE
CHECKED BY		DATE

SURVEY INFORMATION		FIELD NOTES
NO.	BY	

BENCH MARKS

CONTRACTOR	DATE
WORK TAKEN BY	

NO.	RECORDED BY	DATE
MICRO-FILM INFORMATION		
DRAWINGS CORRECTED BY	DATE	

- NO ADDITIONAL POST NEEDED. SIGN TO BE MOUNTED ON COMMON POST WITH ANOTHER SIGN

N. M. P. 4035(4) SHEET . . OF . .
C.O.A. 3203.91

TRAFFIC SIGNAL QUANTITIES (Estimated)										
NUMBER	ITEM	UNIT								TOTAL
509050	STRUCTURAL CONCRETE - CLASS A	CU.YD.	11							11
706010	SERVICE POLE (SIGNAL)	EACH	1							1
707015	TYPE I ALB. STANDARD - 15' ARM	EACH	8							8
707035	TYPE II ALB. STANDARD - 25' ARM	EACH	4							
709030	RIGID ELECTRICAL CONDUIT - 2"	LIN.FT.	715							715
709040	RIGID ELECTRICAL CONDUIT - 3"	LIN.FT.	719							719
710010	ELECTRICAL PULL BOX (STD.)	EACH	2							2
710011	ELECTRICAL PULL BOX (LARGE)	EACH	11							11
711110	MULTI CONDUCTOR CABLE 5	LIN.FT.	1140							1140
711112	MULTI CONDUCTOR CABLE 7	LIN.FT.	453							453
711125	MULTI CONDUCTOR CABLE 20	LIN.FT.	1088							1088
711224	SINGLE CONDUCTOR 10	LIN.FT.	544							544
711228	SINGLE CONDUCTOR 6	LIN.FT.	156							156
712020	3 SECTION TRAFFIC SIGNAL ASSEMBLY	EACH	4							4
712030	5 SECTION TRAFFIC SIGNAL ASSEMBLY	EACH	12							12
712070	PEDESTRIAN SIGNAL (NEON)	EACH	8							8
712103	3 SECTION BACKPLATE	EACH	4							4
713030	PUSH BUTTON STATION	EACH	8							8
713040	LOOP DETECTOR WIRE	LIN.FT.	2170							2170
713050	LOOP LEAD - IN CABLE	LIN.FT.	2558							2558
713060	DETECTOR SAW CUT	LIN.FT.	1025							1025
*	MULTIPHASE ACTUATED CONTROLLER-									

* TO BE FURNISHED AND INSTALLED BY C.O.A.

TRAFFIC CITY SIGNALS

LEGEND

PROPOSED	EXISTING	ITEM
		PULL BOX
		SIGNAL POLE
		SERVICE POLE
		CONTROLLER CABINET
		SPLICE CABINET
		CONDUIT RUN
		LOOP DETECTOR
		TRAFFIC SIGNAL PEDESTAL POLE
		CONDUIT RUN NUMBER
		POLE WITH MASTARM, TRAFFIC SIGNAL AND BACKPLATE
		COMBINATION POLE WITH LUMINAIRE AS INDICATED
		PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		TRAFFIC MANHOLE

GENERAL NOTES

- MASTARMS SHALL BE PLACED 90° TO THE CENTERLINE UNLESS OTHERWISE NOTED.
- MOUNT CONTROLLER SO DOOR FACES TRAFFIC.
- SHOWN DISTANCES TO TRAFFIC SIGNAL POLES TO BE MEASURED FROM FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL ITEMS UNDER SECTION 707-SIGNAL AND LIGHTING STANDARDS SHALL COMPLY TO THE "BUY AMERICA PROVISION" AS COVERED UNDER SPECIAL PROVISION MODIFYING SECTION 106-CONTROL OF MATERIALS JUNE 24, 1988.
- ALL LOOP DETECTOR WIRE SHALL BE NO. 14 AWG STRANDED COPPER WIRE WITH CROSSLINKED POLYETHYLENE INSULATION (INDUSTRY TYPE XHHW) CONFORMING TO THE REQUIREMENTS OF I.M.S.A. SPECIFICATIONS NO. 51-3 1984. BACKER ROD SHALL NOT BE USED IN THE INSTALLATION OF LOOP (EXCEPT PIECES LESS THAN 12" WHICH MAY BE PLACED OVER THE WIRE AT THE SAW CUT CORNERS TO HOLD THE WIRE.) A 1/4" LAYER OF SEALANT SHALL BE PLACED IN THE SAWCUT BEFORE PLACEMENT OF THE WIRE AND THEN THE WIRE SHALL BE ENCAPSULATED WITH SEALANT. HOT-MELT RUBBERIZED ASPHALT LOOP DETECTOR SEALANT MANUFACTURED BY CRAFTO SHALL BE AN ACCEPTABLE SEALANT ALTERNATE.
- COVER ENTIRE SIGNAL HEADS WHEN NECESSARY WITH BURLAP CLOTH OR BAGS AS REQUIRED BY SECTION 712.031 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (EDITION OF 1984)
- BEFORE CONDUIT CAN BE TRENCHED, BORED, DRILLED, OR PUSHED UNDER THE ROADWAY, THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES.
- ALL PULL BOXES SHALL BE REINFORCED POLYMER MORTAR TYPE WITH STEEL OR REINFORCED POLYMER MORTAR COVERS. CONCRETE COVERS AND CONCRETE PULL BOXES WILL NOT BE ACCEPTABLE.
- ALL LOOP LEAD IN CABLES SHALL BE TAGGED AT CABINET TO IDENTIFY EACH CABLE BY PHASE AND LOOP NUMBER.
- CITY OF ALBUQUERQUE WILL FURNISH AND INSTALL CONTROLLER AND PROVIDE PERSONNEL TO TURN SIGNAL ON.
- THE CONTRACTOR IS HEREBY ADVISED THAT THE INTERSECTION SIGNALS SHALL NOT BE TURNED ON UNTIL THE SIGNAL IS COMPLETELY INSTALLED. INCLUDING FULLY ACTUATED OPERATION (INCLUDING ALL LOOPS AND PUSHBUTTON WIRING IS COMPLETE AND OPERATIONAL).
- FLASHING OPERATION IS NOT CONSIDERED THE BEGINNING OF THE FIELD TESTING PERIOD.
- ALL LOOPS SHOWN SHALL BE CENTERED IN THE APPROPRIATE TRAFFIC LANE AS DETERMINED FROM THE FINAL STRIPING PLAN.

26 3203.914793

11/20/92

RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: TRAFFIC SIGNAL GENERAL NOTES,
LEGEND & ESTIMATED QUANTITIES
2nd. STREET / GRIEGOS ROAD

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
	D.R.C. Chavira	8-21-91		K.W. Goyatz	8-16-91
	R. W. Goyatz	8-16-91		R. W. Goyatz	8-16-91

DRAWING M-4035 (4) MAP NO. F-14, G-14 SHEET 6-1 OF 6-1
NO. C.O.A. 3203.91

AS-BUILT INFORMATION	CONTRACTOR	DATE	NO.	BY	DATE
BENCH MARKS	NO.	BY	DATE	NO.	BY
SURVEY INFORMATION	NO.	BY	DATE	NO.	BY
ENGINEER'S SEAL	NO.	BY	DATE	NO.	BY
REVISIONS	NO.	DATE	REVISIONS	NO.	DATE
DESIGNED BY	DATE	DRAWN BY	DATE	CHECKED BY	DATE

FUNCTION CHART

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: TRAFFIC SIGNAL CONDUITS, CABLES & FUNCTIONS 2nd. STREET / GRIEGOS ROAD					
DR C. Dawson	Raymond	8-14-91			
Transcriptions	J. Dawe	8-15-91	W/WW	N/A	AD
Hydrology	Ken Coyat	8-16-91			
TRAFFIC	Ken Coyat	10-4-91			
DRAWING NO. A-4035(4) C.O.A. No. 3203.91		MAP NO. F-14, G-14		SHEET 6-3 OF	

(FOR INFORMATION OF CONTRACTOR ONLY)
FLASH CONDITION *

RED BALL	HEADS	1.1M, 3.3M
YELLOW BALL	HEADS	2.2M, 4.4M

* (MINIMUM OF 24 HOURS) MAXIMUM TO BE DETERMINED BY THE PROJECT MANAGER.

(FOR INFORMATION OF CONTRACTOR ONLY)
BACK UP TIME SETTING

	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
MINIMUM INITIAL	3	3	3	3	3	3	3	3
VEHICLE EXTENSION	1.5	2.5	1.5	1.5	1.5	2.5	1.5	1.5
MAXIMUM 1	15	30	15	30	15	30	15	30
MAXIMUM 2	20	40	20	40	20	40	20	40
YELLOW CHANGE	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
RED CLEAR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
WALK	7	7	7	7	7	7	7	7
PEDESTRIAN CLEAR	10	10	10	10	10	10	10	10
OPERATION	MEM OFF	MIN RECALL	MEM OFF	MEM OFF	MEM OFF	MIN RECALL	MEM OFF	MEM OFF

(FOR INFORMATION OF CONTRACTOR ONLY)
DETECTORS

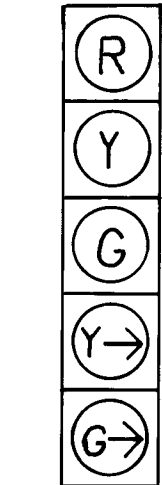
UNIT	PHASE (#)	MODE
1 CHAN 1	1 (1)	PRESENCE
CHAN 2	5 (1)	PRESENCE
2 CHAN 1	3 (1)	PRESENCE
CHAN 2	7 (1)	PRESENCE
3 CHAN 1	2 (1), (2)	PRESENCE
4 CHAN 1	4 (1)	PRESENCE
CHAN 2	4 (2)	PRESENCE
5 CHAN 1	6 (1), (2)	PRESENCE
6 CHAN 1	8 (1)	PRESENCE
CHAN 2	8 (2)	PRESENCE

(FOR INFORMATION OF CONTRACTOR ONLY)
INITIALIZATION

PHASE 2 AND 6 YELLOW
CLEARANCE INTERVAL

PEDESTRIAN PUSH BUTTON
DESIGNATION SIGNS

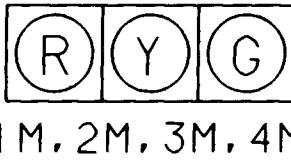
PPB	1, 2, 4, 8	R10 - 4b L
PPB	3, 5, 6, 7	R10 - 4b R



1, 2, 3, 4



1A, 2A, 3A, 4A
5, 6, 7, 8



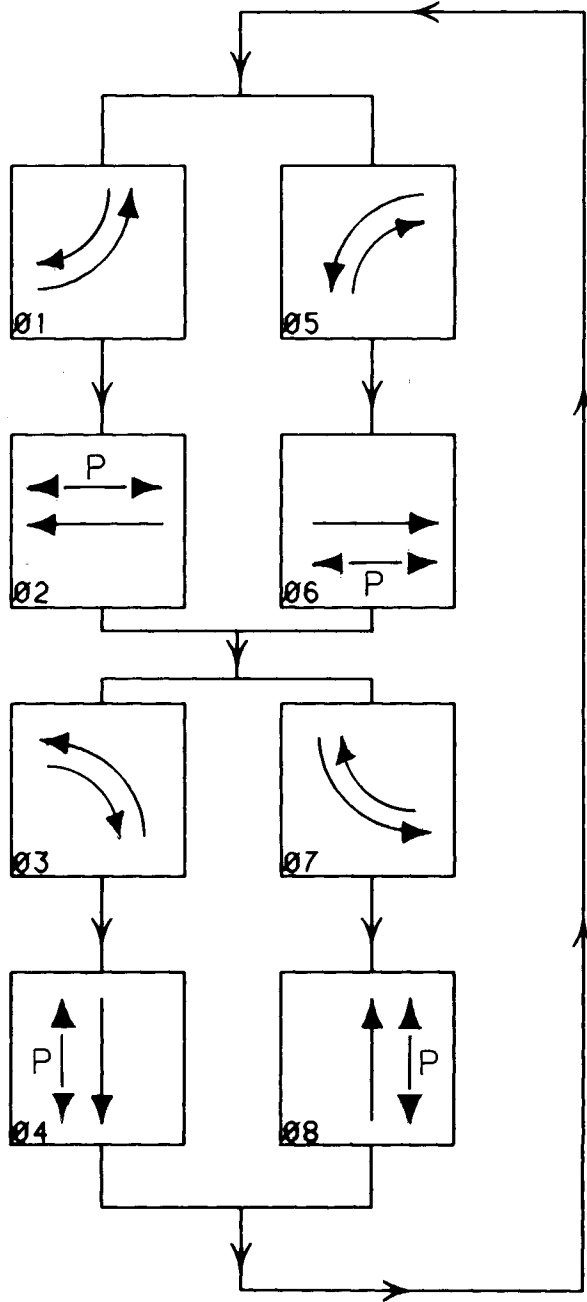
P1, P2, P3, P4
P5, P6, P7, P8

SIGNAL HEAD DETAILS

(FOR INFORMATION OF CONTRACTOR ONLY)
SIGNAL PHASING

LOOP LEAD IN CABLE

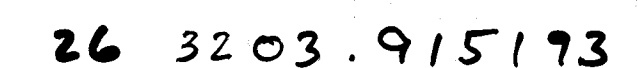
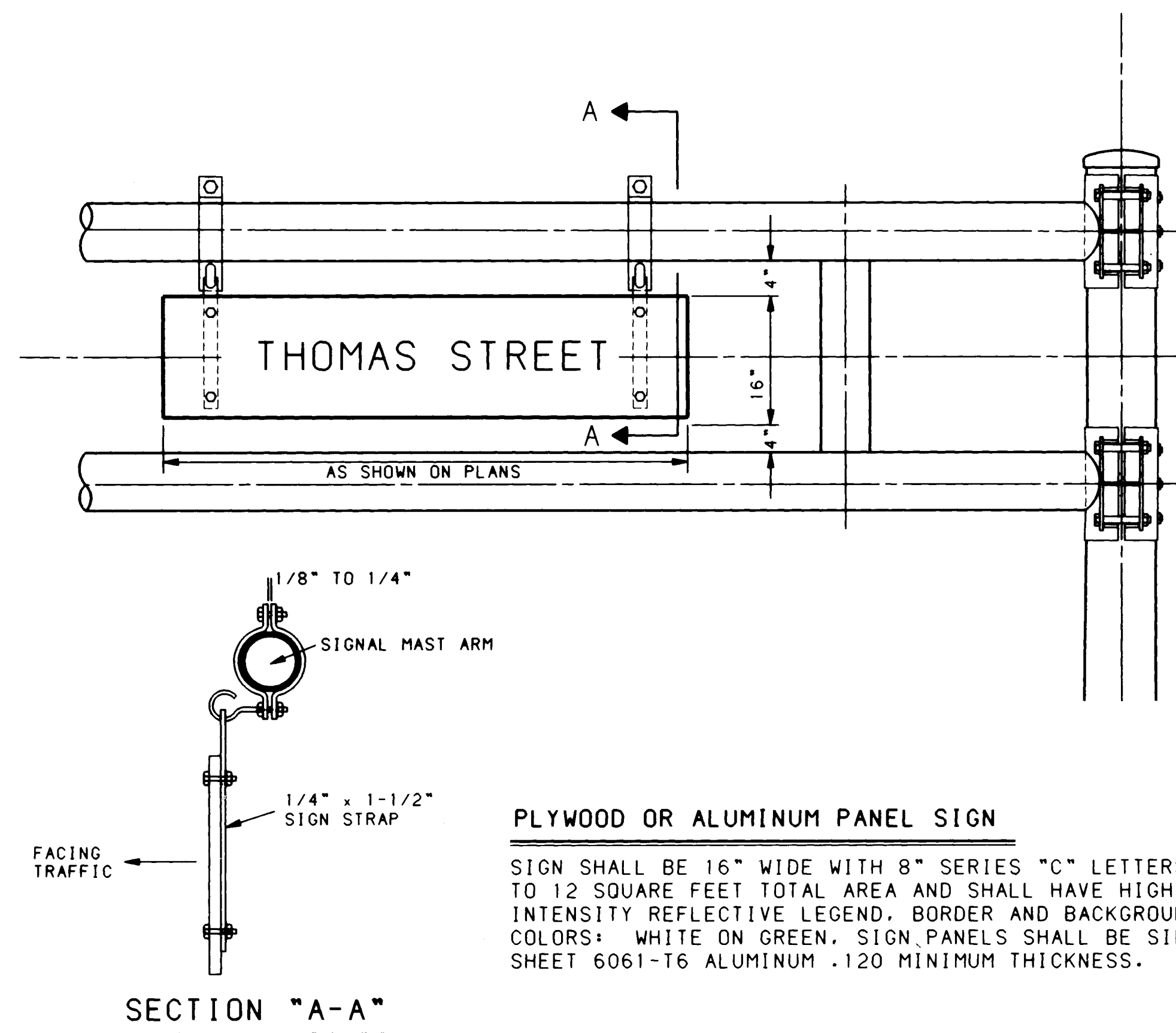
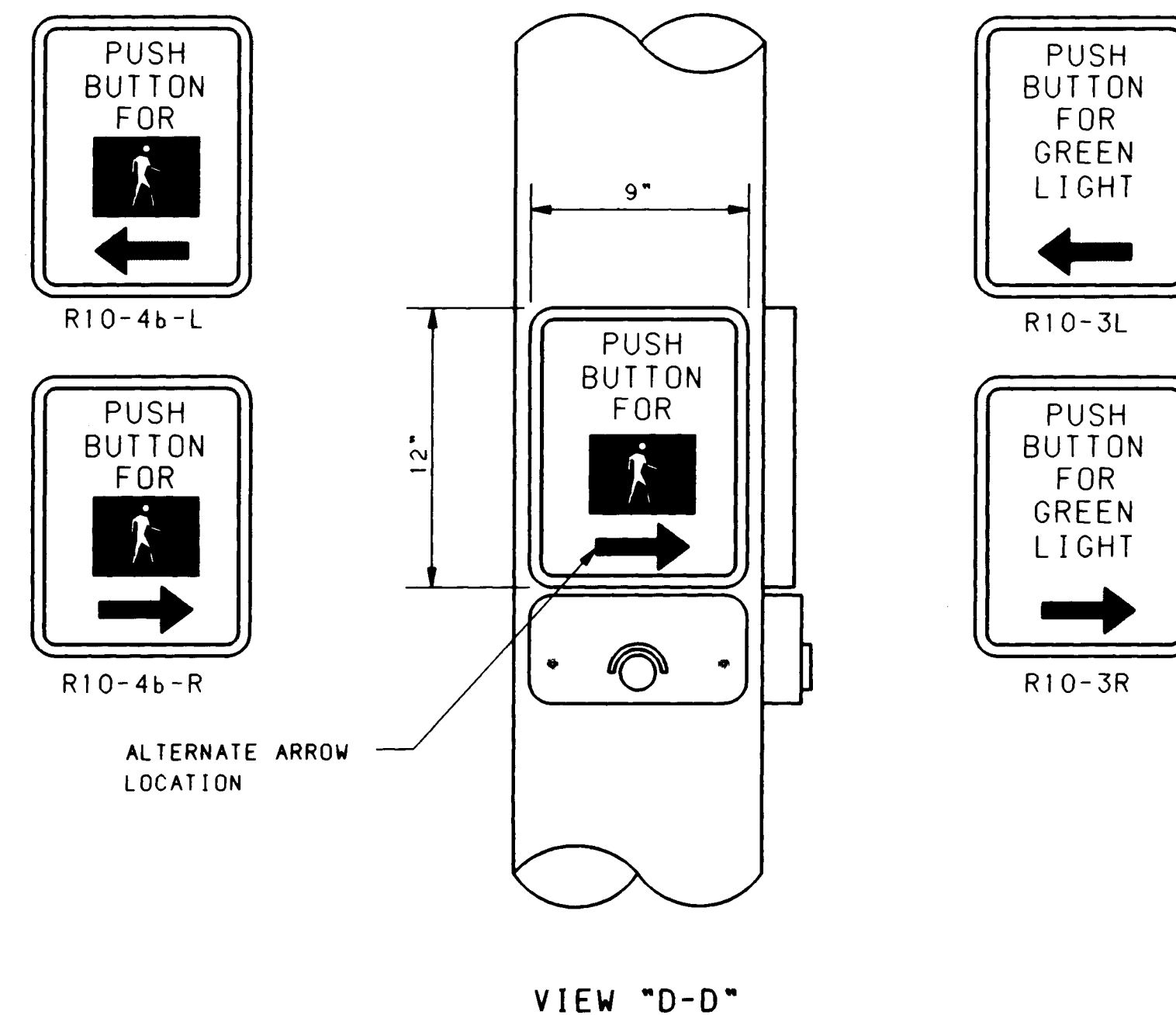
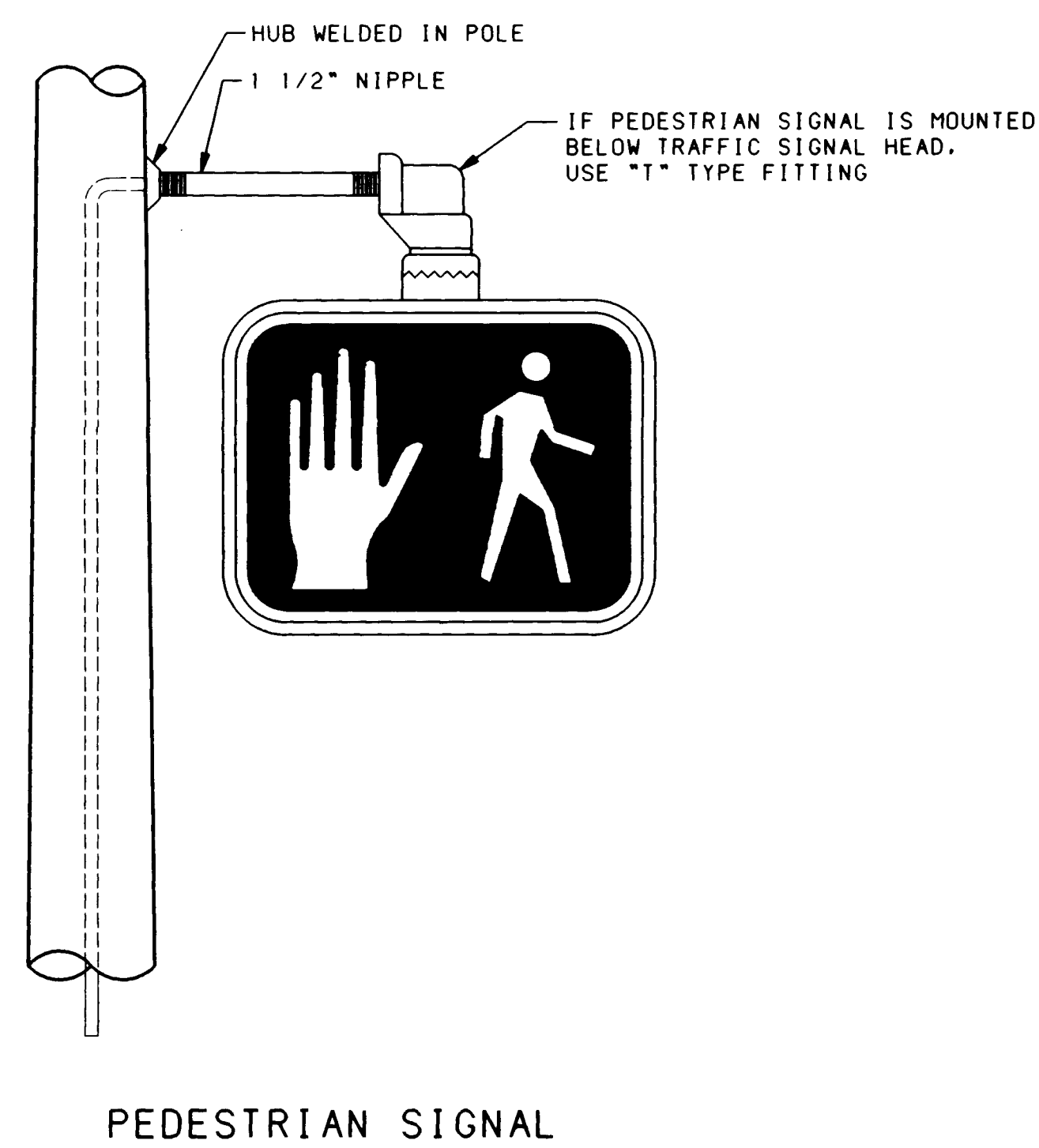
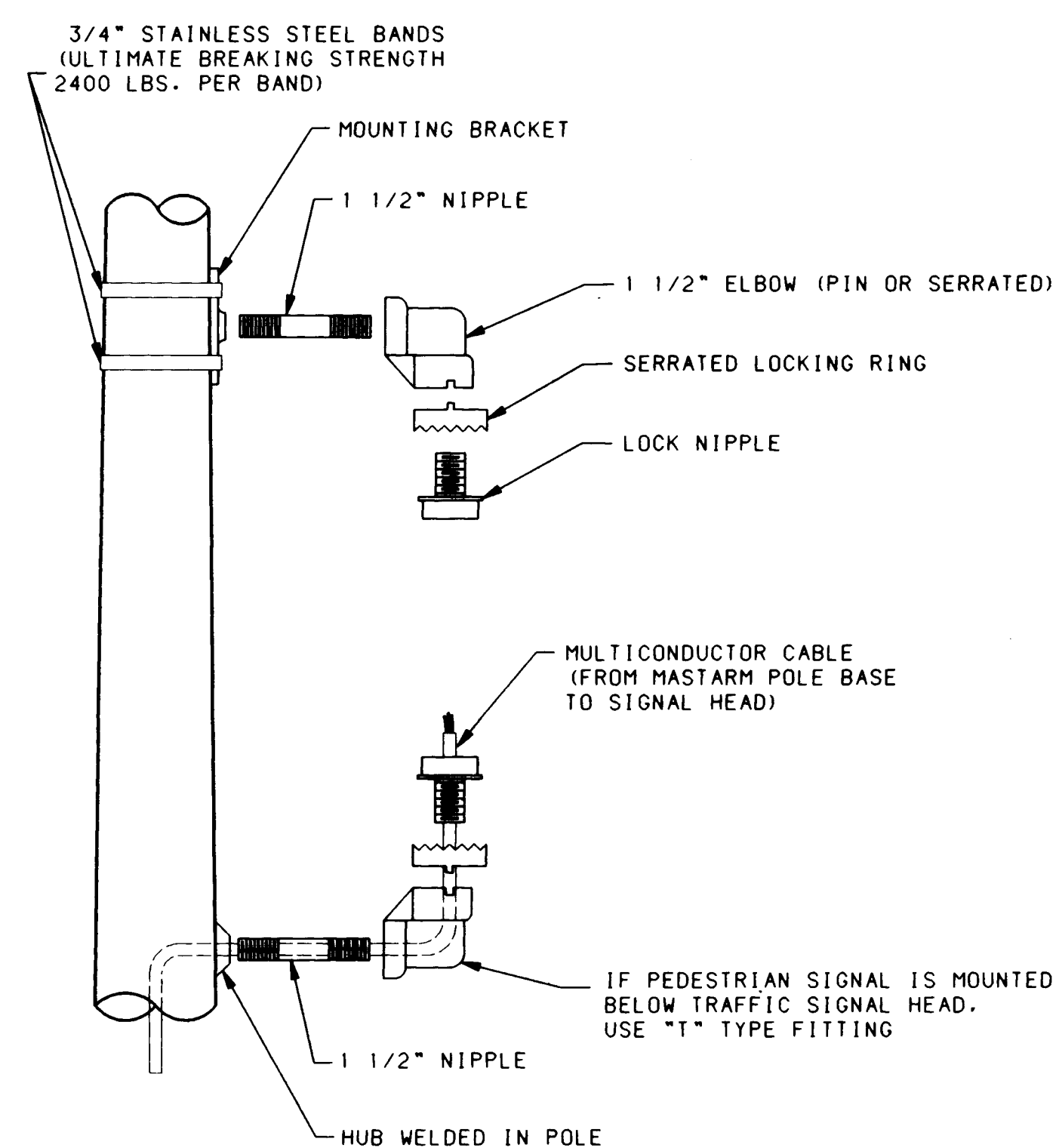
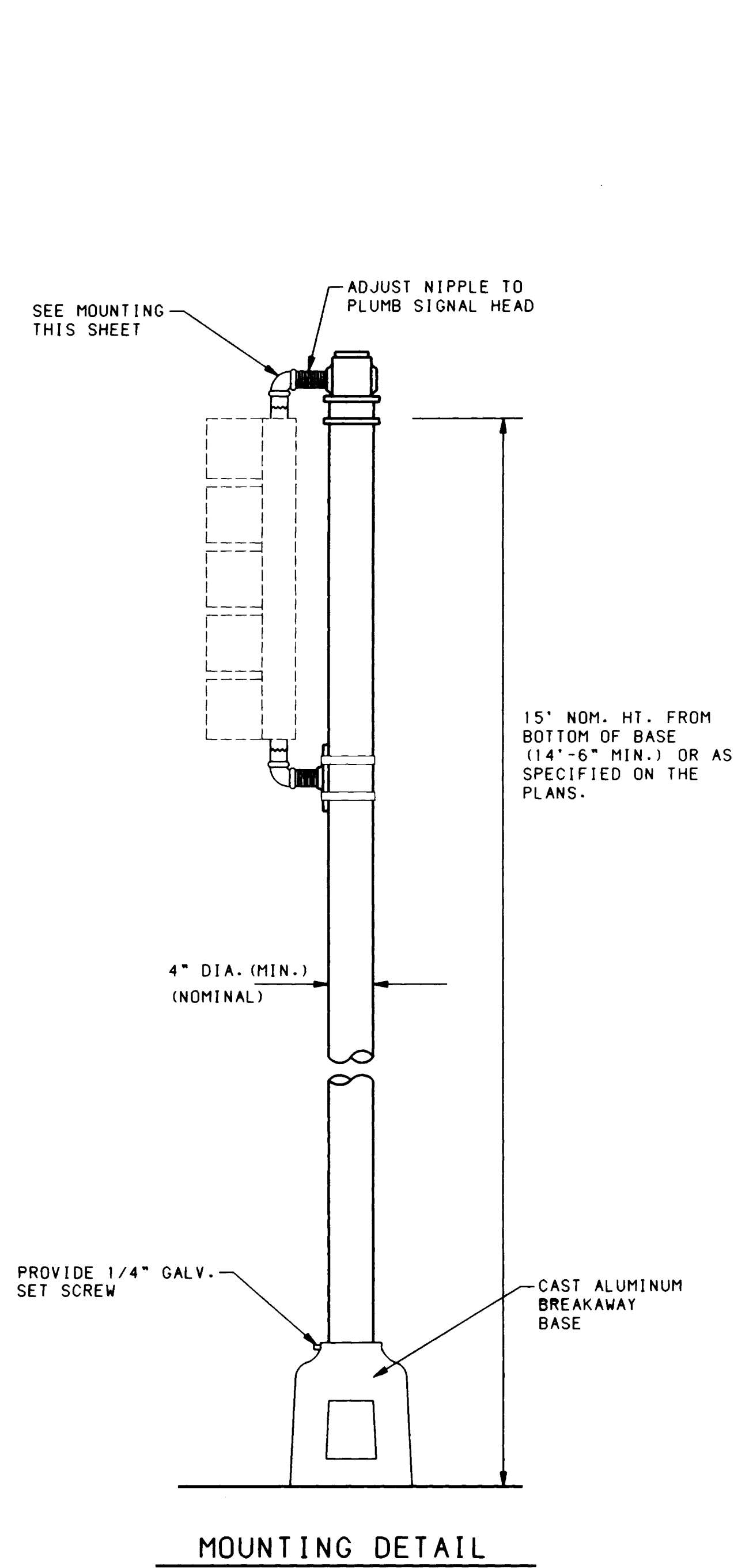
FROM	TO	LENGTH
PB-2	CONTROLLER	2 x 72' = 144'
PB-3	CONTROLLER	129'
PB-5	CONTROLLER	213'
PB-7	CONTROLLER	2 x 408' = 816'
PB-8	CONTROLLER	347'
PB-10	CONTROLLER	164'
PB-11	CONTROLLER	348'
PB-12	CONTROLLER	397'
TOTAL		2,558'



26 3203. 915093

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

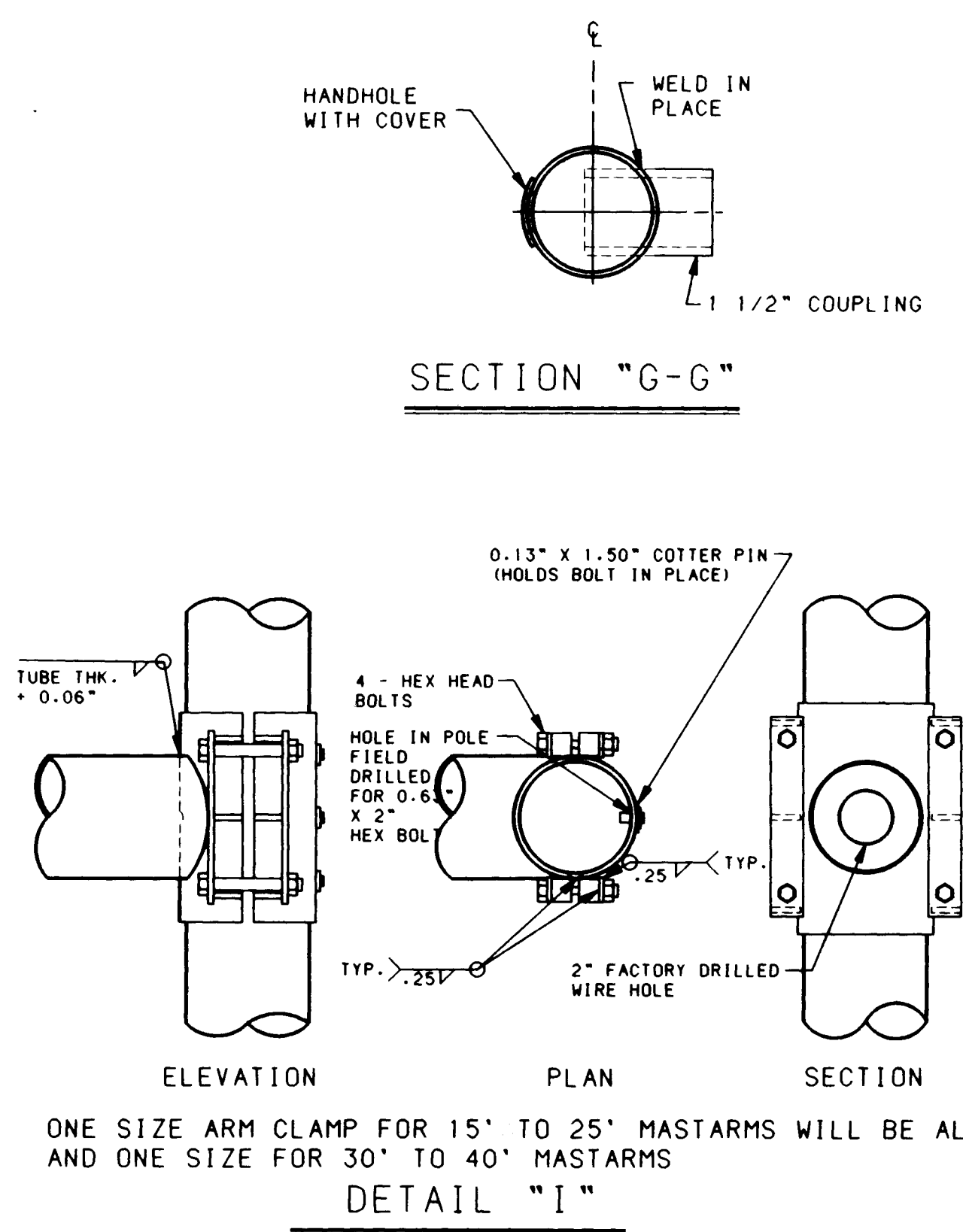
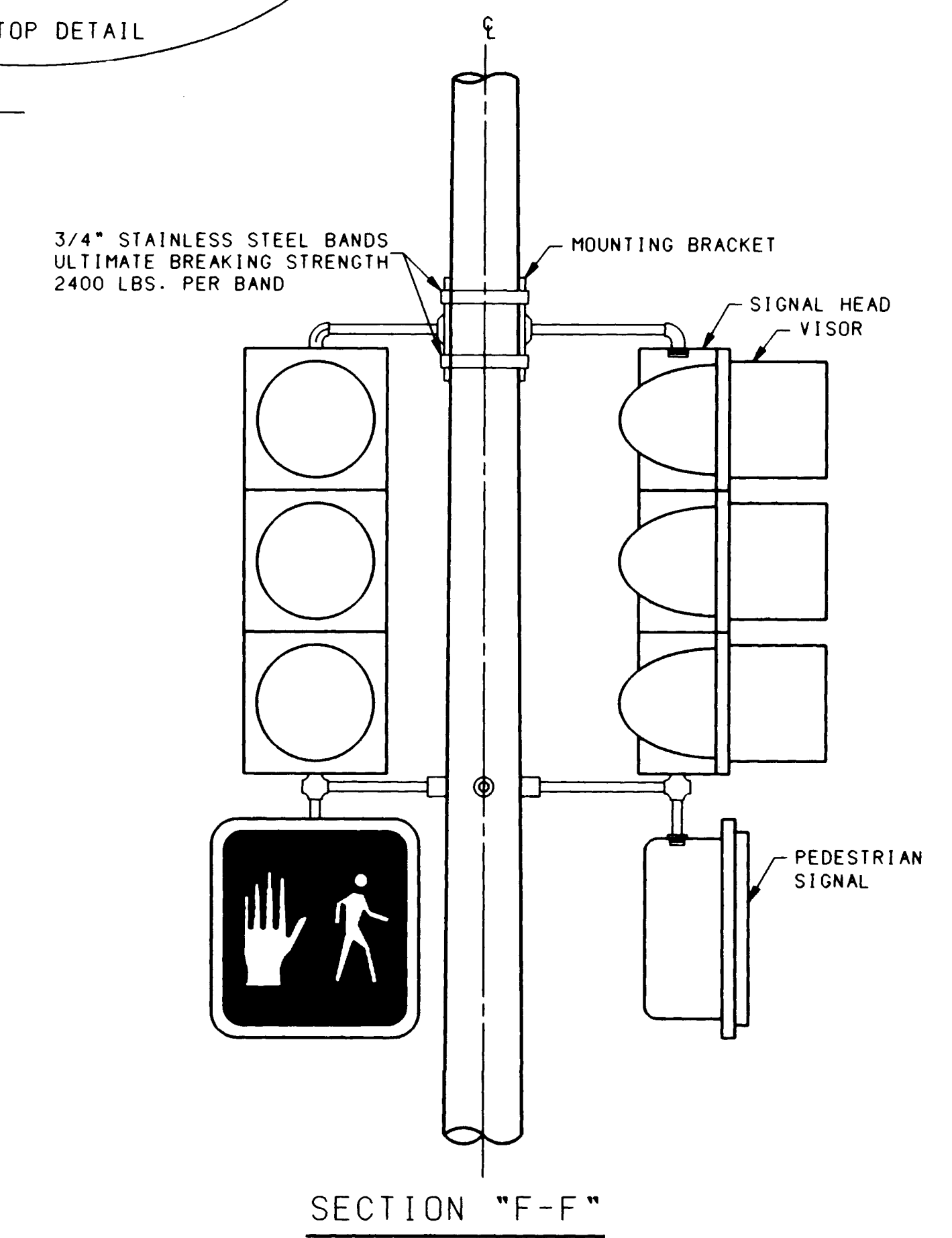
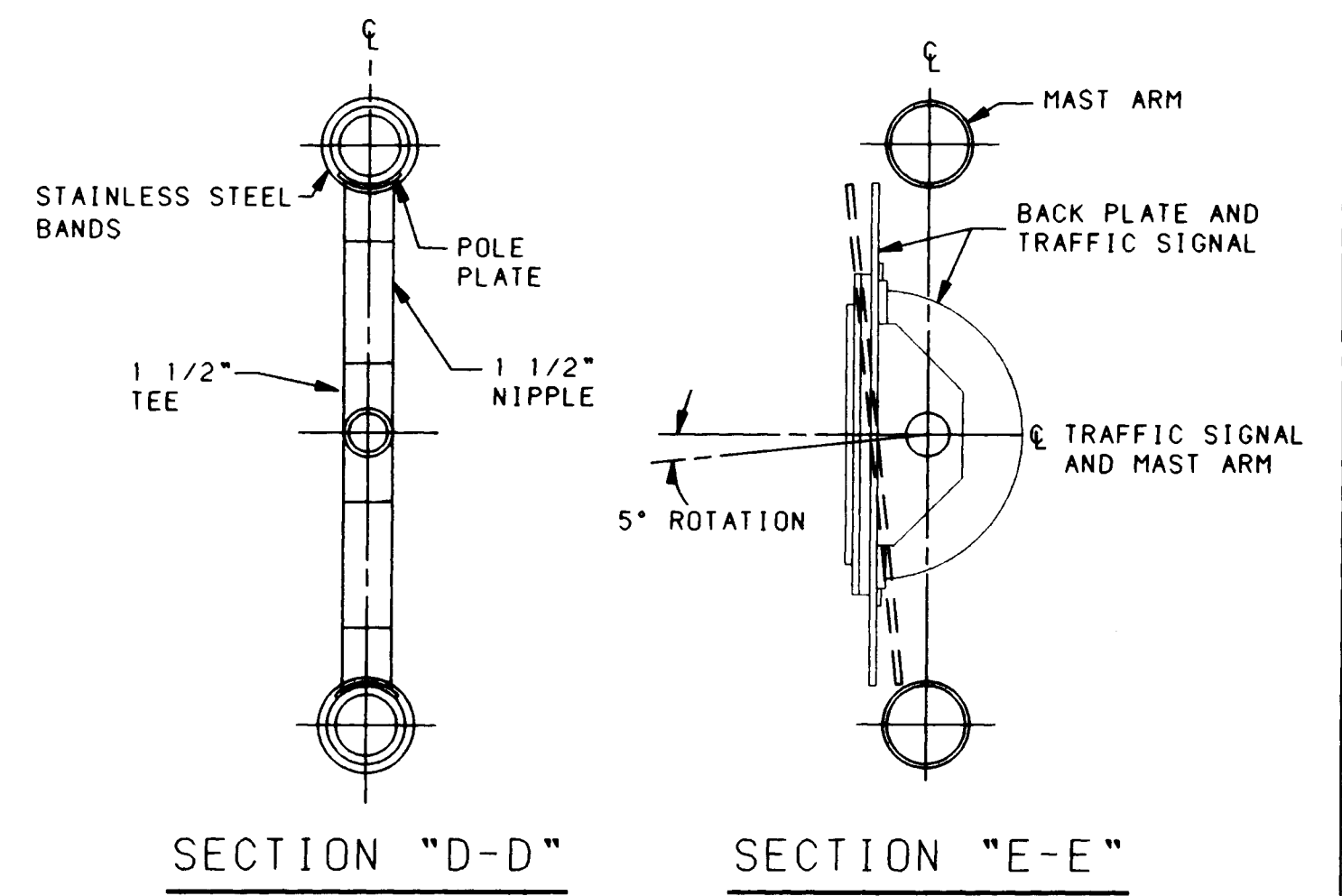
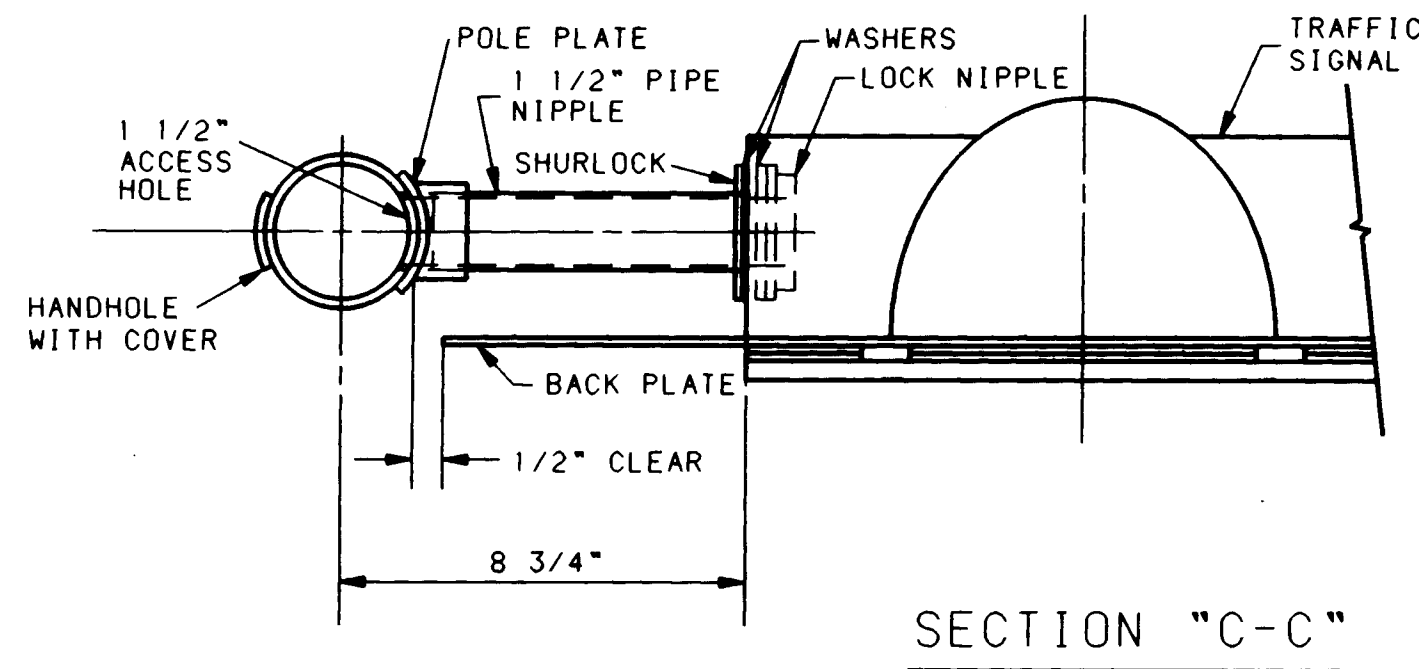
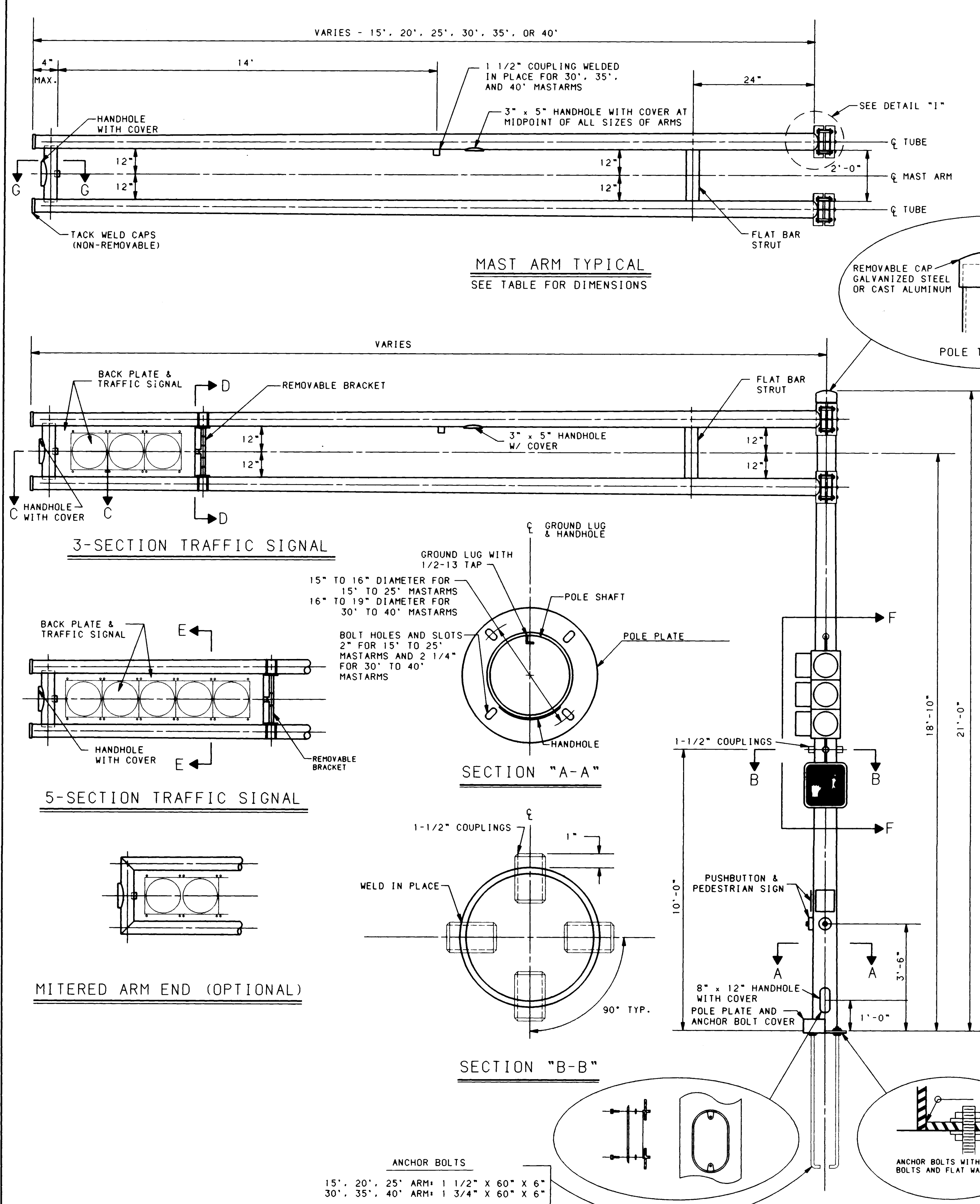
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TITLE: TRAFFIC SIGNAL MISCELLANEOUS ITEMS	
2nd. STREET / GRIEGOS ROAD	
Transportation	K. Deane 8-18-91 10/20/91 N/A
Hydrology	K. Deane 8-18-91 10/20/91 N/A
Design	K. Deane 8-18-91 10/20/91 N/A
DRAWING NO.	M-4035(4) C.O.A. No. 3203.91
MAP NO.	F-14, G-14
SHEET	6-4 OF



11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

	CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP
TITLE: TYPE I POLES & PEDESTRIAN SIGNAL DETAILS 2nd. STREET / GRIEGOS ROAD	

Transportation	C. Davis	8-15-91	w/w	N/A	NO
Hydrology	K.E. Goyal	8-16-91			
TRAFFIC	E. J. J. J.	10-8-91			
DRAWING NO.	M-4035(4)	MAP NO.	SHEET OF		
C.O.A. No.	3203.91	F-14, G-14	6-5		



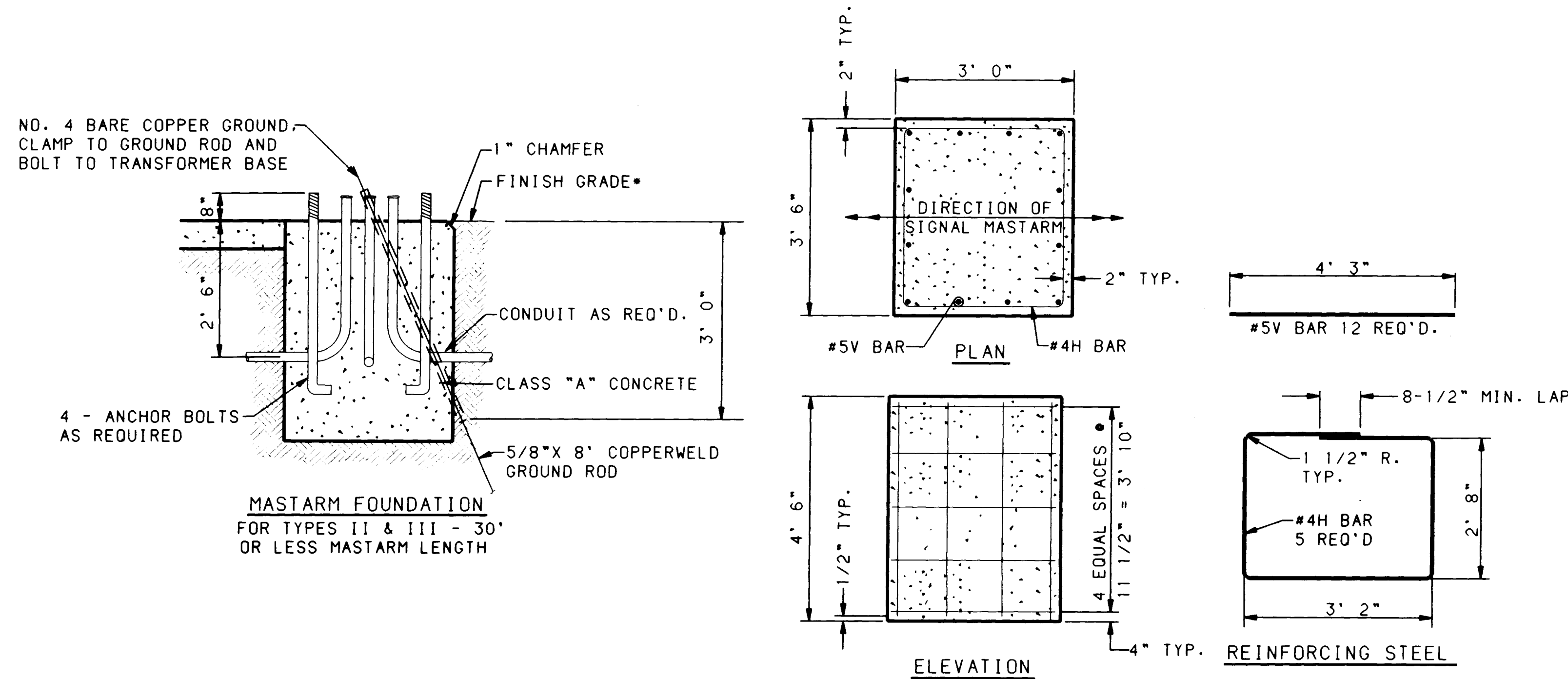
NOTES

1. DESIGN IN ACCORDANCE WITH 1985 AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS FOR AN 80 MPH WIND ZONE.
2. POLES AND ARM SHAFTS SHALL CONFORM TO ASTM A-570 (45,000 PSI MAX + 1.25 SAFETY FACTOR YIELD).
3. ALL POLES AND MASTARMS SHALL BE GALVANIZED TO ASTM A-123.
4. BASE PLATE, POLES, AND ARM CONNECTING PLATES AND GUSSETS SHALL BE ASTM A-36.
5. ANCHOR BOLTS SHALL BE ASTM A-36 MDD 55.
6. ALL STRUCTURAL CONNECTING BOLTS SHALL BE ASTM A-325, GALVANIZED TO ASTM A-153 UNLESS OTHERWISE NOTED.
7. WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY SPECIFICATION AWS D1.1, LATEST EDITION. ALL WELDS SHALL BE FREE FROM CRACKS, EXCESSIVE UNDERCUT, AND POROSITY. ANY WELDING DEFECTS SHALL BE REPAIRED BY REMOVING THE DEFECTIVE MATERIAL AND REPLACING IT WITH SOUND WELD MATERIAL.
8. ALL HOLES SHALL BE DRILLED AND DEBURRED.

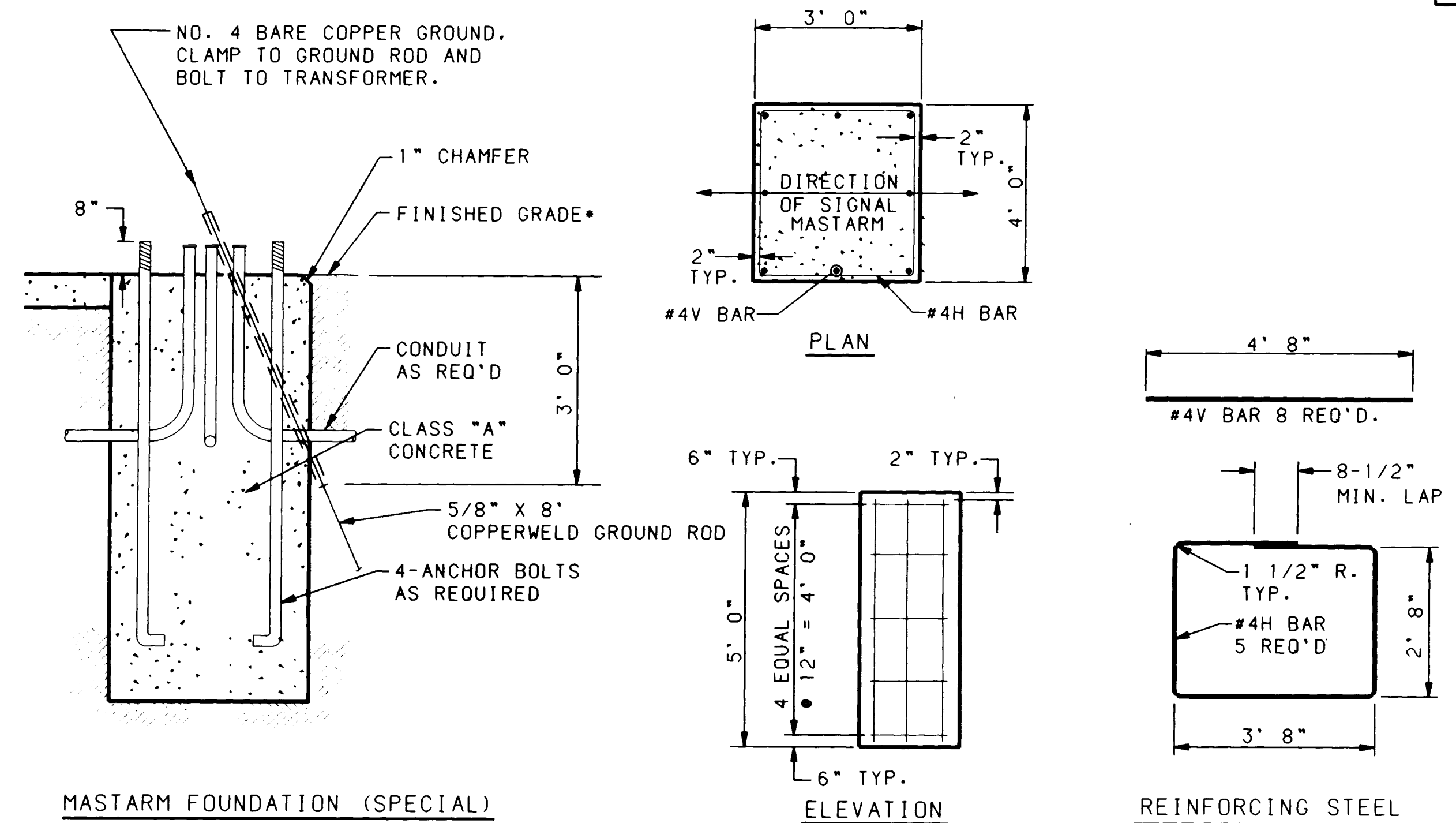
26 3203.915293

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			
TITLE: TYPE II STANDARDS			
2nd. STREET / GRIEGOS ROAD			
DESIGNED BY	DATE	CHECKED BY	DATE
DRWN BY	DATE	CHECKED BY	DATE
DRAWING M-4035(4) MAP NO. SHEET OF			
NO. C.O.A. No. 3203.91 F-14, G-14 6-6			



MASTARM FOUNDATION DETAILS-TYPE II & TYPE III STANDARDS
TYPES II & III - 30' OR LESS MASTARM LENGTH



MASTARM FOUNDATION (SPECIAL) DETAILS-TYPE II & TYPE III STANDARDS
TYPES II & III - GREATER THAN 30' MASTARM LENGTH

NOTES

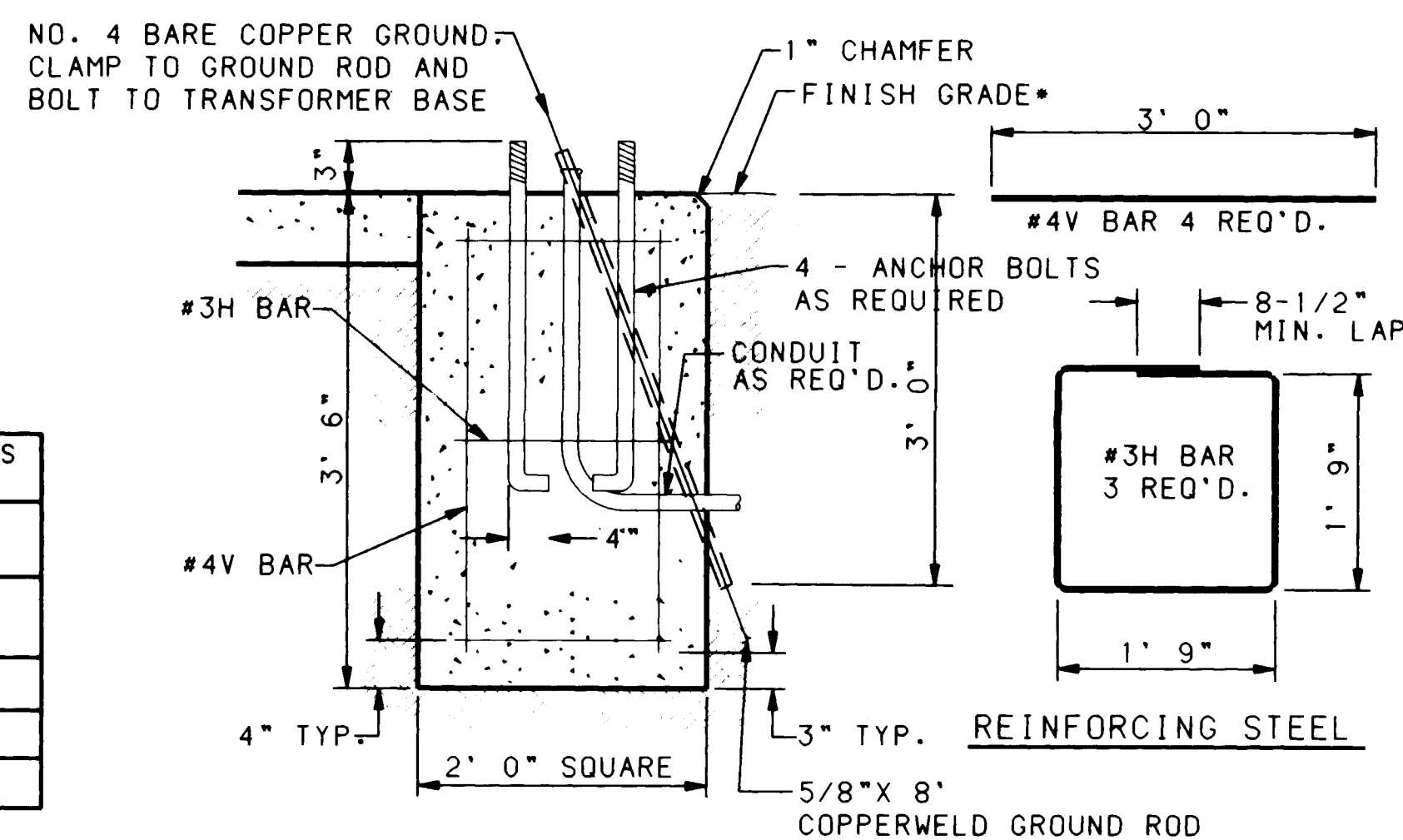
1. ALL COPPERWELD GROUND RODS SHALL BE 5/8" ϕ X 8'-0" AND SHALL BE WRAPPED IN THREE (3) LAYERS OF PIPE INSULATION TAPE OR PLACED THROUGH A 1" ϕ PVC CONDUIT.

ESTIMATED QUANTITIES (FOR CONTRACTORS INFORMATION ONLY)		
FOUNDATION	CLASS "A" CONC. CUBIC YARDS	REINFORCING BARS POUNDS
MASTARM - TYPES II & III (SPECIAL) (FOR 35 FOOT MASTARM)	2.22	72
MASTARM - TYPES II & III (FOR 30 FOOT OR LESS MASTARM)	1.75	94
PEDESTAL POLE TYPE I	0.52	17
CONTROLLER CABINET TYPE P&R	1.26	--
CONTROLLER CABINET TYPE G&M	0.78	--

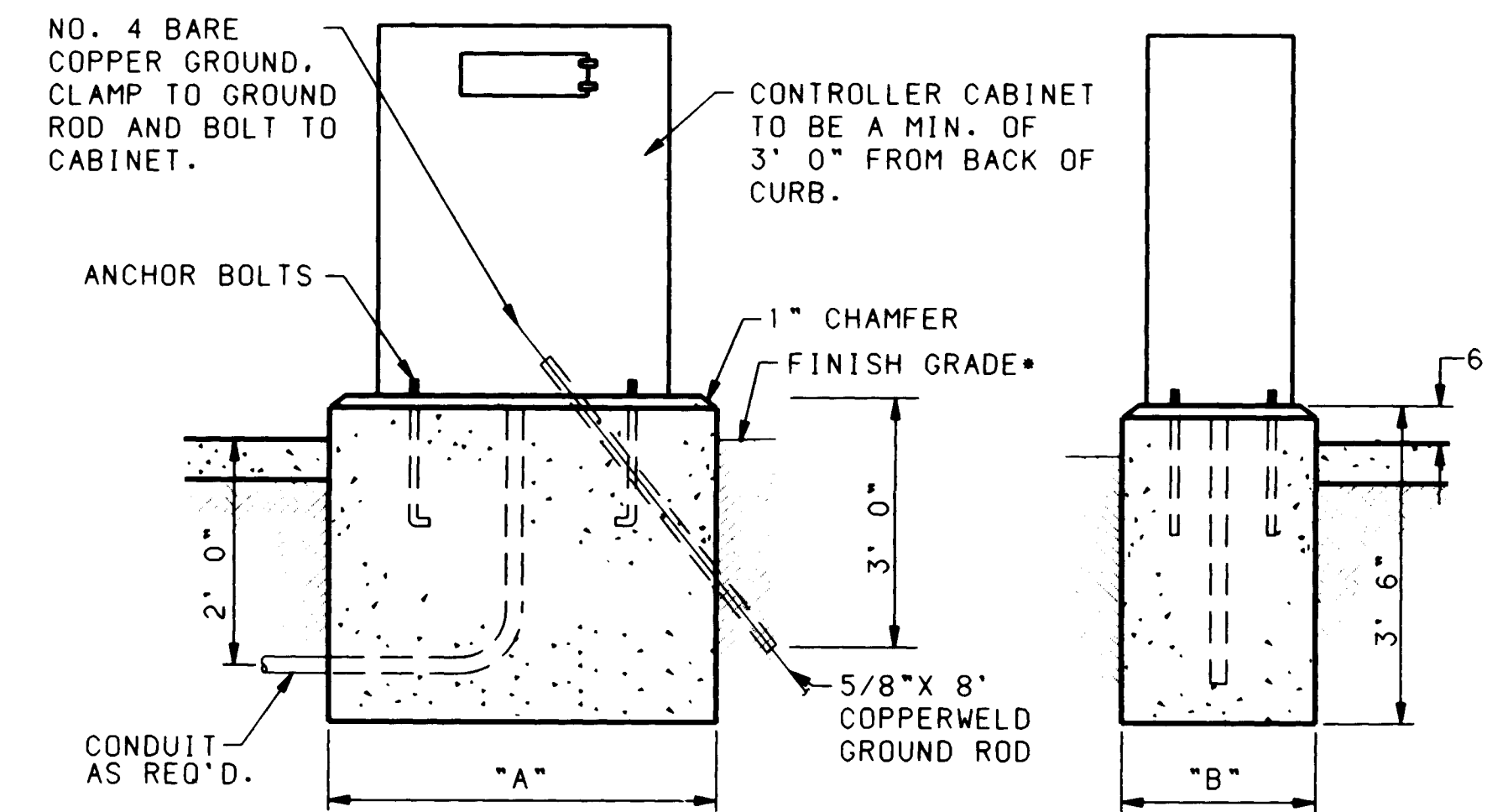
ALTERNATE DESIGNS FOR STANDARD FOUNDATIONS, TO BE SUBMITTED TO THE BRIDGE ENGINEER FOR APPROVAL.

NOTE: ALL SIGNAL FOUNDATIONS SHALL INCLUDE COPPERWELD GROUND RODS AS SHOWN WHICH SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF FOUNDATION. NO PRICE OR PAYMENT SHALL BE MADE THEREFOR.

- FINISHED GRADE FOR ALL FOUNDATIONS TO BE DETERMINED BY THE PROJECT ENGINEER. THE TOP OF STANDARD FOUNDATIONS SHALL BE FLUSH WITH ADJACENT SIDEWALK OR PAVED AREAS.



PEDESTAL FOUNDATION DETAILS-TYPE I STANDARD



CONTROL CABINET FOUNDATION DETAIL

IN THE EVENT THE SUPPLIED CABINET WOULD OVERLAP THE SIDES OF ABOVE FOUNDATION, THE FOUNDATION SHALL BE INCREASED IN SIZE AS DIRECTED BY THE ENGINEER.

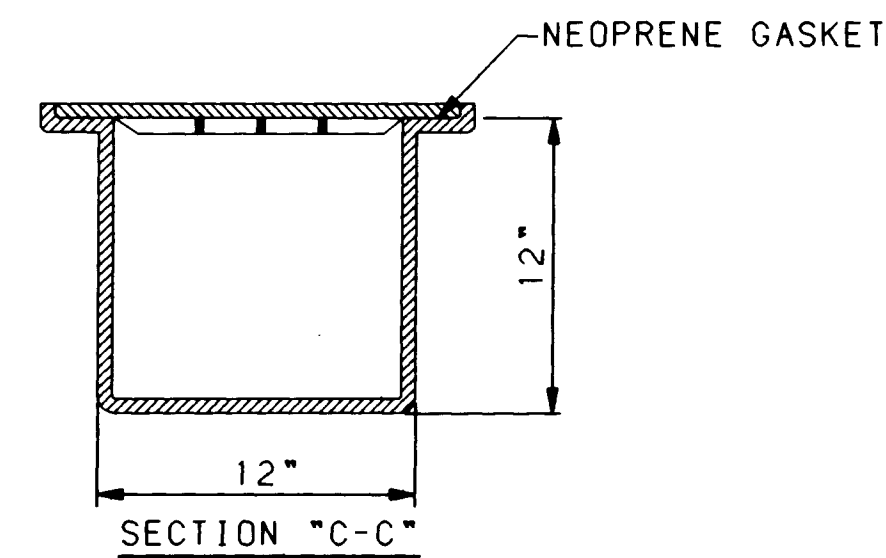
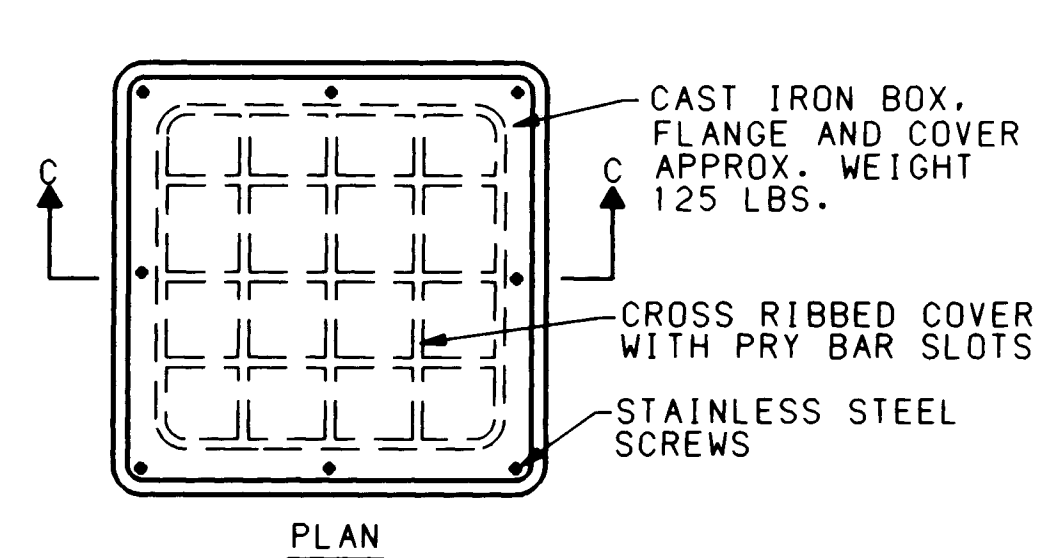
CABINET TYPE	"A"	"B"
P & R	4'-2"	2'-4"
G & M	3'-0"	2'-0"

26 3203.915393

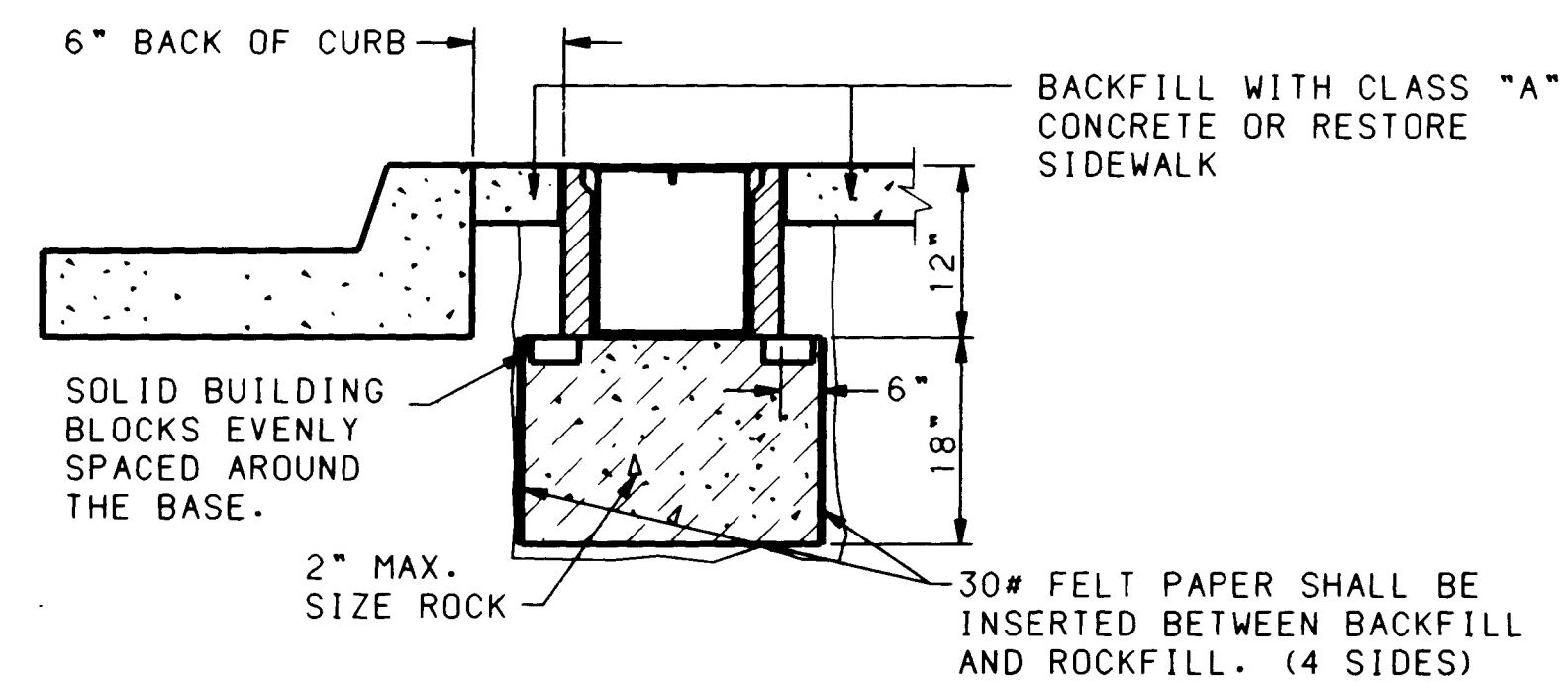
11/20/92

RECORD COPY
SCANLON & ASSOCIATES, INC.

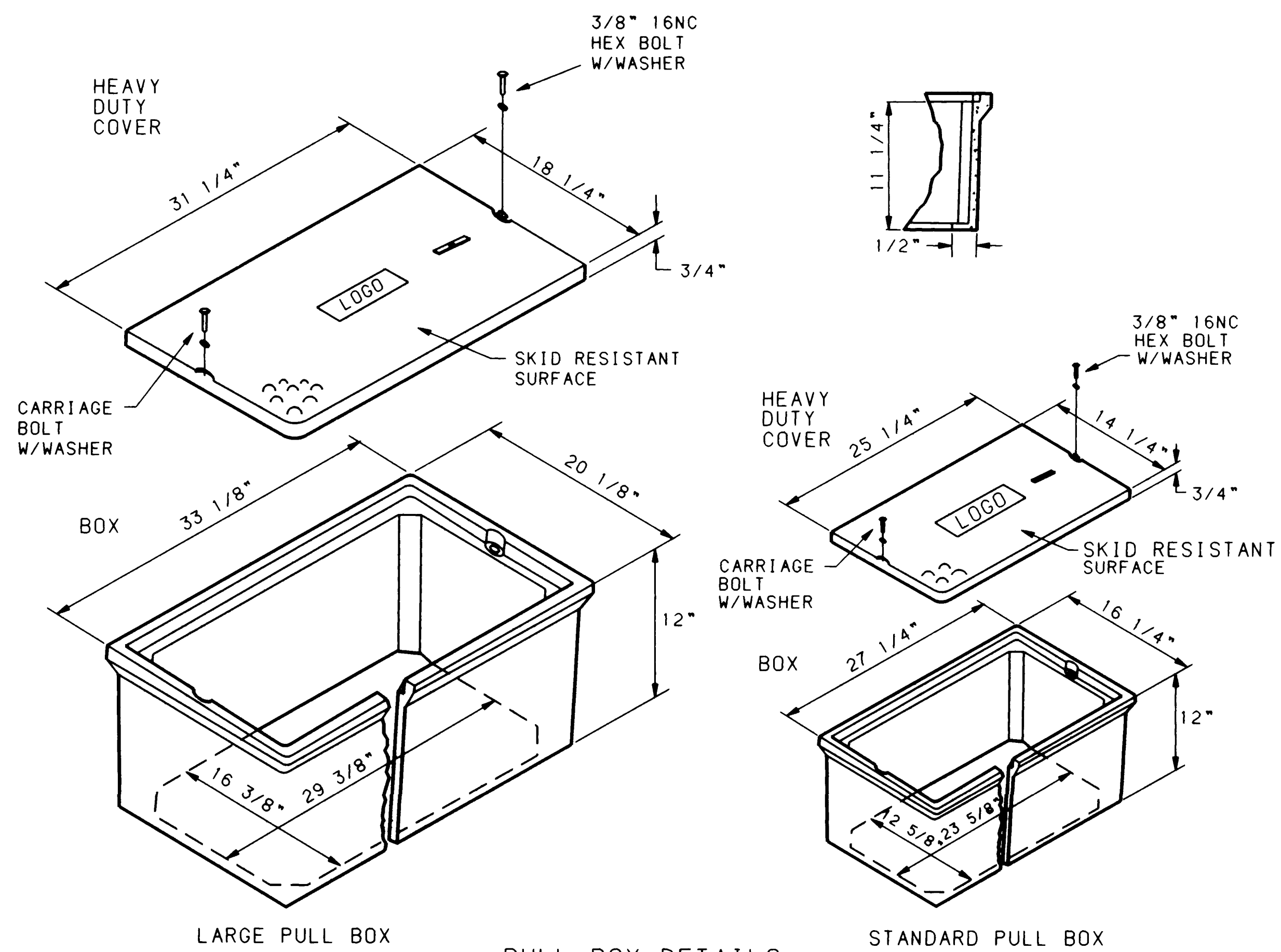
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP		TITLE: TRAFFIC SIGNAL FOUNDATION DETAILS 2nd. STREET / GRIEGOS ROAD	
DESIGNED BY: RLC	DATE: 8/8/91	DRAWN BY: GWC	DATE: 8/8/91
CHECKED BY: RLC	DATE: 8/18/91	NO. DATE	REVISIONS
1	8-15-91	4/20/92	N/A
2	8-16-91		
3	10-2-91		
DRAWING NO. M-4035(4)	MAP NO. C.O.A. No. 3203.91	F-14, G-14	SHEET 6-7 OF 6-7



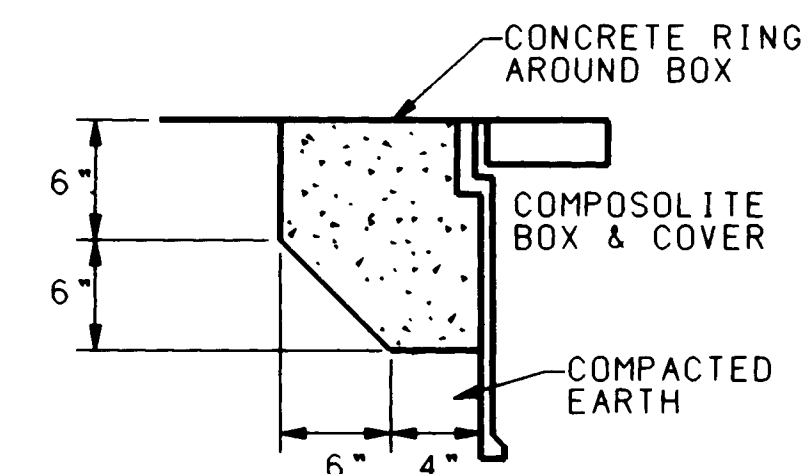
METAL PULL BOX



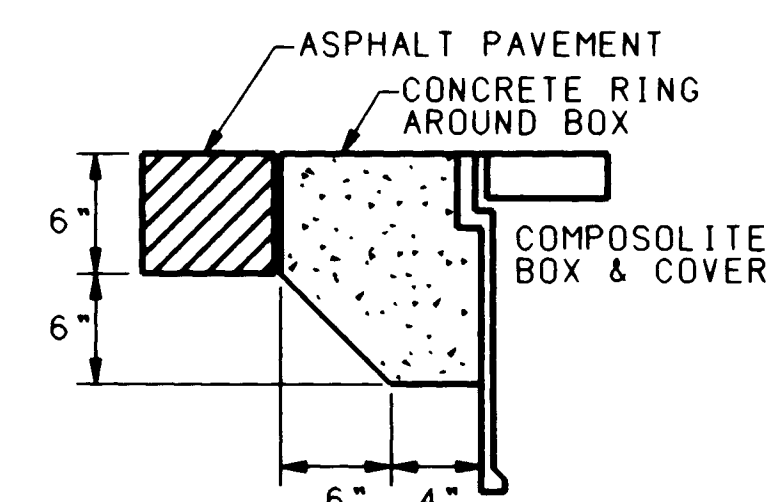
TYPICAL PULLBOX INSTALLATION
SEE DETAIL "A" BELOW



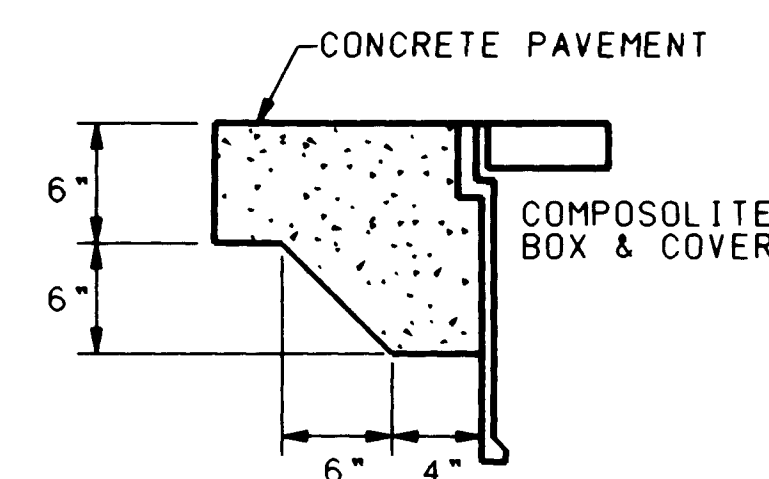
PULL BOX DETAILS



IN COMPACTED EARTH



IN ASPHALT PAVEMENTS



IN CONCRETE PAVEMENTS

CONCRETE COLLAR DETAIL
FOR PULL BOXES

NOTE: THE CONCRETE FOR THE PULL BOXES
WILL BE PAID FOR UNDER ITEM NO.
710010 AND NO OTHER MEASUREMENT
OR PAYMENT WILL BE MADE THEREFOR

DETAIL "A"

- NOTES FOR REINFORCED POLYMER MORTAR PULL BOX
1. SERVICE LOAD FOR (HEAVY DUTY COVERS) - 15,000 LBS. OVER A 10" SQUARE (150 PSI).
 2. MATERIAL TO BE AN AGGREGATE CONSISTING OF SAND AND GRAVEL BOUND TOGETHER WITH A POLYMER AND REINFORCED WITH CONTINUOUS WOVEN GLASS STRANDS. THE MATERIAL MUST HAVE THE FOLLOWING MECHANICAL PROPERTIES: COMPRESSIVE STRENGTH - 11,000 PSI, TENSILE STRENGTH - 1700 PSI, FLEXURAL STRENGTH - 7500 PSI.
 3. ALL PULL BOX COVERS SHALL BE STEEL OR REINFORCED POLYMER MORTAR. NO CONCRETE COVERS WILL BE ACCEPTABLE. PULL BOX TYPE SHALL BE APPROVED BY THE PROJECT MANAGER.
 4. THE DIMENSIONS OF THE PULL BOXES SHOWN ARE MINIMUM DIMENSIONS AND MAY VARY AS TO THE MANUFACTURER'S RECOMMENDATIONS. ALL DIMENSIONS SHALL BE VERIFIED BY THE PROJECT MANAGER.

TRAFFIC.CITY.SIGLTPBDET

26 3203.915493

11/20/92

RECORD COPY
SCANLON & ASSOCIATES, INC.

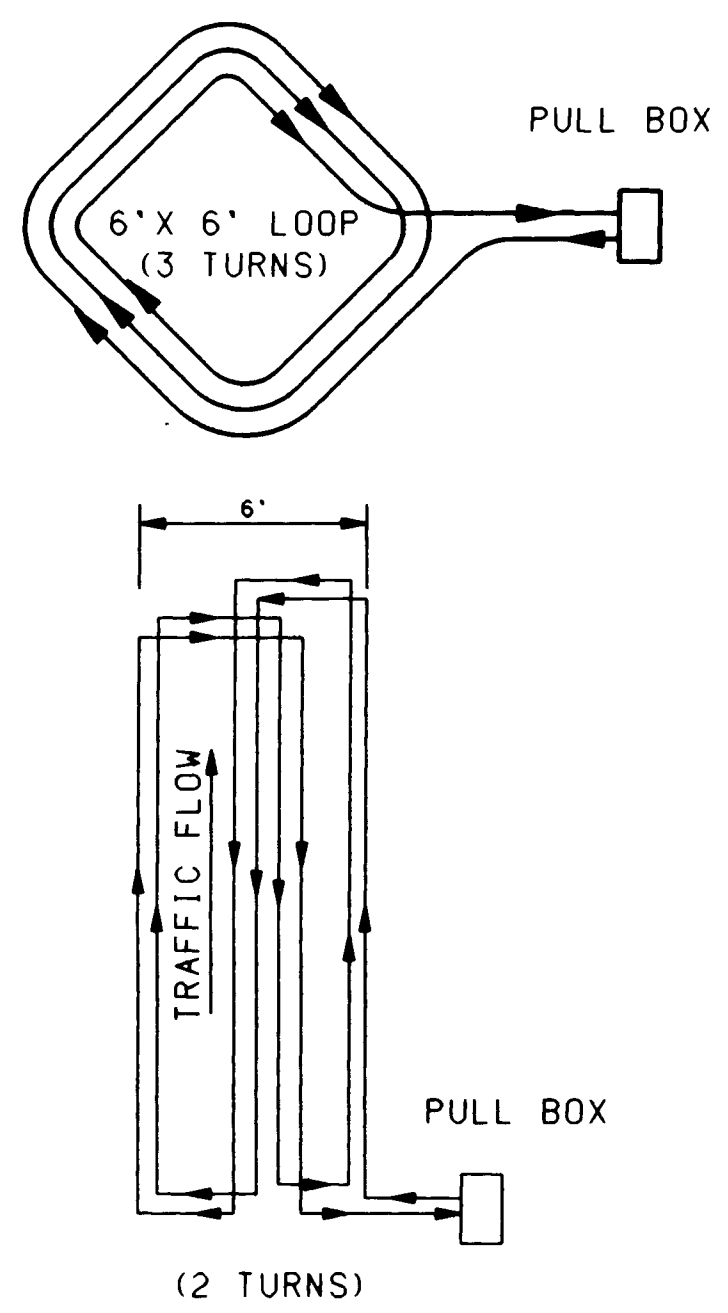
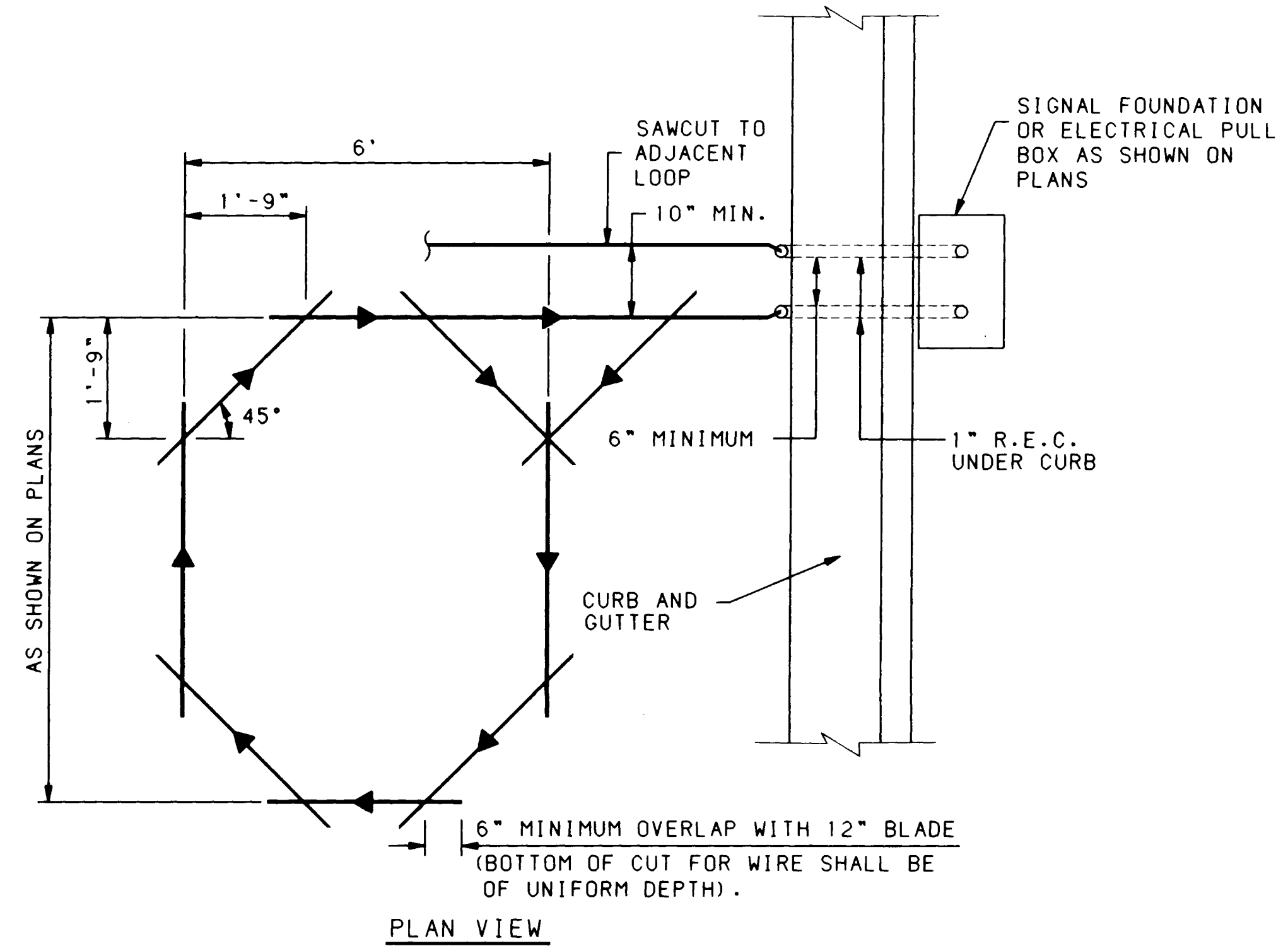
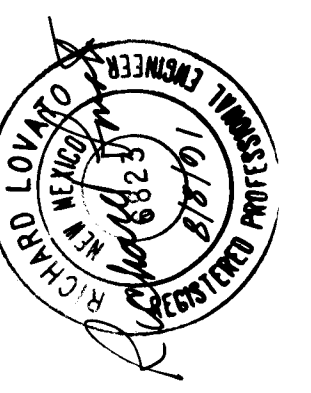
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

	ENGINEERING GROUP	
TITLE: SIGNAL & LIGHTING PULL BOX DETAILS		

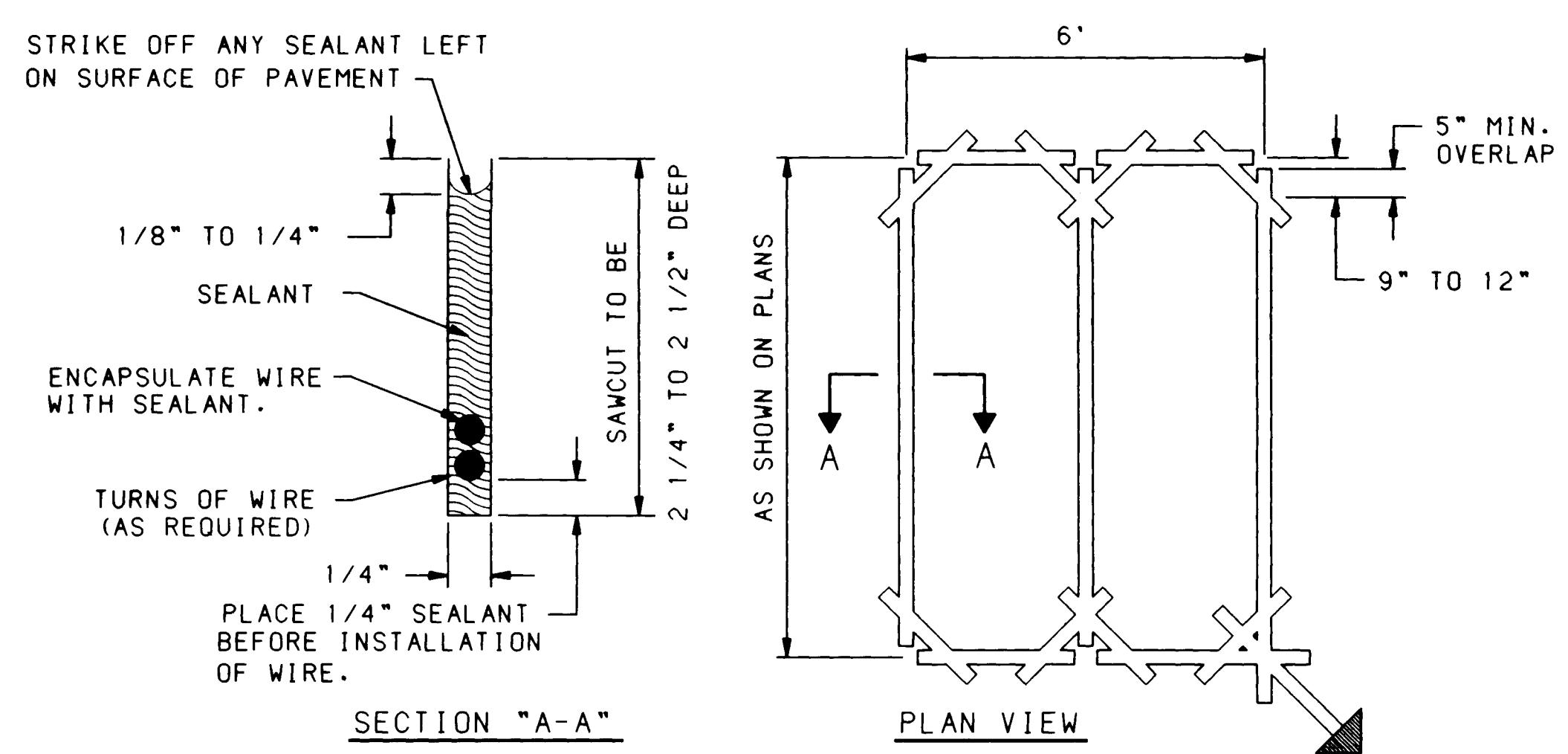
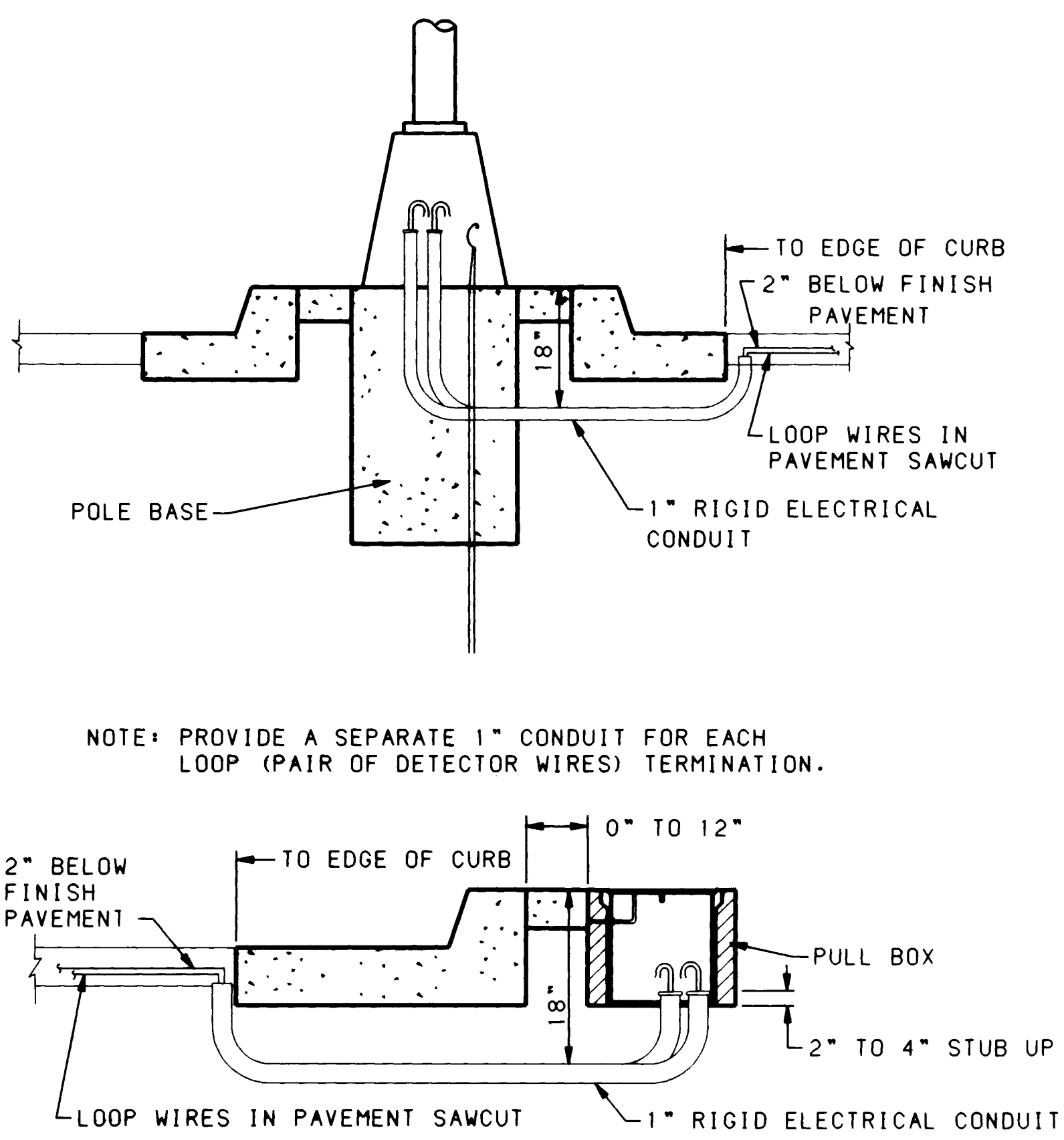
2nd. STREET / GRIEGOS ROAD

Trans Portation	MO Bank	8-15-91	10/10	N/A	AO
Hydrology	M. R. Cuyal	8-16-91			
TRAFFIC	Elmer Galt	10-9-91			
DRAWING NO.	M-4035(4)	MAP NO.	SHEET OF		
C.O.A. NO.	3203.91	F-14, G-14.	6-8		

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		NO.		DATE		BY		NO.		DATE	
CONTRACTOR				FIELD NOTES													
DRAWN BY				NO.				DATE									
INSPECTOR'S																	
ACCEPTANCE BY																	
VERIFICATION BY																	
DRAWING																	
RECORDED BY																	
MICRO-FILM INFORMATION																	
RECORDED BY																	
DATE																	
NO.																	



- NOTES**
- ALL LOOP DETECTOR WIRE SHALL BE NO. 14 AWG STRANDED COPPER WIRE WITH CROSSLINKED POLYETHYLENE INSULATION (INDUSTRY TYPE XHHW) CONFORMING TO THE REQUIREMENTS OF I.M.S.A. SPECIFICATIONS NO. 51-3, 1984. BACKER ROD SHALL NOT BE USED IN THE INSTALLATION OF LOOP (EXCEPT PIECES LESS THAN 12" WHICH MAY BE PLACED OVER THE WIRE AT THE SAW CUT CORNERS TO HOLD THE WIRE. A 1/4" LAYER OF SEALANT SHALL BE PLACED IN THE SAWCUT BEFORE PLACEMENT OF THE WIRE AND THEN THE WIRE SHALL BE ENCAPSULATED WITH SEALANT. HOT-MELT RUBBERIZED ASPHALT LOOP DETECTOR SEALANT MANUFACTURED BY CRAFCO SHALL BE AN ACCEPTABLE SEALANT ALTERNATE.
 - ALL LOOP LEAD IN CABLES SHALL BE TAGGED AT CABINET TO IDENTIFY EACH CABLE BY LOOP AND PHASE NUMBER.

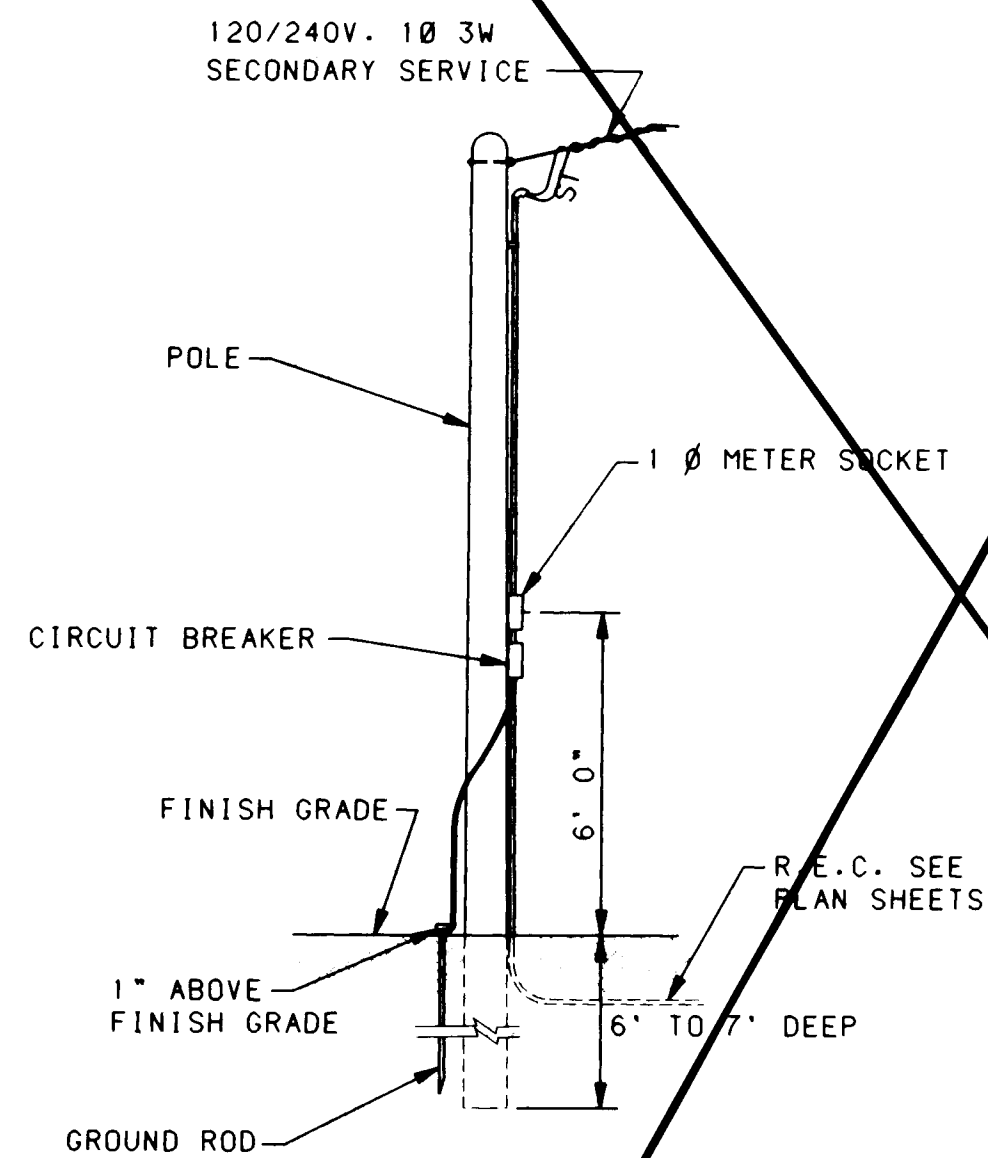


26 3203.915593

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP		TITLE: LOOP DETECTOR DETAILS	
2nd. STREET / GRIEGOS ROAD			
Transp. Planning	10/10/91	10/10/91	N/A
Hydrology	10/16/91	10/16/91	
TRAFFIC	10-9-91	10-9-91	
DRAWING NO.	M-4035(4) C.O.A. No. 3203.91	MAP NO. F-14, G-14	SHEET 6-9 OF

NOT PART
OF
THIS CONTRACT



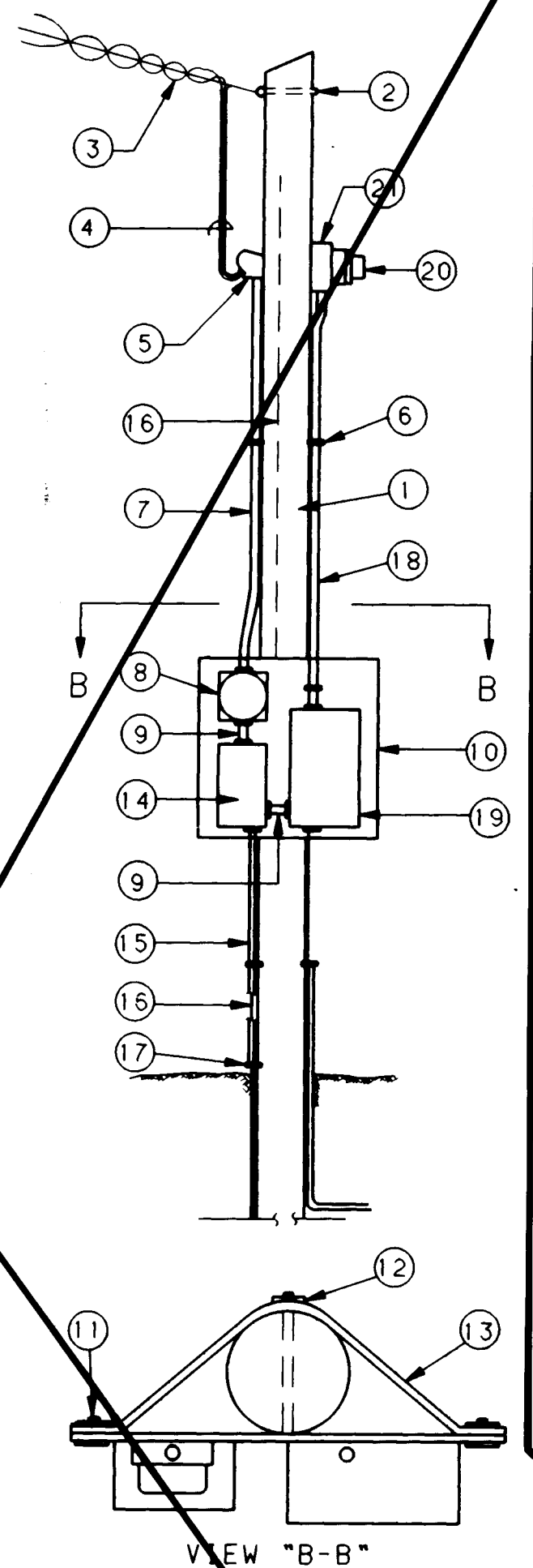
NOTE:
PROVIDE ONE 50A. 1P 120V. CIRCUIT FOR CONTROLLER SIGNALS AND ONE 50A. 1P CIRCUIT FOR DUPLEX CONVENIENCE OUTLET IN CONTROLLER. (USE A 15A FUSE TO PROTECT THIS CIRCUIT.)

MATERIAL LIST

- 1 25' TREATED POLE
- 1 1" X 1" G.R.C. NIPPLE
- 1 SINGLE PHASE METER SOCKET
- 2 CIRCUIT BREAKERS 50A
- 1 1" IN RAIN TIGHT ENCLOSURE (N.E.M.A. 3R)
- 30' 1/2" NO. 6 THW BLACK
- 30' 1/2" NO. 6 THW WHITE
- 30' 1/2" NO. 6 THW RED
- 1 COPPERWELD 3/4" X 10'-0" GROUND ROD
- 1 GROUND ROD CLAMP
- 20' 1" GALV. RIGID CONDUIT (APPROX.)
- 5/8" EYEBOLT
- 1 1" WEATHERHEAD
- 10' NO. 6 BARE COPPER GROUND WIRE
- 5' 1/2" GALV. RIGID CONDUIT

SERVICE POLE (SIGNAL)

NO SCALE



MATERIAL LIST

- 1 WOOD POLE FULLY TREATED - 30'-5"
- 1 EYE BOLT 5/8" Ø
- 3 WIRE - 120/240 VOLT 1Ø SECONDARY
- 60' NO. 6 WIRE THW IDENTIFY PHASES
- 1 1" SERVICE ENTRANCE WEATHERHEAD
- CONDUIT CLAMPS
- 15' 1" GALVANIZED RIGID STEEL CONDUIT
- 1 METER SOCKET 1Ø
- 1 NIPPLES
- 1 TREATED PLYWOOD BACKBOARD 3/4" X 36" X 36"
- 4 1/4" GALVANIZED BOLT, NUT AND WASHER
- 2 5/8" BOLT THROUGH POLE, BOARD AND STRAP
- 2 1" X 1/8" GALVANIZED STEEL STRAP
- 1 AMP 2P. RAIN TIGHT MULTI-BREAKER
- 6' 1/2" GALVANIZED RIGID STEEL CONDUIT
- 10' NO. 6 AWG BARE SOLID WIRE
- 1 3/4" Ø X 10'-0" COPPERWELD GROUND ROD AND CLAMP
- 15' 3/4" GALVANIZED RIGID STEEL CONDUIT - 3 NO. 12 THW
- 1 AMP 2P. LIGHTING CONTACTOR R.T. 240 VOLT
- 1 PHOTO-ELECTRIC CONTROLLER, FACING NORTH 16' ABOVE GRADE - 240 VOLT 1Ø
- 1 WEATHERPROOF JUNCTION BOX

SERVICE POLE (LIGHTING)

NO SCALE

NOTE:

ALL SIGNAL AND LIGHTING SERVICE DETAILS SHALL BE IN ACCORDANCE WITH THE PNM ELECTRIC SERVICE GUIDE, 1991 EDITION.

MATERIAL LIST

- 1 U BOLT
- 2 5/8" x MACHINE BOLTS
- 3 #4 SOL CU WIRE
- 2 2-1/4" SQUARE WASHER
- 2 5/8" MF LOCKNUT
- 1 LINE TAP
- 1 SUPPORT BRACKET
- 1 GROUNDING LUG

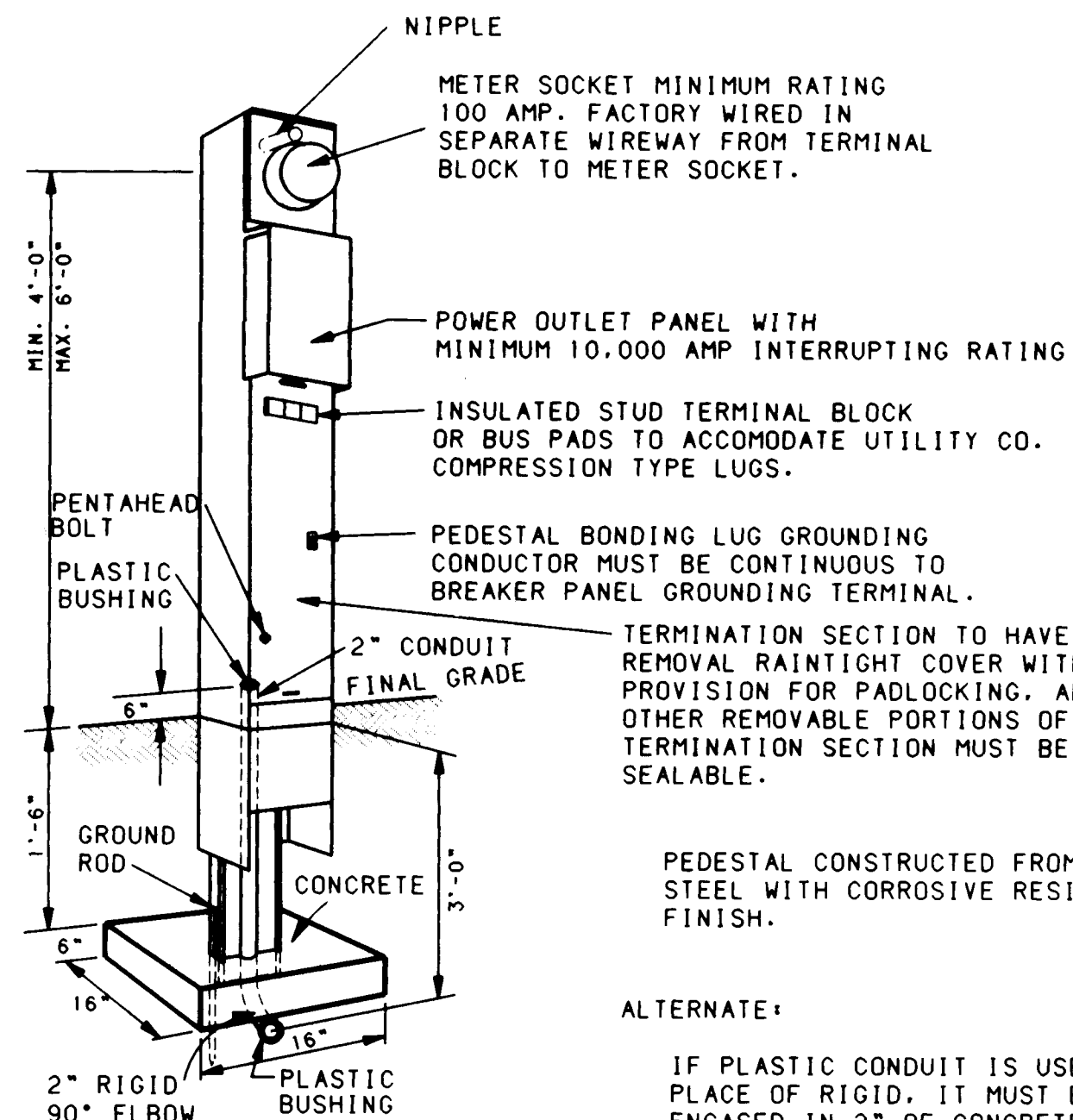
NOTES

- 1. BRACKET TO BE FASTENED TO POLE WITH 5/8" GALVANIZED MACHINE BOLTS.
- 2. BRACKET SUITABLE FOR TWO 2" OR ONE 4" CONDUIT.
- 3. TWO HOLE STRAPS ATTACHED AT 30" INTERVALS WITH 2" LAG SCREWS MAY BE USED INSTEAD OF THE SUPPORT BRACKET WHEN THE CONDUIT IS 1" OR LESS. A MAXIMUM OF TWO CONDUITS MAY BE STRAPPED DIRECTLY TO THE POLE.

SIZE CONDUIT	X	Y
2"	2-7/8"	3-5/8"
4"	5"	5-3/4"

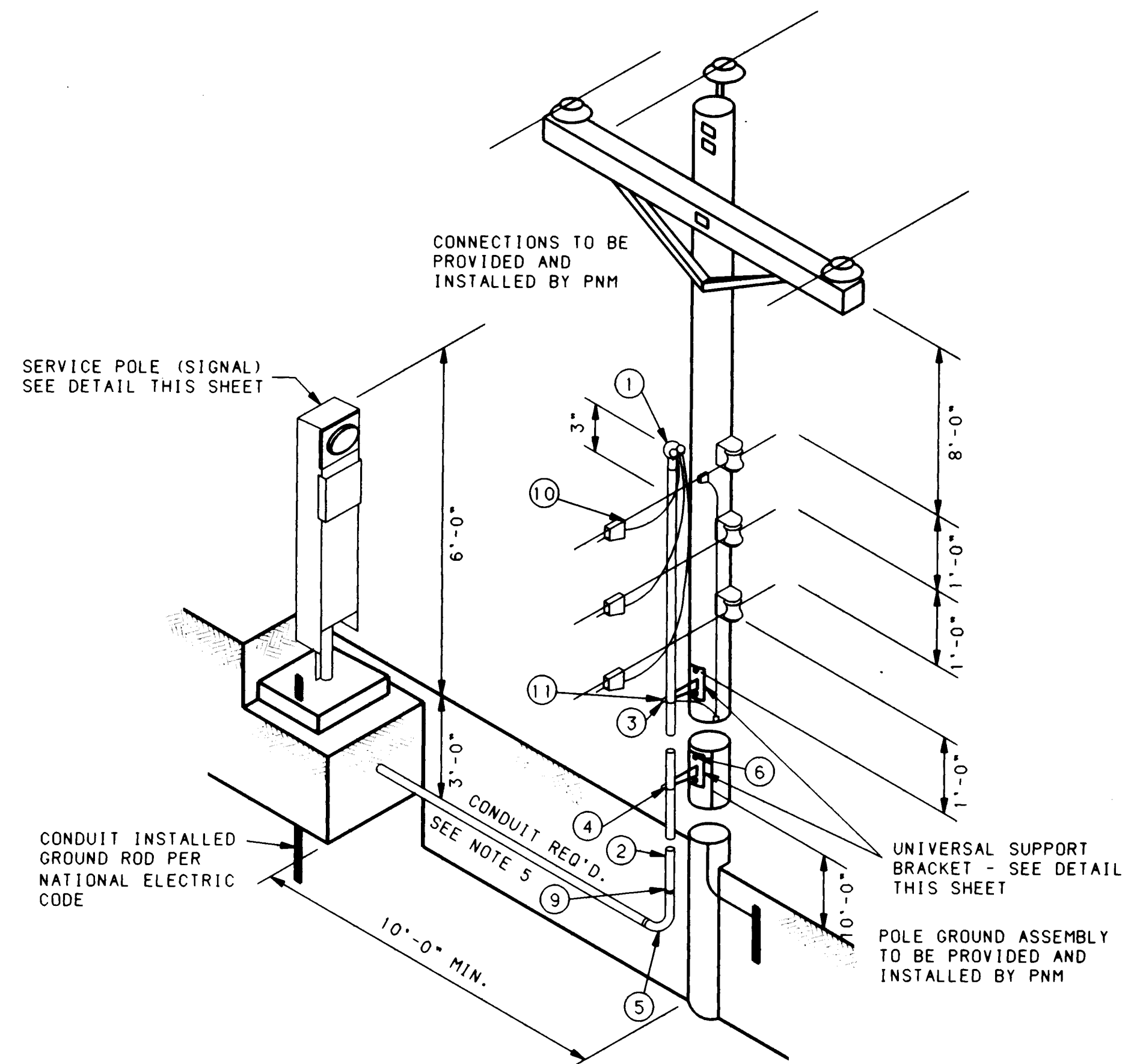
UNIVERSAL SUPPORT BRACKETS

NO SCALE



SERVICE POLE (SIGNAL)
(FOR UNDERGROUND SERVICE)

NO SCALE



SINGLE PHASE PEDESTAL METERING NOTES

- 1. WEATHERHEAD SHALL BE 3" ABOVE NEUTRAL.
- 2. NO STANDOFF BRACKET REQUIRED IF CONDUIT IS 1" OR LESS. UP TO 2 CONDUITS 1" OR LESS MAY BE STRAPPED TO THE POLE.
- 3. CONTACT PNM CUSTOMER SERVICES FOR POLE QUADRANT.
- 4. ALL ABOVE-GRADE CONDUIT SHALL BE RIGID GALVANIZED OR IMC.
- 5. ALL UNDERGROUND CONDUIT EXCEPT TYPE DB PVC, SCHEDULE 40 PVC, RIGID GALVANIZED OR IMC MUST BE CONCRETE ENCASED.
- 6. RISER BRACKET ASSEMBLY MUST HAVE PROVISIONS FOR GROUNDING BY PNM.

MATERIAL LIST

- 1 2" CLAMP TYP WEATHER HD
- 30' 2" GALVANIZED CONDUIT
- 2 UNIVERSAL SUPPORT BRACKET
- 2 2" PIPE STRAP KIT
- 1 2" GALVANIZED ELBOW
- 4 5/8" x MACHINE BOLT
- 4 5/8" LOCKNUT
- 4 2-1/4" SQUARE WASHER
- 1 2" GALVANIZED COUPLING
- 3 LINE TAP
- 2 #10-#2 GROUND LUG
- 1 GROUND ASSEMBLY

SINGLE PHASE PEDESTAL METERING

NO SCALE

26 3203.915693

11/20/92

RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			
TITLE: SIGNAL & LIGHTING SERVICE DETAILS			
2nd. STREET / GRIEGOS ROAD			
DESIGNED BY	DATE	DRAWN BY	CHECKED BY
REMARKS	REVISIONS	DESIGN	
NO. DATE	BY	DATE	DATE
1 11/20/92	RL	11/20/92	RL
DRAWING M-4035(4) MAP NO. SHEET OF			
NO. C.O.A. No. 3203.91 F-14, G-14 6-10			



* INCLUDE COST IN PRICE BID FOR STRUCTURAL CONCRETE, CLASS A.

1. FOUNDATIONS FOR LIGHT STANDARDS TO BE CONSTRUCTED UNDER THIS CONTRACT. P.N.M. WILL INSTALL LIGHT STANDARD AND LUMINAIRE.
2. INSTALL 2" PVC CONDUIT WITH PULL WIRE AS SHOWN ON SHEET 7-2. CONDUCTOR WIRE TO BE INSTALLED BY P.N.M.

PROPOSED	EXISTING	ITEM
----------	----------	------

LUMINAIRE NUMBER

STATIONING

00-00-000-0-0

TYPE OF LAMP *

TYPE OF DISTRIBUTION

WATTAGE

ARM LENGTH

MOUNTING HEIGHT

LAMP TYPES *

26 3203.915793

RECORD COPY
SCANLON & ASSOCIATES, INC.

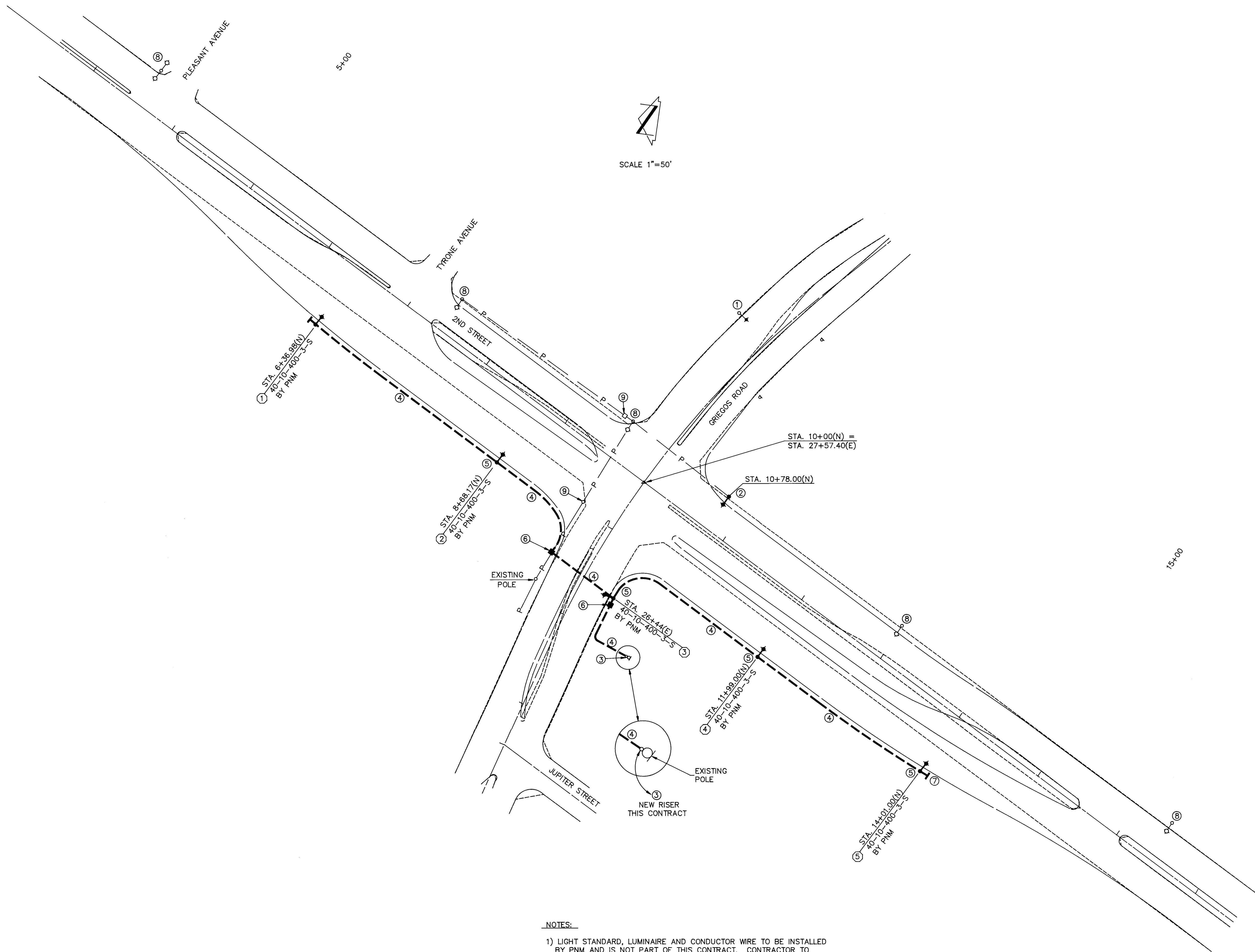
REVISIONS (OR CHANGE NOTICES)	
-------------------------------	--



N.M. PROJECT NO. M-4035 (4) C.O.A. PROJ. NO. 3203.91 SHEET 7-1

Time: 11:19:50
Date: 8/08/1991
Drawing File: TRF-DESG
Directory: C:\A-CAD\86111\

Drawn by: J. L. GARCIA
Checked by: J. L. GARCIA
Director: G. A. GARCIA



- NOTES:
- 1) LIGHT STANDARD, LUMINAIRE AND CONDUCTOR WIRE TO BE INSTALLED BY PNM AND IS NOT PART OF THIS CONTRACT. CONTRACTOR TO INSTALL CONCRETE LIGHT BASES, CONDUIT, PULL WIRES, JUNCTION BOXES AND SERVICE RISER AS SHOWN ABOVE.
 - 2) STREET LIGHT FOUNDATIONS TO BE CONSTRUCTED AT LOCATIONS SHOWN, 6'-0" FROM FACE OF CURB TO CENTER OF FOUNDATION.

F.H.W.A. Region No.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	M-4035(4)	7-2	

AS BUILT INFORMATION	
CONTRACTOR	DATE

BENCH MARKS	
NO.	DATE

SURVEY INFORMATION	
NO.	DATE

ENGINEER'S SEAL	
NO.	DATE

REVISIONS	
NO.	DATE

DESIGN	
DESIGNED BY	DATE
JCL	8/18/91

CHECKED BY	
NO.	DATE
RL	8/22/91

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: ROADWAY LIGHTING LAYOUT PLAN
SECOND STREET / GRIEGOS ROAD

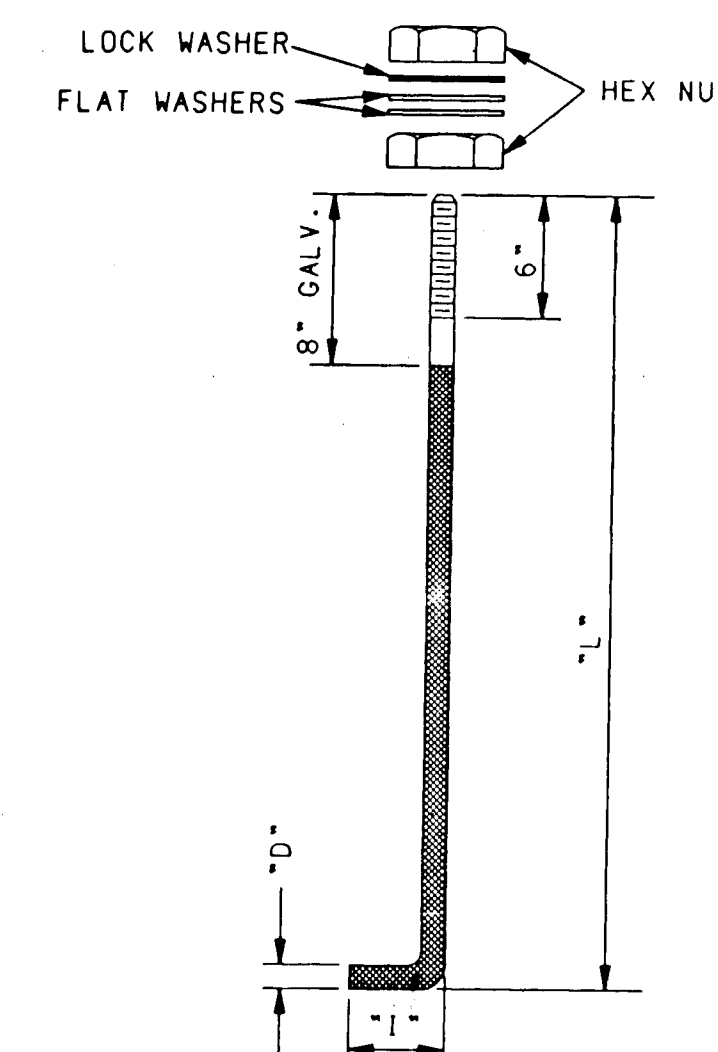
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	J. L. Garcia	8-21-91	WATER	N/A	
TRANSPORTATION	J. L. Garcia	8-15-91	WASTE WATER	N/A	
HYDROLOGY	J. L. Garcia	8-16-91			

PROJECT NO.	MAP NO.	SHEET NO.
M-4035(4) COA PROJ NO. 3203.91	F-14 G-14	7-2 OF 7-2

26 3203.915893

GENERAL NOTES

- ALL FOUNDATIONS SHALL INCLUDE COPPERWELD GROUND RODS AS SHOWN WHICH SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE FOUNDATION. NO PRICE OR PAYMENTS SHALL BE MADE THEREFOR.
- WELDING SHALL BE IN ACCORDANCE WITH SECTION 1.4.2 OF AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.



DIMENSION TABLE					
MOUNTING HEIGHT	NO. OF ARMS	D	L	I	UNC
30' - 35'	1	1"	36	4	8
40'	2	1"	36	4	8
50'	2	1-1/4"	42	6	7

ANCHOR BOLTS SHALL BE HOT BENT AND SHALL MEET THE REQUIREMENTS OF ASTM A-675 GRADE 90. NUTS MEET THE REQUIREMENTS OF ASTM A-563 GRADE A, AND ANSI B18.2.

FLAT WASHERS SHALL MEET THE REQUIREMENTS OF ANSI B27.2 HEAVY WASHERS.

LOCK WASHERS SHALL MEET THE REQUIREMENTS OF ANSI B18.21.1 HEAVY WASHERS.

BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH, ASTM A-153.

FOUR (4) ANCHOR BOLTS, EIGHT (8) HEX NUTS, EIGHT (8) FLAT WASHERS, AND FOUR (4) LOCK WASHERS SHALL BE FURNISHED WITH EACH ANCHOR BASE EQUIPPED POLE.

NUTS, FLAT WASHERS, AND LOCK WASHERS FURNISHED FOR BREAKAWAY SUPPORTS SHALL BE SPECIFIED ON DETAILS.

ANCHOR BOLTS 26 3203.915973

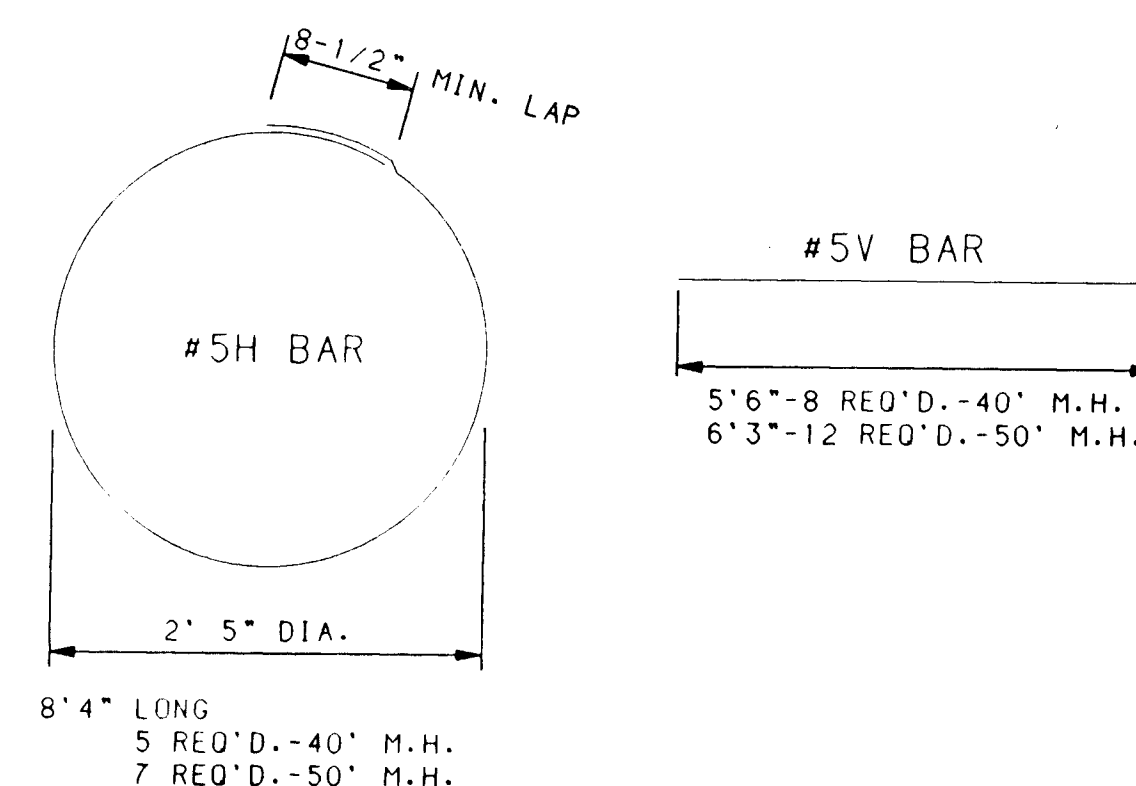
- TO BE USED ONLY WHERE BREAKAWAY SUPPORT COUPLINGS ARE NOT REQUIRED.

NO.	DESCRIPTION	DATE	BY
1			
2			
3			

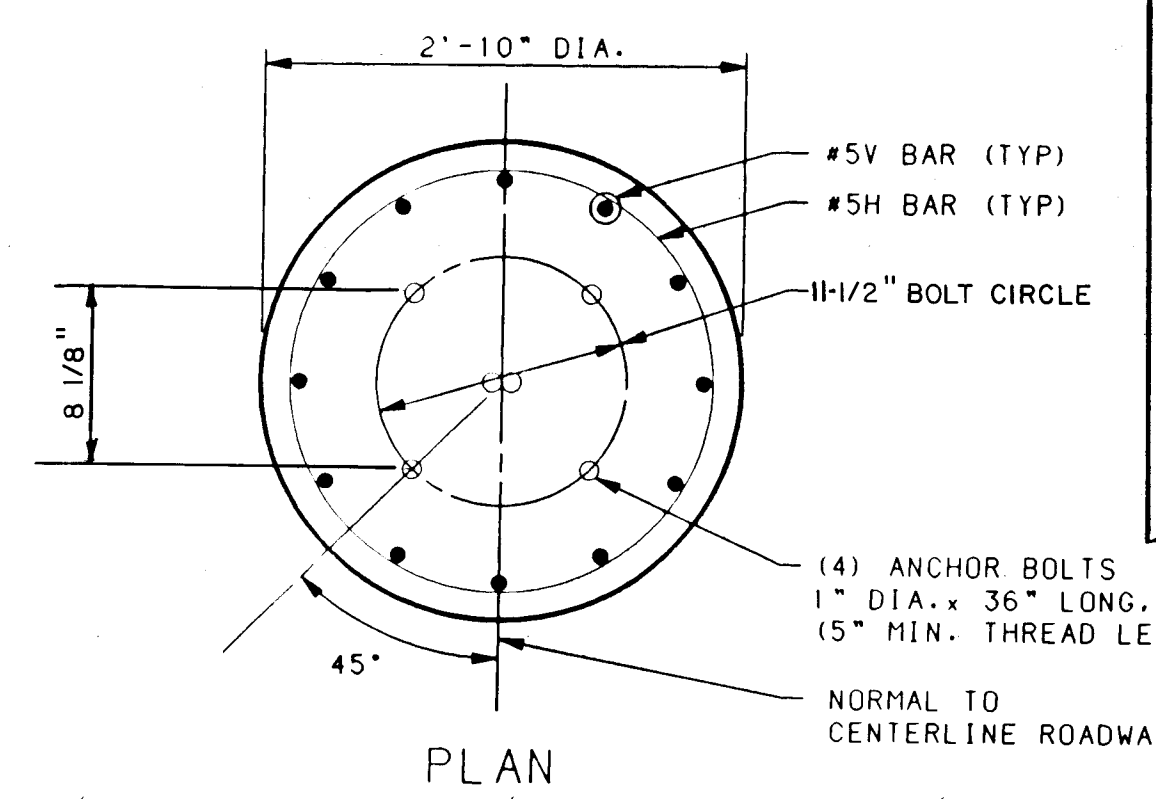
NEW MEXICO STATE
HIGHWAY AND TRANSPORTATION
DEPARTMENT

TRAFFIC DESIGN SECTION
TYPE "V" STANDARD
FOUNDATION & BASE DETAILS

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.



REINFORCING BARS

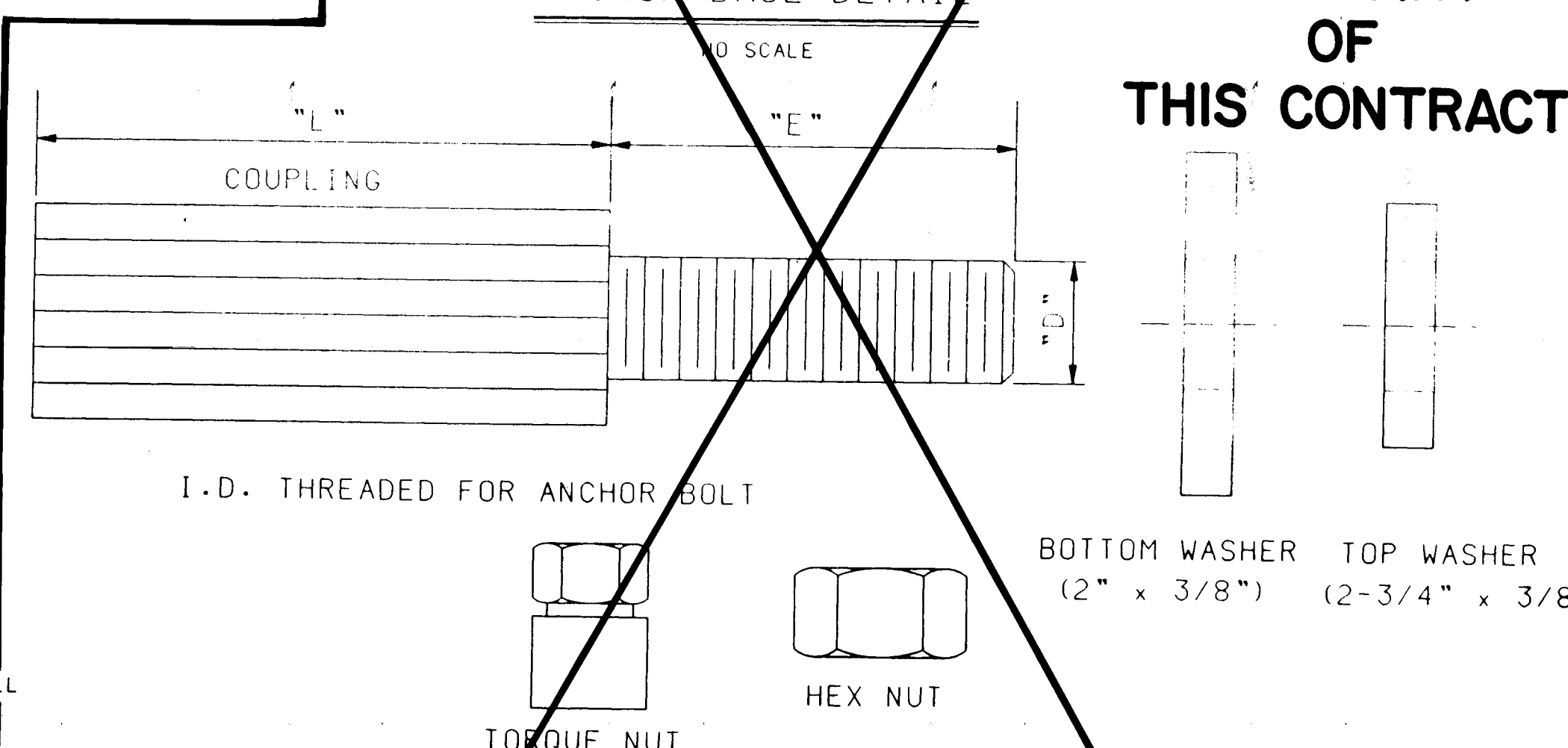


SPECIAL CARE TO BE TAKEN BY CONTRACTOR TO ENSURE ANCHOR BOLTS ARE SET IN PROPER LOCATION AND AT PROPER HEIGHT IN FOUNDATION. EACH FOUNDATION WILL BE CHECKED FOR PROPER INSTALLATION OF ANCHOR BOLTS PRIOR TO PAYMENT FOR THIS ITEM. IF ANCHOR BOLTS ARE NOT PROPERLY INSTALLED, ENTIRE FOUNDATION SHALL BE REMOVED AND REPLACED AT CONTRACTOR'S OWN EXPENSE.

DIMENSION TABLE				
MOUNTING HEIGHT	NO. OF ARMS	DIMENSIONS (INCHES)		
		A (MAX.)	B (MIN.)	C
30' - 35'	1	11	13	1-1/8"
40'	1	11	16	1-1/8"
50'	1	14	16	1-1/8"
40' - 50'	2	14	16	1-3/8"

ANCHOR BASE SHALL BE FABRICATED FROM PLATE STEEL CONFORMING TO ASTM A-36 AND SHALL BE WELDED TO POLE SHAFT PRIOR TO GALVANIZING SHAFT.

ANCHOR BASE DETAIL



DIMENSION TABLE							
D	THREAD	MINIMUM TENSILE STRENGTH	RESTRAINED MIN.	SHEAR MAX.	NUT TORQUE 25 FT. LBS.	L	E
1"	8 UNC	25 KIPS	30 KIPS	7.5 KIPS	175	4-3/4"	3-5/16"

BREAKAWAY SUPPORT COUPLING SHALL CONFORM TO THE REQUIREMENTS OF AASHTO STANDARDS FOR BREAKAWAY SUPPORTS.

COUPLING SHALL BE FABRICATED FROM EITHER DIE CAST ALUMINUM ALLOY 380 ACCORDING TO ASTM B-85, OR EXTRUDED FROM ALLOY 2024-T8511 ACCORDING TO ASTM A-153.

WASHERS SHALL BE FABRICATED FROM ASTM A-36 STEEL PLATE AND SHALL BE GALVANIZED ACCORDING TO ASTM A-153.

HEX NUTS SHALL MEET THE REQUIREMENTS OF ASTM A-563 GRADE A, AND ANSI 18-2.2 HEX TYPE AND SHALL BE GALVANIZED ACCORDING TO ASTM A-153.

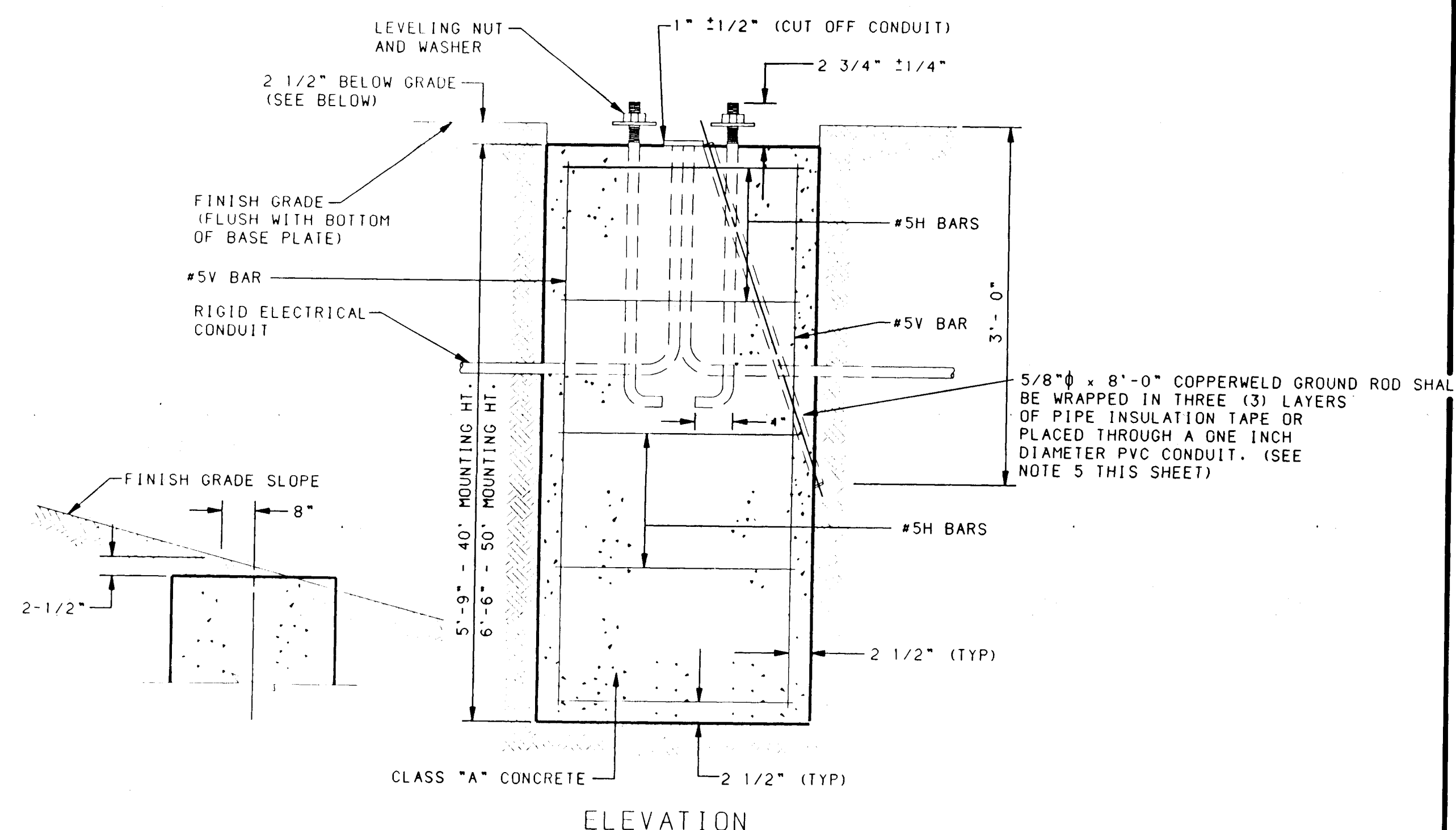
TORQUE NUT SHALL BE FABRICATED FROM ALUMINUM ALLOY AND GROOVED TO SEPARATE AT THE SPECIFIED TORQUE.

THREADED STUD SHALL MEET THE REQUIREMENT OF ASTM A-675 GRADE 90 AND IS GALVANIZED WITH ASTM A-153, OR IS FABRICATED FROM AISI STAINLESS STEEL.

WHEN COUPLINGS ARE FURNISHED, EACH LIGHT POLE SHALL BE FURNISHED WITH FOUR (4) COUPLINGS AND THREADED STUDS, EIGHT (8) FLAT WASHERS, AND FOUR (4) HEX OR TORQUE NUTS.

BREAKAWAY SUPPORT COUPLING

NO SCALE

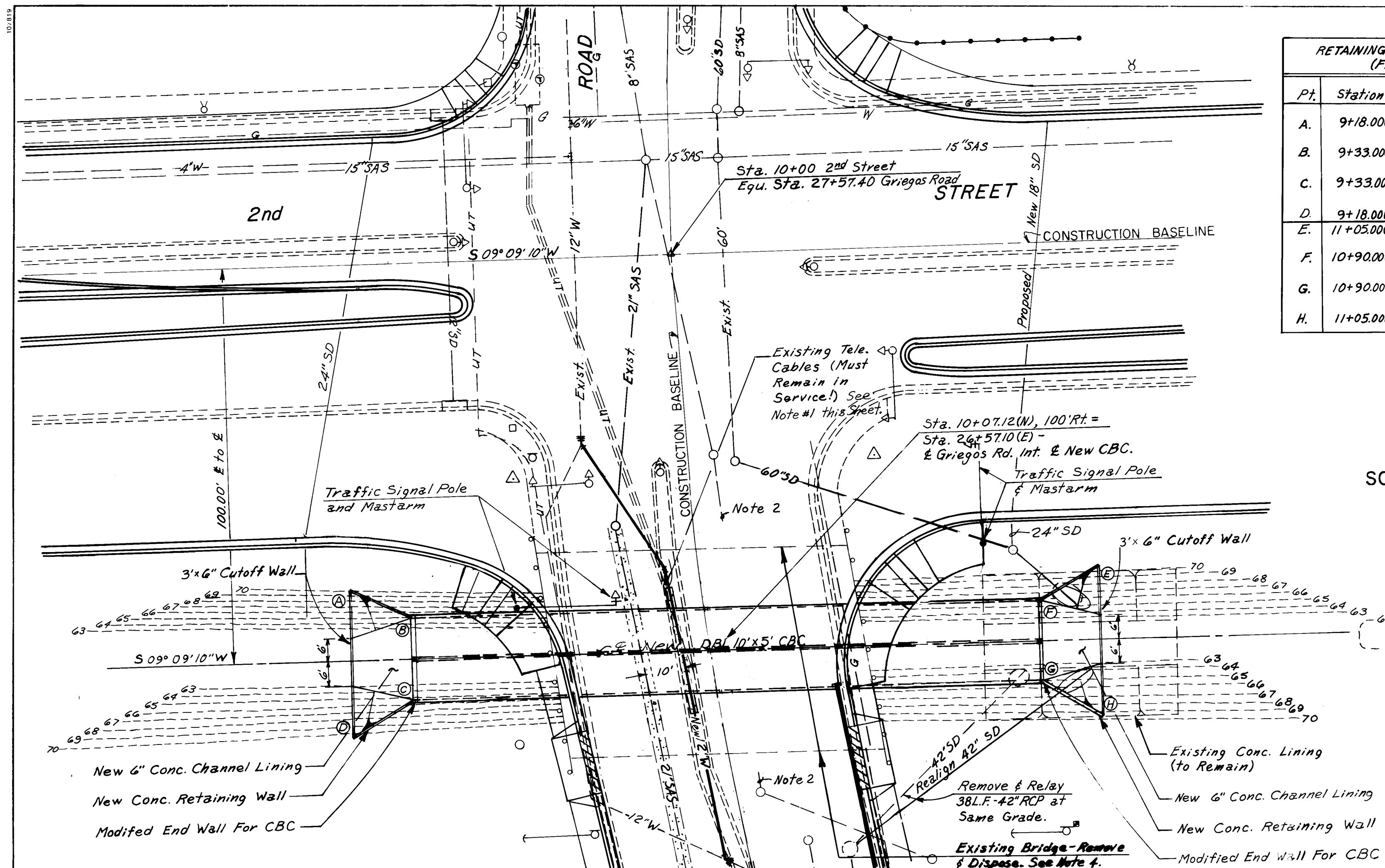


ESTIMATED FOUNDATION MATERIAL

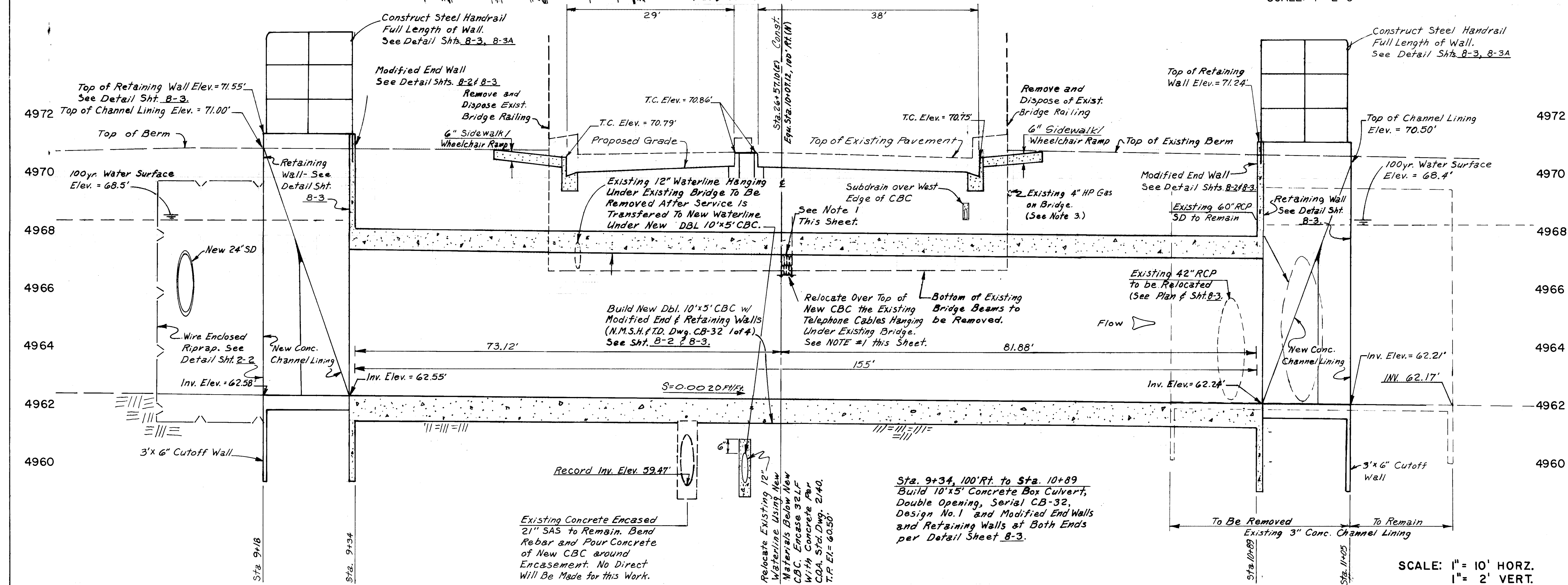
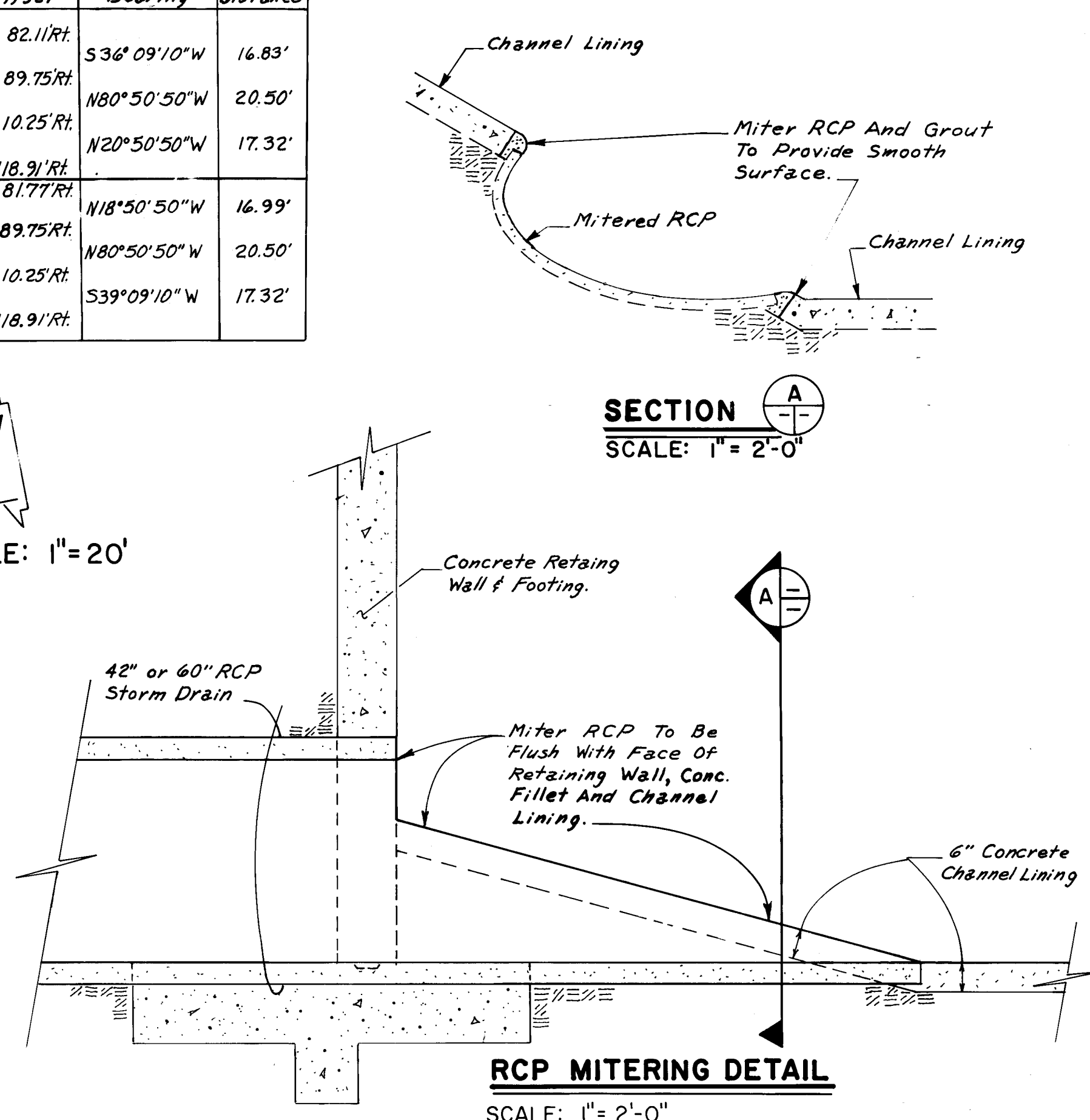
	40' MOUNTING HT.	50' MOUNTING HT.
REINFORCING BARS, GRADE 40	92 POUNDS	139 POUNDS
PORTLAND CEMENT CONCRETE CLASS "A"	1.33 CU.YDS.	1.5 CU.YDS.

FOUNDATION DETAILS

NO SCALE



SCALE: 1" = 20'



SCALE: 1" = 10' HORIZ.
1" = 2' VERT.

FHWA Region No.	STATE NEW MEXICO	SHEET NO. 8-1	TOTAL SHEETS
M-4035(4)			

NOTES:

- The Existing Telephone Cables Hanging Under The Existing Bridge Over The Alameda Drain Must Remain In Service. At All Times. The Contractor Shall Provide Support for and Maintain the Cables in Damage Free Condition During Construction. The Cables shall be Relocated Over the Top of the New DBL 10'x5' Concrete Box Culvert by Others.
- Abandoned Chlorination Line.
- Gas Company of New Mexico will Cap Existing 4" Gasline Crossing the Alameda Drain at Griegos Road Prior to Demolition of Existing Bridge Structure and Construction of New Concrete Box Culvert. The Contractor shall Coordinate his Work with the Gas Co. after Completion of the C.B.C. and Prior to Paving, at which time the Gas Co. will Reconnect the Existing Gasline.
- Remove and Dispose of Existing Bridge, including Pilings (where Required), Concrete Abutments, Precast Concrete Beams, Decking, Pavement, Curbs and Handrails. See Notes 1 & 3 Above.

RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

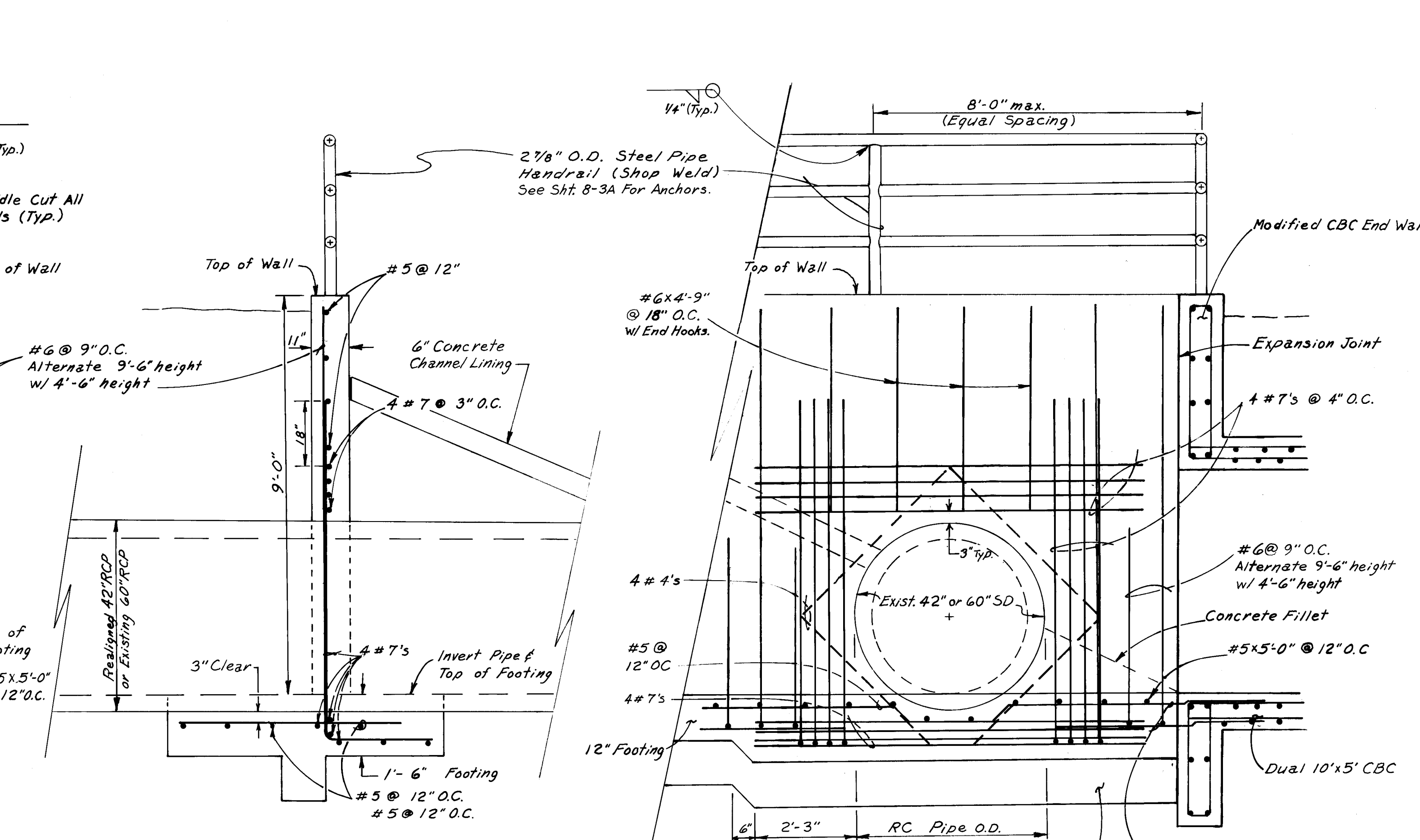
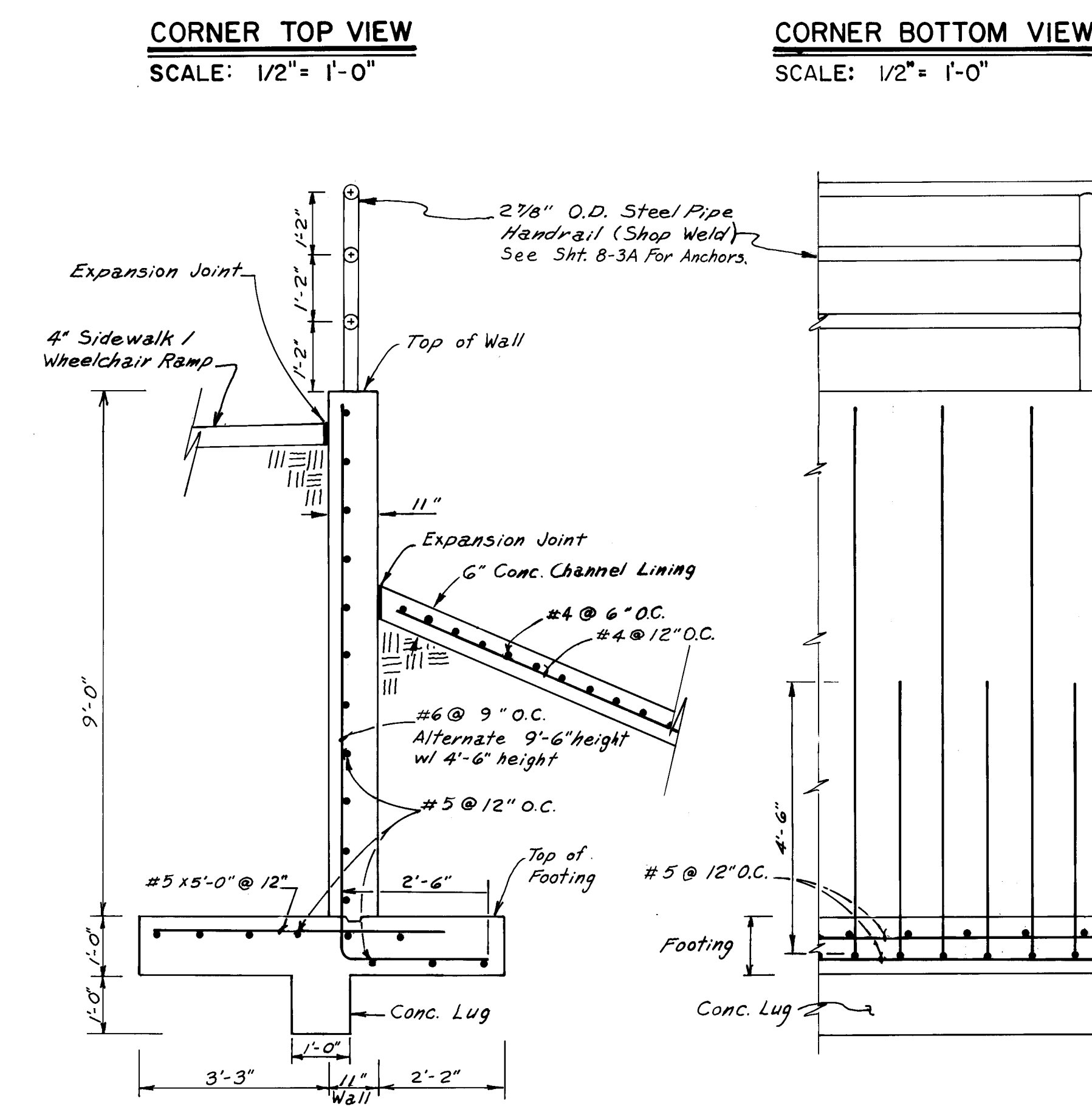
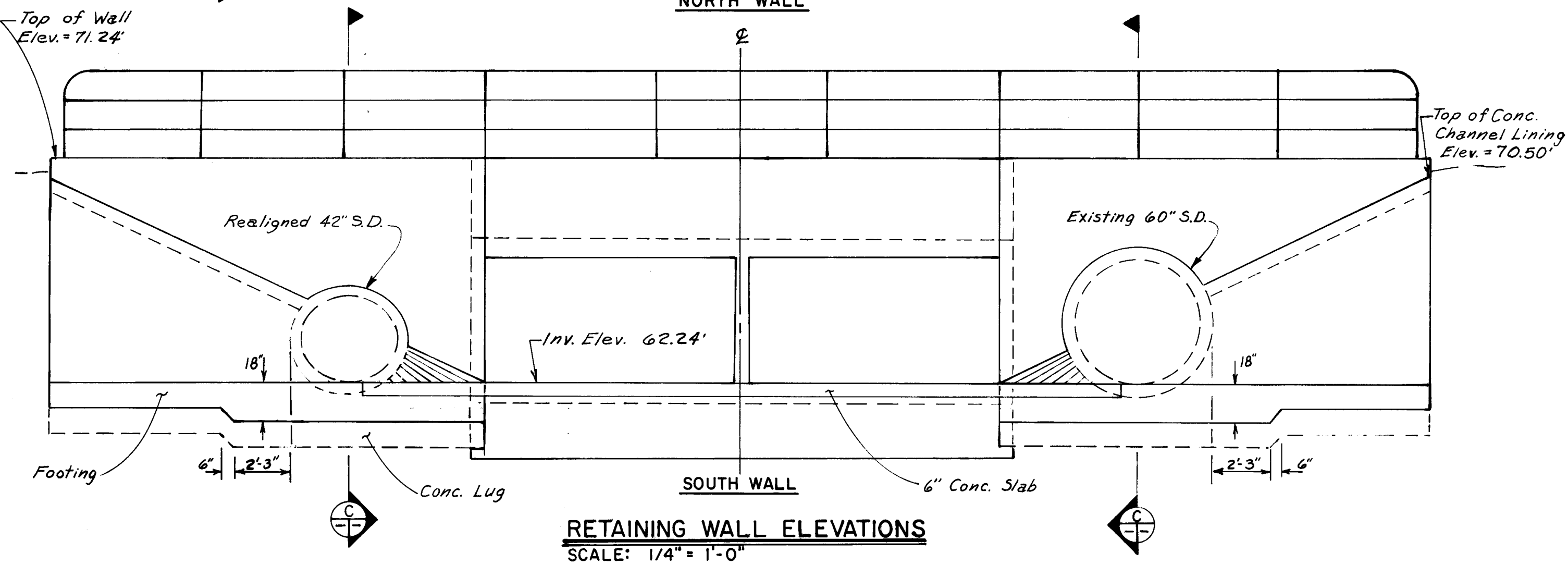
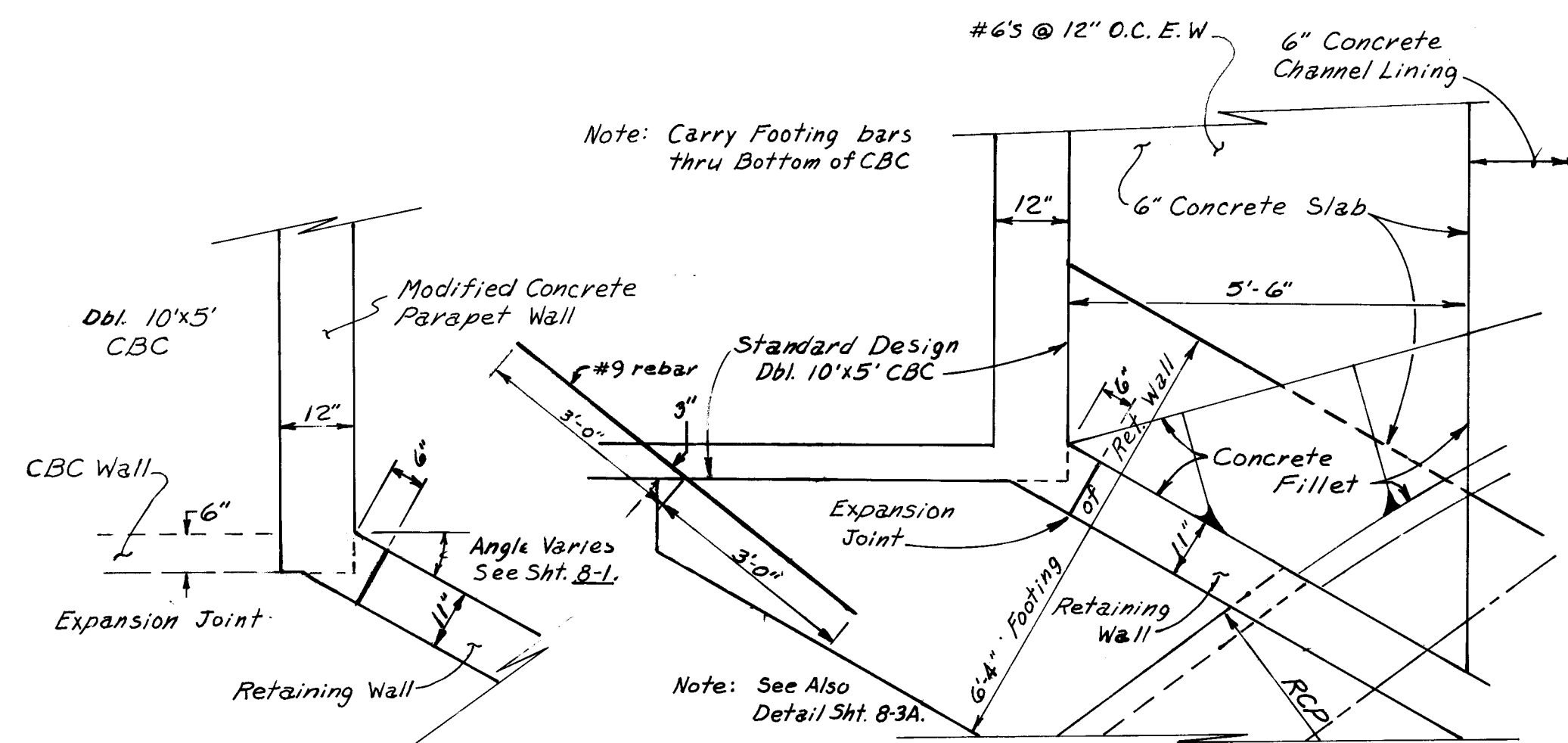
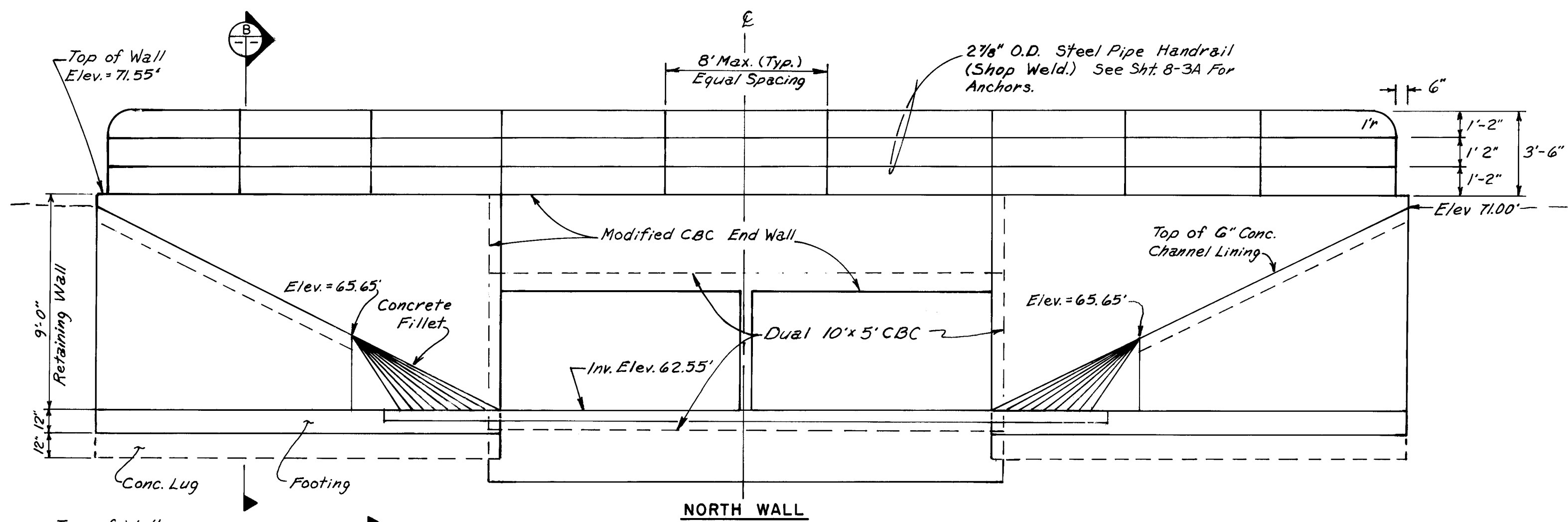
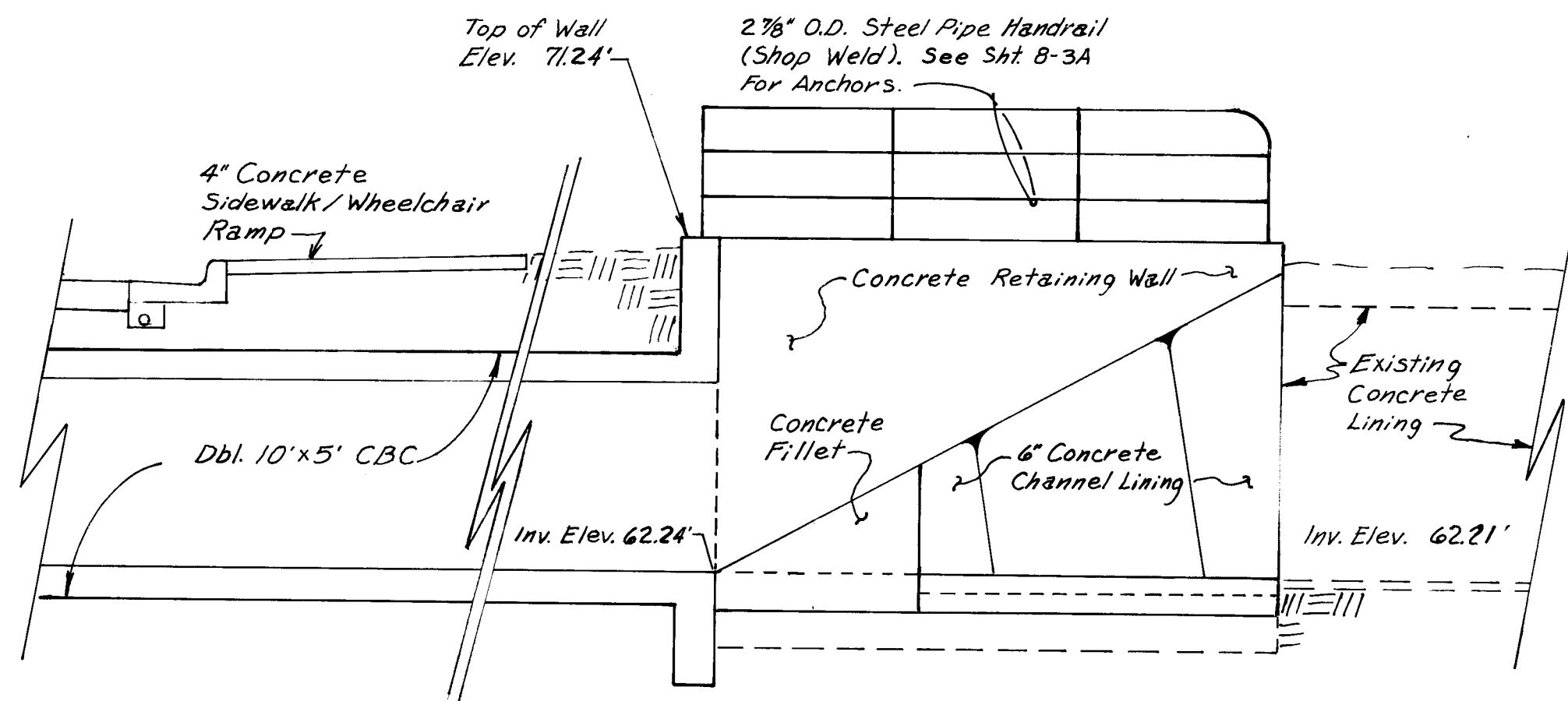
TITLE: STRUCTURE SECTION & DETAILS (GRIEGOS ROAD CROSSING) OF ALAMEDA DRAIN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG. Chief	R. J. [Signature]	8-15-91	DRG. Chief	R. J. [Signature]	8-21-91
Trans. Dev.	[Signature]	8-15-91	Trans. Dev.	[Signature]	8-21-91
Utility Dev.	[Signature]	8-15-91	Utility Dev.	[Signature]	8-21-91

DRAWING NO. M-4035(4)
C.O.A. No. 3203.91

MAP NO. F-14, G-14

SHEET 8-1 OF 8-1



F.N.W.A. Region No.	STATE	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	M-4035(4) 8-3	

STRUCTURAL DESIGN DATA

- Design in accordance with American Concrete Institute (ACI-318-89) "Building Code Requirement for Reinforced Concrete" and Technical Release No. 67(8/80). By U.S.D.A. Soil Conservation Service, and American Institute of Steel Construction "Manual of Steel Construction", 9th Edition.
- Reinforced Concrete (Strength Design)
 $f'_c = 4000 \text{ psi @ 28 days; } n=8$
 $f_y = 60,000 \text{ psi;}$
 Reinforcing Steel: ASTM A-615 Grade 60
 Structural Steel: ASTM A-36, A-53, A-500 & A-501.
 Allowable soil bearing pressure = 2000 lb / sq. ft.
- Payment for Structural Concrete in CBC, Retaining walls and Channel Lining to be made under Bid Item No. 509050- Structural Concrete-Class A. Cost of Reinforcing Steel to be incidental to Price bid for Structural Concrete.

AS BUILT INFORMATION	
CONTRACTOR	DATE
STAKE BY	DATE
ACCEPTANCE BY	DATE
FIELD	DATE
DESIGNATION BY	DATE
DRAWINGS	DATE
CORRECTED BY	DATE
RECORDED BY	DATE

BENCH MARKS	
NO.	DATE

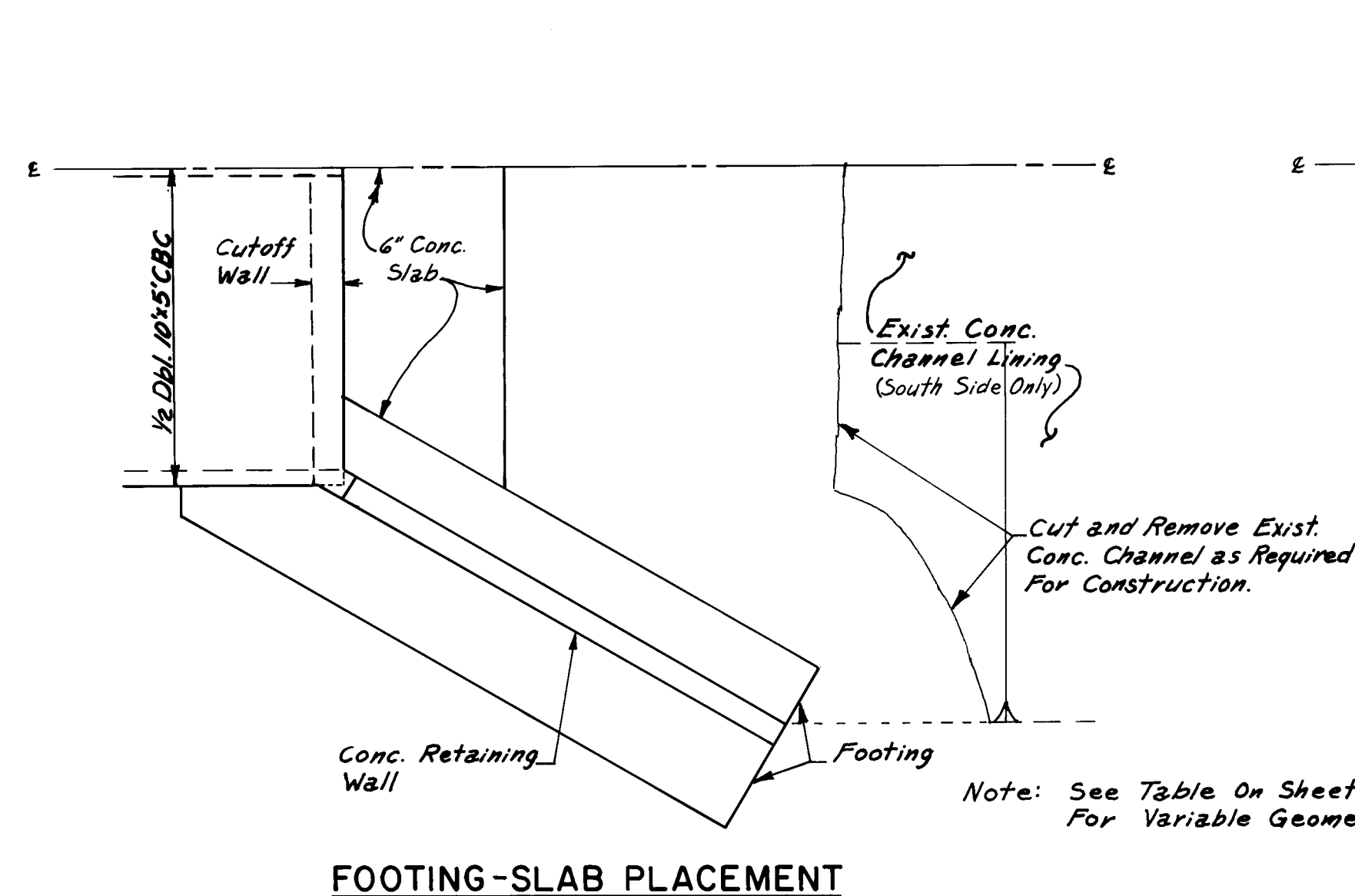
SURVEY INFORMATION	
FIELD NOTES	DATE
BY	
NO.	

ENGINEER'S SEAL	
NO.	DATE
REMARKS	DESIGN
DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE

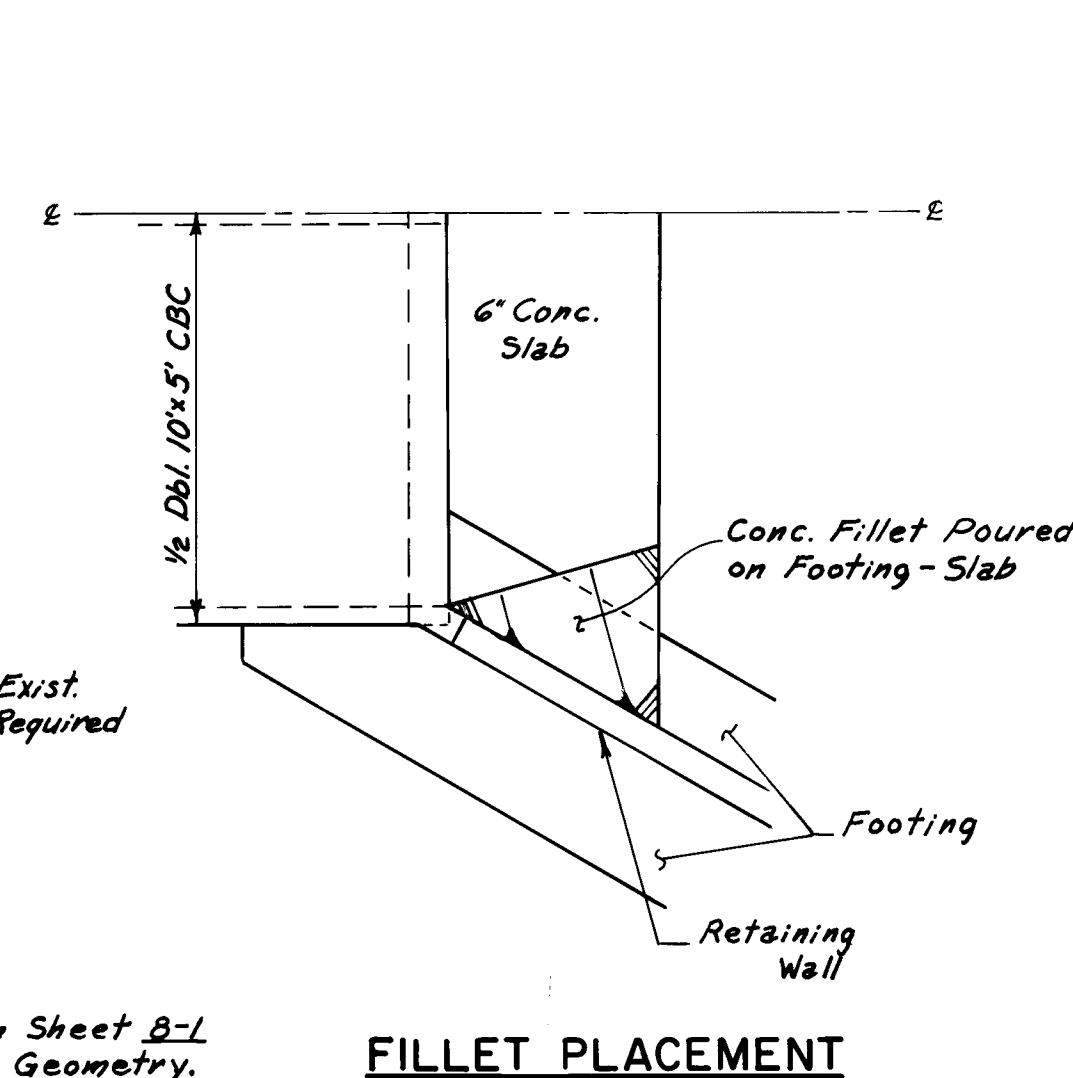
26 3203.916293

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

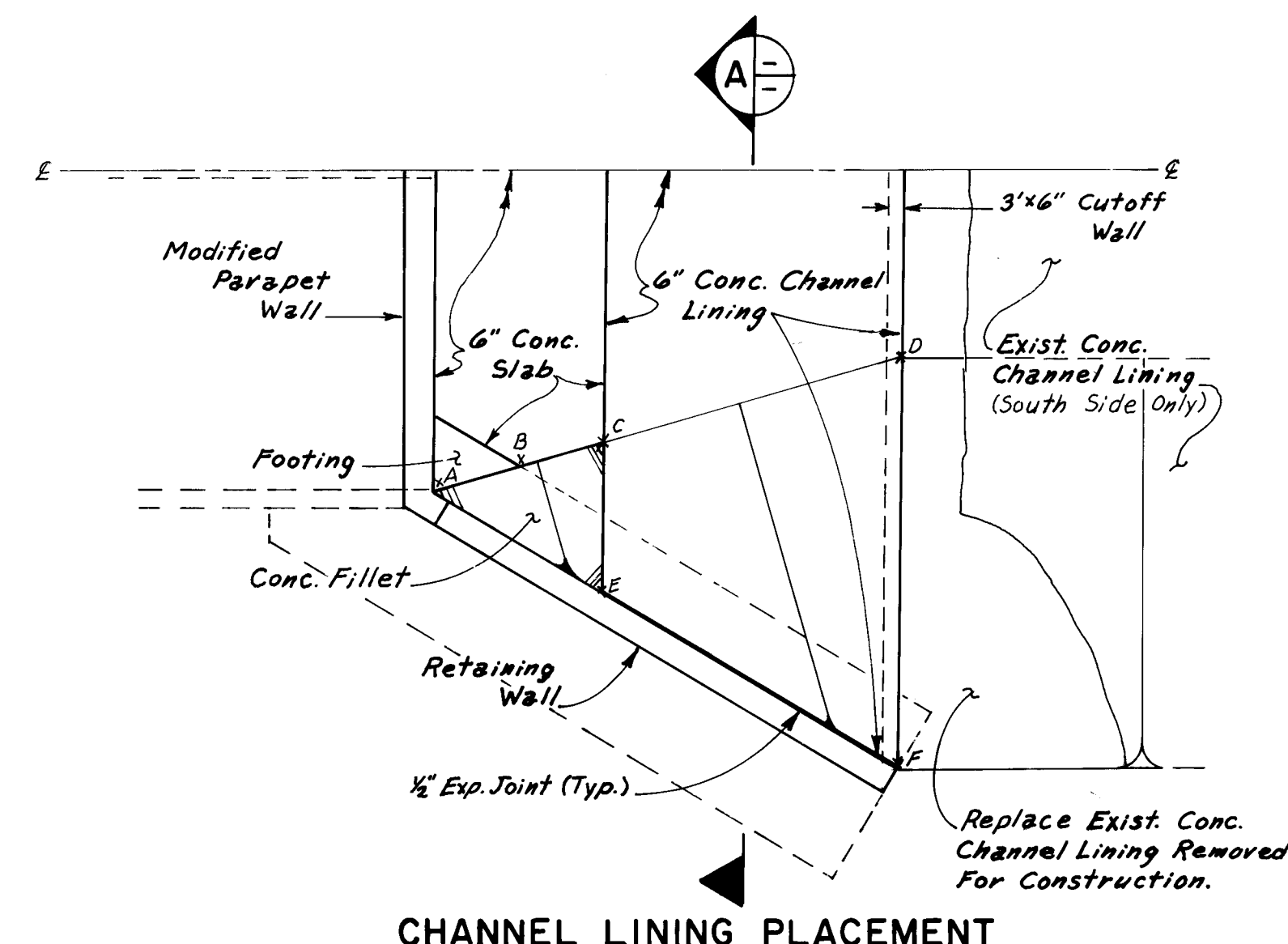
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			
TITLE: RETAINING WALL DETAILS SECOND STREET / GRIEGOS ROAD			
APPROVALS	ENGINEER	DATE	APPROVALS
JRC CHAIRMAN	8-21-91	WATER	8-21-91
TRANSPORTATION	8-15-91	WASTE WATER	
HYDROLOGY	8-16-91		
PROJECT	M-4035(4)	MAP	F-14
NO.	C.O.A. PROJ. 3203.91	NO.	G-14
		SHEET	8-3 OF



FOOTING-SLAB PLACEMENT



FILLET PLACEMENT



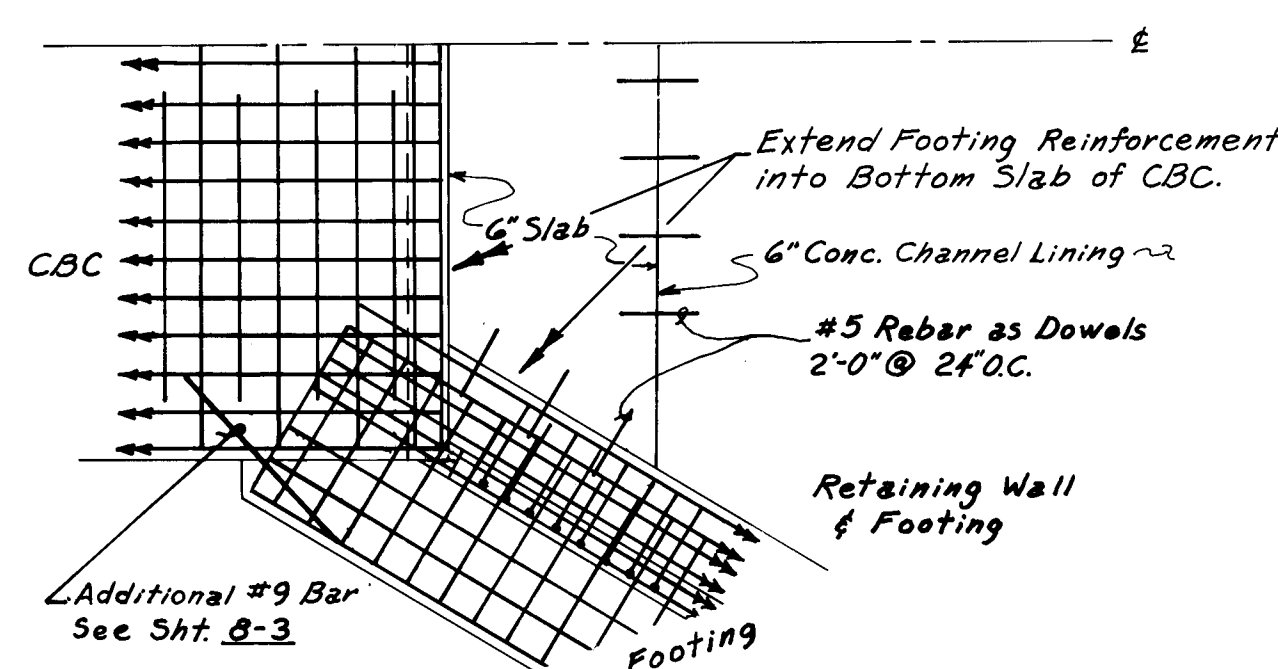
CHANNEL LINING PLACEMENT

<i>SPOT ELEVATIONS</i>		
<i>SPOT</i>	<i>UPSTREAM</i>	<i>DOWNSTREAM</i>
<i>A</i>	<i>62.55'</i>	<i>62.24'</i>
<i>B</i>	<i>62.56'</i>	<i>62.23'</i>
<i>C</i>	<i>62.56'</i>	<i>62.21'</i>
<i>D</i>	<i>62.58'</i>	<i>62.17'</i>
<i>E</i>	<i>* 65.65'</i>	<i>* 65.27'</i>
<i>F</i>	<i>71.00</i>	<i>70.50'</i>

* Note: Elevation at Intersection of Extended Sloping Surface With Retaining Wall.

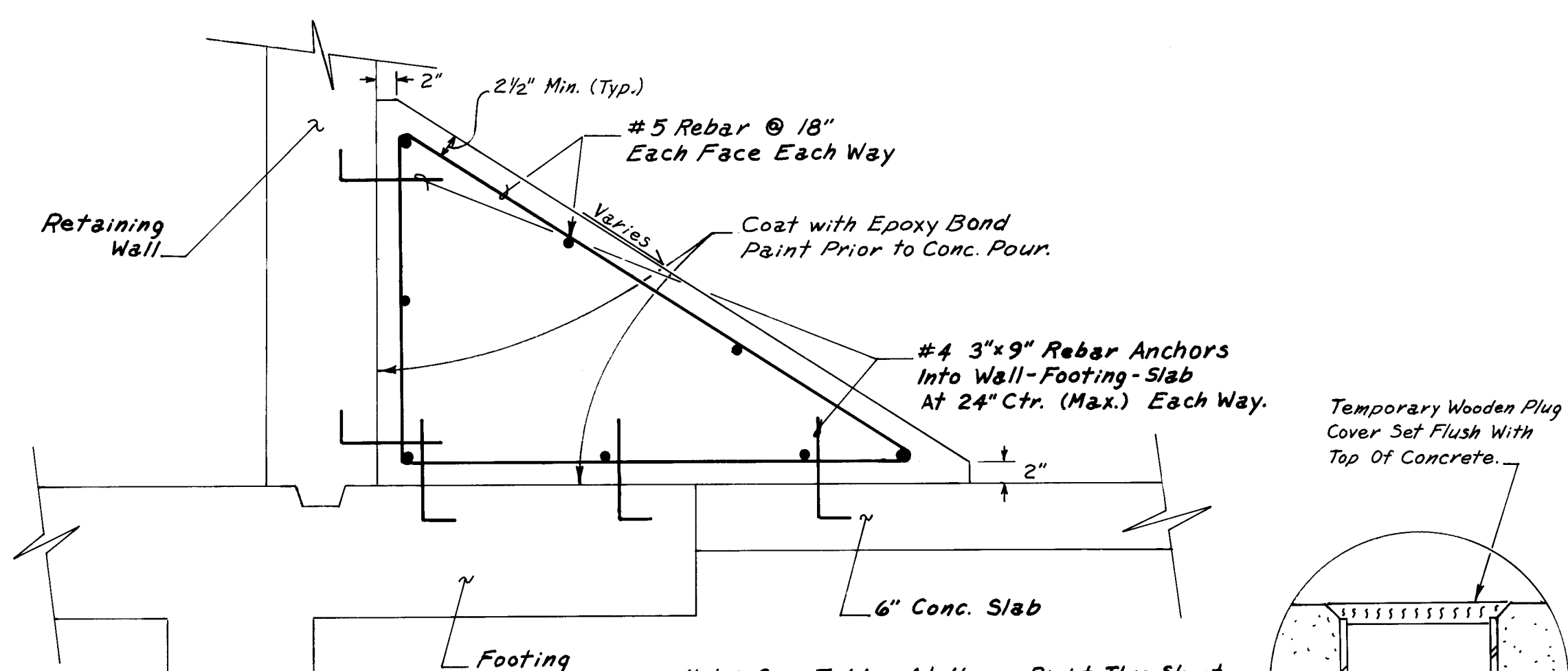
SEQUENTIAL FOOTING-SLAB-FILLET-LINING HALF-PLANS

SCALE: 1" = 5'-0" Note: Typ. Four Places - Only Downstream-West Side Shown.
Storm Drain Pipe Not Shown For Clarity.



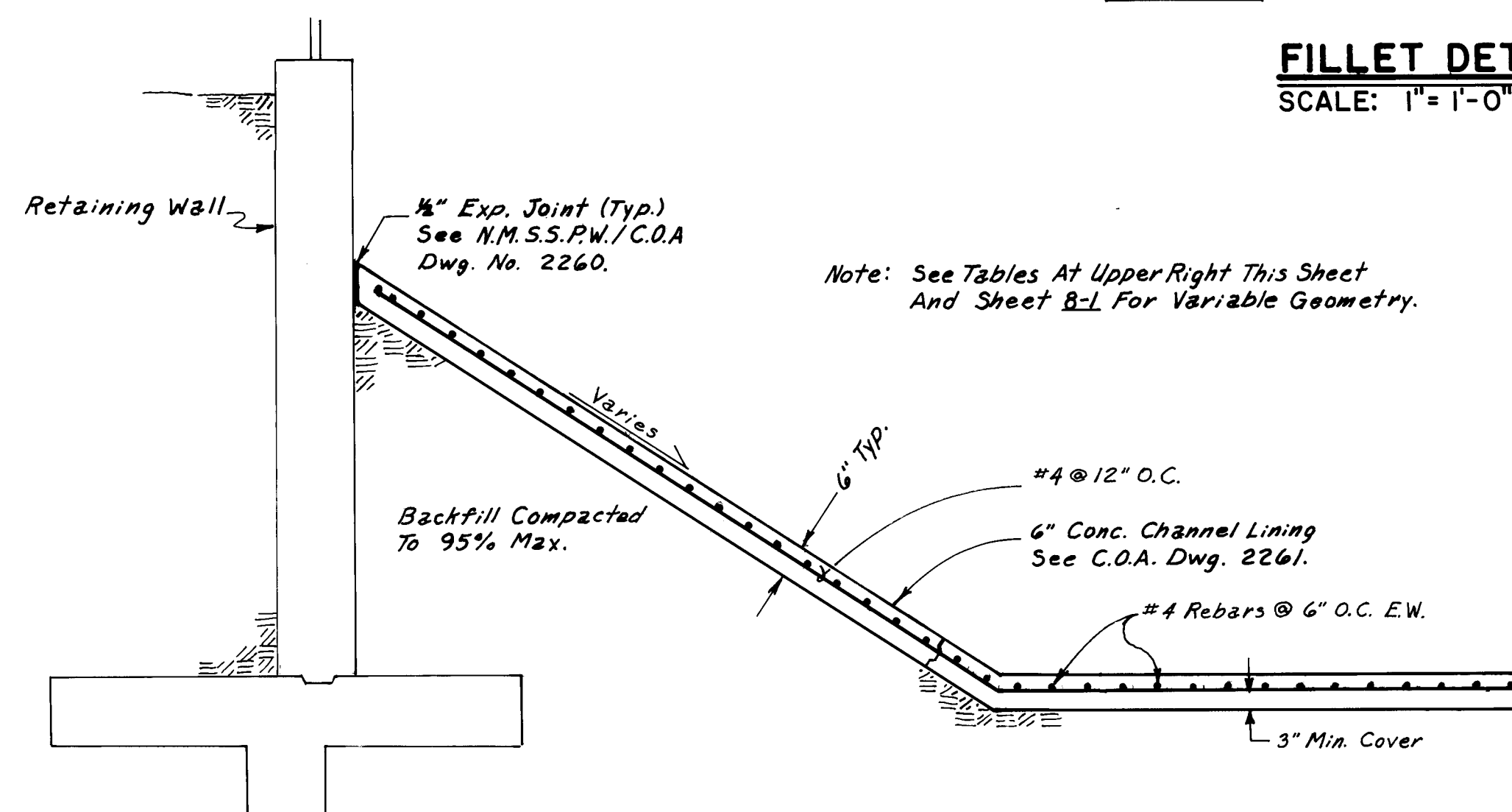
FOOTING / CBC JUNCTION PLAN

SCALE: 1" = 5'-0"



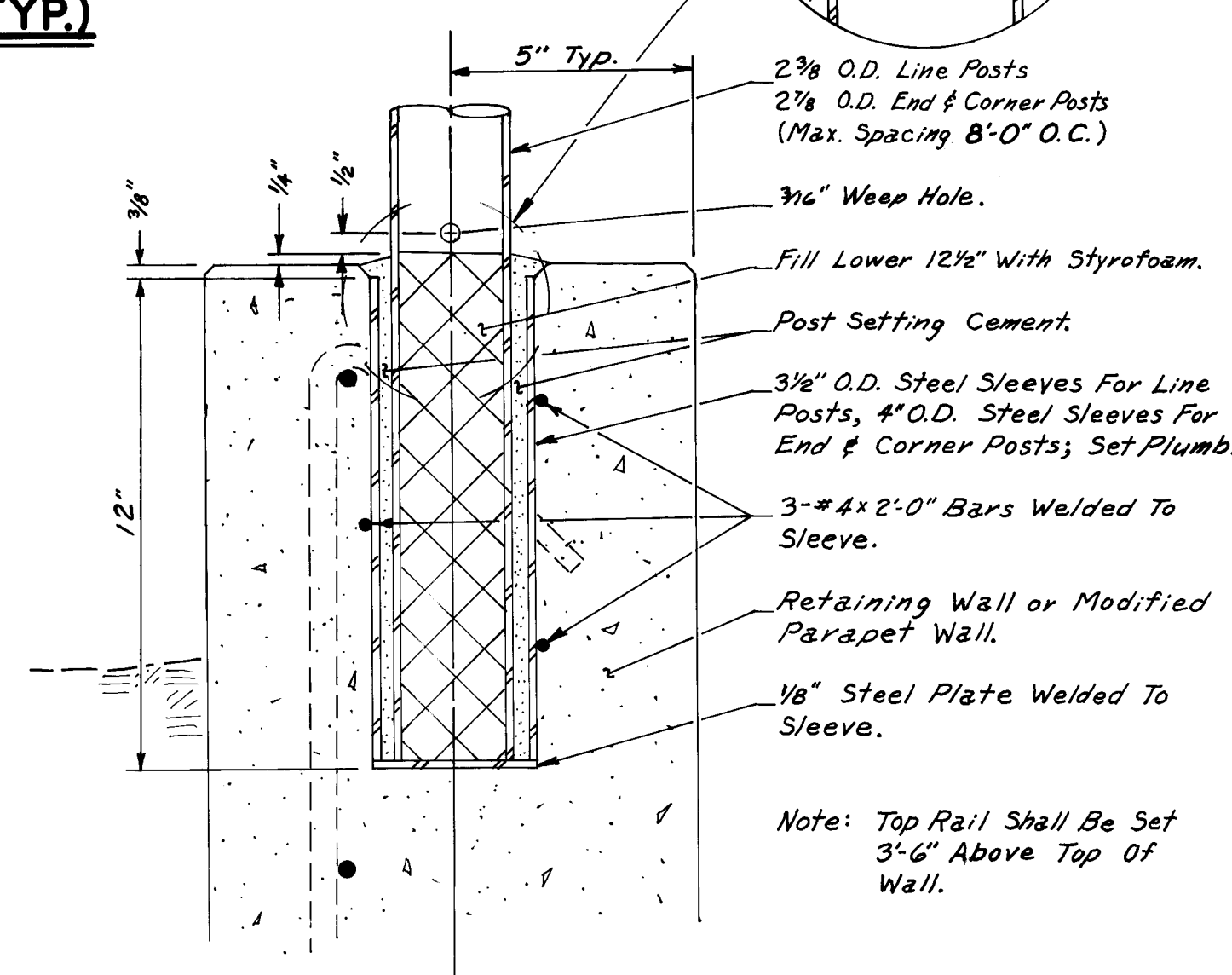
FILLET DETAIL (TYP.)

SCALE: 1" = 1'-0"

SECTION

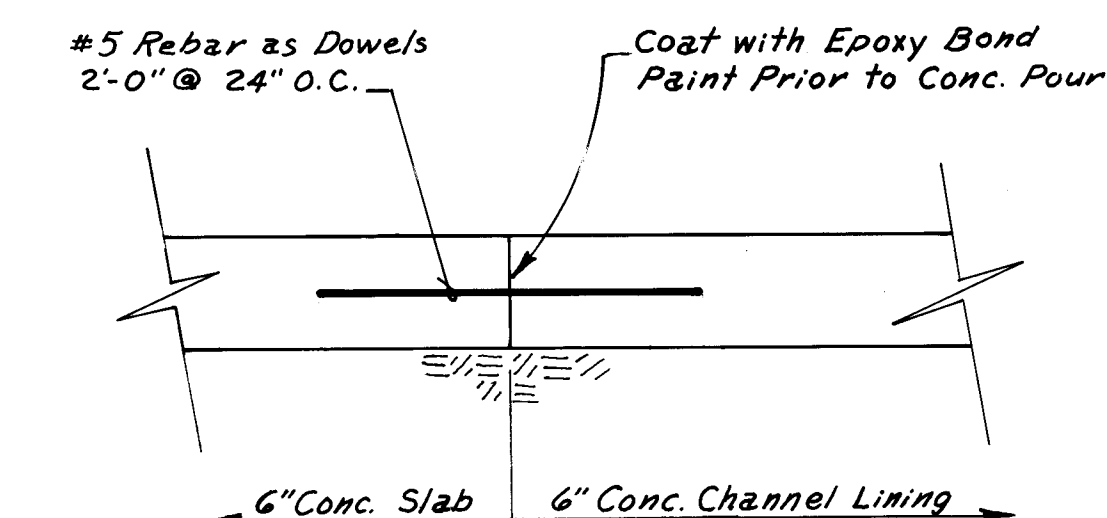
A
- -

SCALE: 1"=2'-0"



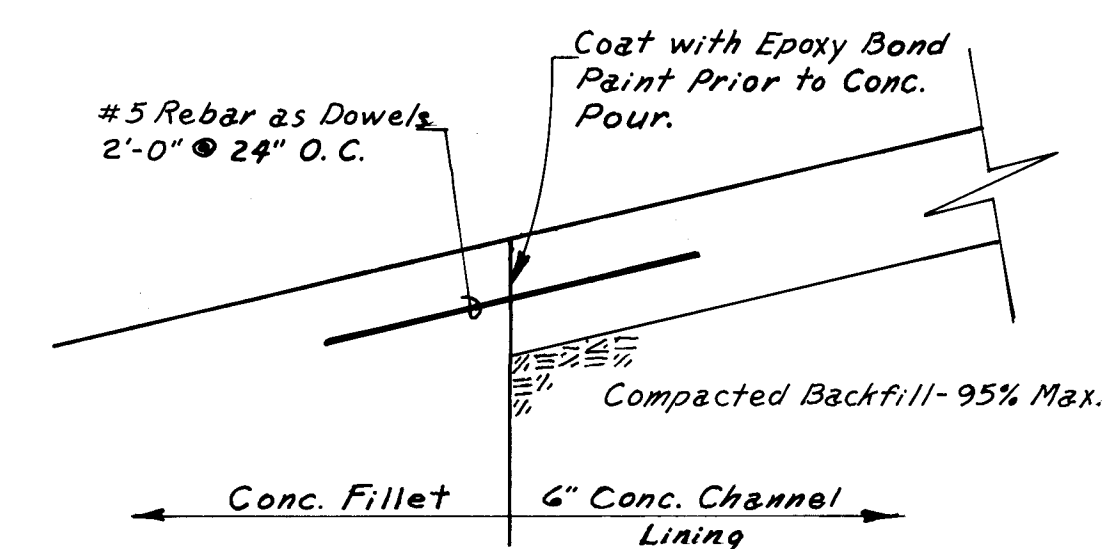
POST SETTING DETAIL

SCALE: 1" = 0'-4"



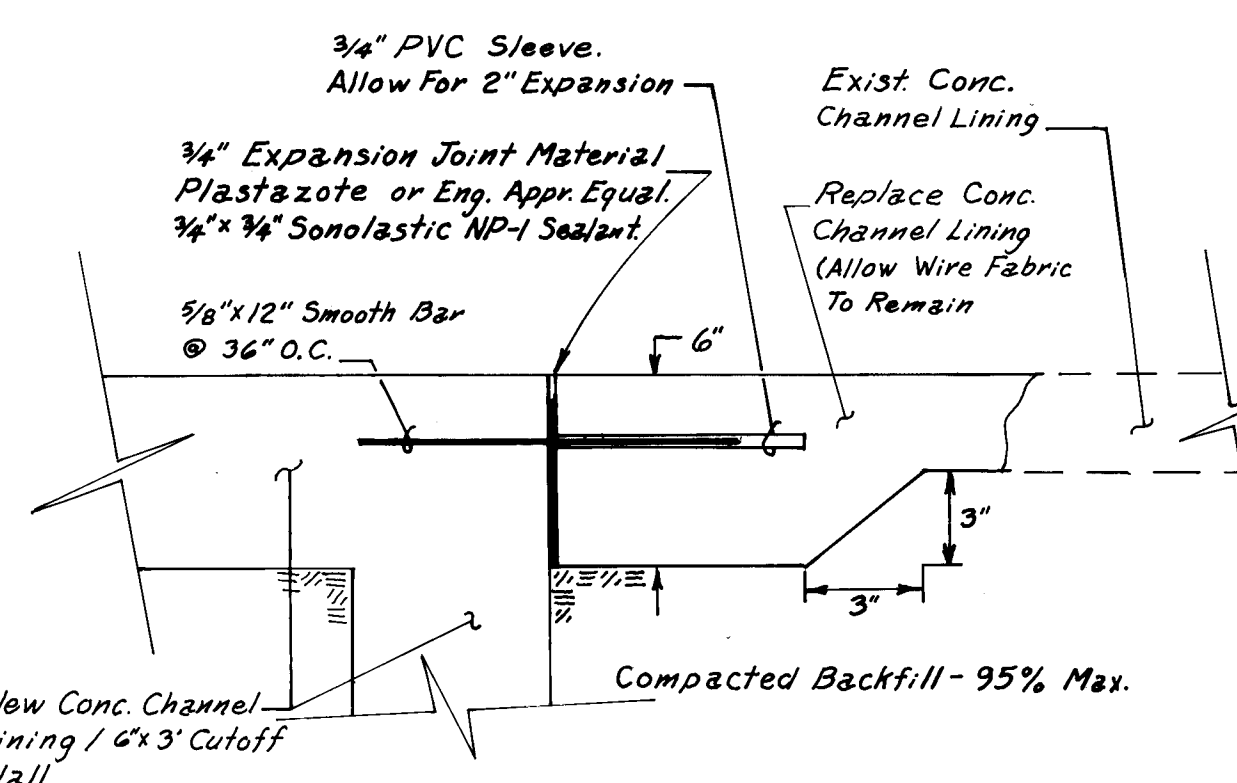
6" CONC. SLAB / CHANNEL LINING TIE DETAIL

SCALE: 1" = 1'-0"



FILLET / CHANNEL LINING TIE DETAIL

SCALE: $1'' = 1' - 0''$



NEW/ EXISTING LINING EXPANSION JOINT DETAIL

SCALE: 1" = 0'-6"

F.N.W.A. Region No.	STATE		SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	M-4035(4)	8-3A	

AS BUILT INFORMATION		MICRO-FILM INFORMATION	
CONTRACTOR		RECORDED BY	
WORK	DATE	NO.	
INSPECTED BY	DATE		
FIELD	DATE		
INSPECTION BY	DATE		
DRAWINGS	DATE		
CORRECTED BY	DATE		

[illegible][illegible][illegible]

26 3203.916393

11/20/92

RECORD COPY
SCANLON & ASSOCIATES, INC

**CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP**

TITLE: RETAINING WALL DETAILS
 SECOND STREET / GRIEGOS ROAD

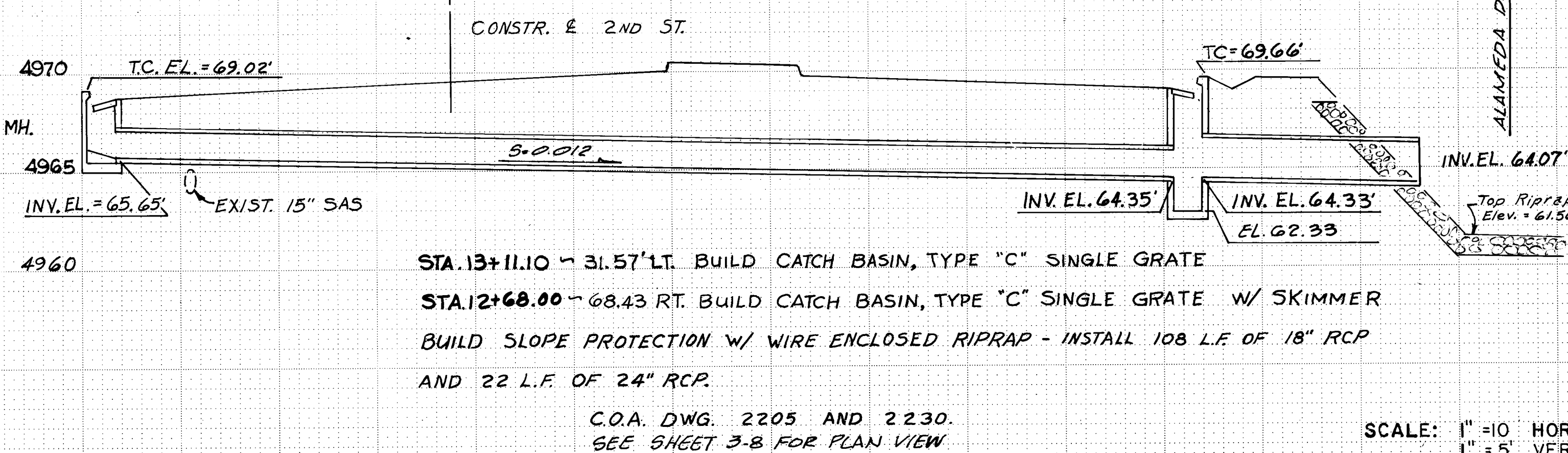
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		
TRANSPORTATION			WASTE WATER		
HYDROLOGY					

PROJECT M-4035(4)
NO. C.O.A. PROJ. 3203.91

91	MAP	F-14
	NO.	G-14

SHEET	OF
8-3A	

ORIGINAL					
SURVEY	SURVEYED		BY		DATE
	PLOTTED				
NOTE BOOK	TEMPLATE				
	AREAS				
NO	AREAS CHECKED				



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: STRUCTURE SECTION & DETAILS SECOND STREET / GRIEGOS ROAD					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Nick H...</i>	8-22-91	WATER	<i>McLean</i>	8-22-91
TRANSPORTATION	<i>R. De...</i>	8-15-91	WASTE WATER	"	"
HYDROLOGY	<i>B. B. Lloyd</i>	8-16-91			
PROJECT M-4035 (3) NO. COA PROJ. NO. 3203.91			MAP NO.	F-14 G-14	SHEET 8-4 OF

1. See sheet 2-2 for slope protection requirements at storm Drain Inlets to Alameda Drain...
2. The words "Catch Basin," "Inlet," Drop Inlet and "storm Inlet" are used interchangeably in this set of plans and have the same meaning.
3. No direct payment will be made for Connection of new storm Drain to exist manhole. Cost to be included in price bid for R.C.P.

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

TITLE: STRUCTURE SECTION & DETAILS
SECOND STREET / GRIEGOS ROAD

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>N. J. Hines</i>	8-21-91	WATER	<i>McLellan</i>	8-21-91
TRANSPORTATION	<i>R. J. Bouch</i>	8-15-91	WASTE WATER	"	"
HYDROLOGY	<i>L. L. Weyand</i>	8-16-91			

SCALE: 1" = 10' HORZ.
1" = 5' VERT.

BRUNING 44-132 5486

PLATE 3 CROSS SECTION - DOTTED
CHARLES BRUNING COMPANY
MADE IN U.S.A.

ORIGINAL		BY	DATE
SURVEY			
PLOTTED			
TEMPLATE			
AREAS			
AREAS CHECKED			
NO			

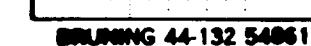
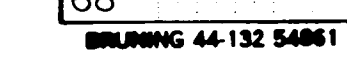


PLATE 3 CROSS SECTION - DOTTED
CHARLES BRUSHING COMPANY
MADE IN U.S.A.

PROJECT NO.	M-4035(4) C.O.A. No. 3203.91	MAP NO.	F-14 G-14	SHEET 9-1 OF
-------------	---------------------------------	---------	--------------	--------------

ORIGINAL SURVEY NOTE BOOK	SURVEYED _____	BY _____	DATE _____
	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		



TITLE:		CROSS SECTIONS			
		STA. 9+00 (N) - STA. 11+00 (N)			
		SECOND STREET / GRIEGOS ROAD			
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>[Signature]</i>	8-21-91	WATER	<i>[Signature]</i>	
TRANSPORTATION	<i>[Signature]</i>	8-15-91	WASTE WATER		
HYDROLOGY	<i>[Signature]</i>	8-16-91			
PROJECT NO.	M-4035(4) C.O.A. NO. 3203.91	MAP NO.	F-14 G-14	SHEET	9-2 OF

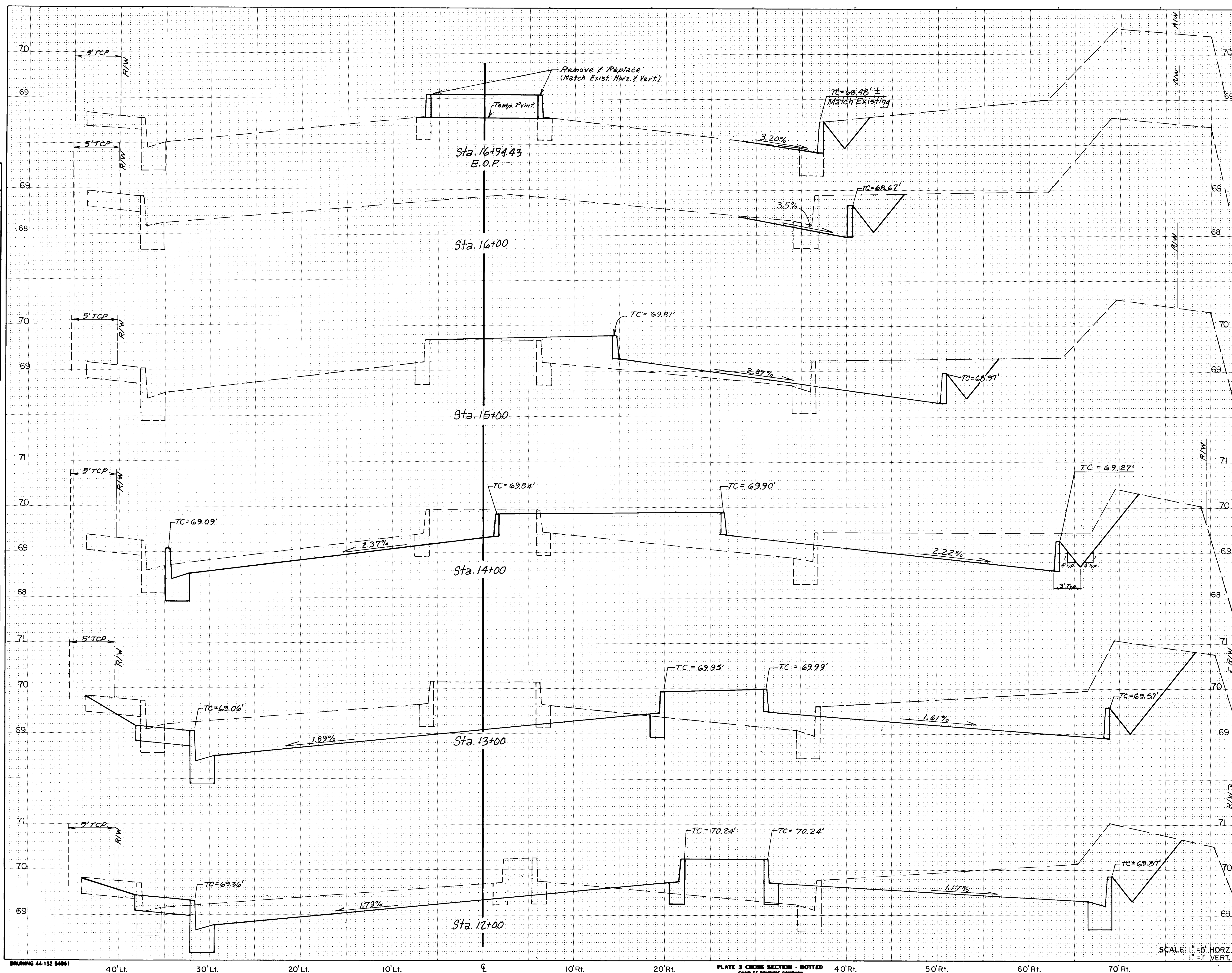
10 11	TITLE:	CROSS SECTIONS
		STA. 9 + 00 (N) - STA. 11 + 00 (N)
		SECOND STREET / GRIEGOS ROAD

	APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
9.	DRC CHAIRMAN	<i>Ray H. Hester</i>	8-21-91	WATER	<i>h/a</i>	
	TRANSPORTATION	<i>R. B. Bunk</i>	8-15-91	WASTE WATER		
ORZ.	HYDROLOGY	<i>S. L. Goyard</i>	8-16-91			

PROJECT NO.	M-4035(4) C.O.A. No. 3203.91	MAP NO.	F-14 G-14	SHEET	9-2 OF
-------------	---------------------------------	---------	--------------	-------	--------

ORIGINAL	SURVEYED _____ BY _____ DATE _____
SURVEY	PLOTTED _____
NOTE BOOK	TEMPLATE _____
	AREAS _____
	AREAS CHECKED _____
NO. _____	

SCANLON AND ASSOCIATES
ENGINEERS PLANNERS



BRUNING 44-132 54061

PLATE 3 CROSS SECTION - DOTTED
CHARLES BOWLING COMPANY
MADE IN U.S.A.

AS BUILT INFORMATION	
CONTRACTOR	
WORK	
STARTED BY	DATE
FINISHED BY	
ACCEPTANCE BY	DATE
FIELD	
VERIFICATION BY	DATE
ASSIGNED BY	
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	

[illegible]

A circular stamp from the National Engineering Laboratory, Kharkov. The text around the perimeter reads "NATIONAL ENGINEERING LABORATORY" at the top and "KHARKOV, U.S.S.R." at the bottom. In the center, there is a date "19/11/86" and a handwritten signature.

[illegible]

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

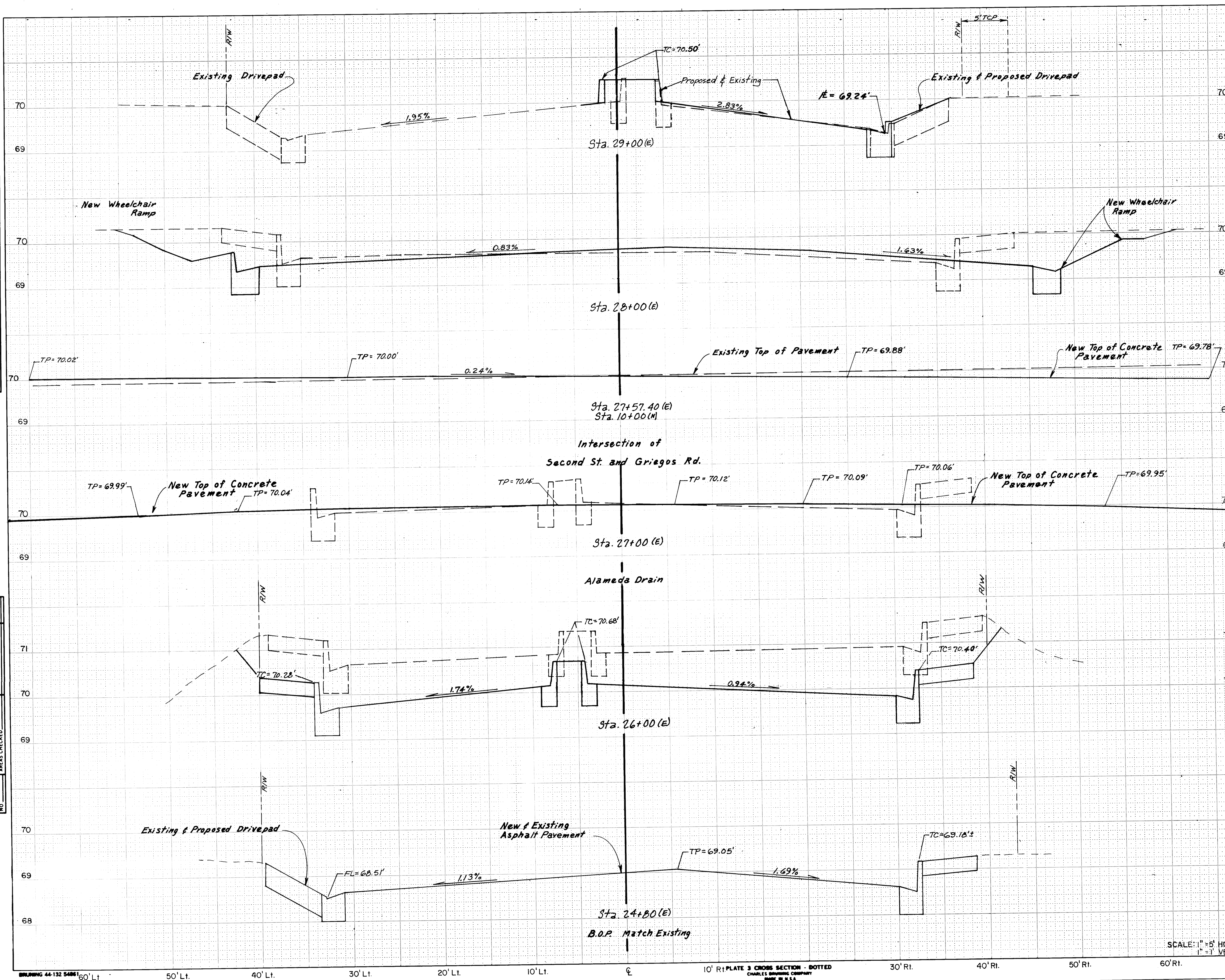
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: CROSS SECTIONS
STA. 12 + 00 (N) - STA. 16 + 94.43 (N)
SECOND STREET / GRIEGOS ROAD

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>[Signature]</i>	8-21-91	WATER	<i>N/A</i>	
TRANSPORTATION	<i>[Signature]</i>	8-15-91	WASTE WATER		
HYDROLOGY	<i>b.k. Goyal</i>	8-16-91			

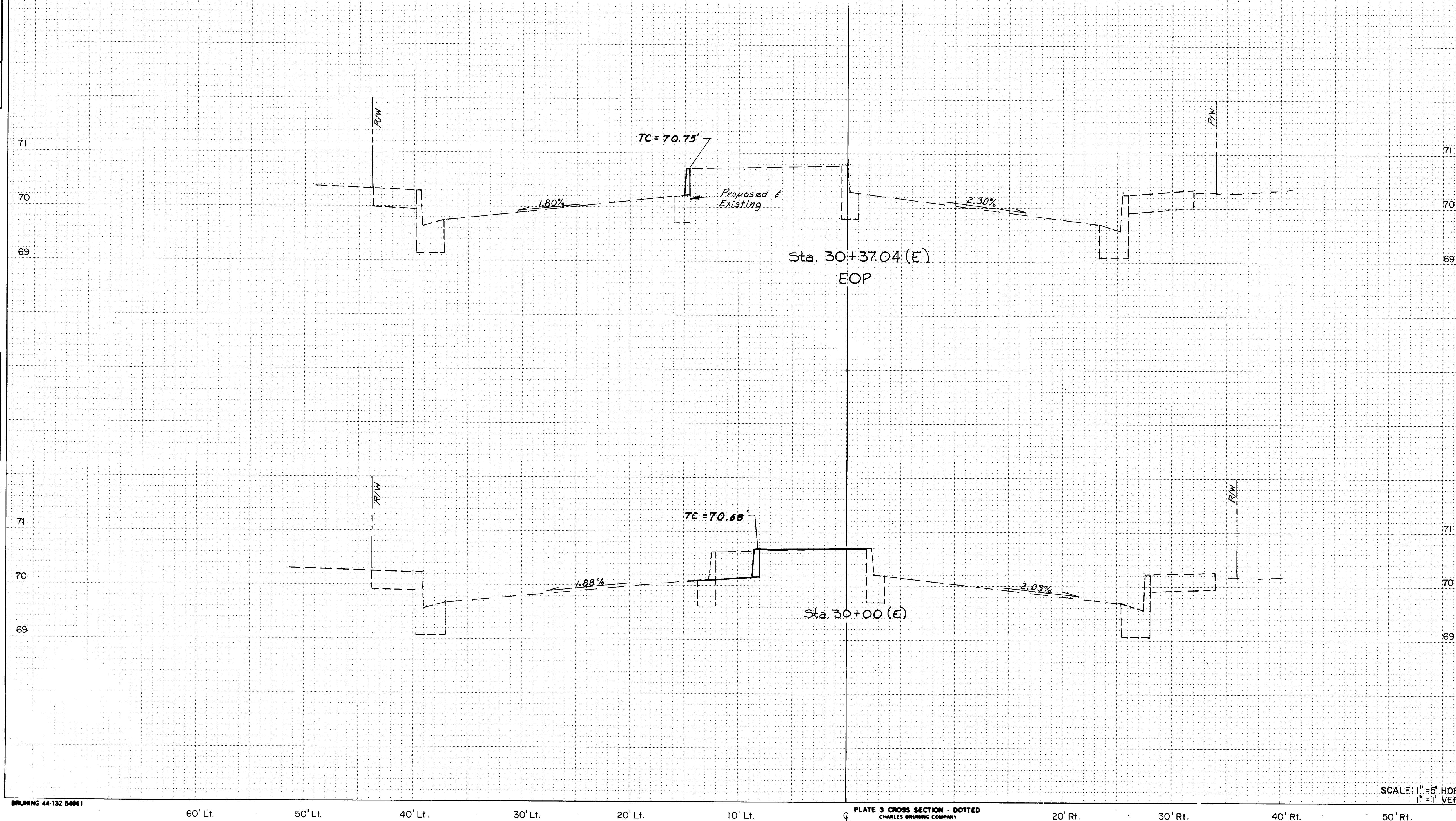
PROJECT	M-4035(4)	MAP	F-14	SHEET	9-3	OF
NO.	C.O.A. No. 3203.91	NO.	G-14			

ORIGINAL	SURVEYED _____	BY		DATE
SURVEY	PLOTTED _____			
NOTE BOOK	TEMPLATE _____			
	AREAS _____			
	CHECKED _____			



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: CROSS SECTIONS STA. 24+80 (E) - STA. 29+00 (E) SECOND STREET / GRIEGOS ROAD					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>[Signature]</i>	8-22-91	WATER	<i>[Signature]</i>	
TRANSPORTATION	<i>[Signature]</i>	8-15-91	WASTE WATER		
HYDROLOGY	<i>[Signature]</i>	8-16-91			
PROJECT NO.	M-4035 (4) C.O.A. No. 3203.91		MAP NO.	F-14 G-14	SHEET 9-4 OF

ORIGINAL			BY _____	DATE _____
SURVEY				
PLOTTED				
TEMPLATE				
AREAS				
AREAS CHECKED				
NO.				



SCALE: 1" = 5' HORIZ
1" = 1' VERT

[illegible]

RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE:	CROSS SECTIONS STA. 30 + 00 (E) - STA. 30 + 37.04 (E) SECOND STREET / GRIEGOS ROAD
--------	--

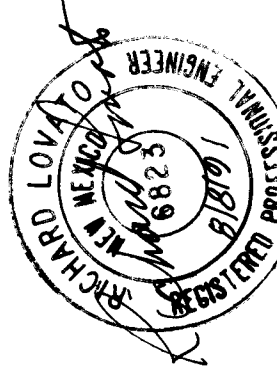
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>[Signature]</i>	8-21-91	WATER	<i>[Signature]</i>	
TRANSPORTATION	<i>[Signature]</i>	9-15-91	WASTE WATER	<i>[Signature]</i>	
HYDROLOGY	<i>[Signature]</i>	8-16-91			

PROJECT NO.	M-4035(4) C.Q.A. No. 3203.91	MAP NO.	F-14 G-14	SHEET 9-5	OF
----------------	---------------------------------	------------	--------------	--------------	----

F.H.W.A. Region No.	STATE		SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	M-4035(4)	10-1	

AS BUILT INFORMATION	
CONTRACTOR	DATE
WORK STANDARD	DATE
INSPECTED BY	DATE
FIELD PERFORMANCE	DATE
CONNECTION BY	DATE
RECORDED BY	DATE
NO.	

BENCH MARKS	
DATE	
FIELD NOTES	
BY	
NO.	

ENGINEER'S SEAL	
	

REVISIONS	
NO.	DATE
REMARKS	
DESIGN	
DATE 8/15/91	
DATE 8/16/91	
DESIGNED BY R.L.	
DRAWN BY GUY STD	
CHECKED BY RL	

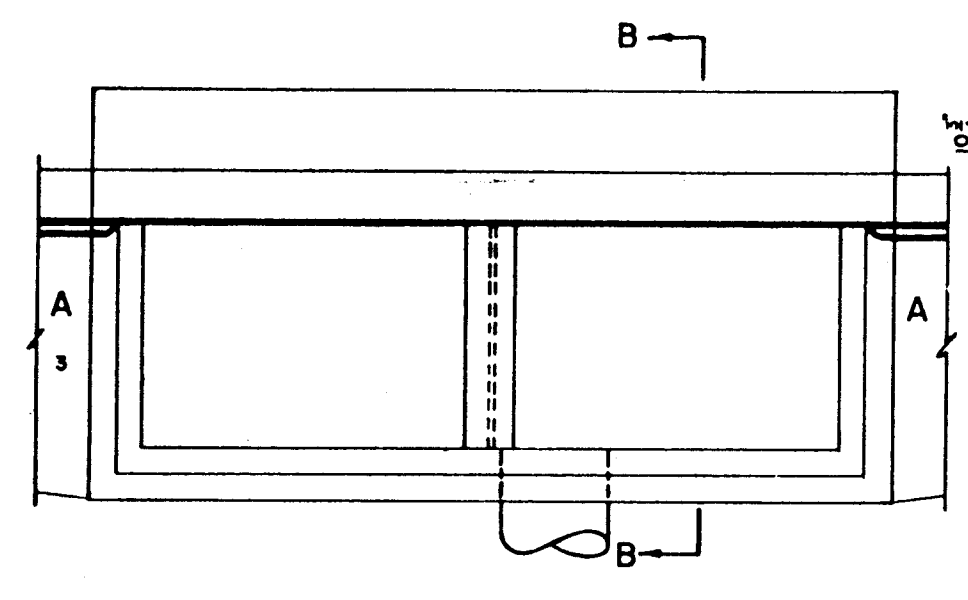
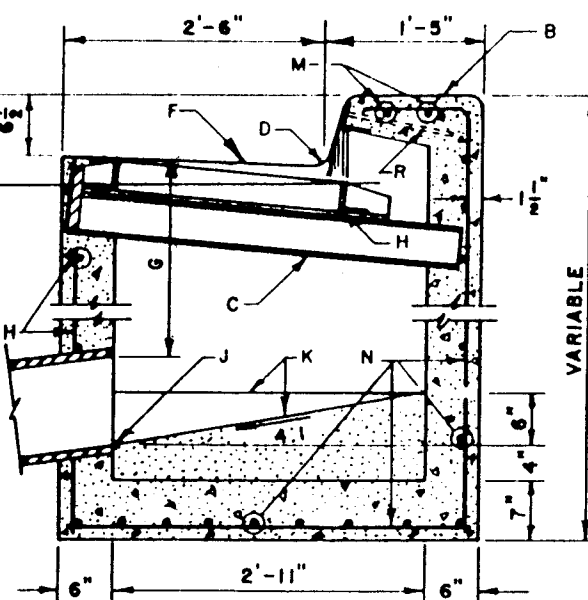
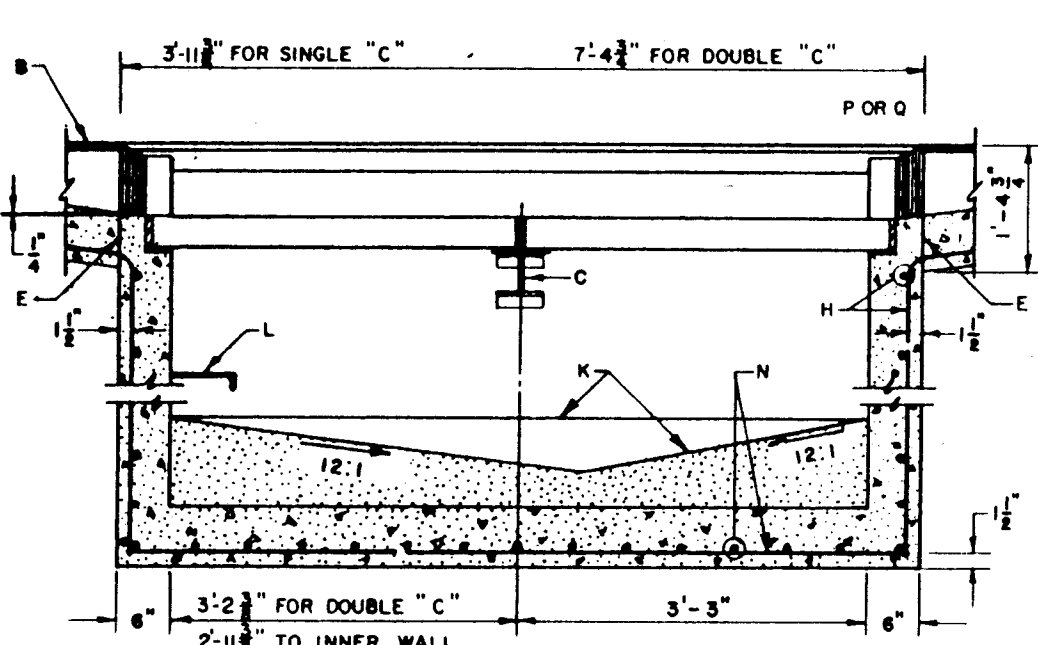
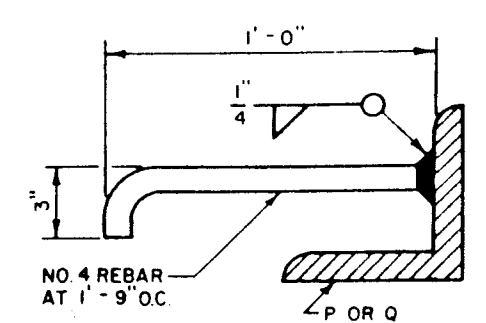
26 3203.917093

11/20/92

RECORD COPY

SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: COA STANDARD DETAILS FOR DRAINAGE SECOND STREET / GRIEGOS ROAD					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>[Signature]</i>	8-21-91	WATER	N/A	
TRANSPORTATION	<i>[Signature]</i>	8-15-91	WASTE WATER		
HYDROLOGY	<i>[Signature]</i>	8-16-91			
PROJECT NO.	M-4035(4) C.O.A. No. 3203.91	MAP NO.	F-14 G-14	SHEET 10-1	OF

GENERAL NOTES:

- FOR SINGLE GRATE TYPE STORM INLET DELETE CENTER SUPPORT AND MOVE ONE END WALL TO FORM NEW SINGLE GRATE INLET.
- FOR STORM INLET GUTTER TRANSITION, SEE DWG 2201.
- OUTLET PIPE SIZE, PER DESIGN REQUIREMENT.
- FOR FRAME & GRATING, SEE DWG 2216, 2220 & 2221.
- FOR ANCHOR SEE DETAIL.
- FOR CENTER SUPPORT ASSEMBLY, SEE DWG 2215.

CONSTRUCTION NOTES:

- GUTTER TRANSITION.
- TOP OF CURB.
- CENTER SUPPORT ASSEMBLY.
- FLOWLINE.
- CONSTRUCTION JOINT.
- NORMAL GUTTER LINE.
- 1'-10" MIN, UNLESS OTHERWISE DIRECTED.
- FRAME AND GRATE.
- INVERT OF OUTLET PIPE.
- CONCRETE FILL, MINIMUM SLOPES AS SHOWN.
- FOR STORM INLET DEPTHS GREATER THAN 4' INSTALL STD STEPS, SEE DWG 2229, UPSTREAM SIDE.
- EXTEND NO. 4 REBAR 18" INTO CURB ON EACH SIDE OF STORM INLET.
- NO. 4 BARS AT 6" O.C.
- 3 1/2" x 3 1/2" x 1/2" x 4' - 0" FOR SINGLE GRATE TYPE "C" STORM INLET.
- 3 1/2" x 3 1/2" x 1/2" x 7' - 6" FOR DOUBLE GRATE TYPE "C" STORM INLET.
- ANCHOR.

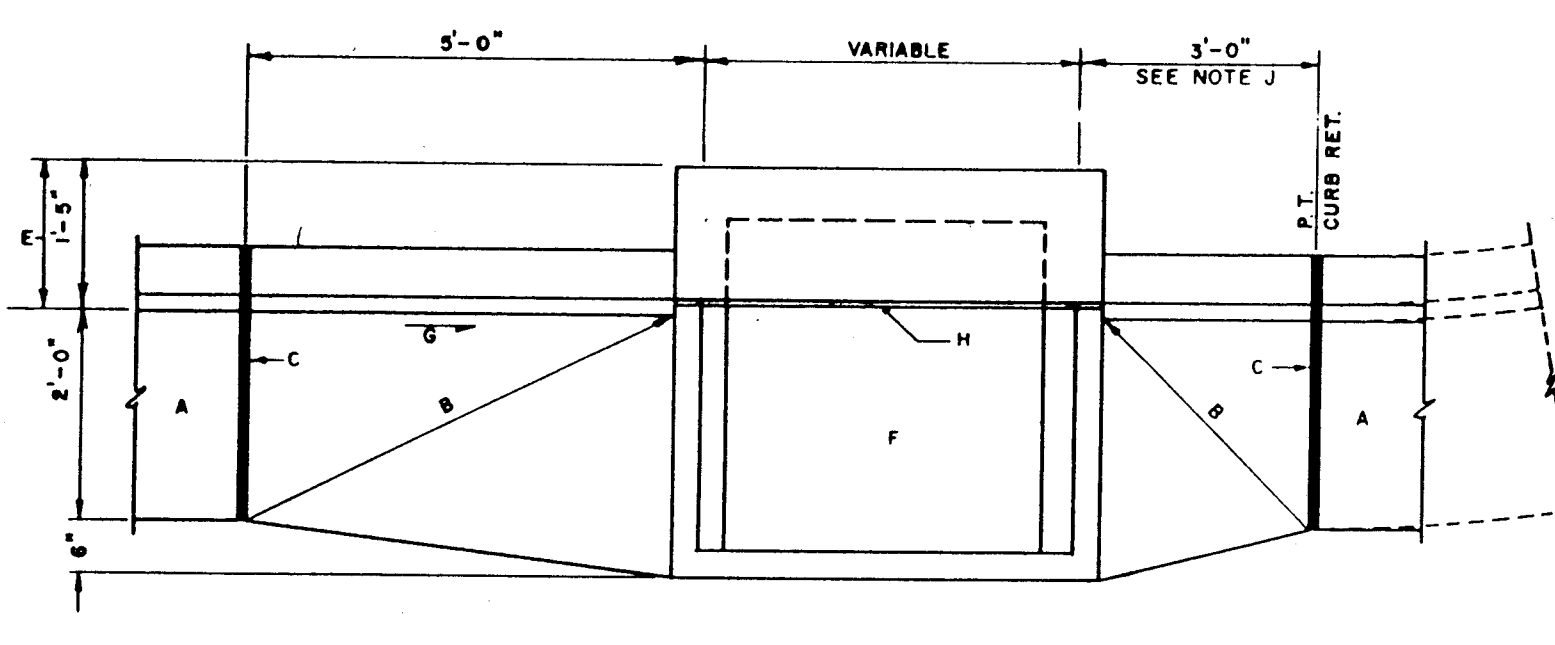
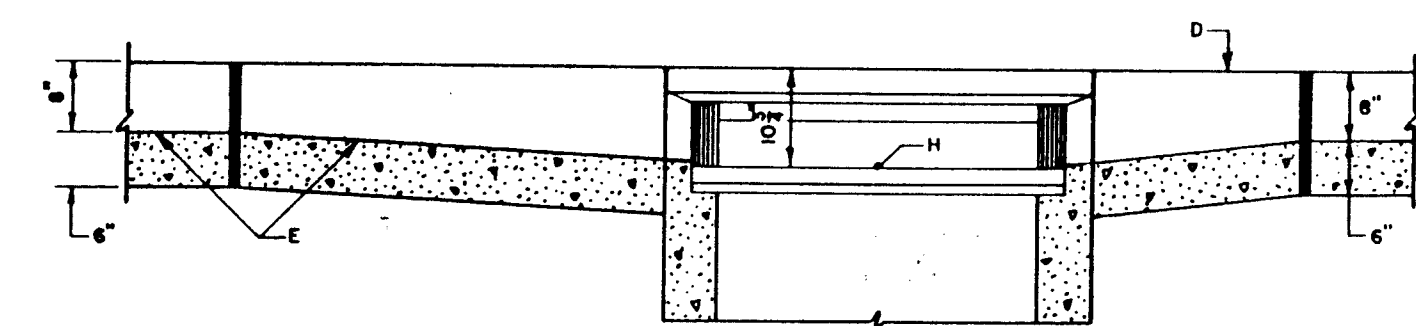
CITY OF ALBUQUERQUE

DRAINAGE

STORM INLET DOUBLE "C"

DWG. 2205

AUG. 1986

GENERAL NOTES:

- DETAILS FOR PLACING CATCH BASINS. STANDARD CURB AND GUTTER.

CONSTRUCTION NOTES:

- STANDARD CURB AND GUTTER.
- STRAIGHT GRADE.
- EXPANSION JOINT.
- TOP OF CURB.
- FLOWLINE.
- FOR FRAME & GRATE SEE DWG 2216, 2220 & 2221.
- DIRECTION OF FLOW.
- POINT OF MEASUREMENT FOR TOP OF GRATE ELEVATION.
- PROVIDE 5 FEET TRANSITION EACH SIDE OF CATCH BASIN, WHEN INSTALLING AT SAG POINT IN INSTALLATIONS OTHER THAN AT CURB RETURN.

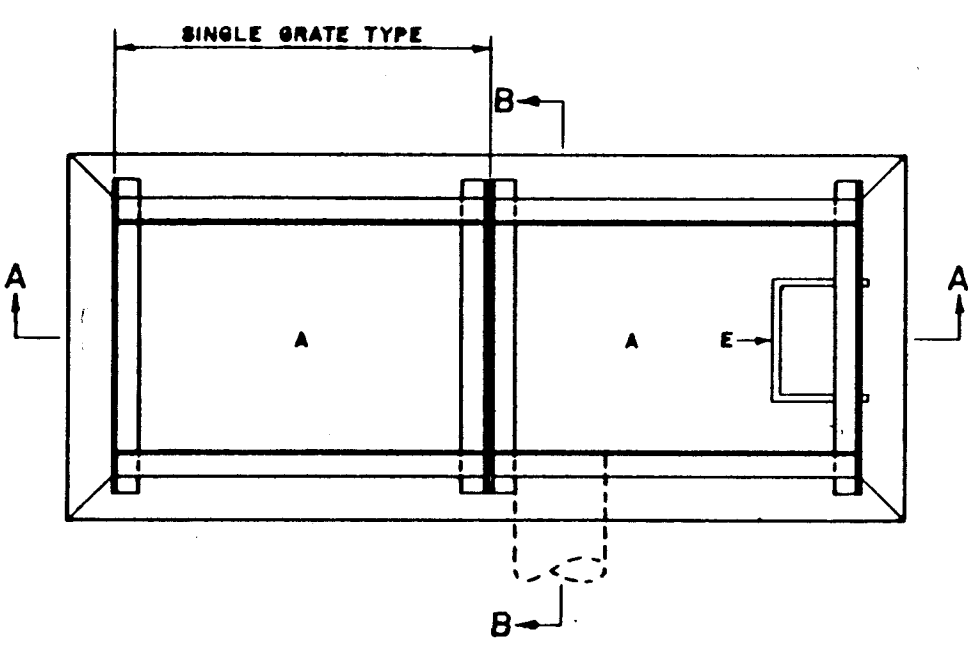
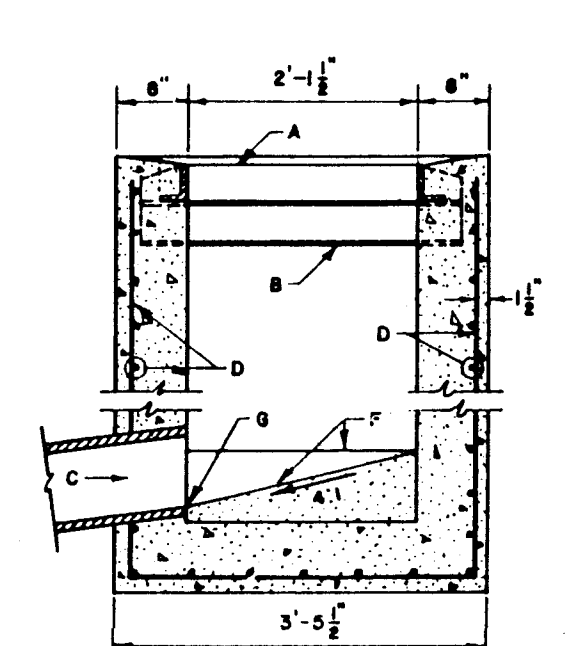
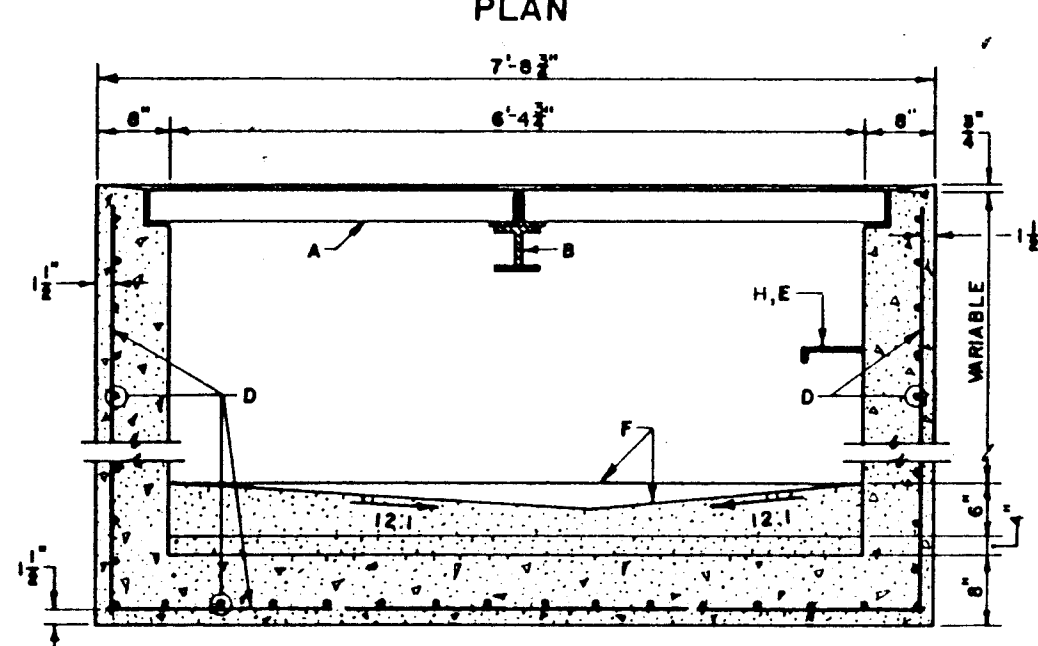
CITY OF ALBUQUERQUE

DRAINAGE

STORM INLET GUTTER TRANSITION

DWG. 2207

AUG. 1986

GENERAL NOTES:

- FOR SINGLE GRATE TYPE STORM INLET, DELETE CENTER SUPPORT AND MOVE ONE END WALL TO FORM NEW SINGLE GRATE INLET.
- STORM INLET GUTTER TRANSITION WILL BE SHOWN ON THE CONSTRUCTION PLANS.
- OUTLET PIPE SIZE, PER DESIGN REQUIREMENT.
- FOR FRAME & GRATING, SEE DWG 2216, 2220 & 2221.
- FOR CENTER SUPPORT ASSEMBLY, SEE DWG 2215.

CONSTRUCTION NOTES:

- FRAME & GRATE.
- CENTER SUPPORT ASSEMBLY.
- CUT ONE HORIZONTAL AND ONE VERTICAL BAR MAX. AT PIPE OPENING.
- NO. 4 BARS AT 6" O.C. EACH WAY.
- USE STANDARD STEPS, SEE DWG 2229.
- CONC. FILL, SEE NOTE C DWG 2201.
- INVERT PER DESIGN.
- INSTALL STEPS ON UPSTREAM FACE.

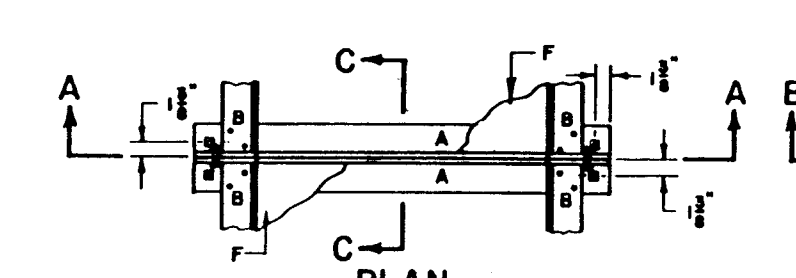
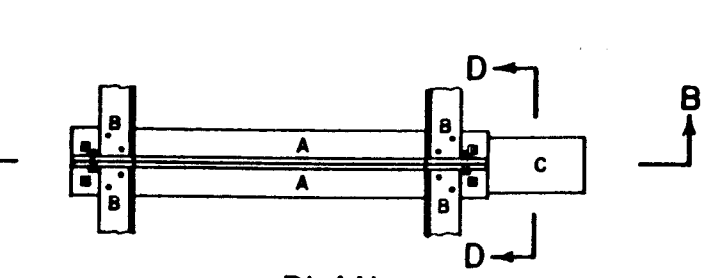
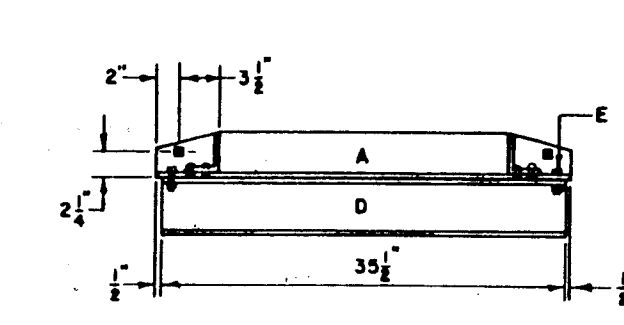
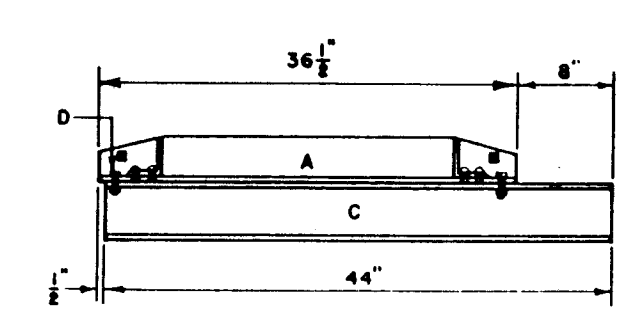
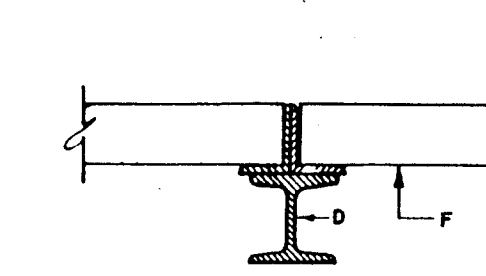
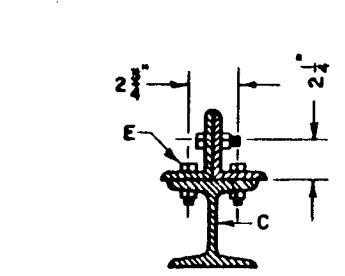
CITY OF ALBUQUERQUE

DRAINAGE

STORM INLET DOUBLE "D"

DWG. 2206

AUG. 1986

GENERAL NOTES:

- ALL BOLTS USED IN CENTER SUPPORT ASSEMBLY SHALL BE 1/2".
- FRAME MAY BE RIVETED OR WELDED.
- BOLTS (NOT RIVETS OR WELDS) SHALL BE USED TO JOIN TWO OR MORE FRAMES TOGETHER AND TO THE W/ BEAM.
- AFTER CLEANING SURFACE OF SCALE, RUST, ETC., GRATING, FRAME AND CENTER SUPPORT SHALL BE PAINTED WITH ONE SHOP COAT RED OXIDE, TWO FINISH COATS ALUMINUM PAINT (AASHTO M 69).
- FOR SINGLE TYPE CATCH BASIN, MOVE ONE END WALL TO FORM NEW SINGLE GRATE CATCH BASIN.

CONSTRUCTION NOTES:

- 4" x 3" x 1/2" x 36 1/2" L.
- 3 1/2" x 3" x 1/2" x 40 1/2" L.
- 5 x 5 W/ 18.5 FLANGE BEAM, FOR CATCH BASIN TYPE DOUBLE "C".
- 5 x 5 W/ 18.5 FLANGE BEAM, FOR CATCH BASIN TYPE DOUBLE "D".
- 1/2" BOLTS, WITH NUTS TO SECURE ANGLE TO BEAM.
- FOR FRAME & GRATE SEE DWGS. 2216, 2220, 2221.

CITY OF ALBUQUERQUE

DRAINAGE

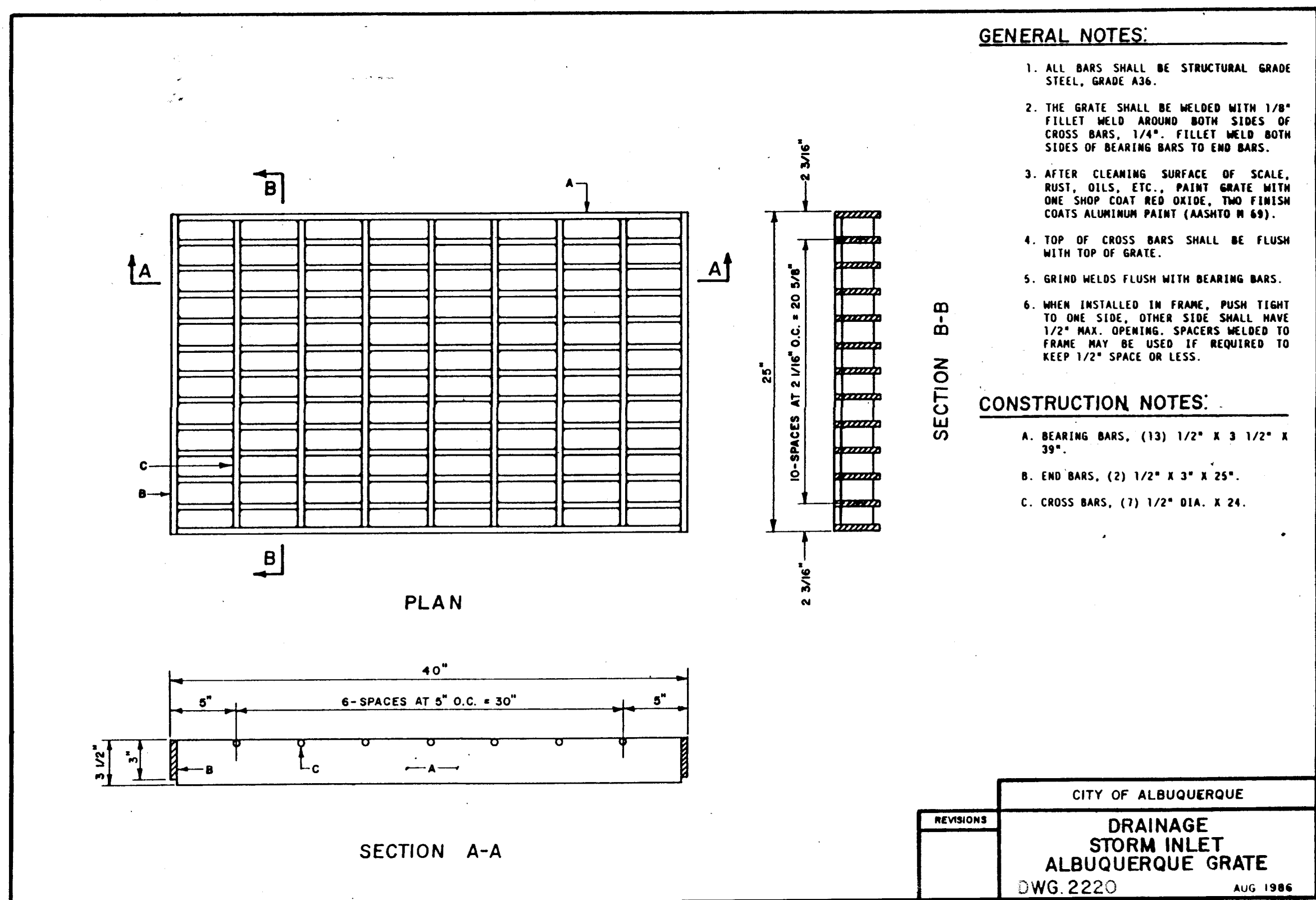
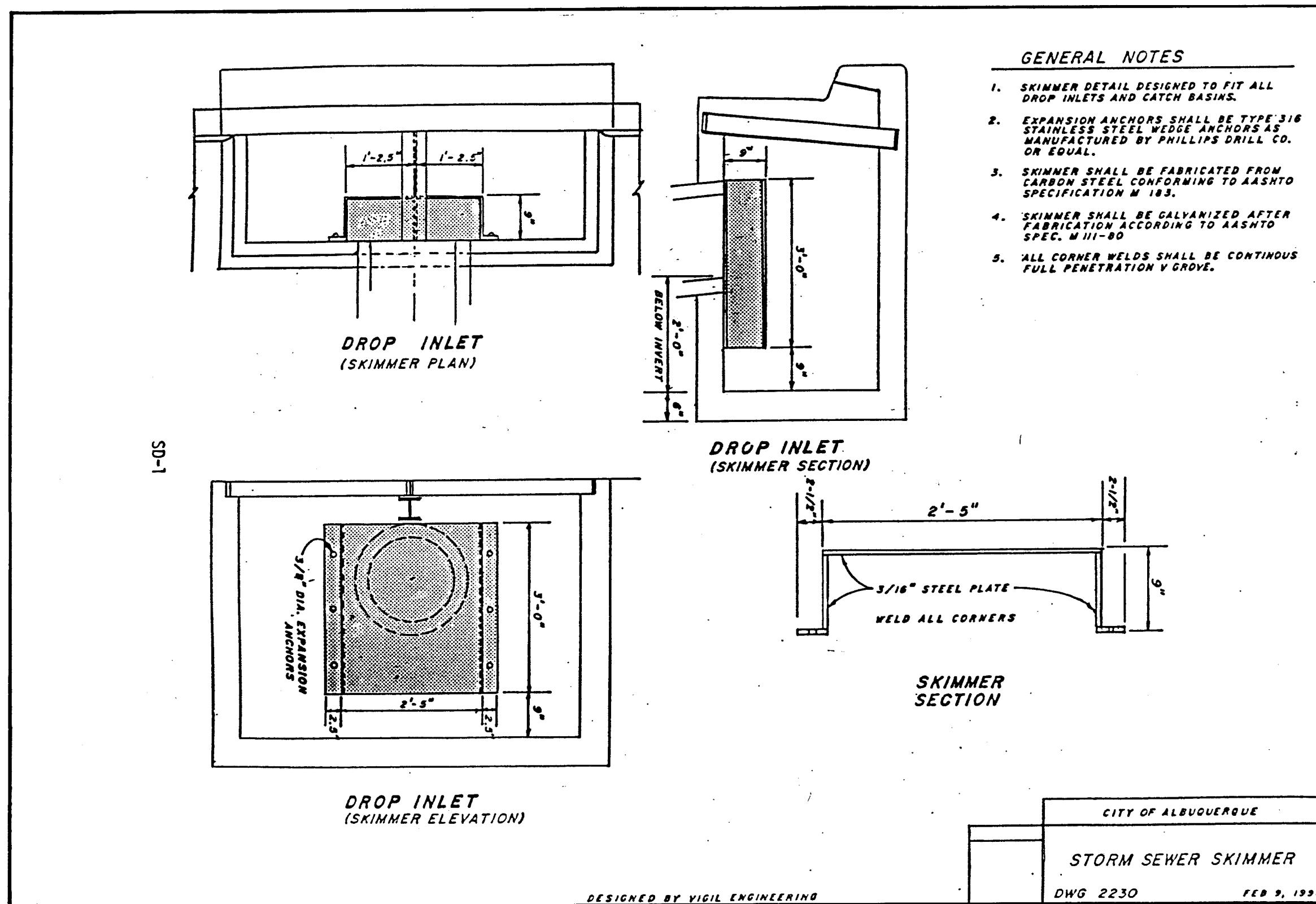
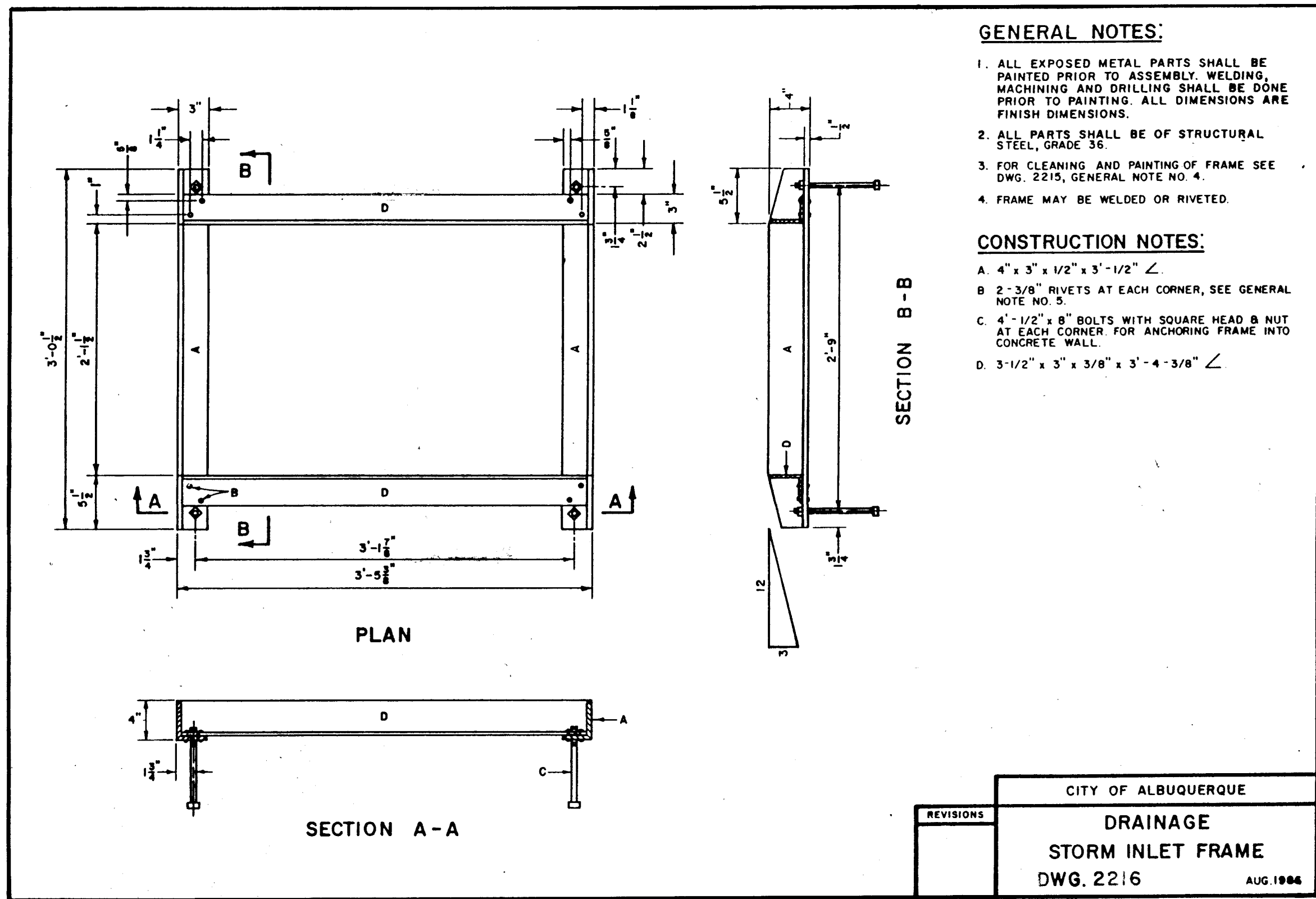
STORM INLET CENTER SUPPORT ASSEMBLY

DWG. 2215

AUG. 1986

Drawn: 8/25/90
Date: 8/25/90
Checked: 8/25/90
Director: C. A. CAD (8/25/91)

DATE: 6/27/90
DRAWN BY: ALB-574M
CHECKED BY: ALB-574M
DESIGNED BY: ALB-574M



F.H.W.A. Region No.	STATE	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	M-4035(4) 10-2	

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	STATION	DATE	FIELD NOTES	DATE	NO.	DATE

MICRO-FILM INFORMATION	
RECORDED BY	DATE

26 3203. 9/7/93

11/20/92

RECORD COPY

SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE

PUBLIC WORKS DEPARTMENT

ENGINEERING GROUP

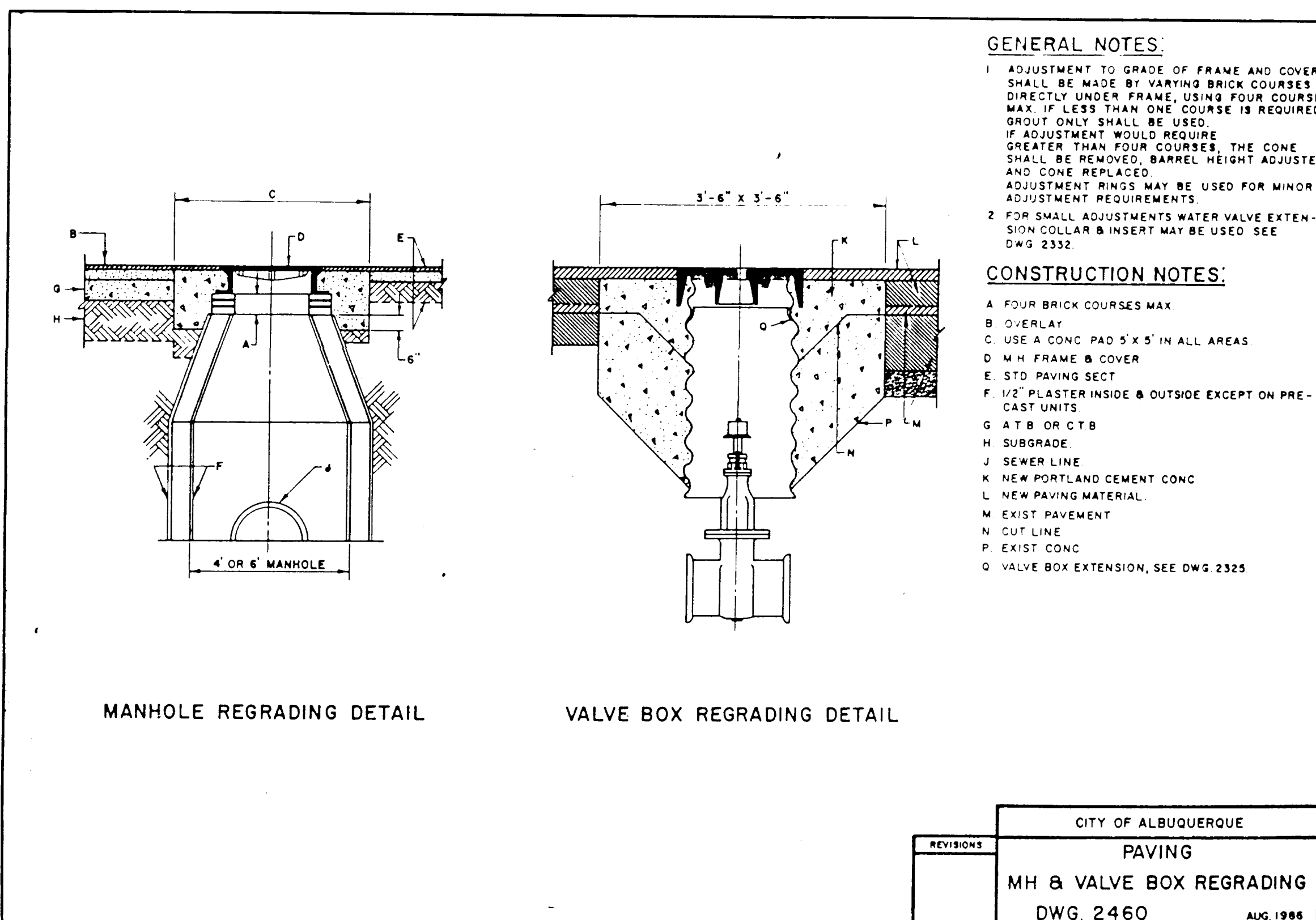
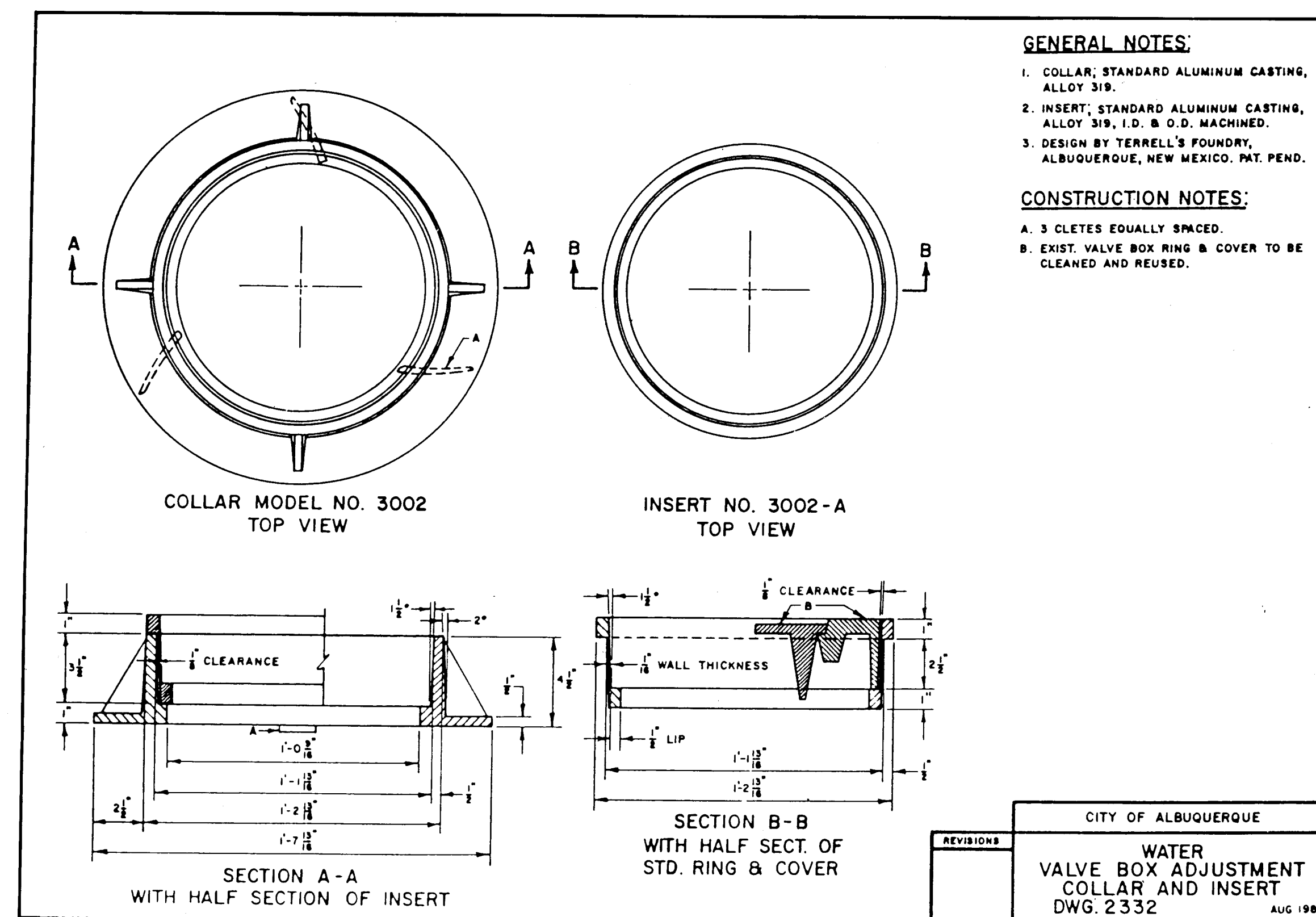
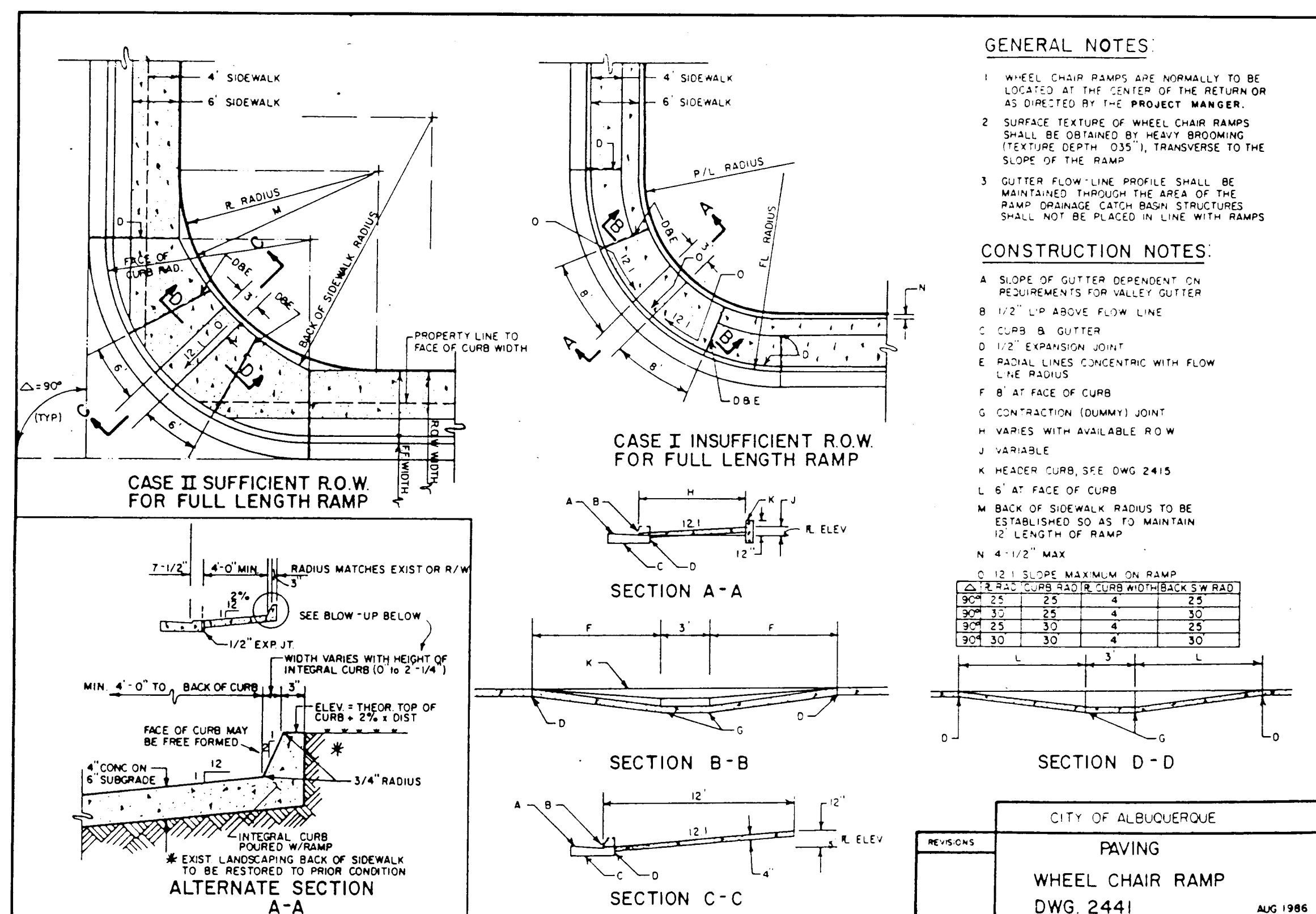
TITLE: COA STANDARD DETAILS FOR DRAINAGE

SECOND STREET / GRIEGOS ROAD

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG CHAIRMAN	Roy	8-1-91	WATER	A/A	
TRANSPORTATION	Roy	8-15-91	WASTE WATER		
HYDROLOGY	Roy	8-16-91			

PROJECT NO. M-4035(4) MAP NO. F-14 G-14

SHEET 10-2



F.H.W.A. Region No.	STATE	M-4035 (4)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		10-4	

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	NO.	DATE	NO.	DATE	NO.	DATE
INSPECTOR	DATE	NO.	DATE	NO.	DATE	NO.	DATE
APPROVED BY	DATE	NO.	DATE	NO.	DATE	NO.	DATE
DESIGNED BY	DATE	NO.	DATE	NO.	DATE	NO.	DATE
CHECKED BY	DATE	NO.	DATE	NO.	DATE	NO.	DATE
RECORDED BY	DATE	NO.	DATE	NO.	DATE	NO.	DATE

26 3203. 9/7393

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: COA-STANDARD DETAILS FOR PAVING
SECOND STREET / GRIEGOS ROAD

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG CHAIRMAN	<i>[Signature]</i>	8-24-91	WATER	<i>[Signature]</i>	8-24-91
TRANSPORTATION	<i>[Signature]</i>	8-25-91	WASTE WATER	<i>[Signature]</i>	8-25-91
HYDROLOGY	<i>[Signature]</i>	8-16-91			

PROJECT NO.	MAP NO.	SHEET	OF
M-4035 (4) COA PROJ. No. 320391	F-14 G-14	10-4	

CHART TO DETERMINE POST SIZE

Post Size	H in feet	H in feet										
		5	6	7	8	9	10	11	12	13	14	15
1/2" x 1/2"	PER POST	4.9	4.1	3.5	3.0	2.7	2.4	2.2	2.0	1.9	1.7	
3/4" x 1 3/4"	PER POST	7.5	6.2	5.3	4.7	4.1	3.7	3.4	3.1	2.9	2.7	
2" x 2"	PER POST	10.5	8.8	7.5	6.6	5.8	5.3	4.8	4.4	4.0	3.8	
2 1/4" x 2 1/4"	PER POST	14.0	11.7	10.0	8.8	7.7	7.1	6.4	5.9	5.3	5.1	
2 3/8" x 2 3/8"	PER POST	16.7	13.9	11.9	10.4	9.3	8.3	7.6	7.0	6.4	6.0	5.6
2 1/2" x 2 1/2"	PER POST	22.2	18.5	15.8	13.8	12.3	11.1	10.1	9.2	8.5	7.9	7.4

EXAMPLE:

DETERMINE SIZE AND NUMBER OF POSTS TO USE WITH SIGN 4'x4' AREA = 16'².
DETERMINE DESIGN HEIGHT FROM ROADWAY CROSS SECTION IN CONJUNCTION WITH SIGN SIZE.
(DESIGN HEIGHT (H) IS FROM THE GROUND ELEVATION AT THE BASE OF THE LONGEST POST TO CENTER OF SIGN).

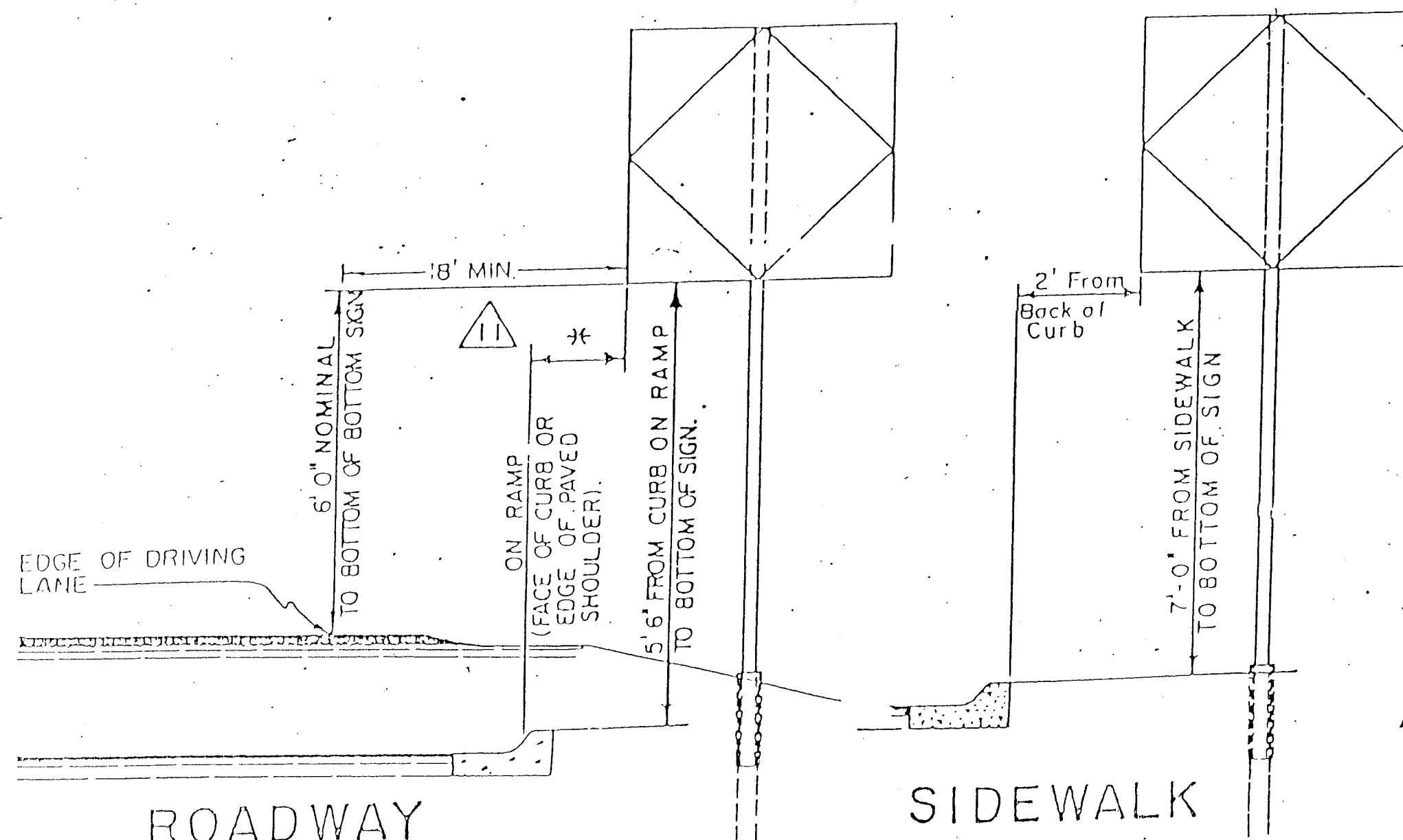
SOLUTION:

FROM ROADWAY CROSS SECTION, CLEARANCE TO BOTTOM OF SIGN = 9.5'
SIGN DEPTH IS 4'.
$$d/2 = \frac{4}{2} = 2'$$

DESIGN HEIGHT
NUMBER OF POSTS (n) NEEDED FOR A 16'² WOULD BE $n = 2$ (NORMALLY NOT OVER 10 TO 12 SQ. FT. PER POST). SIGN AREA PER POST $A_n = 16/2 = 8'$ ² PER POST.

ENTER CHART AT TOP WHERE H=12.0' PROCEED DOWNWARD TO AN AREA EQUAL TO OR GREATER THAN SIGN AREA PER POST. THEN PROCEED TO THE LEFT TO FIND THE REQUIRED POST SIZE. THIS COMES OUT TO BE A 2 1/2" x 2 1/2", 10 GA. POST.

THE LENGTH OF THE LONGER POST WILL THEN BE THE 9.5' FROM GROUND LINE TO BOTTOM OF SIGN PLUS THE SIGN HEIGHT (5.0' IN THIS CASE) PLUS THE 1.5' IN THE GROUND FOR A TOTAL OF 16.0'. THE OTHER POST LENGTH WILL BE 16.0' MINUS THE DIFFERENCE "d" (IN THIS CASE 16.0' - 0.4' OR 15.6').

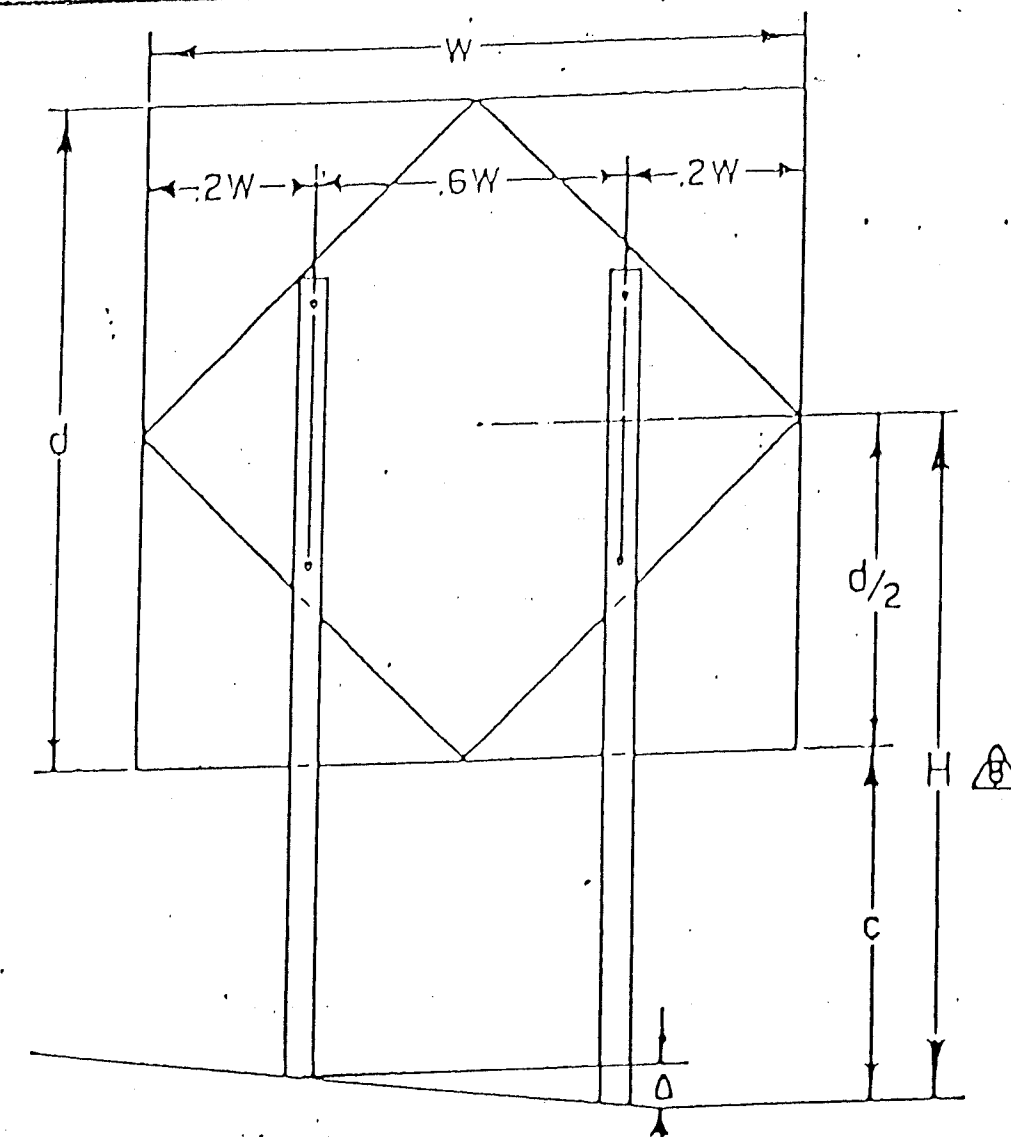


ROADWAY

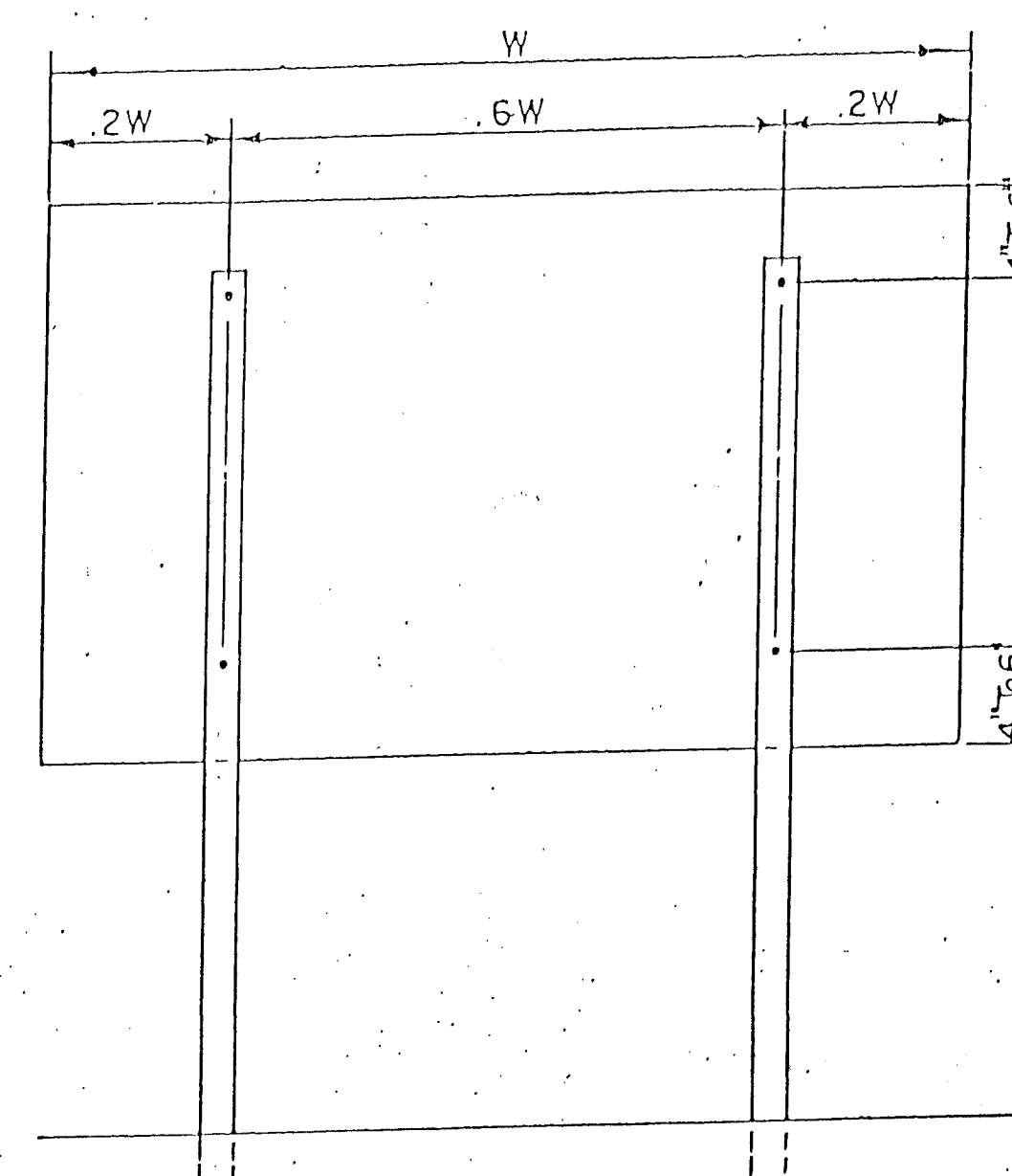
SIDEWALK

POST INSTALLATION

3' MIN. FROM FACE OF CURB OR
6' MIN. FROM EDGE OF PAVED SHOULDER



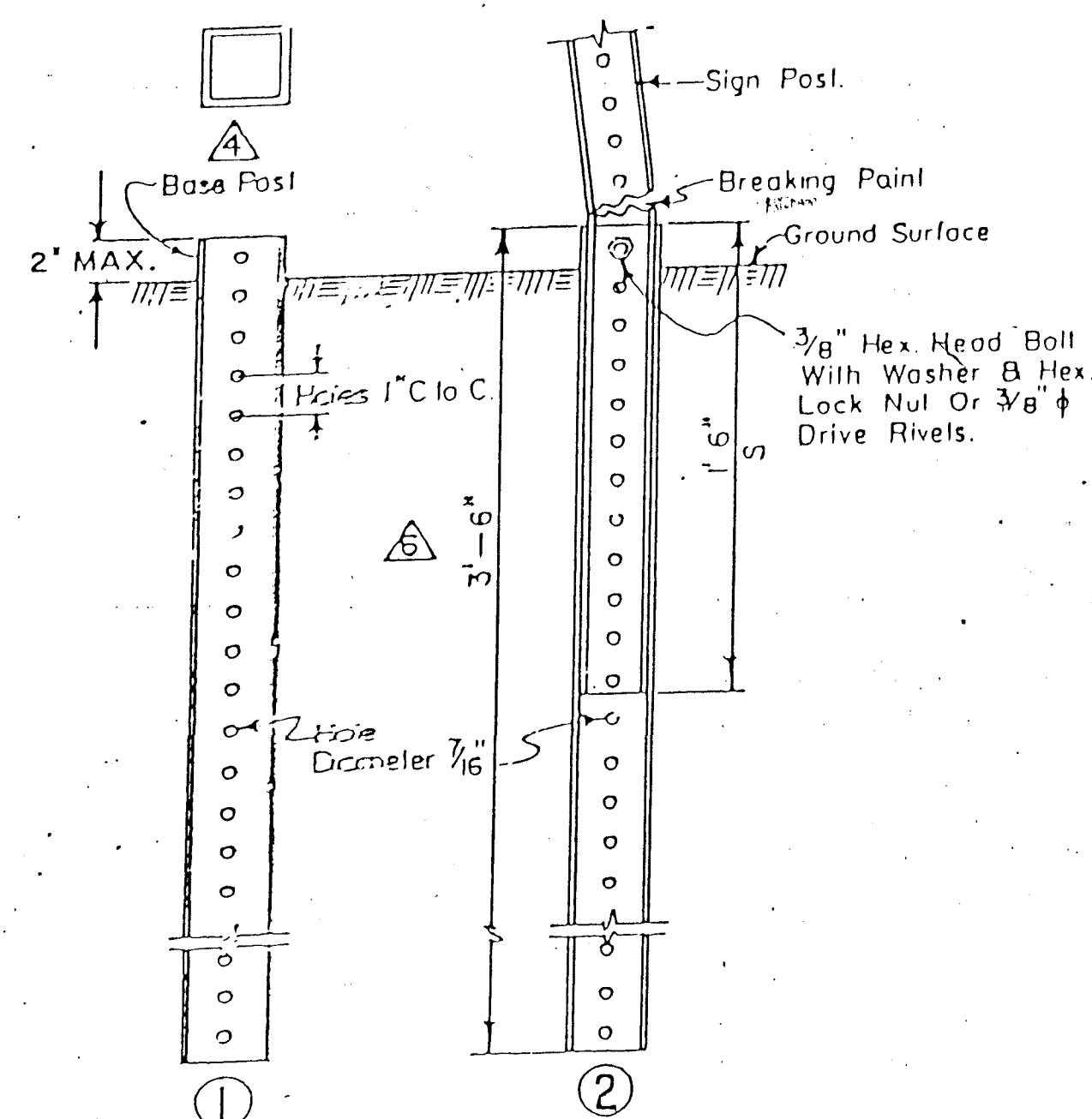
POST SIZE CALCULATION



POST SPACING & SIGN MOUNTING

NOTE: WHERE 3 POSTS ARE USED SPACING SHOULD BE
.15W - .35W - .35W - .15W

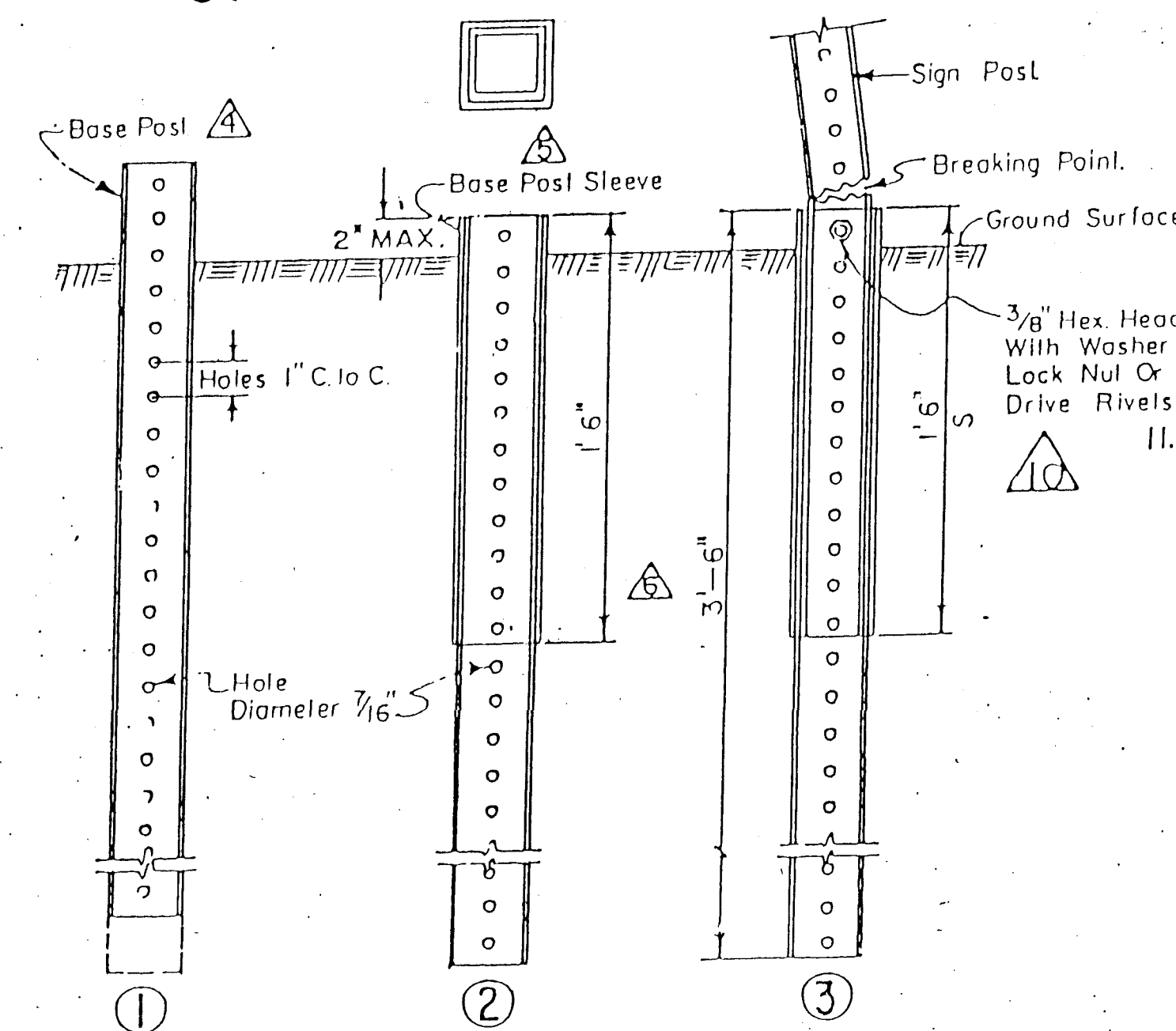
POSTS 0.1345" THICK (10 GA.)



GROUND INSTALLATION

1. DRIVE BASE POST UNTIL ONE HOLE IS EXPOSED ABOVE GROUND FOR RIVET OR BOLT INSTALLATION.
2. INSERT SIGN POST 1'-6" AND FASTEN WITH 2 EACH 3/8" φ DRIVE RIVET OR A 3/8" φ BOLT.
3. THE HOLE PATTERN SHOWN IS ONLY REQUIRED IN THE AREA OF THE BREAKAWAY INFLUENCE AND AT THE SIGN PANEL LOCATION (HOLES MAY BE FIELD DRILLED).

POSTS 0.1046" THICK (12 GA.)



GROUND INSTALLATION 26 3203.917493

1. DRIVE BASE POST TO WITHIN THREE OR FOUR INCHES OF SURFACE. BASE POST IS NEXT SIZE LARGER SECTION THAN SIGN POST.
2. PRE-CUT BASE POST SLEEVE (of next size larger tube) SO THAT THE HOLES WILL MATCH AND STILL BE FLUSH WITH TOP OF THE BASE POST. DRIVE BASE POST SLEEVE UNTIL HOLES MATCH AS NOTED ABOVE, THEN DRIVE BOTH THE BASE POST SLEEVE AND THE BASE POST UNTIL ONE HOLE IS EXPOSED ABOVE GROUND FOR BOLT CONNECTION.
3. INSERT SIGN POST 1'-6" FASTEN WITH 2 EACH 3/8" φ DRIVE RIVETS OR A 3/8" φ BOLT.
4. THE HOLE PATTERN SHOWN IS ONLY REQUIRED IN THE AREAS OF THE BREAKAWAY INFLUENCE AND AT THE SIGN PANEL LOCATION (HOLES MAY BE FIELD DRILLED).

NOTES:

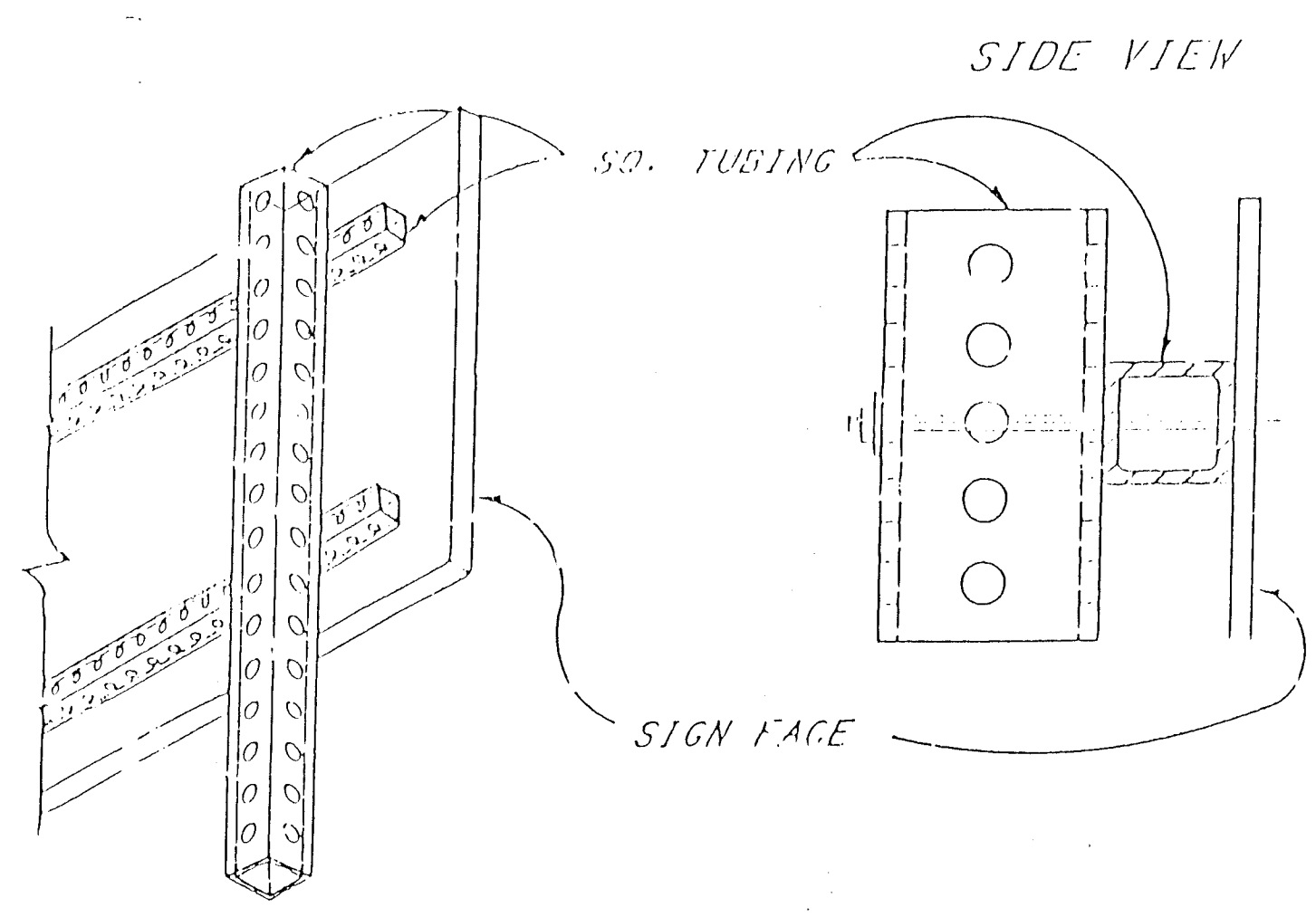
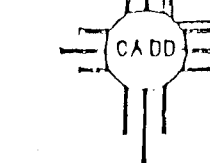
1. MATERIALS AND WORKMANSHIP SHALL CONFORM TO NEW MEXICO STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. BREAKAWAY SIGN SUPPORTS SHALL BE FABRICATED FROM PERFORATED STEEL AND SHALL CONFORM TO THE BREAKAWAY DESIGN SHOWN ON THIS SHEET. ALL HOLES TO BE 7/16" φ.
3. THE STEEL POSTS SHALL CONFORM TO COMMERCIAL QUALITY ASTM DESIGNATION A 446 GRADE A ZINC COATED (G 90) ASTM A 525. THE CROSS SECTION OF THE POST SHALL BE SQUARE TUBE FORMED OF 0.1046 THICK OR 0.1345 THICK. ROLL FORMED CARBON STEEL WELDED DIRECTLY IN THE CORNER BY HIGH FREQUENCY RESISTANCE WELDING OR EQUAL AND EXTERNALLY SCARFED TO AGREE WITH CORNER RADIUS. STANDARD OUTSIDE CORNER RADIUS SHALL BE 5/32" PLUS OR MINUS 1/64".
4. BOLTS AND NUTS SHALL BE CARBON STEEL A-307 OR STAINLESS STEEL A-193.
5. DRIVING CAPS MUST BE USED TO DRIVE POSTS 1'-6".
6. BASE POST SLEEVE IS REQUIRED WITH 0.1046" THICK POST, BUT NOT WITH 0.1345" THICK.
7. 3" X 3" X 4' 0" BASE POST OF 3/16" WALL THICKNESS TO BE USED WITH 2 1/2" X 2 1/2" 0.1345 POST.
8. POSTS SHALL HAVE A MINIMUM COLD FORMED YIELD STRESS OF 40,000 PSI.
9. DESIGN IS IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 1976. WIND LOAD: 19 LBS./SQ. FT. (70 MPH). SOIL BEARING CAPACITY: 3 K/SQ. FT.
10. CARBON STEEL NUTS, BOLTS AND WASHERS SHALL BE HOT DIP GALVANIZED A-153 CLASS D, ZINC COATED A-164, TYPE LS (0.0005 THICKNESS), OR CADMIUM COATED A-165, TYPE OS (0.0003 THICKNESS).
11. AS AN ALTERNATE TO GALVANIZING, STEEL POSTS AND BASE POSTS MAY BE PAINTED WITH A GREEN MODIFIED POLYESTER PAINT MEETING THE COLOR REQUIREMENTS OF FS 595-A (COLOR NO. 14109). METHOD OF APPLICATION SHALL BE BY ELECTRODEPOSITION TO A MINIMUM 1 MIL THICKNESS. FINISHED POSTS SHALL HAVE A SMOOTH, UNIFORM FINISH FREE FROM DEFECTS AFFECTING STRENGTH OR APPEARANCE.

IDENT. NO.	DESCRIPTION	DATE	BY
1	ADDED NOTE No. 11	8/6/93	IGA
2	REVISED NOTE No. 9	9/24/93	TJA
3	CORRECTED LETTER REFERENCE	7-21-70	IGA
4	ADDED LARGER POST SIZE TO CHART	2-20-79	IGA
5	REV. BASE POST DIMENSION	12-5-77	TJA
6	ANCHOR SLEEVE TO BASE POST SLEEVE	12-5-77	TJA
7	SIGN POST ANCHOR TO BASE POST	12-5-77	TJA
8	Rev. Note 4 & Add Note 10	5-6-77	J.S.
9	Rev. Note 4	3-31-77	TJA
10	Rev. Offset Distance	5-11-77	TJA

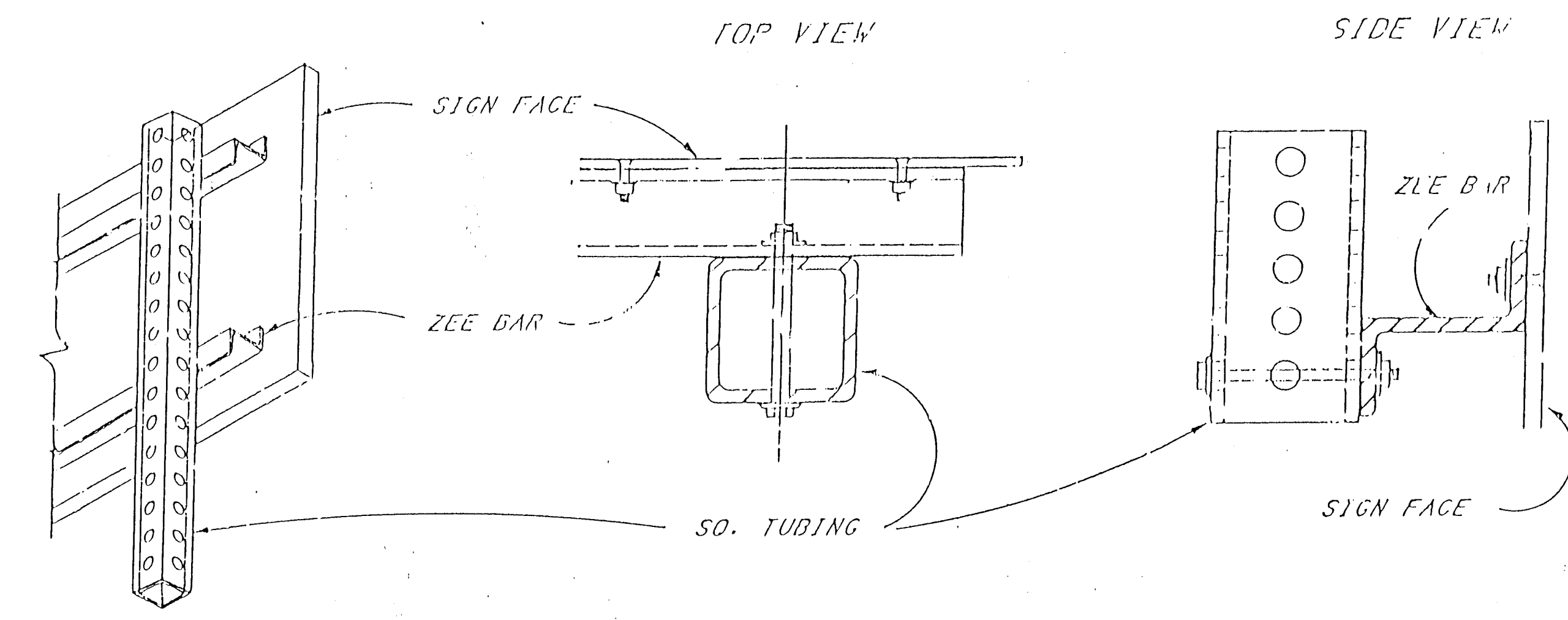
REVISIONS (OR CHANGE NOTICES)	
NEW MEXICO STATE HIGHWAY DEPARTMENT	
DESIGN LOADS FOR SQUARE TUBING POSTS	
DESIGNED BY JG	APPROVAL
DRAWN BY J.P.	RECOMMENDED - TRAFFIC ENGINEER DATE
CHECKED BY JG	APPROVED
	ENGINEER OF DESIGN DATE
SERIAL Sn 75-1 SHEET 1 OF 9	

RECORD COPY
SCANLON & ASSOCIATES, INC.

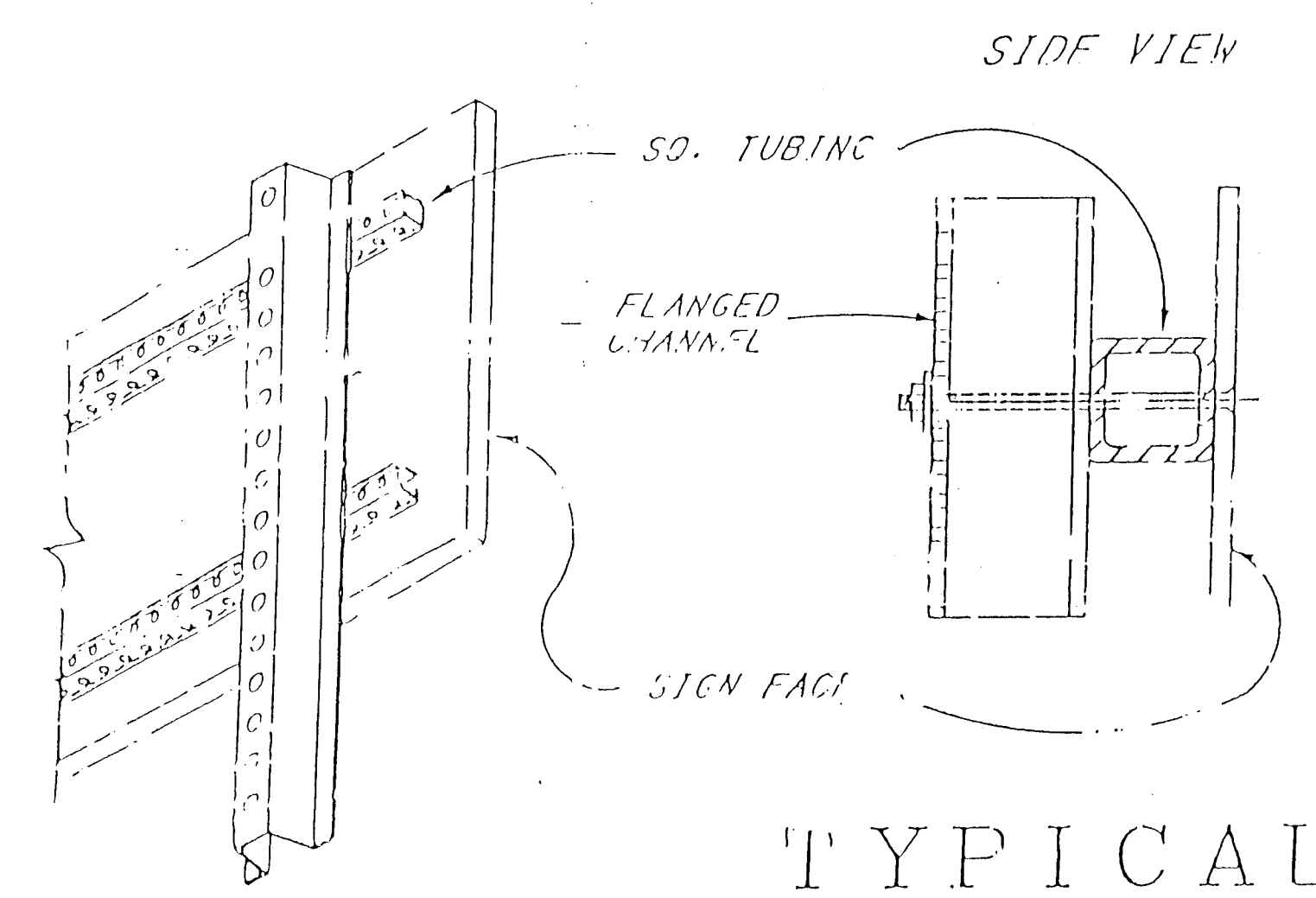
11/20/92



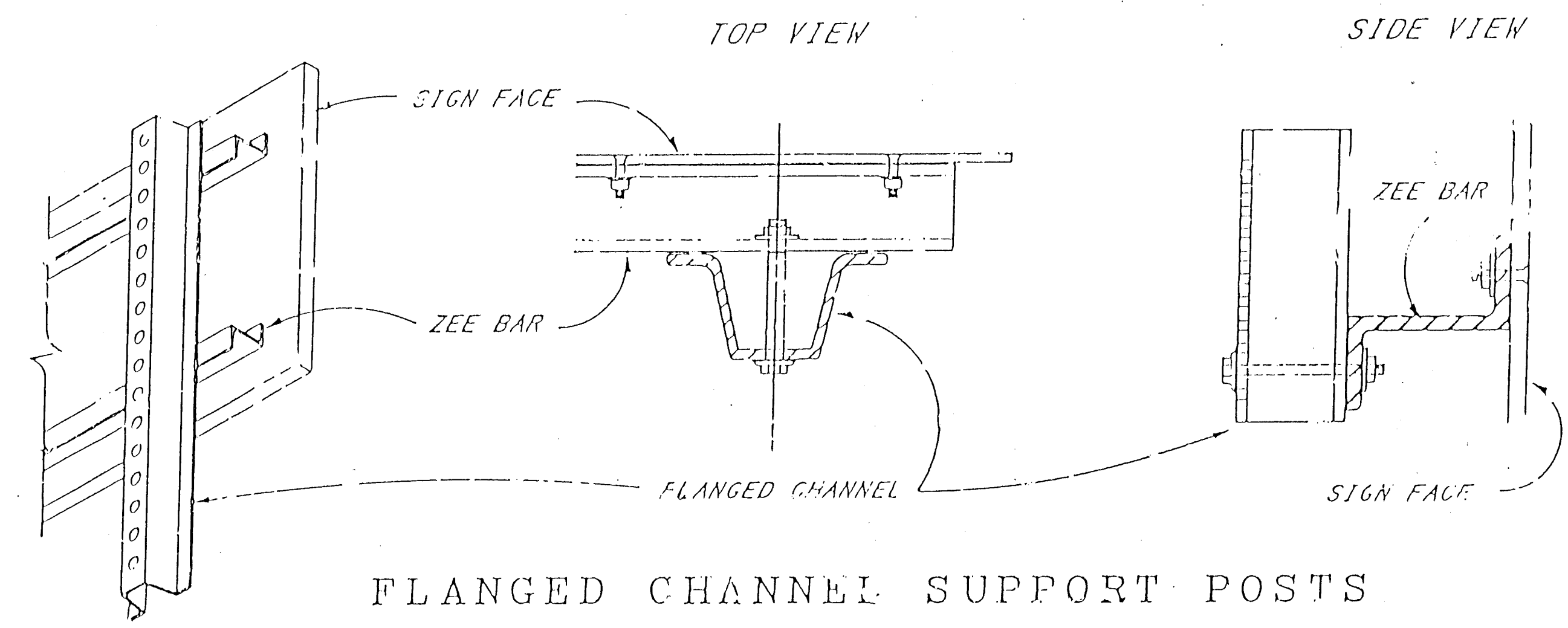
TYPICAL



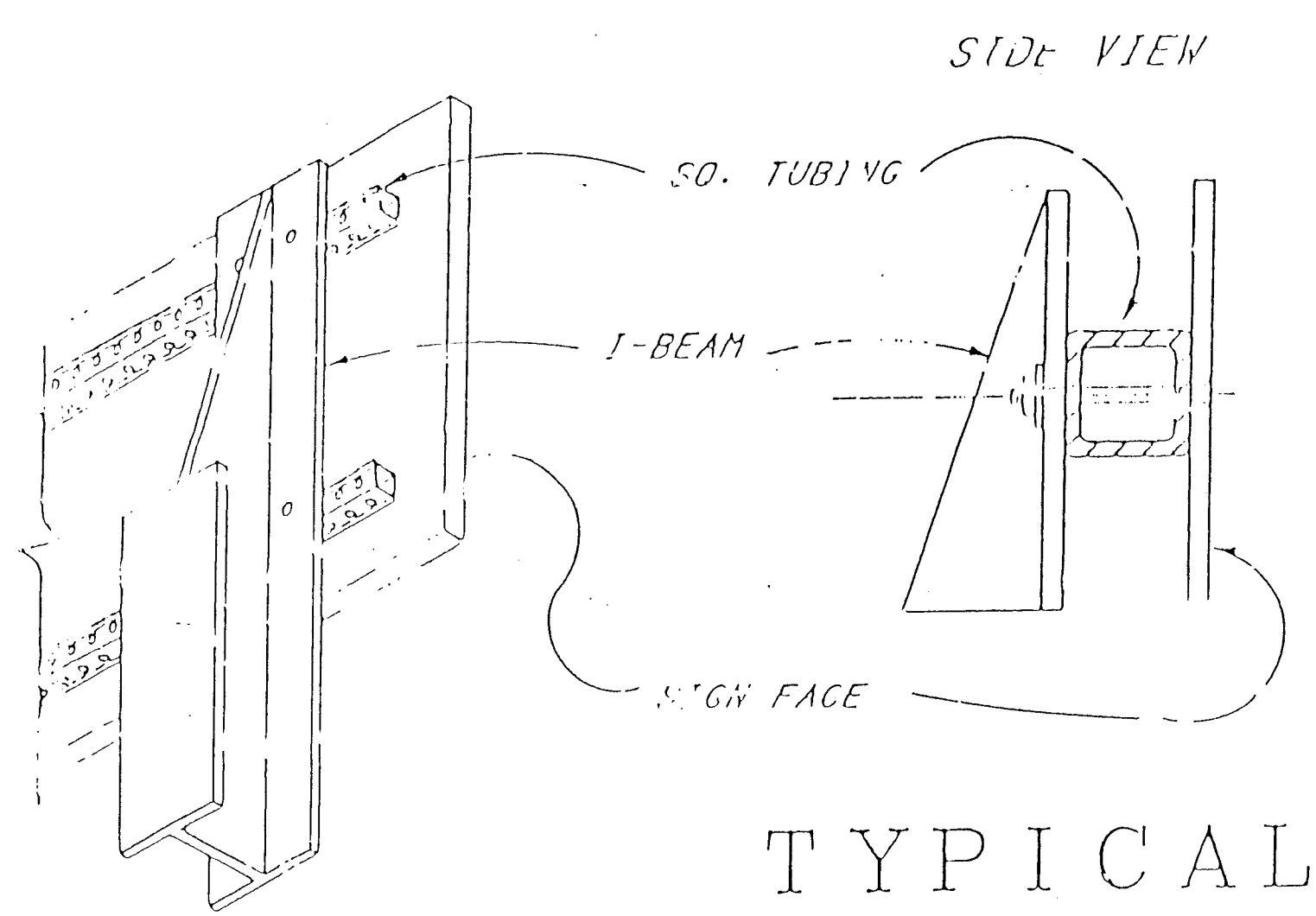
PERFORATED SQUARE TUBING (DRIVEDOWN) POSTS



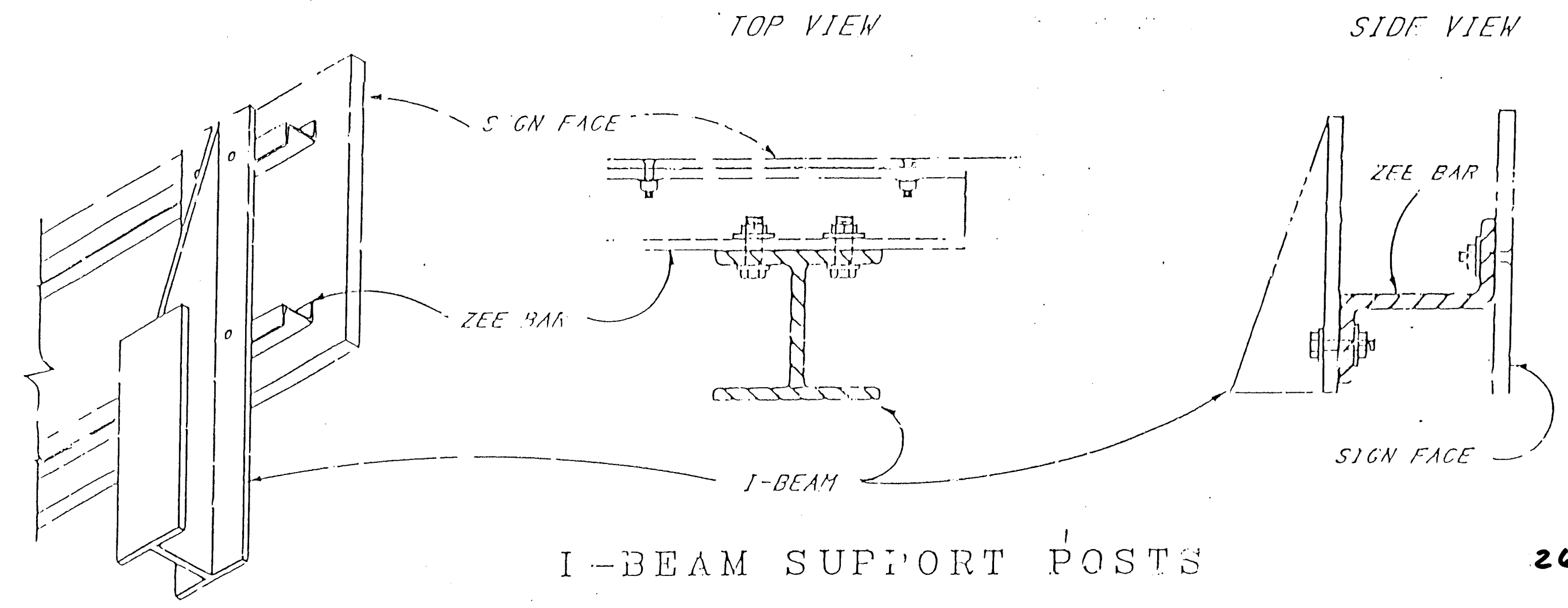
TYPICAL



FLANGED CHANNEL SUPPORT POSTS



TYPICAL



I-BEAM SUPPORT POSTS

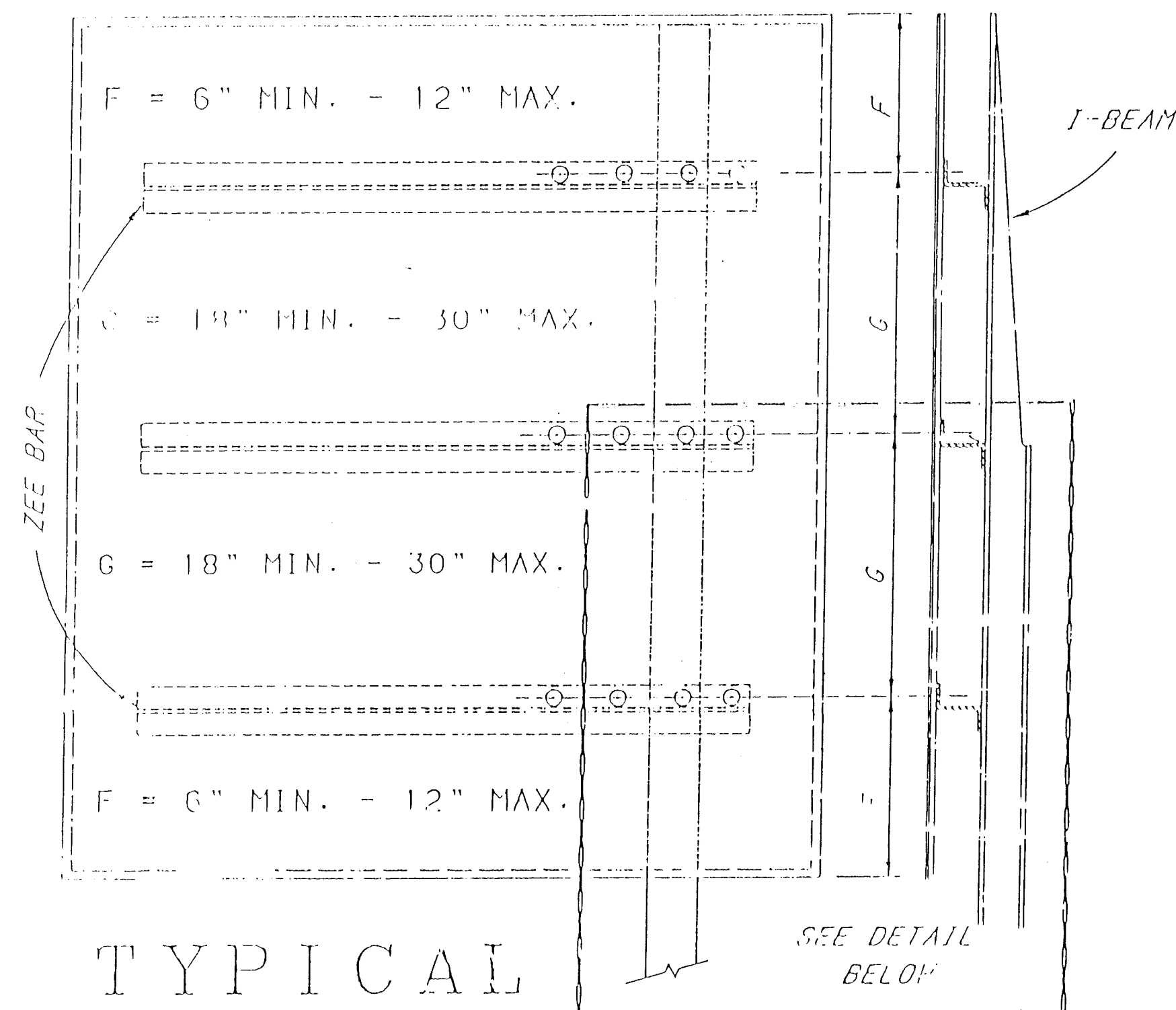
GENERAL NOTES

1. BACKING ZEE SHALL BE ALUMINUM ALLOY 6061-T6. EACH ZEE SHALL BE PROVIDED WITH A 9/16" x 2" HORIZONTAL SLOT FOR EACH POST MOUNTING BOLT.
2. BACKING ZEE SHALL BE FASTENED TO THE SIGN BLANK WITH 1/4" - 20 x 3/4" FLAT HEAD COUNTER SUNK MACHINE SCREWS WITH NUT AND LOCK WASHER. (CADMIUM OR GALVANIZED OR 2024-T4 ALUMINUM ALLOY) FASTENERS AT 9" +/- 1/2" INTERVALS.
3. BACKING ZEE WITH SIGN FACES SHALL BE FASTENED TO THE SIGN SUPPORT POST WITH 3/8" HEX. HEAD BOLT, NUT & TWO WASHERS GALVANIZED OR CADMIUM PLATED.
4. BACKING ZEE IS NOT NEEDED WHERE SIGN IS TO BE MOUNTED ON ONE POST AND IS APPROXIMATELY TEN SQUARE FEET OR LESS.
5. ALTERNATE BACKING MAY BE 1-1/2" PERFORATED SQUARE TUBING AND ASSOCIATED HARDWARE, DESCRIBED IN SERIAL SN-75-1.
6. SIGN PANELS SHALL BE SINGLE SHEET 6061-T6 ALUMINUM .120 MINIMUM THICKNESS.
7. BACKING ZEES SHALL BE 3"x2-3/4"x1/4" AT 2.33 LBS. PER FT. FOR 6061-T6 ALUMINUM.
8. EXPOSED BOLT HEADS ON THE FACE OF THE SIGN SHALL BE PAINTED OF REFLECTORIZED TO MATCH THE SURROUNDING COLOR.

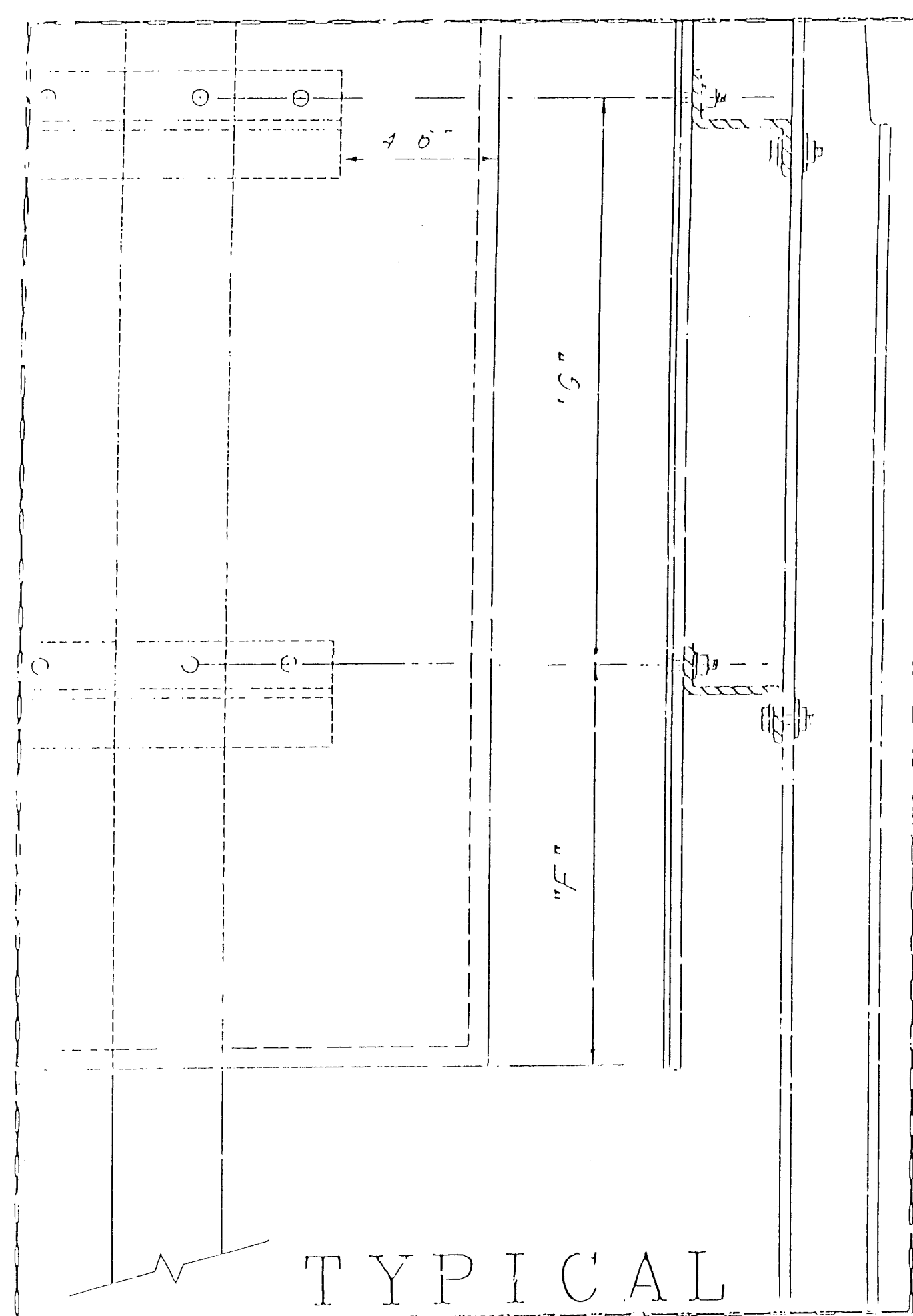
26 3202.917593

4/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

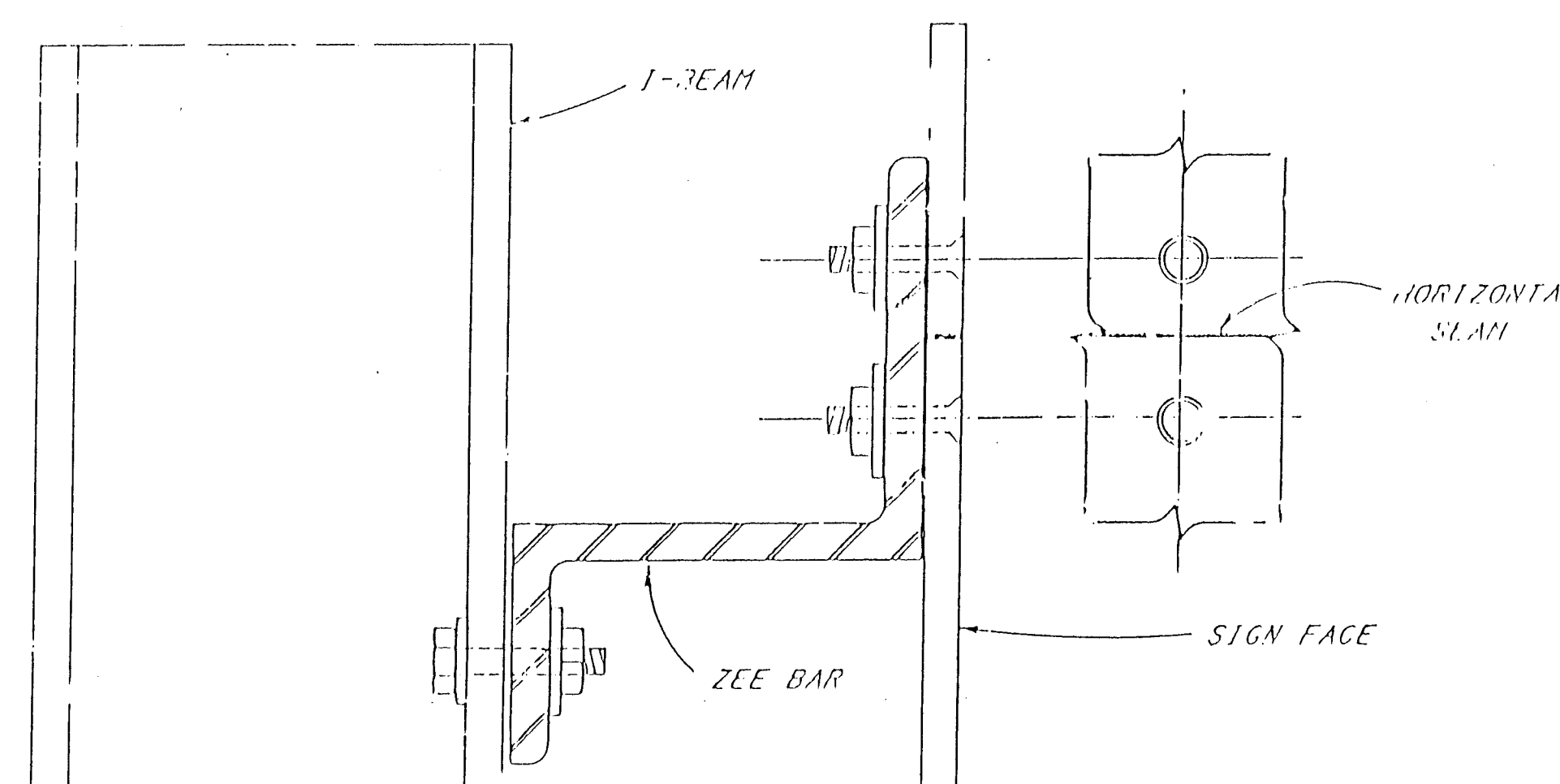
3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
ALUMINUM PANEL SIGN DETAILS			
DESIGNED BY	APPROVED	TRAFFIC DESIGN ENGINEER	DATE
CHECKED BY	APPROVED	TRAFFIC BUREAU CHIEF	DATE
SERIAL SN-75-02		SHEET 1 OF 2	



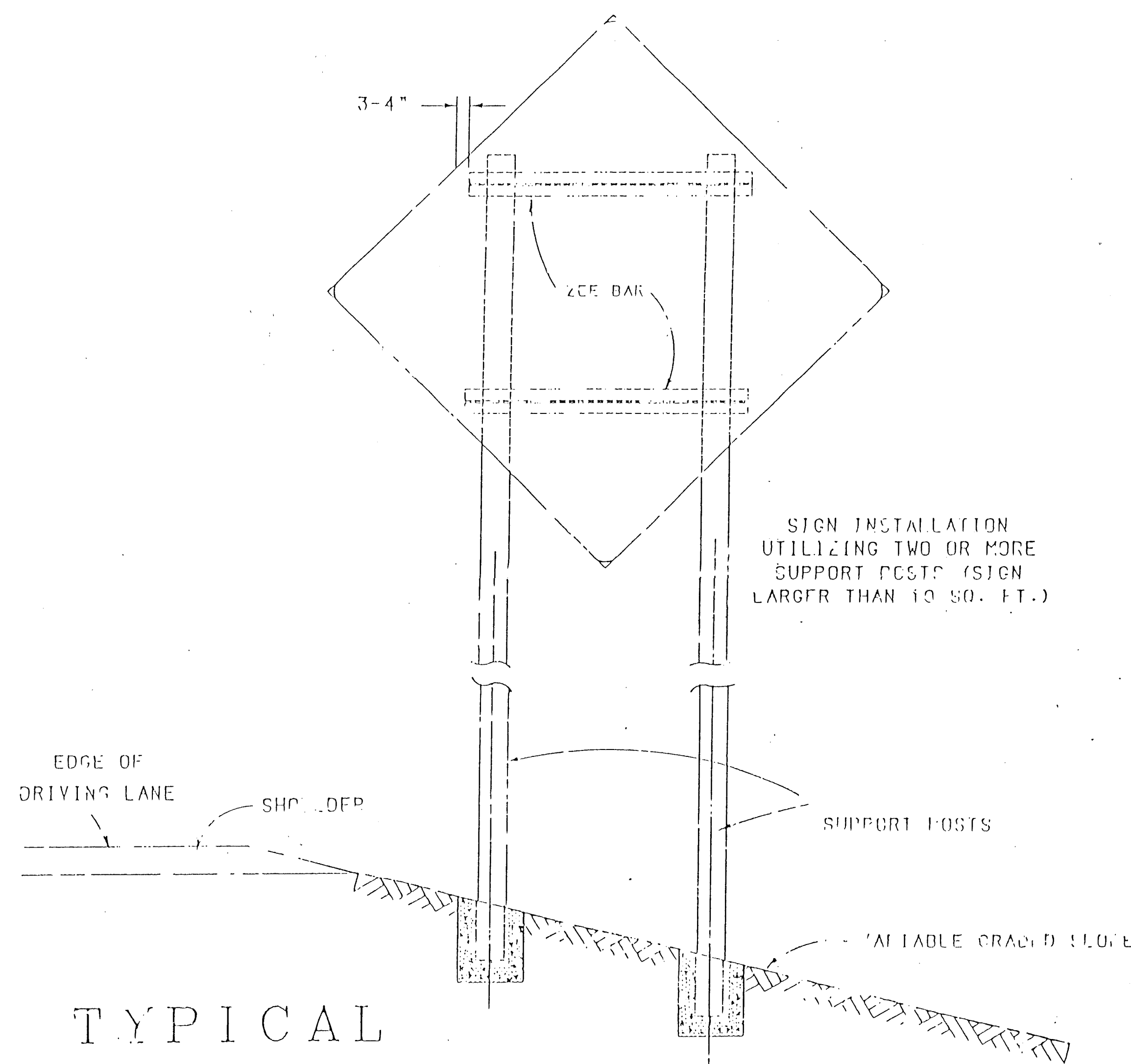
TYPICAL
BACKING ZEE SPACING



TYPICAL
MOUNTING DETAIL



TYPICAL
HORIZONTAL SEAM CLOSURE



TYPICAL
ZEE BACKING FOR DIAMOND SHAPE SIGN

GENERAL NOTES

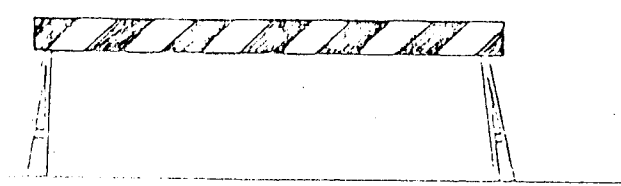
1. BACKING ZEE SHALL BE ALUMINUM ALLOY 6061-T6. EACH ZEE SHALL BE PROVIDED WITH A 9/16" x 2" HORIZONTAL SLOT FOR EACH POST MOUNTING BOLT.
2. BACKING ZEE SHALL BE FASTENED TO THE SIGN BLANK WITH 1/4" - 20 x 3/4" FLAT HEAD COUNTER SUNK MACHINE SCREWS WITH NUT AND LOCK WASHER (CADMIUM OR GALVANIZED OR 2024-T4 ALUMINUM ALLOY FASTENERS AT 9" - 1/2" INTERVALS).
3. BACKING ZEE WITH SIGN FACES SHALL BE FASTENED TO THE SIGN SUPPORT POST WITH 3/8" HEX. HEAD BOLT, NUT & TWO WASHERS GALVANIZED OR CADMIUM PLATED.
4. BACKING ZEE IS NOT NEEDED WHERE SIGN IS TO BE MOUNTED ON ONE POST AND IS APPROXIMATELY TEN SQUARE FEET OR LESS.
5. ALTERNATE BACKING MAY BE 1-1/2" PERFORATED SQUARE TUBING AND ASSOCIATED HARDWARE, DESCRIBED IN SERIAL SN-75-02.
6. SIGN PANELS SHALL BE SINGLE SHEET 6061-T6 ALUMINUM .120 MINIMUM THICKNESS.
7. BACKING ZEES SHALL BE 3"x2-3/4"x1/4" AT 2.33 LBS. PER FT. FOR 6061-T6 ALUMINUM.
8. EXPOSED BOLT HEADS ON THE FACE OF THE SIGN SHALL BE PAINTED OR REFLECTORIZED TO MATCH THE SURROUNDING COLOR.

26 3203-9/76 93

11/20/92

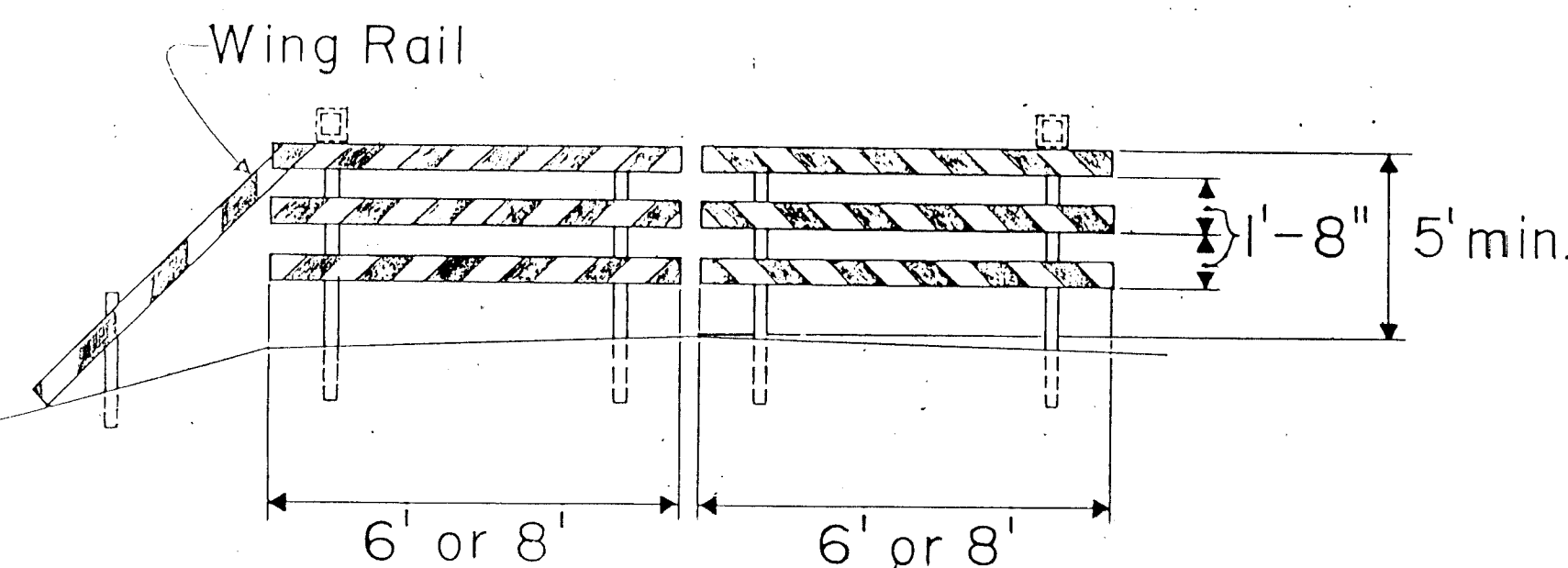
RECORD COPY
SCANLON & ASSOCIATES, INC.

3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (FOR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
ALUMINUM PANEL SIGN DETAILS			
DESIGNED BY	APPROVED BY	CHECKED BY	DATE
DRAWN BY	RECOMMENDED BY	APPROVED BY	DATE
CHECKED BY	APPROVED BY	APPROVED BY	DATE
SERIAL SN-75-02		SHEET 2 OF 2	



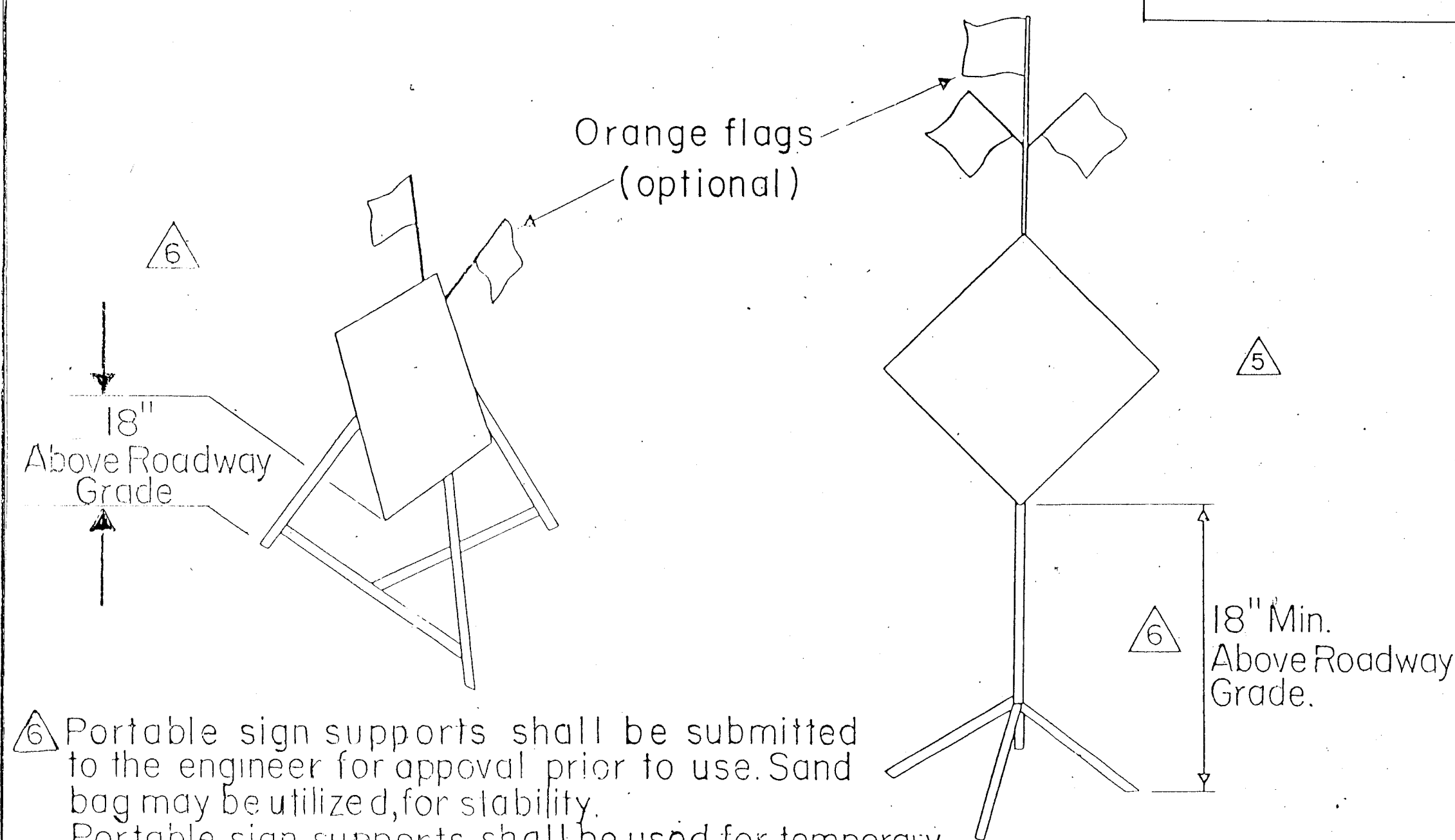
Stands may be detachable for portability. Type "I" Barricades have two (2) reflectorized rail faces (one in each direction). The stand materials may be metal, wood or other suitable light weight materials of structural soundness.

TYPICAL
TYPE "I" BARRICADE



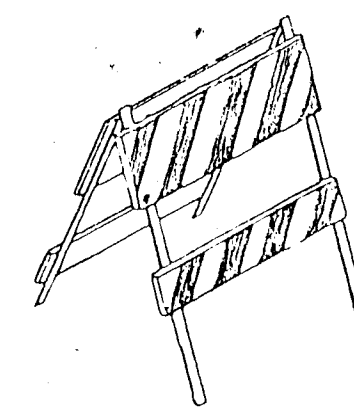
Type "III" Barricades have 3 reflectorized rail faces when facing traffic in one direction; 6 if facing traffic in two directions. Wing Rail may be fitted to the back of the top rail attached by two $\frac{5}{16}$ " bolts, nuts, and washers.

TYPICAL
FIXED TYPE "III" BARRICADE



Portable sign supports shall be submitted to the engineer for approval prior to use. Sand bag may be utilized for stability. Portable sign supports shall be used for temporary or moving construction operation only.

PORTABLE SIGN SUPPORT (TYPICAL)

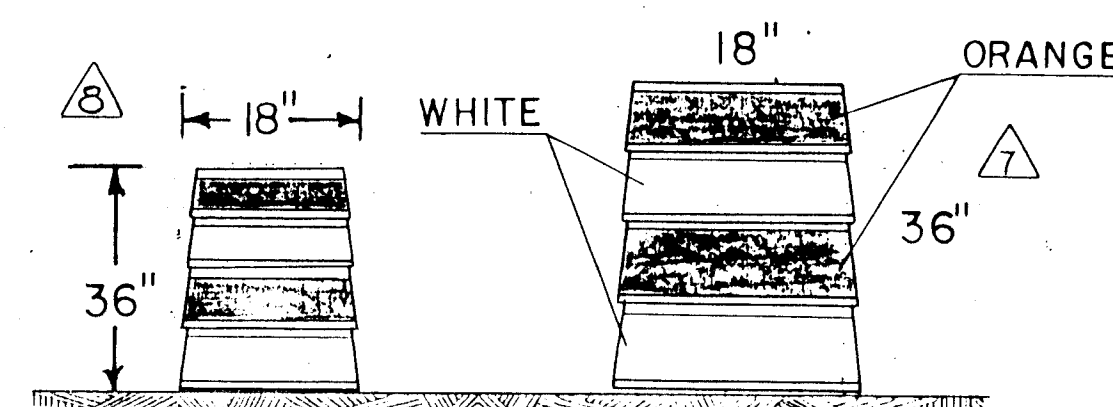


Type "II" Barricades have four (4) reflectorized rail faces (two in each direction). Folding stands shall be of materials similar to Type "I" Barricade stands.

TYPICAL
TYPE "II" BARRICADE

BARRICADES - CHARACTERISTICS

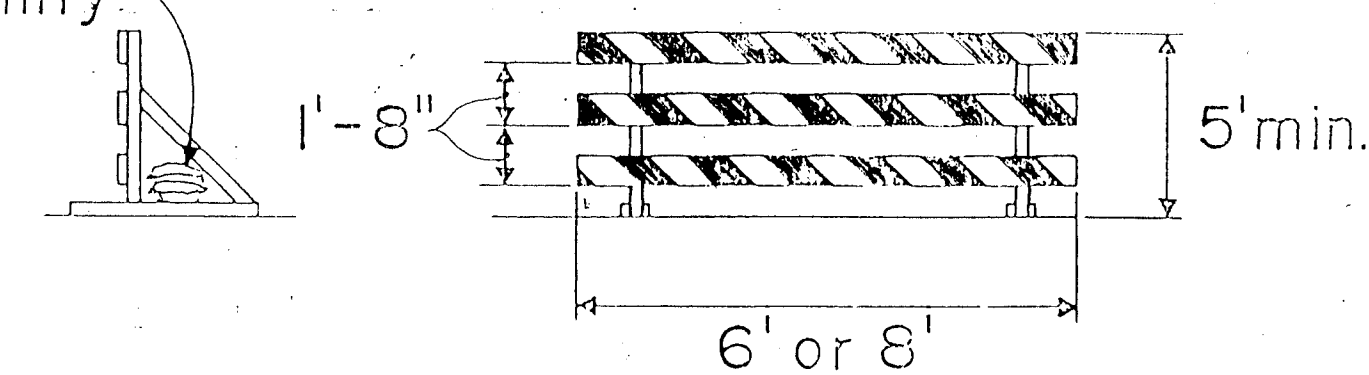
	I	II	III
WIDTH OF RAIL	8" min.-12" max.	8" min.-12" max.	8" min.-12" max.
LENGTH OF RAIL	6' to 8'	3' min.-4' max.	6' or 8'
WIDTH OF STRIPES	6 ins.	6 ins.	6 ins.
HEIGHT	3 ft. min.	3 ft. min.	5 ft. min.
TYPE OF FRAME	Demountable or heavy "A" frame	Light "A" frame	Posts or skids
FLEXIBILITY	Essentially movable	Portable	Essentially permanent



With two (2) orange stripes minimum and alternating white stripes, all reflective tape or sheeting.

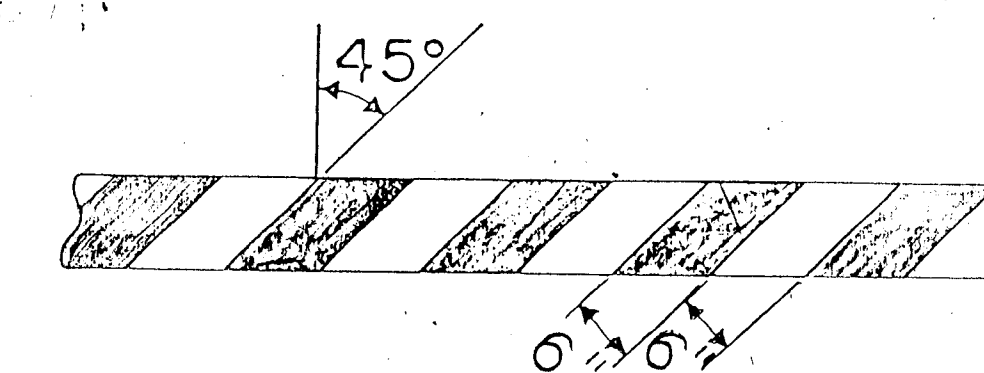
CHANNELIZATION DEVICES
(BARRELS)

Sand bags for added stability



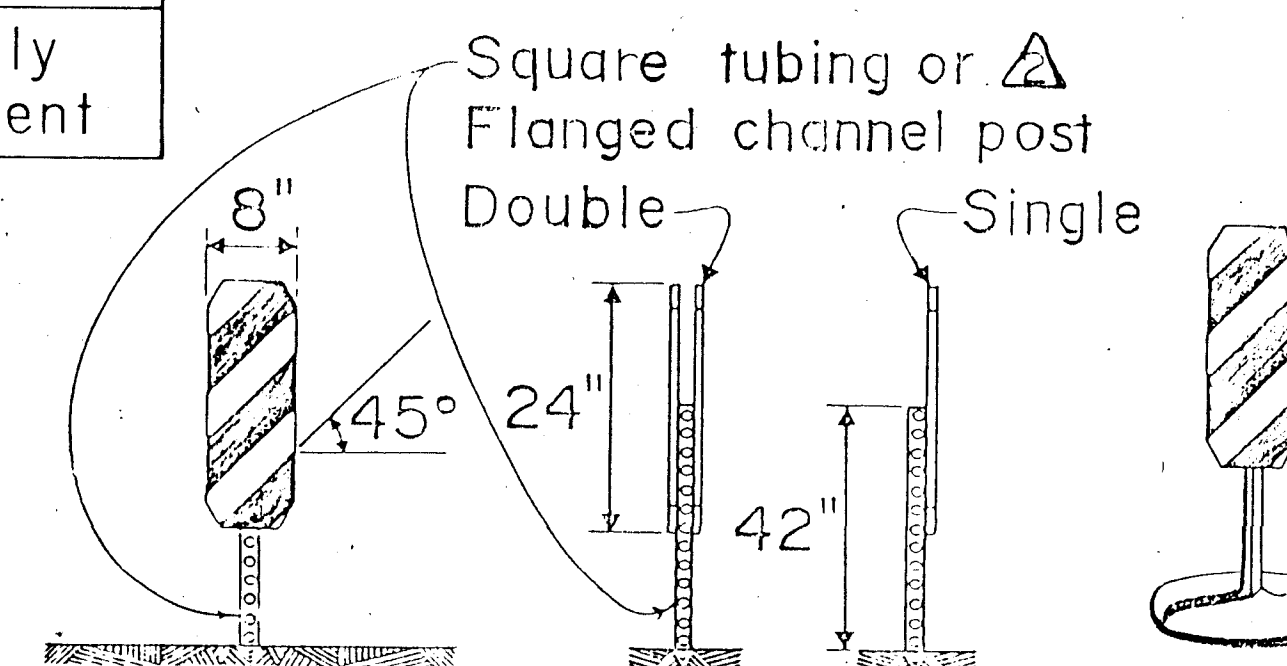
Type "III" Barricade framing and supports shall be 2"x2" min.-12Ga., square metal tubing or driven down posts.

TYPICAL
MOVABLE TYPE "III" BARRICADE



Rail shall be $\frac{1}{2}$ " min. 5 ply sign grade plywood or 2"x8" S4S quality wood. On Types "I" and "II", metal rails, if used, must be light weight material, commensurate with structural soundness. Stripes shall slant downward at 45° toward the side which traffic is to pass.

DETAIL OF BARRICADE
RAIL STRIPING



Panels to be 0.060 min., 6061-T6, or 5052-H38 aluminum alloy mounted on $\frac{1}{2}$ " min. square steel tubing post or 1.33 lb./ft. min. flanged channel post. Stripes shall slant downward at 45° toward the side which traffic is to pass. For temporary installation the post may be set to 3 ft. below ground or the panels may be mounted on stanchions.

CHANNELIZATION DEVICES
(VERTICAL PANELS)

GENERAL NOTES

- All signs, sign materials, beacons, and barricade warning lights shall conform to the standards set forth in the M.U.T.C.D. 1978 edition.
- The entire area of orange and white stripes shall be reflectorized on all barricades, barrels, vertical panels or other channelization devices when used on construction, detours, or participating connections, by use of reflective sheeting or tape.
- Red and white barricades may be used to mark the end of a road, street, or highway where there is no crossroad or outlet at locations considered permanent and semi-permanent closures or termination of roadways.
- Flashing beacons or steady burn lights, when used on barricades, shall be positioned above the top rail of the barricade, facing traffic.
- High intensity flashing beacons shall be used to mark obstructions or hazards. Type "C" steady burn light may be used for delineation at night.
- All barricade framing and supports, other than galvanized metal, shall be painted white.

THIS SERIAL REVISED: 7-20-88

REVISOR	PORT. SIGN SUPPORT DETAILS	3/15/80 T.G.M.
REVISOR	PORT. SIGN SUPPORT DETAILS	1/31/80 T.G.M.
REVISOR	NOTE No. 1	9/24/79 T.G.M.
ADDED	5052 - H38 ALUMINUM ALLOY	5-9-78 T.G.M.
ADDED	FLANGED CHANNEL POST	5-4-78 T.G.M.
REVISOR	BARREL DIMENSIONS	7-20-88
CHANGED	No. of STRIPES ON BARRELS	3-4-88 E.R.

NEW MEXICO
STATE HIGHWAY DEPARTMENT

BARRICADES AND CHANNELIZATION DEVICES

DESIGNED BY J.G.	APPROVAL	10-7-77
DRAWN BY J.L.B.	RECOMMENDED	DATE
CHECKED BY J.G.	APPROVED	DATE

RECORD COPY
SCANLON & ASSOCIATES, INC.

SERIAL Sn 77-9 SHEET 9 of 9

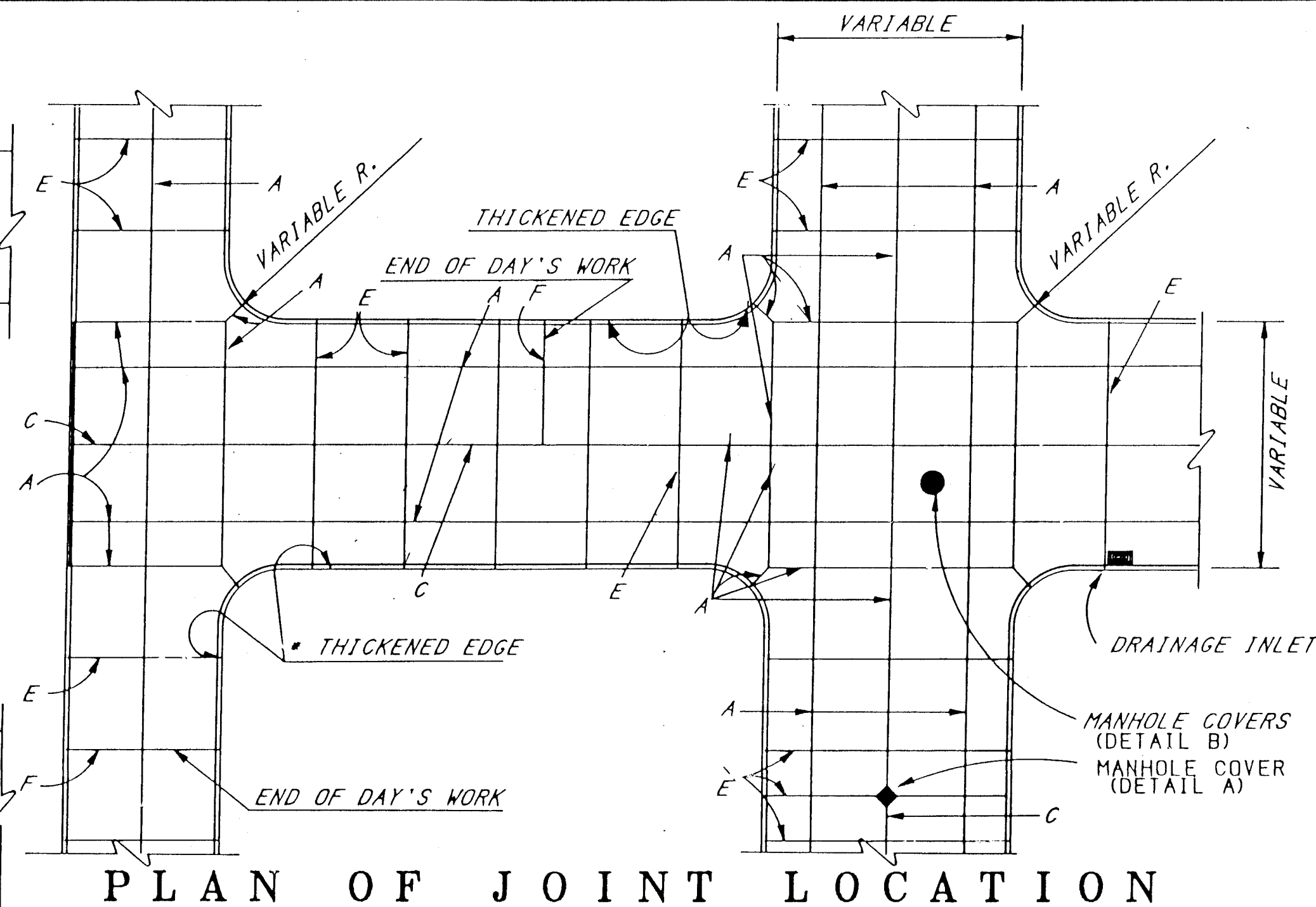
GENERAL NOTES

- ONE-HALF THE LENGTH OF ALL NO. 10 SMOOTH DOWEL BARS SHALL BE COATED WITH ONE COAT OF LEAD OR TAR PAINT. THE COATED HALF SHALL BE GREASED BEFORE PLACEMENT OF CONCRETE.
- IN ALL CASES, DOWELS IN TRANSVERSE JOINTS ARE TO BE PARALLEL TO CENTER LINE OF LANE.
- EXPANSION JOINTS SHALL BE CONSTRUCTED AT THE DIRECTION OF THE ENGINEER. NUMBER AND LOCATION OF EXPANSION JOINTS WILL BE DEPENDENT UPON EXPANSIVE QUALITY OF CONCRETE AGGREGATES AND THE AMBIENT TEMPERATURE, AS PER PORTLAND CEMENT CONCRETE ASSOCIATION DESIGN AND CONTROL OF CONCRETE MIXTURES MANUAL, (12th EDITION, 1979).
- SEALANT RESERVOIR, JOINT SHAPE FACTOR, AND BACKER ROD, IF REQUIRED, SHALL BE AS RECOMMENDED BY THE MANUFACTURER OF THE JOINT FILLER USED.
- WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, AND SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.
- WHEN NEW CONCRETE PAVEMENT ABUTS AN EXISTING CONCRETE PAVEMENT THE TRANSVERSE JOINT SHALL BE DOWELED WITH COATED, SMOOTH, GRADE 60, NO. 10, DOWEL BARS, 16 IN. LONG, SPACED AT 12 IN. CENTER TO CENTER. THE TRANSVERSE FACE OF THE EXISTING PCCP SHALL BE DRILLED TO ACCEPT ONE-HALF OF THE DOWEL LENGTH. THE DRILL HOLES SHALL BE LOCATED SUCH THAT THE DOWEL BARS WILL BE AT MID DEPTH OF THE THINNER OF THE TWO ABUTTING SLABS. THE DRILL HOLES SHALL BE A DIAMETER THAT WILL PROVIDE A CLOSE FIT FOR THE DOWELS. THE DOWELS SHALL BE EPOXIED INTO THE DRILLED HOLES. THE FREE HALF OF THE DOWEL BARS SHALL BE COATED WITH ONE COAT OF LEAD OR TAR PAINT. THE COATED HALF SHALL BE GREASED BEFORE PLACEMENT OF CONCRETE.
- WHEN A NEW LANE OF CONCRETE PAVEMENT IS BUILT ADJACENT TO AN EXISTING LANE OF CONCRETE PAVEMENT THE LONGITUDINAL JOINT SHALL BE TIED WITH GRADE 40, NO. 5, DEFORMED STEEL BARS 30 IN. LONG, SPACED AT 30 INCHES CENTER TO CENTER. THE LONGITUDINAL FACE OF THE EXISTING PCCP SHALL BE DRILLED TO ACCEPT ONE HALF OF THE TIE BAR LENGTH. THE DRILL HOLES SHALL BE LOCATED SUCH THAT THE TIE BARS WILL BE AT MID DEPTH OF THE THINNER OF THE TWO ADJOINING SLABS. THE DRILL HOLES SHALL BE A DIAMETER THAT WILL PROVIDE A CLOSE FIT FOR THE TIE BARS. THE TIE BARS SHALL BE EPOXIED INTO THE DRILLED HOLES.
- INITIAL SAWCUT FOR CRACK CONTROL PURPOSES SHALL BE 1/8" TO 1/4" IN WIDTH.
- NO ADJUSTMENT OF THE JOINT LAYOUT PLAN SHALL BE DONE WITHOUT APPROVAL BY THE CENTRAL LAB.

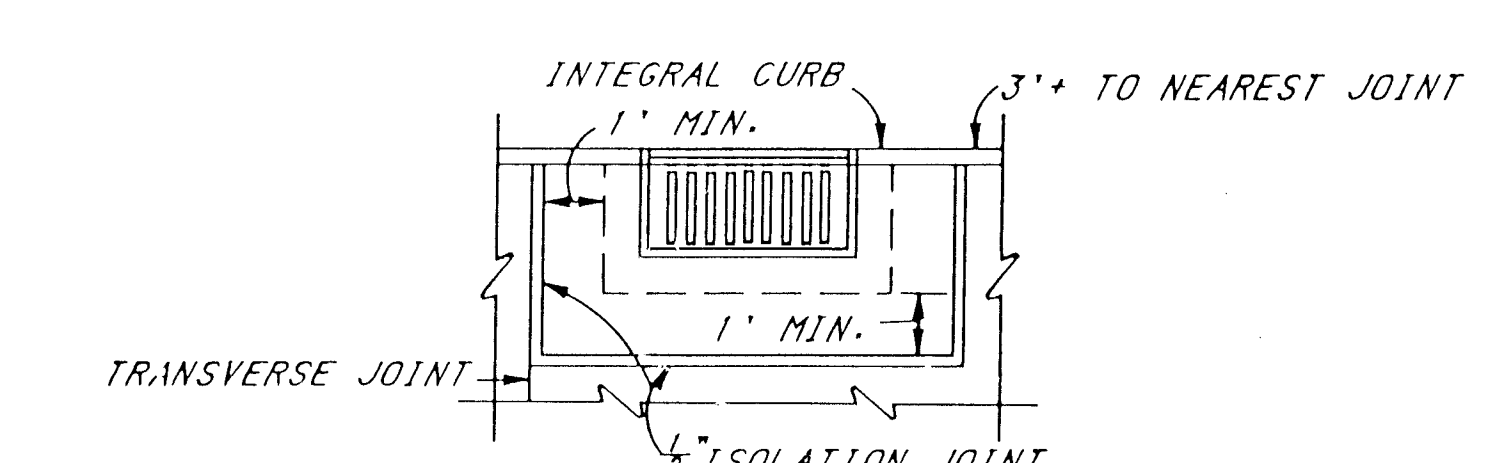
26 3203.917893

3			
2			
1	ADDED NOTE NO. 9	11-19-81	RS
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
STANDARD JOINT DETAILS			
APPROVAL <i>[Signature]</i> RECOMMENDED ENGINEER		DATE 4/23/88	
APPROVED <i>[Signature]</i> ENGINEER OF DESIGN		DATE	
SERIAL NO. LJD-001-10			

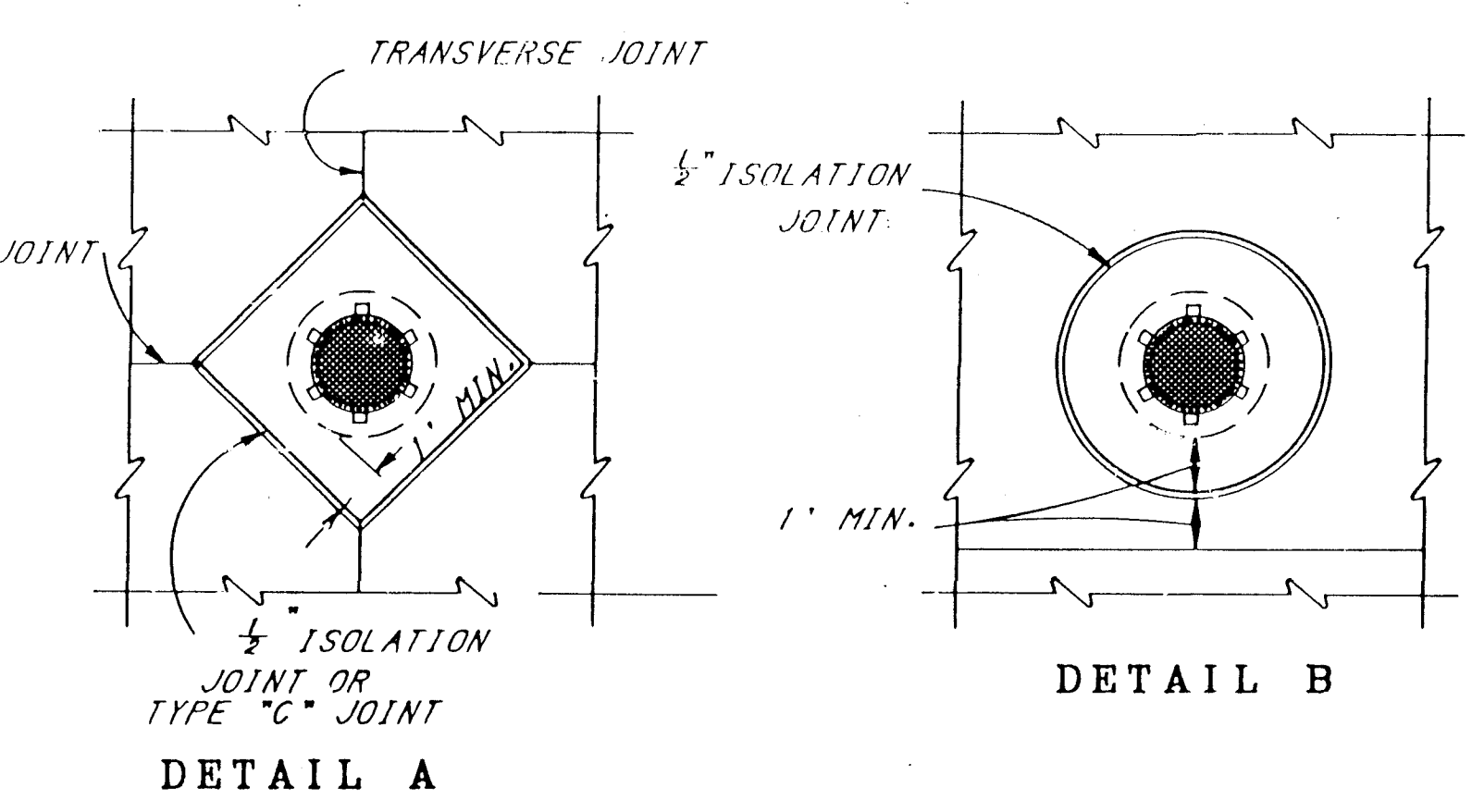
11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.



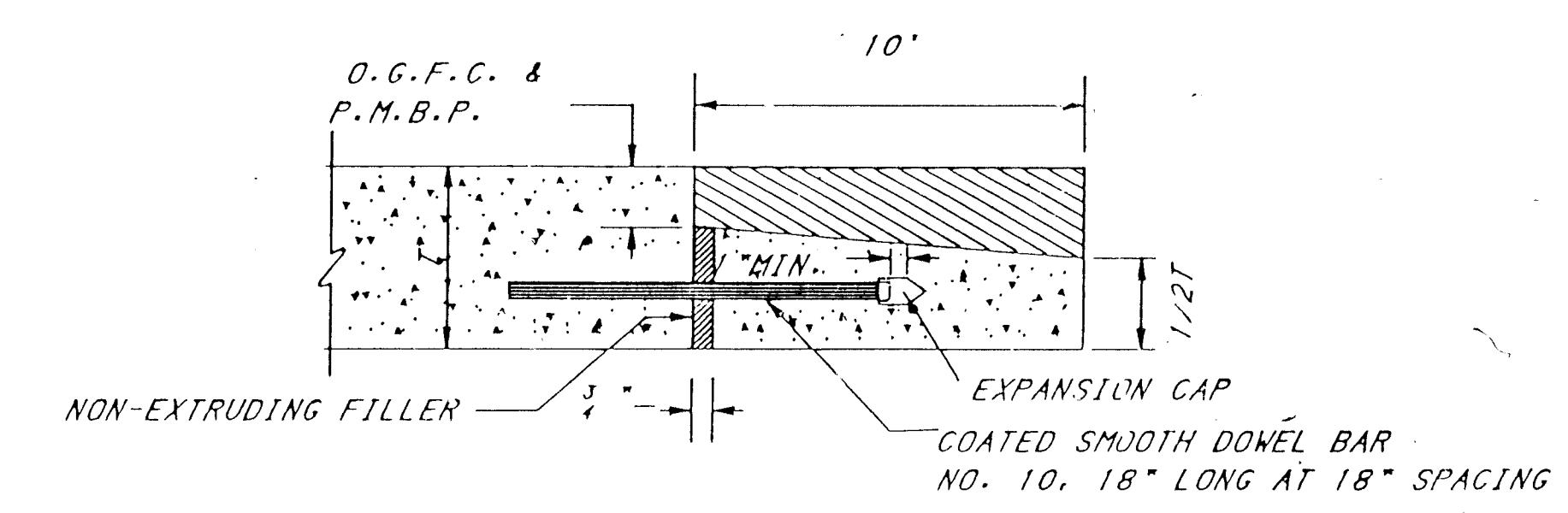
PLAN OF JOINT LOCATION
• APPLIES FOR HIGH PERCENTAGE OF TRUCK TRAFFIC



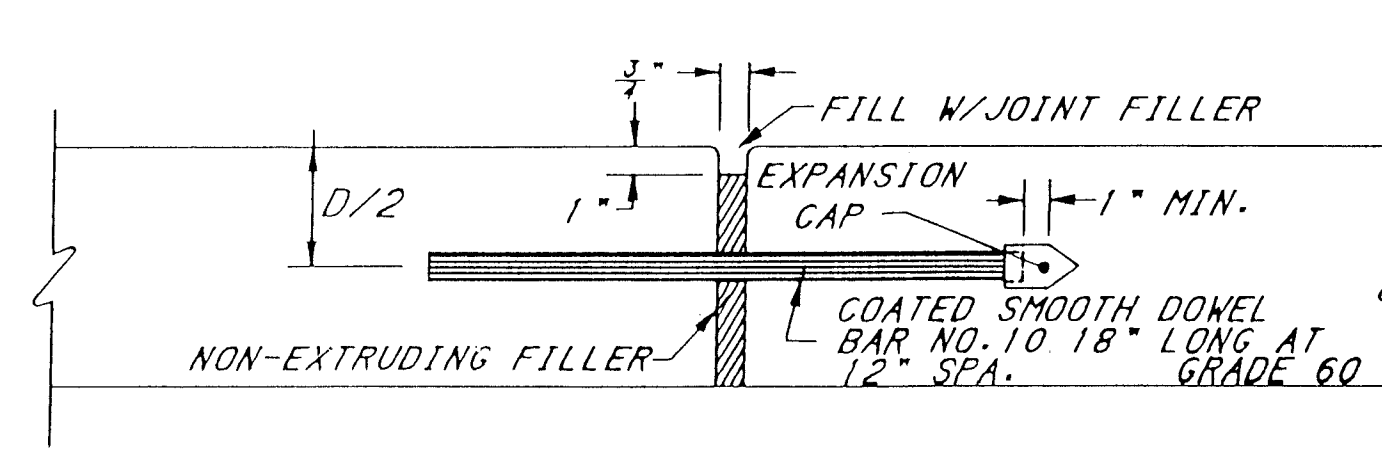
DRAINAGE INLET



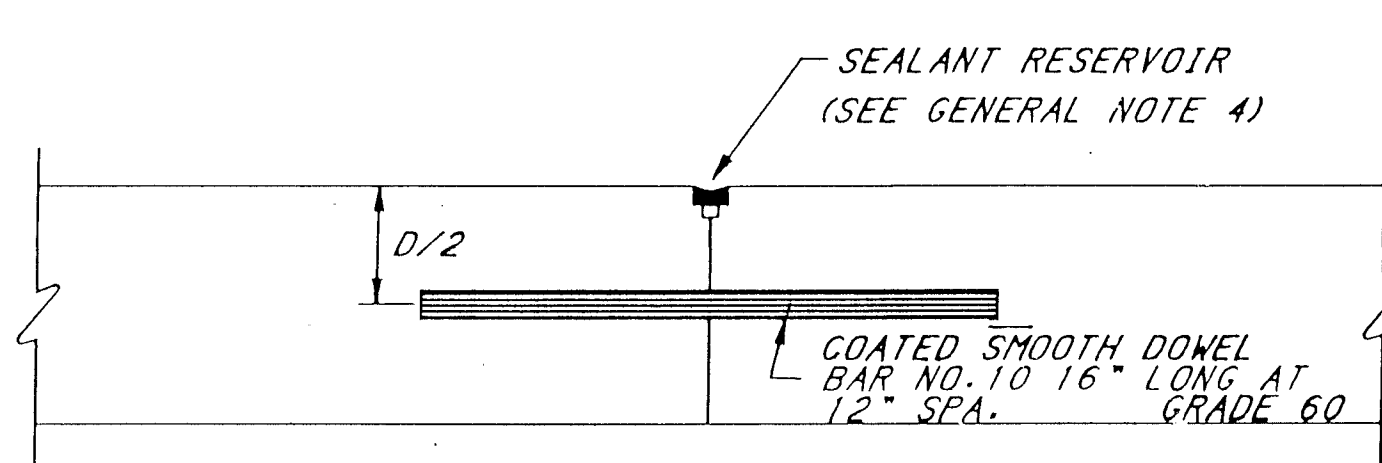
MANHOLE COVERS



TRANSITION JOINT

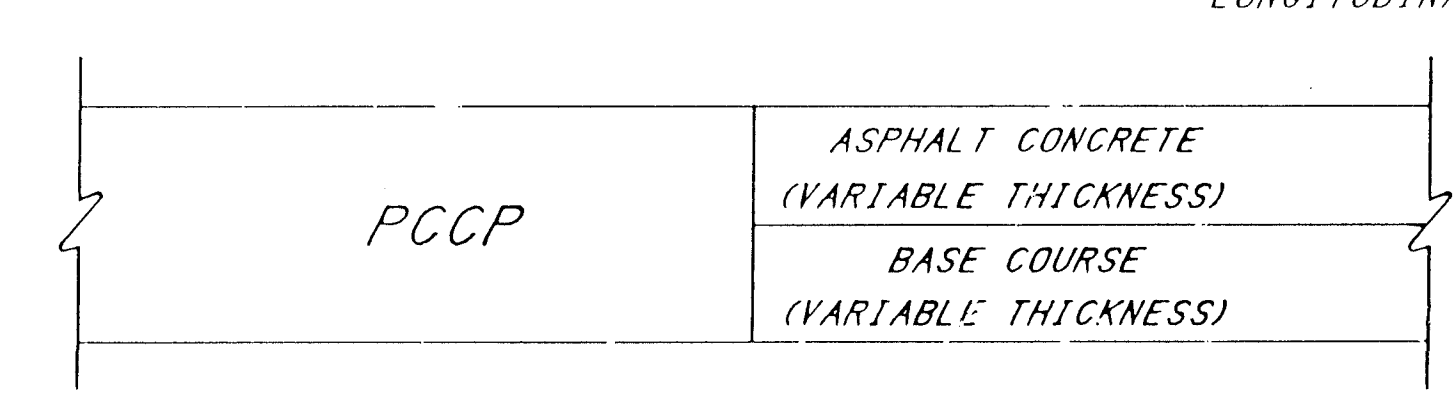


JOINT TYPE "E"
TRANSVERSE DOWELLED EXPANSION JOINT

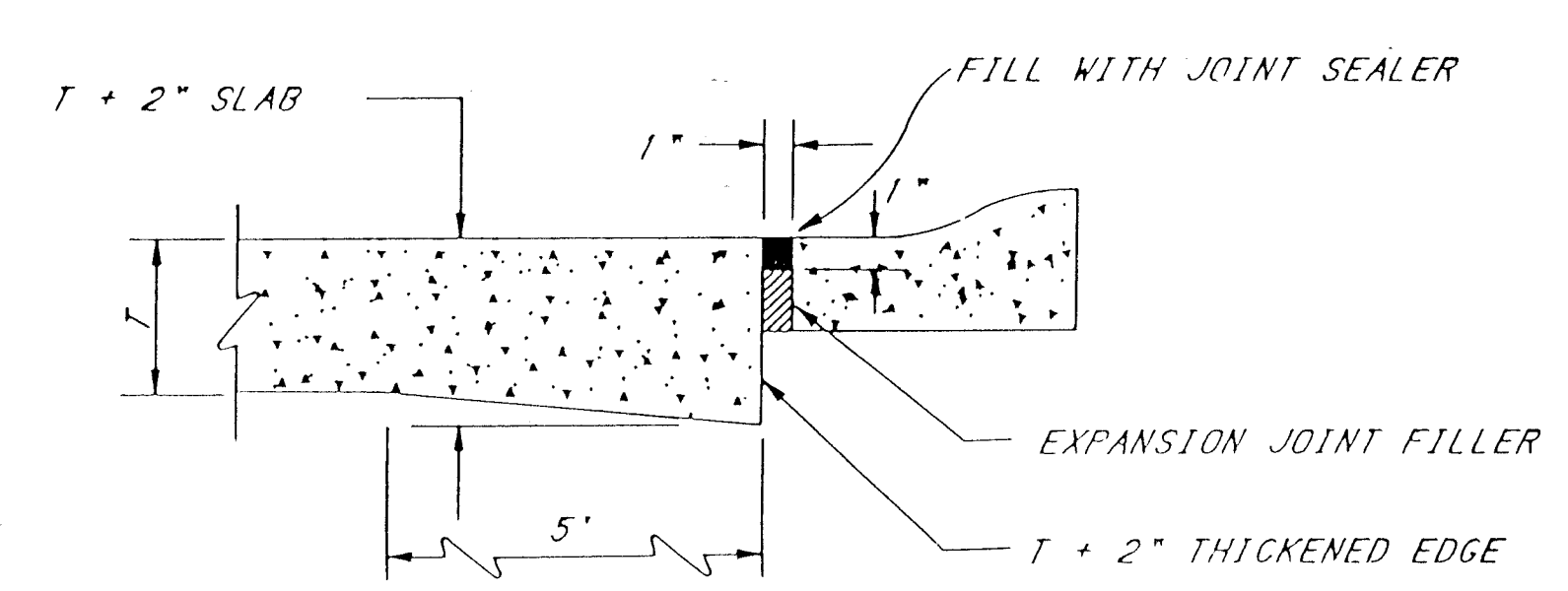


JOINT TYPE "F"
TRANSVERSE DOWELLED CONSTRUCTION JOINT

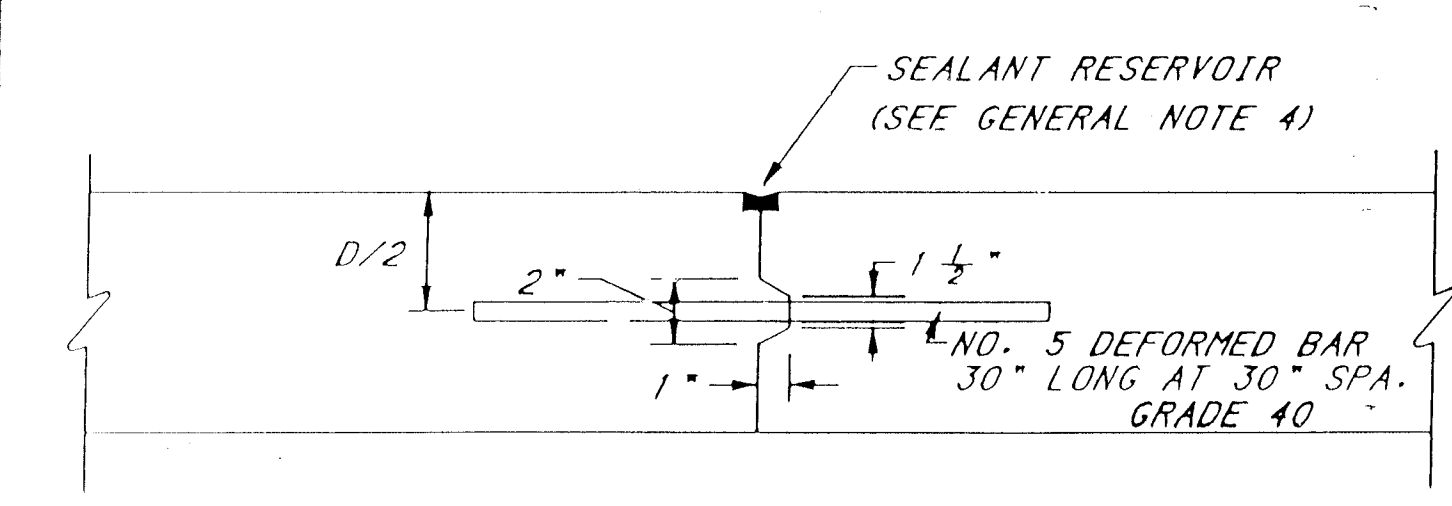
NOTE: TYPE "F" JOINTS ARE TO BE USED AT E.O.P. & B.O.P. AND AT END OF DAYS PAVING, UNLESS DAYS PAVING ENDS AT AN EXPANSION JOINT. IF THE DISTANCE FROM THE LAST JOINT TO BE SAWED TO THE TYPE "F" JOINT REQUIRED WOULD BE LESS THAN 10', THE DISTANCE BETWEEN THE LAST TWO JOINTS TO BE SAWED SHALL BE ADJUSTED SO THAT THE DISTANCE BETWEEN JOINTS WILL NOT BE LESS THAN 10'.



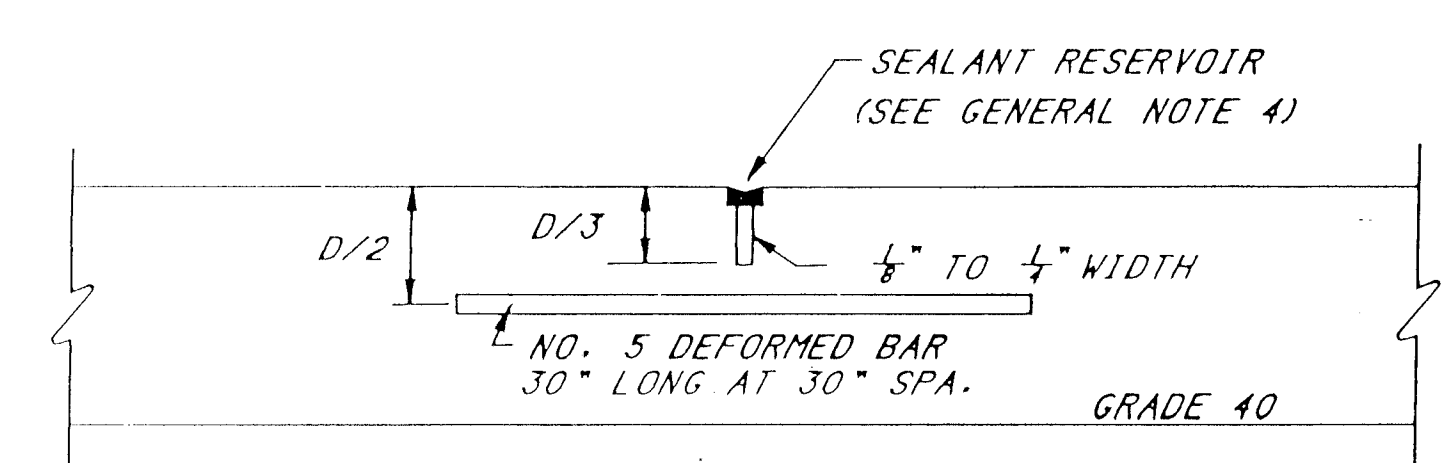
BUTT JOINT
CONCRETE TO ASPHALT



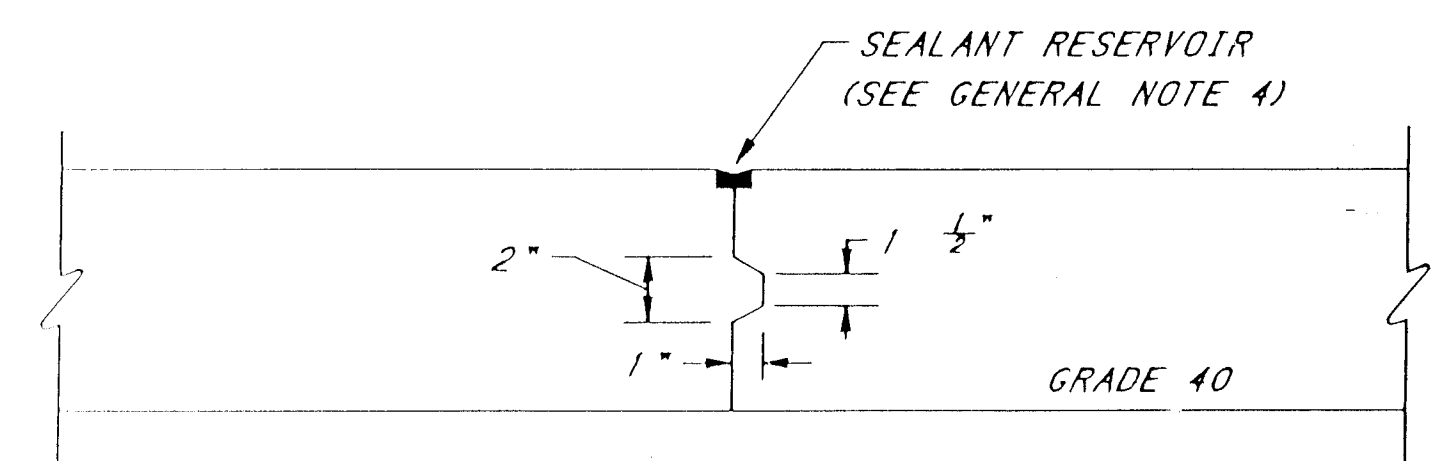
THICKENED SLAB EDGE



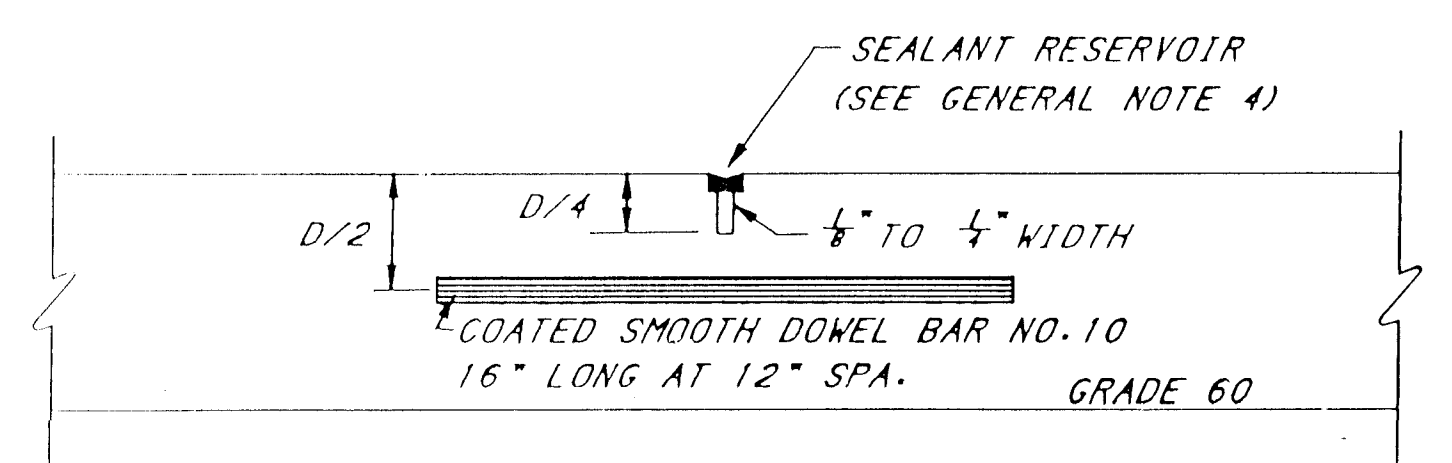
JOINT TYPE "A"
KEYED LONGITUDINAL CONSTRUCTION JOINT WITH TIEBARS



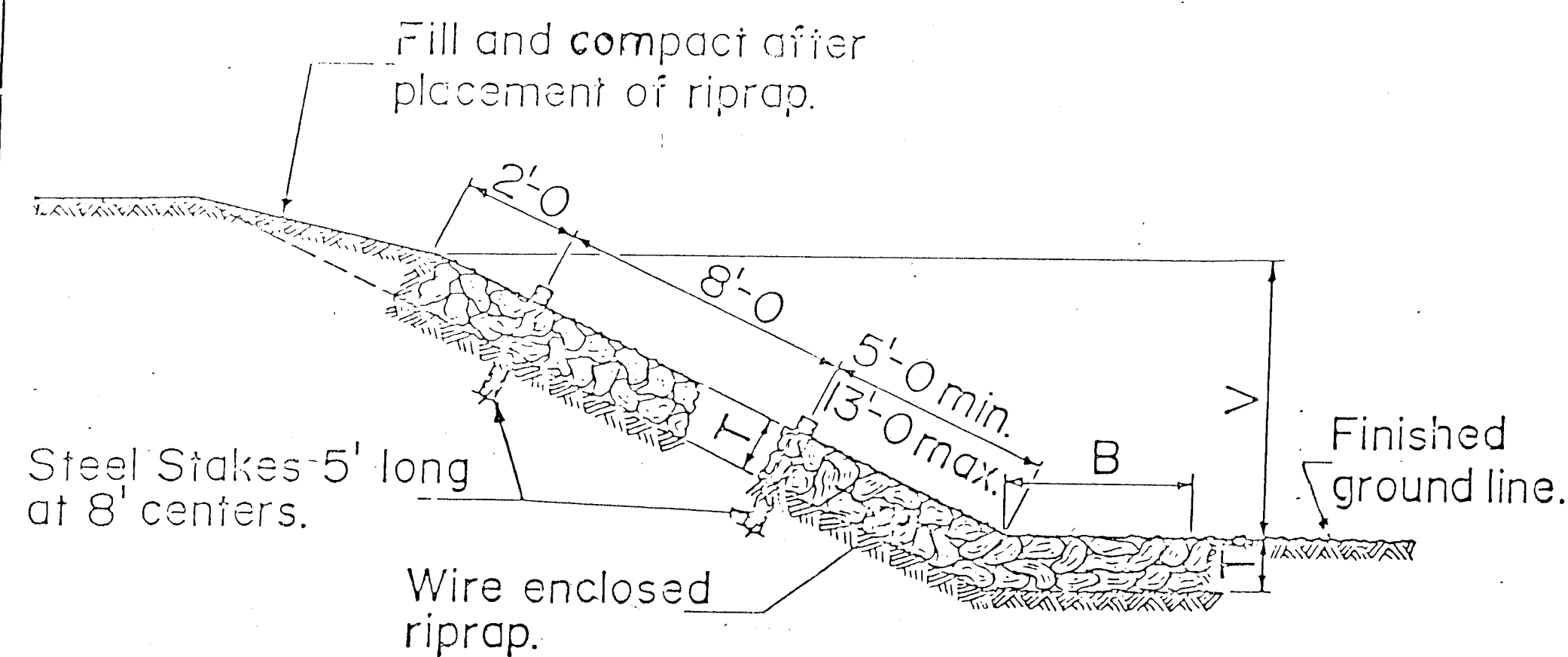
JOINT TYPE "B"
SAWED LONGITUDINAL JOINT WITH TIEBARS



JOINT TYPE "C"
KEYED LONGITUDINAL CONSTRUCTION JOINT



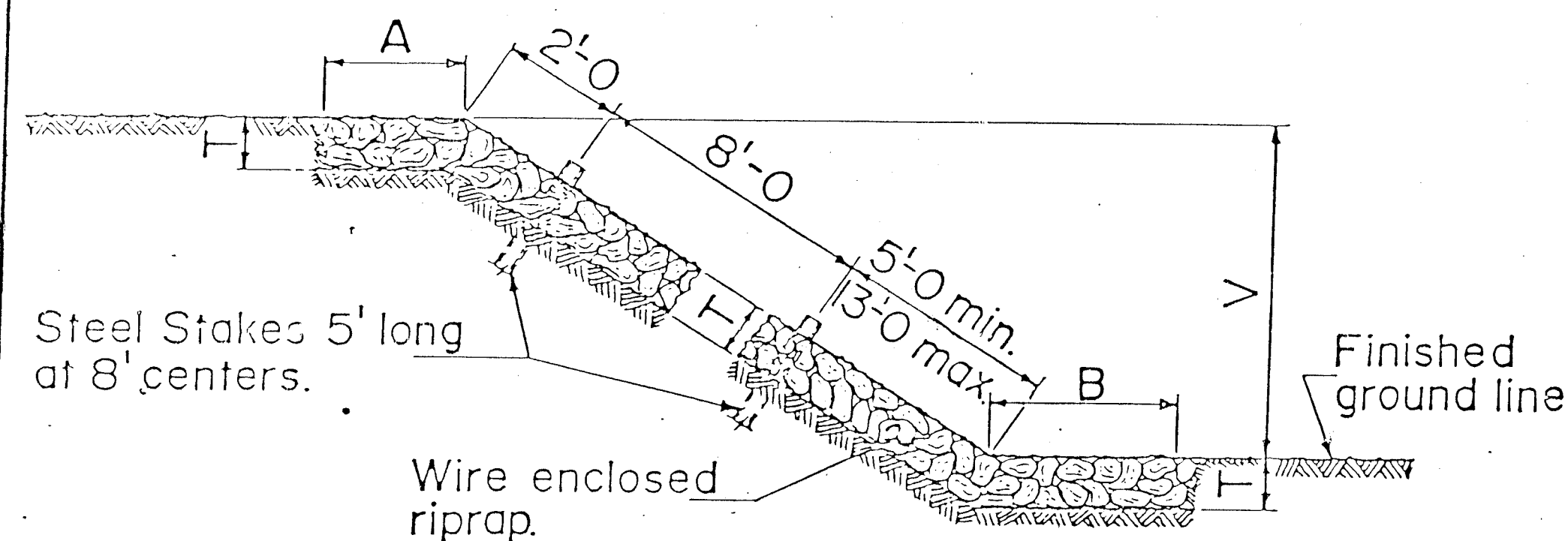
JOINT TYPE "D"
TRANSVERSE DOWELLED SAWED CONTRACTION JOINT



SECTION TYPE A

QUANTITIES PER LIN. FT.

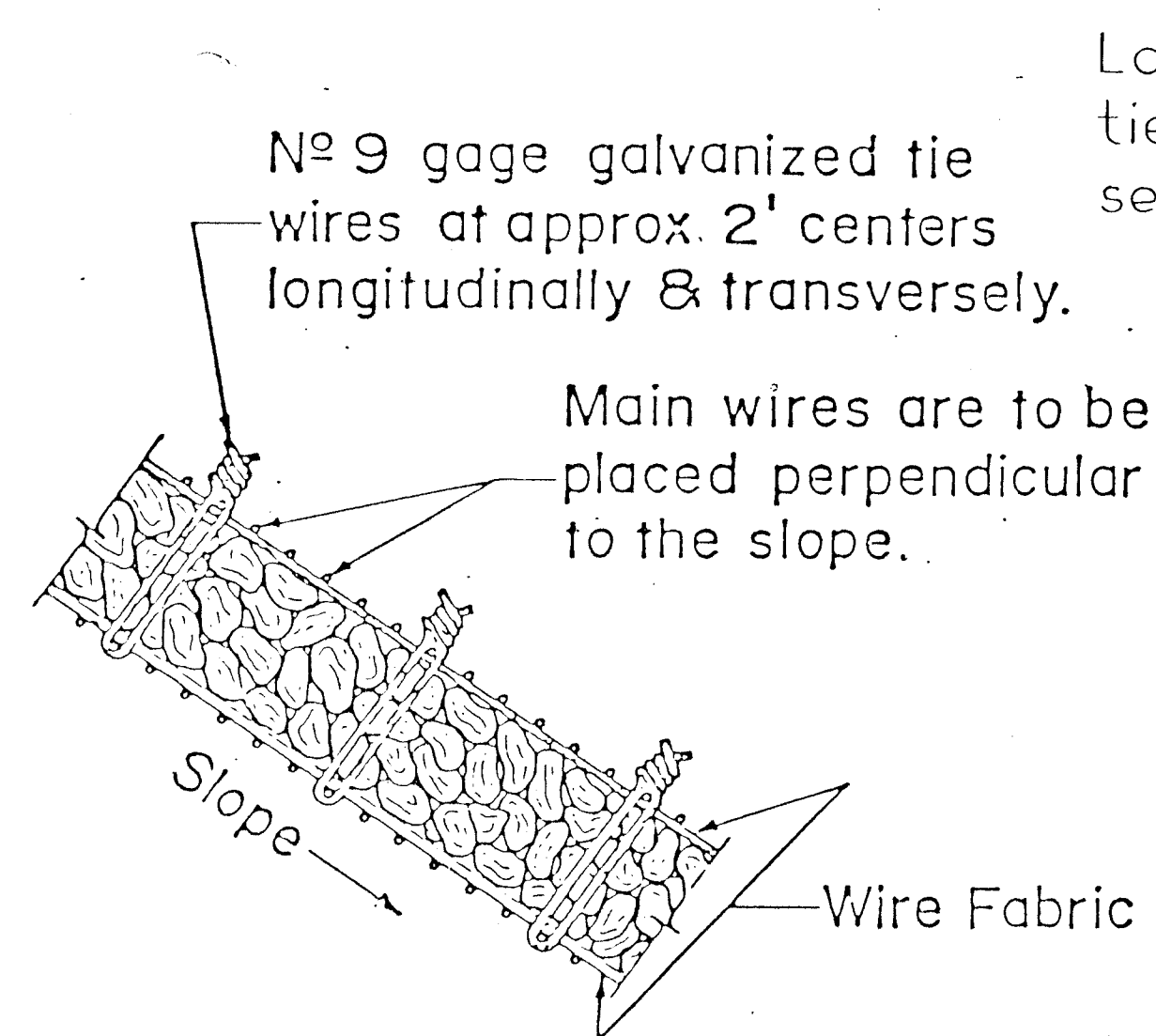
SLOPE	RIPRAP CU. YDS.
1 1/2 : 1	$\frac{T}{27} (B + 1.803V + 0.303T)$
1 3/4 : 1	$\frac{T}{27} (B + 2.016V + 0.266T)$
2 : 1	$\frac{T}{27} (B + 2.236V + 0.236T)$
3 : 1	$\frac{T}{27} (B + 3.162V + 0.162T)$
4 : 1	$\frac{T}{27} (B + 4.123V + 0.123T)$



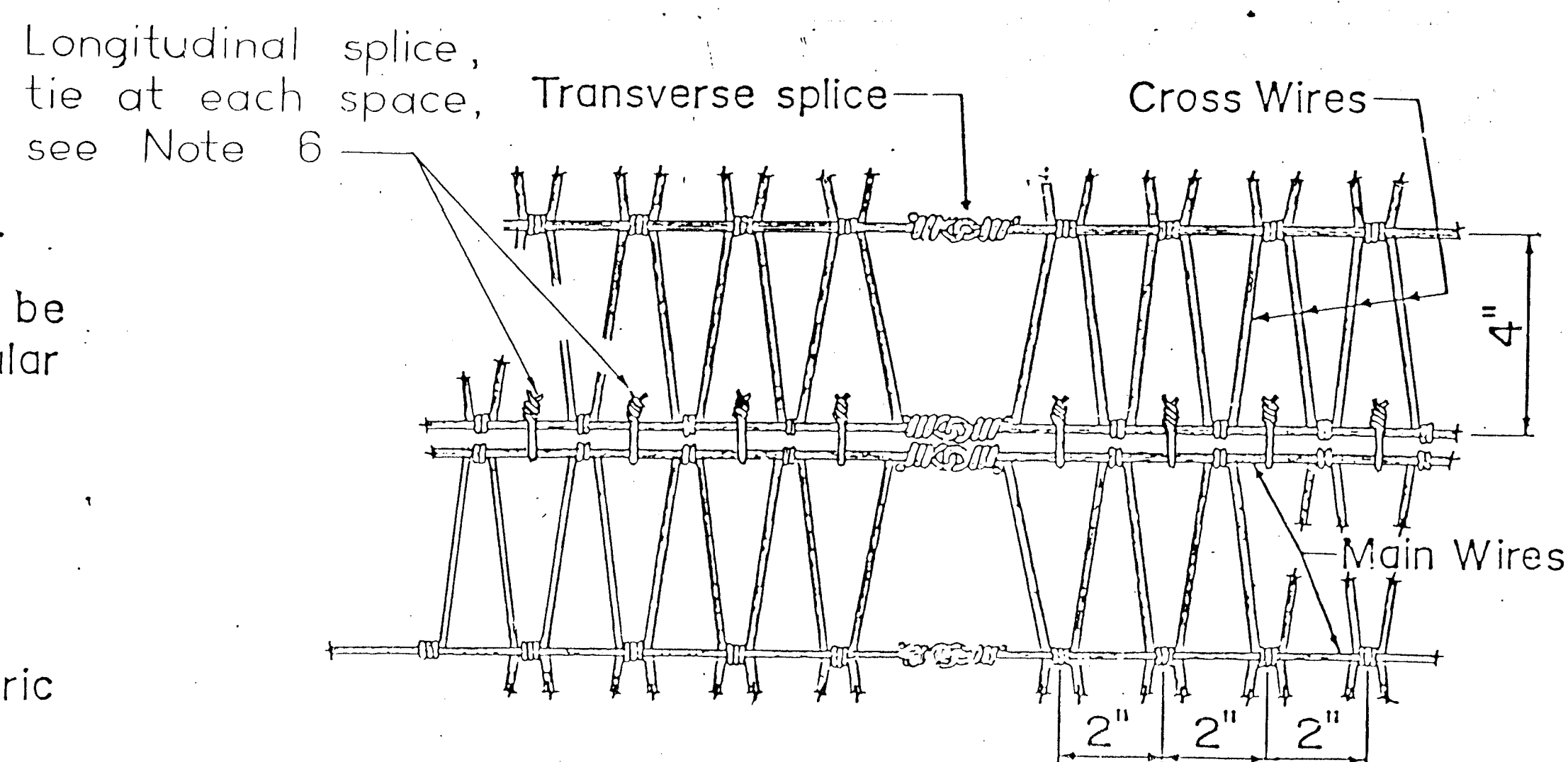
SECTION TYPE B

QUANTITIES PER LIN. FT.

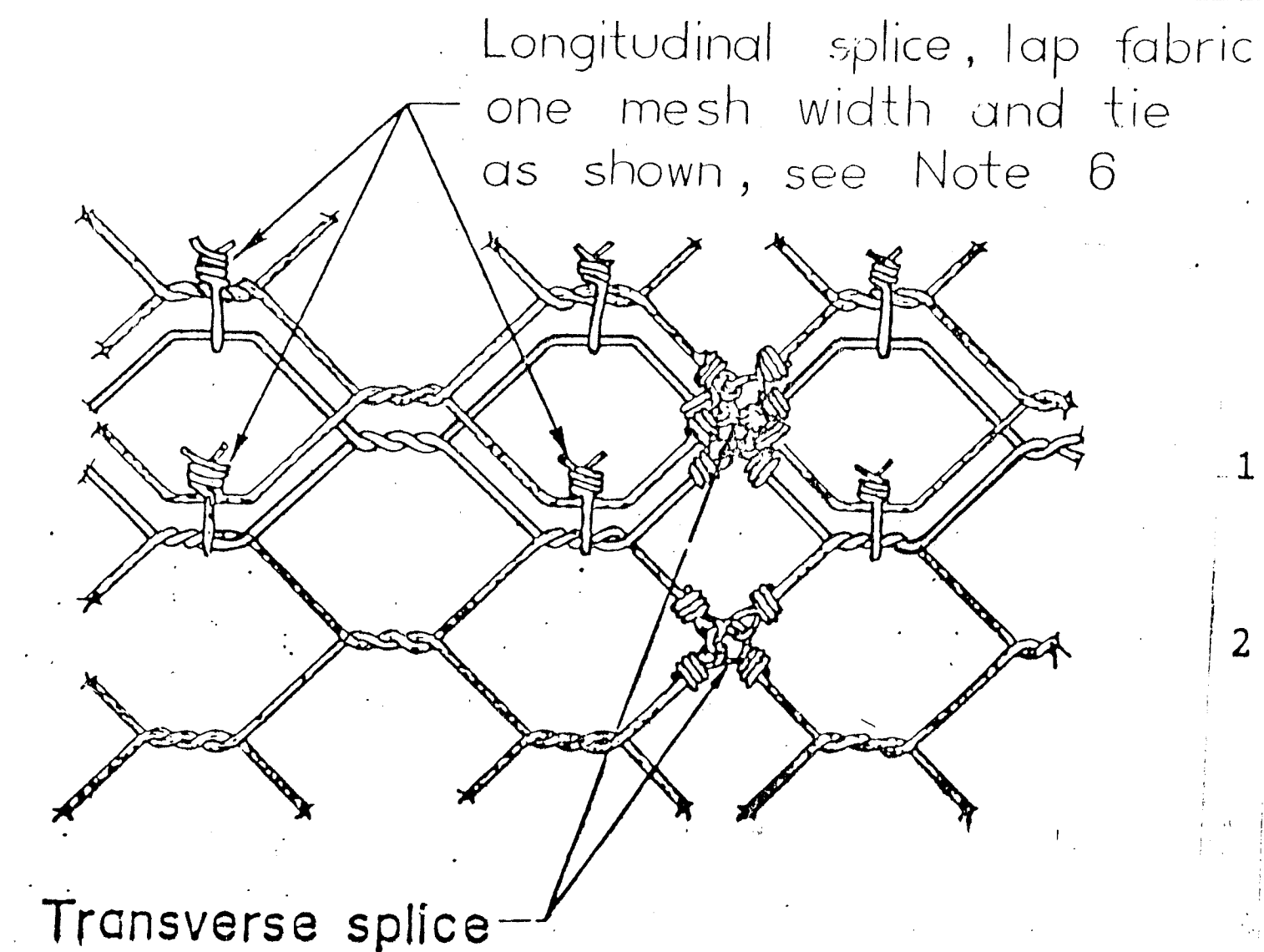
SLOPE	RIPRAP CU. YDS.
1 : 1	$\frac{T}{27} (A + B + 1.414V)$
1 1/2 : 1	$\frac{T}{27} (A + B + 1.803V)$
1 3/4 : 1	$\frac{T}{27} (A + B + 2.016V)$
2 : 1	$\frac{T}{27} (A + B + 2.236V)$
3 : 1	$\frac{T}{27} (A + B + 3.162V)$
4 : 1	$\frac{T}{27} (A + B + 4.123V)$



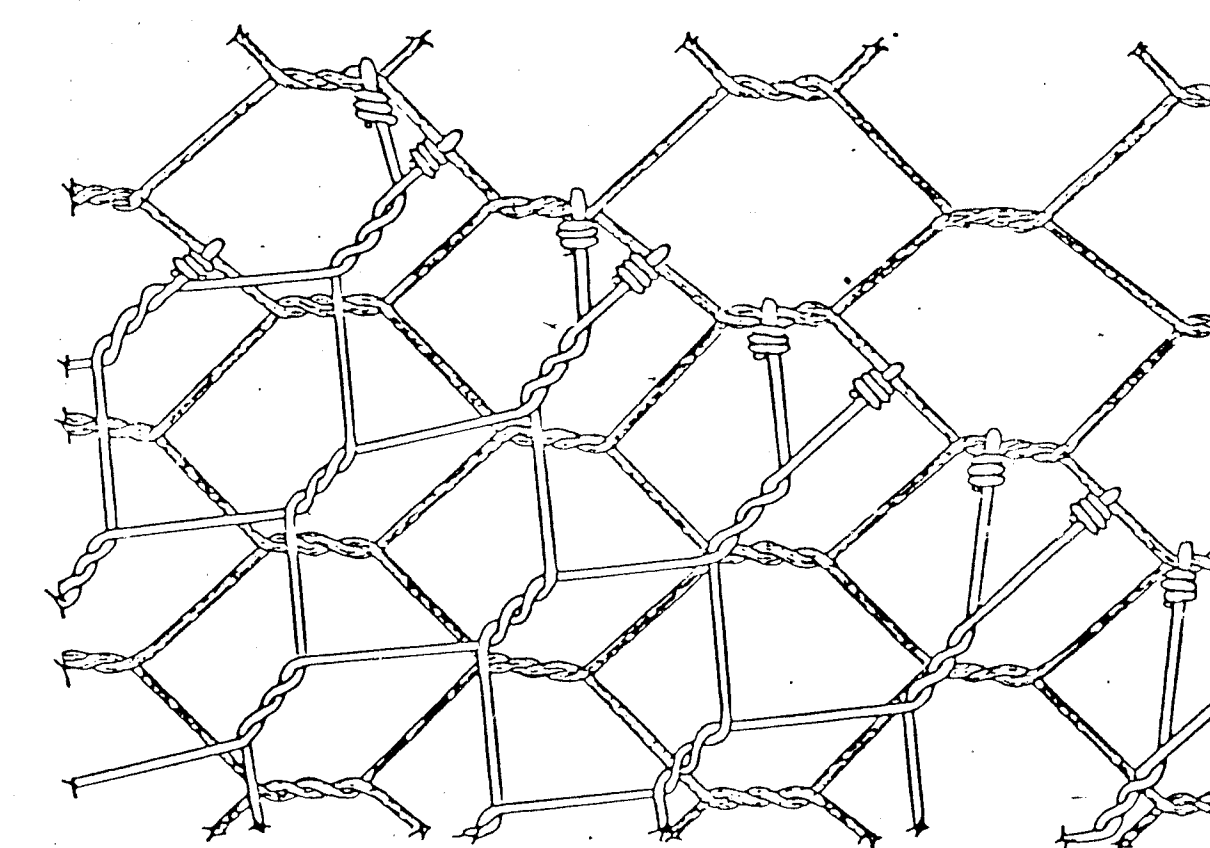
TYPICAL SECTION



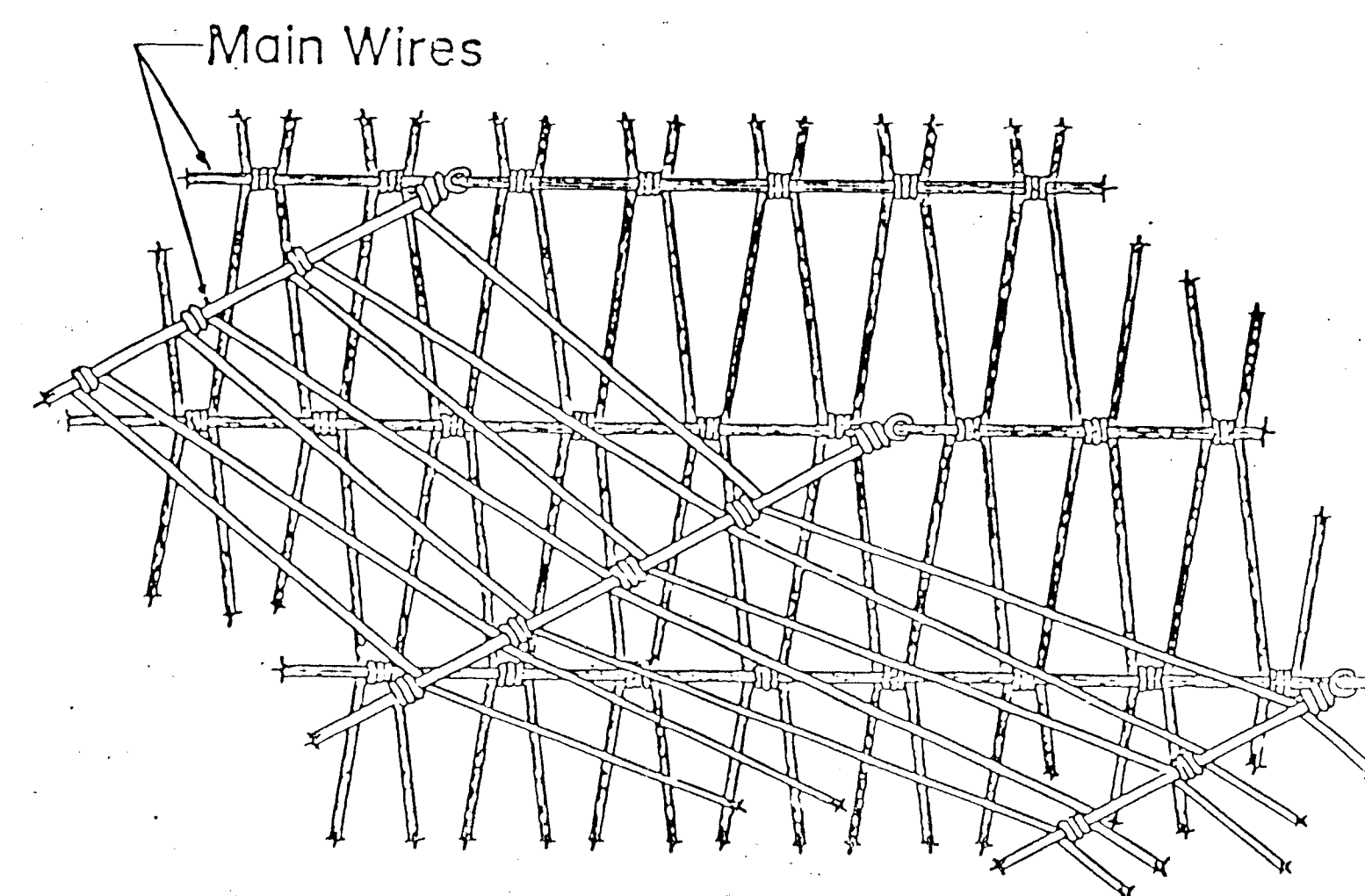
DETAIL OF WIRE FABRIC AND NORMAL SPLICE



DETAIL OF SPLICE AT SKEWED INTERSECTIONS



HEXAGONAL MESH



DETAIL OF SPLICE AT SKEWED INTERSECTIONS

"V" M E S H

26 3203-9/7993

RECORD COPY

SCANLON & ASSOCIATES, INC.

F.P.W.A. Project No.	STATE	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		

GENERAL NOTES

- Wire fabric for riprap shall be "V" or hexagonal mesh meeting the requirements listed in the specifications.
- Steel stakes may be railroad rails, weighing not less than 30 lbs. per yard, 4" O.D. standard strength galvanized steel pipe or 4 x 4 x 3/8 steel angles. Steel stakes shall project 6" above top of riprap. Steel stakes are considered incidental to the completion of the work and no direct measurement or payment will be made therefor.
- If length of slope is 15 feet or less, only one row of steel stakes 2 feet from the top edge of the riprap will be required unless otherwise noted on plans.
- For dimensions A, B, V & T see Bridge or Roadway Plans.
- T = 12" unless otherwise shown on plans. T = 18" at bridges.
- Longitudinal splices may be made with one lap of galvanized 9 gage tie wire, 9 gage galvanized hog rings or 11 1/2 gage galvanized hard drawn interlocking wire clips.

THIS SERIAL REVISED 9-12-89

IDENT. NO.	REVISIONS (OR CHANGE NOTICES)	DATE	BY
1	Notes 1 & 6 and splice details	9-12-89	I.R.H.
2	Changed Tensile Str., Twist, & Mesh Dimen.	4-18-86	C.E.S.
3	Rev. 2 combine Gen. note 6 w/ Gen. note 1	12-2-85	A.R.
4	Changed Mesh Dimensions and Tie Wire Spc.	2/26/80	E.R.D.
5	Change Serial Designation	10/4/79	E.R.D.
6	Add General Note #6	10/4/79	E.R.D.
7	New Mesh Details	10/4/79	E.R.D.
8	New Subtitle - Existing Detail	10/4/79	E.R.D.

NEW MEXICO
STATE HIGHWAY DEPARTMENT

WIRE ENCLOSED RIPRAP

DESIGNED BY J.A.H.	APPROVAL	DATE
DRAWN BY A.J.S.	RECOMMENDED	DATE
CHECKED BY E.R.D.	APPROVED	DATE
	DESIGN BUREAU CHIEF	DATE

△ SERIAL BRR-001-08

FHWA Region No.	STATE	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		

CHART TO DETERMINE SINGLE POST SIZE Δ

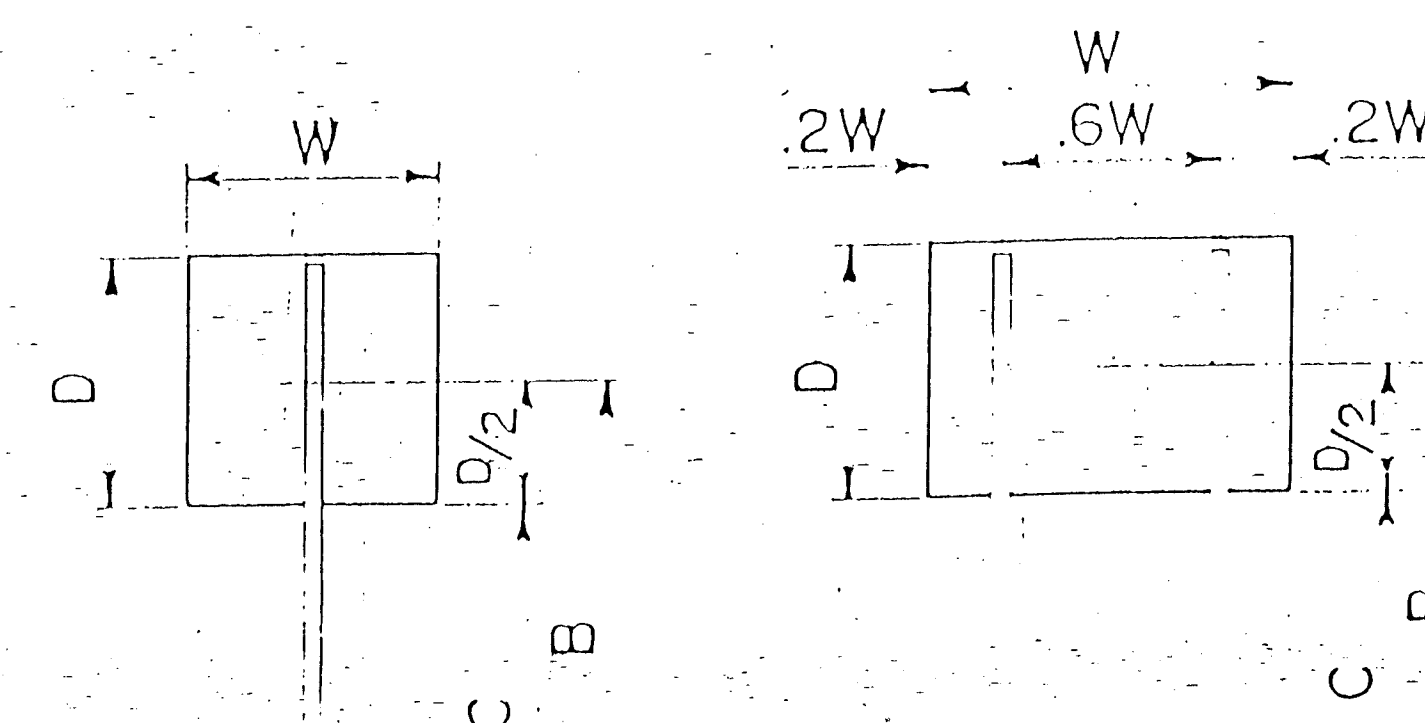
POST SIZE	K FACTOR (B x A)	B DIMENSION (FT.)												A(FT ²) SIGN AREA
		5	6	7	8	9	10	11	12	13	14	15	16	
2.00 LB/FT	DOES NOT APPLY				3.9				3.7	3.4	3.2	2.9	2.8	
2.25 LB/FT					5.1			4.6	4.2	3.9	3.6	3.4	3.2	
2.75 LB/FT					6.7			6.0	5.5	5.1	4.7	4.4	4.1	
3.00 LB/FT					7.3				6.7	6.2	5.6	5.1	5.0	
4.00 LB/FT					9.4				8.6	8.0	7.5	7.0		

CHART TO DETERMINE DOUBLE POST SIZE Δ

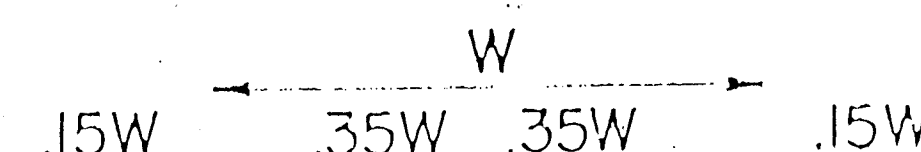
POST SIZE	K FACTOR (B x A)	B DIMENSION (FT.)												A(FT ²) SIGN AREA
		5	6	7	8	9	10	11	12	13	14	15	16	
2.00 LB/FT	97.00	19.4	15.1	13.8	12.1	10.8	9.7	8.8	8.1	7.5	6.9	6.5	6.1	
2.25 LB/FT	109.00	21.9	18.2	15.6	13.7	12.2	10.9	9.9	9.1	8.4	7.8	7.3	6.8	
2.75 LB/FT	142.00	28.4	23.7	20.3	17.8	15.8	14.2	12.9	11.8	10.9	10.1	9.5	8.9	
3.00 LB/FT	174.00	34.8	29.0	24.9	21.8	19.3	17.4	15.8	14.5	13.4	12.4	11.6	10.9	
4.00 LB/FT	241.00	48.2	40.2	34.4	30.1	26.8	24.1	21.9	20.1	18.5	17.2	16.1	15.1	

CHART TO DETERMINE THREE POST SIZE Δ Δ

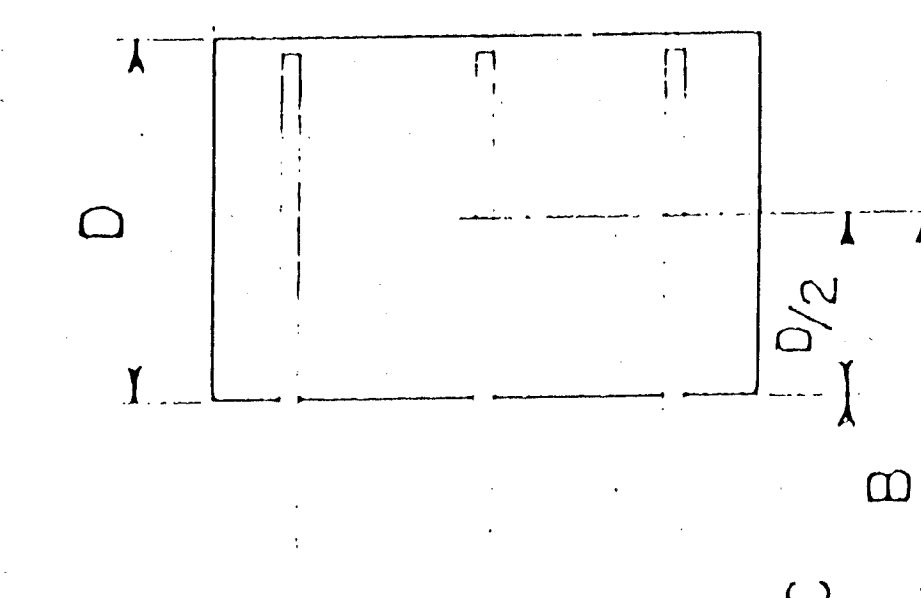
POST SIZE	K FACTOR (B x A)	B DIMENSION (FT.)												A(FT ²) SIGN AREA
		5	6	7	8	9	10	11	12	13	14	15	16	
2.00 LB/FT	145.00	29.0	24.2	20.7	18.1	16.1	14.5	13.2	12.1	11.2	10.4	9.7	9.1	
2.25 LB/FT	164.00	32.8	27.3	23.4	20.5	18.2	16.4	14.9	13.7	12.6	11.7	10.9	10.3	
2.75 LB/FT	213.00	42.6	35.5	30.4	26.6	23.6	21.3	19.3	17.7	16.3	15.2	14.2	13.3	
3.00 LB/FT	261.00	52.2	43.5	37.3	32.6	29.0	26.1	23.7	21.7	20.0	18.6	17.4	16.3	
4.00 LB/FT	361.00	72.2	60.1	51.5	45.1	40.1	36.1	32.8	30.0	27.7	25.8	24.0	22.5	



SINGLE POST SIZE



DOUBLE POST SIZE



THREE POST SIZE

EXAMPLE

Required: Determine post requirements for a 5' wide, 4' high sign. Located on a rural highway.

Given: W = 5'
D = 4'

Solution: 1. For a rural location.

C (min) = 5'

2. D/2 = 4/2 = 2

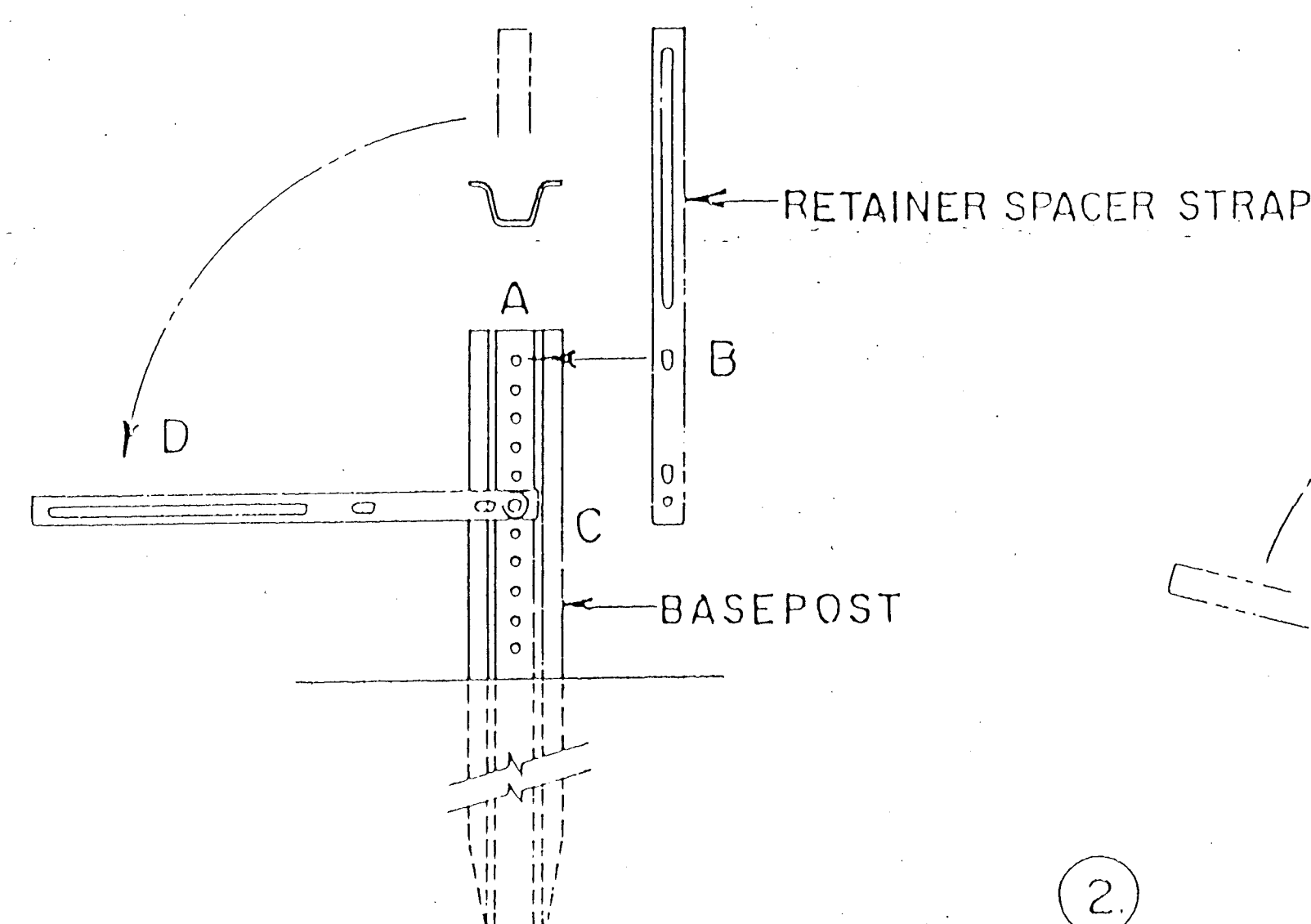
3. B = C + D/2
= 5' + 2' = 7'

4. A = W x D
= 5' x 4' = 20.00 sq. ft.

5. Enter the column for B=7' and continue down the "A" factor equals or exceeds 20 sq. ft. 2 posts of 2.75 lb/ft yields a factor of 20.3 which is optimum.

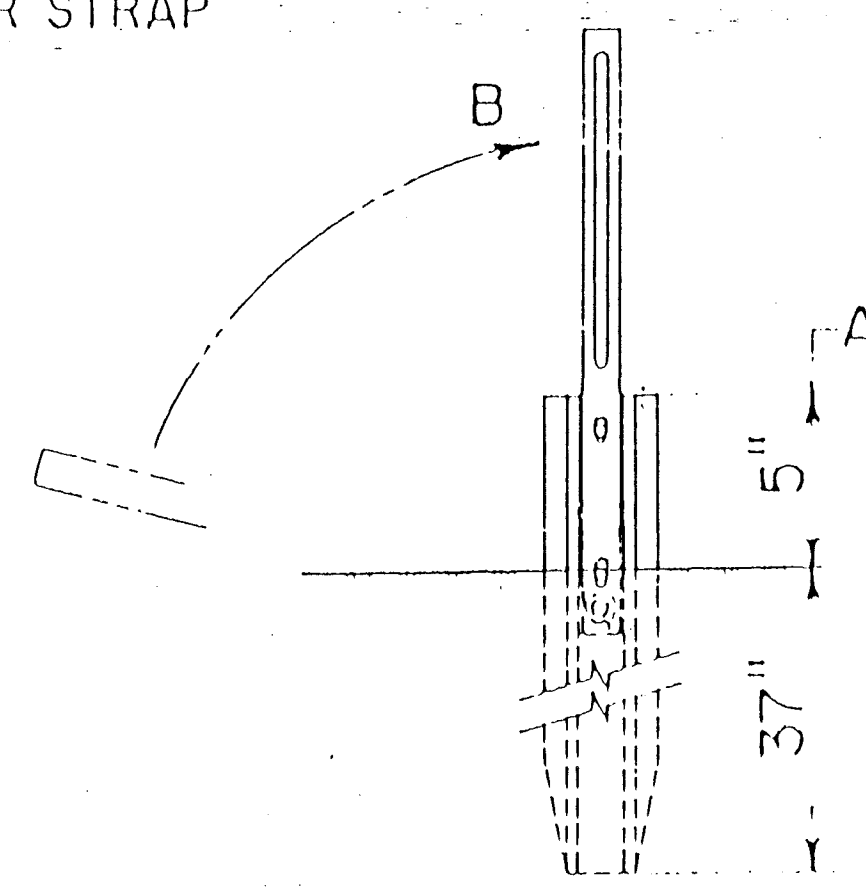
Example:	POST	B=7
	2.75 LB/FT	20.3
	3.00 LB/FT	24.9
	4.00 LB/FT	34.4

INSTALLATION PROCEDURE

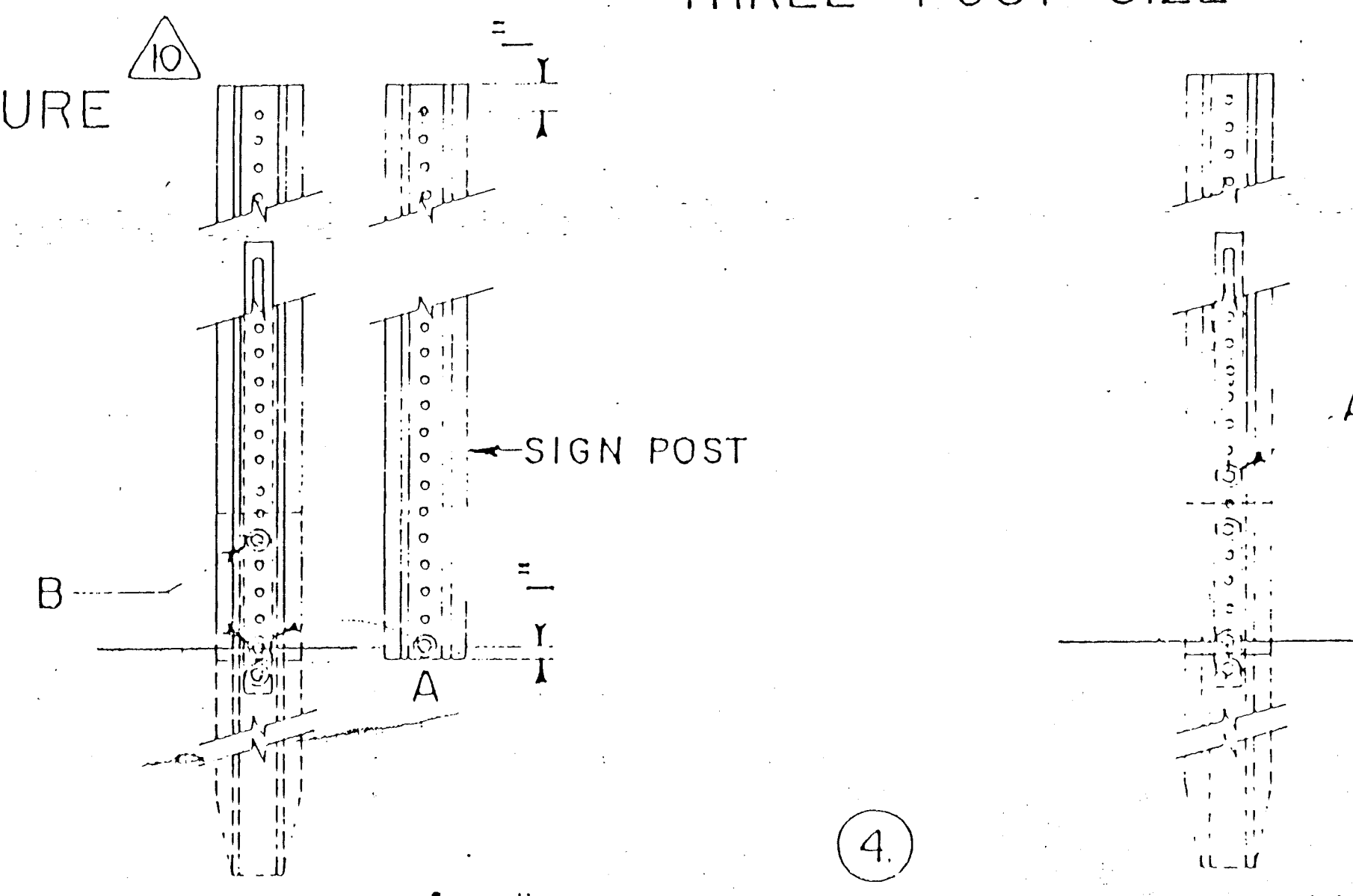


1. A-Drive basepost to within 12" of ground level.
B-Proper assembly established by lining up top 3/4" slot of retainer spacer strap with top hole of basepost.
C-Assemble strap to basepost.

D-Rotate strap 90° to left.



2. A-Drive basepost to 5" dimension.
B-Rotate strap to vertical position.



3. A-Place 3/8-16 UNC x 20" bolt in bottom of sign post to facilitate alignment of sign post with proper hole in base post. (This coincides with bottom 3/4" slot in strap).
B-Alternately tighten two connector bolts.

4. A-Complete assembly by tightening retainer bolt. (This fastens sign post to retainer spacer strap).

11/20/92

RECORD COPY

SCANLON & ASSOCIATES, INC.

26 3203-918093

REVISION	DESCRIPTION	DATE	BY
1	REVISED INSTALLATION PROCEDURE	5-30-82	TGM
2	DELETED NOTE #1	5-30-82	TGM
3	REVISED THREE POST CHART	12-1-80	TGM
4	REVISED NOTE 1	5-17-79	TGM
5	REVISED SINGLE POST CHART	2-13-78	TGM
6	REVISED EXAMPLE	2-13-78	TGM
7	REVISED DOUBLE AND THREE POST CHART	2-9-78	J.G.
8	REVISED NOTE 1, DELETED NOTE 2	2-9-78	TGM
9	ADDED NOTES 1 AND 2	1/25/79	J.G.
10	REVISED CHARTS TO DETERMINE POST SIZE	1/19/78	J.G.
11	DISCONTINUED		
12	DISCONTINUED		
13	DISCONTINUED		
14	DISCONTINUED		
15	DISCONTINUED		
16	DISCONTINUED		
17	DISCONTINUED		
18	DISCONTINUED		
19	DISCONTINUED		
20	DISCONTINUED		
21	DISCONTINUED		
22	DISCONTINUED		
23	DISCONTINUED		
24	DISCONTINUED		
25	DISCONTINUED		
26	DISCONTINUED		
27	DISCONTINUED		
28	DISCONTINUED		
29	DISCONTINUED		
30	DISCONTINUED		
31	DISCONTINUED		
32	DISCONTINUED		
33	DISCONTINUED		
34	DISCONTINUED		
35	DISCONTINUED		
36	DISCONTINUED		
37	DISCONTINUED		
38	DISCONTINUED		
39	DISCONTINUED		
40	DISCONTINUED		
41	DISCONTINUED		
42	DISCONTINUED		
43	DISCONTINUED		
44	DISCONTINUED		
45	DISCONTINUED		
46	DISCONTINUED		
47	DISCONTINUED		
48	DISCONTINUED		
49	DISCONTINUED		
50	DISCONTINUED		
51	DISCONTINUED		
52	DISCONTINUED		
53	DISCONTINUED		
54	DISCONTINUED		
55	DISCONTINUED		
56	DISCONTINUED		
57	DISCONTINUED		
58	DISCONTINUED		
59	DISCONTINUED		
60	DISCONTINUED		
61	DISCONTINUED		
62	DISCONTINUED		
63	DISCONTINUED		
64	DISCONTINUED		
65	DISCONTINUED		
66	DISCONTINUED		
67	DISCONTINUED		
68	DISCONTINUED		
69	DISCONTINUED		
70	DISCONTINUED		
71	DISCONTINUED		
72	DISCONTINUED		
73	DISCONTINUED		
74	DISCONTINUED		
75	DISCONTINUED		
76	DISCONTINUED		
77	DISCONTINUED		
78	DISCONTINUED		
79	DISCONTINUED		
80	DISCONTINUED		
81	DISCONTINUED		
82	DISCONTINUED		
83	DISCONTINUED		
84	DISCONTINUED		
85	DISCONTINUED		
86	DISCONTINUED		
87	DISCONTINUED		
88	DISCONTINUED		
89	DISCONTINUED		
90	DISCONTINUED		
91	DISCONTINUED		
92	DISCONTINUED		
93	DISCONTINUED		
94	DISCONTINUED		
95	DISCONTINUED		
96	DISCONTINUED		
97	DISCONTINUED		
98	DISCONTINUED		
99	DISCONTINUED		
100	DISCONTINUED		

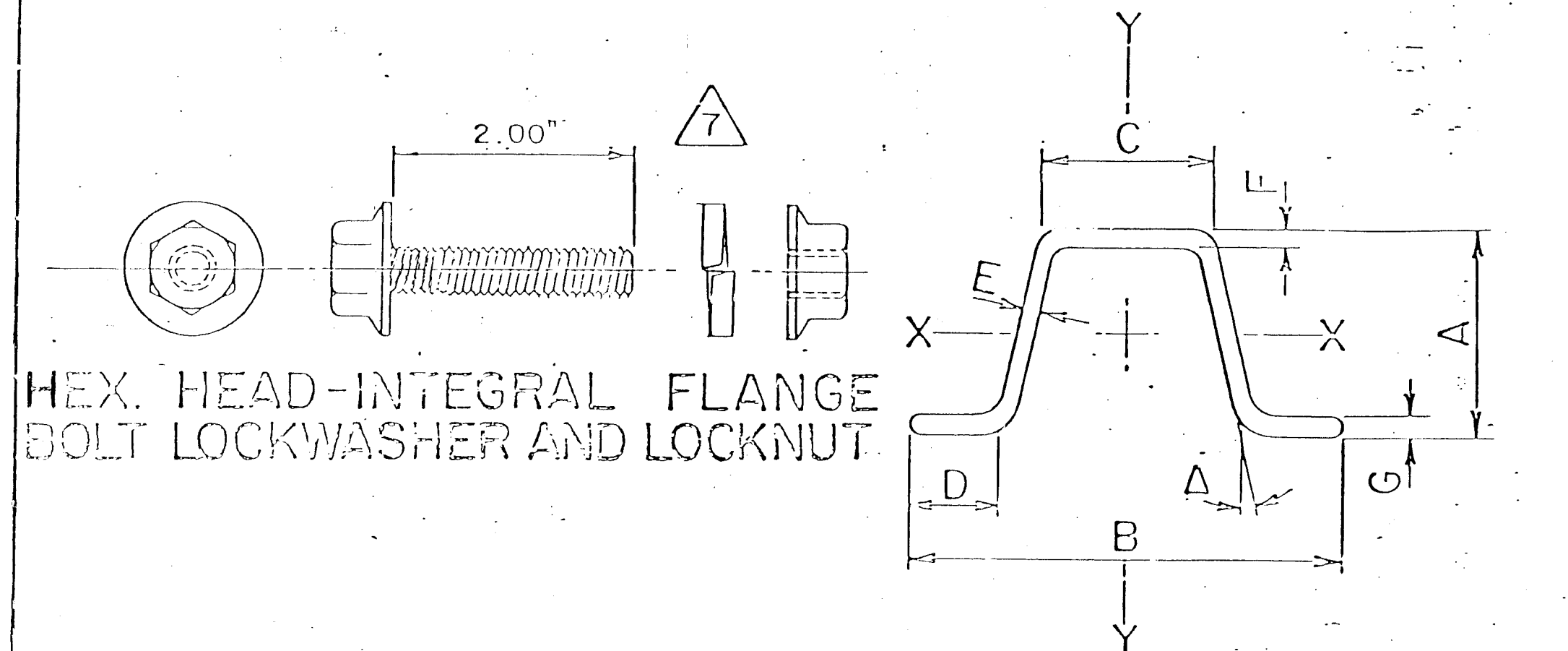
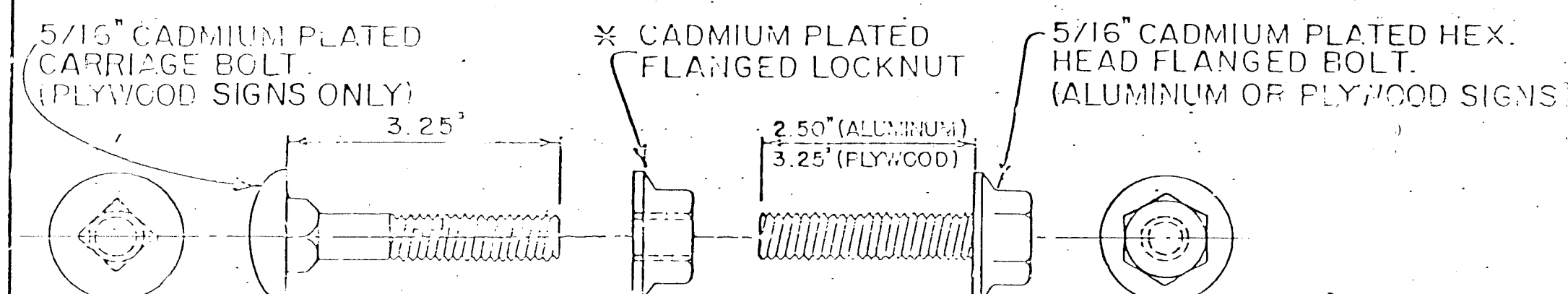
NEW MEXICO
STATE HIGHWAY DEPARTMENT

DESIGN LOADS FOR
BREAKAWAY FLANGED
CHANNEL POSTS

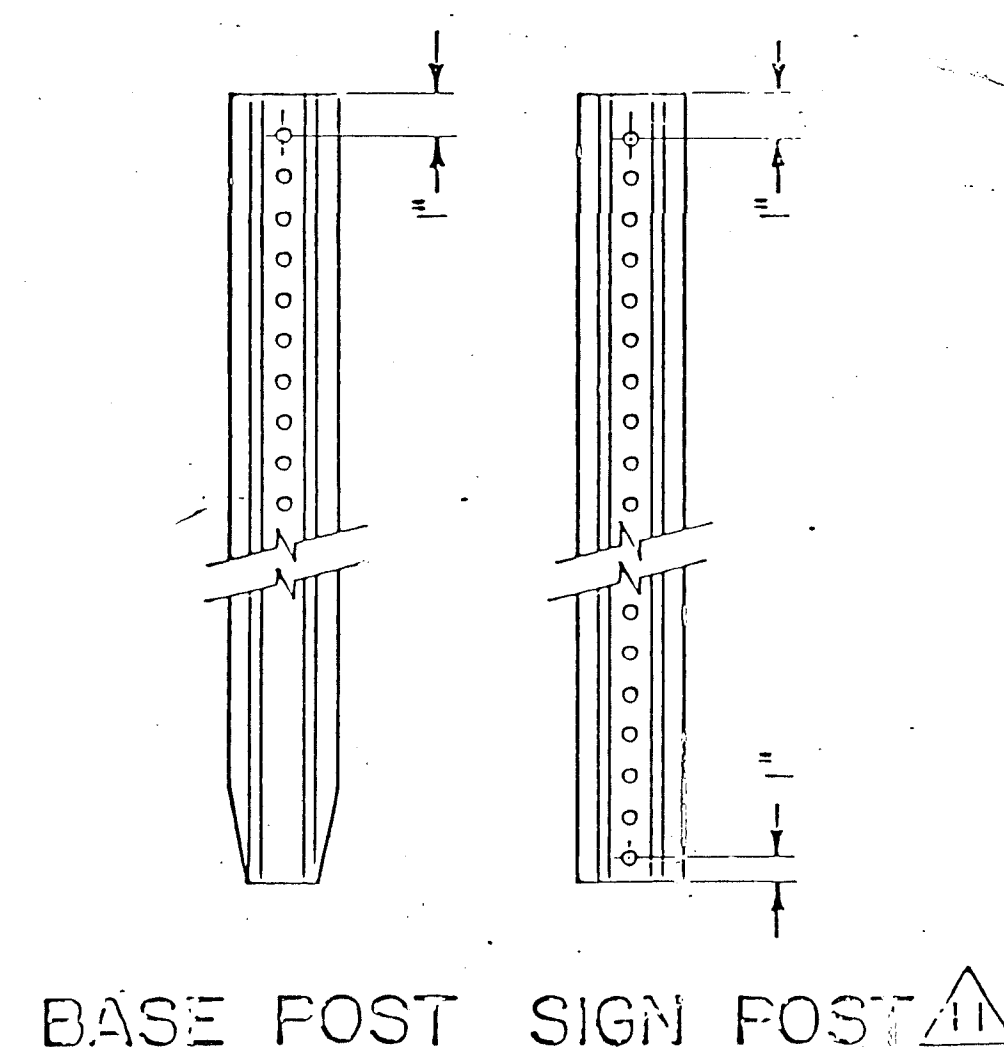
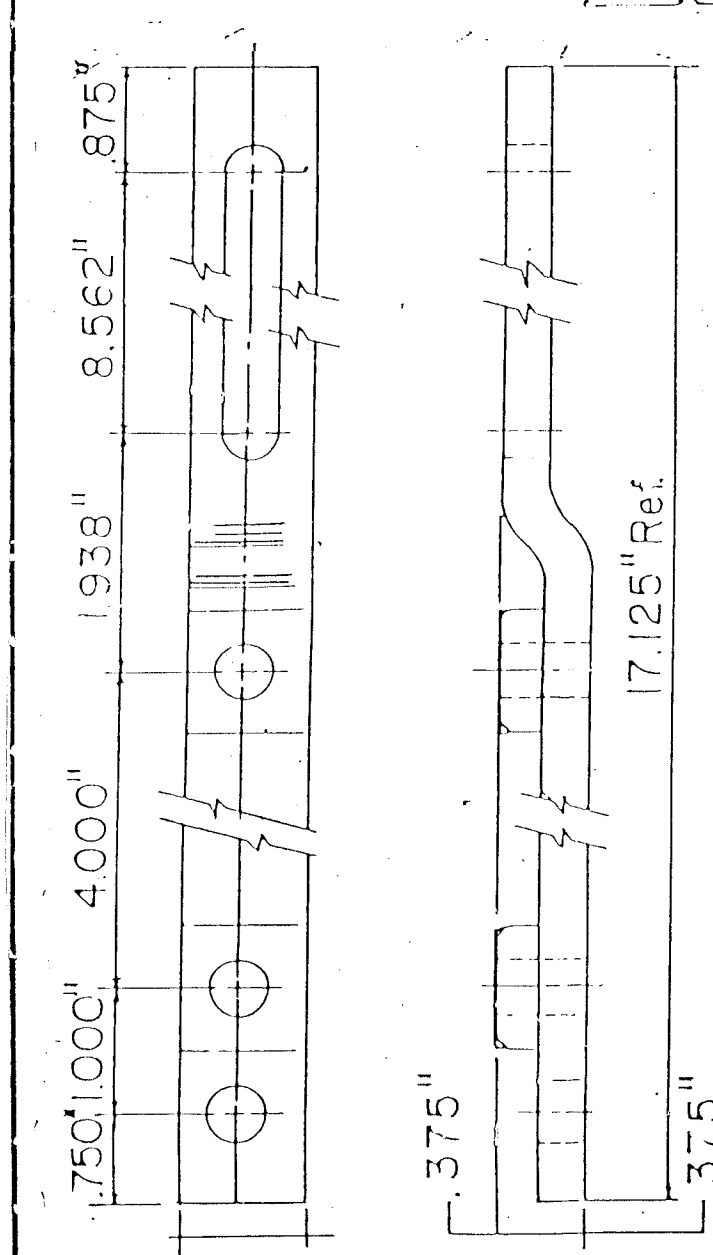
DESIGNED BY GRB	APPROVAL	DATE
DRAWN BY IPH	RECOMMENDED TRAFFIC ENGINEER	DATE
CHECKED BY GRB	APPROVED	DATE
	ENGINEER OF DESIGN	DATE

SERIAL TBAC-001-10

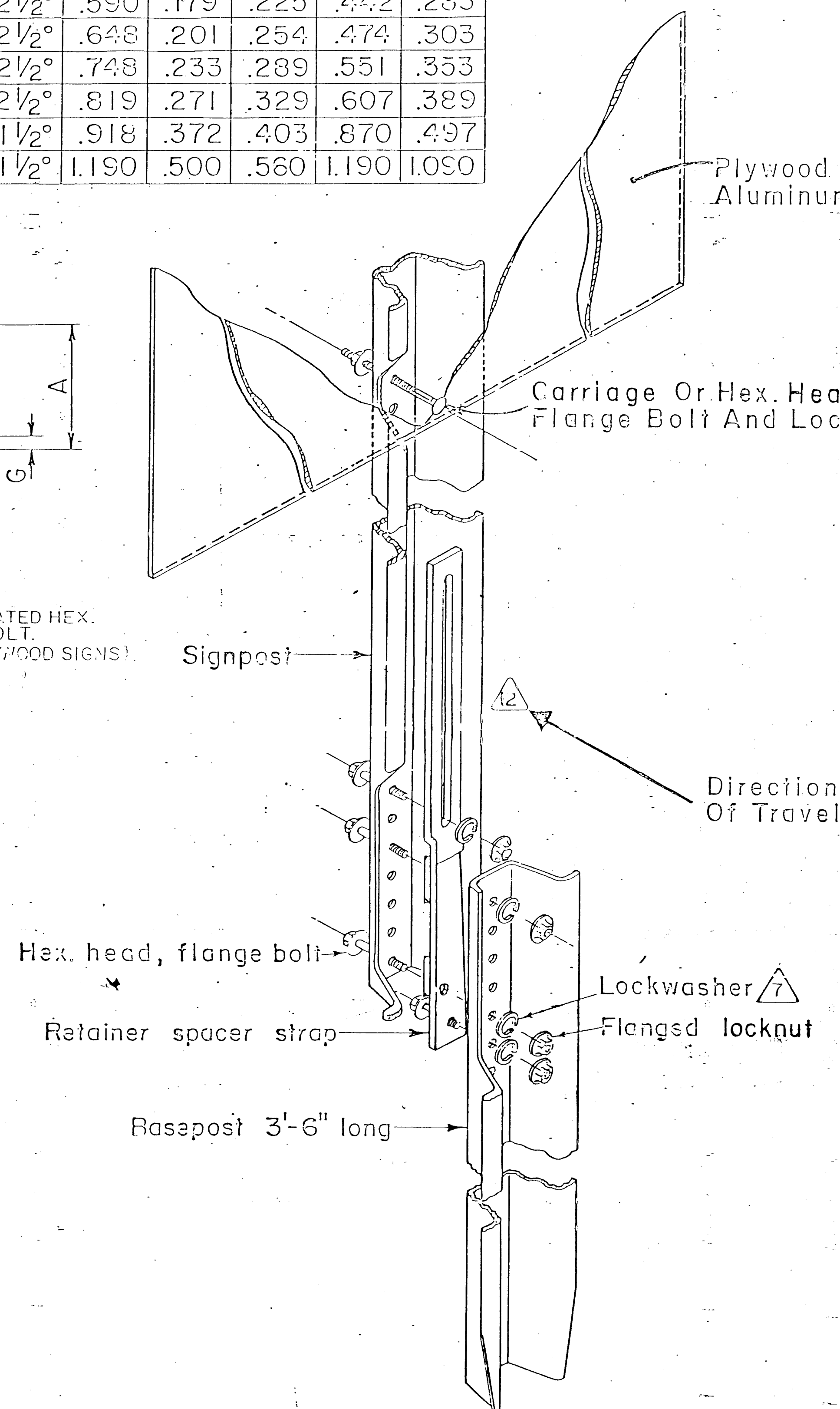
WEIGHT PER FOOT	FLANGED CHANNEL PROPERTIES								AREA IN ²	X-X AXIS		Y-Y AXIS	
	A	B	C	D	E	F	G	Δ		I (in ⁴)	S (in ³)	I (in ⁴)	S (in ³)
2.00	1.516	3.125	1.250	.625	.116	.104	.113	12 1/2°	.590	.179	.225	.442	.233
2.25	1.532	3.125	1.250	.625	.124	.113	.132	12 1/2°	.648	.201	.254	.474	.303
2.50	1.562	3.125	1.250	.625	.132	.149	.164	12 1/2°	.748	.233	.289	.551	.353
2.75	1.578	3.125	1.250	.625	.140	.170	.185	12 1/2°	.819	.271	.329	.607	.389
3.00	1.750	3.500	1.625	.718	.150	.165	.160	11 1/2°	.918	.372	.403	.870	.497
4.00	1.750	3.500	1.671	.718	.175	.230	.250	11 1/2°	1.190	.500	.560	1.190	1.050

HEX. HEAD-INTEGRAL FLANGE
BOLT LOCKWASHER AND LOCKNUT

BOLTS AND LOCKNUT-SIGN ATTACHMENT

* FLANGED LOCKNUT REQUIRED FOR CARRIAGE AND
HEX. HEAD FLANGE BOLTRETAINER SPACER
STRAP

BASE POST SIGN POST



SIGN POST ASSEMBLY

GENERAL NOTES

1. Base post and sign post shall be flanged channel section, hot rolled from high strength steel meeting requirements of ASTM A499 specification modified in that material shall meet minimum yield stress of 60,000 psi and minimum tensile of 90,000 psi or equal.
2. The finish for base post and sign post shall be hot dip galvanizing meeting requirements of ASTM A-123 specifications or flow coated with a green enamel paint meeting the color requirements of F3-505A (color no. 14052) to a minimum 1 mil thickness.
3. The weight of each base post, before punching, shall be 2.75, 3.0 and 4.0 lb/ft. Weight tolerance shall be plus or minus 3 1/2%. Punching shall be eighteen 438" dia. holes on 1 inch centers, except the first and fifth are 438"x.500" slots, beginning 1" from the top. The length of each base post shall be 3.5' plus or minus 1 inch.
4. The weight of each sign post before punching shall be 2.0, 2.25, 2.5, 2.75, 3.0 and 4.0 lb/ft. Weight tolerance shall be plus or minus 3 1/2%. Punching shall be full length .375 dia. holes 1 inch centers. First hole 1 inch from top and last hole .50 inch from bottom. Lengths shall be to increments of 6 inches length tolerance and shall be plus or minus 1.5 inches.
5. The finished posts shall be machine straightened and have a smooth uniform finish free from injurious defects affecting strength or appearance. Bolt holes and slots shall be carefully spaced vertically and horizontally so that holes will align for easy assembly. All holes, slots and sheared ends shall be free from burrs.
6. Retainer spacer strap material shall be steel AISI 1020. The strap for all posts shall be 1 inch wide x 17 inches long x .375 inch thick with a .375 inch offset. Straps shall be hot dip galvanized meeting requirements of ASTM A-123 specifications.
7. Bolts shall be 3/8"x 16 UNC x 2.0" long hex. Integral flange conforming to ASTM A-354 grade BD. Nuts shall be 3/8"x 16 UNC hex head, integral flange conforming to ASTM A-563 grade DH. Lockwashers shall be 3/8" extra duty helical spring. Bolts, nuts and lockwashers shall mechanically galvanized to ASTM B454-76, class 25.
8. For sidewalk and roadway post installation see standard Sn75-1.
9. Assemblies are as follows: 2.0, 2.25, 2.50 and 2.75 lb/ft. sign post with 2.75 lb/ft. base post. 3.0 lb/ft. sign post with 3.0 lb/ft. base post. 4.0 lb/ft. sign post with 4.0 lb/ft. base post.
10. Bolts and locknut hardware for sign attachment shall be carriage or hex. head flange type, size shall be 5/16"- 18 UNC. Bolts and nuts shall be cadmium plated to ASTM A 165 specification.

11/20/92
RECORD COPY
SCANLON & ASSOCIATES, INC.

REVISION NO.	DESCRIPTION	DATE	BY
2	REVISED RETAINER SPACER STRAP	3-10-86	DRR
1	REVISED SIGN POST DETAIL	6-29-82	T.G.M.
1	REVISED STRAP DETAIL	6-29-82	T.G.M.
1	REVISED SIGN POST ASSEMBLY DETAIL	6-29-82	T.G.M.
1	REVISED NOTES 3, 5, 6, 7	6-29-82	T.G.M.
1	REVISED BOLT LENGTH, ADDED LOCKWASHER	6-29-82	T.G.M.

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO
STATE HIGHWAY DEPARTMENTDESIGN DETAILS FOR
BREAKAWAY FLANGED
CHANNEL POST & HARDWARE

DESIGNED BY GPD	APPROVAL	6-29-82	11-16-92
DRAWN BY IPH	RECOMMENDED - TRAFFIC ENGINEER	DATE	DATE
CHECKED BY GPD	APPROVED	6-29-82	11-16-92
	ENGINEER OF DESIGN	DATE	DATE

SERIAL TBAC-002-12