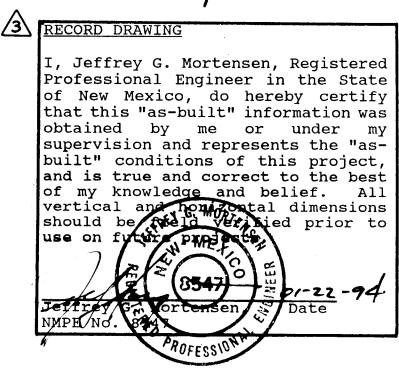


CONSTRUCTION PLANS

for

TIERRA LA CUEVA UNIT 2

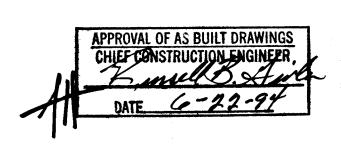
ALBUQUERQUE, NEW MEXICO JUNE, 1993



INDEX OF DRAWINGS

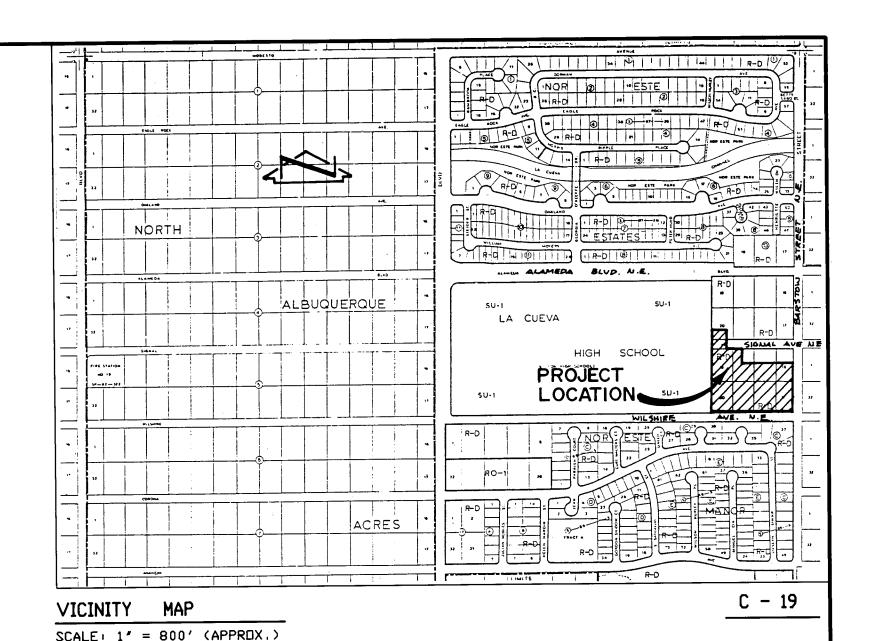
SHEET	DESCRIPTION						
1	COVER SHEET, VICINITY MAP, GENERAL NOTES, LEGEND, INDEX OF DRAWING						
2	SUBDIVISION PLAT						
2	GRADING AND DRAINAGE PLAN						
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13	TIERRA ALEGRE DRIVE N.E.						
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RECORD DRAWING



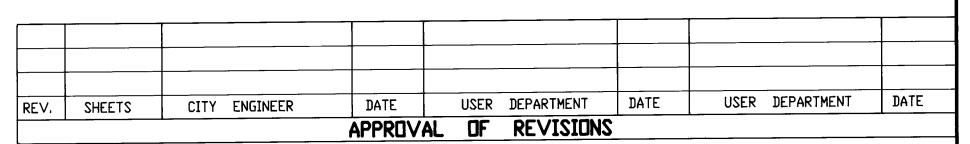
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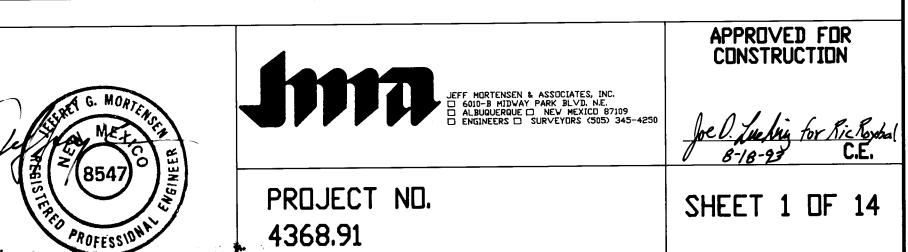
> SCANNED BY BY LASON

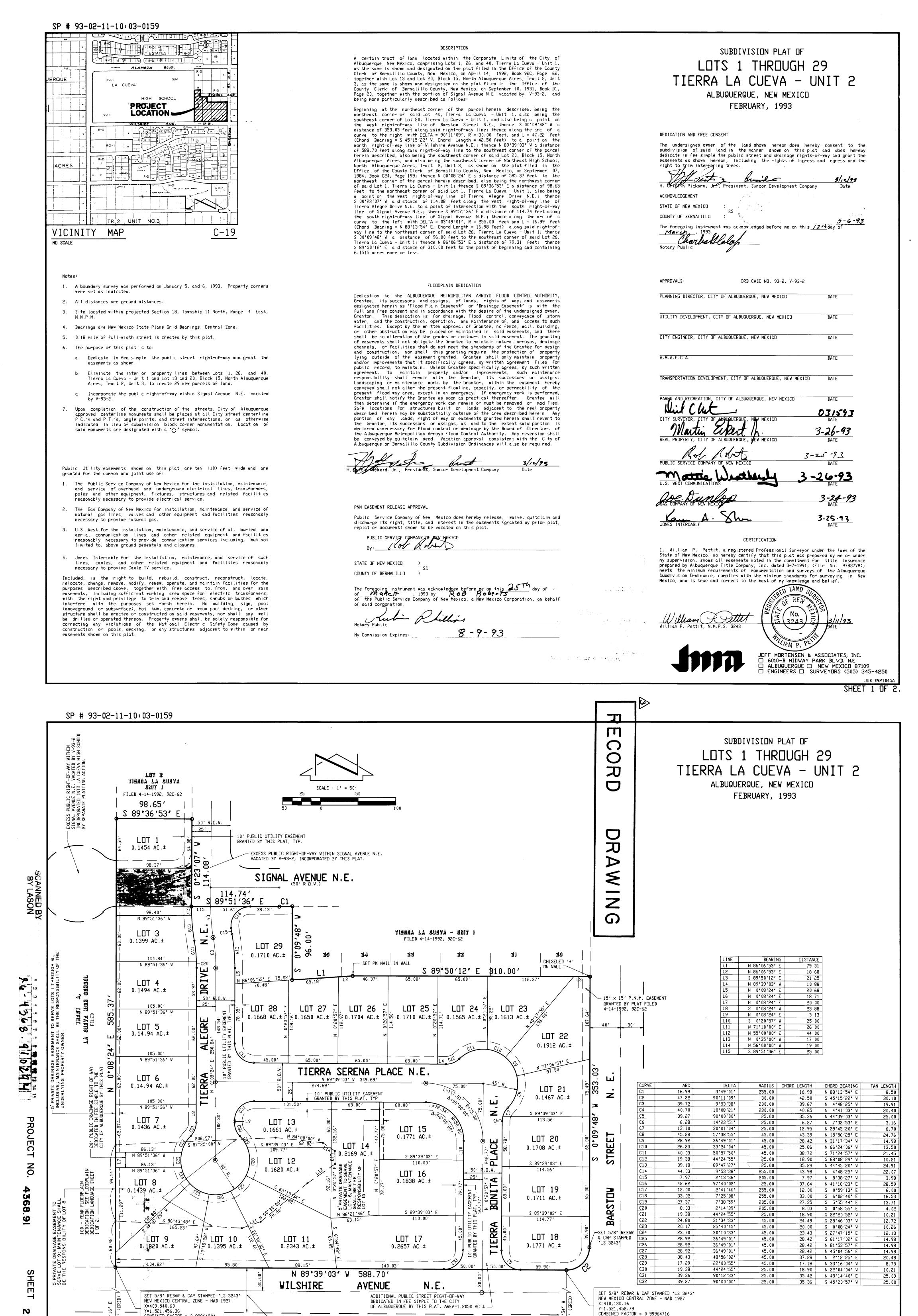


GENERAL NOTES:

- 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.4)
- 2. TWD (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, FOR LOCATION OF EXISTING UTILITIES.
- 3. 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 COMMENCES. 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.
- 5. 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 THREE (3) 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.
- 14. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE ENGINEER. 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. THREE (3) 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 IN KIND BY CONTRACTOR TO LOCATION AND IN KIND AS EXISTING 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.







43

NEW MEXICO CENTRAL ZONE - NAD 1927

COMBINED FACTOR = 0.9996473

DELTA ALPHA = - 0.10,23,

A.C.S. STA. '6-C19'

X=410,163.71

Y=1,518,825.94

DELTA ALPHA = -0.10'24'

JEFF MORTENSEN & ASSOCIATES, INC.

ALBUQUERQUE DNEW MEXICO 87109

© INGINEERS □ SURVEYORS (505) 345-4250

JDB #921045B

□ 010-B MIDWAY PARK BLVD. N.E.

4

0

П

COMBINED FACTOR = 0.99964804

COMBINED FACTOR = 0.99965263 DELTA ALPHA = - 0'10'45'

NEW MEXICO CENTRAL ZONE - NAD 1927

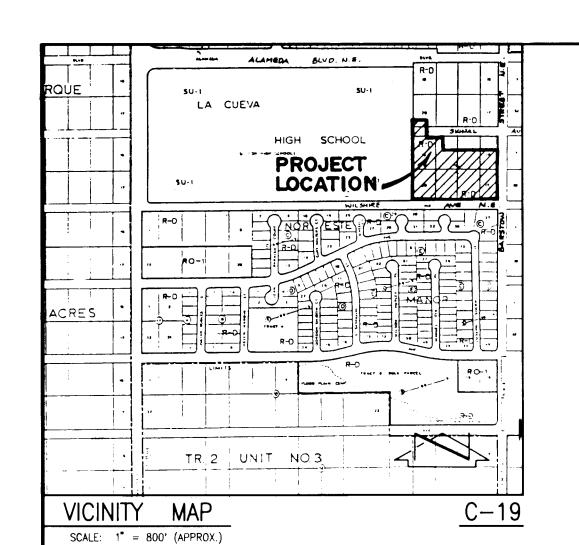
58.5' R.D.W. CREATED BY "PLAT FOR NOR ESTE MANOR BLOCKS A THRU E & TRACTS A & B' FILED MAR. 14, 1990,

DELTA ALPHA = - 0'10'28'

A.C.S. STA. "HEAVEN"

X=407,051.31

Y=1,518,737.03



LEGEND

TOP CURB FL51.00 FLOW LINE TSOW51.00 TOP STEP AT WALL NG50.50 NATURAL GROUND PROPOSED SPOT ELEVATION PROPOSED DIRECTION OF FLOW ---- PROPOSED RETAINING WALL

CONSTRUCTION NOTES:

- 1. Two (2) working days prior to any excavation, contractor must contact New Mexico One Call Service 266-1990, for location of existing
- 2. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer in writing so that the conflict can be resolved with a minimum amount of
- 3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
- 4. All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and
- 5. 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 commences. 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 design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping

the location of these lines and facilities.

EROSION CONTROL MEASURES

- 1. The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property. This can be achieved by constructing temporary berms at the property lines and wetting the soil to keep it from
- 2. The contractor shall promptly clean up any material excavated within the public right-ofway so that the excavated material is not susceptible to being washed down the street.
- 3. The contractor shall secure 'Topsoil Disturbance Permit' prior to beginning

PROJECT BENCHMARK

CITY OF ALBUQUERQUE BENCHMARK "HEAVEN", A STANDARD USC & GS BRASS TABLET STAMPED, "HEAVEN 1969", SET IN TOP OF A CONCRETE POST FLUSH WITH THE GROUND. LOCATED AT THE ENTRANCE WAY TO THE "GATE OF HEAVEN" CEMETARY 0.15 MILE WEST OF THE INTERSECTION OF PASEO DEL NORTE N.E. AND WYOMING BLVD. N.E. STATION IS LOCATED ON THE SOUTH SIDE OF PASEO DEL NORTE. ELEVATION = 5378.78' (M.S.L.D.)

T.B.M.

A CHISELED "", ON TOP OF EXISTING WALL @ SE CORNER OF LA CUEVA HIGH SCHOOL SITE AS SHOWN BELOW.

END RETAINING WALL

EXISTING WALL

CONSTRUCT 2'-0" CONCRETE

5' PRIVATE DRAINAGE EASEMENT

BEGIN RETAINING WALL •

DRAINAGE CHANNEL

DETAIL 4

END RETAINING WALL

BEGIN RETAINING

TOP OF WALL

ELEVATION = 5465.72

• DRAINAGE CHANNEL-

CONSTRUCT 2'-0" CONCRETE

5' PRIVATE DRAINAGE EASEMENT

TRICKLE CHANNEL WITHIN

TRICKLE CHANNEL WITHIN

(TYPICAL)

ELEVATION = 5465.72' (M.S.L.D.)

T01 3

ו גוענו

S 0'23'07" W

BASIN A

EXIST. SANITARY MANHOLE

RIM ELEVATION = 5466.69'

-29

PAD **①**

F.F. = 5470.40'

CONCRETE HOUSE SLAB

S 89'51'36" E

SIGNAL AVENUE N.E.

114.74

114.08'

ONCRETE WHEELCHAIR RAMP

AVEUS AL ARREIT

FILED 4-14-1992, 92C-62

98.65'

S 89°36'53" E

PAD Ø —

5467.5

removal of the above referenced floodplain. In addition, the Carrington Subdivision, which is in the design and development stage, lies upstream from this site. The development of that property will eliminate the offsite flows currently impacting this property. In the event that the Carrington Subdivision does not proceed, then the previous plans for diverting the offsite flows will be effected. The floodplain continues onto the La Cueva High School site. At the time that the La Cueva High School site was platted, a floodplain easement, dedicated to AMAFCA, was created. Structural improvements have been constructed within that easement to receive the existing, undeveloped flows which cross this property and enter the high school site. The improvements on the high school site were designed for an offsite flow of 120 cfs. The developed runoff to be discharged to this facility by the proposed subdivision will be considerably less than that for which the improvement was designed. The developed runoff to be discharged to this point has been calculated at 18.9 cfs, which is the developed runoff from Basin B. The downstream drainage structure was designed by this office and certified as to compliance with the approved design on November 18, 1988. Im closing, the downstream structure has more than adequate capacity to receive the developed runoff from this site. The Grading Plan shows 1) existing grades indicated by spot elevations and contours at 1'0' intervals, 2) proposed grades The Grading Plan shows 1) existing grades indicated by spot elevations and contours at 1'0" intervals, 2) proposed grades indicated by spot elevations, top-of-curb elevations, and pad elevations, 3) the limit and character of the existing improvements, 4) the limit and character of the proposed improvements, and 5) continuity between the existing and proposed grades. As shown by this plan, the proposed construction consists of public streets and lot grading. Public and private drainage facilities are required to effect the grading and drainage of the site. Those facilities are depicted on the plan. The design of the public storm drainage improvements will be addressed in more detail with the Work Order plans. Further project specifications are enumerated in the grading notes which accompany this submittal. The site consists of three drainage begins. Rosin A is a relatively small area which discharges via Tierro. Alegae The site consists of three drainage basins. Basin A is a relatively small area which discharges via Tierra Alegre N.E. to Alameda Boulevard N.E. This small basin drains into the La Cueva Arroyo watershed. Based upon the previous submittal for Tierra La Cueva Unit 1, this area is allowed free discharge. Basin B consists of the majority of the site. Basin B drains internally to the existing drainage structure which is constructed on the La Cueva High School site. The capacity of that facility is addressed above. The third basin is Basin C, which is also a relatively small area. That basin discharges directly into Wilshire Avenue N.E. Wilshire Avenue N.E. drains in a westerly direction to Wyoming Boulevard

DRAINAGE PLAN

Vicinity Map

Grading Plan

Calculations

Grading Notes

. Sections & Details

As shown by the Vicinity Map, the site is located at the northwest corner of the intersection of Wilshire Avenue N.E. and

Barstow Street N.E. The site is bounded on the north by Tierra La Cueva Unit 1, and on the west by La Cueva High School.

This plan is a revision to the previously approved plan. The significant change is that Lots 13 and 20, Block 15, North Albuquerque Acres, Tract 2, Unit 3, have been combined with the previously platted Lot 40, Tierra La Cueva - Unit 1. In

response, the internal lot grading and street configuration have been modified. All offsite improvements, which consist

of Barstow Street N.E. and Wilshire Avenue N.E., are unchanged by this plan. This plan is an update to the internal

As shown by Panel 10 of 50 of the National Flood Insurance Program, Flood Insurance Rate Maps for the City of

Albuquerque, dated October 14, 1983, a portion of this site lies within a designated flood hazard zone. That zone is designated 'AD' (DEPTH 1). A Conditional Letter of Map Revision (CLOMR) is in progress. That CLOMR addresses the

The following Items concerning the Tierra La Cueva Unit 2 Drainage Plan are contained hereon:

N.E. The downstream capacity has been addressed by the previous submittal for this project

I TIKU - AVEUO AJ AKKEIT FILED 4-14-1992, 92C-62

5481.5

RIM ELEVATION = 5473.91
INV.ELEVATION = 5463.18

ROW AVENUE

grading and drainage of the subdivision.

The calculations which appear hereon analyze the existing and developed conditions for the 6-hour, 100-year rainfall event. The calculations have been performed in accordance with the procedure for 140 Acres and Smaller Basins as set forth in Section 22.2, Hydrology of the Development Process manual, Volume 2, Design Criteria, dated August 1991. As shown by these calculations, an increase in runoff is anticipated due to the proposed development. Downstream development will experience a decrease, however, due to the upstream diversion of runoff in accordance with the Carrington Subdivision and/or the Barstow Street Storm Drain as more fully described in the previous submittal which was approved on September 22, 1992, C19/D9A, for Preliminary Plat and Conditional Letter of Map Revision. Hydraulic computations also accompany this submittal for street capacities and public and private drainage facility capacities. As shown by these calculations, the improvements as designed have adequate capacity to handle the developed runoff from this

MATCH EXISTING GRADE

PAD •

5478.0

DRAWING RECORD

-CONSTRUCT RETAINING WALL ON P

NEW SINGLE 'A'

MANHOLE

RIM • 79.5

INV. 0 75.10

STORM INLET

NEW DOUBLE 'D'

SCANNED B) BYLASON

STORM INLET

-NEW STORM DRAIN

' 🖈 15' P.N.M. EASEMENT

| **| EA8**0.62 |

b. Basin B Volume

Site Characteristics

2. $P_{6,100} = P_{360} =$ 3. Total Area (A_T)

<u>Treatment</u>

a. Basin A

b. Basin B

c. Basin C

Volume

Existing Condition

2. Peak Discharge

<u>Developed Condition</u>

1. Volume

 $V_{100} = (E_w/12) A_T$

Peak Discharge

a. Basin A

1. Precipitation Zone

4. Existing Land Treatment

5. Developed Land Treatment

N = 2 Lots/0.29 Ac = 6.9 du/Ac $8 D = 7(N^2 + 5N)^{1/2} = 638 = 0.18 \text{ Ac}$

N = 23 Lots/5.09 Ac = 4.5 du/Ac R = 23 Lots/5.09 Ac = 4.5 du/Ac R = 2.34 Ac

N = 2 Lots/0.49 Ac = 4.1 du/Ac% $D = 7(N^2 + 5N)^{1/2} = 43\% = 0.21 \text{ Ac}$

 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$ $E_W = [(0.66)(5.88)] / 5.88 = 0.66 in$

 $Q_p = Q_{PA} A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$ $Q_p = Q_{100} = (1.87)(5.88) = 11.0 cfs$

% B = 100 - %D = 37% = 0.11 Ac

% B = 100 - %D = 54% = 2.75 Ac

% B = 100 - %D = 57% = 0.28 Ac

= $(E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$ = [(0.92)(2.75) + (2.36)(2.34)] / 5.09 = 1.58 in.

 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$ $E_W = [(0.92)(0.11) + (2.36)(0.18)] / 0.29 = 1.81 in.$

 $V_{100}^{100} = (1.81/12)0.29 = 0.044$ ac. ft. = 1,920 cf

CALCULATIONS

2.60

5.88

Area (sf/ac)

256,020/5.88

 $V_{100} = (E_w/12)A_T = [(0.66)/12]5.88 = 0.323 \text{ ac. ft.} = 14,090 \text{ cf}$

100%

 $V_{100}^{100} = (1.58/12)5.09 = 0.66$ ac. ft. = 28,640 cf

2. Peak Discharge

 $Q_{p} = Q_{PA} A_{A} + Q_{PB} A_{B} + Q_{PC} A_{C} + Q_{PD} A_{D}$ $Q_{p} = Q_{100} = (2.60)(2.75) + (5.02)(2.34)$ $Q_{100} = 18.9 \text{ cfs}$

 $Q_{p} = Q_{PA} A_{A} + Q_{PB} A_{B} + Q_{PC} A_{C} + Q_{PD} A_{D}$ $Q_{p} = Q_{100} = (2.60)(0.11) + (5.02)(0.18)$ $Q_{100} = 1.2 \text{ cfs}$

c. Basin C

1. Volume

= $(E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$ = [(0.92)(0.28) + (2.36)(0.21)] / 0.49 = 1.54 in.

 $V_{100}^{-3} = (1.54/12)(0.49) = 0.063$ ac. ft. = 2,740 cf

2. Peak Discharge

 $Q_{p} = Q_{PA} A_{A} + Q_{PB} A_{B} + Q_{PC} A_{C} + Q_{PD} A_{D}$ $Q_{p} = Q_{100} = (2.60)(0.28) + (5.02)(0.21) = 1.8 cfs$

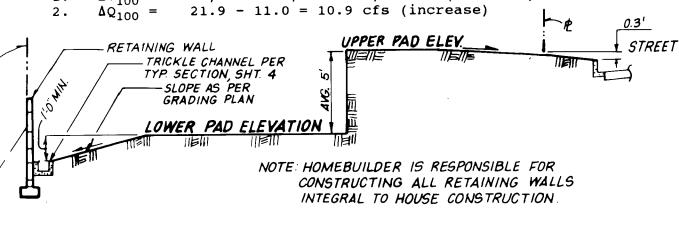
d. Total Developed Basins

1. Volume = $V_{100A} + V_{100B} + V_{100C}$ $V_{100T} = 1,920 + 28,640 + 2,740 = 33,300 \text{ cf}$

2. Peak Discharge = $Q_{100A} + Q_{100B} + Q_{100C}$ $Q_{100T} = 1.2 + 18.9 + 1.8 = 21.9 \text{ cfs}$

<u>Comparison</u>

1. $\Delta V_{100} = 28,640 - 14,090 = 14,550 \text{ cf (increase)}$





PROJECT NO. 4368.91

REVISIONS

921044

14

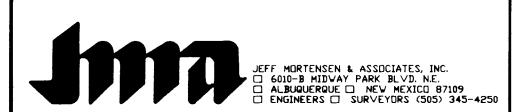
GRADING AND DRAINAGE PLAN TIERRA LA CUEVA -

10" WATERLINE

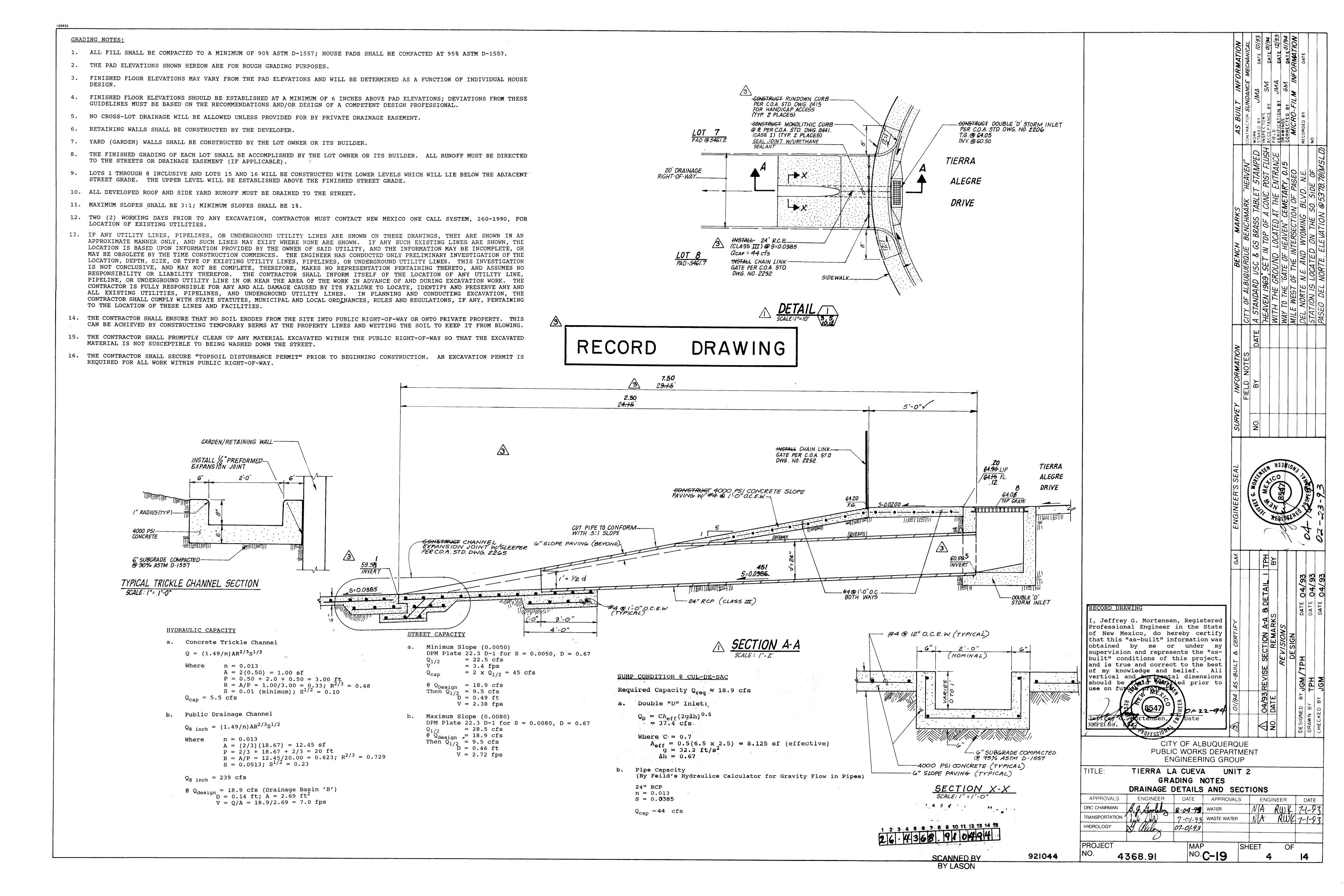
APPROVED FOR ROUGH GRADING

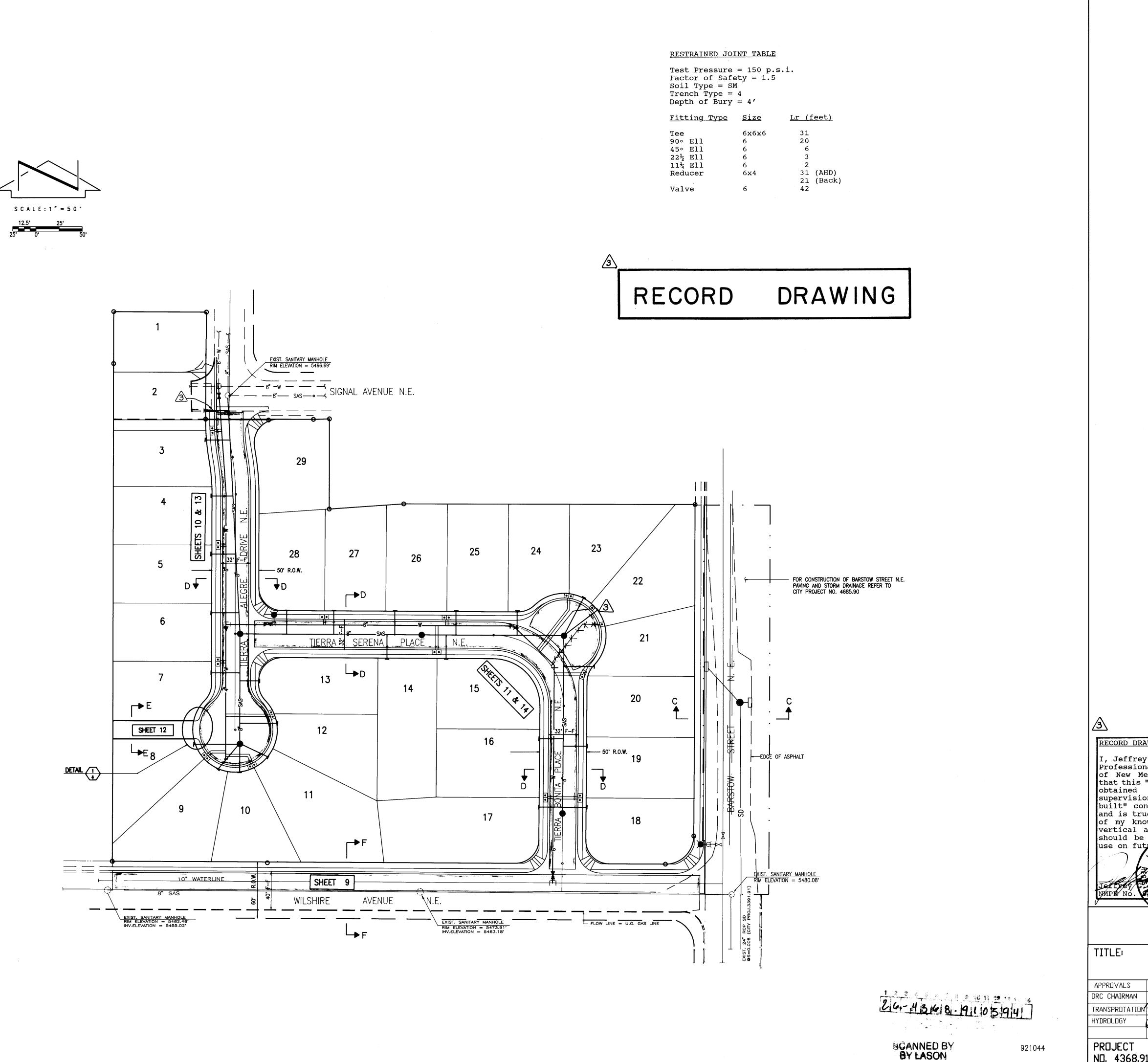
- FLOW LINE - U.G. GAS LINE

DESIGNED BY LG.M. T.C. s ; LABEL FLOODPLAIN 2 04/93 JGM REVISE SECTION B-1 3 01/94 G.M. RECORD DRAWING

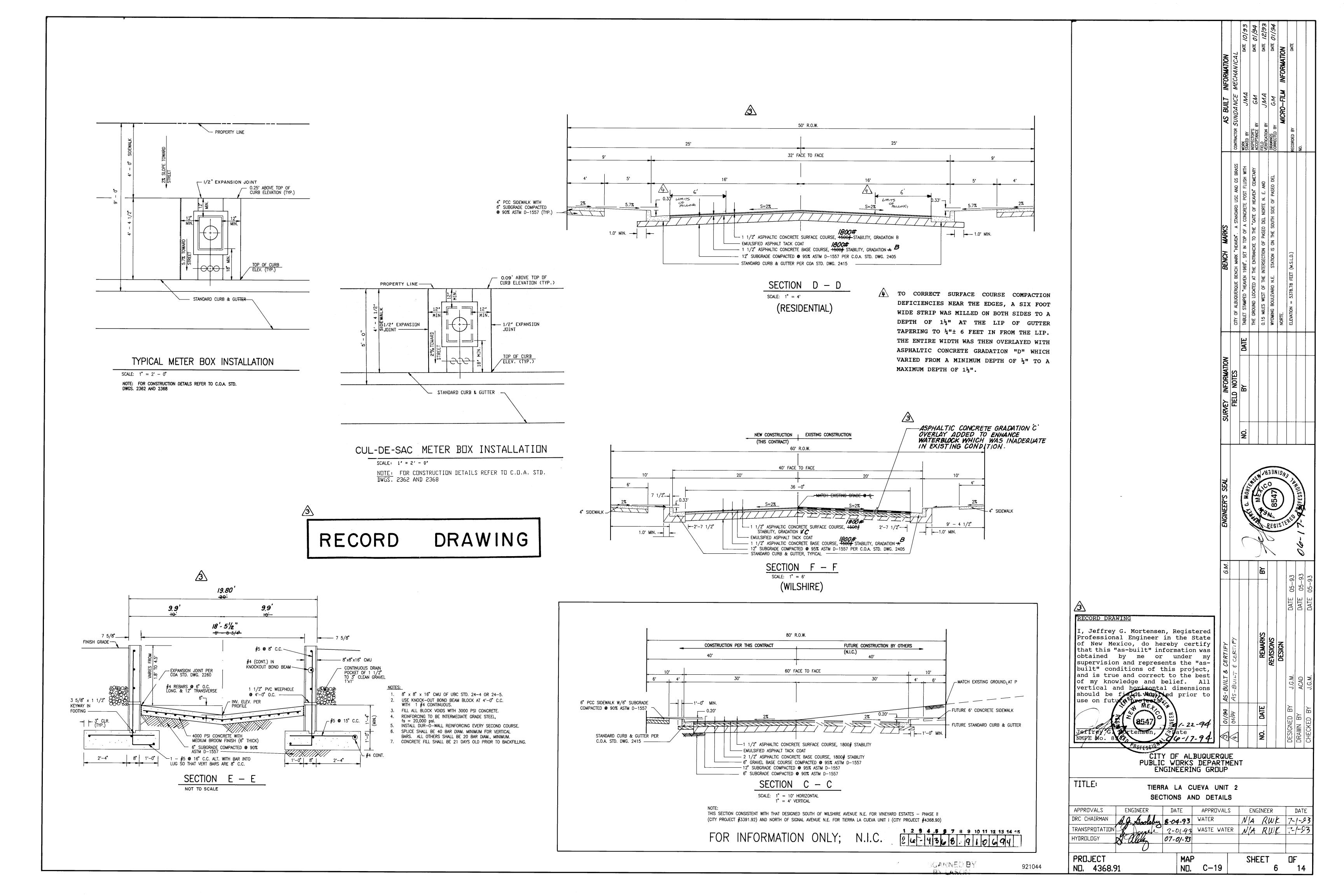


04/93 JGM CLARIFY RETAINING WALLS; SECTION B-B; ADD WILSHIRE 02-1993 DRAWN BY





RECORD DRAWING I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to should be field verified prior to use on future projects 1201-22-9 4 CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP TIERRA LA CUEVA UNIT 2 COMPOSITE SITE PLAN ENGINEER DATE APPROVALS ENGINEER DATE B. J. Goolshy 8-04-93 WATER 7-01-93 WASTE WATER 07-01-93 SHEET N□. C-19 ND. 4368.91

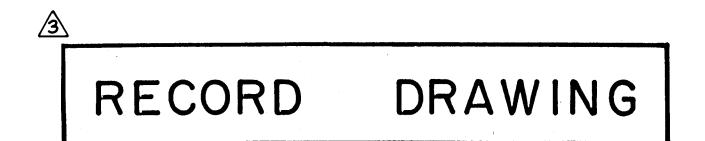


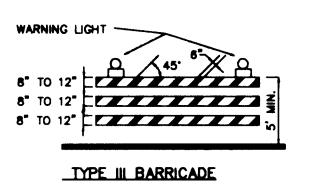
CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

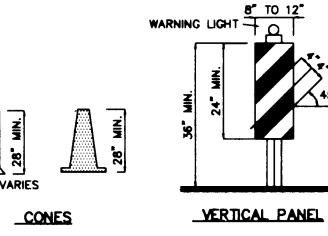
- 1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION. MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A 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. CONTRACTOR SHALL NOT BEGIN WORK BEFORE 8:30 A.M. OR END WORK AFTER 4:00 P.M. WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.
- 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 MUTCD, LATEST EDITION.
- 19. 24 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.

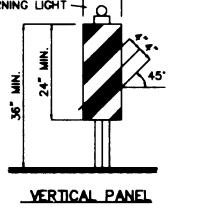
- 21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
- 22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH 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. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION. AS WELL AS OTHER
- 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 STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

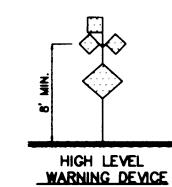
PROJECT CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES









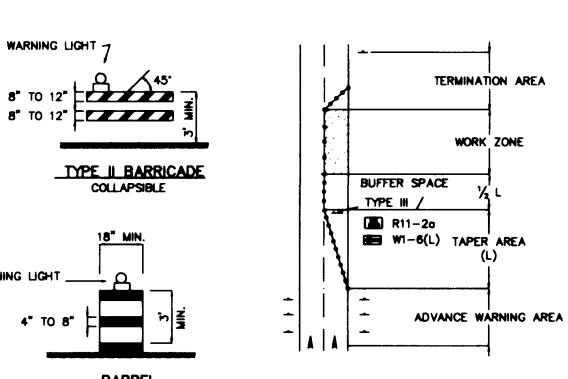


WORK AREA

- 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

LEGEND

- 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.



SPEED LIMIT (MPH)	TA	PER LENO (FEET)	ЭТН	MINIMUM NUMBER	MAXIMUM DEVIC SPACING IN FEE		
	10' LANE	11' LANE	12' LANE	OF DEVICES FOR TAPER	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	

TAPER REQUIREMENTS

TRAFFIC CONTROL ELEMENTS 8" TO 12" MILES PER HOUR

RECOMMENDED SIGN SPACING FOR ADVANCE WARNING SIGN SERIES MINIMUM DISTANCE IN FEET BETWEEN FROM LAST SIGNS SIGN TO TAPER

TAPER CRITERIA

TAPER LENGTH COMPUTATION

TYPE OF TAPER

UPSTREAM TAPER:

MERGING TAPER

SHIFTING TAPER

SPEED LIMIT

40 MPH OR LESS

45 MPH OR GREATER

L = TAPER LENGTH

W = WIDTH OF OFFSET IN FEET

S = POSTED SPEED OR OFF-PEAK

85-PERCENTILE SPEED IN MPH

SHOULDER TAPER

TWO-WAY TRAFFIC TAPER

DOWNSTREAM TAPERS

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 LENGTH

MINIMUM

L = W x S

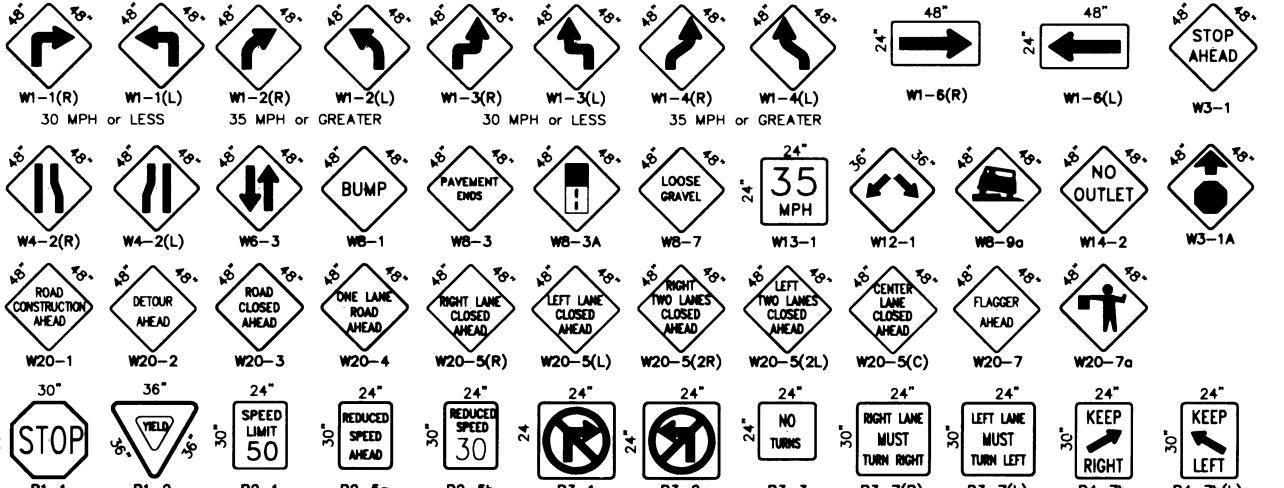
L MINIMUM

MINIMUM

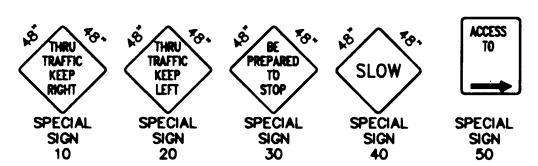
100 FEET MAXIMUM

100 FEET PER LANE

SIGN FACE DETAILS



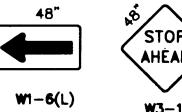
W4-2(R)	W4-2(L)	W6-3	W8-1	W8-3	W8-3A	W8-7	W13-1	W12-1	W8-9a	W14-2	W3-1A	
ROAD CONSTRUCTION AHEAD W20-1	DETOUR AHEAD W20-2	ROAD CLOSED AHEAD	ONE LANE ROAD AHEAD W20-4	RIGHT LANE CLOSED AHEAD W20-5(R)	LEFT LANE CLOSED AHEAD W20-5(L)	RIGHT TWO LANES CLOSED AHEAD W20-5(2R)	TWO LANES CLOSED AHEAD W20-5(2L)	CENTER LANE CLOSED AHEAD W20-5(C)	FLAGGER AHEAD W20-7	ÿ, y₀, w20-7a		
STOP	36" (FILE) (S) (R1-2)	SPEED LIMIT 50	REDUCED SPEED AHEAD	REDUCED SPEED 30 R2-5b	24" R3-1	24" R3-2	24" NO TURNS R3-3	RIGHT LANE MUST TURN RIGHT R3-7(R)	LEFT LANE MUST TURN LEFT R3-7(L)	EEP RIGHT R4−7b	KEEP KEEP LEFT R4-7b(L)	
DO NOT	WRONG WAY	36" NE WA			NO LARKING S	ROAD S	LANE CLOSED	ROAD CLOSED TO THRU TRAFFIC	END DETOI	, DE	TOUR	DE1

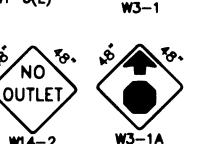


ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

ALL ADVANCE WARNING SIGNS SHALL BE A MINIMUM OF FORTY EIGHT (48) INCHES BY FORTY EIGHT (48) INCHES IN SIZE AND SHALL HAVE ONE WARNING LIGHT.

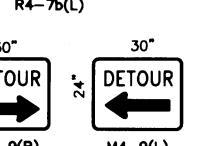


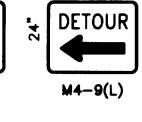


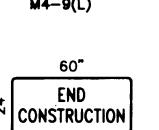


CDETOUR

M4-10(L)







SCANNED BY BYLASON

921044

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP TIERRA LA CUEVA, UNIT 2 SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS DATE APPROVALS ENGINEER APPROVALS ENGINEER DATE DRC CHAIRMAN B. J. Soolahy 8-04-93 WATER
TRANSPORTATION N.A. C. W.O. 7-01-97 WASTE NA RWK 7-1-23 7-01-93 WASTE WATER V/A RUL 7-1-93 HYDROLOGY 07-01-93 PROJECT SHEET MAP OF 1NO. C-19 4368.91 **7A** 14

BY

