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26-71600-182-2011

SCANNED BY  
PLANNING

# UNM HOSPITAL SW MESA CLINIC WATERLINE

301 UNSER BLVD. NW  
ALBUQUERQUE, NEW MEXICO



Structural Engineering  
Civil Engineering

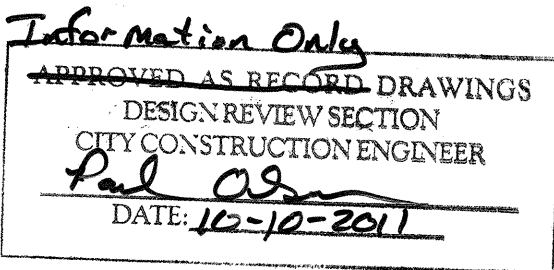
6100 Indian School Road NE • Suite 210  
Albuquerque • New Mexico • 87110  
881-3008 • Facsimile 881-4025

## INDEX OF DRAWINGS

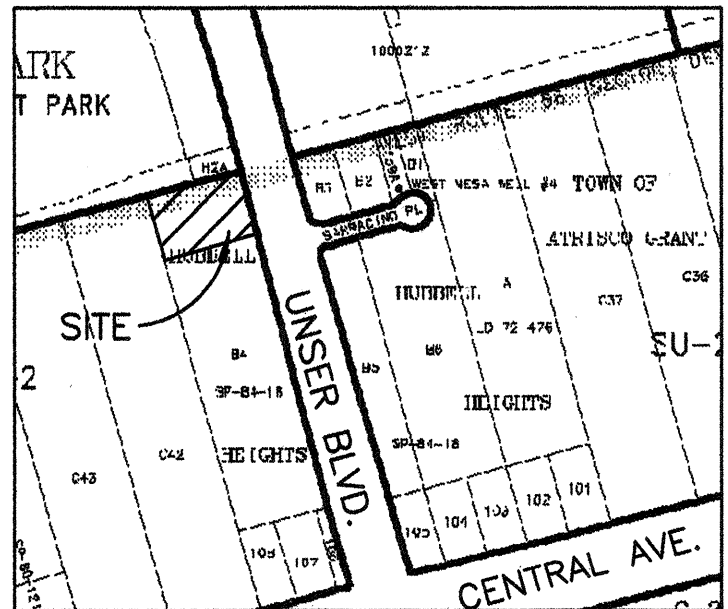
SHEET	TITLE
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2	PLAN AND PROFILE
3	DETAILS
4	TRAFFIC CONTROL DETAILS - FOR REFERENCE ONLY
5	TRAFFIC CONTROL DETAILS - FOR REFERENCE ONLY

INFORMATION

FOR REFERENCE ONLY  
INFORMATION



For Information Only



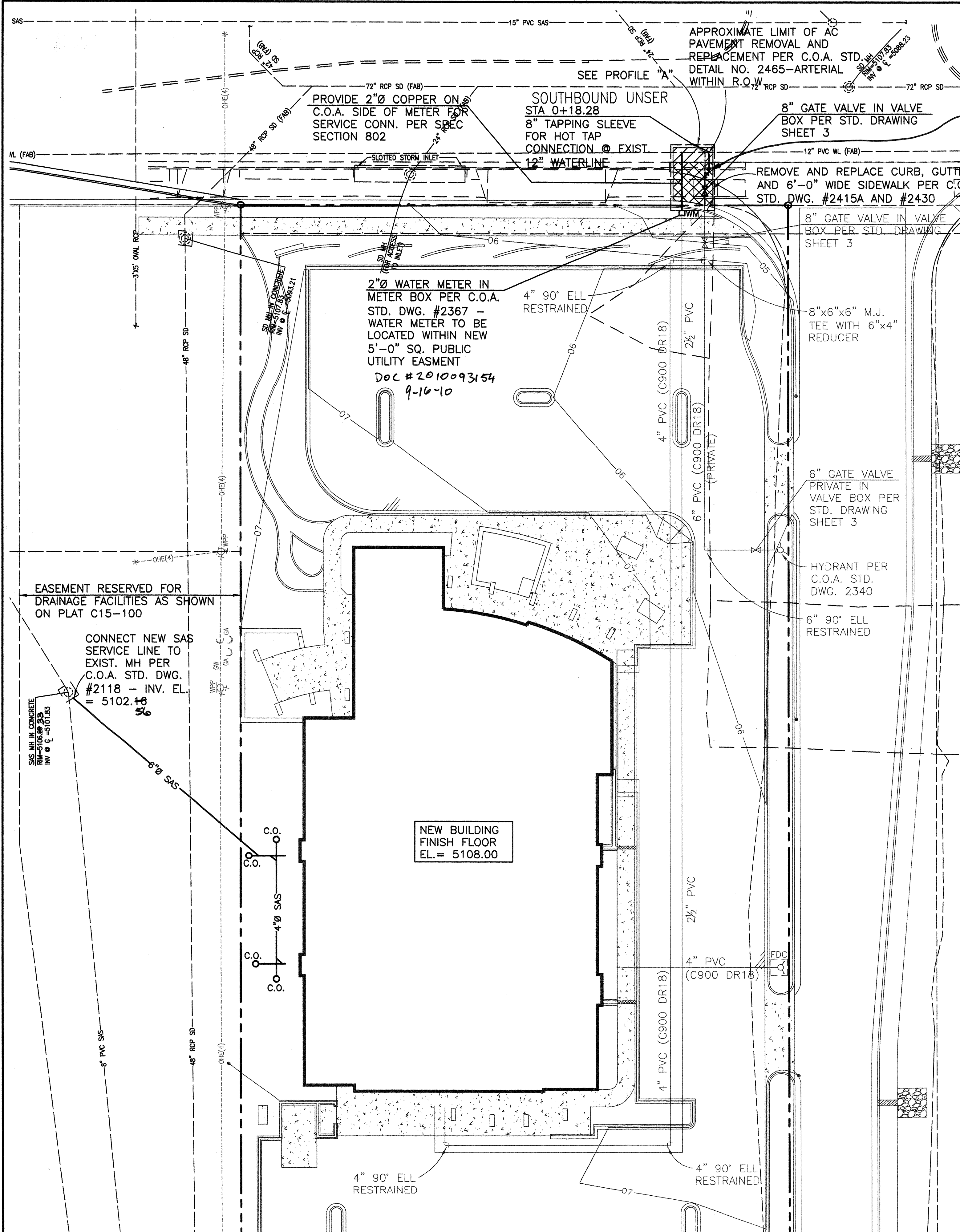
VICINITY MAP K-10-Z

## GENERAL NOTES

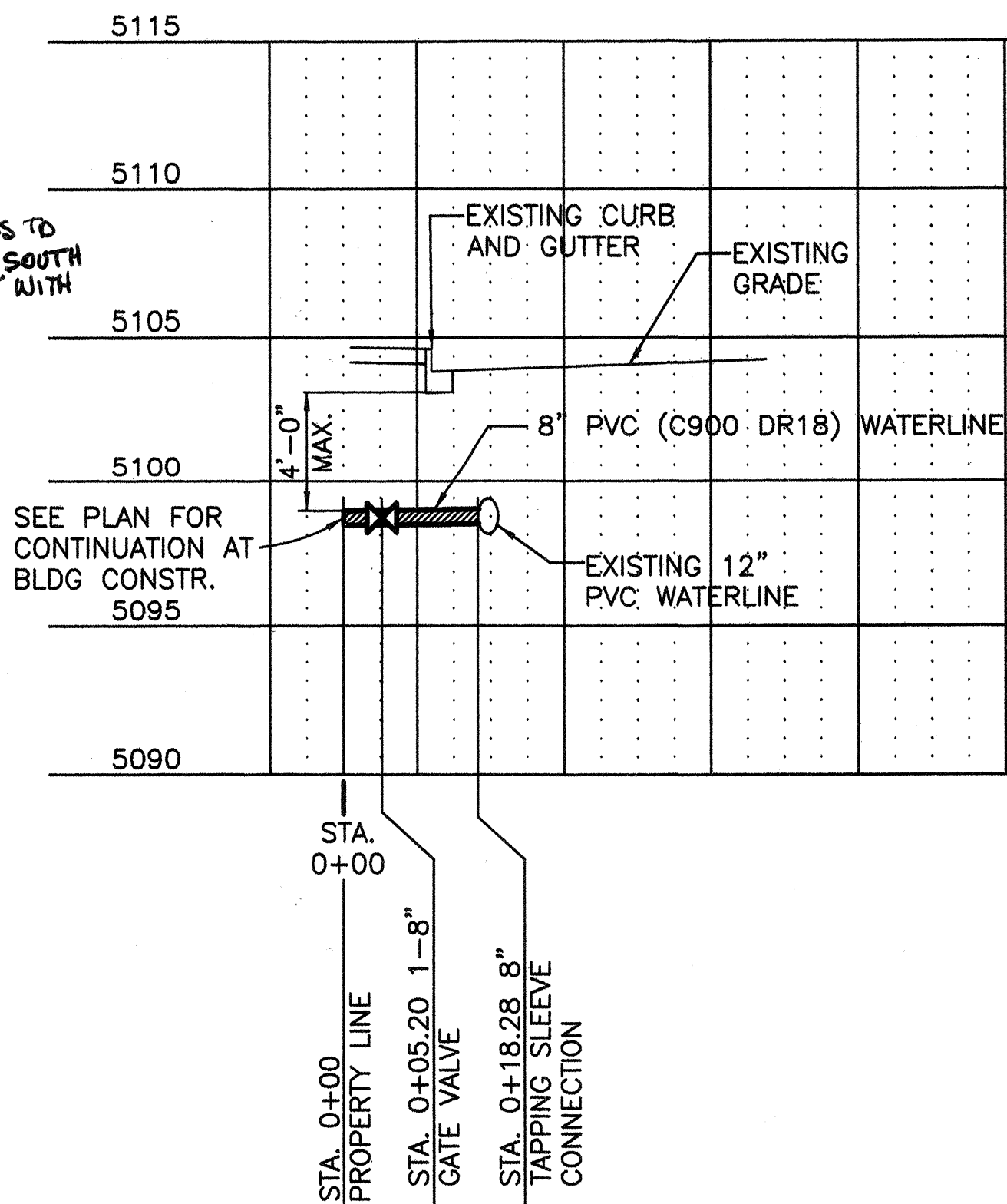
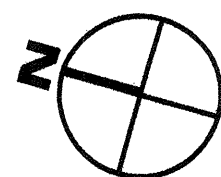
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7 INCLUDING AMENDMENT NO.1.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- 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 ENGINEER IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- SEVEN (7) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION COORDINATION ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
- ALL WORK EFFECTING ARTERIAL ROADWAYS REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
- ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKING BY THE CONTRACTOR TO THE SAME LOCATION AS WAS EXISTING, OR AS INDICATED BY THIS PLAN SET.
- CONTRACTOR SHALL NOTIFY THE ENGINEER 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. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, 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 OF THE STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL RECORD DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS CONSTRUCTED" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
- CONTRACTOR SHALL COORDINATE WITH THE ALBUQUERQUE/BERNALILLO COUNTY WATER UTILITY AUTHORITY (857-8200) SEVEN (7) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING PUBLIC WATER OR SEWER UTILITIES. EXISTING VALVES TO BE OPERATED BY ABCWUA PERSONNEL ONLY. CONTRACTOR SHALL CONTACT THE ABCWUA DIVISION SEVEN (7) WORKING DAYS PRIOR TO NEEDING VALVES TURNED ON OR OFF.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL CONSTRUCTION SIGNAGE UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE CITY OF ALBUQUERQUE.
- CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENT, PAVEMENT MARKINGS, CURB AND GUTTER, HANDICAP RAMPS AND SIDEWALK DURING CONSTRUCTION APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS AND SHALL REPAIR OR REPLACE, PER CITY OF ALBUQUERQUE STANDARDS, AT HIS OWN EXPENSE.
- CONTRACTOR SHALL, AS A PART OF THE AS-BUILTS FOR THIS PROJECT, PROVIDE HORIZONTAL GPS CONTROL DATA TO LOCATE THE NEW GATE VALVE. COMPLETE HORIZONTAL COORDINATES AS INDICATED ONCE THE VALVE IS INSTALLED.  
X-COORDINATE 1498630.7111 Y-COORDINATE 1484609.1832 PUBLIC  
X-COORDINATE 1498617.5345 Y-COORDINATE 1484605.1180 PRIVATE

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEER'S STAMP & SIGNATURE		APPROVALS	ENGINEER	DATE	*****		
		DRC Chairman	<i>A. Woodard</i>	9/16/10	APPROVED FOR CONSTRUCTION  City Engineer Date 10-19-10		
		Transportation	<i>[Signature]</i>	9/20/10			
		Water/Wastewater	<i>[Signature]</i>	9-28-10			
		Hydrology	<i>Bullock B. [Signature]</i>	9/28/10			
		Parks					
		Constr. Coord.					
City Project No.					Sheet 1 Of 5		
760082							



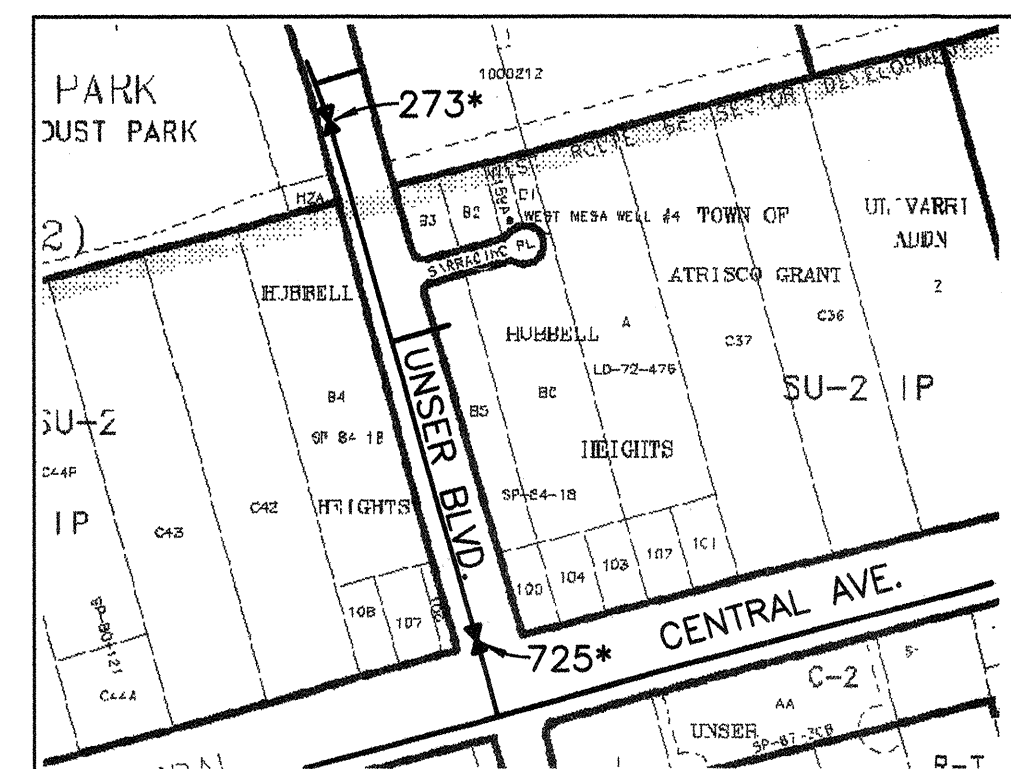


PLAN  
1\"/>



PROFILE "A"  
1\"/>

RESTRAINED JOINT LENGTHS			
FITTING TYPE	PIPE SIZE	RESTRAINED LENGTH-BRANCH	RESTRAINED LENGTH-RUN
90° ELL	6"Ø	16 FEET	16 FEET
90° ELL	4"Ø	11 FEET	11 FEET
8"x6"x6" TEE BRANCH	4"Ø	1 FOOT	12 FEET



EMERGENCY WATER VALVE SHUT OFF PLAN  
\*INDICATES VALVES TO BE CLOSED (#273 & #725)

# WATERLINE CONSTRUCTION NOTES

- 1 WATERLINE SHALL BE PVC C-900 DR-18 PIPE.
- 2 WATERLINE SHALL HAVE A MINIMUM COVER OF 4'-0" (FINISHED GRADE TO TOP OF PIPE).
- 3 ELECTRONIC MARKER SPHERES (EMS) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION.
- 4 IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
- 5 VALVE STEM EXTENSIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- 6 MECHANICAL JOINT FITTINGS SHALL BE PROVIDED WITH RESTRAINED JOINTS AT LENGTHS AS DESCRIBED ON THIS SHEET
- 7 TRENCHING FOR PIPE SHALL BE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD DRAWING 2315. SEE SHEET 3 OF 5 THIS DRAWING SET
- 8 NOTIFY ALBUQUERQUE/BERNALILLO COUNTY WATER AUTHORITY (857-8200) SEVEN (7) WORKING DAYS ADVANCE OF NEEDING EXECUTION OF THE WATER SHUT OFF PLAN.
- 9 ONLY ABC WATER AUTHORITY PERSONNEL ARE AUTHORIZED TO OPERATE VALVES.
- 10 ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.

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

For information Only

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CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DEVELOPMENT GROUP

UNM HOSPITAL SW MESA CLINIC

Design Review Committee  
**APPROVED**  
SEP 16 2010  
DESIGN REVIEW COMMITTEE

City Engineer Approval  
**APPROVED**  
OCT 19 2010  
CITY ENGINEER

Last Design Update

Mo./Day/Yr.  
05/05/10

City Project No.

760082

Zone Map No.  
K-10

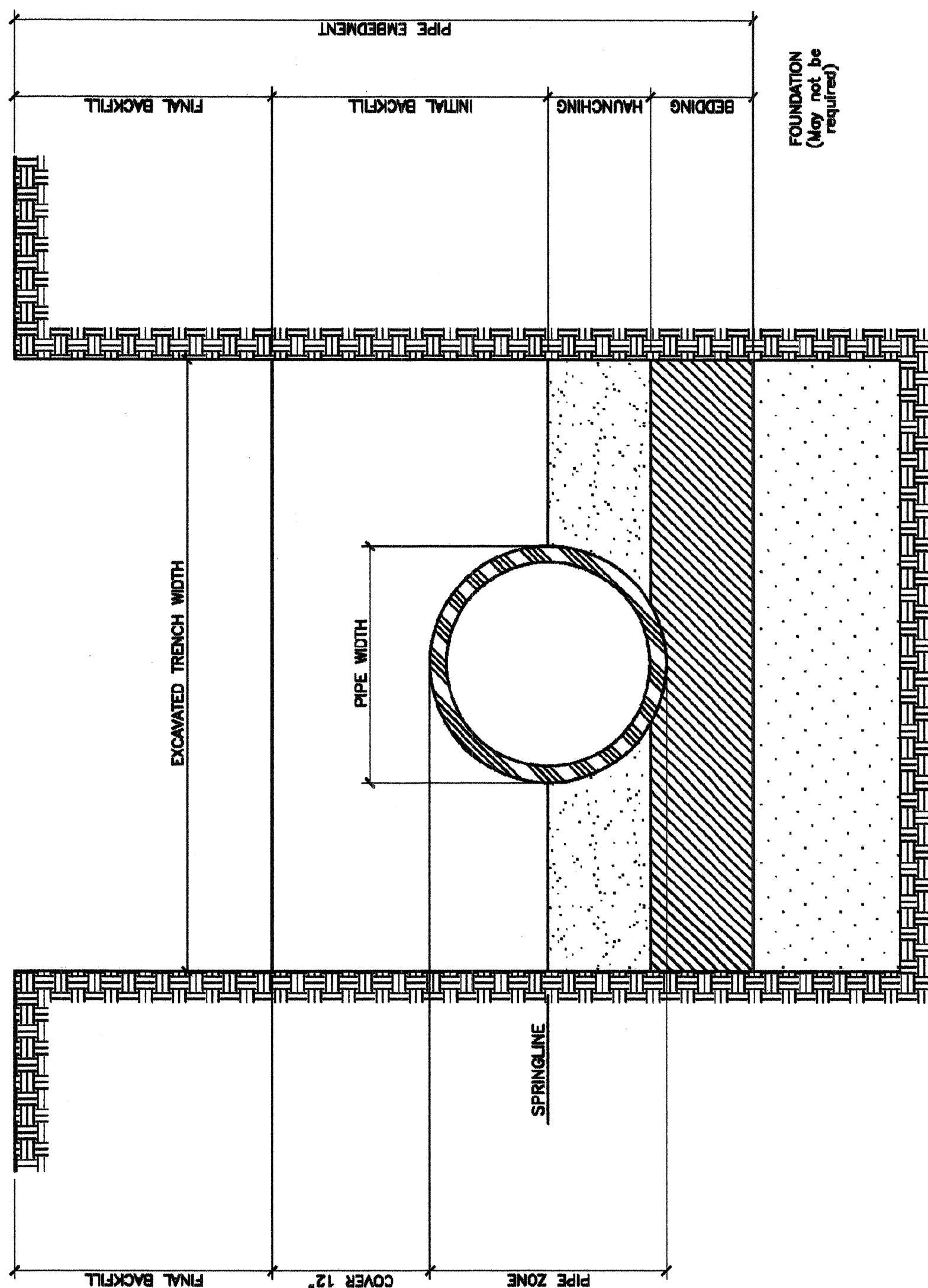
Sheet

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GENERAL NOTES:

- 1 MECHANICAL TAMPERS SHALL NOT BE USED IN THE INITIAL BACKFILL REGION FOR FLEXIBLE PIPE. WHEN FLEXIBLE PIPE IS USED, CONTRACTOR SHALL, PRIOR TO THE START OF CONSTRUCTION, PROVIDE THE BACKFILL WITH A MINIMUM OF 12" OF INITIAL BACKFILL REGION TO THE CITY FOR APPROVAL.
- 2 MINIMUM CLASS "C" BEDDING WILL BE USED.
- 3 COMPACT BEDDING, HAUNCH AND BACKFILL MATERIAL TO 95% OF MAXIMUM DENSITY.

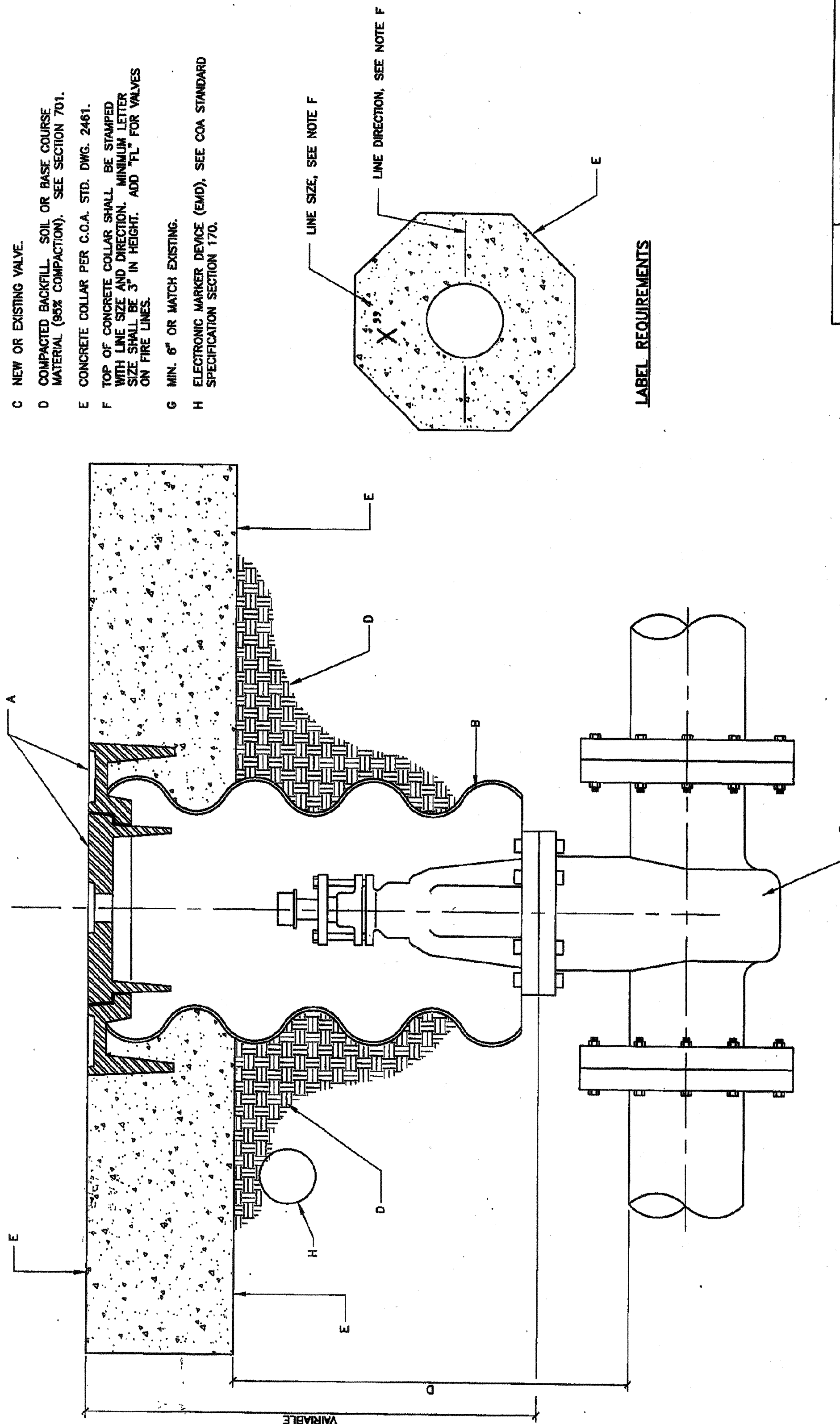


TRENCH CROSS-SECTION  
SHOWING TERMINOLOGY

REVISIONS	CITY OF ALBUQUERQUE
	WATER
	PIPE TRENCH
	TERMINOLOGY
	DWG. 2315
	JANUARY 2003

GENERAL NOTES:

- A VALVE BOX RING AND COVER PER C.O.A. STD. DWG. 2328.
- B 12" DIAMETER CORRUGATED METAL PIPE (CMP), TAR COATED.
- C NEW OR EXISTING VALVE.
- D COMPACTED BACKFILL - SOIL OR BASE COURSE MATERIAL (95% COMPACTION). SEE SECTION 701.
- E CONCRETE COLLAR PER C.O.A. STD. DWG. 2461.
- F TOP OF CONCRETE COLLAR SHALL BE STAMPED WITH LINE SIZE AND DIRECTION. MINIMUM LETTER SIZE SHALL BE 3" IN HEIGHT. ADD "PL" FOR VALVES ON FIRE LINES.
- G MIN. 6" OR MATCH EXISTING.
- H ELECTRONIC MARKER DEVICE (EMD). SEE COA STANDARD SPECIFICATION SECTION 170.



REVISIONS	WATER AUTHORITY
	WATER
	VALVE BOX
	DWG. 2326
	JANUARY 2010

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CITY OF ALBUQUERQUE  
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**APPROVE**  
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Mo./Day/Yr.	Mo./Day/Yr.
05/05/10	

City Project No.

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Zone Map No.

K-10

Sheet

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REVISIONS

NO. DATE REMARKS BY

DESIGNED BY MJW DATE 7/26/10  
DRAWN BY LEK DATE 7/26/10  
CHECKED BY MJW DATE 7/26/10

ENGINEER SEAL



SURVEY INFORMATION  
FIELD NOTES

BY	DATE

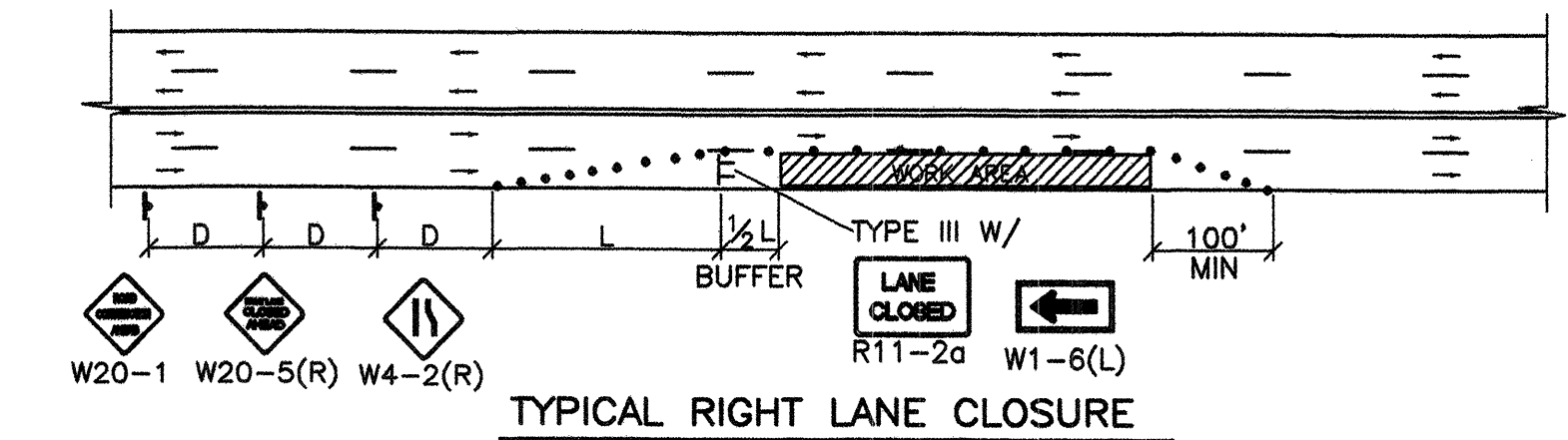
BENCH MARKS

ACS CONTROL STATION 7-K10, LOCATED AT THE INTERSECTION OF CENTRAL AVENUE NW AND UNSER BOULEVARD NW, ON TOP OF CURB @ TRAFFIC ISLAND.  
ELEVATION = 5097.854 (NAVD 1998)

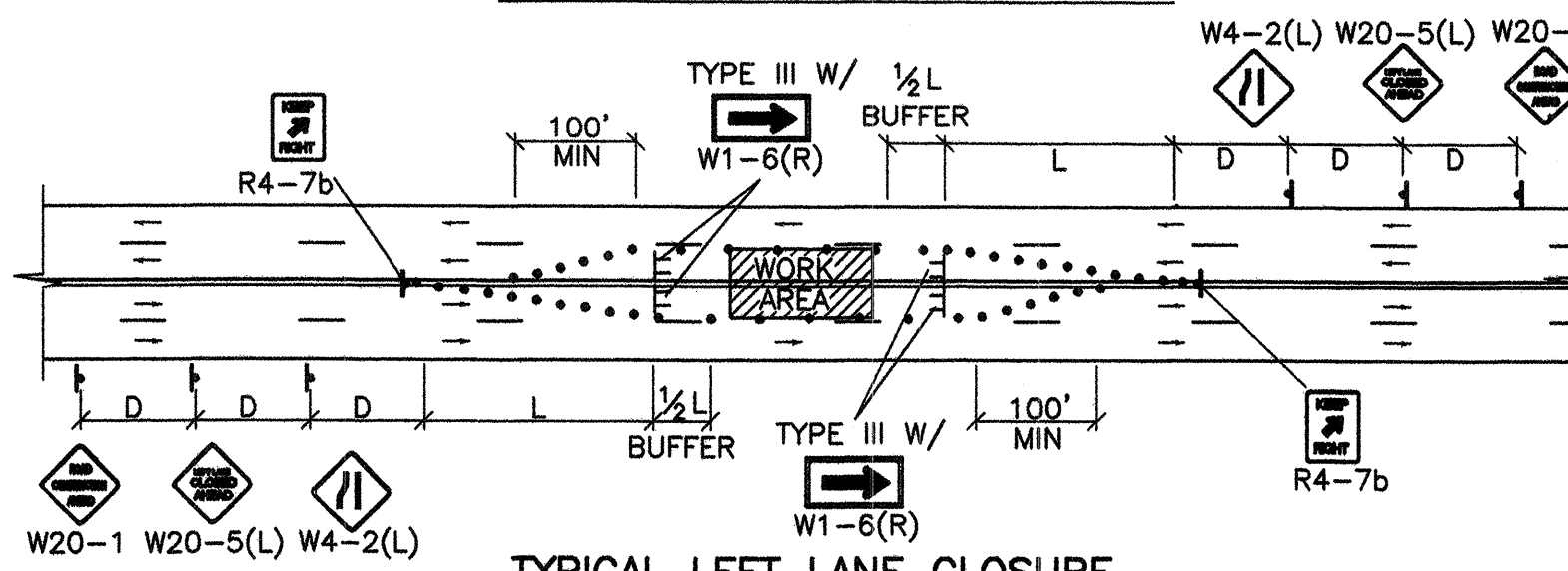
AS-BUILT INFORMATION

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WORK BY	DATE
INSPECTION BY	DATE
ACCEPTANCE BY	DATE
REVISIONS BY	DATE
RECORDED BY	DATE
NO.	

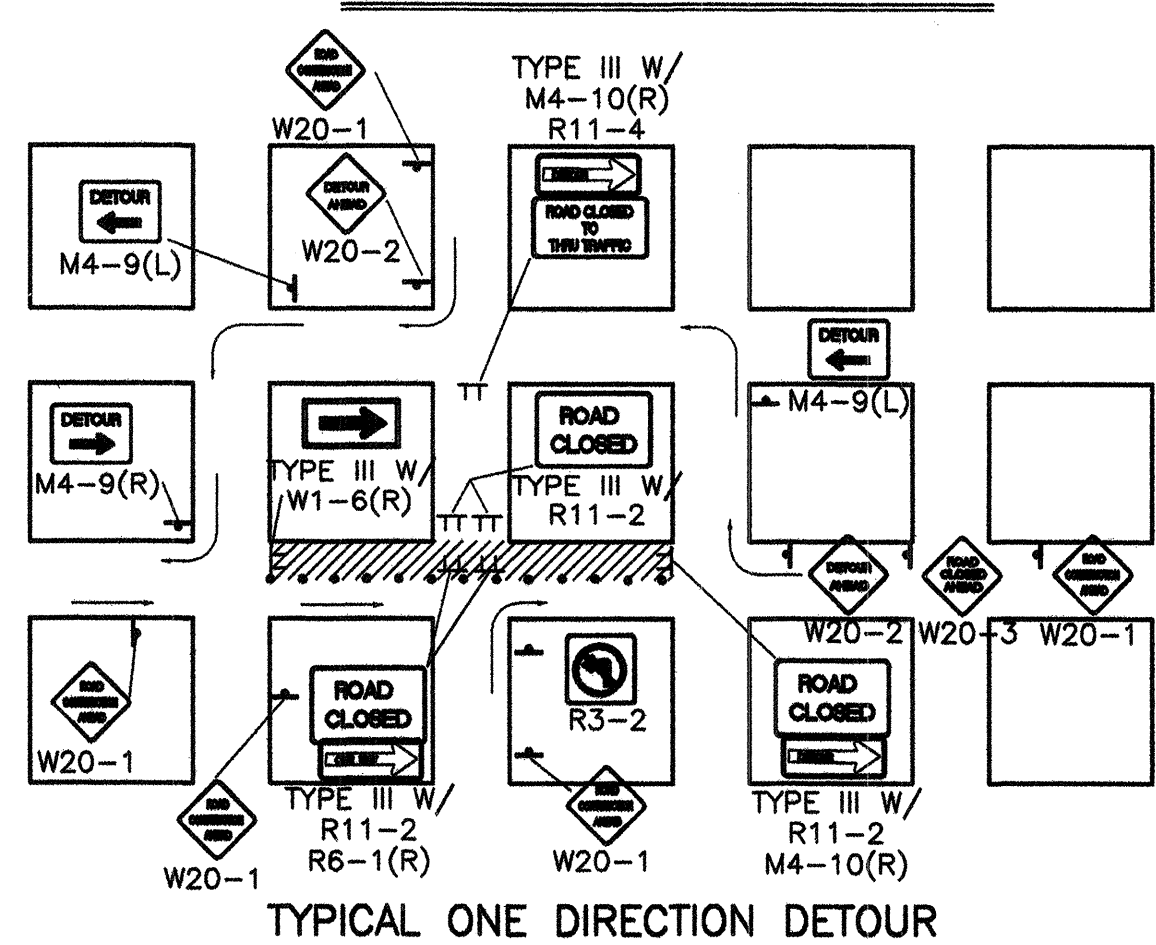




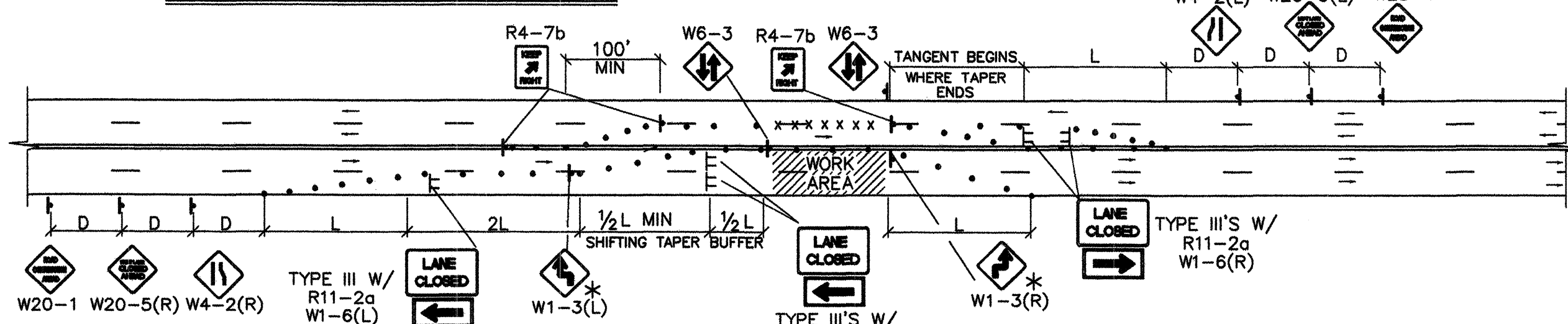
TYPICAL RIGHT LANE CLOSURE



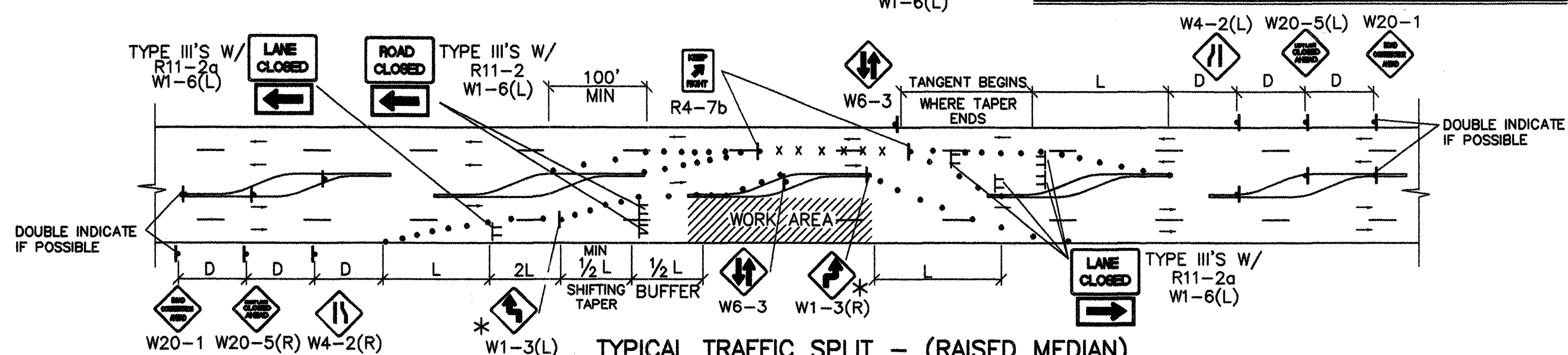
TYPICAL LEFT LANE CLOSURE



TYPICAL ONE DIRECTION DETOUR



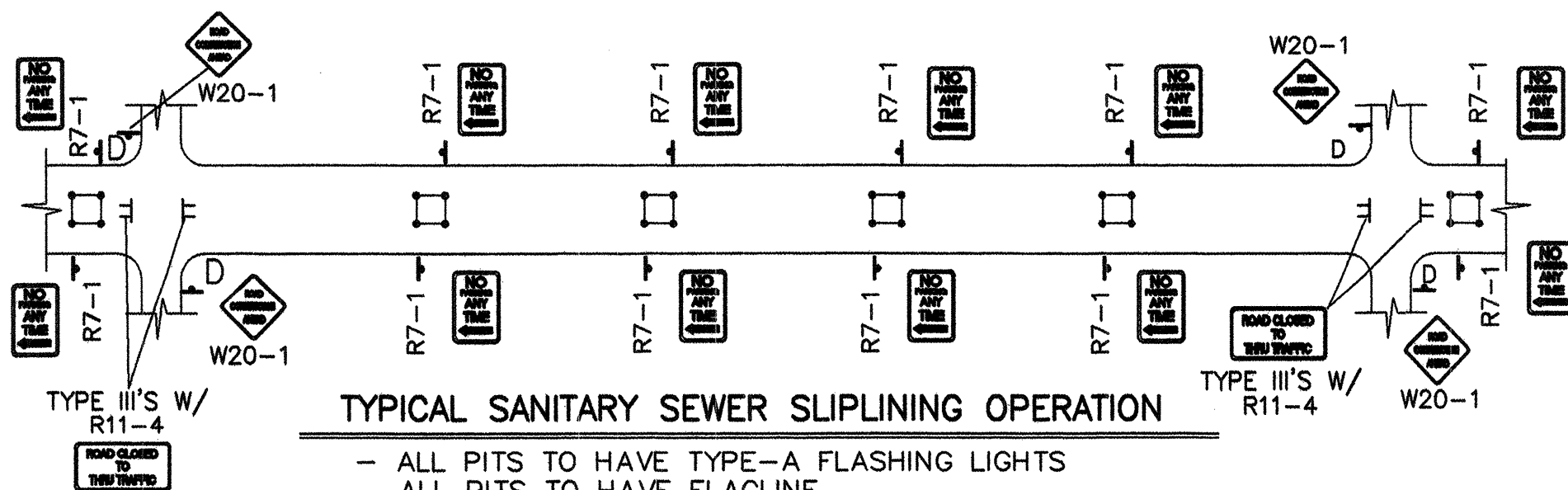
TYPICAL TRAFFIC SPLIT - (PAINTED MEDIAN)



TYPICAL TRAFFIC SPLIT - (RAISED MEDIAN)

TRAFFIC SPLIT NOTES:

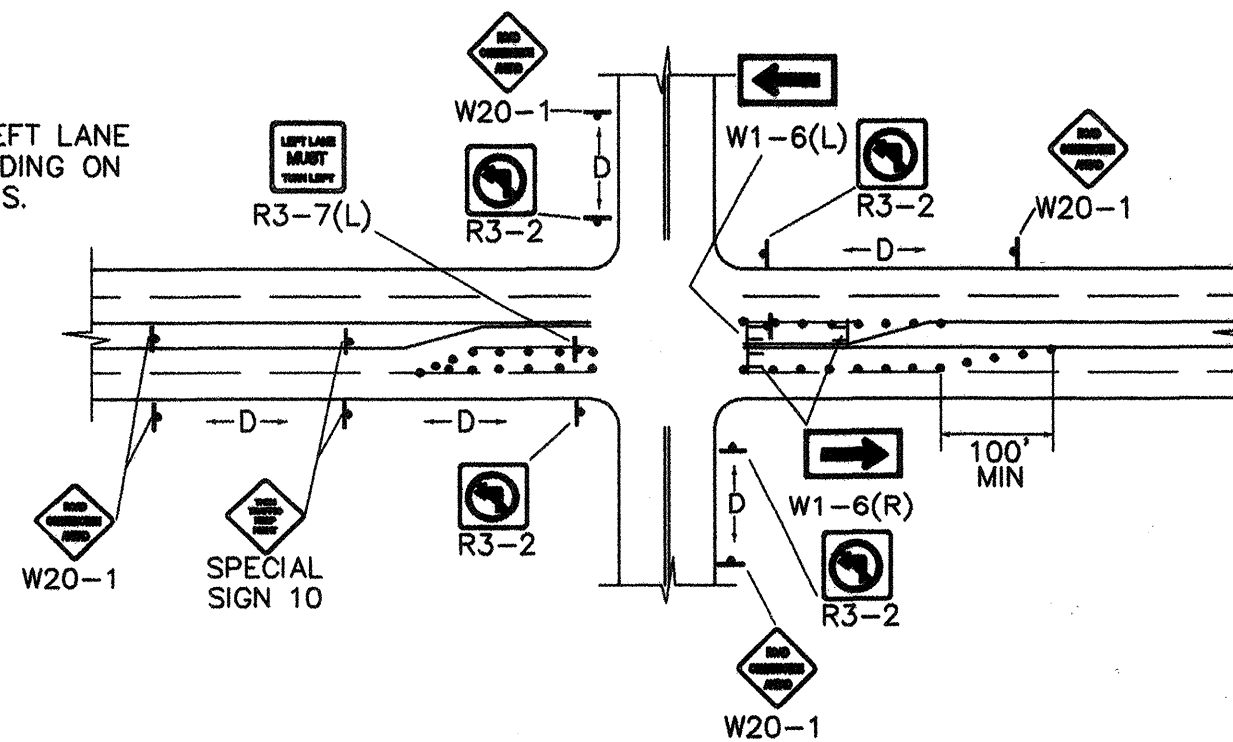
1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCES SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS.
2. 1/2 L IS THE MINIMUM DISTANCE FOR SHIFTING TAPERS.
3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED.
4. MEDIAN REMOVAL SHALL BE REQUIRED IF 1/2 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

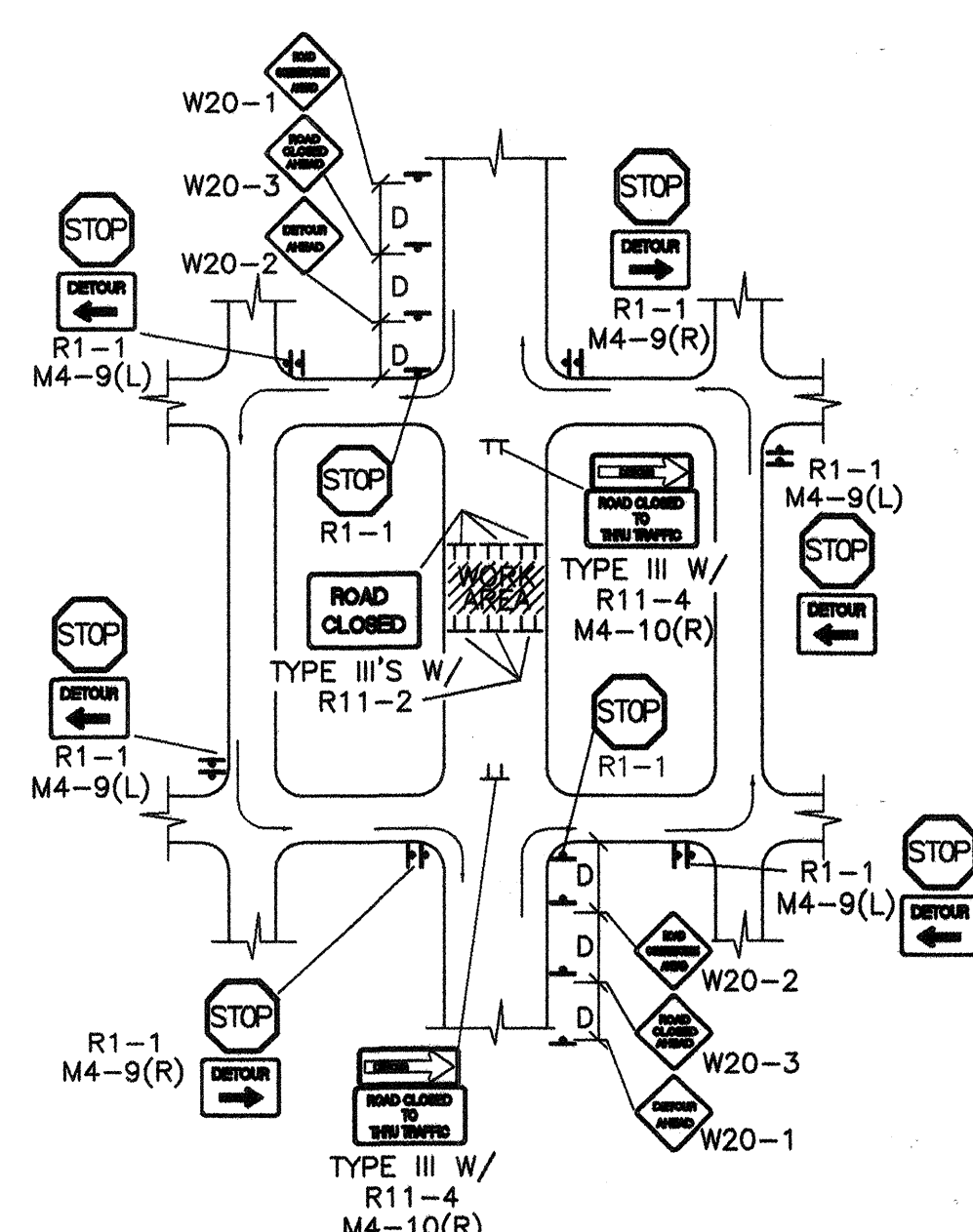
- ALL PITS TO HAVE TYPE-A FLASHING LIGHTS
- ALL PITS TO HAVE FLAGLINE

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



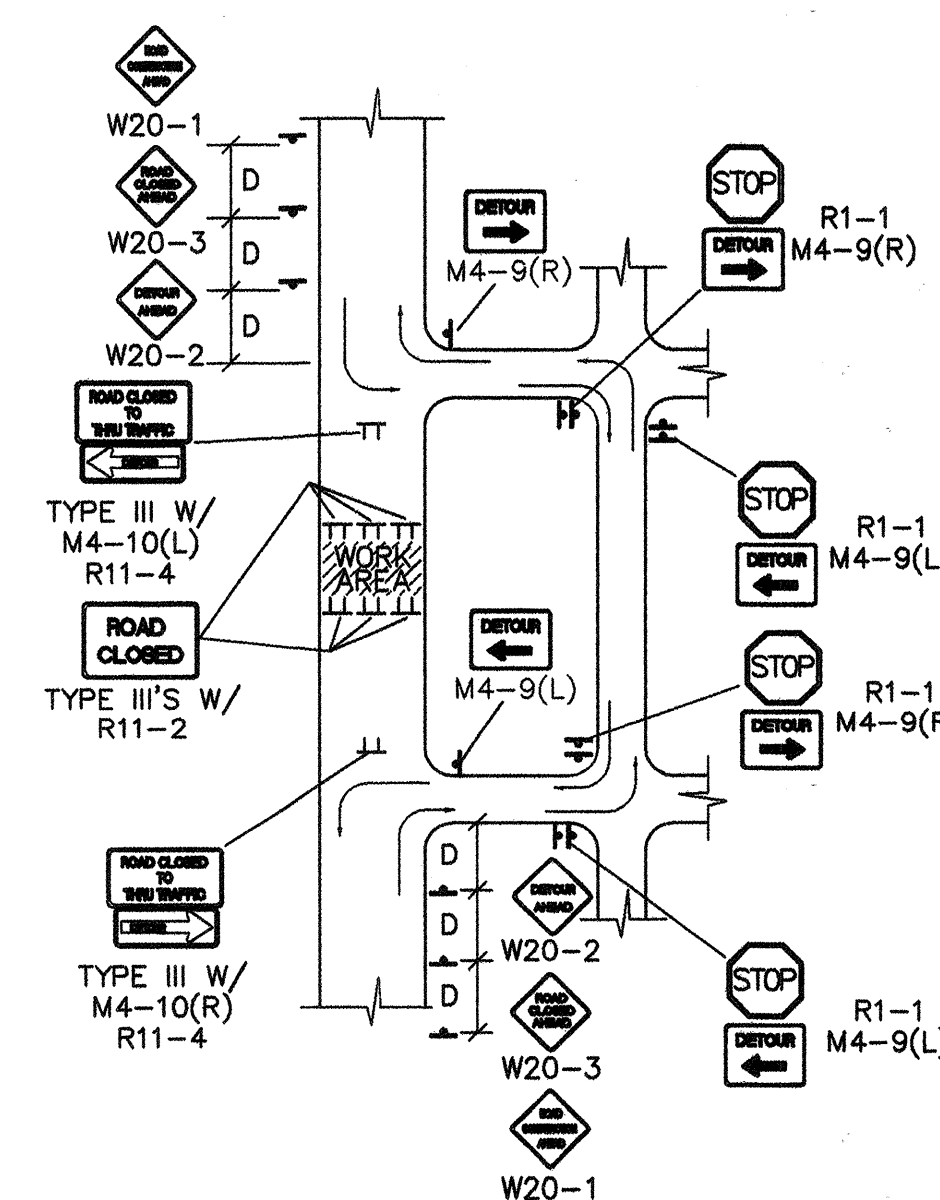
TYPICAL LANE CLOSURE AT INTERSECTION

NOTE: DEPENDING ON WORK ZONE LOCATION.



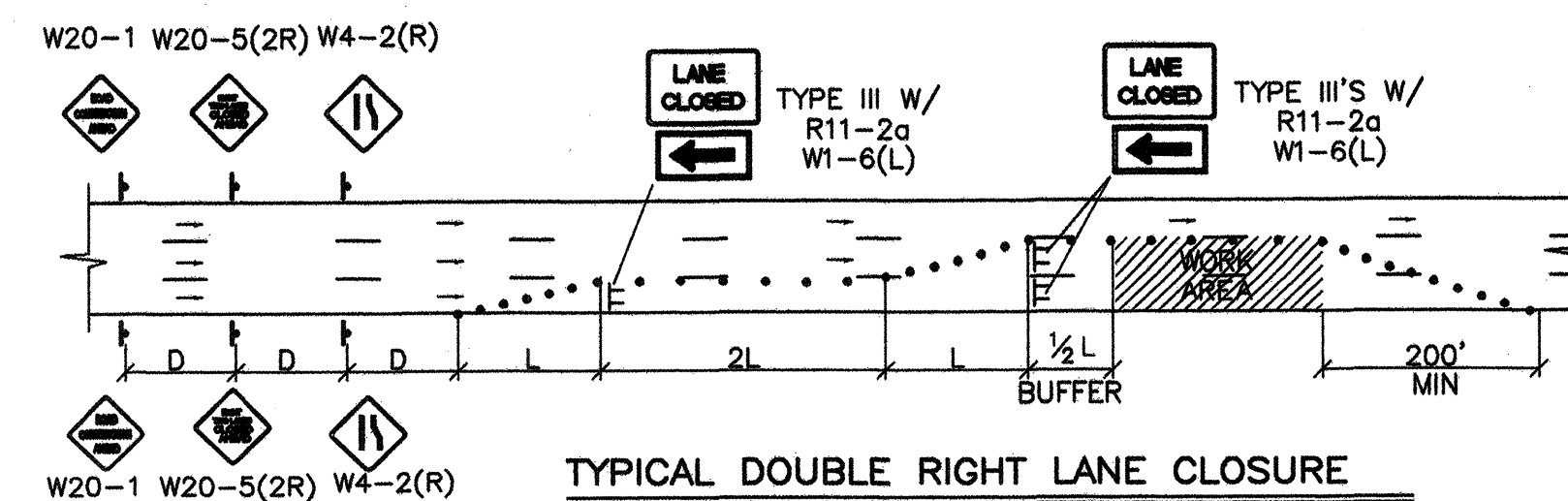
TYPICAL MID-BLOCK CLOSURE

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

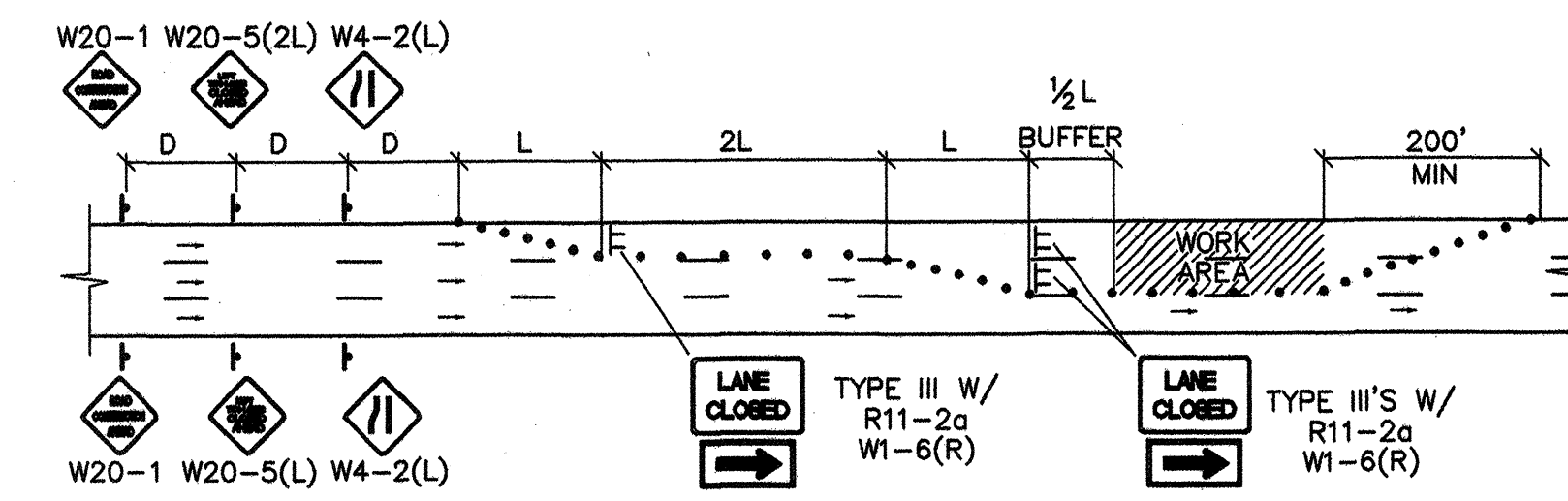


TYPICAL STREET CLOSURE

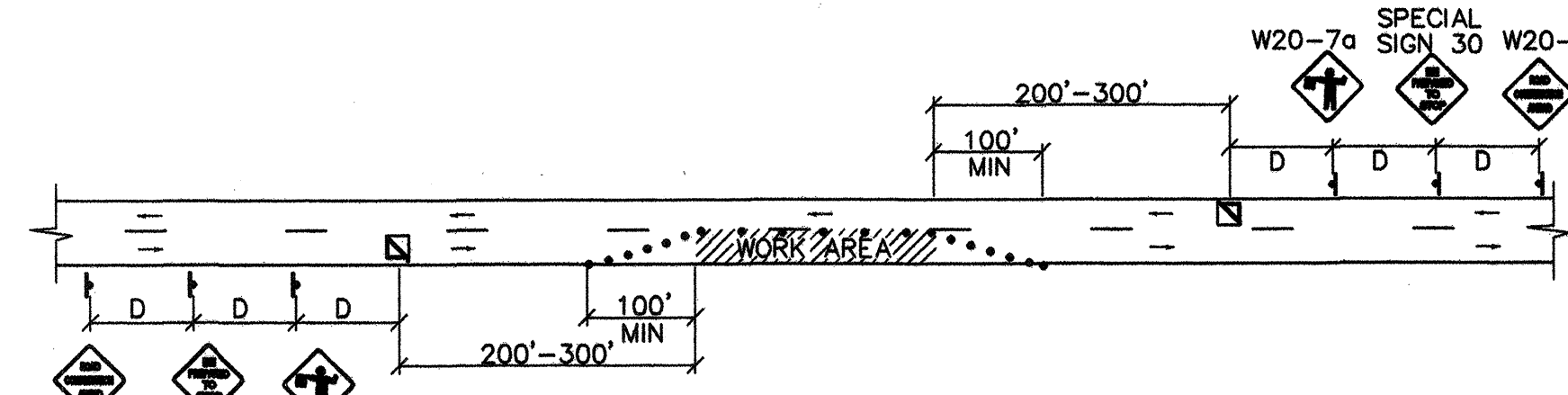
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



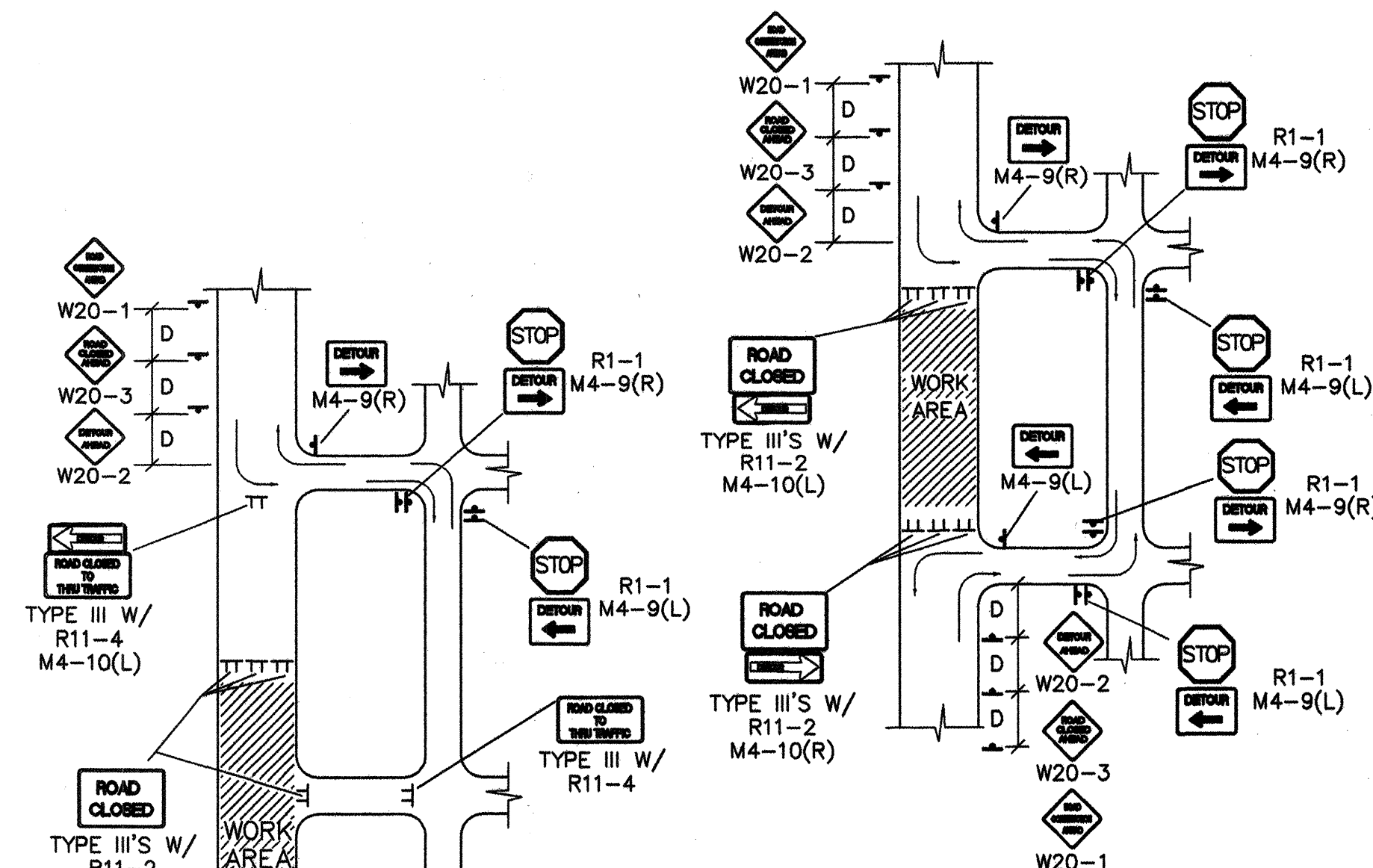
TYPICAL DOUBLE RIGHT LANE CLOSURE



TYPICAL DOUBLE LEFT LANE CLOSURE



TYPICAL FLAGGING OPERATION



TYPICAL STREET CLOSURE

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

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CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DEVELOPMENT GROUP

UNM HOSPITAL SW MESA CLINIC

Design Review Committee

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City Engineer Approval

For Information Only

City Project No.

760082

Zone Map No.

K-10

Sheet

4 OF 5

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER SEAL		REVISIONS	
CONTRACTOR	DATE	CONTRACTOR	DATE	NO.	BY	NO.	BY	NO.	BY
INSPECTOR'S	DATE	INSPECTOR'S	DATE	DATE	DATE	DATE	DATE	DATE	DATE
FIELD VERIFICATION BY	DATE	FIELD VERIFICATION BY	DATE	DATE	DATE	DATE	DATE	DATE	DATE
COMMANDED BY	DATE	COMMANDED BY	DATE	DATE	DATE	DATE	DATE	DATE	DATE
RECORDED BY	DATE	RECORDED BY	DATE	DATE	DATE	DATE	DATE	DATE	DATE

ACS CONTROL STATION 7-K10, LOCATED AT THE INTERSECTION OF CENTRAL AVENUE NW AND UNSER BOULEVARD NW, ON TOP OF CURB @ TRAFFIC ISLAND. ELEVATION = 5097.854 (NAVD 1988)

NO. DATE

DESIGNED BY M.J.W. DATE 7/26/10

DRAWN BY LEK DATE 7/26/10

CHECKED BY M.J.W. DATE 7/26/10



## CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. 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.

2. 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.

3. 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.

4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.

5. 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.

6. 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.

7. 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.

8. 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.

9. 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.

10. 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.

11. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.

12. 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.

13. 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.

14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.

15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.

16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.

17. 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.

18. 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.

19. 48 HOURS PRIOR TO OCCUPANCY 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.

20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

21. 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.

22. 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.

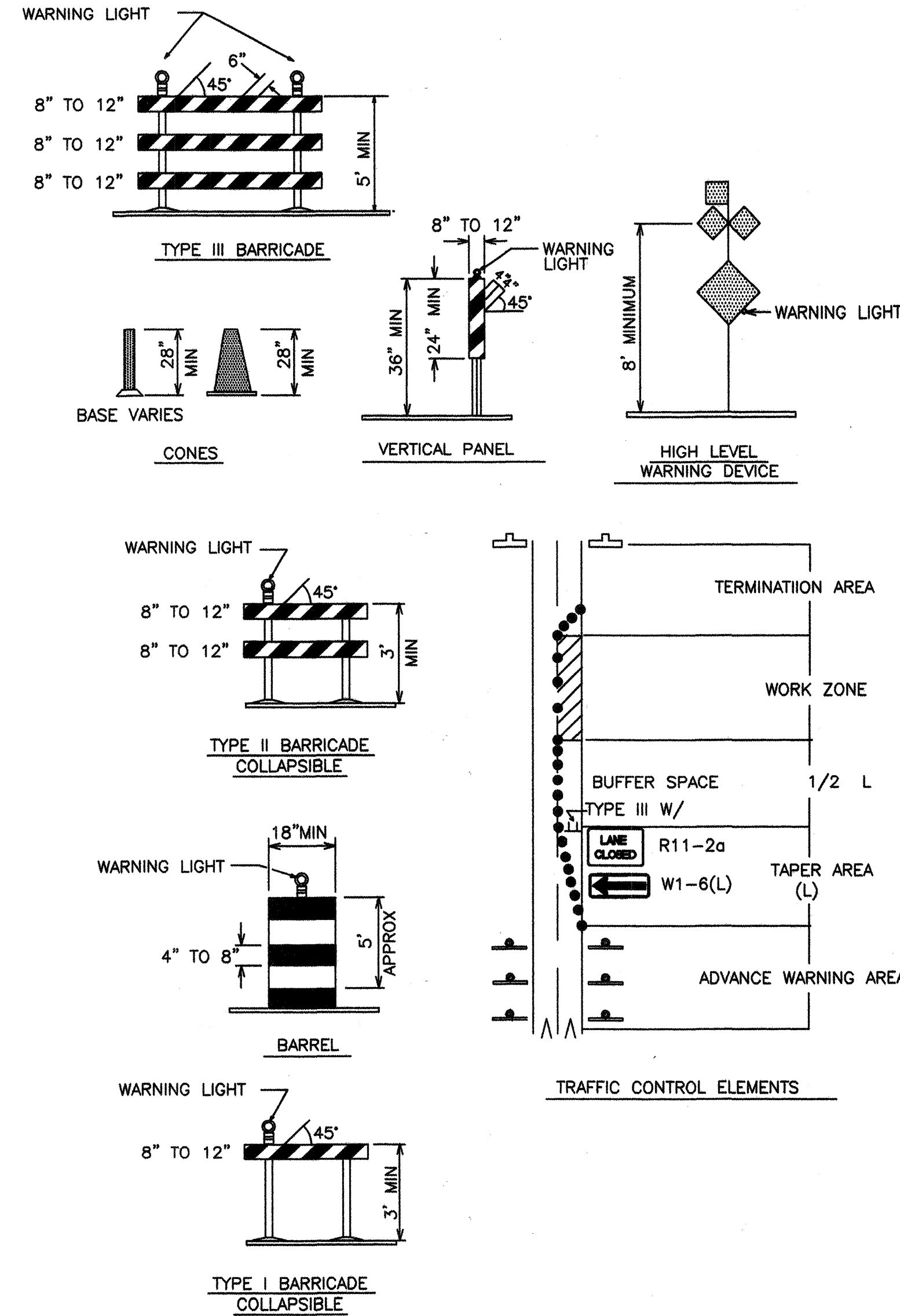
23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.

24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION, WASHING OF EQUIPMENT IS INCIDENTAL TO ITS PLACEMENT AND MAINTENANCE.

25. 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	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

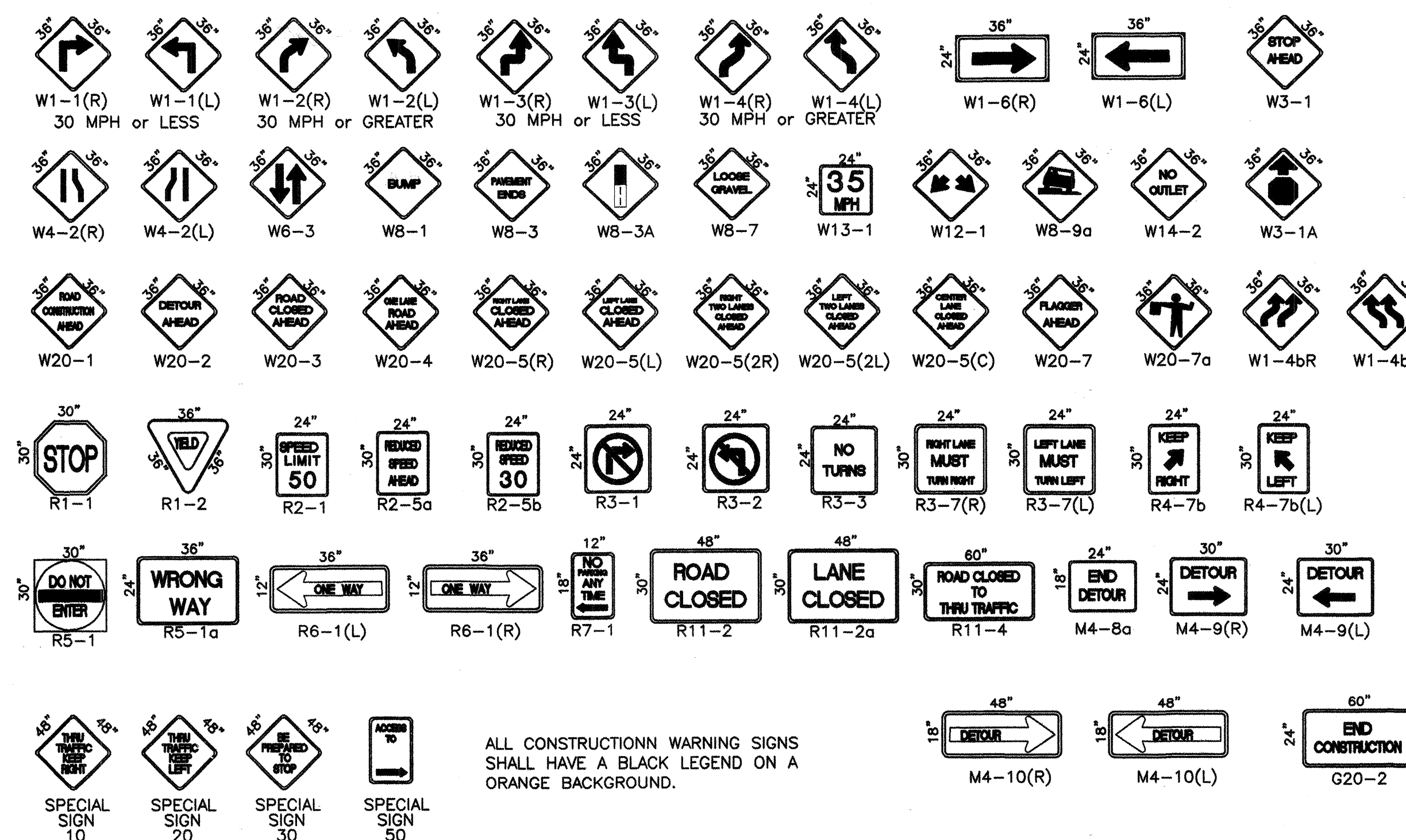
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

## TAPER LENGTH COMPUTATION

SPEED LIMIT	COMPUTATION
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 AN ORANGE BACKGROUND.

For Information Only

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER SEAL		REVISIONS		REMARKS	
CONTRACTOR	DATE	INSPECTOR'S NAME	DATE	FIELD VERIFICATION BY	DATE	NO.	BY	NO.	DATE	DATE	DATE
ACS CONTROL STATION 7-K10, LOCATED AT THE INTERSECTION OF CENTRAL AVENUE NW AND UNSER BOULEVARD NW, ON TOP OF CURB @ TRAFFIC ISLAND											
ELEVATION = 5097.854 (NAVD 1988)											
MICRO-FILM INFORMATION		RECORDED BY		NO.		DATE		DATE		DATE	

**Walla** Structural Engineering  
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Albuquerque, New Mexico 87110  
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CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DEVELOPMENT GROUP

UNM HOSPITAL SW MESA CLINIC

Design Review Committee City Engineer Approval

For Information Only

City Project No. 760082

Zone Map No. K-10

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