

GENERAL NOTES

1. ALL WORK DETAILED ON THESE DRAWINGS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS OTHERWISE STATED, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986, AS AMENDED THROUGH UPDATE NO. 6, HEREBY REFERRED TO AS THE SPECIFICATIONS. REFERENCES MADE TO STANDARD DRAWINGS IMPLY THAT SECTION OF THE SPECIFICATIONS, WHICH INCLUDES MISCELLANEOUS STANDARD DETAILS.

2. LOCATION OF UTILITIES ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL PERTINENT UTILITIES IN THE FIELD. CALL ONE CALL SYSTEM, INC. AT 260-1990 TWO WORKING DAYS BEFORE ANY EXCAVATION.

3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUPPORT ALL UTILITIES EXPOSED DURING CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR DAMAGE TO ALL UTILITIES, INCLUDING SERVICE LINES.

4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.

5. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET, AS PER COA STANDARDS.

6. ALL PAVEMENT MARKINGS OR OTHER TRAFFIC CONTROL DEVICES INCLUDING TRAFFIC SIGNAL CONDUIT, ADVERSELY AFFECTED BY CONSTRUCTION SHALL BE REPLACED IN PRE-CONSTRUCTION CONDITION. THESE COSTS SHALL BE INCIDENTAL TO THE PROJECT UNLESS OTHERWISE INCLUDED IN BID ITEMS.

7. CONTRACTOR SHALL COORDINATE WITH PNM (WARREN ARTHUR - 241-3490) WHERE LIP OF TRENCH IS LESS THAN 5' TO POWER POLE. COSTS ASSOCIATED WITH SUPPORT OF EXISTING POLES SHALL BE INCIDENTAL TO THE PROJECT.

8. CONTRACTOR SHALL BE CHARGED BY PNM FOR ANY DAMAGE TO PNM CABLES AND FOR SUPPORTING OR MINOR RELOCATIONS OF CABLES DURING CONSTRUCTION. THESE COSTS SHALL BE INCIDENTAL TO THE PROJECT.

9. THE CONTRACTOR SHALL PROVIDE TWO PROJECT CONSTRUCTION SIGNS PER THE REQUIREMENTS OF SPECIAL PROVISIONS.

10. CONTRACTOR SHALL COORDINATE WITH THE GAS COMPANY OF NEW MEXICO (241-7752) TWO WEEKS PRIOR TO NEEDING A GAS LINE SEGMENT RELOCATED.

11. CONTRACTOR SHALL NOTIFY THE CITY SURVEYOR NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR SECTION. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS.

12. CRITICAL INTERSECTION WORK SHALL NOT START UNTIL THE CONTRACTOR HAS ALL MATERIAL, EQUIPMENT, AND NECESSARY PERSONNEL ON-SITE. TRAFFIC CONTROL DEVICES SHALL NOT BE PLACED PREMATURELY.

13. FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADE PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. SEE SECTION 19 OF THE SPECIFICATIONS.

14. WORK WITHIN AN ARTERIAL ROADWAY SHALL REQUIRE COMPLIANCE WITH THE ORANGE BARREL POLICY.

15. THE CONTRACTOR SHALL CONTACT CITY TRAFFIC OPERATIONS BEFORE DISTURBING ANY EXISTING TRAFFIC SIGNALS.

16. ALL UTILITY WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH NEW MEXICO UTILITIES, INC. SPECIFICATIONS FOR WATER AND WASTEWATER FACILITIES (MOST RECENT REVISIONS). THE CONTRACTOR SHALL NOTIFY NEW MEXICO UTILITIES (898-2661) THREE (3) WORKING DAYS PRIOR TO BEGINNING THE CONSTRUCTION OF THE UTILITIES.

17. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.

18. BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.

19. SIDEWALK AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREEVER A NEW CURB RETURN IS CONSTRUCTED.

20. ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.

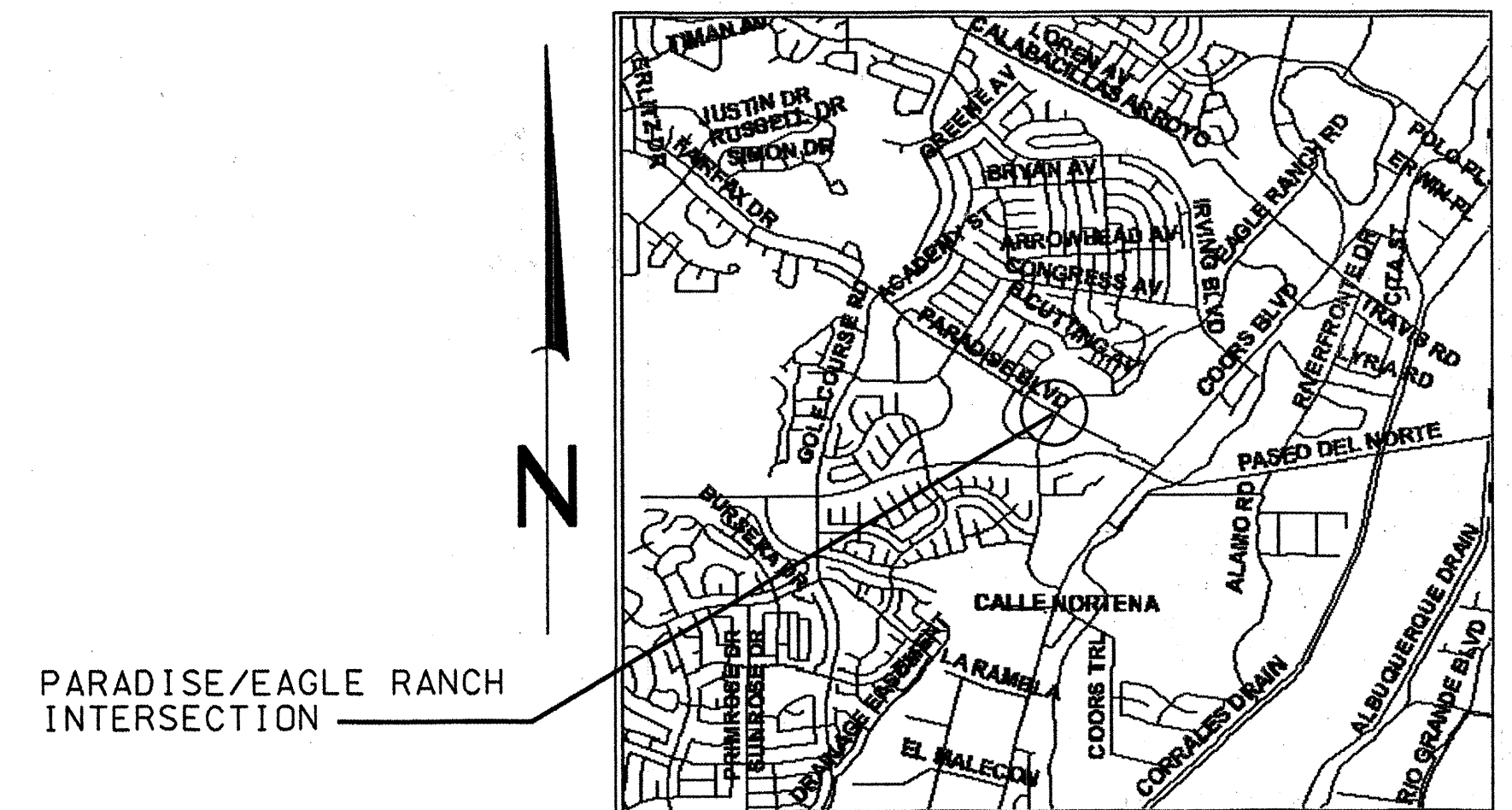


CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

PARADISE BLVD./EAGLE RANCH RD.
INTERSECTION IMPROVEMENTS

DRAWING LIST

- 1 TITLE SHEET
- 2 INTERSECTION LAYOUT
- 3 CENTERLINE PROFILES
- 4 STRIPING LAYOUT
- 5 TRAFFIC CONTROL
- 6 TRAFFIC CONTROL
- 7 - 9 TURN LANE CROSS SECTIONS
- 10 TRAFFIC SIGNAL LAYOUT
- 11 (SL-4) STREET LIGHTING FOUNDATIONS
- 12 (TS-1A) TRAFFIC SIGNAL NOTES
- 13 (TS-16) TRAFFIC SIGNAL FOUNDATION
- 14 (TS-17) TRAFFIC SIGNAL CONTROLLER
PEDESTAL FOUNDATION
- 15 (TS-20) TRAFFIC SIGNAL PULL BOX
- 16 (TS-21) TRAFFIC SIGNAL LOOP DETECTOR



VICINITY MAP

MAP C-13

PARADISE/EAGLE RANCH
INTERSECTION

FOR INFORMATION ONLY
DO NOT SCALE

 Homes & Naver, Inc. 6501 AMERICAS PARKWAY, NE SUITE 700 (505)889-4100 ALBUQUERQUE, NM 87110					
FOR INFORMATION ONLY DO NOT SCALE					
REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS	ENGINEER	DATE	*****
		DRC Chairman	<i>[Signature]</i>	1-29-02	APPROVED FOR CONSTRUCTION
		Transportation	<i>[Signature]</i>	3-14-02	
		N M U I	<i>[Signature]</i>	4-10-02	
		Hydrology	<i>[Signature]</i>	3-14-02	
		Water/Wastewater	<i>[Signature]</i>	4-29-02	
		Constr. Mngmt.	<i>[Signature]</i>	3-14-02	City Engineer Date
		Constr. Coord.	<i>[Signature]</i>	3-14-02	
		City Project No.	648091	Sheet	Of
				1	16

NOTE: CURVE & STA/OFF DATA IS TO LIP
OF GUTTER OR FACE OF PINNED CURB



- 1 MEDIAN CURB AND GUTTER COA STDs.
DWG. 2415
- 2 STD. C&G COA STD. DWG. 2415
- 3 PATTERNED CONCRETE
COA STD. DWG. 2502
- 4 HANDICAP RAMP COA. STD.
DWG. 2441 CASE I
- 5 PINNED CURB TYPE I
COA STD. DWG. 2415
- 6 ADJUST MANHOLE TO GRADE
- 7 REMOVE & REPLACE SIDEWALK
FLUSH WITH CURB
- 8 ADJUST WATER VALVE TO GRADE
- 9 REMOVE & REPLACE MEDIAN CURB AND
CUTTER.

GENERAL NOTES:

1. SEE SHEET 10 FOR LIGHTING AND SIGNALS
2. UTILITY LOCATIONS ARE APPROXIMATE
3. SEE SHEETS 7,8,9 FOR NEW TURN LANE CURB ELEVATIONS AND ROADWAY CROSS SLOPES.
4. STATIONS AND OFFSETS ARE BASED ON EAGLE RANCH ROAD.

LEGEND:

- TSL
 □ TCB
 □ EB
 ⊕
 □ DI
 X59.5
 X59.82
 59.25
 WCR
 —SAS—
 —W—
 —CATV—
 —UT—
 —SD—
 —HP G—
 TRAFFIC SIGNAL LIGHT
 TRAFFIC SIGNAL BOX
 ELECTRIC BOX
 UNDETERMINED MANHOLE
 DROP INLET
 SPOT ELEVATION
 NATURAL GROUND
 SPOT ELEVATION
 WHEEL CHAIR RAMP
 TC-TOP OF CURB, FL-FLOWLINE
 TC-TOP OF CURB, FL-FLOWLINE
 MH-MANHOLE, DI-DROP INLET
 SANITARY SEWER
 WATER LINE
 CABLE TELEVISION
 UNDERGROUND TELEPHONE
 STORM DRAIN
 GAS LINE

 NEW FULL DEPTH ASPHALT PAVEMENT.
SEE PAVING SECTION THIS SHEET.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENGINEERING DEVELOPMENT SHEET	
TITLE:	PARADISE BLVD. / EAGLE RANCH RD. INTERSECTION IMPROVEMENTS

INTERSECTION LAYOUT

Design Review Committee City Engineer Approval

APR 29 2002 MAY 29 2002

DESIGN	CITY ENGINEER
REVIEW COMMITTEE	

City Project No. 648091	Zone Map No. C-13
----------------------------	----------------------

SURVEY INFORMATION		FIELD NOTES		BENCH MARKS		AS BUILT INFORMATION	
NO.	BY	DATE	ACS CONTROL		CONTRACTOR	DATE	
			"R. ALAMEDA B. NO. 2"		WORK RECORDED BY	DATE	
			ELEV = 5058.25		INSPECTOR'S ACCEPTANCE BY	DATE	
					VERIFICATION BY	DATE	
					DATE CORRECTED BY	DATE	
<i>MICRO-FILM INFORMATION</i>							
					RECORDED BY	DATE	
					NO.		

A circular professional engineer seal for David J. Lawrence, State of New Mexico, License No. 8556. The seal features the text "REGISTERED PROFESSIONAL ENGINEER" around the top, "STATE OF NEW MEXICO" around the bottom, and "DAVID J. LAWRENCE" in the center. The license number "8556" is also visible.

2-14-02

[illegible][illegible]

KS	DATE:
S	DATE:
	DATE:

EMARK	SION	IGN
-------	------	-----

R
REVI
DES

	DJE
	DJE
	DL

[illegible][illegible]

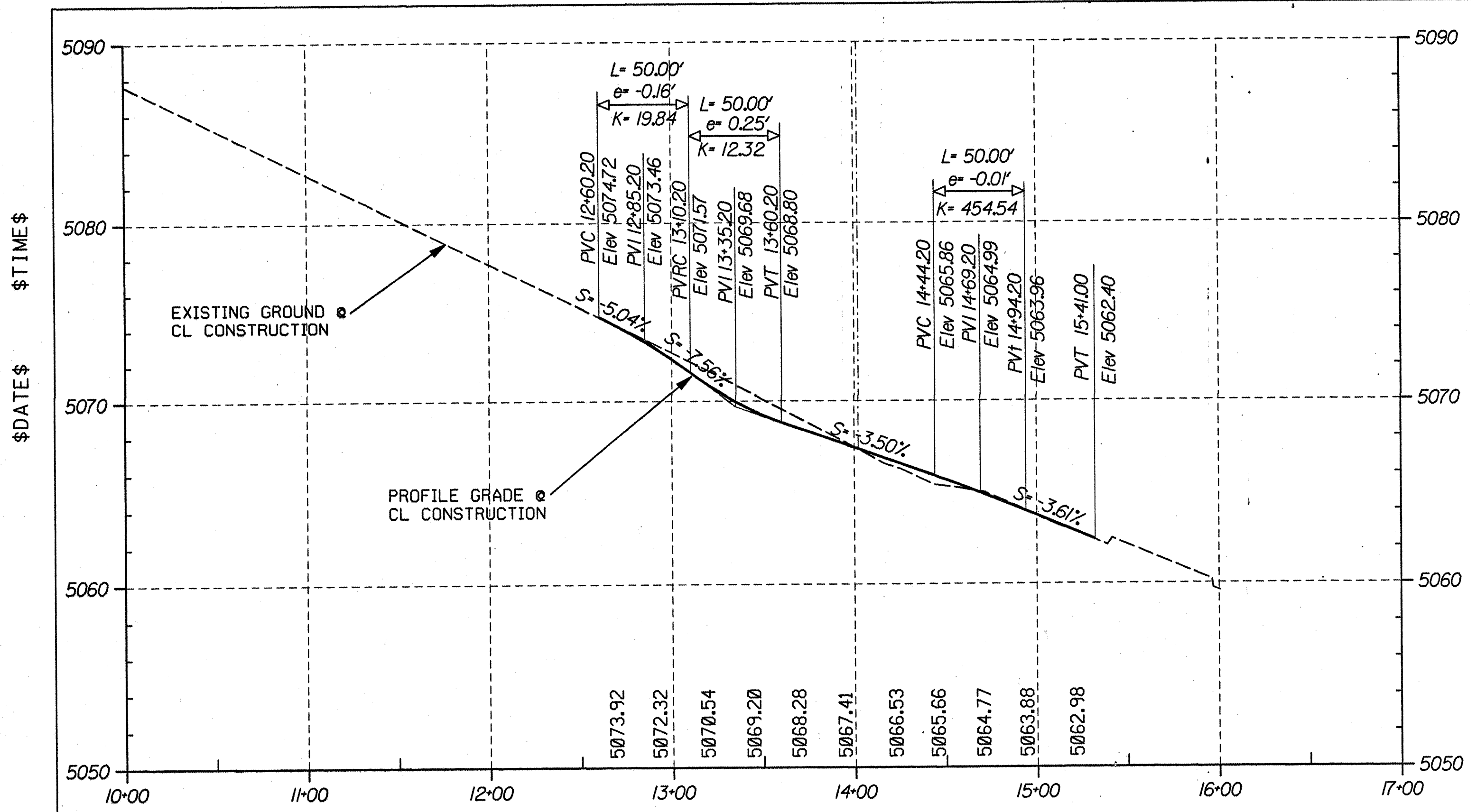
RQUE
RTMENT
ENT GROUP

RANCH RD.
IMENTS

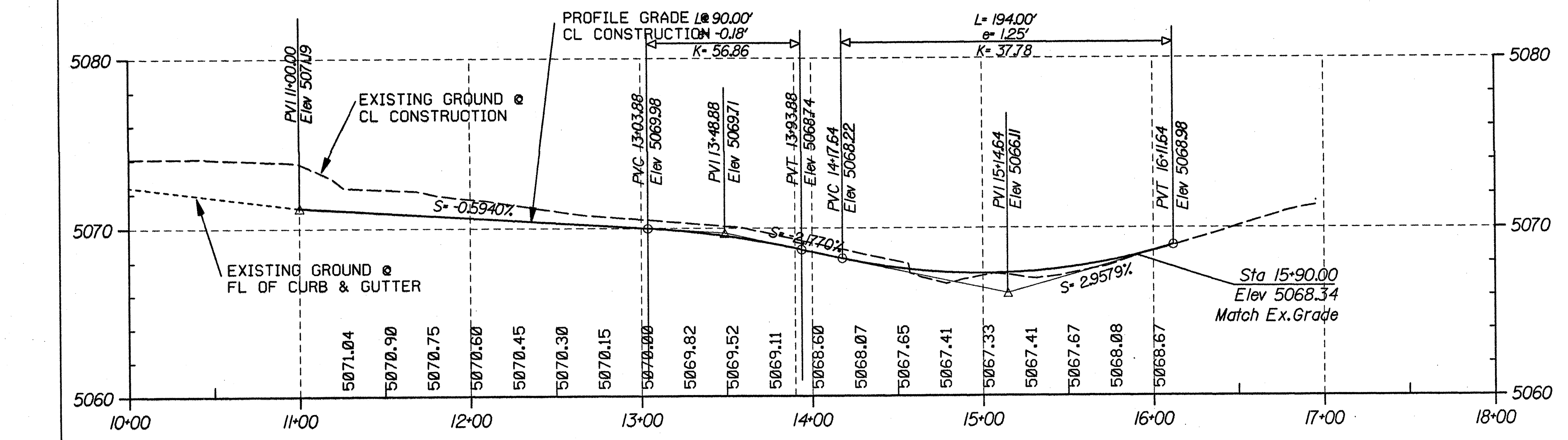
OUT	
Mo./Day/Yr.	Mo./Day/Yr.

Sheet		Of	

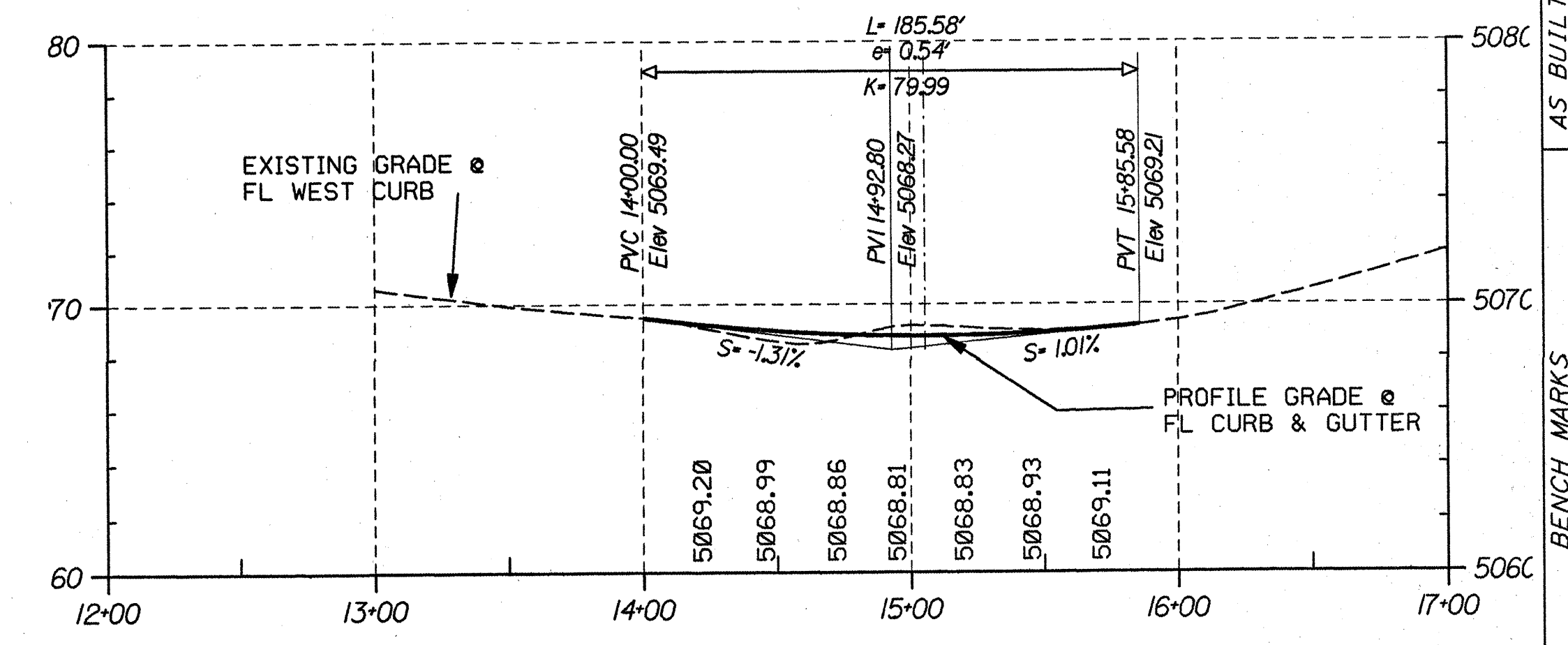
	2	16
--	---	----



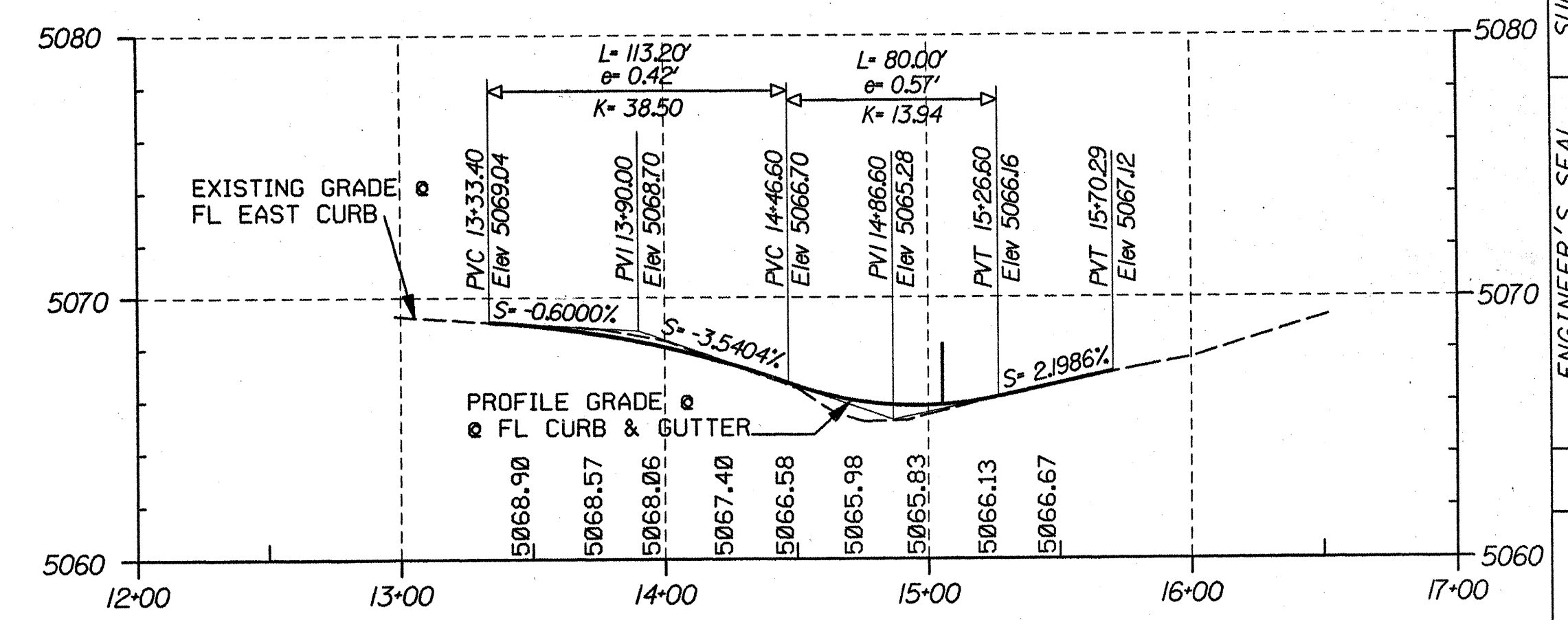
PARADISE BLVD. PROFILE AT CL CONSTRUCTION



EAGLE RANCH RD. PROFILE AT CL CONSTRUCTION



EAGLE PROFILE AT FL WEST CURB

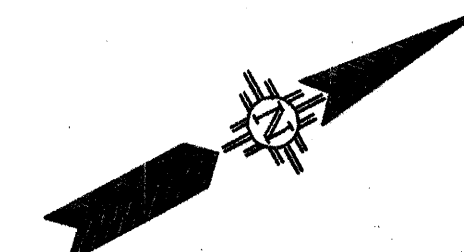


EAGLE PROFILE AT FL EAST CURB

		CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: PARADISE BLVD. / EAGLE RANCH RD. INTERSECTION IMPROVEMENTS CENTERLINE PROFILES		No. 7 Day / Yr. No. 7 Day / Yr.	
Design Review Committee City Engineer Approval City Engineer	City Project No. 648091	Zone Map No. C-13	Sheet 3 of 16

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	ACS CONTROL	NO. 2"	FIELD NOTES	DATE	NO.	BY
INSPECTOR'S	DATE	"R. ALAMEDA B. NO. 2"	ELEV = 5058.25	NO.	DATE	NO.	BY
FIELD NAME BY	DATE						
VERIFICATION BY	DATE						
CORRECTED BY	DATE						
MICRO-FILM INFORMATION							
RECORDED BY	DATE						

	\$DATE\$	\$TIME\$
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		



SCALE: 1" = 30'

1 REMOVE EXISTING CONFLICTING STRIPING BY SURFACE PLANING.

NOTES:

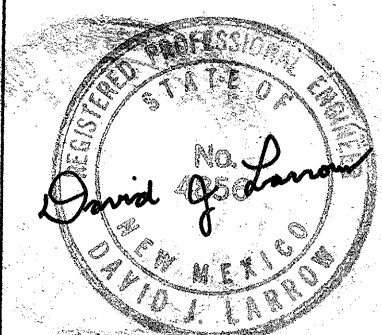
- 1 4" DASHED WHITE (10' LINE 30' SPACE)
- 2 6" SOLID WHITE
- 3 12" SOLID WHITE
- 4 4" SOLID WHITE
- 5 ADJUST LANE STRIPES TO MATCH EXISTING
- 6 PAINT MEDIAN NOSE YELLOW
- 7 EXISTING STRIPING TO REMAIN
- 8 4" DASHED WHITE

<i>AS BUILT INFORMATION</i>	
CONTRACTOR	
WORK	
STARTED BY	DATE
INSPECTOR'S	
FIELD NAME, BT	DATE
VERIFICATION BY	DATE
DRAWINGS	
CORRECTED BY	DATE
<i>MICRO-FILM INFORMATION</i>	
RECORDED BY	DATE
NO.	

BENCH MARKS

KEY INFORMATION
FIELD NOTES

ENGINEER'S SEAL



2-14-02

NO.	DATE	REMARKS	BY
REVISIONS			
DESIGN			
DESIGNED BY:		DATE:	DJE
DRAWN BY:		DATE:	DJE
CHECKED BY:		DATE:	DL



Holmes & Narver, Inc.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: PARADISE BLVD. / EAGLE RANCH RD.
INTERSECTION IMPROVEMENTS
STRIPING LAYOUT

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APR 29 2002	APR 29 2002		
DESIGN	CITY ENGINEER		

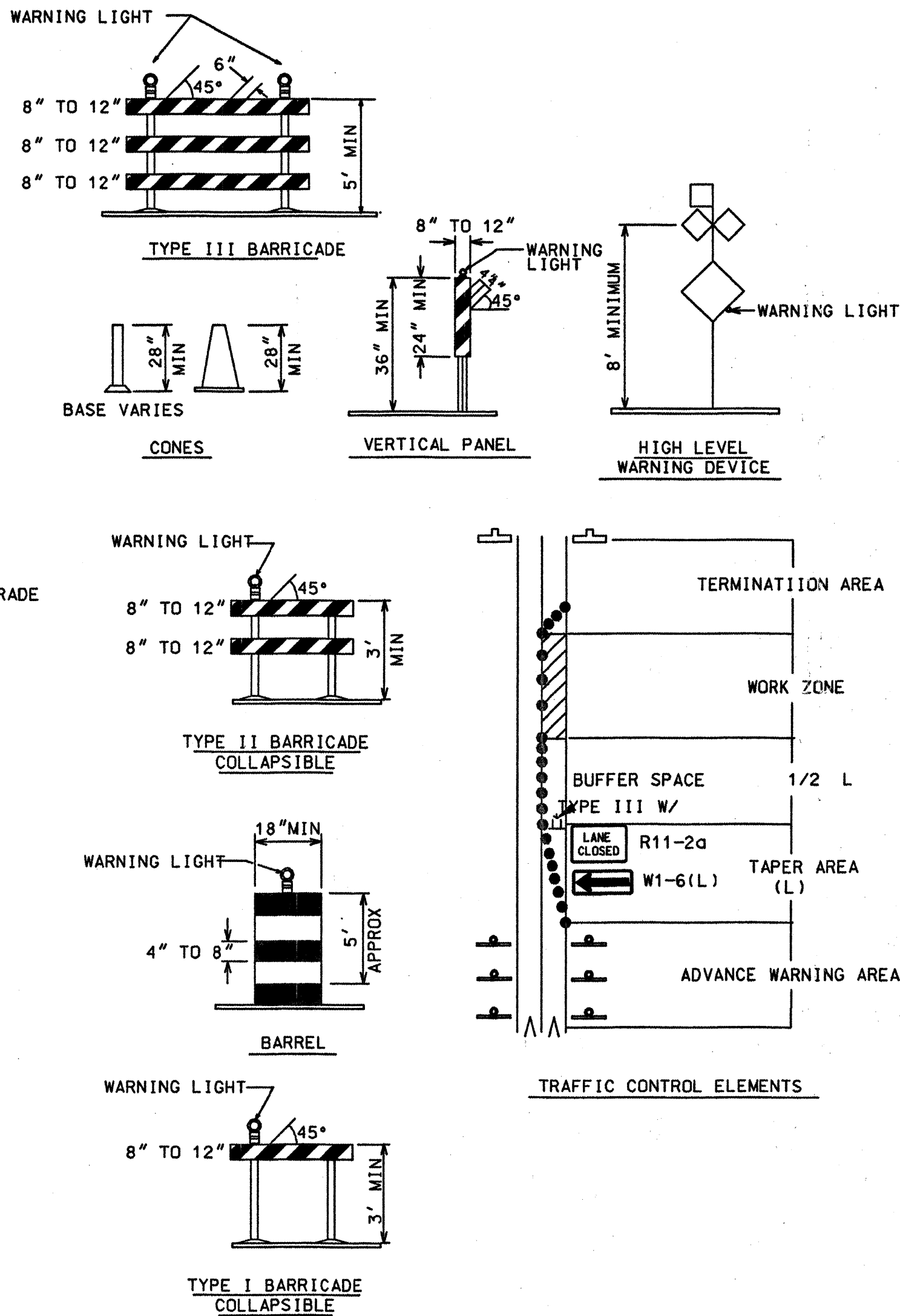
City Project No. 648091	Zone Map No. C-13	Sheet 4	Of 16
----------------------------	----------------------	------------	----------

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

- CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.
- CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.
- THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.
- CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.
- CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.
- ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
- THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.
- CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.
- ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.
- ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.
- ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.
- CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.
- EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
- CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
- CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.
- ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
- 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.
- ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

- EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
- CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
 - STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
 - SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.
- FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.
- ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.
- TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

26. ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.
27. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY.



- LEGEND**
- WORK AREA
 - BARRICADE - TYPE I, TYPE II, OR BARREL
 - BARRICADE - TYPE III
 - VERTICAL PANEL
 - WARNING SIGN
 - DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
 - FLAGMAN POSITION
 - SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET EQUAL TO THE STREET LIMIT OF THE STREET
 - TAPER LENGTH - SEE CHART BELOW
- THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENT

SPEED LIMIT (MPH)	TAPER LENGTH(L) (FEET)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

SPEED LIMIT (MPH)	MINIMUM DISTANCE IN FEET BETWEEN SIGNS	MINIMUM DISTANCE IN FEET FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

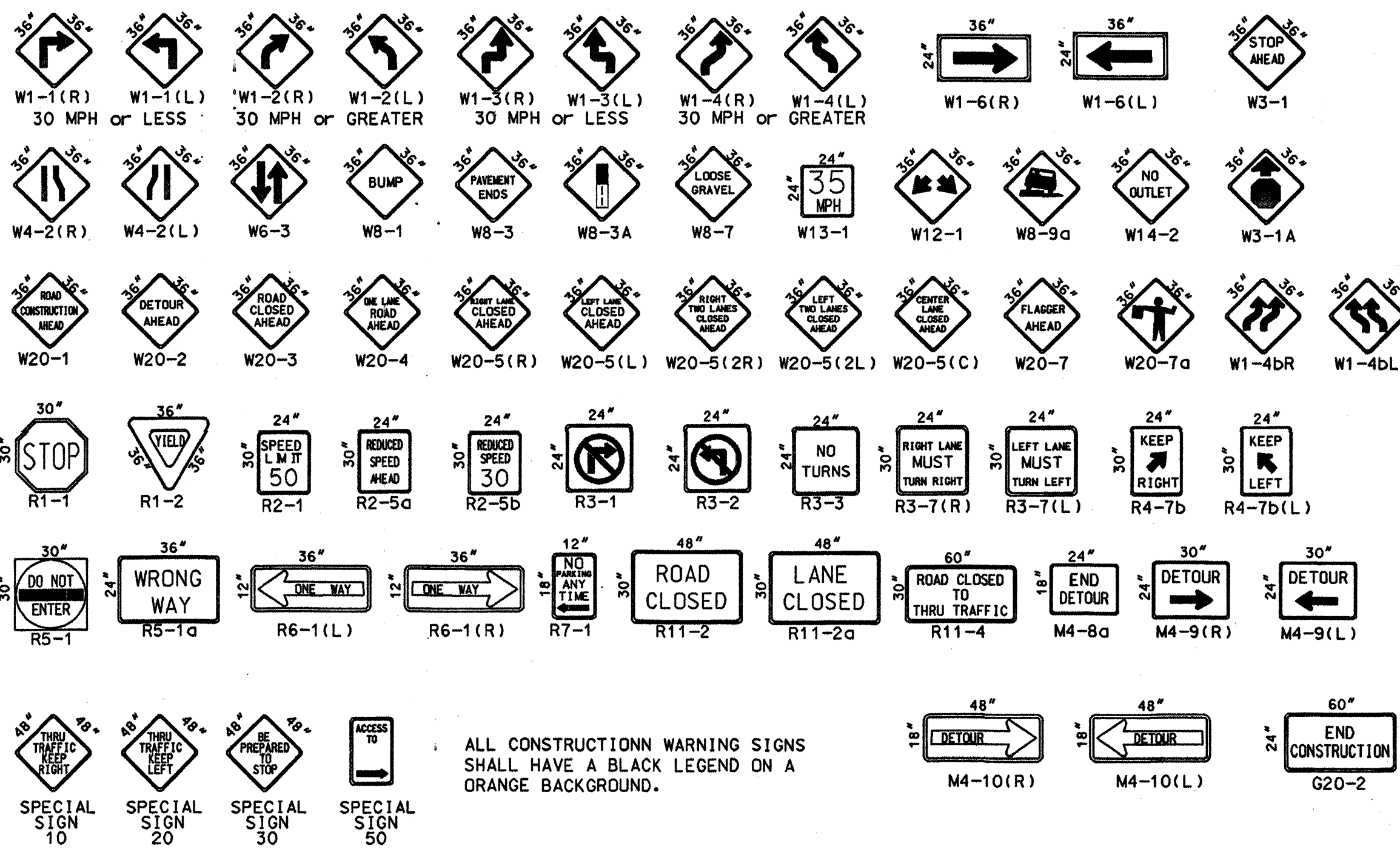
TAPER CRITERIA

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
40 MPH OR GREATER	$L = W \times S$
L = TAPER LENGTH	
W = WIDTH OF OFFSET IN FEET	
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH	

SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: TRAFFIC CONTROL
SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
COA	STD		
CITY PROJECT NO.	648091	ZONE MAP NO.	C-13
		SHEET	5 OF 16

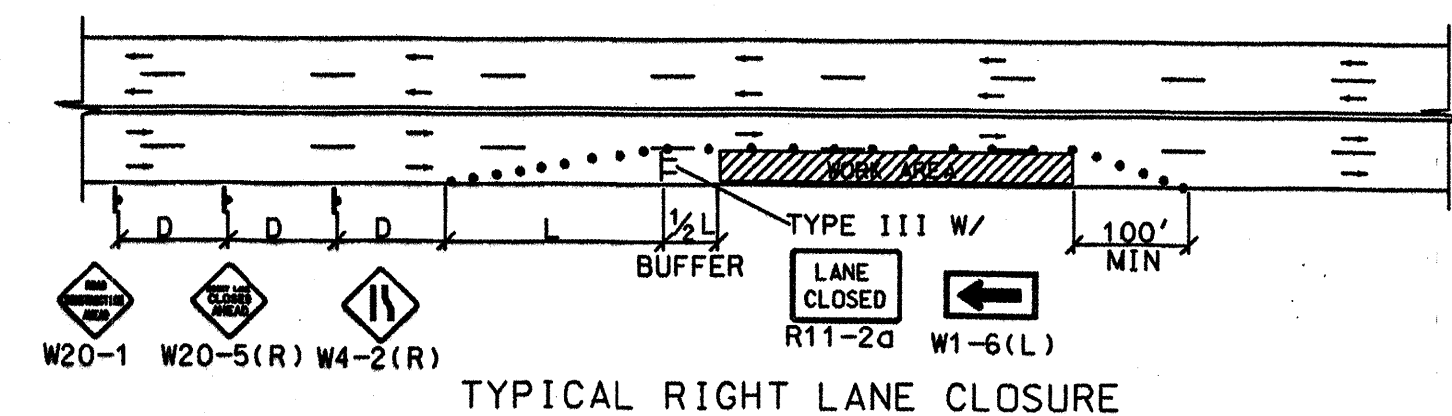
\$TIME\$

\$DATE\$

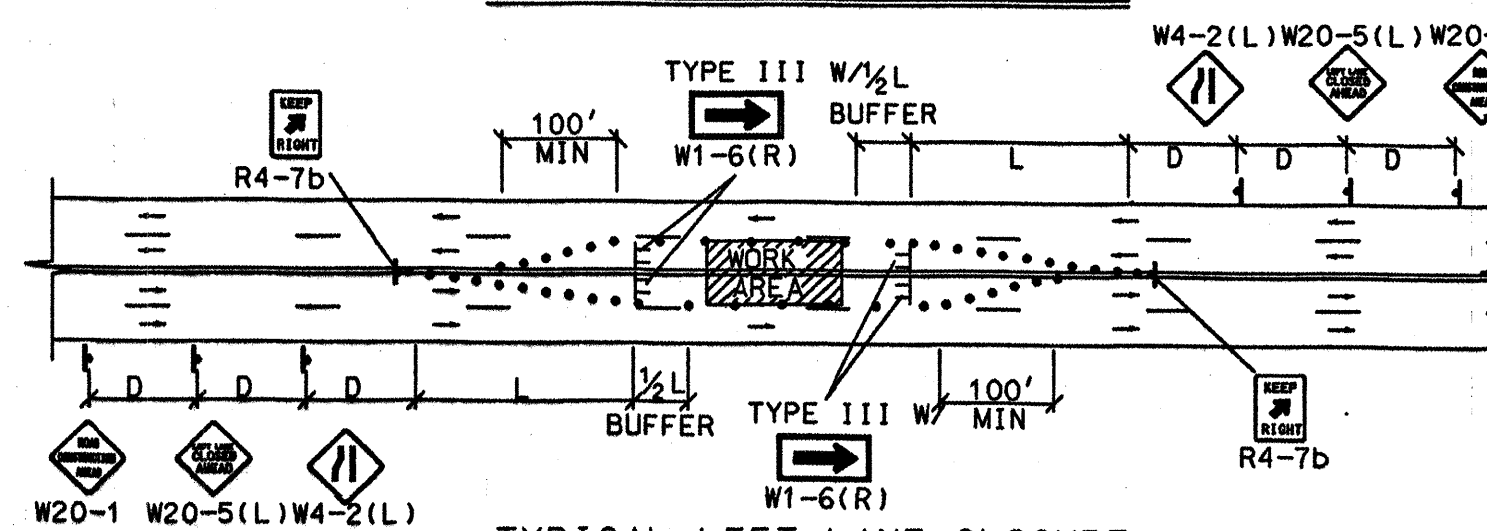
\$FILE\$

\$DATE\$ \$TIME\$

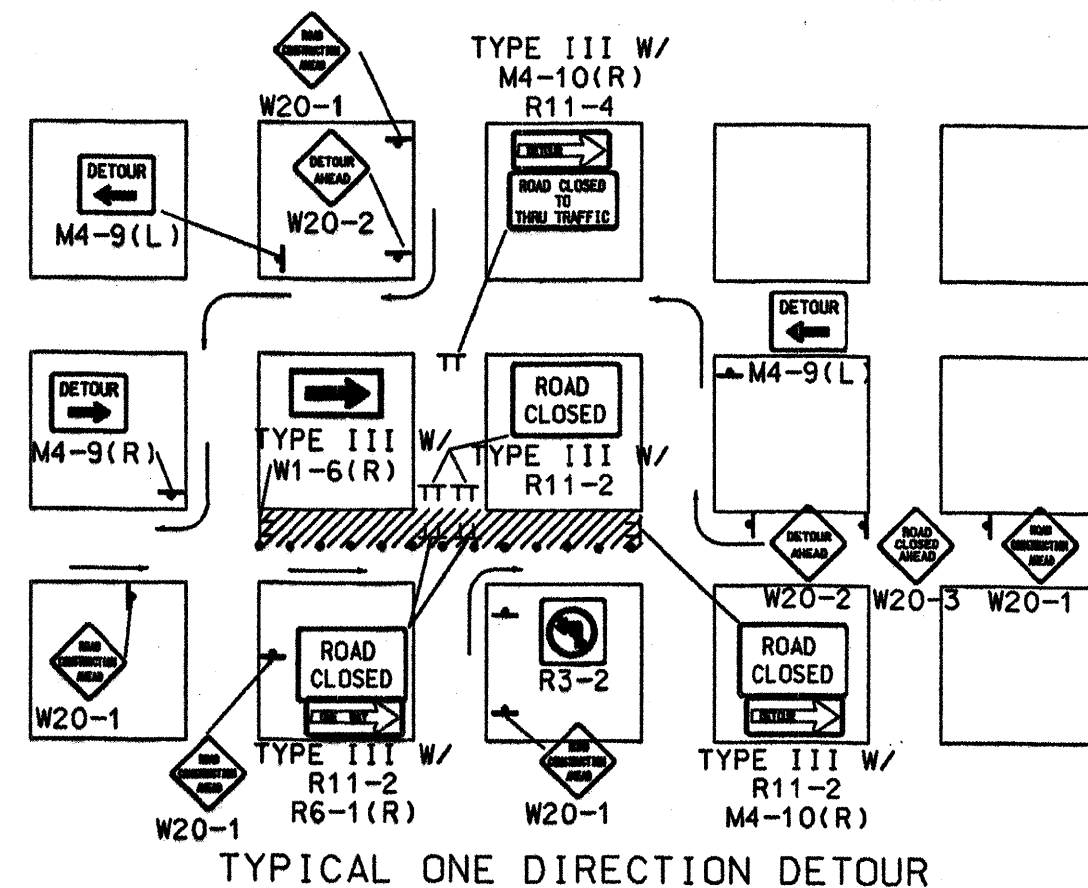
\$FILE\$



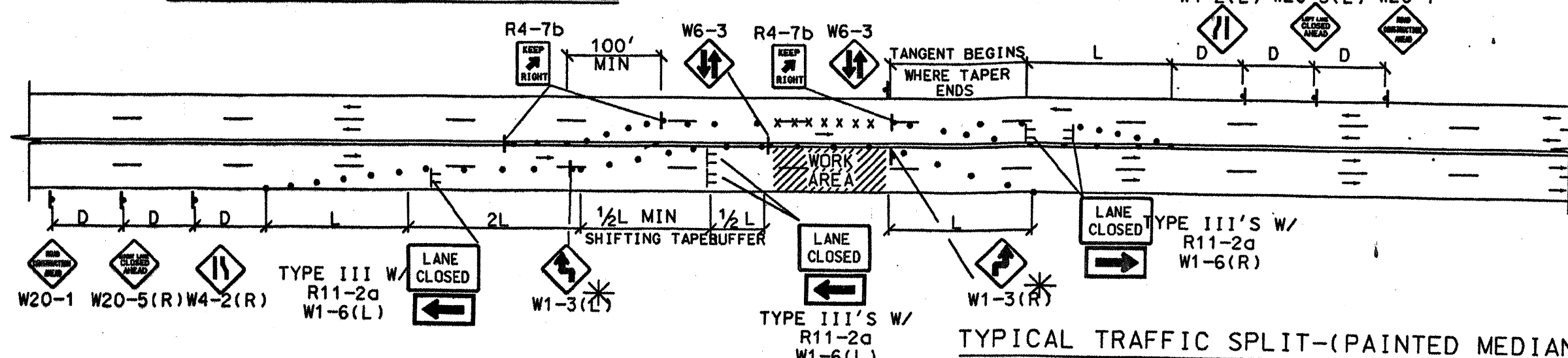
TYPICAL RIGHT LANE CLOSURE



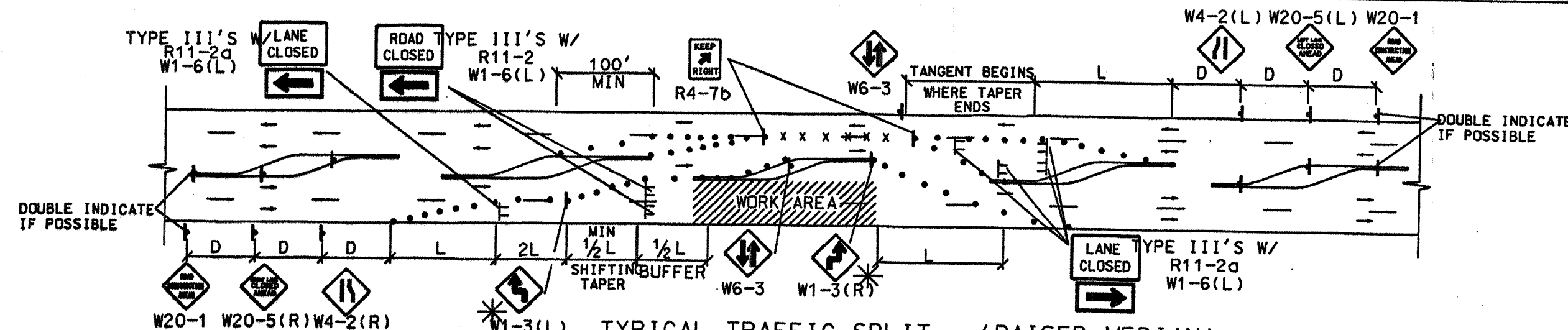
TYPICAL LEFT LANE CLOSURE



TYPICAL ONE DIRECTION DETOUR

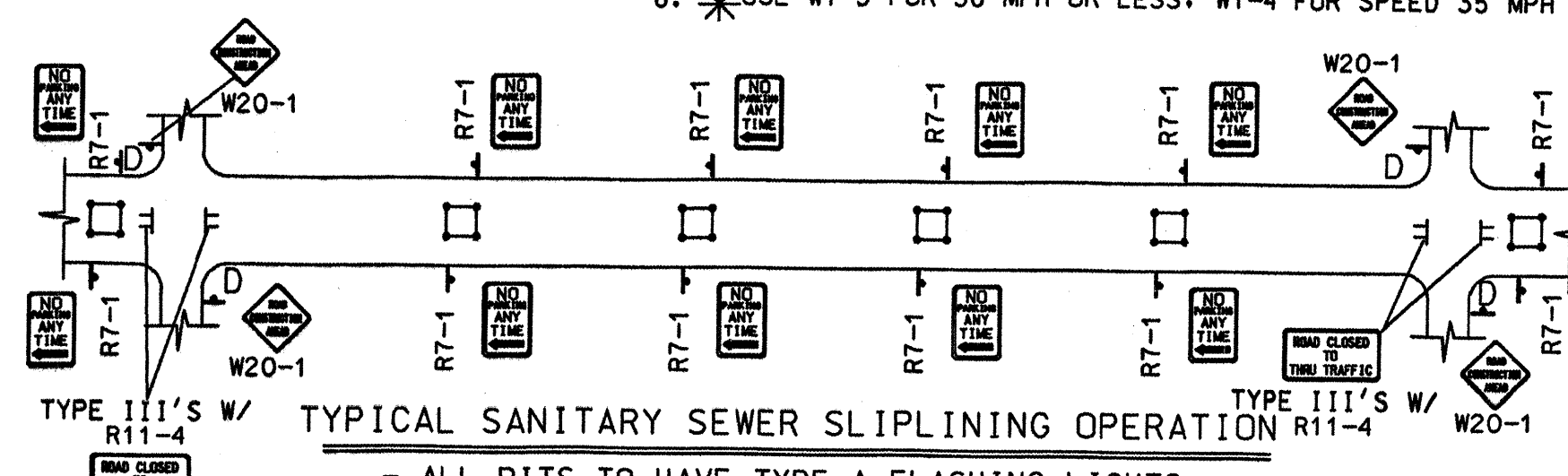


TYPICAL TRAFFIC SPLIT - (PAINTED MEDIAN)



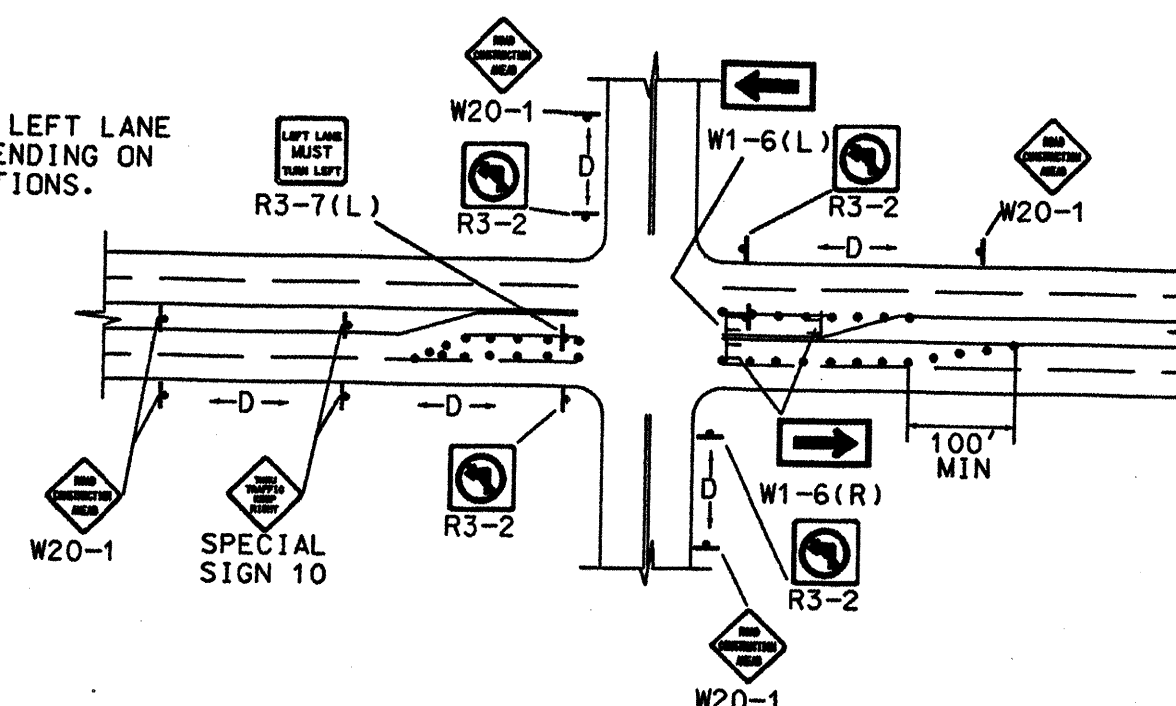
TYPICAL TRAFFIC SPLIT - (RAISED MEDIAN)

- TRAFFIC SPLIT NOTES:
1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCES SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS.
 2. 1/2 L IS THE MINIMUM DISTANCE FOR SHIFTING TAPERS.
 3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED.
 4. MEDIAN REMOVAL SHALL BE REQUIRED IF 1/2 L OR REVERSE CURVE IS NOT SUFFICIENT. MEDIAN REMOVAL SHALL TAKE PLACE BEFORE SPLITS.
 5. REDUCED SPEED MAY BE CONSIDERED.
 6. *USE W1-3 FOR 30 MPH OR LESS. W1-4 FOR SPEED 35 MPH OR GREATER.



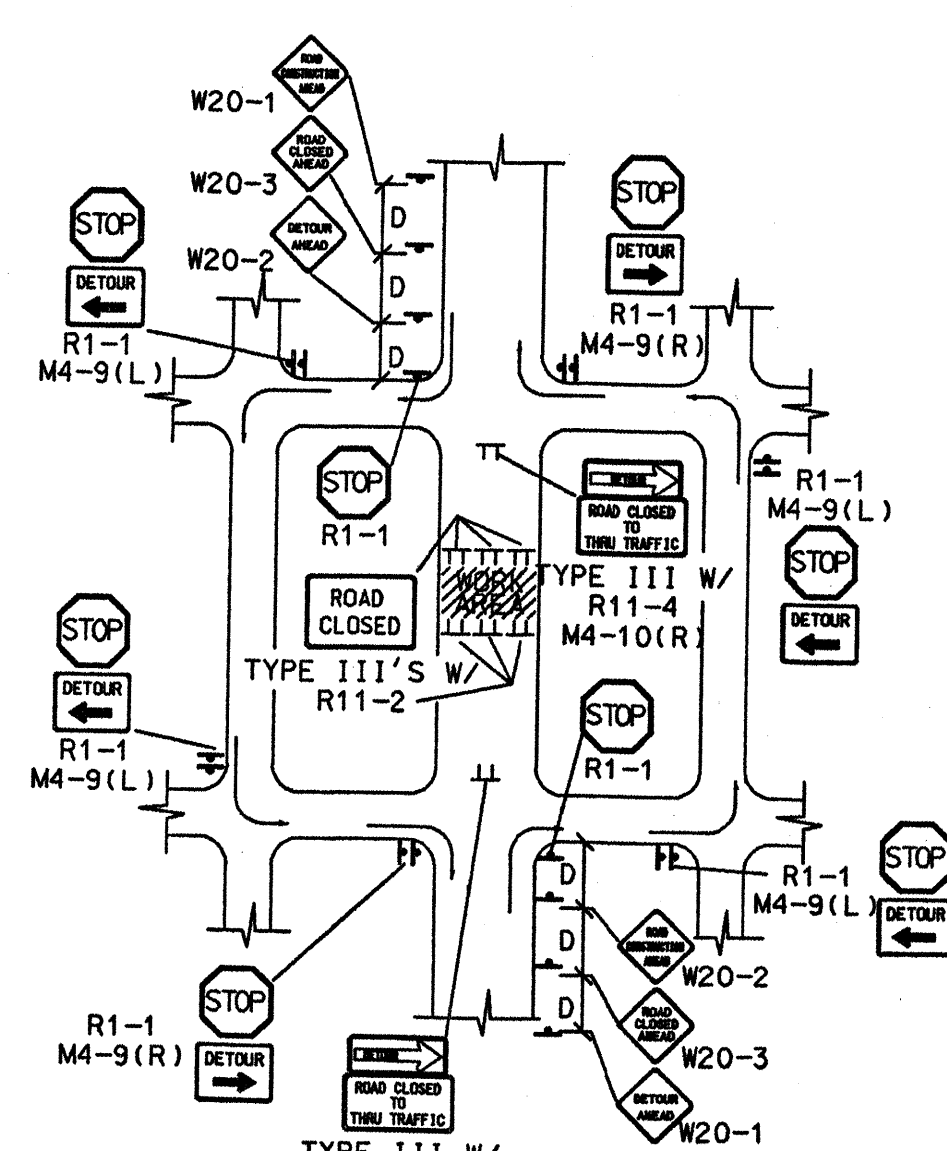
- TYPICAL SANITARY SEWER SLIPLINING OPERATION
- ALL PITS TO HAVE TYPE-A FLASHING LIGHTS
 - ALL PITS TO HAVE FLAGLINE

NOTE:
MAY REQUIRE LEFT LANE
CLOSURE DEPENDING ON
FIELD CONDITIONS.



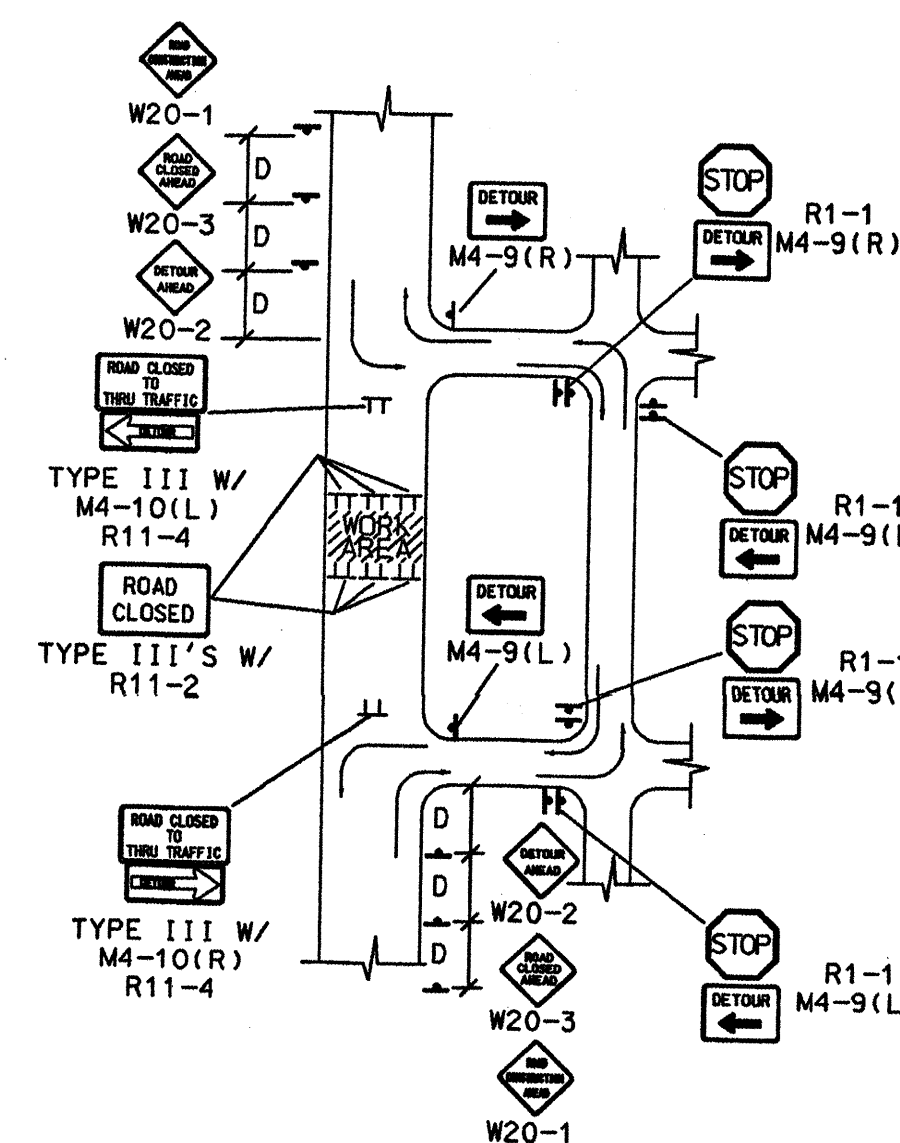
TYPICAL LANE CLOSURE AT INTERSECTION

NOTE: DEPENDING ON WORK ZONE LOCATION.



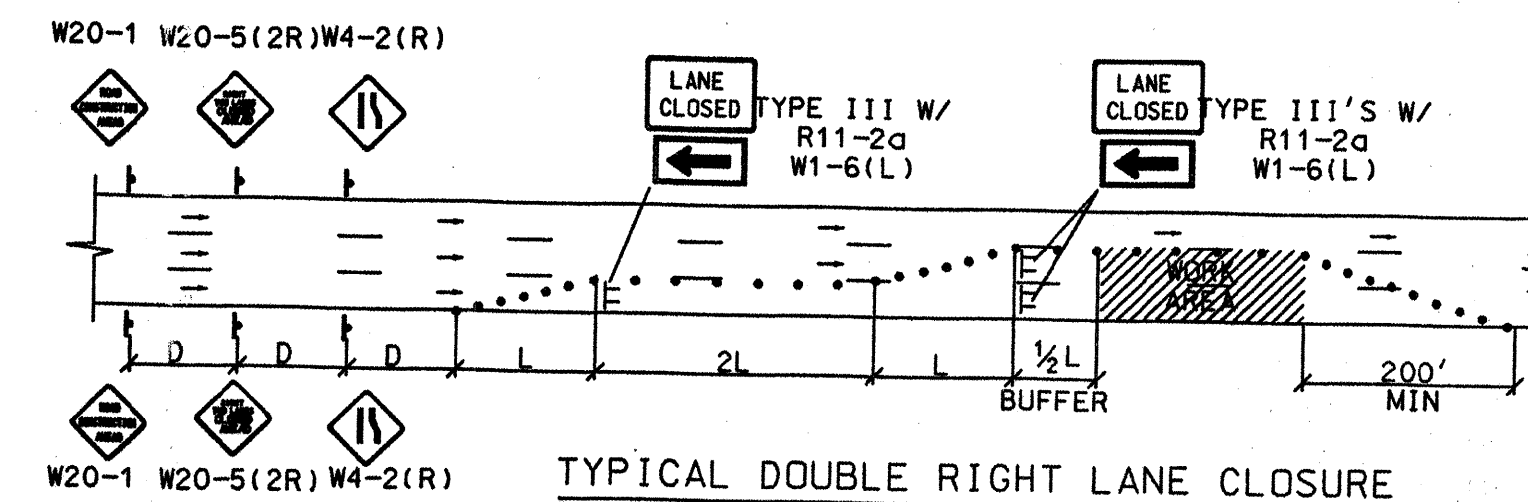
TYPICAL MID-BLOCK CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

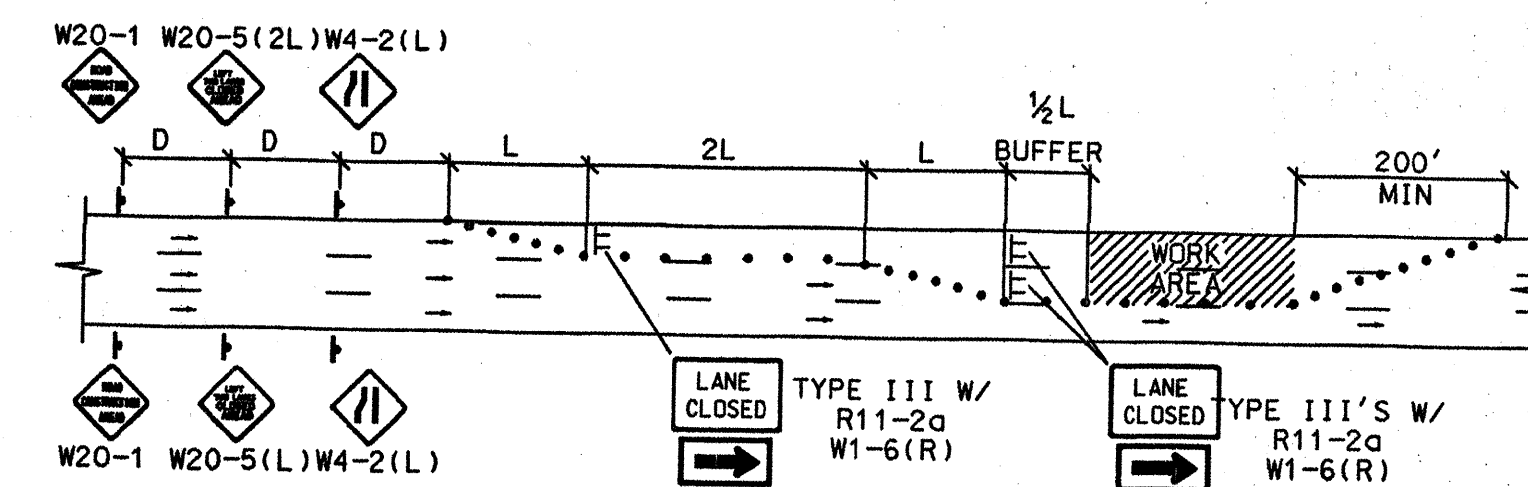


TYPICAL STREET CLOSURE

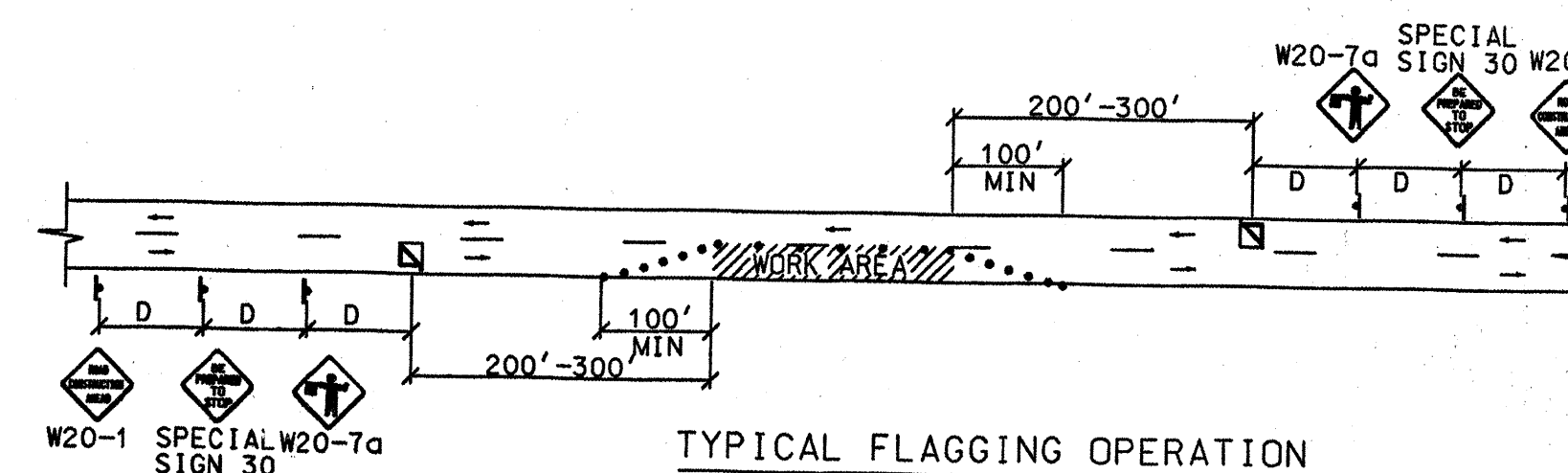
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



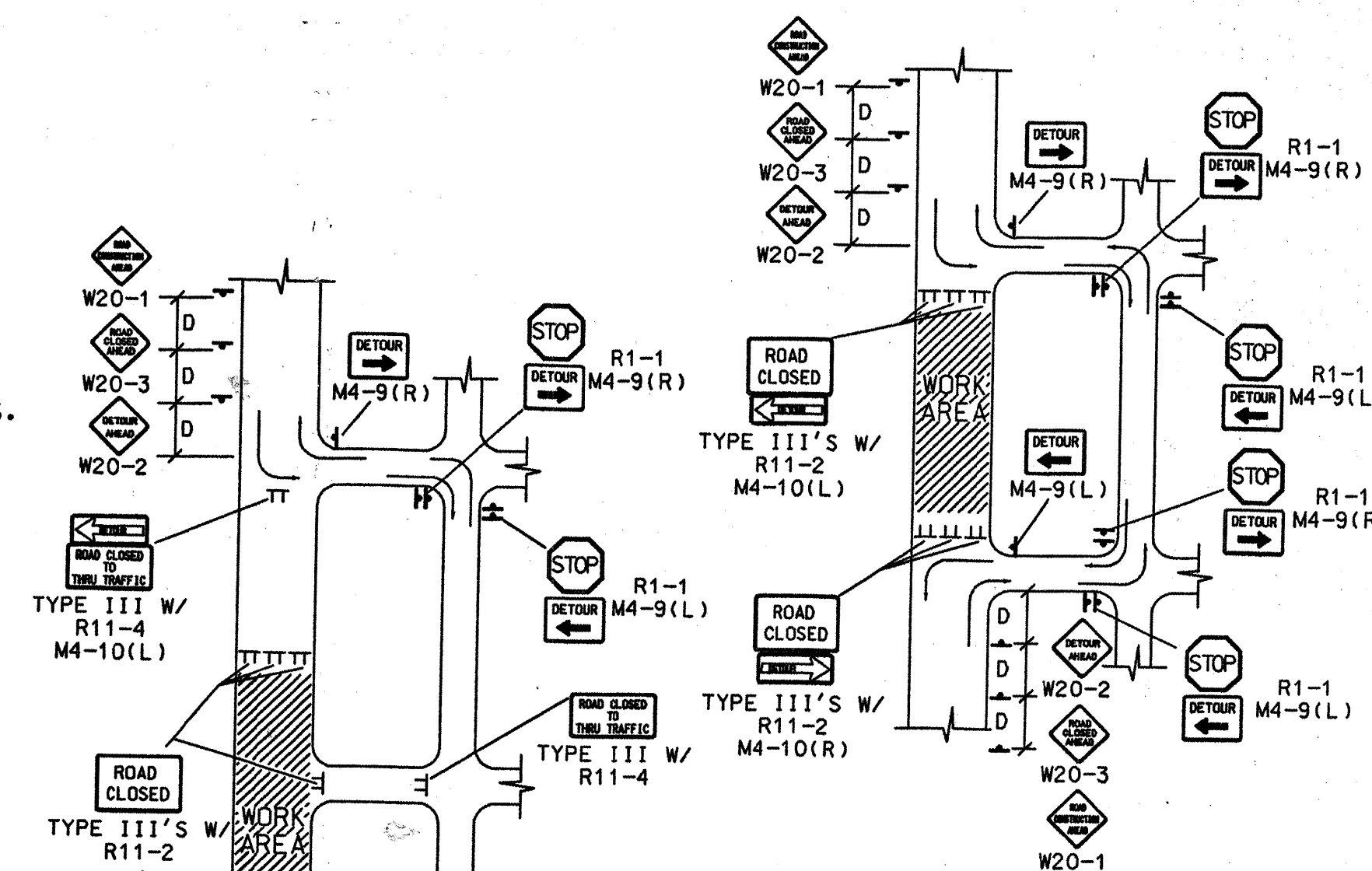
TYPICAL DOUBLE RIGHT LANE CLOSURE



TYPICAL DOUBLE LEFT LANE CLOSURE



TYPICAL FLAGGING OPERATION



TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE:
TYPICAL TRAFFIC CONTROL
& SIGNING EXAMPLES (REF MUTCD)

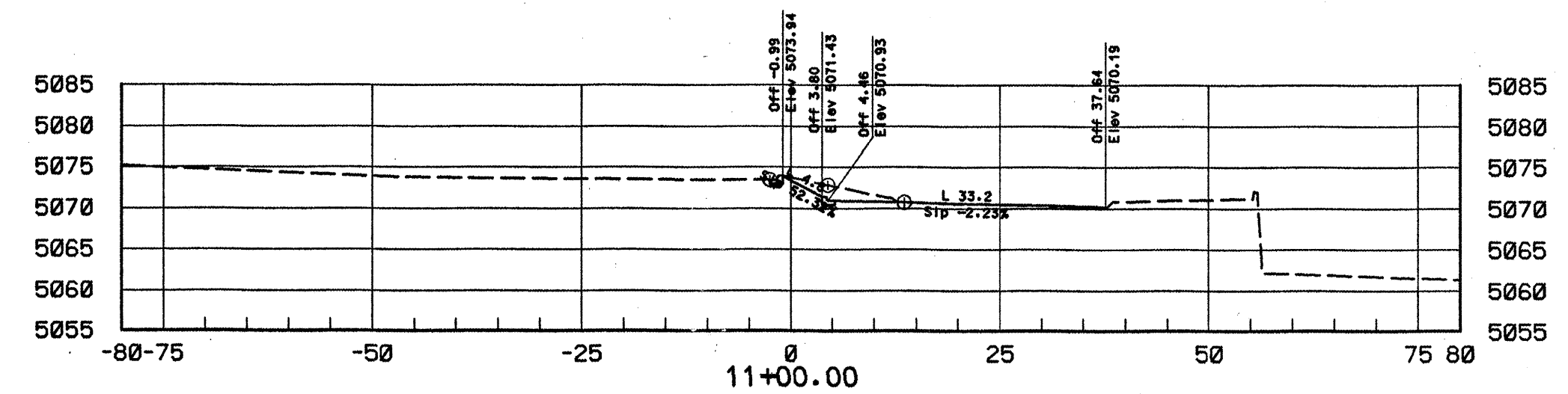
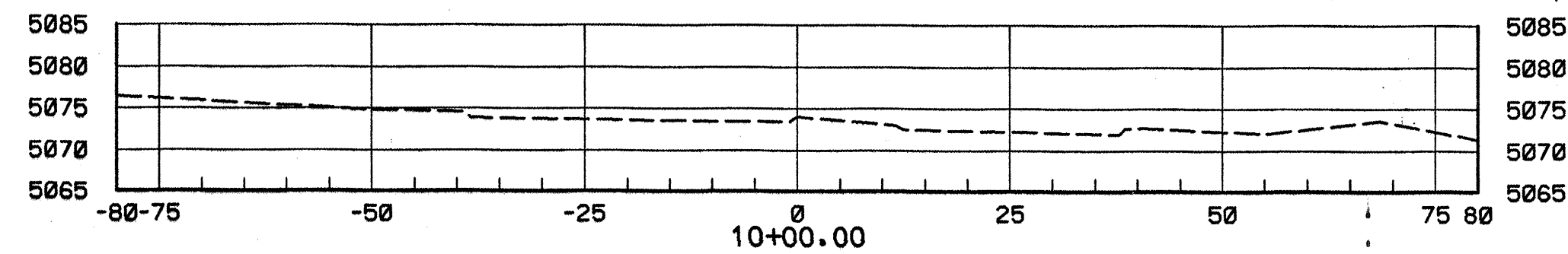
DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL MO./DAY/YR. MO./DAY/YR.

COA STD

LAST DESIGN UPDATE

CITY PROJECT NO. 648091 ZONE MAP NO. C-13 SHEET 6 OF 16

\$FILE\$

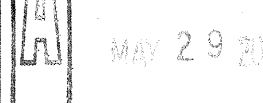
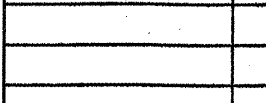
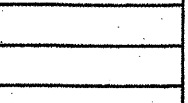
[illegible]

ENGINEER'S SEAL

REGISTERED PROFESSIONAL ENGINEER
STATE OF
NEW MEXICO
No. 466
DAVID J. LARSON
2-14-02

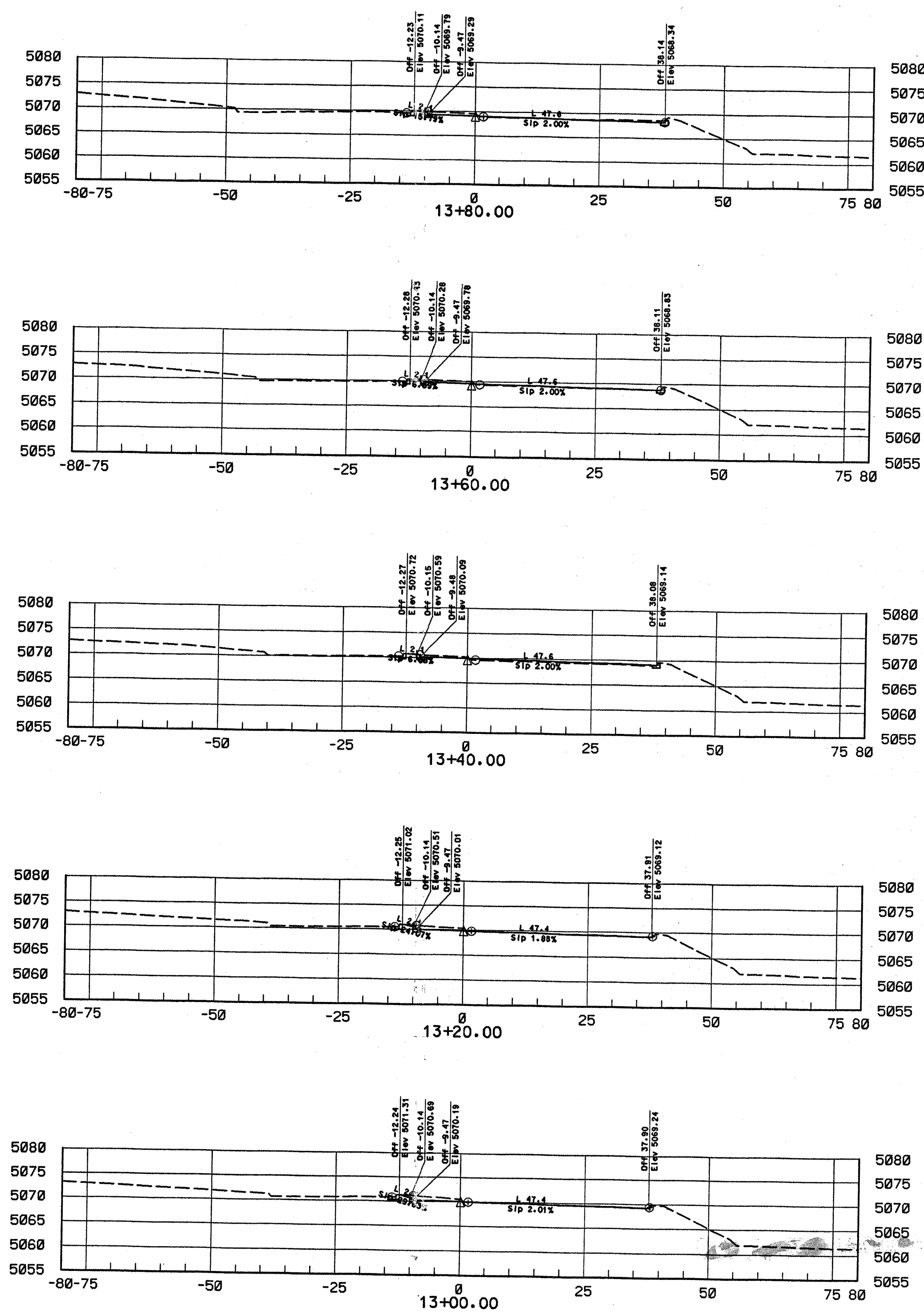
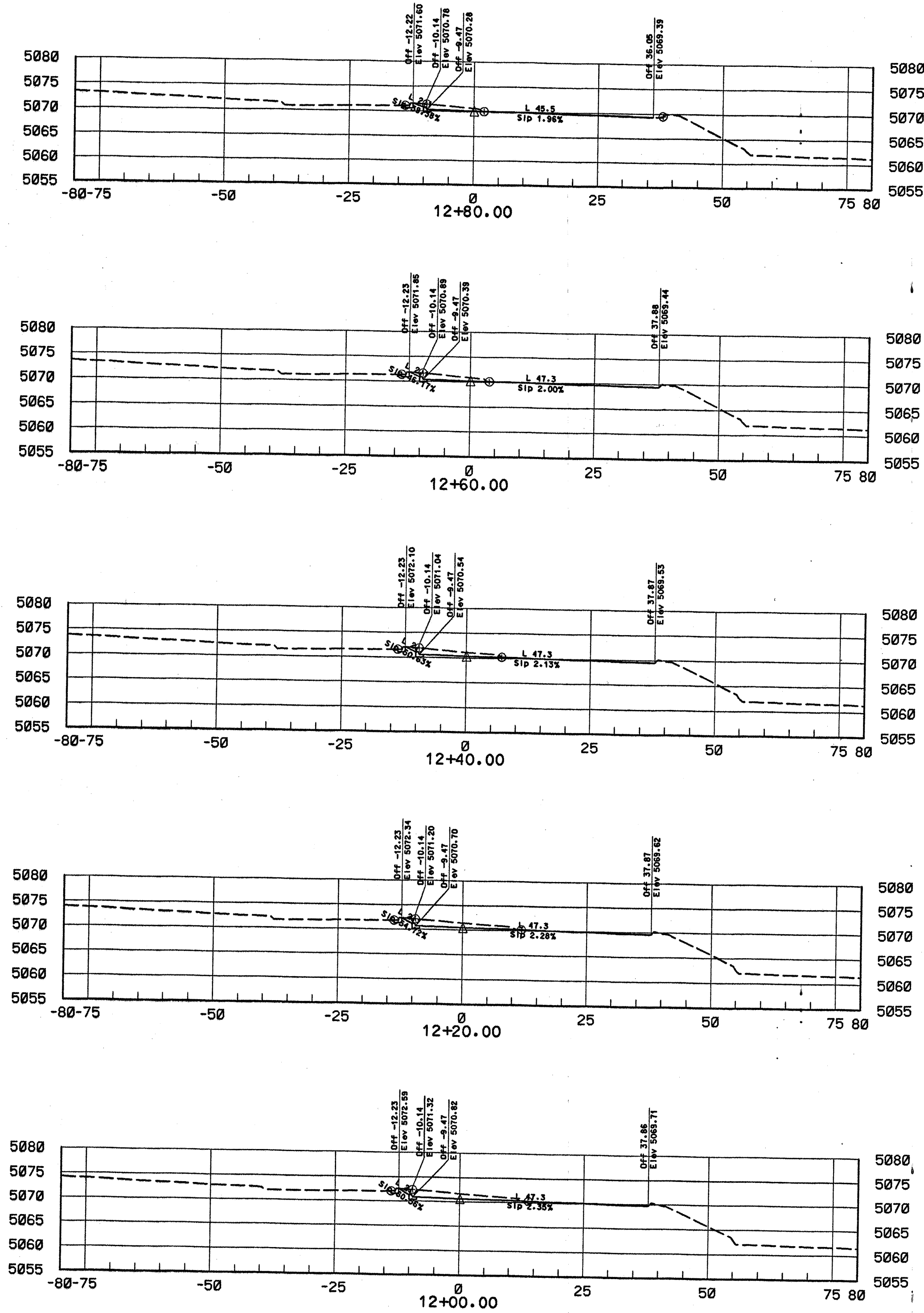
[illegible]

Holmes & Narver, Inc.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: PARADISE BLVD. / EAGLE RANCH RD. INTERSECTION IMPROVEMENTS TURN LANE CROSS SECTIONS			
Design Review Committee 	City Engineer Approval 	Last Design Update 	Mo./Day/Yr. 
City Project No. 648091	Zone Map No. C-13	Sheet 7	Of 16

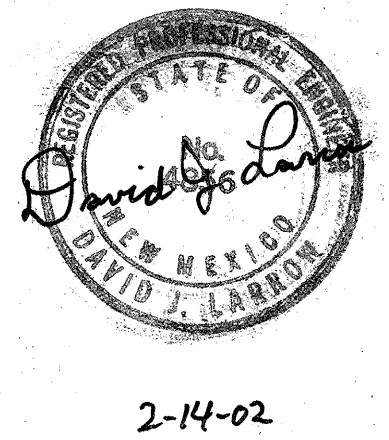
\$DATE\$ \$TIME\$

\$FILE\$

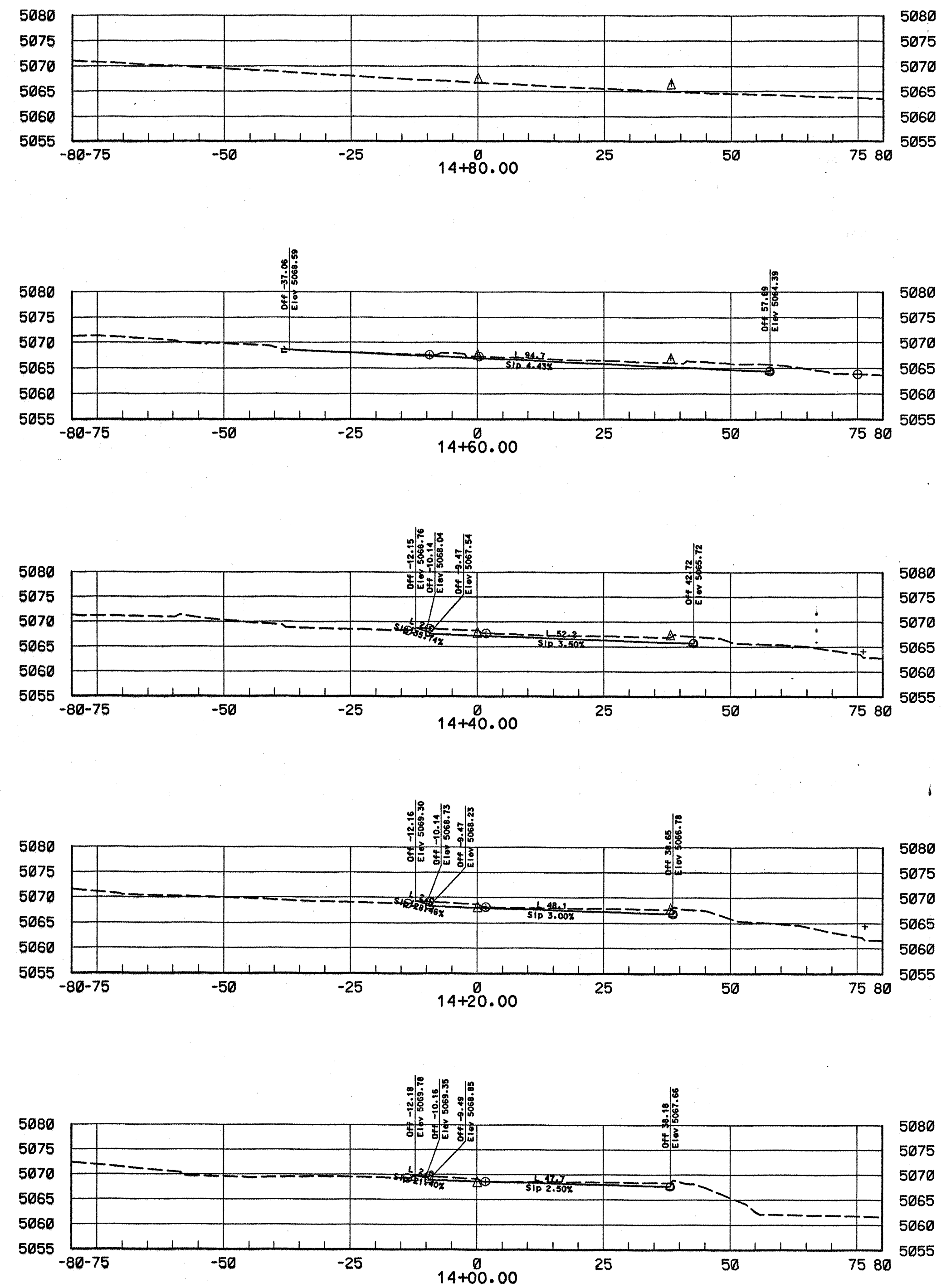


CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: PARADISE BLVD. / EAGLE RANCH RD. INTERSECTION IMPROVEMENTS TURN LANE CROSS SECTIONS	
Design Review Committee	City Engineer Approval
Mo./Day/Yr.	Mo./Day/Yr.
DESIGN REVIEW COMMITTEE	CITY ENGINEER
City Project No. 648091	Zone Map No. C-13
Sheet 8	Of 16

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO. DATE		FIELD NOTES		ACS CONTROL		CONTRACTOR	
BY		DATE		"R. ALAMEDA B., NO. 2"		DATE	
REMARKS		REVISIONS		ELEV = 5058.25		DATE	
DESIGNED BY: DJE		DATE:		DATE		DATE	
DRAWN BY: DJE		DATE:		DATE		DATE	
CHECKED BY: DL		DATE:		DATE		DATE	



\$FILE\$

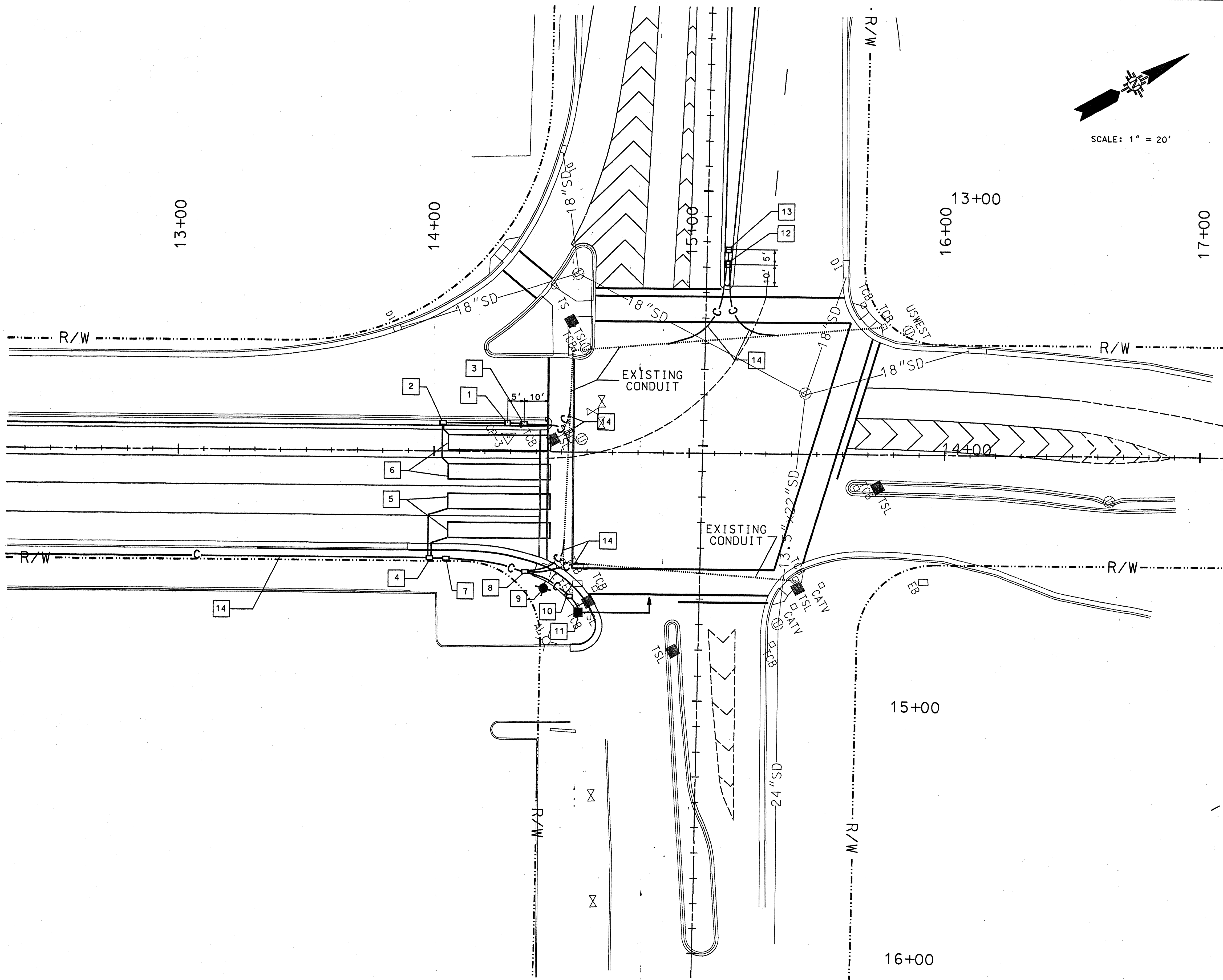


 Holmes & Narver, Inc.									D/D	DESIGNED BY	DRAWN BY	CHECKED
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP												
TITLE: PARADISE BLVD. / EAGLE RANCH RD. INTERSECTION IMPROVEMENTS TURN LANE CROSS SECTIONS												
Design Review Committee			City Engineer Approval			Last Design Update		Mo./Day/Yr.		Mo./Day/Yr.		
APPROVE  DATE 6-29-02			APPROVE  DATE MAY 29 2002 CITY ENGINEER									
DESIGN REVIEW COMMITTEE												
City Project No. 648091			Zone Map No. C-13			Sheet 9		Of 16				

\$DATE\$

\$TIME\$

\$FILE\$



SCALE: 1" = 20'

KEYED NOTES:

- 1 STA. 14+27.61 11.14' LT. NEW STANDARD PEDESTAL FOUNDATION. RELOCATE EXISTING PEDESTAL SIGNAL AND SIGNAL HEADS. SEE TS-17
- 2 STA 14+03.54 11.14' LT. NEW STANDARD PULL BOX (13"x24") SEE TS-20
- 3 STA 14+32.61 11.14' LT. NEW LARGE PULL BOX (17"x30") SEE TS-20
- 4 STA 14+03.54 42.05' RT. NEW STANDARD PULL BOX (13"x24") SEE TS-20
- 5 STA 14+05.62 RT. BEGIN BI POLE 6'x40' SEE TS-21
- 6 STA 14+05.62 RT. BEGIN QUAD POLE 6'x40' SEE TS-21
- 7 STA 14+05.02 42.05' RT. P-TYPE CONTROLLER FOUNDATION SEE TS-17
- 8 STA 14+35.83 46.79' RT. NEW LARGE PULL BOX (17"x30") SEE TS-20
- 9 STA 14+43.08 53.33' RT. STREET LIGHT FOUNDATION SEE SL-4
- 10 STA 14+53.46 56.45' RT. NEW STANDARD PULL BOX (13"x24") SEE TS-20
- 11 STA 14+56.92 62.70' RT. NEW MASTARM FOUNDATION. RELOCATE EXISTING MASTARM AND SIGNAL HEADS. SEE TS-16
- 12 STA 13+27.24 8.32' LT. NEW LARGE PULL BOX (17"x30") SEE TS-20
- 13 STA 13+32.24 8.49' LT. NEW PEDESTAL FOUNDATION ONLY. SEE TS-17
- 14 3" PVC

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	NO.	ACS CONTROL	NO.	FIELD NOTES	NO.	BY	DATE
WORKED BY	DATE	"R. ALAMEDA B. NO. 2"	DATE	BY	DATE	REMARKS	DATE
INSPECTED BY	DATE	ELEV = 5058.25	DATE	NO.	DATE	REVISIONS	DATE
ACCEPTANCE BY	DATE		DATE		DATE	DESIGN	DATE
VERIFICATION BY	DATE		DATE		DATE	DRAWN BY: DJE	DATE
DRAWINGS BY	DATE		DATE		DATE	CHECKED BY: DL	DATE
MICRO-FILM INFORMATION							
RECORDED BY	DATE						
NO.	DATE						



2-14-02



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: PARADISE BLVD. / EAGLE RANCH RD. INTERSECTION IMPROVEMENTS TRAFFIC SIGNAL LAYOUT	
Design Review Committee	City Engineer Approval
Mo. 29 2002	Mo. 7 Day/Yr. Mo. 7 Day/Yr.
DESIGN REVIEW COMMITTEE	Last Design Update
City Project No. 648091	Zone Map No. C-13
Sheet 10	Of 16

1. ALL WORK ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL CONFORM TO THE CURRENT NATIONAL ELECTRIC CODE, THE STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS FOR ELECTRICAL WIRING AND APPARATUS, AND THE CITY'S TRAFFIC ENGINEERING OPERATIONS THIRD DRAFT SPECIFICATIONS (JUNE 1994).
2. LOCATIONS OF CONDUITS, FOUNDATIONS, CONTROL CABINETS, POLES, PULL BOXES, MANHOLES, AND SPLICE CABINETS SHOWN ON THE PLANS ARE SCHEMATIC AND SHALL BE ADJUSTED IN THE FIELD TO MAXIMIZE CLEAR SPACE AVAILABLE FOR PEDESTRIANS AND WHEELCHAIRS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE CONTRACTOR SHALL MEET WITH THE CITY'S TRAFFIC ENGINEERING OPERATIONS PERSONNEL IN THE FIELD AT ALL LOCATIONS TO SPOT EQUIPMENT BEFORE BEGINNING THE WORK. ALL SUCH EQUIPMENT SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY.
3. THE CONTRACTOR IS WARNED THAT EXISTING CONDUITS MAY CONTAIN AC POWER AND CAUTION SHALL BE EXERCISED IN INTERCEPTING OR INSTALLING CABLE IN EXISTING CONDUIT.
4. THE CONTRACTOR SHALL BORE, DRILL, OR PUSH WHEN CROSSING EXISTING PAVEMENTS AND ANY DRIVEWAYS FOR SIDE STREET CROSSINGS. BEFORE CONDUIT CAN BE BORED, DRILLED, OR PUSHED THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES. THE CONTRACTOR SHALL LOCATE AND EXPOSE GAS LINES WHICH CROSS ANY PROPOSED BORES. THESE EXCAVATIONS SHALL REMAIN OPEN UNTIL AFTER THE BORE IS COMPLETE. CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ANY SIDEWALK OR PAVEMENT REQUIRED TO EXPOSE SUCH LINES. THE CONTRACTOR MAY CUT, TRENCH, AND REPLACE EXISTING PAVEMENT ONLY WHEN APPROVED BY THE PROJECT MANAGER.
5. SPLICING OF COMMUNICATIONS CABLE WILL NOT BE PERMITTED IN PULL BOXES. SPLICING OF COMMUNICATIONS CABLE (CONNECTIONS) WILL BE PERMITTED ONLY AT SPLICE CABINETS OR CONTROLLER CABINETS WITH SPLICE BARS. SPLICING OF TRAFFIC SIGNALS MCC WILL BE PERMITTED IN LARGE PULL BOXES INCLUDING LARGE MEDIAN PULL BOXES. SPLICING OF VIDEO DETECTION COAXIAL CABLE WILL NOT BE PERMITTED FROM THE MASTARM BASE TO THE CONTROLLER CABINET. SPLICING OF OPTICAL DETECTOR CABLE WILL NOT BE PERMITTED FROM THE DETECTOR TO THE CONTROLLER CABINET.
6. ALL LOOP LEAD-IN CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY PHASE AND LOOP NUMBER. ALL VIDEO DETECTION COAXIAL AND POWER CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY CAMERA NUMBER AND LOCATION. ALL OPTICAL DETECTOR CABLE SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH BY DIRECTION AND LOCATION.
7. ALL PULL BOXES SHALL BE REINFORCED POLYMER MORTAR HEAVY DUTY TYPE WITH REINFORCED POLYMER MORTAR HEAVY DUTY COVERS. CONCRETE COVERS, STEEL COVERS, AND CONCRETE PULL BOXES WILL NOT BE ACCEPTABLE.
8. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS (857-8000) THREE WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON SIGNALS, LIGHTING, AND POWER SERVICES. TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL ASSIST THE CONTRACTOR IN FIELD LOCATION OF EQUIPMENT, COLOR CODING OF WIRING, AND MUST BE PRESENT WHEN SIGNALS AND LIGHTING ARE SHUT-OFF OR TURNED ON. THE CONTRACTOR SHALL ALSO NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS EACH TIME A TRAFFIC SIGNAL CONTROL DOOR IS OPENED.
9. THE CONTRACTOR SHALL NOTIFY PUBLIC SERVICE COMPANY 30 DAYS IN ADVANCE OF ANTICIPATED POWER SERVICE CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WITH PUBLIC SERVICE COMPANY TO ESTABLISH ELECTRICAL SERVICE IN THE CITY'S NAME. THE CONTRACTOR SHALL PAY THE LOCAL POWER COMPANY ALL COSTS TO PROVIDE ELECTRICAL SERVICE. THIS WORK WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
10. THE CONTRACTOR SHALL REMOVE ALL CONFLICTING SIGNING AND DELIVER TO THE CITY TRAFFIC ENGINEERING YARDS WHEN TRAFFIC SIGNALS ARE PUT INTO OPERATION.
11. LIVE UNUSED CONDUCTORS WILL NOT BE ALLOWED AT MASTARM POLES AND PEDESTAL POLES. ALL SUCH UNUSED CONDUCTORS SHALL BE DISCONNECTED AT THE LARGE PULL BOX ADJACENT TO THE POLE.
12. IF TRENCH WIDTHS LESS THAN 12" ARE PROPOSED BY THE CONTRACTOR, APPROVED COMPACTION METHODS SHALL BE USED DURING BACKFILL TO PREVENT LATENT TRENCH FAILURES. THE CONTRACTOR SHALL USE GROUT OR LEAN FILL AS APPROVED BY THE PROJECT MANAGER IN LIEU OF EARTH BACKFILL.
13. FOR CONDUITS CONTAINING ONLY LOW VOLTAGE COMMUNICATIONS CABLES, THE REQUIREMENTS FOR A SINGLE CONDUCTOR BARE COPPER #8 AWG MAY BE WAIVED WHERE PERMITTED BY THE NATIONAL ELECTRIC CODE.
14. THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL PROVIDE TRAFFIC SIGNAL TIMING PLANS AND WILL PROGRAM TRAFFIC SIGNAL CONTROLLERS.
15. EXISTING CONDUITS TO BE REMOVED OR ABANDONED SHALL HAVE ALL WIRING REMOVED.
16. EXISTING CONDUITS SHALL BE REPAIRED, ADJUSTED, OR REPLACED AS DIRECTED BY THE PROJECT MANAGER WHERE ELECTRICAL PULLBOXES OR TRAFFIC MANHOLES ARE INSTALLED OR REPLACED.
17. CONTRACTOR SHALL COIL EXCESS INTERCONNECT CABLE AT ALL NEW OR EXISTING TRAFFIC MANHOLES BETWEEN SPLICE CABINET OR CONTROL CABINETS WITH SPLICE BARS. IF MORE THAN ONE MANHOLE EXISTS BETWEEN SPLICE CABINETS OR CONTROL CABINETS WITH SPLICE BARS, THEN COILING IS ONLY REQUIRED AT ONE OF THE MANHOLES. THE FOLLOWING QUANTITIES OF COMMUNICATION CABLE SHALL BE COILED:

12 PAIR	- 50 FT.
25 PAIR	- 50 FT.
50 PAIR	- 25 FT.
75 PAIR	- 25 FT.
18. THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO DIRECT TRAFFIC WHEN SIGNALS ARE TURNED OFF.
19. ALL DATA SHOWN HEREIN CONCERNING EXISTING UTILITIES HAS BEEN OBTAINED FROM "AS-BUILT" DRAWINGS AND FROM FIELD OBSERVATIONS WHICH MAY OR MAY NOT BE ACCURATE. THE CONTRACTOR WILL BE RESPONSIBLE FOR EXPLORATORY TRENCHING. IF NECESSARY, TO MORE SPECIFICALLY LOCATE UTILITY LINES. COST OF LOCATING UTILITY LINES INCLUDING EXPLORATORY TRENCHING WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
20. THE CONTRACTOR SHALL VIDEO TAPE THE EXISTING TRAFFIC SIGNAL EQUIPMENT IN VHS FORMAT AND REVIEW THE TAPE WITH CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL PRIOR TO BEGINNING ANY REMOVALS OF SIGNAL EQUIPMENT. THE TAPE SHALL BECOME THE PROPERTY OF THE CITY AND MAY BE USED TO RESOLVE ANY QUESTIONS RELATED TO THE ORIGINAL CONDITION AND QUALITY OF EXISTING EQUIPMENT. THE EXISTING TRAFFIC SIGNAL EQUIPMENT INCLUDING POLES, CONTROLLER CABINETS, CONFLICT MONITORS, AND DETECTORS SHALL BE DELIVERED TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING YARD ON PIND ROAD NE.

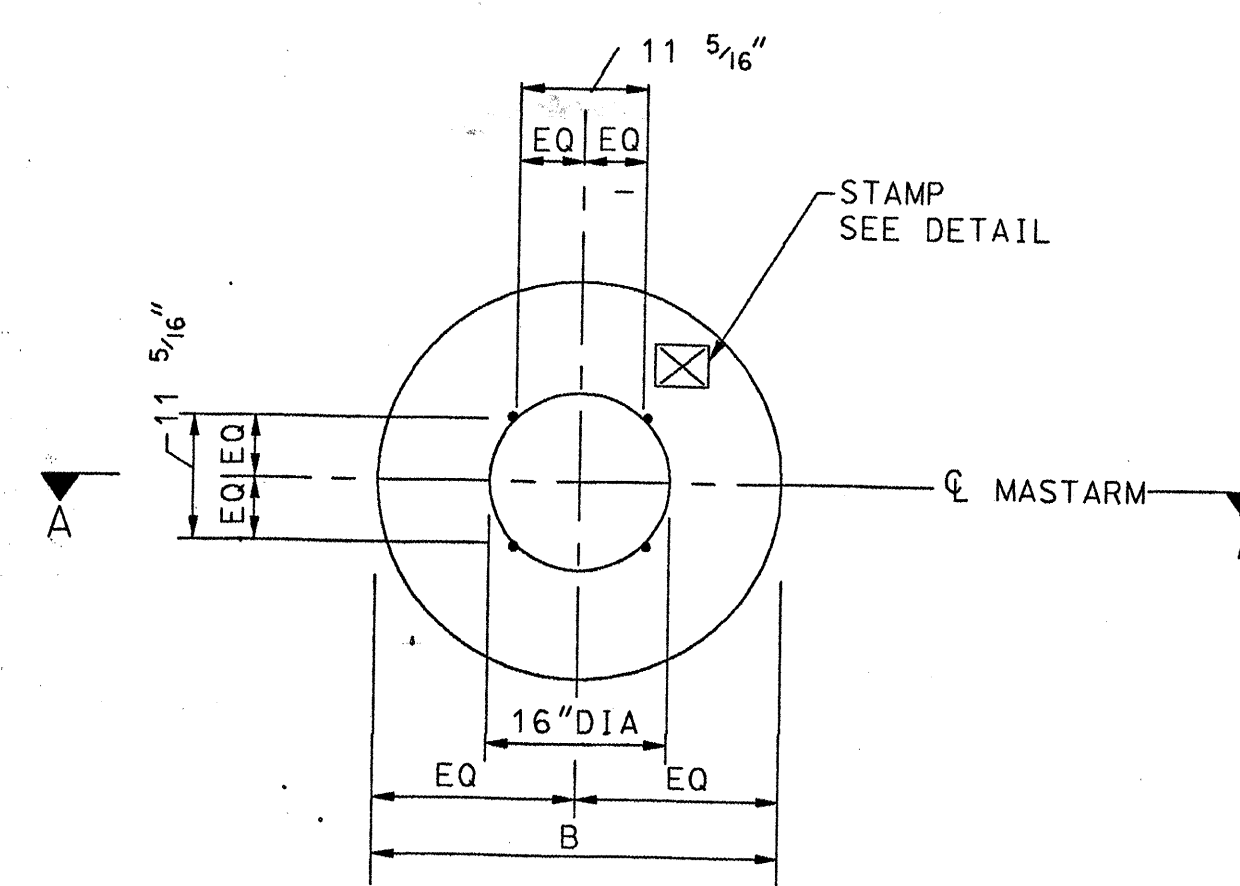
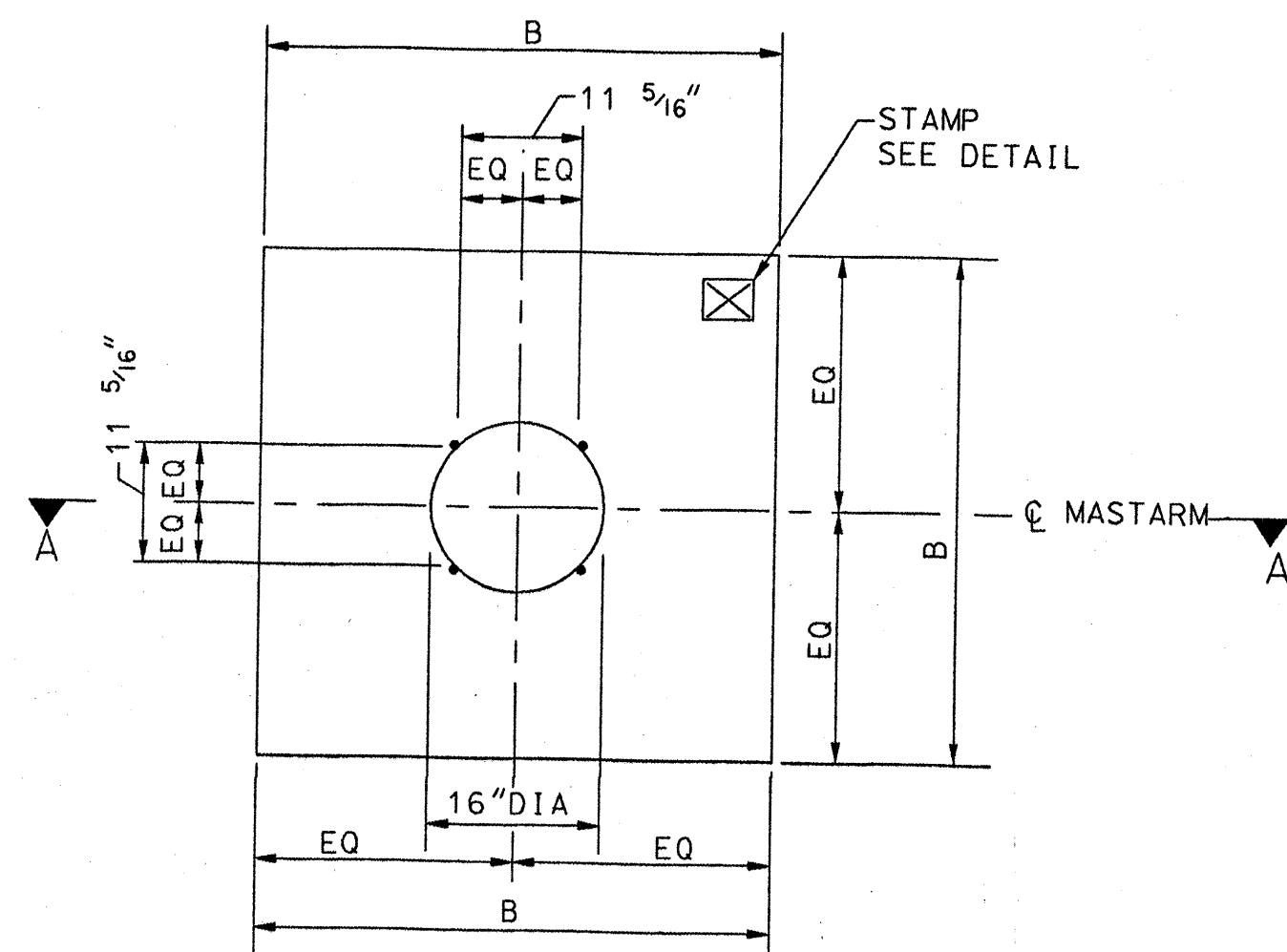
NEW	EXISTING	ITEM
		PULL BOX
		SERVICE POLE
		METER PEDESTAL
		CONTROLLER CABINET
		CONDUIT RUN (SIGNALS)
		CONDUIT RUN (INTERCONNECT)
		LOOP DETECTOR
		TRAFFIC SIGNAL PEDESTAL POLE
		CONDUIT RUN NUMBER (SIGNAL)
		CONDUIT RUN NUMBER (POWER SERVICE)
		CONDUIT RUN NUMBER (INTERCONNECT)
		CONDUIT RUN NUMBER (WARNING BEACON)
		TYPE II STANDARD WITH MASTARM, TRAFFIC SIGNAL, BACK PLATE, AND OPTICAL DETECTOR
		TRAFFIC SIGNAL, BACK PLATE, OPTICAL DETECTOR, LUMINAIRE, AND VIDEO CAMERA
		PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		SPLICE CABINET
		TRAFFIC MANHOLE
		VIDEO CAMERA

1. "ENGINEER" - FOR THE PURPOSES OF THIS PROJECT, THE TERM "ENGINEER" IS SYNONYMOUS WITH THE TERM "PROJECT MANAGER".

 CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR. MO./DAY/YR. MO./DAY/YR. MO./DAY/YR. MO./DAY/YR. MO./DAY/YR.	
COA	STD	LAST DESIGN UPDATE	
CITY PROJECT NO.	ZONE MAP NO.	SHEET OF	
648091	C-13	TS-1A	

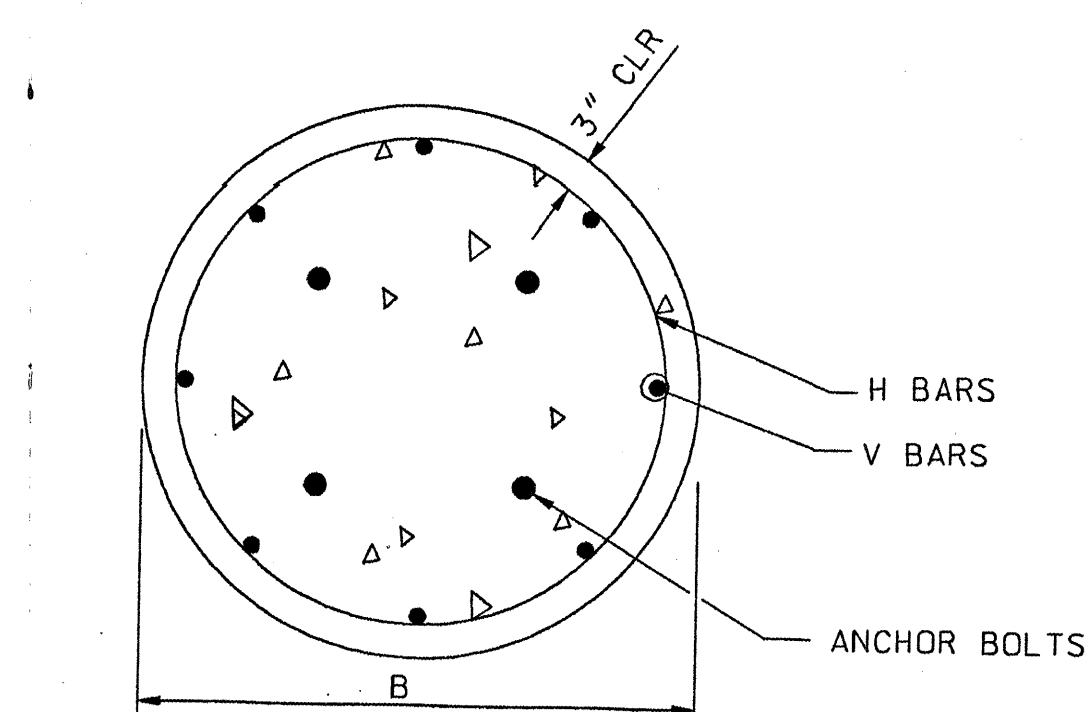
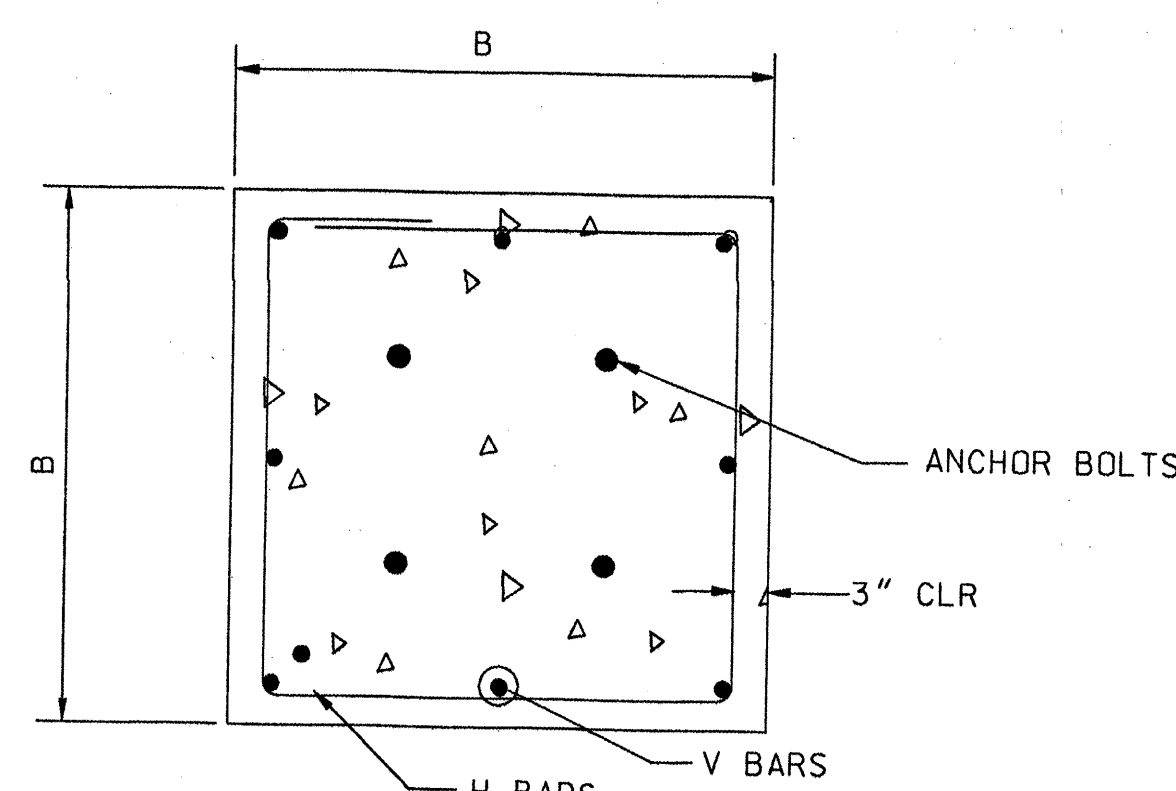
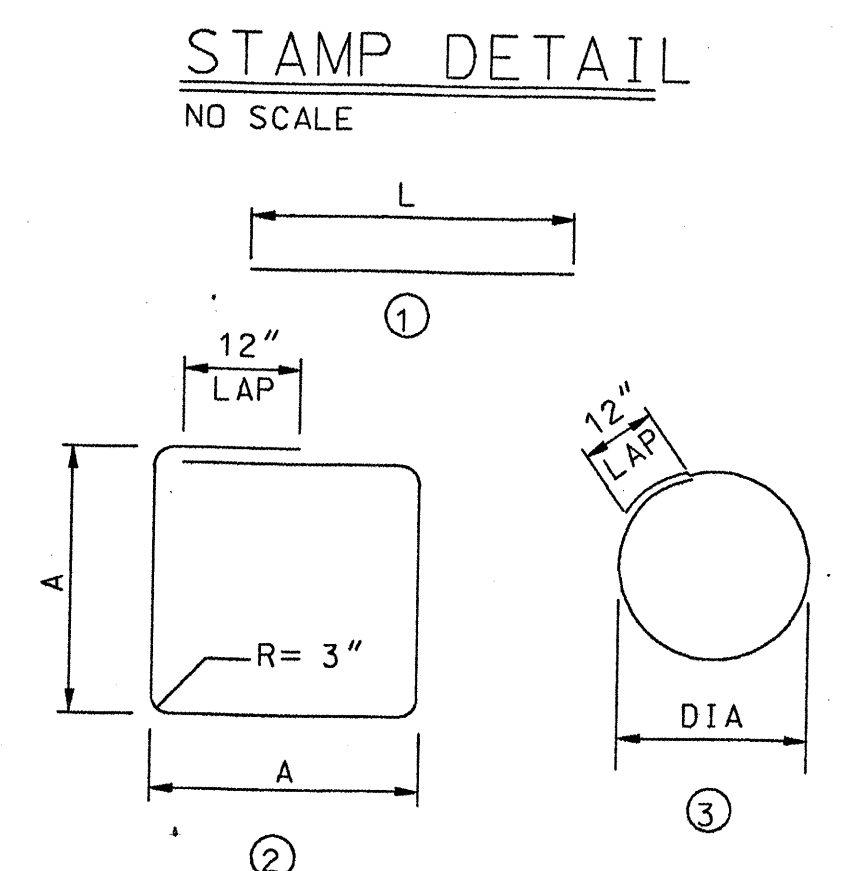
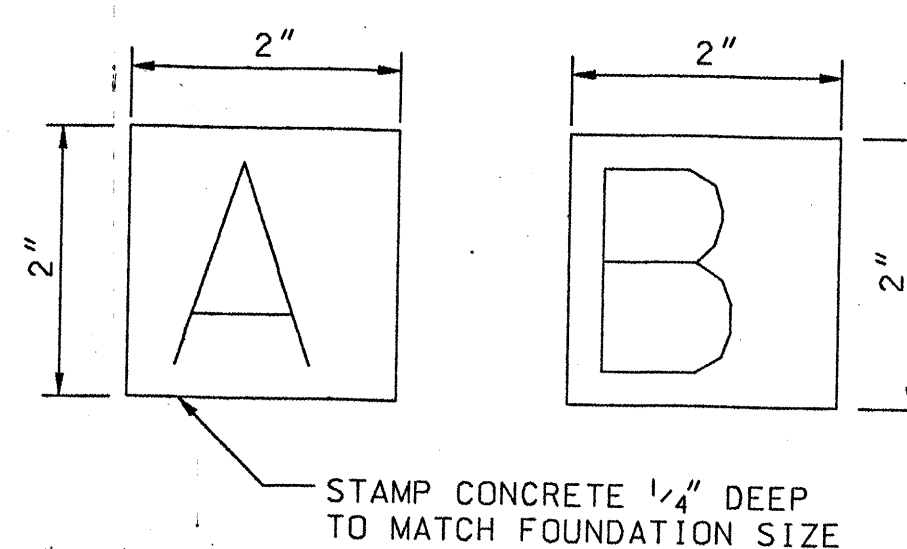
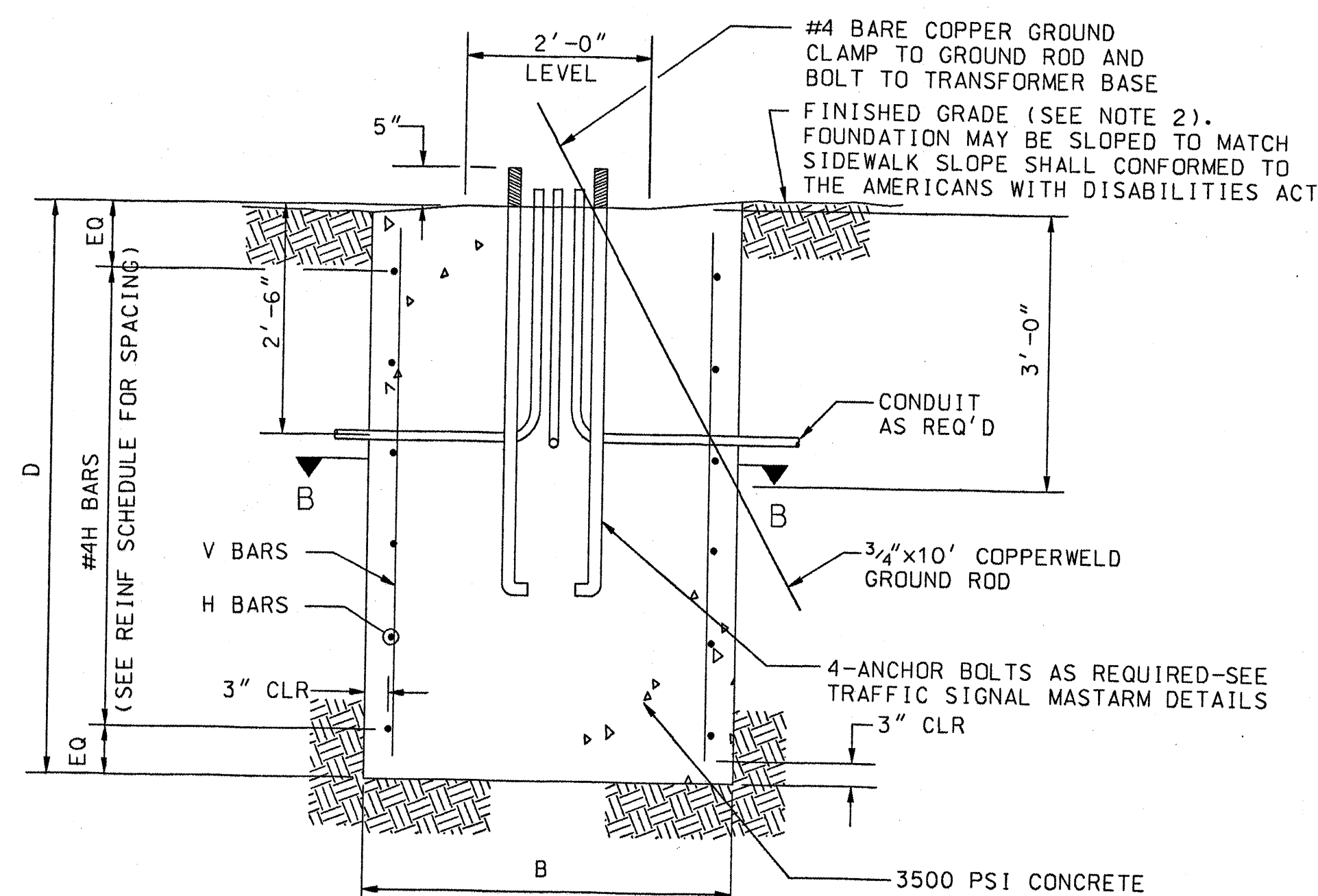
2-16



FOUNDATION DIMENSIONS AND QUANTITIES								
FOUNDATIONS TYPE	SIGNAL ARM SPAN(FT)	DIMENSION		REINFORCING		REBAR POUNDS	3500 PSI CONCRETE CUBIC YARDS	NOTES
		B (WIDTH)	D (DEPTH)	V BARS MARK	H BARS MARK			
TYPE A (SQUARE)	15	3'-6"	5'-0"	#4V2	#3H2	49.1 •	2.27	
	20	"	"	"	"		"	
	25	"	"	"	"		"	
TYPE B (SQUARE)	30	4'-0"	6'-3"	#5V1	#3H1	82.6	3.70	
	35	"	"	"	"		"	
	40	"	"	"	"		"	
TYPE A (ROUND)	15	2'-6"	8'-6"	#6V4	#3H4	98.1	1.55	
	20	"	"	"	"		"	
	25	"	"	"	"		"	
TYPE B (ROUND)	30	3'-0"	11'-9"	#7V3	#3H3	179.7	3.08	
	35	"	"	"	"		"	
	40	"	"	"	"		"	

ROUND SHAPE TO BE USED
ONLY WHERE SPECIFICALLY
NOTED ON PLANS OR WHEN
APPROVED BY THE PROJECT
MANAGER.

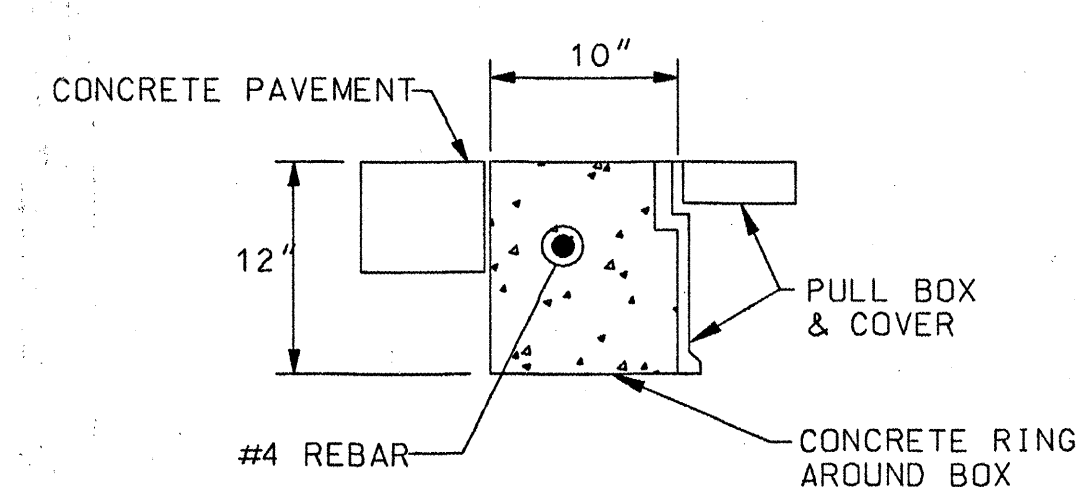
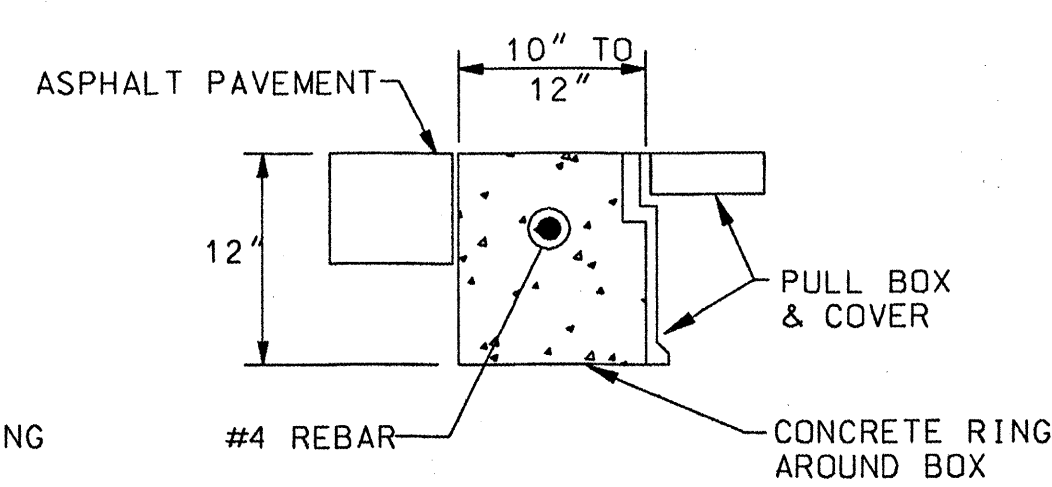
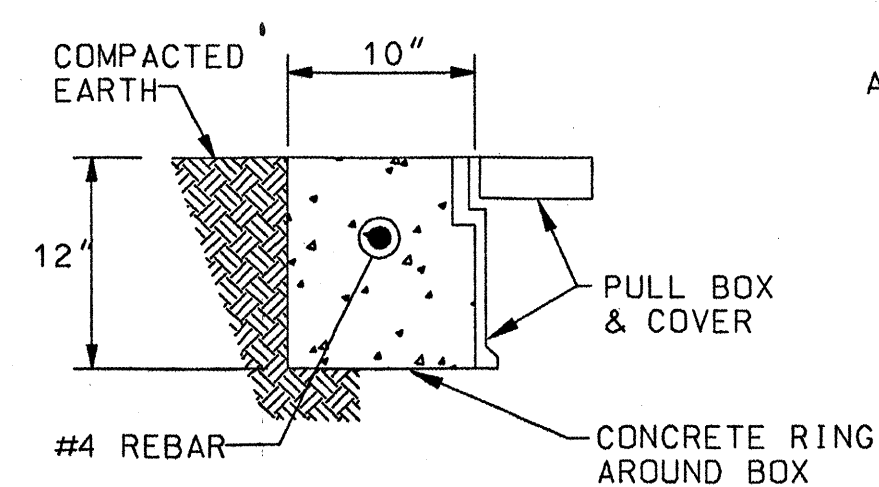
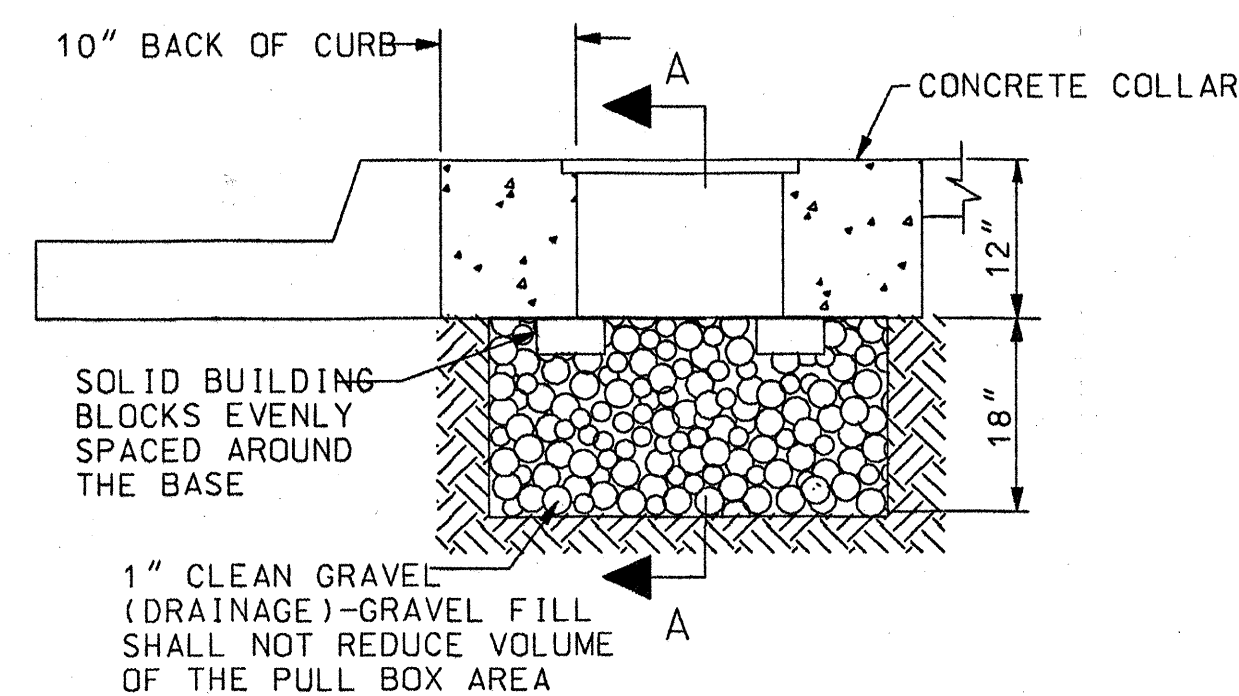
REINFORCING SCHEDULE (GRADE 60 BARS)					
MARK	QUANT	TYPE	SIZE	LENGTH	COMMENTS
#5V1	8	1	5	5'-9"	A = 42", TIES AT 14" OC A = 36", TIES AT 12" OC DIA = 30", TIES AT 12" OC DIA = 24", TIES AT 12" OC
#4V2	8	1	4	4'-6"	
#7V3	6	1	7	11'-3"	
#6V4	6	1	6	8'-0"	
#3H1	6	2	3	15'-4"	
#3H2	5	2	3	13'-4"	
#3H3	12	3	3	9'-3"	
#3H4	9	3	3	7'-8"	



- TRAFFIC SIGNAL MASTARM FOUNDATION NOTES

1. REFER TO THE PLANS FOR LOCATIONS OF TRAFFIC SIGNAL MASTARM FOUNDATIONS.
2. FINISHED GRADE FOR THE FOUNDATIONS SHALL BE ESTABLISHED IN THE FIELD BY THE PROJECT MANAGER.
3. THE FOUNDATIONS SHOWN HERE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT REVISION.
4. CONCRETE SHALL BE 3500 PSI FOR EXTERIOR STRUCTURES. REFER TO TABLE 101.C OF THE SPECIFICATIONS.
5. REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60.
6. THE TOP 6 INCHES OF THE FOUNDATION PEDESTAL SHALL BE FORMED TO THE DIMENSIONS SHOWN ON THIS SHEET TO FORM NEAT LINES. CONCRETE BELOW 6 LINES MAY BE CAST AGAINST THE EARTH.
7. THE CONCRETE SHALL GAIN 80% OF THE DESIGN STRENGTH PRIOR TO INSTALLING THE TRAFFIC SIGNAL MASTARM.
8. ALL FOUNDATIONS SHALL INCLUDE COPPERWELD GROUND RODS. ALL GROUND RODS SHALL BE $\frac{3}{4}$ " DIA X 10'-0" AND WILL BE CONSIDERED INCIDENTAL TO THE FOUNDATIONS BID ITEMS.
9. ALL FOUNDATIONS SHALL BE STAMPED EITHER "A" OR "B" TO SHOW TYPE CONSTRUCTED (SEE STAMP DETAIL).

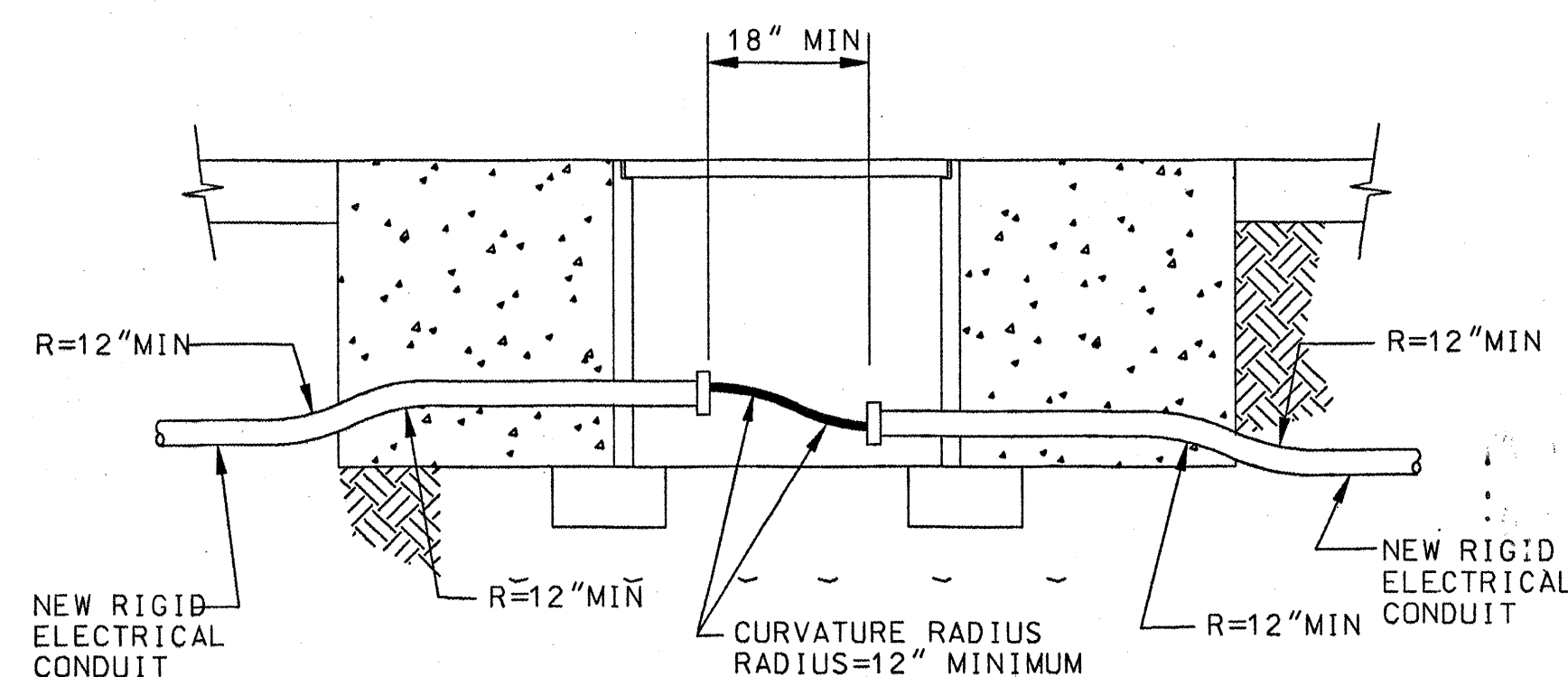
[illegible]



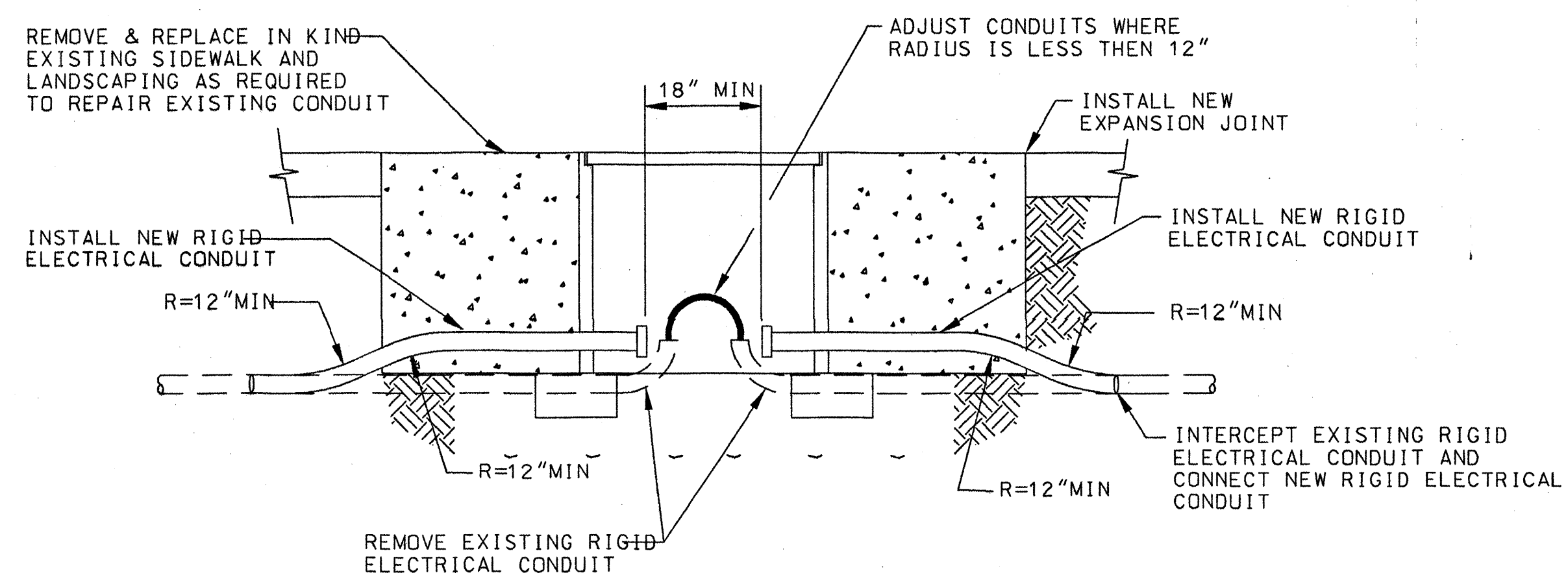
TYPICAL PULL BOX INSTALLATION
NOTE: SEE "CONCRETE COLLAR DETAIL"

CONCRETE COLLAR DETAILS

NOTE: THE CONCRETE COLLAR FOR THE PULL BOXES WILL BE
CONSIDERED INCIDENTAL TO THE PULL BOX BID ITEMS

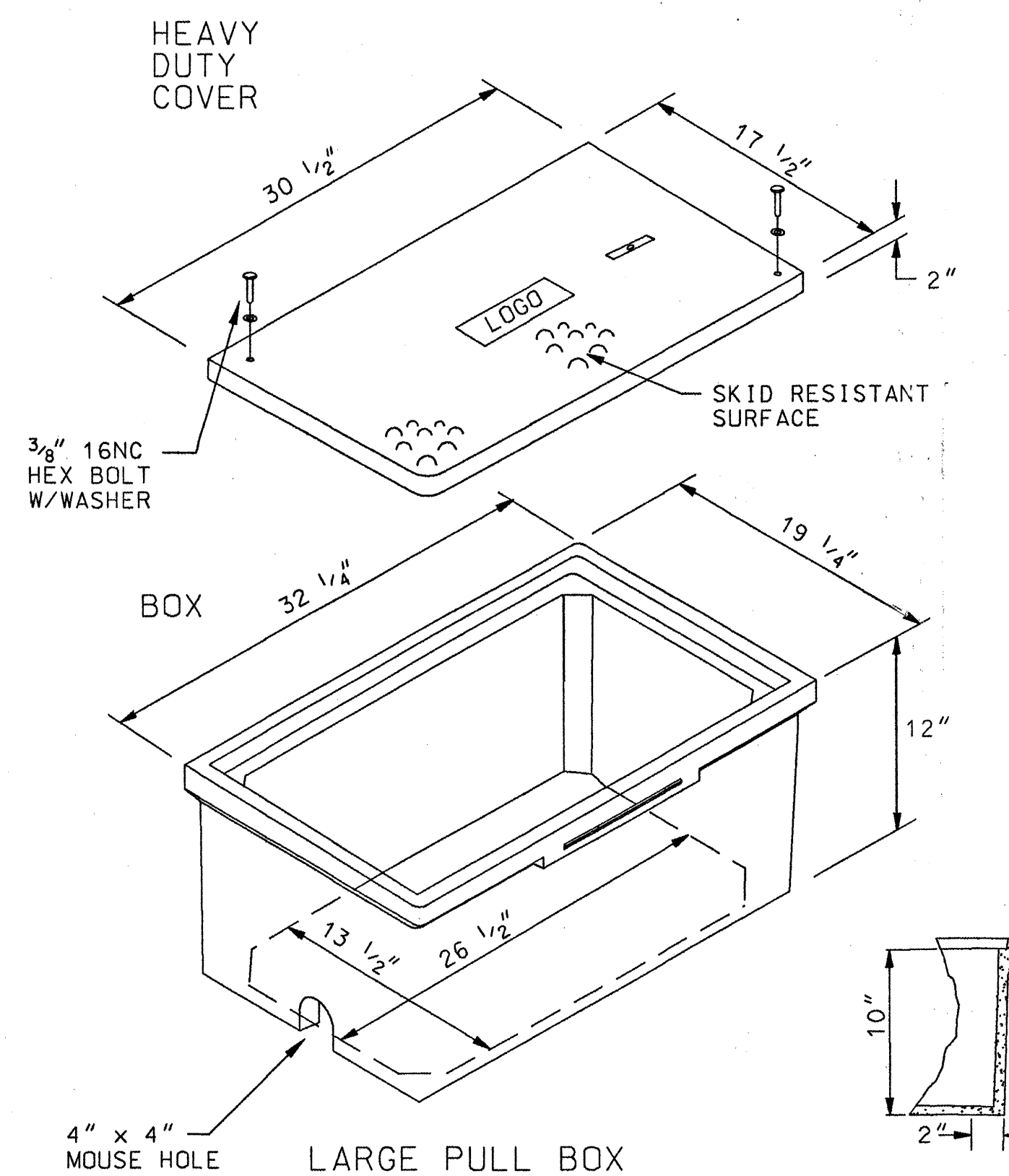


TRAFFIC SIGNAL PULL BOX (TYPICAL)
NEW CONDUIT INSTALLATION

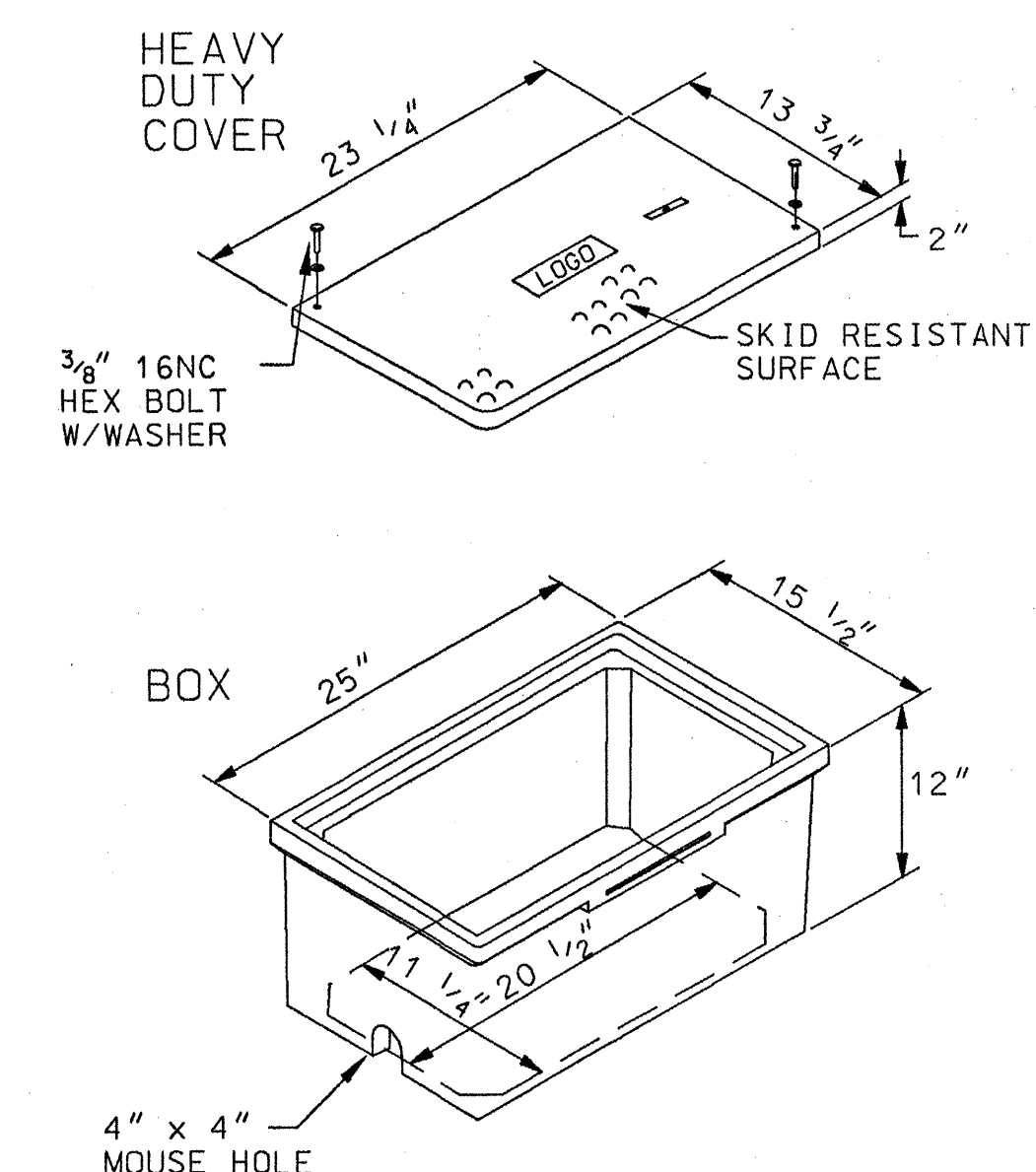


TRAFFIC SIGNAL PULL BOX (TYPICAL)

RETROFIT INSTALLATION



PULL BOX DETAILS

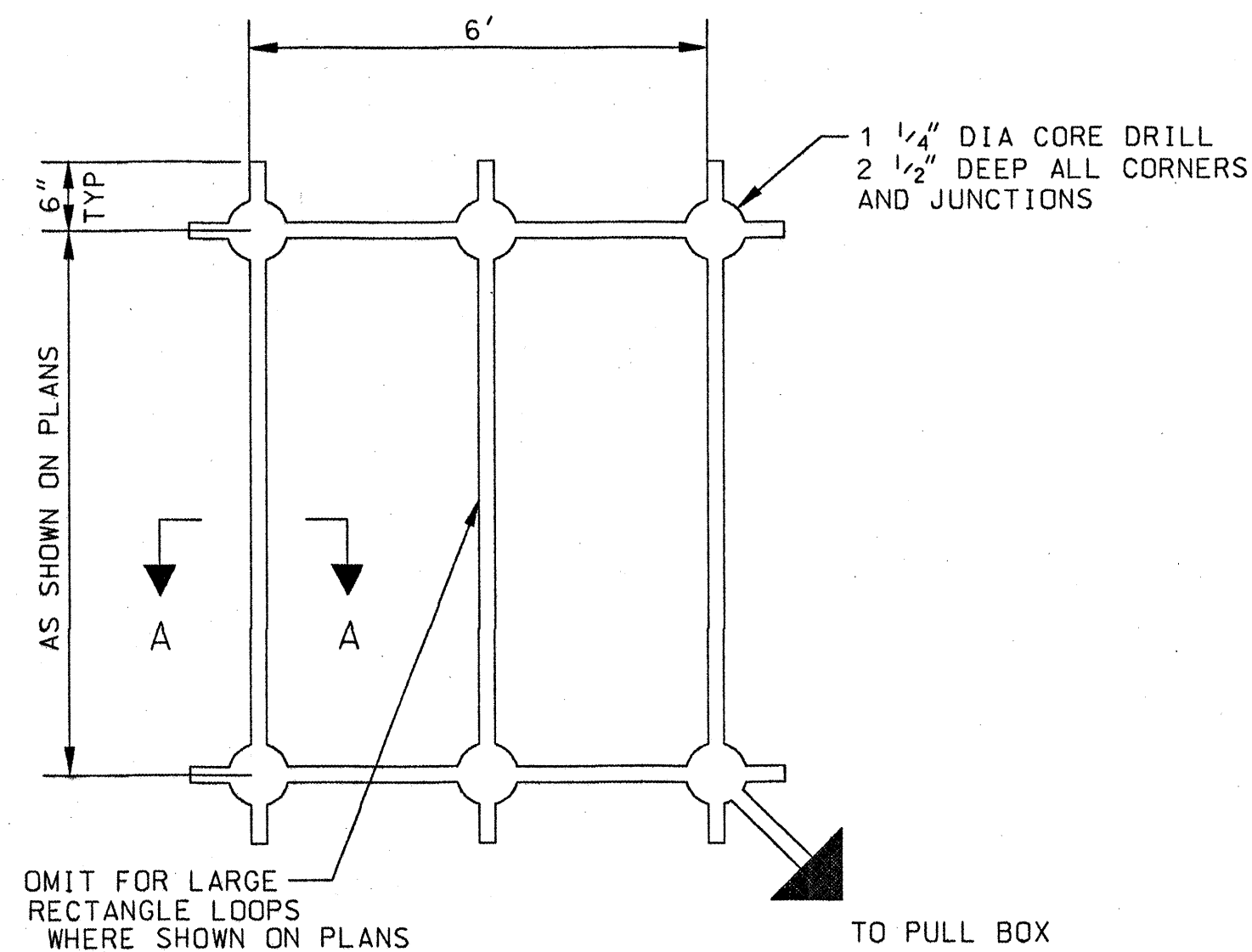


STANDARD PULL BOX

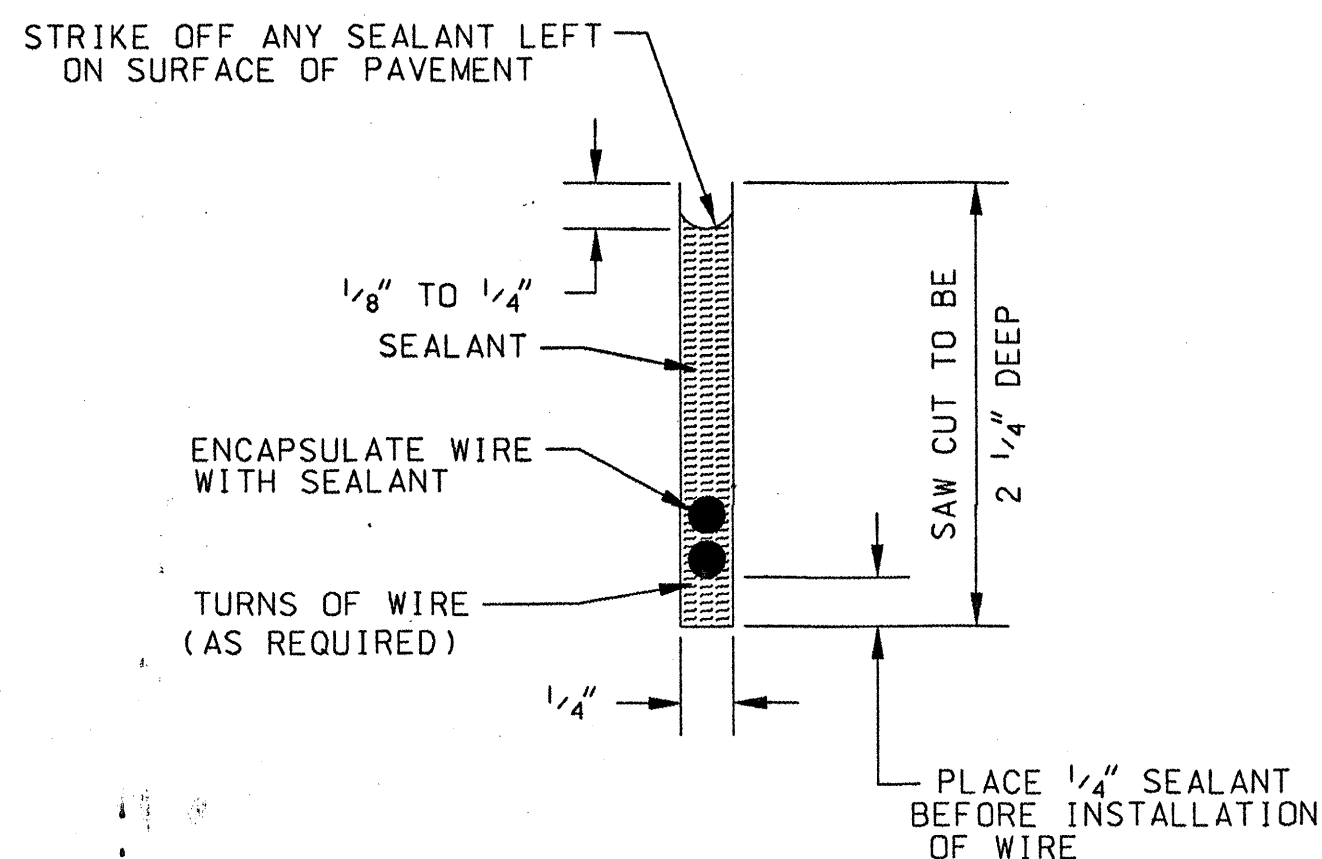
NOTES FOR HEAVY DUTY REINFORCED POLYMER MORTAR PULL BOX AND COVERS

1. 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 - 1,700 PSI, FLEXURAL STRENGTH - 7,500 PSI.
2. ALL PULL BOX COVERS SHALL BE HEAVY DUTY REINFORCED POLYMER MORTAR, HAVING A SERVICE LOAD OF 22,568 LBS OVER 10" SQUARE (225 PSI).
3. PULL BOX TYPE AND LOGO SHALL BE APPROVED BY THE PROJECT MANAGER.
4. THE DIMENSIONS OF THE PULL BOXES SHOWN ARE NOMINAL DIMENSIONS AND MAY VARY AS TO THE MANUFACTURER'S RECOMMENDATIONS. ALL DIMENSIONS SHALL BE VERIFIED BY THE PROJECT MANAGER.
5. ELECTRICAL PULL BOX (STANDARD) SHALL BE A HEAVY DUTY REINFORCED POLYMER MORTAR PULL BOX AND COVER MEASURING 13 3/4" x 23 1/4" x 2".

 CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: TRAFFIC SIGNAL PULL BOX DETAILS			
DESIGN REVIEW COMMITTEE COA		CITY ENGINEER APPROVAL STD	
		LAST DESIGN UPDATE	MO./DAY/YR.
			MO./DAY/YR.
			MO./DAY/YR.
			MO./DAY/YR.
			MO./DAY/YR.
CITY PROJECT NO. 648091		ZONE MAP NO. C-13	SHEET TS-20

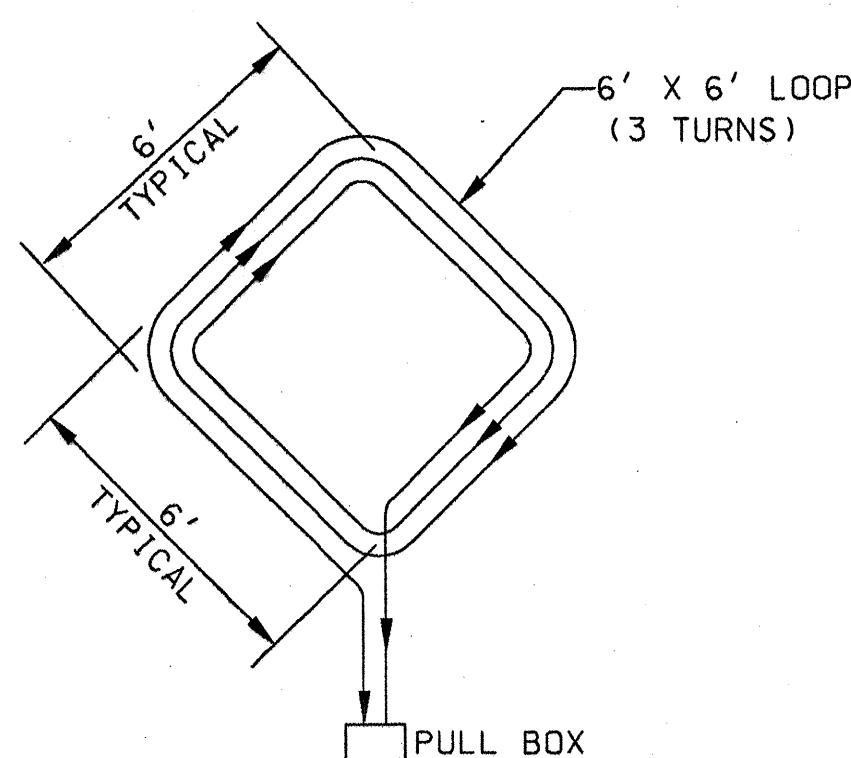


PLAN VIEW

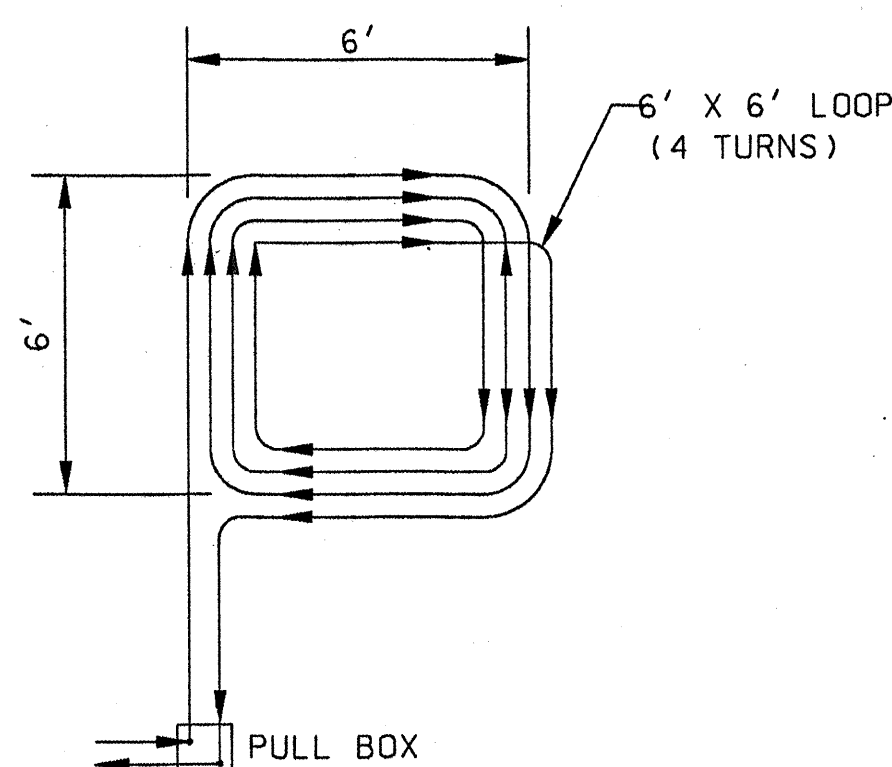


SECTION A-A

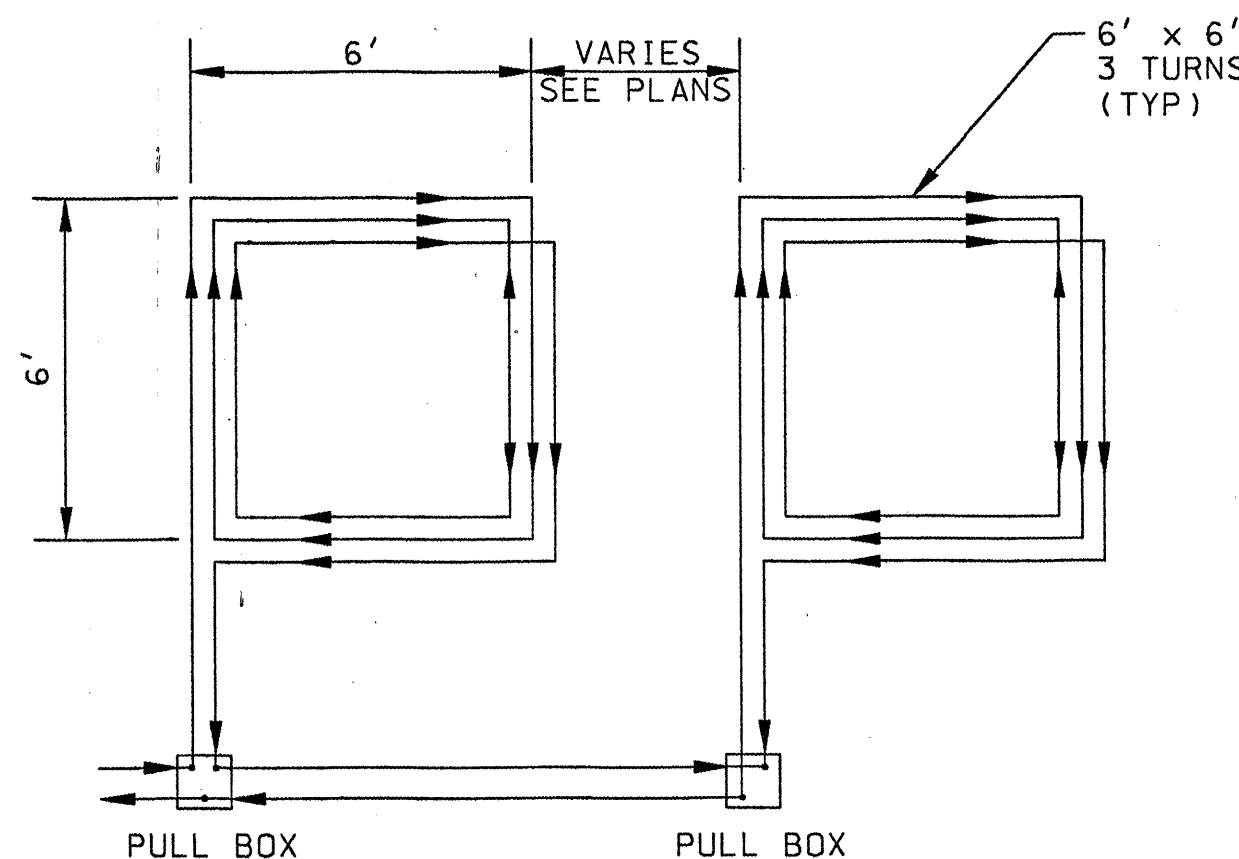
TYPICAL ROADWAY LOOP SAW CUT DETAIL



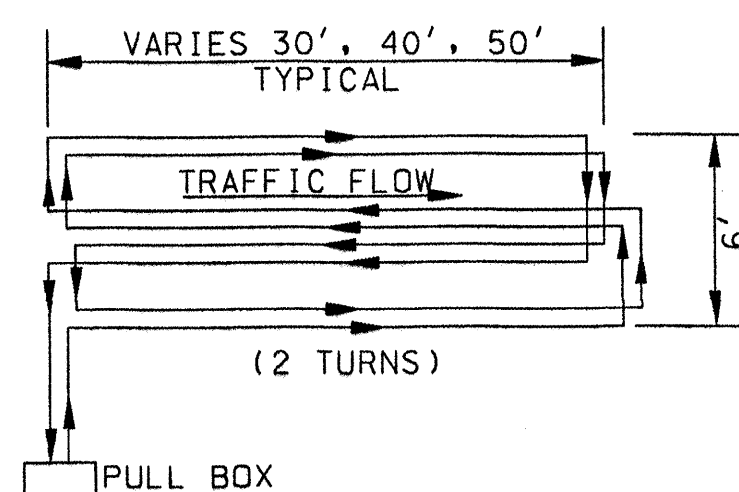
EXTEND CALL LOOP WIRING DETAIL



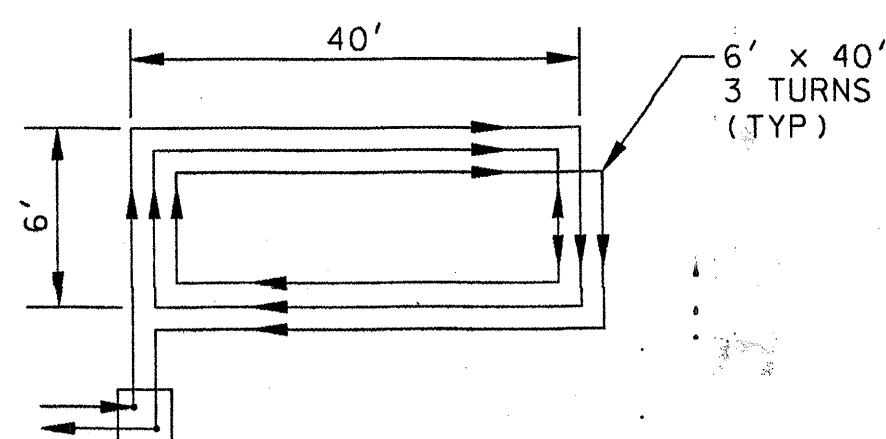
SYSTEM LOOP WIRING DETAIL



SERIES LOOP WIRING DETAIL



QUADRUPOLE LOOP WIRING DETAIL



LARGE RECTANGULAR LOOP WIRING DETAIL

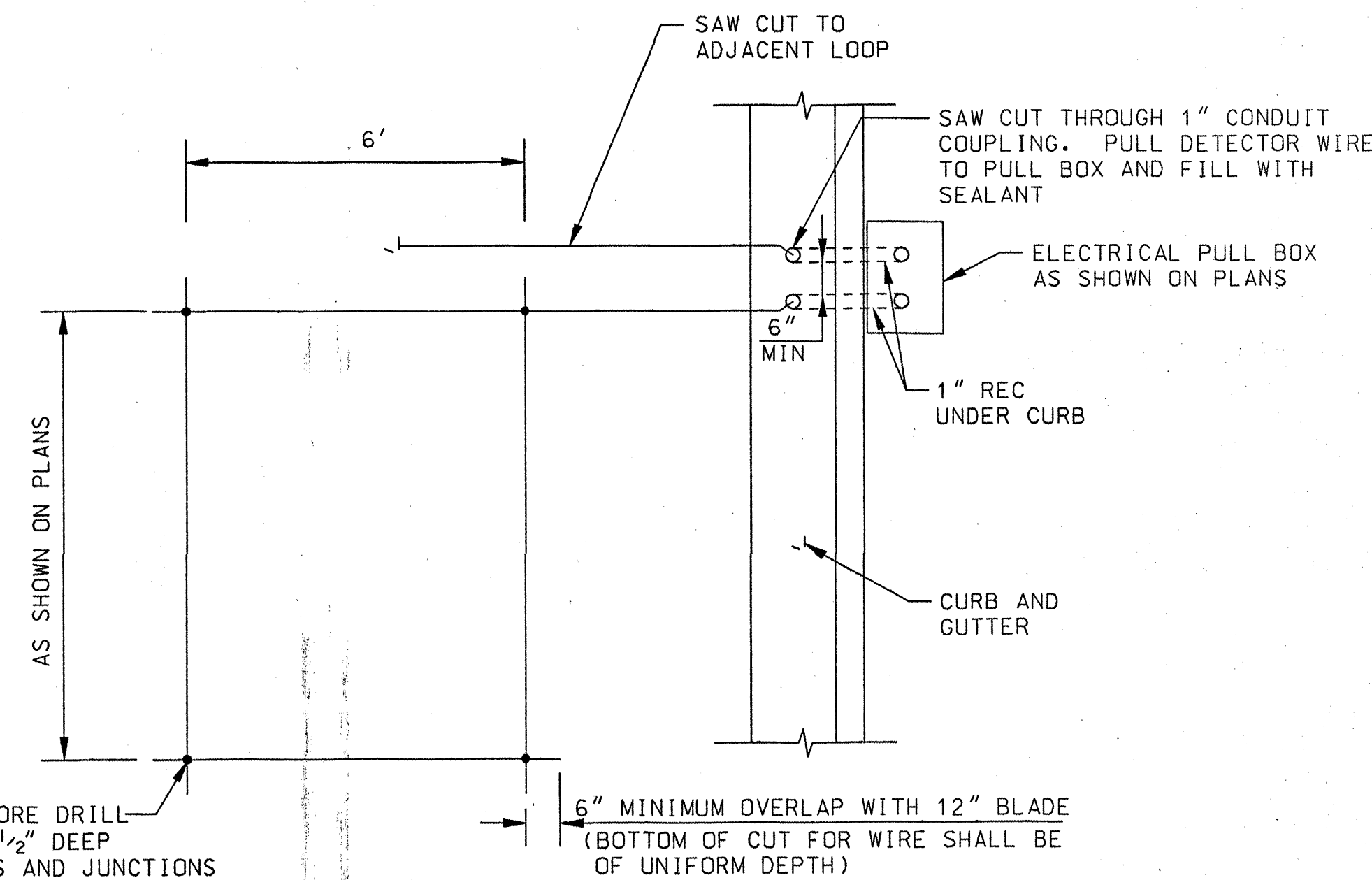
TYPICAL LOOP WIRE PLACEMENT DETAILS

NOTES

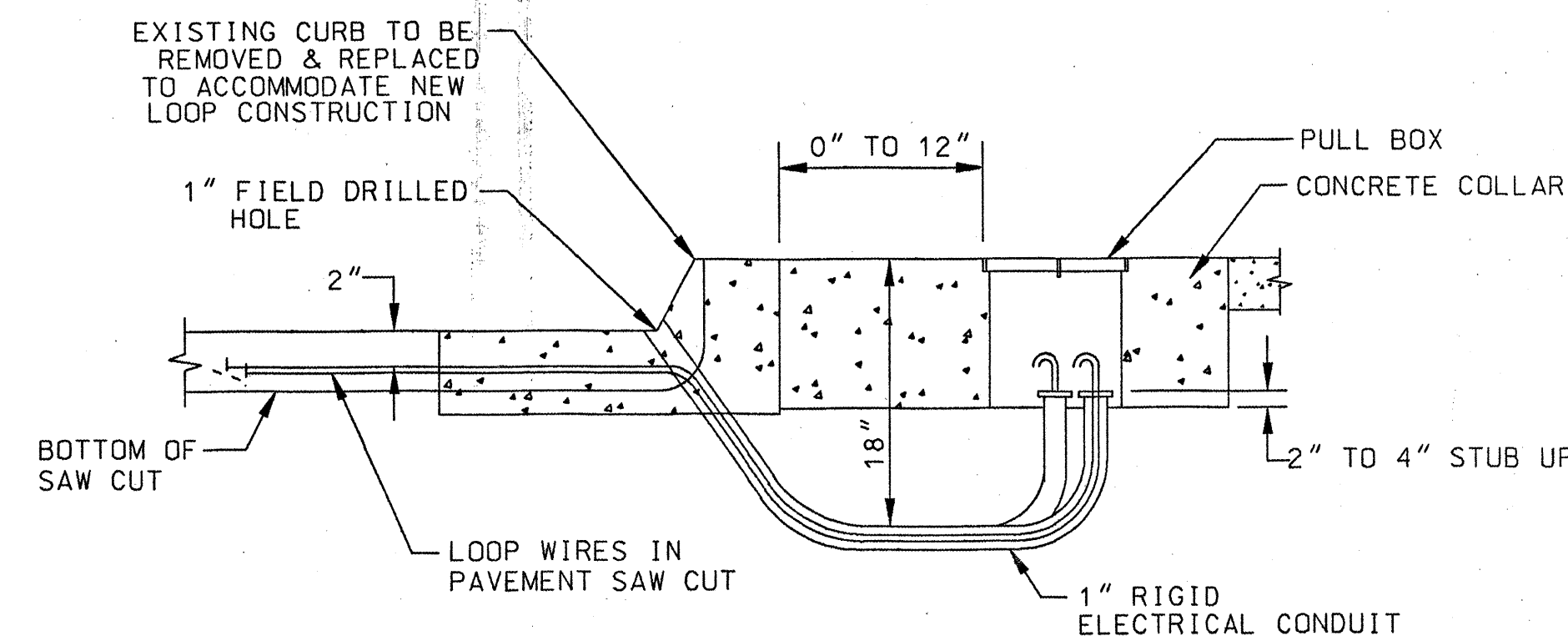
1. WIRES MUST BE WOUND IN THE DIRECTION SHOWN.
2. QUADRUPOLE LOOPS SHALL HAVE 2 TURNS.
3. EXTEND CALL LOOPS SHALL HAVE 3 TURNS.
4. SYSTEM DETECTOR LOOPS SHALL HAVE 4 TURNS.
5. LARGE RECTANGLE LOOPS SHALL HAVE 3 TURNS.

LOOP DETECTOR NOTES

1. ALL LOOP DETECTOR WIRE SHALL BE #14 AWG STRANDED COPPER WIRE WITH CROSS-LINKED POLYETHYLENE INSULATION (INDUSTRY TYPE XHHW) CONFORMING TO THE REQUIREMENTS OF IMSA SPECIFICATIONS #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 SAW CUT 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 AN ACCEPTABLE SEALANT ALTERNATE.
2. ALL LOOP LEAD IN CABLES SHALL BE TAGGED AT CABINET TO IDENTIFY. EACH CABLE BY LOOP AND PHASE NUMBER.
3. GROUND LOOP LEAD IN CABLE SHIELDING IN CONTROL CABINET.
4. SEPARATE 1" RIGID ELECTRICAL CONDUITS ARE REQUIRED FOR EACH PAIR OF DETECTOR WIRES.



PLAN VIEW



SECTION

LOOP WIRE TERMINATION DETAILS

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

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE:		TRAFFIC SIGNAL LOOP DETECTOR DETAILS	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
COA	STD		
CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
648091	C-13	TS-21	