CONSTRUCTION PLANS FOR

VENTURA STREET N.E. MASTERPLAN WATERLINE

PASEO DEL NORTE N.E. TO CORONA AVENUE N.E.

ALBUQUERQUE, NEW MEXICO
JANUARY, 1993

• LEGEND •

MATERIALS

CONCRETE
RIP-RAP

LINES

SUBSIVISION BOUNDARY
PROPERTY LINE (PLAN)
PROPERTY LINE (SECTION)
CENTERLINE
EASEMENT LINE
MATCH LINE
SECTION CUT LINE

EARTHWORK

	EXISTING	NEW
CONTOUR LINE	25	25
SPOT ELEVATION	⊕	◕
PROJECT / PHASE BOUNDARY		
SWALE		
DIRECTION OF FLOW		

MISCELLANEOUS UTILITIES

GAS LINE — G
UNDERGROUND TELEPHONE — UT
UNDERGROUND ELECTRICAL — UE
STORM DRAIN — SD
STORM DRAIN MANHOLE
STORM DRAIN INLET

SANITARY SEWER

SANITARY SEWER LINE — SAS
SANITARY SEWER MANHOLE
SAS SERVICE CONNECTIONS
SAS CAP OR PLUG
ENCASEMENT

WATER

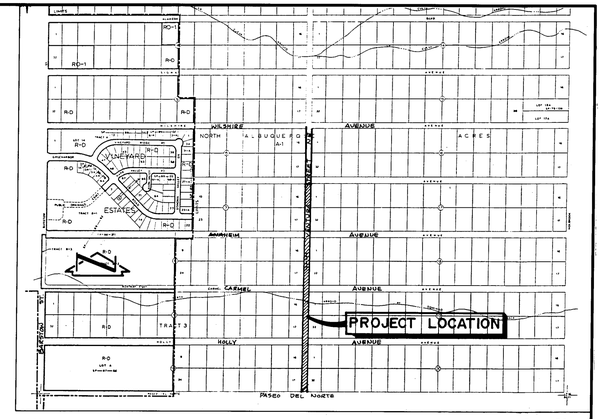
WATER LINE — W
WATER SERVICE CONNECTIONS
GATE VALVE
FIRE HYDRANT
BUTTERFLY VALVE
REDUCER
WATER PRESSURE ZONE BOUNDARY

WATER FITTINGS

CAPS AND PLUGS
ELBOW
CROSS
TEE

MISCELLANEOUS

CHAINLINK FENCE
FIELD FENCE
COMMON YARD WALL
RETAINING WALL
POWER OR TELEPHONE POLE



VICINITY MAP
SCALE: 1" = 800' (APPROX.)

C - 20

INDEX OF DRAWINGS

1. COVER SHEET, VICINITY MAP, GENERAL NOTES, LEGEND, INDEX OF DRAWINGS
2. SITE PLAN / WATER VALVE SHUTOFF PLAN
3. WATERLINE EXTENSION PLAN AND PROFILE STA. 10+00 TO STA. 22+00
4. WATERLINE EXTENSION PLAN AND PROFILE STA. 22+00 TO STA. 31+12
5. TRAFFIC CONTROL DETAILS
6. DETAILS

1 RECORD DRAWING

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 3391.95 01 93

APPROVAL OF AS BUILT DRAWINGS
CHIEF CONSTRUCTION ENGINEER
Russell B. Lewis
DATE 11-15-93

1 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 before use on future projects.

Jeffrey G. Mortensen, NMPE 8547 — 10-25-93 Date

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

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. TWO (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.

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
APPROVAL OF REVISIONS							

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER
12-10-92

JMA
JEFF MORTENSEN & ASSOCIATES, INC.
6601-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 345-4250

APPROVED FOR CONSTRUCTION
Joe Ortiz for Rio Grande
5-20-93 C.E.

PROJECT NO. 3391.95

SHEET 1 OF 6

JMA JOB NO.920821

148413

RECORD DRAWING

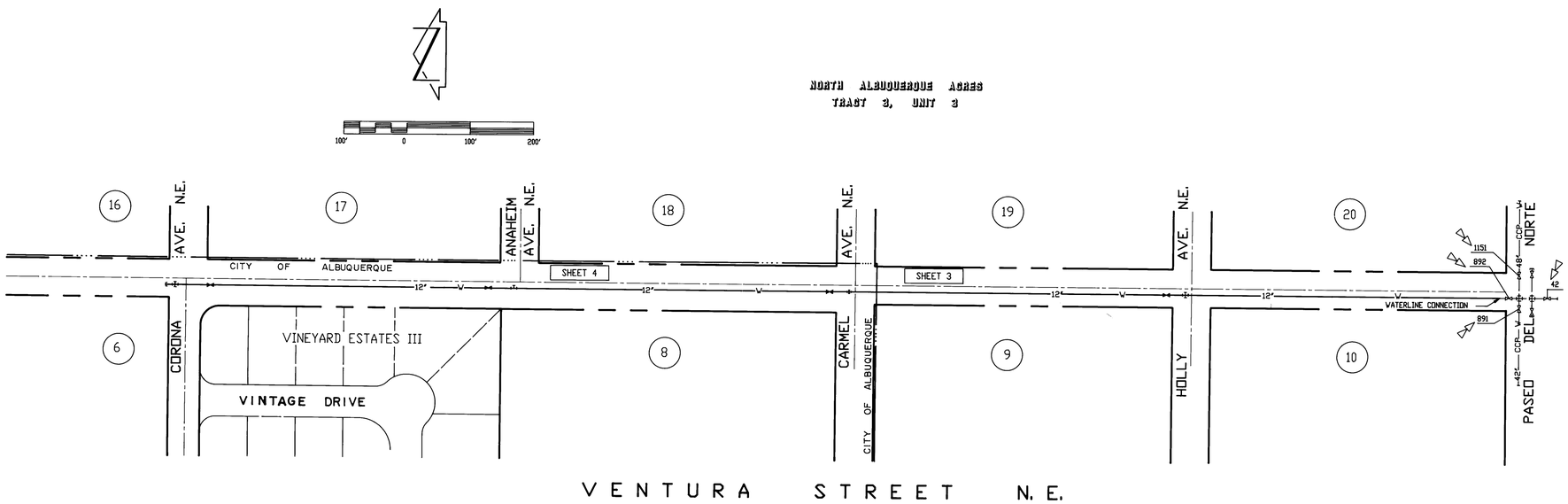


TABLE OF MINIMUM REQUIRED LENGTH OF PIPE JOINT RESTRAINT

Required Length (in feet) of Restraint (Lr) for Bends in PVC Pipe
Test Pressure = 150 p.s.i. Factor of Safety = 1.5
Soil Type = SM Trench Type = 4

Bend Angle (Degrees)	Depth of Bury (ft)	Fitting Diameter 4"	6"	8"	10"	12"
90	3	14	20	26	31	36
90	4	11	15	20	24	28
90	5	9	12	16	19	23
45	3	6	8	11	13	15
45	4	5	6	8	10	12
45	5	4	5	7	8	9
22.5	3	3	4	5	6	7
22.5	4	2	3	4	5	6
22.5	5	2	2	3	4	5
11.25	3	1	2	3	3	4
11.25	4	1	2	2	2	3
11.25	5	1	1	2	2	2

Required Length (in feet) of Restraint (La and Lb) for Reducers in PVC Pipe
Test Pressure = 150 p.s.i. Factor of Safety = 1.5
Soil Type = SM Trench Type = 4

Dimensions of Reducer (in.)	Depth of Bury (ft)	La (feet)	Lb (feet)
6" X 4"	3	42	28
6" X 4"	4	31	21
6" X 4"	5	25	17
8" X 6"	3	39	30
8" X 6"	4	30	23
8" X 6"	5	24	18
10" X 6"	3	87	53
10" X 6"	4	66	40
10" X 6"	5	53	33
10" X 8"	3	36	29
10" X 8"	4	28	22
10" X 8"	5	22	18
12" X 6"	3	146	74
12" X 6"	4	111	57
12" X 6"	5	89	46
12" X 8"	3	81	54
12" X 8"	4	62	41
12" X 8"	5	50	33
12" X 10"	3	36	30
12" X 10"	4	27	23
12" X 10"	5	22	18

Required Length (in feet) of Restraint (Lbr) for Crosses and Tees in PVC Pipe
Test Pressure = 150 p.s.i. Soil Type = SM
Factor of Safety = 1.5 Trench Type = 4
Lrn = 2 feet

Dimensions of Fitting (in.)	Depth of Bury (ft)	Lbr (feet)
6" X 6" X 4"	3	24
6" X 6" X 4"	4	14
6" X 6" X 4"	5	9
6" X 6" X 6"	3	44
6" X 6" X 6"	4	31
6" X 6" X 6"	5	23
8" X 8" X 6"	3	41
8" X 8" X 6"	4	28
8" X 8" X 6"	5	20
8" X 8" X 8"	3	61
8" X 8" X 8"	4	44
8" X 8" X 8"	5	34
10" X 10" X 6"	3	37
10" X 10" X 6"	4	24
10" X 10" X 6"	5	16
10" X 10" X 8"	3	58
10" X 10" X 8"	4	41
10" X 10" X 8"	5	31
10" X 10" X 10"	3	75
10" X 10" X 10"	4	55
10" X 10" X 10"	5	43

Required Length (in feet) of Restraint (Lr) for Dead ends and Valves in PVC Pipe

Test Pressure = 150 p.s.i. Factor of Safety = 1.5
Soil Type = SM Trench Type = 4

Depth of Bury (ft)	Fitting Daimeter 4"	6"	8"	10"	12"
3	39	55	72	86	102
4	29	42	55	66	78
5	24	33	44	53	63

920821

WATER DISTRIBUTION SYSTEM:

1. ALL STATIONING IS BASED ON STREET CENTERLINE.
2. FOR ALL LINES 12" AND SMALLER, WATER MAIN SHALL BE PVC C-900 PIPE OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. FOR ALL LINES 12" AND LARGER, WATER MAIN SHALL BE CONCRETE CYLINDER OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. DUCTILE IRON IS AN ACCEPTABLE PIPE MATERIAL IN LIEU OF PVC AND CONCRETE CYLINDER.
3. WATER LINE SHALL HAVE A MINIMUM COVER OF 4'0" TOP OF CURB TO TOP OF PIPE) OR 5'0" (EXISTING GRADE TO TOP OF PIPE).
4. ELECTRONIC MARKER DISCS (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION.
5. IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
6. VALVE STEM AND FIRE HYDRANT EXTENSIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE COST OF EACH EXTENSION SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.
7. JOINT RESTRAINT SHALL BE CONSIDERED INCIDENTAL TO WATERLINE CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.

WATER VALVE SHUTOFF PLAN NOTES:

1. AS A MINIMUM, THE FOLLOWING VALVES SHALL BE CLOSED TO FACILITATE THE WATERLINE CONNECTION: 42, 891, 892, 1151.
2. THE CONTRACTOR SHALL NOTIFY WATER SYSTEMS, THREE (3) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING WATERLINE; ALL SHUTOFFS SHALL BE PERFORMED BY THE WATER SYSTEM DIVISION PERSONNEL (857-8200).
3. THE CONTRACTOR SHALL PROVIDE ALL RESTRAINTS AND THRUST BLOCKS NECESSARY TO EFFECT THE NECESSARY SHUTOFFS AND CONNECTIONS.
4. EXISTING WATER VALVE AND WATERLINE INFORMATION OBTAINED FROM CITY OF ALBUQUERQUE AUTOMATED WATER DISTRIBUTION SYSTEM SECTIONAL MAPS, PLATE C-20.
5. AT THE TIME OF WATER SHUTOFF APPLICATION, THE CONTRACTOR SHALL REQUEST THAT THE WATER SYSTEM DIVISION NOTIFY ALL AFFECTED PROPERTY OWNERS AT LEAST 24 HOURS IN ADVANCE OF THE RESPECTIVE SHUTOFFS.

SUPPLEMENTAL GENERAL NOTES:

THE FOLLOWING APPLY TO THAT PORTION OF THE WORK WHICH LIES OUTSIDE THE CORPORATE LIMITS OF THE CITY OF ALBUQUERQUE:

1. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES AND SCHEDULES WITH THE NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPT. (NMSHTD) AND THE BERNALILLO COUNTY PUBLIC WORKS DEPT. (BCPWD).
2. ALL BACKFILL AND COMPACTION WITHIN COUNTY RIGHT-OF-WAY AND/OR EASEMENT SHALL BE 95% ASTM D-1557 FOR THE FULL DEPTH OF TRENCH PER COUNTY STANDARD DRAWING 2465.
3. THIS PROJECT IS TO BE CONSTRUCTED UNDER, AND 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 8/20/90.

26 3391.950293

AS BUILT INFORMATION
CONTRACTOR NEW CONCEPTS, INC.
WORK STAKED BY JMA DATE 7/93
INSPECTORS ACCEPTANCE BY GM DATE 9/93
FIELD VERIFICATION BY JMA DATE 9/93
DRAWINGS CORRECTED BY GM DATE 9/93
MICRO-FILM INFORMATION
RECORDED BY DATE
NO

BENCH MARKS
STA. 19 A STANDARD BRASS TABLET STAMPED "1-C19 NAA. LOT 32, BLK. 10 SET IN TOP OF CONC. POST FLUSH W/GROUND & LOCATED IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF LOUISIANA BLVD. NE & LOS ANGELES DR. NE, 50 NORTH OF THE NORTHEAST CORNER OF CHAINLINK FENCE AROUND THE F.A.A. AIR TRAFFIC CONTROL CENTER.
ELEVATION = 5318.195 FEET (M.S.L.D.)

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
N/A	W.P.P.	9/22/92

ENGINEER'S SEAL
JEFFREY G. MONTANSEN NEW MEXICO 8542 REGISTERED PROFESSIONAL ENGINEER
12-10-92

AS-BUILT & CERTIFY GM

NO.	DATE	REVISIONS	BY
1	10/93	REMARKS	GM

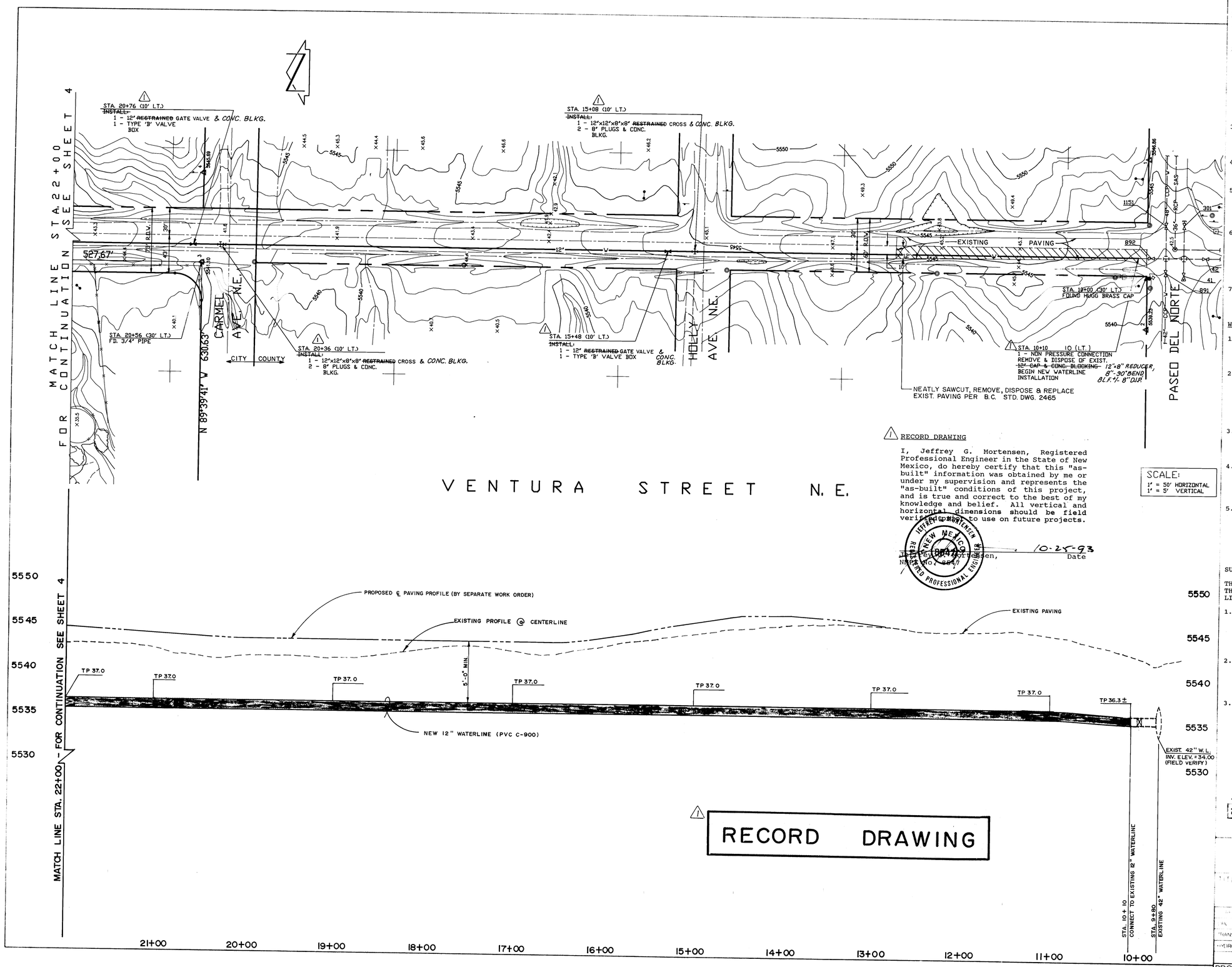
DESIGN
DESIGNED BY J.G.M. DATE 12-92
DRAWN BY ACAD DATE 12-92
CHECKED BY J.G.M. DATE 12-92

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: VENTURA STREET NE MASTERPLAN WATERLINE
PASEO DEL NORTE TO CORONA AVENUE NE
SITE PLAN / WATER VALVE SHUTOFF PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	B.G. Foothly	5-11-93	WATER	R.W. Kane	4-13-93
TRANSPORTATION	N/A	4-15-93	WASTE WATER	R.W. Kane	4-13-93
HYDROLOGY	N/A JPC	4-15-93	BCPWD	CR Bowman	4/27/93

PROJECT NO.	MAP NO.	SHEET	OF
3391.95	C-20	2	6



RECORD DRAWING

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 use on future projects.

Jeffrey G. Mortensen, N.M. No. 8847 — 10-25-93 Date

REGISTERED PROFESSIONAL ENGINEER — JEFFREY G. MORTENSEN — NEW MEXICO — 8847

WATER DISTRIBUTION SYSTEM:

1. ALL STATIONING IS BASED ON STREET CENTERLINE.
2. FOR ALL LINES 12" AND SMALLER, WATER MAIN SHALL BE PVC C-900 PIPE OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. FOR ALL LINES 12" AND LARGER, WATER MAIN SHALL BE CONCRETE CYLINDER OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. DUCTILE IRON IS AN ACCEPTABLE PIPE MATERIAL IN LIEU OF PVC AND CONCRETE CYLINDER.
3. WATER LINE SHALL HAVE A MINIMUM COVER OF 4'0" TOP OF CURB TO TOP OF PIPE) OR 5'0" (EXISTING GRADE TO TOP OF PIPE).
4. ELECTRONIC MARKER DISCS (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION.
5. IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
6. VALVE STEM AND FIRE HYDRANT EXTENSIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE COST OF EACH EXTENSION SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.
7. JOINT RESTRAINT SHALL BE CONSIDERED INCIDENTAL TO WATERLINE CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.

WATER VALVE SHUTOFF PLAN NOTES:

1. AS A MINIMUM, THE FOLLOWING VALVES SHALL BE CLOSED TO FACILITATE THE WATERLINE CONNECTION: 42, 891, 892, 1151.
2. THE CONTRACTOR SHALL NOTIFY WATER SYSTEMS, THREE (3) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING WATERLINE; ALL SHUTOFFS SHALL BE PERFORMED BY THE WATER SYSTEM DIVISION PERSONNEL (857-8200).
3. THE CONTRACTOR SHALL PROVIDE ALL RESTRAINTS AND THRUST BLOCKS NECESSARY TO EFFECT THE NECESSARY SHUTOFFS AND CONNECTIONS.
4. EXISTING WATER VALVE AND WATERLINE INFORMATION OBTAINED FROM CITY OF ALBUQUERQUE AUTOMATED WATER DISTRIBUTION SYSTEM SECTIONAL MAPS, PLATE C-20.
5. AT THE TIME OF WATER SHUTOFF APPLICATION, THE CONTRACTOR SHALL REQUEST THAT THE WATER SYSTEM DIVISION NOTIFY ALL AFFECTED PROPERTY OWNERS AT LEAST 24 HOURS IN ADVANCE OF THE RESPECTIVE SHUTOFFS.

SUPPLEMENTAL GENERAL NOTES:

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AS BUILT INFORMATION — NEW CONCEPTS, INC. — JMA 7/93 — GM 9/93 — JMA 9/93 — GM 8/93 — MICRO-FILM INFORMATION

BENCH MARKS

STA. 15A STANDARD BRASS TABLET STAMPED "1-CR NAA. LOT 32, BLK. 10" SET IN TOP OF CONC. POST FLUSH W/GROUND & LOCATED IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF LOUISIANA BLVD. NE & LOS ANGELES DR. NE, 80' NORTH OF THE NORTHWEST CORNER OF CHAIN-LINK FENCE AROUND THE F.A.A. AIR TRAFFIC CONTROL CENTER.

ELEVATION = 5318.195 FEET (M.S.L.D.)

DATE	BY	NO	REMARKS
9/22/92	W.P.P.	N/A	

FIELD NOTES

SUPPLY INFORMATION

AS-BUILT & CERTIFY — 10/93

REVISIONS

NO	DATE	REMARKS
		DESIGN J.G.M. DATE 12-92
		ACAD DATE 12-92
		J.G.M. DATE 12-92

ENGINEER'S SEAL — JEFFREY G. MORTENSEN — NEW MEXICO — 8847 — REGISTERED PROFESSIONAL ENGINEER — 12-10-92

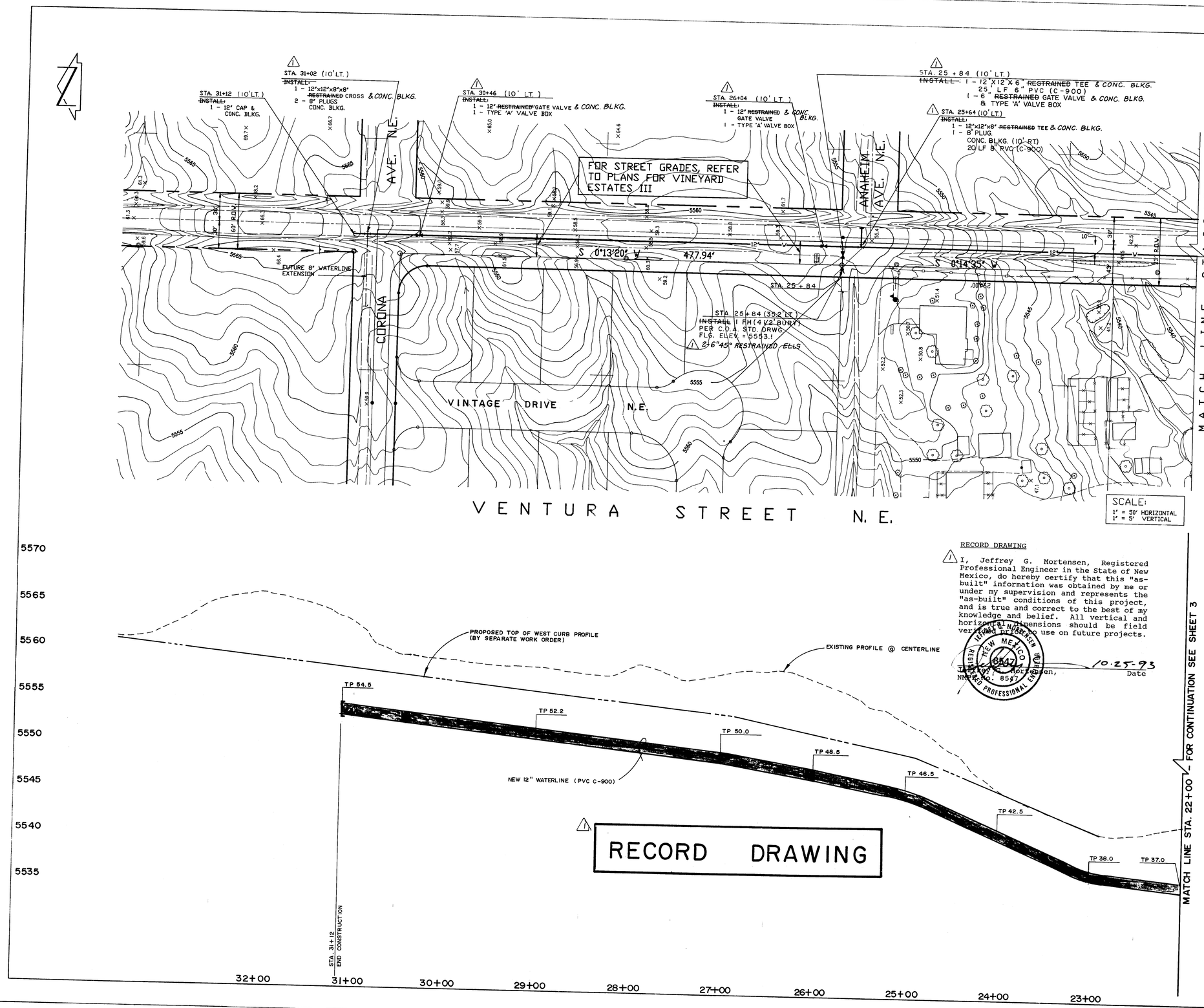
26 3391.950393

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING

TITLE: VENTURA STREET NE MASTERPLAN WATERLINE
PASEO DEL NORTE TO CORONA AVENUE NE
STA. 10+00 TO STA. 22+00

CITY ENGINEER			
TRANSPORTATION	B.J. Bodeker 5-11-93		R.W. Kane 4-13-93
HYDROLOGY	N/A RWD 4-15-93		R.W. Kane 4-13-93
	N/A JRC 4-15-93	BCPWD	C.R. Bowman 4/27/93

PROJECT NO	MAP NO	SHEET	OF
3391.95	C-20	3	6



920821

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 use on future projects.

JEFFREY G. MORTENSEN, NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 8547

Jeffrey G. Mortensen, NM REG. NO. 8547 — 10-25-93 Date

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WATER VALVE SHUTOFF PLAN NOTES:

1. AS A MINIMUM, THE FOLLOWING VALVES SHALL BE CLOSED TO FACILITATE THE WATERLINE CONNECTION: 42, 891, 892, 1151.
2. THE CONTRACTOR SHALL NOTIFY WATER SYSTEMS, THREE (3) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING WATERLINE; ALL SHUTOFFS SHALL BE PERFORMED BY THE WATER SYSTEM DIVISION PERSONNEL (857-8200).
3. THE CONTRACTOR SHALL PROVIDE ALL RESTRAINTS AND THRUST BLOCKS NECESSARY TO EFFECT THE NECESSARY SHUTOFFS AND CONNECTIONS.
4. EXISTING WATER VALVE AND WATERLINE INFORMATION OBTAINED FROM CITY OF ALBUQUERQUE AUTOMATED WATER DISTRIBUTION SYSTEM SECTIONAL MAPS, PLATE C-20.
5. AT THE TIME OF WATER SHUTOFF APPLICATION, THE CONTRACTOR SHALL REQUEST THAT THE WATER SYSTEM DIVISION NOTIFY ALL AFFECTED PROPERTY OWNERS AT LEAST 24 HOURS IN ADVANCE OF THE RESPECTIVE SHUTOFFS.

26 3391.950493

AS BUILT INFORMATION

CONTRACTOR NEW CONCEPTS, INC.
WORK STAKED BY JMA DATE 7/93
ASBUILT CHECKED BY GM DATE 9/93
FIELD VERIFICATION BY JMA DATE 9/93
DRAWINGS CORRECTED BY GM DATE 9/93
MICRO-FILM INFORMATION
RECORDED BY DATE
NO

BENCH MARKS

STA. 16 A STANDARD BRASS TABLET STAMPED "1-C19 NAA. LOT 32 BLK 10" SET IN TOP OF CONC. POST FLUSH W/GROUND & LOCATED IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF LOUISIANA BLVD. NE & LOS ANGELES DRIVE, 50 NORTH OF THE NORTHWEST CORNER OF CHAINLINK FENCE AROUND THE F.A.A. AIR TRAFFIC CONTROL CENTER.

ELEVATION = 5318.195 FEET (M.S.L.D.)

SURVEY INFORMATION

NO	BY	DATE
N/A	W.P.P.	9/22/92

FIELD NOTES

ENGINEER'S SEAL

JEFFREY G. MORTENSEN, NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 8547 — 12-10-92

AS-BUILT & CERTIFY

GM

NO	DATE	REMARKS	BY
1	10/93		

REVISIONS

		DATE
DESIGNED BY	J.G.M.	12-92
DRAWN BY	ACAD	12-92
CHECKED BY	J.G.M.	12-92

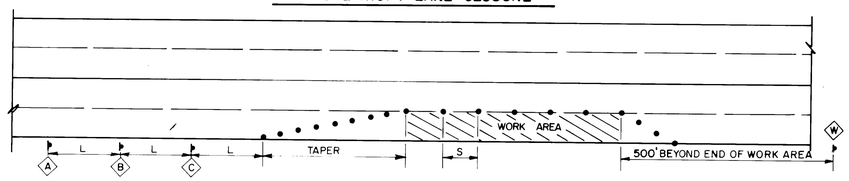
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: VENTURA STREET NE MASTERPLAN WATERLINE
PASEO DEL NORTE TO CORONA AVENUE NE
STA. 22 + 00 TO STA. 31 + 12

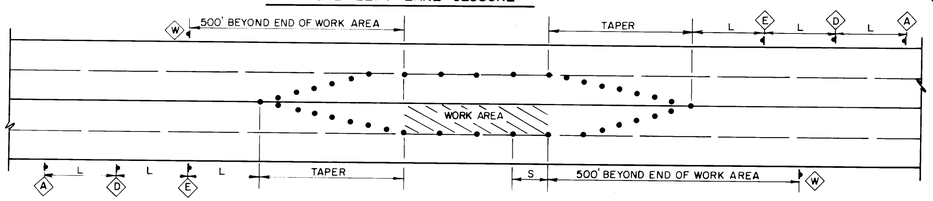
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	B.J. Gallaher	5-11-93	WATER	R.W. Kane	4-13-93
TRANSPORTATION	W. Dorko	4-15-93	WASTE WATER	R.W. Kane	4-13-93
HYDROLOGY	N/A	JPC 4-15-93			

PROJECT NO.	MAP NO.	SHEET	OF
3391.95	C-20	4	6

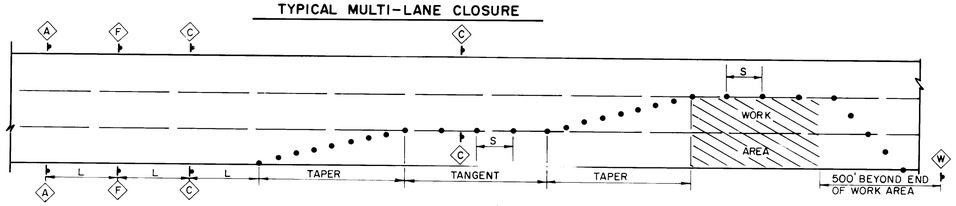
TYPICAL RIGHT LANE CLOSURE



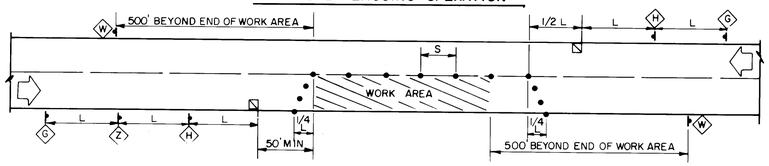
TYPICAL LEFT LANE CLOSURE



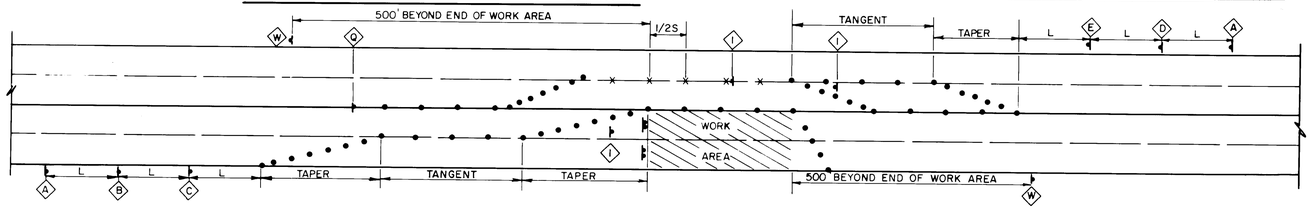
TYPICAL MULTI-LANE CLOSURE



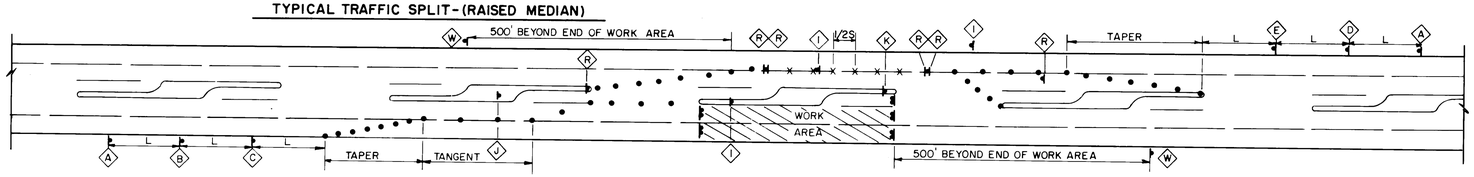
TYPICAL FLAGGING OPERATION



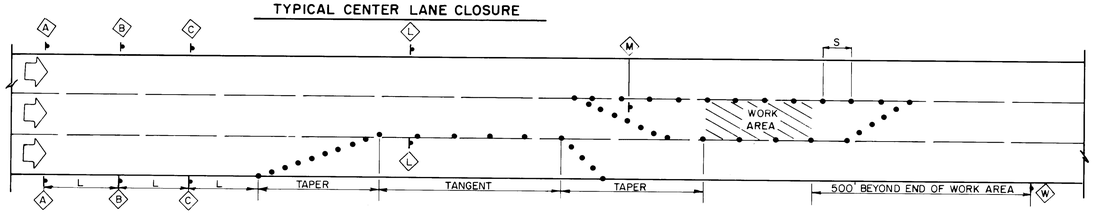
TYPICAL TRAFFIC SPLIT-(PAINTED MEDIAN)

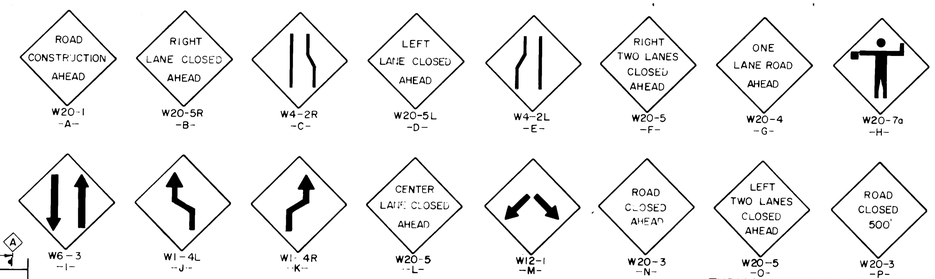


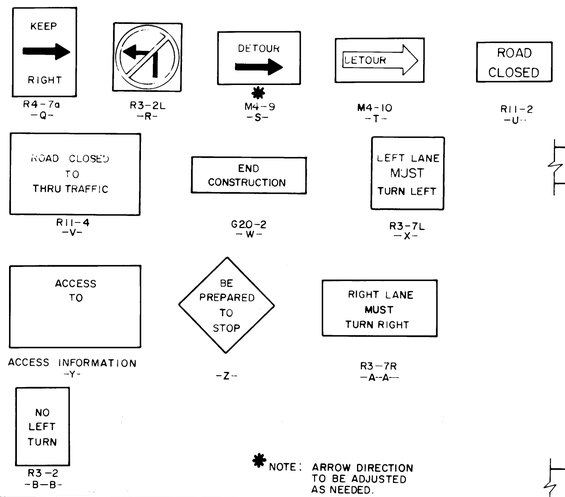
TYPICAL TRAFFIC SPLIT-(RAISED MEDIAN)



TYPICAL CENTER LANE CLOSURE



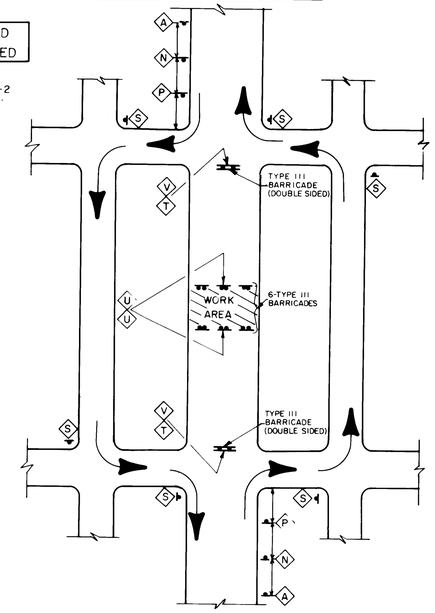




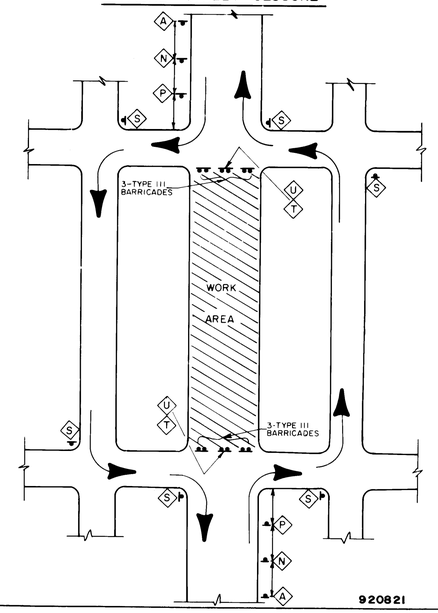
✱ NOTE: ARROW DIRECTION TO BE ADJUSTED AS NEEDED.

RECORD DRAWING

TYPICAL STREET CLOSURE (MID BLOCK)



TYPICAL STREET CLOSURE



920821

LEGEND

- WORK AREA
- TRAFFIC SIGN & QUANTITY (See this sheet for designation)
- BARRICADE - TYPE I, TYPE II, OR BARREL
- BARRICADE - TYPE III
- X VERTICAL PANEL
- WARNING SIGN
- L DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION
- S SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED OF THE STREET

TAPER LENGTH — SEE CHART BELOW

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

NOTES

ALL ADVANCE WARNING SIGNS ARE TO BE DOUBLE INDICATED WHENEVER MEDIANS ARE PRESENT.

TRANSFORMATION FROM EXISTING SIGNALS TO SPAN WIRE IS TO OCCUR AT OFF PEAK HOURS.

THESE DETAILS PROVIDED COURTESY OF THE CITY OF ALBUQUERQUE TRANSPORTATION DEVELOPMENT SECTION.

TAPER REQUIREMENTS

SPEED LIMIT (MPH)	TAPER LENGTH (FEET) 10' LANE	11' LANE	12' LANE	MAXIMUM DISTANCE BETWEEN DEVICES (FEET)	MINIMUM NUMBER OF DEVICES REQUIRED
25	104	115	125	25	6
30	150	165	185	30	7
35	204	225	245	35	8
40	267	293	320	40	9
45	450	495	540	45	13
50	500	550	600	50	13
55	550	605	660	55	13

26 3391.950593

AS BUILT INFORMATION
CONTRACTOR - NEW CONCEPTS, INC.
AS-BUILT BY JMA DATE 7/93
INSTALLATION BY GM DATE 9/93
FIELD TESTING BY JMA DATE 9/93
VERIFICATION BY GM DATE 9/93
CORRECTED BY MICRO-FILM INFORMATION
RECORDED BY DATE
NO

BENCH MARKS
STA. 15 A STANDARD BRASS TABLET STAMPED "I-C19 M.A.A. LOT32, BLK10" SET IN TOP OF CONC. POST FLUSH W/GROUND & LOCATED IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF LOUISIANA BLVD. NE & LOS ANSELES DRIVE, 50' NORTH OF THE NORTHWEST CORNER OF CHAINLINK FENCE AROUND THE F.A.A. AIR TRAFFIC CONTROL CENTER.
ELEVATION = 5318.195 FEET (M.S.L.D.)

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
N/A	W.P.P.	9/22/92

ENGINEER'S SEAL

GM

AS-BUILT & CERTIFY

10/93

NO.	DATE	REMARKS
		REVISIONS

DESIGN

		DATE
DESIGNED BY	C.O.A.	N/A
DRAWN BY	C.O.A.	N/A
CHECKED BY	C.O.A.	N/A

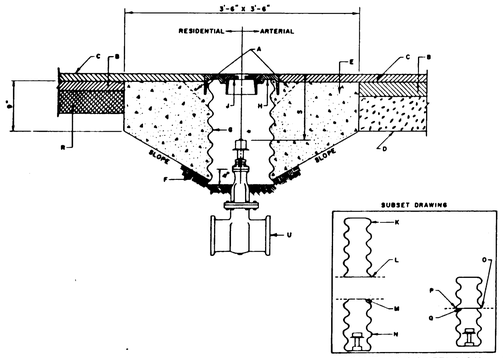
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: VENTURA STREET NE MASTERPLAN WATERLINE
PASEO DEL NORTE TO CORONA AVENUE NE
TRAFFIC CONTROL DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. CHAIRMAN	A.G. Hadley	5-11-93	WATER	N/A RWE	4-13-93
TRANSPORTATION	N/A [illegible]	4-15-93	WASTE WATER	N/A RWE	4-13-93
HYDROLOGY	N/A JAC	4-15-93	BCPWD	[illegible]	4/27/93

PROJECT NO.	MAP NO.	SHEET	OF
3391.95	C-20	5	6

189632

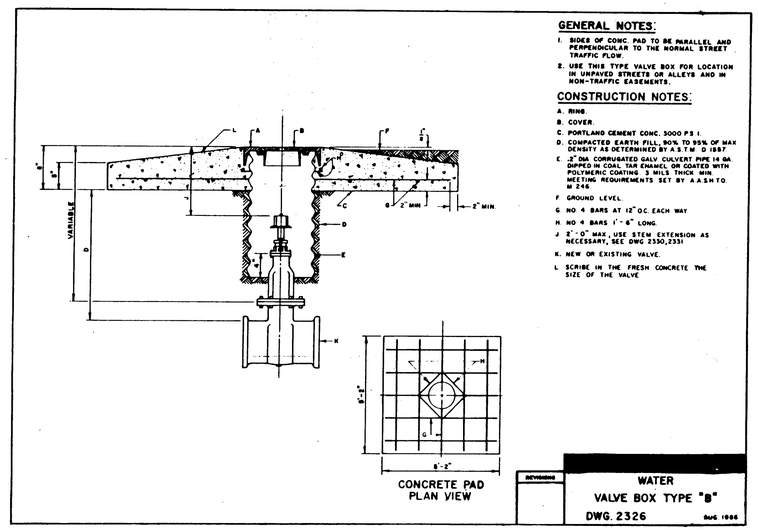


VALVE BOX EXTENSION

CONSTRUCTION NOTES:

A. AREA REMOVED FOR FUTURE RAISING TO GRADE WHEN OVERLAYED (SEE SUBSET DWG. BELOW, ALSO DWG. 2460
B. ASPHALTIC CONC. BASE COURSE.
C. SURFACE COURSE.
D. CEMENT TREATED BASE COURSE.
E. PORTLAND CEMENT CONC. (ROUGH SURFACE FINISH).
F. COMPACTED EARTH FILL (90% TO 95%, OF MAX. DENSITY AS DETERMINED BY A.S.T.M. D 1557
G. SPECIAL 12" DIA. CORRUGATED GALV. CULVERT, PIPE 14 GA., DIPPED IN COAL TAR ENAMEL, OR COATED WITH POLYMERIC COATING (WHEELING PLASTILOTE, MANUFACTORED BY WHEELING CORRUGATING CO. OR APPROVED EQUAL) 3 MILS THICK MIN. MEETING REQUIREMENTS SET BY A.A.S.H.T.O. M 246
H. RING
J. COVER.
K. ADJUSTING CAN.
L. CUT ON OUTSET
M. CUT ON INSET.
N. ORIGINAL CAN.
O. PLACE ADJ. CAN ON ORIGINAL CAN.
P. OUTSET CUT
Q. INSET CUT
R. COMPACTED SUBBASE.
S. 18" MAX. USE STEM EXTENSIONS AS NECESSARY
T. FOR VALVE STEM EXTENSION SEE DWG. 2331
U. NEW OR EXISTING VALVE.

REVISIONS	CITY OF ALBUQUERQUE
	WATER VALVE BOX TYPE "A" DWG. 2325 AUG 1986



CONCRETE PAD
PLAN VIEW

GENERAL NOTES:

1. SIDES OF CONC. PAD TO BE PARALLEL AND PERPENDICULAR TO THE NORMAL STREET TRAFFIC FLOW.
2. USE THIS TYPE VALVE BOX FOR LOCATION IN UNPAVED STREETS OR ALLEYS AND IN NON-TRAFFIC EASEMENTS.

CONSTRUCTION NOTES:

A. RING.
B. COVER.
C. PORTLAND CEMENT CONC. 3000 P.S.I.
D. COMPACTED EARTH FILL, 90% TO 95% OF MAX DENSITY AS DETERMINED BY A.S.T.M. D 1557.
E. 12" DIA. CORRUGATED GALV. CULVERT PIPE 14 GA. DIPPED IN COAL TAR ENAMEL, OR COATED WITH POLYMERIC COATING 3 MILS THICK MIN. MEETING REQUIREMENTS SET BY A.A.S.H.T.O. M 246.
F. GROUND LEVEL.
G. NO. 4 BARS AT 12" O.C. EACH WAY
H. NO. 4 BARS 1'-4" LONG.
J. 2'-0" MAX., USE STEM EXTENSION AS NECESSARY, SEE DWG. 2330, 2331
K. NEW OR EXISTING VALVE.
L. SCRIBE IN THE FRESH CONCRETE THE SIZE OF THE VALVE

REVISIONS	WATER
	VALVE BOX TYPE "B" DWG. 2326 AUG 1986

GENERAL NOTES:

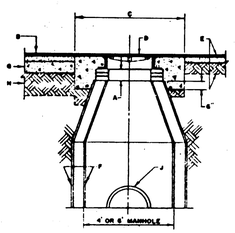
1. Adjustment to grade of frame and cover shall be made by varying brick courses directly under frame, using for course max. if less than one course is required, grout only shall be used.

   If adjustment would require greater than four course, the cone shall be removed, barrel height adjusted and cone replaced.

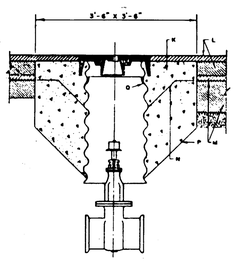
   Adjustment rings may be used for minor adjustment requirements.
2. For small adjustments water valve extension collar & insert may be used see DWG: 2332.

CONSTRUCTION NOTES:

A. Four brick courses max.
B. Overlay
C. Use a conc pad 5'x5' in all areas.
D. MH frame & cover.
E. STD paving sect
F. 1/2" plaster inside & outside except on precast units.
G. A.T.B. or C.T.B.
H. Subgrade.
J. Sewer line.
K. New portland cement conc
L. New paving material.
M. Exist pavement.
N. Cut line.
P. Exist conc
Q. Valve box extension, see DWG: 2325



MANHOLE REGRADING DETAIL



VALVE BOX REGRADING DETAIL

67

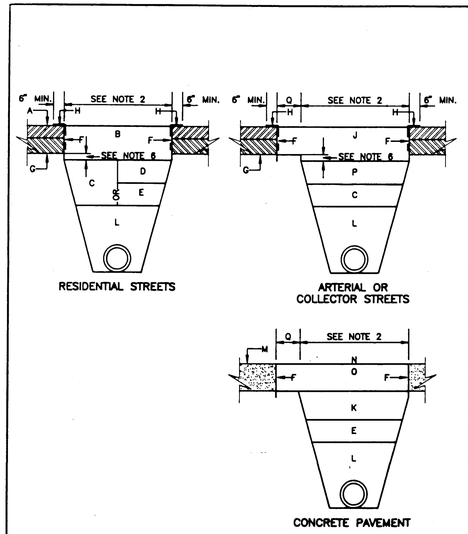
REVISION	COUNTY OF BERNALILLO
1-JUL-91	PAVING MH & VALVE BOX REGRADING DWG: 2460

GENERAL NOTES

1. COMPACTION AS DETERMINED BY ASTM D 1557 MAX. DENSITY.
2. TRENCH CUT WIDTHS SHALL BE MIN. WIDTH REQ'D FOR UTILITY INSTALLATION, ECONOMICAL BACKFILL COMPACTION AND COMPLIANCE WITH CURRENT AND APPLICABLE SAFETY REGULATIONS.
3. ALL PAVEMENT CUT EDGES WILL BE TRIMMED TO PRESENT AN EVEN LINE PRIOR TO REPLACEMENT OF PAVING MATERIALS. "STITCH" CUTTING OF PAVEMENT WILL NOT BE PERMITTED.
4. FOR RESIDENTIAL STREETS, ASPHALT CONC. SURFACE COURSE SHALL BE 1 1/2". THE REMAINDER SHALL BE BASE COURSE.
5. FOR ARTERIAL OR COLLECTOR STREETS, ASPHALT CONC. SURFACE COURSE SHALL BE 1 1/2" - 2". THE REMAINDER SHALL BE BASE COURSE.
6. 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

A. 2"-4" EXIST. ASPHALT SURFACE COURSE.
B. 4"-6" ASPHALT CONC. TO BE 2" THICKER THAN EXIST. PAVEMENT, SEE NOTES 4 & 6.
C. 12" COMPACTED SUBBASE MATERIAL, PLACED IN 2-6" LIFTS, 95% COMPACTION.
D. 8" BASECOURSE, 95% COMPACTION.
E. 6" SUBGRADE MATERIAL, 95% COMPACTION.
F. SAWCUT OR BLADECUT ASPHALT PAVEMENT, SAWCUT ONLY ONE THIRD CONC. PAVEMENT DEPTH.
G. EXIST. ASPHALT PAVEMENT.
H. TACK COAT.
J. 4"-6" ASPHALT CONC. TO BE 2" THICKER THAN EXIST. PAVEMENT. SEE NOTES 5 & 6.
K. 8" BASECOURSE, 95% COMPACTION.
L. SUBGRADE MATERIAL, 95% COMPACTION.
M. EXIST. CONC. PAVEMENT.
N. JOINTS TO BE TOOLED & SEALED IN ACCORDANCE WITH ENGINEER'S REQUIREMENTS.
O. TO MATCH EXIST. THICKNESS, 6" MIN. 4000 P.S.I.
P. 8" BASECOURSE, 95% COMPACTION.
Q. 12" CUT-BACK, ONLY APPLICABLE TO FED. HWY. AND NMSHD FUNDED PROJECTS.



RESIDENTIAL STREETS

ARTERIAL OR COLLECTOR STREETS

CONCRETE PAVEMENT

REVISIONS	COUNTY OF BERNALILLO
	PAVING COUNTYWIDE PAVEMENT CUTS FOR ALL UTILITIES DWG. 2465

RECORD DRAWING

920821

AS BUILT INFORMATION	
CONTRACTOR NEW CONCEPTS, INC.	
WORK INSPECTED BY JMA	DATE 7/93
ACCEPTANCE BY GM	DATE 9/93
FIELD VERIFICATION BY JMA	DATE 9/93
DRAWINGS CORRECTED BY GM	DATE 9/93
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	

BENCH MARKS

STA. 15 A STANDARD BRASS TABLET STAMPED "1-C19 N.A.A. LOT 32, BLK 10" SET IN TOP OF CONC. POST FLUSH W/GROUND & LOCATED IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF LOUISIANA BLVD. NE & LOS ANGELES DR. NE, 50' NORTH OF THE NORTHWEST CORNER OF CHAINLINK FENCE AROUND THE F.A.A. AIR TRAFFIC CONTROL CENTER

ELEVATION = 5318.195 FEET (M.S.L.D.)

SURVEY INFORMATION

NO.	FIELD NOTES	BY	DATE
N/A			

ENGINEER'S SEAL

JESSE G. MONTANO JR. NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

GM

AS-BUILT & CERTIFY

NO.	DATE	REMARKS	BY
1	10/93		

REVISIONS

DESIGN

DESIGNED BY J.G.M. DATE 04-93
DRAWN BY J.M.A. DATE 04-93
CHECKED BY J.G.M. DATE 04-93

26 3391.950693

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: VENTURA STREET NE MASTERPLAN WATERLINE DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		
TRANSPORTATION			WASTE WATER		
HYDROLOGY			BCPWD	CKBowman	4/27/98

PROJECT NO. 3391.95	MAP NO. C-20	SHEET 6 OF 6