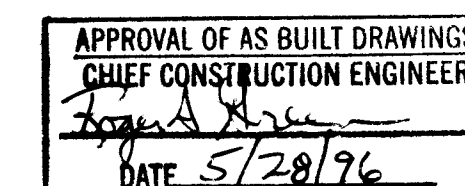




CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

EL PUEBLO ROAD SEWER DIVERSION

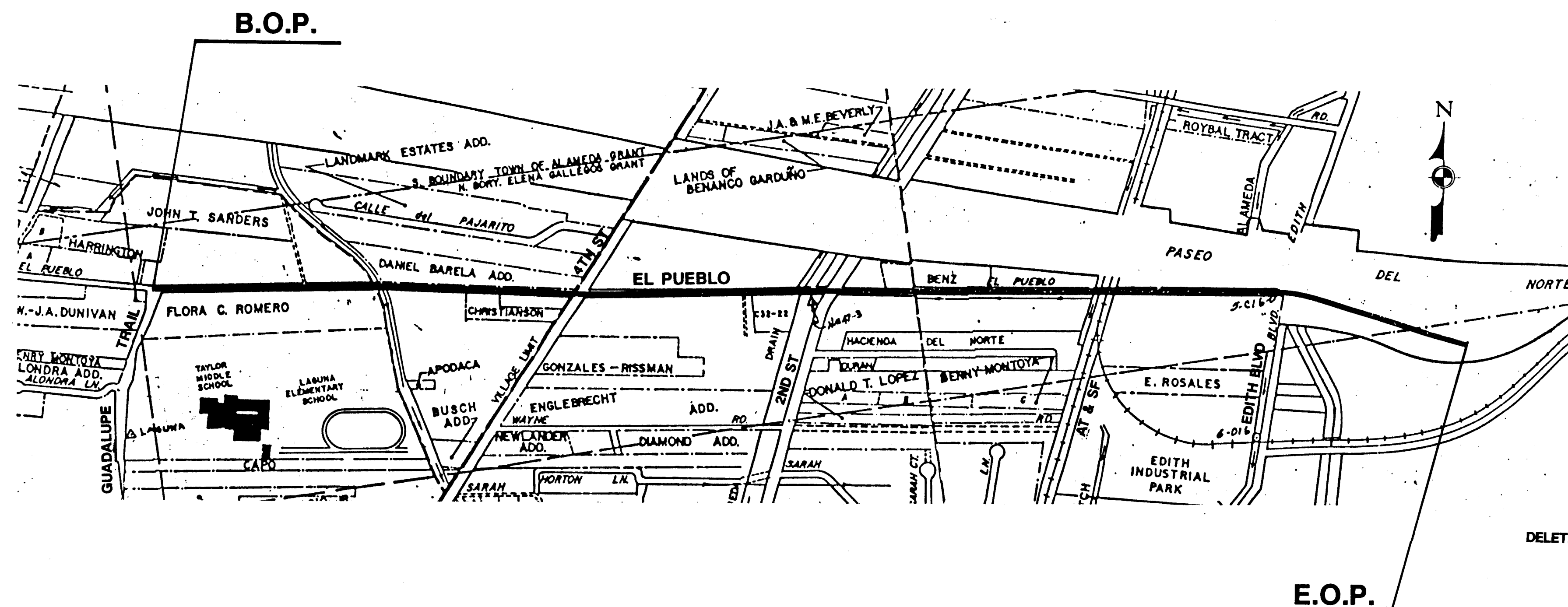


RECORD SET
David J. Laron
5-23-96

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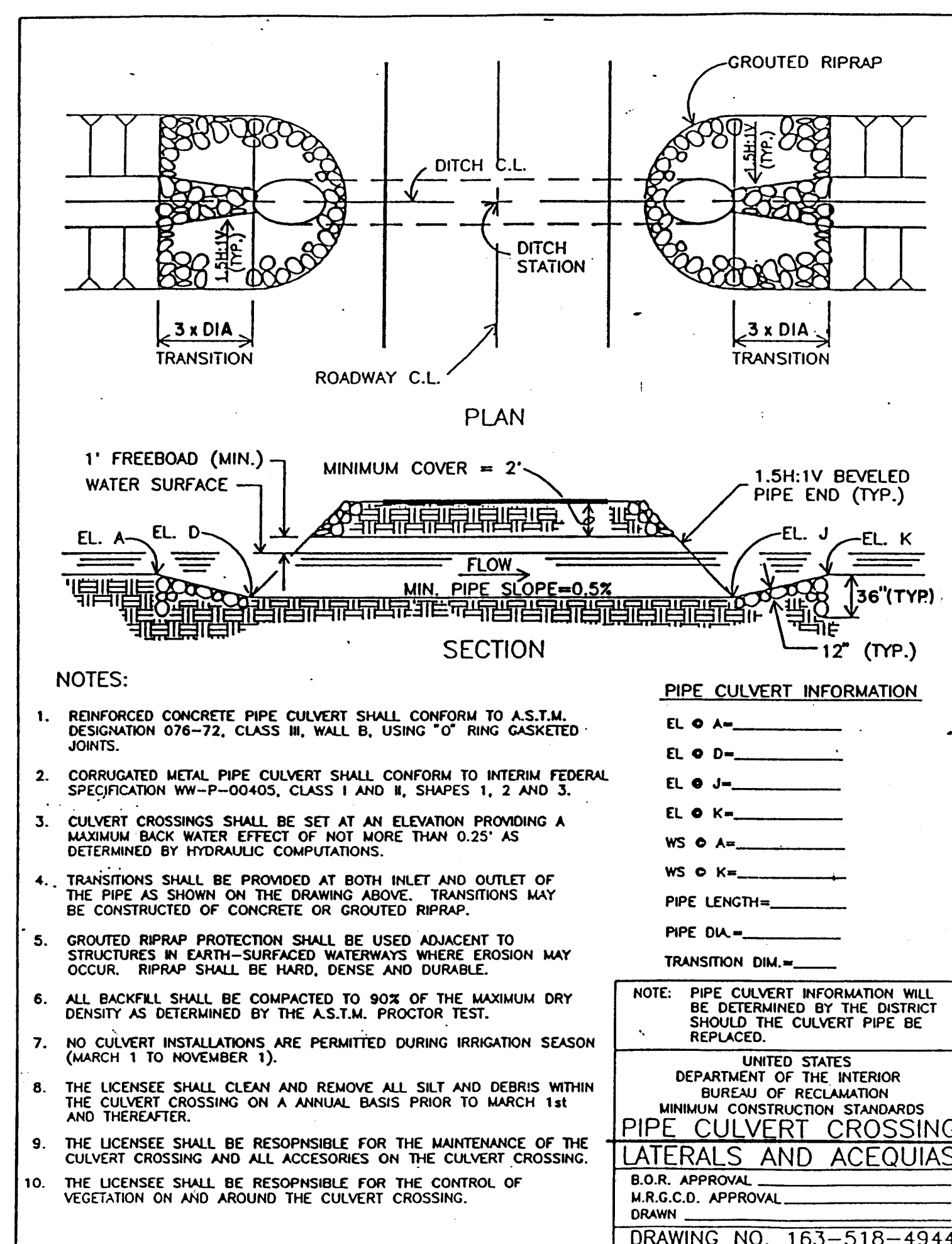
△	1, 10, 14													
REV.	SHEETS	CITY ENGR.	DATE	USER DEPT.	DATE	USER DEPT.	DATE							
				<i>Roger A. Green</i>	8/1/92									
APPROVAL OF REVISIONS														

	H N Holmes & Narver	APPROVED FOR CONSTRUCTION
	Greiner, Inc.	<i>Clayton Roff</i>
	4778.90	SHEET <u>1</u> OF <u>15</u>



M R G C D
GENERAL CONSTRUCTION NOTES

1. Any work to be performed within the Middle Rio Grande Conservancy District Right-of-way shall be closely coordinated with the Middle Rio Grande Conservancy District; Engineering Department at 247-0234.
2. No work is to be done on facilities or structures belonging to, or operated by, the Middle Rio Grande Conservancy District, (M.R.G.C.D.) between March 1 and October 31 inclusive. However, work may be permitted by the M.R.G.C.D. if it can be shown that the work will not interfere with operations of the M.R.G.C.D. facility. All Work to be done within the M.R.G.C.D. facilities must be approved by the M.R.G.C.D. Engineer prior to commencing work.
3. The Contractor shall not store equipment, new materials or debris within District right-of-way which may interfere with operations and maintenance of the M.R.G.C.D. facility.
4. The Contractor shall not service vehicles or equipment within District right-of-way.
5. Seeding of disturbed areas within District Right-of-Ways is required per the attached seeding specifications.
6. The Contractor must maintain a minimum cover of 3' over all culvert crossings used for access to the project site.
7. The Contractor is responsible for repairing and/or replacement of damaged structure/structures within District Right-of-Ways that may occur due to the Contractors activities.
8. All damaged culvert crossings must be restored and/or replaced to the satisfaction of the Middle Rio Grande Conservancy District.
9. All salvageable culverts, irrigation gates, etc. must be returned to the District.
10. The Contractor is responsible for executing a "Special Use License Agreement" with the District prior to construction.



DRAWING LIST

1. TITLE SHEET
2. VICINITY MAP AND DRAWING LIST
3. GENERAL NOTES AND LEGEND
4. PLAN AND PROFILE STATION BOP TO STATION 15+75
5. PLAN AND PROFILE STATION 15+75 TO STATION 29+50
6. PLAN AND PROFILE STATION 29+50 TO STATION 41+25
7. PLAN AND PROFILE STATION 41+25 TO STATION 54+00
8. PLAN AND PROFILE STATION 54+00 TO STATION 66+75
9. PLAN AND PROFILE STATION 66+75 TO STATION 79+50
10. PLAN AND PROFILE STATION 79+50 TO STATION 90+50
- ~~11. PLAN AND PROFILE STATION 90+50 TO STATION B.O.P.~~
12. TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES
(REF. M.U.T.C.D.)
13. SIGNING AND CONSTRUCTION TRAFFIC CONTROL
STANDARDS
14. GRIT CHAMBER LAYOUT
15. GRIT CHAMBER GRADING & DRAINAGE PLAN

[illegible]

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RECORD SET
David G. Larrow
5-23-86

HN
Holmes & Narver

Greiner, Inc.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **EL PUEBLO RD. SEWER DIVERSION
VICINITY MAP**

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG CHAIRMAN	<i>B.G. Baskley</i>	2-9-95	WATER	<i>CSN</i>	2/9/95
TRANSPORTATION	N/A		WASTE WATER	<i>CSN</i>	2/9/95
HYDROLOGY	N/A		BCPWD	<i>CSN</i>	2/9/95

PROJECT NO.	4778.90	MAP NO.	SHEET 2 OF 15
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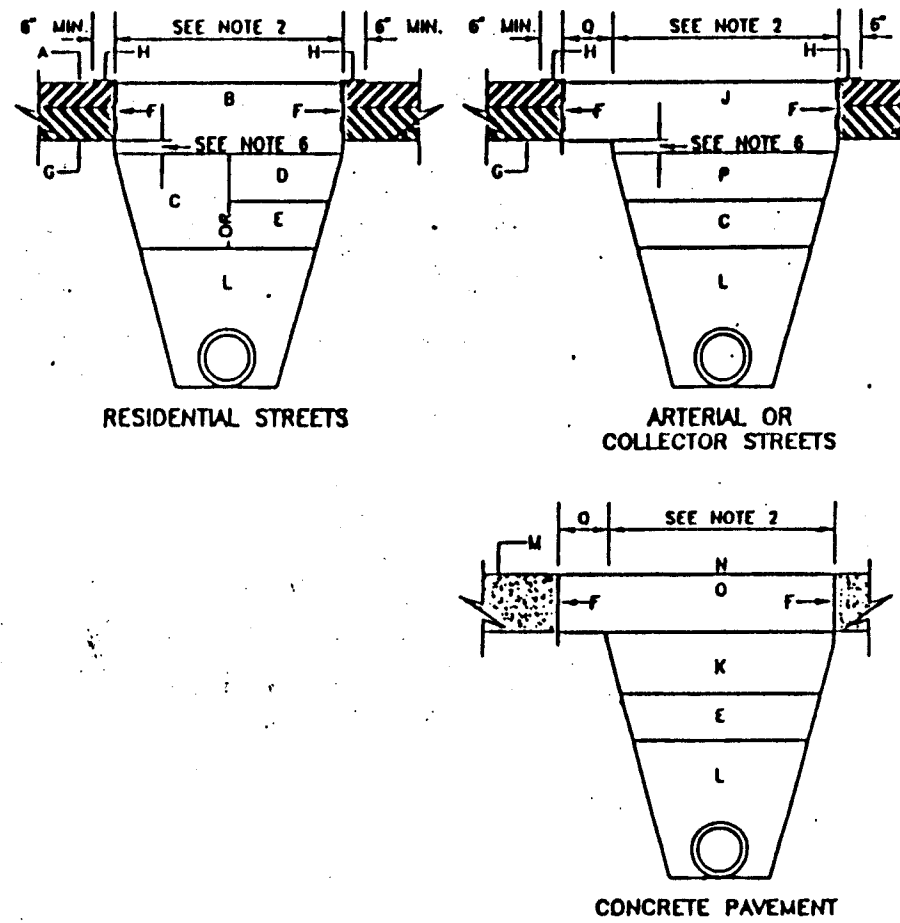
GENERAL NOTES

- ALL WORK DETAILED ON THESE DRAWINGS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS OTHERWISE STATED, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986, HEREBY REFERRED TO AS THE SPECIFICATIONS. REFERENCES MADE TO STANDARD DRAWINGS IMPLY THAT SECTION OF THE SPECIFICATIONS WHICH INCLUDES MISCELLANEOUS STANDARD DETAILS.
- LOCATION OF UTILITIES ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL PERTINENT UTILITIES IN THE FIELD. CALL ONE CALL SYSTEM, INC. AT 260-1990 TWO WORKING DAYS BEFORE ANY EXCAVATION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUPPORT ALL UTILITIES EXPOSED DURING CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR DAMAGE TO ALL UTILITIES, INCLUDING SERVICE LINES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.
- 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.

ALL PAVEMENT MARKINGS OR OTHER TRAFFIC CONTROL DEVICES INCLUDING TRAFFIC CONTROL CONDUIT, ADVERSELY AFFECTED BY CONSTRUCTION SHALL BE PLACED IN PRE-CONSTRUCTION CONDITION. THESE COSTS SHALL BE INCIDENTAL TO THE PROJECT.
- CONTRACTOR SHALL COORDINATE WITH PNM (JIM VANN - 848-3426) WHERE LIP OF TRENCH IS LESS THAN 5' TO POWER POLE. COSTS ASSOCIATED WITH SUPPORT OF EXISTING POLES SHALL BE INCIDENTAL TO THE PROJECT.
- CONTRACTOR SHALL BE CHARGED BY PNM FOR ANY DAMAGE TO PNM CABLES AND FOR SUPPORTING OR MINOR RELOCATIONS OF CABLES DURING CONSTRUCTION. THESE COSTS SHALL BE INCIDENTAL TO THE PROJECT.
- ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING. FINAL SURFACE COURSE SHALL BE INSTALLED AFTER FULL APPROVAL AND ACCEPTANCE OF THE UTILITY LINES.
- PAVEMENT REPLACEMENT SHALL BE BY LAYDOWN MACHINE. PAVEMENT REPLACEMENT AND BACKFILL SHALL BE PER DETAIL "A" & DETAIL "B", THIS SHEET.
- THE CONTRACTOR SHALL PROVIDE FOUR PROJECT CONSTRUCTION SIGNS PER THE REQUIREMENTS OF SPECIAL PROVISIONS SECTION 3. THE CONTRACTOR SHALL MOVE THE SIGNS DURING THE PROJECT AT THE DIRECTION OF THE ENGINEER.
- STATIONING IS BASED ON CENTERLINE OF SANITARY SEWER, CENTERLINE MANHOLE TO CENTERLINE MANHOLE, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DEFECTIVE OR DETERIORATED CONDITION UPON VISUAL INSPECTION OF EXISTING SERVICE LINES. THE ENGINEER OR THE CONTRACTOR AS DIRECTED BY THE ENGINEER SHALL NOTIFY PROPERTY OWNERS OF SUCH SITUATION AND SHALL PROVIDE THE PROPERTY OWNERS WITH THE OPPORTUNITY TO VISUALLY OBSERVE AND REPLACE THE SERVICE LINE WITHIN A REASONABLE AMOUNT OF TIME.
- PVC GRAVITY FLOW PIPE IN SIZES 18 INCHES AND LARGER SHALL MEET THE REQUIREMENTS OF ASTM F679 OR ASTM F794. MINIMUM PIPE STIFFNESS SHALL BE 46 PSI.
- ALL NEW MANHOLES SHALL BE COATED WITH STRONG SEAL OR APPROVED EQUAL.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND RECONNECT ALL EXISTING SEWER SERVICE CONNECTIONS.
- SANITARY SEWER SERVICE RECONNECTIONS AND TRANSFERS SHALL BE PAID FOR IN ACCORDANCE TO THE UNIT PRICE LISTED ON THE BID PROPOSAL. HOWEVER, THOSE CONNECTIONS DAMAGED WHILE PERFORMING THE WORK UNDER THIS PROJECT SHOULD BE REPLACED AT NO ADDITIONAL COST TO THE CITY.
- ALL SANITARY SEWER MANHOLES SHALL BE BUILT IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD DRAWING 2102. ALL SANITARY SEWER MANHOLES SHALL BE 4 FEET DIAMETER UNLESS OTHERWISE NOTED.
- ELECTRONIC MARKER DISCS SHALL BE INSTALLED PER SECTION 170 OF THE TECHNICAL SPECIFICATIONS.
- INSTALL VERTICAL DROP AT MANHOLE AS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2116.
- CONTRACTOR SHALL COORDINATE WITH THE GAS COMPANY OF NEW MEXICO (761-7775) TWO WEEKS PRIOR TO NEEDING A GAS LINE SEGMENT RELOCATED.

- PARALLEL WATER AND SEWER LINES SHALL BE LAID AT LEAST 10 FEET APART HORIZONTALLY AND THE WATERLINE SHOULD BE AT A HIGHER ELEVATION THAN THE SEWER.
- WHEN WATER AND SEWER LINES CROSS EACH OTHER, THE WATERLINE SHALL BE AT LEAST EIGHTEEN (18) INCHES ABOVE THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATERLINE JOINTS.
- 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 GENERAL CONDITIONS.
- ALL EXISTING SANITARY SERVICES SHALL BE RECONNECTED TO THE NEW SEWER MAIN AS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2134.
- EXISTING MANHOLE FLOORS SHALL BE REHABILITATED AS PER CITY OF ALBUQUERQUE STANDARD DRAWINGS 2101 AND 2102.
- CONTRACTOR SHALL NOTIFY THE BERNALILLO COUNTY PUBLIC WORKS DEPT., TRAFFIC CONTROL MANAGER, SHERIFF, AND FIRE DEPARTMENTS IN WRITING, A MINIMUM OF 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK WITHIN COUNTY ROW.
- THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF THE MASTER UTILITY EASEMENT AND RIGHT-OF-WAY AGREEMENT ENTERED INTO BETWEEN THE COUNTY OF BERNALILLO AND THE CITY OF ALBUQUERQUE. EFFECTIVE DATE 8-20-1990.
- ALL TRENCH BACKFILL WITHIN COUNTY RIGHT OF WAY SHALL BE COMPACTED TO 95% PERCENT IN ACCORDANCE WITH ASTM D 1557 IN ACCORDANCE WITH COUNTY OF BERNALILLO STANDARDS.
- ECCENTRIC PLUG VALVES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - NON-LUBRICATED TYPE, MECHANICAL JOINT.
 - VALVE BODY: ASTM A-126, CLASS B CAST IRON WITH 90% NICKEL WELDED OVERLAY SEAT.
 - PLUG: ASTM A126, CLASS B CAST IRON WITH BUNA RUBBER COATING.
 - BEARINGS: PERMANENTLY LUBRICATED BRONZE OR STAINLESS STEEL.
 - EXTERIOR COATING: ASPHALT VARNISH.
 - PRESSURE RATING: 150 PSI.
 - BURIED OPERATORS:
- BURIED SERVICE OPERATORS ON VALVES LARGER THAN 2-1/2" SHALL HAVE A 2-INCH AWWA OPERATING NUT. ALL MOVING PARTS OF THE VALVE AND OPERATORS SHALL BE ENCLOSED IN A HOUSING TO PREVENT CONTACT WITH THE SOIL.
- BURIED SERVICE OPERATORS FOR QUARTER-TURN VALVES SHALL BE DESIGNED TO WITHSTAND 300 FOOT-POUNDS OF INPUT TORQUE AT THE FULLY OPEN OR FULLY CLOSED POSITIONS WITHOUT DAMAGE TO THE VALVE OR OPERATOR AND SHALL BE GREASE PACKED AND GASKETED TO WITHSTAND A SUBMERSION IN WATER TO 10 PSI.
- VALVES SHALL BE INSTALLED WITH EXTENSION STEMS, AS REQUIRED, AND VALVE BOXES.
- A SINGLE LANE OF TRAFFIC SHALL BE MAINTAINED ON THE NORTH SIDE OF EL PUEBLO ROAD IN THE VILLAGE OF LOS RANCHOS DE ALBUQUERQUE TO ALLOW SCHOOL BUS AND OTHER LOCAL TRAFFIC.

- CONSTRUCTION ON EL PUEBLO ROAD AND GUADALUPE TRAILS SHALL BE COORDINATED BY THE CONTRACTOR TO PREVENT DISRUPTION OF SCHOOL BUS TRAFFIC TO TAYLOR MIDDLE SCHOOL.
- CRITICAL INTERSECTION WORK SHALL NOT START UNTIL THE CONTRACTOR HAS ALL MATERIAL, EQUIPMENT, AND NECESSARY PERSONNEL ON-SITE. TRAFFIC CONTROL DEVICES SHALL NOT BE PLACED PREMATURELY.
- ALL IRRIGATION PIPE CONSTRUCTION SHALL CONFORM TO THE DETAIL SHOWN BELOW.
- THE CONTRACTOR SHALL NOTIFY MR. DON MARQUEZ (764-6186) AT SUN TRAN 5 DAYS PRIOR TO WORKING AT THE 4TH ST./EL PUEBLO ROAD INTERSECTION.
- THE MAXIMUM LENGTH OF OPEN TRENCH SHALL BE 300 FEET.
- PRIOR TO THE START OF CONSTRUCTION ALL ADJACENT PROPERTY OWNERS SHALL BE GIVEN NOTIFICATION BY THE CONTRACTOR OF THE FORTHCOMING CONSTRUCTION IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS. THIS NOTIFICATION WILL INCLUDE THE DETERMINATION OF THE LOCATION OF NEW SANITARY SERVICE CONNECTIONS OR THE CONDITION OF AN EXISTING SANITARY SERVICE LINE TO BE RECONNECTED TO THE NEW SEWER MAIN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS TO ALL ADJACENT PROPERTIES.



GENERAL NOTES

- COMPACTION AS DETERMINED BY ASTM D 1557 MAX. DENSITY.
- TRENCH CUT WIDTHS SHALL BE MIN. WIDTH REQ'D FOR UTILITY INSTALLATION, ECONOMICAL BACKFILL COMPACTION AND COMPLIANCE WITH CURRENT AND APPLICABLE SAFETY REGULATIONS.
- ALL PAVEMENT CUT EDGES WILL BE THINNED TO PRESENT AN EVEN LINE PRIOR TO REPLACEMENT OF PAVING MATERIALS. "STITCH" CUTTING OF PAVEMENT WILL NOT BE PERMITTED.
- FOR RESIDENTIAL STREETS, ASPHALT CONC. SURFACE COURSE SHALL BE 1 1/2" - THE REMAINDER SHALL BE BASE COURSE.
- FOR ARTERIAL OR COLLECTOR STREETS, ASPHALT CONC. SURFACE COURSE SHALL BE 1 1/2" - 2". THE REMAINDER SHALL BE BASE COURSE.
- ADDITIONAL 2" THICKNESS OF ASPHALT CONC. REQ'D ON PAVEMENT CUTS LESS THAN 8" WIDE OR LESS THAN 100' LONG. FOR ASPHALT CONC. PAVEMENT CUTS 8" OR MORE IN WIDTH AND LONGER THAN 100' SHALL BE PLACED WITH LAYDOWN MACHINE TO A DEPTH EQUAL TO THAT OF ASPHALT CONC. REMOVED OR TO THE DEPTH SHOWN ON DWG. 2405, 2407, 2408 FOR APPROPRIATE PAVEMENT SECTION, WHICH EVER IS GREATER.

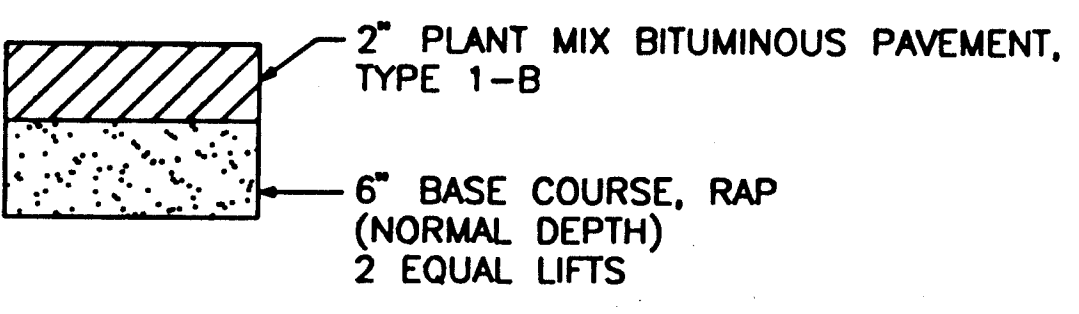
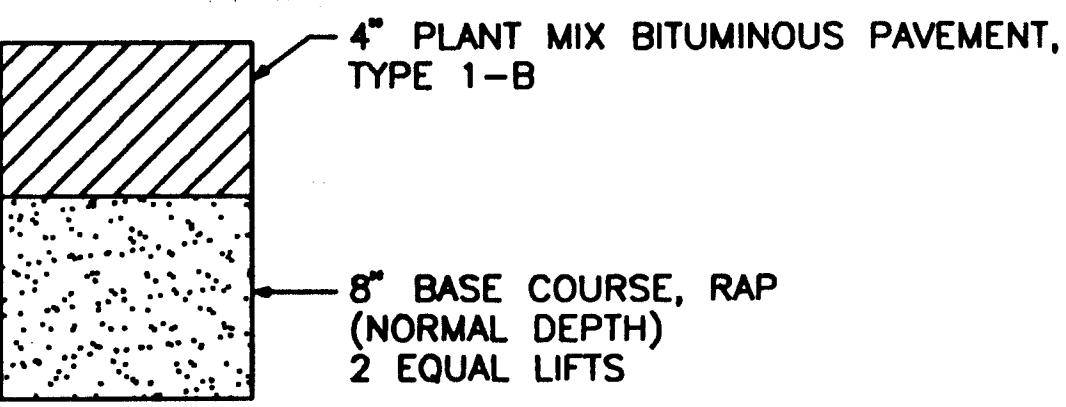
CONSTRUCTION NOTES

- 2"-4" EXIST. ASPHALT SURFACE COURSE.
- 2"-4" ASPHALT CONC. TO BE 2" THICKER THAN EXIST. PAVEMENT. SEE NOTES 5 & 6.
- 17" COMPACTED SUBBASE MATERIAL, PLACED IN 2"-6" LIFTS, 95% COMPACTION.
- 6" BASECOURSE, 95% COMPACTION.
- 6" SUBGRADE MATERIAL, 95% COMPACTION.
- SAWCUT OR BLACKTOP ASPHALT PAVEMENT, SAWCUT ONLY ONE THIRD CONC. PAVEMENT DEPTH.
- EXIST. ASPHALT PAVEMENT.
- TACK COAT.
- 4"-6" ASPHALT CONC. TO BE 2" THICKER THAN EXIST. PAVEMENT. SEE NOTES 5 & 6.
- 6" BASECOURSE, 95% COMPACTION.
- SUBGRADE MATERIAL, 95% COMPACTION.
- ENGINEER'S REQUIREMENTS.
- 10" MATCH EXIST. THICKNESS, 6" MIN. 4000 P.S.I.
- 6" BASECOURSE, 95% COMPACTION.
- 17" CUT-BACK, ONLY APPLICABLE TO FED. HWY. AND HSHSD FUNDED PROJECTS.

COUNTY OF BERNALILLO

RECORD SET

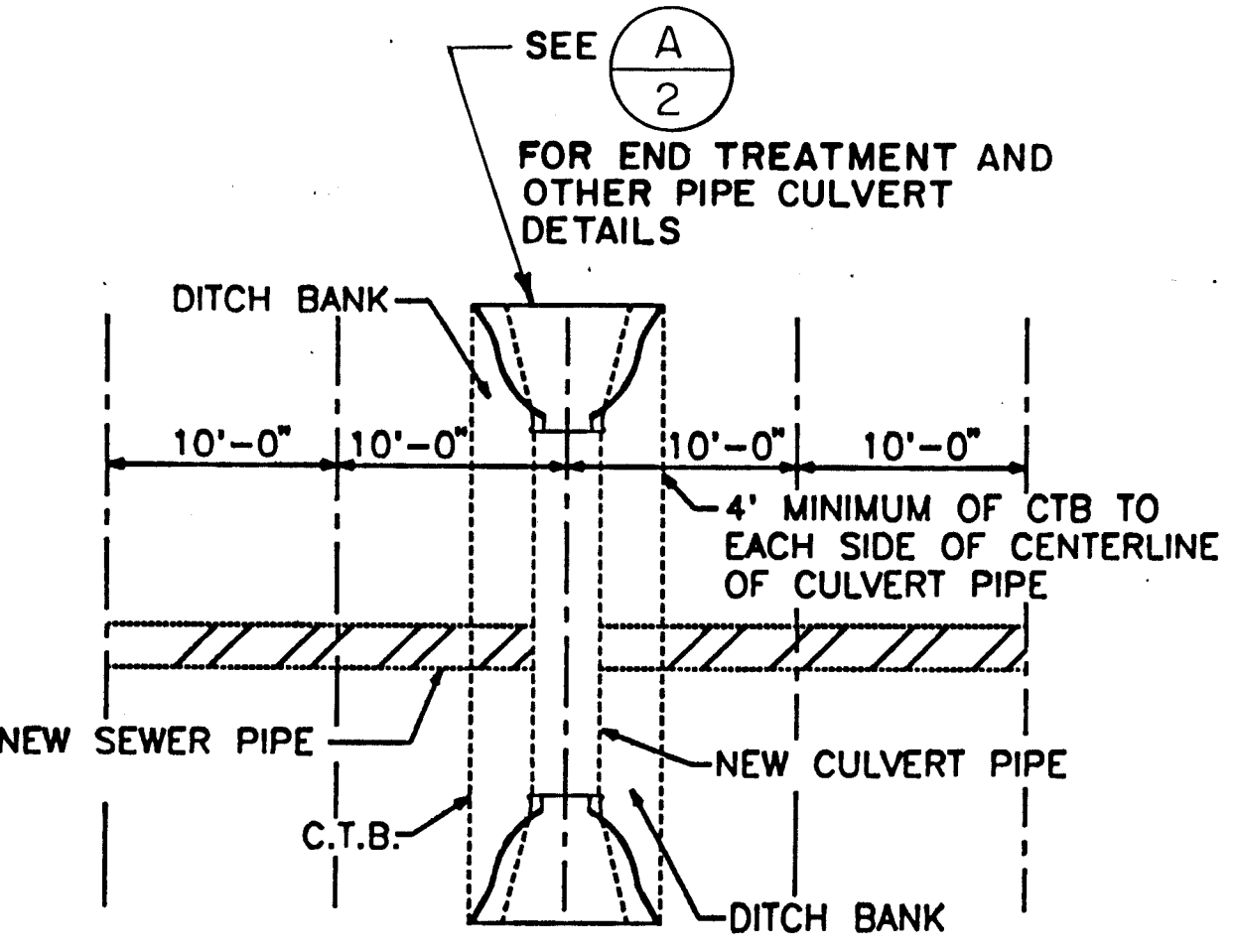
PAVING COUNTYWIDE PAVEMENT CUTS FOR ALL UTILITIES DWG. 2465



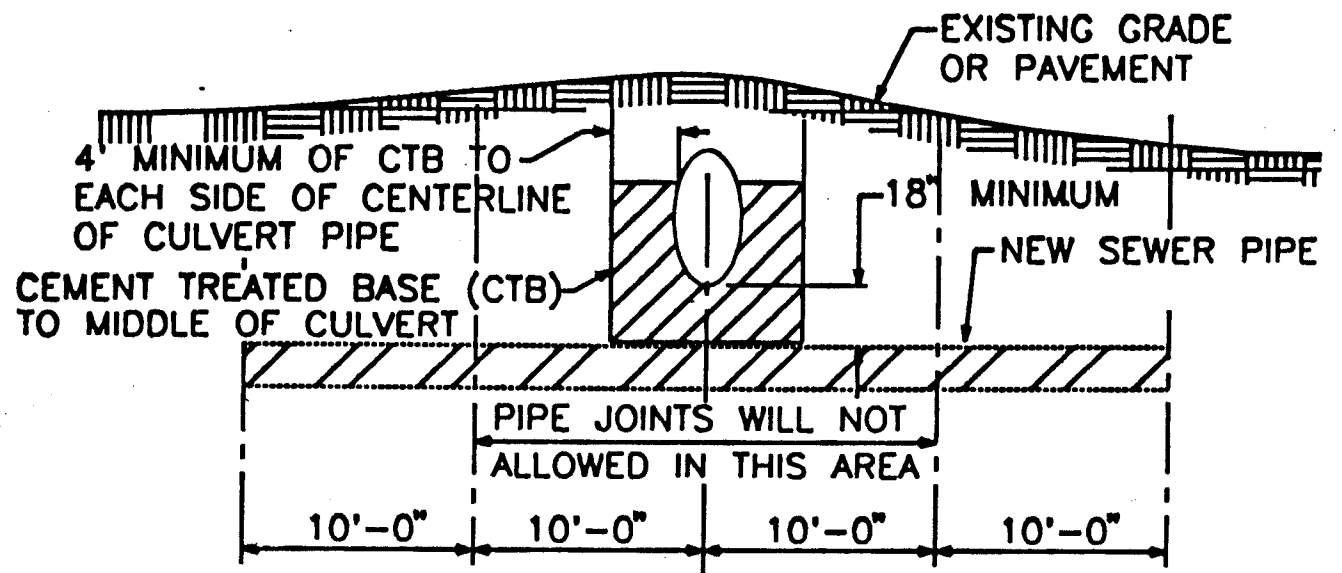
B.O.P. TO STA 33+25

STA 34+00 TO E.O.P.

EL PUEBLO RD
PAVEMENT REPLACEMENT SECTIONS
NO SCALE



PLAN VIEW OF CROSSING



PROFILE VIEW OF CROSSING

TYPICAL DITCH CROSSING DETAIL

NONE

A
3

- NOTE:
- HORIZONTAL LOCATION TO BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR WITH M.C.G.C.D. APPROVAL. VERTICAL PLACEMENT MUST BE OF SIMILAR ELEVATION 0.1"±
 - SEWER PIPE TO BE POSITIONED EQUAL DISTANCE BETWEEN CULVERT PIPE JOINTS.
 - INSTALLATION OF SEWER PIPE SHOULD BE MINIMUM OF 18" BELOW EXISTING CULVERT PIPE AND A MINIMUM OF 3'-0" BELOW EXISTING GRADE.
 - SEWER SLEEVE PIPE UNDER DITCH CULVERT MUST BE SINGLE LENGTH. PIPE JOINTS WILL NOT BE ALLOWED UNDER DITCH CULVERT.
 - FOR CULVERT DETAILS SEE M.R.G.C.D. STANDARD DRAWINGS.

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RECORD SET

David G. Larrow
5-23-96

HN
Holmes & Narver

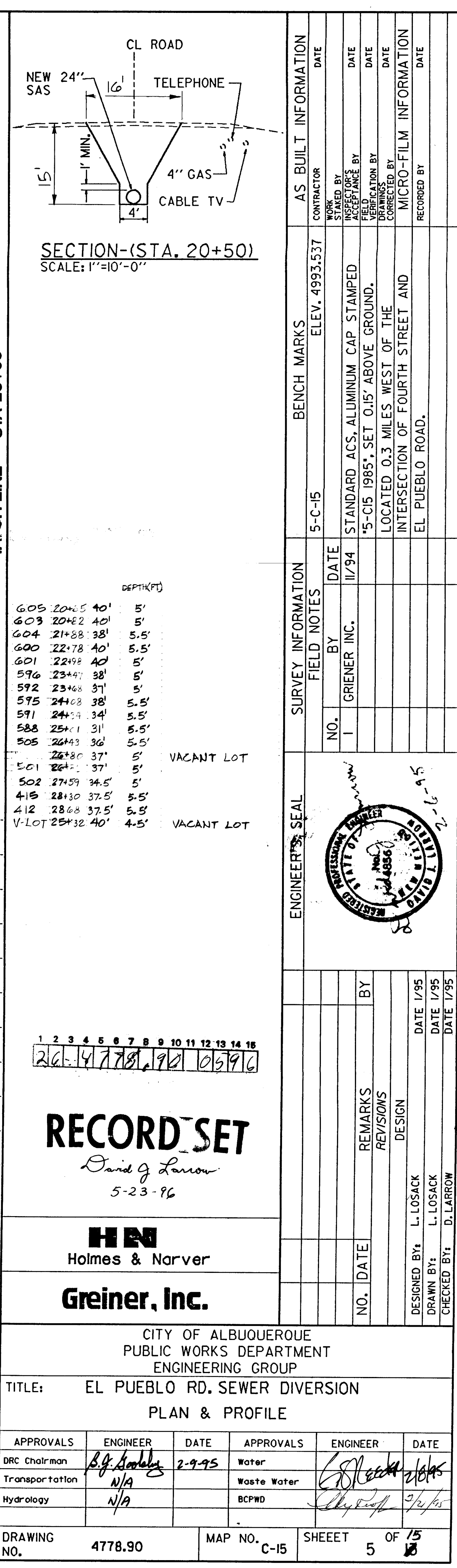
Greiner, Inc.

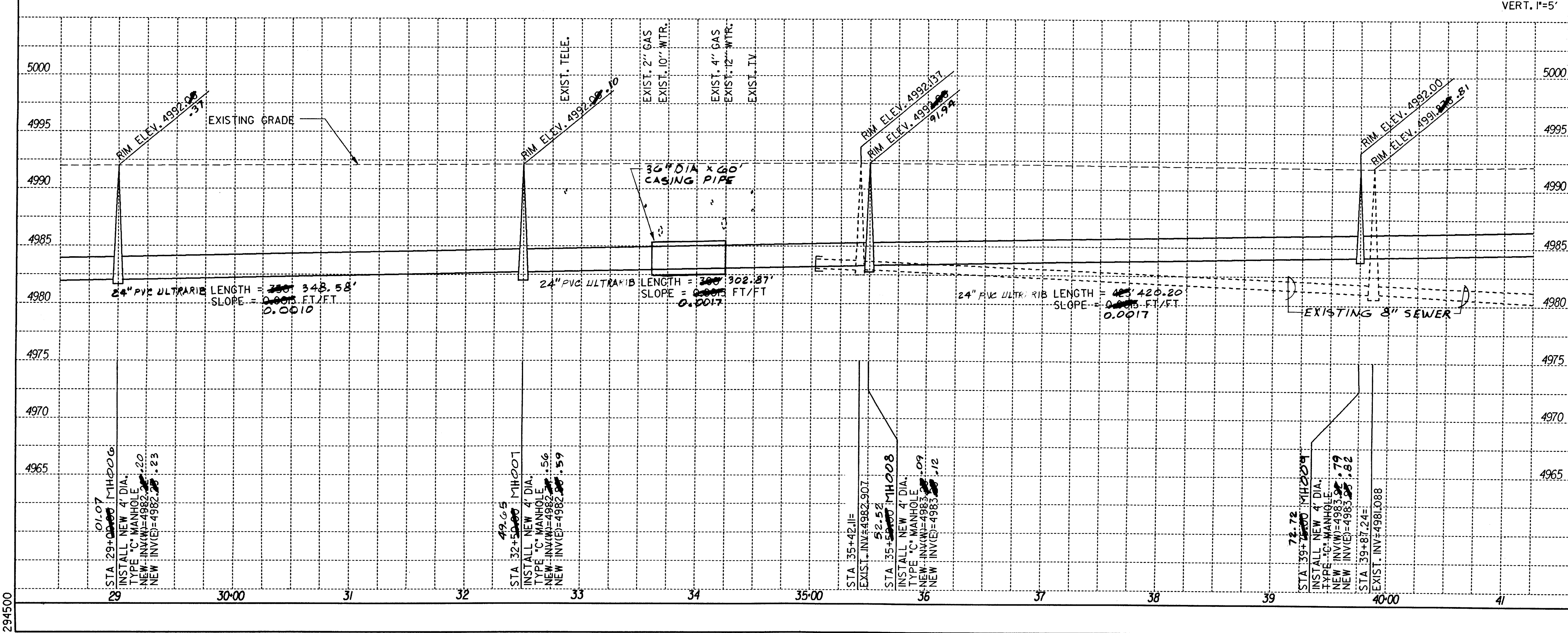
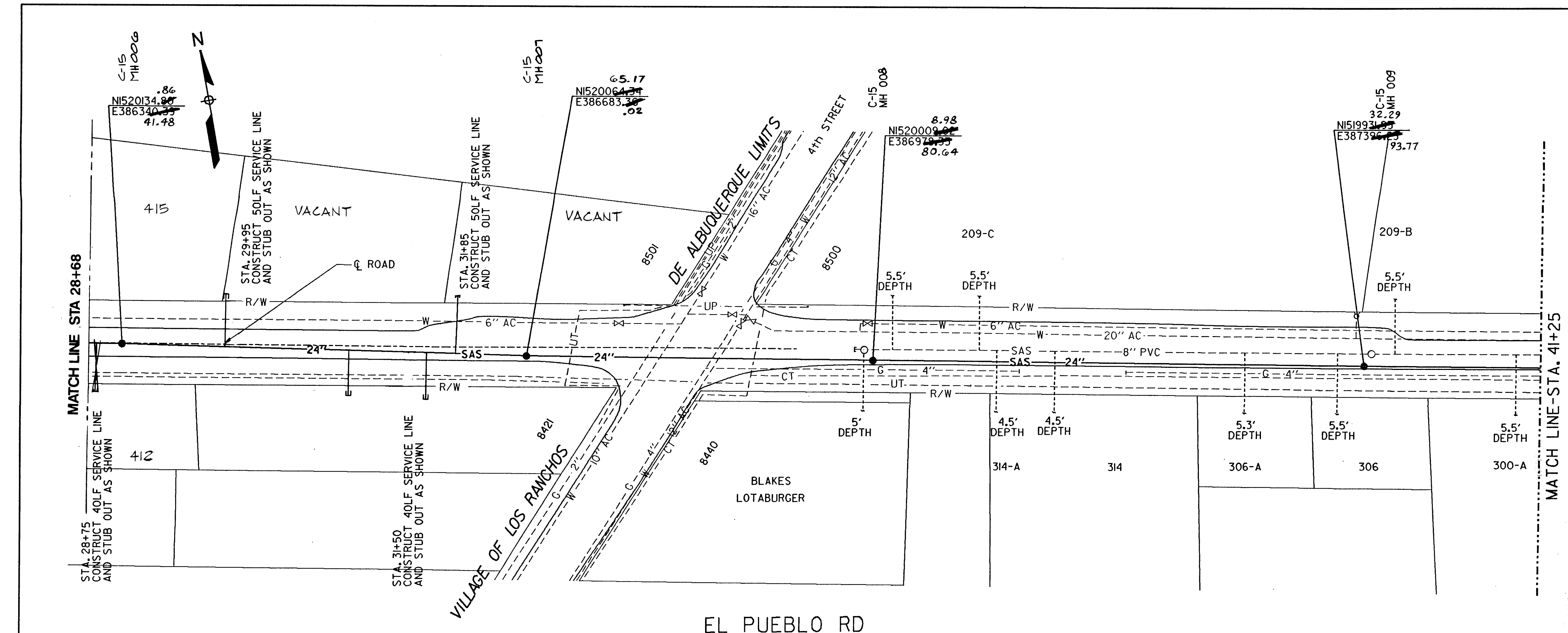
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: EL PUEBLO RD. SEWER DIVERSION
GENERAL NOTES AND LEGEND

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>B. G. Greiner</i>	2-9-95	WATER	<i>[Signature]</i>	2/9/95
TRANSPORTATION	N/A		WASTE WATER	<i>[Signature]</i>	2/9/95
HYDROLOGY	N/A		BCPWD	<i>[Signature]</i>	2/9/95
PARKS & REC					
PROJECT NO.	4778.90		MAP NO.		
			SHEET	3	OF 15

SCANNED BY
BY LASON





CL ROAD

NEW 24" SAS

11" CABLE TV

8" SAS

4" GAS

4" MIN.

SECTION-(STA. 36+00)

SCALE: 1"=10'-0"

DEPTH(FT)

29+85	37.5'	5'	VACANT LOT
8421-B-30+76	37'	5.5'	4TH ST
8421-A-31+64	37'	9'	4TH ST

SCALE:

HORIZ. 1"=50'

VERT. 1"=5'

AS BUILT INFORMATION

CONTRACTOR	DATE
ELEV. 4993.537 <td></td>	

WORK	DATE
STANDARD ACS, ALUMINUM CAP STAMPED	
5-C-15 1985, SET 0.15' ABOVE GROUND.	
LOCATED 0.3 MILES WEST OF THE	
INTERSECTION OF FOURTH STREET AND	
EL PUEBLO ROAD.	

ENGINEER'S SEAL

RECORD SET

David G Larson

5-23-96

H N

Holmes & Narver

Greiner, Inc.

CITY OF ALBUQUERQUE

PUBLIC WORKS DEPARTMENT

ENGINEERING GROUP

TITLE: EL PUEBLO RD. SEWER DIVERSION

PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC Chairman	B.G. Greiner	2-9-95	Water		
Transportation	N/A		Waste Water		
Hydrology	N/A		BCPWD		

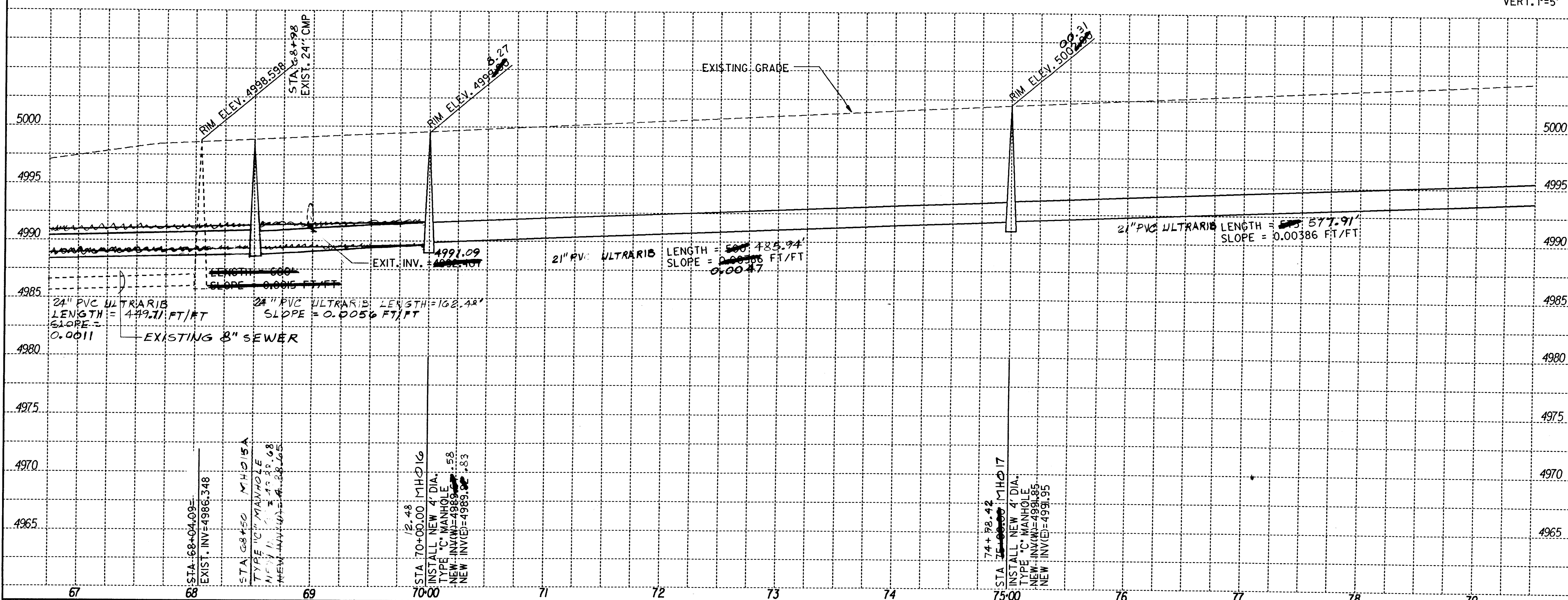
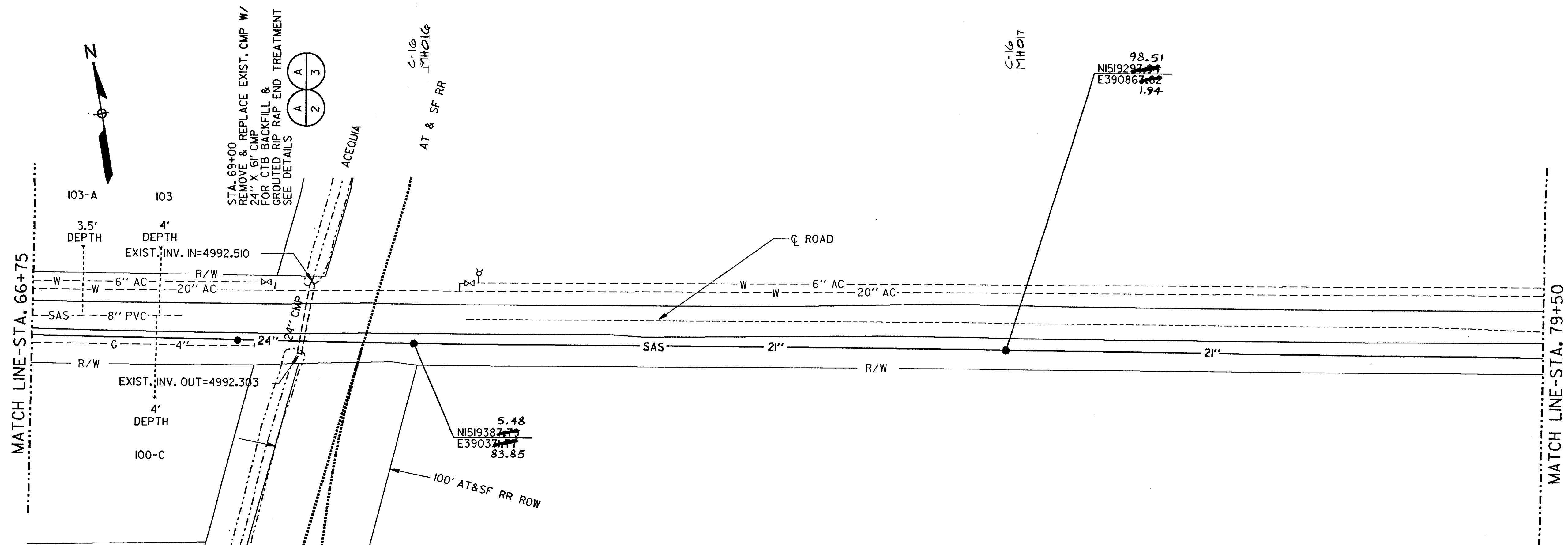
NO.	DATE	REMARKS	BY
1	2-9-95	DESIGN	
2	2-9-95	REVISIONS	

DESIGNED BY: L. LOSACK	DATE 1/95
DRAWN BY: L. LOSACK	DATE 1/95
CHECKED BY: D. LARROW	DATE 1/95

DRAWING NO. 4778.90

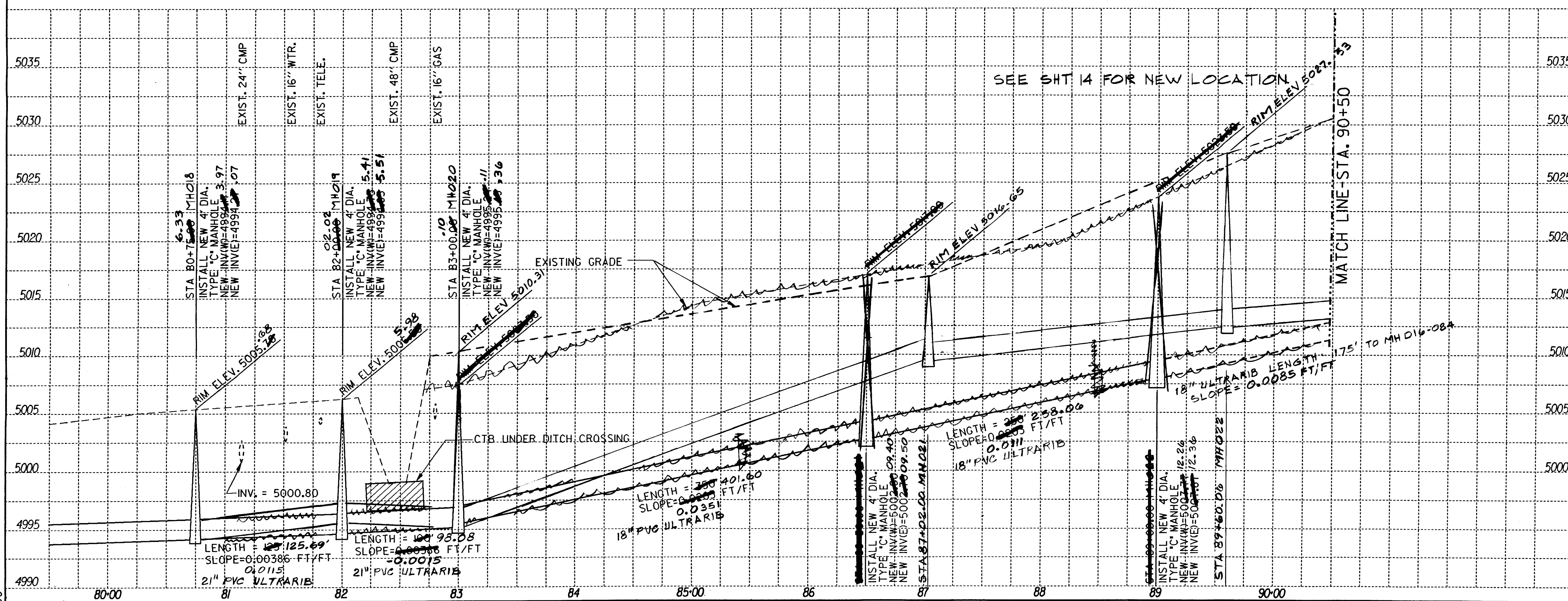
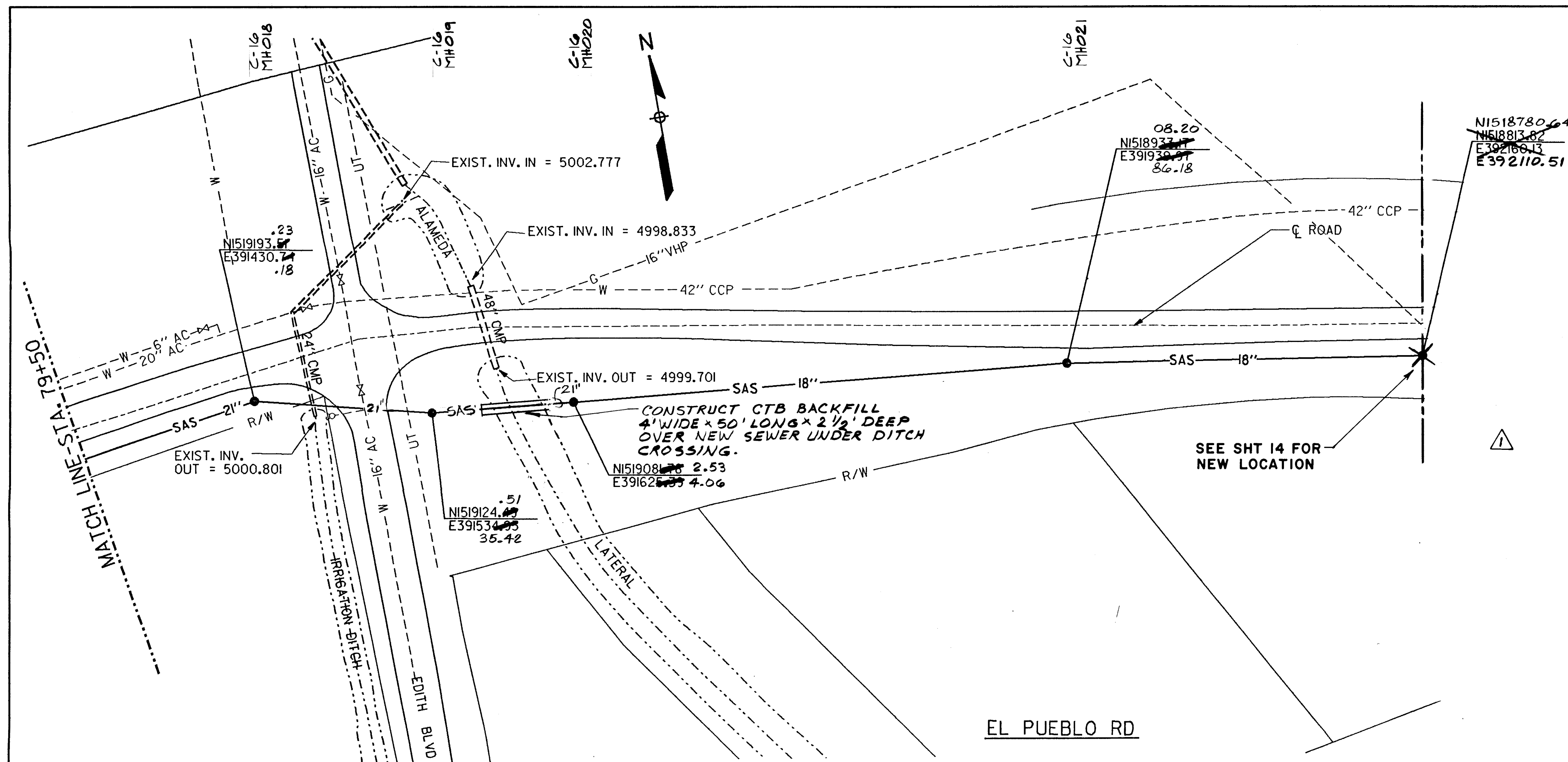
MAP NO. C-15

SHEET 6 OF 15

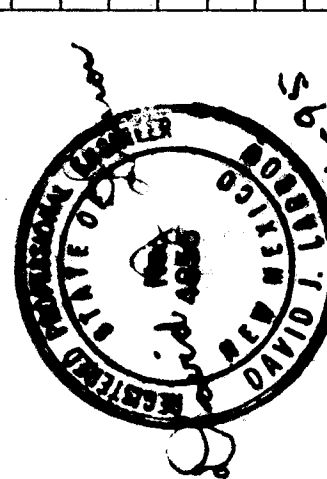


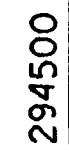
SCALE:
HORIZ. 1"=50'
VERT. 1"=5'

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 24-477 7819 010910															RECORD SET David G. Larrow 5-23-86															HN Holmes & Narver															Greiner, Inc.															CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP															TITLE: EL PUEBLO RD. SEWER DIVERSION PLAN & PROFILE															APPROVALS ENGINEER DATE APPROVALS ENGINEER DATE DRC Chairman B.G. Larrow 2-9-95 Water B.G. Larrow 2/9/95 Transportation N/A Waste Water BCPWD B.G. Larrow 2/2/95 Hydrology N/A															DRAWING NO. 4778.90 MAP NO. C-16 SHEET 9 OF 15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							



SCALE:
HORIZ. 1"=50'
VERT. 1"=5'

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 26-42778.90 17096															RECORD SET David G Larson 5-23-96															HN Holmes & Narver															Greiner, Inc.															ENGINEER'S SEAL 															SURVEY INFORMATION FIELD NOTES NO. 1 BY GREINER INC. DATE 11/94															BENCH MARKS 5-C-15 ELEV. 4993.537 STANDARD ACS, ALUMINUM CAP STAMPED "5-C15 1985", SET 0.15' ABOVE GROUND. LOCATED 0.3 MILES WEST OF THE INTERSECTION OF FOURTH STREET AND EL PUEBLO ROAD.															AS BUILT INFORMATION CONTRACTOR WORK STAGED BY FIELD ACCEPTANCE BY DATE <														
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SCANNED BY
BY LASON

123456789101112131415

26-4778-9011916

RECORD SET

David G. Larson

5-23-96

VOID

HN

Holmes & Narver

Greiner, Inc.

CITY OF ALBUQUERQUE

PUBLIC WORKS DEPARTMENT

ENGINEERING GROUP

TITLE:

EL PUEBLO RD. SEWER DIVERSION

PLAN & PROFILE

APPROVALS

ENGINEER

DATE

APPROVALS

ENGINEER

DATE

DRC Chairman

Transportation

Hydrology

2-9-95

N/A

N/A

2-9-95

N/A

N/A

2-9-95

N/A

N/A

DRAWING NO.

4778.90

MAP NO.

D-16 & C-16

SHEET

OF

1115

26-4778-9011916

RECORD SET

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DRC Chairman

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Hydrology

2-9-95

N/A

N/A

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Hydrology

2-9-95

N/A

N/A

2-9-95

N/A

N/A

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DRC Chairman

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Hydrology

2-9-95

N/A

N/A

2-9-95

N/A

N/A

2-9-95

N/A

N/A

DRAWING NO.

4778.90

MAP NO.

D-16 & C-16

SHEET

OF

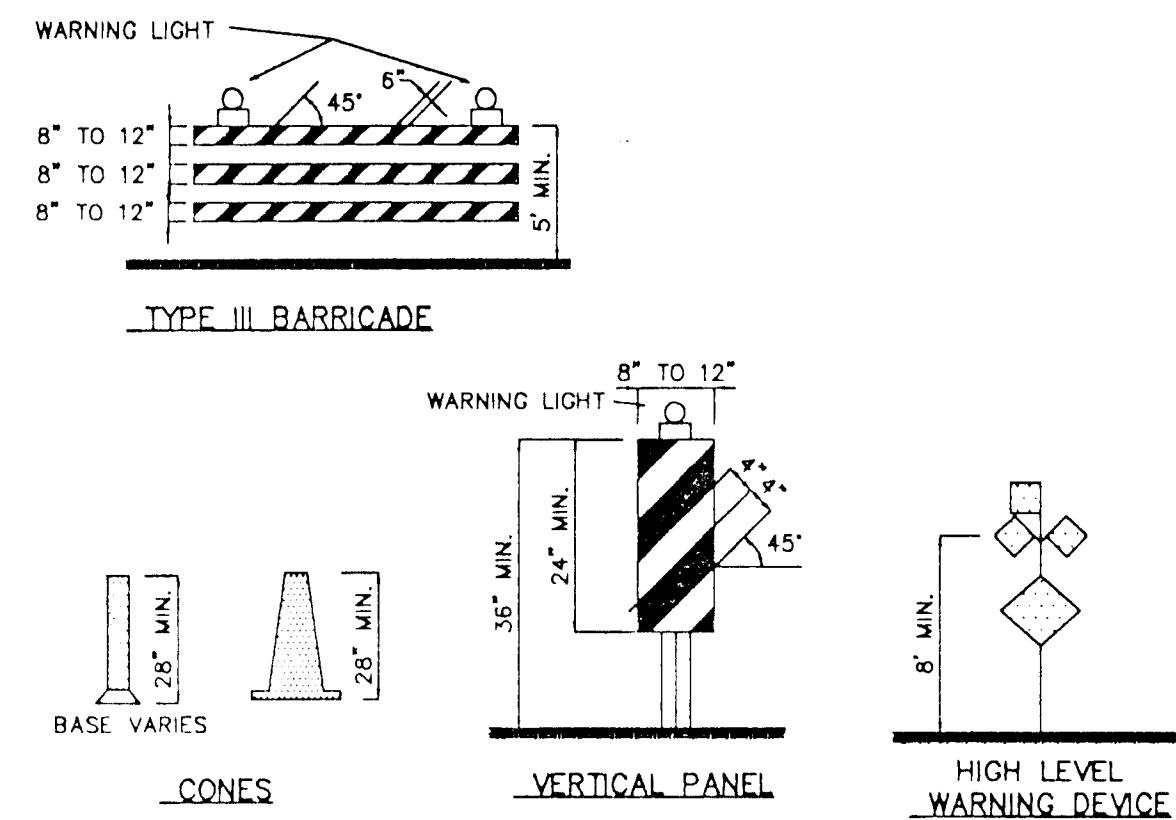
1115

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

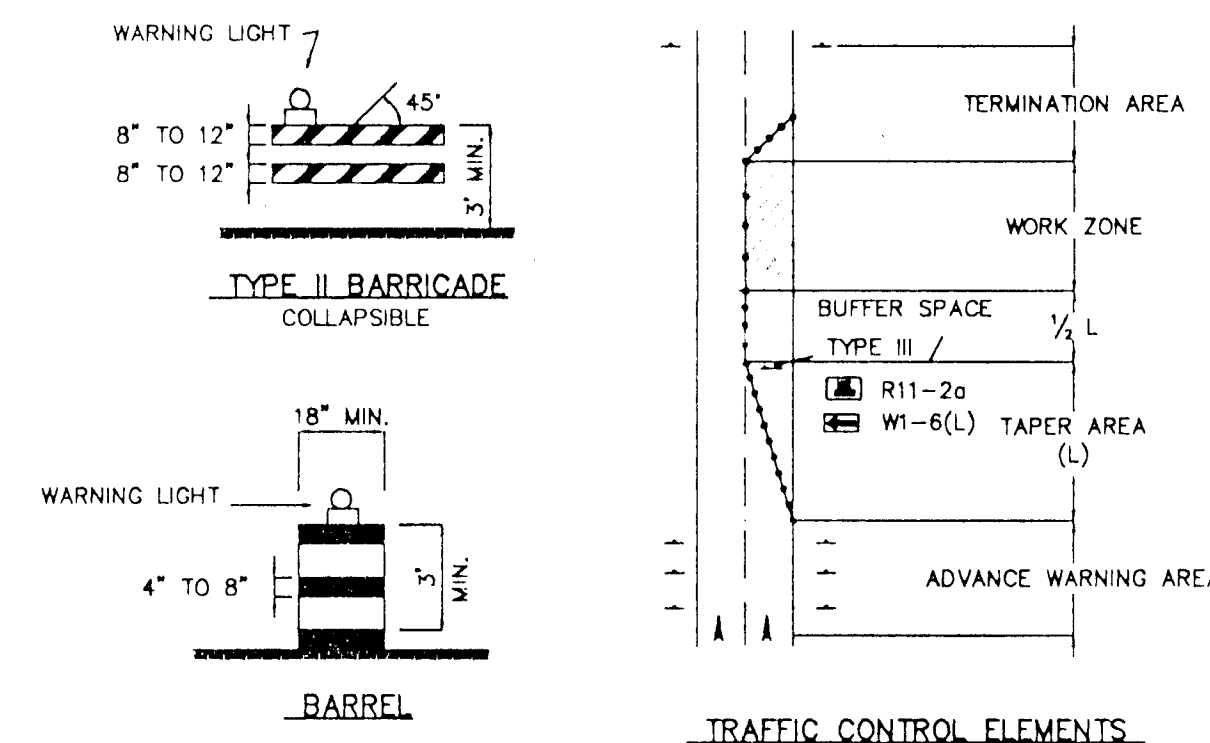
1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT 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.
 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 ITS PLACEMENT AND MAINTENANCE.
25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

PROJECT CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES



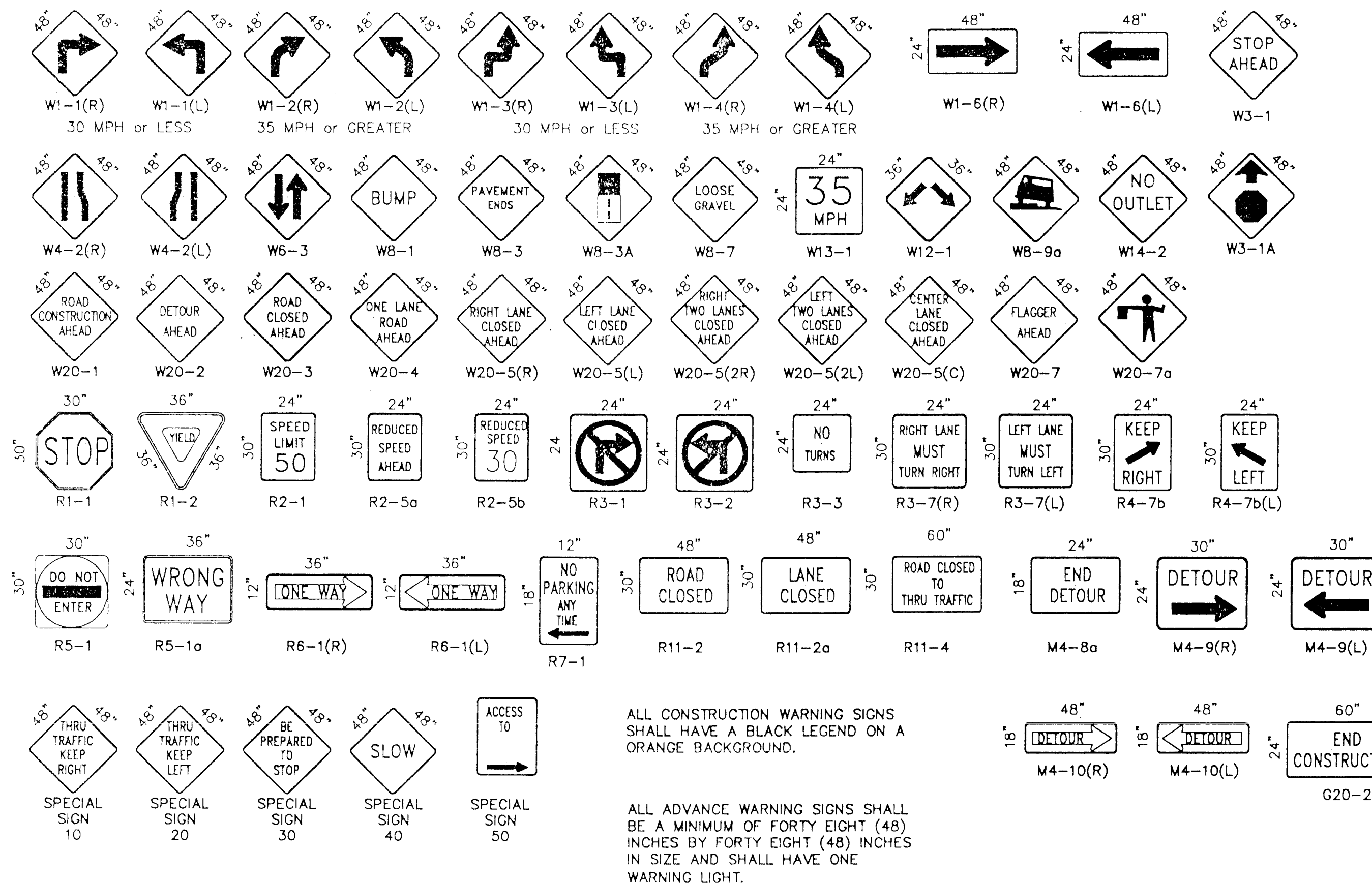
- LEGEND**
- WORK AREA
 - BARRICADE - TYPE I, TYPE II, OR BARREL
 - BARRICADE - TYPE III
 - VERTICAL PANEL
 - WARNING SIGN
 - DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
 - FLAGMAN POSITION
 - SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET EQUAL TO THE 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)	TAPER LENGTH (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 FOR ADVANCE WARNING SIGN SERIES		
SPEED	MINIMUM DISTANCE IN FEET BETWEEN SIGNS	FROM LAST SIGN TO TAPER
MILES PER HOUR		
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

SIGN FACE DETAILS



TAPER CRITERIA

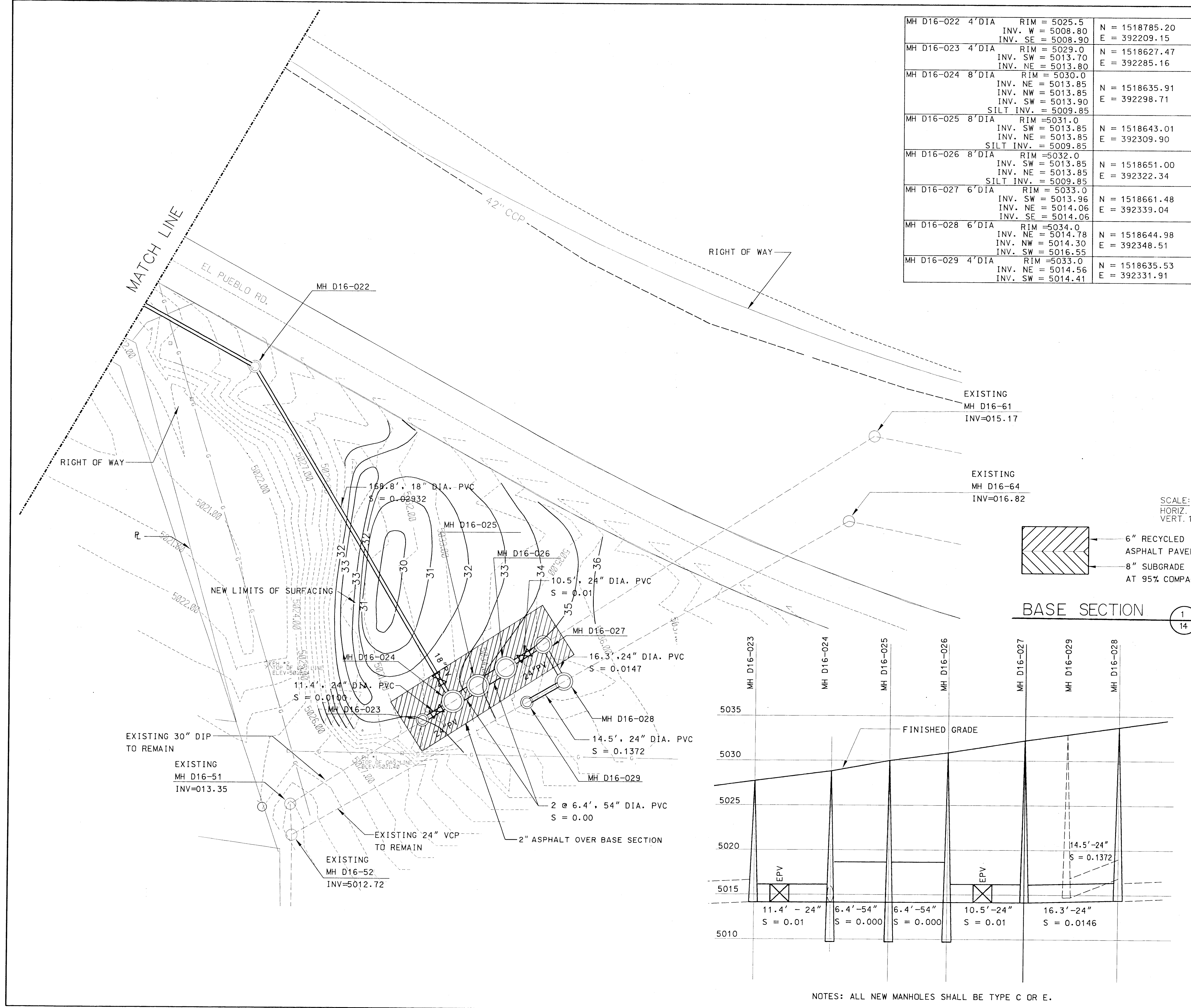
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 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	

Greiner, Inc.		H N Holmes & Narver	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			
TITLE: EL PUEBLO RD. SEWER DIVERSION			
SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS			
APPROVALS	ENGINEER	DATE	APPROVALS
ENGINEER	DATE	DATE	ENGINEER
DRC CHAIRMAN	DATE	DATE	DATE
TRANSPORTATION	DATE	DATE	DATE
HYDROLOGY	DATE	DATE	DATE
PROJECT NO. 4778.90		MAP NO.	SHEET 13 OF 15

RECORD SET



LEGEND

NEW
EXISTING

ECCENTRIC PLUG VALVE
EPV

MANHOLE

SEWER PIPE

CONTOUR

AS-BUILT INFORMATION	
CONTRACTOR	DATE
WORKED BY	DATE
INSPECTOR'S	DATE
STANDARD ACS ALUMINUM CAP STAMPED	DATE
"5-C15 1985", SET 0.15' ABOVE GROUND.	DATE
LOCATED 0.3 MILES WEST OF THE	DATE
INTERSECTION OF FOURTH STREET AND	DATE
EL PUEBLO ROAD.	DATE

SURVEY INFORMATION	
NO.	DATE
1	11/94
BY GREINER INC.	

ENGINEER'S SEAL	

REVISIONS	
NO.	DATE
1	7/17/95
BY J.L. MOORE	
DESIGNED BY: R.L. BELL	
DRAWN BY: J.L. MOORE	
CHECKED BY: D.J. LARROW	

RECORD SET

David J. Larrow

5-23-96

HN

Holmes & Norver

Greiner, Inc.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: EL PUEBLO RD. SEWER DIVERSION
GRIT CHAMBER LAYOUT

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC Chairman			Water		
Transportation			Waste Water		
Hydrology			BCPWD		

DRAWING NO.	4778.90	MAP NO.	D-16	SHEET	14	OF	15
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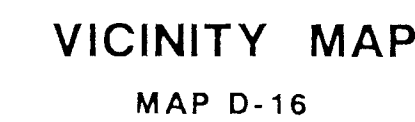
TOTAL AREA = 0.55 ACRES
AREA C TREATMENT = 0.36 ACRES
AREA D TREATMENT = 0.20 ACRES

$$\text{WEIGHTED E} = \frac{1.13 \times 0.35 + 2.12 \times 0.20}{0.55} = 1.49$$

$$VOL_{360} = 1.49 \times \frac{0.55}{12} = 0.07 \text{ ACRE-FT.}$$

$$\begin{aligned} \text{VOL}_{1440} &= \text{VOL}_{360} + A_D (P_{1440} - P_{360}) / 12 \\ &= 0.07 + 0.20 \left(\frac{2.75 - 2.35}{12} \right) \end{aligned}$$

= 0.08 ACRE-FT



LEGAL DESCRIPTION

Unplatted lands of Albuquerque Gravel Products Company




 LIMITS OF R.A.P.

 DIVERSION DITCH

A circular professional engineer seal for David J. Larrow, State of New Mexico, No. 4856. The seal is stamped in black ink. The outer ring contains the text "REGISTERED PROFESSIONAL ENGINEER" at the top and "DAVID J. LARROW" at the bottom. The inner ring contains "STATE OF NEW MEXICO". In the center, "No. 4856" is printed, with a handwritten signature "D. Larrow" written over it.

12-20-95

26-4778, 90 1596

RECORD SET

David J Lawton
5-23-96



Greiner, Inc.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: EL PUEBLO RD. SEWER DIVERSION
GRIT CHAMBER GRADING AND DRAINAGE PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC Chairman			Water		
Transportation			Waste Water		
Hydrology			BCPWD		

DRAWING NO.	4778.90	MAP NO.	D-16	SHEET	15	OF	15
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SCANNED BY
BY LASON