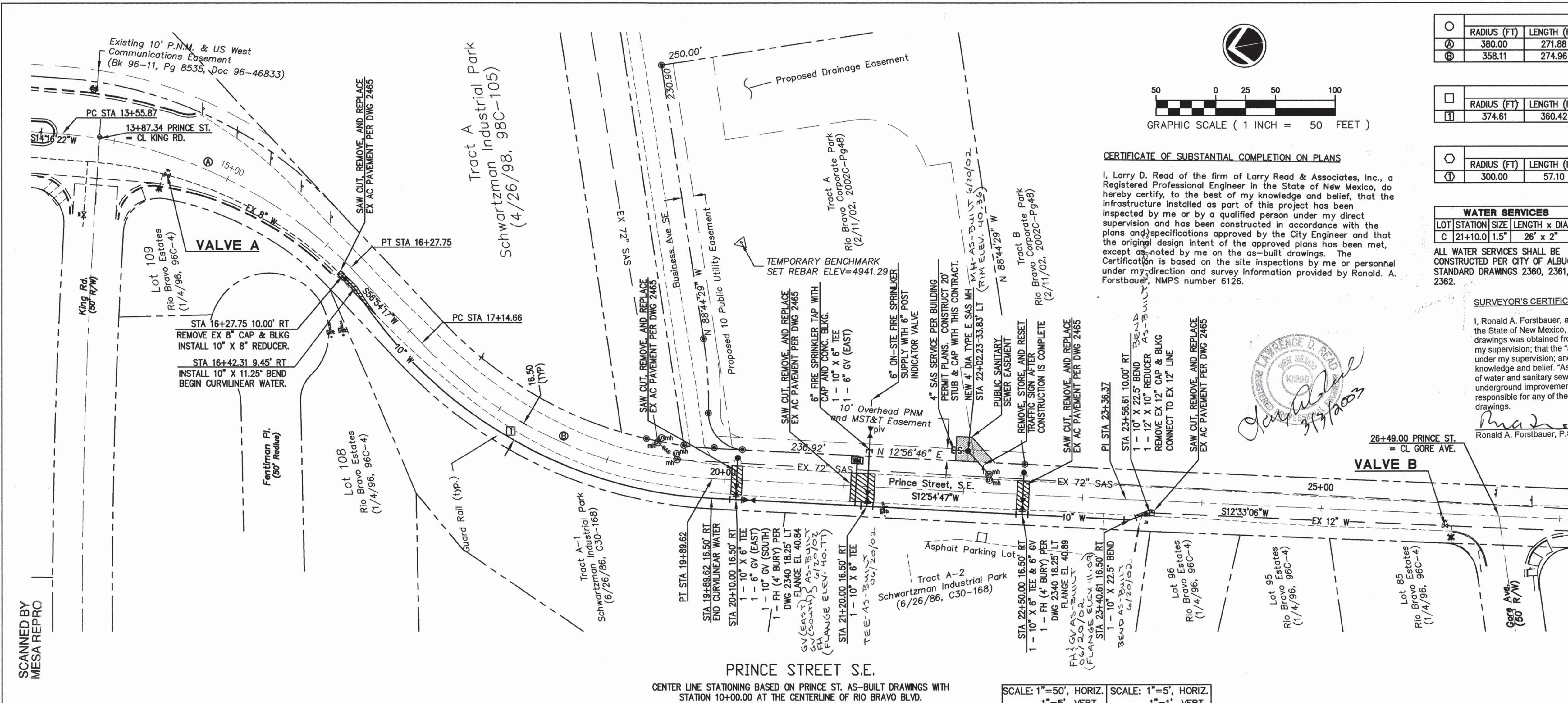


REV.	SHEETS	CITY ENGINEER	DATE	USER DEPT.	DATE	USER DEPT.	DATE			
ENGINEER'S SEAL			APPROVALS	ENGINEER	DATE					
			DRC CHAIRMAN	[Signature]	5-23-02	APPROVED FOR CONSTRUCTION [Signature] 5/23/02 CITY ENGINEER DATE				
			TRANSPORTATION	N/A						
			WATER/WASTEWATER	[Signature]	4-15-2002					
			HYDROLOGY	N/A						
			PARKS							
			CONSTR. MAINTENANCE	[Signature]	5-23-03					
PROJECT NO.			6840.81			SHEET 1 OF 5				

SCANNED BY
MESA REPRO



○	CENTER LINE CURVE DATA					
	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA	CHORD (FT)	CH BRNG
Ⓐ	380.00	271.88	142.06	40°59'48"	266.14	S 34°46'16" W
Ⓑ	358.11	274.96	144.66	43°59'34"	268.26	S 34°54'30" W

□	WATER LINE CURVE DATA					
	RADIUS (FT)	LENGTH (FT)	DELTA	DELTA/JOINT	CHORD (FT)	CH BRNG
①	374.61	360.42	55°07'33"	3°03'38"	346.68	S 40°28'30" W

⬡	SANITARY SEWER LINE CURVE DATA					
	RADIUS (FT)	LENGTH (FT)	DELTA	DELTA/JOINT	CHORD (FT)	CH BRNG
①	300.00	57.10	10°54'16"	3°49'18"	57.00	S 7°55'09" W

LEGAL DESCRIPTION

TRACT A, RIO BRAVO CORPORATE PARK

CONSTRUCTION NOTE

CONSTRUCT FIRE HYDRANT SERVICES AND 6" FIRE SERVICE LINE TO PROPERTY WITH 6" MIN SEPARATION ABOVE EXISTING 72" SAS. CONCRETE ENCASE WATER LINES FOR 20' CENTERED OVER 72" SAS PER DWG 2140.

WATER SHUTOFF PLAN

- VALVES A AND B SHALL BE SHUT OFF SO NONPRESSURE CONNECTIONS CAN BE MADE.
- CONTRACTOR SHALL CONTACT WATER SYSTEMS DIVISION (857-8200) FIVE (5) WORKING DAYS PRIOR TO VALVE SHUT OFF. ONLY WATER SYSTEMS PERSONNEL ARE AUTHORIZED TO OPERATE VALVES.

JOINT RESTRAINTS

MEGA-LUG RESTRAINED JOINTS (OR APPROVED EQUAL) SHALL BE USED ON ALL JOINTS FOR A MINIMUM DISTANCE OF:
72" ON EACH SIDE OF THE 10" GATE VALVES,
3' ON EACH SIDE OF THE 10" X 11.25" BEND,
5' ON EACH SIDE OF THE 10" X 22.5" BENDS,
25' ON THE LARGE SIDE OF THE 12" X 10" REDUCER,
24' ON THE LARGE SIDE OF THE 10" X 8" REDUCER, AND
5' ON EACH SIDE OF THE 12" X 6" TEES.
RESTRAIN ALL JOINTS ON FIRE HYDRANTS.
GATE VALVES SHALL BE MECHANICALLY RESTRAINED AND INSTALLED WITH CONCRETE THRUST BLOCKING PER DWG 2332 IN ADDITION TO THE MECHANICALLY RESTRAINED LENGTHS.

LARRY READ & ASSOCIATES

Civil Engineers
4800-C Juan Tabo, NE
Albuquerque, New Mexico 87111
(505) 237-8421

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: BERNALILLO COUNTY FIRE STATION # 8
WATER & SANITARY SEWER PLAN AND PROFILE
KING ROAD TO GORE AVENUE



CITY ENGINEER APPROVAL

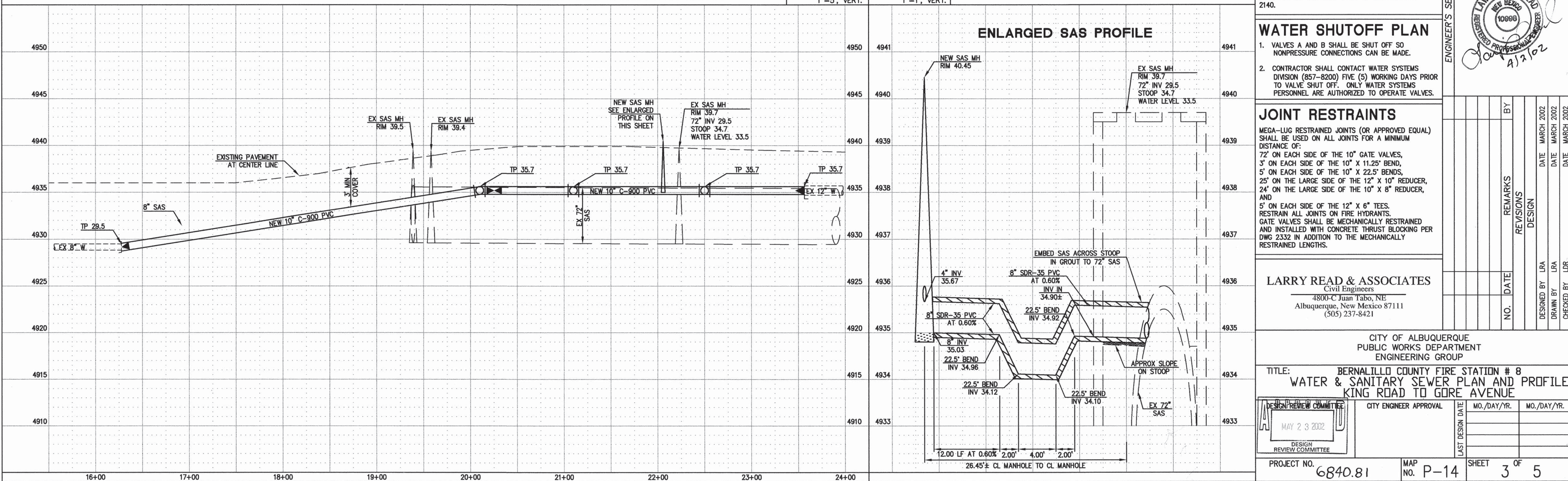
MO./DAY/YR. MO./DAY/YR.

PROJECT NO. 6840.81

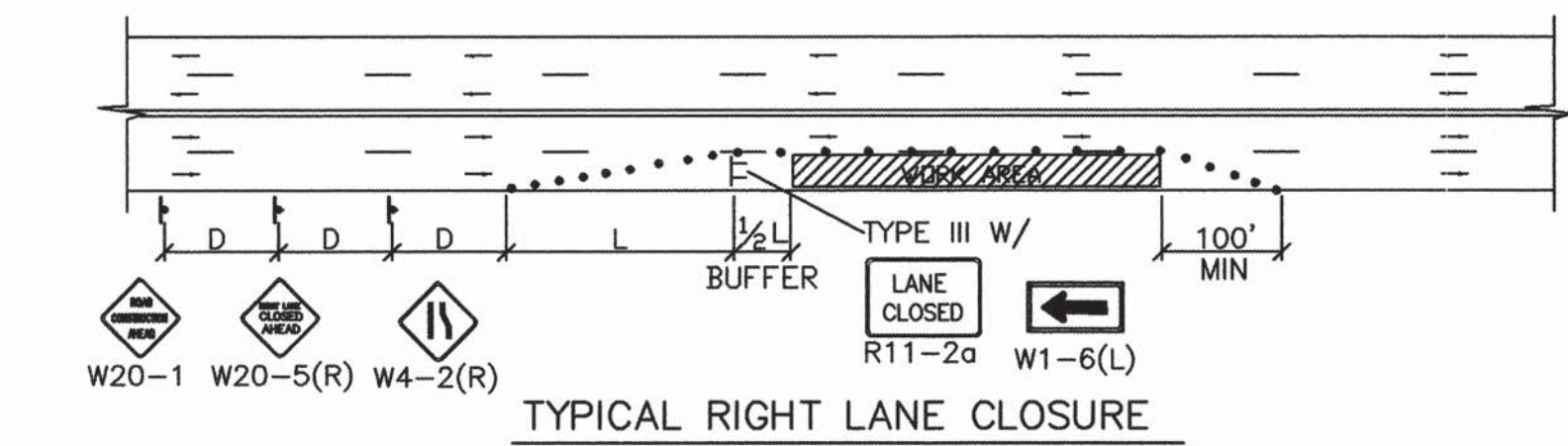
MAP NO. P-14

SHEET 3 OF 5

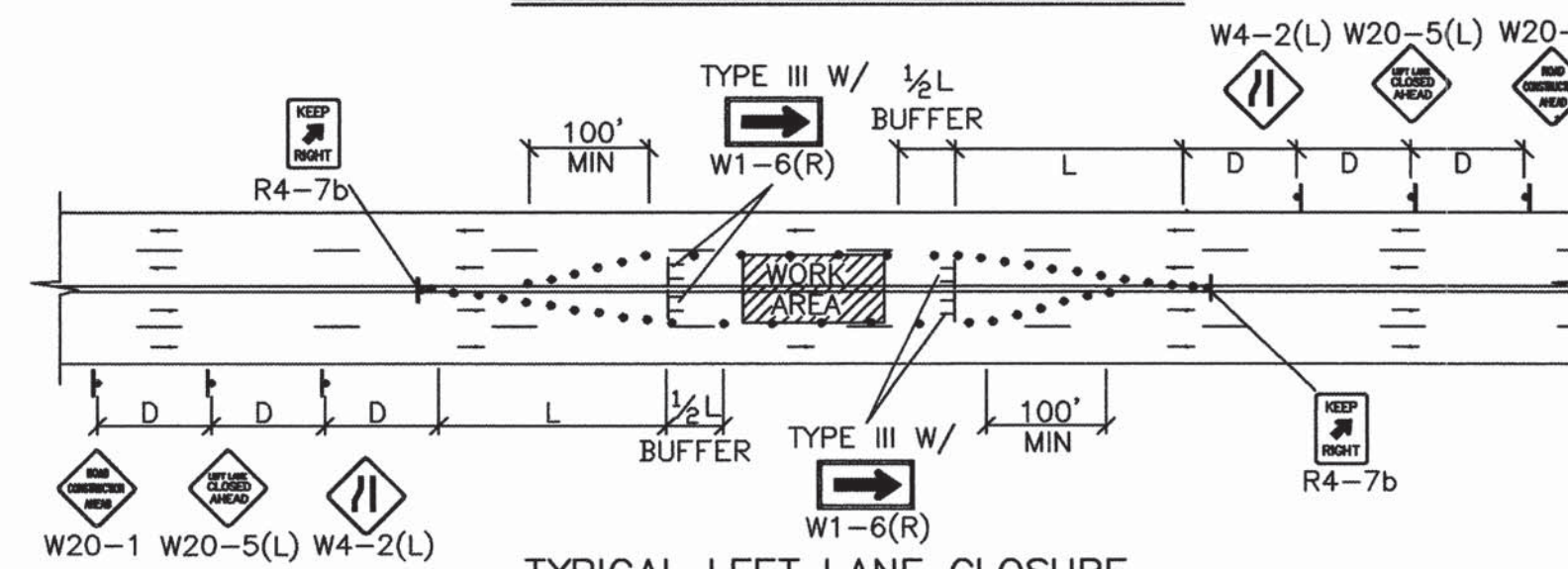
ENLARGED SAS PROFILE



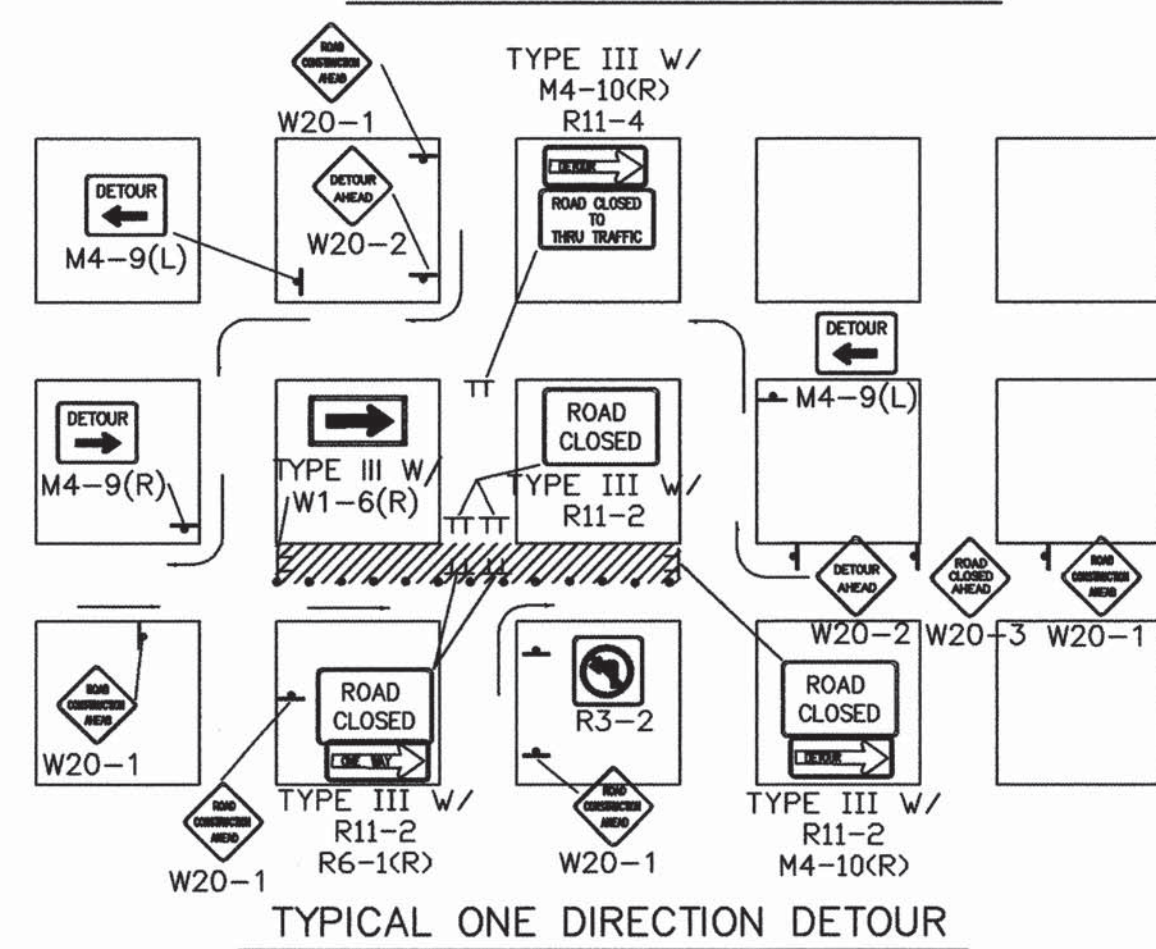
SCANNED BY
MESA REPRO



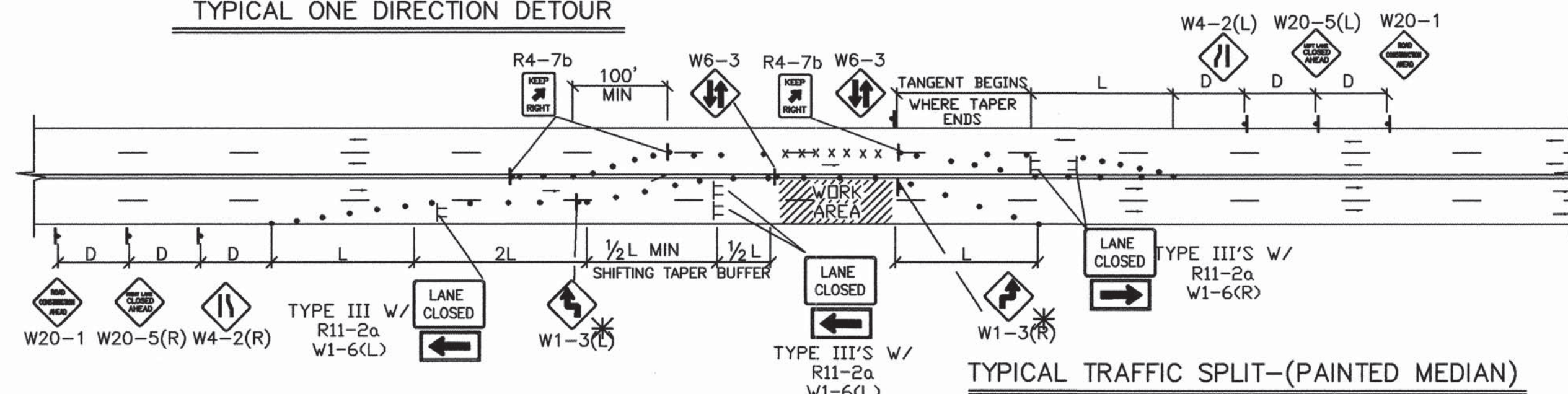
TYPICAL RIGHT LANE CLOSURE



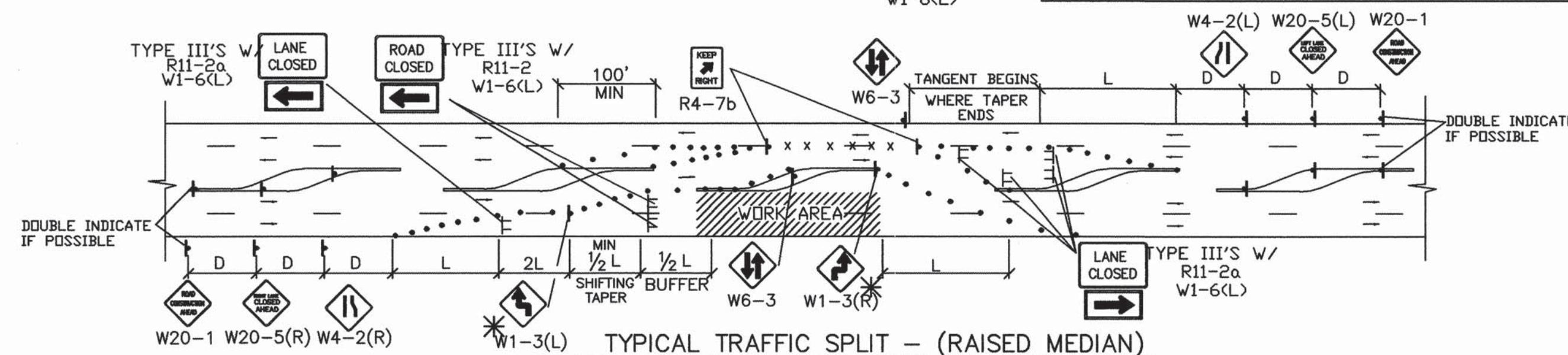
TYPICAL LEFT LANE CLOSURE



TYPICAL ONE DIRECTION DETOUR

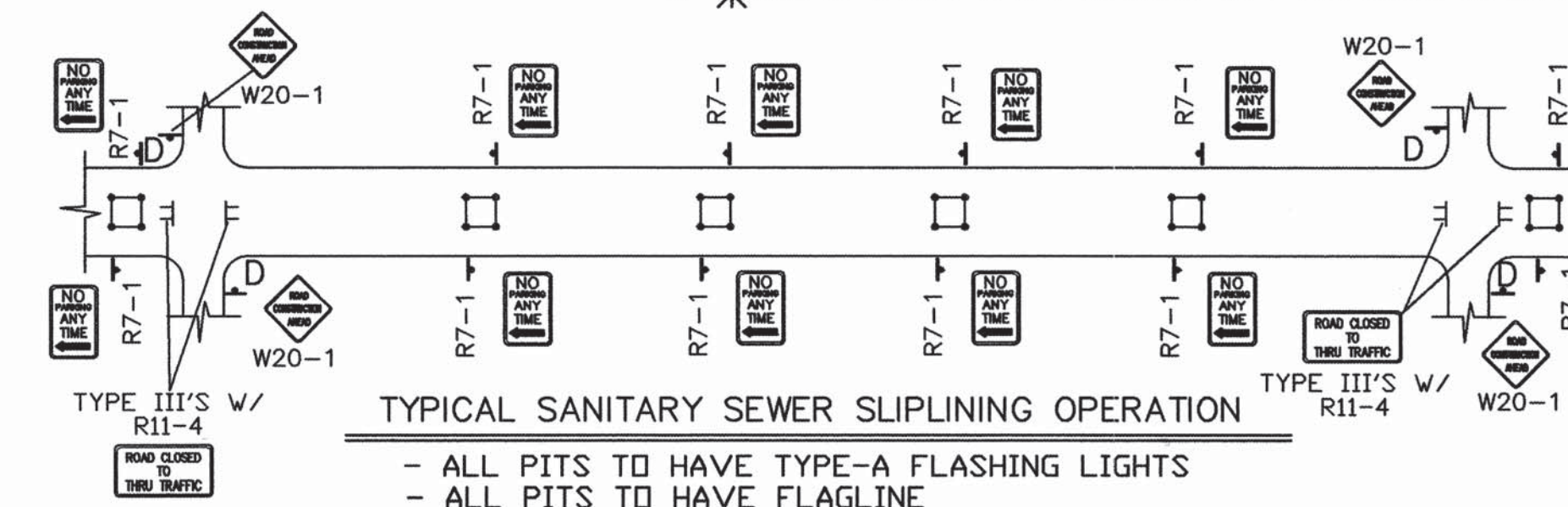


TYPICAL TRAFFIC SPLIT - (PAINTED MEDIAN)



TYPICAL TRAFFIC SPLIT - (RAISED MEDIAN)

- TRAFFIC SPLIT NOTES:**
1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCE 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.

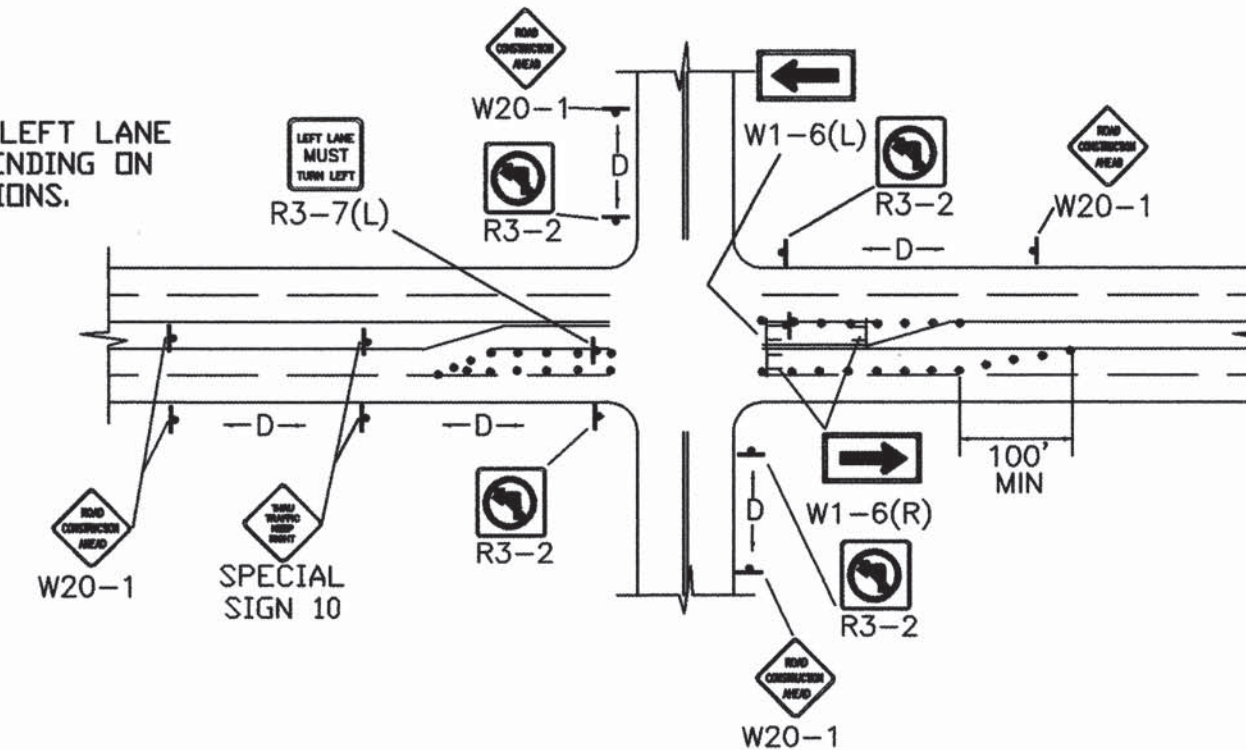


TYPICAL SANITARY SEWER SLIPLINING OPERATION

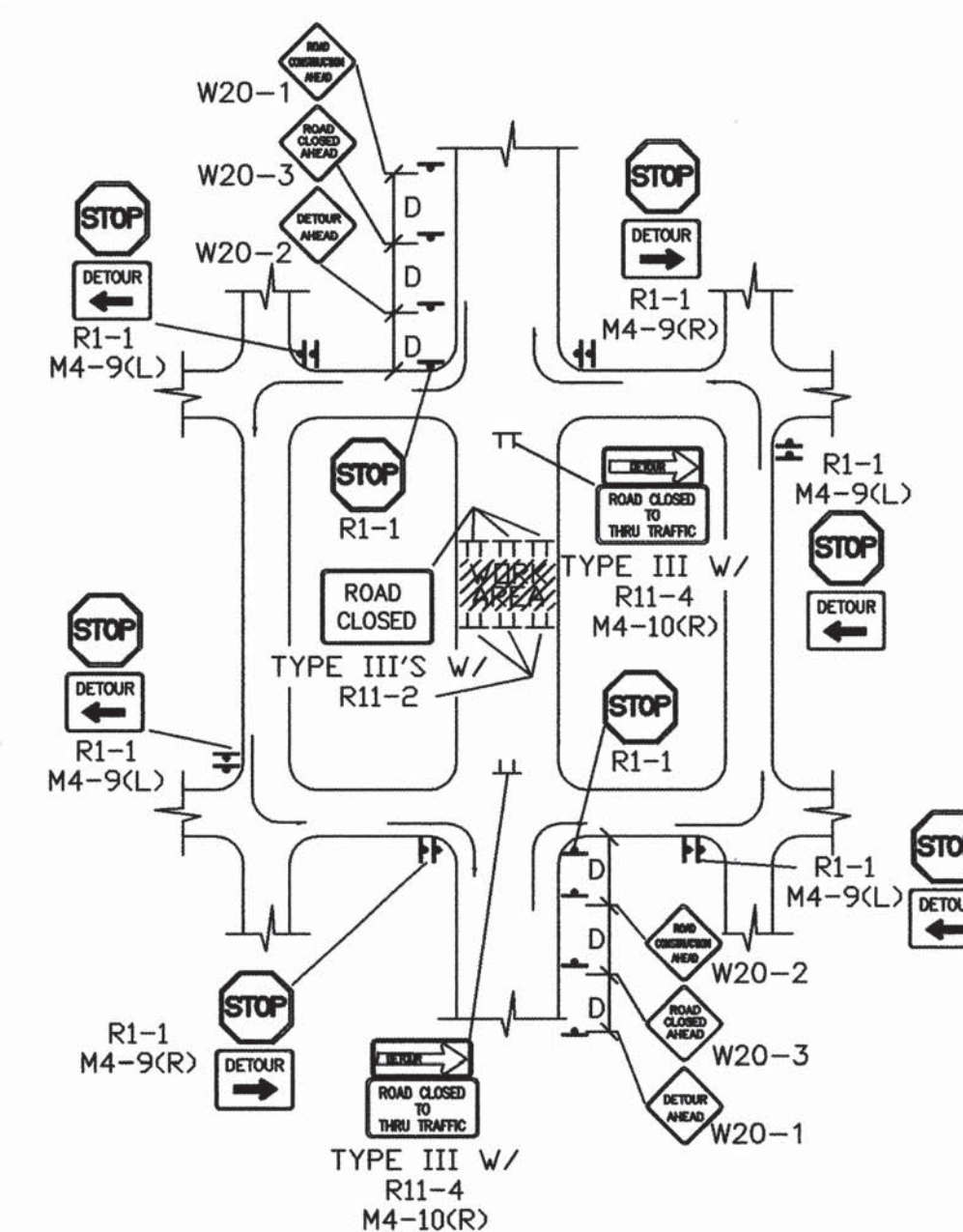
- ALL PITS TO HAVE TYPE-A FLASHING LIGHTS
- ALL PITS TO HAVE FLAGLINE

GENERAL NOTE:
ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.
ALL ADVANCE WARNING SIGNS SHALL BE A MINIMUM OF 36" THIRTY SIX INCHES BY 36" THIRTY SIX INCHES IN SIZE AND SHALL HAVE ONE WARNING LIGHT.

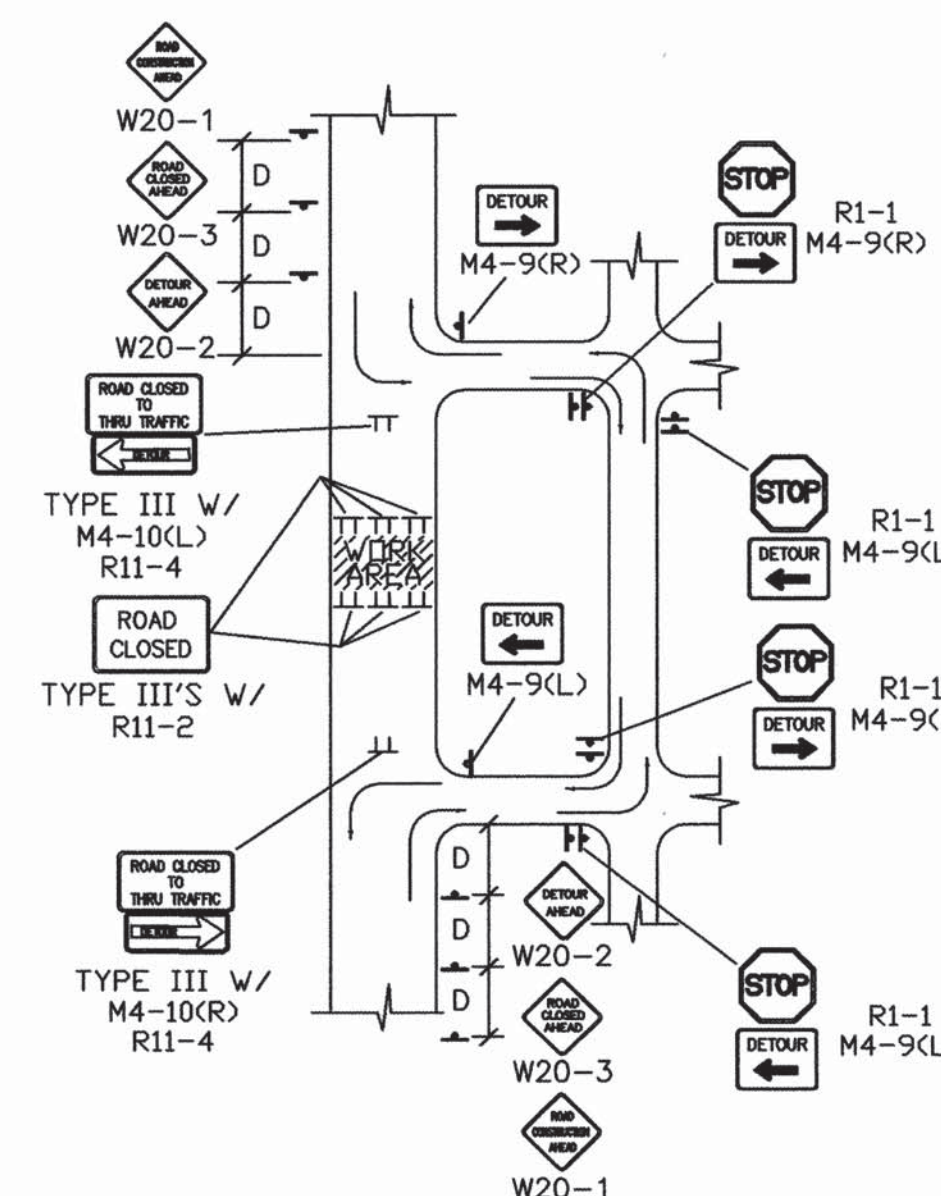
NOTE:
MAY REQUIRE LEFT LANE CLOSURE DEPENDING ON FIELD CONDITIONS.



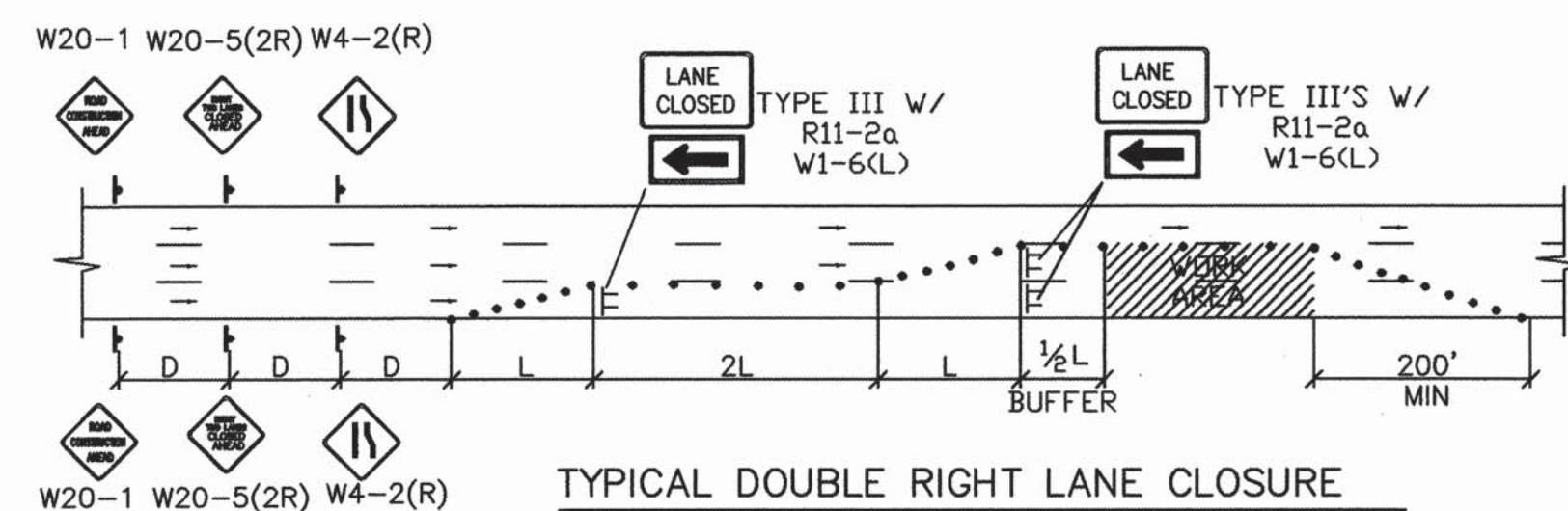
TYPICAL LANE CLOSURE AT INTERSECTION
NOTE: DEPENDING ON WORK ZONE LOCATION.



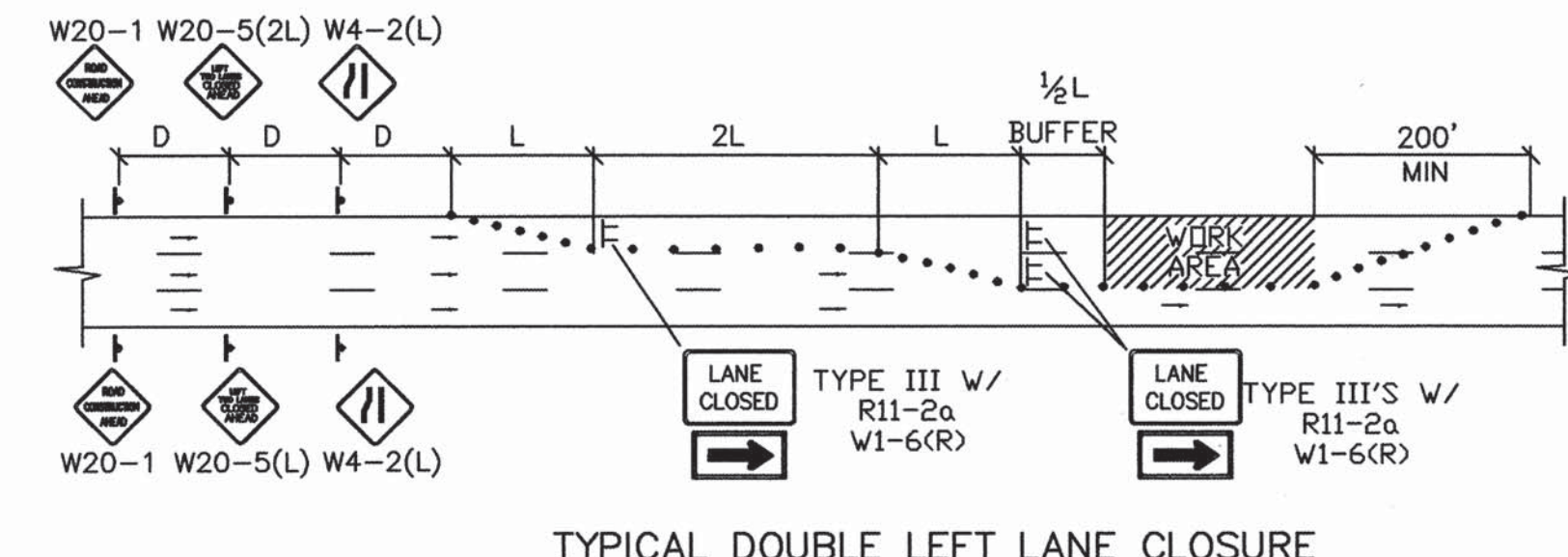
TYPICAL MID-BLOCK CLOSURE
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



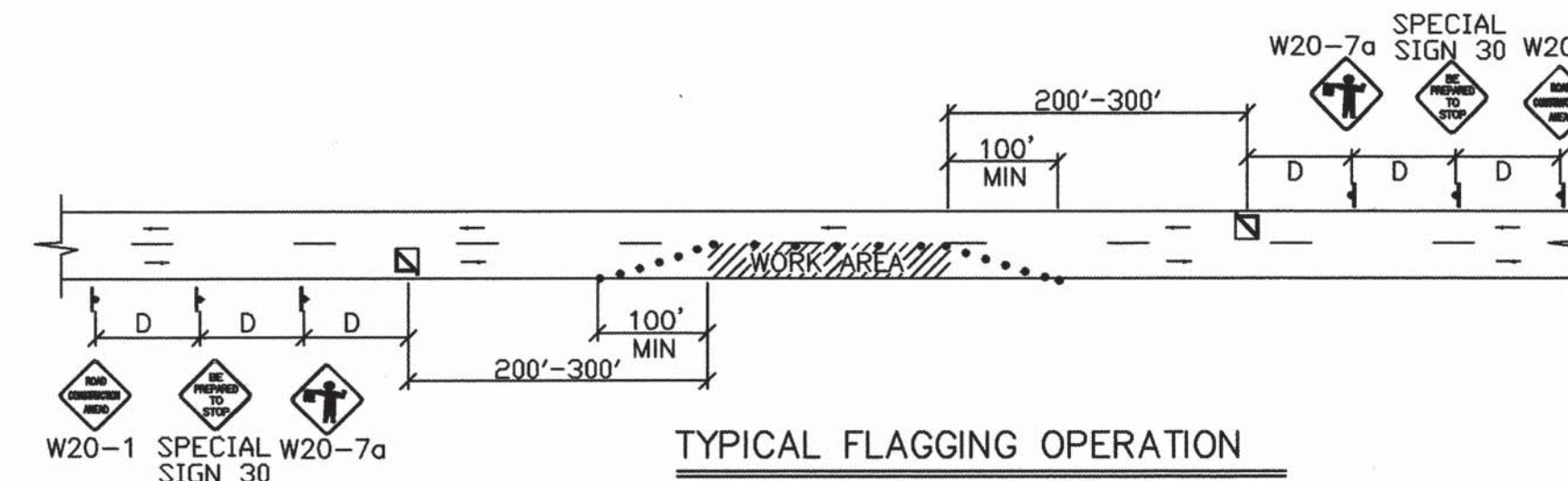
TYPICAL STREET CLOSURE
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



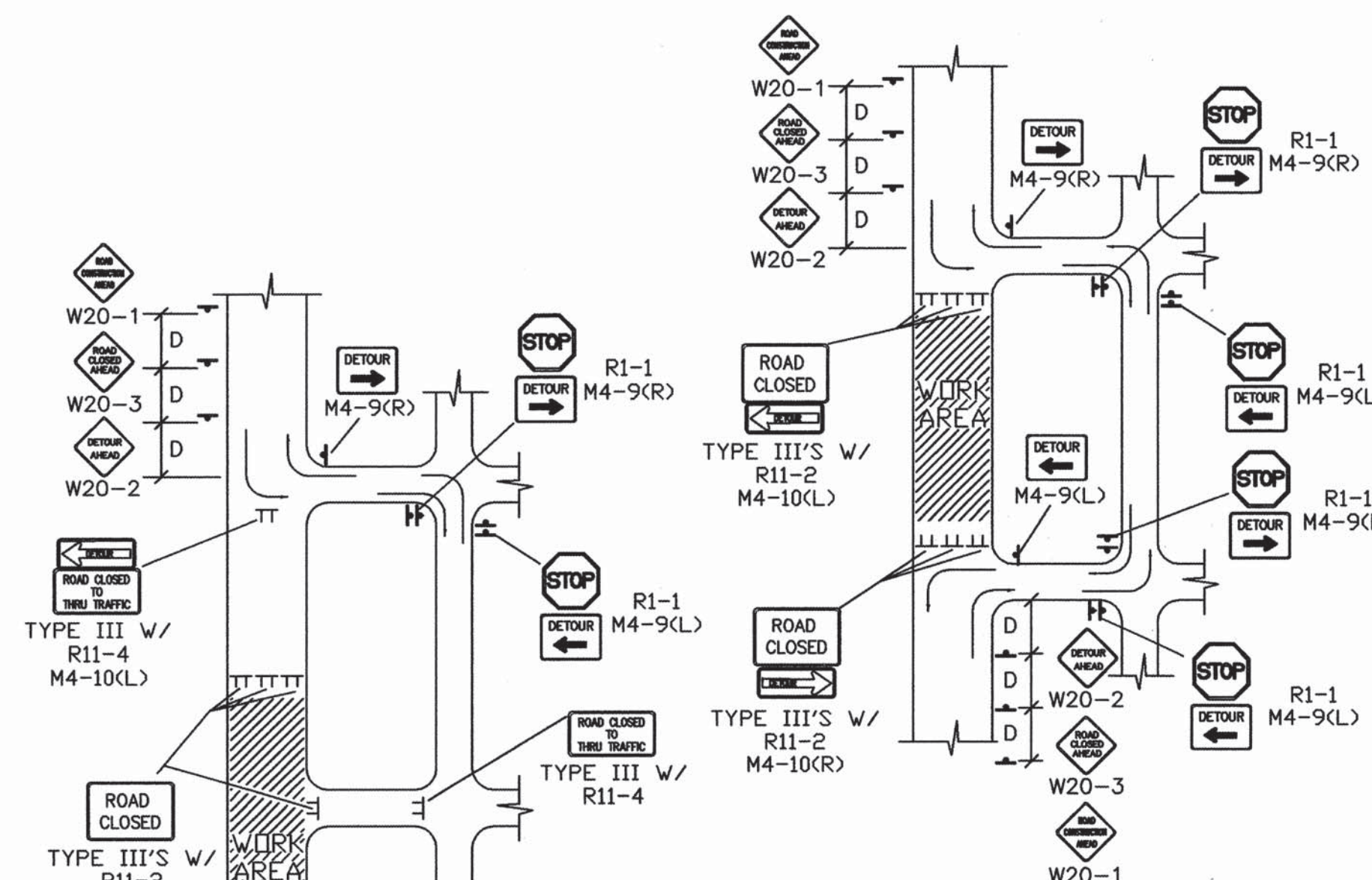
TYPICAL DOUBLE RIGHT LANE CLOSURE



TYPICAL DOUBLE LEFT LANE CLOSURE



TYPICAL FLAGGING OPERATION



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

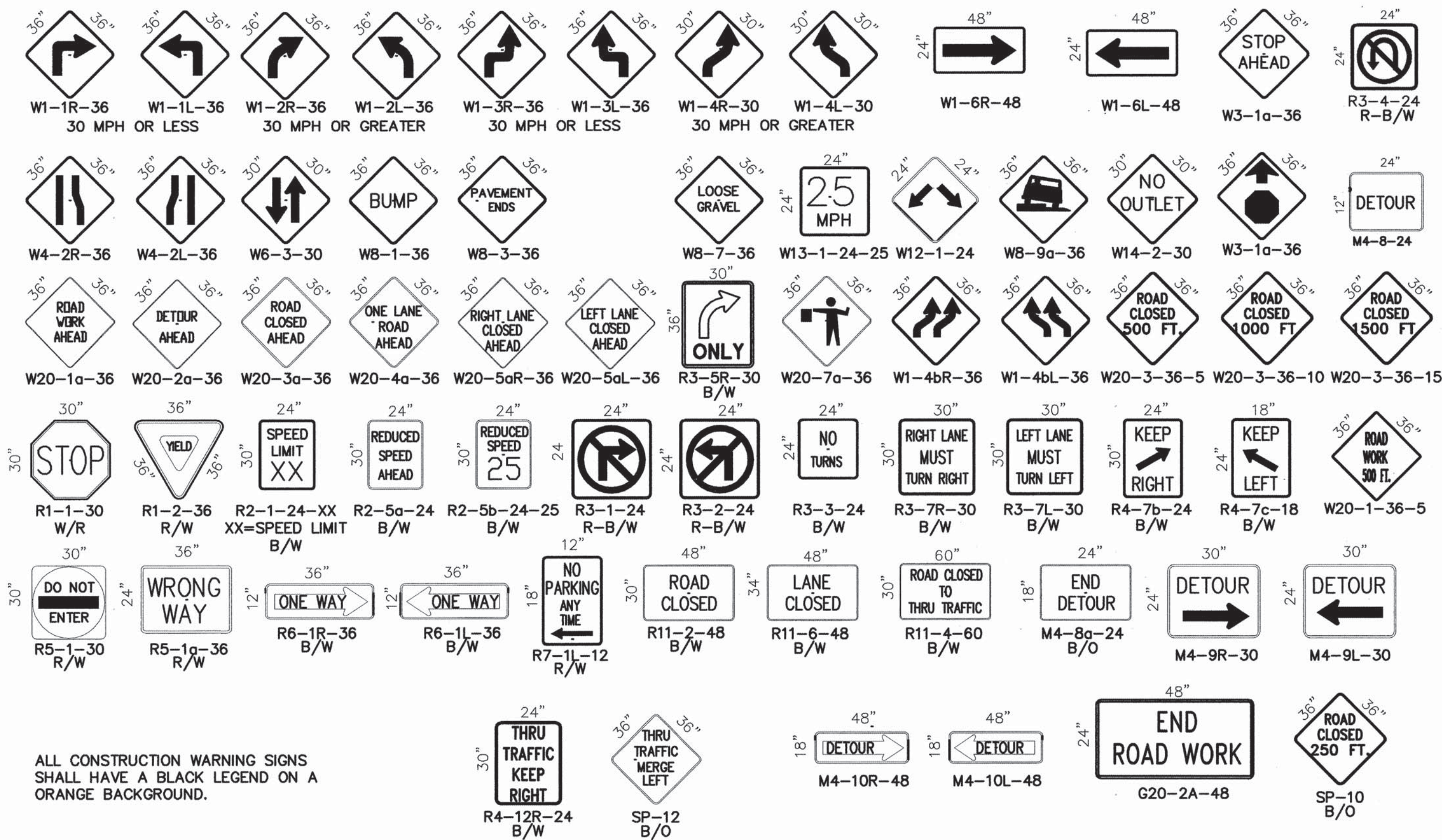
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES (REF MUTCD)			
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
COA STANDARD	COA STANDARD	LAST DESIGN UPDATE	
QTY PROJECT NO.	6840.81	ZONE MAP NO.	P-14
		SHEET	4 OF 5

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

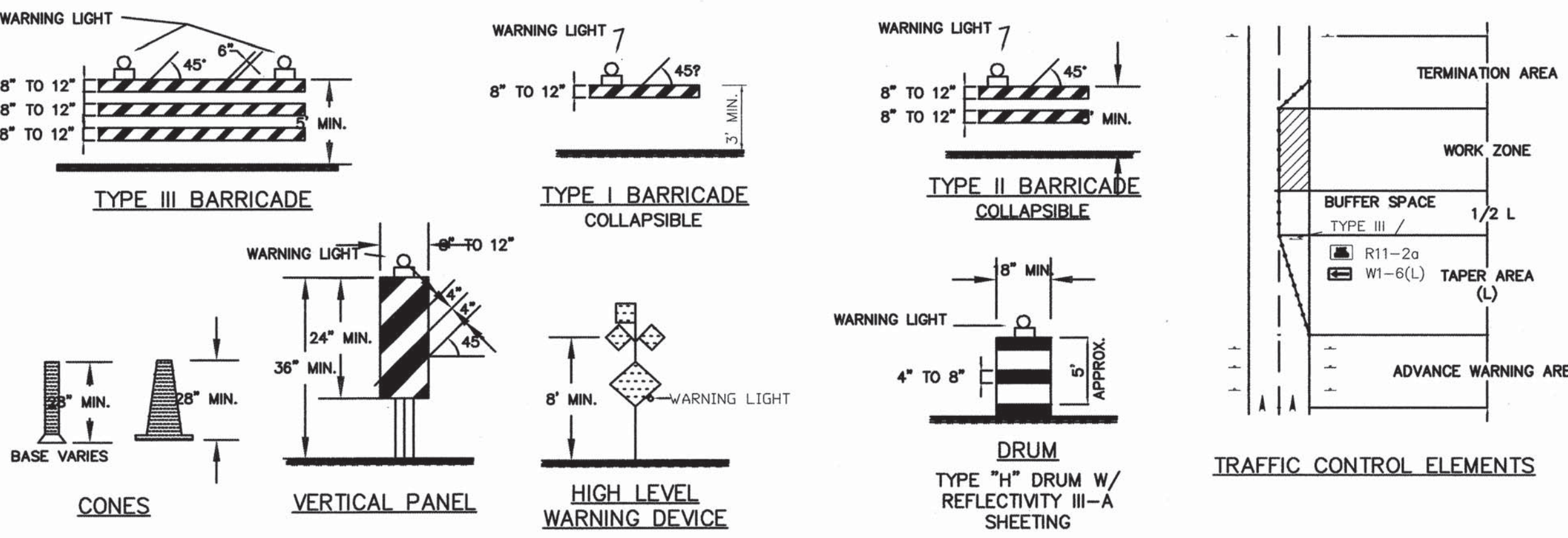
1. PROJECT IS SUBJECT TO THE REQUIREMENTS OF COUNTY ORDINANCE NO. 95-12 AND COUNTY ORDINANCE NO. 96-3. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY. CONTRACTOR SHALL CALL 848-1504 FOR MORE INFORMATION.
2. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE COUNTY TRAFFIC CONTROL ADMINISTRATOR AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF WORK. TRAFFIC CONTROL PLANS SHALL BE PREPARED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION AND BY CERTIFIED PERSONNEL AND MUST BE APPROVED PRIOR TO COMMENCEMENT OF WORK ON THE PROJECT. CALL 848-1504 FOR FURTHER INFORMATION.
3. A DAILY TRAFFIC CONTROL LOG SHALL BE MAINTAINED BY THE CONTRACTOR REFLECTING THE TYPES AND LOCATIONS OF ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, ETC. BEING USED ON THE PROJECT IN COMPLIANCE WITH THE APPROVED TRAFFIC CONTROL PLAN. THIS LOG SHALL BE SUBMITTED TO THE BERNALILLO COUNTY TRAFFIC CONTROL ADMINISTRATOR UPON COMPLETION OF THE PROJECT CONSTRUCTION OR WHEN SO REQUESTED BY THE PROJECT MANAGER OR THE BERNALILLO COUNTY TRAFFIC CONTROL ADMINISTRATOR.
4. CONTRACTOR SHALL PROVIDE A WEEKLY CONSTRUCTION ACTIVITY SCHEDULE TO BERNALILLO COUNTY PUBLIC WORKS DIVISION ATTN: PROJECT MANAGER
5. THE CONTRACTOR SHALL FILE A WEEKLY WRITTEN REPORT TO THE TRAFFIC CONTROL ADMINISTRATOR DESCRIBING THE TRAFFIC CONTROL PLAN THAT WILL BE IN EFFECT FOR THE FOLLOWING WEEK.
6. SUBJECT TO THE APPROVED TRAFFIC CONTROL PLAN, AT LEAST ONE LANE SHALL BE OPEN TO TRAFFIC AT ALL TIMES. CONTRACTOR SHALL PROVIDE PROPER SIGNAGE AND FLAGMAN AND SHALL MAINTAIN THE TRAFFIC LANE IN SUCH A MANNER AS TO ASSURE PROPER SAFETY TO THE TRAVELING PUBLIC AT ALL TIMES, EXCEPT WHEN GRADING, EXCAVATION AND BACKFILL OPERATIONS ARE BEING CONDUCTED IMMEDIATELY IN FRONT OF THE PROPERTY, IN WHICH CASE ACCESS WILL NOT BE DENIED FOR MORE THAN 4 HOURS WITHOUT APPROVAL BY THE COUNTY.
7. TRAFFIC LANES PROVIDED DURING CONSTRUCTION SHALL BE MAINTAINED, IN SUCH A CONDITION UNDER ALL WEATHER CONDITIONS, SO AS TO PERMIT THE REASONABLE PASSAGE OF PASSENGER VEHICLES, AND SHALL BE KEPT GRADED AND SMOOTH, AND WATERED SEVERAL TIMES DAILY TO CONTROL DUST.
8. 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.
9. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY BERNALILLO COUNTY TRAFFIC ENGINEERING.
10. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY WITH 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 THE COUNTY TRAFFIC CONTROL ADMINISTRATOR, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
11. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP FOR EACH PHASE 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.
12. 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.
13. 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.

14. 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 BERNALILLO COUNTY TRAFFIC ENGINEERING PER MUTCD SECTION 6A-4.
15. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.
16. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF BERNALILLO COUNTY TRAFFIC ENGINEERING.
17. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
18. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
19. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
20. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF BERNALILLO COUNTY TRAFFIC ENGINEERING. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE LETTERING ON BLUE BACKGROUND. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.
21. 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.
22. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY BERNALILLO COUNTY TRAFFIC ENGINEERING.
23. 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.

SIGN FACE DETAILS



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



LEGEND

- WORK AREA
 - BARRICADE - TYPE I, TYPE II, OR TYPE "H" DRUM W/ REFLECTIVITY III-A SHEETING
 - 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 SPEED LIMIT OF THE STREET
 - TAPER LENGTH - SEE CHART BELOW
- THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

BERNALILLO COUNTY STANDARD

NO.	DESCRIPTION	DATE	BY
REVISIONS			
COUNTY OF BERNALILLO			
COUNTY FIRE AND RESCUE STA #8			
SIGNING & CONSTRUCTION			
TRAFFIC CONTROL STANDARDS			
PROJECT NO. PWCO 20008			
DRAWN: XXX		DATE: 04-15-02	
CHECKED: XXX		SCALE:	