

RECORD DRAWING

CONSTRUCTION PLANS for

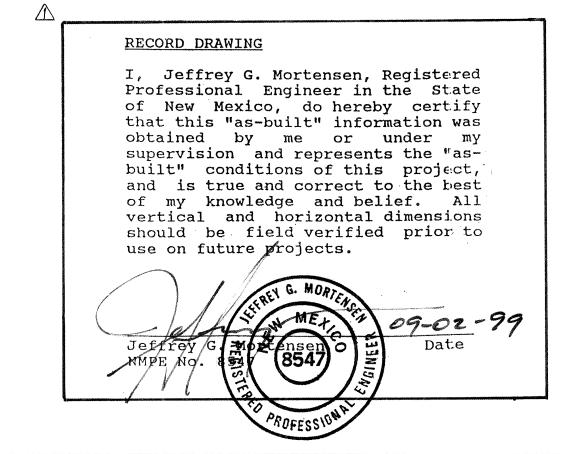
MANZANO HIGH SCHOOL WATERLINE EXTENSION - PHASE

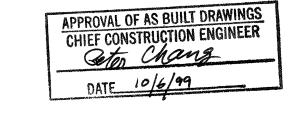
ALBUQUERQUE, NEW MEXICO MARCH, 1999

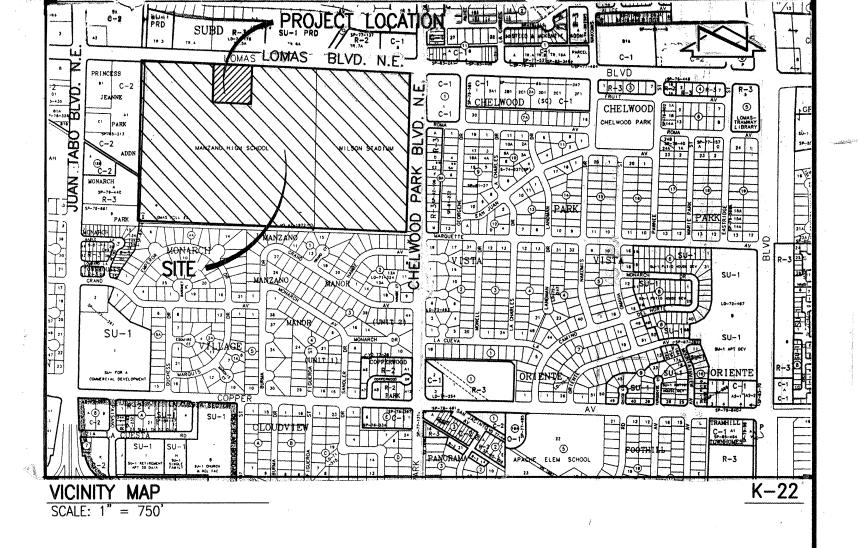


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DESCRIPTION				
COVER SHEET, VICINITY MAP, GENERAL NOTES, LEGEND				
AND INDEX OF DRAWINGS				
BOUNDARY / EASEMENT SURVEY				
SITE PLAN - WEST				
SITE PLAN — EAST				
WATER VALVE SHUTOFF PLAN, SECTIONS AND DETAILS				
WATERLINE EXTENSION PLAN AND PROFILE				
LINE "E" STA.9+60.12 TO STA.12+07.27				
SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS				
TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES				

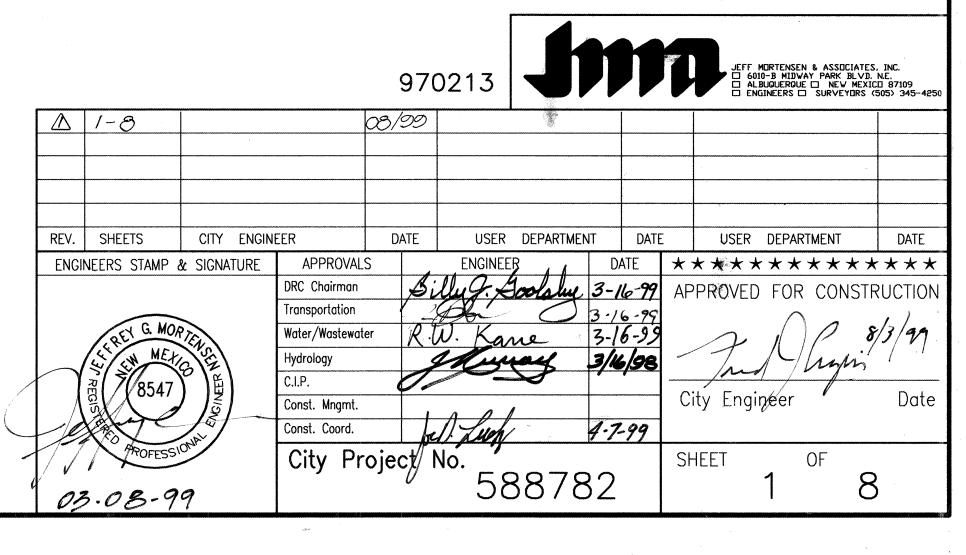




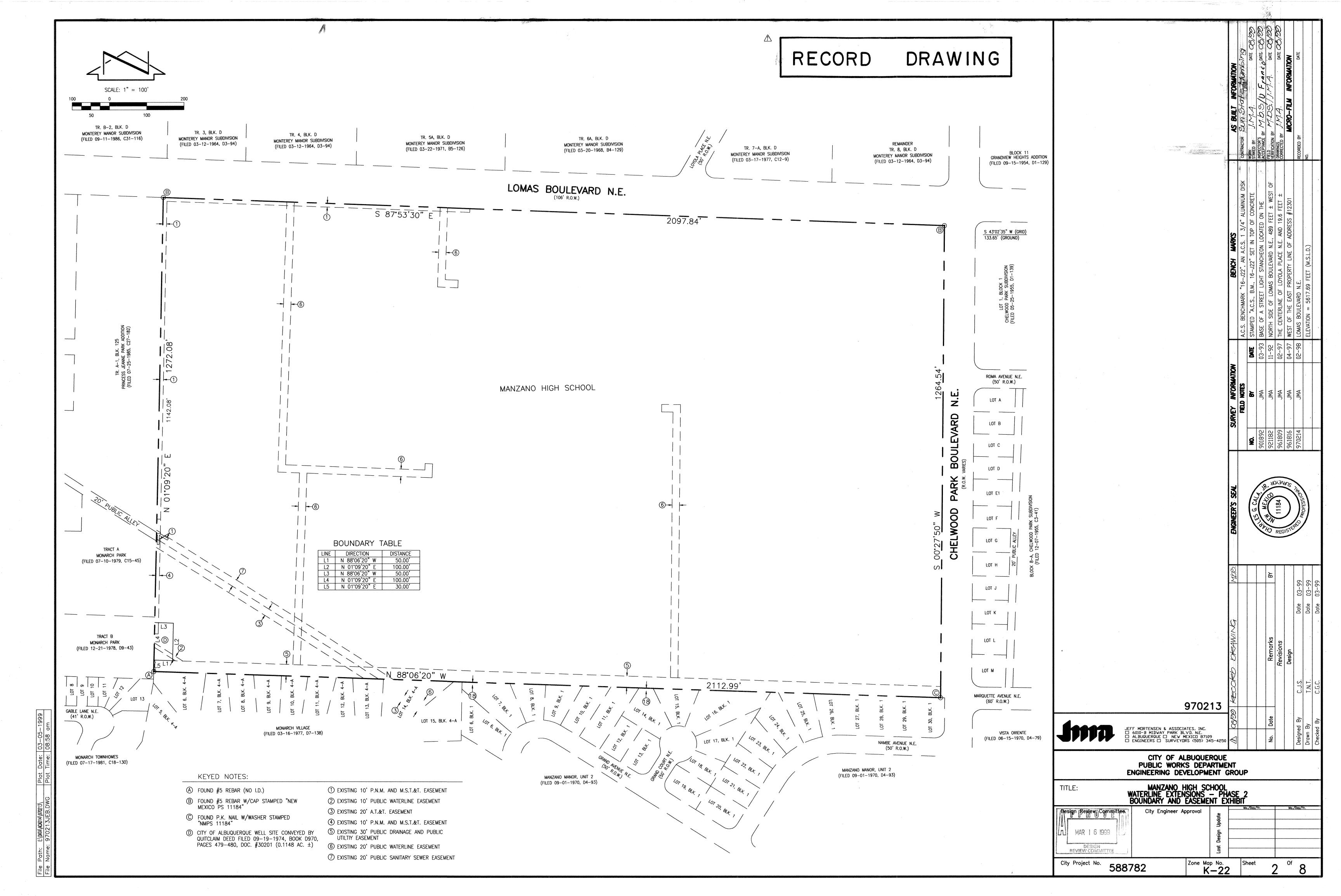


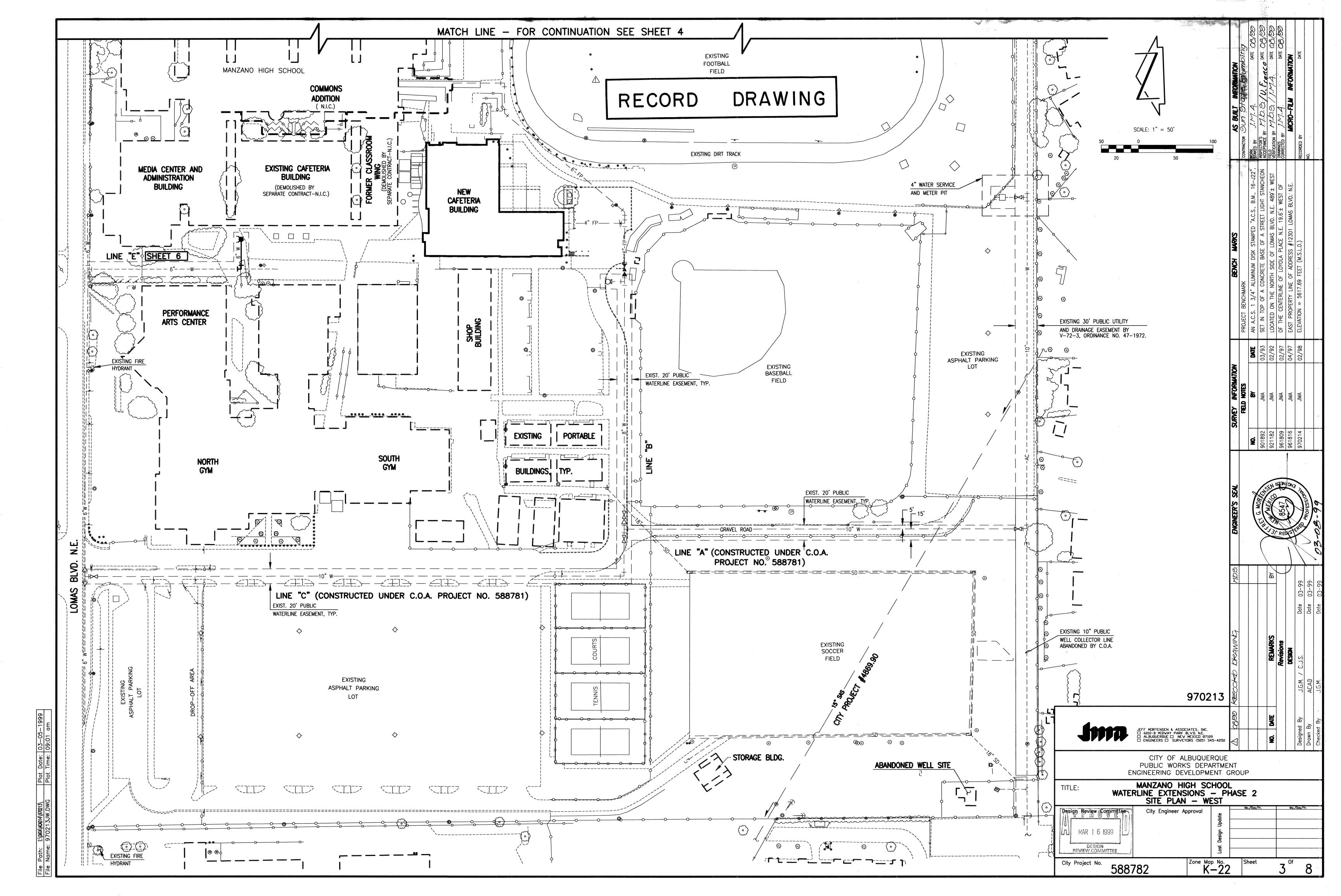
GENERAL NOTES:

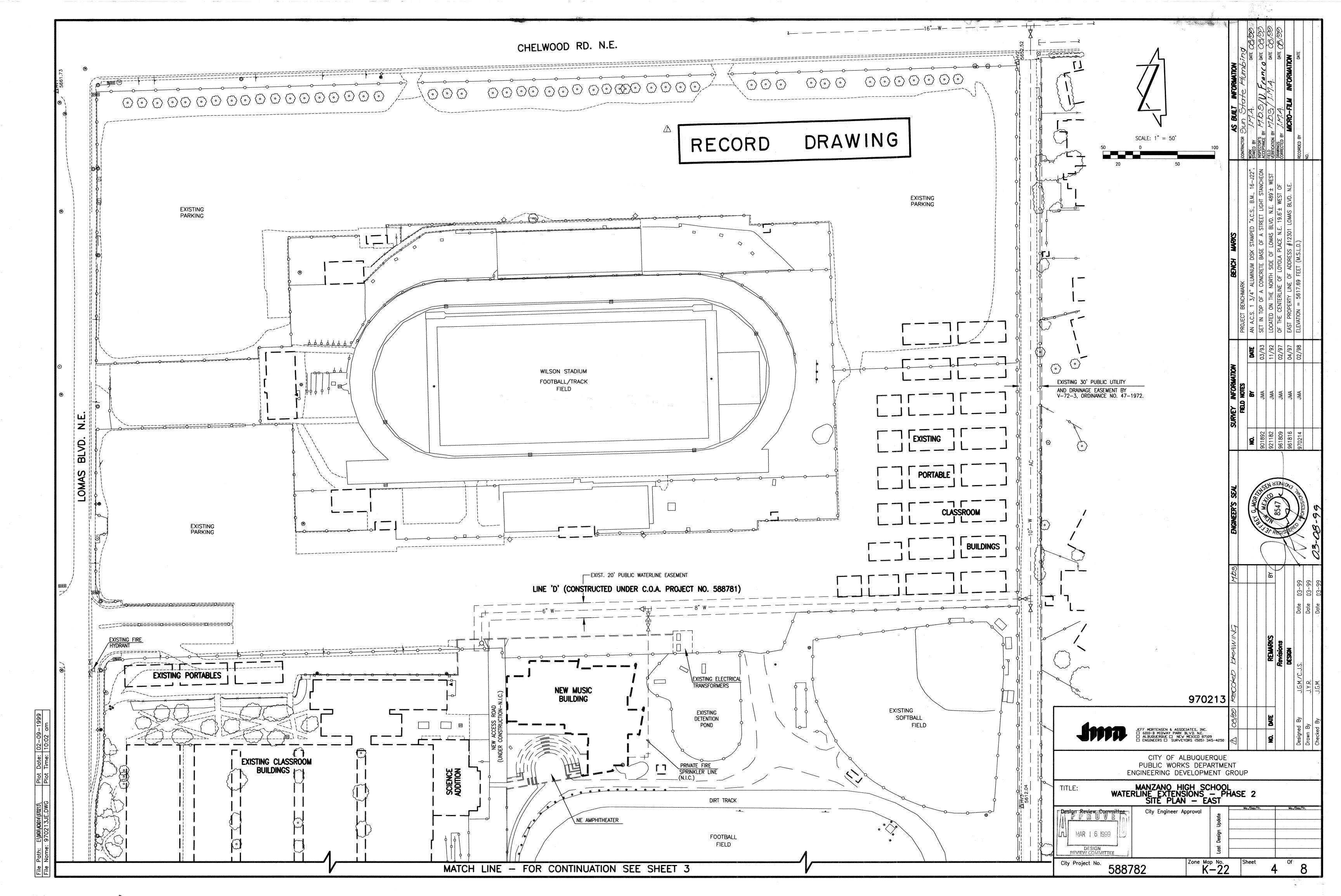
- 1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS—PUBLIC WORKS CONSTRUCTION—1986 UPDATE NO. 6
- 2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, (ALBUQUERQUE AREA) 1-800-321-ALERT (2537) (STATEWIDE) FOR LOCATION OF EXISTING UTILITIES. CONTACT A.P.S. MAINTENANCE AND OPERATIONS AT 765-5950 FOR LOCATION OF PRIVATE ONSITE UTILITIES.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCE THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- 4. SHOULD A CONFLICT EXIST BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR ALL PARTIES.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.
- 6. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH.
- 7. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- 8. BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
- 9. TACK COAT REQUIREMENTS SHALL BE DETERMINED DURING CONSTRUCTION BY THE PROJECT ENGINEER.
- 10. SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- 11. IF CURB IS DEPRESSED FOR A DRIVEPAD OR A HANDICAP RAMP, THE DRIVEPAD OR RAMP SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB AND GUTTER.
- 12. ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
- 13. CONTRACTOR SHALL COORDINATE WITH THE WATER SYSTEM DIVISION FOR THE EXECUTION OF THE VALVE SHUT OFF PLAN, NOT LESS THAN FIVE (5)
 WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT THE EXISTING PUBLIC WATER UTILITIES. ONLY WATER SYSTEM DIVISION PERSONNEL SHALL
 OPERATE EXISTING VALVES. REFER TO SECTION 18 OF THE SPECIFICATION. THE WATER SYSTEM DIVISION PHONE NUMBER IS 857—8200.
- 14. 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 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 ELEVATION 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 SPECIFICATIONS.
- 15. FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION CO-ORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION CO-ORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. CONTRACTOR MUST REFER TO SECTION 19 OF THE STANDARD SPECIFICATION FOR TRAFFIC CONTROL.
- 16. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED STRIPING BY CONTRACTOR TO EXISTING LOCATION OR AS INDICATED BY THIS PLAN SET.
- 17. CAUTION: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.
- 18. ANY WORK OCCURRING WITHIN AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
- 19. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.

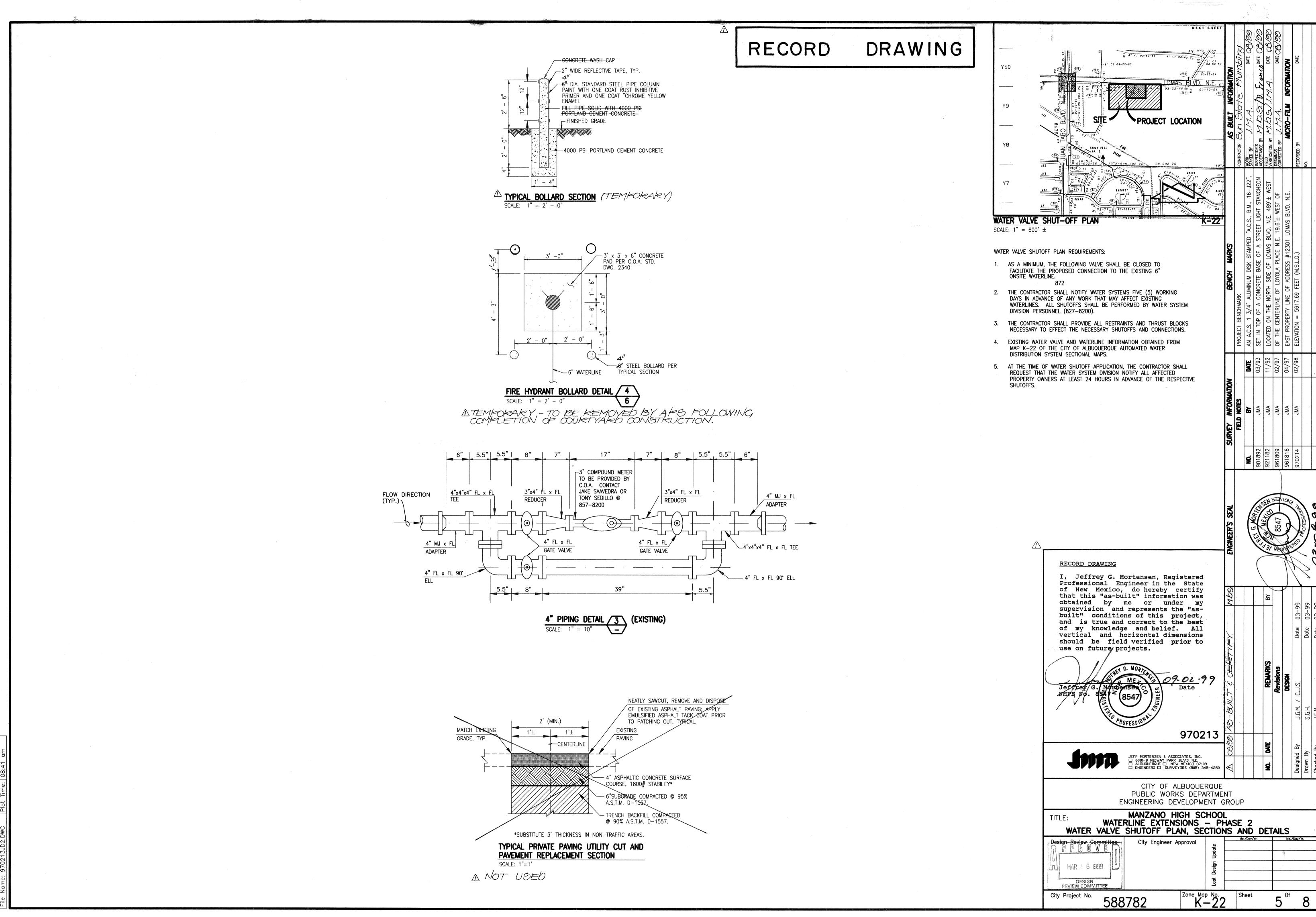


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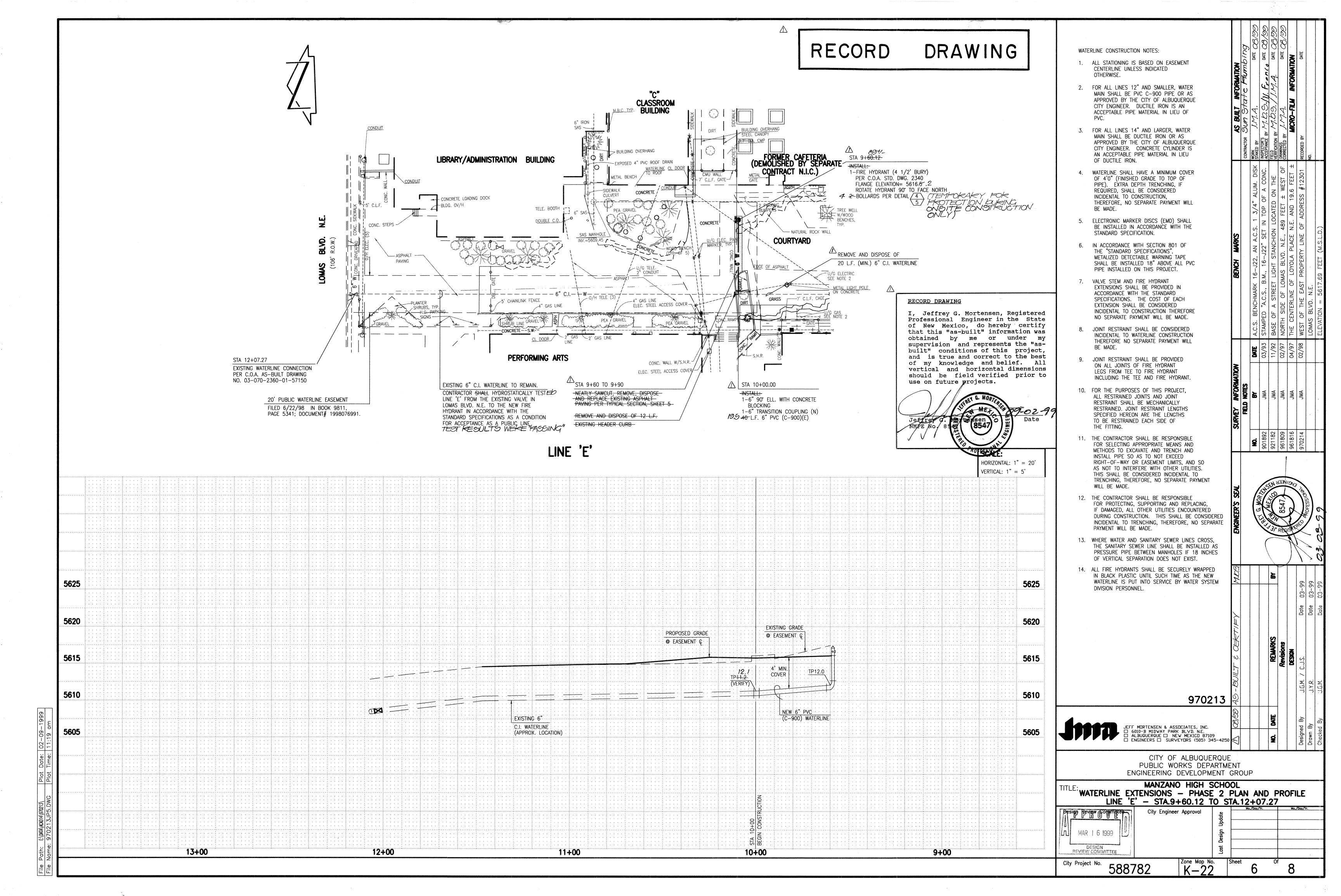








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CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

- 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.
- 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 (F. F. M. 130), 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 64 4 OF THE MUTCH, 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 TRAVELLED 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 MUTCH, LATEST EDITION.
- 19. 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.
- 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: 1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. 2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION. 3. 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 IT'S PLACEMENT AND MAINTENANCE.
- 25. TRAFFIC CONTROL STANDARD'S APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

ROAD CLOSED

AHEAD

ONE WAY

R6-1(R)

PREPARED TO

SPECIAL

SIGN

CONSTRUCTION

AHEAD

ENTER

R5 - 1

TRAFFIC KEEP

R5-1a

THRU TRAFFIC KEEP

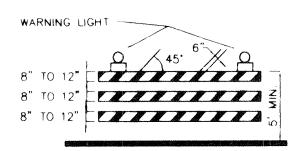
SPECIAL

SIGN 20

ONE LANE ROAD AHEAD

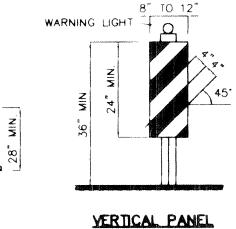
SPEED AHEAD

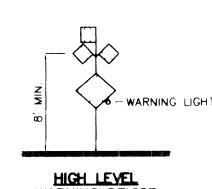
- 26. ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGTH AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D. $\sqrt{3}$
- 27. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE, ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY. 4

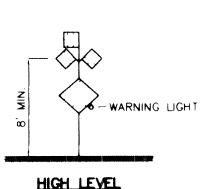


BASE VARIE









WARNING DEVICE

LEGEND

- WORK AREA
- BARRICADE TYPE I, TYPE II, OR BARREL
- BARRICADE TYPE III
- VERTICAL PANEL
- WARNING SIGN

SPEED

LIMIT

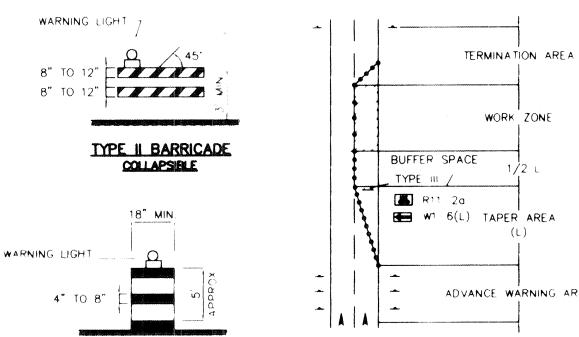
- DISTANCE BETWEEN SIGNS A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION SPACING BETWEEN BARRICADES- A DISTANCE MEASURED IN FEET
- EQUAL TO THE SPEED LIMIT OF THE STREET

TAPER LENGTH (L)

(FEET)

TAPER LENGTH - SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.



ADVANCE WARNING AREA

ALONG AFTER (MPH) DEVICES ANE FOR TAPER TAPER TAPER 70 20 20 20 75 115 125 25 30 150 165 180 205 225 245 270 320 40 295 450 540 495 13

TAPER REQUIREMENTS

MINIMUM MAXIMUM DEVICE

NUMBER | SPACING IN FEET

TRAFFIC CONTROL ELEMENTS

25 30 | 30 35 | 35 45 45 55 660 605 13

RECOMMENDI	ED SIGN S	SPACING(D) FOR
		SIGN SERIES
SPEED	MINIMUM	DISTANCE IN FEET
MILES	BETWEEN	FROM LAST
PER HOUR	SIGNS	SIGN TO TAPER

10 X SPEED LIMIT 10 X SPEED LIMIT

10 X SPEED LIMIT 10 X SPEED LIMIT

L MINIMUM

 $L = W \times S$

TAPER CRITERIA TYPE OF TAPER TAPER LENGTH UPSTREAM TAPER:

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

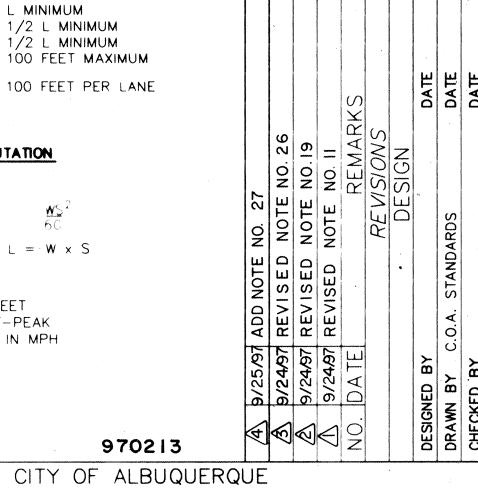
TAPER LENGTH COMPUTATION

SPEED LIMIT 40 MPH OR LESS

MERGING TAPER

45 MPH OR GREATER

L = TAPER LENGTHW = WIDTH OF OFFSET IN FEET S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH



8

J.D.L. J.D.L. J.D.L.

PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP MANZANO HIGH SCHOOL WATERLINE EXTENSIONS-PHASE 2

970213

SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS DESIGN REVIEW COMMITEE | CITY ENGINEER APPROVAL

NO. K.22

588782

DRAWING

SIGN FACE DETAILS

PAVEMENT ENDS

CLOSED

REDUCED SPEED 30

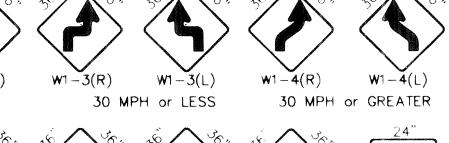
CONE WAY

R6-1(L)

ACCESS

SPECIAL

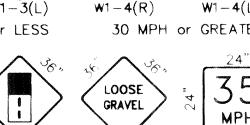
SIGN 50



LEFT LANE CLOSED AHEAD

PARKING

ANY



TWO LANES CLOSED AHEAD

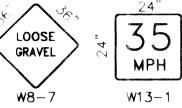
W20-5(2R)

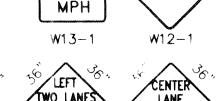
CLOSED

ALL CONSTRUCTION WARNING SIGNS

ORANGE BACKGROUND.

SHALL HAVE A BLACK LEGEND ON A





TURNS

LANE

CLOSED



RIGHT LANE

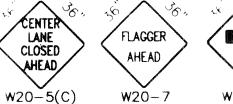
MUST

TURN RIGHT

R3 - 7(R)

R11 - 4

W1-6(R)





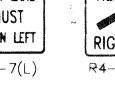
BARREL

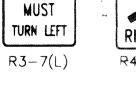
8" TO 12"

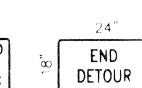


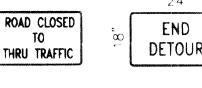


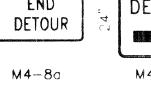


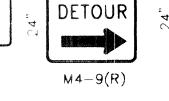


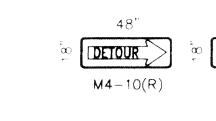


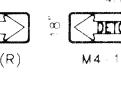


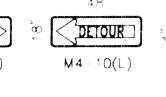












60" END CONSTRUCTION G20-2

KEEP

LEFT

R4 - 7b(L)

DETOUR

M4-9(L)

RECORD

